City of Santa Fe

AGENDA

REGULAR MEETING OF THE PLANNING COMMISSION NOVEMBER 19, 2020 AT 6:00 PM ATTEND VIRTUALLY

SPECIAL PROCEDURES FOR VIRTUAL ATTENDANCE AND PUBLIC COMMENT

Attendance: In response to the State's declaration of a Public Health Emergency, the Mayor's Proclamation of Emergency, and the ban on public gatherings of more than five (5) people, the Planning Commission meeting will be conducted using Zoom.

Viewing on YouTube: Members of the public may stream the meeting live on the City of Santa Fe's YouTube channel at https://www.youtube.com/channel/UCuW5Fb7iWuKpTdsWYNDurgA. The YouTube live stream can be accessed at this address from most computers, mobile devices, or smartphones. A video recording of the meeting will be posted on YouTube and available for viewing after the meeting.

Attending on Zoom: Members of the public may attend the Zoom meeting on a computer, mobile device, or phone. The video conference link and teleconference number will be posted on the City of Santa Fe's Calendar of Events website at least seventy-two (72) hours before the meeting: https://www.santafenm.gov/events. The direct Zoom link is: https://us02web.zoom.us/j/83138050511?pwd=UlhueHUwd2VLUG5JM1c4RURFZ1NKdz09 and use password: 349362.

Attending Zoom by Phone: Members of the public can attend the Zoom meeting by phone by dialing:
US: 1 346 248 7799 or 1 669 900 6833 or 1 253 215 8782 or 1 312 626 6799 or 1 929 205 6099 or 1 301 715 8592
Webinar ID: 831 3805 0511

Public Comment:

- By video: A person attending the Zoom meeting by using a computer, mobile device, or smart phone may provide public comment during the meeting. Attendees should use the "Raise Hand" function to be recognized by the chair to speak at the appropriate time.
- By phone: A person attending the Zoom meeting by phone may provide public comment during the meeting but **must** provide advance notice to City staff. Please

contact Noah Berke (505-490-5930, nlberke@santafenm.gov) at least seventy-two (72) hours in advance of the meeting and provide your **full name, address, and the phone number** you will be using to call in to the teleconference. Without your phone number, the chair will not be able to recognize you to speak at the meeting.

- In writing: A person may submit written public comments in at least seventy-two (72) hours in advance of the meeting via the virtual comment "button" at https://santafe.primegov.com/public/portal.

A. ROLL CALL

B. PLEDGE OF ALLEGIANCE

C. APPROVAL OF AGENDA

D. APPROVAL OF MINUTES:

E. APPROVAL OF FINDINGS/CONCLUSIONS

F. OLD BUSINESS

G. NEW BUSINESS

1. **Appeal #2020-2789-APPL of Case #2020-2430. 1298 Lejano Lane Lot Line Adjustment.** Karl Sommer, Agent, for Daniel and Monika O'Friel, Owners, appeal the Land Use Director's denial of an application for a lot line adjustment between 1298 Lejano Lane, which is zoned R-5 (Residential – five dwelling unit per acre), and 1300 Lejano Lane, which is zoned R-1 (Residential – one dwelling unit per acre). (Sally Paez, Assistant City Attorney, sapaez@santafenm.gov , 955-6501).

2. **Case #2020-2640. 4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision**. JenkinsGavin, Inc., Agent, for Homewise, Inc., Owner, requests approval of a preliminary subdivision plat for fifty-six single family lots. The properties are approximately 10.05 acres and are zoned R-5 (Residential- five dwelling units per acre). (Dan Esquibel, Case Manager, daesquibel@santafenm.gov, 955-6587)

3. **Case #2020-2642. Vista de La Sierra Preliminary Subdivision Plat.** JenkinsGavin, Inc., Agent, for Branch Family Holdings, LLC, Owner, requests a preliminary subdivision plat for a 393 single family residential lot subdivision. The property located at 3800 Governor Miles Road, is approximately 79.69 acres and is zoned R-5 (Residential-five dwelling units per acre). (Donna Wynant, AICP, Case Manager, djwynant@santafenm.gov , 955-6325).

4. **Case #2020-2720. Vista de La Sierra Preliminary Subdivision Setback Variance.** JenkinsGavin, Inc., Agent, for Branch Family Holdings, LLC, Owner, requests a variance from SFCC Table 14-7.2-1 (Note 6), which requires an additional 5-foot side yard setback for any portion of a structure over 14 feet in height. The property located at 3800 Governor Miles Road, is approximately 79.69 acres and is zoned R-5 (Residential-five dwelling units per acre). (Donna Wynant, AICP, Case Manager, djwynant@santafenm.gov , 955-6325).

H. STAFF COMMUNICATIONS

MATTERS FROM THE COMMISSION

I. ADJOURNMENT

Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6521, five (5) working days prior to meeting date.

City of Santa Fe, New Mexico

200 Lincoln Avenue, P.O. Box 909, Santa Fe, N.M. 87504-0909
www.santafenm.gov

Alan Webber, Mayor

Councilors:
Signe I. Lindell, Mayor Pro Tem, District 1
Renee Villarreal, District 1
Michael J. Garcia, District 2
Carol Romero-Wirth, District 2
Roman "Tiger" Abeyta, District 3
Chris Rivera, District 3
Jamie Cassutt-Sanchez, District 4
JoAnne Vigil Coppler, District 4

MEMORANDUM

To: **Members of the Planning Commission**

From: **Sally A. Paez, Assistant City Attorney**

Via: **Erin K. McSherry, City Attorney**

Re: **Appeal #2020-2789-APPL of Case #2020-2430.** Appeal by Owners Daniel O'Friel and Monika Steinhoff O'Friel of the Land Use Director's denial of a lot line adjustment between 1298 Lejano Lane, which is zoned R-5 (Residential – five dwelling unit per acre), and 1300 Lejano Lane, which is zoned R-1 (Residential – one dwelling unit per acre).

Date: **November 19, 2020 Meeting of the Planning Commission**

Owners Daniel O'Friel and Monika Steinhoff O'Friel ("Appellants"), through agent Karl Sommer, appeal a decision by the Land Use Director ("Director") to deny an application ("Application") to adjust the lot line that establishes the boundary between Appellants' property at 1298 Lejano Lane and the neighboring property at 1300 Lejano Lane. The Director denied the application because the two properties are in different zoning districts and have different designations on the General Plan's Future Land Use Map, as follows:

1298 Lejano Lane (Lot 15 of Valle Lejano Subdivision)

- Zoning: R-5 (Residential – five dwelling unit per acre)
- Future Land Use Map: Low Density Residential (3-7 units per acre)

1300 Lejano Lane (Lot 14 of Valle Lejano Subdivision)

- Zoning: R-1 (Residential – one dwelling unit per acre)
- Future Land Use Map: Very Low Density Residential (1-3 units per acre)

Appellant argues that the Director's decision should be reversed because it was based on a misapplication of applicable ordinances. Appellant asserts that if the Application is granted, the boundary between the R-5 zoning district and the R-1 zoning district will automatically be construed as following the new property line, without the need to rezone the property.

In this de novo appeal, the Planning Commission ("Commission") should independently determine whether to grant or deny the Application for a lot line adjustment.

I. BACKGROUND & PROCEDURAL HISTORY

On July 30, 2020, Appellants filed the Application with the Land Use Department, requesting to adjust the lot line between 1298 Lejano Lane (Lot 15 in the Valle Lejano Subdivision), which is owned by Appellants, and 1300 Lejano Lane (Lot 14 in the Valle Lejano Subdivision), which is owned by Christopher Clancy ("Neighbor"). **[pp. 14, 19-20 of 31]** Appellants seek to align the lot line with the existing fence line, which creates a boundary that Appellants and Neighbor have agreed upon. **[p. 31 of 31]**

Appellants and Neighbor previously received approval of a lot line adjustment in 2017 (Case #2017-36) to adjust the boundary between Lot 14 and Lot 15 to encompass/wrap around an existing shed and driveway. **[pp. 14, 23 of 31]** The 2017 lot line adjustment resulted in the addition of a small portion of land zoned R-1 to Appellants' property, which is otherwise zoned R-5.

Land Use Department staff reviewed the Application and supporting documents and submitted a report ("Staff Report") to the Director, recommending denial of the Application because the two lots are located in two different zoning districts and are designated differently on the General Plan's Future Land Use Map. **[pp. 14-17 of 31]** On September 21, 2020, the Director issued a letter concurring with the staff recommendation and denying the Application for the reasons set forth in the Staff Report. **[p. 12 of 22]**

The Director's denial of the Application for a lot line adjustment constitutes a final action, which may be appealed. *See* Santa Fe City Code ("SFCC") § 14-3.17(A)(1)(c). Appellants timely filed an appeal on October 21, 2020. *See* SFCC § 14-3.17(C)(1)(b) (providing a thirty-day appeal period for a decision of the Director denying a resubdivision); SFCC § 14-1.9(D) (rules for computation of time deadlines in the Land Use Code). The Governing Body has delegated the power and duty to hear this appeal to the Commission. SFCC §§ 14-2.2(G); 14-2.3(C)(4)(a).

II. GROUNDS FOR APPEAL TO THE PLANNING COMMISSION

Under the SFCC Section 14-3.17(A)(2), an appeal of a final action of the Director may be filed for one or more of the following reasons only:

(1) The Director's final action does not comply with SFCC Chapter 14 or the Zoning Enabling Act, NMSA 1978, Sections 3-21-1 to -14;
(2) The Director misapplied SFCC Chapter 14; or
(3) The Director's decision is not supported by substantial evidence.

On appeal, Appellants have the burden of proving one of these grounds for reversal of the Director's decision. *See* SFCC § 14-3.17(H)(4).

III. ISSUES RAISED ON APPEAL

Appellants raise the following issues in the appeal petition:

1. The Director misapplied SFCC Section 14-4.1(E)(2), which provides as follows: "Where uncertainty exists as to the boundaries of districts as shown on the official zoning map, . . . district boundaries indicated as approximately following platted lot lines shall be construed as following those lot lines." **[p. 31 of 31]**
2. The Director erred by concluding that granting the Application would effect a change in zoning classification. **[p. 31 of 31]**

IV. ANALYSIS

Under SFCC Section 14-3.7(E), the Director has authority to review and approve or deny an application for a lot line adjustment, also known as a "resubdivision." See SFCC § 14-12.1. The Director may grant administrative approval of a resubdivision if the five subdivision criteria in SFCC Section 14-3.7(C) have been met and the subdivision otherwise complies with Chapter 14 of the SFCC.

Relevant to this case, the subdivision criterion in SFCC Section 14-3.7(C)(4) provides that "[a] plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat." Similarly, SFCC Section 14-3.7(A)(2)(a) provides, "No subdivision plat shall be approved that does not comply with applicable provisions of the Santa Fe City Code that regulate the development and use of land, or that increases the degree or extent of noncompliance with those provisions, unless the appropriate variance or other relief procedure is approved."

The Director denied the Application because Appellants' lot at 1298 Lejano Lane and Neighbor's lot at 1300 Lejano Lane are located in different zoning districts with different future land use designations. The Director concluded that approving the lot line adjustment would be inconsistent with the following provisions of Chapter 14, which establish a strong preference for maintaining a uniform zoning classification for an entire lot:

- SFCC Section 14-3.5(A)(3) (Uniform Zoning Classification for Entire Lot Required): Except where a legal lot of record is divided by a zoning district boundary, no request to change the zoning classification on a portion of a legal lot of record shall be considered unless the change will establish a uniform zoning classification for the entire lot. A new zoning district boundary shall not divide a legal lot of record, except to establish overlay district boundaries based on topography or other physical conditions.

- SFCC Section 14-4.1(E)(2) (Rules for Interpretation of District Boundaries): Where uncertainty exists as to the boundaries of districts as shown on the official zoning map, the following rules shall apply: . . . district boundaries indicated as approximately following platted lot lines shall be construed as following those lot lines[.]

SFCC Section 14-4.1(E)(2) does not support Appellant's assertion that approving the lot line adjustment will result in the realignment of the zoning district boundary to follow the new property line. As set forth in SFCC Section 14-4.1(C)(3), "Changes affecting the zoning district designation of any portion of land represented on the official zoning map, including rezonings, annexations and the creation of new zoning districts, shall be made only as the result of action by the governing body related to the zoning change and shall follow the prescribed procedures for such action as set forth in Chapter 14." The rule set forth in SFCC Section 14-4.1(E)(2) is a tool for determining a zoning district boundary when uncertainty exists; it is not a tool for changing the zoning designation on a portion of a parcel when the location of the zoning boundary is known.

The previous lot line adjustment in 2017 resulted in "split zoning" on Appellants' lot, i.e., the majority of Appellants' lot is zoned R-5, while a small portion of Appellants' lot is zoned R-1. In this case, the Director concluded that the previous lot line adjustment was approved in error and that approving the current Application would increase the degree or extent of noncompliance with provisions of Chapter 14 that generally require a uniform zoning classification for an entire lot. Under SFCC Section 14-4.1(C)(2), the "land use director is responsible for tracking and maintaining all changes to the map and shall be the final authority of reference as to the current zoning status of lands, buildings and other structures in the city."

The City Attorney's Office recommends denying the appeal and affirming the Director's decision for the following reasons. The Director's decision complies with and is a reasonable application of Chapter 14. SFCC Sections 14-3.5(A)(3) and 14-4.1(E)(2) reflect the general rule that property lines should follow zoning district boundaries. This general rule furthers important policy objectives. Zoning dictates the permitted uses and dimensional standards that apply on a parcel. Allowing a zoning district boundary to divide a lot leaves one part of the lot subject to one set of restrictions, and the other part of the lot subject to another set of restrictions. Split zoning can have a significant impact on the use and value of the property. Split zoning also creates administrative challenges in maintaining the City's official zoning map. Finally, as set forth in SFCC Section 14-4.1(C)(2)-(3), the land use director is the final authority as to the current zoning status of land in the city, and changes affecting the zoning district designation of any portion of land represented on the official zoning map requires action by the Governing Body.

V. CONCLUSION & MOTIONS OPTIONS

In this appeal, the Commission should conduct a public hearing de novo, meaning the Commission may consider evidence and testimony not presented to the Director in the decision below. *See* SFCC § 14-3.17(H)(3)(a). The Commission should apply the law to the facts, as presented in the record and at the hearing, to reach a decision. The Commission may reverse or affirm the Director's decision, in whole or in part, or may modify the Director's final action. *Id.*

The Commission's decision will be the City's final decision in this matter and may be appealed to district court. *See* SFCC § 14-2.2(G) ("Final actions of a land use board on the appeal of a decision of the land use director shall not be heard by the governing body. That appeal shall be filed in district court.").

VI. MOTION OPTIONS

There are two options for motions in this case. Sample motions follow:

Motion 1: *I move to **grant** the appeal and to grant Appellants' Application for a lot line adjustment.*

Motion 2: *I move to **deny** the appeal and affirm the decision of the Land Use Director to deny Appellants' Application for a lot line adjustment.*

APPENDIX A:

EXCERPTS FROM THE LAND USE CODE

14-3.5(A) – REZONINGS; GENERAL PROVISIONS

(3) Uniform Zoning Classification for Entire Lot Required

Except where a legal lot of record is divided by a zoning district boundary, no request to change the zoning classification on a portion of a legal lot of record shall be considered unless the change will establish a uniform zoning classification for the entire lot. A new zoning district boundary shall not divide a legal lot of record, except to establish overlay district boundaries based on topography or other physical conditions.

14-3.7(E) - RESUBDIVISIONS

The land use director has the authority to review and approve or disapprove resubdivisions where the combination or recombination of portions of previously platted lots does not increase the total number of lots and the resulting lots comply with the approval criteria in Subsection (C) of this section.

14-3.7(C) – SUBDIVISION APPROVAL CRITERIA

(1) In all subdivisions, due regard shall be shown for all natural features such as vegetation, water courses, historical sites and structures, and similar community assets that, if preserved, will add attractiveness and value to the area or to Santa Fe.
(2) The planning commission shall give due regard to the opinions of public agencies and shall not approve the plat if it determines that in the best interest of the public health, safety or welfare the land is not suitable for platting and development purposes of the kind proposed. Land subject to flooding and land deemed to be topographically unsuited for building, or for other reasons uninhabitable, shall not be platted for residential occupancy, nor for other uses that may increase danger to health, safety or welfare or aggravate erosion or flood hazard. Such land shall be set aside within the plat for uses that will not be endangered by periodic or occasional inundation or produce unsatisfactory living conditions. See also Section 14-5.9 (Ecological Resource Protection Overlay District) and Section 14-8.3 (Flood Regulations).
(3) All plats shall comply with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements and Dedication Standards).
(4) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat.
(5) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with applicable provisions of other chapters of the Santa Fe City Code unless an exception is approved pursuant to the procedures provided in that chapter prior to approval of the plat.

14-4.1 – ZONING DISTRICTS; GENERAL PROVISIONS

(A) Purpose of Dividing City into Districts

(1) To achieve the purposes stated in Section 14-1, the city is divided into districts within which there are distinct regulations for the development and use of structures and land.

(2) The regulations are made in accordance with the general plan and are designed to lessen congestion in the streets and public ways; to secure safety from fire, panic and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of lands; to avoid undue concentration of population; and to facilitate the adequate provision for transportation, water, sewerage, schools, parks and other public requirements.

(3) The regulations and restrictions have been made with reasonable consideration for the character of each district and its peculiar suitability for particular uses and with a view to conserving the value of buildings and land and encouraging the most appropriate use of land throughout Santa Fe.

(B) Compliance with District Regulations

A structure or land shall not be used or occupied and a structure or part of a structure shall not be erected, constructed, reconstructed, moved or structurally altered unless in conformance with the regulations specified in Chapter 14 for the district in which it is located.

(C) Official Zoning Map

(1) The city is divided into zones or districts as shown on the official zoning map, which, together with all explanatory matter on the map and as amended from time to time, is adopted by reference and declared to be a part of Chapter 14.

(2) The official zoning map shall be maintained in electronic form and depicted in various formats and scales as appropriate to the need. The land use director is responsible for tracking and maintaining all changes to the map and shall be the final authority of reference as to the current zoning status of lands, buildings and other structures in the city.

(3) Changes affecting the zoning district designation of any portion of land represented on the official zoning map, including rezonings, annexations and the creation of new zoning districts, shall be made only as the result of action by the governing body related to the zoning change and shall follow the prescribed procedures for such action as set forth in Chapter 14.

(4) The land use director may make the following changes to the official zoning map at any time:

(a) revisions of style, format or layout to enhance clarity;

(b) additions of explanatory text or labels;

(c) corrections of spelling and grammar;

(d) corrections based on oversight or error and to identify official actions that are not reflected or are incorrectly reflected;

(e) and any other changes affecting the appearance, style, color or graphic presentation of the map.

(5) A revised official zoning map, including the proposed nonsubstantive changes, shall be administratively approved by the land use director in writing.

(D) Rezoning Procedure

Rezoning requirements set forth in this article are in addition to the requirements set forth in Section 14-3.5, which apply to all rezonings.

(E) Rules for Interpretation of District Boundaries

Where uncertainty exists as to the boundaries of districts as shown on the official zoning map, the following rules shall apply:

(1) district boundaries indicated as approximately following center lines of streets, highways or alleys shall be construed as following those center lines;

(2) district boundaries indicated as approximately following platted lot lines shall be construed as following those lot lines;

(3) district boundaries indicated as approximately following city limits shall be construed as following the city limits;

(4) in the event of annexation of new areas to Santa Fe, the areas shall be zoned R-1 until otherwise classified. If changes in the city limits remove territory from Santa Fe, district boundaries shall be construed as moving to conform with the city limits; (Ord. No. 2014-31 § 8)

(5) district boundaries indicated as approximately following railroad lines shall be midway between the main tracks;

(6) district boundaries indicated as approximately following center lines of stream beds, other bodies of water or drainage ways shall be construed to follow those center lines;

(7) district boundaries indicated as approximately parallel to or extensions of features indicated in Sections 14-4.2(E)(1) through (6) shall be construed as such and at such distance from the features as indicated on the official zoning map. Distances not specifically indicated on the official zoning map shall be determined by the scale of the map; and

(8) where natural or man-made features that actually exist are at variance with those shown on the official zoning map or in other circumstances not covered by this section, the governing body shall interpret the district boundaries.

14-10.1 – NONCONFORMITIES; GENERAL PROVISIONS

(C) Determination of Nonconformity Status

The land use director determines the status of a nonconforming lot, nonconforming use, nonconforming structure or nonconforming sign. For purposes of this Article 14-10, each sign is treated as a separate structure, including those attached to or painted on buildings.

14-12.1 - DEFINITIONS

RESUBDIVISION

The adjustment of platted lot lines for the following purposes:

(A) increasing or reducing the size of contiguous lots, but not less than the minimum standard size required by the city, or changing the shape of contiguous lots, commonly known as a lot line adjustment; and

(B) combining contiguous lots, commonly known as a lot consolidation.

The resubdivision must result in the same or a fewer number of lots.

SUBDIVIDE

To divide land into two or more parts by platting or by metes and bounds description to:

(A) sell for building purposes;

(B) laying out a municipality or any part of a municipality;

(C) adding to a municipality;

(D) laying out suburban lots; or

(E) resubdivide.

LUD Use Only

Time Filed: 2:49pm
Fee paid: $ 100.00
Receipt attached:)
GGurule

(date stamp)

VERIFIED APPEAL PETITION

Two originals of this form must be filed. The Land Use Department Director or his/her designee will enter the date and time of receipt and initial both originals. See Section 14-3.17(D) SFCC 2001 for the procedure.

Appellant Information

Name: O'Friel, Daniel and O'Friel, Monika Steinhoff
Last *First* *M.I.*

Address: 1298 Lejano Lane
Street Address *Suite/Unit #*

Santa Fe NM 87501
City *State* *ZIP Code*

Phone: (505) 982-5929 E-mail Address: Dan@OFrielandLevy.com

Additional Appellant Names:

Correspondence Directed to: ☐ Appellant ☒ Agent ☐ Both

Agent Authorization (if applicable)

I/We: Daniel O'Friel and Monika Steinhoff O'Friel

authorize Karl H. Sommer, Esq. (Sommer Karnes & Assoc.) to act as my/our agent to execute this application.

Signed: _____ Date: _____

Signed: _____ Date: _____

Subject of Appeal

Project Name: Lot Line Adjustment #14 & #15 Valle Lejano IV & V

Applicant or Owner Name: Daniel O'Friel and Monika Steinhoff O'Friel

Location of Subject Site: 1298 Lejano Lane

Case Number: 2020-2430 Permit Number (if applicable):

Final Action Appealed:

☐ Issuance of Building Permit ☒ Other Final Determination of LUD Director

Final Action of Board or Commission (specify): ☐ Planning Commission ☐ Board of Adjustment ☐ BCD-DRC ☐ HDRB

Basis of Standing (see Section 14-3.17(B) SFCC 2001):

To contest the application of Chapter 14 of the City Code

Basis for Appeal: X The facts were incorrectly determined ☐ Ordinances/laws were violated and/or misrepresented

Description of the final action appealed from, and date on which final action was taken:

On September 2, 2020, PLUD Director Isaacson issued concurrence with Staff's recommendation to deny the request for the Lot Line Adjustment because the lots are located in two different zoning districts. See **ATTACHMENT A**

☒ Check here if you have attached a copy of the final action that is being appealed.

Description of Harm

Describe the harm that would result to you from the action appealed from (attach additional pages if necessary):

See ATTACHMENT B

Explain the Basis for Appeal

Please detail the basis for Appeal here (be specific):

See ATTACHMENT B

Signature and Verification

I hereby certify that the documents submitted for review and consideration by the City of Santa Fe have been prepared to meet the minimum standards outlined in the Land Development Code, Chapter 14 SFCC 2001. Failure to meet these standards may result in the rejection or postponement of my application. I also certify that I have met with the City's Current Planning staff to verify that the attached proposal is in compliance with the City's zoning requirements.

Appellant Signature: _____ Date: _____

Agent Signature: Karl W. Sommer Date: October 21, 2020

State of New Mexico)
) ss.
County of Santa Fe)

I/We **Daniel O'Friel** and Monika Steinhoff O'Friel, being first duly sworn, depose and say: I/We have read the foregoing appeal petition and know the contents thereof and that the same are true to my/our own knowledge.

Appellant/s:

Daniel J. O'Friel
Signature

Monika Steinhoff O'Friel
Signature

DANIEL O'FRIEL
Print Name

MONIKA STEINHOFF O'FRIEL
Print Name

Subscribed and sworn to before me this 16TH day of **October**, 20 **20**.

OFFICIAL SEAL
Veronica L. Dale
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 10-30-22

NOTARY PUBLIC

My commission expires:
OCTOBER 30, 2022

City of Santa Fe, New Mexico

200 Lincoln Avenue, P.O. Box 909, Santa Fe, NM 87504-0909
www.santafenm.gov

Alan Webber, Mayor

Councilors:
Signe I. Lindell, Mayor Pro Tem, District 1
Renee Villarreal, District 1
Peter N. Ives, District 2
Carol Romero-Wirth, District 2
Roman "Tiger" Abeyta, District 3
Chris Rivera, District 3
Mike Harris, District 4
JoAnne Vigil Coppler, District 4

September 21, 2020

VIA EMAIL TO: dan@ofrielandlevy.com

Daniel O'Friel
1298 Lejano Lane
Santa Fe, NM 87501

Re: Case #2020-2430, 1298 Lejano Lane

Land Use Department staff has reviewed your application for a Lot Line Adjustment (Administrative) for your property located at 1298 Lejano Lane (Case #2020-2430). You have requested to adjust the lot line held in common between lots #14 and #15 of the Valle Lejano subdivision. Staff has recommended denial of the application because the lots are located in two different zoning districts. See the attached Case No. 2020-2430 staff report.

I concur with the recommendation of staff and deny your request for a Lot Line Adjustment at 1298 Lejano Lane (Case No. 2020-2430) for the reasons set forth in the staff report. This denial constitutes a final action of the Land Use Director, which may be appealed as provided in the Santa Fe City Code, Section 14-3.17.

Please do not hesitate to contact me if you have further questions regarding this matter.

Sincerely,

Elias Isaacson

Elias Isaacson
Planning and Land Use Department Director

Attachment: Case No. 2020-2430 Staff Report

Cc: Sally Paez, Assistant City Attorney
Noah Berke, Planner Manager
Donna Wynant, Planner Senior

ATTACHMENT A

City of Santa Fe, New Mexico

200 Lincoln Avenue, P.O. Box 909, Santa Fe, NM 87504-0909
www.santafenm.gov

Alan Webber, Mayor

Councilors:
Signe I. Lindell, Mayor Pro Tem, District 1
Renee Villarreal, District 1
Peter N. Ives, District 2
Carol Romero-Wirth, District 2
Roman "Tiger" Abeyta, District 3
Chris Rivera, District 3
Mike Harris, District 4
JoAnne Vigil Coppler, District 4

September 18, 2020

VIA EMAIL TO: dan@ofrielandlevy.com

Daniel O'Friel
1298 Lejano Lane
Santa Fe, NM 87501

Re: Case #2020-2430, 1298 Lejano Lane

Land Use Department staff has reviewed your application for a Lot Line Adjustment (Administrative) for your property located at 1298 Lejano Lane (Case #2020-2430). You have requested to adjust the lot line held in common between lots #14 and #15 of the Valle Lejano subdivision. Staff has recommended denial of the application because the lots are located in two different zoning districts. See the attached Case No. 2020-2430 staff report.

I concur with the recommendation of staff and deny your request for a Lot Line Adjustment at 1298 Lejano Lane (Case No. 2020-2430) for the reasons set forth in the staff report. This denial constitutes a final action of the Land Use Director, which may be appealed as provided in the Santa Fe City Code, Section 14-3.17

Please do not hesitate to contact me if you have further questions regarding this matter.

Sincerely,

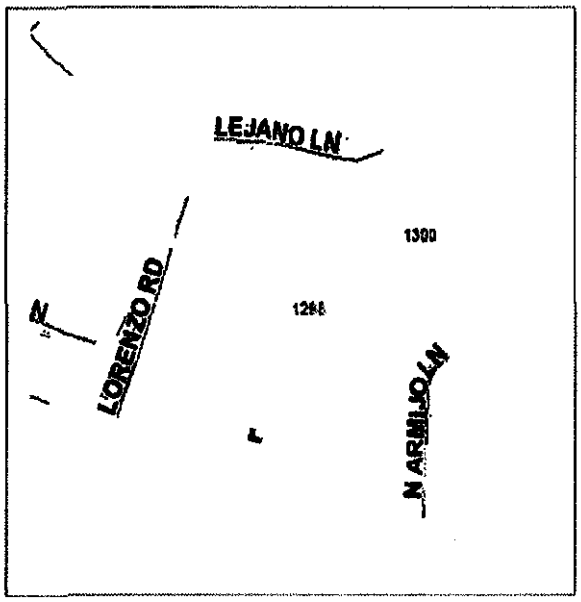
Elias Isaacson
Planning and Land Use Department Director

Attachment: **Case No. 2020-2430 Staff Report**

Cc: **Sally Paez, Assistant City Attorney**
Noah Berke, Planner Manager
Donna Wynant, Planner Senior

Land Use Department
Lot Line Adjustment Staff Report

Case No:	**2020-2430**
Applicant:	**Daniel O'Friel**
Request:	**Lot Line Adjustment**
Location:	**1298 Lejano Lane**
Case Mgr.:	**Donna Wynant, AICP**
Zoning:	
•	**1298 Lejano Lane (Lot 15): R-5 (Residential, Five dwelling units per acre)**
•	**1300 Lejano Lane (Lot 14): R-1 (Residential, One dwelling unit per acre)**
Overlay:	**Downtown & Eastside Historic District**
Proposal:	**To adjust the property line between two lots in two different zoning districts.**



Case #2020-2430. 1298 Lejano Lot Line Adjustment. Daniel O'Friel, Owner, of property at 1298 Lejano Lane, requests the adjustment of a lot line between Lot 15 (1298 Lejano Lane) and Lot 14 (1300 Lejano Lane) as shown in Exhibit A. Lot 15 is zoned R-5 (Residential – five dwelling units per acre) and Lot 14 is zoned R-1 (Residential- one dwelling unit per acre). (Donna Wynant, AICP, Case Manager)

Request

The Applicant, Mr. Daniel O'Friel submitted his application for a Lot Line Adjustment for a lot line adjustment between lots #14 and #15 in the Valle Lejano Subdivision which are the following:

- **Lot #14:** 1298 Lejano Lane is in Valle Lejano (Unit V sub.) Zoned R-5, Daniel O'Friel
- **Lot #15:** 1300 Lejano Lane is in Valle Lejano (Unit IV sub.) Zoned R-1, Christopher Clancy

Mr. O'Friel previously received approval of a lot line adjustment in 2017 (Case #2017-36) to make an adjustment in his east property line, the property line held in common between lots #14 and #15, to encompass/wrap around an existing shed and driveway turnaround as shown in his Exhibit A attached to his application. To date, no further information is available from Case #2017-36 since the file has not been located. The lot line adjustment plat was recorded on August 9, 2017.

The 2017 lot line adjustment was done to correct a problem of the shed that encroached into the neighboring property. The line was adjusted to wrap around the shed to include it into Mr. O'Friel's property. Mr. O'Friel is currently requesting to adjust his east lot line to go up to the neighboring

property's coyote fence, thereby adjusting his lot line to take in a somewhat irregularly shaped sliver of land as shown in his proposed lot line adjustment plat.

Background

Typically, a lot line adjustment is an administrative process requiring no public review. It is often requested by a property owner wanting to correct/adjust a property line with an adjacent property owner where an encroachment exists or the property owner wants to attach additional land from an adjacent property for any number of reasons. In this case, based on an agreement between Mr. O'Friel and Mr. Clancy, Mr. O'Friel is requesting to adjust his east property line (i.e. the common property line between them) to be adjusted up to the coyote fence Mr. Clancy erected. The fence was erected as much as 14 feet into his own property east of the subject property line which was done with benefit of permit (permit #2018-1574).

Ordinarily, this type of request is a simple fairly straight forward process, but in this case the two subject properties are zoned in two different zoning classifications as depicted on the City's official zoning map and are designated differently on the general plan's future land use map.

- ***Lot #14:*** *1298 Lejano Lane; Zoned R-5 (Five dwelling units per acre);*
  LU designation - Residential 3-7 dwelling units per acre.
- ***Lot #15:*** *1300 Lejano Lane; Zoned R-1 (One dwelling unit per acre);*
  FLU designation - Residential 1-3 dwelling units per acre.

Mr. O'Friel states in his email in response to staff's review of his request:

- *I have received this material.*
- *Can you explain how we were able to obtain a lot line adjustment earlier? You have that approved plat, which is now a legal lot of record.*
- *We do not seek to change the zoning classification.*
- *We do not seek to establish a new zoning boundary.*
- *We are merely adding (a very small piece of land) to our lot based on topography and other physical conditions.*

Analysis

Subsection 14-3.7(E) gives the Land Use Director authority to grant administrative approval of a resubdivision, i.e., a lot line adjustment, but only if the proposed resubdivision meets the subdivision approval criteria set forth in the code. Under Subsection 14-3.7(C)(4), a subdivision cannot be approved if the plat would create a nonconformity or increase the extent or degree of an existing nonconformity. Similarly, Subsection 14-3.7(A)(2) provides, "No subdivision plat shall be approved that does not comply with applicable provisions of the Santa Fe City Code that regulate the development and use of land, or that increases the degree or extent of noncompliance with those provisions, unless the appropriate variance or other relief procedure is approved."

In this case, the property at 1298 Lejano Lane and the adjacent property to the east at 1300 Lejano Lane are in different zoning districts, see attached zoning map with 1298 Lejano Lane zoned R-5 (Residential- five dwelling units per acre) and 1300 Lejano Lane zoned R-1 (Residential- one dwelling unit per acre). Because of that, a lot split or lot line adjustment where it splits a zoning district cannot be approved per Subsection 14-3.5(A)(3) which states:

> ***(3) Uniform Zoning Classification for Entire Lot Required***
> *Except where a legal lot of record is divided by a zoning district boundary, no request to change the zoning classification on a portion of a legal lot of record shall be considered unless the change will establish a uniform zoning classification for the entire lot. A new zoning district boundary shall not divide a legal lot of record, except to establish overlay district boundaries based on topography or other physical conditions.*

And Subsection 14-4.1(E)(2) which states:

> ***(E) Rules for Interpretation of District Boundaries***
> *Where uncertainty exists as to the boundaries of districts as shown on the official zoning map, the following rules shall apply:*
> *(1) district boundaries indicated as approximately following center lines of streets, highways or alleys shall be construed as following those center lines;*
> *(2) district boundaries indicated as approximately following platted lot lines shall be construed as following those lot lines;*

The proposed lot line adjustment would increase the existing nonconformity by moving the platted lot line farther from the zoning district boundary and adding additional R-1 zoned property to the Applicant's parcel, which is zoned R-5. Given that the application does not meet the code criteria for administrative approval, Staff has presented the Applicant with the following alternatives:

1. Do nothing and continue with the fence/property situation as it exists.

2. Rezone the two properties into one consistent zoning district.
   - Either downzone the Applicant's property from R-5 to R-1, which is how the adjacent neighbor's property is zoned; or
   - Have the neighbor upzone their property from the R-1 to the R-5 district, which is how the Applicant's property is zoned (which would also require a general plan amendment to change the future land use designation to the Residential 3-7 dwelling unit designation.)

3. Obtain an easement from the neighbor to allow the Applicant to use their property up to the coyote fence on their property.

Staff has not found any other available options to offer Mr. O'Friel.

Staff Recommendation:

Based on this review and analysis of this request, staff recommends that the Land Use Director deny the Applicant's request for a Lot Line Adjustment.

ATTACHMENTS:

EXHIBIT A: Applicant Submittals

1. Lot Line Adjustment Application Form (dated 7/30/20)
2. Quitclaim Deed, recorded 9-22-17 between Chris & Seren Clancy and Daniel O'Friel & Monika Steinhoff O'Friel
3. O'Friel – Clancy Lot Line Adjustment – recorded 8-9-17 in Book 823/Page 8-9.
4. Proposed Lot Line Adjustment Plat of Lots 14 & 15
5. Signature Sheet to Proposed Lot Line Adjustment

EXHIBIT B: Maps

1. Future Land Use Map
2. Current Zoning Map
3. Aerial Photo

APPROVED BY:

Title	Name	Initials
Land Use Current Planning Division Manager	Noah Berke, AICP, CFM	NB
Land Use Department Case Manager	Donna Wynant, AICP	DW

City of Santa Fe, New Mexico

Exhibit A

Applicant Submittals

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(date stamp)

Case#2020-2430

LOT CONSOLIDATION OR LOT LINE ADJUSTMENT

Parcel Information

Project Name: Lot Line Adjustment #1415 Valle Lejano Lvdv

Address: 1298 Lejano Lane Property Size: 1.281 Ac

Current Use of Land: Residential Proposed Use of Land: Residential

Does this project have a Legal Lot of record? YES ☑ NO ☐

Uniform Parcel Code Number: # B-19-A 1-051-096-095-431

Does the application comply with all zoning requirements (please illustrate on plans)? YES ☐ NO ☐

Property Owner Information

Name: Daniel O'Friel
First Last

Address: 1298 Lejano Lane
Street Address

Santa Fe, NM 87501
City State ZIP Code

Phone: (505) 982-5929 E-mail Address: dan@ofrielandlevy.com

Applicant/Agent Information (if different from owner)

Company Name: N/A

Name:
First Last

Address:
Street Address Suite/Unit #

City State ZIP Code

Phone: ( ) E-mail Address:

Correspondence Directed to: ☐ Owner ☐ Applicant ☐ Both

Agent Authorization (if applicable)

I am/We are the owner(s) and record title holder(s) of the property located at:

I/We authorize to act as my/our agent to execute this application.

Signed: Date:

Signed: Date:

Submittal Checklist (Requirements found in Section 14-3.7 SFCC 1987)

☐ *Three (3) 24"x36" copies and one (1) CD with a PDF of the preliminary plat are required. Please include the following:*

☐	Letter of Application (intent, location, acreage)	☐	Legal Lot of Record, Legal Description

Plat must illustrate the following:

☐	Vicinity Map	☐	Legal access easements and width of easements	☐	Existing and proposed utility and right-of-way easements and widths	☐	Drainage easements with bearings and distances	☐	Indicate adjacent property ownership (Owner name, plat book and page)
☐	Identify old lot lines (utilizing a dashed line)	☐	Boundary tie must be a permanent survey monument	☐	Give location and description of all monuments	☐	Define 100-year flood plain limits (if applicable) and Define slopes greater than 30% (if applicable)	☐	Signature Line & Date for SF County Treasurer in accordance with SB 406 effective April 2, 2013
☐	Define lot area, acreage	☐	Show parking lot layout (if applicable)	☐	Net leasable area calculations (non-residential only)	☐	Common and private open space	☐	Signature blocks for City Engineer and City Planner

Subdivision Approval Criteria (Section 14-3.7(C) SFCC 1987)

Resubdivisions:
Section 14-3.7(E) SFCC 1987: The land use director has the authority to review and approve or disapprove resubdivisions where the combination or recombination of portions of previously platted lots does not increase the total number of *lots* and the resulting lots comply with the approval criteria in Subsection (C) of this section:

(1) In all subdivisions, due regard shall be shown for all natural features such as vegetation, water courses, historical sites and structures, and similar community assets that, if preserved, will add attractiveness and value to the area or to Santa Fe.

(2) The planning commission shall give due regard to the opinions of public agencies and shall not approve the plat if it determines that in the best interest of the public health, safety or welfare the land is not suitable for platting and development purposes of the kind proposed. Land subject to flooding and land deemed to be topographically unsuited for building, or for other reasons uninhabitable, shall not be platted for residential occupancy, nor for other uses that may increase danger to health, safety or welfare or aggravate erosion or flood hazard. Such land shall be set aside within the plat for uses that will not be endangered by periodic or occasional inundation or produce unsatisfactory living conditions. See also Section 14-5.9 (Ecological Resource Protection Overlay District) and Section 14-8.3 (Flood Regulations).

(3) All plats shall comply with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements and Dedication Standards).

(4) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat.

(5) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with applicable provisions of other chapters of the Santa Fe City Code unless an exception is approved pursuant to the procedures provided in that chapter prior to approval of the plat.

Signature

I hereby certify that the documents submitted for review and consideration by the City of Santa Fe have been prepared to meet the minimum standards outlined in the Land Development Code, Chapter 14 SFCC 1987. Failure to meet these standards may result in the rejection of my application. I also certify that I have met with the City's Current Planning staff in a preapplication meeting to verify that the attached proposal is in compliance with the City's zoning and development plan requirements.

Signature: [signature] Date: 1/30/2019

QUITCLAIM DEED

CHRIS CLANCY, and his wife, SEREN CLANCY, grant to DANIEL J. O'FRIEL and MONIKA STEINHOFF O'FRIEL, Individually and as Co-Trustees of the O'Friel Family Trust the following described real estate situate in Santa Fe County to wit:

> Beginning at the far northeast point of this Plat, continuing for a distance of 40.05' along Lejano Lane in a westerly direction N.70°40'21"E to a ½" REBAR stake, and then proceeding in a southerly direction 104.36' along N21°34'39"E to a Plastic Cap, and then proceeding in a southwesterly direction 300.56' along N44°32'18"E to a ½" REBAR post, and then a southerly direction and then suddenly 44.31" along N21°10'10 "E to the far southwesterly corner of the property marked by a ½" REBAR, and then 245.12' along N77°27'45"W to a BRASS TAG IN CONCRETE at the far southerly corner of the property, and then 205.34' N08°38'39"E to the lot line adjustment marked L1, L2, L3 and L4, and then 104.38' along N08°38'39"E to the lot line adjustment marked L1, L2, L3 and L4, and then 104.36" along N06°38'39"E to the point of beginning, being Lot 15 Valle Lejano Unit V containing 1.231 Ac. ±.
>
> Recorded August 9, 2017, in Book 823, Page 8-9 of the records of Santa Fe County. Attached here as Exhibit "A".

More particularly described in Exhibit "A" the Lot Line Adjustment as "L1-L2-L3-L4".

WITNESS our hands and seal this day of September, 2017.

Chris Clancy

Seren Clancy

SUBSCRIBED, SWORN AND ACKNOWLEDGED TO before me, a Notary Public, on this 12 day of September, 2017, by Chris Clancy and Seren Clancy, persons known to me.

My Commission Expires

OFFICIAL SEAL
Kathryn M. Martinez
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires:

Notary Public

COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

QUITCLAIM DEED
PAGES: 3

I Hereby Certify That This Instrument Was Filed for Record On The 27TH Day Of September, 2017 at 03:22:44 PM And Was Duly Recorded as Instrument # 1837386 Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Geraldine Salazar
Deputy _____ County Clerk, Santa Fe, NM



EXHIBIT
A
LOT LINE ADJUSTMENT

VALLE LEJANO, UNIT 4
1.609 Ac.±
ADDRESS: 1300 LEJANO LANE
NEW LOT LINES
STUDIO
N/F DELIA O. MARQUEZ
LOT 2, MEDRANO SUBDIVISION
PLAT BOOK 14, PAGE 54
UPC 1-055-099-485-088
1-055-099-475-076
1-055-099-471-069
COYOTE FENCE
Gravel
L1
L2
L3
L4
140.3'
205.34'
(S08°52'28"W, 423.99')
((S08°52'28"W, 423.99'))
OLD LOT LINE
WALL
RESIDENCE
1/2" REBAR
LS 13605
Plastic Cap
300.56'
WELL HOUSE
LOT 15
LLE LEJANO, UNIT V
1.231 Ac.±
RESS: 1298 LEJANO LANE

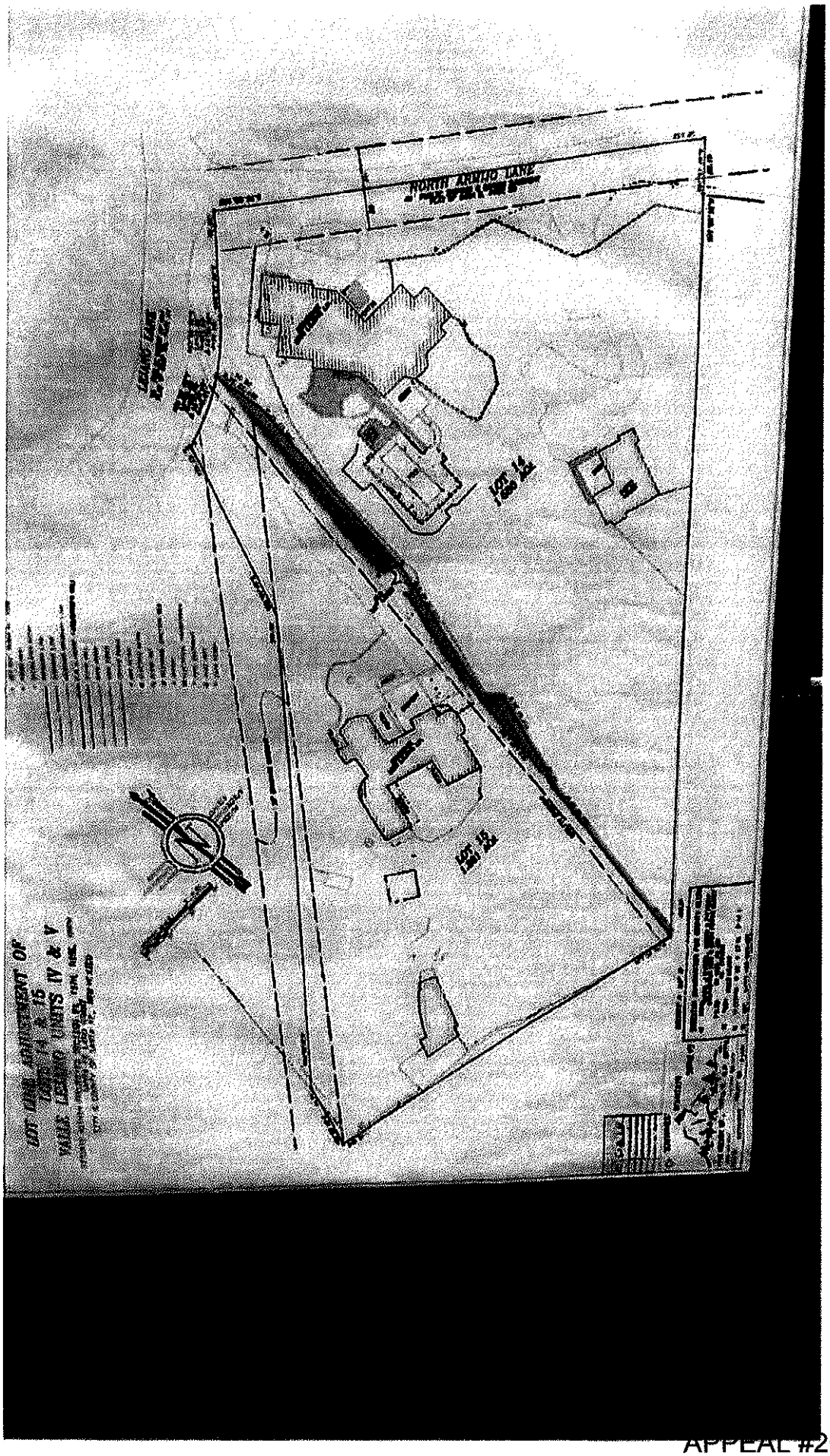


Photo of Plan Sheet

(no electronic pdf submitted with application)

Yellow line
existing property line

Orange line
proposed lot line

Green
area between existing & proposed lot lines

LOT LINE ADJUSTMENT OF LOTS 14 & 15 VALLE LEJANO UNITS IV & V

SITUATE WITHIN PROJECTED SECTION 28, T.17N., R.10E., N.M.P.M.
SANTA FE LAND GRANT
CITY & COUNTY OF SANTA FE, NEW MEXICO

PURPOSE:
THIS PLAT AMENDS AND ADJUST THE ADJOINING LOT LINES OF LOTS 14 & 15

NOTES

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OWNER'S CONSENT

OWNER

Daniel Leitner

REVIEWED BY
CITY OF SANTA FE

SURVEYOR'S NOTES

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SURVEYOR'S CERTIFICATE

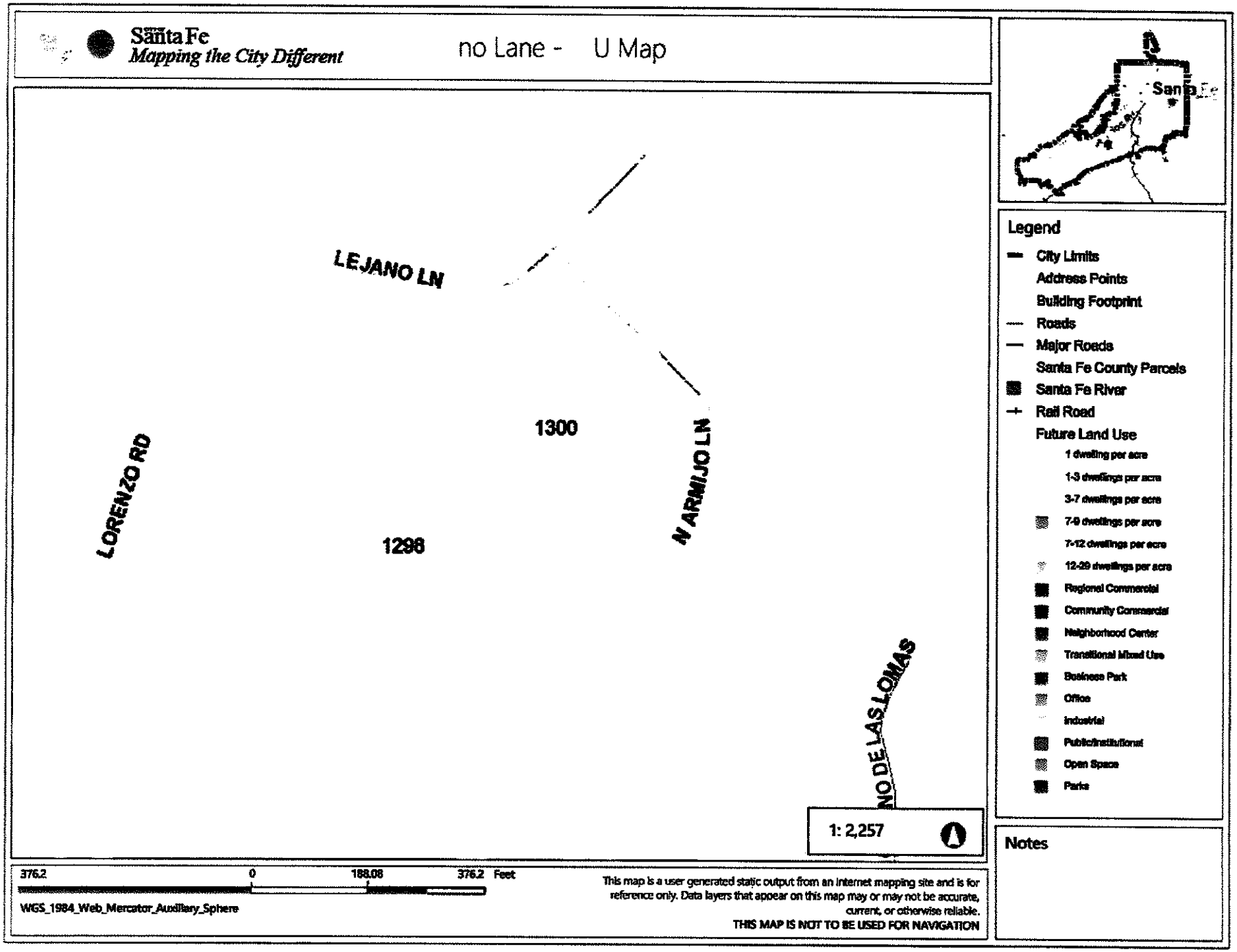
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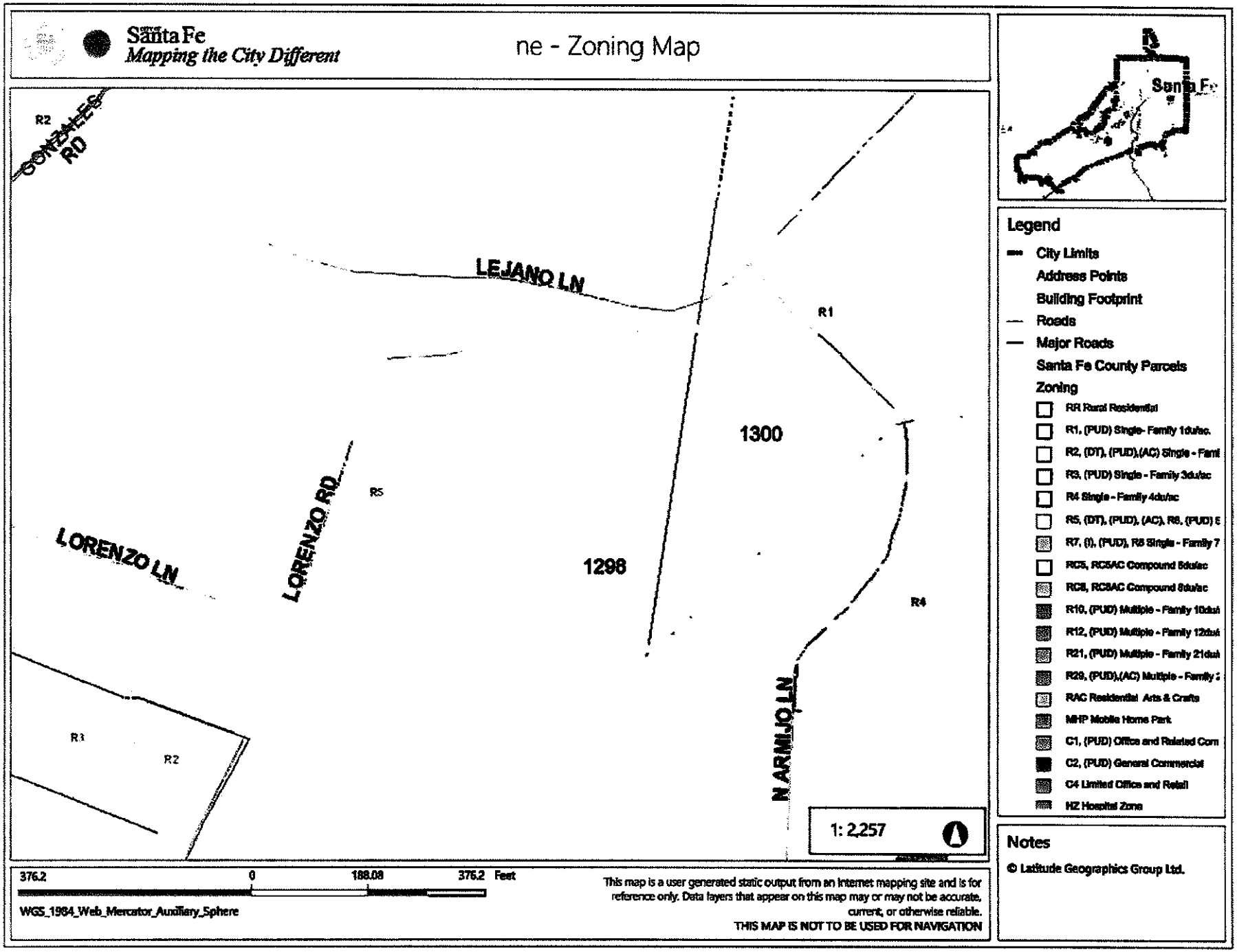
City of Santa Fe, New Mexico

Exhibit B

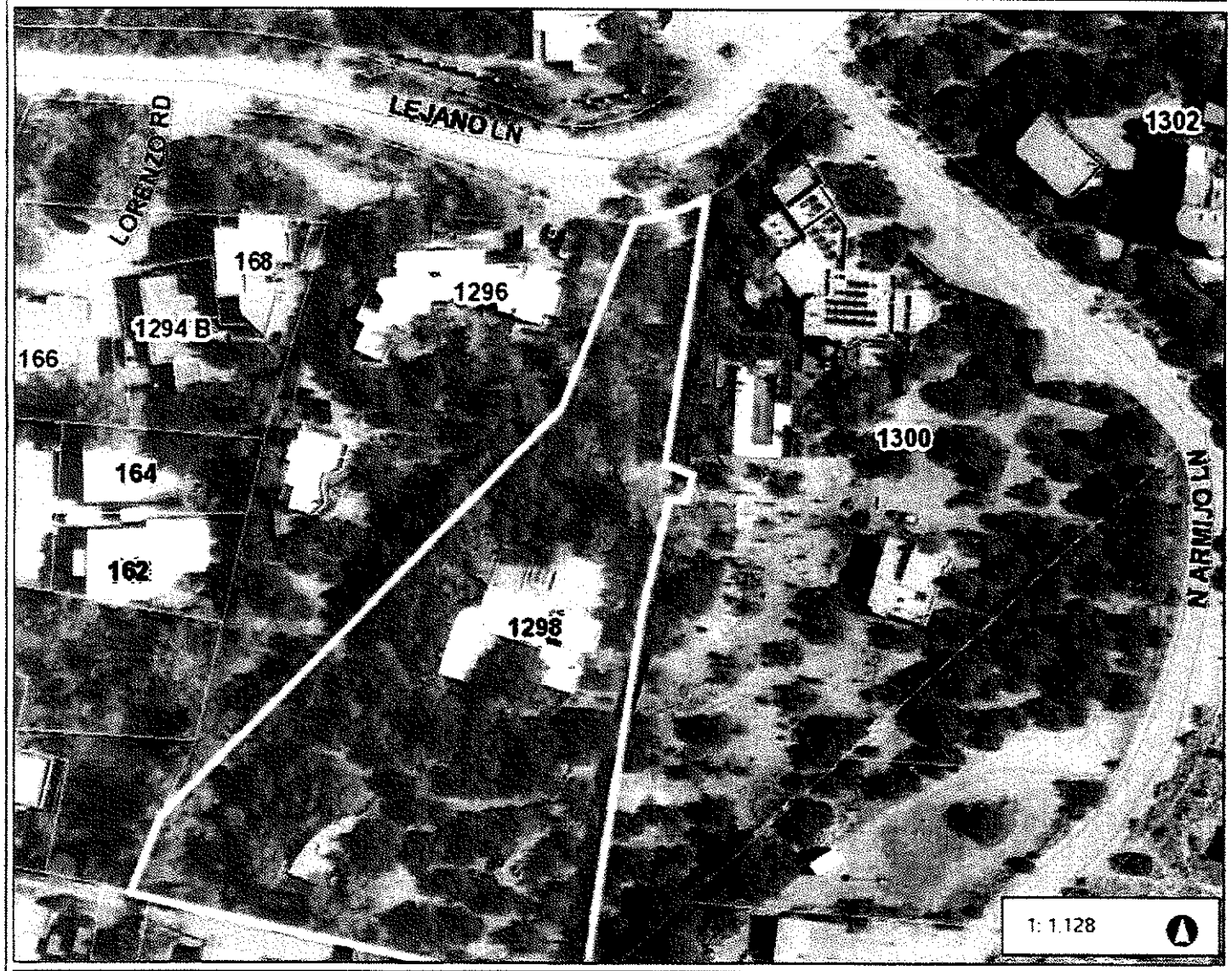
Maps

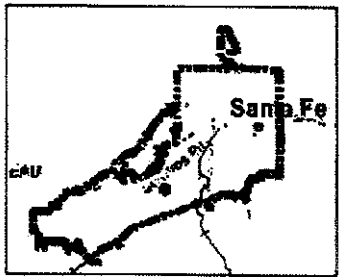
1. Future Land Use Map
2. Current Zoning Map
3. Aerial Photo


Santa Fe
Mapping the City Different
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LORENZO RD
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1298
N ARMIJO LN
NO DE LAS LOMAS
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Legend
City Limits
Address Points
Building Footprint
Roads
Major Roads
Santa Fe County Parcels
Santa Fe River
Rail Road
Future Land Use
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1-3 dwellings per acre
3-7 dwellings per acre
7-9 dwellings per acre
7-12 dwellings per acre
12-29 dwellings per acre
Regional Commercial
Community Commercial
Neighborhood Center
Transitional Mixed Use
Business Park
Office
Industrial
Public/Institutional
Open Space
Parks
Notes
376.2 0 188.08 376.2 Feet
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This map is a user generated static output from an internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION


Santa Fe
Mapping the City Different
ne - Zoning Map
R2
GONZALES RD
LEJANO LN
R1
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LORENZO RD
R5
LORENZO LN
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R4
N ARMIJO LN
R3
R2
1: 2,257
Legend
City Limits
Address Points
Building Footprint
Roads
Major Roads
Santa Fe County Parcels
Zoning
RR Rural Residential
R1, (PUD) Single- Family 1du/ac.
R2, (DT), (PUD),(AC) Single - Fami
R3, (PUD) Single - Family 3du/ac
R4 Single - Family 4du/ac
R5, (DT), (PUD), (AC), R6, (PUD) S
R7, (I), (PUD), R8 Single - Family 7
RC5, RC5AC Compound 5du/ac
RC8, RC8AC Compound 8du/ac
R10, (PUD) Multiple - Family 10du/
R12, (PUD) Multiple - Family 12du/
R21, (PUD) Multiple - Family 21du/
R29, (PUD),(AC) Multiple - Family
RAC Residential Arts & Crafts
MHP Mobile Home Park
C1, (PUD) Office and Related Com
C2, (PUD) General Commercial
C4 Limited Office and Retail
HZ Hospital Zone
Notes
© Latitude Geographics Group Ltd.
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WGS_1984_Web_Mercator_Auxiliary_Sphere
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
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Santa Fe
Mapping the City Different





Legend

- City Limits
- Address Points
- Roads
- Major Roads
- Santa Fe County Parcels
- Santa Fe River
- Rail Road

Notes

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WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

ATTACHMENT B
to Verified Appeal of Daniel O'Friel

Describe the harm that would result to you from the action appealed from:

The fence line which separates my property from my neighbors' land creates a boundary that my neighbors and I have agreed upon, and without the benefit of the lot line adjustment, I cannot effect the agreement to make the fence line and the boundary line the same. As such, I will be deprived of the benefit of my agreement with my neighbor and the benefit of a proper application of the ordinances which permit lot line adjustments as an administrative matter.

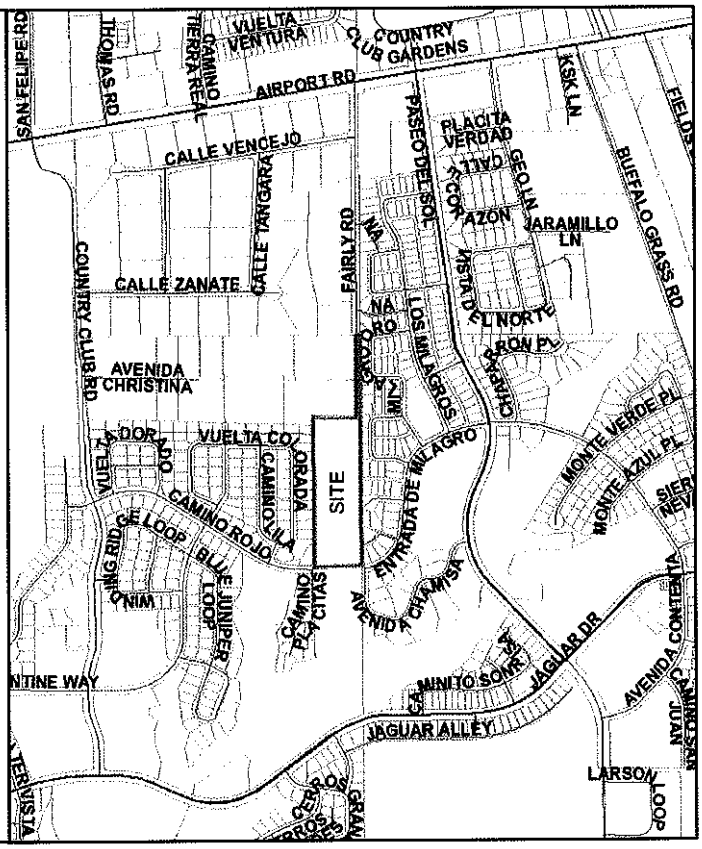
Please detail the basis for Appeal here (be specific):

The basis of this appeal rests on the fact that Staff has misinterpreted and misapplied the applicable ordinances in denying my application for a lot line. Staff has denied the application for a lot line adjustment because it apparently interprets or treats my application for a lot line adjustment as a "request to change the zoning classification on a portion of a legal lot of record . . . ." (*See* Staff Memo p. 3 of 4). I have not requested a zone change and a lot line adjustment will not effect a zone change. The rules of interpretation regarding boundary lines for zoning districts will mean that this zoning district on my property, as modified by the lot line adjustment, will be interpreted as following the lot lines. (*See* SFCC 14-4.1(E)(2).("district boundary indicated as approximately following platted lot lines shall be construed as following those lot lines."). The R-5 and R-1 zoning boundary which on the official zoning map is "indicated as approximately following platted lot lines" and is thus construed as following those lot lines. The previously approved lot line adjustment along the same boundary did not have the effect of changing the zoning, but rather falls within this rule of interpretation that my entire lot, as modified, is zoned R-5. Likewise the zoning boundary will be similarly construed under this rule of interpretation and will not effect a zoning change.

Land Use Department
Planning Commission Staff Report

Case No:	2020-2640
Hearing Date:	November 19, 2020
Applicant:	JenkinsGavin, INC. Agent for Homewise, Inc
Request:	Preliminary Subdivision Plat for a 56 lot subdivision
Location:	4193 A and B Fairly Rd & 6450 Camino Rojo
Case Mgr.:	Dan Esquibel
Zoning:	R-5 (Residential- five dwelling units per acre).
Overlay:	Suburban Archaeological Review District
Pre-app. Mtg.:	May 14, 2020
ENN Mtg.:	August 19, 2020 and September 16, 2020

Proposal:
Requests approval of a preliminary subdivision plat for 56 single family lots.



Case #2020-2640. 4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision. JenkinsGavin, Inc., Agent, for Homewise, Inc., Owner, requests approval of a preliminary subdivision plat for fifty-six single family lots. The properties are approximately 10.05 acres and are zoned R-5 (Residential- five dwelling units per acre).

I. RECOMMENDATION

The Land Use Department recommends **APPROVAL** of the preliminary subdivision plat subject to the recommended conditions of approval below and all technical corrections in Exhibit A.

Two motions will be required in this case, in the following order:

- Approve or deny the preliminary subdivision plat for Case #2020-2640, subject to conditions of approval and technical corrections recommended by staff; and
- Approve or deny the Findings of Facts and Conclusions of Law for Case #2020-2640 as shown in Exhibit B.

II. CONDITIONS OF APPROVAL

Table 1 Conditions

#	Condition of Approval	Dept. or Division	To be completed by:
1	An approved Water Plan from the Water Division will be required. Water Plan comments will be submitted to the design engineer.	Water Division	Prior to Final Subdivision Plat
2	Accessibility feature design within the Site shall comply with NMDOT Pedestrian Access Route Details (Serial 608) or demonstrate compliance with applicable ADA regulations by other means as provided in the permitted Construction Documents.	Land Use – ADA Site Review	Prior to Construction Permit Submittal
3	All Sidewalks and Walkways along the accessible path of travel shall be firm, stable and slip resistant and shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Provide detectable warning surfaces at curb ramps and transitions to the vehicular way along the accessible paths of travel as applicable.		
4	Sidewalks and Walkways along the accessible path of travel shall not exceed 1:20 (5%) running slopes without handrail(s) in accordance with current ANSI 117.1 standards 505 & 2015 IBC 1014. Cross slopes shall not exceed 2% staff recommends 1% to 1.5% as a target cross slope. Walkways shall provide 5' diameter turning space every 200 linear feet of run. It is preferred to have marked crossings where the accessible route crosses vehicular traffic lanes. Ramps within the site shall have 1:12 (8.33%) running slope and 1:48 (2%) cross slope max. With a max. rise of 30" and with 5' clear length landings where straight. Changes in direction shall comply with 304.3. Landing typical slope is 1.5% and shall not exceed 2% running and cross slope.		
5	Curb Ramps shall have the required 5' clear length landing and turning space. Changes in direction shall comply with 304.3. Curb Ramps within the site shall have a target running slope of 7% or less typical and 1:12 (8.33%) maximum. Curb Ramp landing target slope is 1.5% and shall not exceed 2% running and cross slope maximum in any direction.		
6	Sidewalks and Walkways along the accessible path of		

	travel route shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Provide detectable warning surfaces at curb ramps and transitions to the vehicular way along the accessible paths of travel as applicable.		
7	All walk surfaces along the accessible path of travel shall be firm, stable and slip resistant. Sidewalks and Walkways along the accessible path of travel shall not exceed 1:20 (5%) running slopes without handrail(s) in accordance with current ANSI 117.1 standards 505 & 2015 IBC 1014. Cross slopes shall not exceed 2% staff recommends 1% to 1.5% as a target cross slope. Walkways shall provide 5' diameter turning space every 200 linear feet of run. It is preferred to have marked crossings where the accessible route crosses vehicular traffic lanes.		
8	"HC", "Handicapped", "Handicap", or similar terms are erroneous, derogatory descriptors for ADA accessible or Disabled accessible features. Please remove or modify any references in the plans accordingly.		
9	At time of construction, the Contractor shall ensure ADA compliance for construction of required ADA accessible features and appurtenances, as detailed in, and in addition to, the approved construction permit documents. Improvements shall comply with ICC ANSI A117.1-2009 Chapters 1-5 and Chapter 7, 2015 New Mexico Accessible Parking Checklist, MUTCD, NMDOJ, and NM State Statute and Code as applicable.		

Should the Commission approve the preliminary subdivision plat, a final subdivision plat application will be submitted for future approval by the Commission.

III. EXECUTIVE SUMMARY

The request is for a 56 residential lot subdivision located at 4193 A & B Fairly Rd and 6450 Camino Rojo. The subject site currently comprises 2 lots totaling approximately 10.04 acres, zoned R-5 (Residential - five dwelling units per acre), and located within the Suburban Archaeological Review District. The proposed subdivision lots will range in size from approximately 0.06 acres (2,586 square feet) to 0.20 acres (8,608 square feet), establishing a proposed density of 5.5 dwelling units per acre. The Applicant is proposing to develop 22 lots in compliance with the Santa Fe Homes Program allowing for a 15% increase in density. Archaeological clearance was approved by the City Archaeological Review Committee on August 6, 2020.

The Applicant has complied with Subsections 14-3.1(E) "Pre-application", 14-3.1(H) "Notice Requirements" for Public Hearings, and 14-3.1(F) "Early Neighborhood Notification.

The City's Development Review Team ("DRT") reviewed this development application for compliance with applicable City Code sections (reference Exhibit C).

Staff's analysis identifies the Application has satisfied preliminary subdivision plat approval criteria according to Subsection 14-3.7(B)(3) "Preliminary Plat," subject to conditions of approval and technical correction listed in Exhibit A.

IV. BACKGROUND

The proposed site is vacant and is surrounded by residential uses, additional vacant land, and open space. The property was annexed into the City of Santa Fe by Ordinance 2009-01 "SPPaZO (Subdivision, Platting, Planning and Zoning Ordinance)". These properties were shown under Area 5 of Phase 2 of the Annexation maps. It was assigned a zoning density of R-5 (five residential units per acre) through the Annexation agreement.

It is part of the Southwest Santa Fe Community Area Master Plan Western Neighborhood Plan Area which was adopted in 2007 as an Amendment to the General Plan. This is considered the more urbanized areas of the Southwest Santa Fe Community Area Master Plan and has a range of uses from residential to commercial.

The properties were formally one Tract of land known as the "T.J. Henry Tract" until it was split into two Lots through "A Lot Split Plat Prepared for Marie M. Oglevie Revocable Trust." in 2010. There is a 44' wide public right-of-way easement on Lot 2 (6450 Camino Rojo) which connects Camino Rojo to Entrada de Milagro (which are both 44' wide public rights-of-ways).

V. PROJECT ANALYSIS

A. Adjacent Properties

Table 2 Adjacent Uses

Direction	Address	Zoning	Use
North	(No address)	R-3 (Residential – one dwelling unit per acre)	Vacant Land
West	Colonia Prisma Subdivision: • 6451 Camino Rojo • 4203, 4205, 4209, 4213, 4215, 4217, 4219, 4221, 4223, 4225, 4227, 4229, and 4231 Vuelta Colorada Calle Cielo Subdivision: • 4510, 4518, 4534, 4531, 4523 Camino Placitas	PRC (Planned Residential Community)	Residential
East	Monte Sol Subdivision: • 4025, 4029, 4033, 4037, 4041 Milagro Oro	PRC (Planned Residential Community)	Residential

	• 6337, 6341, 6345, 6349, 6353, 6357 Milagro Luna • 6337 and 6336 Milagro Estrella Chamisa Estates Subdivision: • 6381, 6397, 6396, 6345, 6340 Avenida Chamisa		
South	(No address)	R-3 (Residential –three dwelling units per acre)	Tierra Contenta Dedicated Open Space.

B. Traffic

There are four proposed points of access into the proposed subdivision: Fairly Road, Camino Rojo, Camino Chamisa, and Entrada de Milagro. Fairly Road is a 50' wide public right-of-way extending to the subject property from Airport Road. GIS measurements identify driving widths vary from 19 to 30 feet. Camino Rojo and Entrada de Milagro are both 44' wide public rights-of-way with 24' driving surfaces, and Camino Chamisa is a 36' wide right-of-way with a 20' driving surface.

The Traffic Impact Study (TIS) summary stated the that *"The development will be accessed via the existing intersections of Entrada de Milagro / Paseo Del Sol, Camino Rojo / Country Club Rd., and Airport Rd. / Fairly Rd. Both intersections as well as Airport Rd. / Fairly Rd. are unsignalized intersections controlled by two-way stop signs."*

The Traffic Study analyzed the following intersections:

- Airport Rd./Paseo del Sol
- Airport Rd./Fairly Rd.
- Airport Rd./Country Club Dr.
- Entrada de Milagro/Paseo del Sol
- Camino Rojo/Country Club Dr.

The TIS concluded that each intersection operates at a Level of Service B, eliminating the need for upgrades.

The TIS summary concluded that *"the proposed development does not have a significant adverse impact to the adjacent transportation system and the minimal impact to the transportation system can be mitigated"* by the following recommendation:

> *"Subdivision intersections and access shall be designed and constructed to preserve adequate sight distances as required by the City of Santa Fe Traffic Engineer."*

The City Traffic Engineer position is vacant at present and therefore MPO staff reviewed the project TIS

and concluded that "both the assumptions used around the traffic count COVID numbers and the results of the TIS are satisfactory for the City of Santa Fe".

C. Utilities

Extensions for wet and dry utilities into the Subdivision will be placed underground and within the subdivision streets.

1. **Water**

   Proposed water plan states:

   The project will connect to the City Water via an 8" looped system. The annual water budget for the 56-lots is 8.48 afy. Water offset in the amount of 5.69 afy are proposed. Water offsets are not required for the 22 affordable lots.

   The Water Division requires an *"approved Water Plan from the Water Division...Water Plan comments will be submitted to the design engineer"*. Water Division comments can be reviewed in Exhibit C.

2. **Sewer**

   The Application states that *a "[n]ew 8-inch gravity sewer line will be constructed within the Project roadways."* The proposed sewer lines will connect to an existing manhole west of Camino Rojo and east in Entrada de Milagro.

   Technical corrections to the drawings are requested by the Sewer Division and listed in Exhibit A and C:

3. **Dry Utilities**

   Dry utilities will extend into the subdivision at multiple locations at Fairly Road, Camino Rojo and Entrada de Milagro. Dry utilities will be placed in 7.5' easements adjacent the roads within the subdivision.

D. Fire

The Applicant is proposing four new fire hydrants: two adjacent to Fairly Road, one at the end of Tradition Place and one at the end of Festival Place. One existing fire hydrant exists at the entrance at Camino Rojo.

The Fire Division provided technical corrections to be implemented at the time of new constructions or remodel (reference Exhibits A and C).

E. Terrain Management and Landscape

The property has an overall change in grade of 25-feet, running north to south. There is a steep escarpment at the south end of the site that will be designated as open space. Detention ponds are placed throughout the subdivision. Storm drains will direct storm sewer to ponding areas and Arroyo de Los Chamisos.

Landscaping will be planted along the roadways, in detention ponds and in open space areas, as specified in Section 14-8.4.

Common open space is required for lots less than 4000 square feet. Applicant is proposing approximately 124,312 square feet (approximately 2.85 acres) of open space. Proposed open space amenities include a shade structure, seating, trash receptacles and pet stations.

The City Technical Review Division required Technical Corrections for both Terrain Management and Landscaping plans. The plan corrections are required prior to recording the plat and at the time of construction (reference Exhibit A and C).

F. Archaeological

The property is located within the Suburban Archaeological Review District. Archaeological clearance has been granted for this subdivision on August 6, 2020 (reference Exhibit C).

VI. PRELIMINARY SUBDIVISION PLAT

Section 14-3.7 governs the authority, procedures, and restrictions for the division of land. Subsection 14-3.7(B)(3)(d) states that "*The planning commission shall review the preliminary plat and other materials submitted for conformity to this article, consider the land use director report and recommendations and require any changes deemed advisable and the kind and extent of improvements to be made by the subdivider*".

Approval Criteria (§ 14-3.7(C)(1))

Criterion 1: In all subdivisions, due regard shall be shown for all natural features such as vegetation, water courses, historical sites and *structures*, and similar community assets that, if preserved, will add attractiveness and value to the area or to Santa Fe.	**Criterion Met:** (Yes/No/Conditional) **YES**
An Archaeological Clearance has been issued for the property by the city (reference Exhibit C). The DRT has reviewed the Application with due regard for vegetation, watercourses, historic sites, structures, and similar community assets in the area, including a trail connection and has not required any variances or provided feedback that this criteria has not been met.	

Criterion 2: The planning commission shall give due regard to the opinions of public agencies and shall not approve the *plat* if it determines that in the best interest of the public health, safety or welfare the land is not suitable for *platting* and *development* purposes of the kind proposed. Land subject to *flooding* and land deemed to be topographically unsuited for building, or for other reasons uninhabitable, shall not be *platted* for *residential* occupancy, nor for other uses that may increase danger to health, safety or welfare or aggravate *erosion* or *flood* hazard. Such land shall be set aside within the *plat* for uses that will not be endangered by periodic or occasional inundation or produce unsatisfactory living conditions. See also Section 14-5.9 (Ecological Resource Protection Overlay District) and Section 14-8.3 (Flood Regulations).	**Criterion Met:** (Yes/No/Conditional) **YES**
The proposed preliminary platted lots of the subdivision do not lie within a 100-year flood zone. The Applicants proposed design has been reviewed by the DRT in conjunction with the City Code. The findings of the DRT Review, identify that the proposed development would not endanger health, safety or welfare aggravate erosion or flood hazard and is suitable to be platted.	
Criterion 3: All *plats* shall comply with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements and Dedication Standards).	**Criterion Met:** (Yes/No/Conditional) **YES**
The proposed preliminary plat identified the location of existing and proposed roadway improvements and wet and dry utilities, as is required for the preliminary plat. However, the Application for the final plat is required to comply with relevant conditions of approval and technical corrections for the preliminary plat as part of the final plat review that will further satisfy this approval criteria. The proposed preliminary subdivision plat complies with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements, and Dedication Standards).	
Criterion 4: A plat shall not be approved that creates nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat.	**Criterion Met:** (Yes/No/Conditional) **YES**
There are no existing nonconformities. No variances are required or have been requested for this subdivision. Approval of the proposed subdivision would not create nonconformities under current city regulations.	
Criterion 5: A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with applicable provisions of other chapters of the Santa Fe City Code unless an exception is approved pursuant to the procedures provided in that chapter prior to approval of the plat.	**Criterion Met:** (Yes/No/Conditional) **YES**
No existing non-conformities exist on the subject property.	

VII. EARLY NEIGHBORHOOD NOTIFICATION (ENN)

The Applicant conducted a virtual ENN via GoTo Meeting on August 19, 2020 and September 16, 2020. The Applicant and Staff were in attendance along with many interested area participants. The Applicant

presented the proposed preliminary subdivision to all attendees, followed by a questions and answers.

General concerns raised at the meeting included the following:
August 19, 2020:

- Entrada de Milagro has too much parking and people will use Avenida Chamisa instead.
- Avenida Chamisa is dangerous, and many accidents happen here.
- Trail in the arroyo will be dangerous for the existing communities.
- What is this project going to do to my property value?
- How is pollution during construction handled?
- There are many types of animals that will be displaced.
- Entrada de Milagro and Avenida Chamisa are both dangerous.
- Where are the 1 and 2 story homes located?
- Concern about traffic on Camino Rojo.

September 16, 2020:

- Construction dust.
- The speed on Entrada de Milagro is not moderate. It is dangerous.
- There is already ready traffic flow issues, with South Meadows. What is going to be done about the increase of vehicles impacting that intersection?
- Avenida Chamisa Findings are being under stated for our experiences & concerns.
- Entrada de Milagro and Avenida Chamisa and even Camino De Rojo need Traffic Calming.
- Household vehicles exceed the 2 per car per house minimum. Counts are based on two per house.
- Construction traffic Avenida Chamisa
- The traffic study you showed us is NOT what our experience has been pre-COVID-19.re up to 4 cars per house!
- From the new development to Airport road improvements are necessary to alleviate much traffic.
- A 4-way stop is needed on Camino Rojo and Valentine Way.
- Street trees create problems for trash trucks and delivery trucks.

VIII. EXPIRATION

According to Subsection14-3.19(B)(2) "Approval of a preliminary subdivision plat ... shall expire three years after final action approving it unless the final plat ... is approved." Should the Commission approve the preliminary subdivision plat and adopt the recommended Findings of Fact at this hearing, the expiration date would be November 19, 2023.

IX. ATTACHMENTS:

EXHIBIT A: Technical Corrections

EXHIBIT B: Findings of Facts and Conclusions of Law

EXHIBIT C: Development Review Team Memoranda

1. Archaeological Clearance – Daniel Shwab
2. Water Engineering Division Memorandum, Brian Snyder P.E.
3. Wastewater Division Memorandum, Stan Holland, P.E.
4. Fire Marshal, Geronimo Griego
5. Technical Review Memorandum, Dee Beingessner P.E.
6. Technical Review Landscaping Memorandum,

EXHIBIT D: Maps and Photos

1. Zoning Map
2. Aerial Photo

EXHIBIT E: Early Neighborhood Notification Meeting (ENN)

1. ENN Notes
2. ENN Guidelines

EXHIBIT F: Applicant Materials

1. Application Submittals

APPROVED BY:

Title	**Name**	**Initials**
Land Use Department Director	Elias Isaacson, AICP	*ESI*
Land Use Current Planning Planner Manager	Noah Berke, AICP	*NLB*
Land Use Department Case Manager	Dan Esquibel	DAE

November 19, 2020
Planning Commission
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Final Subdivision Plat

EXHIBIT A

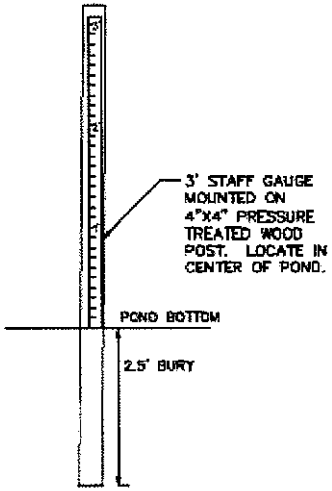
Technical Corrections

EXHIBIT A
Technical Corrections
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision

	Technical Corrections of approval	Department	To be completed by:
1	Dry Utilities shall be located outside of the 25 foot sewer and water easement.	**Wastewater Management**	Prior to Sign Off for Final Subdivision Plan.
2	All sewer pipe shall be identified as SDR 26 PVC		
3	Show water line crossings and clearance shall be shown in the sewer P&P		
4	All sewer lines shall be a minimum of 6 feet deep to avoid conflict with the public water lines when there is a crossing of one over the other.		
5	Fire apparatus access shall have an unobstructed width of not less than 20 feet exclusive of shoulders and an unobstructed vertical clearance of not less than 20 feet exclusive of shoulders and an unobstructed vertical clearance of not less than 13 feet 6 inches (IFC 2009 Section 503.2.1)	**Fire Division**	Prior to any new construction or remodel.
6	Fire apparatus access shall have an unobstructed width of not less than 20 feet exclusive of shoulders and an unobstructed vertical clearance of not less than 13 feet 6 inches (IFC 2009 Section 503.2.1)		
7	Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4)		
8	Shall comply with table D103.4 Requirements for Dead-End Fire Apparatus Access Roads.		
9	Fire Department shall have 150 feet distance to any portion of the building on any new construction. (IFC 2009 section 503.1.1)		
10	507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6. 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building.		
11	Shall have water supply that meets fire flow requirements as per IFC (Appendix B)		

12	Shall comply with Section D102.1 Access and Loading (75,000 lbs).		
13	Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4)		
14	Shall comply with IFC 2009 Section D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.		
15	Shall comply with IFC 2009 Section D103.5 Fire apparatus access road gates.		
16	Shall comply with IFC 2009, Appendix D, Aerial Fire Apparatus Access Roads.		
17	Shall meet the IFC code requirements 2009 edition or the most current edition the governing body has adopted at the time of permitting.		
18	Include a note on the plat regarding whether on-lot ponding is required and also state how much impervious surface is allowed on each lot without requiring on-lot ponding.	**Technical Review Division**	Prior to recordation
19	Include discussion on drainage report of number of ponds provided, pond volume required and pond volumes provided.		
20	Provide HOA documents for review. Documents must include the attached Drainage Facilities Maintenance note		
21	The North arrow is incorrect on numerous pages. Once that is fixed, all pages should have the drawing oriented so north is either up or to the right. Also correct the north arrow in the terrain management report drawings		
22	There is no grading and drainage sheet for the southern end of the project. It appears that sheet 8-2 is missing from the plans. There is no pond information shown for the southern pond except for a small portion of the pond on the storm sewer plan and profile. Provide sheet 8-2.		

23	This Development shall comply with the most current requirements of the American with Disabilities Act (ADA). Place a note on the Plan to reflect this condition	**Technical Review Division**	Building Permit Process
24	Other comments will be provided on these plans at the time of the building permit and changes may be required during permitting process		
25	In accordance with Article 14-8.4(F)(2)(e), "storm water detention ponds and retention ponds shall be planted… with a minimum of one tree and three shrubs per 500 SF of required ponding area."		
26	Include a pond measurement post in all ponds to determine depth of water and sediment for maintenance. See attached example		
	DRAINAGE FACILITIES MAINTENANCE NOTE ALL DRAINAGE FACILITIES SHALL BE MAINTAINED BY ALL PROPERTY OWNERS. INSPECTIONS SHALL BE CONDUCTED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO OR OTHER QUALIFIED PERSON. INSPECTIONS SHALL BE CONDUCTED ON THE DRAINAGE FACILITIES IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. MAINTENANCE OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED AND DOCUMENTED BY THE ENGINEER AND THE OWNER. THE OWNER SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES. WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE ENGINEER'S RECOMMENDATIONS, AND SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING: A. FLUSH ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND VEGETATION THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURE(S). B. REMOVE SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH,		

	AND IF NECESSARY, RESEED WITH NATIVE GRASSES AND INSTALL FILTER FABRIC AND 3 TO 4 INCH COBBLE AS DIRECTED BY THE ENGINEER. C. INSPECT FOR SEDIMENTATION IN ALL SWALES, DITCHES, DRAINGE PONDS AND REMOVE AND STABILIZE AS NECESSARY. D. INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS, CUT AND FILL SLOPES, AND REPAIR OR STABILIZE ACCORDINGLY. E. INSPECT THE STRUCTURAL INTEGRITY OF DRAINAGE PONDS, SLOPES, RIP-RAP, GABIONS, DROP INLETS, CULVERTS, ENERGY DISSIPATORS, AND RETAINING WALLS, ROCK PLATING, EROSION CONTROL MATS OR BLANKETS, AND REPAIR OR STABILIZE ACCORDINGLY.  POST & STAFF GAUGE NTS Example for pond measurement post		
27	COSF Code 3.19.1 requires landscape irrigation plans for large projects not to exceed 20 scale, 1 inch equals 20 feet.	Land Use/Terrain Management-Landscape/Irrigation Review	Prior to permit review

28	Provide a complete set of installation details, notes and specifications for the irrigation system. Show on the detail drawings the installation of all assemblies without any questions for size or type of materials to use for said irrigation system.	Land Use/Terrain Management-Landscape/Irrigation Review	Prior to permit review
29	Install backflow preventer enclosure on a 4" concrete pad with GFI receptacle at proper height with heat tape per COSF Irrigation Standards. Provide detail on plan.		
30	No stop & waste valves or King Drains permitted per COSF Irrigation Design Standards. Manual drain to be sch. 80 Ball Valve in a six inch round valve box.		
31	Siberian elm (Ulmus pumila) trees are classified by the New Mexico department of agriculture as a class C noxious weeds. City staff respectfully requests the removal of trees and the addition of fourteen trees to the replacement list of significant trees.		
32	Caliper measurements for clump form and multi-stem trees shall follow The American Standard for Nursery Stock: "The number of required trunks, caliper specified is one-half (1/2) of the caliper of up to the three largest required trunks."		
33	Please show light standards and fire hydrants on the landscape plan. Street trees shall be located at least fifteen (15) feet from fire hydrants and light standards		
34	14-8.4(F)(2)(b) all required shrubs shall be five gallon minimum except as noted on the City of Santa Fe Recommended Plant List;		
35	Provide open space trees and shrubs.		
36	Filter fabric under all Gravel Mulches and rip rap rock. Mulch to be two inches below top of concrete walkway or curb and noted on landscape plan.		

37	Provide irrigation to all revegetation native seed areas. (Per COSF Code 14-8.2 D(5)(c) Add a heat treated compost material one inch (1") to all seeded areas. Test soil: Contractor shall have seeded areas soil tested for nutrient deficiencies and amend soil according to testing lab recommendations. Seeded areas shall be graded two inches (2") below top of concrete curbs and sidewalks.		
38	Stormwater Ponding: A water level measuring device with zero set at finish grade located at the center of each pond is required. Storm water storage ponds are not to exceed 1 foot in depth without a verification that storm water will drain within 24 hrs. A percolation test is required for each pond. A security fence around ponds three feet and deeper with a maintenance gate is required.		
39	Provide information on connection to existing sidewalks/pedestrian access to Airport Rd.	**Land Use – ADA**	Prior to recording
40	Indicate ADA parking spaces provided. (There is an ADA parking signage detail on sheet 10-1.)		
41	Provide final subdivision documents for review graphically demonstrating compliance with all applicable ADA regulations. Prior to recording		

November 19, 2020
Planning Commission
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Final Subdivision Plat

EXHIBIT B

Findings of Fact and Conclusions of Law

City of Santa Fe
Planning Commission
Findings of Fact and Conclusions of Law

Case #2020 2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Plat (Miraflores Preliminary Subdivision)
Owner/Applicant's Name - Homewise, Inc.
Agent's Name- Jennifer Jenkins, JenkinsGavin, Inc.

THIS MATTER came before the Planning Commission (Commission) for hearing on November 19, 2020 upon the application (Application) of Jennifer Jenkins, JenkinsGavin, Inc., agent for Homewise, Inc., (Applicant).

The Applicant seeks the Commission's approval of a preliminary subdivision plat for fifty-six (56) single-family lots on approximately 10.05 acres (Project). The property is located at 4193 A and B Fairly Road and 6450 Camino Rojo, and is zoned R-5 (Residential- five dwelling units per acre).

After conducting a public hearing and having heard from staff and all interested persons, the Commission hereby FINDS, as follows:

FINDINGS OF FACT

1. At the hearing, the Commission received reports from staff, testimony and evidence from the Applicant, and testimony offered by any interested members of the public.
2. The Santa Fe City Code (SFCC) Section 14-3.1 sets out certain procedures to be followed on the Application, including, without limitation, (a) a pre-application conference [SFCC § 14-3.1(E)]; (b) an Early Neighborhood Notification (ENN) meeting [SFCC § 14-3.1(F)(2)(a)(v)]; and (c) compliance with notice and public hearing requirements [SFCC § 14-3.1(H)-(I)].
3. A pre-application conference was held on May 14, 2020 in accordance with SFCC Section 14-3.1(E).
4. Pursuant to SFCC Section 14-3.1(H)(1), notice of the ENN meeting was properly given.
5. Pursuant to SFCC Section 14-3.1(F), the Applicant conducted an ENN meeting. The Applicant conducted one ENN on August 2, 2020 and a second ENN on September 16, 2019. The ENN meetings were conducted virtually via GoTo Meeting. The ENN meeting was attended by a representative of the Applicant and two members of City staff. Both meeting were well attended by the public.
6. Pursuant to SFCC Sections 14-2.3(C)(1) and 14-3.7(B)(3)(d), the Commission has the authority to review and approve or disapprove preliminary subdivision plats.
7. City staff reviewed the Application and related materials and information submitted by the Applicant for conformity with applicable SFCC requirements and provided the Commission with a written report of its findings (Staff Report), which evaluates the factors relevant to the Application.
8. Staff recommended that the Commission approve the preliminary subdivision plat, subject to certain conditions and technical corrections set out in the Staff Report and exhibits.

9. SFCC Section 14-3.7(B) establishes certain procedures for preliminary subdivision plat approval including, without limitation, a public hearing by the Commission, review of the preliminary plat, and a decision based on the criteria set out in SFCC Section 14-3.7(C).
10. SFCC Section 14-3.7(B)(3)(b) requires the Applicant to submit a preliminary plat prepared by a professional land surveyor, together with improvement plans and other specified supplementary material that demonstrates conformance with the standards of SFCC Section 14-9 (Submittal Requirements).
11. SFCC Section 14-3.7(C) sets out approval criteria and requires the Commission to make complete findings of fact sufficient to show that these criteria have been met before approving a preliminary subdivision.
12. Pursuant to SFCC Section 14-3.7(C)(1), the Commission finds that due regard has been shown for all natural features such as vegetation, water courses, historical sites and structures, and similar community assets. An archaeological survey was performed on the subject property in 2006 when it was located within Santa Fe County. The City has subsequently approved the survey and issued an Archaeological Clearance Permit for the property. The Project shows due regard for natural features and enhancement of community assets through the following measures:
    - Approximately 2.85 acres of open space will be provided, offering opportunities for recreation.
13. Pursuant to SFCC Section 14-3.7(C)(2), the Commission finds that the land is suitable for platting and development purposes of the kind proposed. No portion of the proposed subdivision falls within the 100-year flood zone.
14. Pursuant to SFCC Section 14-3.7(C)(3), the Commission finds that the plat complies with the infrastructure design, improvement, and dedication standards set forth in SFCC Section 14-9.
15. Pursuant to SFCC Section 14-3.7(C)(4)-(5), the Commission finds that the plat does not create any nonconformities or increase any existing nonconformities, and no variances or exceptions are requested or needed.

CONCLUSIONS OF LAW

Under the circumstances and given the evidence and testimony submitted during the hearing, the Commission CONCLUDES as follows:

1. Pursuant to SFCC Section 14-3.1, all procedures regarding the pre-application conference, ENN meeting, notice, and public hearing requirements have been followed.
2. The Commission has the authority to review and approve the preliminary subdivision plat subject to conditions.
3. The Applicant met the applicable Submittal Requirements.
4. The preliminary subdivision plat should be approved because all applicable code requirements and criteria for preliminary subdivision plat approval have been met.

WHEREFORE, IT IS ORDERED ON THE 19TH DAY OF NOVEMBER, 2020 BY THE PLANNING COMMISSION OF THE CITY OF SANTA FE:

Considering the foregoing findings and conclusions, the Commission approves the preliminary subdivision plat for the Project, subject to the Conditions and the technical corrections set forth in

the Staff Report and exhibits. Approval of the preliminary subdivision plat will expire on November 19, 2023, unless the plat is filed for record with the county clerk or an extension is granted under SFCC Section 14-3.19.

_____ _____

John B Hiatt
Chairperson

Date:

FILED:

_____ _____

Yolanda Y. Vigil
City Clerk

Date:

APPROVED AS TO FORM:

_____ _____

Sally A. Paez
Assistant City Attorney

Date:

November 19, 2020
Planning Commission
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Final Subdivision Plat

EXHIBIT C

Development Review Team Memoranda

City of Santa Fe

LAND USE DEPARTMENT | HISTORIC PRESERVATION DIVISION

ARCHAEOLOGICAL REVIEW COMMITTEE CLEARANCE PERMIT

Case Number: 2020-002407-ARC Date of Application: July 1, 2020

NMCRIS Number: _____ Date of ARC Hearing: August 6, 2020

Archaeological Review District: ____Historic Downtown ____Rivers and Trails x Suburban

Project Title: "Archaeological Survey of 4139B Fairly Road and 6450 Camino Rojo, Santa Fe County, New Mexico"

Site Address/Location: 4139 B Fairly Road and 6450 Camino Rojo

Archaeologist: Ron Winters Email: rondigs@comcast.net Phone: 505-670-6952

Mailing Address: 109 Calle Paula, Santa Fe, NM 87505

Applicant: Homewise Email: _____ Phone: _____

Mailing Address: 1301 Siler Road, Blgd D, Santa Fe, NM 87507

Submittal Type:

- x Reconnaissance Report
- ____ Monitoring Plan
- ____ Monitoring Report
- ____ Archaeologist Certification
- ____ Treatment Plan
- ____ Preliminary Treatment Report
- ____ Final Treatment Report
- ____ Other: _____

ARC Action: ____Approved x Approved with Conditions *(see below)*

Conditions minor corrections

Archaeological Review Committee Chairperson

August 12, 2020
Date

Submitted to SHPO: Yes No Date Submitted _____

THIS IS NOT A CONSTRUCTION PERMIT.

DO NOT BEGIN DEMOLITION, GRADING, INFRASTRUCTURE, or CONSTRUCTION WITHOUT A PERMIT.
SUBMIT THIS FORM ALONG WITH YOUR BUILDING PERMIT APPLICATION, AND RETAIN A COPY AT THE JOB SITE.

Development Review Team

Comment Form

Date: 09/28/2020

Staff person: Brian Snyder

Dept/Div: Public Utilities/Water

Case: **Case #2020-2640. 4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision.**

Case Mgr: Dan Esquibel

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:
1 An approved Water Plan from the Water Division will be required. Water Plan comments will be submitted to the design engineer.	Prior to final plat approval.
2	
3	
4	

Technical Corrections*:	Must be completed by:
1	
2	
3	
4	

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project:

1. [list any additional items]

Explanation of Conditions or Corrections (if needed):

Development Review Team

Comment Form

Date: October 19, 2020

Staff person: Stan Holland, Engineer

Dept/Div: Public Utilities/Wastewater

Case: **Case #2020-2640 4193 A&B Fairly Road & 6450 Camino Rojo Preliminary Subdivision.**

Case Mgr: Dan Esquibel, Case Manager

The subject properties are accessible to the City public sewer system. Accessible is defined as within 200 feet of a public sewer line.

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:
1. None at this time	Prior to Sign Off for Final Subdivision Plan.

Technical Corrections*:	Must be completed by:
1. Dry Utilities shall be located outside of the 25 foot sewer and water easement. 2. All sewer pipe shall be identified as SDR 26 PVC 3. Show water line crossings and clearance shall be shown in the sewer P&P 4. All sewer lines shall be a minimum of 6 feet deep to avoid conflict with the public water lines when there is a crossing of one over the other.	Prior to Sign Off for Final Subdivision Plan.

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project:

1. [None]

Development Review Team

Comment Form

Date: 10/02/2020

Staff person: Geronimo Griego

Dept/Div: Fire Prevention

Case: 2020-2640 4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision

Case Mgr: Dan Esquibel

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:
	Prior to planning commission.

Technical Corrections*:	Must be completed by:
1. Fire apparatus access shall have an unobstructed width of not less than 20 feet exclusive of shoulders and an unobstructed vertical clearance of not less than 13 feet 6 inches (IFC 2009 Section 503.2.1) 2. Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4) 3. Shall comply with table D103.4 Requirements for Dead-End Fire Apparatus Access Roads. 4. Fire Department shall have 150 feet distance to any portion of the building on any new construction. (IFC 2009 section 503.1.1) 5. 507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6. 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. 6. Shall have water supply that meets fire flow requirements as per IFC (Appendix B)	At the time of any new construction or remodel.

7. Shall comply with Section D102.1 Access and Loading (75,000 lbs). 8. Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4) 9. Shall comply with IFC 2009 Section D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade. 10. Shall comply with IFC 2009 Section D103.5 Fire apparatus access road gates. 11. Shall comply with IFC 2009, Appendix D, Aerial Fire Apparatus Access Roads. 12. Shall meet the IFC code requirements 2009 edition or the most current edition the governing body has adopted at the time of permitting.	

*Must made prior to recording and/or permit issuance

Development Review Team
Comment Form

Date: 9/30/20

Staff person: Dee Beingessner

Dept/Div: Land Use/Terrain Management

Case: **Case #2020-2640.** 4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary

Case Mgr: Dan Esquibel

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval :	Must be completed by:
1	
2	

Technical Corrections*:	Must be completed by:
1 Include a note on the plat regarding whether on-lot ponding is required and also state how much impervious surface is allowed on each lot without requiring on-lot ponding.	Prior to recordation
2 Include discussion on drainage report of number of ponds provided, pond volume required and pond volumes provided.	Prior to recordation
3 Provide HOA documents for review. Documents must include the attached Drainage Facilities Maintenance note	Prior to recordation
4. The North arrow is incorrect on numerous pages. Once that is fixed, all pages should have the drawing oriented so north is either up or to the right. Also correct the north arrow in the terrain management report drawings	Prior to recordation
5 There is no grading and drainage sheet for the southern end of the project. It appears that sheet 8-2 is missing from the plans. There is no pond information shown for the southern pond except for a small portion of the pond on the storm sewer plan and profile. Provide sheet 8-2.	Prior to recordation
6 This Development shall comply with the most current requirements of the American with Disabilities Act (ADA). Place a note on the Plan to reflect this condition	Building Permit Process

7 Other comments will be provided on these plans at the time of the building permit and changes may be required during permitting process	Building Permit Process
8 In accordance with Article 14-8.4(F)(2)(e), "storm water detention ponds and retention ponds shall be planted... with a minimum of one tree and three shrubs per 500 SF of required ponding area."	Building Permit Process
9 Include a pond measurement post in all ponds to determine depth of water and sediment for maintenance. See attached example	Building Permit Process

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project:

1. [list any additional items]

Explanation of Conditions or Corrections (if needed):

DRAINAGE FACILITIES MAINTENANCE NOTE

ALL DRAINAGE FACILITIES SHALL BE MAINTAINED BY ALL PROPERTY OWNERS.

INSPECTIONS SHALL BE CONDUCTED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO OR OTHER QUALIFIED PERSON. INSPECTIONS SHALL BE CONDUCTED ON THE DRAINAGE FACILITIES IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. MAINTENANCE OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED AND DOCUMENTED BY THE ENGINEER AND THE OWNER. THE OWNER SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.

WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE ENGINEER'S RECOMMENDATIONS, AND SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING:

A. FLUSH ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND VEGETATION THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURE(S).

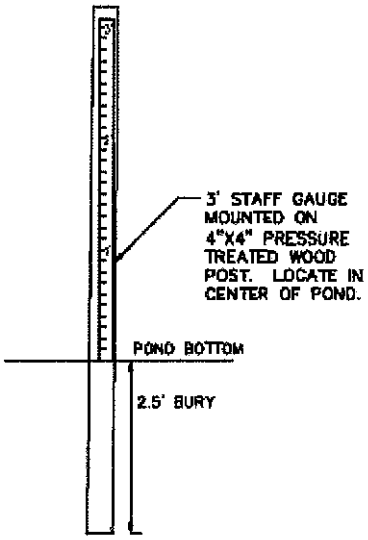
B. REMOVE SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH, AND IF NECESSARY, RESEED WITH NATIVE GRASSES AND INSTALL FILTER FABRIC AND 3 TO 4 INCH COBBLE AS DIRECTED BY THE ENGINEER.

C. INSPECT FOR SEDIMENTATION IN ALL SWALES, DITCHES, DRAINGE PONDS AND REMOVE AND STABILIZE AS NECESSARY.

D. INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS, CUT AND FILL SLOPES, AND REPAIR OR STABILIZE ACCORDINGLY.

E. INSPECT THE STRUCTURAL INTEGRITY OF DRAINAGE PONDS, SLOPES, RIP-RAP, GABIONS, DROP INLETS, CULVERTS, ENERGY DISSIPATORS, AND RETAINING WALLS, ROCK PLATING, EROSION CONTROL MATS OR BLANKETS, AND REPAIR OR STABILIZE ACCORDINGLY.

Example for pond measurement post



POST & STAFF GAUGE
NTS

Development Review Team

Comment Form

Date: 10/07/2020

Staff person: Lawrence Rivera

Dept. /Div.: Land Use/Terrain Management- Landscape/Irrigation Review

Case: **Case #2020-2640. 4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision**

Case Mgr.: Dan Esquibel

Review by this division/department of the September 2020 plan set has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:

Technical Corrections*:	Must be completed by:
1. COSF Code 3.19.1 requires landscape irrigation plans for large projects not to exceed 20 scale, 1 inch equals 20 feet.	Prior to permit review
2. Provide a complete set of installation details, notes and specifications for the irrigation system. Show on the detail drawings the installation of all assemblies without any questions for size or type of materials to use for said irrigation system.	
3. Install backflow preventer enclosure on a 4" concrete pad with GFI receptacle at proper height with heat tape per COSF Irrigation Standards. Provide detail on plan.	
4. No stop & waste valves or King Drains permitted per COSF Irrigation Design Standards. Manual drain to be sch. 80 Ball Valve in a six inch round valve box.	
5. Siberian elm (Ulmus pumila) trees are classified by the New Mexico department of agriculture as a class C noxious weeds. City staff respectfully requests the removal of trees and the addition of fourteen trees to the replacement list of significant trees.	
6. Caliper measurements for clump form and multi-stem trees shall follow The American Standard for Nursery Stock: "The number of required trunks, caliper specified is one-half (1/2) of the caliper of up to the three largest required trunks."	
7. Please show light standards and fire hydrants on the landscape plan. Street trees shall be located at least fifteen (15) feet from fire hydrants and light standards	
8. 14-8.4(F)(2)(b) all required shrubs shall be five gallon minimum except as noted on the City of Santa Fe Recommended Plant List;	
9. Provide open space trees and shrubs.	

10. Filter fabric under all Gravel Mulches and rip rap rock. Mulch to be two inches below top of concrete walkway or curb and noted on landscape plan.	
11. Provide irrigation to all revegetation native seed areas. (Per COSF Code 14-8.2 D(5)(c) Add a heat treated compost material one inch (1") to all seeded areas. Test soil: Contractor shall have seeded areas soil tested for nutrient deficiencies and amend soil according to testing lab recommendations. Seeded areas shall be graded two inches (2") below top of concrete curbs and sidewalks.	
12. Stormwater Ponding: A water level measuring device with zero set at finish grade located at the center of each pond is required. Storm water storage ponds are not to exceed 1 foot in depth without a verification that storm water will drain within 24 hrs. A percolation test is required for each pond. A security fence around ponds three feet and deeper with a maintenance gate is required.	

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project:

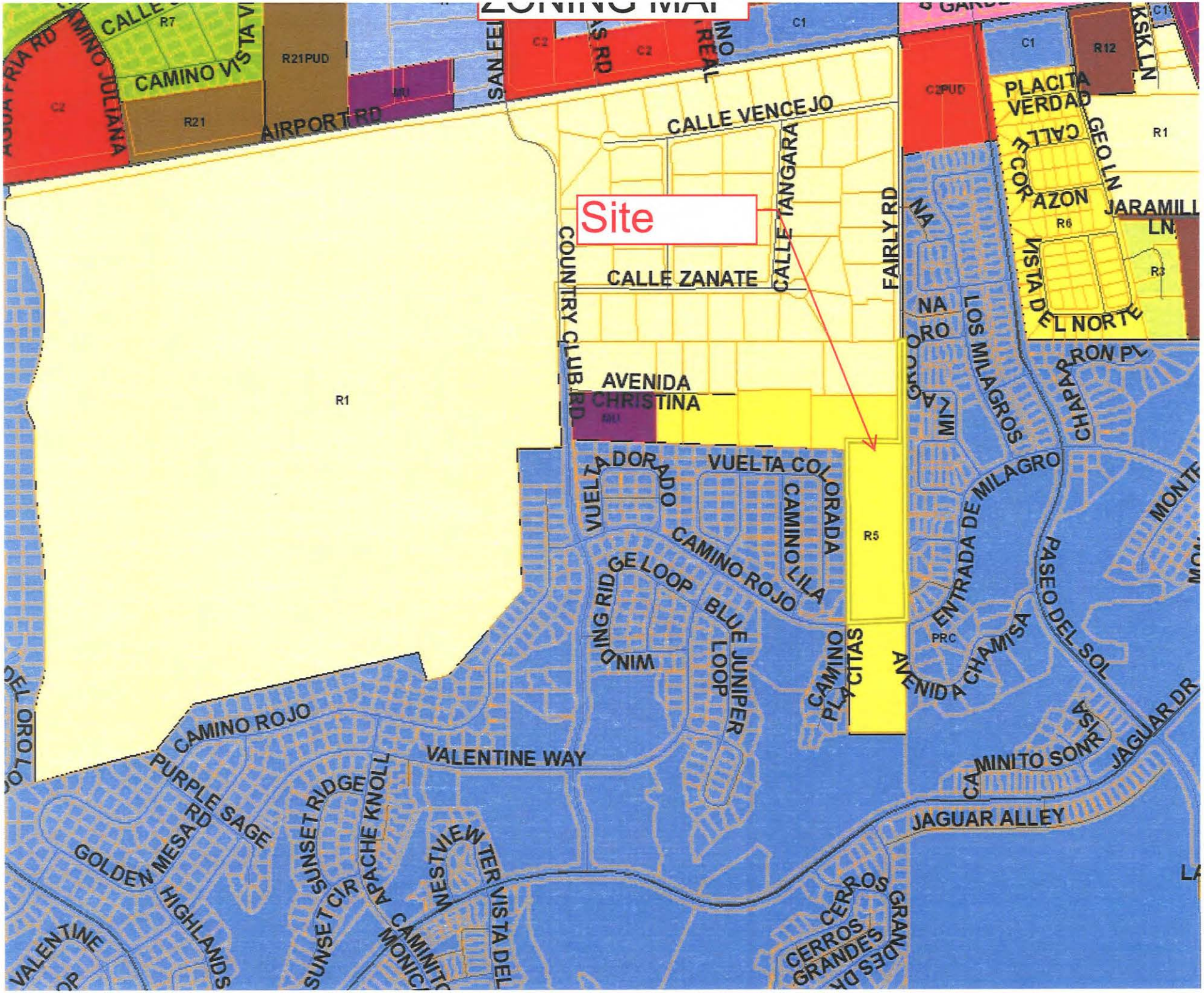
1. [list any additional items]

Explanation of Conditions or Corrections (if needed):

November 19, 2020
Planning Commission
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Final Subdivision Plat

EXHIBIT D

Maps and Photos


Site
AIRPORT RD
CALLE VENCEJO
CALLE TANGARA
CALLE ZANATE
COUNTRY CLUB RD
FAIRLY RD
AVENIDA CHRISTINA
CAMINO VISTA V
CAMINO JULIANA
R21PUD
R21
R7
R1
R5
R6
R12
C1
C2
C2PUD
VUELTA DORADO
VUELTA COLORADA
CAMINO ROJO
CAMINO LILA
BLUE JUNIPER LOOP
PLACITAS
AVENIDA CHAMISA
ENTRADA DE MILAGRO
PASEO DEL SOL
LOS MILAGROS
CHAPARRON PL
PLACITA VERDAD
CALLE GEO LN
JARAMILL LN
VISTA DEL NORTE
JAGUAR DR
JAGUAR ALLEY
CAMINITO SONRISA
VALENTINE WAY
PURPLE SAGE RD
GOLDEN MESA RD
HIGHLANDS
SUNSET CIR
SUNSET RIDGE
APACHE KNOLL
WESTVIEW TER
CERROS GRANDES


Site
AIRPORT RD
CAMINO VISTA
CAMINO JULIANA
CALLE VENCEJO
CALLE ZANATE
CALLE TANGARA
COUNTRY CLUB RD
FAIRLY RD
AVENIDA CHRISTINA
VUELTA COLORADA
CAMINO LINA
CAMINO ROJO
VALENTINE WAY
JAGUAR ALLEY
JAGUAR DR
AVENIDA CHAMISA
PASEO DEL SOL
LOS MILAGROS
ENTRADA DE MILAGRO
PURPLE SAGE RD
GOLDEN MESA RD
HIGHLANDS
SUNSET CIR
SUNSET RIDGE
CERROS GRANDES

November 19, 2020
Planning Commission
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Final Subdivision Plat

EXHIBIT E

ENN

City of Santa Fe
Land Use Department
Early Neighborhood Notification Meeting Notes

Project Name	ENN: 4193B Fairly Road and 6450 Camino Rojo
Project Location	4193B Fairly Road and 6450 Camino Rojo
Project Description	Proposed 57 lot subdivision comprising 2 existing lots located east of Fairly Road right of way and north and south of Camino Rojo. The project is located at 4193B Fairly Road and 6450 Camino Road.
Applicant / Owner	Homewise, Inc
Agent	JenkinsGavin, Inc.
Pre-App Meeting Date	May 14, 2020
ENN Meeting Date	August 19, 2020 and September 16, 2020
ENN Meeting Location	GoTo Virtual meeting
Application Type	ENN
Land Use Staff	John Neunuebel and Dan Esquibel
Other Staff	Noah Berke
Attendance	An available

Notes/Comments:
The Applicant conducted a virtual ENN via GoTo Meeting on August 19, 2020 and September 16, 2020. The Applicant and Staff were in attendance along with many interested area participants. The Applicant presented the proposed preliminary subdivision to all attendees, followed by a questions and answers.

General concerns raised at the meeting included the following:
August 2, 2020:

- Entrada de Milagro has too much parking and people will use Avenida Chamisa instead.
- Avenida Chamisa is dangerous, and many accidents happen here.
- Trail in the arroyo will be dangerous for the existing communities.
- What is this project going to do to my property value?
- How is pollution during construction handled?
- There are many types of animals that will be displaced.
- Entrada de Milagro and Avenida Chamisa are both dangerous.
- Where are the 1 and 2 story homes located?
- Concern about traffic on Camino Rojo.

September 16, 2020

- Construction dust.
- The speed on Entrada de Milagro is not moderate. It is dangerous.
- There is already ready traffic flow issues, with South Meadows. What is going to be done about the increase of vehicles impacting that intersection?
- Avenida Chamisa Findings are being under stated for our experiences & concerns.
- Entrada de Milagro and Avenida Chamisa and even Camino De Rojo need Traffic Calming.
- Household vehicles exceed the 2 per car per house minimum. Counts are based on two per house.
- Construction traffic Avenida Chamisa
- The traffic study you showed us is NOT what our experience has been pre-COVID-19.re up to 4 cars per house!
- From the new development to Airport road improvements are necessary to alleviate much traffic.
- A 4-way stop is needed on Camino Rojo and Valentine Way.
- Street trees create problems for trash trucks and delivery trucks.

Submit by Email | Print Form

Early Neighborhood Notification (ENN) Guidelines

Section 14-3.1(F)(5) SFCC 1987, as Amended

Please address each of the criteria below. Each criterion is based on the Early Neighborhood Notification (ENN) guidelines for meetings, and can be found in Section 14-3.1(F)(5) SFCC 1987, as amended, of the Santa Fe City Code. A short narrative should address each criterion (if applicable) in order to facilitate discussion of the project at the ENN meeting. These guidelines should be submitted with the application for an ENN meeting to enable staff enough time to distribute to the interested parties. For additional detail about each criterion, consult the Land Development Code.

(a) EFFECT ON CHARACTER AND APPEARANCE OF THE SURROUNDING NEIGHBORHOODS *For example: number of stories, average setbacks, mass and scale, architectural style, landscaping, lighting, access to public places, open spaces and trails.(Ord. No. 2008-29 § 3)*

The proposed 57-lot subdivision ("The Project") will be comprised of single family residences, a pattern that is consistent with the character of the surrounding neighborhoods. The residences will comply with City code requirements with respect to architectural standards, landscaping, lighting, etc.

(b) EFFECT ON PROTECTION OF THE PHYSICAL ENVIRONMENT *For example: trees, open space, rivers, arroyos, floodplains, rock outcroppings, escarpments, trash generation, fire risk, hazardous materials, easements, etc.*

All terrain management regulations will be met. Street trees will be provided along the road frontages. Open space preservation and new trail connections will be provided for the residents. There will not be any development on steep slopes.

(c) IMPACTS ON ANY PREHISTORIC, HISTORIC, ARCHAEOLOGICAL OR CULTURAL SITES OR STRUCTURES, INCLUDING ACEQUIAS AND THE HISTORIC DOWNTOWN *For example: the project's compatibility with historic or cultural sites located on the property where the project is proposed.*

The property is located in Suburban Archaeological District. As the project comprises more than ten acres, an archaeological clearance permit will be required prior to Final Plat approval. An archaeological survey has been conducted in accordance with this requirement.

(d) RELATIONSHIP TO EXISTING DENSITY AND LAND USE WITHIN THE SURROUNDING AREA AND WITH LAND USES AND DENSITIES PROPOSED BY THE CITY GENERAL PLAN *For example: how are existing City Code requirements for annexation and rezoning, the Historic Districts, and the General Plan and other policies being met.*

As described above, the proposed project is consistent with surrounding uses and densities. The subject property is zoned R-5. The subject property's General Plan Future Land Use designation is 1-3 dwellings per acre.

(e) EFFECTS UPON PARKING, TRAFFIC PATTERNS, CONGESTION, PEDESTRIAN SAFETY, IMPACTS OF THE PROJECT ON THE FLOW OF PEDESTRIAN OR VEHICULAR TRAFFIC AND PROVISION OF ACCESS FOR TEH DISABLED, CHILDREN, LOW-INCOME AND ELDERLY TO SERVICES *For example: increased access to public transportation, alternate transportation modes; traffic mitigation, cumulative traffic impacts, pedestrian access to destinations and new or improved pedestrian trails.*

The project design will include pedestrian connections to the existing sidewalks. In addition, connectivity will be provided to existing roadways. Furthermore, a traffic study will be submitted with the subdivision application. On street parking and trail connections will be implemented to ensure adequate levels of service. No negative impact on access to services is anticipated.

(f) IMPACT ON THE ECONOMIC BASE OF SANTA FE *For example: availability of jobs to Santa Fe residents; market impacts on local businesses; and how the project supports economic development efforts to improve living standards of neighborhoods and their businesses.*

Initially, the Project will create jobs in the construction and real estate industries. After the project is built, residents will support local businesses.

(g) EFFECT ON THE AVAILABILITY OF AFFORDABLE HOUSING AND AVAILABILITY OF HOUSING CHOICES FOR ALL SANTA FE RESIDENTS *For example: creation, retention or improvement of affordable housing; how the project contributes to serving different ages, incomes and family sizes; the creation or retention of affordable business space. (Ord. No. 2005-30(A) § 4)*

Twenty percent of the lots will be developed with affordable homes in compliance with the Santa Fe Homes Program requirements.

(h) EFFECT UPON PUBLIC SERVICES SUCH AS FIRE, POLICE PROTECTION, SCHOOL SERVICES AND OTHER PUBLIC SERVICES OR INFRASTRUCTURE ELEMENTS SUCH AS WATER, POWER, SEWER, COMMUNICATIONS, BUS SYSTEMS, COMMUTER OR OTHER SERVICES OR FACILITIES *For example: whether or how the project maximizes the efficient use or improvement of existing infrastructure; and whether the project will contribute to the improvement of existing public infrastructure and services.*

The Project will be served with existing City sewer and water lines. The Project will be served by existing fire and police protection.

(i) IMPACTS UPON WATER SUPPLY, AVAILABILITY AND CONSERVATION METHODS *For example: conservation and mitigation measures; efficient use of distribution lines and resources; effect of construction or use of the project on water quality and supplies.*

As stated above, the Project will connect to existing City water service. The Project will comply with the City's water offset ordinance, thereby offsetting any increased demand on the water system, as well as with applicable City regulations governing landscaping and water conservation.

(j) EFFECT ON THE OPPORTUNITIES FOR COMMUNITY INTEGRATION AND SOCIAL BALANCE THROUGH MIXED LAND USE, PEDESTRIAN ORIENTED DESIGN, AND LINKAGES AMONG NEIGHBORHOODS AND RECREATIONAL ACTIVITY AND EMPLOYMENT CENTERS *For example: how the project improves opportunities for community integration and balance through mixed land uses, neighborhood centers and/or pedestrian-oriented design.*

The Project improves opportunities for community integration and balance by incorporating a pedestrian oriented design, and linkages among neighborhoods.

(k) EFFECT UPON SANTA FE'S URBAN FORM *For example: how are policies of the existing City General Plan being met? Does the project promote a compact urban form through appropriate infill development? The project's effect on intra-city travel; and between employment and residential centers.*

The Project is consistent with a compact urban form as an infill development at densities that conform with neighboring developments.

ADDITIONAL COMMENTS (Optional)

November 19, 2020
Planning Commission
Case #2020-2640
4193 A and B Fairly Rd & 6450 Camino Rojo Preliminary Subdivision Final Subdivision Plat

EXHIBIT F

Applicant Materials

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT

September 21, 2020

Dan Esquibel, Senior Planner
City of Santa Fe Current Planning Division
200 Lincoln Ave.
Santa Fe, NM 87501

RE: Miraflores Preliminary Subdivision Plat Application
4193 B Fairly Rd. & 6450 Camino Rojo

Dear Dan:

This letter is respectfully submitted on behalf of Homewise, Inc. in application for Preliminary Subdivision Plat approval for a 56-lot single-family subdivision, for consideration by the Planning Commission at their meeting of November 5, 2020.

Project Summary

The subject property comprises two vacant parcels located at 4193-B Fairly Road and 6450 Camino Rojo totaling ±10.05 acres, and is zoned R-5 (5 dwelling units per acre). The proposed subdivision ("the Project") comprises 56 single family residential lots, ranging in size from 2,586 s.f. to 9,864 s.f. The project shall consist of a combination of single- and two-story homes. Eleven of the lots (20%) will be developed with affordable homes in compliance with the Santa Fe Homes Program ("SFHP"), and an additional eleven of the lots (20%) are being developed as Low Priced Dwelling Units ("LPDUs") for a total of 40% (22) affordable housing as part of the Project. No variances are requested as part of this application.

The Project shall follow SFCC Table 14-7.2-1, Table of Dimensional Standards, with the applicable residential dimensional standards for R-5 development as follows:

- Maximum height shall be 24 feet for the residential homes with the required stepbacks for two-story structures.
- Lot Size: Per 14-7.2(C) the minimum lot area may be reduced to a minimum of 2,000 square feet if common open space is provided equal to the sum of lot area reductions within the subdivision. There are six lots with less than 4,000 s.f. for a total square footage reduction of 16,490 square feet. The common, landscaped open space located on the gently sloping area south of Lots 47 through Lot 52 equals ±19,200 square feet, satisfying this requirement.
- The Project shall comply with the requisite R-5 minimum setbacks as follows:

  Street: A 20-foot setback is provided for all lots to accommodate the garage setback requirement. This also satisfies the requisite 10-foot utility easement.

Side: 5 feet from property line.
Rear: 15 feet from property line.

Subdivision Approval Criteria

Our responses to the Subdivision Approval Criteria are outlined below.

(1) In all subdivisions, due regard shall be shown for all natural features such as vegetation, water courses, historical sites and structures, and similar community assets that, if preserved, will add attractiveness and value to the area or to Santa Fe.

An archaeological survey was performed on the subject property in May 2020. The City has subsequently approved the survey and issued an Archaeological Clearance Permit for the property (see attached).

The Project shows due regard for natural features and enhancement of community assets through the preservation of open space located in the south section of the Project with an internal sidewalk and trail connection to this natural feature. In addition, significant trees will be replaced in accordance with Code requirements.

(2) The planning commission shall give due regard to the opinions of public agencies and shall not approve the plat if it determines that in the best interest of the public health, safety or welfare the land is not suitable for platting and development purposes of the kind proposed. Land subject to flooding and land deemed to be topographically unsuited for building, or for other reasons uninhabitable, shall not be platted for residential occupancy, nor for other uses that may increase danger to health, safety or welfare or aggravate erosion or flood hazard. Such land shall be set aside within the plat for uses that will not be endangered by periodic or occasional inundation or produce unsatisfactory living conditions. See also Section 14-5.9 (Ecological Resource Protection Overlay District) and Section 14-8.3 (Flood Regulations).

There is no flood plain on the property. The site's terrain is gentle and well-suited for development.

(3) All plats shall comply with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements and Dedication Standards).

The Subdivision Plat complies with the standards of Chapter 14, Article 9.

(4) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat.

The property contains no existing nonconformity. No nonconformity is being created with this Subdivision Plat.

(5) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with applicable provisions of other chapters of the Santa Fe City Code unless an exception is approved pursuant to the procedures provided in that chapter prior to approval of the plat.

Please refer to the answer to (4) above.

Access and Traffic

The Project will have three access points – Camino Rojo, Entrada de Milagro and Fairly Road. Both Camino Rojo on the west and Entrada de Milagro on the east are 44' wide public rights-of-way, and Fairly Road is a 50' wide public right-of-way to Airport Road. The 504-foot flag portion of the property extends to the north and connects to the existing Fairly Road right-of-way. There is a 20' access/utility easement in the flag and an adjacent 30' wide access/utility easement to the west that will accommodate this roadway connection.

The roadways within the development consist of three roadway sections – a standard 42' wide sub-collector without parking and three innovative street designs to address the specific conditions of the subdivision. Per 14-9.2(B)(3):

> *To better achieve the intent of this Section 14-9.2, the planning commission, or in the case of summary plats and re-subdivisions, the land use director, or in the case of city street projects, the governing body, may consider and approve innovative street designs that are not included among the street types and street sections shown or described in this Section 14-9.2 that provide adequate pedestrian and bicycle facilities, as well as necessary transit facilities.*

Due to the lot dimensions and driveway proximity, on-street parking is not feasible where lots directly access a roadway. The proposed innovative designs take advantage of road segments without driveway access and will provide 35 on-street guest parking spaces with sidewalks at the back of curb in order to better accommodate entering and exiting vehicles. The 46' innovative street design with parking on each side is located along Fairly running north-south at the northern curve. The 45' innovative street design with parking on one side occurs at the Fairly Road hammerhead section. The extension of Camino Rojo to Entrada de Milagro has varying width while providing parking on both sides of the street. Refer to the roadway sections for further details.

Per the requirements of SFCC Table 14-8.6-1: Parking and Loading Requirements, a minimum of two off-street parking spaces will be provided for each dwelling unit. Sidewalks will be constructed along both sides of the on-site roadways and will connect to the existing Tierra Contenta sidewalk network.

A Traffic Study was conducted by Terry Brown, P.E. and is submitted herewith for your review. The following intersections were analyzed:

- Airport Rd./Paseo del Sol
- Airport Rd./Fairly Rd.
- Airport Rd./Country Club Dr.
- Entrada de Milagro/Paseo del Sol
- Camino Rojo/Country Club Dr.

Each intersection operates at a Level of Service B in the Build Condition and no off-site roadway improvements are warranted. Please note that the traffic counts were adjusted to reflect normal conditions based on recent, pre-COVID Airport Road counts provided by the Public Works Department (+55% in the AM and +22% in the PM). In response to concerns expressed during our initial ENN meeting, we conducted additional analyses of Avenida Chamisa, including traffic counts, a speed study, and crash data, with the following results:

- Traffic Counts:

	ITE	**ACTUAL***
AM Peak Hour	16	20
PM Peak Hour	14	13

*Adjusted to reflect pre-COVID conditions (+55% in the AM and +22% in the PM.)

- Speed Study conducted on September 8, 2020:

< 10 mph	0%
11 – 15 mph	38%
16 – 20 mph	48%
21 – 22 mph	14%
> 22 mph	0%

- Crash Data: Per the DOT Transportation Safety Bureau, there were no reported accidents on Avenida Chamisa in 2017, 2018, or 2019. We have requested YTD 2020 data from the Santa Fe Police Department and will submit it upon receipt.

Terrain Management

The site slopes gently from north to south with a steep escarpment at the south end of the site. Stormwater will be collected in a series of detention ponds and conveyed via storm sewer to an existing drainageway that flows to the Arroyo de Los Chamisos. All applicable terrain management regulations will be met. Requisite drainage easements are created with this plat.

In addition to the detention areas, each lot will be graded with a depressed drainage swale in the front yard to address localized drainage and allow for passive water harvesting. Detention pond and open space areas will be landscaped in accordance with Code requirements. All disturbed areas will be revegetated with a native grass seed mix.

Landscaping

Street trees will be provided along the roadways within the 5' planting strip. Where the road section does not accommodate the 5' landscape area, the street trees will be placed within the lot to meet this requirement. In addition, the drainage ponds will be landscaped in accordance with Code requirements and the open space area supplemented with native vegetation. All disturbed areas will be reseeded and significant trees will be replaced.

Parks, Open Space and Trails

Per Section 14-8.15(C) parks are required for subdivisions of 167 lots or more. The Project is therefore not required to provide a designated park amenity. However, the southern open space in Tract D shall provide passive recreational open space for the residents, which will be accessed via a pedestrian path from the southern terminus of Fairly Road. The open space will have a shade structure, seating, trash receptacles and pet stations. No path or pole lights are proposed.

Connection to the extensive Tierra Contenta trail network will be achieved vis the existing sidewalk improvements along Camino Rojo and Entrada de Milagro. The steep terrain of the southern open space does not allow for a viable trail connection to the Arroyo trail.

Water and Wastewater

The Project will be served with City water and sewer. Water will be delivered via an 8" looped system connecting to the existing water mains adjacent to the property. The connection points are as follows: Fairly Road, Camino Rojo, Entrada de Milagro, and the Camino Placitas utility easement. New fire hydrants will be installed along the roadways as illustrated on the Master Utility Plan. Per the attached Water Budget, annual water use for the Project's 56 lots is 8.48 afy: Retrofit and/or conservation credits will be provided to offset this demand in the amount of 5.69 afy (inclusive of the 9.8% contingency), as offsets are not required for the 22 affordable lots.

New 8" gravity sewer lines will be constructed within the Project roadways and connect to the existing manholes to the west in Camino Rojo and to the east in Entrada de Milagro. A new manhole will be constructed at the intersection of Camino Rojo and Fairly Road. Please refer to the utility plans for comprehensive details.

Solid Waste

The proposed subdivision will be served by the City of Santa Fe Solid Waste Management Division.

Archaeology

An archaeological survey was performed on the subject property in May 2020. The City's Archaeological Review Committee has subsequently approved the survey and issued an Archaeological Clearance Permit for the property (see attached).

Santa Fe Homes Program

In accordance with the provisions of the Santa Fe Homes Program, the Project will provide 11 affordable homes (20% of the lot total), as well as an additional 11 Low Priced Dwelling Units for a total of 22 affordable homes comprising 40% of the Project. The Santa Fe Homes Program Proposal is attached for your reference.

Early Neighborhood Notification

Two virtual Early Neighborhood Notification meetings were held on August 19, 2020 and September 16, 2020. Meeting notes and chat logs are attached herein as an attachment for your reference. We have responded to concerns expressed by our neighbors as follows:

1. Modification to Fairly Road in order to support preservation of existing trees along our east boundary.
2. Reduced the number of homes fronting Avenida Chamisa from four to two.
3. Provision of useable open space for Miraflores residents.
4. Design changes to maximize on-street parking.
5. Additional traffic analysis of Avenida Chamisa.

In support of this request, the following documentation is submitted herewith for your review and consideration:

- Subdivision Application
- Letter of Owner Authorization
- Warranty Deed & Lot of Record Plat
- Utility Service Application
- Water Budget
- Santa Fe Homes Program Proposal
- Archaeological Clearance Permit
- Drainage Report
- Traffic Impact Analysis
- ENN Meeting Notes
- Subdivision Plans

Please let us know if you have any questions or need additional information. Thank you.

Sincerely,

JENKINSGAVIN, INC.

Jennifer Jenkins, Principal

Colleen Gavin, Principal

SUBDIVISION APPLICATION

Parcel Information

Project Name: **Miraflores Subdivision (Fairly Rd)**

Address: **4193 B Fairly Rd & 6450 Camino Rojo**

Property Size: **10.05 acres**

Current Use of Land: **Vacant**

Proposed Use of Land: **Residential**

Does a Rezoning application accompany this application? YES ☐ NO ☒

Are any variances required? YES ☐ NO ☒

Preapplication Conference Date: _____

Early Neighborhood Notice (ENN) meeting date: **September 16, 2020**

Zoning: **R-5**

Check One: Preliminary Plat ☒ Final Plat ☐

UPC Number: **1-048-095-246-139**

Property Owner Information

Company Name: **Homewise, Inc**

Name: _____
First *Last*

Address: **1301 Siler Rd Bldg D**
Street Address *Suite/Unit #*

Santa Fe **New Mexico 87507**
City *State* *ZIP Code*

Phone: ( ) _____ E-mail Address: _____

Applicant/Agent Information (if different from owner)

Company Name: **Jenkins Gavin, Inc**

Name: **Jennifer Jenkins**
First *Last*

Address: **130 Grant Ave., #101**
Street Address *Suite/Unit #*

Santa Fe, NM 87501
City *State* *ZIP Code*

Phone: **(505) 820-7444** E-mail Address: **jennifer@jenkinsgavin.com**

Correspondence Directed to: ☐ Owner ☒ Applicant ☐ Both

Agent Authorization (if applicable)

I am are the owner and record title holder of the property located at: _____

I authorize **See attached letters of authorization.** to act as my agent to execute this application.

Submittal Checklist (Requirements found in Section 14-3.7 SFCC 1987)

☐ *Three (3) 24"x36" plan sets and one CD containing the same information as the paper set (PDF) are required. Please include the following:*

☒	Letter of Application (intent, location, acreage)	☒	Legal Lot of Record, Legal Description	☒	Preliminary Plat or Final Plat	☒	Landscape, Parking and Lighting Plan, Signage Specifications	☒	Terrain Management Plans (as required by Section 14-8.2 SFCC 2001)
☐	Traffic Impact Analysis (if required) **N/A**	☒	Sewer and Water Plan (Profiles and details – Final Plat only)	☐	Phasing Plan (if applicable) **N/A**	☒	Archaeological Clearance (if applicable)	☐	
Subdivisions per Section 14-3.7 SFCC 1987:									

Preliminary Plat (Section 14-3.7(B)(3) SFCC 1987)
See above for submittal requirements. See also Section 14-9 Infrastructure Design, Improvement and Dedication Standards.

Final Plat (Section 14-3.7(B)(4) SFCC 1987)
The final plat shall conform substantially to the preliminary plat as approved.

Signature

I hereby certify that the documents submitted for review and consideration by the City of Santa Fe have been prepared to meet the minimum standards outlined in the Land Development Code, Chapter 14 SFCC 1987. Failure to meet these standards may result in the rejection of my application. I also certify that I have met with the City's Current Planning staff in a preapplication meeting to verify that the attached proposal is in compliance with the City's zoning and development plan requirements.

Signature: _____ Date: 9/21/20

A case manager will be assigned to your project and will notify you within 10 business days if any additional information is needed. After your application has been reviewed by City staff, you will be contacted by us regarding public notice requirements. A packet of information and instructions will be provided regarding the required mailing and sign posting. Please contact the Land Use Department staff at (505) 955-6585 with any questions.

May 20, 2020

City of Santa Fe
Land Use Department
200 Lincoln Ave
Santa Fe, NM 87501

RE: 6450 Camino Rojo
4193 B Fairly Rd

To Whom It May Concern:

This letter shall serve as authorization for JenkinsGavin, Inc. to act on our behalf with respect to the referenced properties regarding land use applications to be submitted to the City of Santa Fe.

Thank you.

Sincerely,

By: _____ 6/2/2020
Daniel Slavin Date
Homewise, Inc

ACKNOWLEDGMENT

State of New Mexico)
) ss
County of Santa Fe)

The foregoing instrument was acknowledged before me this 6 day of June, 2020 by Daniel Slavin on behalf of Homewise, Inc.

Berlinda L Delgado
Notary Public

My commission expires: _____

OFFICIAL SEAL
BERLINDA L. DELGADO
NOTARY PUBLIC - State of New Mexico
My Commission Expires 2-13-2021

WARRANTY DEED

ST & E 12271 / 69

Joe Schiel, successor Trustee of the Marie M. Oglevie Revocable Trust dated June 19, 1998, for consideration paid, grant(s) to **Homewise Inc., a New Mexico nonprofit corporation,** whose address is 1301 Siler Road Bldg D, Santa Fe, NM, 87507 the following described real estate in Santa Fe County, New Mexico:

Lots 1 & 2 as shown and delineated on that certain plat entitled "A Lot Split Plat Prepared for Marie M. Oglevie Revocable Trust of a Tract of Land Previously Surveyed as a Portion of Lots 8 & 9 of Section 12, T.16N., R.8E., and Identified as the T. J. Henry Tract...",
prepared by Scott Yager, NMLS No. 8123 filed May 19, 2010 as Document No. 1599188 and recorded in Plat Book 717 page 016, records of Santa Fe County, New Mexico.

SUBJECT TO: Restrictions, reservations and easements of record.

with warranty covenants.

WITNESS my hand and seal this 30 day of January, 2013.

Marie M. Oglevie Revocable Trust dated June 19, 1998

By: Joe Schiel, Successor Trustee

COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

WARRANTY DEED
PAGES: 1

I Hereby Certify That This Instrument Was Filed for Record On The 30TH Day Of January, A.D., 2013 at 02:33:16 PM And Was Duly Recorded as Instrument # 1695151 Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Geraldine Salazar
Deputy - PBARAJAS County Clerk, Santa Fe, NM

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

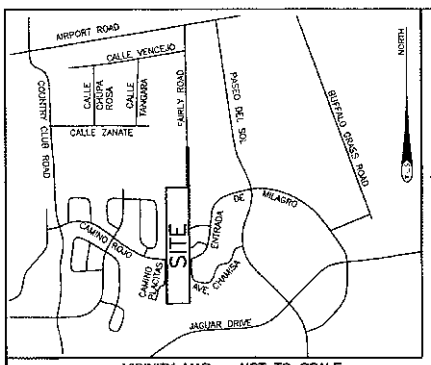
This instrument was acknowledged before me on the 30 day of January, 2013, by Joe Schiel, successor trustee of the Marie M. Oglevie Revocable Trust dated June 19, 1998.

Notary Public

My Commission Expires: _____(Seal)

OFFICIAL SEAL
Barbara Kayleen Jones
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 2/15/2015

e-Recorded 1695151 01/30/13 SFC



VICINITY MAP -- NOT TO SCALE

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:
The foregoing Lot Division of the parcel of land shown, hereon, lying and being situate in Santa Fe County, New Mexico, is made in accordance with the wishes and desires of the undersigned owner and proprietor. These tracts are subject to all easements of record, and additional easements are hereby granted to all existing utilities within the boundaries of the shown tracts.

AFFIDAVIT

The proposed Lot Division lies within the planning and platting jurisdiction of the City of Santa Fe.

JOSEPH J. SCHIEL, Power of Attorney for The Marie M. Oglevie Revocable Trust

State of New Mexico)
County of Santa Fe) ss

The foregoing instrument was subscribed, sworn to and acknowledged before me this 1st day of April, 2010.

My Commission Expires March 21, 2012

Notary Public

LEGEND

- ● SURVEY MONUMENT; Found, as noted
- ○ SURVEY MONUMENT; Set this survey; 1/2 inch Rebar, YAGER/8123 aluminum cap
- ✎ UTILITY POLE

SCALE 1"=60' FEET
60 0 60

SURVEYOR'S CERTIFICATION

I, SCOTT YAGER, a New Mexico registered Professional Surveyor, certify that I conducted and am responsible for this survey, that this survey is true and correct to the best of my knowledge and belief, and that this survey and plat meet the Minimum Standards for Surveying in New Mexico.
Date of field work: March, 2010

SCOTT YAGER, NMPLS #8123 — DATE 4/6/10

STATE OF NEW MEXICO)ss
COUNTY OF SANTA FE)

I hereby certify that this instrument was filed for record on the 15 day of April A.D., 20 10, at 1021 o'clock A M., and was duly recorded in Book 706 Page 014 of the records of Santa Fe County.

Witness my hand and Seal of Office
VALERIE ESPINOZA
County Clerk, Santa Fe County, NM

Deputy

#1599198

LOT 1
6.260 Ac±
Address: 4193 B Fairly Road

LOT 2
3.787 Ac±
ADDRESS: 6450 CAMINO Road

T.J. HENRY TRACT

BEARING BASE

UTILITY COMPANY APPROVALS

Easements are hereby granted for all existing utilities and the tracts shown are subject to all easements of record.

PNM Electric Services — 4/9/10 DATE
New Mexico Gas Company — 4.8.10 DATE
QWEST Communications Services — 4/8/10 DATE

QWEST Communications, Inc. Disclaimer
This plat has been approved for easement purposes only. The signing of this plat by QWEST Communications, Inc. does not in any way guarantee telephone service to the subject tracts.

Comcast Cable Company — 4-8-10 DATE

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:

1. New Mexico Gas Company for installation, maintenance and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.
2. Public Service Company of New Mexico for the installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment, fixtures, structures and related facilities reasonable necessary to provide electrical service.
3. Qwest for installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.
4. Cable TV for installation, maintenance and service of such lines, cable and other related equipment and facilities reasonably necessary to provide Cable TV service. Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate and maintain facilities for the purposes described above, together with free access to, from, and over said right of way and easement, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, and to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (above ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any wall be drilled or operated thereon.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM) and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

NOTES AND REFERENCE DOCUMENTS

1) THE BEARINGS FOR THIS SURVEY WERE BASED ON THE WEST BOUNDARY LINE OF THE TRACT OF LAND NOTED AS THAT OF "T.J. HENRY," AS SHOWN ON THE PLAT OF SURVEY TITLED "PLAT OF LOTS 8 AND 9, SECTION 12, T.16 N., R.8 E., NMPM&BL, SANTA FE COUNTY, NEW MEXICO," AS SAID PLAT WAS PREPARED BY WALTER G. TURLEY, NMPEALS 95, DATED FEBRUARY 11, 1949.

2) THE PERIMETER BOUNDARY PORTION OF THIS PLATTING IS INTENDED TO REPRESENT A RETRACEMENT SURVEY OF THE TRACTS SHOWN ON THE ABOVE NOTED PLAT OF SURVEY, USING FOUND AND ACCEPTED MONUMENTATION, AS NOTED.

3) THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY YAGER LAND SURVEYS OF THE TRACTS OF LAND SHOWN HEREON. ALL INFORMATION REGARDING RECORD EASEMENTS, ADJOINERS, AND OTHER DOCUMENTS THAT MIGHT AFFECT THE QUALITY OF TITLE TO THE LANDS SHOWN HEREON WAS OBTAINED FROM FILE NO. 1388445-SF-01, PREPARED BY FIRST AMERICAN TITLE COMPANY OF SANTA FE, NEW MEXICO.

4) THE LANDS SHOWN HEREON ARE SUBJECT TO ALL RESERVATIONS, RESTRICTIONS, COVENANTS AND EASEMENTS OF RECORD THAT PERTAIN.

5) PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.

6) PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH APPLICABLE CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND/OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK, OR SUBMITTAL FOR A BUILDING PERMIT APPLICATION THAT MODIFIES ANY PROVISION OF CHAPTER 14, LAND DEVELOPEMENT CODE, SFCC1987 AND SUBSEQUENT AMENDMENTS.

7) THE LANDS SHOWN HEREON LIE IN A ZONE X, AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, F.I.R.M. PANEL 35049C0193D; EFFECTIVE DATE JUNE 17, 2008.

REVIEWED BY:

CITY OF SANTA FE

CITY ENGINEER FOR LAND USE — 05/19/10 DATE

CITY PLANNER — 5.7.10 DATE

Approved by the SUMMARY COMMITTEE at their meeting of MARCH 4, 2010 as Case No. 2010-06

Chairperson — 4-27-10 Date — Secretary — 4/23/10 Date

INDEXING INFORMATION FOR COUNTY CLERK

MARIE M. OGLEVIE, Trustee of the Marie M. Oglevie Revocable Trust
RECORD DEED: Instrument No. 1107,887
SECTION: SECTION 12 TOWNSHIP: 16 NORTH, RANGE: 8 EAST N.M.P.M.
U.P.C. : 1-048-095-246-139

A LOT SPLIT PLAT
Prepared for
MARIE M. OGLEVIE REVOCABLE TRUST
of a
Tract of Land Previously Surveyed as
A Portion of Lots 8 and 9 of
Section 12, T. 16 N., R. 8 E.
And Identified as the
T. J. HENRY TRACT
Walter G. Turley Plat 49-F-7
Dated February 11, 1949
4193 B FAIRLY ROAD
SANTA FE COUNTY, NEW MEXICO

YAGER LAND SURVEYS
2307 ROSLYN ROAD
SANTA FE, NEW MEXICO
505-983-8172

DATE: 4/9/10
SCALE: 1"=60'

SHEET 1 of 1

City of Santa Fe, New Mexico
UTILITY SERVICE APPLICATION

***Fill in all highlighted fields on this application. Applicant must sign and date application.**

Check one only:

- [X] Sewer Service Technical Evaluation Request
- [X] Water Service Technical Evaluation Request
- [ ] Agreement for Metered Service (AMS)
- [ ] Agreement to Construct and Dedicate Public Improvements (ACD)
- [ ] Annexation Application Water Budget
- [ ] Water Offset Program/Water Rights Compliance Evaluation Request

WORK ORDER # _____

Applicant Name: Mira flores subdivision (Fairy Rd)

Project Address: 4193 B Fairy Rd & 4150 Camino Rojo

***Required - Attach a Plat of the Property (legal lot of record and proposed development)**

Plat Filing Information: Year 2020 Book 717 Page 94 Township, Range, Section: 16N, 8E, 12

Location: (check one only) Inside Corporate City Limits_____ Outside Corporate City Limits_____

Property Uniform Property Code: 1-048-095-254-170 1-048-095-254-094 Existing Well: Yes _____ No X

Legal Description including lot size: 56-lot subdivision; single family

Short Description of Project: 5

Construction Start Date: Spring 2024

*RESIDENTIAL PROJECT - Complete the following

1. Type of project: (i.e. Single Family Residence, Subdivision, Lot split, Apartments) Single Family Subdivision
2. Total number of lots approved on final plat/development plan: _____
3. Total number of homes existing or under construction: _____
4. Size of service requested: (5/8", 3/4", 1" or 2") _____

***Please fill in all categories below that apply for which water service is requested:**

--- COMPLETED BY APPLICANT --- Number of Lots or Units		--- COMPLETED BY STAFF --- Water Use Factors	Annual Water Demand
52	Single Family Dwelling Unit, lot size less than 6,000 sq. ft.	.15 afy per d.u.	_____
4	Single Family Dwelling Unit, lot size 6,000-10,890 sq. ft	.17 afy per d.u.	_____
_____	Single Family Dwelling Unit, lot size greater than 10,890 sq. ft.	.25 afy per d.u.	_____
_____	Mobile Home (in Mobile home park)	.17 afy per d.u.	_____
_____	Accessory Dwelling Unit	.09 afy per d.u.	_____
_____	Apartment/Condominium	.16 afy per d.u.	_____
_____	Senior Complex	.12 afy per d.u.	_____
56	**Total**	**Total Residential Water Demand**	_____ **AFY**

City of Santa Fe, New Mexico
UTILITY SERVICE APPLICATION

*COMMERCIAL PROJECT - Complete the following

Type of Project: (i.e. Office, Retail, Mixed, etc.) _____

Total gross floor area of building: _____ square feet

Total area of lot, tract or parcel: _____ acres

Automatic Fire Sprinkler System: _____ Yes _____ No

Building Construction Type: _____

Building Square Footage: _____

Site Plan Attached: _____Yes _____ No

*Please check all use categories below that are planned for the building and the gross floor areas of each use within the proposed building.

---- COMPLETED BY APPLICANT ----		---- COMPLETED BY STAFF ----	
Check Type of Use	Gross Floor Area	Water Use Factors	Annual Water Demand
Commercial			
____ Office – Non-medical	_____	(0.70 afy per 10,000 s.f.)	_____
____ Medical Office	_____	(0.72 afy per 10,000 s.f.)	_____
____ Office – City/State	_____	(0.58 afy per 10,000 s.f.)	_____
____ Research and Development Lab	_____	(1.18 afy per 10,000 s.f.)	_____
____ Manufacturing – Goods	_____	(0.21 afy per site)	_____
____ Manufacturing – Consumables	_____	(2.33 afy per site)	_____
____ Laundromat, Commercial	_____	(0.78 afy per machine)	_____
____ Laundromat, Other	_____	(0.22 afy per machine)	_____
____ Drycleaner	_____	(0.41 afy per site)	_____
____ Plant Nursery	_____	(0.56 afy per 10,000 s.f.)	_____
____ Gyms with showers	_____	(8.94 afy per site)	_____
____ Gyms without showers	_____	(0.77 afy per site)	_____
____ Salons	_____	(0.21 afy per site)	_____
____ Pet Grooming	_____	(0.52 afy per site)	_____
____ Pet Daycare	_____	(0.11 afy per site)	_____
____ Retail, Large (Individual stores or shopping areas > 75,000 sq ft)	_____	(0.45 afy per 10,000 s.f.)	_____
____ Neighborhood Center/Medium Retail (Individual stores or shopping areas 75,000-25,000 sq ft)		(0.43 afy per 10,000 s.f.)	_____
____ Retail, Small (Individual stores or shopping areas < 25,000 sq ft)	_____	(0.06 afy per site)	_____
____ Gallery	_____	(0.60 afy per site)	_____
____ Grocery Store	_____	(1.27 afy per 10,000 s.f.)	_____
____ Restaurant (full service)	_____	(0.02 afy per seat)	_____
____ Restaurant (limited service)	_____	(1.63 afy per Site)	_____
____ Gasoline Station w/ Car Wash	_____	(6.56 afy per Site)	_____

____ Gasoline Station	_____	(0.88 afy per Site)	_____
____ Car Wash (full service)	_____	(5.66 afy per Site)	_____
____ Car Wash (limited service)	_____	(0.94 afy per Wash Bay)	_____
____ Auto Repair	_____	(0.12 afy per site)	_____
____ Car Rental	_____	(0.12 afy per site)	_____
____ Car Sales	_____	(0.07 afy per 10,000 s.f.)	_____
____ Self Storage	_____	(0.13 afy per site)	_____
____ Wholesale, Warehousing	_____	(0.4 afy per 10,000 s.f.)	_____
____ Industrial, Manufacturing	_____	(applicant estimate of water use)	_____
____ Church w/ day care or school)	_____	(1.3 afy per Site)	_____
____ Church w/o day care or school)	_____	(0.6 afy per Site)	_____
____ Hotel	No. of rooms _____	(.13 afy per room)	_____
____ Motel	No. of rooms _____	(.09 afy per room)	_____

Public Services

____ School, Elementary	(0.53 afy per 100 students)	_____
____ School, Middle or Junior High	(1.68 afy per 100 students)	_____
____ School, Senior High	(2.64 afy per 100 students)	_____
____ Schools, Daycare	(0.85 afy per 100 kids)	_____
____ Places of Worship	(0.15 afy per site)	_____
With Daycare and school	(0.95 afy per site)	_____
____ Parks	(1.48 afy per acre)	_____
____ **Other** (not listed above) Please attach	(with attachment)	_____

water demand calculations and assumptions used

Total Floor Area _____

Total Commercial Water Demand _____ **AFY**

Total Residential Water Demand _____ **AFY**

TOTAL PROJECT WATER DEMAND _____ **AFY**

City of Santa Fe, New Mexico
UTILITY SERVICE APPLICATION

OWNER: _____	***Only If Applicable**
Mailing Address: _____	AGENT: Jenkins Gavin
_____	Title: Jennifer Jenkins
_____	Mailing Address: 130 Grant Ave, Ste 101 Santa Fe, NM 87501
Phone Number: _____	Phone Number: 505.820.7444
Mobile Number: _____	Mobile Number: _____

Information Provided By: Check one: Owner _____ Agent X

Signature: _____ Date: 9/21/20

Technical Evaluation to be Sent to: Check one: Owner _____ Agent X

COMMENTS: Water Budget attached

APPLICANTS, PLEASE NOTE:

- Ordinance 2008-53, prohibits new connections outside the presumptive city limits including the Agua Fria traditional historic community (AFTHC) unless specific conditions are met. Applications for service outside the presumptive city limits and AFTHC must include documentation showing these conditions are met or the application will be rejected. The documents required are shown below.
- A map of the proposed project in relation to the existing city limits and the presumptive city limits
- A detailed description of the proposed develop0ment including the type and size of proposed land uses
- The health, safety and welfare or other legal reason for the connection
- A site water budget
- Documentation from the County of Santa Fe that county water service is not available
- Documentation from the wastewater division regarding sewer availability
- A certified Santa Fe Homes Proposal as set forth in Section 14-8.11 SFCC 1987 if applicable

Miraflores Subdivision
Water Budget
September 21, 2020

TOTAL LOTS	**56**
5FHP LOTS	**11**
LPDU'S	**11**
MARKET LOTS	**34**

LOT SIZE	QUANTITY	AFY/LOT	TOTAL AFY
< 6,000 sf	52	0.15	7.8
6,000 - 10,890 sf	4	0.17	0.68
SUBTOTAL	*56*		*8.48*
LESS AFFORDABLE LOTS	*22*	*0.15*	*3.3*
MARKET LOT BUDGET			*5.18*
9.8% LINE LOSS CONTINGENCY			*0.51*
TOTAL WATER DEMAND TO BE OFFSET			***5.69***

City of Santa Fe
SANTA FE HOMES PROGRAM
P R O P O S A L
"Miraflores Subdivision"
6450 Camino Rojo & 4193-B Fairly Road
Santa Fe, New Mexico

This Santa Fe Homes Program Proposal ("SFHP Proposal") is made this ___ day of _____, 2020 by ***Homewise, Inc.*** ("SFHP Developer").

RECITALS

A. SFHP Developer is the developer of ***Miraflores Subdivision*** hereinafter referred to as the "Property".

B. SFHP Developer desires to ***subdivide and develop*** the Property.

C. It is understood that all representations made herein are material to the City and that the City will rely upon these representations in permitting or approving development of the Property.

PROPOSAL

SFHP Developer proposes to comply with the SFHP requirements as follows:

A. DEVELOPMENT REQUEST. SFHP Developer seeks ***preliminary and final subdivision plat*** approval.

B. SFHP PLAN. The project has an area of approximately **10.05** acres, is zoned **R-5,** permitting **5** dwelling units per acre. SFHP Developer proposes to build **56 total dwelling units**. Developer agrees to comply with the Santa Fe Homes Program ordinance. SFHP which requires that 20% of these homes are affordably-priced, resulting in ***11*** **affordable homes.** Developer also proposes to include an additional **11** Low Priced Dwelling Units (LPDU), pursuant to SFCC 26-2. The home sales price won't exceed what is affordable for a household earning 100% of the area median income (AMI) as depicted on the

Pricing Schedule in Exhibit 2, and the maximum income under which a homebuyer may be certified is 120% of AMI. The SFHP Plan shall include the number of bedrooms and bathrooms, the minimum square footage and the minimum household size, the income range to be served and the current SFHP Home price for each SFHP Home as set forth in Section 8.2 of the SFHP Administrative Procedures. If the development is constructed in phases, a SFHP Plan for each phase shall be reviewed and approved by the City and recorded at the County Clerk's office prior to issuance of a building permit by the City for that phase.

C. SUCCESSORS IN TITLE. SFHP Developer proposes to develop the Property consistent with this SFHP Proposal. In the event that SFHP Developer sells, assigns, leases, conveys, mortgages, or encumbers the Property to any third party, the third party shall be required to execute a SFHP Agreement consistent with this Proposal prior to obtaining any City approvals.

D. MONITORING. SFHP Developer proposes to provide such information and documentation as the City may reasonably require in order to ensure that the actual sales were in compliance with the SFHP Agreement.

E. DEVELOPMENT INCENTIVES. SFHP Developer **does** request a **density** bonus (15%) and other fee waivers and reduced fees for the affordable units as per SFCC 14.8.11(G)(2), including: Impact Fees, Wastewater UECs and Building, Electrical, Plumbing & Mechanical Permit Fees. Water UECs (not including the construction costs associated with installation) are REDUCED.

E. REVISIONS, MODIFICATIONS AND SUPPLEMENTATION OF THIS PROPOSAL. In the event that the SFHP Developer or the City make material modifications, including modifications to the number of lots or units or the area covered by the Proposal, a revised SFHP Proposal shall be promptly submitted to the Office of Affordable Housing in order to

provide a SFHP Proposal that is current and reflects the intended development.

IN WITNESS WHEREOF, this Proposal is made the day and year first written above.

SFHP DEVELOPER:

{Signature}

Daniel J Scanlon, Director
{Print Name & Title of Developer.}

STATE OF NEW MEXICO)
)ss.
COUNTY OF SANTA FE)

ACKNOWLEDGEMENT

The foregoing instrument was acknowledged before me this 15 day of September 2020, by Daniel J Scanlon .the {title} Director RE Development of {entity} Homewise

NOTARY PUBLIC

My Commission Expires:

July 9th 2024

REVIEWED BY:

OFFICIAL SEAL
Norma L. Campos
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires:

9/15/2020

OFFICE OF AFFORDABLE HOUSING
Alexandra Ladd, Director

DATE

Attach: Exhibit 1 - Subdivision layout (proposed)
Exhibit 2 - Pricing Schedule

OFFICIAL SEAL
Norma L. Campos
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires July 9th 2024

EXHIBIT 1

Site Plan

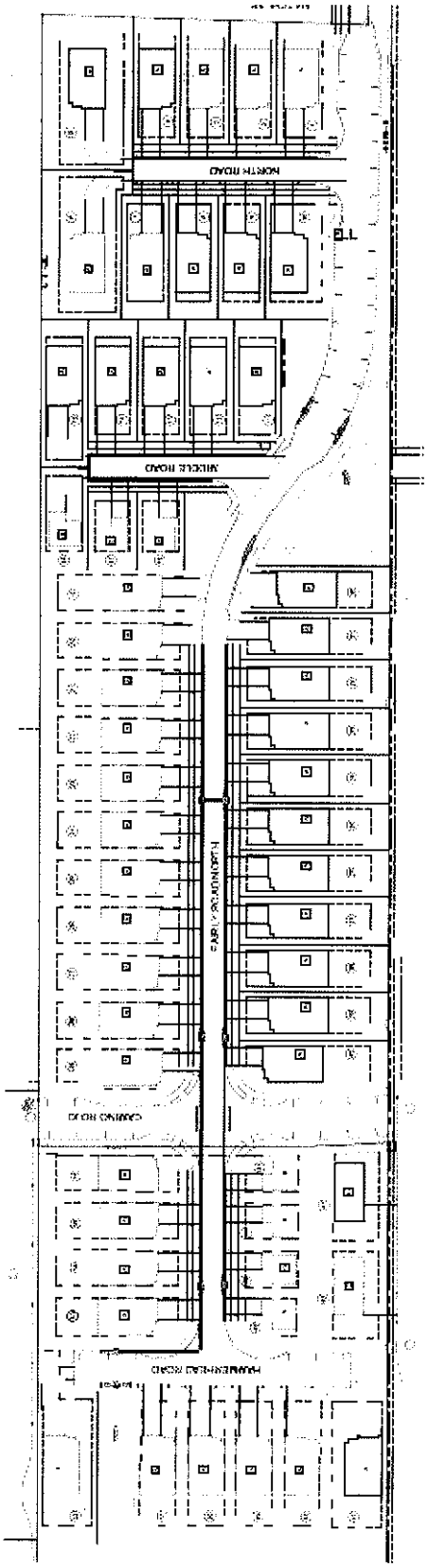


EXHIBIT 2

SANTA FE HOMES PROGRAM
SFHP PLAN AND HOME SALES PRICING SCHEDULE
Effective April 2020*

Income Range	***Two Bedrooms*** *1-2 person HH (900 sq min)*	***Three Bedrooms*** *3-4 person HH (1,150 sq ft min)*	***Four Bedrooms*** *4-5 person HH (1,250 sq ft min)*
2 (50-65%AMI)	Max. Price $137,750 0 Units	Max. Price $155,000 0 Units	Max. Price $172,250 0 Units
3 (65-80%AMI)	Max. Price $179,000 0 Units	Max. Price $201,500 0 Units	Max. Price $223,750 0 Units
4 (80-100%AMI)	Max. Price $220,500 0 Units	Max. Price $248,250 0 Units	Max. Price $275,500 0 Units

Prices reflect April 2020 HUD Area Median Incomes for Santa Fe. Refer to Section 26-1.16 (B) and the SFHP Administrative Procedures. For specific requirements contact The Office of Affordable Housing.

AFFORDABILITY CALCULATION
Single Family Building Lots

The project has an area of approximately 10.05 acres, zoned R-5, permitting 5 dwellings per acre. The required number of SFHP units is 20% of the total units, 5% each in Income Ranges 2 and 4 and 10% in Income Range 2. The project proposes **56 total lots** for development as single-family homes.

CALCULATION for the SFHP requirement:

= Total number of units multiplied by (0.2) = # of Units Required
= **56** total units x 0.2 = **11.2 SFHP unit**(s) are required
= **11 lots/units** delivered and a fractional fee paid for **0.2** units

CALCULATION for the Fractional Fee:

= ½ price of 3 BR, Tier 2 Home X Unit Fraction
= $77,500 X 0.2
= **$15,500 fractional fee**

NOTE: The home prices and fractional fee schedule are modified by the City according to Section 8.7.3 of the SFHP Administrative Procedures to reflect annual changes in the median income levels. The SFHP Home prices shown in this SFHP Agreement are the prices in effect at the time this Agreement is made. The current SFHP prices that are in effect at the time the SFHP Home is made available for sale or the fractional fees are paid, determines the actual SFHP Home Price and/or amount of fractional fee. The prices are updated annually.

City of Santa Fe

LAND USE DEPARTMENT | HISTORIC PRESERVATION DIVISION

ARCHAEOLOGICAL REVIEW COMMITTEE CLEARANCE PERMIT

Case Number: 2020-002407-ARC Date of Application: July 1, 2020

NMCRIS Number: _____ Date of ARC Hearing: August 6, 2020

Archaeological Review District: _____Historic Downtown _____Rivers and Trails x Suburban

Project Title: "Archaeological Survey of 4139B Fairly Road and 6450 Camino Rojo, Santa Fe County, New Mexico"

Site Address/Location: 4139 B Fairly Road and 6450 Camino Rojo

Archaeologist: Ron Winters Email: rondigs@comcast.net Phone: 505-670-6952

Mailing Address: 109 Calle Paula, Santa Fe, NM 87505

Applicant: Homewise Email: _____ Phone: _____

Mailing Address: 1301 Siler Road, Blgd D, Santa Fe, NM 87507

Submittal Type:

- x Reconnaissance Report
- _____ Treatment Plan
- _____ Monitoring Plan
- _____ Preliminary Treatment Report
- _____ Monitoring Report
- _____ Final Treatment Report
- _____ Archaeologist Certification
- _____ Other: _____

ARC Action: _____**Approved** x **Approved with Conditions** *(see below)*

Conditions minor corrections

Archaeological Review Committee Chairperson August 12, 2020 *Date*

Submitted to SHPO: Yes No Date Submitted _____

THIS IS NOT A CONSTRUCTION PERMIT.

DO NOT BEGIN DEMOLITION, GRADING, INFRASTRUCTURE, or CONSTRUCTION WITHOUT A PERMIT.

SUBMIT THIS FORM ALONG WITH YOUR BUILDING PERMIT APPLICATION, AND RETAIN A COPY AT THE JOB SITE.

Santa Fe Engineering Consultants, LLC

Civil and Traffic Engineering
Construction Management
Land Development

TERRAIN MANAGEMENT REPORT
SOILS, GRADING, AND DRAINAGE
PRELIMINARY PLAT SUBMITTAL
MIRAFLORES SUBDIVISION
SANTA FE, NEW MEXICO

Prepared For:

Homewise, Inc.
1301 Siler Road, Bldg D
Santa Fe, NM 87507

Prepared By:

Santa Fe Engineering Consultants, LLC
1599 S. St. Francis Drive, Suite B
Santa Fe, New Mexico 87505

September 2020

TERRAIN MANAGEMENT REPORT
SOILS, GRADING, AND DRAINAGE
PRELIMINARY PLAT SUBMITTAL
MIRAFLORES SUBDIVISION
SANTA FE, NEW MEXICO

I. INTRODUCTION I-1

II. EXISTING CONDITIONS II-1

III. SOILS III-1

IV. DRAINAGE IV-1

V. GRADING AND EROSION CONTROL PLAN V-8

TABLE OF APPENDICES

APPENDIX A FIGURES

APPENDIX B EXISTING CONDITIONS DRAINAGE CALCULATIONS

APPENDIX C FLOW ROUTING CALCULATIONS – EXISTING CONDITIONS

APPENDIX D DEVELOPED CONDITIONS DRAINAGE CALCULATIONS

APPENDIX E FLOW ROUTING CALCULATIONS

TERRAIN MANAGEMENT REPORT
SOILS, GRADING, AND DRAINAGE
PRELIMINARY PLAT SUBMITTAL
MIRAFLORES SUBDIVISION
SANTA FE, NEW MEXICO

I. INTRODUCTION

Homewise, Inc. is proposing to develop a 57-lot single family subdivision comprising of two existing lots located east of Fairly Road. The project is located at 4193B Fairly Road and 6450 Camino Rojo, Santa Fe, NM. The proposed 10.05 ± acre development is located in the City of Santa Fe within Section 12, Township 16 North, Range 8 East, N.M.P.M at latitude 35°36'51.68" N and longitude 106°1'48.72" W. The Vicinity Map is presented in Figure 1, Appendix A.

The legal lot of record is presented in Figure 2, Appendix A. It should be noted that structures shown on the plat have been demolished and removed from the site. The site is currently vacant except for a storage shed.

The Preliminary Plat is presented in figure 3. Appendix A. The development is proposed to be constructed in 2021.

The purpose of this report is to evaluate soils and drainage conditions and to provide recommendations for site grading and runoff control to meet City of Santa Fe Terrain Management Regulations.

II. EXISTING CONDITIONS

The proposed Miraflores Subdivision is located on currently vacant land. The existing land uses in the area consist of vacant and residential land. The land on the north is vacant land. The land on the east, south, and west is residential land in the Tierra Contenta Master Planned Development. The Existing Conditions Map is presented in Figure 4, Appendix A.

Topographic mapping at a scale of 1 inch = 60 feet with 1-foot contour intervals, was prepared for this project by Rick Chatroop Professional Land Surveys. The certified topographic map is presented in Figure 5, Appendix A. The majority of the site runoff flows south.

A slope analysis map was prepared based upon the topographic mapping. The Slope Analysis Map is presented in the project plans. The slope analysis map indicates that there are no 30% or greater slopes on the property. Any 30% and greater slopes within the project limits are manmade.

Existing ground consists of fair herbaceous cover.

III. SOILS

Soil classifications were obtained from the Natural Resource Conservation Service, "Soil Survey of Santa Fe Area, N.M.," by the U.S.D.A., dated June 19, 2018. The survey in this area is the result of a high intensity soil survey. The Soils Map is presented in Figure 6, Appendix A. The following soils are to be found onsite and in the drainage basin areas:

102	Khapo sandy loam, 3 to 8 percent slopes
115	Panky-Urban land complex, 1 to 4 percent slopes
118	Golondrina-Paraje complex, 8 to 45 percent slopes

Khapo sandy loam, 3 to 8 percent slopes soil is located on site. The following interpretations of engineering properties have been identified by the Natural Conservation Resource Service (NCRS):

Natural Drainage Class	Well drained
Capacity to Transmit Water	Moderately high to high (0.60 to 1.98 in / hr)
Hydrologic Soil Group	B

Panky-Urban land complex, 1 to 4 percent slopes soil is located throughout the majority of the site. The following interpretations of engineering properties have been identified by the Natural Conservation Resource Service (NCRS):

Natural Drainage Class	Well drained
Capacity to Transmit Water	Moderately low to moderately high (0.06 to 0.20 in / hr)
Hydrologic Soil Group	C

Golondrina-Paraje complex, 8 to 45 percent slopes soil is located throughout the majority of the site. The following interpretations of engineering properties have been identified by the Natural Conservation Resource Service (NCRS):

Natural Drainage Class	Well drained
Capacity to Transmit Water	Moderately high to high (0.60 to 2.00 in / hr)
Hydrologic Soil Group	B

The NCRS has classified the soils into four hydrologic soils groups. The hydrologic soils groups, according to their infiltration and transmission rates, are defined as follows:

A. (Low runoff potential). Soils having high infiltration rates even thoroughly wetted. These consist chiefly of deep, well to excessively drained, sands or gravel. These soils have a high rate of water transmission in that water readily passes through them.

B. Soils having moderate infiltration rates when thoroughly wetted. These consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures such as loamy sands and course sandy loams. These soils have a moderate rate of water transmission.

C. Soils having slow infiltration rates when thoroughly wetted. These consist chiefly of soils with a layer that impedes downward movement of water or soils with moderately fine-to-fine textures such as loams and fine sandy loams. These soils have slow rate of water transmission.

D. (High Runoff Potential). Soils having very slow infiltration rates when thoroughly wetted. These consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

The cover condition is assumed to be herbaceous in fair condition.

IV. DRAINAGE

Drainage in the area of the site generally flows south. There is an existing offsite basin on the north which drains through the site. Storm drainage computations for existing conditions were calculated using the on-site topographic mapping prepared for this project.

A. Existing Conditions

According to maps prepared by the United States Department of Commerce, presented in NOAA Atlas 14 Volume 1, Version 5, dated 2006, revised 2011, the following precipitation data in Table 1 should be used for the project:

TABLE 1
PRECIPITATION DATA

FREQUENCY	DURATION	PRECIPITATION
100 Year	24 Hour	3.23
50 Year	24 Hour	2.91
25 Year	24 Hour	2.60
10 Year	24 Hour	2.20
2 Year	24 Hour	1.52

Drainage areas were delineated on the on-site and off-site topographic maps prepared for the project. Drainage area and channel lengths were measured several times and average numbers used for this report. The Existing Conditions Drainage Map is presented in Figure 7, Appendix A. The drainage basins which impact the site, are presented in Table 2.

TABLE 2 EXISTING DRAINAGE BASIN CHARACTERISTICS		
Basin	Description	Acres
Q1	Onsite basin exiting the site to the south	1.81
Q2	Onsite basin exiting the site to the east	0.37
Q3	Onsite basin exiting the site to the east	0.10
Q4	Onsite and offsite basin exiting the site to the east	0.39
Q5	Onsite basin exiting the site to the east	1.51
Q6	Offsite basin flowing into southeast	0.85
Q7	Offsite basin flowing into the site on the east	3.17
Q8	Offsite and onsite basin flowing south	3.58
Q9	Onsite basin exiting the site through 24" CMP to the southwest	1.92
Q10	Onsite basin exiting the site to the west	0.10
Q11	Offsite basin flowing southeast	0.31

The WinTR-55 software by the NRCS, version 1.00.10 dated April 2011, was used to calculate weighted runoff number, time of concentration, and peak flow for the existing drainage basins. TR-55 takes into account soil type, time of concentration, and cover conditions to estimate runoff. The graphical discharge method was used. The 25, 50, and 100-year frequency storms were calculated.

Existing Drainage Calculations are presented in Appendix B. The calculated peak flows are presented in Table 3.

TABLE 3 PEAK FLOW QUANTITIES EXISTING CONDITIONS					
Basin	Description	CN	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Q1	Onsite basin exiting the site to the south	76	1.55	2.00	2.49
Q2	Onsite basin exiting the site to the east	78	0.42	0.53	0.65
Q3	Onsite basin exiting the site to the east	81	0.14	0.17	0.20
Q4	Onsite and offsite basin exiting the site to the east	81	0.39	0.48	0.58
Q5	Onsite basin exiting the site to the east	82	1.92	2.36	2.82
Q6	Offsite basin flowing into southeast	83	1.30	1.58	1.88
Q7	Offsite basin flowing into the site on the east	81	3.39	4.20	5.06
Q8	Offsite and onsite basin flowing south	80	3.65	4.57	5.54
Q9	Onsite basin exiting the site through 24" CMP to the southwest	81	2.54	3.14	3.77
Q10	Onsite basin exiting the site to the west	81	0.13	0.16	0.20
Q11	Offsite basin flowing southeast	87	0.66	0.79	0.92

The individual basins were routed using Hydraflow Hydrographs 2019 to obtain the peak flow exiting the site. The routings are presented in Appendix ___. A total of 3.3 CFS runs off the site for the 100-year flood.

B. Developed Conditions

The development of the Miraflores subdivision will impact stormwater runoff due to an increase in impervious surfaces (driveways, parking, patios, sidewalks, and roofs). The impervious surfaces were names as follows.

Public Improvements

New Pavement

New Curb and Gutter

New Sidewalks

Total Public Improvement =

The simplified method based upon runoff numbers was used to estimate ponding requirements for design.

GNOTE

Private on lot impervious area 57 units

Roof area	57x1200= 68,400
Driveway	57x20x20= 22,800
Private Sidewalk	57x40x5= 11,400
Patio Area	57x10x20=11,400
	114,000

In order to control excess runoff, a number of LID methods are proposed as follows:

- Passive water harvesting techniques using shallow open ponds (rain gardens).
- On lot ponds and swales with trees and landscaping to provide water harvesting benefits as well as runoff reduction.
- Gravel mulched areas with pervious filter fabric.

The Civil Site Plan is presented in Figure 8, Appendix A. The Developed Conditions Drainage Map is presented in Figure 9, Appendix A. The developed drainage basin characteristics are presented in Table 4.

TABLE 4 DEVELOPED DRAINAGE BASIN CHARACTERISTICS		
Basin	Description	Acres
QD1	Onsite basin exiting the site to the south	0.15
QD2	Onsite basin exiting the site to the east	0.79
QD3	Onsite basin exiting the site to the east	
QD4	Onsite and offsite basin exiting the site to the east	.11
QD5	Onsite basin exiting the site to the east	
QD6	Offsite basin flowing into southeast	
QD7	Offsite basin flowing into the site on the east	3.01
QD8	Offsite and onsite basin flowing south	
QD9	Onsite basin exiting the site through 24" CMP to the southwest	
QD10	Onsite basin exiting the site to the west	
QD11	Offsite basin flowing southeast	
QP12	Onsite basin to check down	0.21
QP13	Onsite basin to check down	0.36
QP14	Pond outflow	0.26
QP15	Onsite basin to drop inlet	0.42
QP16	Onsite basin to drop inlet	0.5
QP17	Onsite basin to drop inlet	0.63
QP18	Onsite basin to drop inlet	
QP19	Onsite basin to drop inlet	0.59
QP20	Onsite basin to drop inlet	0.25
QP21	Onsite basin to drop inlet	0.06
QP22	Onsite basin to drop inlet	0.55
QP23	Onsite basin to drop inlet	1.01
QP24	Onsite basin to drop inlet	0.64
QP25	Onsite basin to drop inlet	0.17
QP26	Onsite basin to drop inlet	0.5
QP27	Onsite basin to drop inlet	0.45
QP28	Onsite basin to drop inlet	0.66
QP29	Onsite basin to drop inlet	0.65
QP30	Onsite basin to drop inlet	0.74

TR-55 Version 2.1 by the NRCS was used to calculate weighted runoff number, time of concentration, and peak flow for the existing standalone drainage basins. This version of TR-55 was used because it incorporates ponding in the drainage basin definition, however it rounds out to the nearest integer. The graphical discharge method

was used. The 25, 50, and 100-year frequency storms were calculated. The calculated peak flows are presented in Table 5. The results are presented in Appendix D.

TABLE 5
PEAK FLOW QUANTITIES
DEVELOPED CONDITIONS

Basin	Description	CN	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
QD1	Onsite basin exiting the site to the south	81	0.23	0.28	0.34
QD2	Onsite basin exiting the site to the east	81	1.21	1.50	1.81
QD3	Onsite basin exiting the site to the east				
QD4	Onsite and offsite basin exiting the site to the east	89	0.26	0.30	0.35
QD5	Onsite basin exiting the site to the east				
QD6	Offsite basin flowing into southeast				
QD7	Offsite basin flowing into the site on the east	81	3.22	3.99	4.80
QD8	Offsite and onsite basin flowing south				
QD9	Onsite basin exiting the site through 24" CMP to the southwest				
QD10	Onsite basin exiting the site to the west				
QD11	Offsite basin flowing southeast				
QP12	Onsite basin to check down	81	0.33	0.40	0.48
QP13	Onsite basin to check down	82	0.59	0.72	0.86
QP14	Pond outflow	83	0.44	0.54	0.64
QP15	Onsite basin to drop inlet	91	1.10	1.27	1.46
QP16	Onsite basin to drop inlet	89	1.18	1.39	1.61
QP17	Onsite basin to drop inlet	90	1.37	1.60	1.84
QP18	Onsite basin to drop inlet				
QP19	Onsite basin to drop inlet	88	1.33	1.57	1.82
QP20	Onsite basin to drop inlet	81	0.36	0.45	0.54
QP21	Onsite basin to drop inlet	95	0.17	0.20	0.22
QP22	Onsite basin to drop inlet	97	1.66	1.87	2.09
QP23	Onsite basin to drop inlet	90	2.42	2.82	3.24
QP24	Onsite basin to drop inlet	88	1.24	1.46	1.69
QP25	Onsite basin to drop inlet	91	0.45	0.52	0.60
QP26	Onsite basin to drop inlet	88	1.13	1.33	1.55
QP27	Onsite basin to drop inlet	89	0.98	1.16	1.34
QP28	Onsite basin to drop inlet	88	1.35	1.59	1.85
QP29	Onsite basin to drop inlet	88	1.31	1.54	1.79
QP30	Onsite basin to drop inlet	90	1.61	1.88	2.16

C. Floodplains

The flooding situation in the County of Santa Fe has been investigated by the Federal Insurance Administration (FIA). Their studies are contained in a report titled "Flood Insurance Study, Santa Fe County, New Mexico and Incorporated Areas." The FEMA Flood Plain Map Number 35049C393D, dated June 17, 2008 for this section of the Arroyo de Los Chamisos is presented in Figure 10, Appendix A. A review of the map indicates that there are no proposed buildings to be developed in the areas impacted by the 1% Annual Chance Flood of being equaled or exceeded in any given year (base flood).

V. GRADING AND EROSION CONTROL PLAN

Grading plans have been prepared for this development. Included within these plans are existing road profiles, proposed profiles, and typical roadway cross-sections. Roadway construction methods to be utilized for this development will be pursuant to New Mexico Department of Transportation Specifications for Road and Bridge Construction.

The grading activity at the site will require cut and fill operations. Utility installation will be scheduled to coincide with roadway grading and will be located with the roadway section and parkway.

The following plans will be utilized for controlling erosion and drainage through construction:

A. The limits of construction will be clearly delineated to avoid unnecessary disturbance of adjacent areas prior to construction.

B. Cut and fill slopes will be as follows:

Fills - 1 vertical on 3 horizontal.

Cuts - 1 vertical on 2 horizontal.

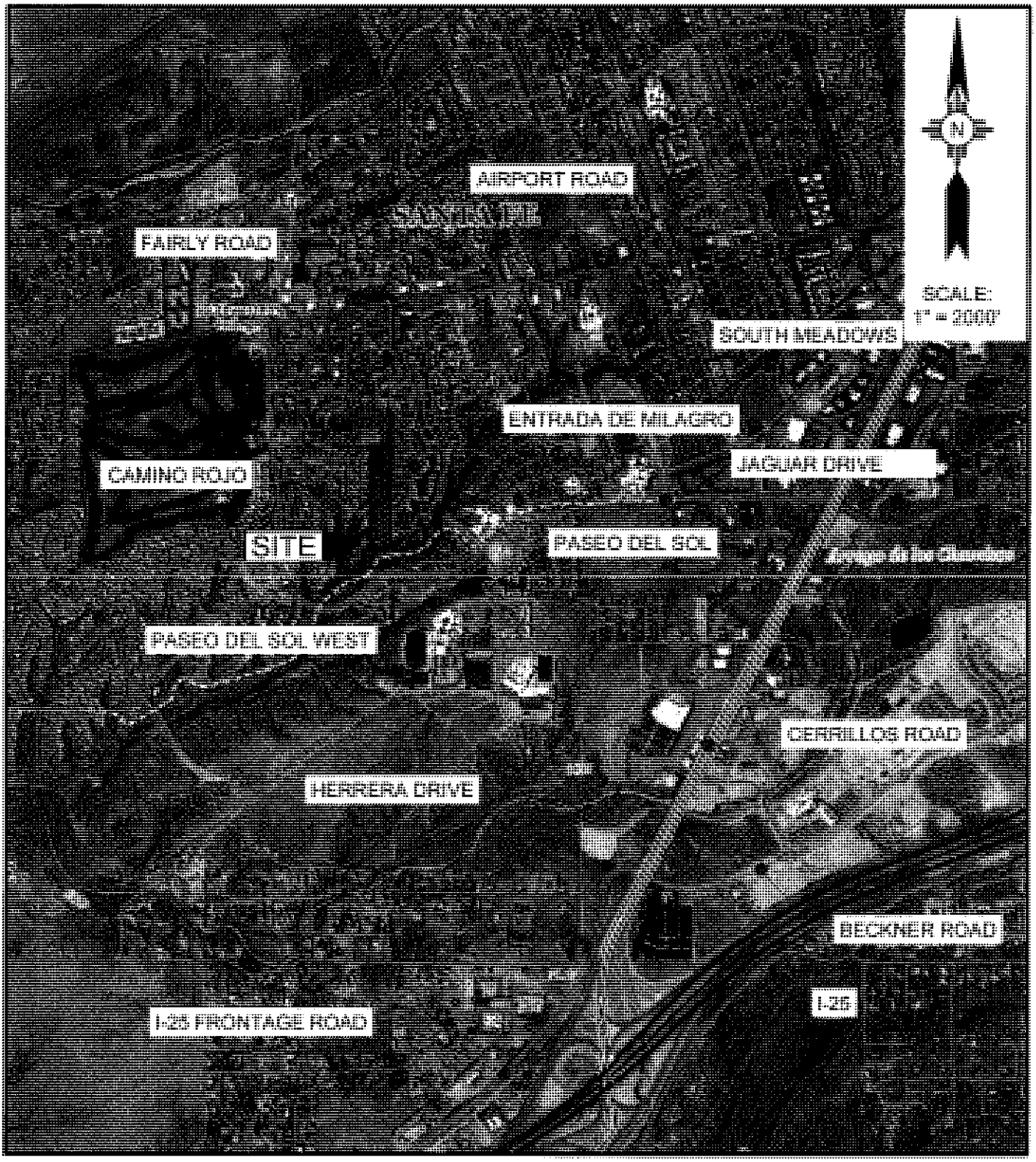
C. Roadway drainage structures (culverts, rain gardens, ponds, check dams, and repairs to existing structures) will be constructed in conjunction with grading. No changes in the drainage ways or floodplain will be permitted except as shown on the drainage plans.

D. Stabilization of cut or fills will begin soon after construction at the optimum time for plant survival, according to an approved landscape plan.

E. The project will be inspected on a regular basis and additional measures such as silt fences, borrow ditches, etc., will be utilized as required to meet field conditions and to control erosion.

APPENDIX A

FIGURES

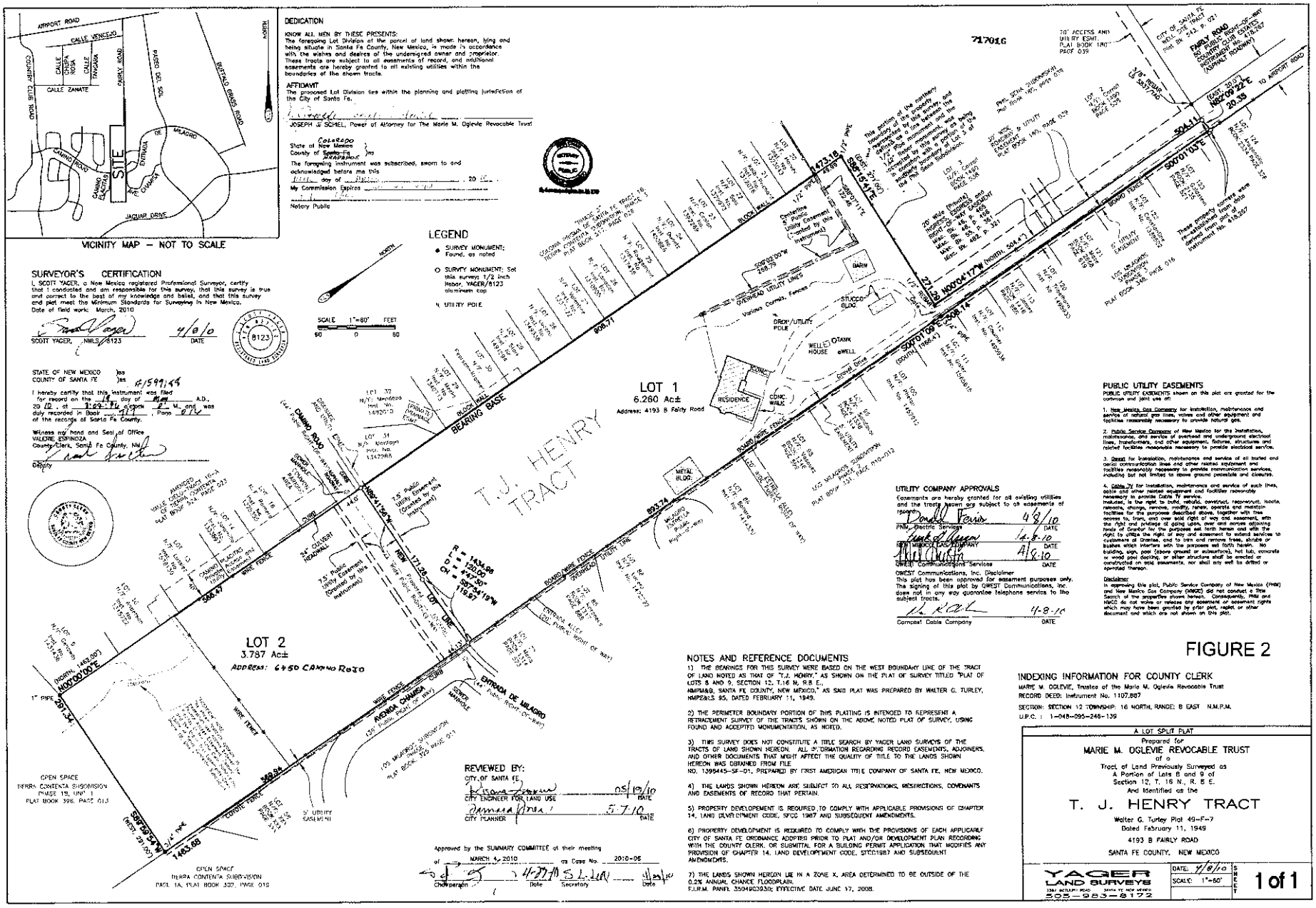


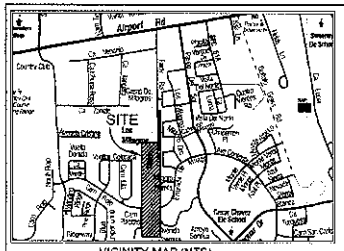
2000 1000 0 2000

SCALE: 1" = 2000'

REFERENCE:
U.S.G.S. QUADRANGLE MAPS ENTITLED "AGUA FRIA, NM" AND
TURQUOISE HILL, NM" BOTH DATED 2020

VICINITY MAP
FIGURE 1


VICINITY MAP – NOT TO SCALE
AIRPORT ROAD
CALLE VENCEJO
CALLE CHUPA ROSA
CALLE TANCASA
CALLE ZANATE
FAIRLY ROAD
OLD SANTA FE TRAIL
BUFFALO GRASS ROAD
COUNTRY CLUB
CAMINO CARLOTA
CAMINO ENTRADA
CAMINO CHAMISA
ENTRADA DE MILAGRO
CAMINO ROJO
JAGUAR DRIVE
SITE
NORTH
DEDICATION
KNOW ALL MEN BY THESE PRESENTS:
The foregoing Lot Division of the parcel of land shown hereon, lying and being situate in Santa Fe County, New Mexico, is made in accordance with the wishes and desires of the undersigned owner and proprietor. These tracts are subject to all easements of record, and additional easements are hereby granted to all existing utilities within the boundaries of the shown tracts.
AFFIDAVIT
The proposed Lot Division lies within the planning and platting jurisdiction of the City of Santa Fe.
JOSEPH J. SCHIEL, Power of Attorney for The Marie M. Oglevie Revocable Trust
State of New Mexico
County of Santa Fe
The foregoing instrument was subscribed, sworn to and acknowledged before me this
day of , 20 .
My Commission Expires
Notary Public
LEGEND
SURVEY MONUMENT: Found, as noted
SURVEY MONUMENT: Set this survey 1/2 inch Rebar, YAGER/8123 aluminum cap
UTILITY POLE
SCALE 1"=80' FEET
SURVEYOR'S CERTIFICATION
I, SCOTT YAGER, a New Mexico registered Professional Surveyor, certify that I conducted and am responsible for this survey, that this survey is true and correct to the best of my knowledge and belief, and that this survey and plat meet the Minimum Standards for Surveying in New Mexico.
Date of field work: March, 2010
SCOTT YAGER, NMPS 8123
DATE
STATE OF NEW MEXICO)ss
COUNTY OF SANTA FE)
I hereby certify that this instrument was filed for record on the day of A.D., 20 10, at o'clock M., and was duly recorded in Book , Page of the records of Santa Fe County.
Witness my hand and Seal of Office
VALERIE ESPINOZA
County Clerk, Santa Fe County, NM
Deputy
LOT 1
6.260 Ac±
Address: 4193 B Fairly Road
LOT 2
3.787 Ac±
Address: 6450 CAMINO ROJO
T.J. HENRY TRACT
BEARING BASE
N00°04'17"W (NORTH: 504.4')
S00°01'03"E
N00°09'22"E
S89°54'17"E
S00°02'00"W
N89°41'54"W
N00°00'00"E (NORTH: 1462.00')
S89°59'54"W (WEST: 1463.00')
R=1430.00'
Δ=20°00'00"
CH=S77°57'19"W
L=499.37'
R=1470.00'
Δ=17°45'00"
CH=S78°54'19"W
L=455.57'
R=1470.00'
Δ=2°15'18"
CH=S88°15'47"W
L=57.87'
R=1473.18'
L=44.99'
L=21.28'
L=208.14'
L=504.11'
L=20.35'
L=208.79'
L=908.71'
L=566.47'
L=933.74'
L=1711.26'
L=460.34'
L=569.84'
L=1463.69'
L=44.14'
L=44.00'
L=34.00'
L=25.00'
L=25.00'
L=25


SITE
Airport Rd
Country Club
Camino Placitas
Camino Real
Fairly Rd
Fairly Rd
Camino Placitas
Camino Real
Camino Placitas
Camino Real
Camino Placitas
Camino Real

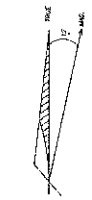


100 50 0 100

SCALE: 1" = 100'

EXISTING CONDITIONS MAP
FIGURE 4

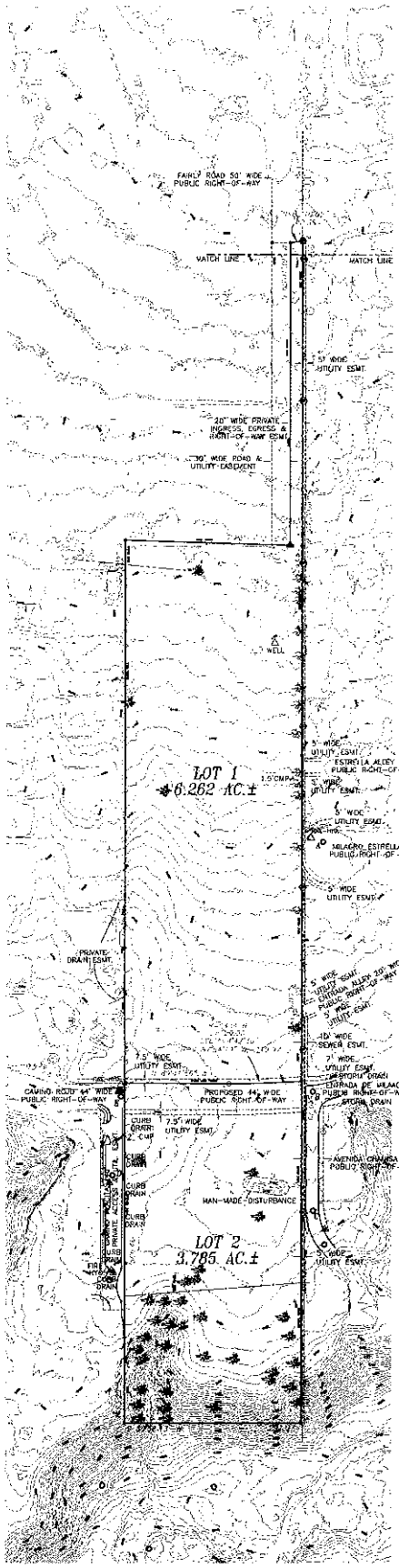
TOPOGRAPHIC PLAN ONLY NOT A BOUNDARY SURVEY



NORTH

SCALE 1"=80'





LEGEND AND NOTES

- DENOTES UTILITY BOX
- DENOTES MANHOLE AS NOTED
- DENOTES SPIGOT
- DENOTES TEL RISER OR AS NOTED
- DENOTES WATER VALVE OR MTR.
- DENOTES LAMP
- DENOTES POINT FOUND (AS NOTED)
- DENOTES POINT SET THIS SURVEY
- DENOTES POINT CALCULATED
- DENOTES EDGE OF EASEMENT
- DENOTES UTILITY POLE W/OVERHEAD LINES
- DENOTES FENCE LINE

1. BASIS OF BEARING IS FROM OSE OBSERVATION WOSB4.

LOT OF RECORD IS FROM "A LOT SPLIT PLAT PREPARED FOR MARIE M. OLGLEVIE REVOCABLE TRUST" BY SCOTT YAGER NMPLS # 8123 AND FILED IN PLAT BOOK 717, PG. 18 IN THE OFFICE OF THE SANTA FE COUNTY CLERK.

2. THIS PLAT IS SUBJECT TO ANY EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD.

SANITARY SEWER DATA

MANHOLE	R/M ELEVATION	INVERT ELEVATION
A	6437.8'	6426.5'
B	6439.5'	6419.7'
C	6436.5'	6417.3'
D	6435.7'	6418.9'
E	6427.1'	6420.1'

- DENOTES ELM TREE AVG. 1.5' DIA
- DENOTES EVERGREEN OVER 8" TALL

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT AND THE NOTES HEREON ARE AN ACCURATE DELINEATION OF A FIELD SURVEY COMPLETED BY ME OR UNDER MY DIRECTION ON MAY 15TH, 2020, AND ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEET THE MINIMUM STANDARDS FOR PROFESSIONAL LAND SURVEYORS PRACTICING IN NEW MEXICO.

PRELIMINARY COPY

TOPOGRAPHIC PLAN OF
LOTS 1 and 2
10.046 AC.±

LYING WITHIN SECTION 12, T16N, R8E, NMPM, SANTA FE COUNTY, NEW MEXICO.

RICK CHATROOP
PROFESSIONAL LAND SURVEYOR
NEW MEXICO REGISTRATION NO. 11011
(505) 470-0037 110 WAGON TRAIL RD. CERRILLOS, NM. 87010

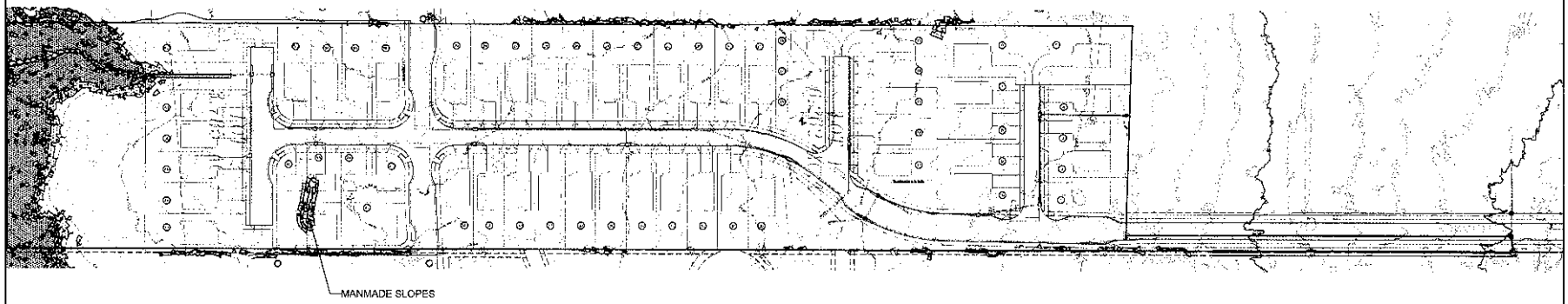
NOTES FOR THE COUNTY CLERK

OWNER: HOMEWISE, LLC

LOCATION: LYING WITHIN SECTION 12, T16N, R8E, NMPM, SANTA FE COUNTY, NEW MEXICO.

SHEET 1

FIGURE 5



SLOPE ANALYSIS MAP

SCALE: 1" = 60'
CONTOUR INTERVAL = 5'

LEGEND
AREA OF 20% TO 30% SLOPE
AREA OF 30% AND GREATER SLOPE

NOTE:

1. ALL TOPOGRAPHIC INFORMATION IS PROVIDED BY DAWSON SURVEYS, INC.
2. THIS SLOPE ANALYSIS IS BASED UPON 5 FOOT CONTOUR INTERVALS
3. THE TOTAL AMOUNT OF NATURAL 30% OR GREATER SLOPES DISTURBANCE ON THIS PROJECT IS 0 SQUARE FEET

0 30 60 120
SCALE: 1" = 60'

FIGURE 6

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

CASE # _____

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SLOPE ANALYSIS MAP

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 60'	5-1

REVISIONS	DATE	ENGINEERS SEAL



LEGEND		
SOIL ID #	SOIL NAME	HYDROLOGIC SOIL GROUP
102	KHAPO SANDY LOAM, 3 TO 8 PERCENT SLOPES	B
115	PANKY-URBAN LAND COMPLEX, 1 TO 4 PERCENT SLOPES	C
118	GOLONDRINA-PARAJE COMPLEX, 8 TO 45 PERCENT SLOPES	B

0 100 200 400

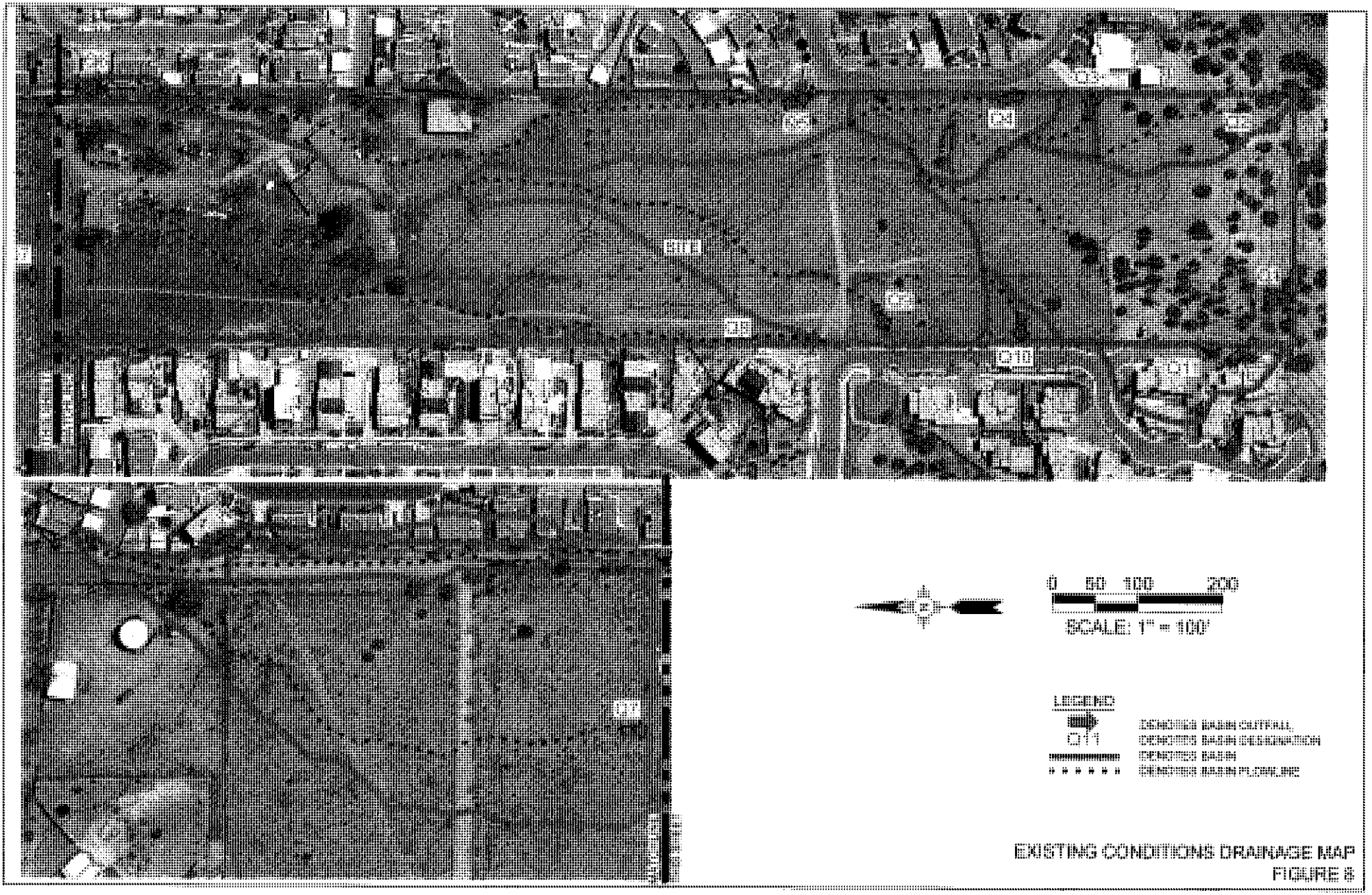
SCALE: 1" = 200'

LEGEND

- DENOTES BASIN OUTFALL
- Q11 DENOTES BASIN DESIGNATION
- DENOTES BASIN
- - - - - - DENOTES BASIN FLOWLINE

REFERENCE:
USDA National Resources Conservation Service
Custom Soil Resource Report for Santa Fe County Area, New Mexico,
Survey Area Data: Version 12, Jun 8, 2020

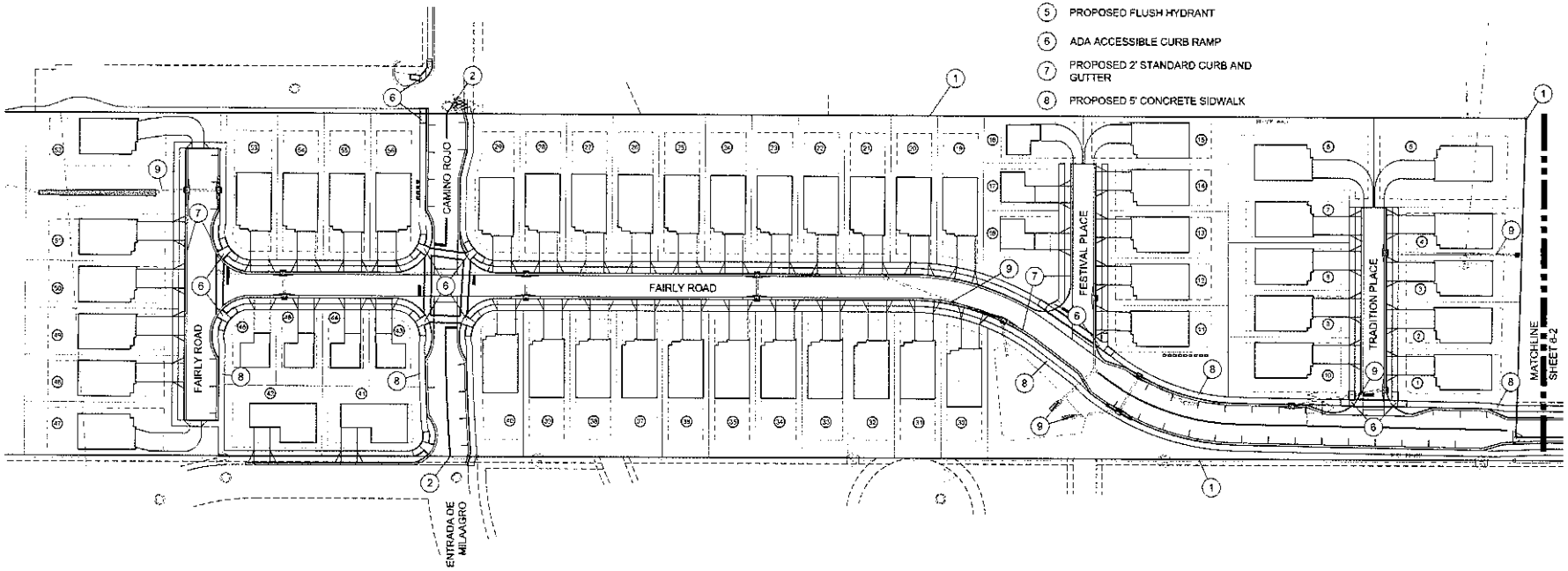
SOILS MAP
FIGURE 7



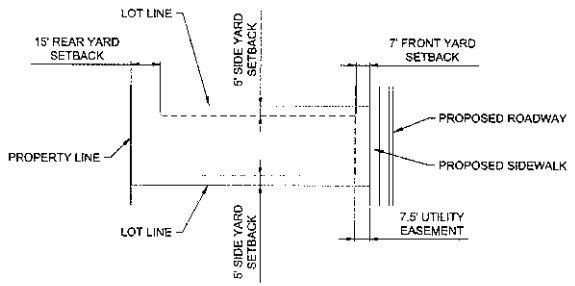
EXISTING CONDITIONS DRAINAGE MAP
FIGURE 8

SHEET KEYNOTES

1. PROPERTY LINE
2. TIE TO EXISTING ROADWAY
3. TIE TO EXISTING POWER POLE
4. PROPOSED FIRE HYDRANT
5. PROPOSED FLUSH HYDRANT
6. ADA ACCESSIBLE CURB RAMP
7. PROPOSED 2' STANDARD CURB AND GUTTER
8. PROPOSED 5' CONCRETE SIDWALK
9. PROPOSED STORM SEWER



CIVIL SITE PLAN
SCALE: 1" = 40'



TYPICAL LOT LAYOUT
SCALE: N.T.S.

LEGEND
(29) DENOTES LOT NUMBER

FIGURE 9

0 20 40 80
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEER'S SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV		
TRAFFIC DIV		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

CASE # _____

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

CIVIL SITE PLAN

DATE	SCALE	SHEET
SEPTEMBER 2020	1" = 40'	6-1



DEVELOPED CONDITIONS
DRAINAGE MAP
FIGURE 10

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross-sections and interpolated between cross-sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was New Mexico State Plane Central zone. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided by the U.S. Geological Survey and Bohannan Huston, Incorporated (BHI). Digital Orthophoto Quadrangles were produced at a scale of 1:12,000 from photography dated 1997. BHI orthophotos were produced at a scale of 1:2,000 from photography dated 2007.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations** and **floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for the Rio Grande and Santa Fe River may reflect stream channel distances that differ from what is shown on this map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or deannexations may have occurred after this map was published, users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9620 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at www.msc.fema.gov.

If you have **questions** about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.



FIGURE 11

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood is also known as the base flood, or the 100-year flood. It has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 — Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Limit of Moderate Wave Action (LiMWA)
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

1000-meter Universal Transverse Mercator grid values, zone 13

3000-foot ticks: New Mexico State Plane coordinate system, Central zone (FIPSZONE 3002), Lambert Conformal Conic

Bench mark (see explanation in Notes to Users section of this FIRM panel)

River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
DECEMBER 17, 2008

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For communities/panels previously printed, consult previous panel(s) for effective dates. For communities/panels newly added to the initial countywide FIRM, the initial effective date for the community is shown in the Community Number field in the Panel Locator Diagram.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

PANEL 0393D

FIRM

FLOOD INSURANCE RATE MAP

SANTA FE COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 393 OF 1100

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SANTA FE COUNTY	350069	0393	D
SANTA FE, CITY OF	350070	0393	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
35049C0393D

EFFECTIVE DATE
JUNE 17, 2008

Federal Emergency Management Agency

APPENDIX B

EXISTING DRAINAGE CALCULATIONS

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q1 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q1.w55

Date: 9/9/2020
Units: English
Areal Units: &Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q1		Outlet	1.81	76	.276

Total area: 1.81 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	1-Yr
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr	50-Yr	100-Yr
SUBAREAS			
Q1	1.55	2.00	2.49
REACHES			
OUTLET	1.55	2.00	2.49

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr	50-Yr	100-Yr
	(hr)	(hr)	(hr)
SUBAREAS			
Q1	1.55	2.00	2.49
	12.08	12.07	12.07
REACHES			
OUTLET	1.55	2.00	2.49

CPC

FAIRLY ROAD
Q1 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q1	1.81	0.276	76	Outlet	

Total Area: 1.81 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length	Slope	Mannings's n	End Area	Wetted Perimeter	Velocity	Travel Time (hr)
Q1							
SHEET	100	0.0139	0.130				0.244
SHALLOW	181	0.0352	0.050				0.017
CHANNEL	238	0.1403	0.035	0.57	3.80	4.407	0.015
					Time of Concentration		.276

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q1	Herbaceous	(fair)	B	.89	71
	Herbaceous	(fair)	C	.92	81
	Total Area / Weighted Curve Number			1.81	76

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q2 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q2a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q2		Outlet	0.37	78	.187

Total area: .37 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q2	0.42	0.53	0.65
REACHES			
OUTLET	0.42	0.53	0.65

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q2	0.42 12.03	0.53 12.02	0.65 12.02
REACHES			
OUTLET	0.42	0.53	0.65

CPC

FAIRLY ROAD
Q2 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q2	.37	0.187	78	Outlet	

Total Area: .37 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q2							
SHEET	100	0.0295	0.130				0.181
SHALLOW	68	0.1015	0.050				0.004
SHALLOW	78	0.2953	0.050				0.002
						Time of Concentration	.187

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q2	Herbaceous	(fair)	B	.1	71
	Herbaceous	(fair)	C	.27	81
	Total Area / Weighted Curve Number			.37	78

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q3 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q3a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q3		Outlet	0.1	81	.196

Total area: .10 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q3	0.14	0.17	0.20
REACHES			
OUTLET	0.14	0.17	0.20

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q3	0.14	0.17	0.20
	12.03	12.02	12.01
REACHES			
OUTLET	0.14	0.17	0.20

CPC

FAIRLY ROAD
Q3 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q3	.10	0.196	81	Outlet	

Total Area: .10 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q3							
SHEET	100	0.0246	0.130				0.195
SHALLOW	15	0.0347	0.050				0.001
						Time of Concentration	.196

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q3	Herbaceous	(fair)	C	.1	81
	Total Area / Weighted Curve Number			.1	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q4 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q4a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q4		Outlet	0.39	81	.398

Total area: .39 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q4	0.39	0.48	0.58
REACHES			
OUTLET	0.39	0.48	0.58

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q4	0.39	0.48	0.58
	12.15	12.13	12.14
REACHES			
OUTLET	0.39	0.48	0.58

CPC

FAIRLY ROAD
Q4 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q4	.39	0.398	81	Outlet	

Total Area: .39 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q4							
SHEET	100	0.0045	0.130				0.384
SHALLOW	117	0.0205	0.050				0.014
						Time of Concentration	.398

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q4	Herbaceous	(fair)	B	.01	71
	Herbaceous	(fair)	C	.38	81
	Total Area / Weighted Curve Number			.39	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q5 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q5a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q5		Outlet	1.51	82	.275

Total area: 1.51 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q5	1.92	2.36	2.82
REACHES			
OUTLET	1.92	2.36	2.82

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q5	1.92 12.07	2.36 12.06	2.82 12.05
REACHES			
OUTLET	1.92	2.36	2.82

CPC

FAIRLY ROAD
Q5 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q5	1.51	0.275	82	Outlet	

Total Area: 1.51 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q5							
SHEET	100	0.0235	0.130				0.198
SHALLOW	719	0.0259	0.050				0.077
						Time of Concentration	.275

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q5	Paved parking lots, roofs, driveways		C	.07	98
	Paved; curbs and storm sewers		C	.02	98
	Herbaceous	(fair)	B	.02	71
	Herbaceous	(fair)	C	1.4	81
	Total Area / Weighted Curve Number			1.51	82

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q6 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q6a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q6		Outlet	0.85	83	.189

Total area: .85 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q6	1.30	1.58	1.88
REACHES			
OUTLET	1.30	1.58	1.88

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q6	1.30 12.02	1.58 12.01	1.88 12.02
REACHES			
OUTLET	1.30	1.58	1.88

CPC

FAIRLY ROAD
Q6 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q6	.85	0.189	83	Outlet	

Total Area: .85 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q6							
SHEET	44	0.0441	0.150				0.090
SHALLOW	735	0.0164	0.050				0.099
						Time of Concentration	.189

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q6	Dirt (w/ right-of-way)		C	.28	87
	Herbaceous	(fair)	C	.57	81
	Total Area / Weighted Curve Number			.85	83

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q7 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q7a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q7		Outlet	3.17	81	.349

Total area: 3.17 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q7	3.39	4.20	5.06
REACHES			
OUTLET	3.39	4.20	5.06

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q7	3.39 12.10	4.20 12.11	5.06 12.10
REACHES			
OUTLET	3.39	4.20	5.06

CPC

FAIRLY ROAD
Q7 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q7	3.17	0.349	81	Outlet	

Total Area: 3.17 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q7							
SHEET	100	0.0117	0.130				0.262
SHALLOW	630	0.0155	0.050				0.087
						Time of Concentration	.349

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q7	Herbaceous	(fair)	C	3.17	81
	Total Area / Weighted Curve Number			3.17	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q8 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q8a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q8		Outlet	3.58	80	.337

Total area: 3.58 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q8	3.65	4.57	5.54
REACHES			
OUTLET	3.65	4.57	5.54

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q8	3.65 12.11	4.57 12.10	5.54 12.10
REACHES			
OUTLET	3.65	4.57	5.54

CPC

FAIRLY ROAD
Q8 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q8	3.58	0.337	80	Outlet	

Total Area: 3.58 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q8							
SHEET	100	0.0149	0.130				0.238
SHALLOW	333	0.0254	0.050				0.036
SHALLOW	594	0.0260	0.050				0.063
						Time of Concentration	.337

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q8	Herbaceous	(fair)	B	.46	71
	Herbaceous	(fair)	C	3.12	81
	Total Area / Weighted Curve Number			3.58	80

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q9 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q9a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q9		Outlet	1.92	81	.207

Total area: 1.92 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q9	2.54	3.14	3.77
REACHES			
OUTLET	2.54	3.14	3.77

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q9	2.54 12.03	3.14 12.02	3.77 12.02
REACHES			
OUTLET	2.54	3.14	3.77

CPC

FAIRLY ROAD
Q9 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q9	1.92	0.207	81	Outlet	

Total Area: 1.92 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q9							
SHEET	100	0.0415	0.130				0.158
SHALLOW	489	0.0295	0.050				0.049
						Time of Concentration	.207

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q9	Herbaceous	(fair)	C	1.92	81
	Total Area / Weighted Curve Number			1.92	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q10 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q10a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q10		Outlet	0.1	81	.218

Total area: .10 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q10	0.13	0.16	0.20
REACHES			
OUTLET	0.13	0.16	0.20

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
Q10	0.13	0.16	0.20
	12.04	12.03	12.03
REACHES			
OUTLET	0.13	0.16	0.20

CPC

FAIRLY ROAD
Q10 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q10	.10	0.218	81	Outlet	

Total Area: .10 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q10							
SHEET	100	0.0185	0.130				0.218
						Time of Concentration	.218

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q10	Herbaceous	(fair)	C	.1	81
	Total Area / Weighted Curve Number			.1	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: Q11 EXISTING CONDITION
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\Q11a.w55

Date: 9/15/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q11		Outlet	0.31	87	0.1

Total area: .31 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
Q11	0.66	0.79	0.92
REACHES			
OUTLET	0.66	0.79	0.92

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs)	(hr)	50-Yr (cfs)	(hr)	100-Yr (cfs)	(hr)
SUBAREAS						
Q11	0.66	11.94	0.79	11.93	0.92	11.93
REACHES						
OUTLET	0.66		0.79		0.92	

CPC

FAIRLY ROAD
Q11 EXISTING CONDITION
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Q11	.31	0.100	87	Outlet	

Total Area: .31 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Q11							
SHEET	27	0.0237	0.150				0.078
SHALLOW	124	0.0256	0.025				0.011
SHALLOW	37	0.2214	0.050				0.001
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q11	Paved parking lots, roofs, driveways		B	.03	98
	Paved parking lots, roofs, driveways		C	.07	98
	Paved; open ditches (w/right-of-way)		B	.03	89
	Paved; open ditches (w/right-of-way)		C	.05	92
	Herbaceous	(fair)	B	.06	71
	Herbaceous	(fair)	C	.07	81
	Total Area / Weighted Curve Number			.31	87

APPENDIX C

FLOW ROUTING CALCULATIONS – EXISTING CONDITIONS

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Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	0.958	-------	-------	0.000	3.498	4.336	5.237	Q7
2	Reach	1	-------	0.780	-------	-------	0.000	3.022	3.781	4.595	FLOW FROM Q7
3	SCS Runoff	------	-------	0.993	-------	-------	0.000	3.872	4.833	5.871	Q8
4	SCS Runoff	------	-------	0.780	-------	-------	0.000	2.722	3.364	4.049	Q9
6	Combine	2, 3, 4,	-------	2.189	-------	-------	0.000	8.598	10.75	13.07	TOTAL FLOW TO EXISTING PIPE
7	SCS Runoff	------	-------	0.041	-------	-------	0.000	0.142	0.175	0.211	Q10
9	Combine	6, 7,	-------	2.223	-------	-------	0.000	8.720	10.90	13.25	TOTAL FLOW EXITING SITE TO WE
11	SCS Runoff	------	-------	0.475	-------	-------	0.000	1.465	1.784	2.122	Q6
12	Reach	11	-------	0.377	-------	-------	0.000	1.185	1.445	1.720	FLOW FROM Q6
13	SCS Runoff	------	-------	0.616	-------	-------	0.000	2.060	2.533	3.035	Q5
15	Combine	12, 13,	-------	0.987	-------	-------	0.000	3.233	3.960	4.731	TOTAL FLOW TO EXISTING DROP I
17	SCS Runoff	------	-------	0.107	-------	-------	0.000	0.392	0.487	0.588	Q4
18	SCS Runoff	------	-------	0.041	-------	-------	0.000	0.142	0.175	0.211	Q3
19	SCS Runoff	------	-------	0.108	-------	-------	0.000	0.472	0.595	0.728	Q2
21	Combine	17, 18, 19,	-------	0.227	-------	-------	0.000	0.918	1.152	1.403	TOTAL FLOW EXITING SITE TO EA
23	SCS Runoff	------	-------	0.317	-------	-------	0.000	0.797	0.943	1.095	Q11
24	SCS Runoff	------	-------	0.291	-------	-------	0.000	1.657	2.141	2.667	Q1
26	Combine	23, 24,	-------	0.470	-------	-------	0.000	2.122	2.698	3.323	TOTAL FLOW EXITING SITE TO SO

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

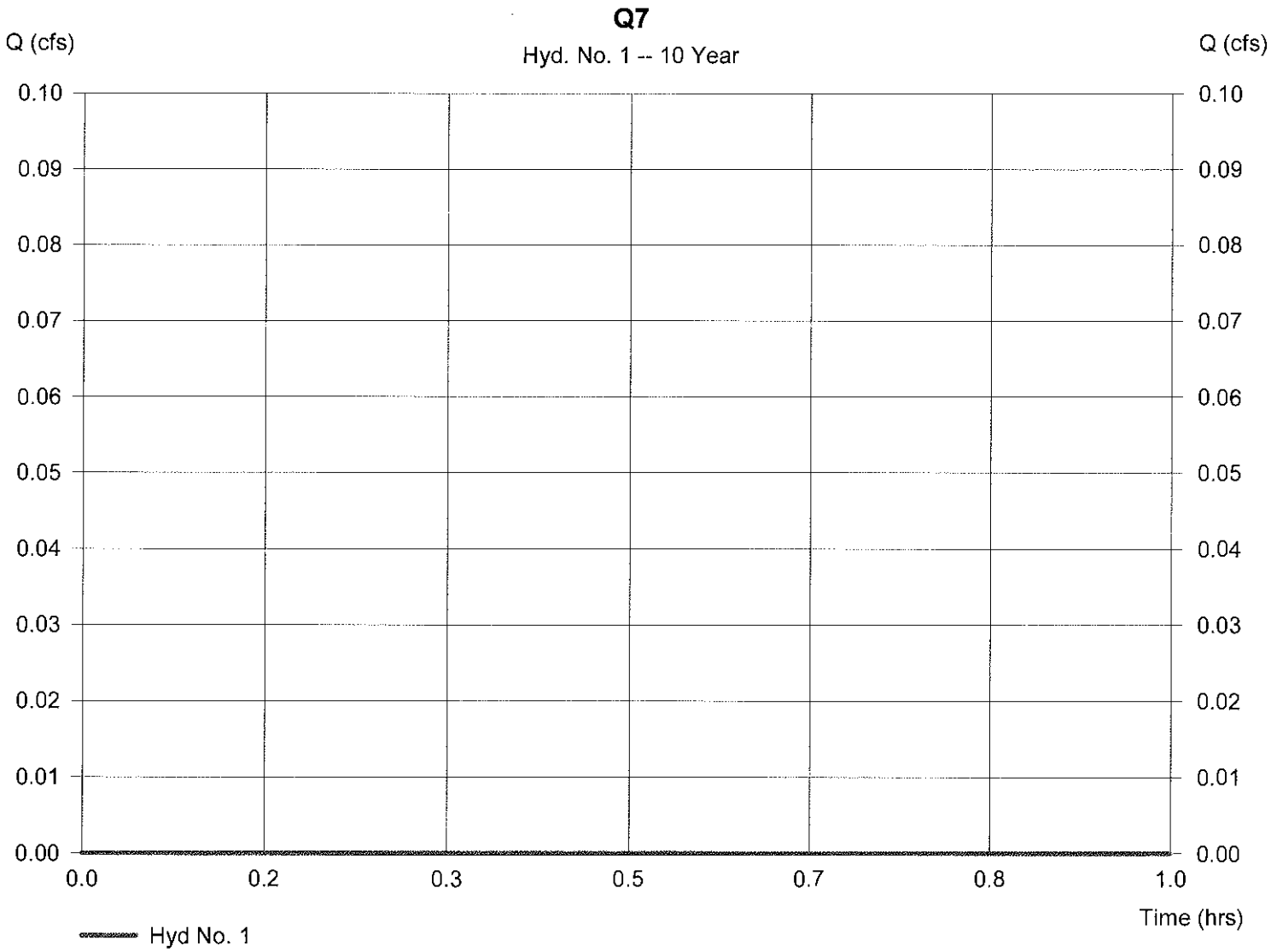
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.000	1	n/a	0	------	------	------	Q7
2	Reach	0.000	1	n/a	0	1	------	------	FLOW FROM Q7
3	SCS Runoff	0.000	1	n/a	0	------	------	------	Q8
4	SCS Runoff	0.000	1	n/a	0	------	------	------	Q9
6	Combine	0.000	1	n/a	0	2, 3, 4,	------	------	TOTAL FLOW TO EXISTING PIPE
7	SCS Runoff	0.000	1	n/a	0	------	------	------	Q10
9	Combine	0.000	1	n/a	0	6, 7,	------	------	TOTAL FLOW EXITING SITE TO WE
11	SCS Runoff	0.000	1	n/a	0	------	------	------	Q6
12	Reach	0.000	1	n/a	0	11	------	------	FLOW FROM Q6
13	SCS Runoff	0.000	1	n/a	0	------	------	------	Q5
15	Combine	0.000	1	n/a	0	12, 13,	------	------	TOTAL FLOW TO EXISTING DROP I
17	SCS Runoff	0.000	1	n/a	0	------	------	------	Q4
18	SCS Runoff	0.000	1	n/a	0	------	------	------	Q3
19	SCS Runoff	0.000	1	n/a	0	------	------	------	Q2
21	Combine	0.000	1	n/a	0	17, 18, 19,	------	------	TOTAL FLOW EXITING SITE TO EA
23	SCS Runoff	0.000	1	n/a	0	------	------	------	Q11
24	SCS Runoff	0.000	1	n/a	0	------	------	------	Q1
26	Combine	0.000	1	n/a	0	23, 24,	------	------	TOTAL FLOW EXITING SITE TO SO

Hydrograph Report

Hyd. No. 1

Q7

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 3.170 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



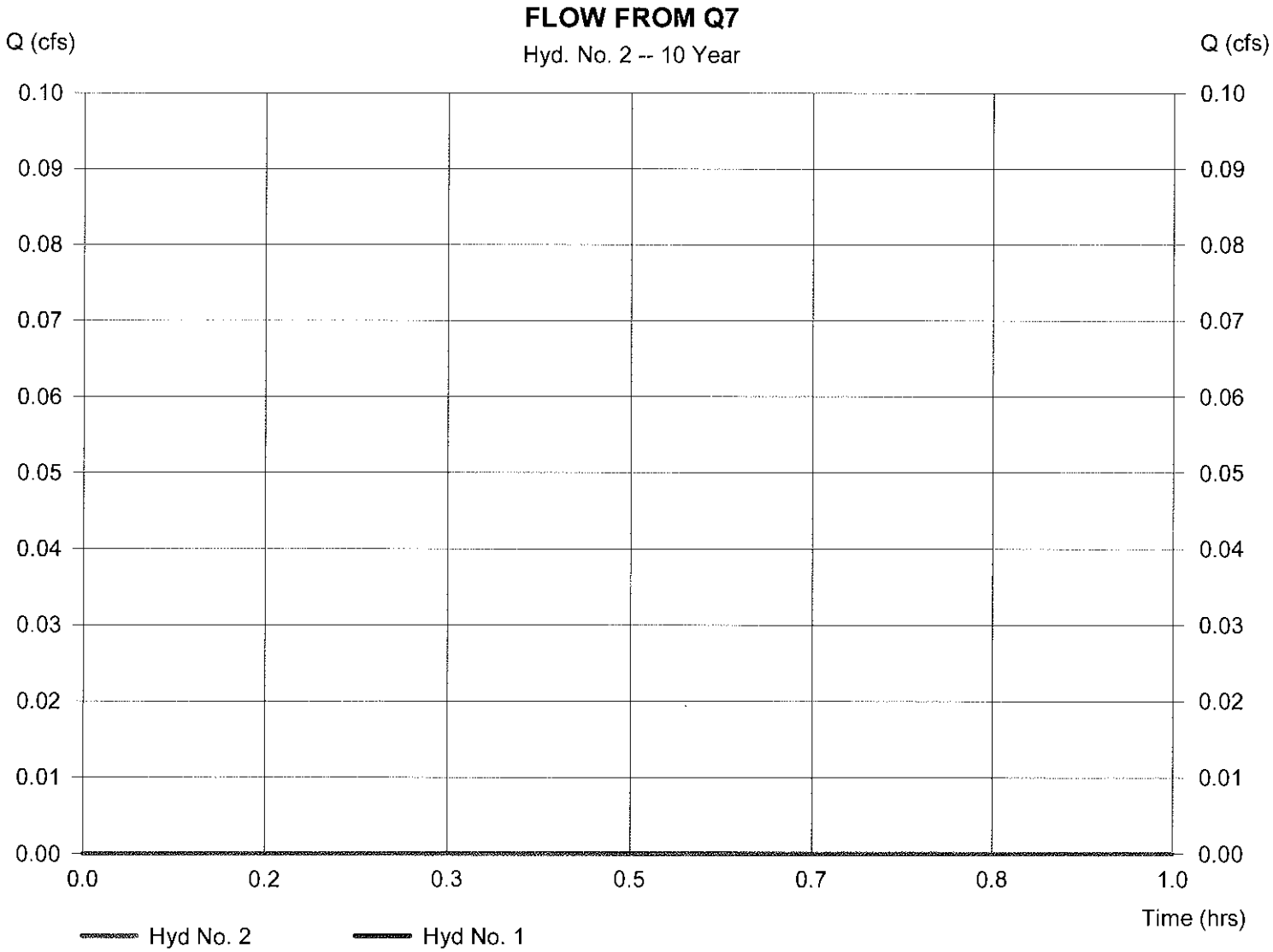
Hydrograph Report

Hyd. No. 2

FLOW FROM Q7

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 1 - Q7	Section type	= Trapezoidal
Reach length	= 933.0 ft	Channel slope	= 2.6 %
Manning's n	= 0.035	Bottom width	= 7.0 ft
Side slope	= 15.0:1	Max. depth	= 2.0 ft
Rating curve x	= 1.864	Rating curve m	= 1.177
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.0000

Modified Att-Kin routing method used.

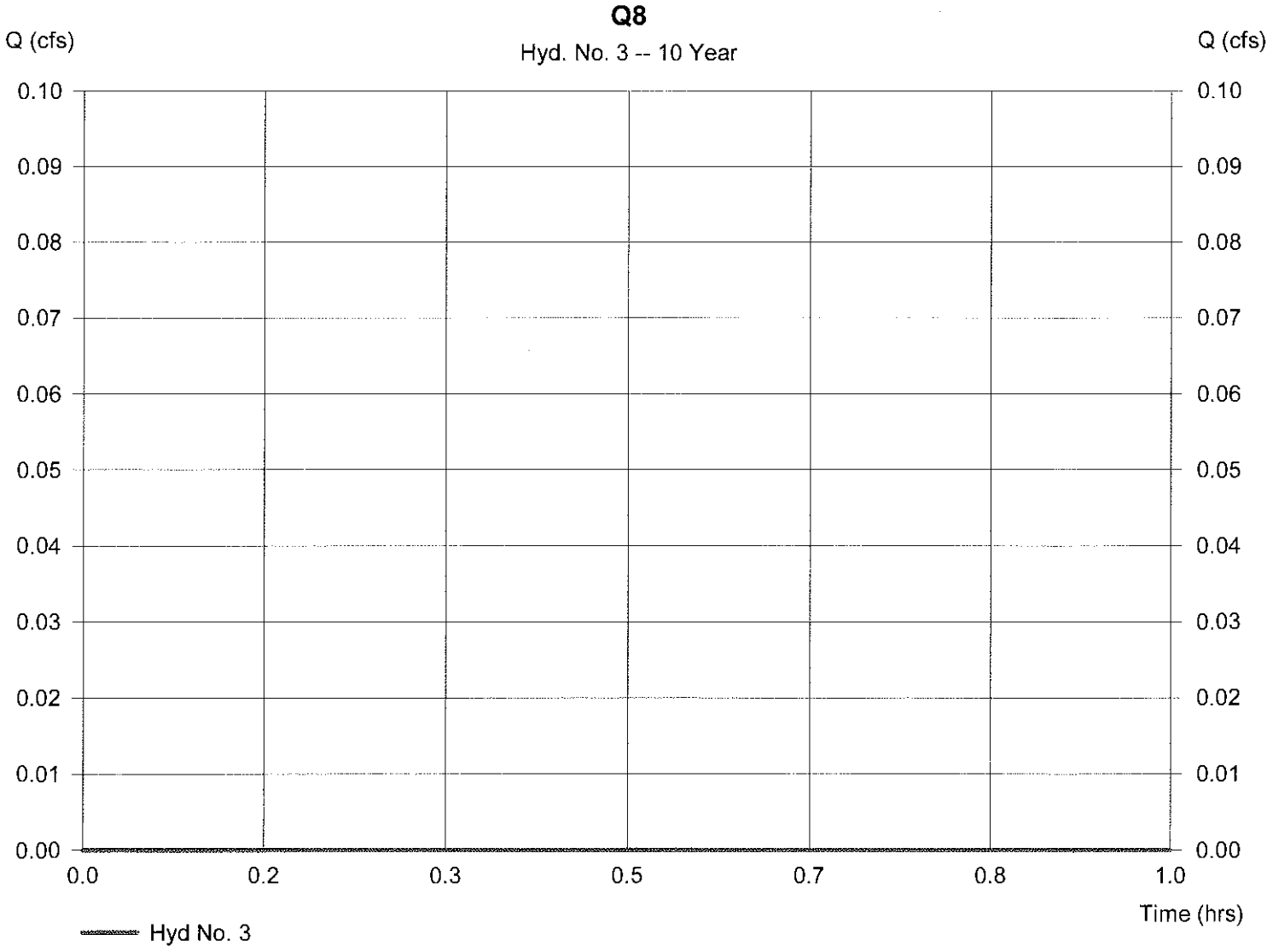


Hydrograph Report

Hyd. No. 3

Q8

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 3.580 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.22 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

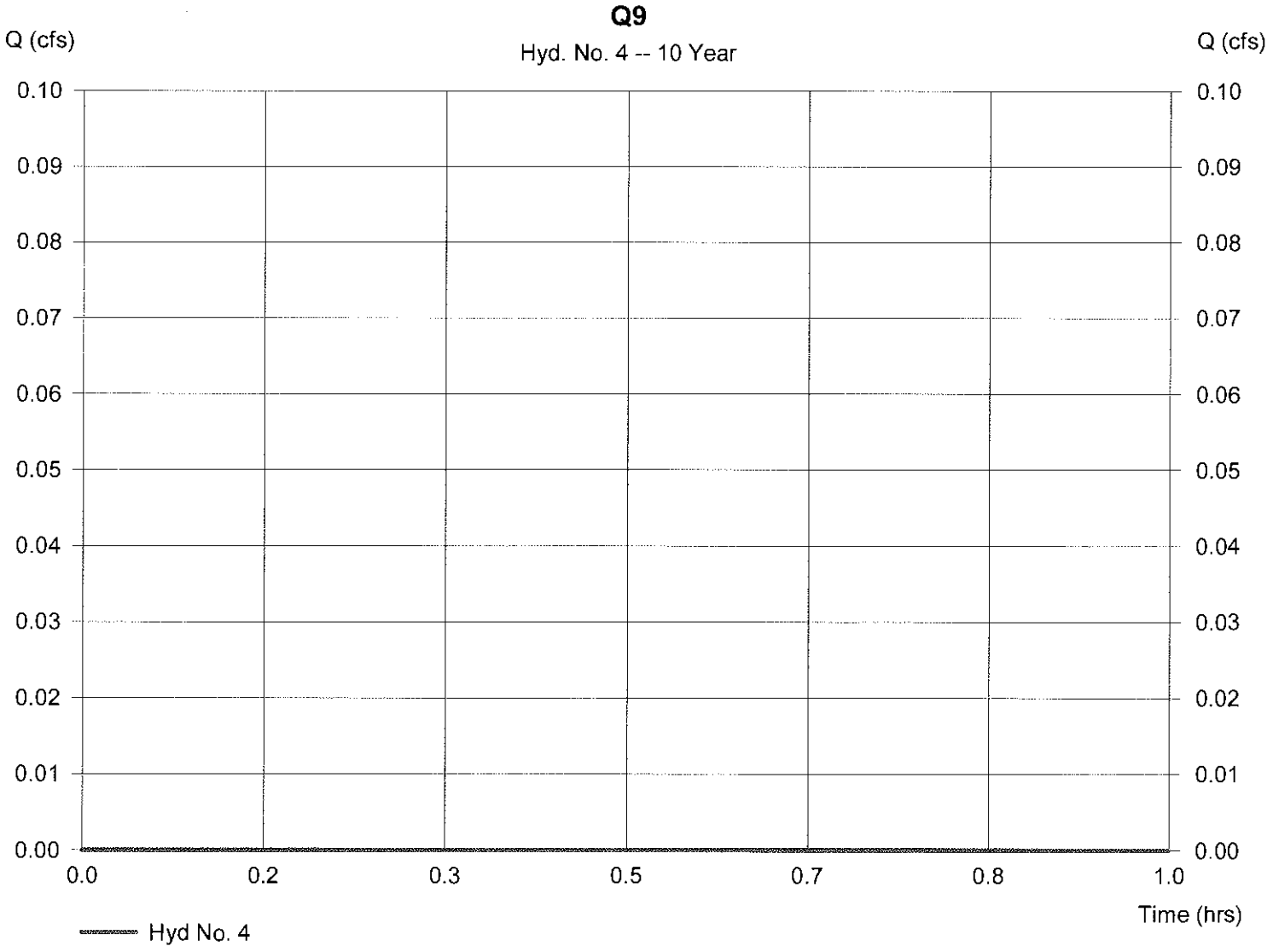


Hydrograph Report

Hyd. No. 4

Q9

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 1.920 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

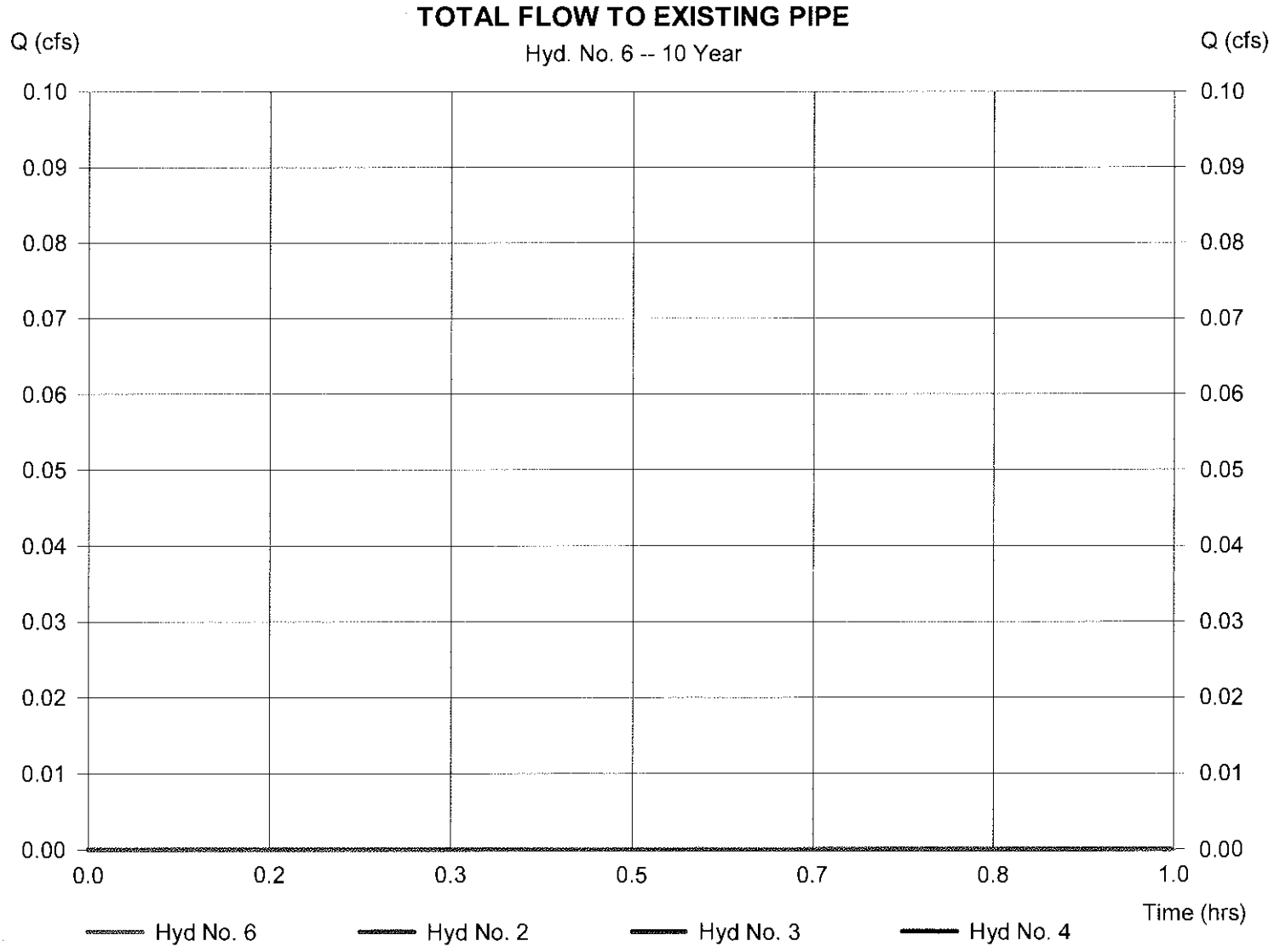


Hydrograph Report

Hyd. No. 6

,OTAL FLOW TO EXISTING PIPE

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 5.500 ac

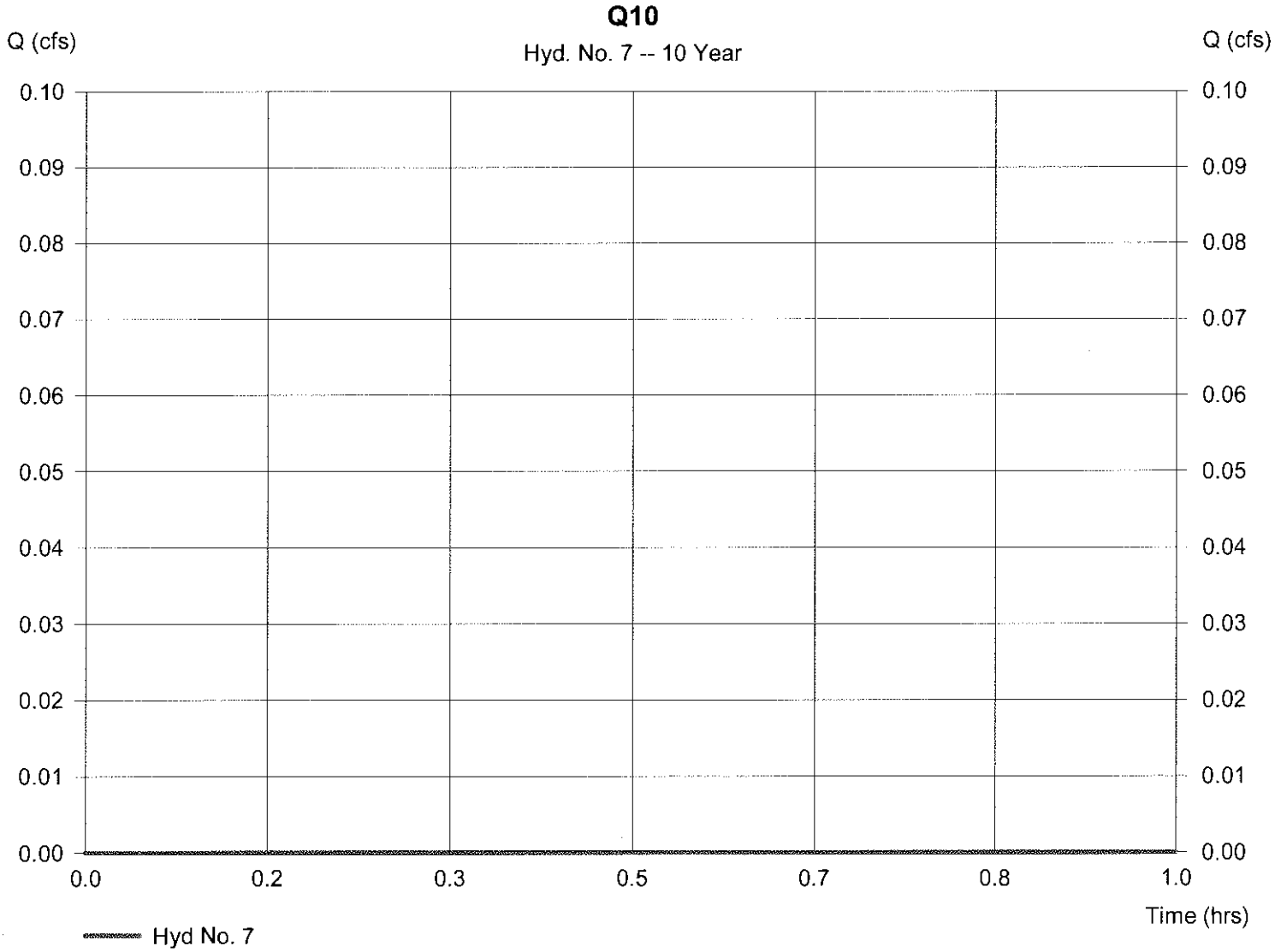


Hydrograph Report

Hyd. No. 7

Q10

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 13.08 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

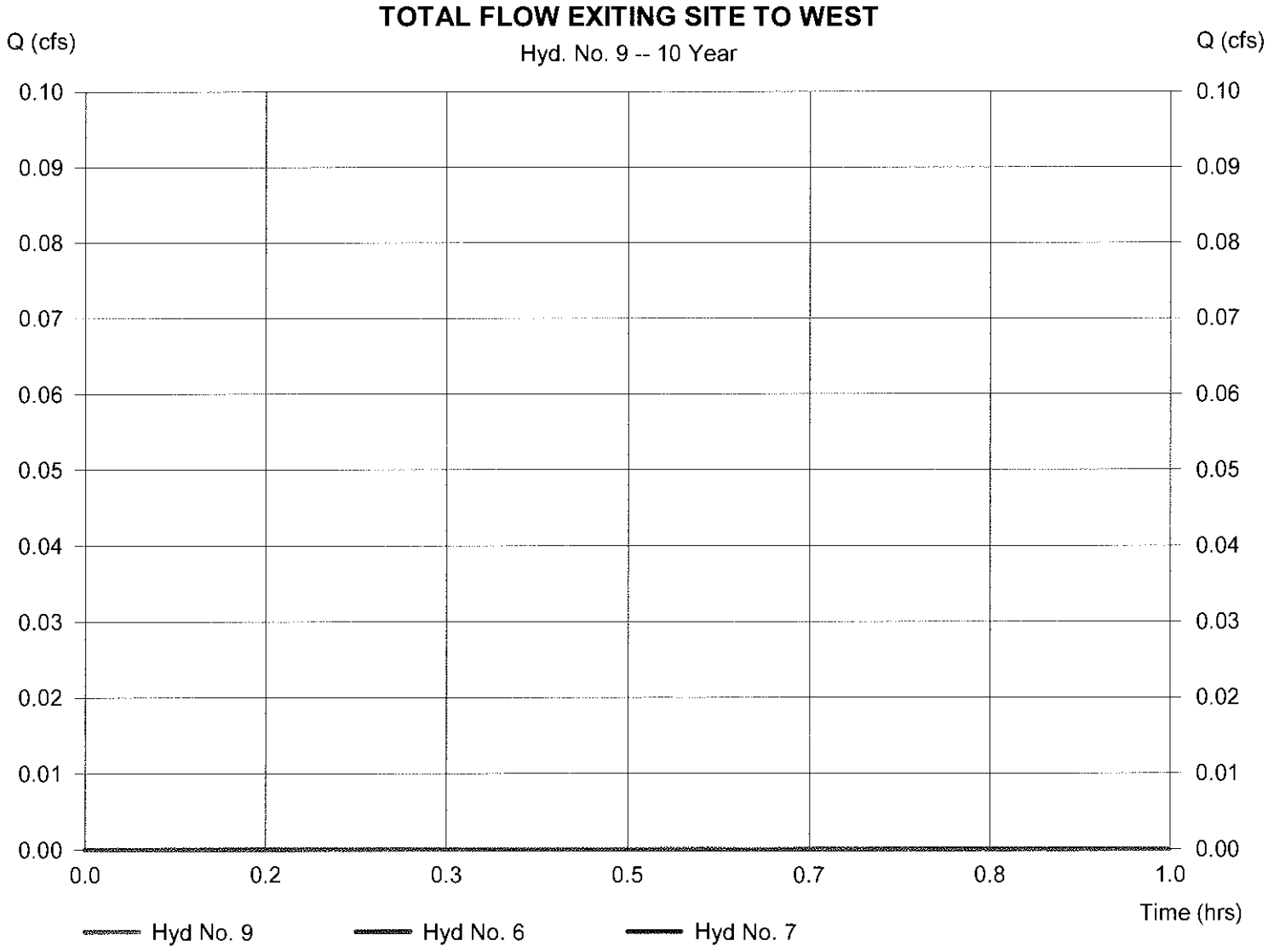


Hydrograph Report

Hyd. No. 9

TOTAL FLOW EXITING SITE TO WEST

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.100 ac

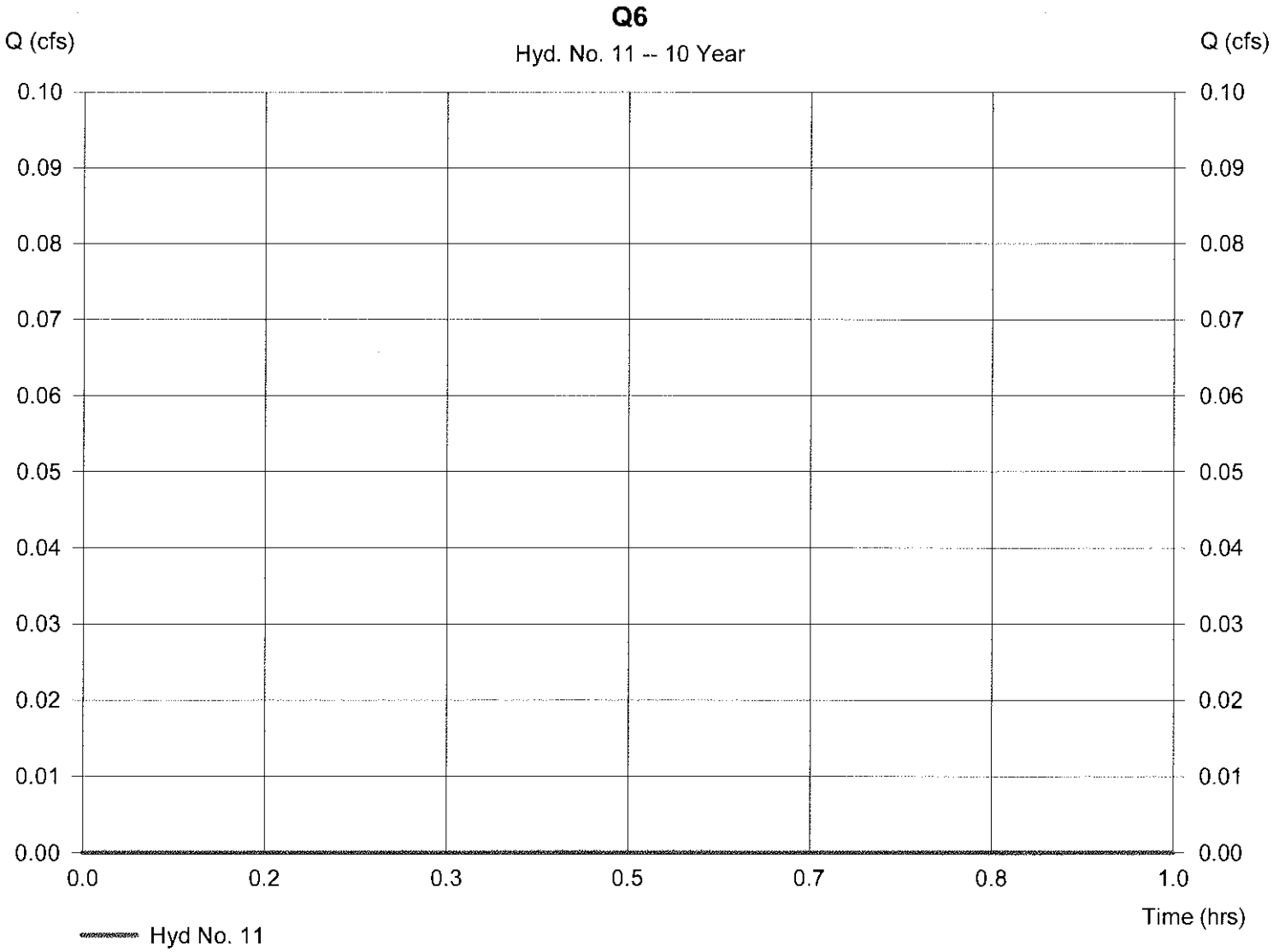


Hydrograph Report

Hyd. No. 11

Q6

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 0.850 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.34 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



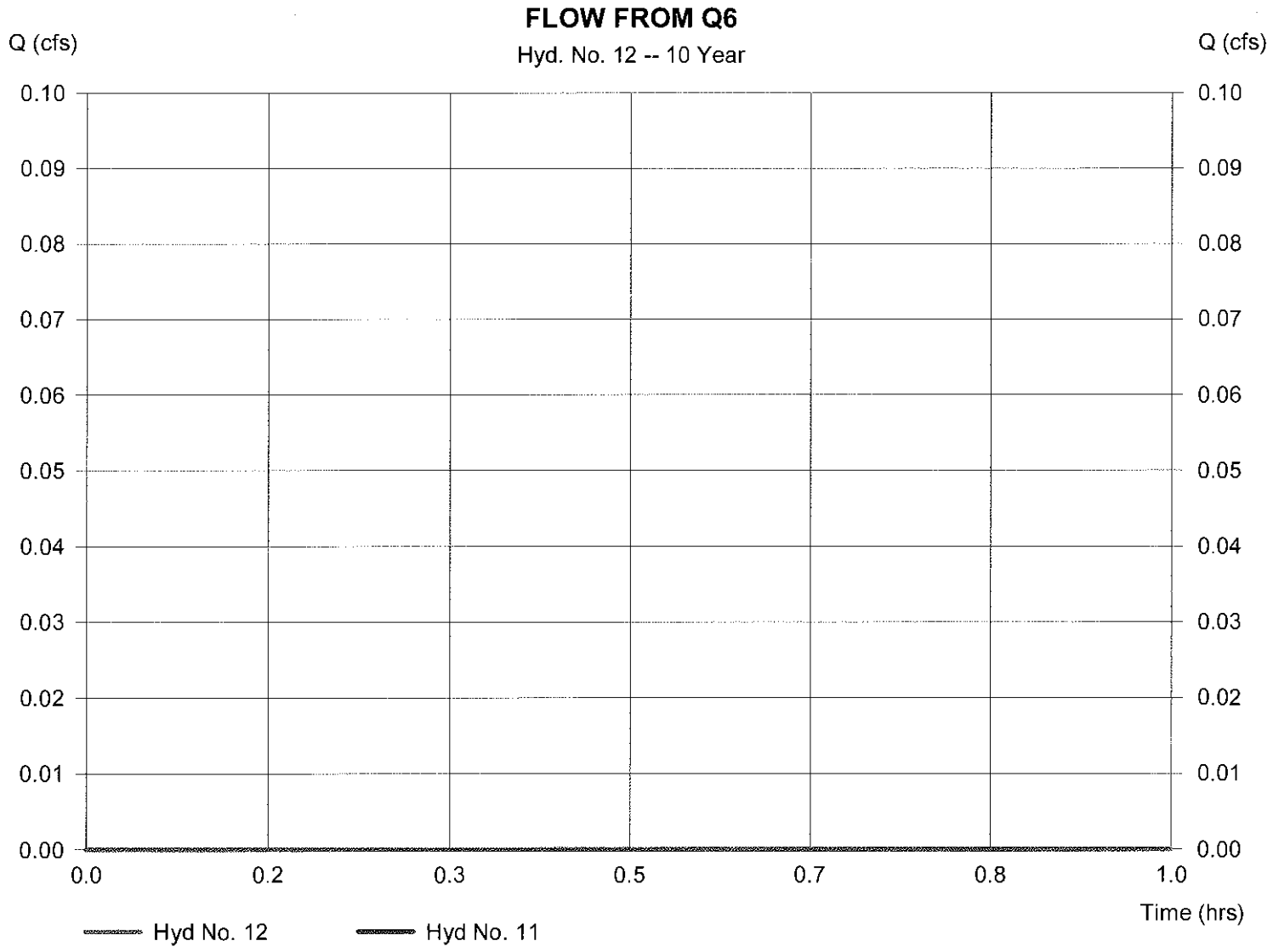
Hydrograph Report

Hyd. No. 12

FLOW FROM Q6

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 11 - Q6	Section type	= Trapezoidal
Reach length	= 819.0 ft	Channel slope	= 2.5 %
Manning's n	= 0.035	Bottom width	= 5.0 ft
Side slope	= 25.0:1	Max. depth	= 1.0 ft
Rating curve x	= 2.301	Rating curve m	= 0.970
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.0000

Modified Att-Kin routing method used.

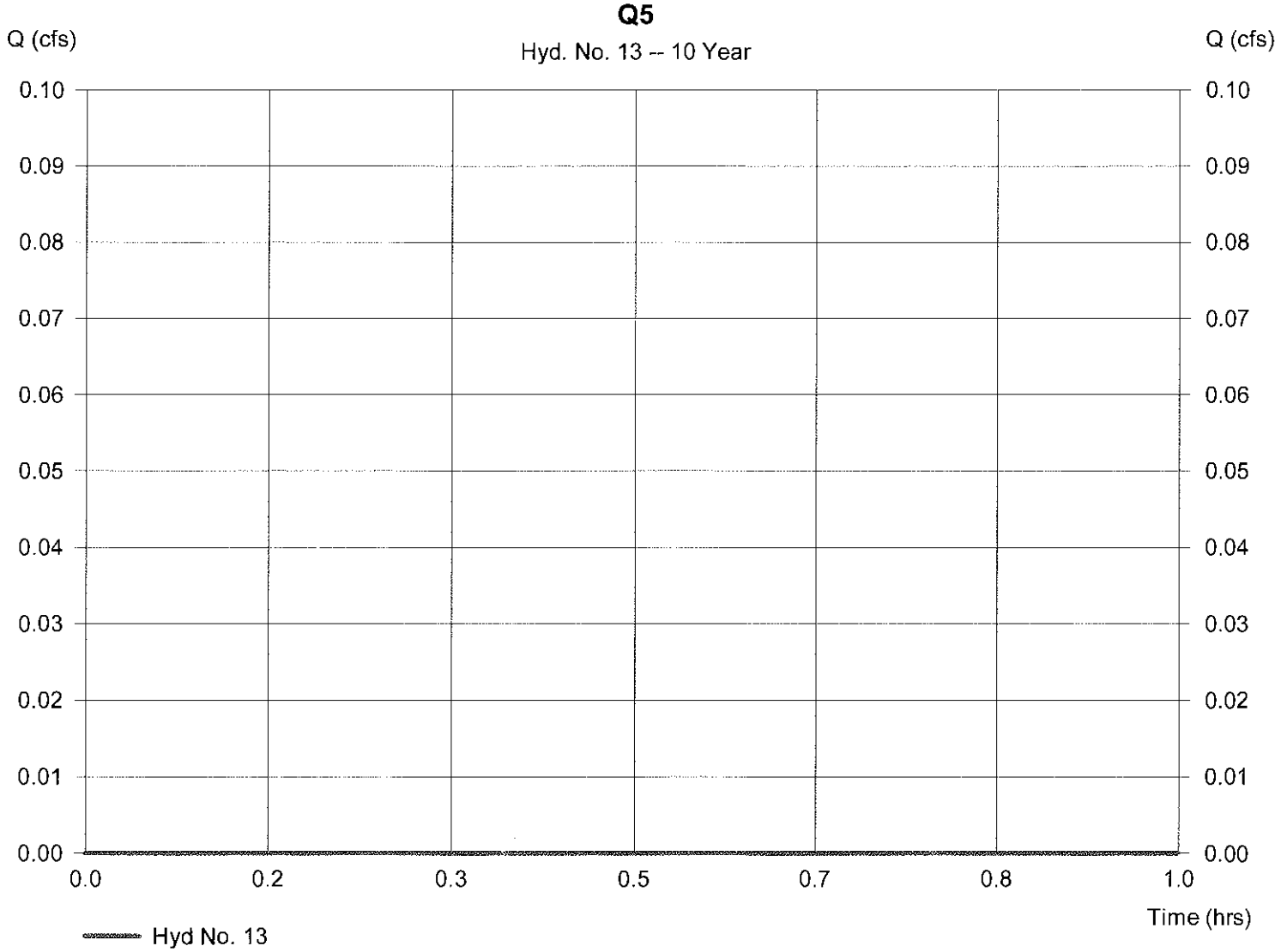


Hydrograph Report

Hyd. No. 13

Q5

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 1.510 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.50 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

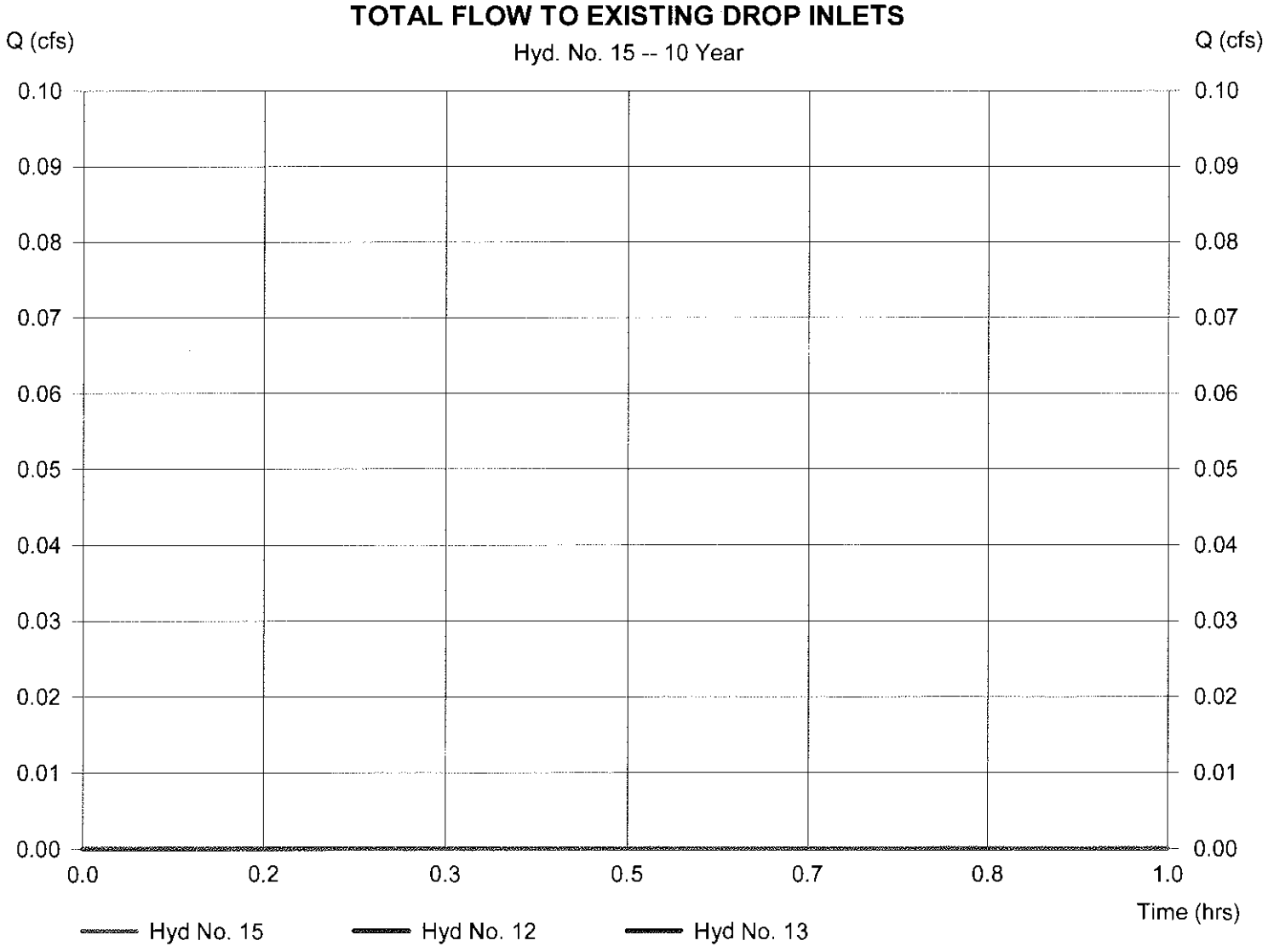


Hydrograph Report

Hyd. No. 15

TOTAL FLOW TO EXISTING DROP INLETS

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 12, 13	Contrib. drain. area	= 1.510 ac

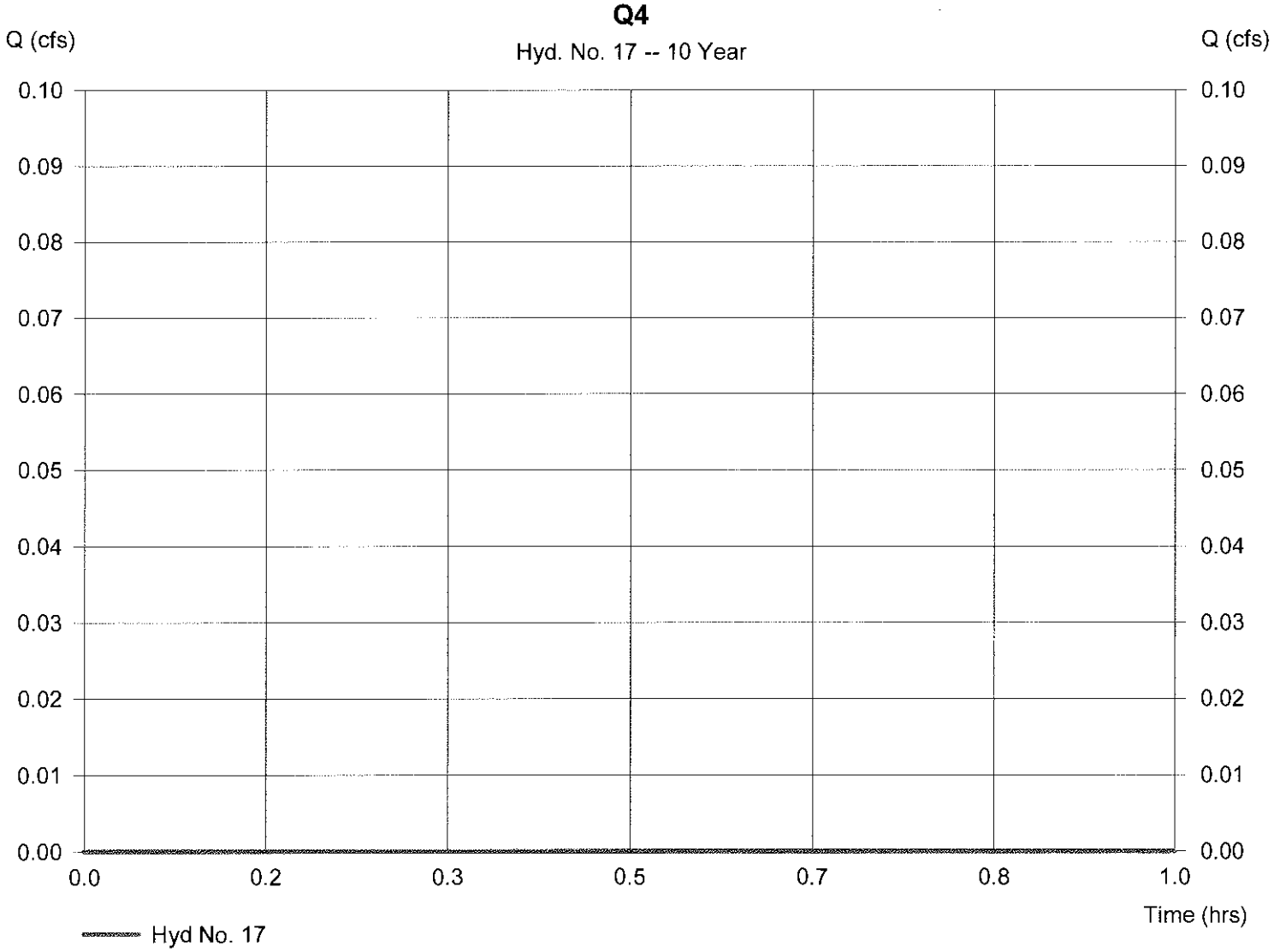


Hydrograph Report

Hyd. No. 17

Q4

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 0.390 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 23.88 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

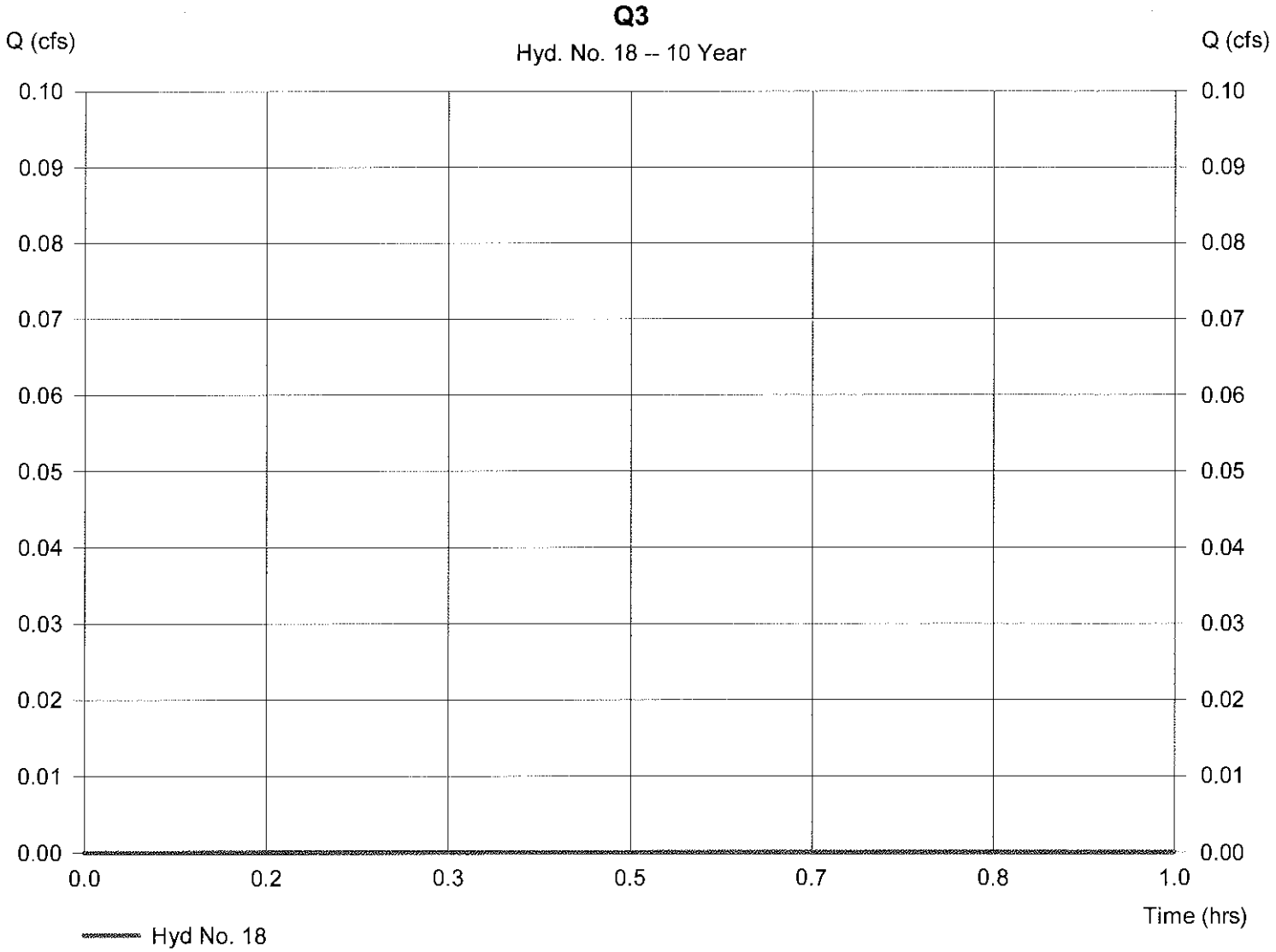


Hydrograph Report

Hyd. No. 18

Q3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.76 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

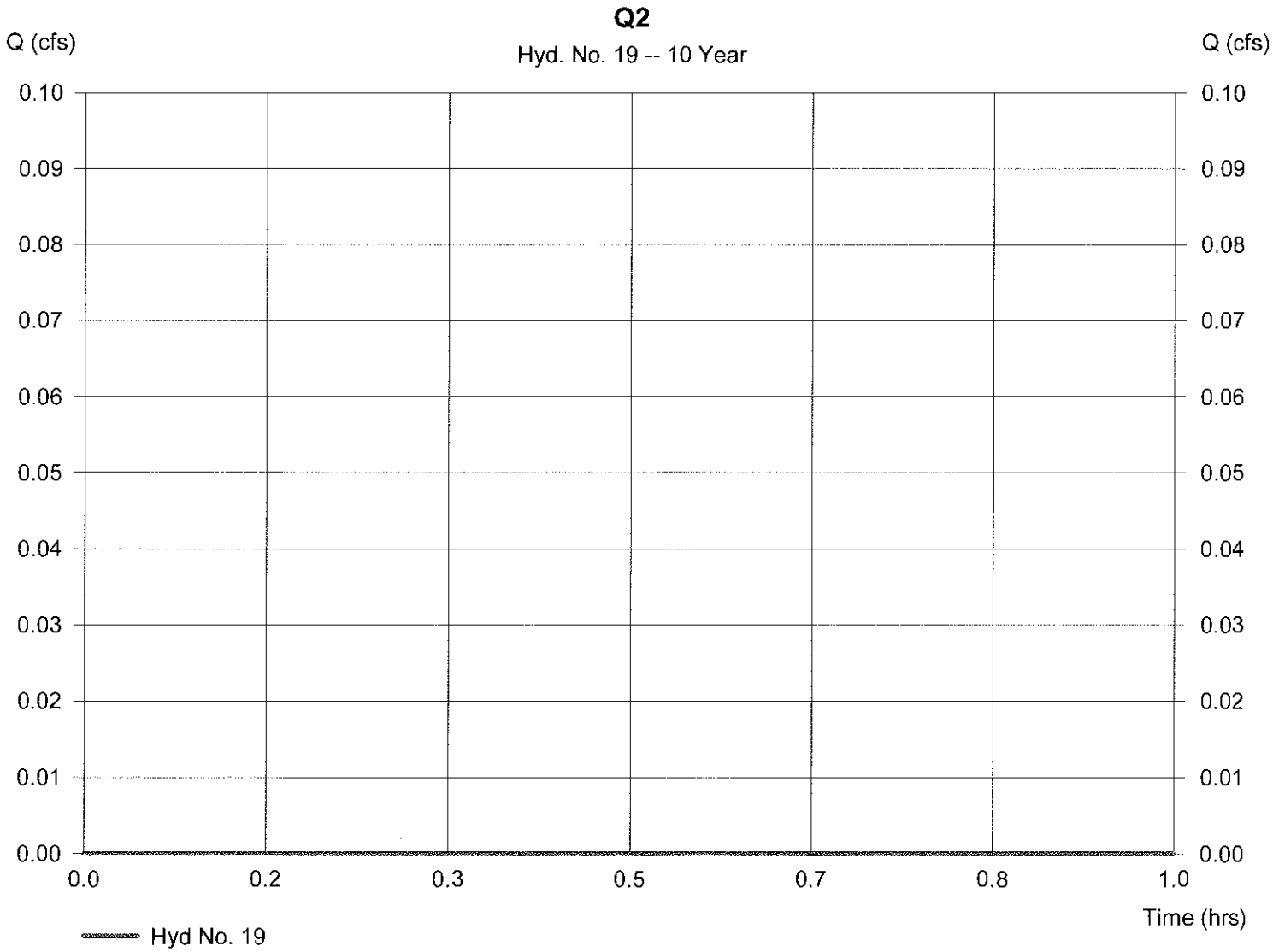


Hydrograph Report

Hyd. No. 19

Q2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 0.370 ac	Curve number	= 78
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.22 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

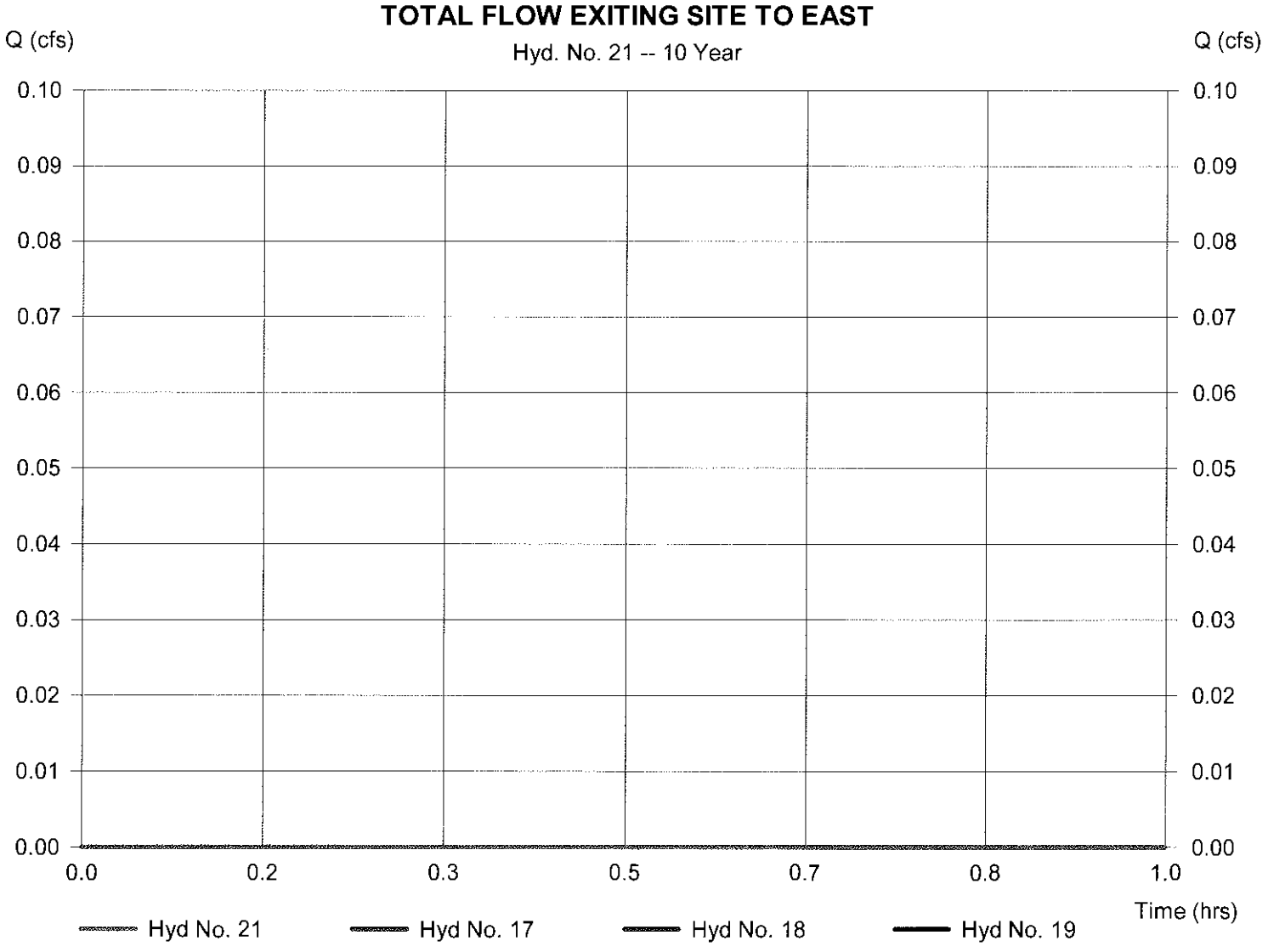


Hydrograph Report

Hyd. No. 21

TOTAL FLOW EXITING SITE TO EAST

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 17, 18, 19	Contrib. drain. area	= 0.860 ac

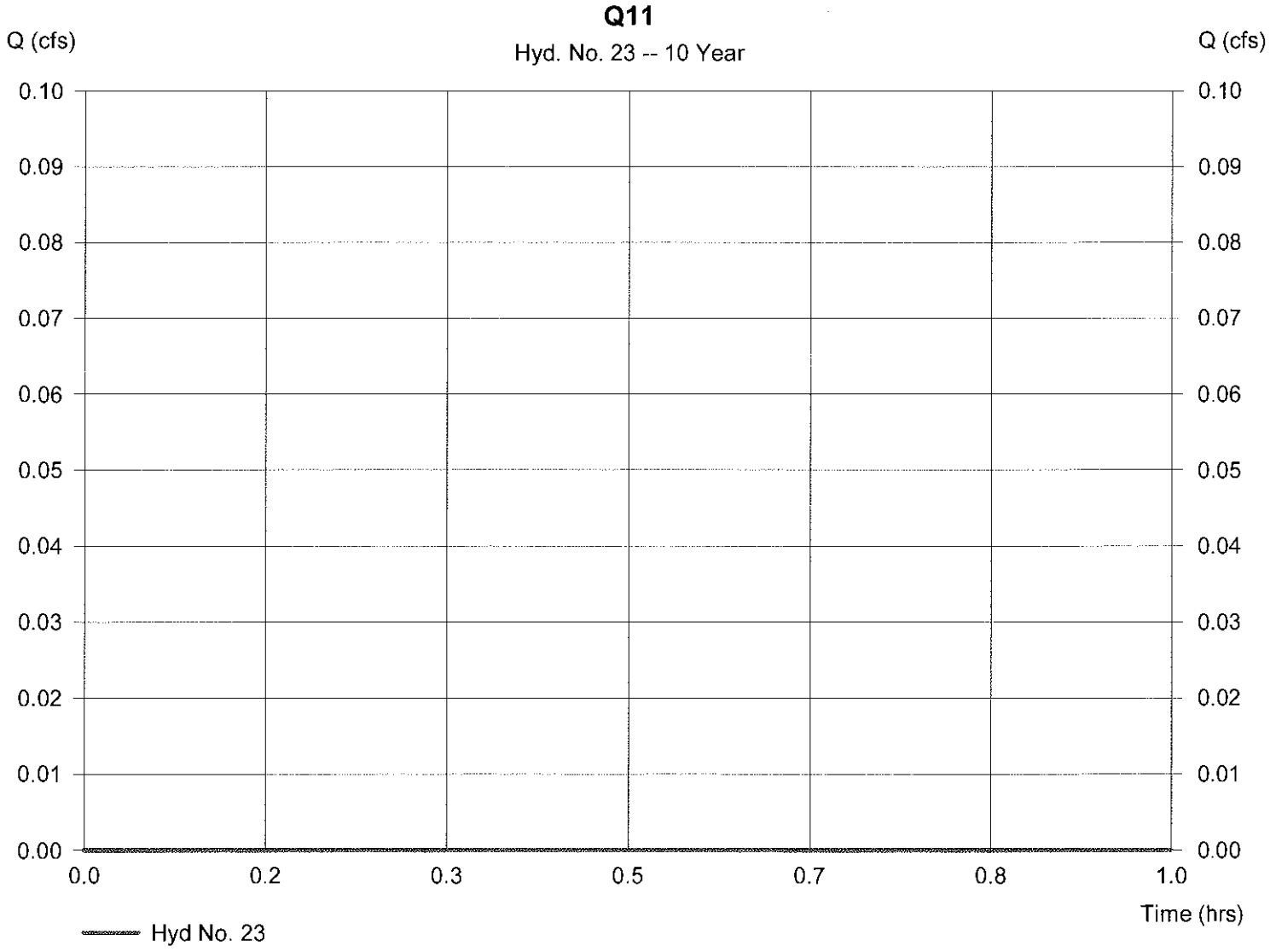


Hydrograph Report

Hyd. No. 23

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

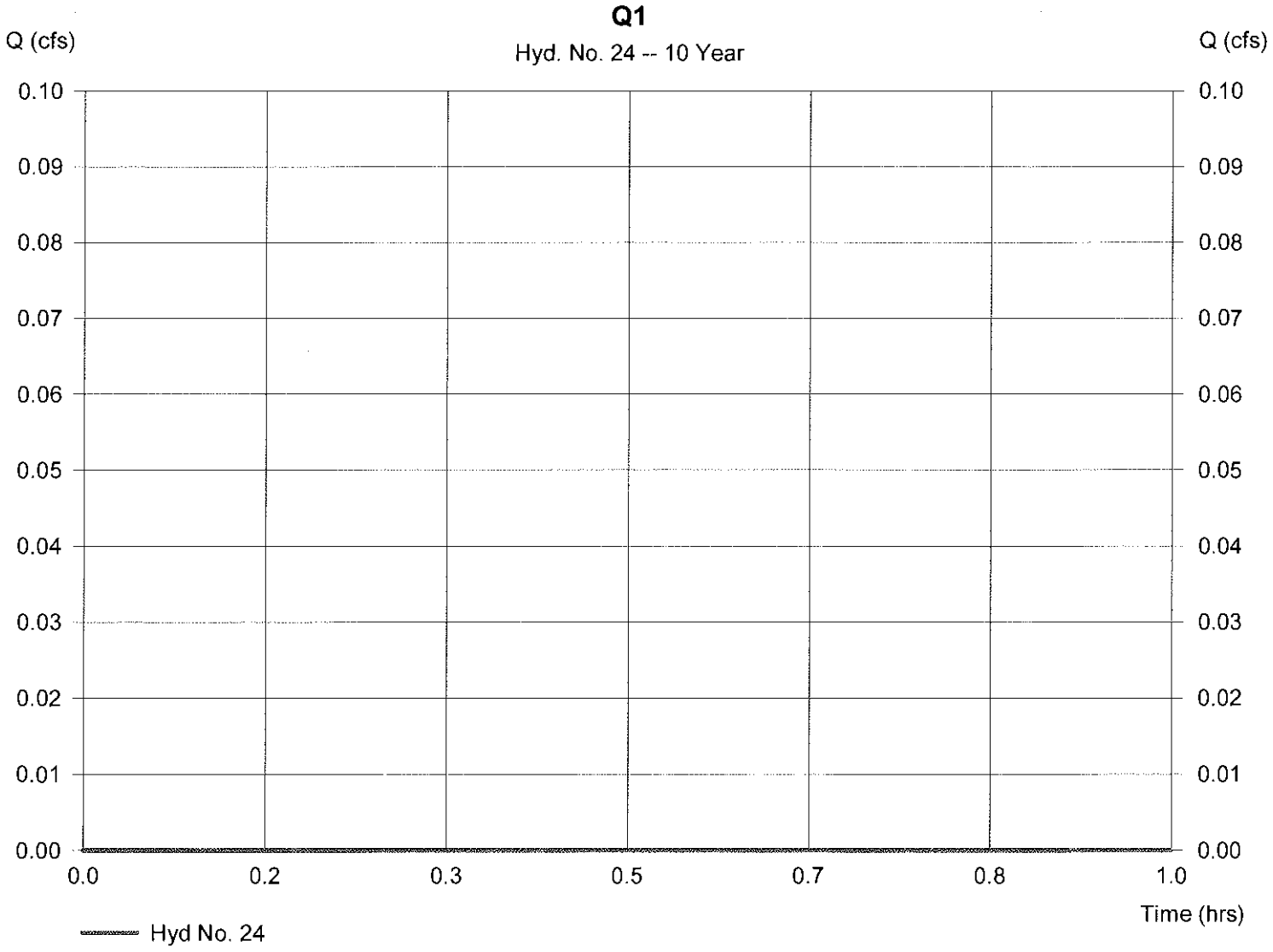


Hydrograph Report

Hyd. No. 24

Q1

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Drainage area	= 1.810 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.56 min
Total precip.	= 0.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

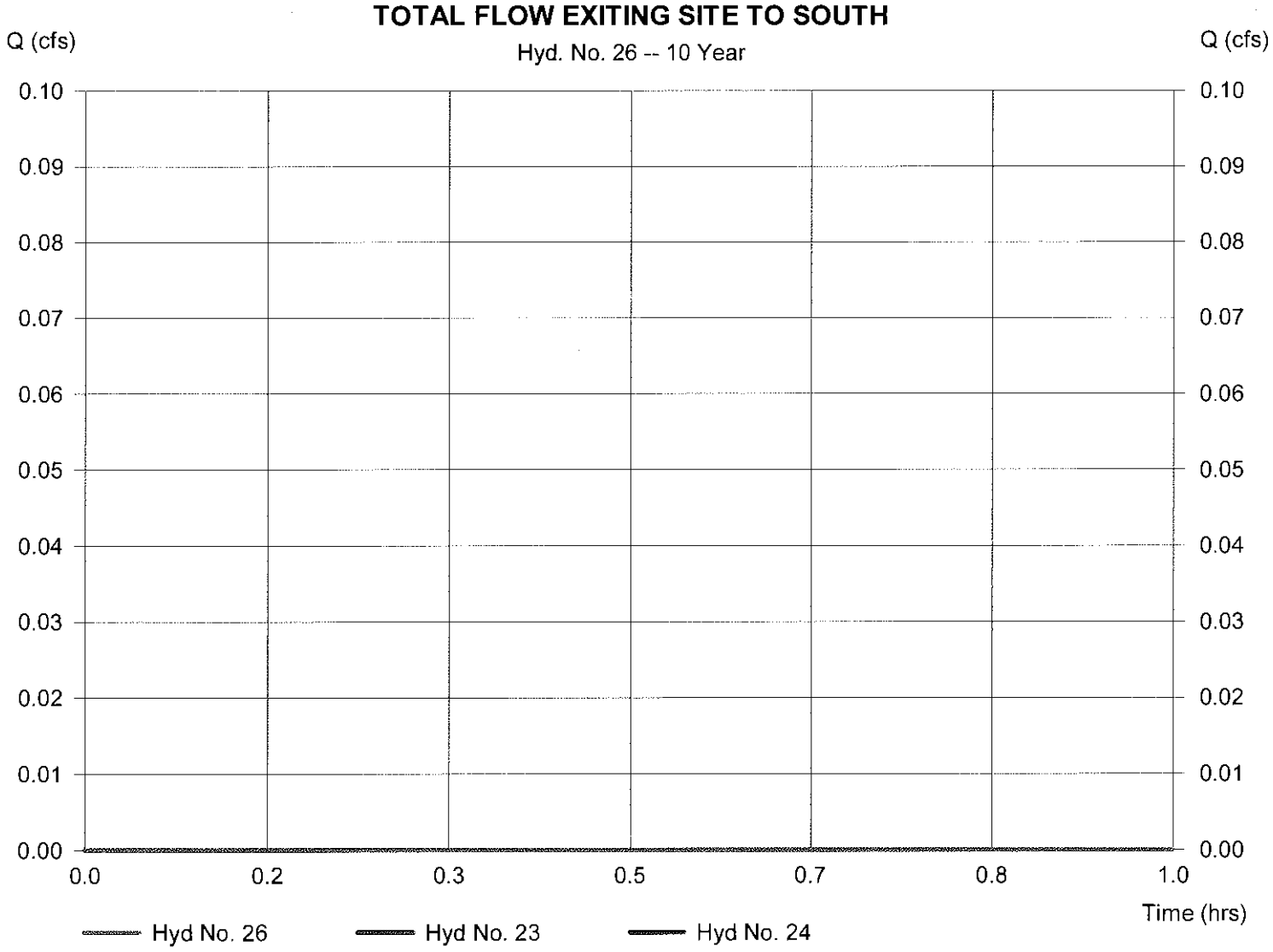


Hydrograph Report

Hyd. No. 26

TOTAL FLOW EXITING SITE TO SOUTH

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 1 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 2.120 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

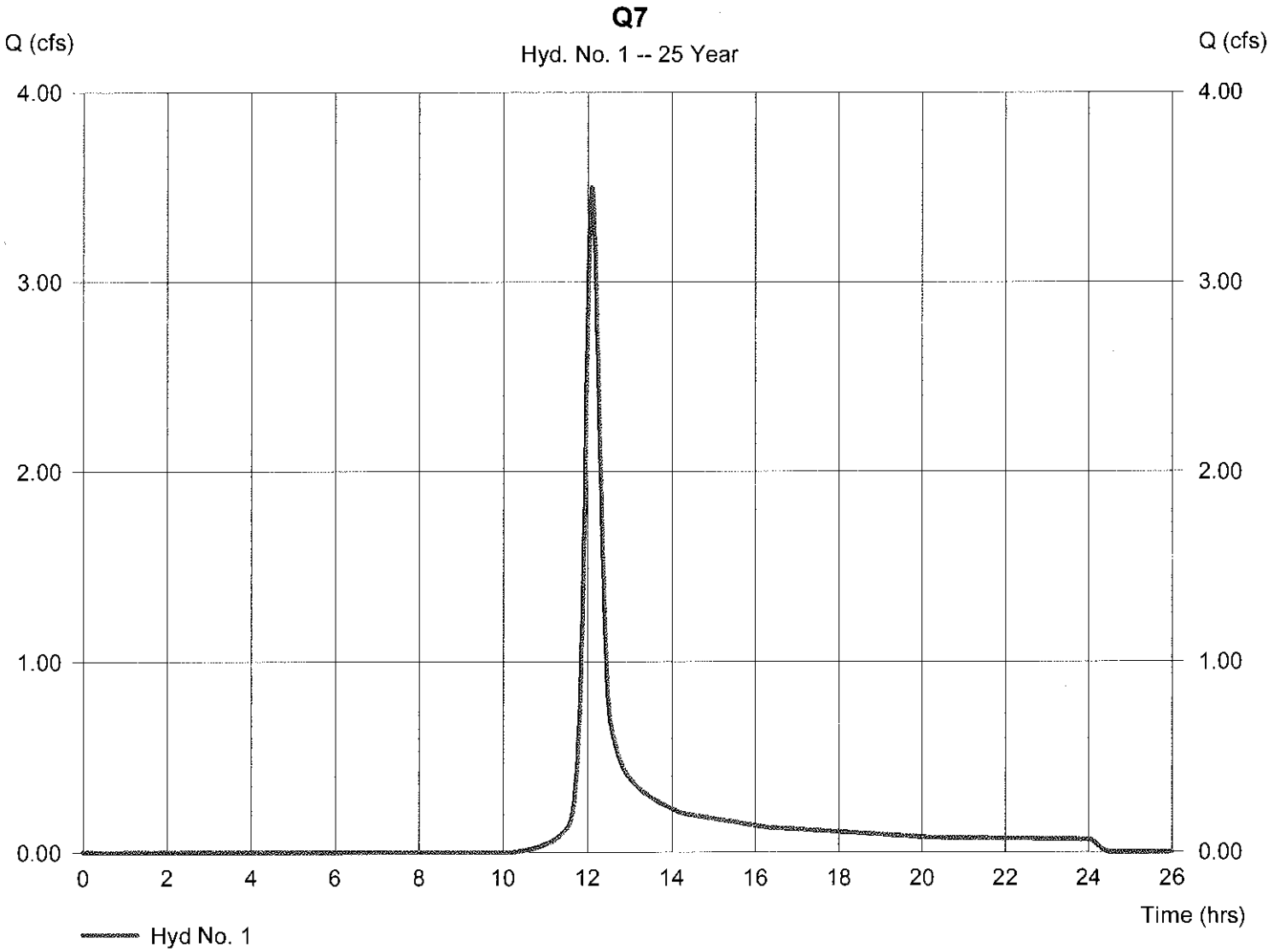
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	3.498	1	727	11,784	------	------	------	Q7
2	Reach	3.022	1	732	11,780	1	------	------	FLOW FROM Q7
3	SCS Runoff	3.872	1	726	12,459	------	------	------	Q8
4	SCS Runoff	2.722	1	721	6,959	------	------	------	Q9
6	Combine	8.598	1	725	31,198	2, 3, 4,	------	------	TOTAL FLOW TO EXISTING PIPE
7	SCS Runoff	0.142	1	721	362	------	------	------	Q10
9	Combine	8.720	1	725	31,560	6, 7,	------	------	TOTAL FLOW EXITING SITE TO WE
11	SCS Runoff	1.465	1	721	3,555	------	------	------	Q6
12	Reach	1.185	1	725	3,551	11	------	------	FLOW FROM Q6
13	SCS Runoff	2.060	1	723	5,950	------	------	------	Q5
15	Combine	3.233	1	724	9,501	12, 13,	------	------	TOTAL FLOW TO EXISTING DROP I
17	SCS Runoff	0.392	1	729	1,436	------	------	------	Q4
18	SCS Runoff	0.142	1	721	362	------	------	------	Q3
19	SCS Runoff	0.472	1	721	1,167	------	------	------	Q2
21	Combine	0.918	1	722	2,965	17, 18, 19,	------	------	TOTAL FLOW EXITING SITE TO EA
23	SCS Runoff	0.797	1	718	1,619	------	------	------	Q11
24	SCS Runoff	1.657	1	724	5,028	------	------	------	Q1
26	Combine	2.122	1	721	6,647	23, 24,	------	------	TOTAL FLOW EXITING SITE TO SO

Hydrograph Report

Hyd. No. 1

Q7

Hydrograph type	= SCS Runoff	Peak discharge	= 3.498 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 11,784 cuft
Drainage area	= 3.170 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



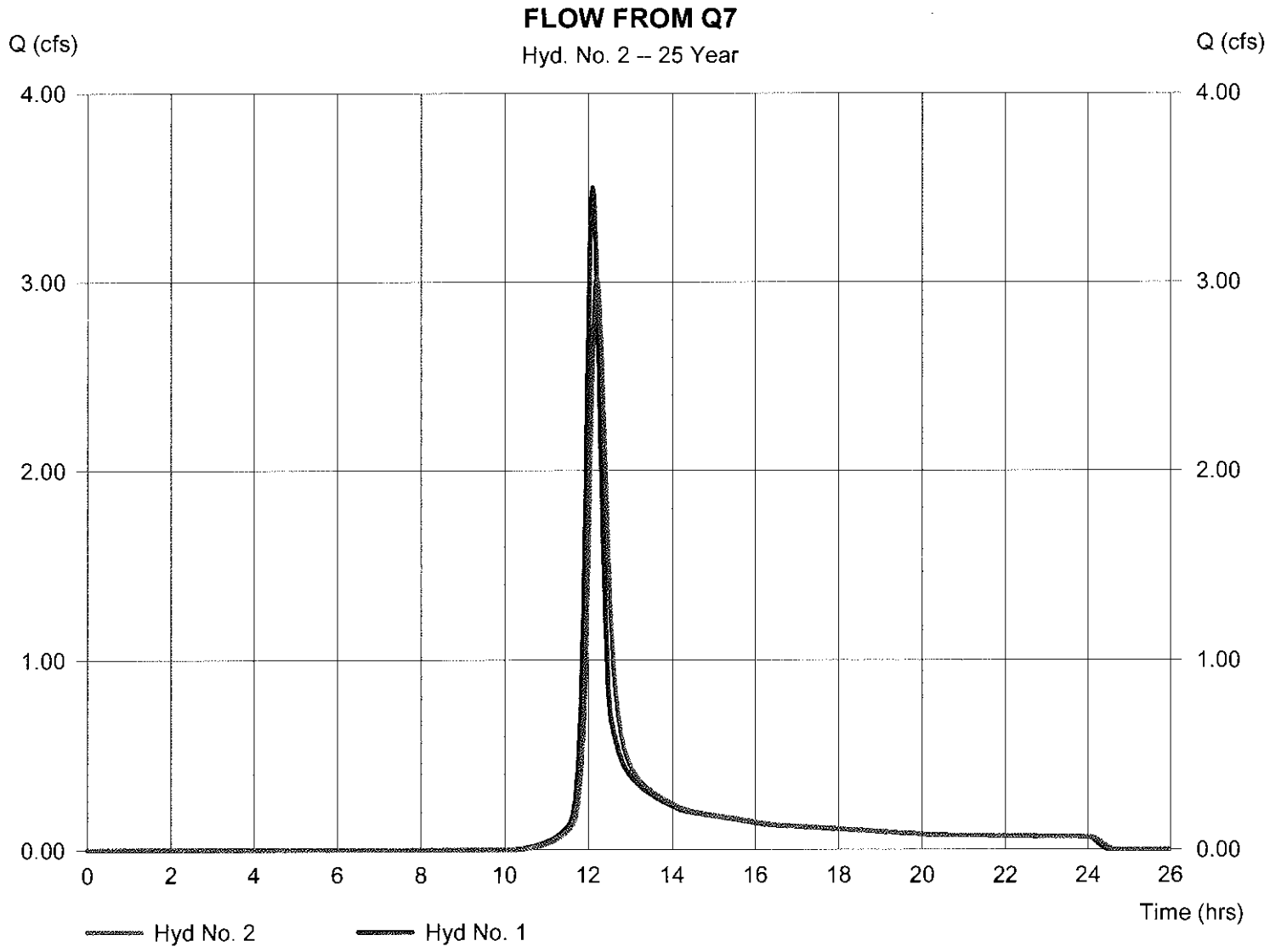
Hydrograph Report

Hyd. No. 2

FLOW FROM Q7

Hydrograph type	= Reach	Peak discharge	= 3.022 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.20 hrs
Time interval	= 1 min	Hyd. volume	= 11,780 cuft
Inflow hyd. No.	= 1 - Q7	Section type	= Trapezoidal
Reach length	= 933.0 ft	Channel slope	= 2.6 %
Manning's n	= 0.035	Bottom width	= 7.0 ft
Side slope	= 15.0:1	Max. depth	= 2.0 ft
Rating curve x	= 1.864	Rating curve m	= 1.177
Ave. velocity	= 2.05 ft/s	Routing coeff.	= 0.1439

Modified Att-Kin routing method used.

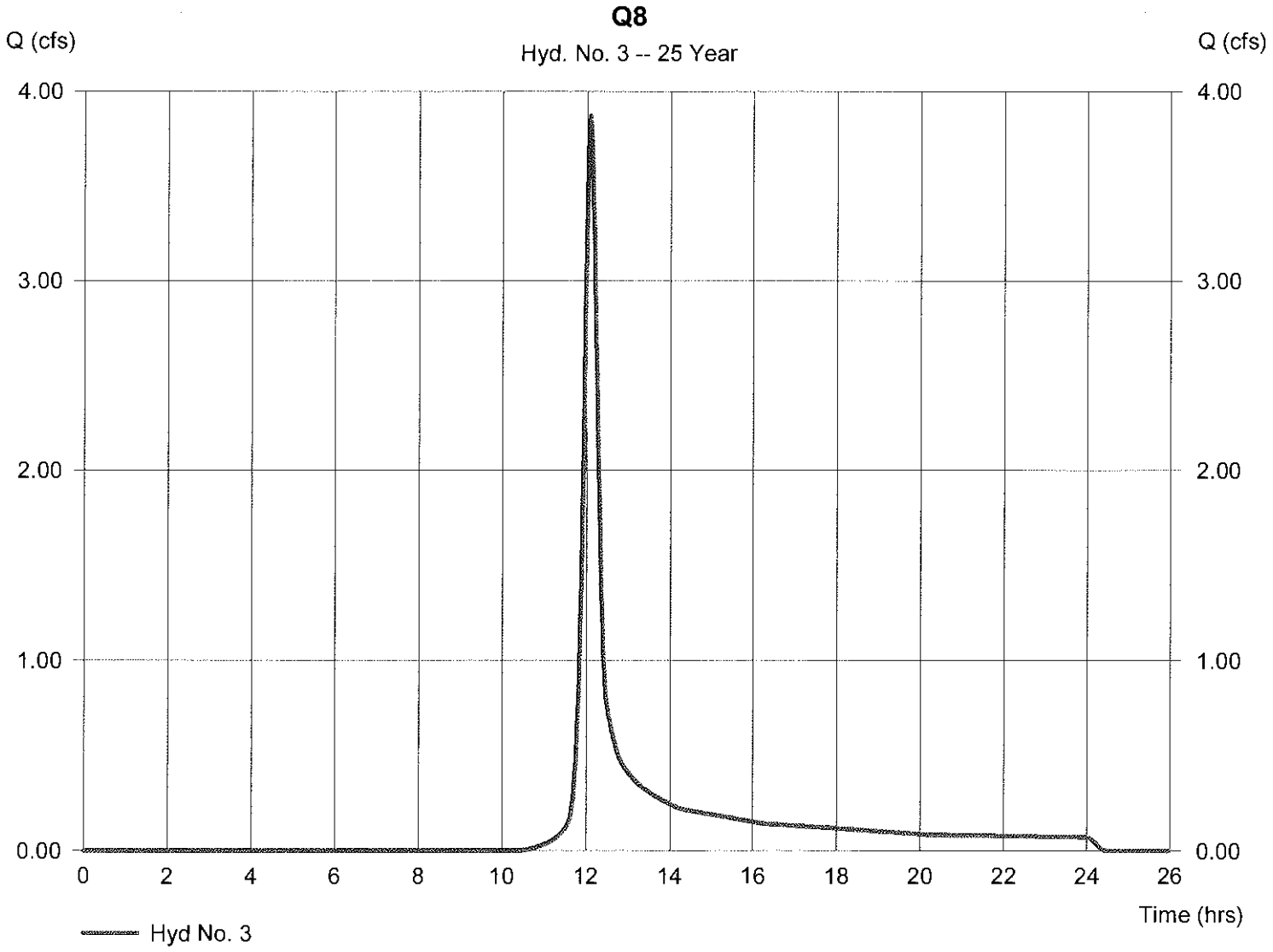


Hydrograph Report

Hyd. No. 3

Q8

Hydrograph type	= SCS Runoff	Peak discharge	= 3.872 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 12,459 cuft
Drainage area	= 3.580 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.22 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

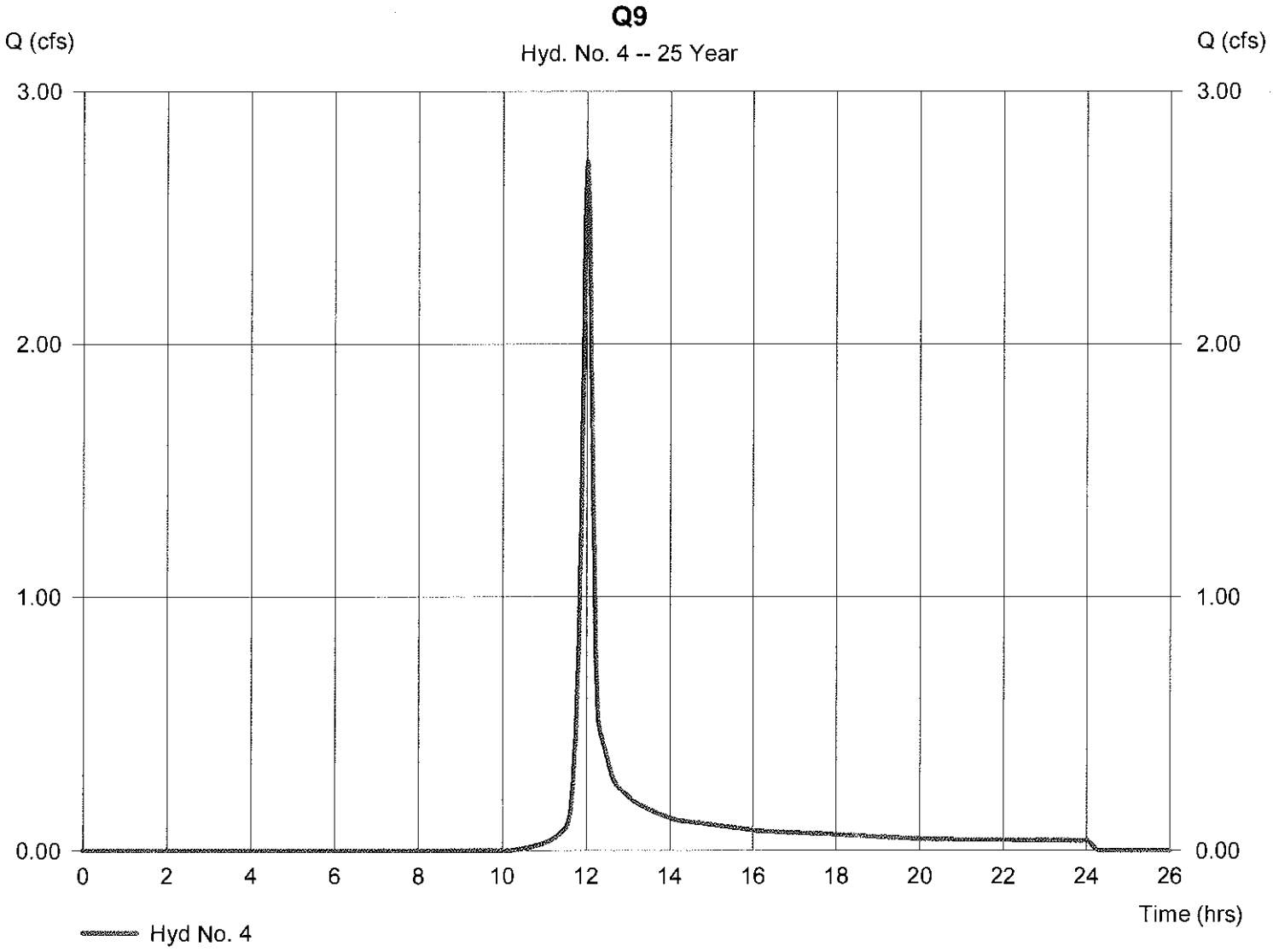


Hydrograph Report

Hyd. No. 4

Q9

Hydrograph type	= SCS Runoff	Peak discharge	= 2.722 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 6,959 cuft
Drainage area	= 1.920 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

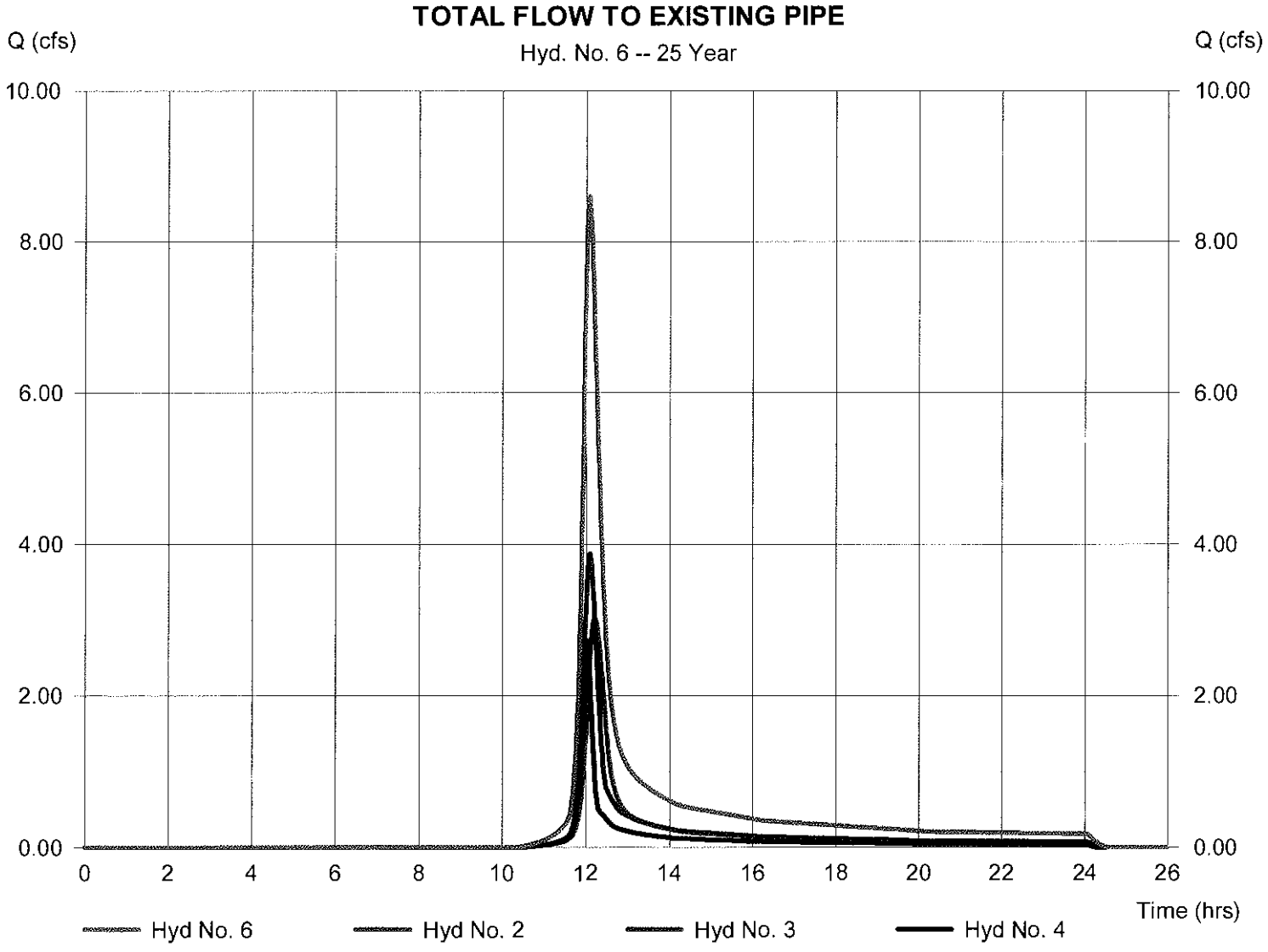


Hydrograph Report

Hyd. No. 6

TOTAL FLOW TO EXISTING PIPE

Hydrograph type	= Combine	Peak discharge	= 8.598 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 31,198 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 5.500 ac

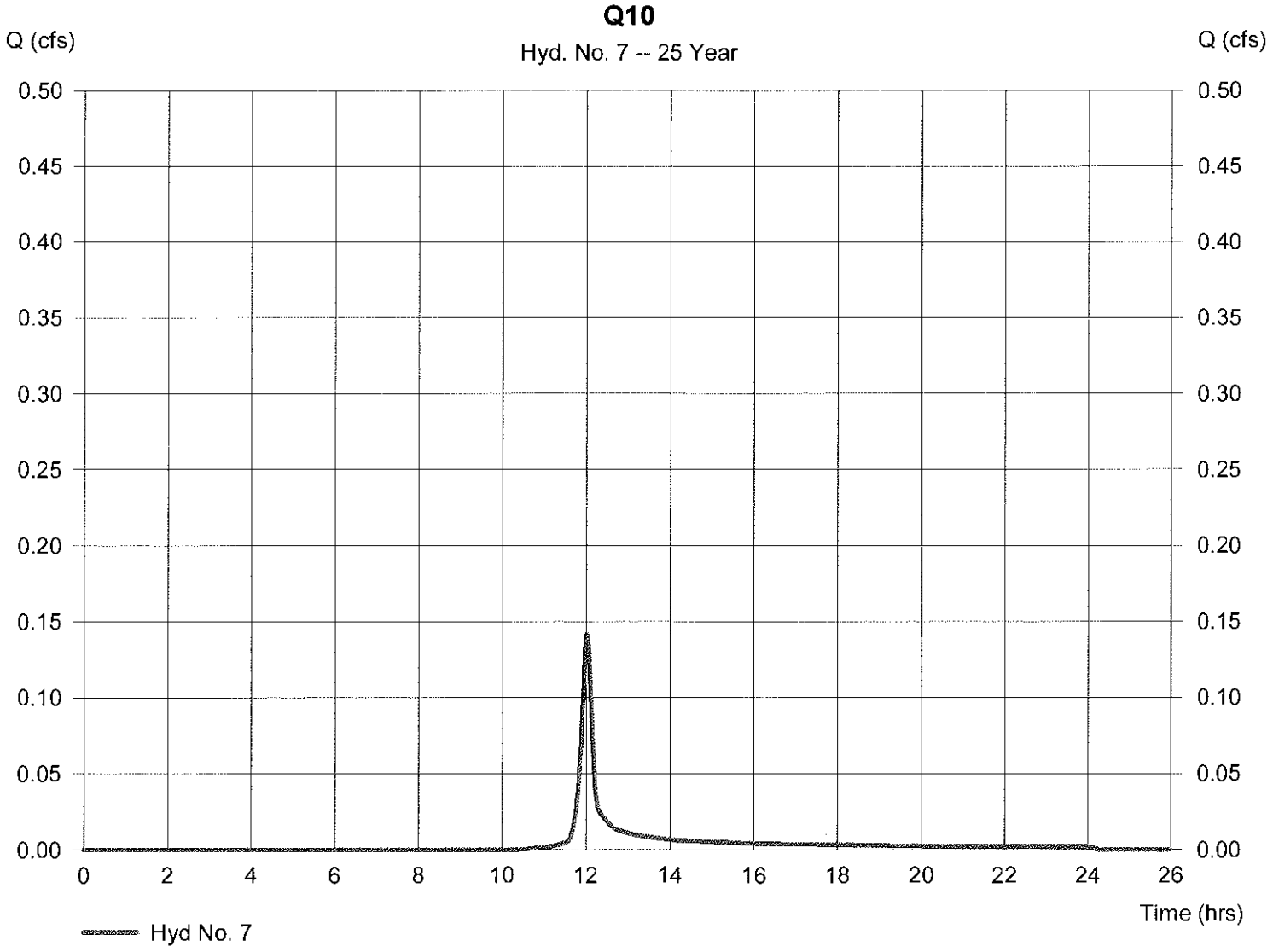


Hydrograph Report

Hyd. No. 7

Q10

Hydrograph type	= SCS Runoff	Peak discharge	= 0.142 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 362 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 13.08 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

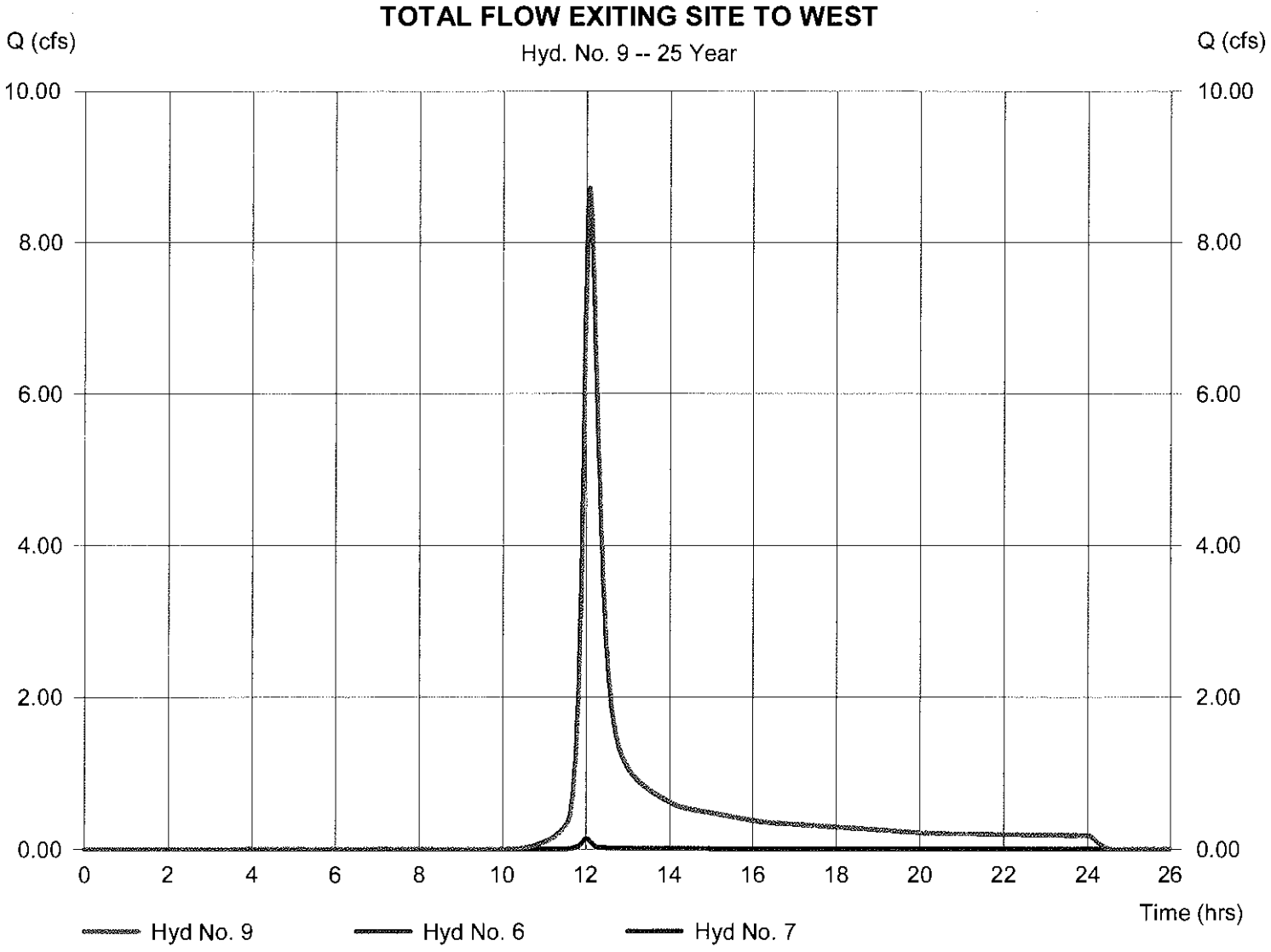


Hydrograph Report

Hyd. No. 9

,OTAL FLOW EXITING SITE TO WEST

Hydrograph type	= Combine	Peak discharge	= 8.720 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 31,560 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.100 ac

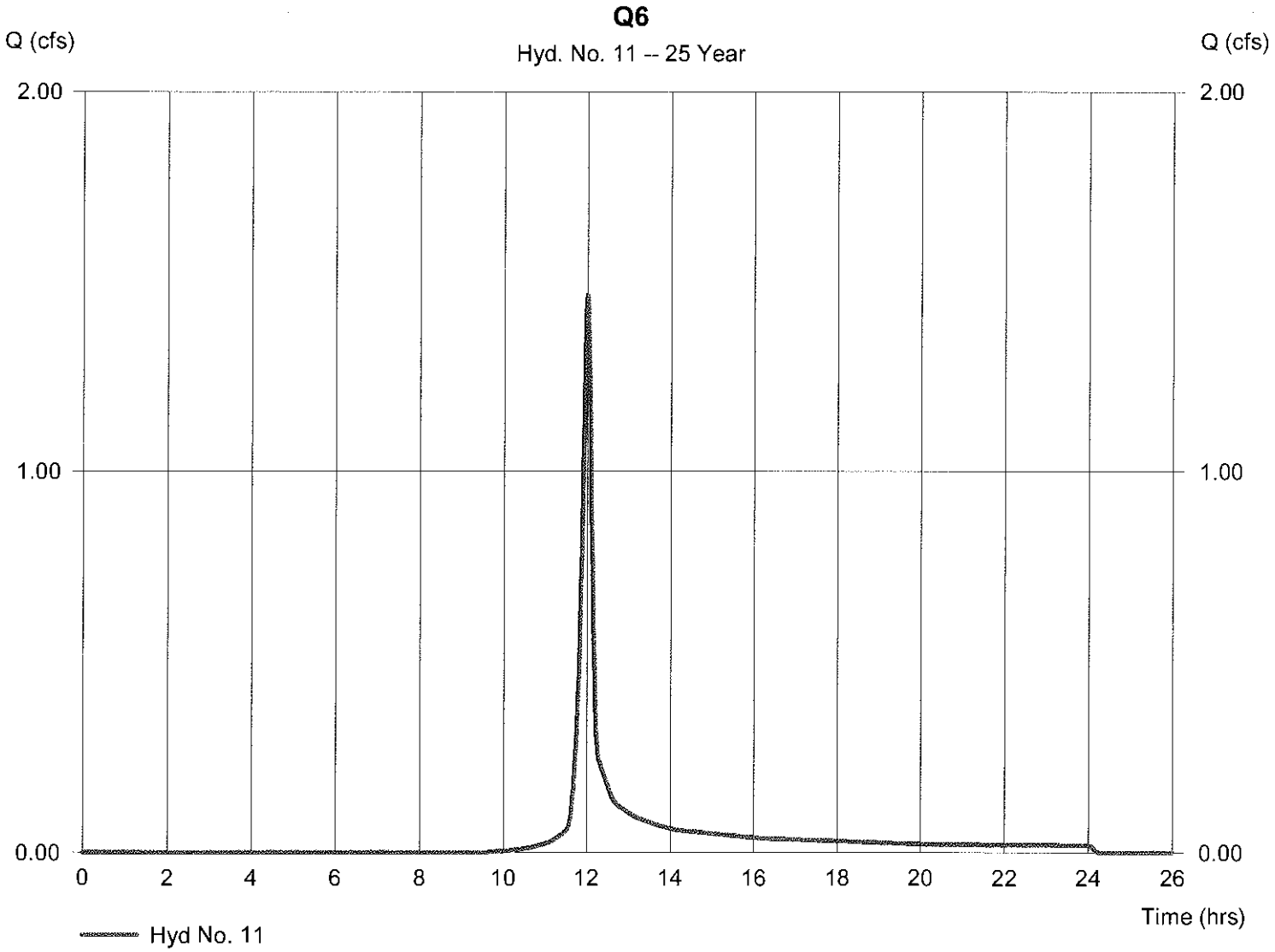


Hydrograph Report

Hyd. No. 11

Q6

Hydrograph type	= SCS Runoff	Peak discharge	= 1.465 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 3,555 cuft
Drainage area	= 0.850 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.34 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



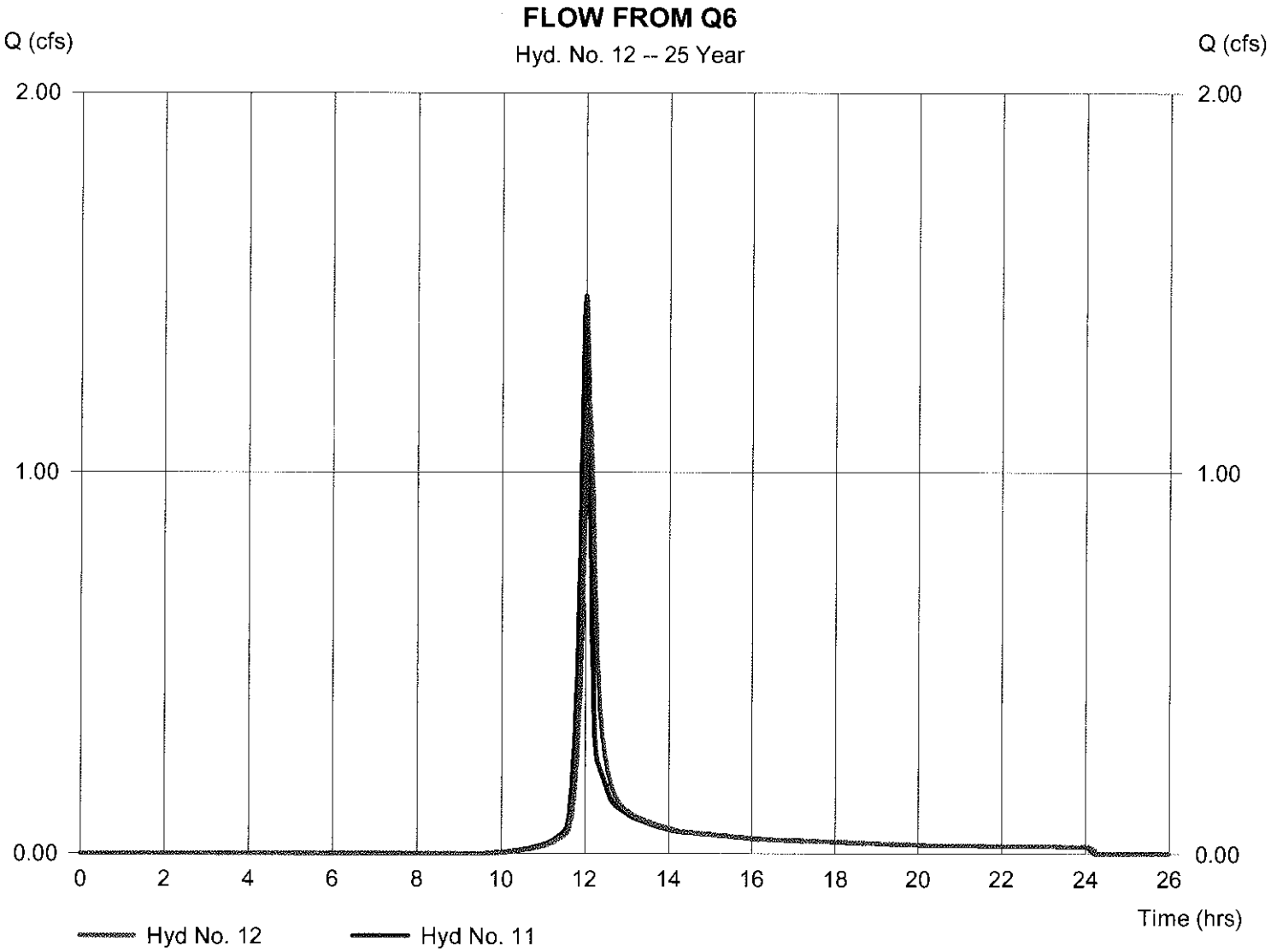
Hydrograph Report

Hyd. No. 12

FLOW FROM Q6

Hydrograph type	= Reach	Peak discharge	= 1.185 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 3,551 cuft
Inflow hyd. No.	= 11 - Q6	Section type	= Trapezoidal
Reach length	= 819.0 ft	Channel slope	= 2.5 %
Manning's n	= 0.035	Bottom width	= 5.0 ft
Side slope	= 25.0:1	Max. depth	= 1.0 ft
Rating curve x	= 2.301	Rating curve m	= 0.970
Ave. velocity	= 2.33 ft/s	Routing coeff.	= 0.1531

Modified Att-Kin routing method used.

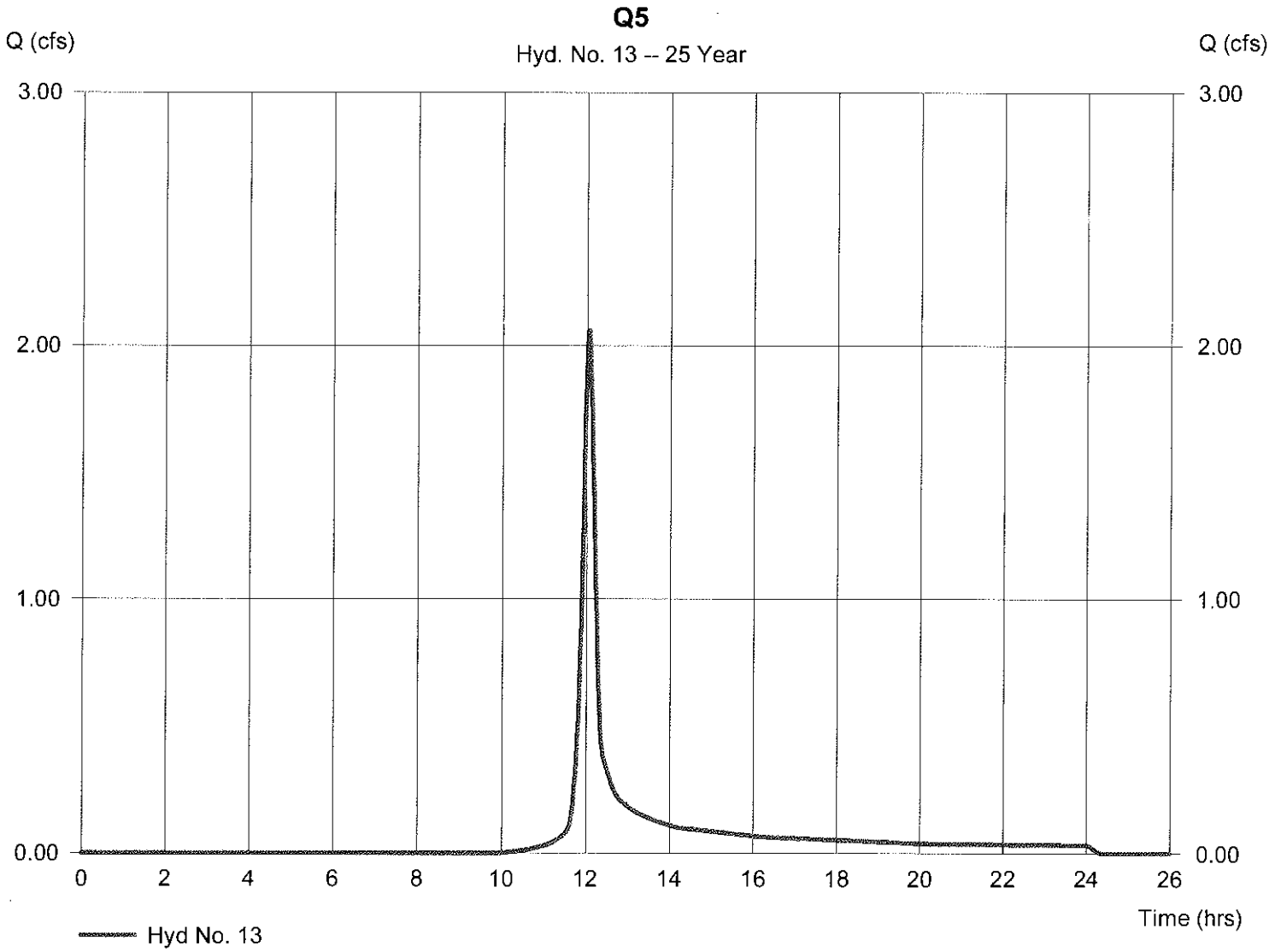


Hydrograph Report

Hyd. No. 13

Q5

Hydrograph type	= SCS Runoff	Peak discharge	= 2.060 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 5,950 cuft
Drainage area	= 1.510 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.50 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

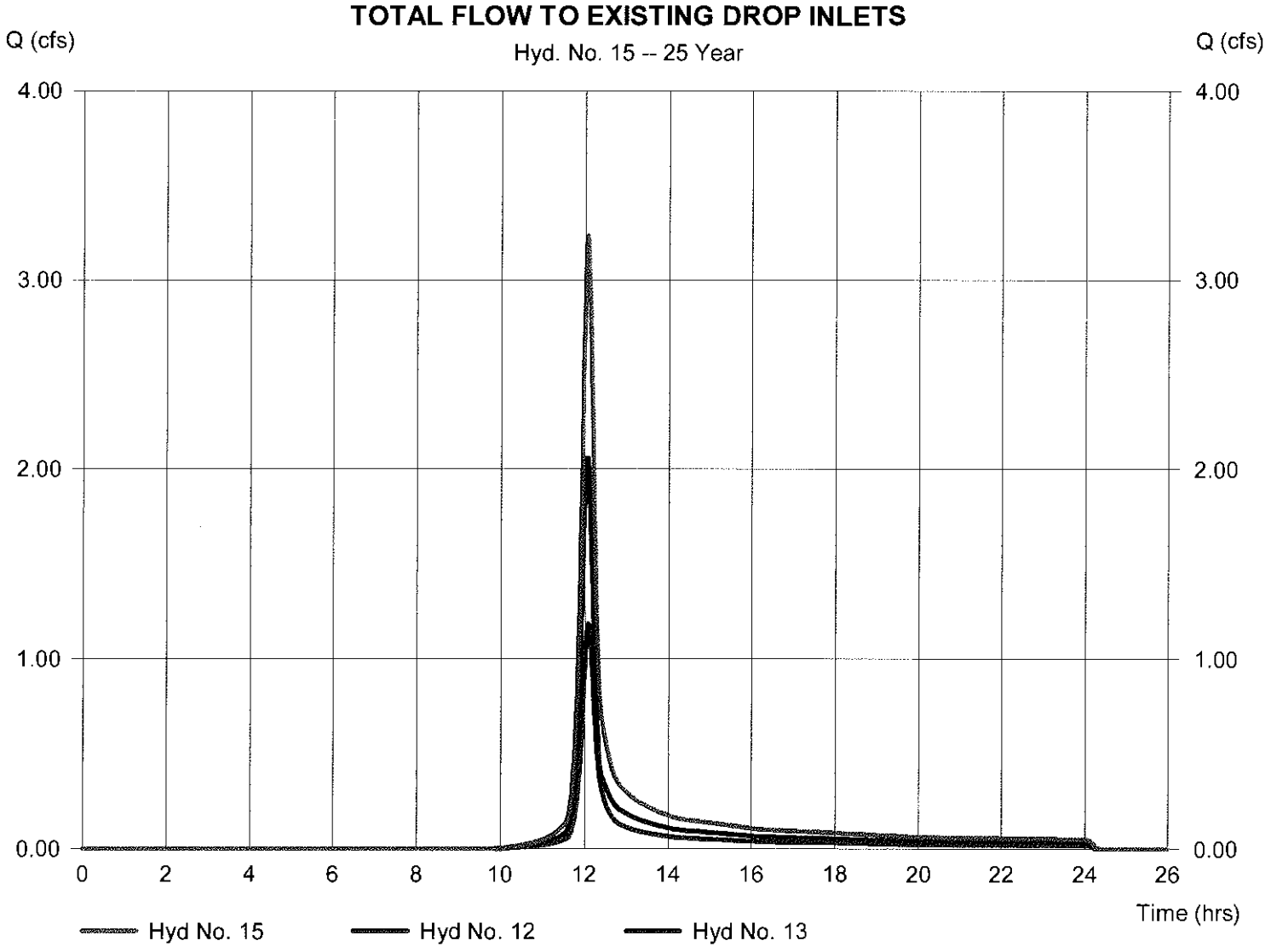


Hydrograph Report

Hyd. No. 15

TOTAL FLOW TO EXISTING DROP INLETS

Hydrograph type	= Combine	Peak discharge	= 3.233 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 9,501 cuft
Inflow hyds.	= 12, 13	Contrib. drain. area	= 1.510 ac

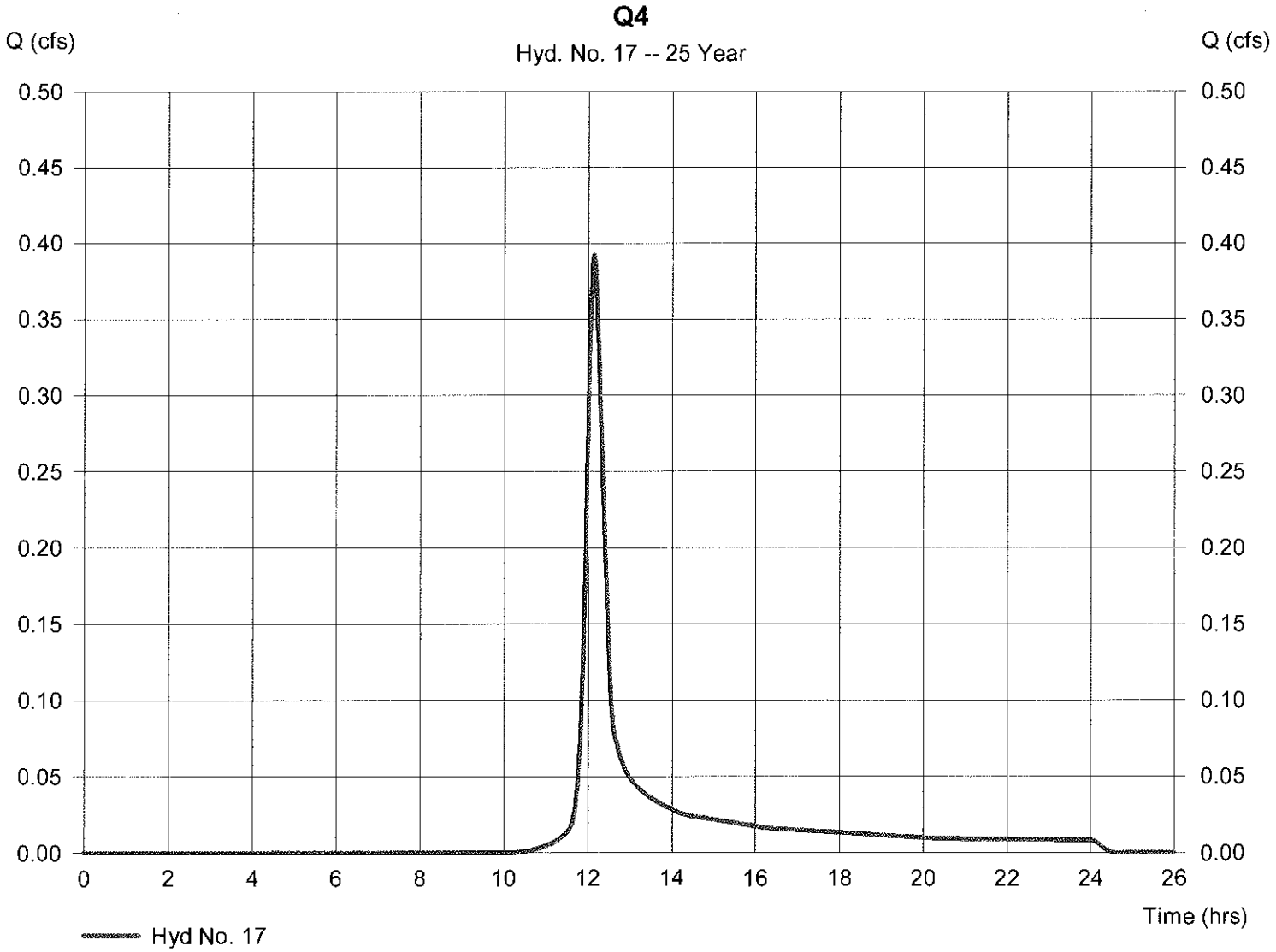


Hydrograph Report

Hyd. No. 17

Q4

Hydrograph type	= SCS Runoff	Peak discharge	= 0.392 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 1,436 cuft
Drainage area	= 0.390 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 23.88 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

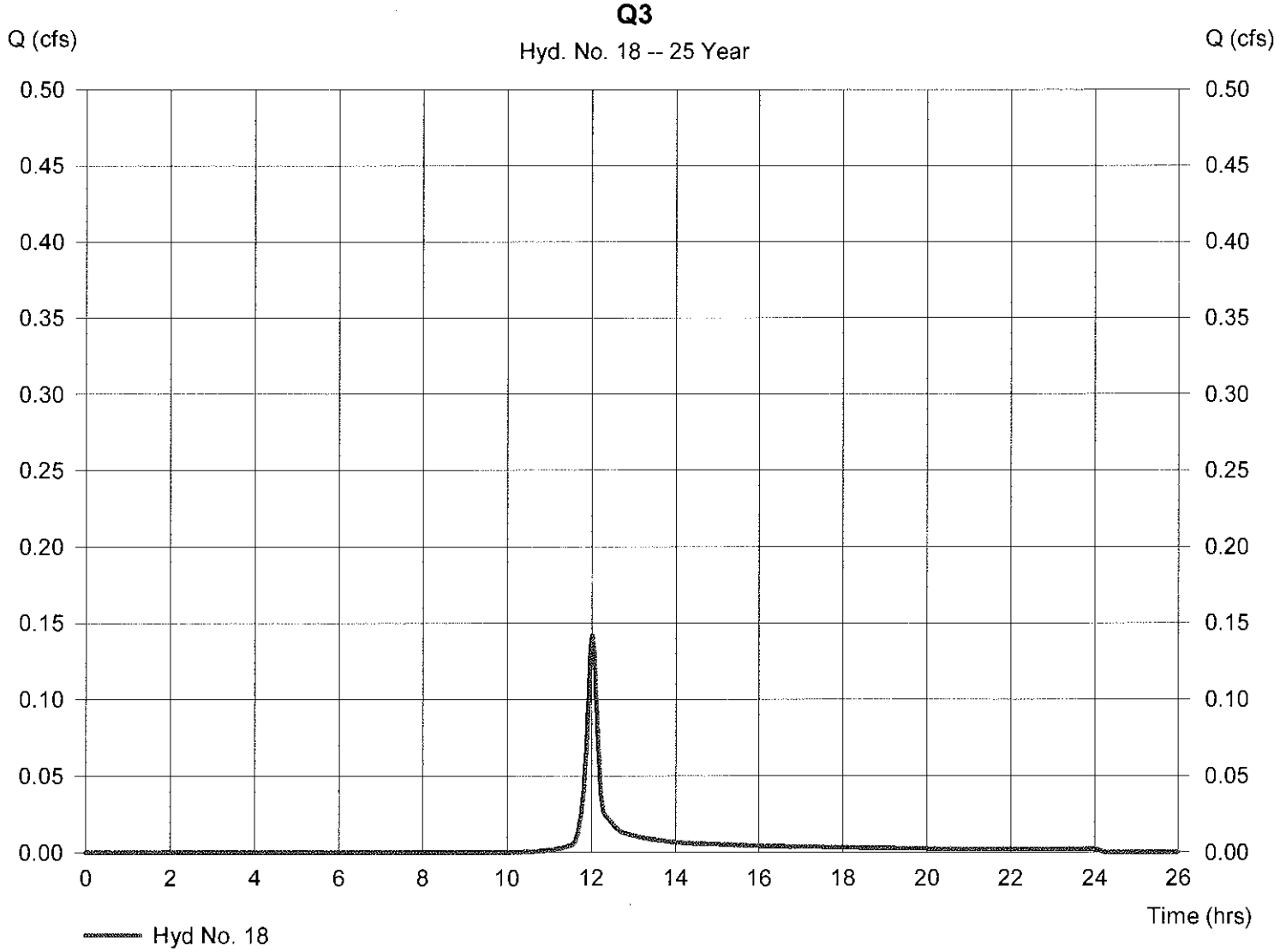


Hydrograph Report

Hyd. No. 18

Q3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.142 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 362 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.76 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

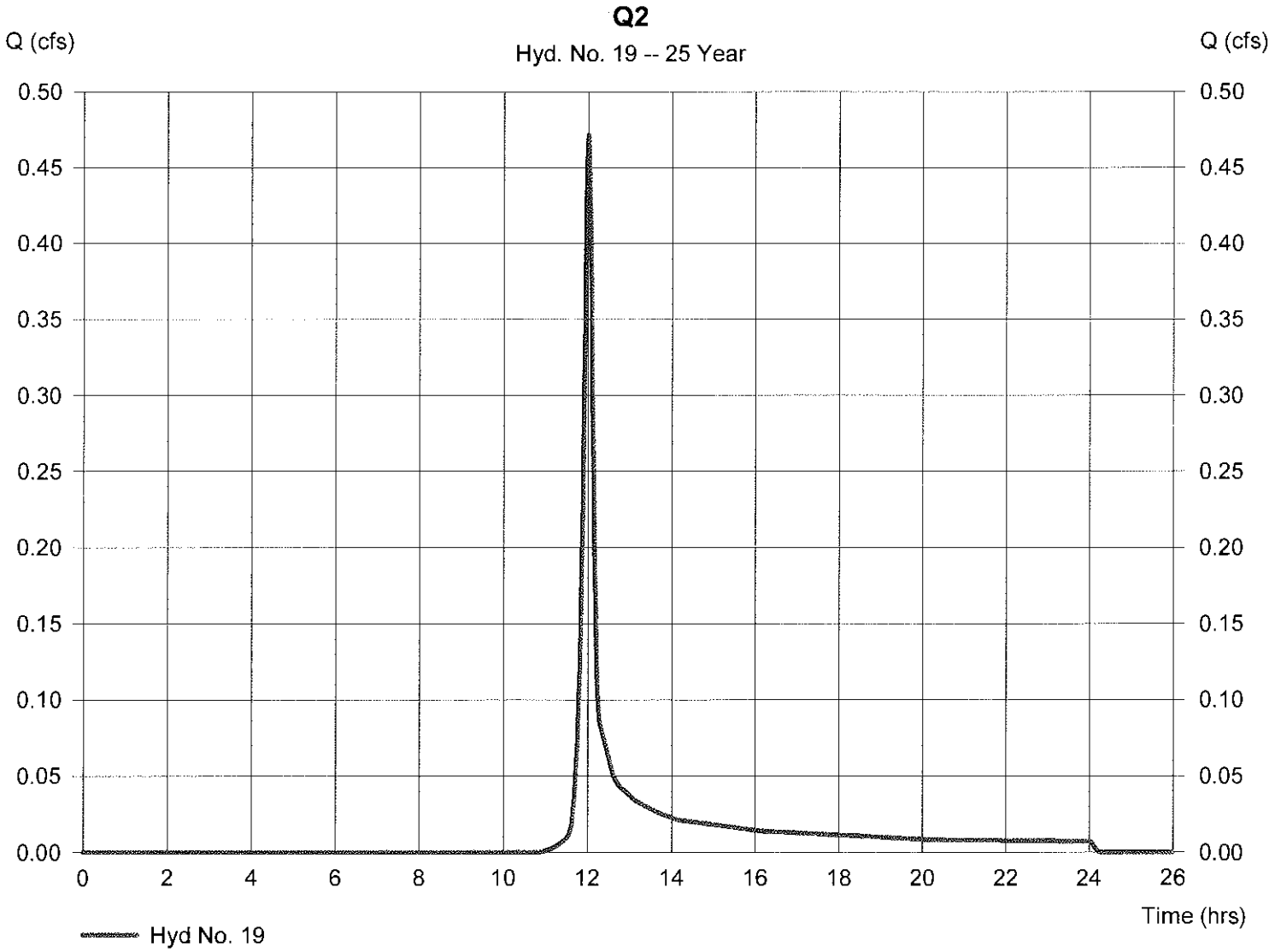


Hydrograph Report

Hyd. No. 19

Q2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.472 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 1,167 cuft
Drainage area	= 0.370 ac	Curve number	= 78
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.22 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

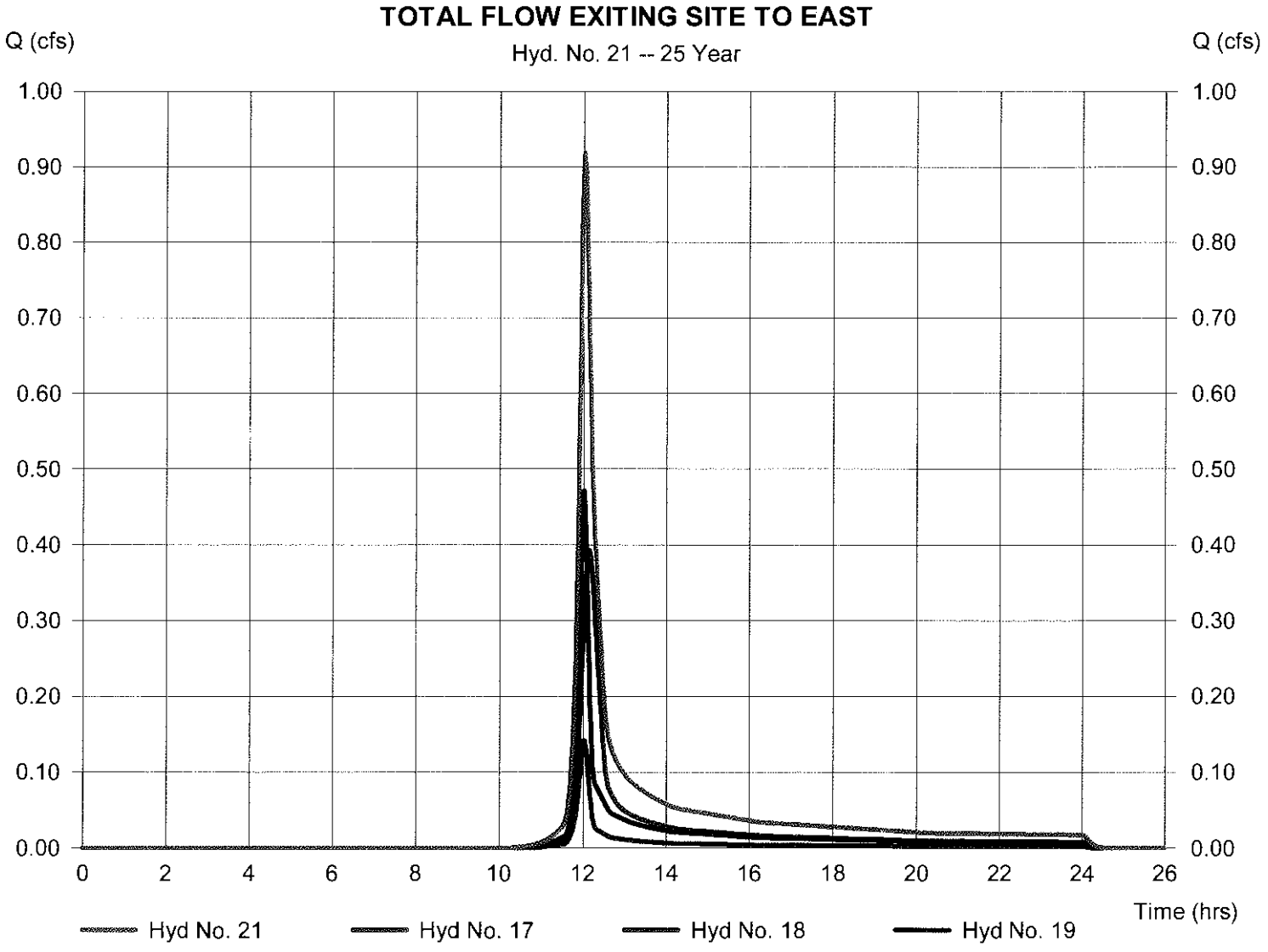


Hydrograph Report

Hyd. No. 21

TOTAL FLOW EXITING SITE TO EAST

Hydrograph type	= Combine	Peak discharge	= 0.918 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.03 hrs
Time interval	= 1 min	Hyd. volume	= 2,965 cuft
Inflow hyds.	= 17, 18, 19	Contrib. drain. area	= 0.860 ac

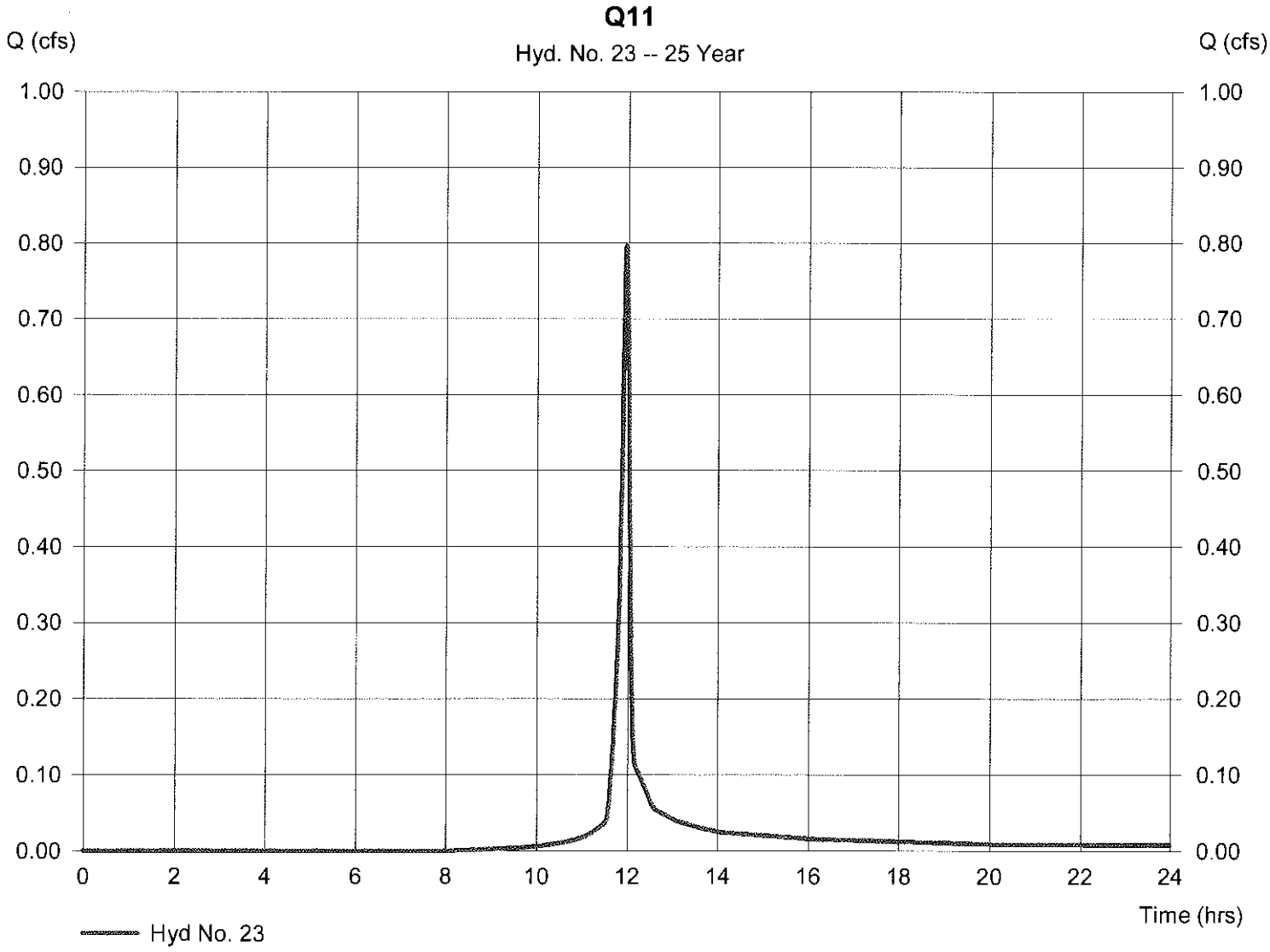


Hydrograph Report

Hyd. No. 23

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 0.797 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,619 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

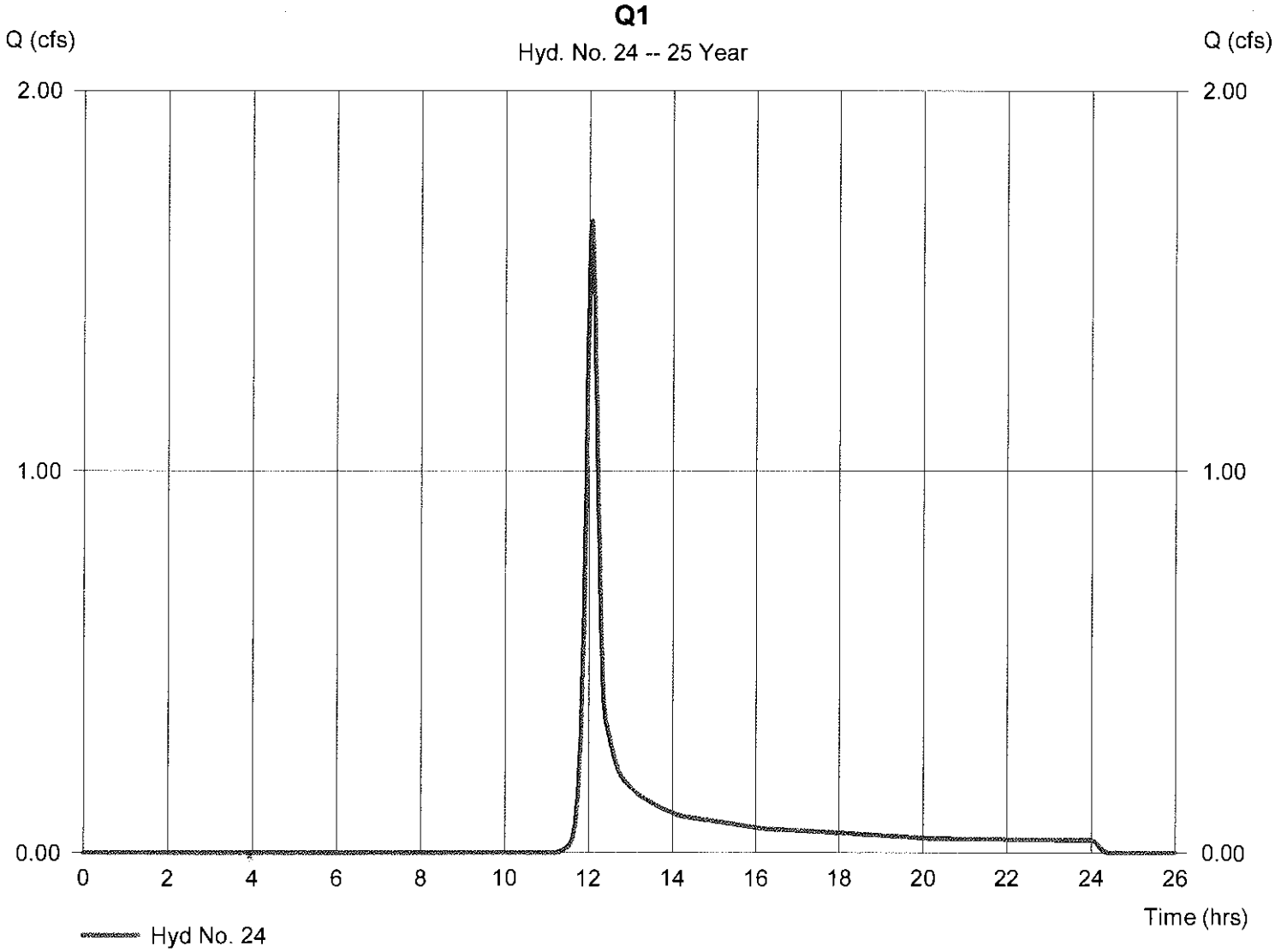


Hydrograph Report

Hyd. No. 24

Q1

Hydrograph type	= SCS Runoff	Peak discharge	= 1.657 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 5,028 cuft
Drainage area	= 1.810 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.56 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

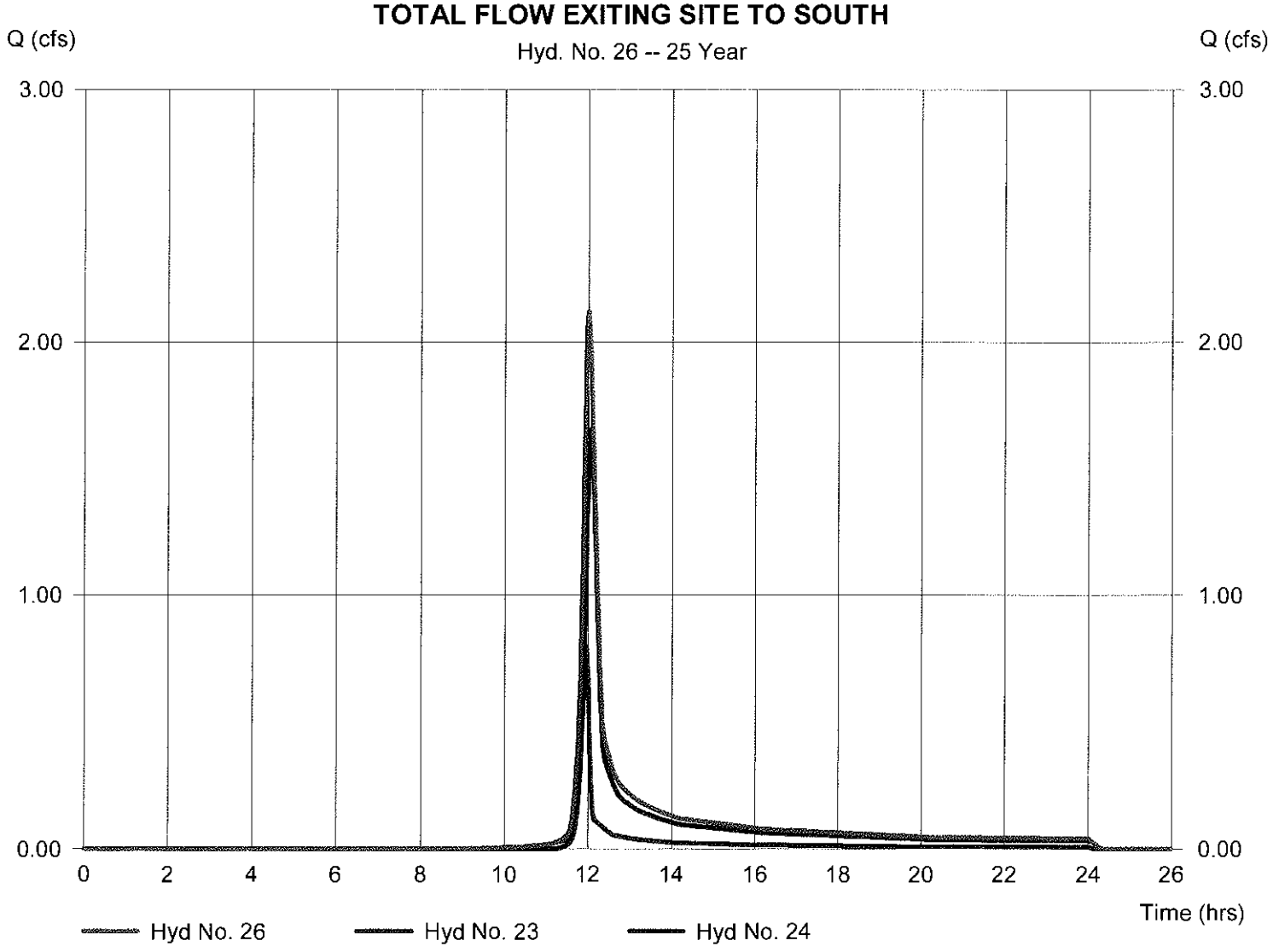


Hydrograph Report

Hyd. No. 26

, OTAL FLOW EXITING SITE TO SOUTH

Hydrograph type	= Combine	Peak discharge	= 2.122 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 6,647 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 2.120 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

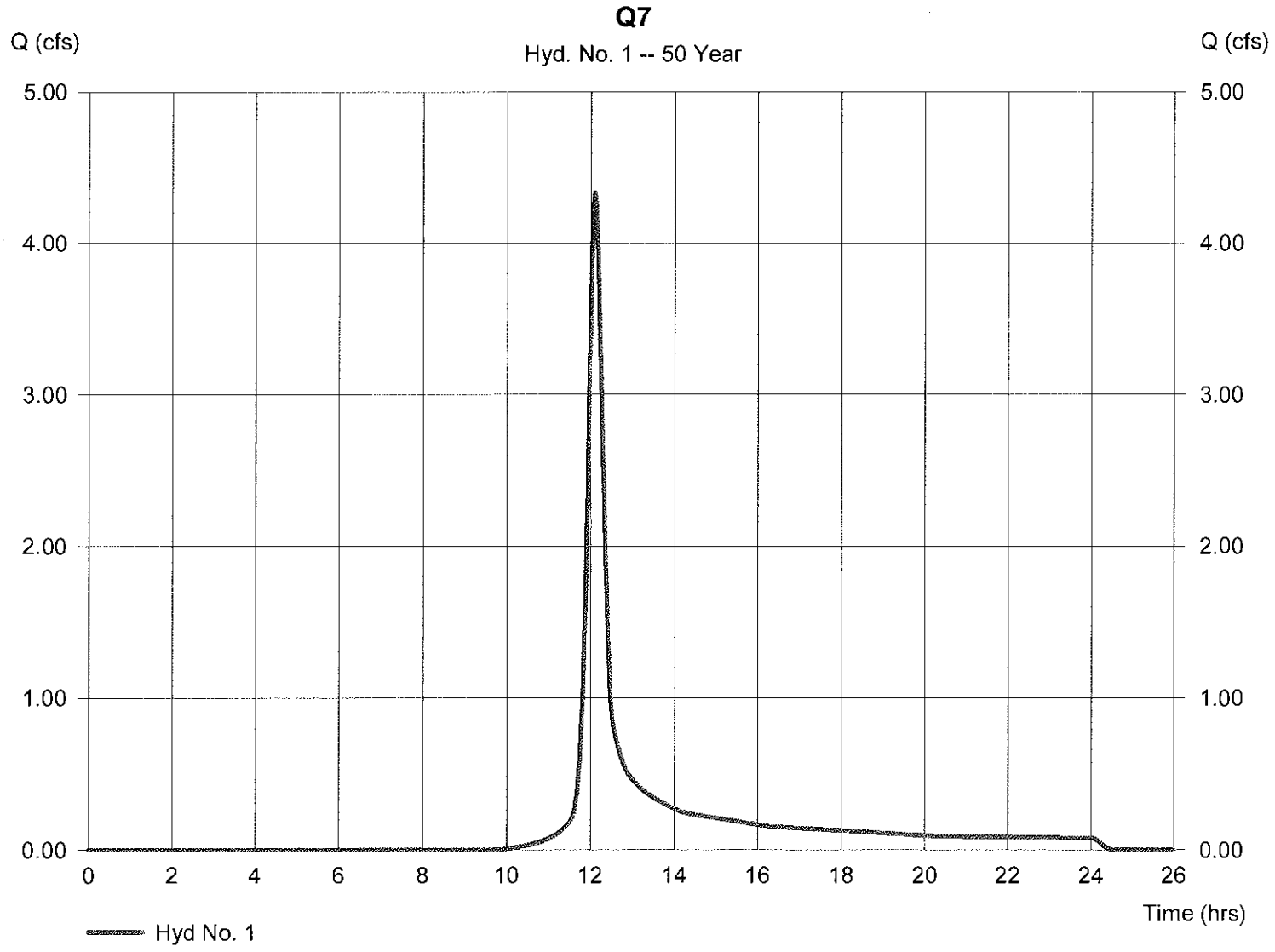
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.336	1	726	14,461	------	------	------	Q7
2	Reach	3.781	1	732	14,457	1	------	------	FLOW FROM Q7
3	SCS Runoff	4.833	1	725	15,372	------	------	------	Q8
4	SCS Runoff	3.364	1	721	8,540	------	------	------	Q9
6	Combine	10.75	1	725	38,369	2, 3, 4,	------	------	TOTAL FLOW TO EXISTING PIPE
7	SCS Runoff	0.175	1	721	445	------	------	------	Q10
9	Combine	10.90	1	725	38,814	6, 7,	------	------	TOTAL FLOW EXITING SITE TO WE
11	SCS Runoff	1.784	1	720	4,317	------	------	------	Q6
12	Reach	1.445	1	725	4,313	11	------	------	FLOW FROM Q6
13	SCS Runoff	2.533	1	723	7,262	------	------	------	Q5
15	Combine	3.960	1	724	11,575	12, 13,	------	------	TOTAL FLOW TO EXISTING DROP I
17	SCS Runoff	0.487	1	729	1,762	------	------	------	Q4
18	SCS Runoff	0.175	1	721	445	------	------	------	Q3
19	SCS Runoff	0.595	1	721	1,456	------	------	------	Q2
21	Combine	1.152	1	722	3,663	17, 18, 19,	------	------	TOTAL FLOW EXITING SITE TO EA
23	SCS Runoff	0.943	1	718	1,927	------	------	------	Q11
24	SCS Runoff	2.141	1	724	6,352	------	------	------	Q1
26	Combine	2.698	1	721	8,280	23, 24,	------	------	TOTAL FLOW EXITING SITE TO SO

Hydrograph Report

Hyd. No. 1

Q7

Hydrograph type	= SCS Runoff	Peak discharge	= 4.336 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 14,461 cuft
Drainage area	= 3.170 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



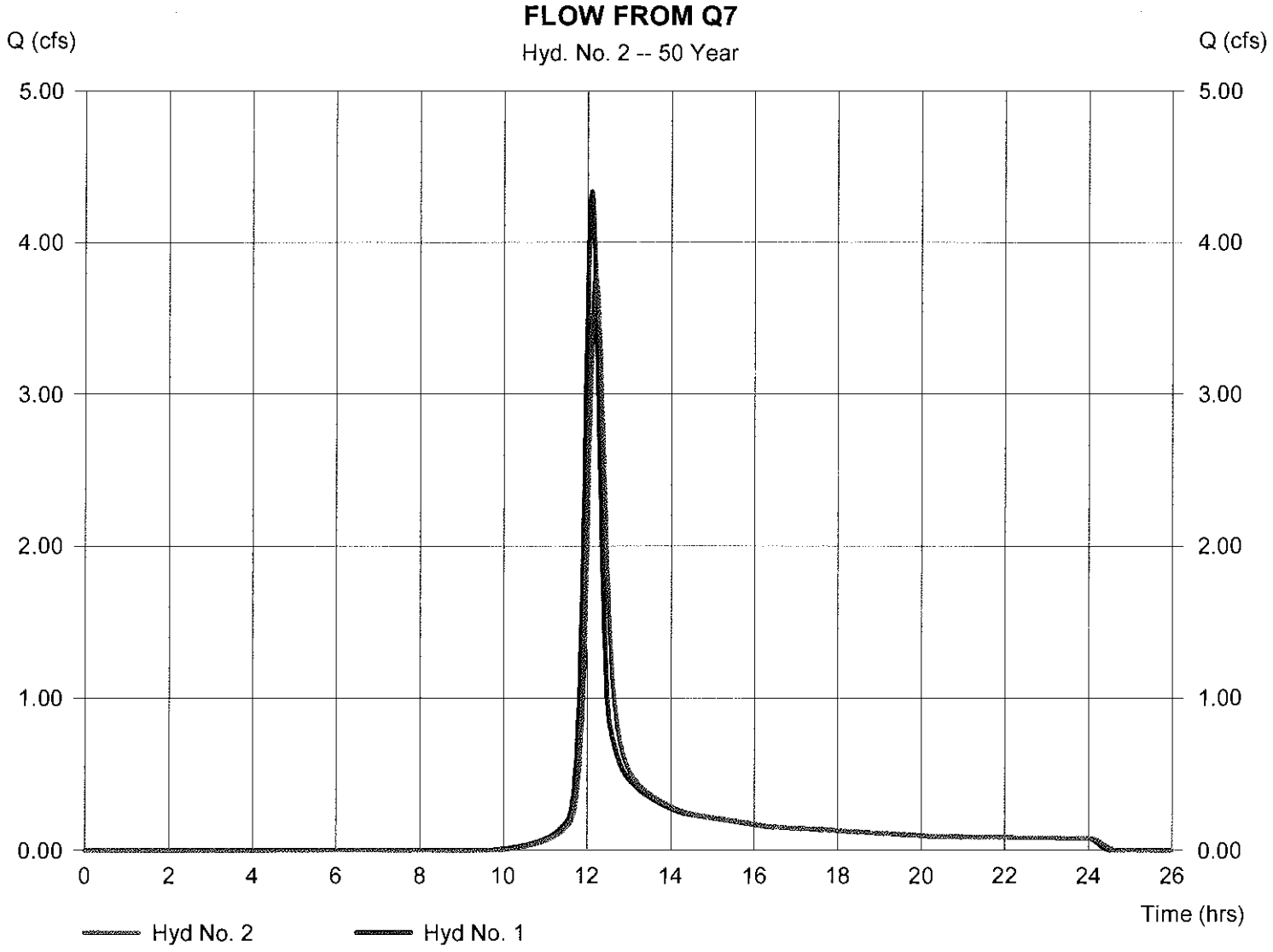
Hydrograph Report

Hyd. No. 2

FLOW FROM Q7

Hydrograph type	= Reach	Peak discharge	= 3.781 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.20 hrs
Time interval	= 1 min	Hyd. volume	= 14,457 cuft
Inflow hyd. No.	= 1 - Q7	Section type	= Trapezoidal
Reach length	= 933.0 ft	Channel slope	= 2.6 %
Manning's n	= 0.035	Bottom width	= 7.0 ft
Side slope	= 15.0:1	Max. depth	= 2.0 ft
Rating curve x	= 1.864	Rating curve m	= 1.177
Ave. velocity	= 2.12 ft/s	Routing coeff.	= 0.1483

Modified Att-Kin routing method used.

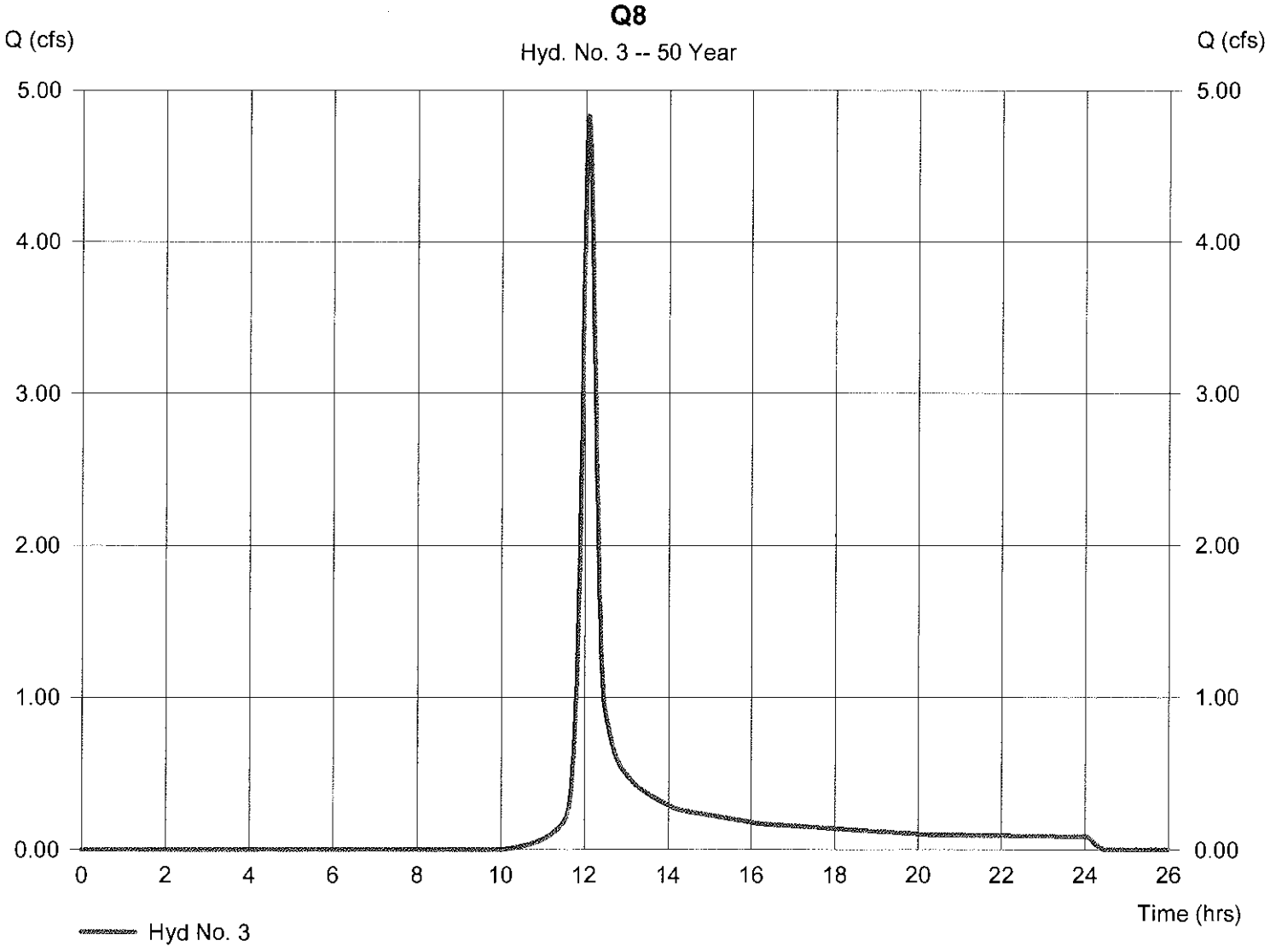


Hydrograph Report

Hyd. No. 3

Q8

Hydrograph type	= SCS Runoff	Peak discharge	= 4.833 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,372 cuft
Drainage area	= 3.580 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.22 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

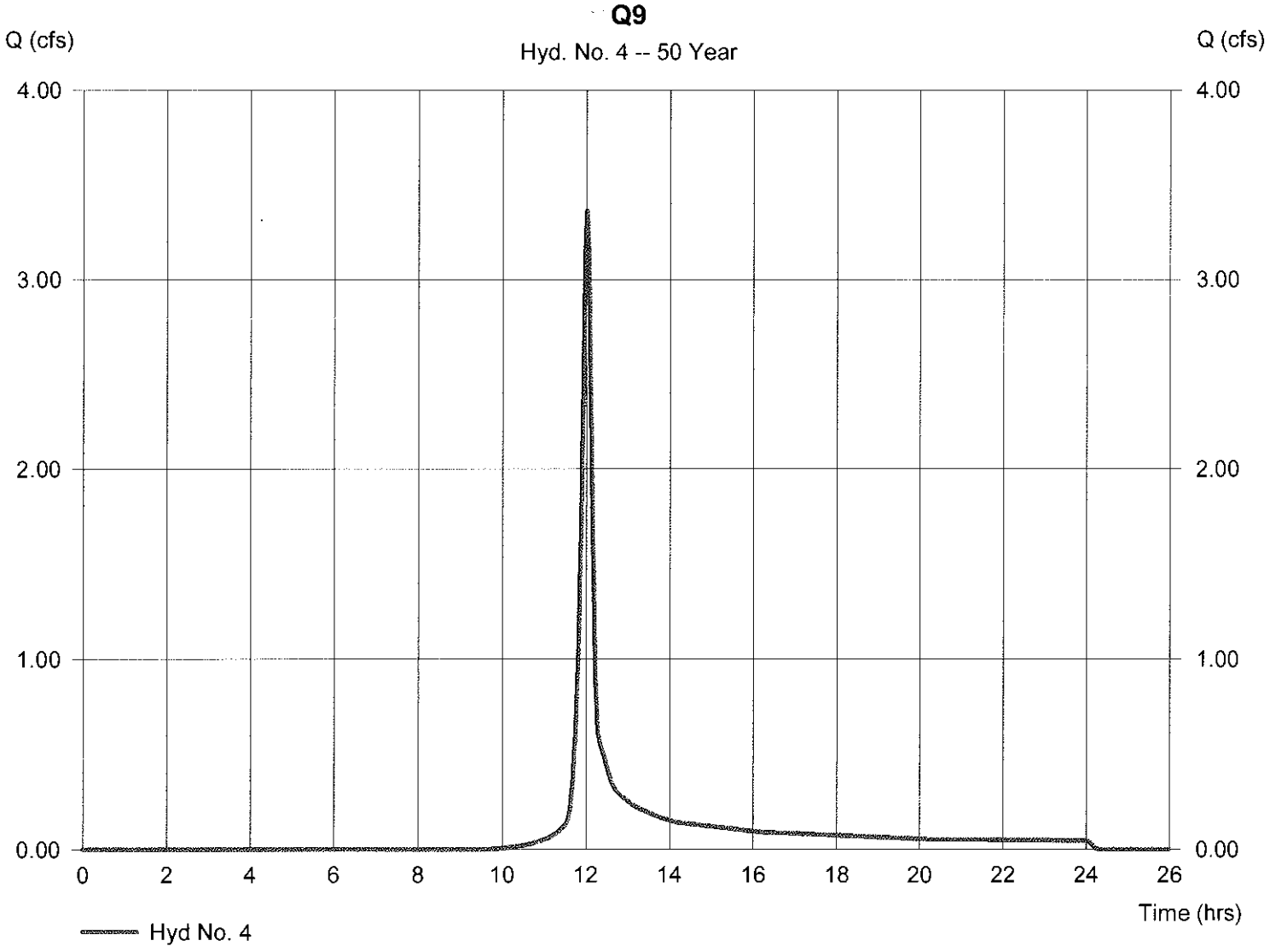


Hydrograph Report

Hyd. No. 4

Q9

Hydrograph type	= SCS Runoff	Peak discharge	= 3.364 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 8,540 cuft
Drainage area	= 1.920 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

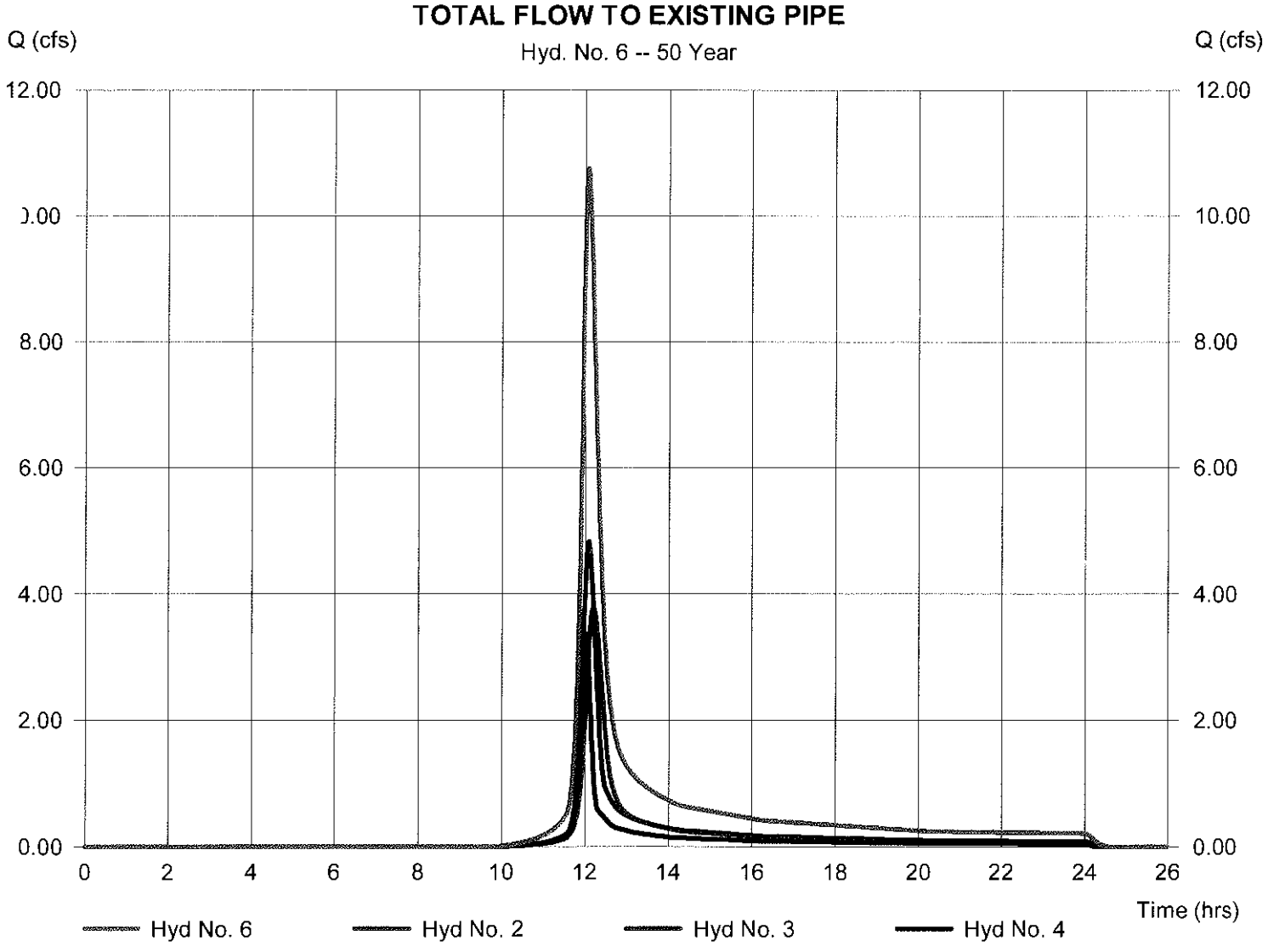


Hydrograph Report

Hyd. No. 6

TOTAL FLOW TO EXISTING PIPE

Hydrograph type	= Combine	Peak discharge	= 10.75 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 38,369 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 5.500 ac

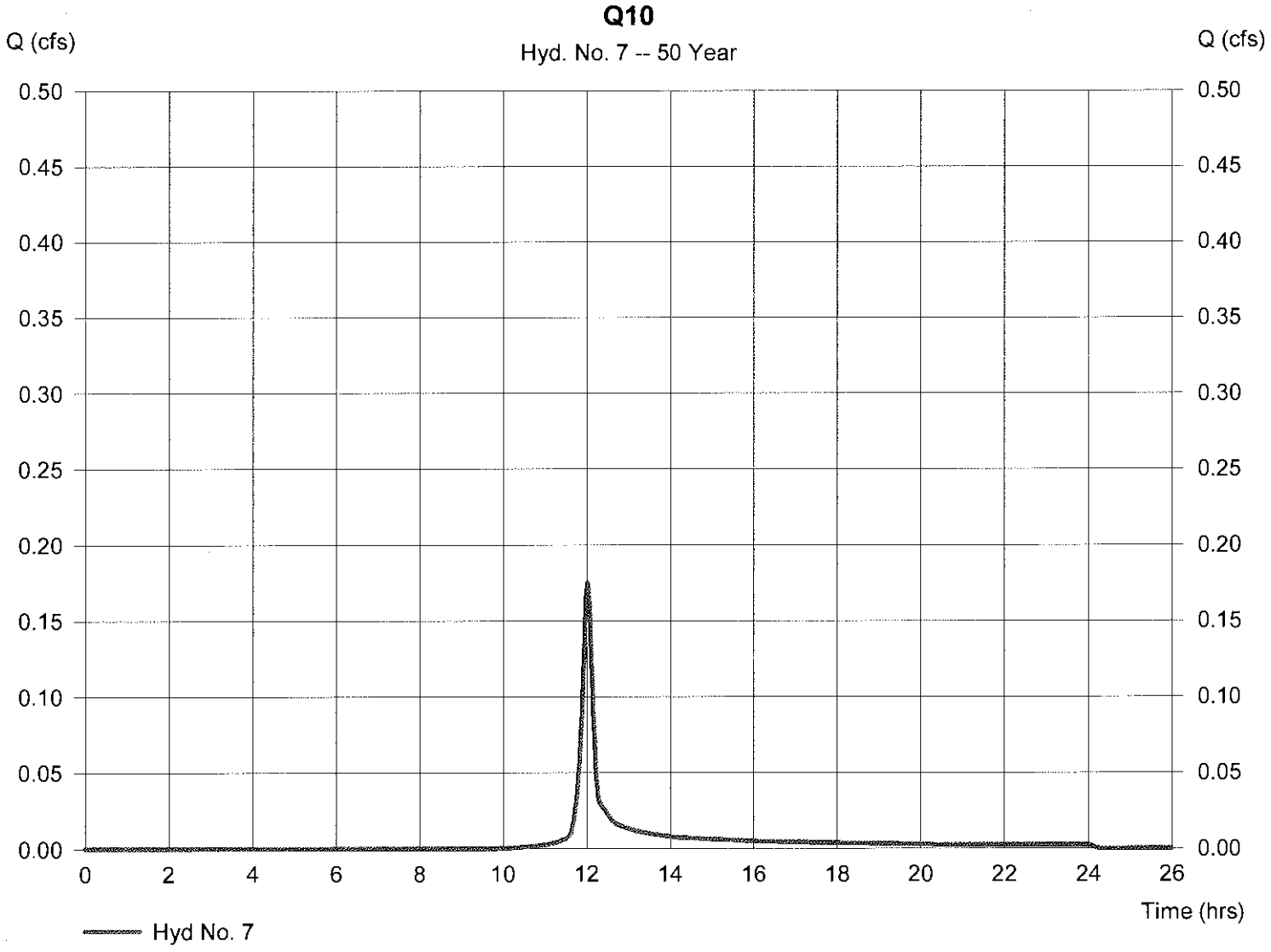


Hydrograph Report

Hyd. No. 7

Q10

Hydrograph type	= SCS Runoff	Peak discharge	= 0.175 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 445 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 13.08 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

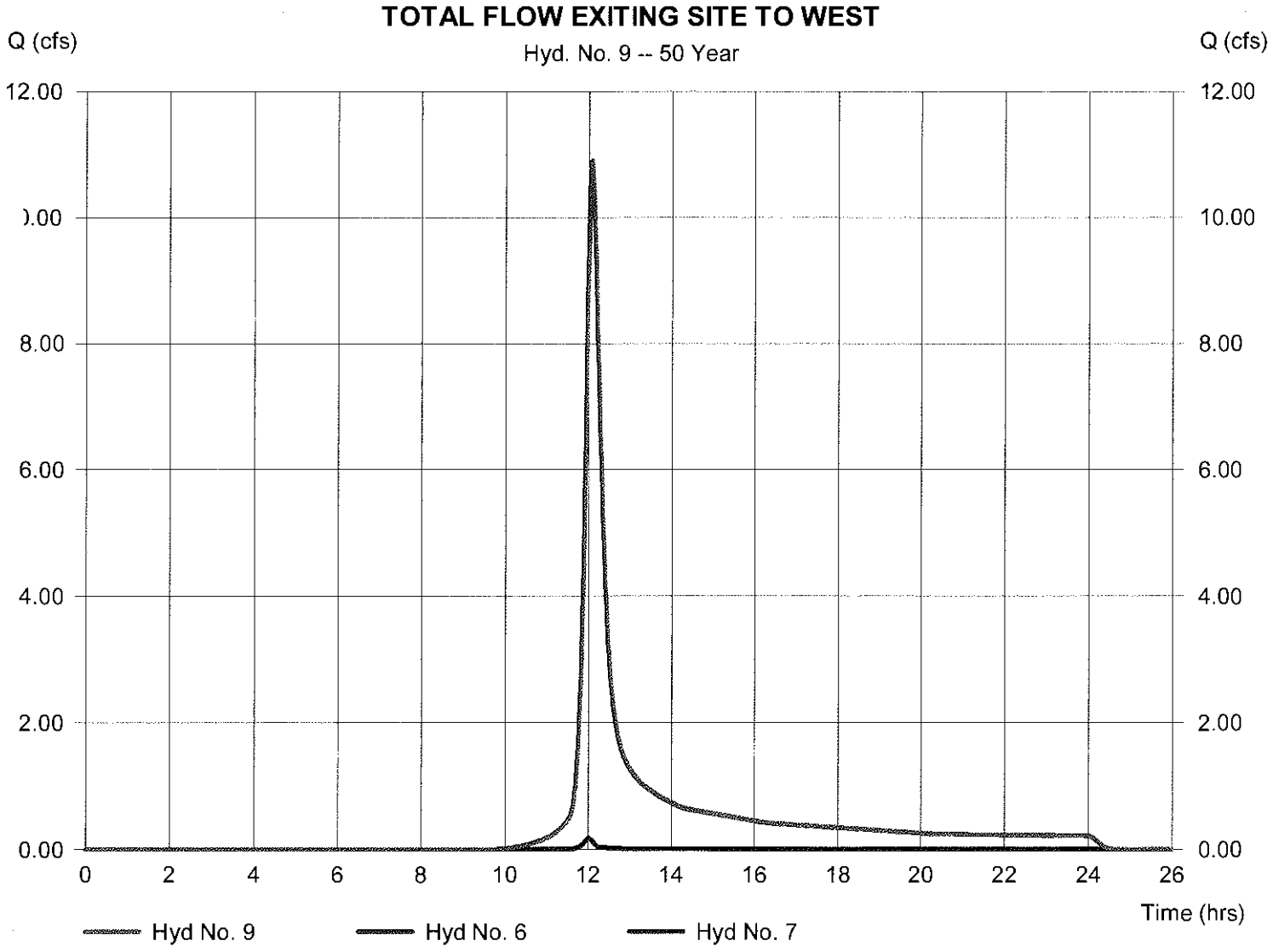


Hydrograph Report

Hyd. No. 9

TOTAL FLOW EXITING SITE TO WEST

Hydrograph type	= Combine	Peak discharge	= 10.90 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 38,814 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.100 ac

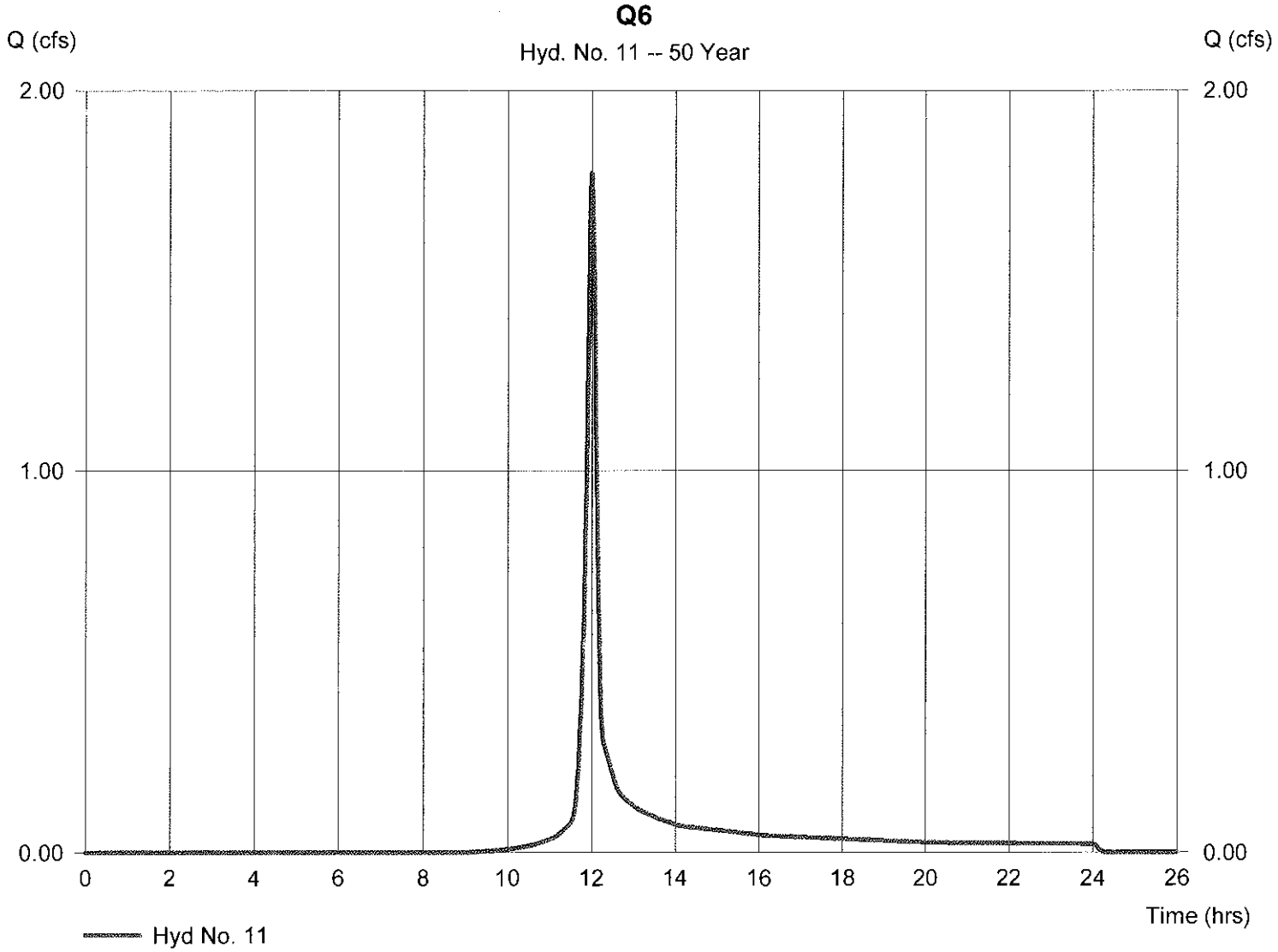


Hydrograph Report

Hyd. No. 11

Q6

Hydrograph type	= SCS Runoff	Peak discharge	= 1.784 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 4,317 cuft
Drainage area	= 0.850 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.34 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



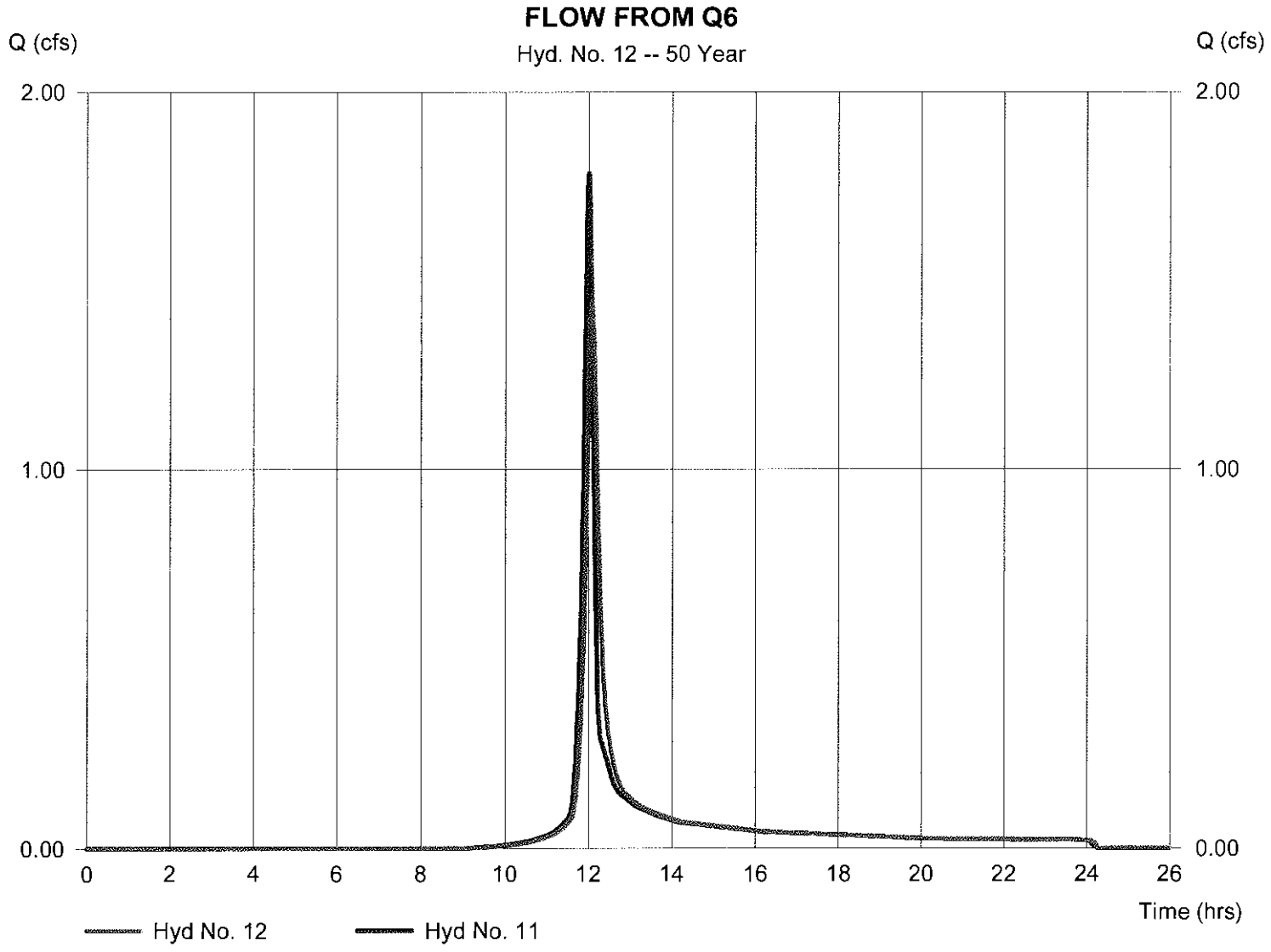
Hydrograph Report

Hyd. No. 12

. LOW FROM Q6

Hydrograph type	= Reach	Peak discharge	= 1.445 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 4,313 cuft
Inflow hyd. No.	= 11 - Q6	Section type	= Trapezoidal
Reach length	= 819.0 ft	Channel slope	= 2.5 %
Manning's n	= 0.035	Bottom width	= 5.0 ft
Side slope	= 25.0:1	Max. depth	= 1.0 ft
Rating curve x	= 2.301	Rating curve m	= 0.970
Ave. velocity	= 2.32 ft/s	Routing coeff.	= 0.1522

Modified Att-Kin routing method used.

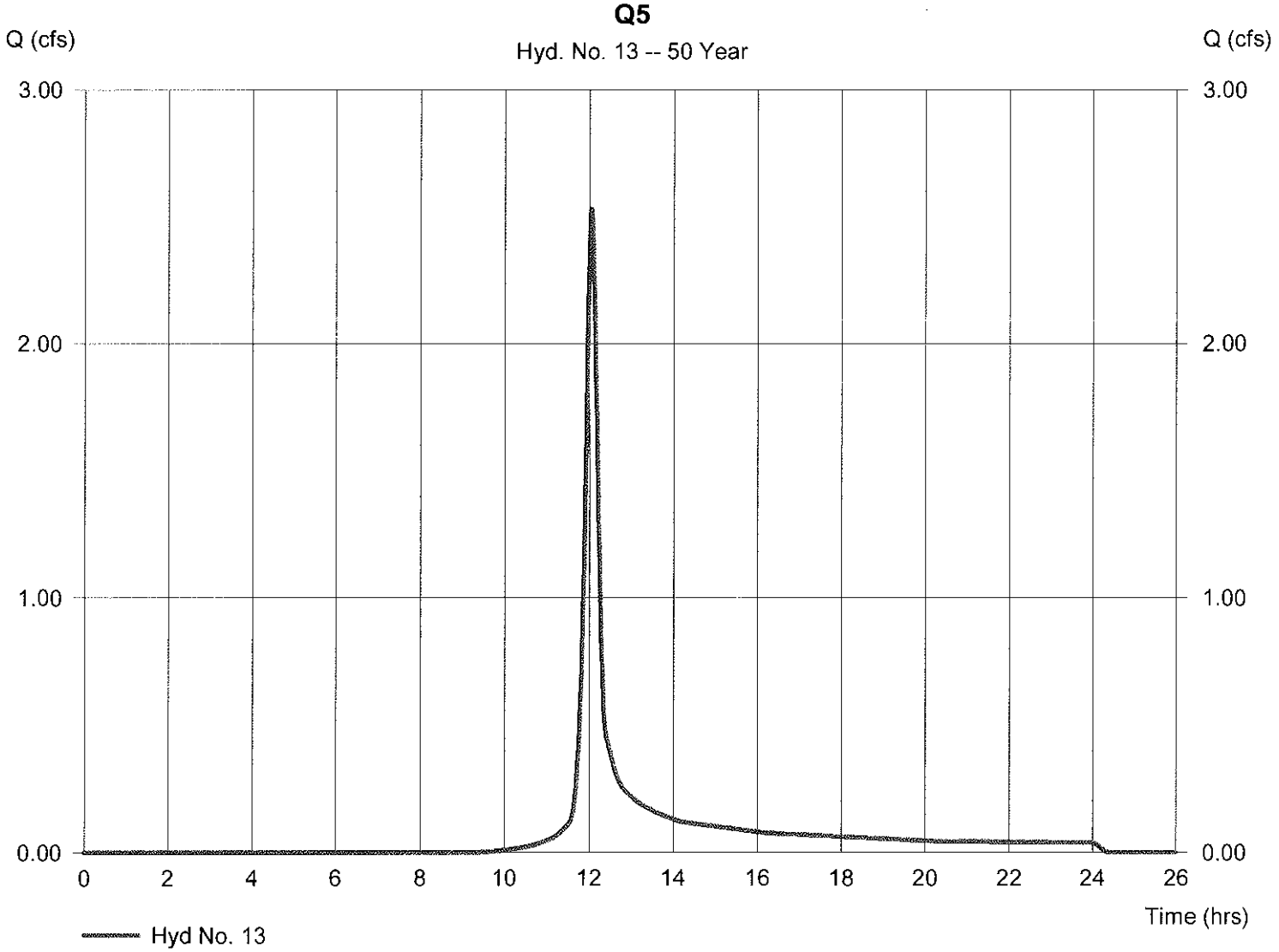


Hydrograph Report

Hyd. No. 13

Q5

Hydrograph type	= SCS Runoff	Peak discharge	= 2.533 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 7,262 cuft
Drainage area	= 1.510 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.50 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

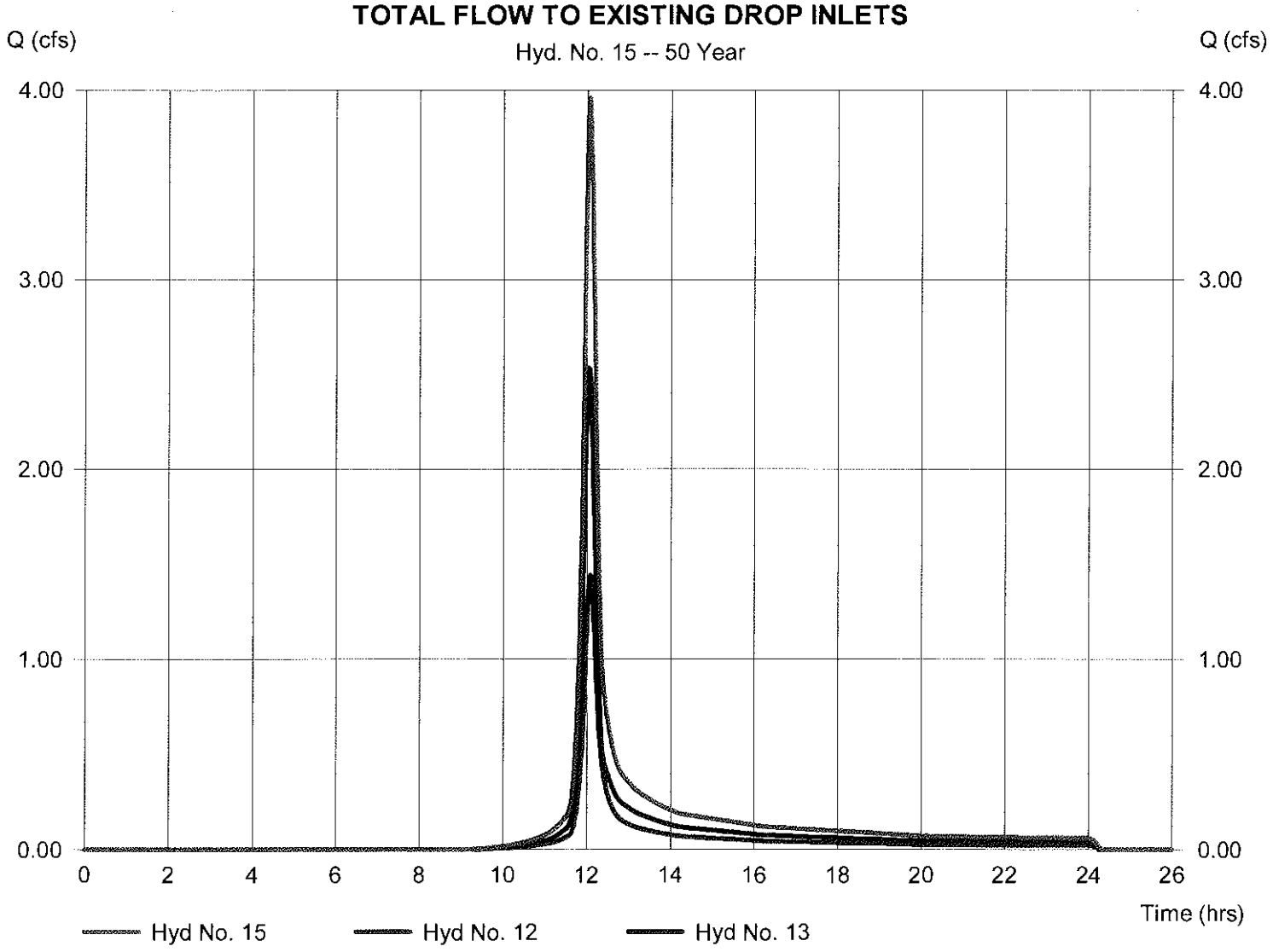


Hydrograph Report

Hyd. No. 15

TOTAL FLOW TO EXISTING DROP INLETS

Hydrograph type	= Combine	Peak discharge	= 3.960 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 11,575 cuft
Inflow hyds.	= 12, 13	Contrib. drain. area	= 1.510 ac

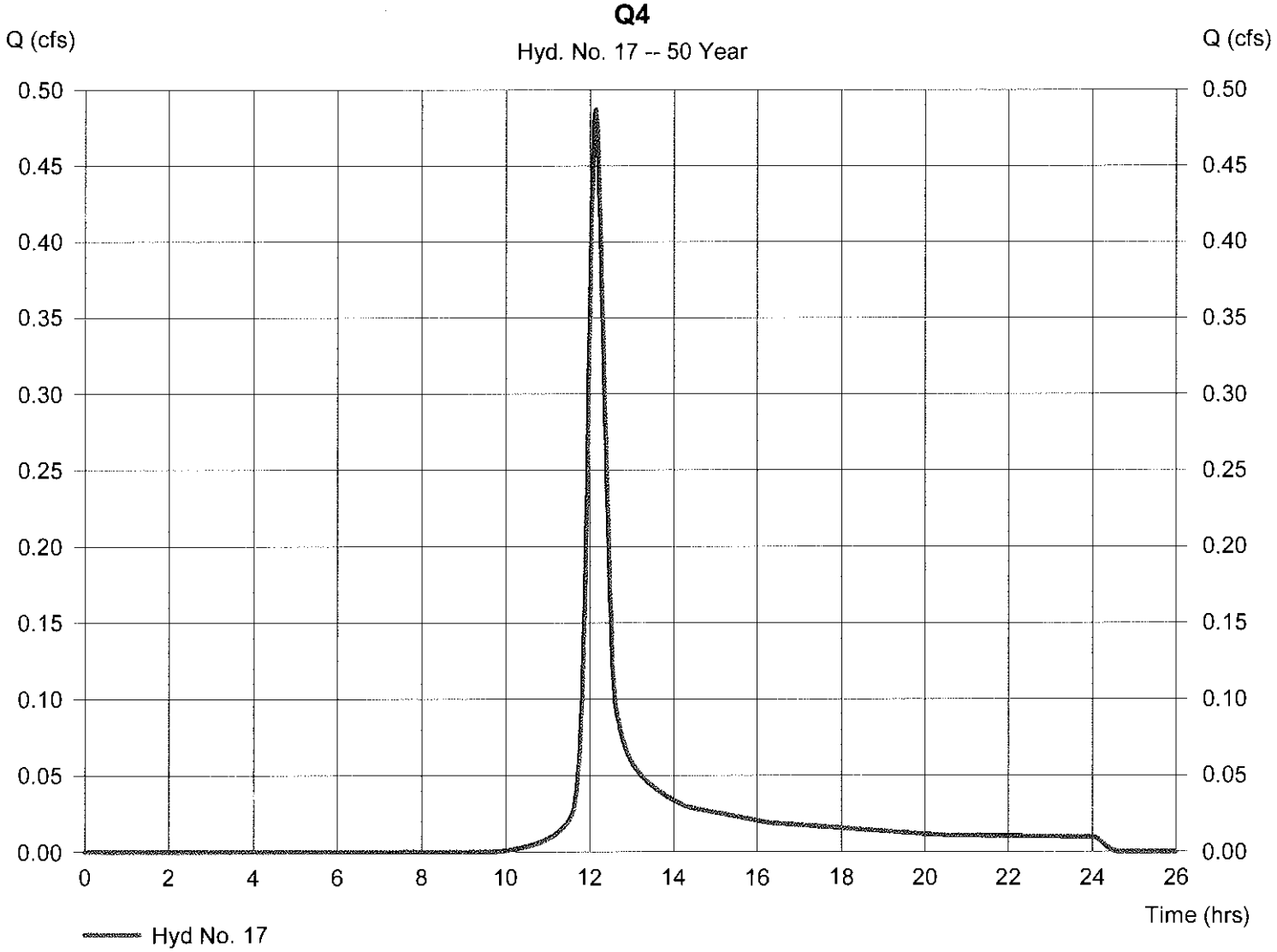


Hydrograph Report

Hyd. No. 17

Q4

Hydrograph type	= SCS Runoff	Peak discharge	= 0.487 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 1,762 cuft
Drainage area	= 0.390 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 23.88 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

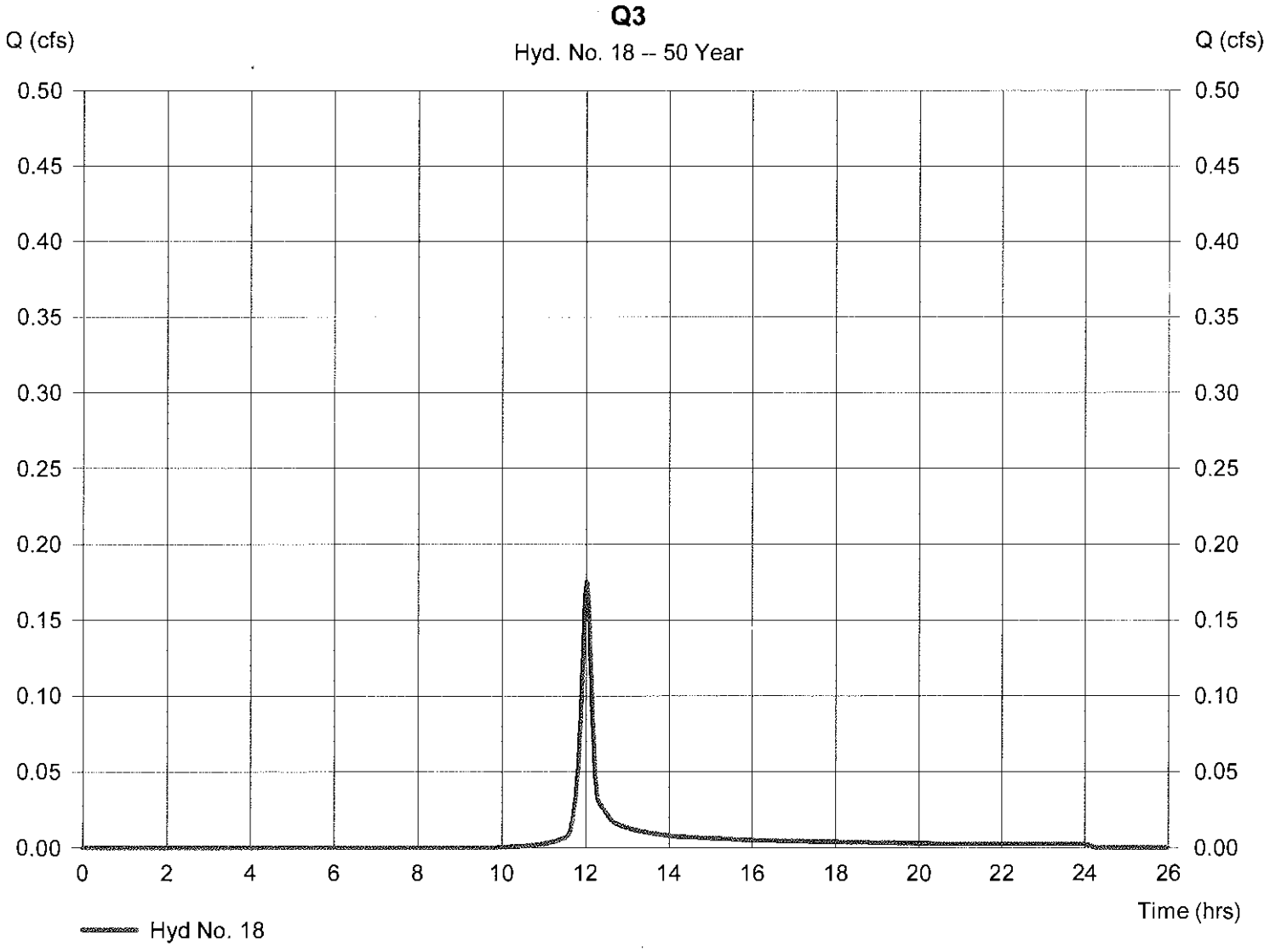


Hydrograph Report

Hyd. No. 18

Q3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.175 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 445 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.76 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

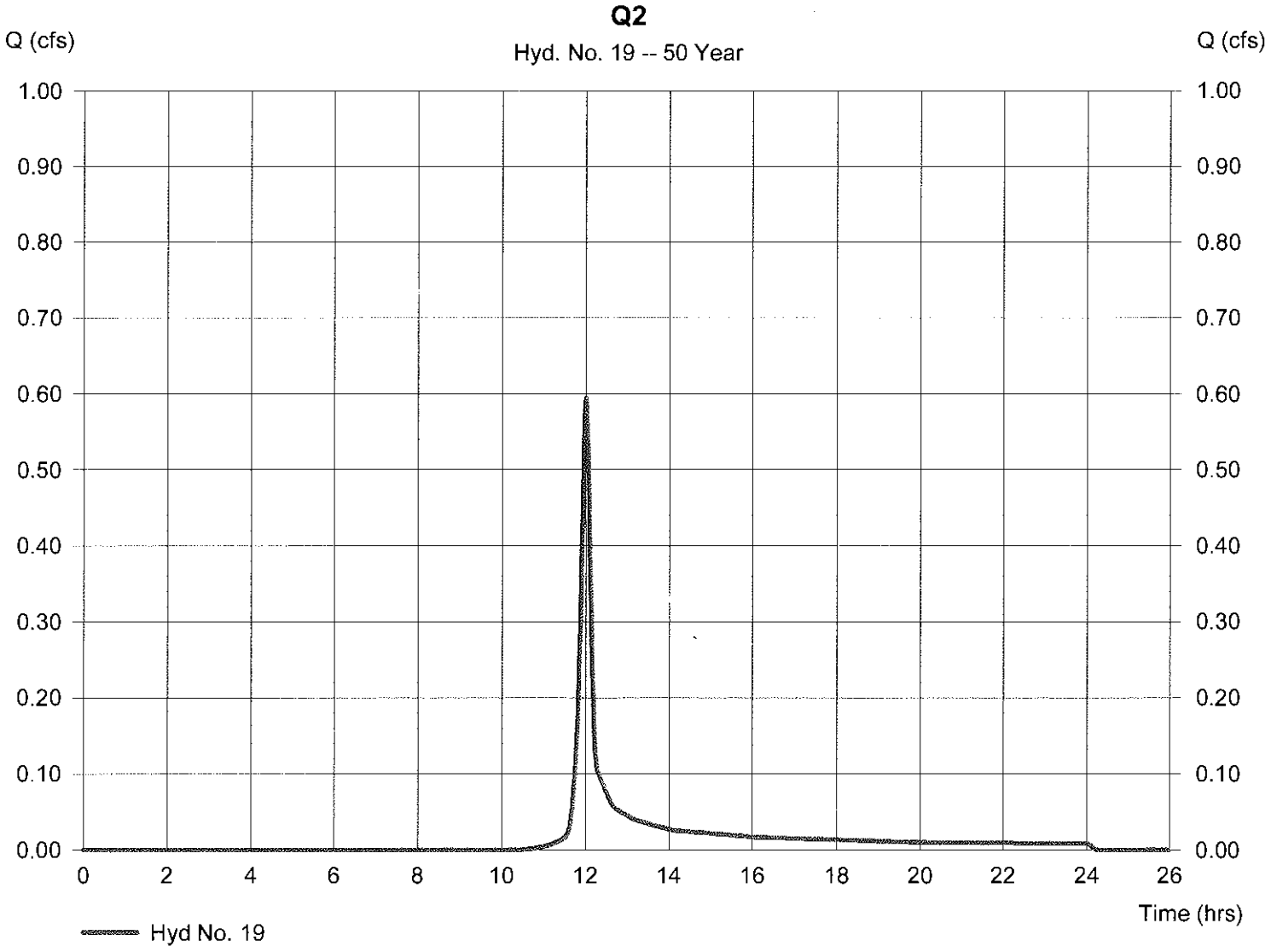


Hydrograph Report

Hyd. No. 19

Q2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.595 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 1,456 cuft
Drainage area	= 0.370 ac	Curve number	= 78
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.22 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

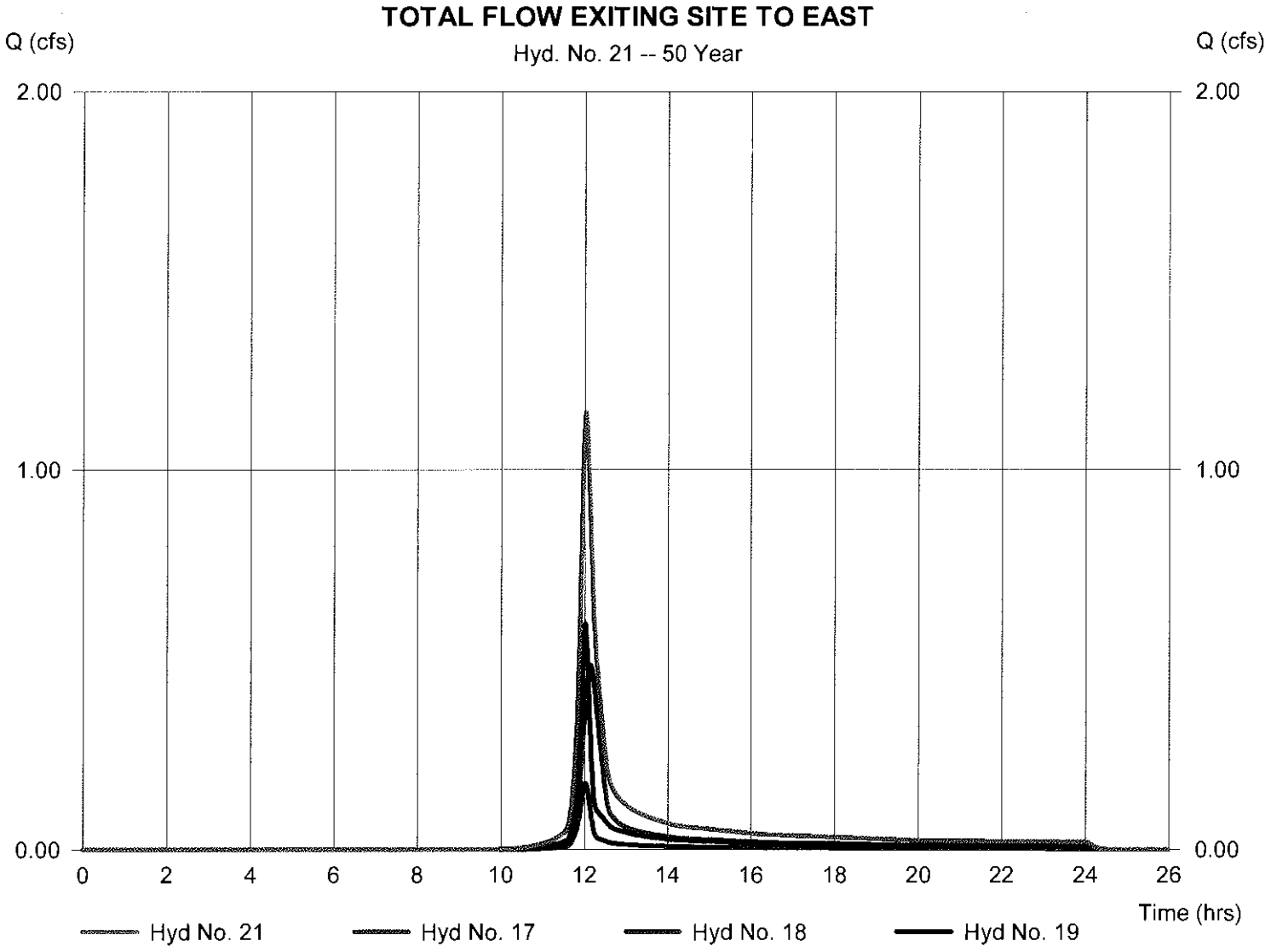


Hydrograph Report

Hyd. No. 21

TOTAL FLOW EXITING SITE TO EAST

Hydrograph type	= Combine	Peak discharge	= 1.152 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.03 hrs
Time interval	= 1 min	Hyd. volume	= 3,663 cuft
Inflow hyds.	= 17, 18, 19	Contrib. drain. area	= 0.860 ac

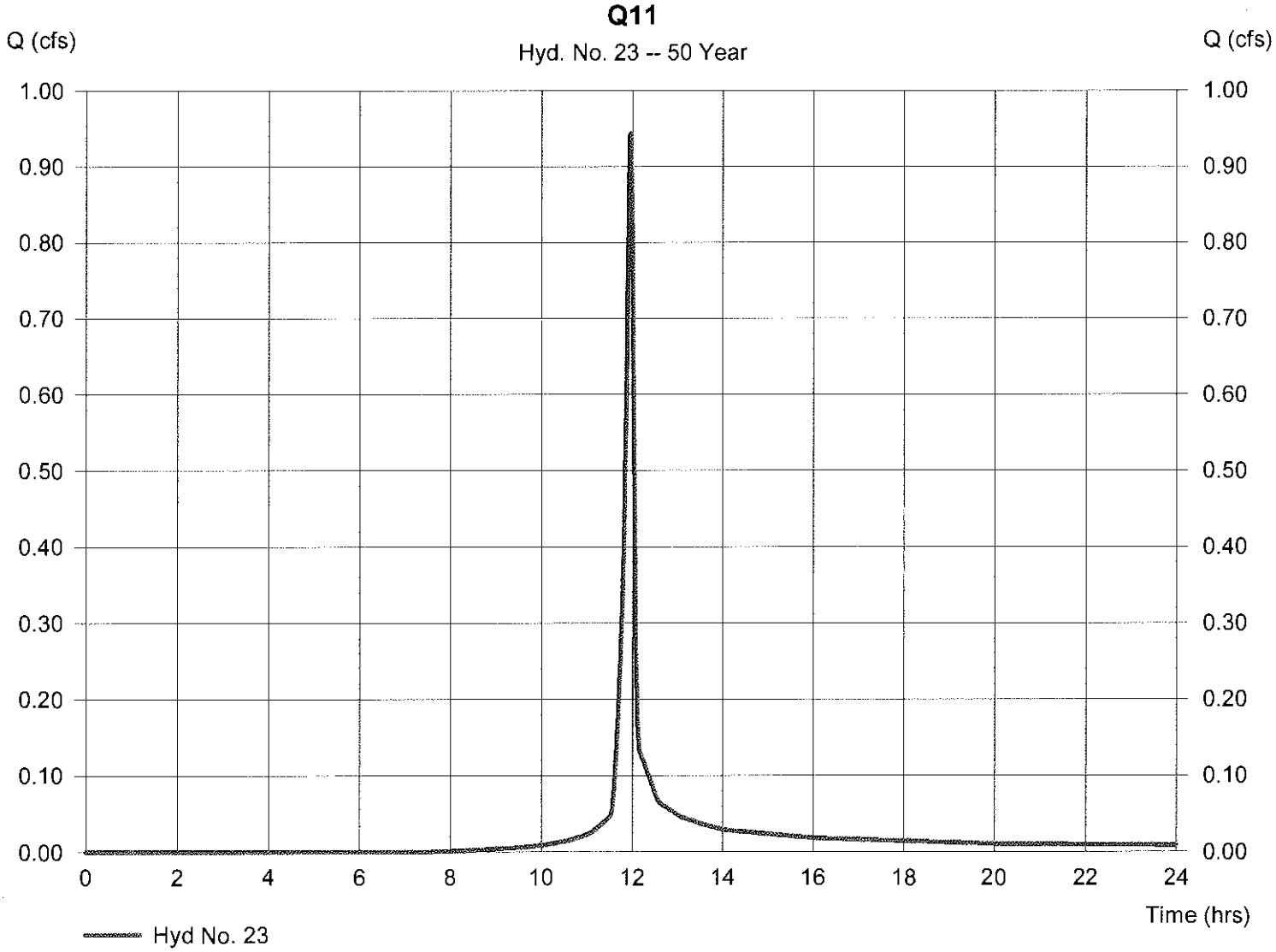


Hydrograph Report

Hyd. No. 23

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 0.943 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,927 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

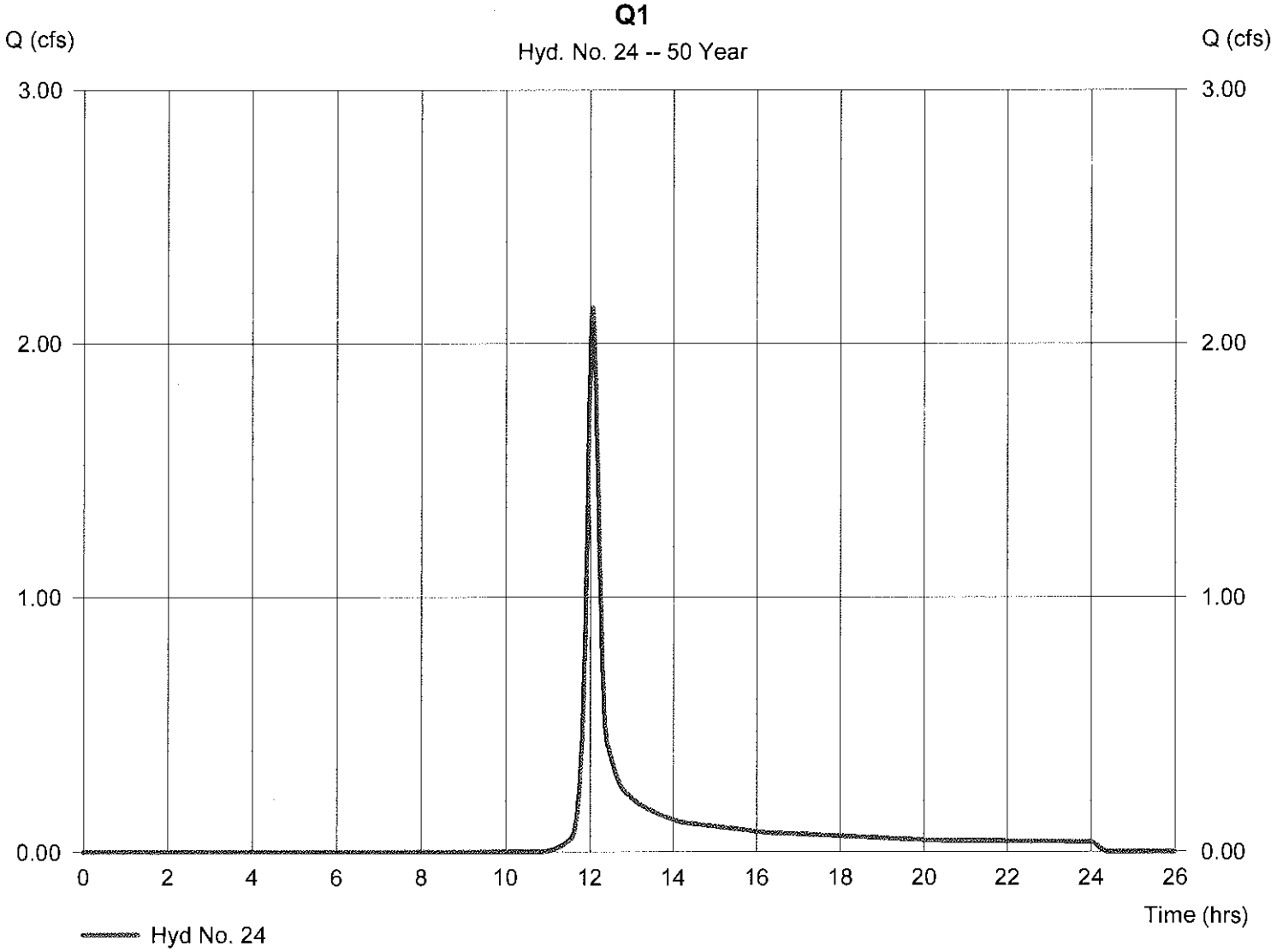


Hydrograph Report

Hyd. No. 24

Q1

Hydrograph type	= SCS Runoff	Peak discharge	= 2.141 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 6,352 cuft
Drainage area	= 1.810 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.56 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

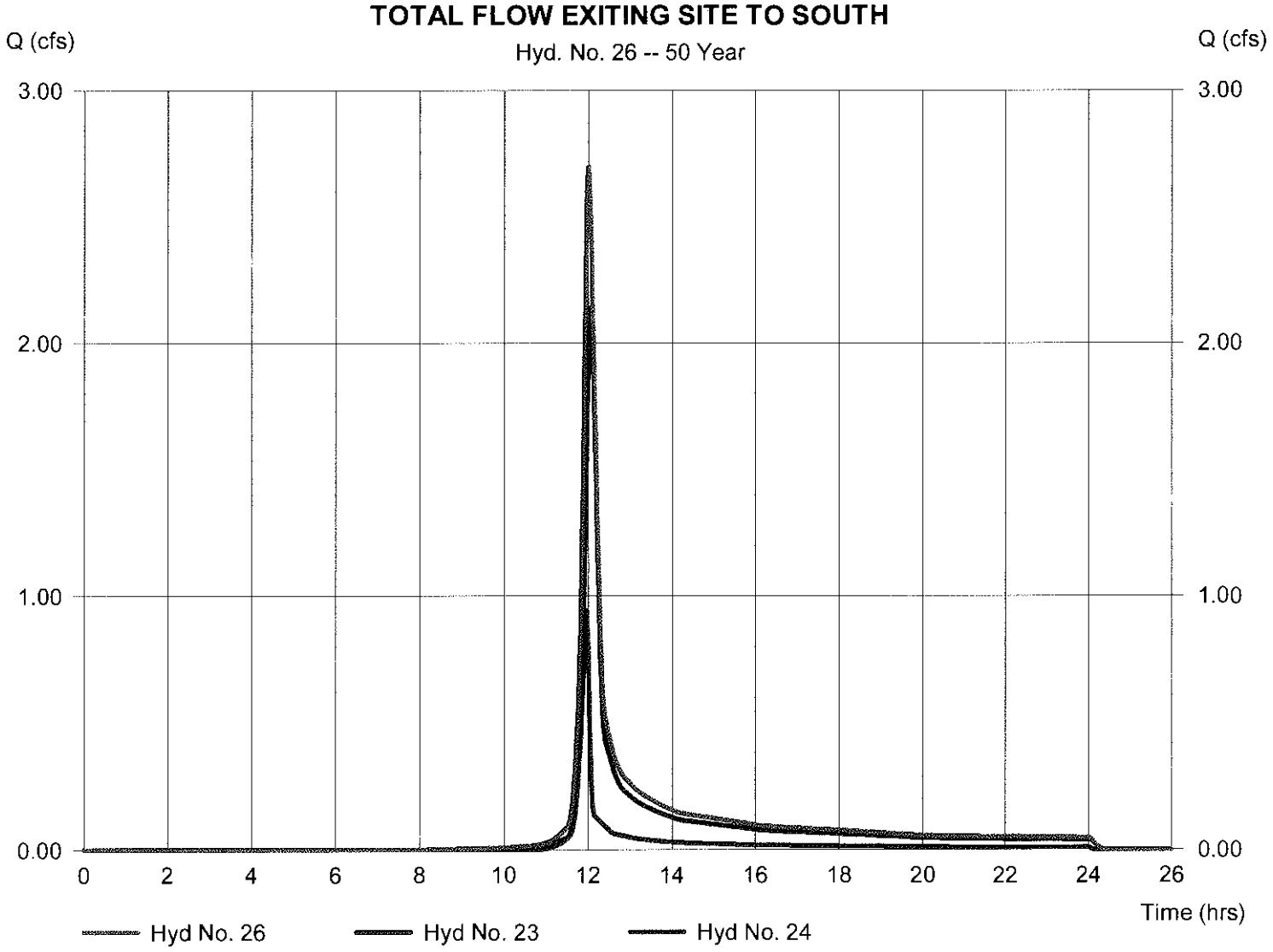


Hydrograph Report

Hyd. No. 26

,OTAL FLOW EXITING SITE TO SOUTH

Hydrograph type	= Combine	Peak discharge	= 2.698 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 8,280 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 2.120 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

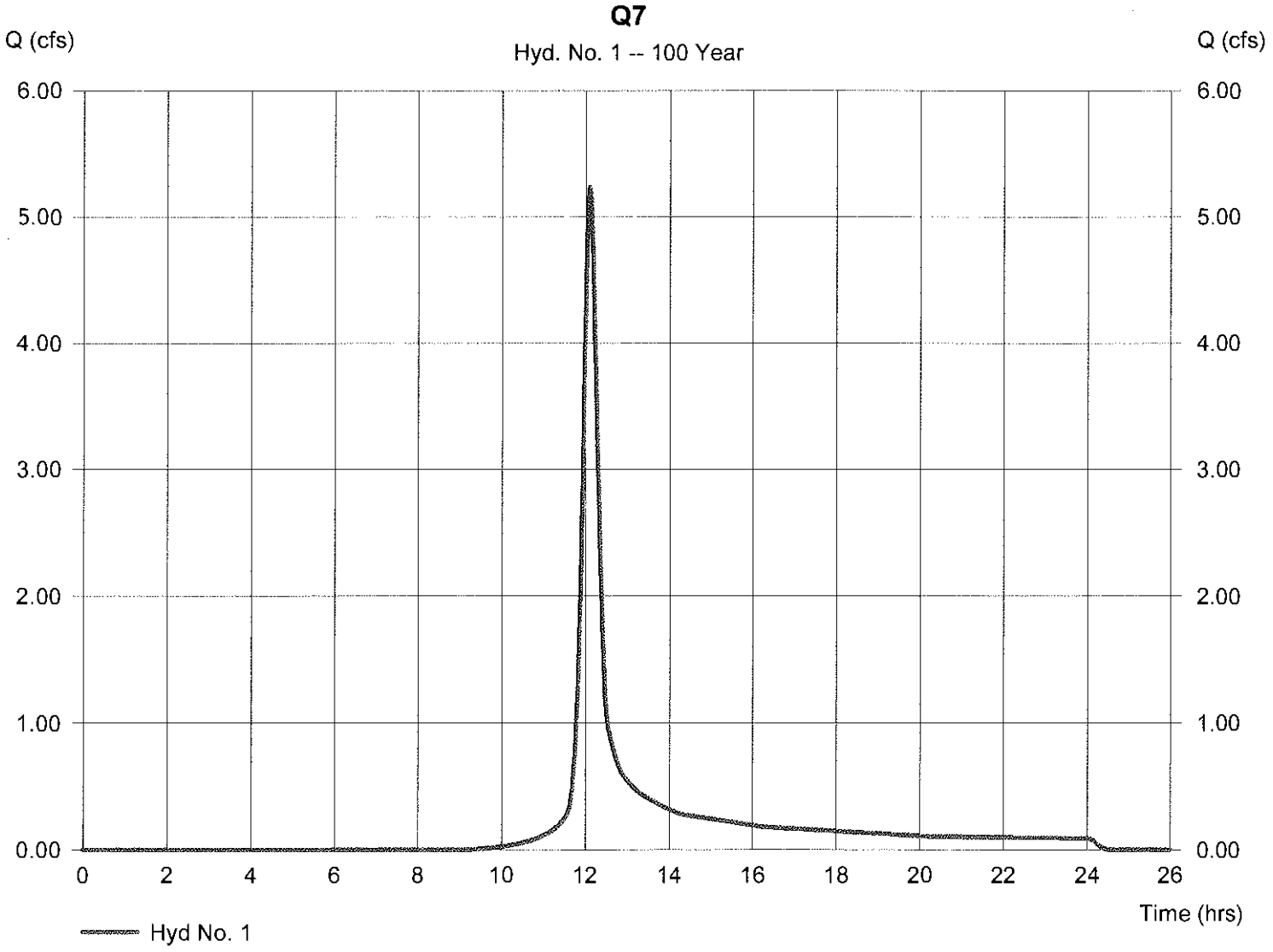
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	5.237	1	726	17,341	------	------	------	Q7
2	Reach	4.595	1	732	17,338	1	------	------	FLOW FROM Q7
3	SCS Runoff	5.871	1	725	18,519	------	------	------	Q8
4	SCS Runoff	4.049	1	721	10,241	------	------	------	Q9
6	Combine	13.07	1	725	46,097	2, 3, 4,	------	------	TOTAL FLOW TO EXISTING PIPE
7	SCS Runoff	0.211	1	721	533	------	------	------	Q10
9	Combine	13.25	1	725	46,631	6, 7,	------	------	TOTAL FLOW EXITING SITE TO WE
11	SCS Runoff	2.122	1	720	5,131	------	------	------	Q6
12	Reach	1.720	1	725	5,127	11	------	------	FLOW FROM Q6
13	SCS Runoff	3.035	1	723	8,670	------	------	------	Q5
15	Combine	4.731	1	724	13,798	12, 13,	------	------	TOTAL FLOW TO EXISTING DROP I
17	SCS Runoff	0.588	1	728	2,113	------	------	------	Q4
18	SCS Runoff	0.211	1	721	533	------	------	------	Q3
19	SCS Runoff	0.728	1	721	1,771	------	------	------	Q2
21	Combine	1.403	1	722	4,417	17, 18, 19,	------	------	TOTAL FLOW EXITING SITE TO EA
23	SCS Runoff	1.095	1	717	2,253	------	------	------	Q11
24	SCS Runoff	2.667	1	724	7,803	------	------	------	Q1
26	Combine	3.323	1	721	10,056	23, 24,	------	------	TOTAL FLOW EXITING SITE TO SO

Hydrograph Report

Hyd. No. 1

Q7

Hydrograph type	= SCS Runoff	Peak discharge	= 5.237 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 17,341 cuft
Drainage area	= 3.170 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



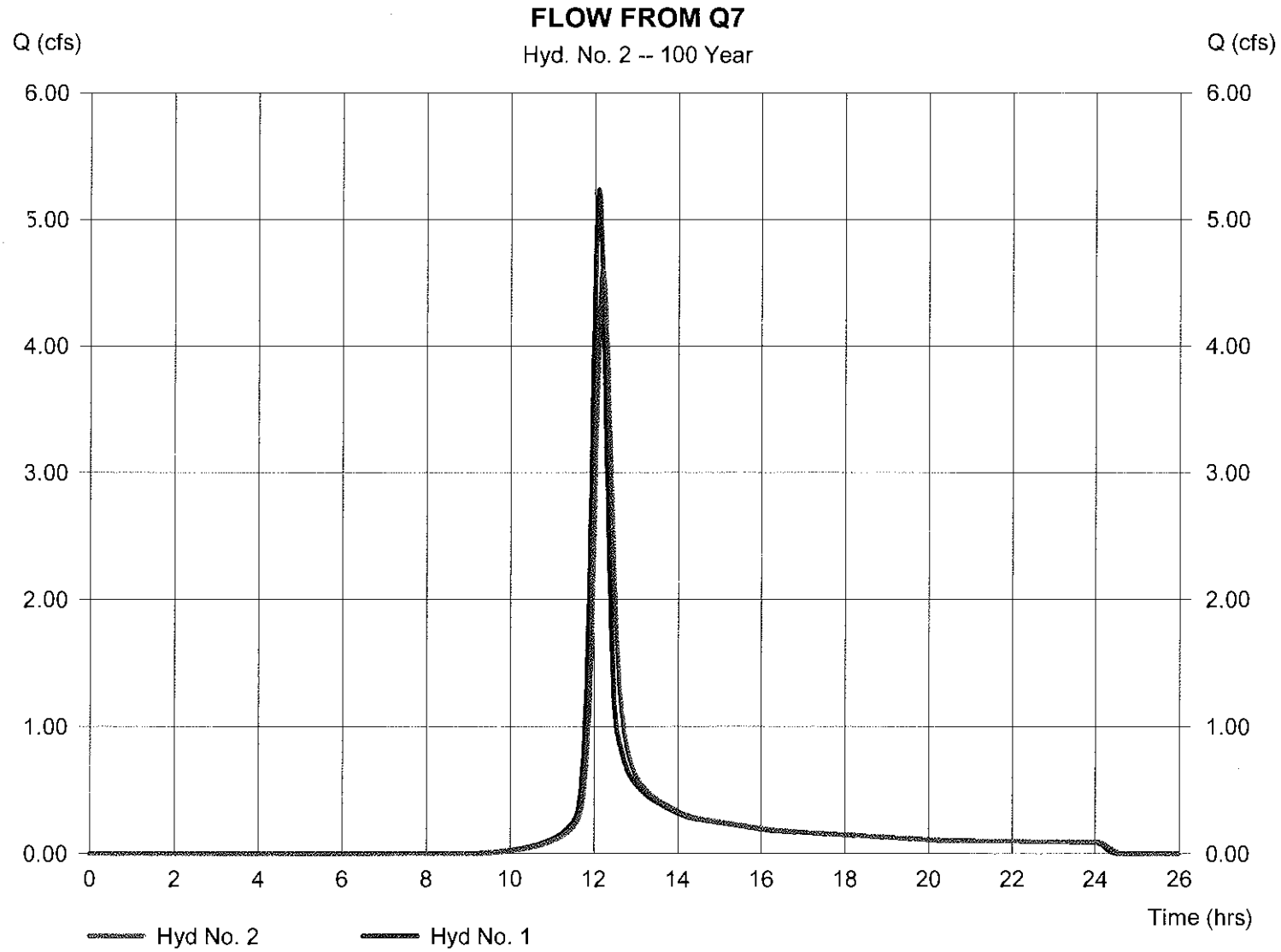
Hydrograph Report

Hyd. No. 2

. LOW FROM Q7

Hydrograph type	= Reach	Peak discharge	= 4.595 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.20 hrs
Time interval	= 1 min	Hyd. volume	= 17,338 cuft
Inflow hyd. No.	= 1 - Q7	Section type	= Trapezoidal
Reach length	= 933.0 ft	Channel slope	= 2.6 %
Manning's n	= 0.035	Bottom width	= 7.0 ft
Side slope	= 15.0:1	Max. depth	= 2.0 ft
Rating curve x	= 1.864	Rating curve m	= 1.177
Ave. velocity	= 2.18 ft/s	Routing coeff.	= 0.1522

Modified Att-Kin routing method used.

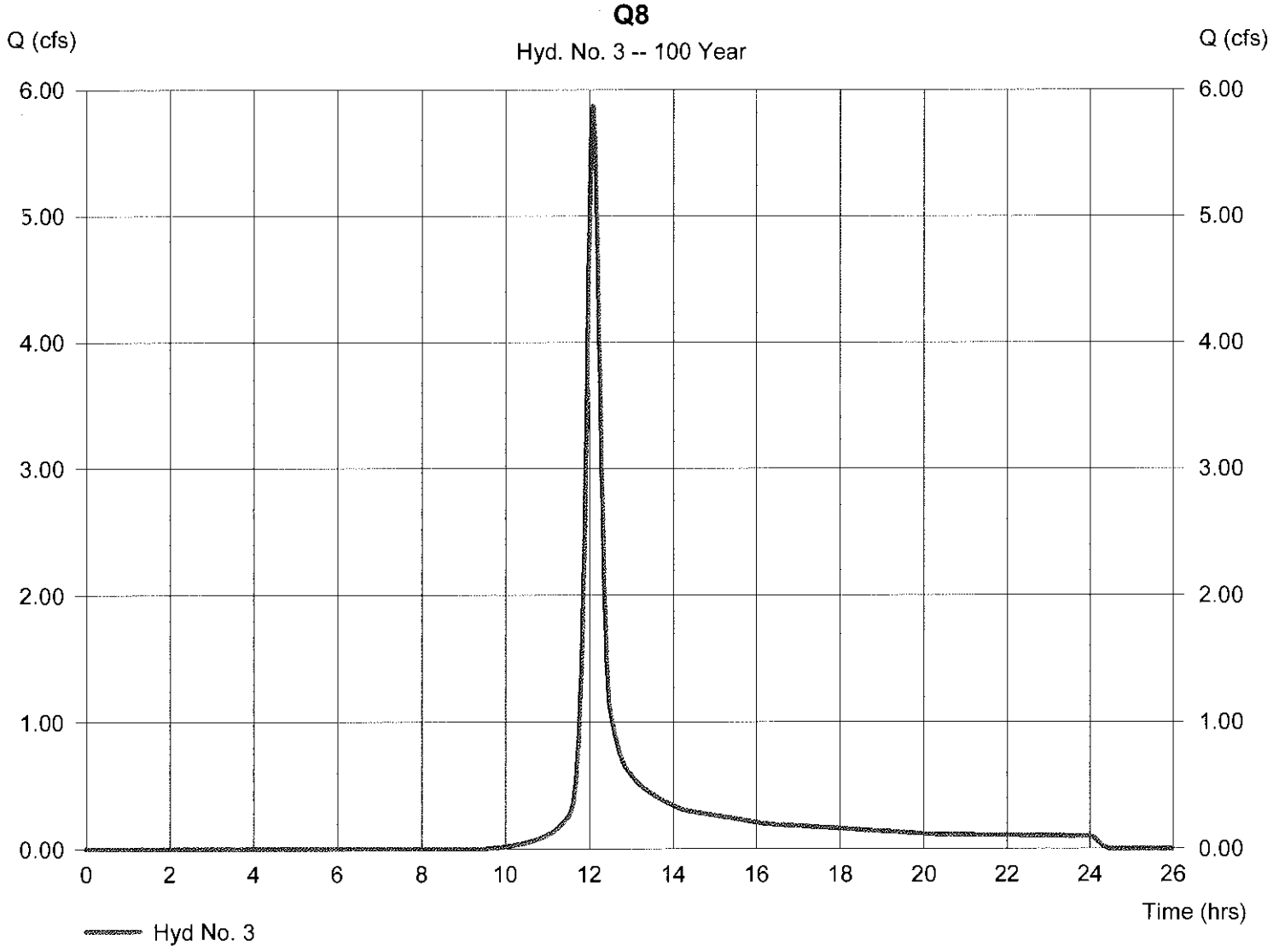


Hydrograph Report

Hyd. No. 3

Q8

Hydrograph type	= SCS Runoff	Peak discharge	= 5.871 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 18,519 cuft
Drainage area	= 3.580 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.22 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

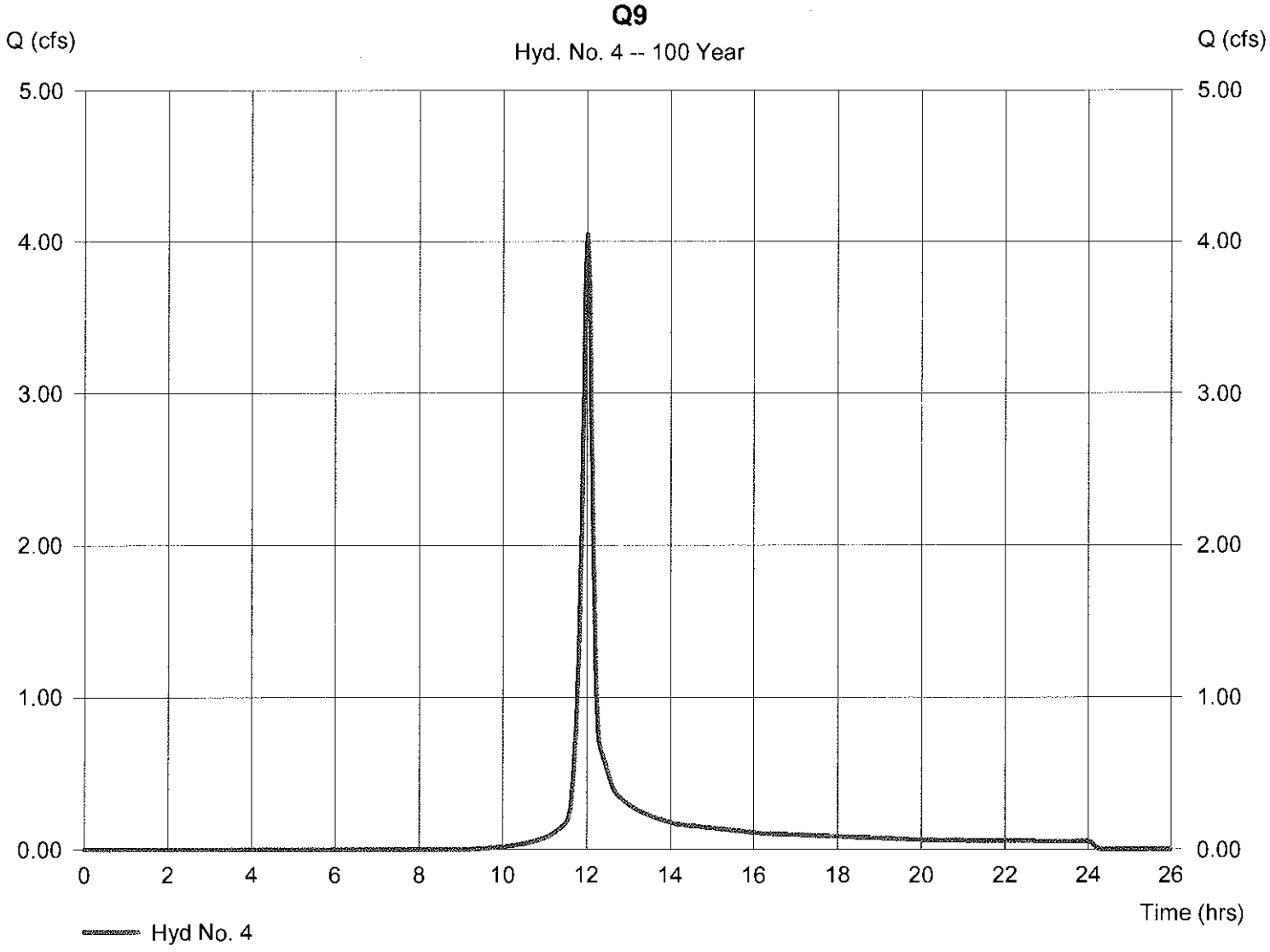


Hydrograph Report

Hyd. No. 4

Q9

Hydrograph type	= SCS Runoff	Peak discharge	= 4.049 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 10,241 cuft
Drainage area	= 1.920 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

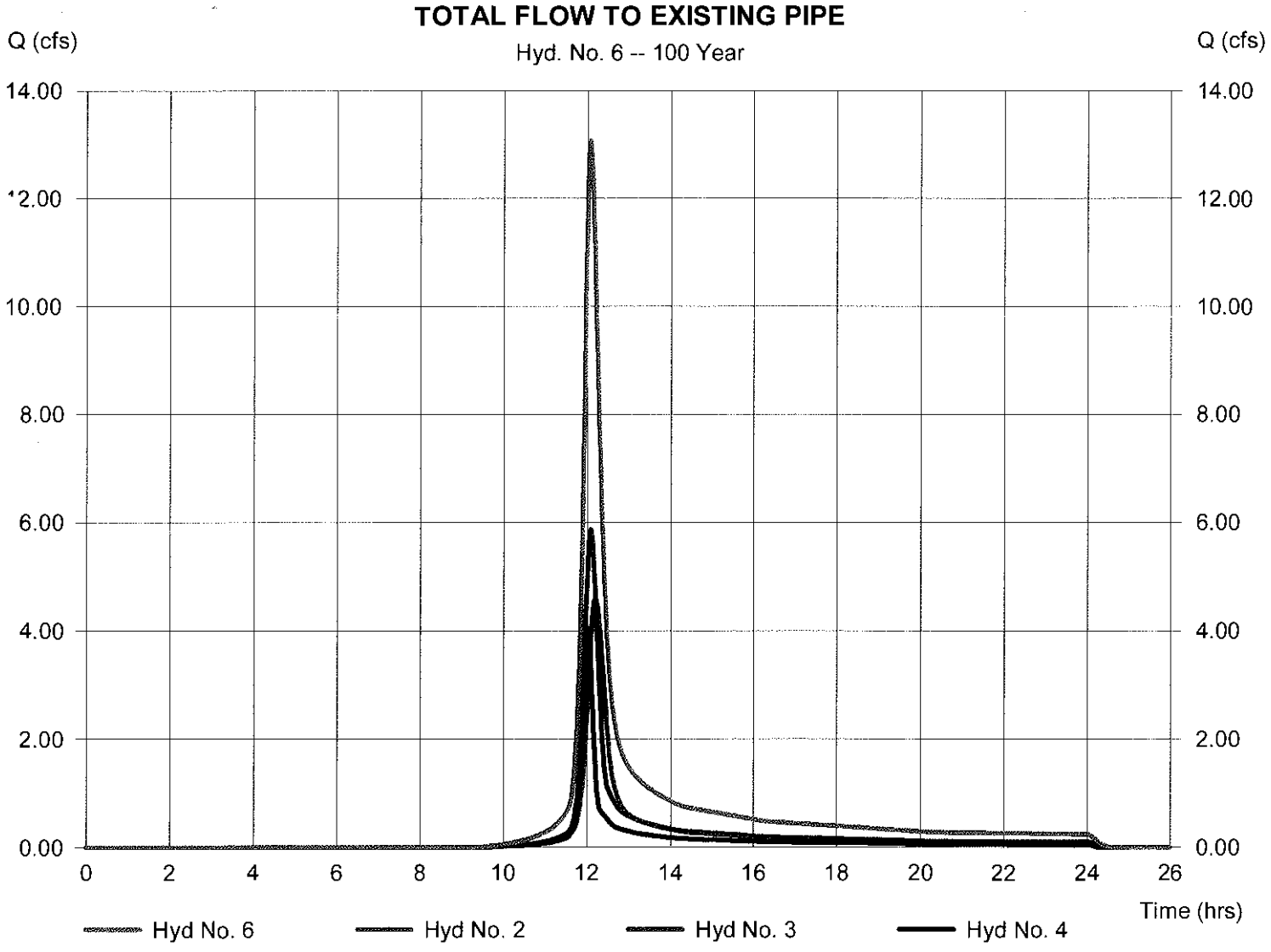


Hydrograph Report

Hyd. No. 6

TOTAL FLOW TO EXISTING PIPE

Hydrograph type	= Combine	Peak discharge	= 13.07 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 46,097 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 5.500 ac

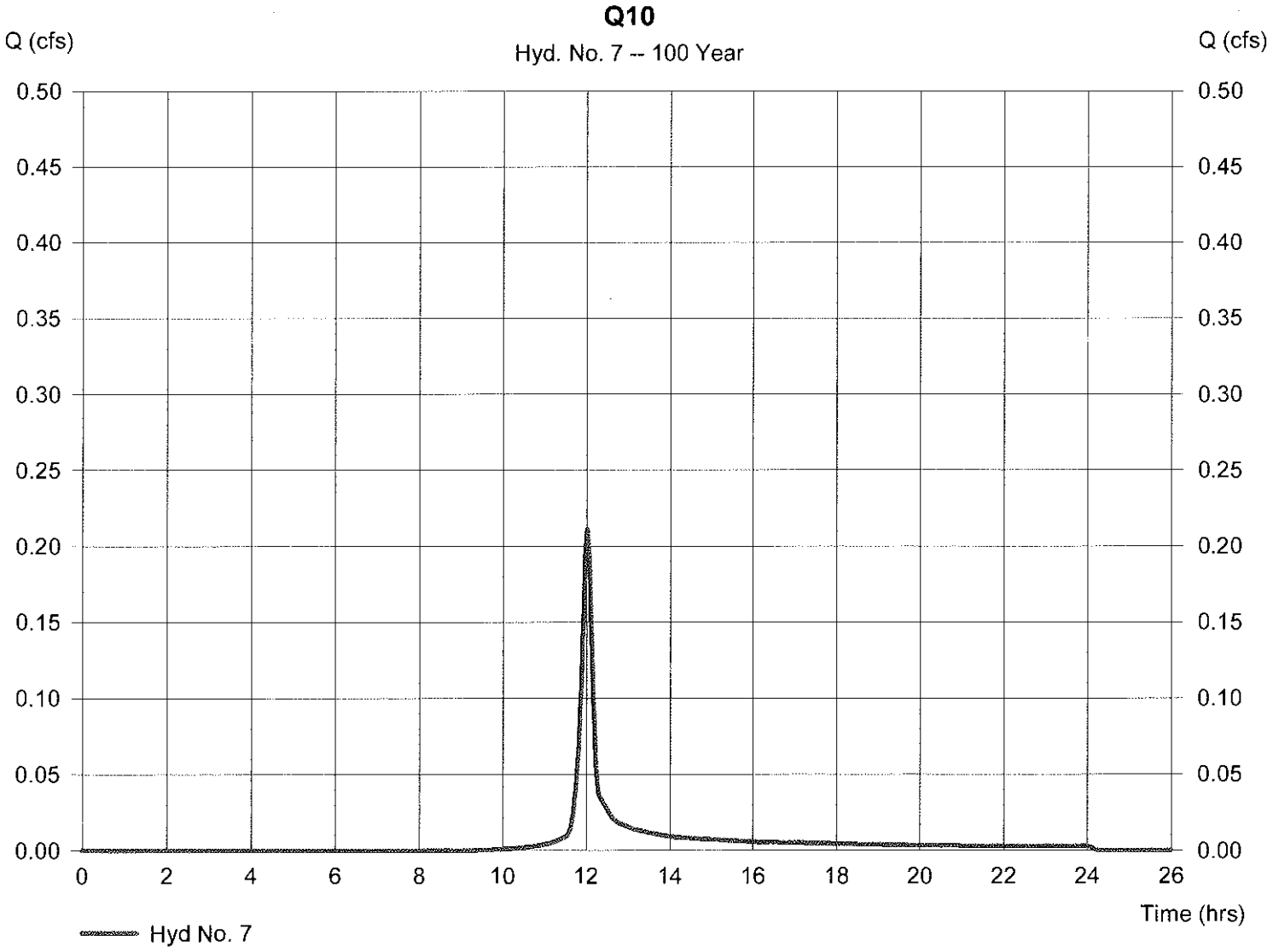


Hydrograph Report

Hyd. No. 7

Q10

Hydrograph type	= SCS Runoff	Peak discharge	= 0.211 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 533 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 13.08 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

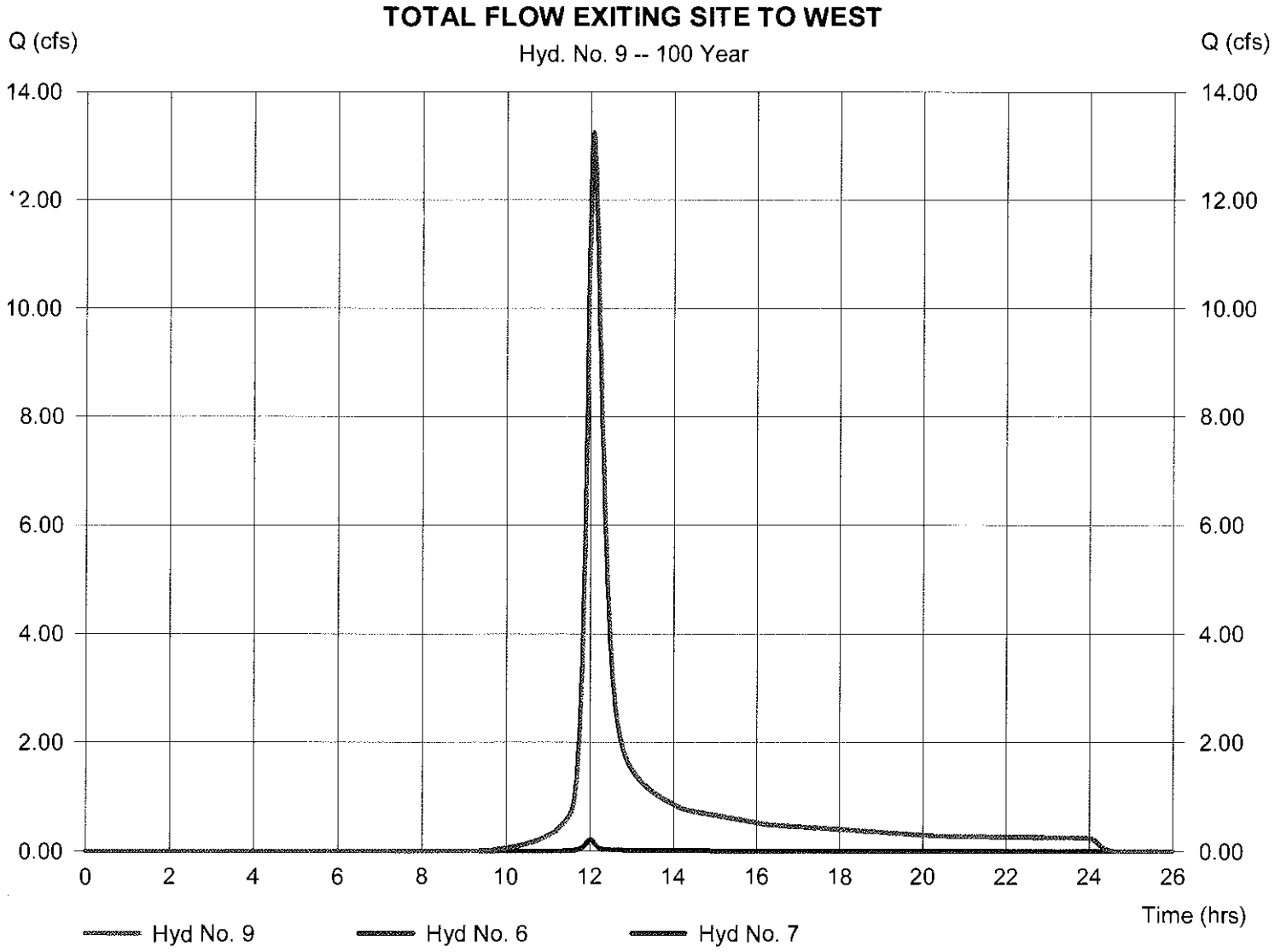


Hydrograph Report

Hyd. No. 9

TOTAL FLOW EXITING SITE TO WEST

Hydrograph type	= Combine	Peak discharge	= 13.25 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 46,631 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.100 ac

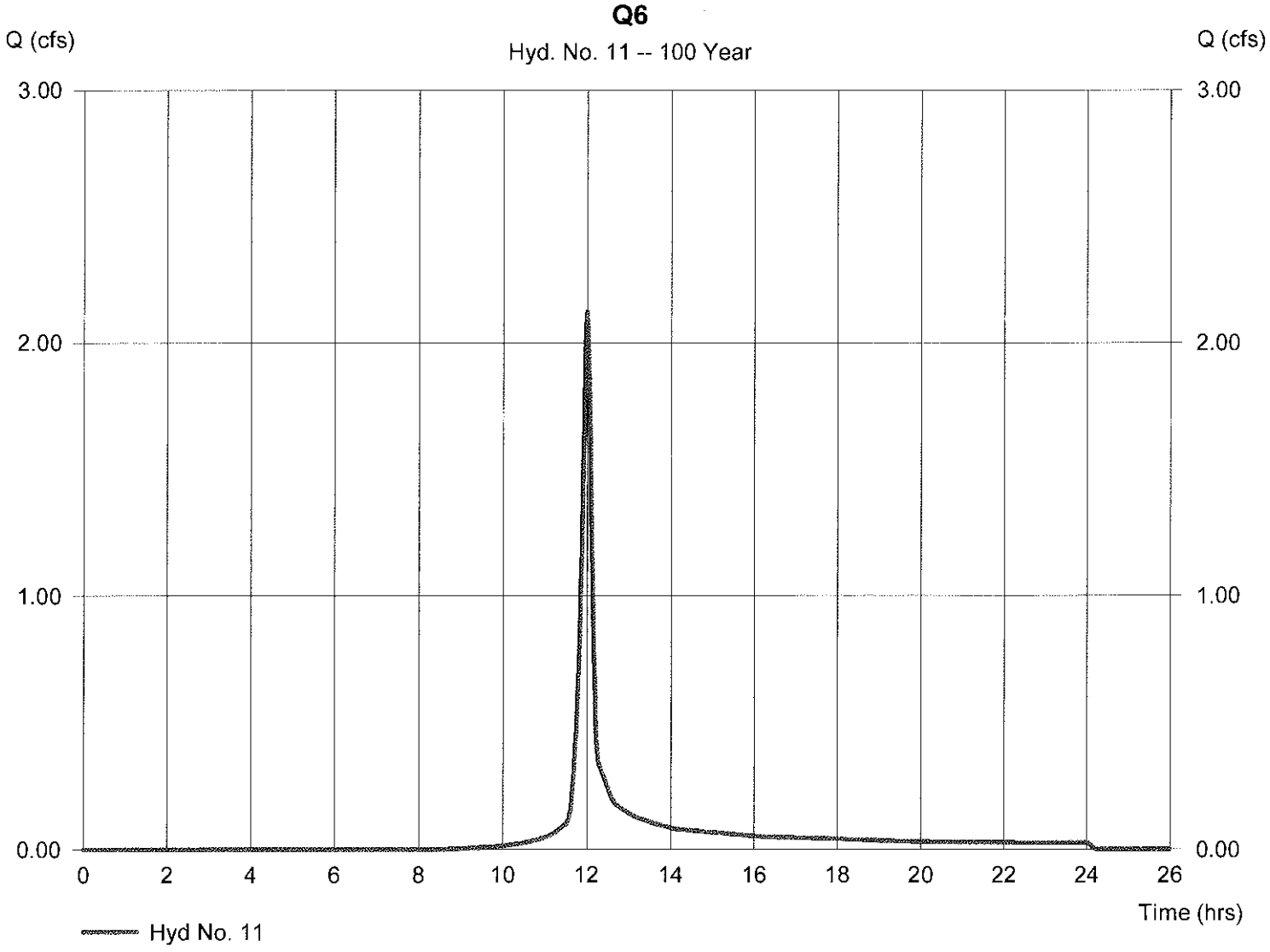


Hydrograph Report

Hyd. No. 11

Q6

Hydrograph type	= SCS Runoff	Peak discharge	= 2.122 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 5,131 cuft
Drainage area	= 0.850 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.34 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



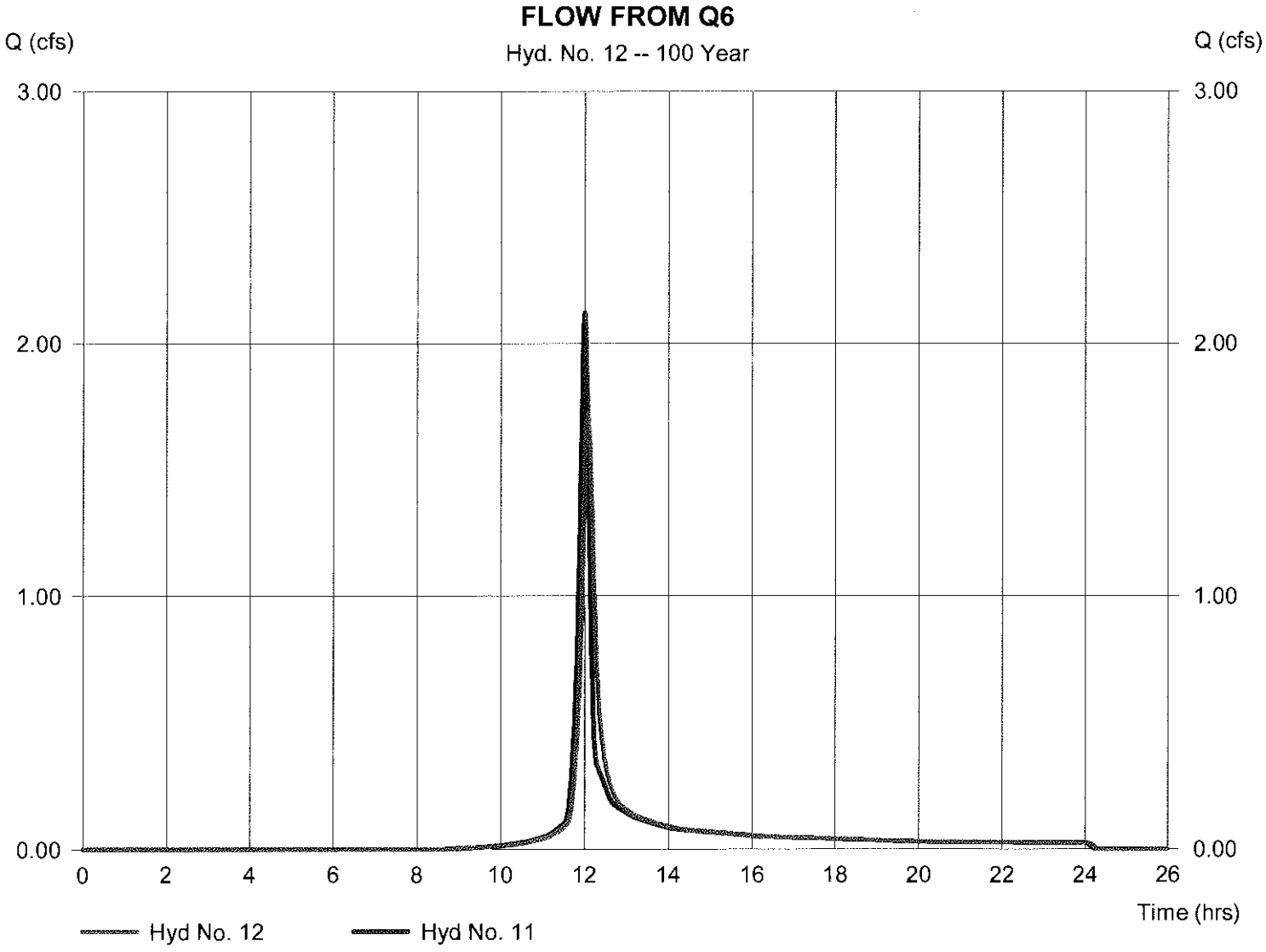
Hydrograph Report

Hyd. No. 12

FLOW FROM Q6

Hydrograph type	= Reach	Peak discharge	= 1.720 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 5,127 cuft
Inflow hyd. No.	= 11 - Q6	Section type	= Trapezoidal
Reach length	= 819.0 ft	Channel slope	= 2.5 %
Manning's n	= 0.035	Bottom width	= 5.0 ft
Side slope	= 25.0:1	Max. depth	= 1.0 ft
Rating curve x	= 2.301	Rating curve m	= 0.970
Ave. velocity	= 2.31 ft/s	Routing coeff.	= 0.1514

Modified Att-Kin routing method used.

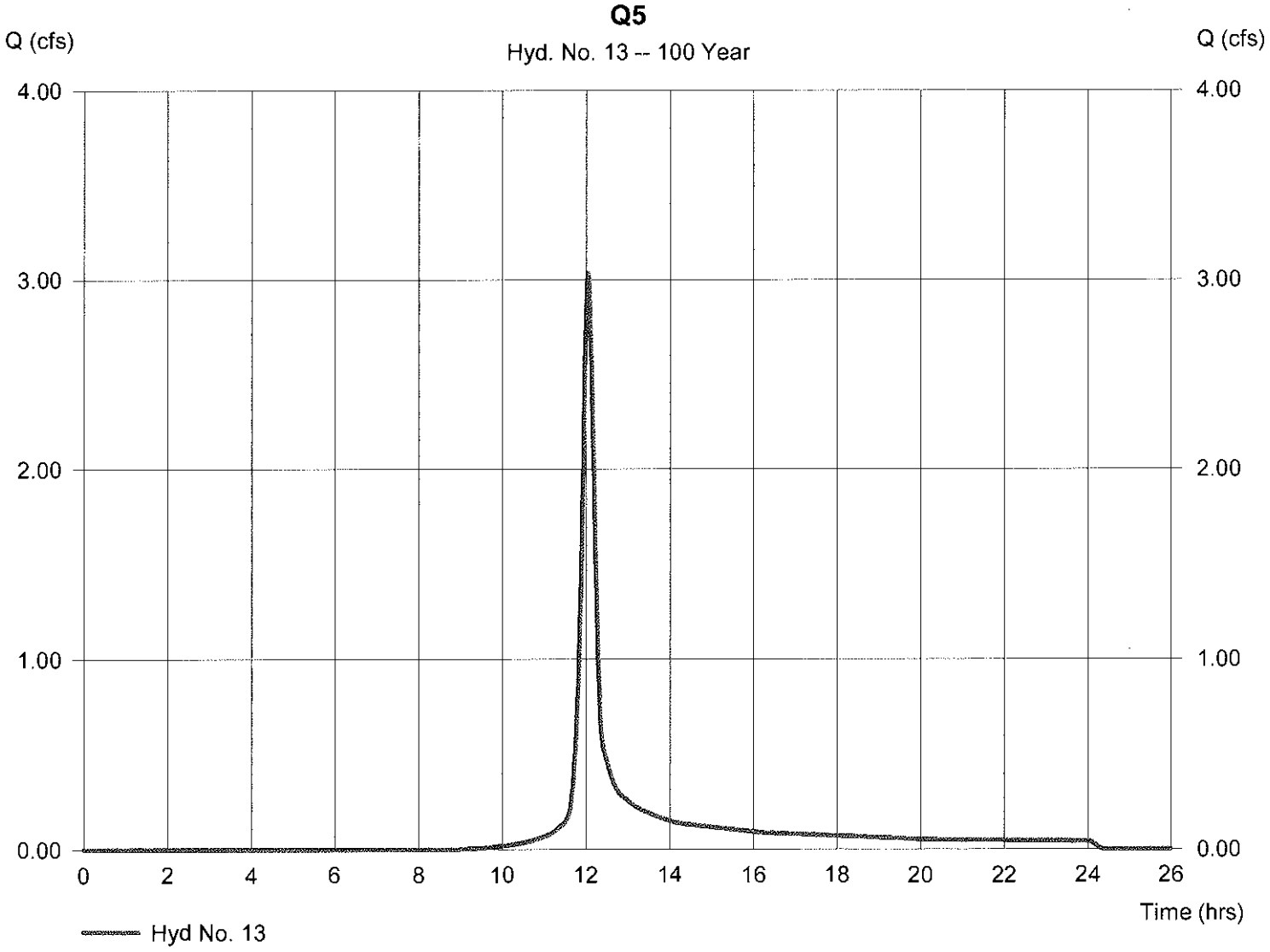


Hydrograph Report

Hyd. No. 13

Q5

Hydrograph type	= SCS Runoff	Peak discharge	= 3.035 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 8,670 cuft
Drainage area	= 1.510 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.50 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

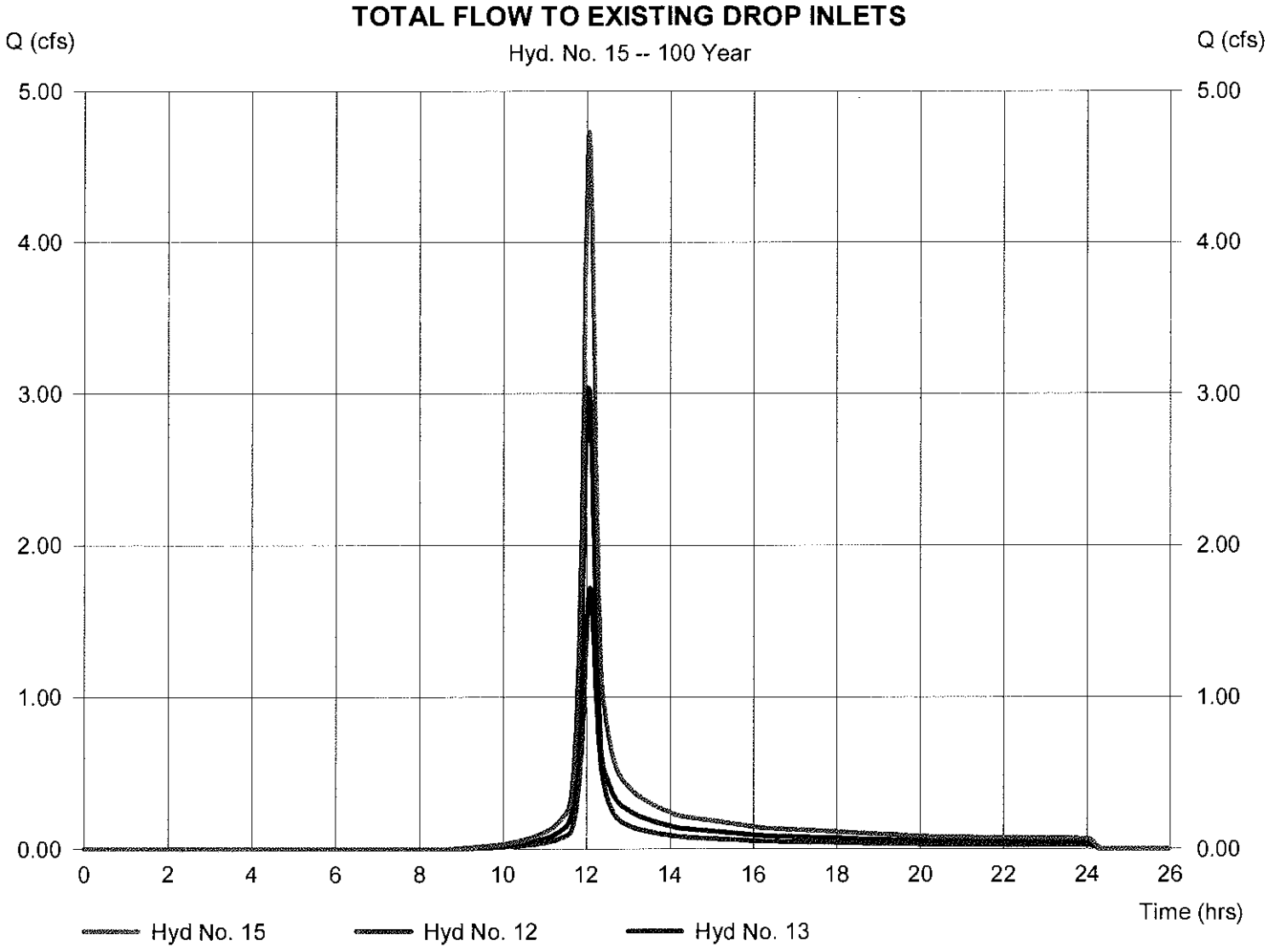


Hydrograph Report

Hyd. No. 15

,OTAL FLOW TO EXISTING DROP INLETS

Hydrograph type	= Combine	Peak discharge	= 4.731 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 13,798 cuft
Inflow hyds.	= 12, 13	Contrib. drain. area	= 1.510 ac

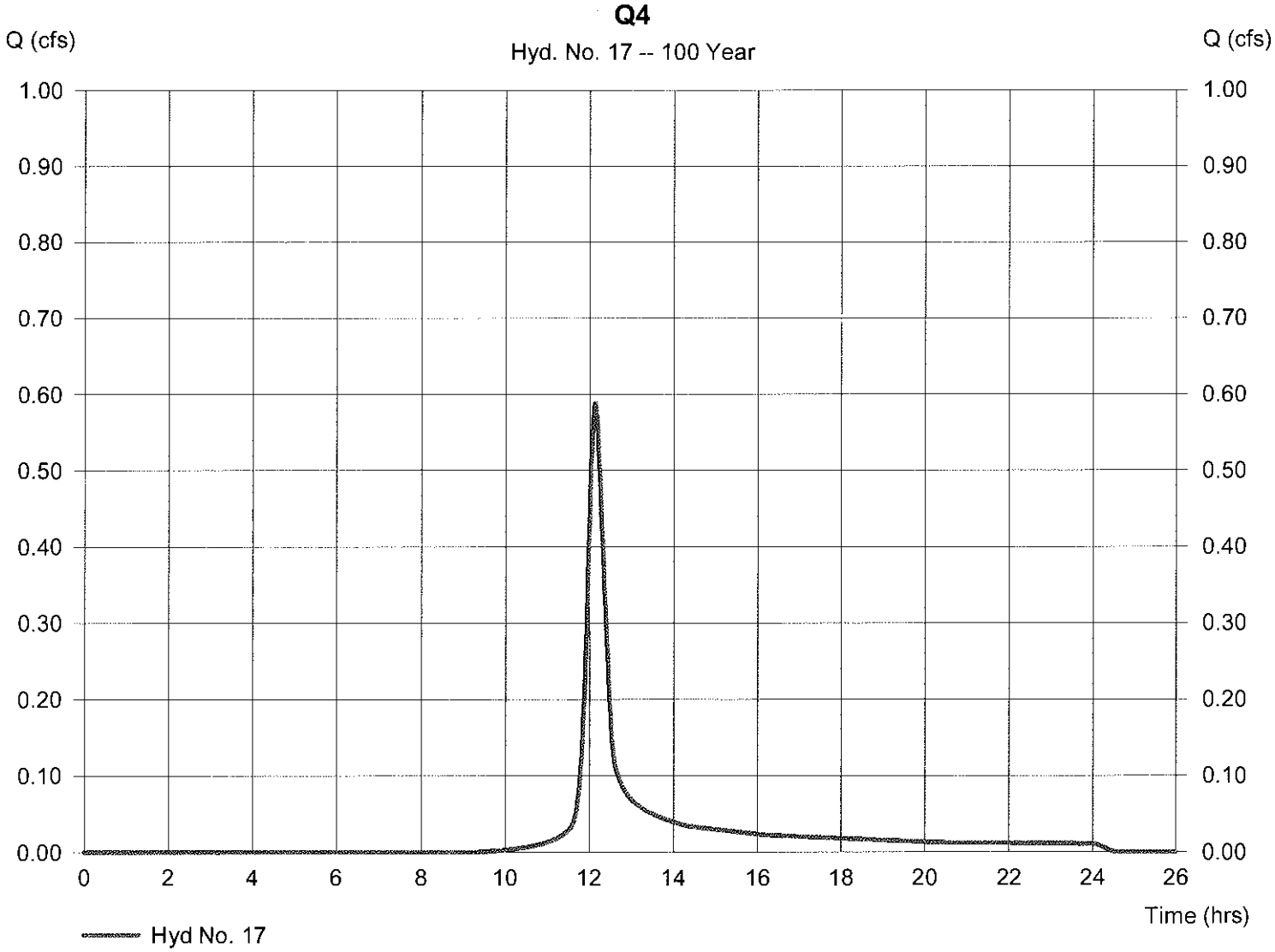


Hydrograph Report

Hyd. No. 17

Q4

Hydrograph type	= SCS Runoff	Peak discharge	= 0.588 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 2,113 cuft
Drainage area	= 0.390 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 23.88 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

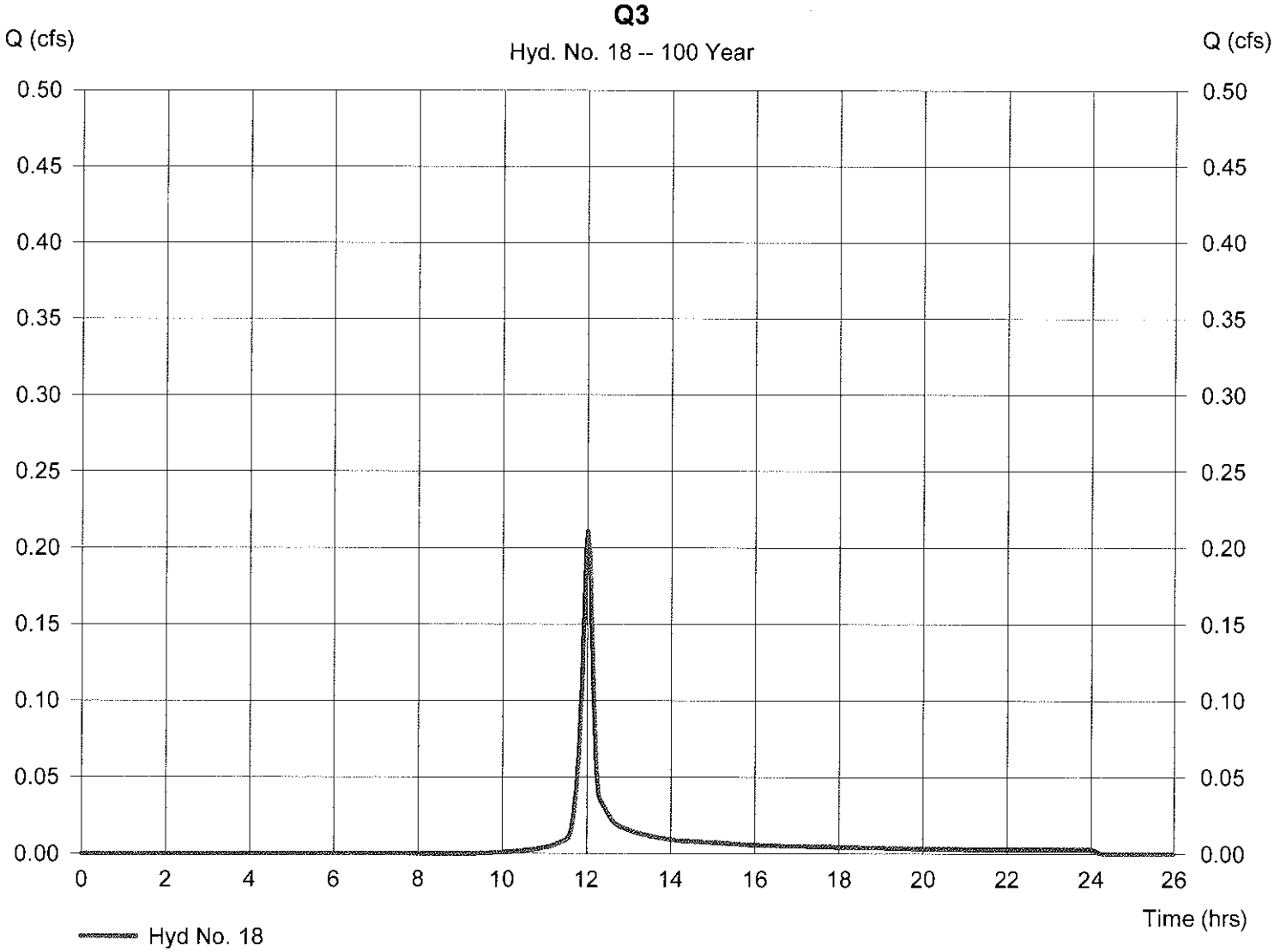


Hydrograph Report

Hyd. No. 18

Q3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.211 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 533 cuft
Drainage area	= 0.100 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.76 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

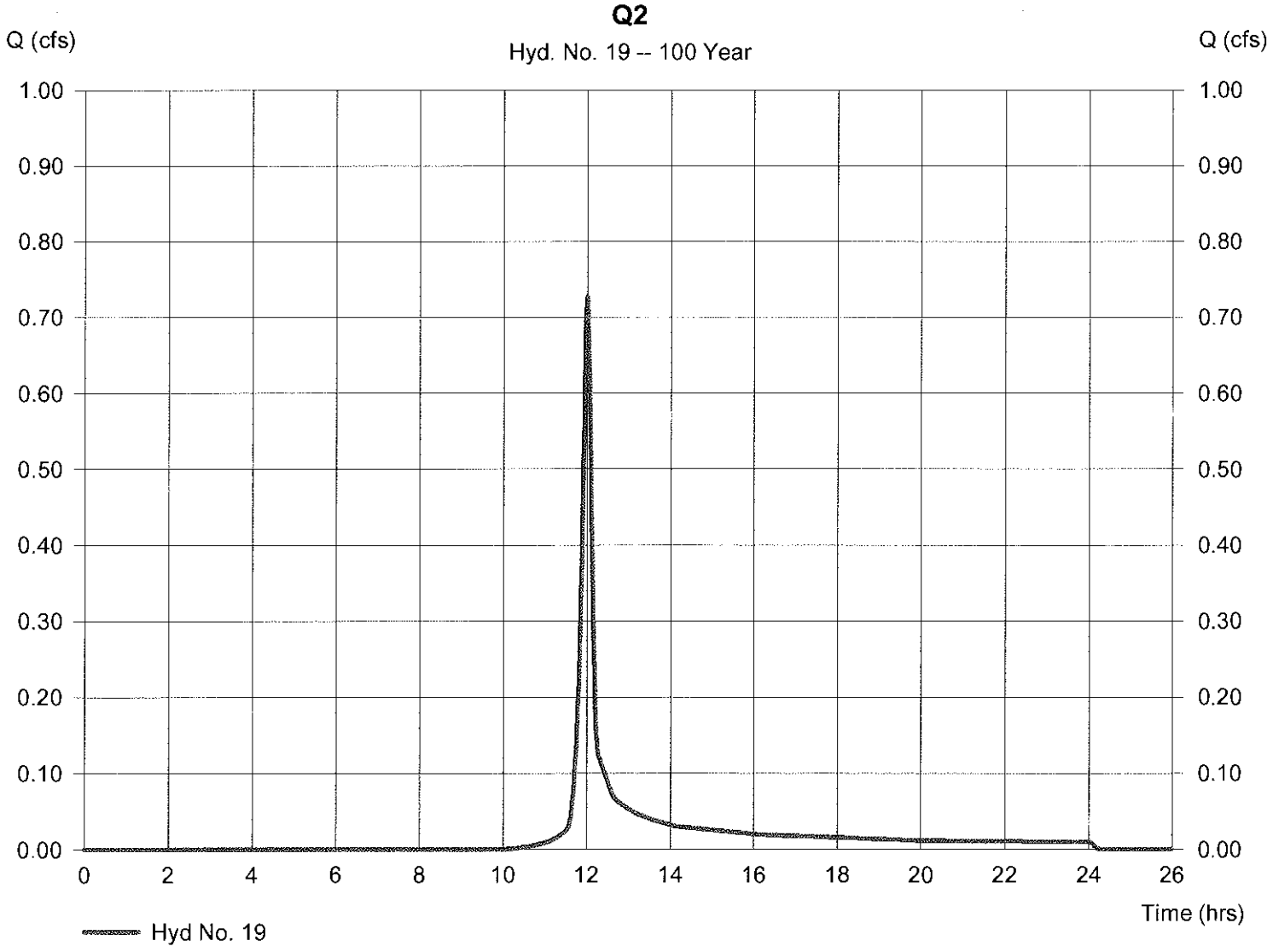


Hydrograph Report

Hyd. No. 19

Q2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.728 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 1,771 cuft
Drainage area	= 0.370 ac	Curve number	= 78
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.22 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

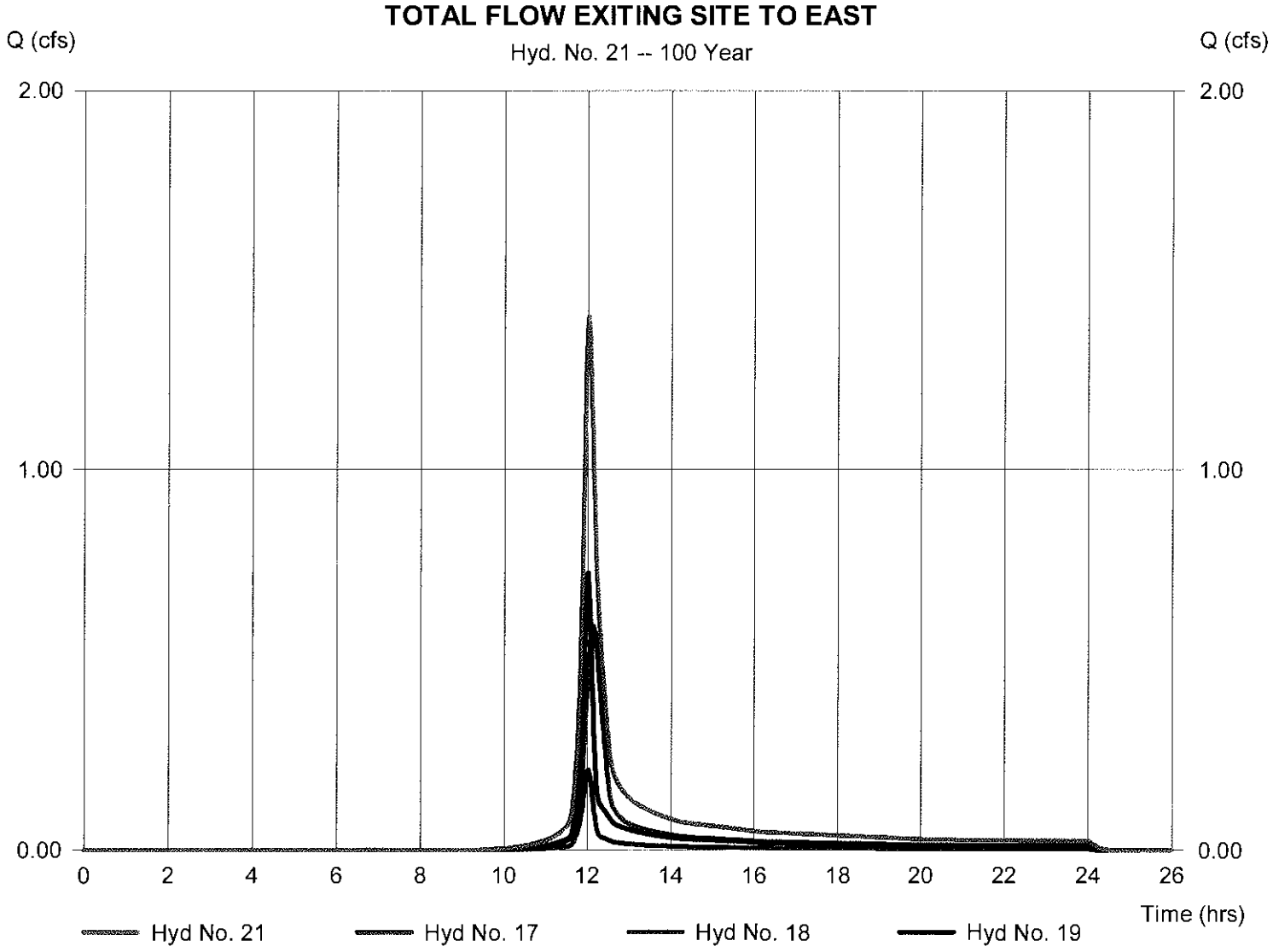


Hydrograph Report

Hyd. No. 21

TOTAL FLOW EXITING SITE TO EAST

Hydrograph type	= Combine	Peak discharge	= 1.403 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 1 min	Hyd. volume	= 4,417 cuft
Inflow hyds.	= 17, 18, 19	Contrib. drain. area	= 0.860 ac

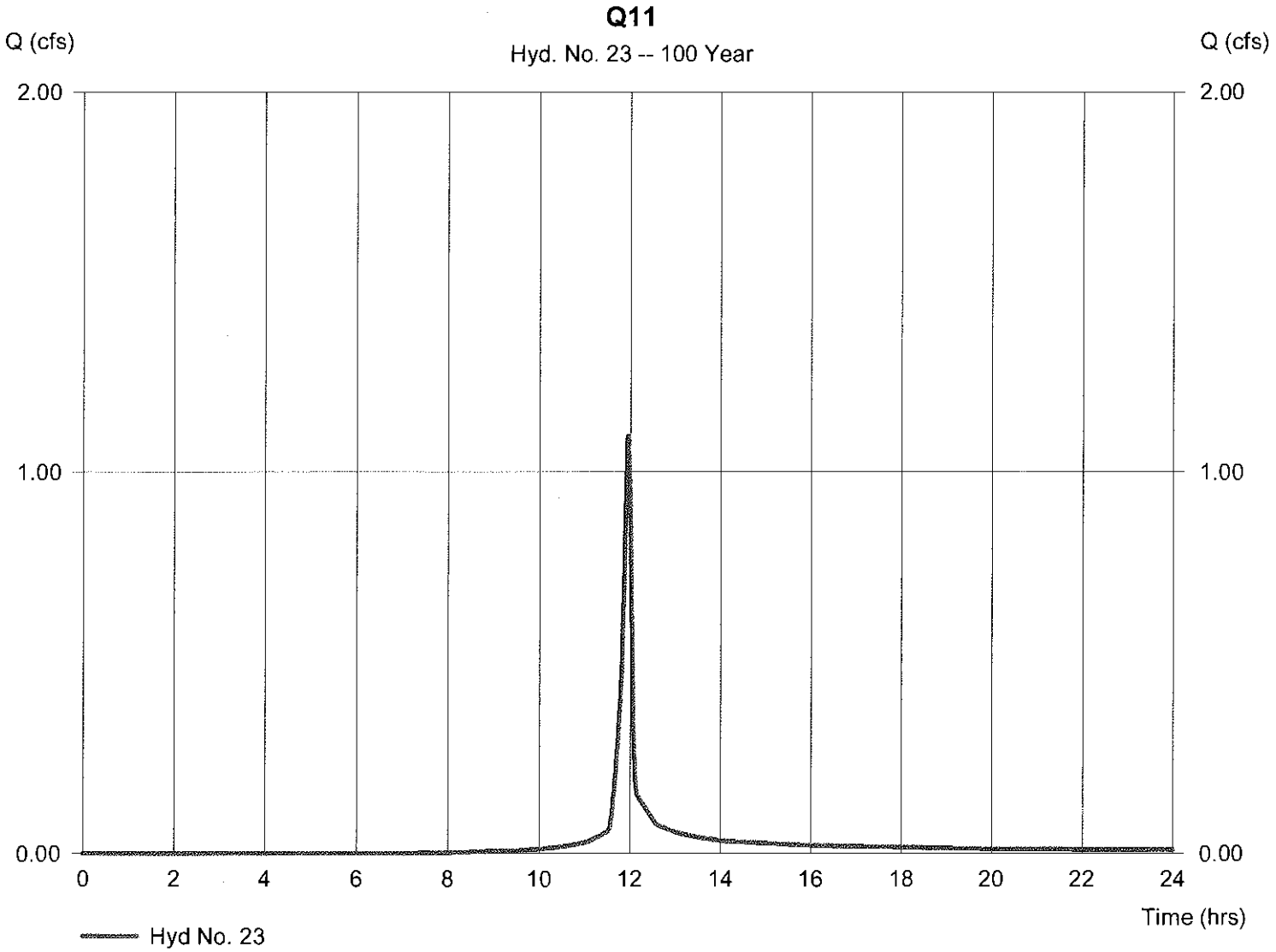


Hydrograph Report

Hyd. No. 23

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 1.095 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 2,253 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

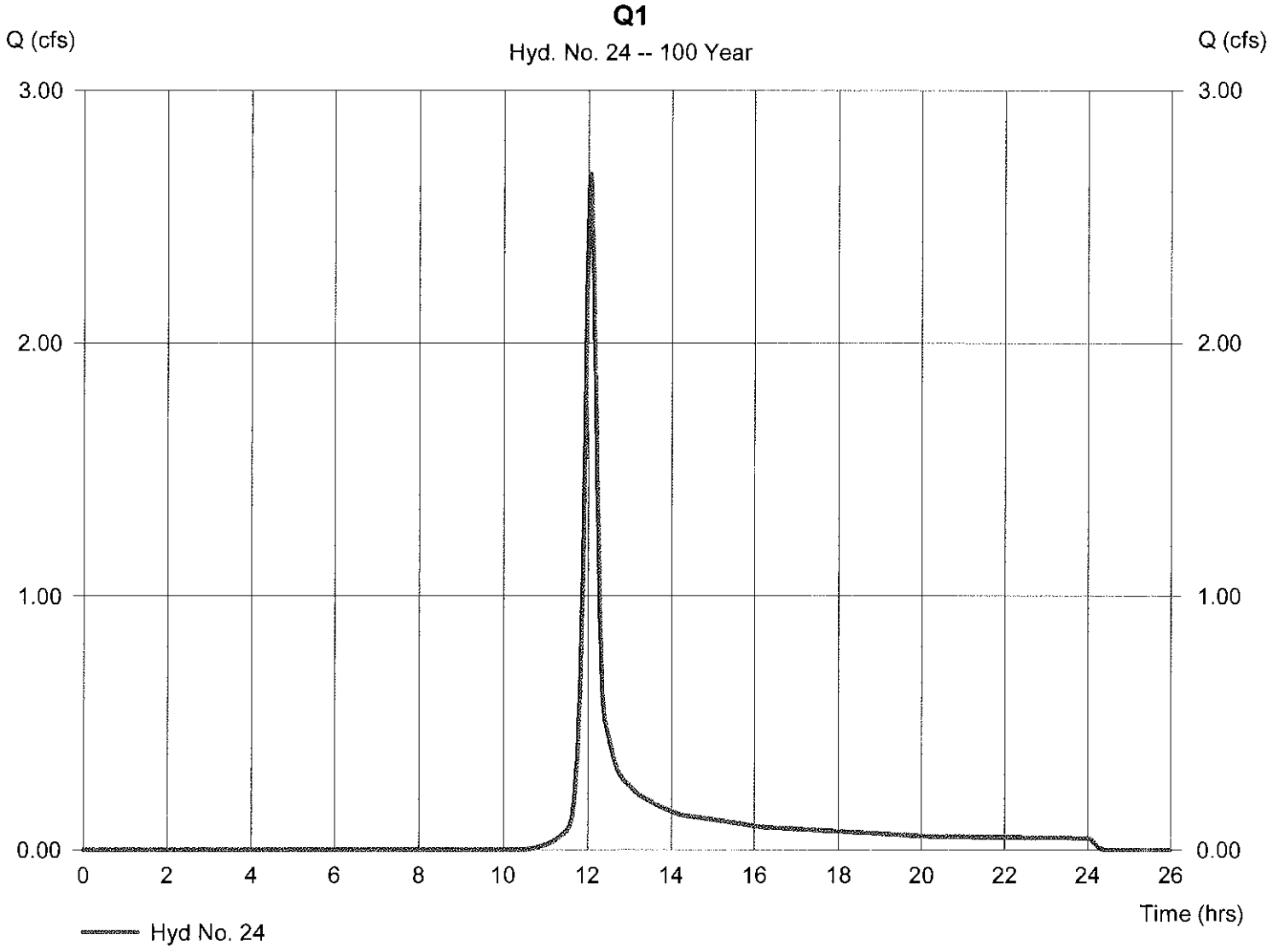


Hydrograph Report

Hyd. No. 24

Q1

Hydrograph type	= SCS Runoff	Peak discharge	= 2.667 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 7,803 cuft
Drainage area	= 1.810 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.56 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

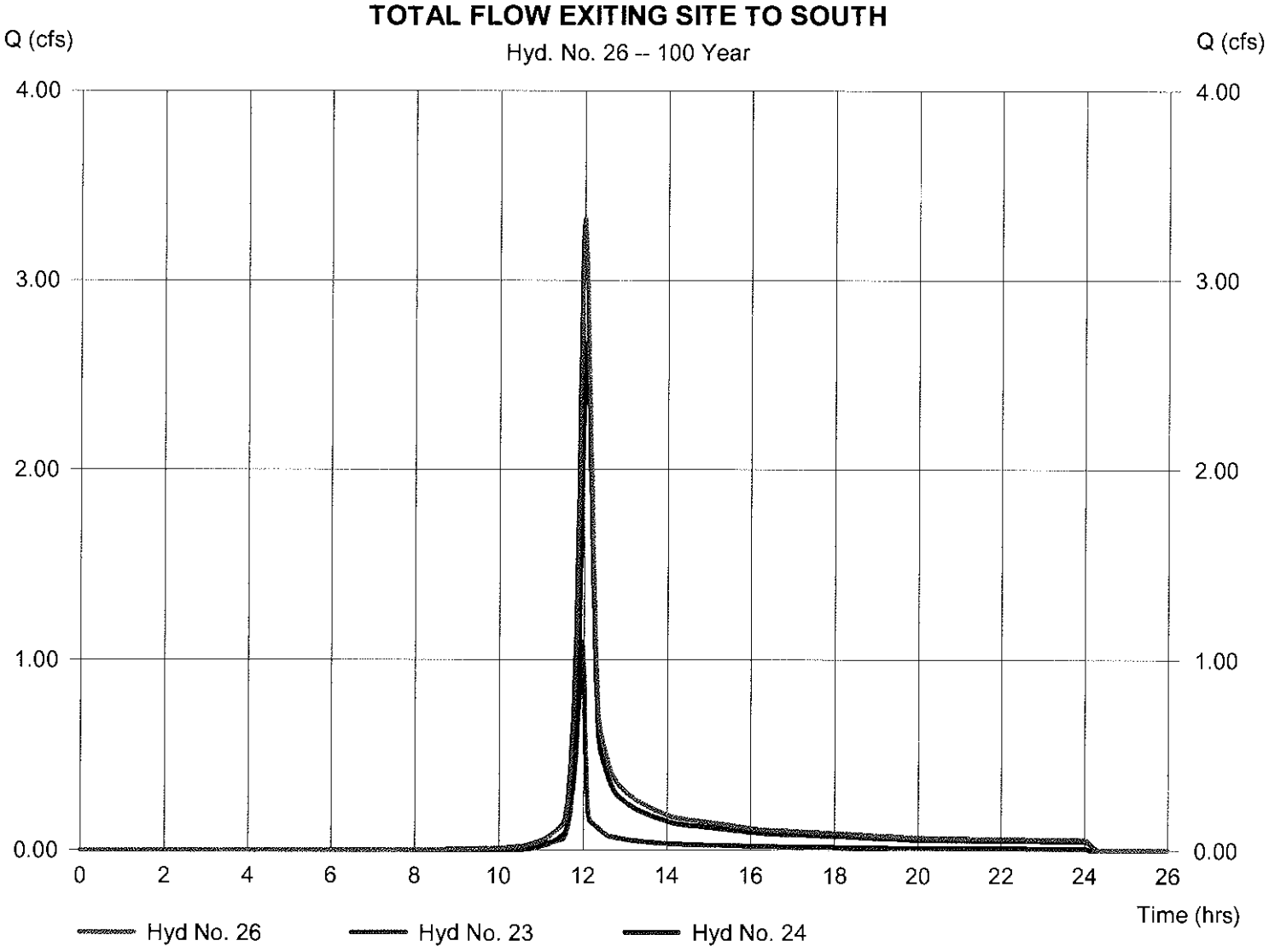


Hydrograph Report

Hyd. No. 26

,OTAL FLOW EXITING SITE TO SOUTH

Hydrograph type	= Combine	Peak discharge	= 3.323 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 10,056 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 2.120 ac



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	--------
2	69.8703	13.1000	0.8658	--------
3	0.0000	0.0000	0.0000	--------
5	79.2597	14.6000	0.8369	--------
10	88.2351	15.5000	0.8279	--------
25	102.6072	16.5000	0.8217	--------
50	114.8193	17.2000	0.8199	--------
100	127.1596	17.8000	0.8186	--------

File name: SampleFHA.idf

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

Precip. file name: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\FAIRLY ROAD.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	1.52	0.00	0.00	0.00	2.60	2.91	3.23
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX D

DEVELOPED CONDITIONS DRAINAGE CALCULATIONS

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QD1
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QD1.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QD1		Outlet	0.15	81	0.1

Total area: .15 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QD1	0.23	0.28	0.34
REACHES			
OUTLET	0.23	0.28	0.34

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QD1	0.23	0.28	0.34
	11.94	11.94	11.94
REACHES			
OUTLET	0.23	0.28	0.34

CPC

FAIRLY ROAD
QD1
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QD1	.15	0.100	81	Outlet	

Total Area: .15 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QD1							
SHEET	100	0.2034	0.130				0.084
SHALLOW	37	0.3724	0.050				0.001
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QD1	Herbaceous	(fair)	C	.15	81
	Total Area / Weighted Curve Number			.15	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QD2
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QD2.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QD2		Outlet	0.79	81	0.1

Total area: .79 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QD2	1.21	1.50	1.81
REACHES			
OUTLET	1.21	1.50	1.81

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QD2	1.21 11.94	1.50 11.94	1.81 11.94
REACHES			
OUTLET	1.21	1.50	1.81

CPC

FAIRLY ROAD
QD2
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QD2	.79	0.100	81	Outlet	

Total Area: .79 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QD2							
SHEET	24	0.0100	0.011				0.012
SHALLOW	156	0.0580	0.050				0.011
SHALLOW	83	0.3066	0.050				0.003
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QD2	Open space; grass cover 50% to 75%	(fair)	C	.11	79
	Paved parking lots, roofs, driveways		C	.03	98
	Herbaceous	(fair)	C	.65	81
	Total Area / Weighted Curve Number			.79	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QD4
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QD4.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QD4		Outlet	0.11	89	0.1

Total area: .11 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QD4	0.26	0.30	0.35
REACHES			
OUTLET	0.26	0.30	0.35

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QD4	0.26 11.93	0.30 11.93	0.35 11.93
REACHES			
OUTLET	0.26	0.30	0.35

CPC

FAIRLY ROAD
QD4
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QD4	.11	0.100	89	Outlet	

Total Area: .11 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QD4							
SHEET	36	0.0142	0.011				0.015
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QD4	Open space; grass cover 50% to 75% (fair)	C	.05	79
	Paved parking lots, roofs, driveways	C	.06	98
	Total Area / Weighted Curve Number		.11	89

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QD7
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QD7.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QD7		Outlet	3.01	81	.349

Total area: 3.01 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QD7	3.22	3.99	4.80
REACHES			
OUTLET	3.22	3.99	4.80

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QD7	3.22 12.10	3.99 12.11	4.80 12.10
REACHES			
OUTLET	3.22	3.99	4.80

CPC

FAIRLY ROAD
QD7
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QD7	3.01	0.349	81	Outlet	

Total Area: 3.01 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QD7							
SHEET	100	0.0117	0.130				0.262
SHALLOW	630	0.0155	0.050				0.087
						Time of Concentration	.349

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QD7	Herbaceous	(fair)	C	3.01	81
	Total Area / Weighted Curve Number			3.01	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP12
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP12.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP12		Outlet	0.21	81	0.1

Total area: .21 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP12	0.33	0.40	0.48
REACHES			
OUTLET	0.33	0.40	0.48

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP12	0.33	0.40	0.48
	11.94	11.94	11.94
REACHES			
OUTLET	0.33	0.40	0.48

CPC

FAIRLY ROAD
QP12
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP12	.21	0.100	81	Outlet	

Total Area: .21 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP12							
SHEET	100	0.2385	0.130				0.078
SHALLOW	35	0.1326	0.050				0.002
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP12	Herbaceous	(fair)	C	.21	81
	Total Area / Weighted Curve Number			.21	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP13
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP13.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP13		Outlet	0.36	82	0.1

Total area: .36 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP13	0.59	0.72	0.86
REACHES			
OUTLET	0.59	0.72	0.86

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP13	0.59 11.94	0.72 11.94	0.86 11.94
REACHES			
OUTLET	0.59	0.72	0.86

CPC

FAIRLY ROAD
QP13
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP13	.36	0.100	82	Outlet	

Total Area: .36 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP13							
SHEET	28	0.0100	0.011				0.014
SHALLOW	58	0.0247	0.050				0.006
SHALLOW	117	0.1628	0.050				0.005
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP13	Open space; grass cover 50% to 75%	(fair)	C	.2	79
	Paved parking lots, roofs, driveways		C	.04	98
	Herbaceous	(fair)	C	.12	81
	Total Area / Weighted Curve Number			.36	82

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP14
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP14.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP14		Outlet	0.26	83	.12

Total area: .26 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP14	0.44	0.54	0.64
REACHES			
OUTLET	0.44	0.54	0.64

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP14	0.44	0.54	0.64
	11.95	11.95	11.95
REACHES			
OUTLET	0.44	0.54	0.64

CPC

FAIRLY ROAD
QP14
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP14	.26	0.120	83	Outlet	

Total Area: .26 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP14							
SHEET	71	0.0551	0.150				0.120
						Time of Concentration	.12

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP14	Open space; grass cover 50% to 75% (fair)	C	.21	79
	Paved parking lots, roofs, driveways	C	.05	98
	Total Area / Weighted Curve Number		.26	83

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP15
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP15.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP15		Outlet	0.42	91	0.1

Total area: .42 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP15	1.10	1.27	1.46
REACHES			
OUTLET	1.10	1.27	1.46

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP15	1.10	1.27	1.46
	11.93	11.93	11.93
REACHES			
OUTLET	1.10	1.27	1.46

CPC

FAIRLY ROAD
QP15
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP15	.42	0.100	91	Outlet	

Total Area: .42 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP15							
SHEET	72	0.0210	0.011				0.022
SHALLOW	201	0.0106	0.025				0.027
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP15	Open space; grass cover 50% to 75% (fair)	C	.16	79
	Paved parking lots, roofs, driveways	C	.2	98
	Paved; curbs and storm sewers	C	.06	98
	Total Area / Weighted Curve Number		.42	91

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP16
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP16.w55

Date: 9/19/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP16		Outlet	0.5	89	0.1

Total area: .50 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP16	1.18	1.39	1.61
REACHES			
OUTLET	1.18	1.39	1.61

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP16	1.18	1.39	1.61
	11.93	11.93	11.93
REACHES			
OUTLET	1.18	1.39	1.61

CPC

FAIRLY ROAD
QP16
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP16	.50	0.100	89	Outlet	

Total Area: .50 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP16							
SHEET	34	0.0100	0.011				0.016
SHALLOW	24	0.1150	0.050				0.001
SHALLOW	185	0.0054	0.025				0.034
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP16	Open space; grass cover 50% to 75% (fair)	C	.25	79
	Paved parking lots, roofs, driveways	C	.12	98
	Paved; curbs and storm sewers	C	.13	98
	Total Area / Weighted Curve Number		.5	89

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP17
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP17.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP17		Outlet	0.63	90	.182

Total area: .63 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP17	1.37	1.60	1.84
REACHES			
OUTLET	1.37	1.60	1.84

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP17	1.37 12.00	1.60 11.99	1.84 11.99
REACHES			
OUTLET	1.37	1.60	1.84

CPC

FAIRLY ROAD
QP17
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP17	.63	0.182	90	Outlet	

Total Area: .63 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP17							
SHEET	65	0.0291	0.150				0.144
SHALLOW	101	0.0237	0.025				0.009
SHALLOW	150	0.0050	0.025				0.029
						Time of Concentration	.182

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP17	Open space; grass cover 50% to 75% (fair)	C	.28	79
	Paved parking lots, roofs, driveways	C	.19	98
	Paved; curbs and storm sewers	C	.16	98
	Total Area / Weighted Curve Number		.63	90

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP18
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP18.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP18		Outlet	0.68	88	0.1

Total area: .68 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP18	1.53	1.81	2.10
REACHES			
OUTLET	1.53	1.81	2.10

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP18	1.53	1.81	2.10
	11.93	11.93	11.93
REACHES			
OUTLET	1.53	1.81	2.10

CPC

FAIRLY ROAD
QP18
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP18	.68	0.100	88	Outlet	

Total Area: .68 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP18							
SHEET	33	0.0755	0.150				0.057
SHALLOW	98	0.0360	0.050				0.009
SHALLOW	197	0.0145	0.025				0.022
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP18	Open space; grass cover 50% to 75% (fair)	C	.37	79
	Paved parking lots, roofs, driveways	C	.26	98
	Paved; curbs and storm sewers	C	.05	98
	Total Area / Weighted Curve Number		.68	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP19
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP19.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP19		Outlet	0.59	88	0.1

Total area: .59 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP19	1.33	1.57	1.82
REACHES			
OUTLET	1.33	1.57	1.82

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP19	1.33	1.57	1.82
	11.93	11.93	11.93
REACHES			
OUTLET	1.33	1.57	1.82

CPC

FAIRLY ROAD
QP19
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP19	.59	0.100	88	Outlet	

Total Area: .59 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP19							
SHEET	36	0.1367	0.150				0.049
SHALLOW	83	0.0267	0.050				0.009
SHALLOW	187	0.0231	0.025				0.017
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP19	Open space; grass cover 50% to 75% (fair)	C	.31	79
	Paved parking lots, roofs, driveways	C	.22	98
	Paved; curbs and storm sewers	C	.06	98
	Total Area / Weighted Curve Number		.59	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP20
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP20.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP20		Outlet	0.25	81	.133

Total area: .25 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP20	0.36	0.45	0.54
REACHES			
OUTLET	0.36	0.45	0.54

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP20	0.36	0.45	0.54
	11.97	11.96	11.96
REACHES			
OUTLET	0.36	0.45	0.54

CPC

FAIRLY ROAD
QP20
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP20	.25	0.133	81	Outlet	

Total Area: .25 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP20							
SHEET	81	0.0565	0.150				0.132
SHALLOW	31	0.2616	0.050				0.001
						Time of Concentration	.133

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP20	Open space; grass cover 50% to 75% (fair)	C	.23	79
	Paved parking lots, roofs, driveways	C	.02	98
	Total Area / Weighted Curve Number		.25	81

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP21
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP21.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP21		Outlet	0.06	95	0.1

Total area: .06 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP21	0.17	0.20	0.22
REACHES			
OUTLET	0.17	0.20	0.22

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP21	0.17	0.20	0.22
	11.93	11.93	11.93
REACHES			
OUTLET	0.17	0.20	0.22

CPC

FAIRLY ROAD
QP21
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP21	.06	0.100	95	Outlet	

Total Area: .06 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP21							
SHEET	33	0.0445	0.150				0.071
SHALLOW	121	0.0363	0.050				0.011
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP21	Open space; grass cover 50% to 75% (fair)	C	.01	79
	Paved parking lots, roofs, driveways	C	.01	98
	Paved; curbs and storm sewers	C	.04	98
	Total Area / Weighted Curve Number		.06	95

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP22
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP22.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP22		Outlet	0.55	97	.138

Total area: .55 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP22	1.66	1.87	2.09
REACHES			
OUTLET	1.66	1.87	2.09

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP22	1.66	1.87	2.09
	11.95	11.95	11.95
REACHES			
OUTLET	1.66	1.87	2.09

CPC

FAIRLY ROAD
QP22
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP22	.55	0.138	97	Outlet	

Total Area: .55 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP22							
SHEET	18	0.0278	0.150				0.053
SHALLOW	918	0.0218	0.025				0.085
						Time of Concentration	.138

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP22	Open space; grass cover 50% to 75% (fair)	C	.04	79
	Paved parking lots, roofs, driveways	C	.19	98
	Paved; curbs and storm sewers	C	.32	98
	Total Area / Weighted Curve Number		.55	97

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP23
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP23.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP23		Outlet	1.01	90	.122

Total area: 1.01 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP23	2.42	2.82	3.24
REACHES			
OUTLET	2.42	2.82	3.24

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP23	2.42	2.82	3.24
	11.95	11.94	11.94
REACHES			
OUTLET	2.42	2.82	3.24

CPC

FAIRLY ROAD
QP23
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP23	1.01	0.122	90	Outlet	

Total Area: 1.01 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP23							
SHEET	20	0.0480	0.150				0.046
SHALLOW	727	0.0170	0.025				0.076
						Time of Concentration	.122

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP23	Open space; grass cover 50% to 75% (fair)	C	.44	79
	Paved parking lots, roofs, driveways	C	.34	98
	Paved; curbs and storm sewers	C	.23	98
	Total Area / Weighted Curve Number		1.01	90

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP24
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP24.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP24		Outlet	0.64	88	.207

Total area: .64 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP24	1.24	1.46	1.69
REACHES			
OUTLET	1.24	1.46	1.69

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP24	1.24 12.01	1.46 12.01	1.69 12.01
REACHES			
OUTLET	1.24	1.46	1.69

CPC

FAIRLY ROAD
QP24
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP24	.64	0.207	88	Outlet	

Total Area: .64 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP24							
SHEET	46	0.0089	0.150				0.176
SHALLOW	74	0.0178	0.050				0.010
SHALLOW	152	0.0101	0.025				0.021
						Time of Concentration	.207

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP24	Open space; grass cover 50% to 75% (fair)	C	.35	79
	Paved parking lots, roofs, driveways	C	.25	98
	Paved; curbs and storm sewers	C	.04	98
	Total Area / Weighted Curve Number		.64	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP25
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP25.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP25		Outlet	0.17	91	0.1

Total area: .17 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP25	0.45	0.52	0.60
REACHES			
OUTLET	0.45	0.52	0.60

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP25	0.45	0.52	0.60
	11.93	11.93	11.93
REACHES			
OUTLET	0.45	0.52	0.60

CPC

FAIRLY ROAD
QP25
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP25	.17	0.100	91	Outlet	

Total Area: .17 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP25							
SHEET	39	0.0949	0.150				0.060
SHALLOW	145	0.0448	0.050				0.012
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP25	Open space; grass cover 50% to 75% (fair)	C	.06	79
	Paved parking lots, roofs, driveways	C	.04	98
	Paved; curbs and storm sewers	C	.07	98
	Total Area / Weighted Curve Number		.17	91

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP26
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP26.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP26		Outlet	0.5	88	0.1

Total area: .50 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP26	1.13	1.33	1.55
REACHES			
OUTLET	1.13	1.33	1.55

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP26	1.13	1.33	1.55
	11.93	11.93	11.93
REACHES			
OUTLET	1.13	1.33	1.55

CPC

FAIRLY ROAD
QP26
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP26	.50	0.100	88	Outlet	

Total Area: .50 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP26							
SHEET	46	0.1052	0.150				0.066
SHALLOW	118	0.0194	0.050				0.015
SHALLOW	91	0.0230	0.025				0.008
						Time of Concentration	0.1

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP26	Open space; grass cover 50% to 75% (fair)	C	.26	79
	Paved parking lots, roofs, driveways	C	.21	98
	Paved; curbs and storm sewers	C	.03	98
	Total Area / Weighted Curve Number		.5	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP27
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP27.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP27		Outlet	0.45	89	.145

Total area: .45 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP27	0.98	1.16	1.34
REACHES			
OUTLET	0.98	1.16	1.34

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP27	0.98	1.16	1.34
	11.97	11.97	11.96
REACHES			
OUTLET	0.98	1.16	1.34

CPC

FAIRLY ROAD
QP27
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP27	.45	0.145	89	Outlet	

Total Area: .45 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n .	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP27							
SHEET	20	0.0035	0.150				0.131
SHALLOW	54	0.2090	0.050				0.002
SHALLOW	162	0.0332	0.025				0.012
						Time of Concentration	.145

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP27	Open space; grass cover 50% to 75% (fair)	C	.22	79
	Paved parking lots, roofs, driveways	C	.13	98
	Paved; curbs and storm sewers	C	.1	98
	Total Area / Weighted Curve Number		.45	89

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP28
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP28.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP28		Outlet	0.66	88	.161

Total area: .66 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP28	1.35	1.59	1.85
REACHES			
OUTLET	1.35	1.59	1.85

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP28	1.35	1.59	1.85
	11.98	11.98	11.98
REACHES			
OUTLET	1.35	1.59	1.85

CPC

FAIRLY ROAD
QP28
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP28	.66	0.161	88	Outlet	

Total Area: .66 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP28							
SHEET	74	0.0409	0.150				0.140
SHALLOW	82	0.0229	0.050				0.009
SHALLOW	148	0.0264	0.025				0.012
						Time of Concentration	.161

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP28	Open space; grass cover 50% to 75% (fair)	C	.36	79
	Paved parking lots, roofs, driveways	C	.24	98
	Paved; curbs and storm sewers	C	.06	98
	Total Area / Weighted Curve Number		.66	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP29
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP29.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP29		Outlet	0.65	88	.177

Total area: .65 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP29	1.31	1.54	1.79
REACHES			
OUTLET	1.31	1.54	1.79

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP29	1.31 12.00	1.54 12.00	1.79 11.99
REACHES			
OUTLET	1.31	1.54	1.79

CPC

FAIRLY ROAD
QP29
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP29	.65	0.177	88	Outlet	

Total Area: .65 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP29							
SHEET	44	0.0136	0.150				0.143
SHALLOW	91	0.0179	0.050				0.012
SHALLOW	193	0.0149	0.025				0.022
						Time of Concentration	.177

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP29	Open space; grass cover 50% to 75% (fair)	C	.35	79
	Paved parking lots, roofs, driveways	C	.25	98
	Paved; curbs and storm sewers	C	.05	98
	Total Area / Weighted Curve Number		.65	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: FAIRLY ROAD
SubTitle: QP30
State: New Mexico
County: SANTA FE
Filename: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\TR55\QP30.w55

Date: 9/20/2020
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
QP30		Outlet	0.74	90	.19

Total area: .74 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
1.52	.0	.0	2.6	2.91	3.23	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
SUBAREAS			
QP30	1.61	1.88	2.16
REACHES			
OUTLET	1.61	1.88	2.16

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS			
QP30	1.61 12.00	1.88 12.00	2.16 12.00
REACHES			
OUTLET	1.61	1.88	2.16

CPC

FAIRLY ROAD
QP30
SANTA FE County, New Mexico

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
QP30	.74	0.190	90	Outlet	

Total Area: .74 (ac)

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
QP30							
SHEET	68	0.0325	0.150				0.143
SHALLOW	120	0.0037	0.025				0.027
SHALLOW	150	0.0101	0.025				0.020
						Time of Concentration	.19

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
QP30	Open space; grass cover 50% to 75% (fair)	C	.32	79
	Paved parking lots, roofs, driveways	C	.26	98
	Paved; curbs and storm sewers	C	.16	98
	Total Area / Weighted Curve Number		.74	90

APPENDIX E

FLOW ROUTING DEVELOPMENT CONDITIONS

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Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	0.910	-------	-------	0.000	3.322	4.117	4.946	QD7
2	Reach	1	-------	0.868	-------	-------	0.000	3.316	4.115	4.944	FLOW FROM OFFSITE
3	SCS Runoff	------	-------	0.533	-------	-------	0.000	1.325	1.565	1.806	QP24
4	Combine	2, 3	-------	1.159	-------	-------	0.000	4.259	5.256	6.283	FLOW FROM QD7 AND QP24
5	SCS Runoff	------	-------	1.184	-------	-------	0.000	2.693	3.139	3.586	QP23
6	Combine	4, 5	-------	2.022	-------	-------	0.000	6.131	7.436	8.772	FLOW FROM QP24 AND QP23
7	SCS Runoff	------	-------	0.238	-------	-------	0.000	0.520	0.603	0.686	QP25
8	Combine	6, 7	-------	2.229	-------	-------	0.000	6.573	7.944	9.345	FLOW ON WEST SIDE OF ROAD T
9	SCS Runoff	------	-------	1.032	-------	-------	0.000	1.862	2.098	2.334	QP22
10	Combine	8, 9	-------	3.238	-------	-------	0.000	8.339	9.925	11.54	INFLOW TO POND 1
12	SCS Runoff	------	-------	0.555	-------	-------	0.000	1.345	1.582	1.823	QP26
13	Reach	12	-------	0.459	-------	-------	0.000	1.284	1.536	1.786	INFLOW TO POND 1
14	SCS Runoff	------	-------	0.126	-------	-------	0.000	0.425	0.522	0.622	QP20
15	Combine	10, 13, 14	-------	3.794	-------	-------	0.000	10.05	11.98	13.95	TOTAL FLOW TO POND 1
16	Reservoir	15	-------	1.505	-------	-------	0.000	4.663	5.633	6.611	OUTFLOW FROM POND 1
18	SCS Runoff	------	-------	0.466	-------	-------	0.000	1.105	1.296	1.487	QP27
19	SCS Runoff	------	-------	0.111	-------	-------	0.000	0.212	0.241	0.269	QP21
20	Combine	16, 18, 19	-------	1.669	-------	-------	0.000	4.911	5.968	6.939	ROAD FLOW
22	SCS Runoff	------	-------	0.630	-------	-------	0.000	1.547	1.825	2.105	QP28
23	SCS Runoff	------	-------	0.655	-------	-------	0.000	1.587	1.867	2.152	QP19
24	Combine	20, 22, 23	-------	2.767	-------	-------	0.000	7.425	8.852	10.34	ROAD FLOW
26	SCS Runoff	------	-------	0.587	-------	-------	0.000	1.453	1.715	1.980	QP29
27	SCS Runoff	------	-------	0.755	-------	-------	0.000	1.829	2.152	2.480	QP18
28	Combine	24, 26, 27	-------	4.024	-------	-------	0.000	10.50	12.46	14.48	ROAD FLOW
30	SCS Runoff	------	-------	0.790	-------	-------	0.000	1.813	2.116	2.420	QP30
31	SCS Runoff	------	-------	0.672	-------	-------	0.000	1.544	1.801	2.060	QP17
32	Combine	28, 30, 31	-------	5.479	-------	-------	0.000	13.81	16.33	18.92	ROAD FLOW SOUTH OF ROJOS
34	SCS Runoff	------	-------	0.602	-------	-------	0.000	1.405	1.646	1.889	QP16
35	SCS Runoff	------	-------	0.589	-------	-------	0.000	1.285	1.489	1.694	QP15
3	Combine	32, 34, 35	-------	6.582	-------	-------	0.000	16.34	19.26	22.25	INFLOW TO POND 3
37	SCS Runoff	------	-------	0.164	-------	-------	0.000	0.494	0.598	0.707	QP14

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
38	Combine	36, 37	-------	6.746	-------	-------	0.000	16.83	19.86	22.96	TOTAL INFLOW TO POND 3
39	Reservoir	38	-------	6.221	-------	-------	0.000	15.70	18.39	21.27	OUTFLOW FROM POND 3
41	SCS Runoff	------	-------	0.227	-------	-------	0.000	0.720	0.877	1.039	QP13
42	Combine	39, 41	-------	6.406	-------	-------	0.000	16.25	19.06	22.06	FLOW TO CHECK DAM 1
44	SCS Runoff	------	-------	0.118	-------	-------	0.000	0.397	0.487	0.580	QP12
45	Combine	42, 44	-------	6.503	-------	-------	0.000	16.56	19.43	22.50	FLOW TO CHECK DAM 2
47	SCS Runoff	------	-------	0.317	-------	-------	0.000	0.797	0.943	1.090	Q11
48	SCS Runoff	------	-------	0.084	-------	-------	0.000	0.284	0.348	0.414	QD1
49	Combine	45, 47, 48	-------	6.819	-------	-------	0.000	17.42	20.40	23.62	FLOW TO CHECK DAM 3 SOUTH E
51	SCS Runoff	------	-------	0.444	-------	-------	0.000	1.493	1.833	2.183	QD2 OUTFLOW TO SOUTHEAST
53	SCS Runoff	------	-------	0.132	-------	-------	0.000	0.309	0.362	0.415	QD4 OUTFLOW TO EAST

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	3.322	1	727	11,189	------	------	------	QD7
2	Reach	3.316	1	728	11,187	1	------	------	FLOW FROM OFFSITE
3	SCS Runoff	1.325	1	721	3,356	------	------	------	QP24
4	Combine	4.259	1	725	14,543	2, 3	------	------	FLOW FROM QD7 AND QP24
5	SCS Runoff	2.693	1	718	5,793	------	------	------	QP23
6	Combine	6.131	1	721	20,335	4, 5	------	------	FLOW FROM QP24 AND QP23
7	SCS Runoff	0.520	1	717	1,083	------	------	------	QP25
8	Combine	6.573	1	720	21,418	6, 7	------	------	FLOW ON WEST SIDE OF ROAD T
9	SCS Runoff	1.862	1	718	4,404	------	------	------	QP22
10	Combine	8.339	1	719	25,822	8, 9	------	------	INFLOW TO POND 1
12	SCS Runoff	1.345	1	718	2,747	------	------	------	QP26
13	Reach	1.284	1	719	2,745	12	------	------	INFLOW TO POND 1
14	SCS Runoff	0.425	1	719	897	------	------	------	QP20
15	Combine	10.05	1	719	29,465	10, 13, 14	------	------	TOTAL FLOW TO POND 1
16	Reservoir	4.663	1	731	29,243	15	6436.80	7,772	OUTFLOW FROM POND 1
18	SCS Runoff	1.105	1	719	2,520	------	------	------	QP27
19	SCS Runoff	0.212	1	717	463	------	------	------	QP21
20	Combine	4.911	1	725	31,328	16, 18, 19	------	------	ROAD FLOW
22	SCS Runoff	1.547	1	719	3,516	------	------	------	QP28
23	SCS Runoff	1.587	1	718	3,241	------	------	------	QP19
24	Combine	7.425	1	720	38,085	20, 22, 23	------	------	ROAD FLOW
26	SCS Runoff	1.453	1	720	3,524	------	------	------	QP29
27	SCS Runoff	1.829	1	718	3,735	------	------	------	QP18
28	Combine	10.50	1	719	45,345	24, 26, 27	------	------	ROAD FLOW
30	SCS Runoff	1.813	1	720	4,431	------	------	------	QP30
31	SCS Runoff	1.544	1	720	3,772	------	------	------	QP17
32	Combine	13.81	1	720	53,548	28, 30, 31	------	------	ROAD FLOW SOUTH OF ROJOS
34	SCS Runoff	1.405	1	718	2,887	------	------	------	QP16
35	SCS Runoff	1.285	1	717	2,675	------	------	------	QP15
36	Combine	16.34	1	719	59,110	32, 34, 35	------	------	INFLOW TO POND 3
37	SCS Runoff	0.494	1	719	1,042	------	------	------	QP14

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

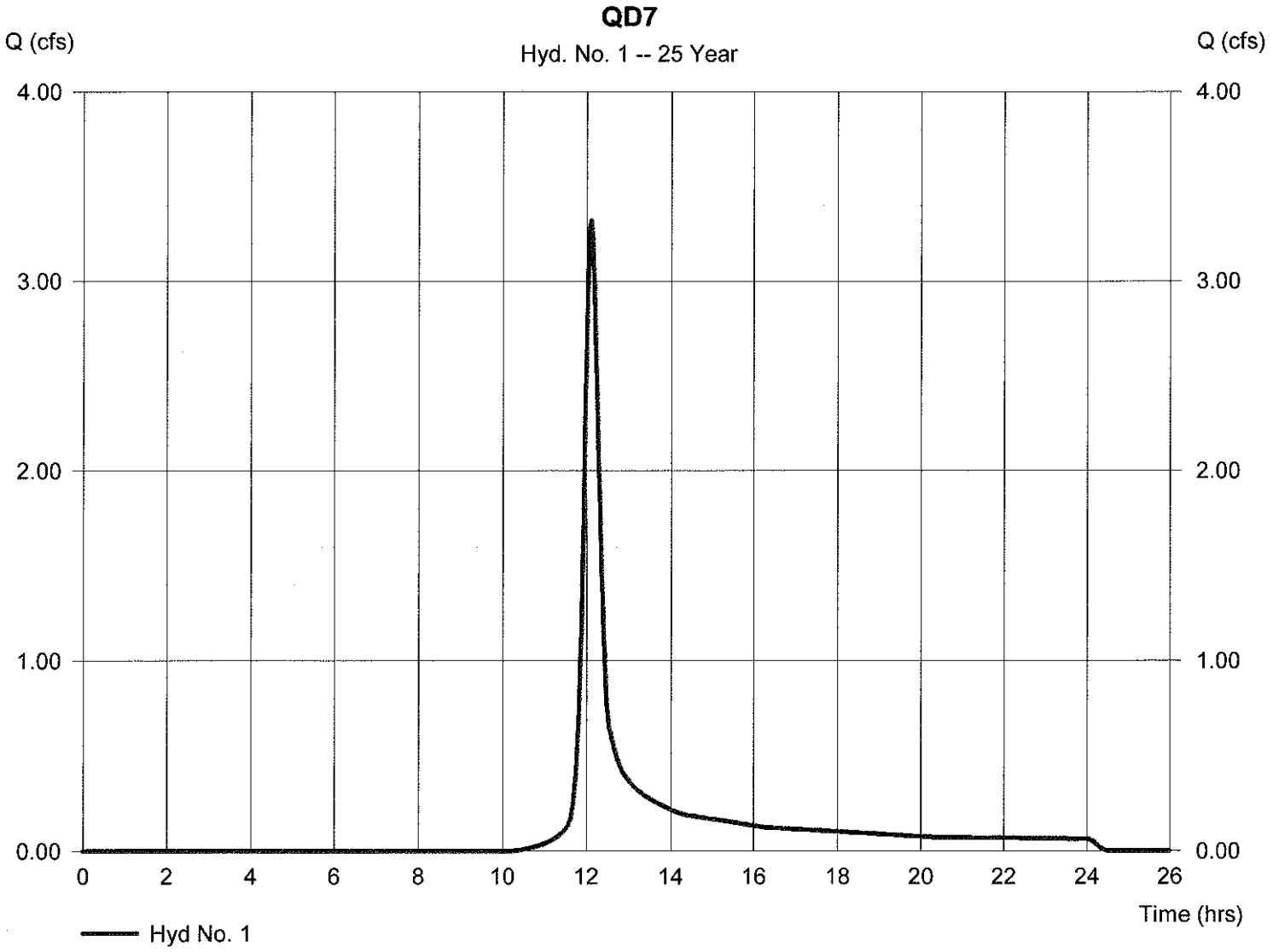
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
38	Combine	16.83	1	719	60,152	36, 37	------	------	TOTAL INFLOW TO POND 3
39	Reservoir	15.70	1	721	60,071	38	6423.09	2,494	OUTFLOW FROM POND 3
41	SCS Runoff	0.720	1	718	1,445	------	------	------	QP13
42	Combine	16.25	1	721	61,516	39, 41	------	------	FLOW TO CHECK DAM 1
44	SCS Runoff	0.397	1	718	797	------	------	------	QP12
45	Combine	16.56	1	721	62,313	42, 44	------	------	FLOW TO CHECK DAM 2
47	SCS Runoff	0.797	1	718	1,619	------	------	------	Q11
48	SCS Runoff	0.284	1	718	570	------	------	------	QD1
49	Combine	17.42	1	720	64,502	45, 47, 48	------	------	FLOW TO CHECK DAM 3 SOUTH E
51	SCS Runoff	1.493	1	718	3,000	------	------	------	QD2 OUTFLOW TO SOUTHEAST
53	SCS Runoff	0.309	1	718	635	------	------	------	QD4 OUTFLOW TO EAST

Hydrograph Report

Hyd. No. 1

QD7

Hydrograph type	= SCS Runoff	Peak discharge	= 3.322 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 11,189 cuft
Drainage area	= 3.010 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



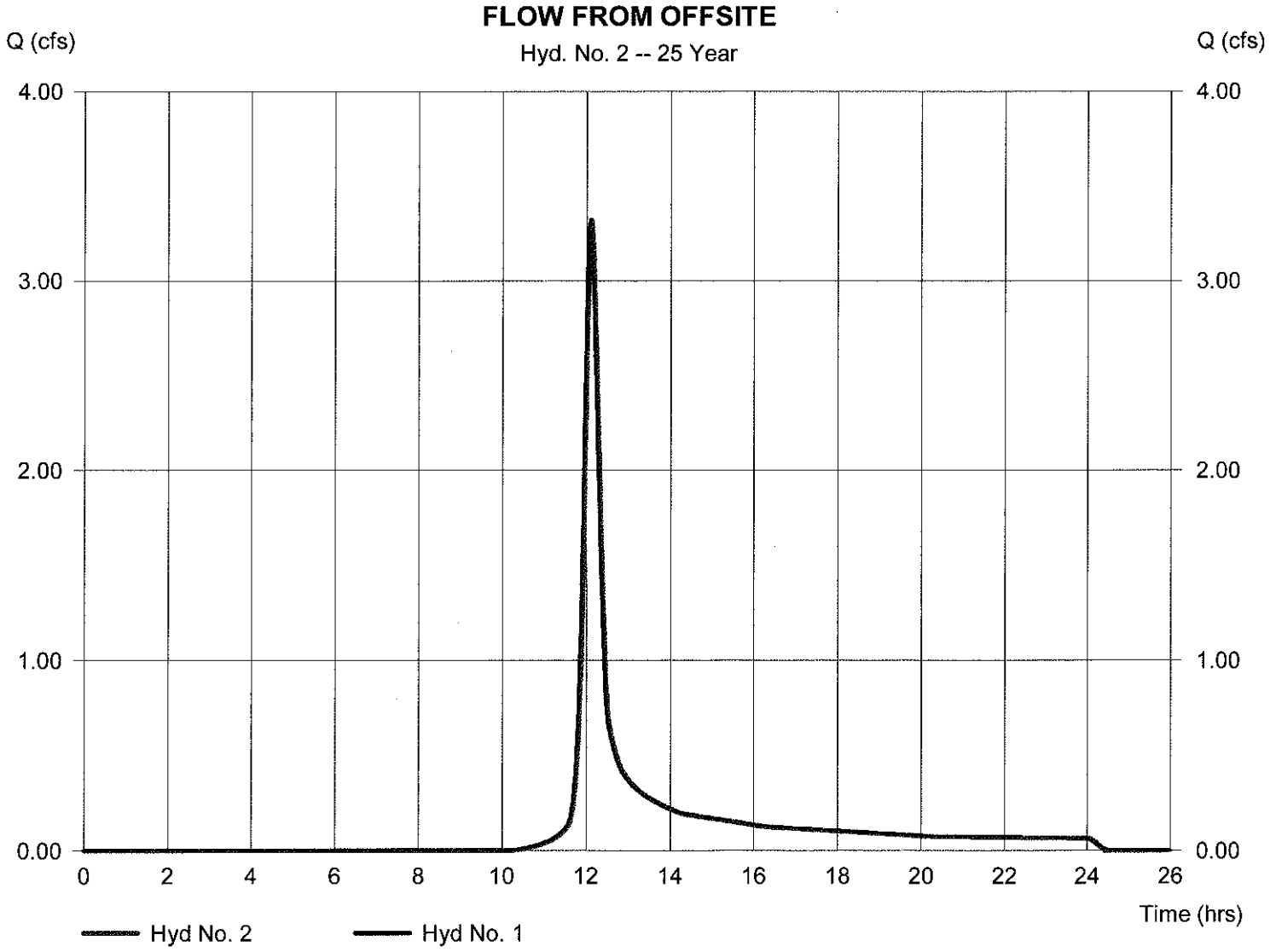
Hydrograph Report

Hyd. No. 2

FLOW FROM OFFSITE

Hydrograph type	= Reach	Peak discharge	= 3.316 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 11,187 cuft
Inflow hyd. No.	= 1 - QD7	Section type	= Circular
Reach length	= 113.8 ft	Channel slope	= 1.0 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 3.441	Rating curve m	= 1.250
Ave. velocity	= 1.88 ft/s	Routing coeff.	= 0.7651

Modified Att-Kin routing method used.

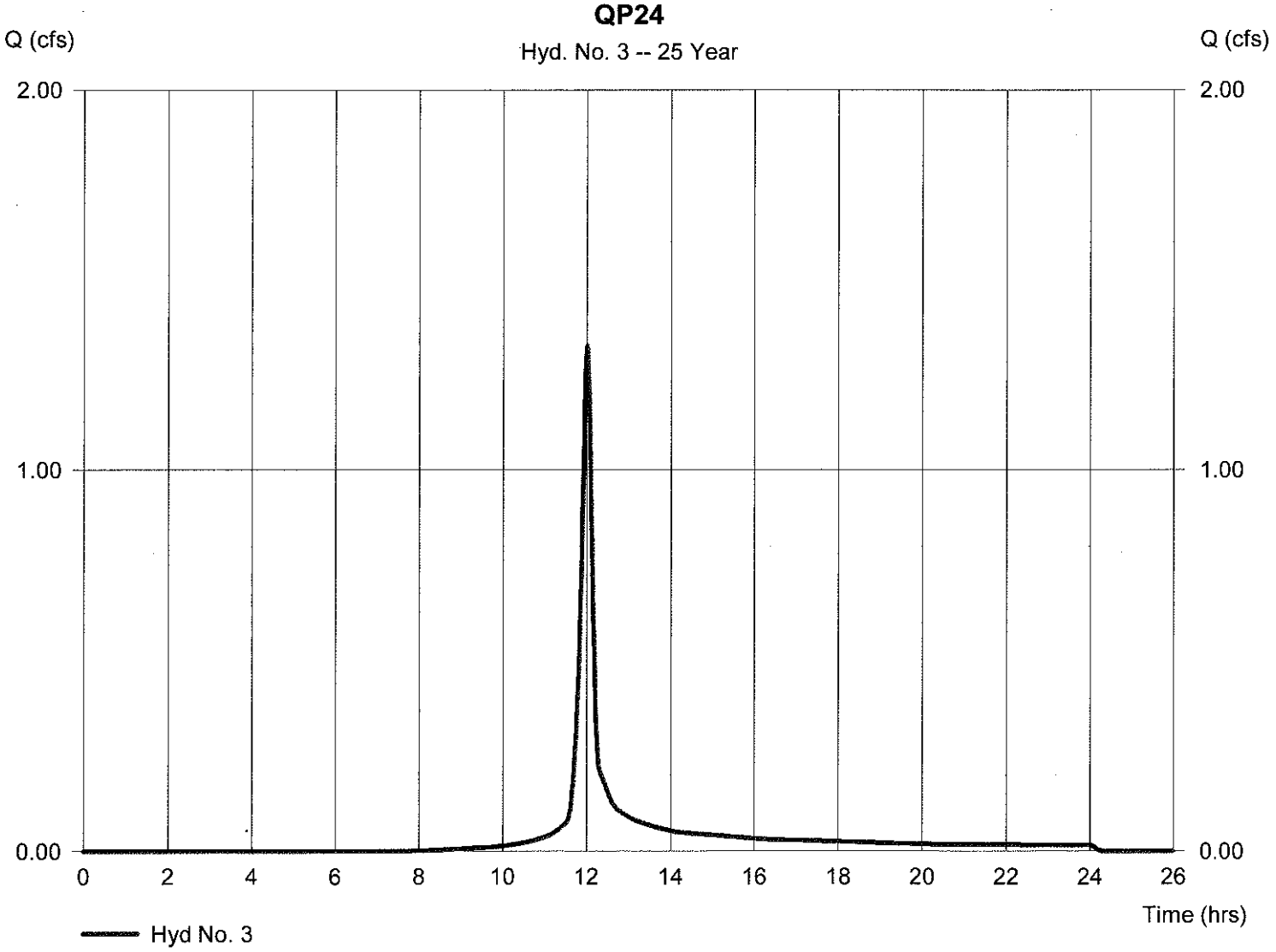


Hydrograph Report

Hyd. No. 3

QP24

Hydrograph type	= SCS Runoff	Peak discharge	= 1.325 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 3,356 cuft
Drainage area	= 0.640 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

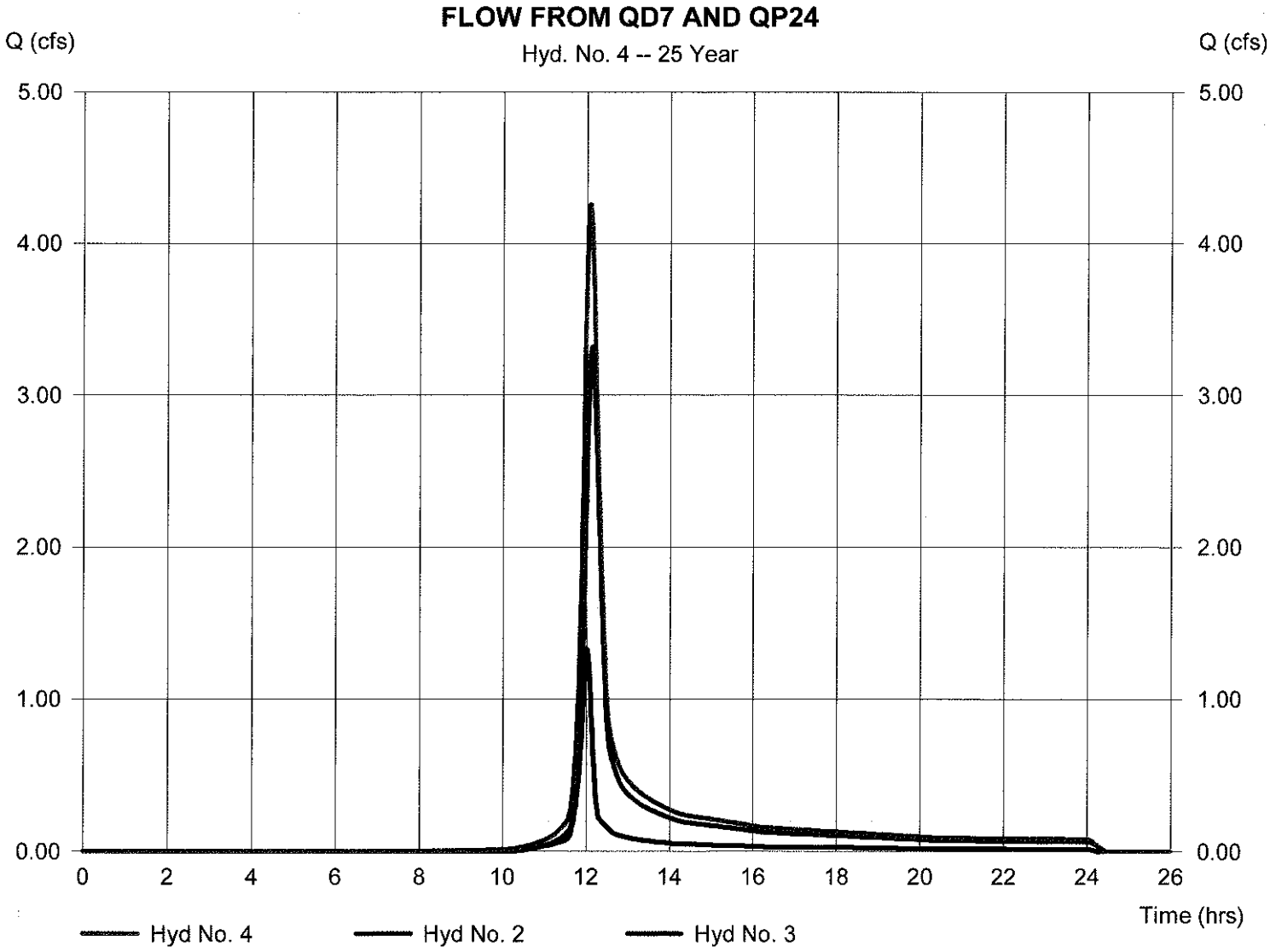


Hydrograph Report

Hyd. No. 4

FLOW FROM QD7 AND QP24

Hydrograph type	= Combine	Peak discharge	= 4.259 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 14,543 cuft
Inflow hyds.	= 2, 3	Contrib. drain. area	= 0.640 ac

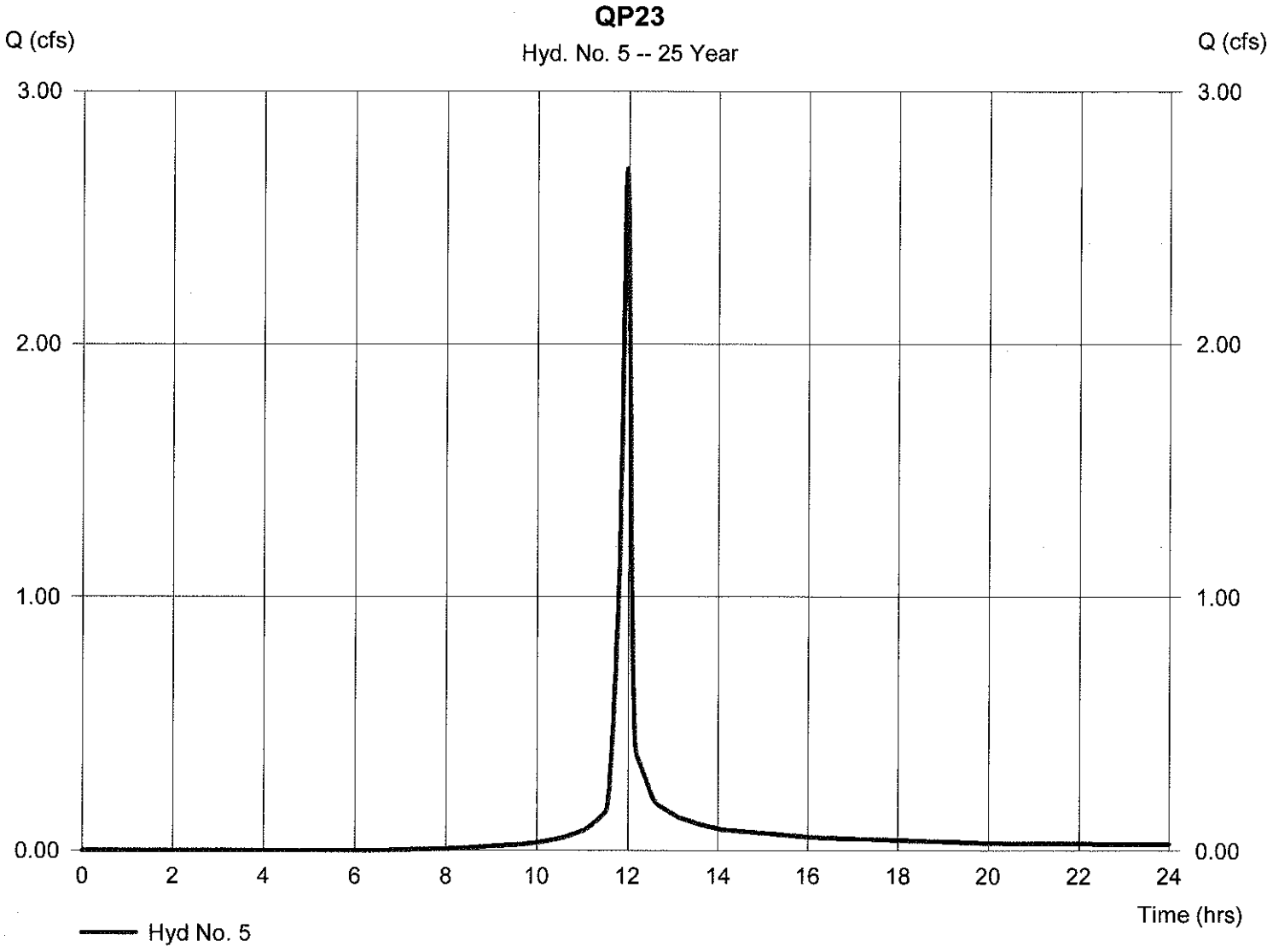


Hydrograph Report

Hyd. No. 5

QP23

Hydrograph type	= SCS Runoff	Peak discharge	= 2.693 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 5,793 cuft
Drainage area	= 1.010 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.32 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

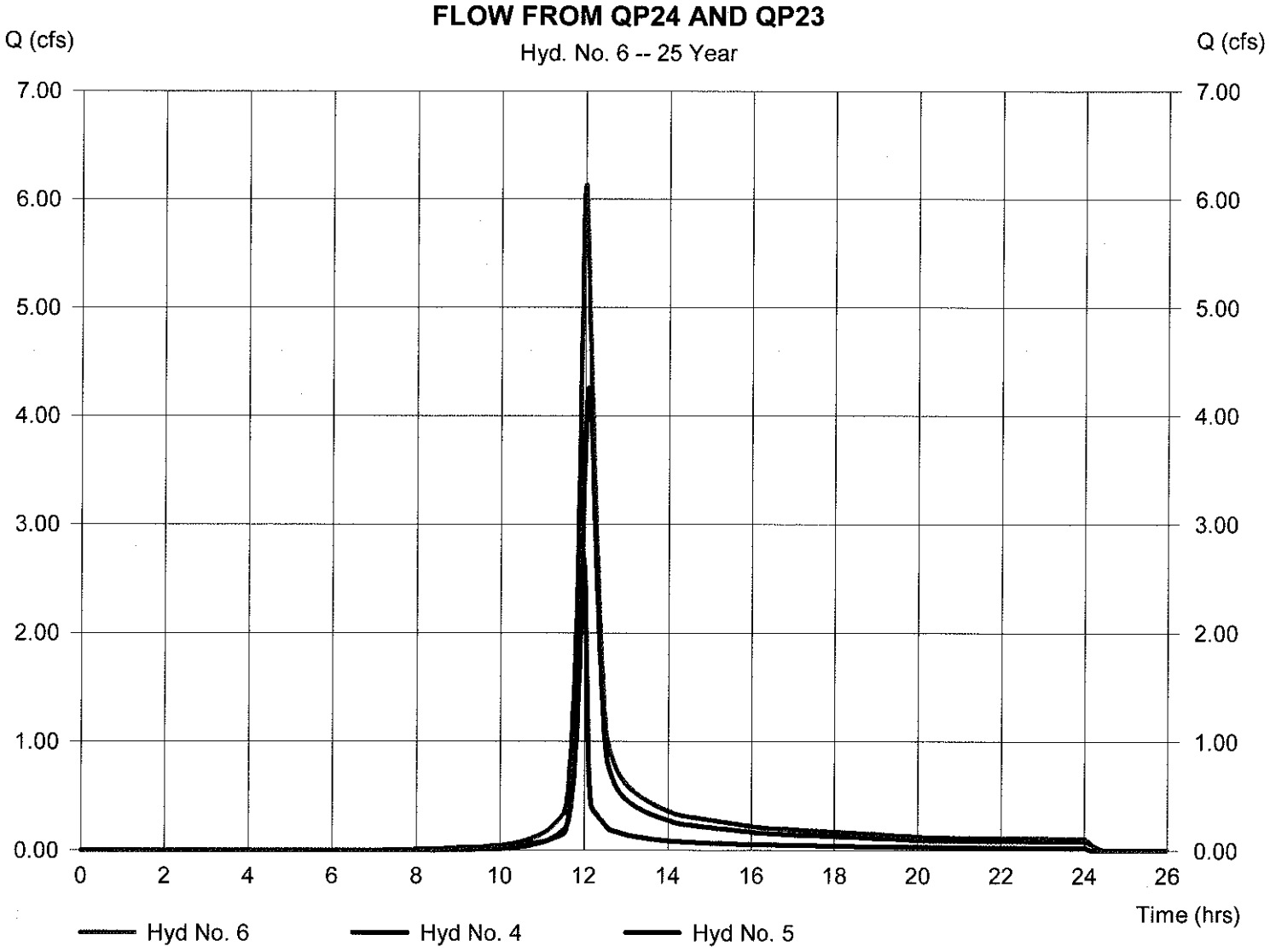


Hydrograph Report

Hyd. No. 6

FLOW FROM QP24 AND QP23

Hydrograph type	= Combine	Peak discharge	= 6.131 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 20,335 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 1.010 ac

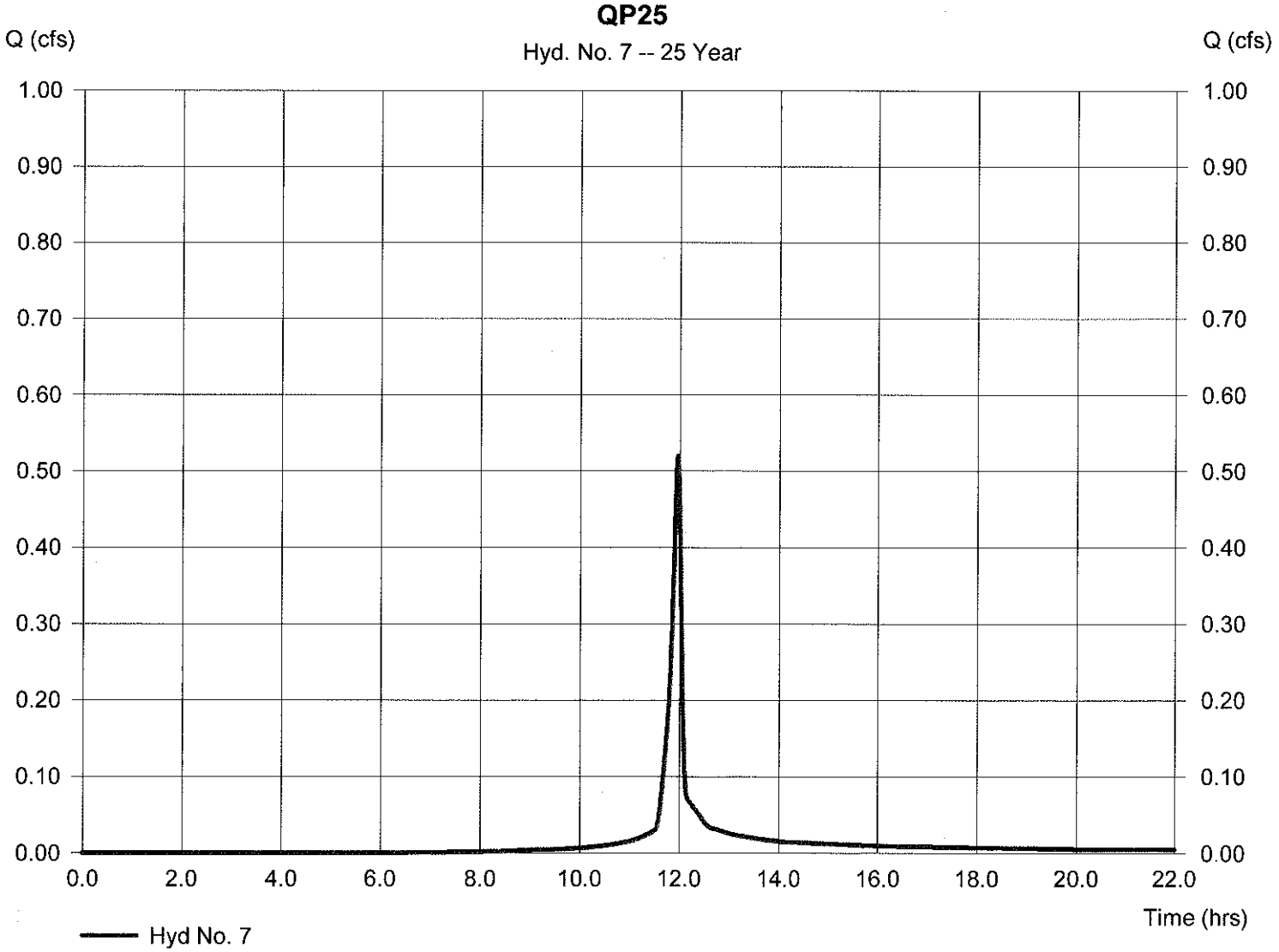


Hydrograph Report

Hyd. No. 7

QP25

Hydrograph type	= SCS Runoff	Peak discharge	= 0.520 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 1,083 cuft
Drainage area	= 0.170 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

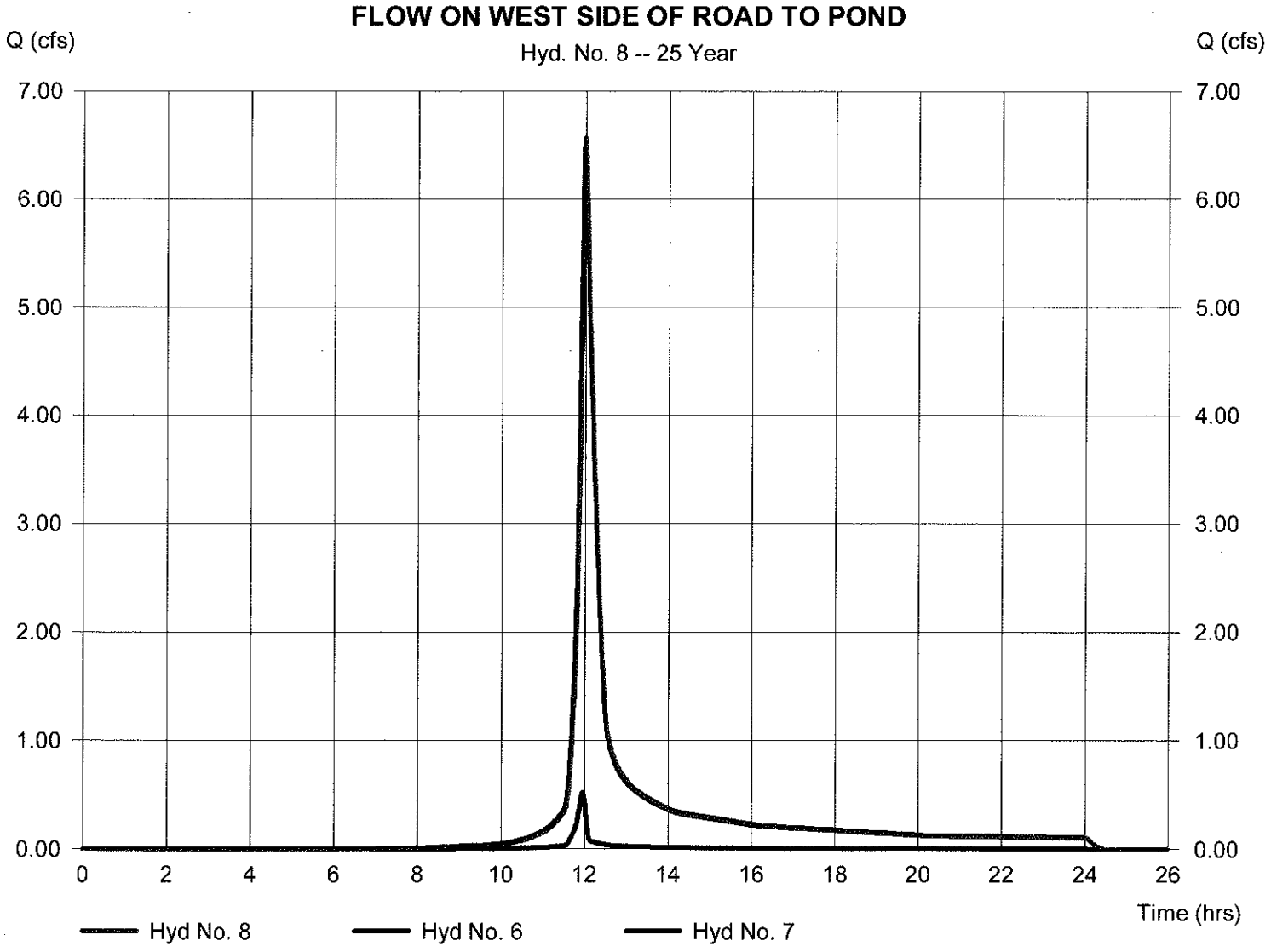


Hydrograph Report

Hyd. No. 8

FLOW ON WEST SIDE OF ROAD TO POND

Hydrograph type	= Combine	Peak discharge	= 6.573 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 21,418 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.170 ac

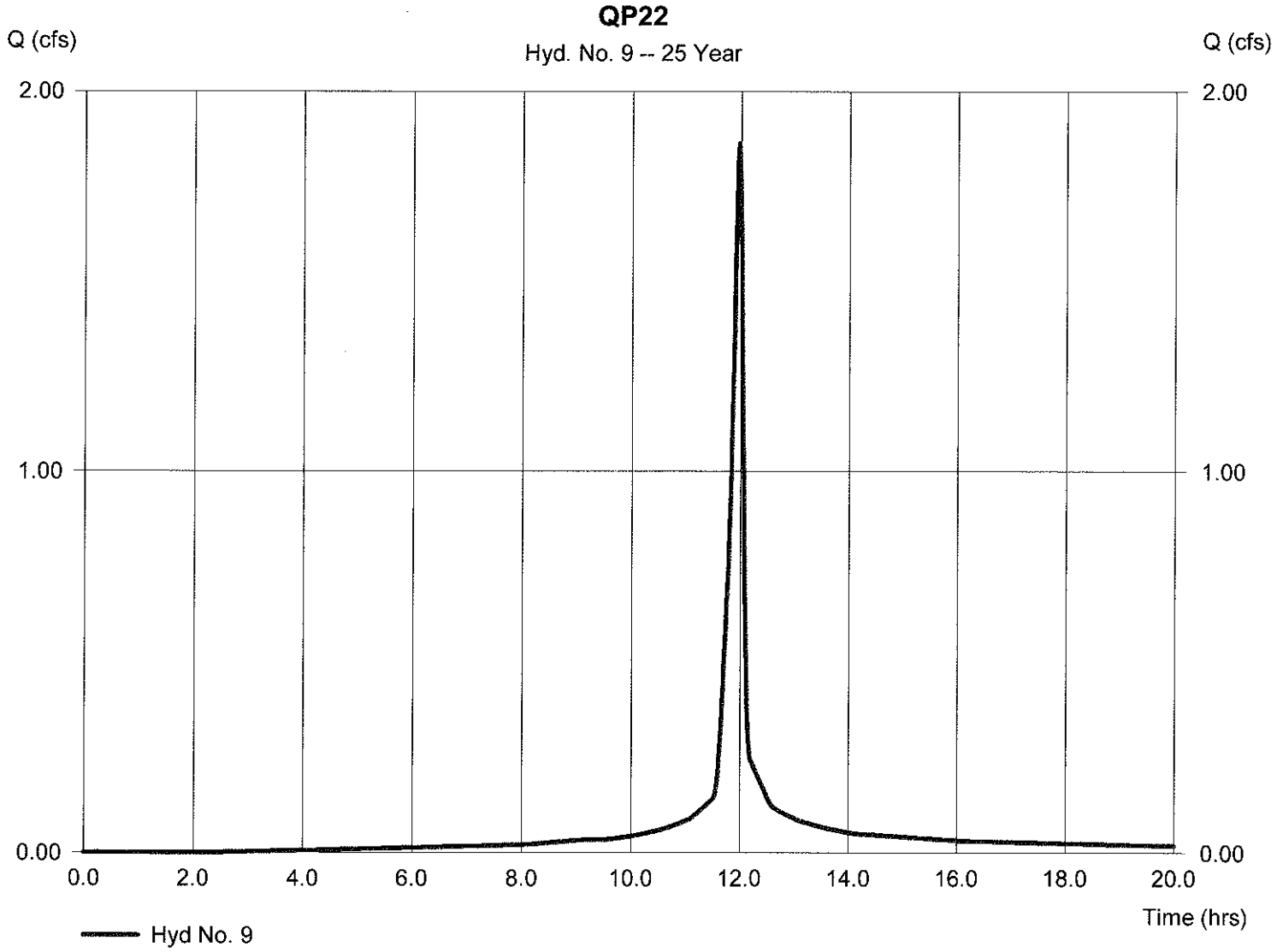


Hydrograph Report

Hyd. No. 9

QP22

Hydrograph type	= SCS Runoff	Peak discharge	= 1.862 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 4,404 cuft
Drainage area	= 0.550 ac	Curve number	= 97
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.28 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

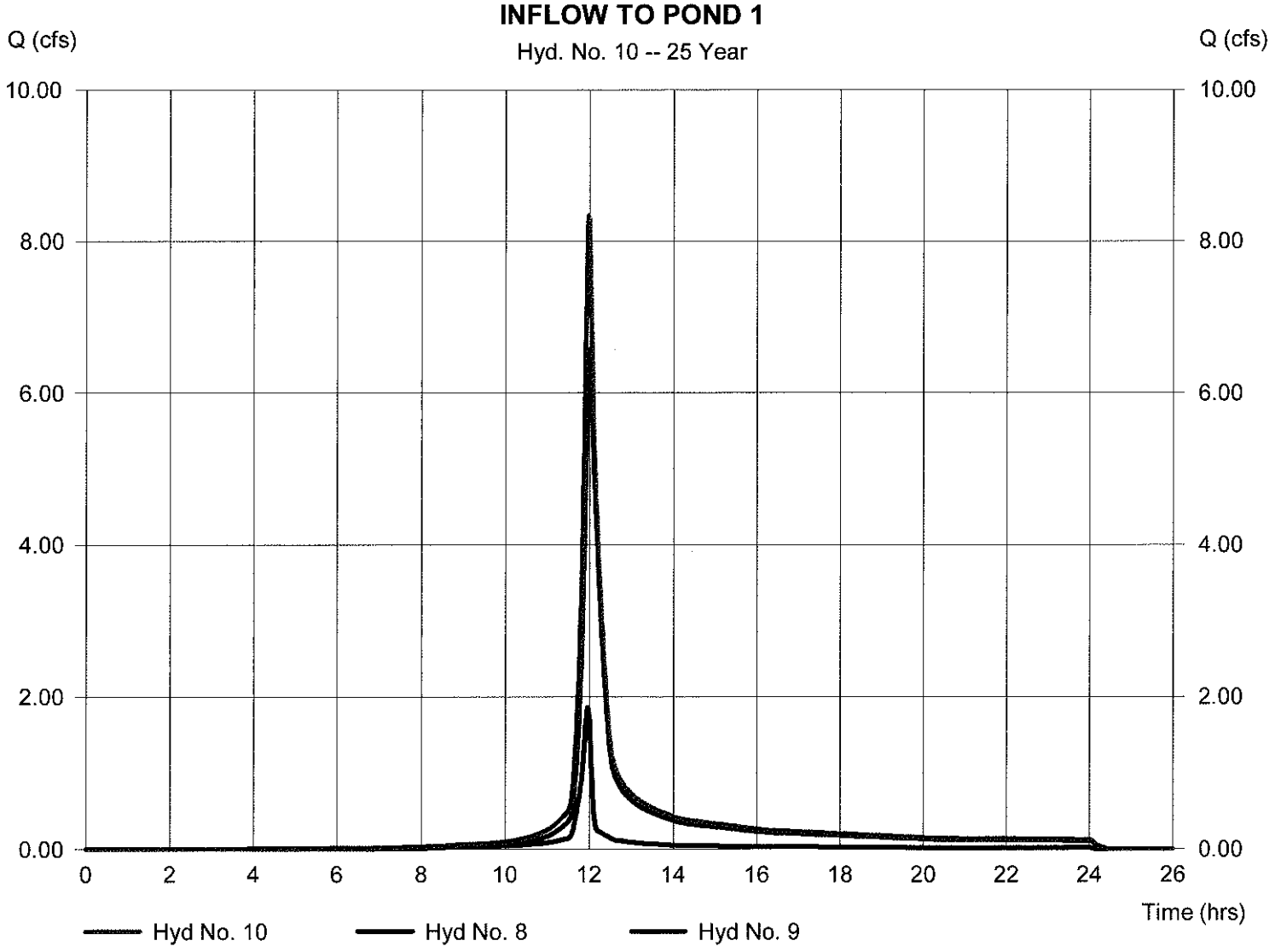


Hydrograph Report

Hyd. No. 10

INFLOW TO POND 1

Hydrograph type	= Combine	Peak discharge	= 8.339 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 25,822 cuft
Inflow hyds.	= 8, 9	Contrib. drain. area	= 0.550 ac

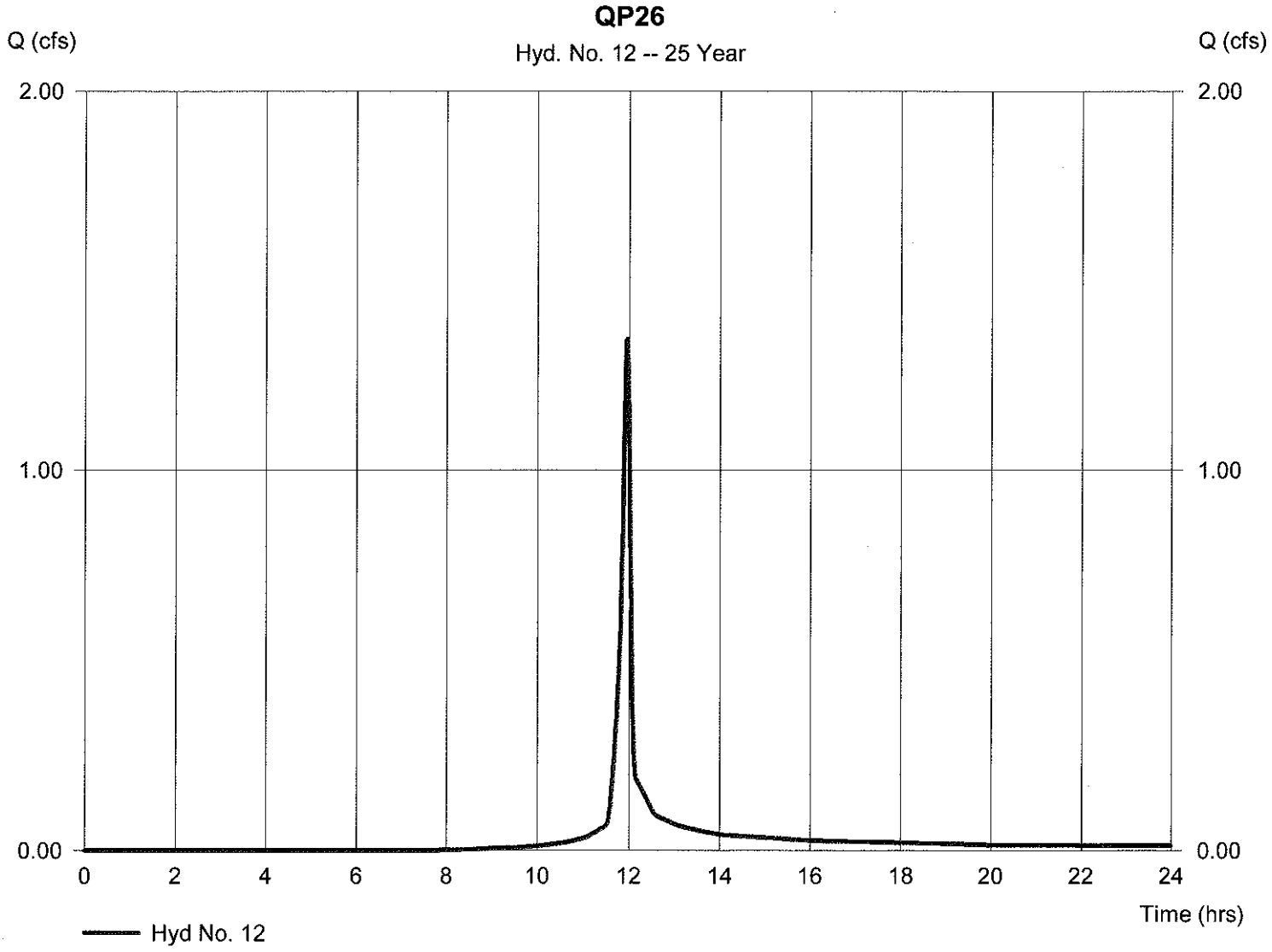


Hydrograph Report

Hyd. No. 12

QP26

Hydrograph type	= SCS Runoff	Peak discharge	= 1.345 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 2,747 cuft
Drainage area	= 0.500 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



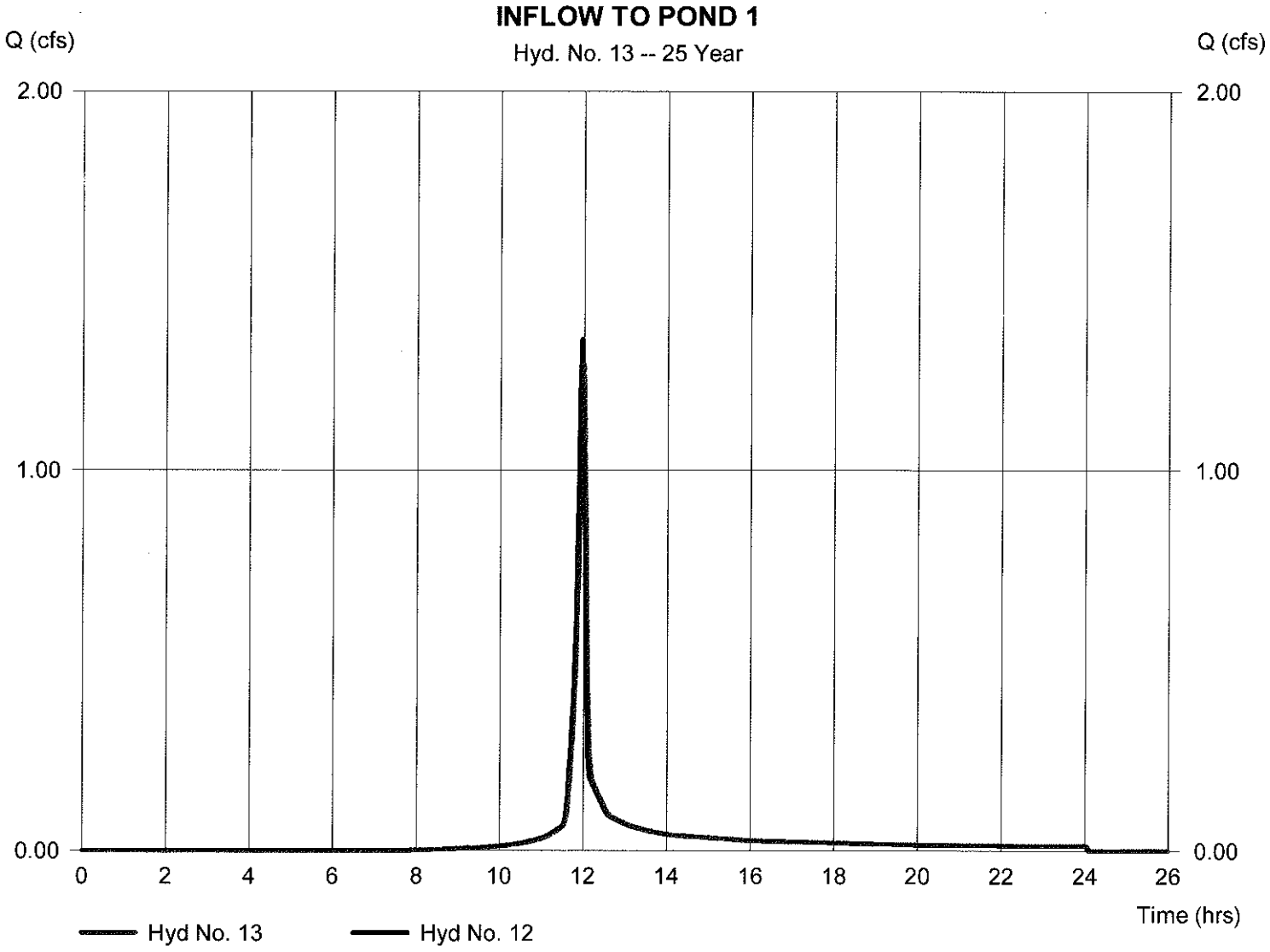
Hydrograph Report

Hyd. No. 13

INFLOW TO POND 1

Hydrograph type	= Reach	Peak discharge	= 1.284 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 2,745 cuft
Inflow hyd. No.	= 12 - QP26	Section type	= Circular
Reach length	= 100.2 ft	Channel slope	= 1.0 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 3.441	Rating curve m	= 1.250
Ave. velocity	= 0.76 ft/s	Routing coeff.	= 0.4435

Modified Att-Kin routing method used.

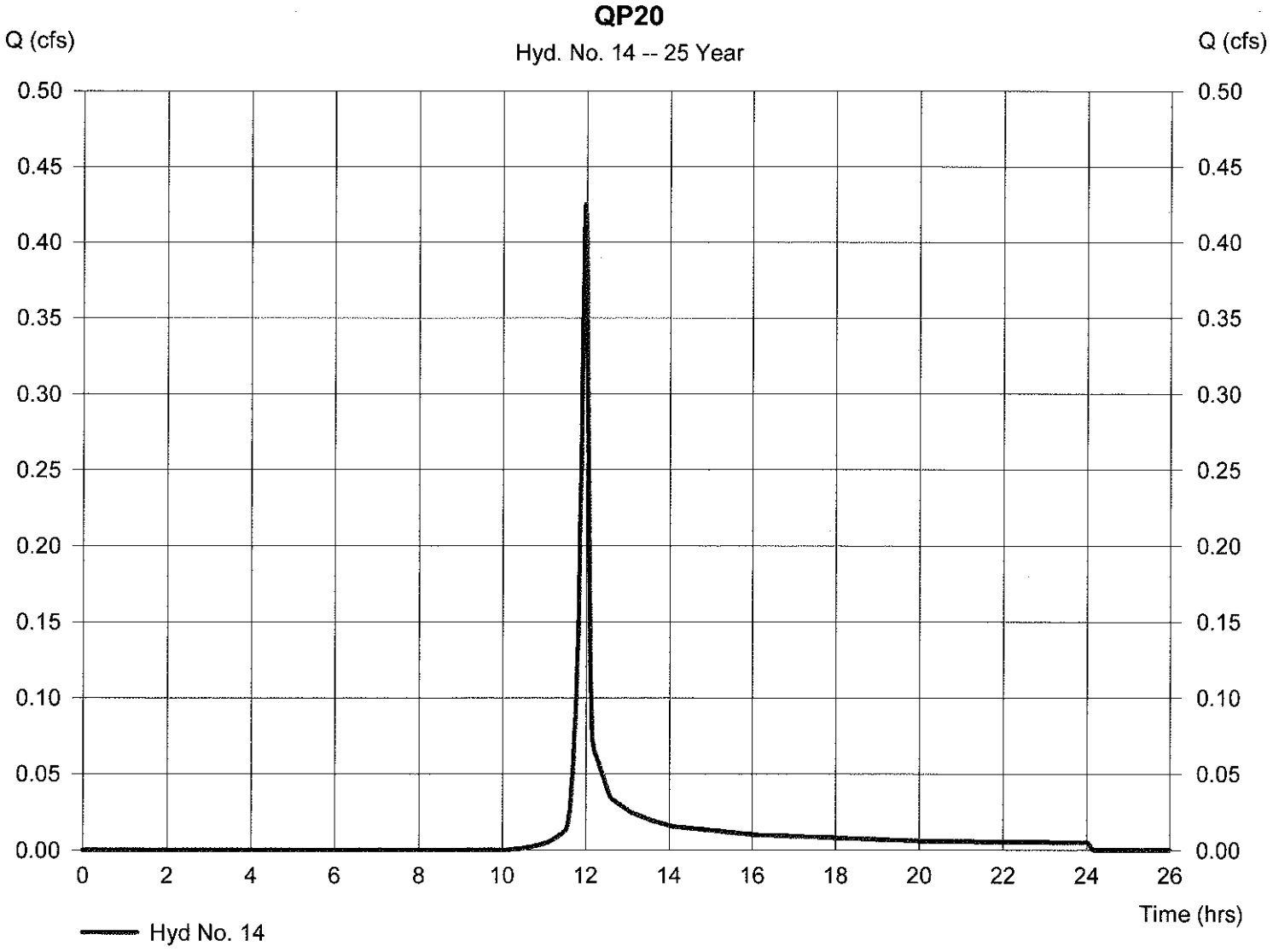


Hydrograph Report

Hyd. No. 14

QP20

Hydrograph type	= SCS Runoff	Peak discharge	= 0.425 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 897 cuft
Drainage area	= 0.250 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.98 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

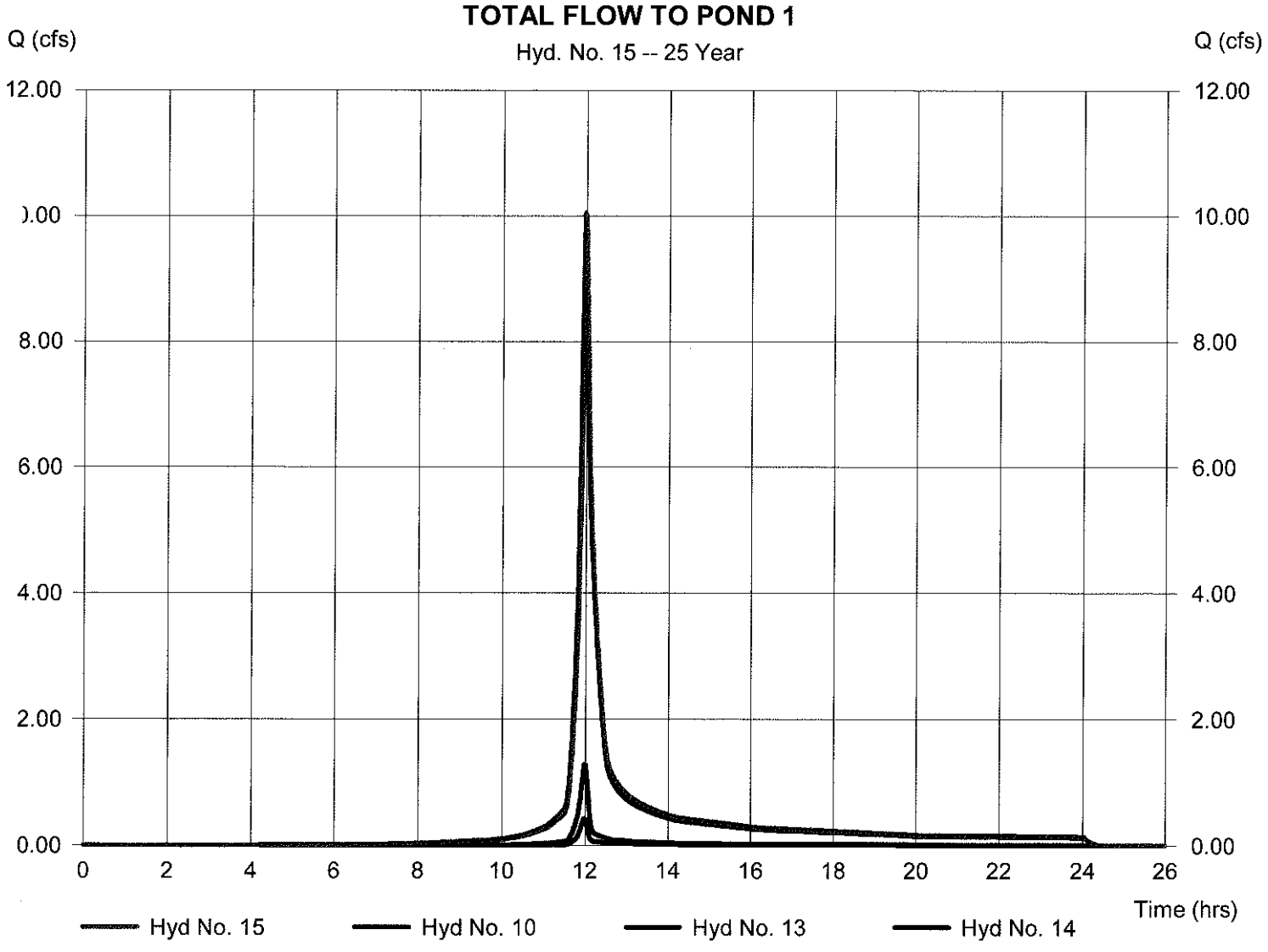


Hydrograph Report

Hyd. No. 15

TOTAL FLOW TO POND 1

Hydrograph type	= Combine	Peak discharge	= 10.05 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 29,465 cuft
Inflow hyds.	= 10, 13, 14	Contrib. drain. area	= 0.250 ac



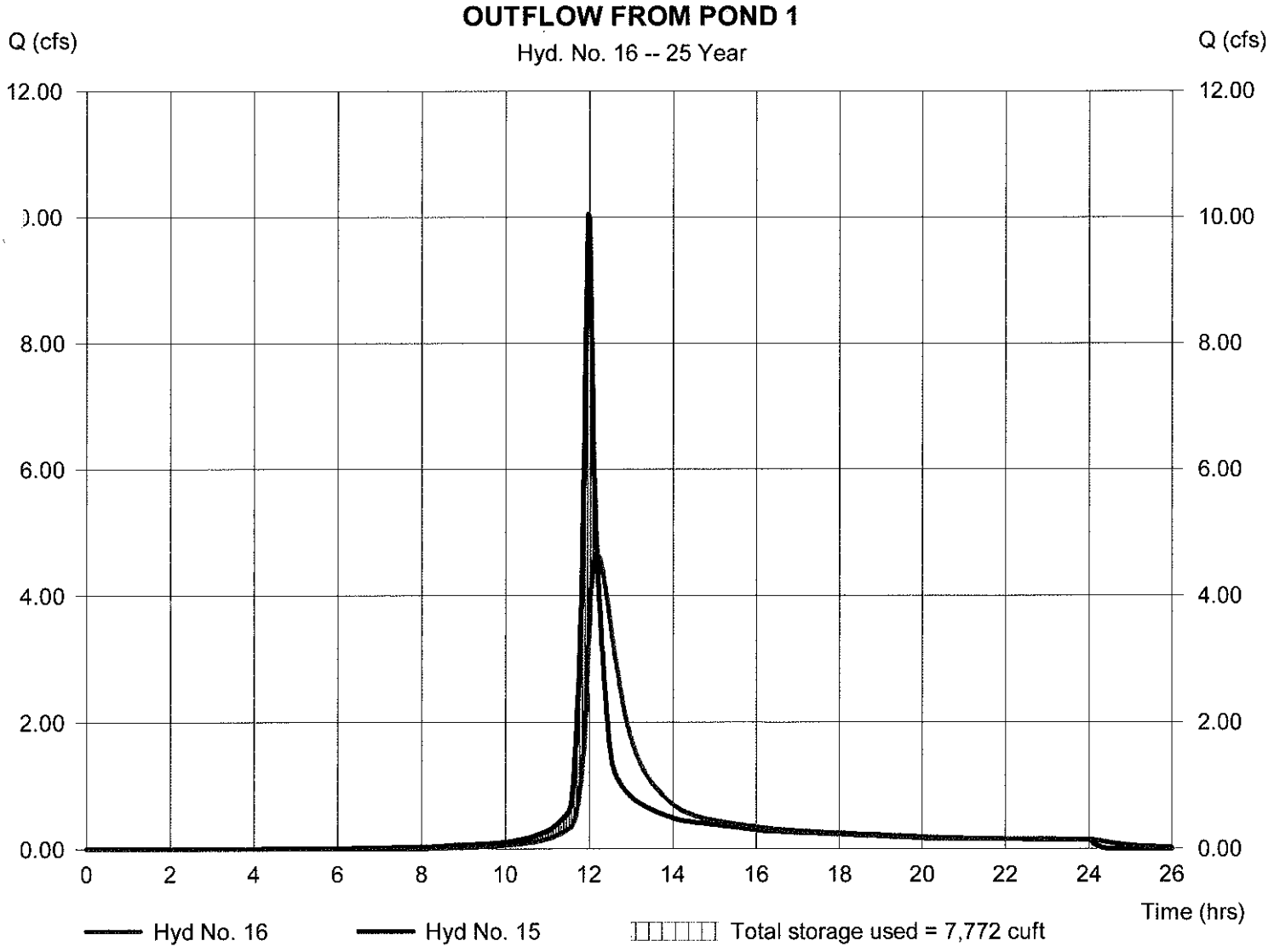
Hydrograph Report

Hyd. No. 16

OUTFLOW FROM POND 1

Hydrograph type	= Reservoir	Peak discharge	= 4.663 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.18 hrs
Time interval	= 1 min	Hyd. volume	= 29,243 cuft
Inflow hyd. No.	= 15 - TOTAL FLOW TO POND	Max. Elevation	= 6436.80 ft
Reservoir name	= POND 1	Max. Storage	= 7,772 cuft

Storage Indication method used.



Pond No. 1 - POND 1

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 6434.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6434.00	1,834	0	0
1.00	6435.00	2,464	2,149	2,149
2.00	6436.00	3,149	2,807	4,956
3.00	6437.00	3,889	3,519	8,475
4.00	6438.00	4,660	4,275	12,749

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	0.00	0.00	1.00
Span (in)	= 18.00	0.00	0.00	1.00
No. Barrels	= 1	0	0	6
Invert El. (ft)	= 6434.00	0.00	0.00	6434.10
Length (ft)	= 29.72	0.00	0.00	0.10
Slope (%)	= 6.39	0.00	0.00	n/a
N-Value	= .024	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	20.00	0.00	0.00
Crest El. (ft)	= 6437.50	6437.90	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	6434.00	0.00	---	---	0.00	0.00	0.00	---	---	---	---	0.000
0.10	215	6434.10	0.00	---	---	0.00	0.00	0.00	---	---	---	---	0.000
0.20	430	6434.20	0.00	---	---	0.03	0.00	0.00	---	---	---	---	0.033
0.30	645	6434.30	0.00	---	---	0.09	0.00	0.00	---	---	---	---	0.094
0.40	860	6434.40	0.00	---	---	0.17	0.00	0.00	---	---	---	---	0.173
0.50	1,075	6434.50	0.00	---	---	0.27	0.00	0.00	---	---	---	---	0.266
0.60	1,289	6434.60	0.00	---	---	0.37	0.00	0.00	---	---	---	---	0.372
0.70	1,504	6434.70	0.00	---	---	0.49	0.00	0.00	---	---	---	---	0.489
0.80	1,719	6434.80	0.00	---	---	0.62	0.00	0.00	---	---	---	---	0.616
0.90	1,934	6434.90	0.00	---	---	0.75	0.00	0.00	---	---	---	---	0.753
1.00	2,149	6435.00	0.00	---	---	0.90	0.00	0.00	---	---	---	---	0.897
1.10	2,430	6435.10	0.00	---	---	1.05	0.00	0.00	---	---	---	---	1.050
1.20	2,710	6435.20	0.00	---	---	1.21	0.00	0.00	---	---	---	---	1.212
1.30	2,991	6435.30	0.00	---	---	1.38	0.00	0.00	---	---	---	---	1.381
1.40	3,272	6435.40	0.00	---	---	1.56	0.00	0.00	---	---	---	---	1.557
1.50	3,552	6435.50	0.00	---	---	1.74	0.00	0.00	---	---	---	---	1.741
1.60	3,833	6435.60	0.00	---	---	1.93	0.00	0.00	---	---	---	---	1.931
1.70	4,114	6435.70	0.00	---	---	2.13	0.00	0.00	---	---	---	---	2.127
1.80	4,394	6435.80	0.00	---	---	2.33	0.00	0.00	---	---	---	---	2.329
1.90	4,675	6435.90	0.00	---	---	2.54	0.00	0.00	---	---	---	---	2.538
2.00	4,956	6436.00	0.00	---	---	2.75	0.00	0.00	---	---	---	---	2.751
2.10	5,307	6436.10	0.00	---	---	2.97	0.00	0.00	---	---	---	---	2.971
2.20	5,659	6436.20	0.00	---	---	3.20	0.00	0.00	---	---	---	---	3.197
2.30	6,011	6436.30	0.00	---	---	3.43	0.00	0.00	---	---	---	---	3.428
2.40	6,363	6436.40	0.00	---	---	3.66	0.00	0.00	---	---	---	---	3.664
2.50	6,715	6436.50	0.00	---	---	3.91	0.00	0.00	---	---	---	---	3.906
2.60	7,067	6436.60	0.00	---	---	4.15	0.00	0.00	---	---	---	---	4.153
2.70	7,419	6436.70	0.00	---	---	4.40	0.00	0.00	---	---	---	---	4.405
2.80	7,771	6436.80	0.00	---	---	4.66	0.00	0.00	---	---	---	---	4.662
2.90	8,123	6436.90	0.00	---	---	4.92	0.00	0.00	---	---	---	---	4.923
3.00	8,475	6437.00	0.00	---	---	5.19	0.00	0.00	---	---	---	---	5.187
3.10	8,902	6437.10	0.00	---	---	5.46	0.00	0.00	---	---	---	---	5.458
3.20	9,329	6437.20	0.00	---	---	5.73	0.00	0.00	---	---	---	---	5.733
3.30	9,757	6437.30	0.00	---	---	6.01	0.00	0.00	---	---	---	---	6.013
3.40	10,184	6437.40	0.00	---	---	6.30	0.00	0.00	---	---	---	---	6.297
3.50	10,612	6437.50	0.00 ic	---	---	6.59	0.00	0.00	---	---	---	---	6.586
3.60	11,039	6437.60	0.52 ic	---	---	6.88	0.50	0.00	---	---	---	---	7.379
3.70	11,467	6437.70	1.42 ic	---	---	7.18	1.41	0.00	---	---	---	---	8.586

Continues on next page...

POND 1

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
3.80	11,894	6437.80	2.59 ic	---	---	7.48	2.59	0.00	---	---	---	---	10.06
3.90	12,322	6437.90	4.03 ic	---	---	7.78	3.98	0.00	---	---	---	---	11.77
4.00	12,749	6438.00	5.57 ic	---	---	8.09	5.55	1.65	---	---	---	---	15.28

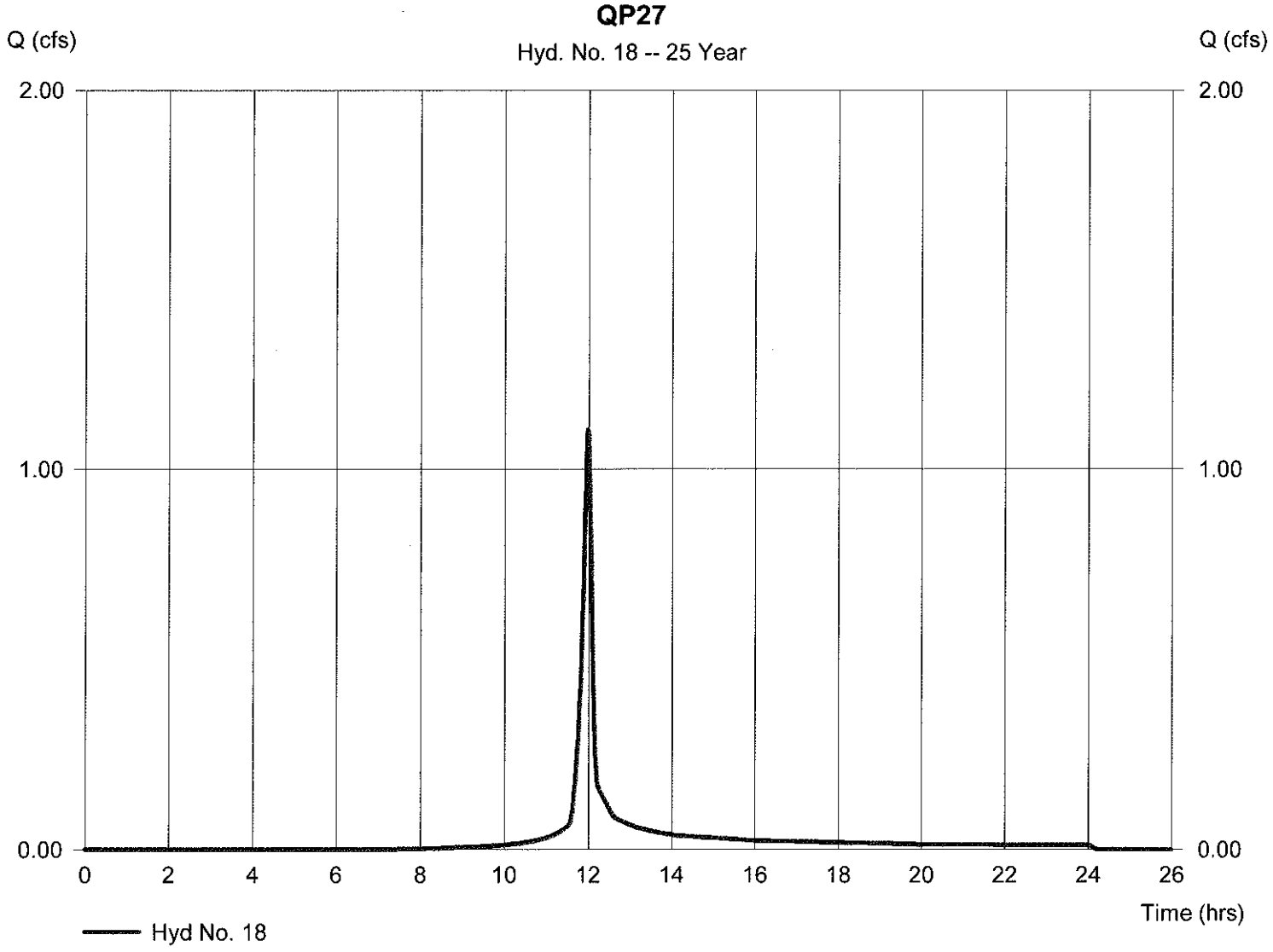
...End

Hydrograph Report

Hyd. No. 18

QP27

Hydrograph type	= SCS Runoff	Peak discharge	= 1.105 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 2,520 cuft
Drainage area	= 0.450 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.70 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

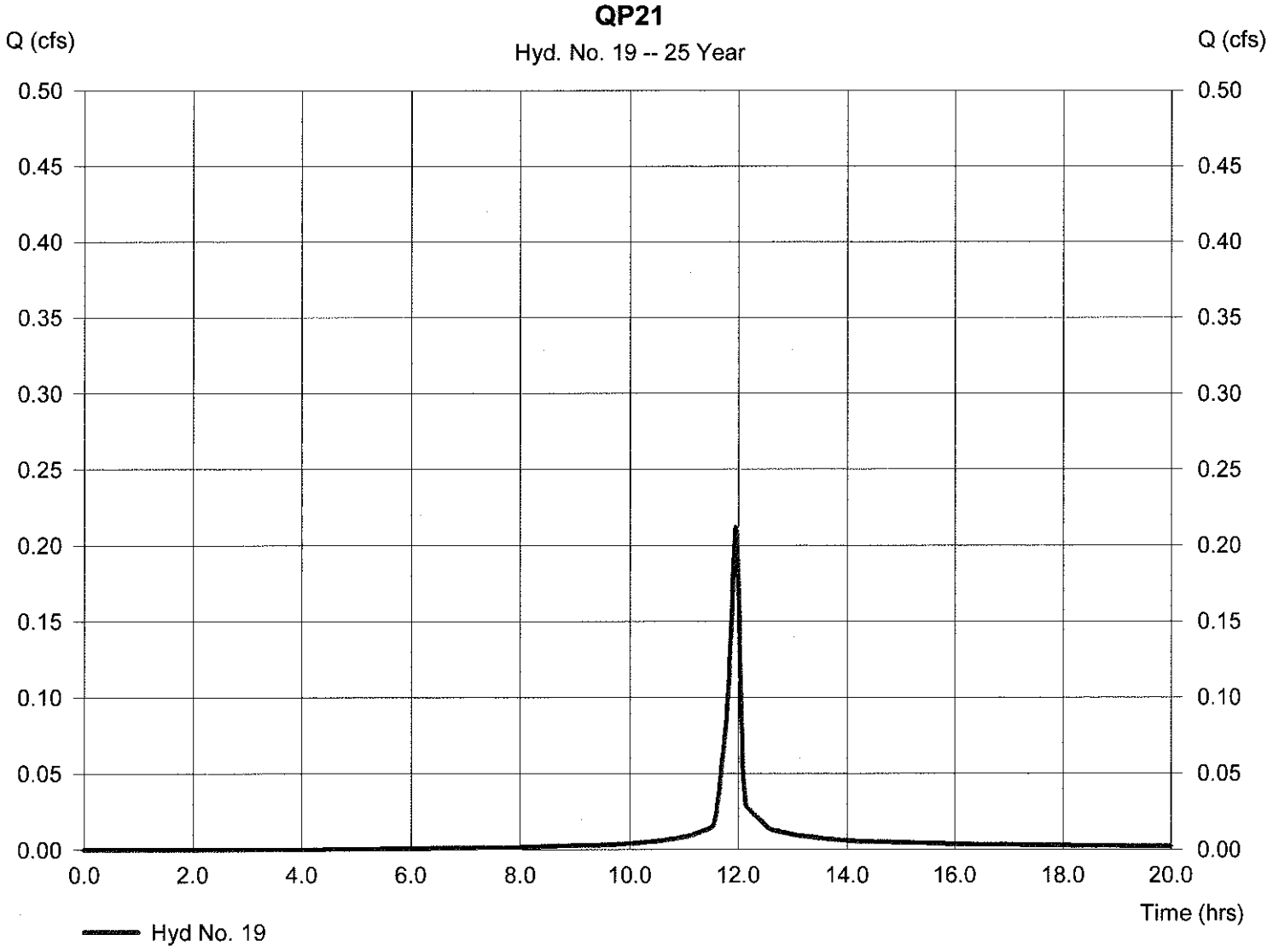


Hydrograph Report

Hyd. No. 19

QP21

Hydrograph type	= SCS Runoff	Peak discharge	= 0.212 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 463 cuft
Drainage area	= 0.060 ac	Curve number	= 95
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

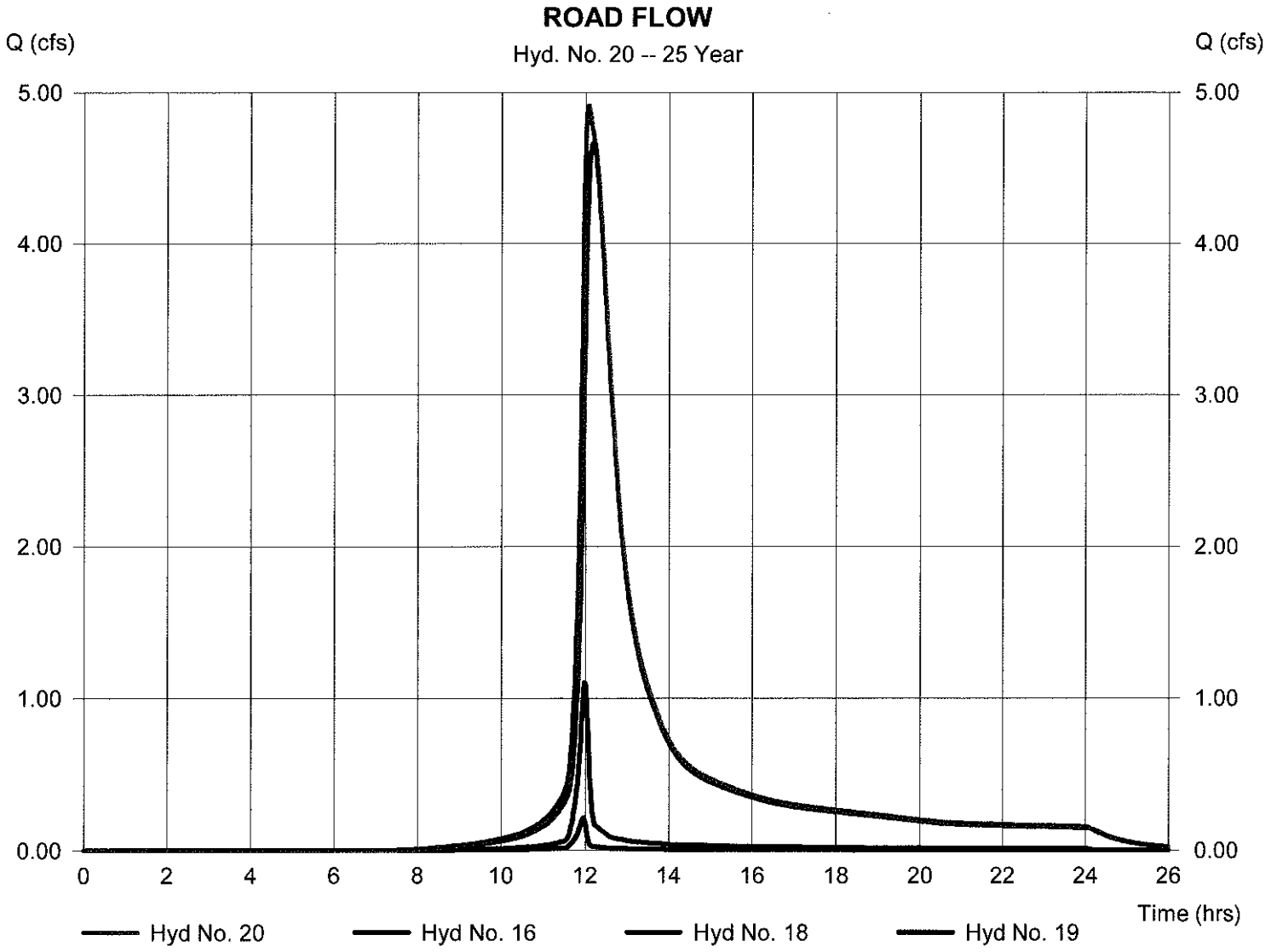


Hydrograph Report

Hyd. No. 20

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 4.911 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 31,328 cuft
Inflow hyds.	= 16, 18, 19	Contrib. drain. area	= 0.510 ac

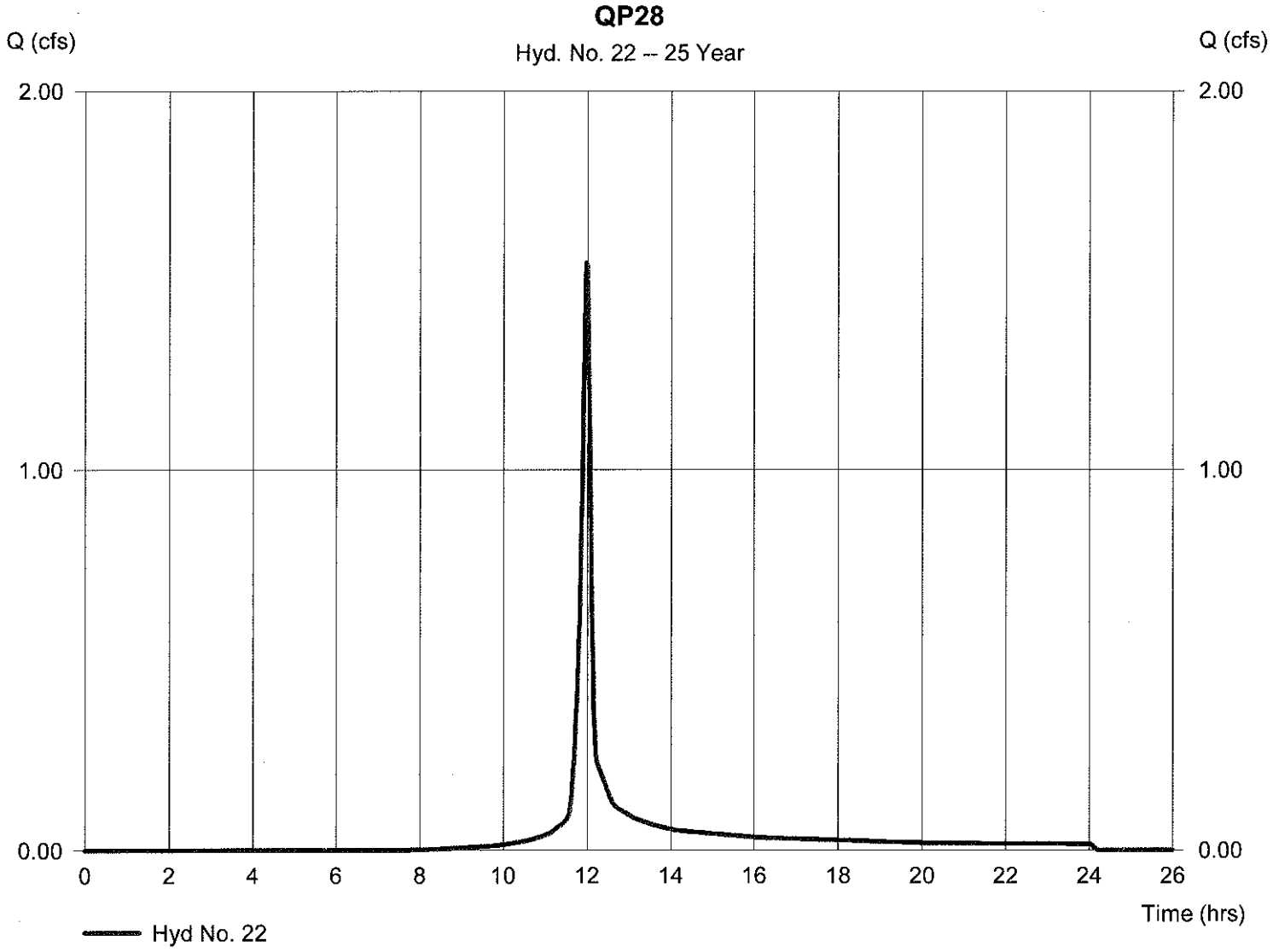


Hydrograph Report

Hyd. No. 22

QP28

Hydrograph type	= SCS Runoff	Peak discharge	= 1.547 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 3,516 cuft
Drainage area	= 0.660 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 9.66 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

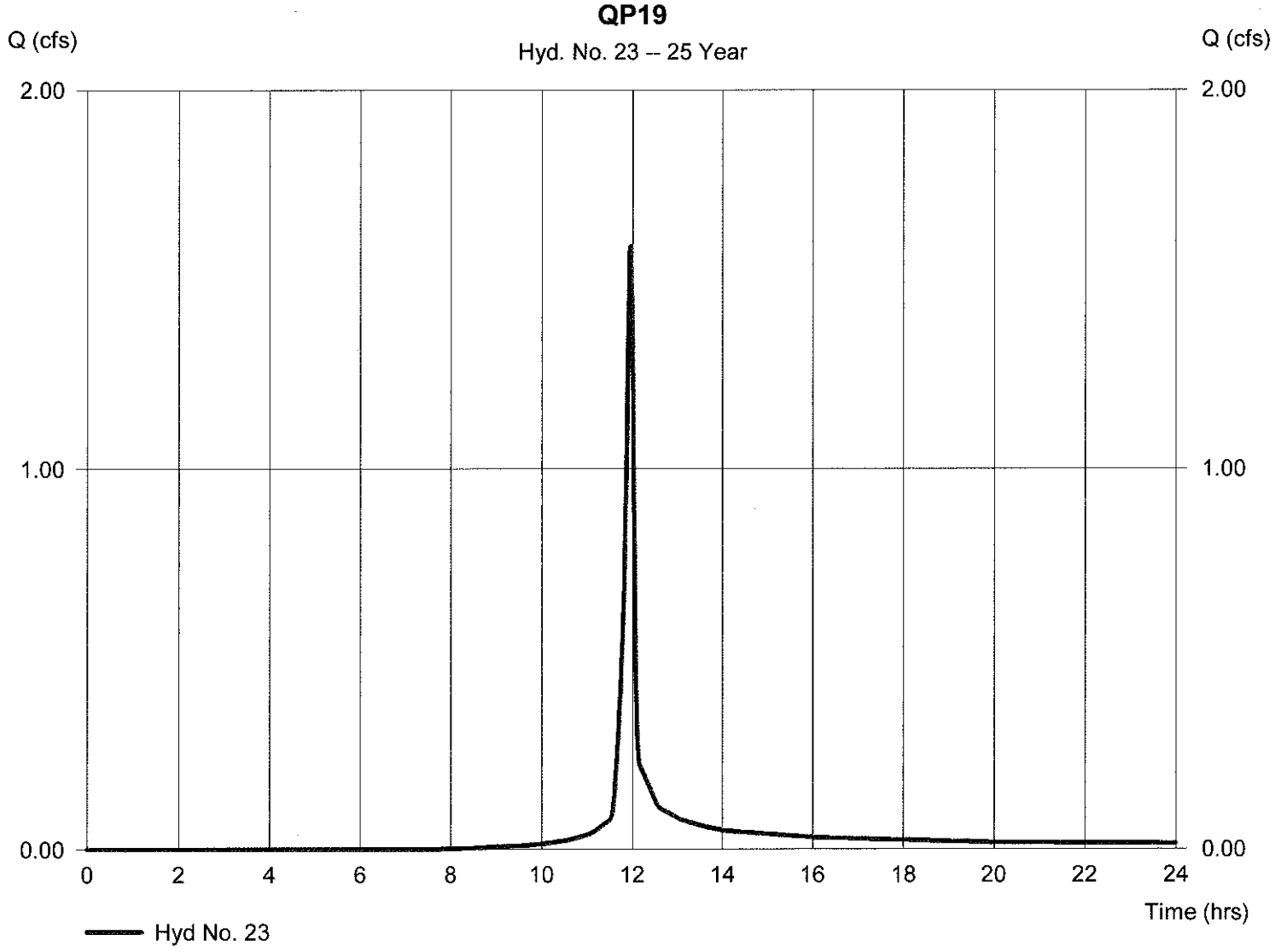


Hydrograph Report

Hyd. No. 23

QP19

Hydrograph type	= SCS Runoff	Peak discharge	= 1.587 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 3,241 cuft
Drainage area	= 0.590 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

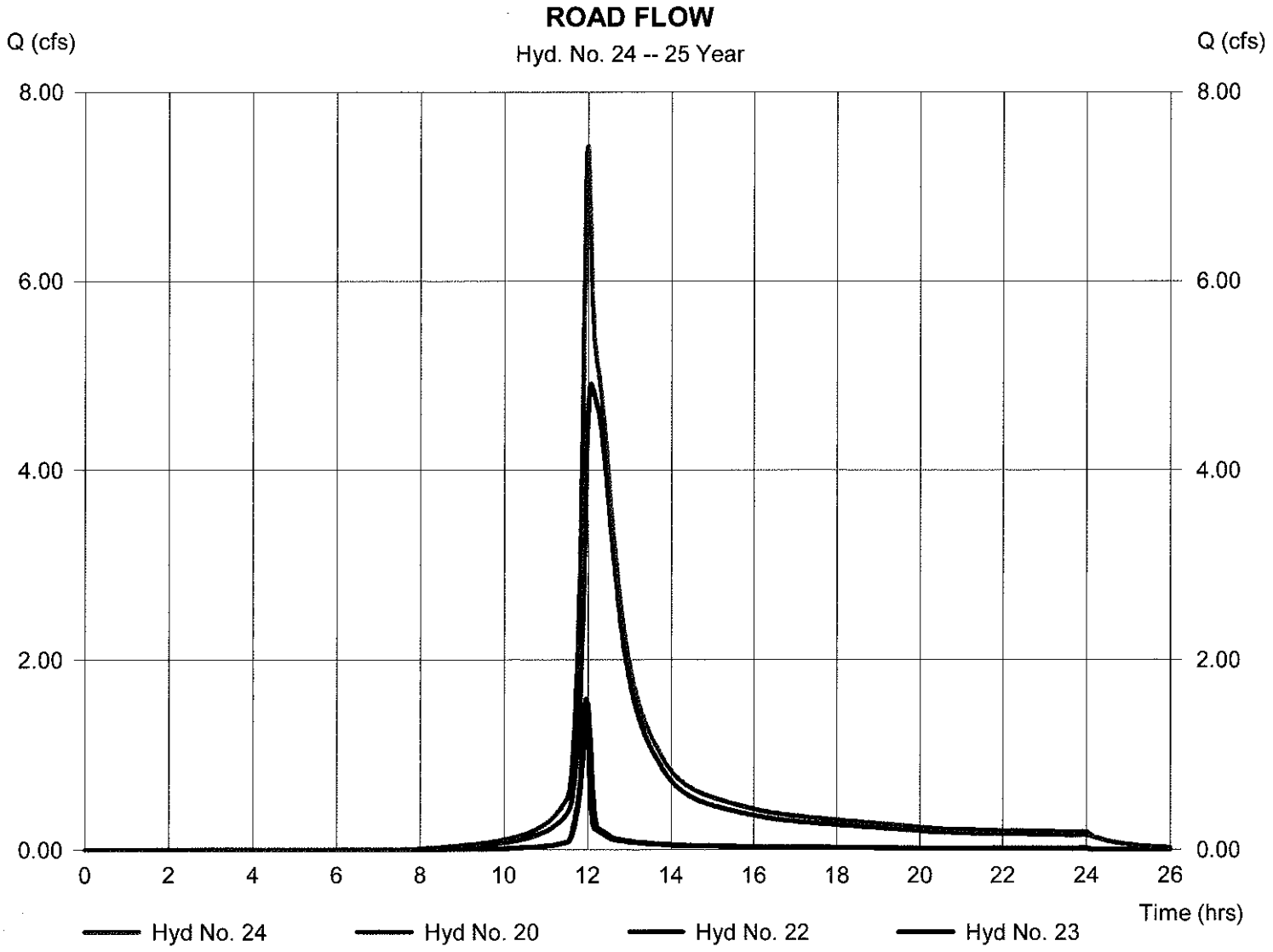


Hydrograph Report

Hyd. No. 24

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 7.425 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 38,085 cuft
Inflow hyds.	= 20, 22, 23	Contrib. drain. area	= 1.250 ac

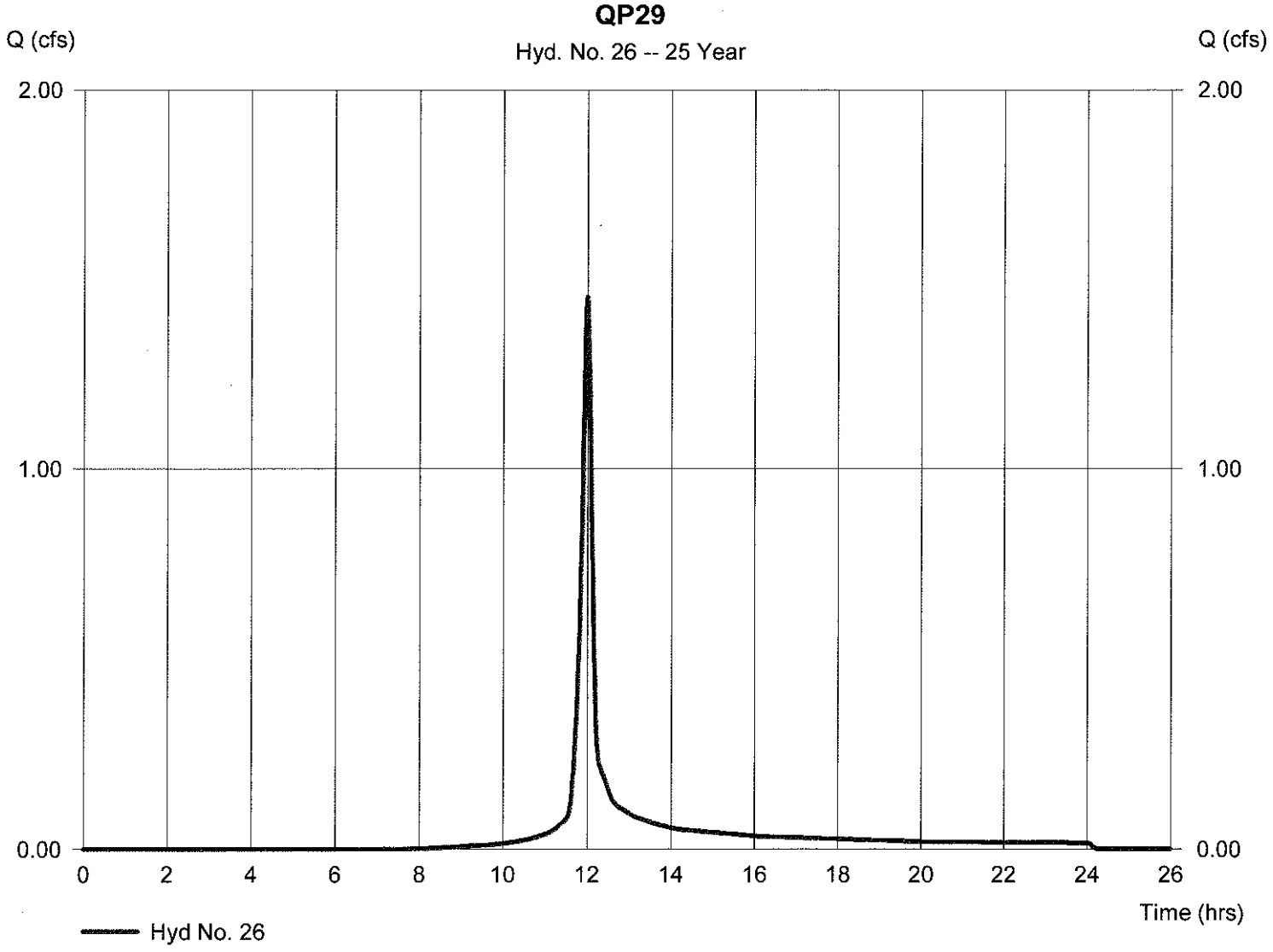


Hydrograph Report

Hyd. No. 26

QP29

Hydrograph type	= SCS Runoff	Peak discharge	= 1.453 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 3,524 cuft
Drainage area	= 0.650 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.62 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

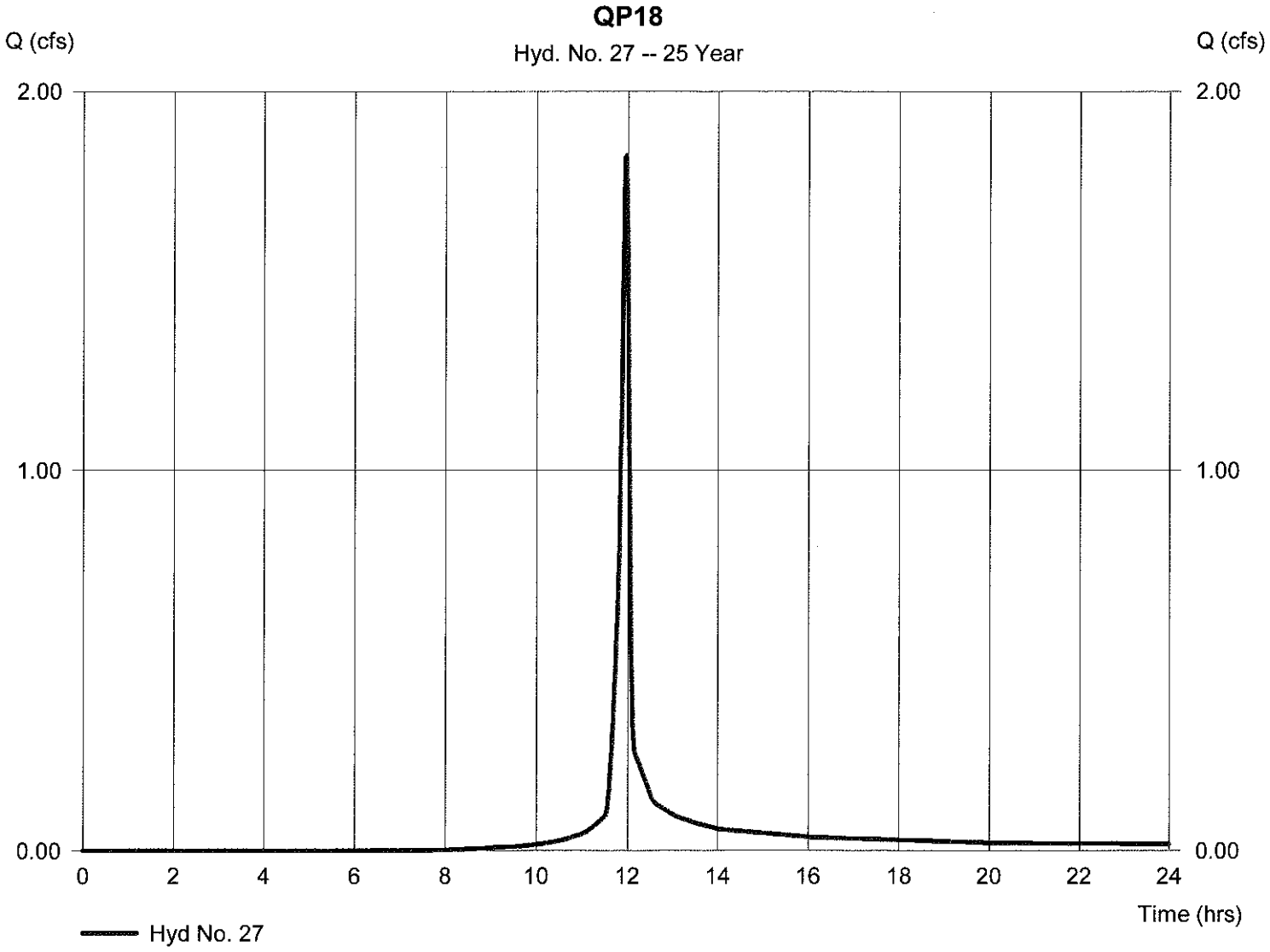


Hydrograph Report

Hyd. No. 27

QP18

Hydrograph type	= SCS Runoff	Peak discharge	= 1.829 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 3,735 cuft
Drainage area	= 0.680 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

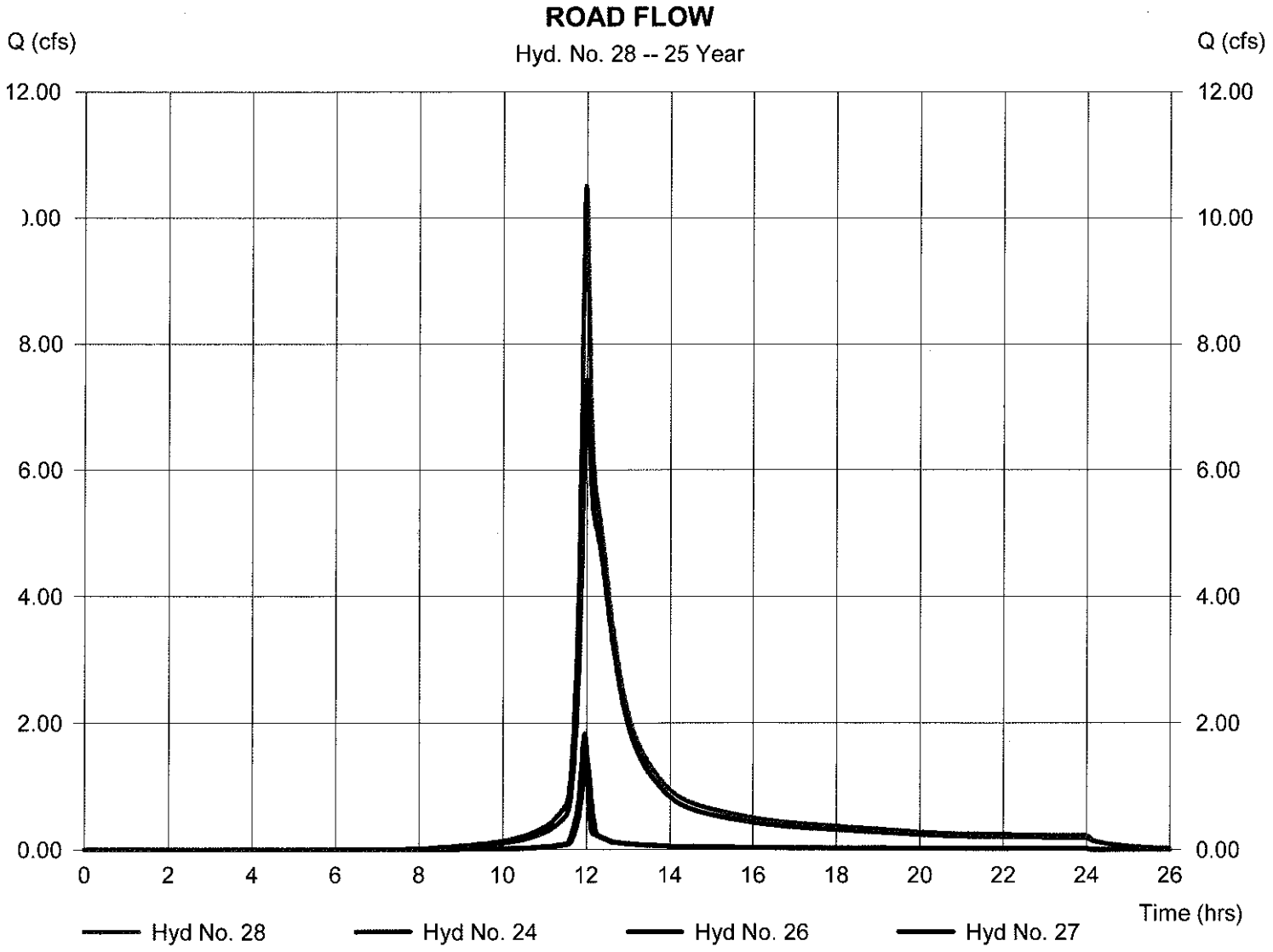


Hydrograph Report

Hyd. No. 28

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 10.50 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 45,345 cuft
Inflow hyds.	= 24, 26, 27	Contrib. drain. area	= 1.330 ac

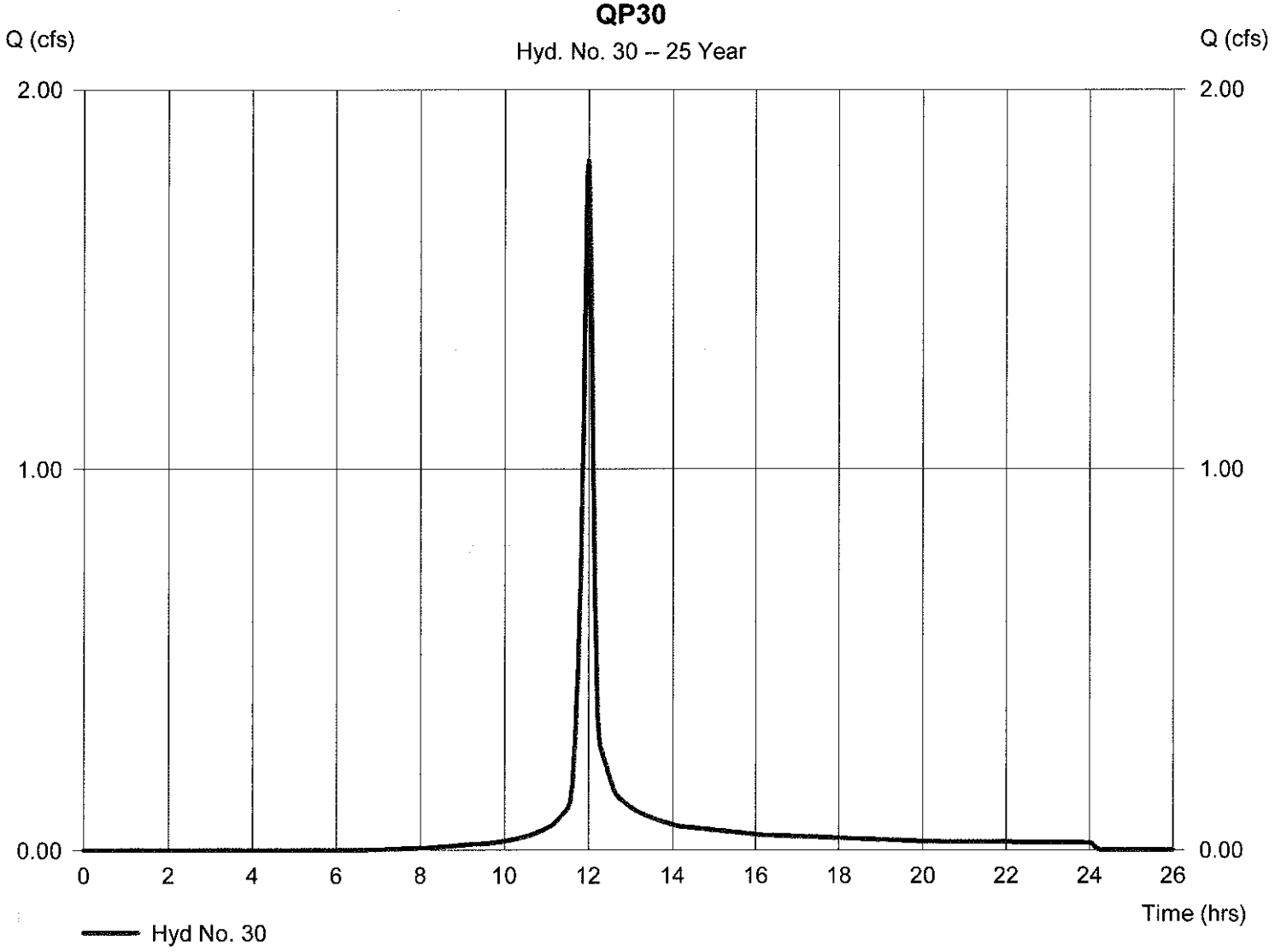


Hydrograph Report

Hyd. No. 30

QP30

Hydrograph type	= SCS Runoff	Peak discharge	= 1.813 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 4,431 cuft
Drainage area	= 0.740 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.40 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

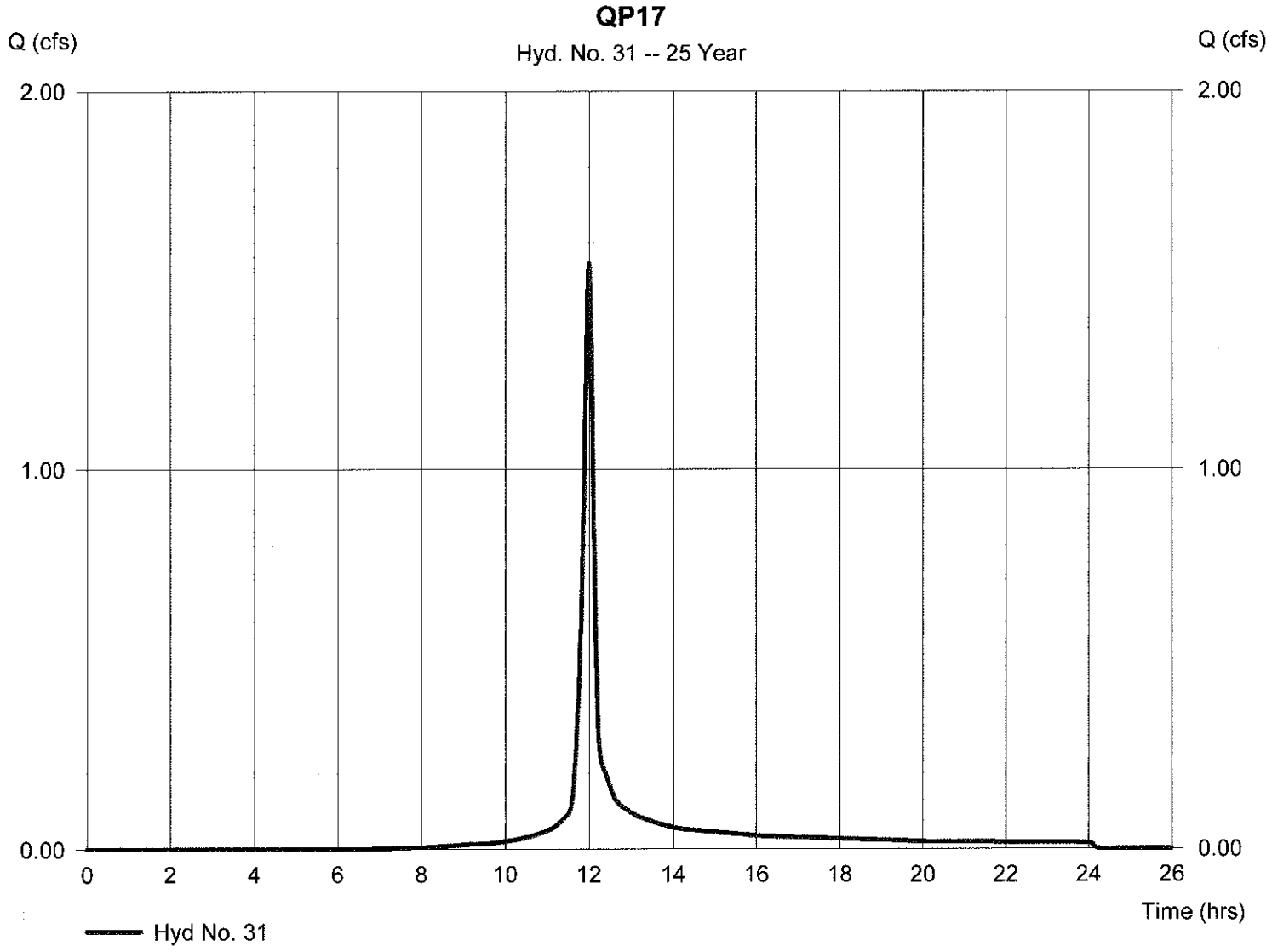


Hydrograph Report

Hyd. No. 31

QP17

Hydrograph type	= SCS Runoff	Peak discharge	= 1.544 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 3,772 cuft
Drainage area	= 0.630 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.92 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

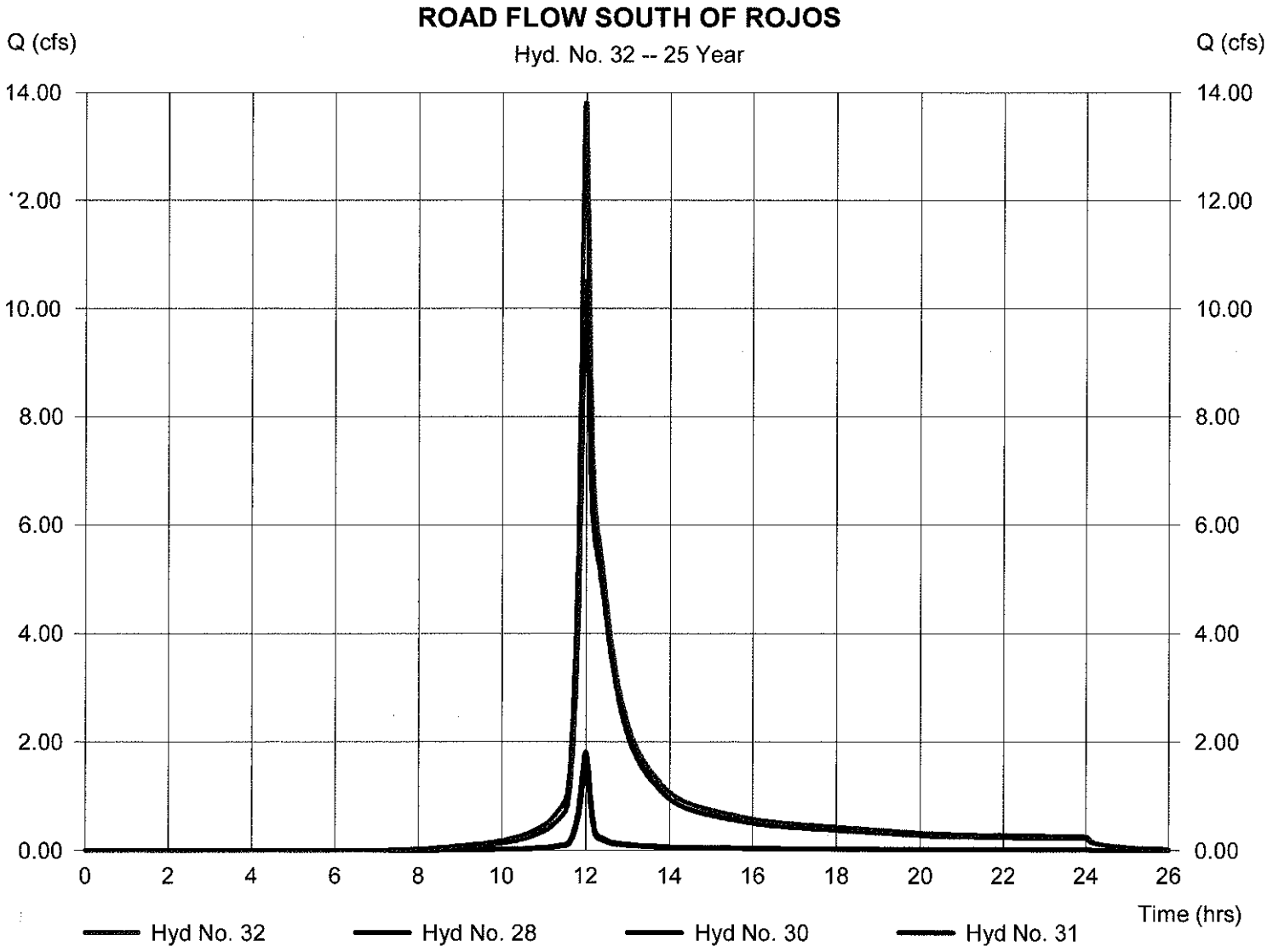


Hydrograph Report

Hyd. No. 32

ROAD FLOW SOUTH OF ROJOS

Hydrograph type	= Combine	Peak discharge	= 13.81 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 53,548 cuft
Inflow hyds.	= 28, 30, 31	Contrib. drain. area	= 1.370 ac

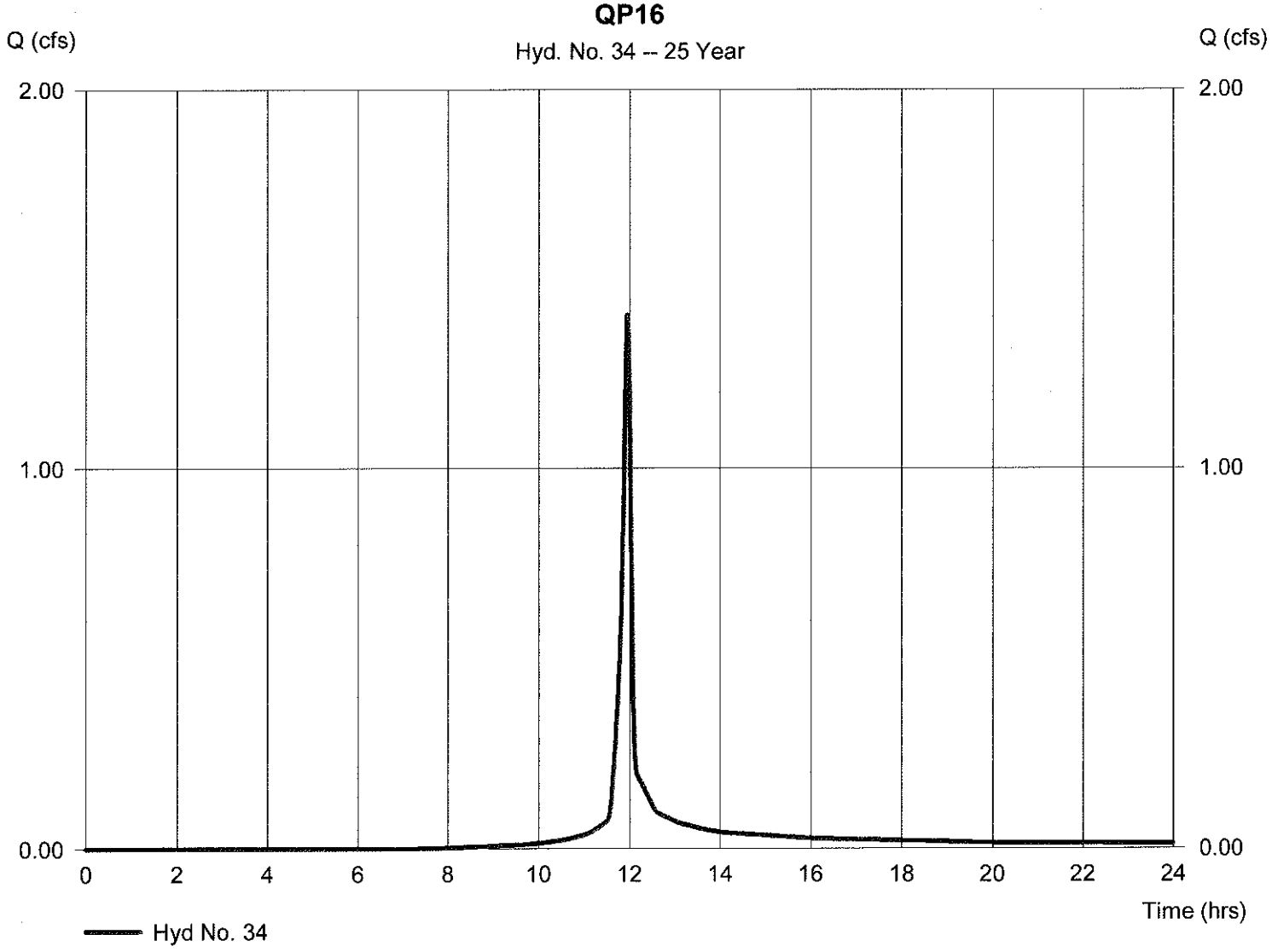


Hydrograph Report

Hyd. No. 34

QP16

Hydrograph type	= SCS Runoff	Peak discharge	= 1.405 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 2,887 cuft
Drainage area	= 0.500 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

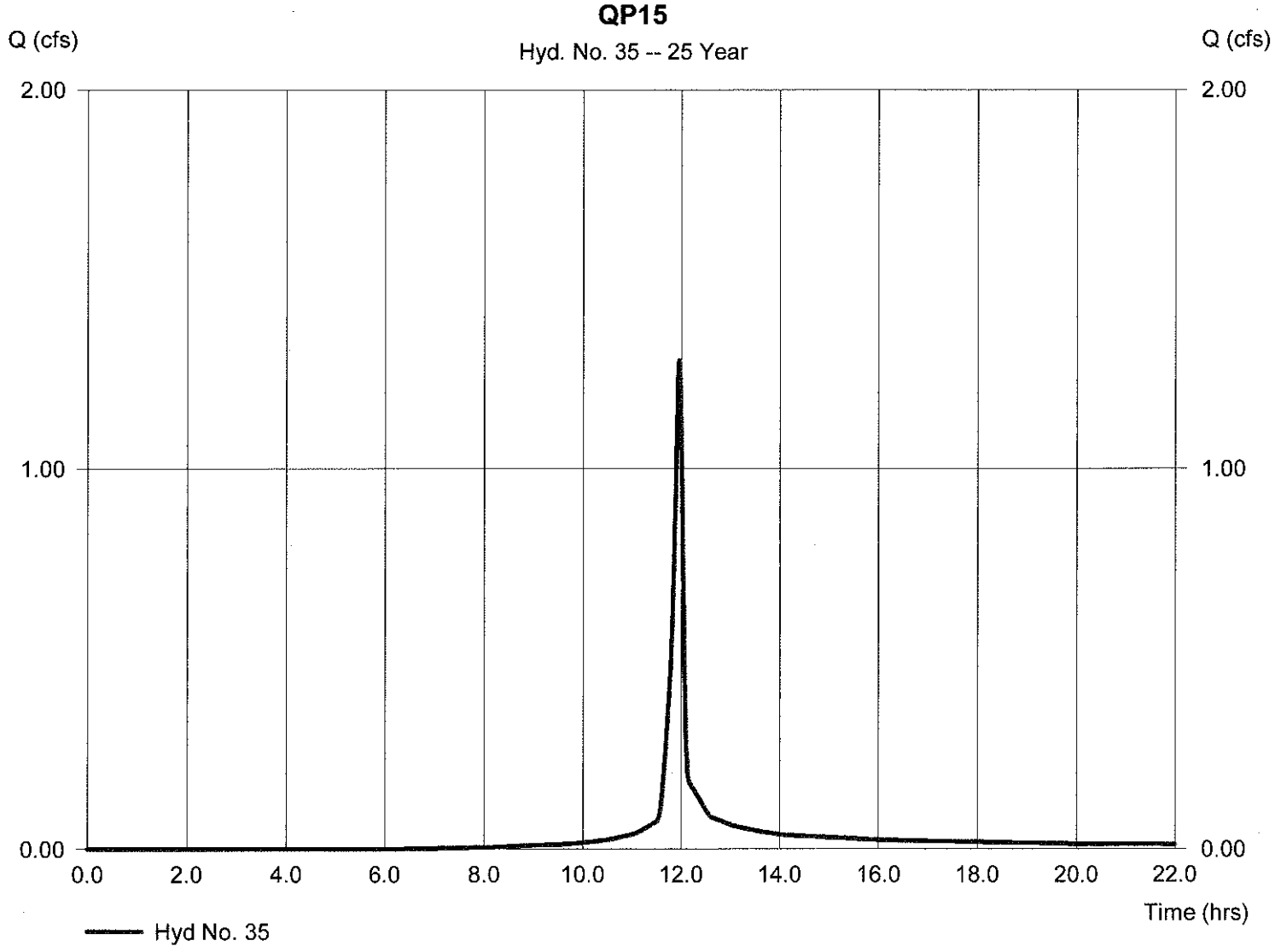


Hydrograph Report

Hyd. No. 35

QP15

Hydrograph type	= SCS Runoff	Peak discharge	= 1.285 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 2,675 cuft
Drainage area	= 0.420 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

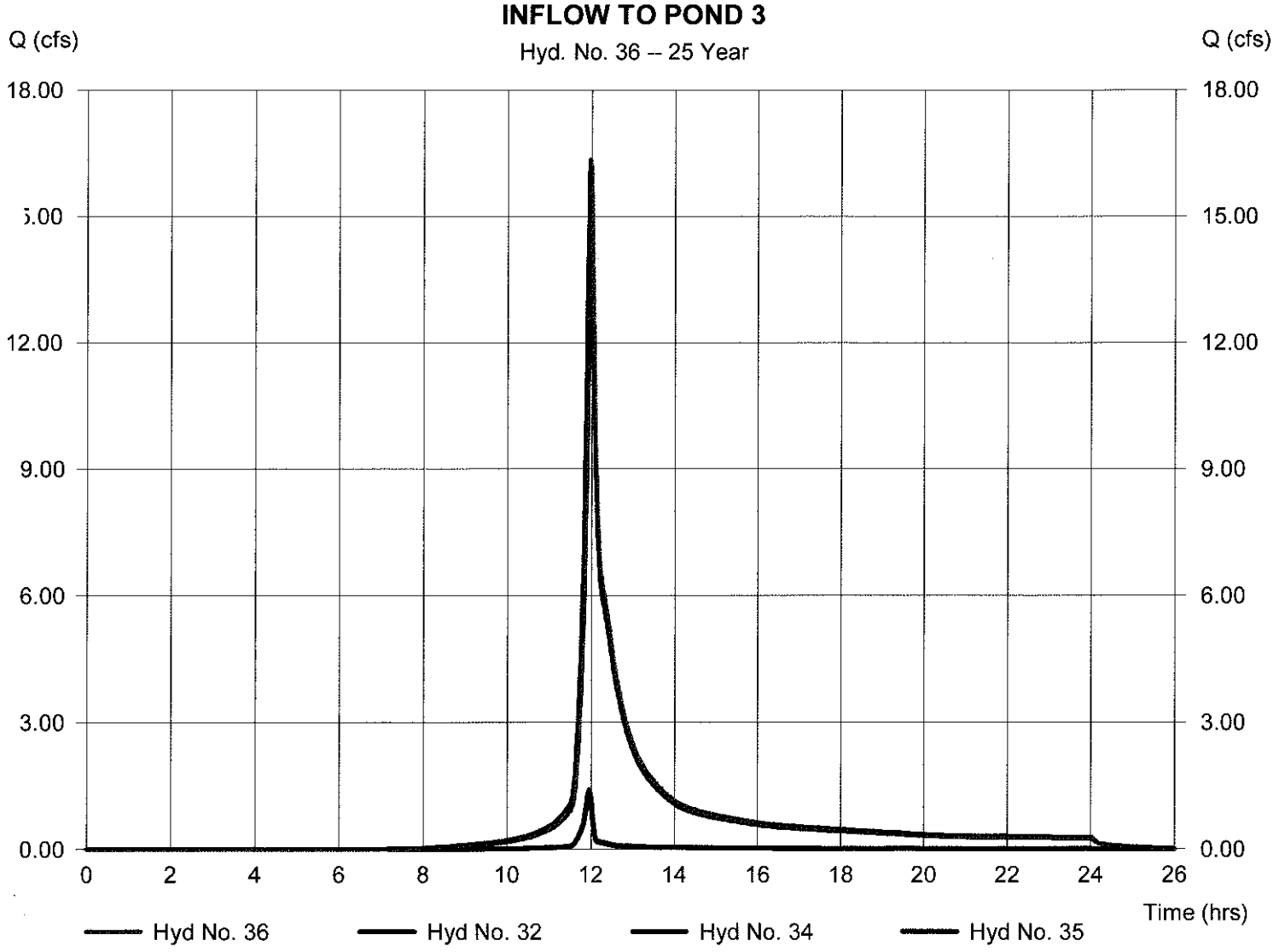


Hydrograph Report

Hyd. No. 36

INFLOW TO POND 3

Hydrograph type	= Combine	Peak discharge	= 16.34 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 59,110 cuft
Inflow hyds.	= 32, 34, 35	Contrib. drain. area	= 0.920 ac

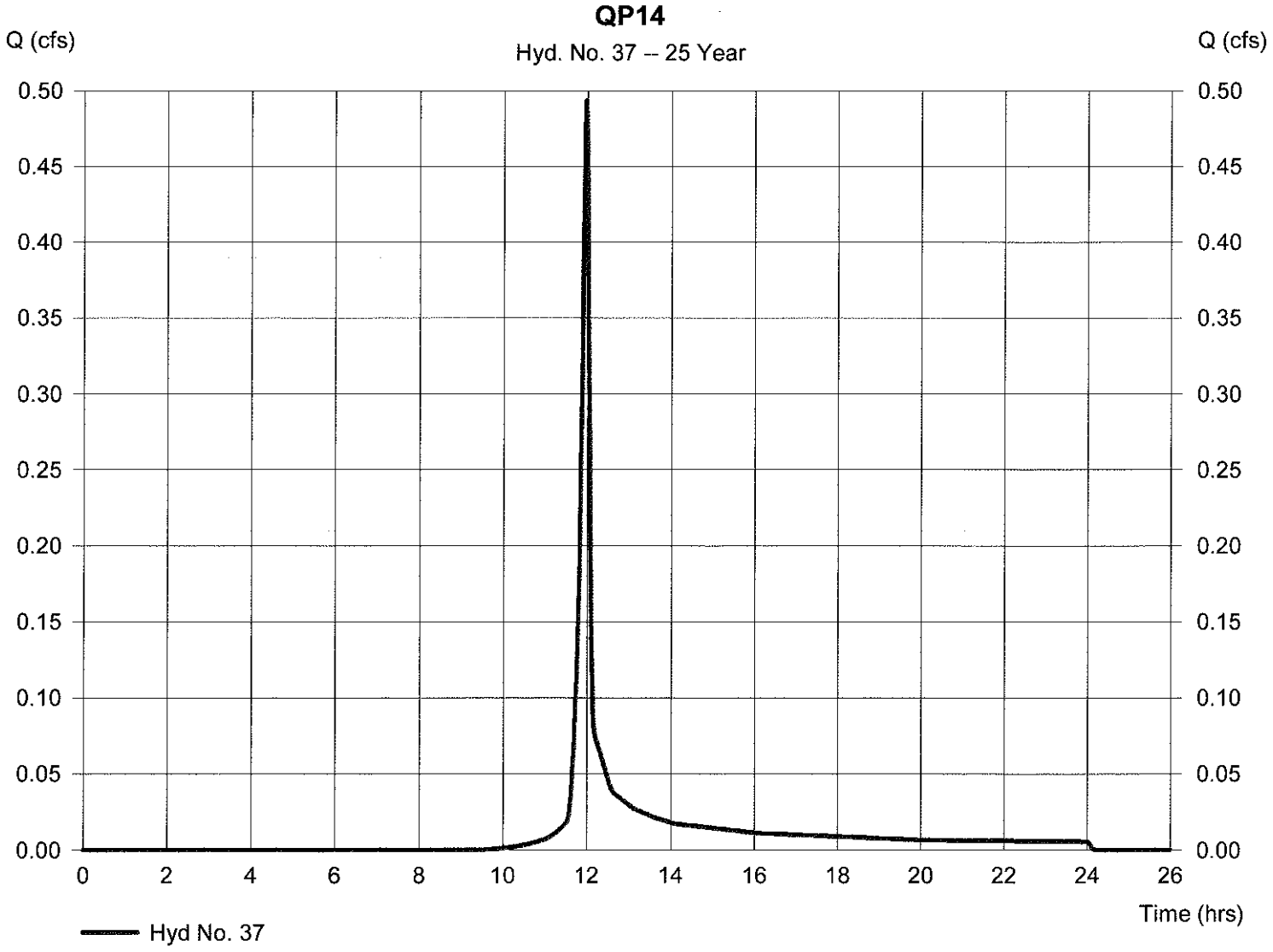


Hydrograph Report

Hyd. No. 37

QP14

Hydrograph type	= SCS Runoff	Peak discharge	= 0.494 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 1,042 cuft
Drainage area	= 0.260 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.20 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

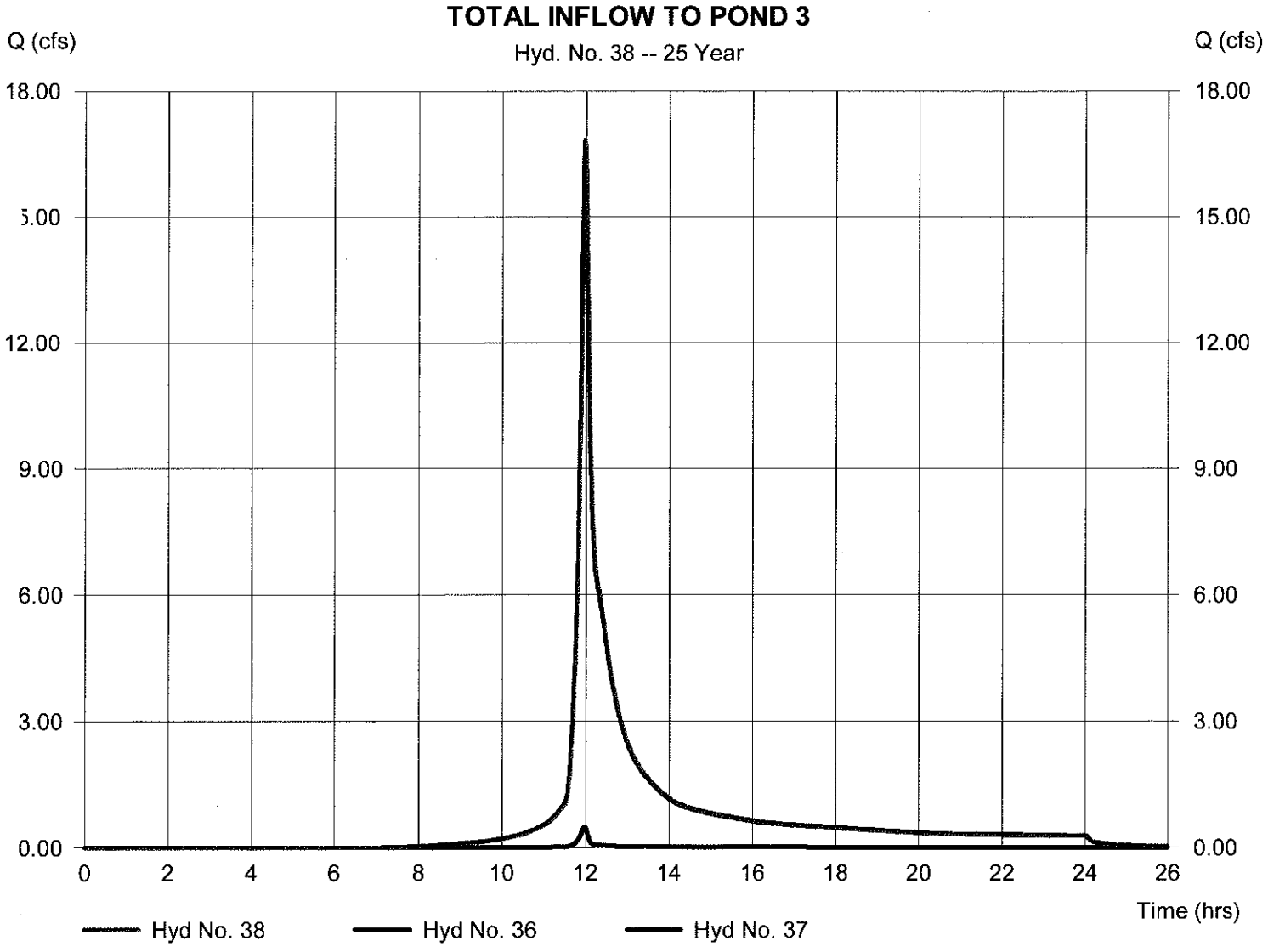


Hydrograph Report

Hyd. No. 38

TOTAL INFLOW TO POND 3

Hydrograph type	= Combine	Peak discharge	= 16.83 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 60,152 cuft
Inflow hyds.	= 36, 37	Contrib. drain. area	= 0.260 ac



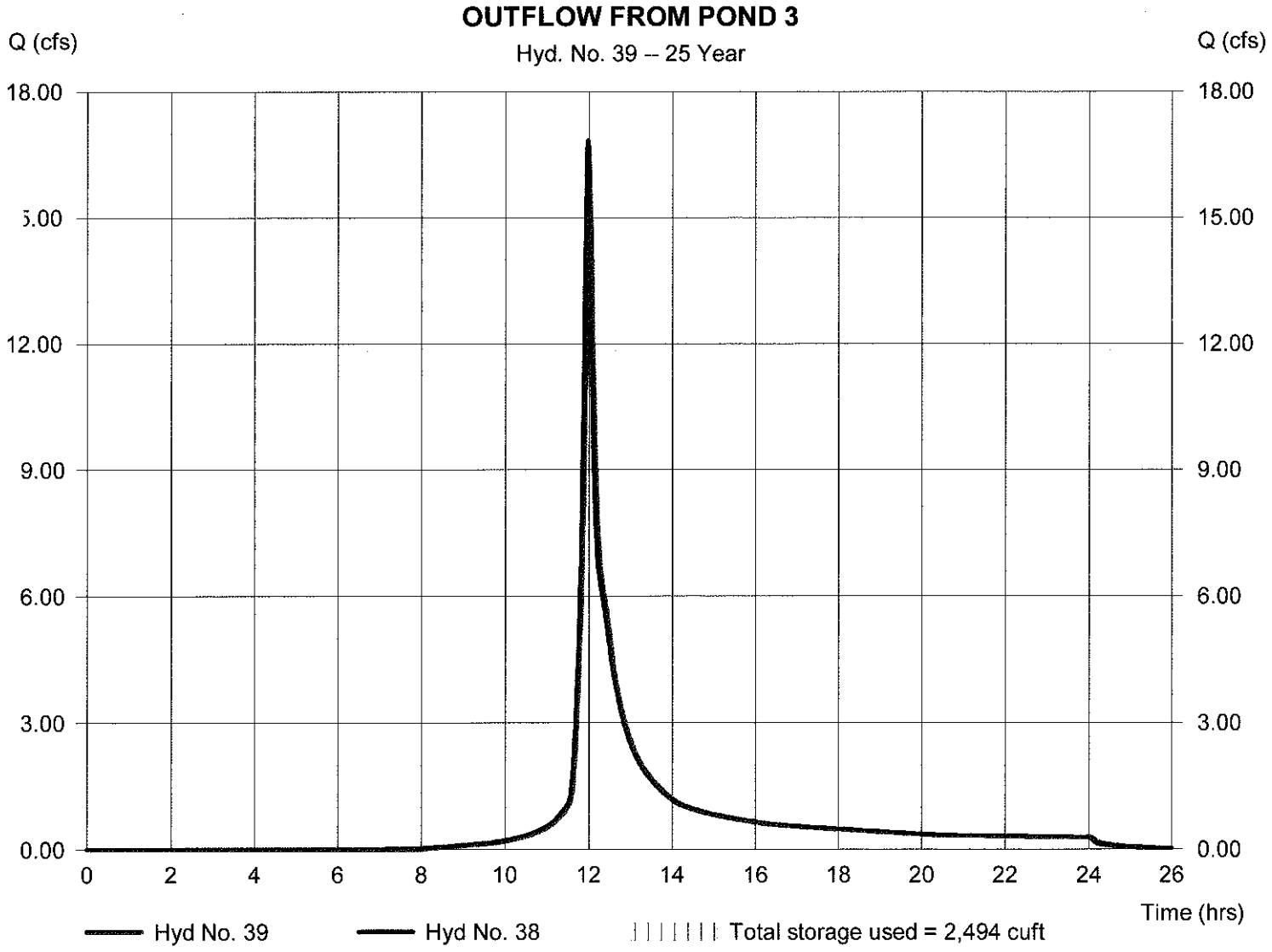
Hydrograph Report

Hyd. No. 39

OUTFLOW FROM POND 3

Hydrograph type	= Reservoir	Peak discharge	= 15.70 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 60,071 cuft
Inflow hyd. No.	= 38 - TOTAL INFLOW TO POND 3	Max. Elevation	= 6423.09 ft
Reservoir name	= POND 3	Max. Storage	= 2,494 cuft

Storage Indication method used.



Pond Report

Pond No. 3 - POND 3

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 6421.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6421.00	470	0	0
1.00	6422.00	1,135	803	803
2.00	6423.00	1,854	1,495	2,297
3.00	6424.00	2,625	2,240	4,537

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	0.00	0.00	4.00
Span (in)	= 18.00	0.00	0.00	4.00
No. Barrels	= 1	0	0	2
Invert El. (ft)	= 6421.00	0.00	0.00	6421.10
Length (ft)	= 63.57	0.00	0.00	0.10
Slope (%)	= 17.85	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	20.00	0.00	0.00
Crest El. (ft)	= 6423.60	6423.90	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No
Exfil.(in/hr)	= 0.000 (by Contour)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

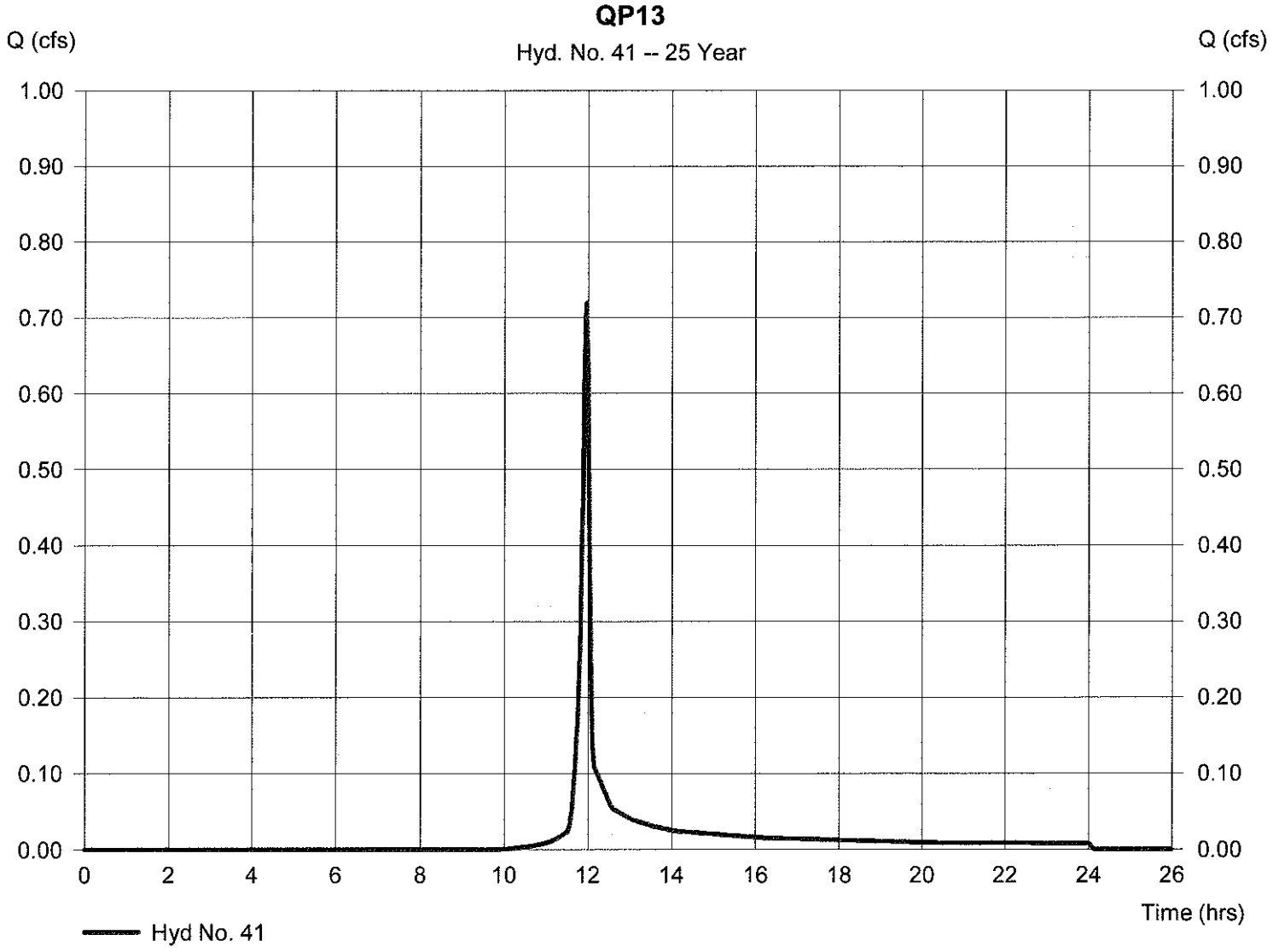
Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	6421.00	0.00	---	---	0.00	0.00	0.00	---	---	---	---	0.000
0.10	80	6421.10	0.00	---	---	0.00	0.00	0.00	---	---	---	---	0.000
0.20	161	6421.20	0.00	---	---	0.18	0.00	0.00	---	---	---	---	0.177
0.30	241	6421.30	0.00	---	---	0.50	0.00	0.00	---	---	---	---	0.502
0.40	321	6421.40	0.00	---	---	0.92	0.00	0.00	---	---	---	---	0.922
0.50	401	6421.50	0.00	---	---	1.42	0.00	0.00	---	---	---	---	1.419
0.60	482	6421.60	0.00	---	---	1.98	0.00	0.00	---	---	---	---	1.983
0.70	562	6421.70	0.00	---	---	2.61	0.00	0.00	---	---	---	---	2.607
0.80	642	6421.80	0.00	---	---	3.29	0.00	0.00	---	---	---	---	3.286
0.90	722	6421.90	0.00	---	---	4.01	0.00	0.00	---	---	---	---	4.014
1.00	803	6422.00	0.00	---	---	4.78	0.00	0.00	---	---	---	---	4.782
1.10	952	6422.10	0.00	---	---	5.60	0.00	0.00	---	---	---	---	5.602
1.20	1,101	6422.20	0.00	---	---	6.46	0.00	0.00	---	---	---	---	6.464
1.30	1,251	6422.30	0.00	---	---	7.37	0.00	0.00	---	---	---	---	7.366
1.40	1,400	6422.40	0.00	---	---	8.31	0.00	0.00	---	---	---	---	8.306
1.50	1,550	6422.50	0.00	---	---	9.28	0.00	0.00	---	---	---	---	9.283
1.60	1,699	6422.60	0.00	---	---	10.30	0.00	0.00	---	---	---	---	10.30
1.70	1,849	6422.70	0.00	---	---	11.34	0.00	0.00	---	---	---	---	11.34
1.80	1,998	6422.80	0.00	---	---	12.42	0.00	0.00	---	---	---	---	12.42
1.90	2,148	6422.90	0.00	---	---	13.54	0.00	0.00	---	---	---	---	13.54
2.00	2,297	6423.00	0.00	---	---	14.67	0.00	0.00	---	---	---	---	14.67
2.10	2,521	6423.10	0.00	---	---	15.84	0.00	0.00	---	---	---	---	15.84
2.20	2,745	6423.20	0.00	---	---	17.05	0.00	0.00	---	---	---	---	17.05
2.30	2,969	6423.30	0.00	---	---	18.28	0.00	0.00	---	---	---	---	18.28
2.40	3,193	6423.40	0.00	---	---	19.54	0.00	0.00	---	---	---	---	19.54
2.50	3,417	6423.50	0.00	---	---	20.83	0.00	0.00	---	---	---	---	20.83
2.60	3,641	6423.60	0.00 ic	---	---	22.15	0.00	0.00	---	---	---	---	22.15
2.70	3,865	6423.70	0.52 ic	---	---	23.49	0.50	0.00	---	---	---	---	23.99
2.80	4,089	6423.80	1.42 ic	---	---	24.86	1.41	0.00	---	---	---	---	26.27
2.90	4,313	6423.90	2.59 ic	---	---	26.26	2.59	0.00	---	---	---	---	28.85
3.00	4,537	6424.00	3.97 ic	---	---	27.66	3.97	1.65	---	---	---	---	33.28

Hydrograph Report

Hyd. No. 41

QP13

Hydrograph type	= SCS Runoff	Peak discharge	= 0.720 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,445 cuft
Drainage area	= 0.360 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

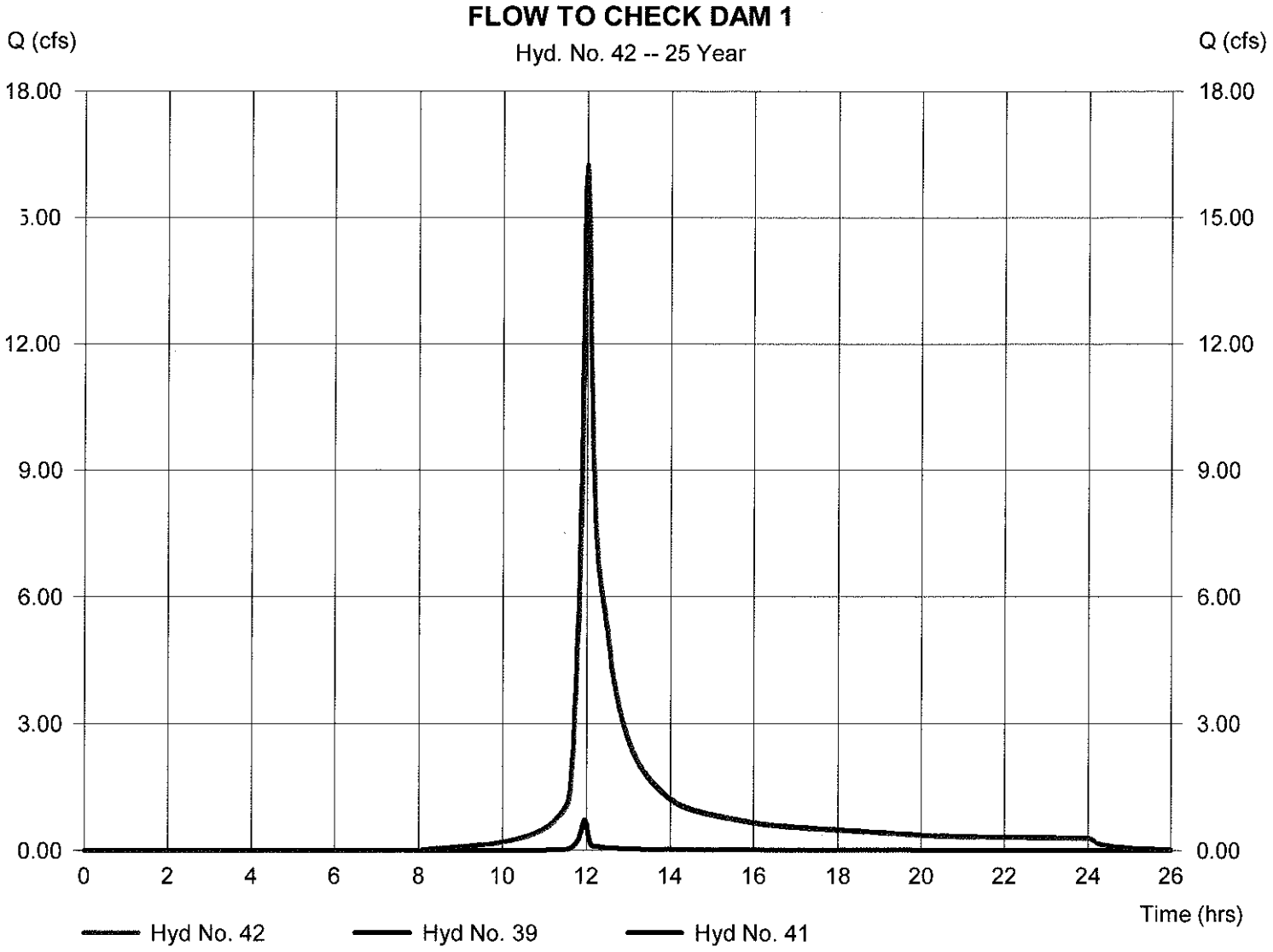


Hydrograph Report

Hyd. No. 42

FLOW TO CHECK DAM 1

Hydrograph type	= Combine	Peak discharge	= 16.25 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 61,516 cuft
Inflow hyds.	= 39, 41	Contrib. drain. area	= 0.360 ac

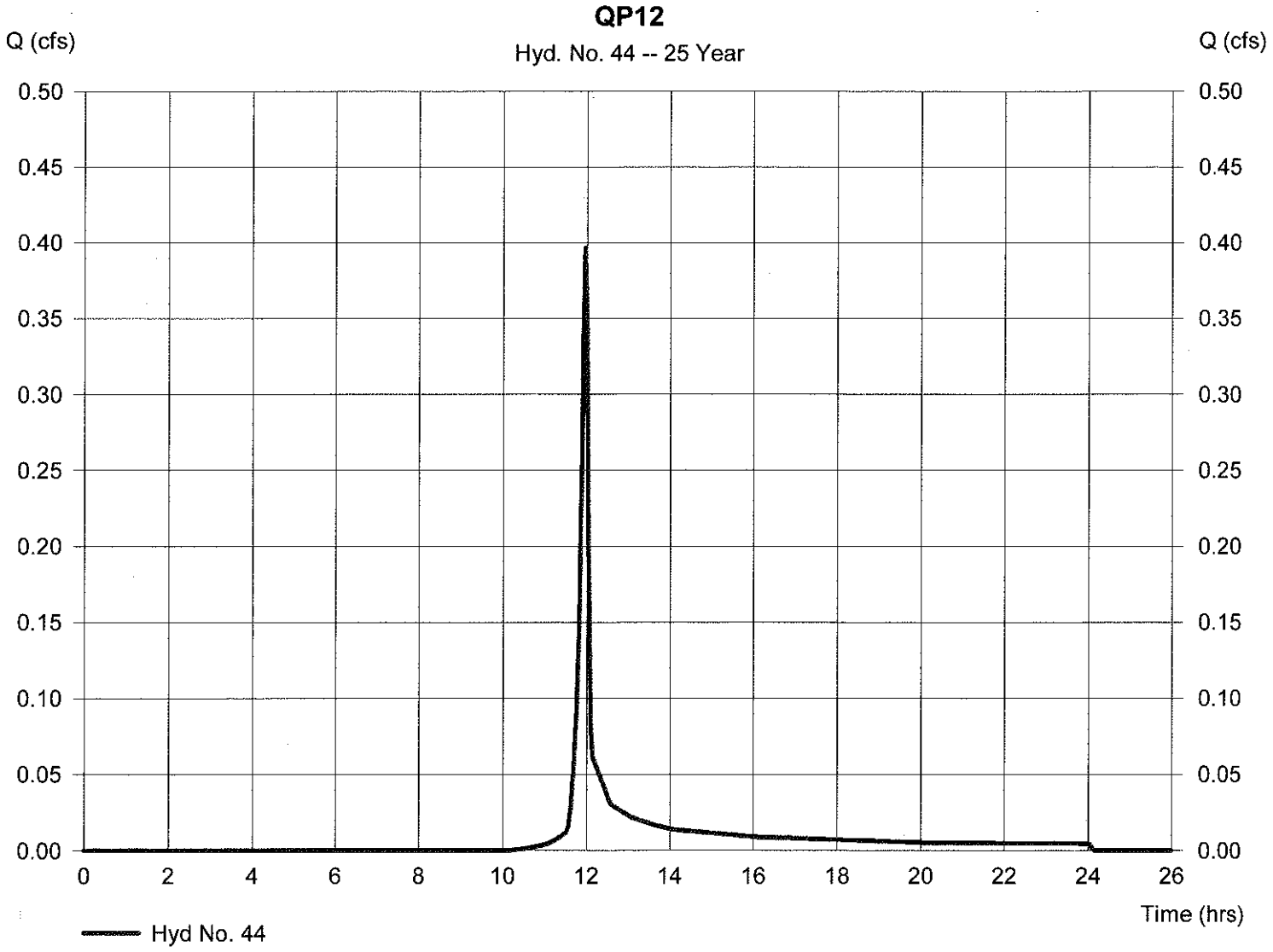


Hydrograph Report

Hyd. No. 44

QP12

Hydrograph type	= SCS Runoff	Peak discharge	= 0.397 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 797 cuft
Drainage area	= 0.210 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

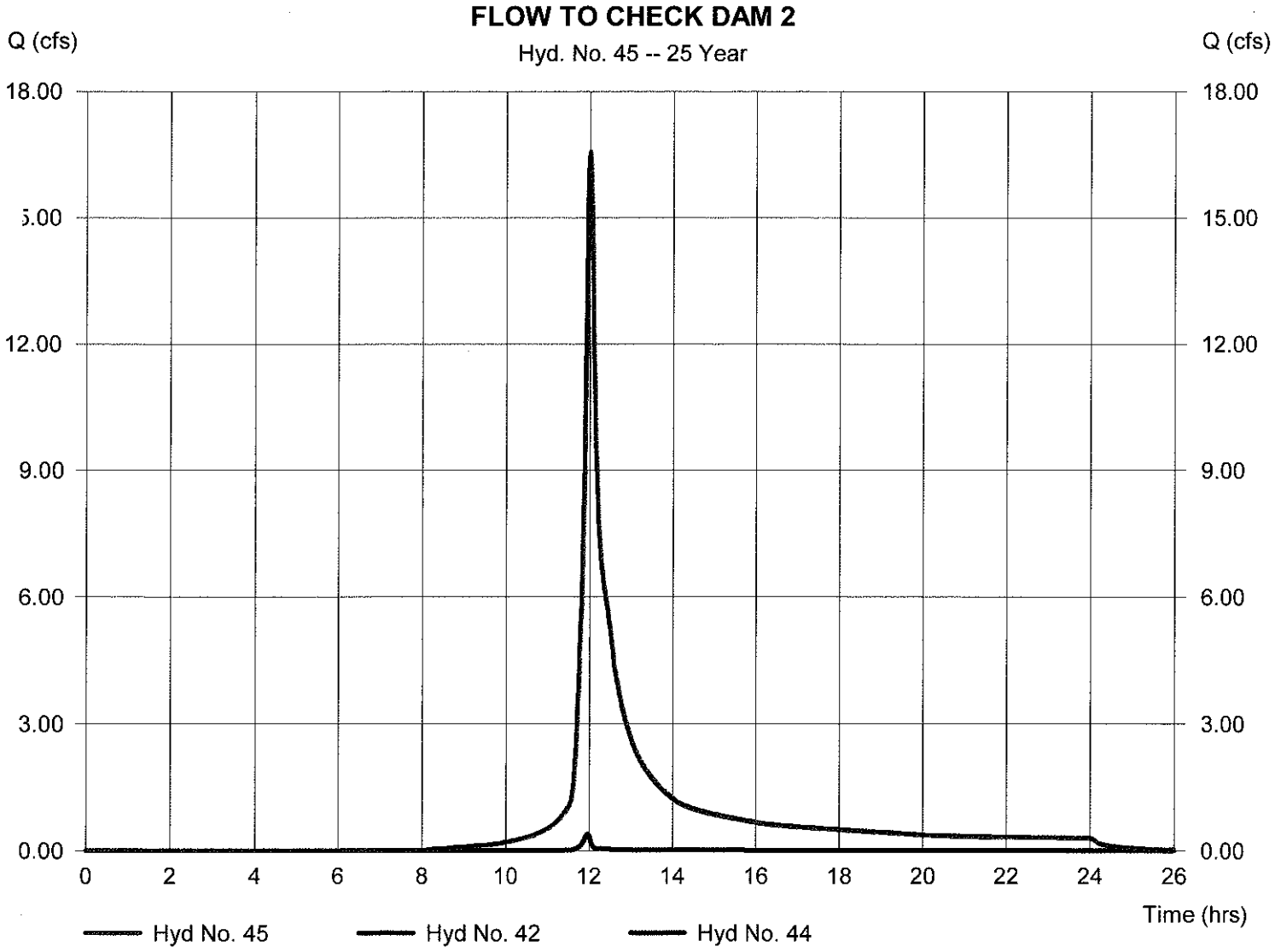


Hydrograph Report

Hyd. No. 45

FLOW TO CHECK DAM 2

Hydrograph type	= Combine	Peak discharge	= 16.56 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 62,313 cuft
Inflow hyds.	= 42, 44	Contrib. drain. area	= 0.210 ac

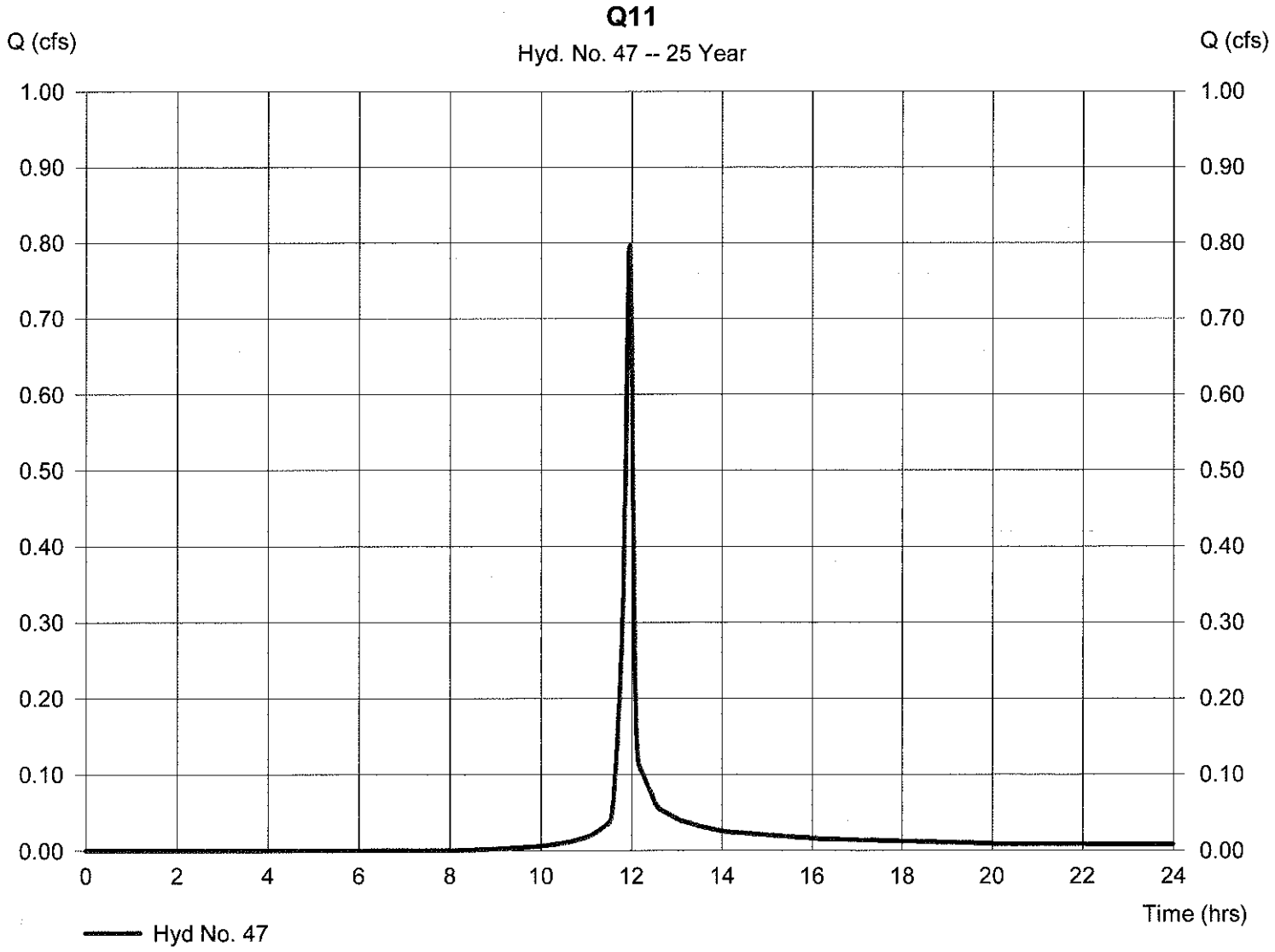


Hydrograph Report

Hyd. No. 47

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 0.797 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,619 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

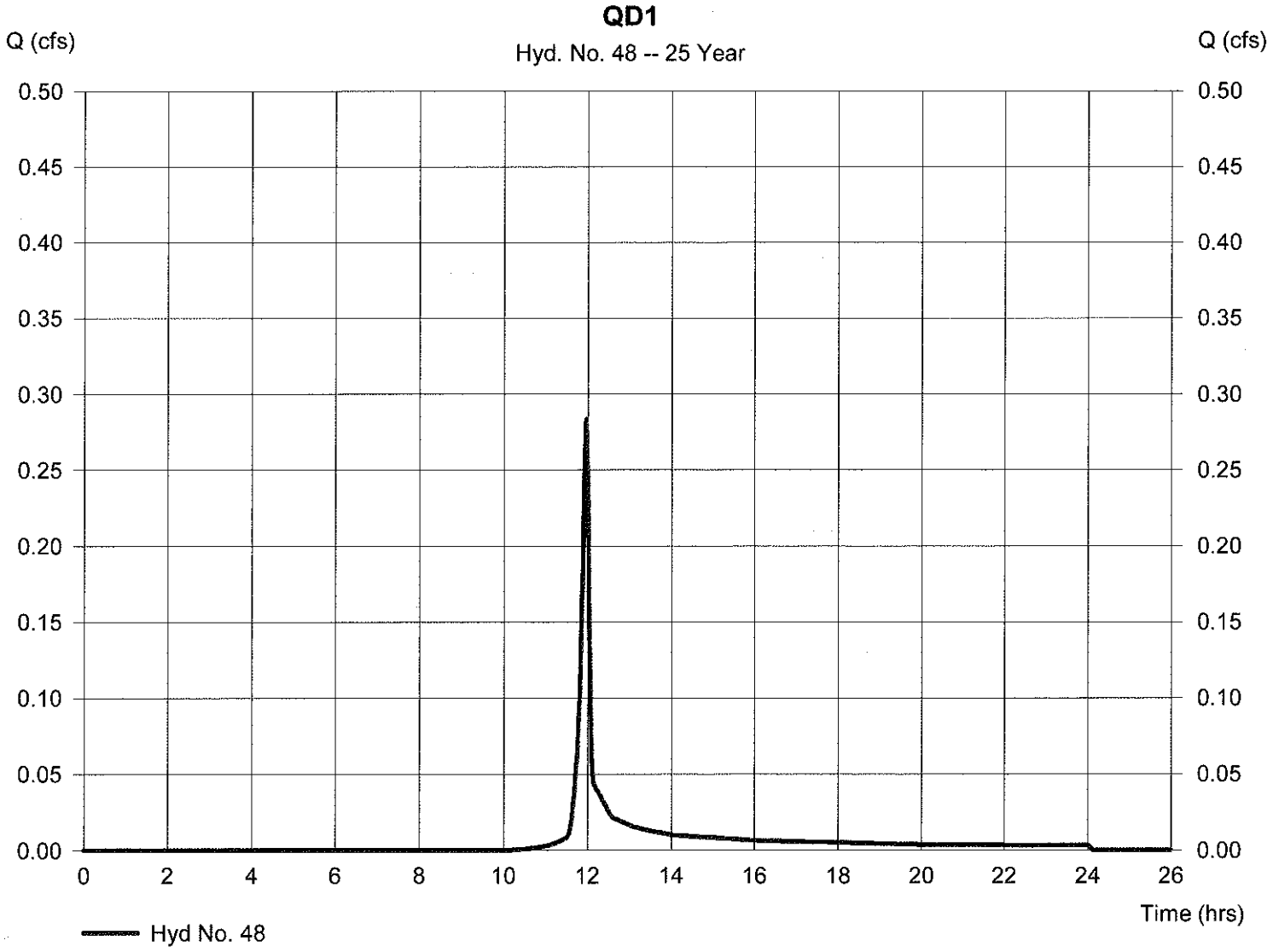


Hydrograph Report

Hyd. No. 48

QD1

Hydrograph type	= SCS Runoff	Peak discharge	= 0.284 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 570 cuft
Drainage area	= 0.150 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

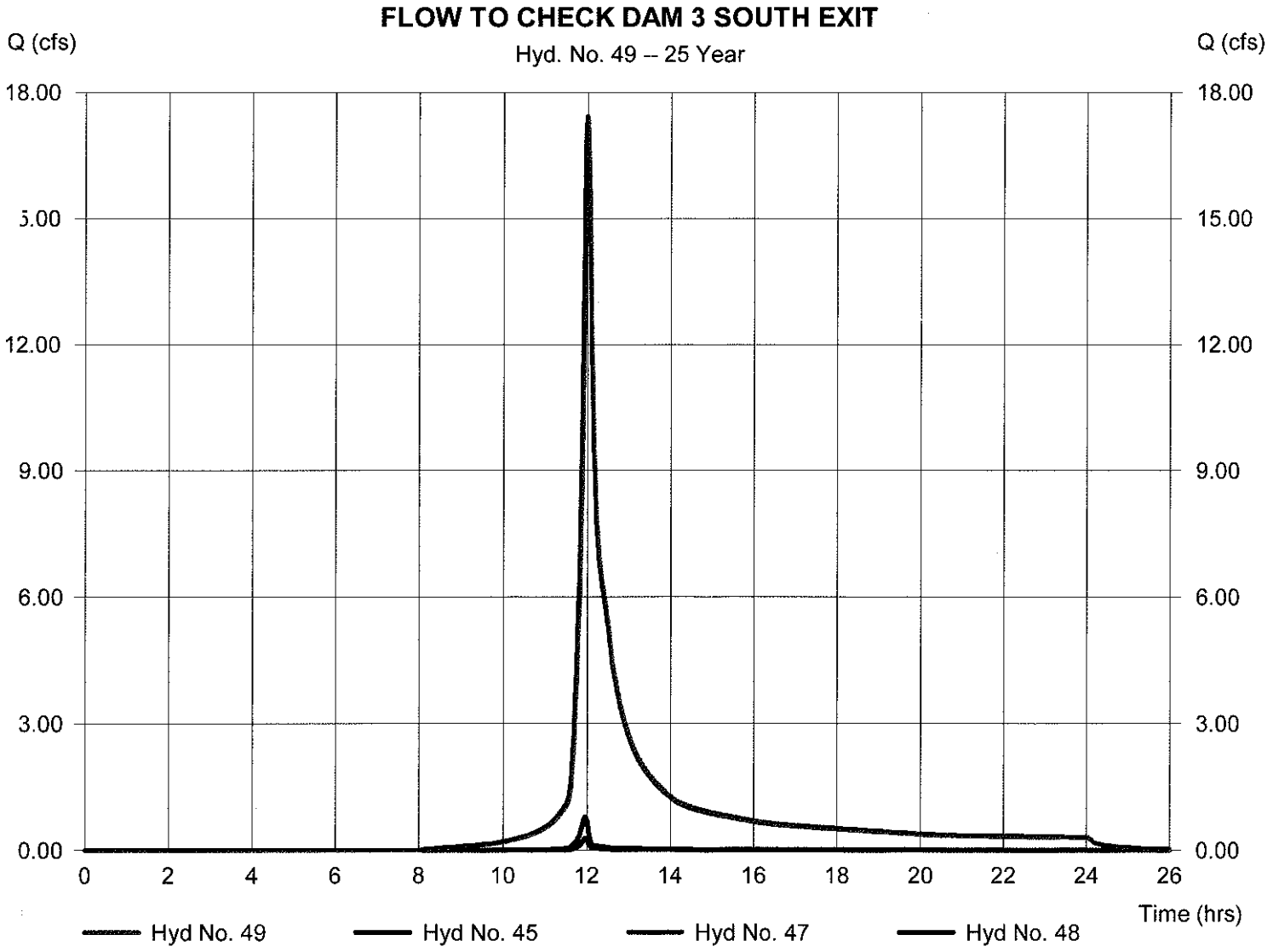


Hydrograph Report

Hyd. No. 49

FLOW TO CHECK DAM 3 SOUTH EXIT

Hydrograph type	= Combine	Peak discharge	= 17.42 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 64,502 cuft
Inflow hyds.	= 45, 47, 48	Contrib. drain. area	= 0.460 ac

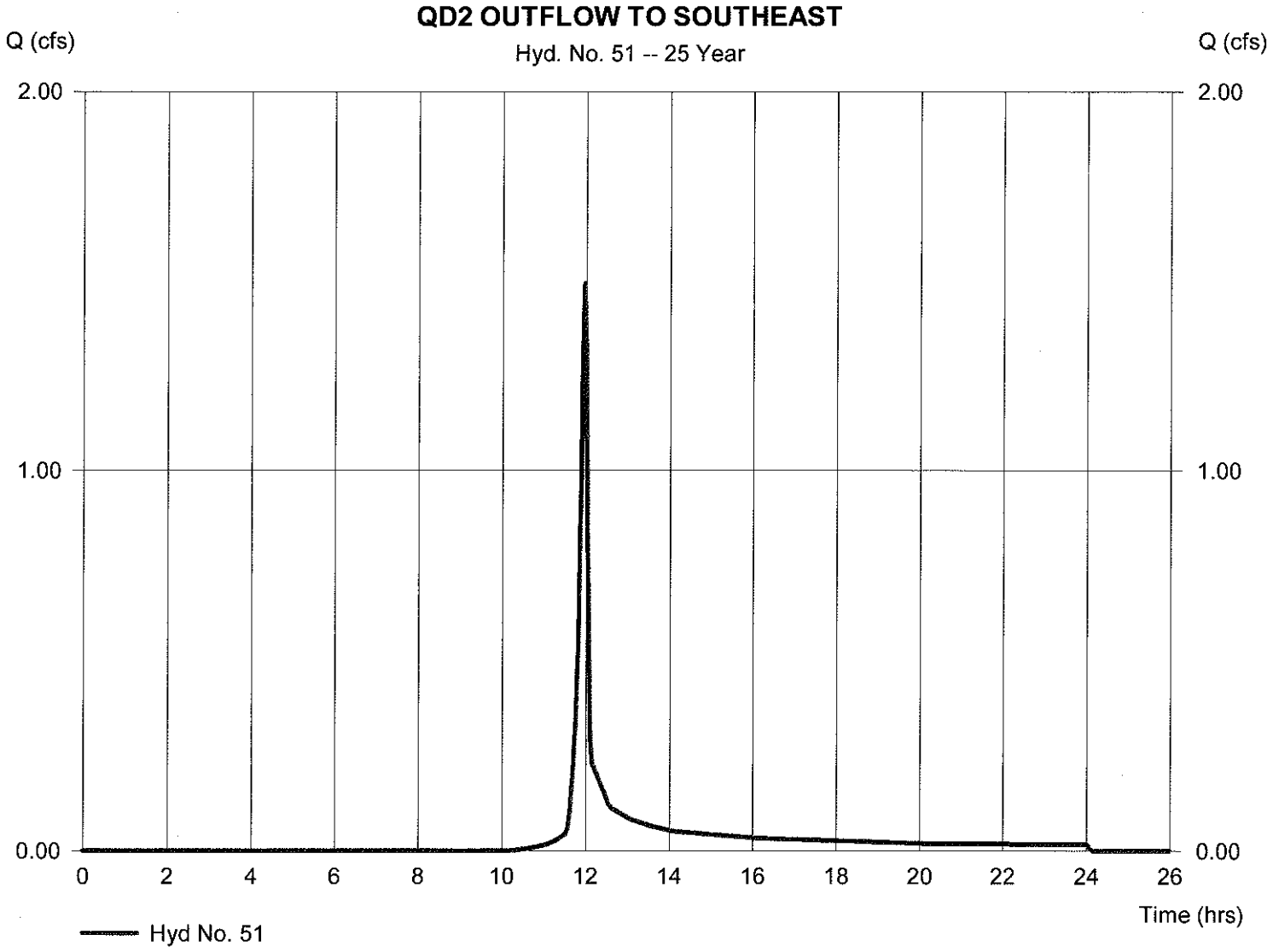


Hydrograph Report

Hyd. No. 51

QD2 OUTFLOW TO SOUTHEAST

Hydrograph type	= SCS Runoff	Peak discharge	= 1.493 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 3,000 cuft
Drainage area	= 0.790 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

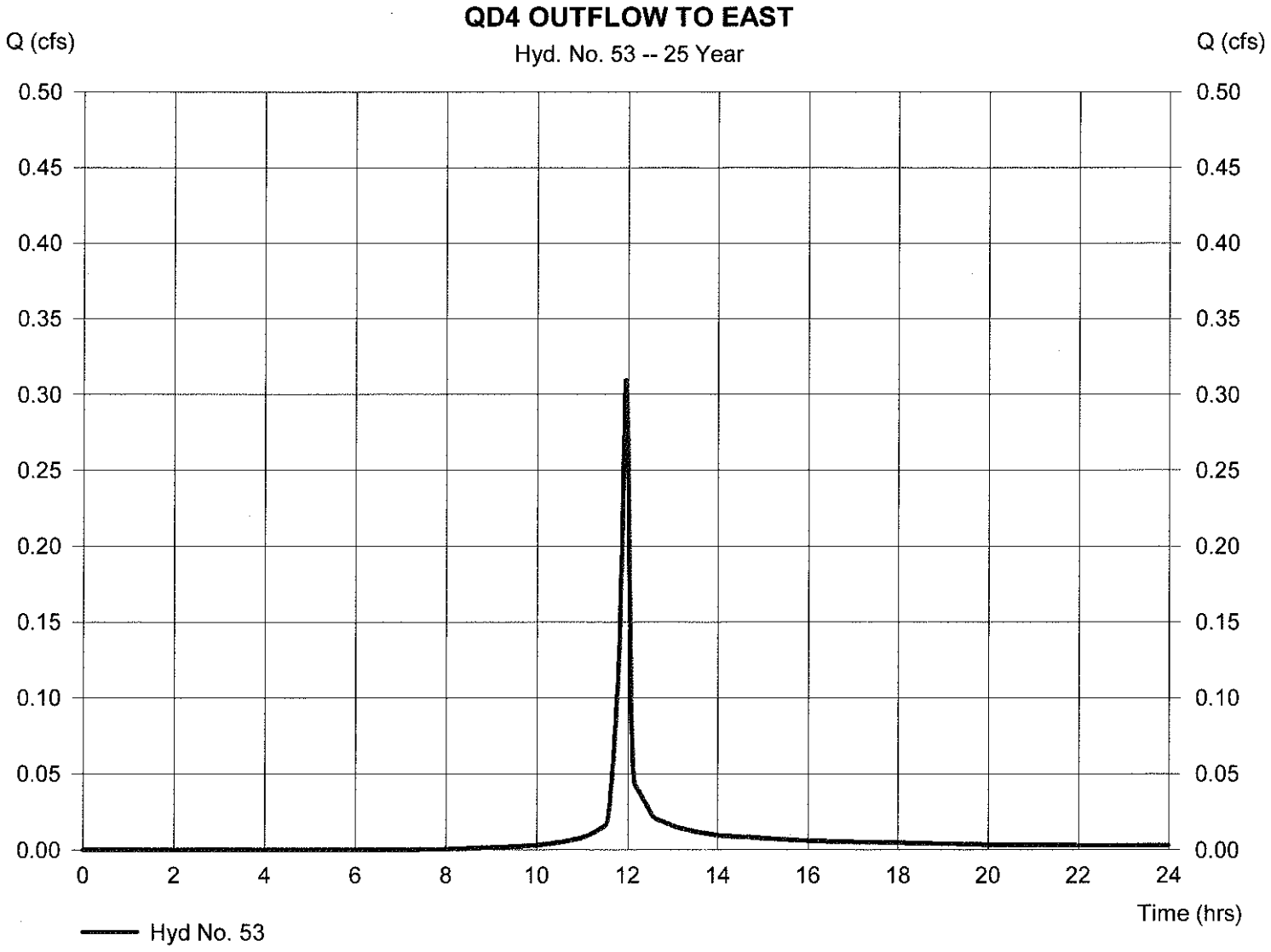


Hydrograph Report

Hyd. No. 53

QD4 OUTFLOW TO EAST

Hydrograph type	= SCS Runoff	Peak discharge	= 0.309 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 635 cuft
Drainage area	= 0.110 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.117	1	726	13,731	------	------	------	QD7
2	Reach	4.115	1	728	13,729	1	------	------	FLOW FROM OFFSITE
3	SCS Runoff	1.565	1	721	3,976	------	------	------	QP24
4	Combine	5.256	1	725	17,704	2, 3	------	------	FLOW FROM QD7 AND QP24
5	SCS Runoff	3.139	1	718	6,798	------	------	------	QP23
6	Combine	7.436	1	721	24,502	4, 5	------	------	FLOW FROM QP24 AND QP23
7	SCS Runoff	0.603	1	717	1,265	------	------	------	QP25
8	Combine	7.944	1	720	25,767	6, 7	------	------	FLOW ON WEST SIDE OF ROAD T
9	SCS Runoff	2.098	1	718	5,001	------	------	------	QP22
10	Combine	9.925	1	719	30,768	8, 9	------	------	INFLOW TO POND 1
12	SCS Runoff	1.582	1	718	3,254	------	------	------	QP26
13	Reach	1.536	1	719	3,252	12	------	------	INFLOW TO POND 1
14	SCS Runoff	0.522	1	719	1,101	------	------	------	QP20
15	Combine	11.98	1	719	35,122	10, 13, 14	------	------	TOTAL FLOW TO POND 1
16	Reservoir	5.633	1	731	34,900	15	6437.16	9,173	OUTFLOW FROM POND 1
18	SCS Runoff	1.296	1	719	2,971	------	------	------	QP27
19	SCS Runoff	0.241	1	717	530	------	------	------	QP21
20	Combine	5.968	1	725	37,300	16, 18, 19	------	------	ROAD FLOW
22	SCS Runoff	1.825	1	719	4,165	------	------	------	QP28
23	SCS Runoff	1.867	1	718	3,839	------	------	------	QP19
24	Combine	8.852	1	720	45,305	20, 22, 23	------	------	ROAD FLOW
26	SCS Runoff	1.715	1	720	4,175	------	------	------	QP29
27	SCS Runoff	2.152	1	718	4,425	------	------	------	QP18
28	Combine	12.46	1	719	53,905	24, 26, 27	------	------	ROAD FLOW
30	SCS Runoff	2.116	1	720	5,199	------	------	------	QP30
31	SCS Runoff	1.801	1	720	4,427	------	------	------	QP17
32	Combine	16.33	1	720	63,531	28, 30, 31	------	------	ROAD FLOW SOUTH OF ROJOS
34	SCS Runoff	1.646	1	717	3,404	------	------	------	QP16
35	SCS Runoff	1.489	1	717	3,125	------	------	------	QP15
[illegible]	Combine	19.26	1	719	70,060	32, 34, 35	------	------	INFLOW TO POND 3
37	SCS Runoff	0.598	1	719	1,265	------	------	------	QP14

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

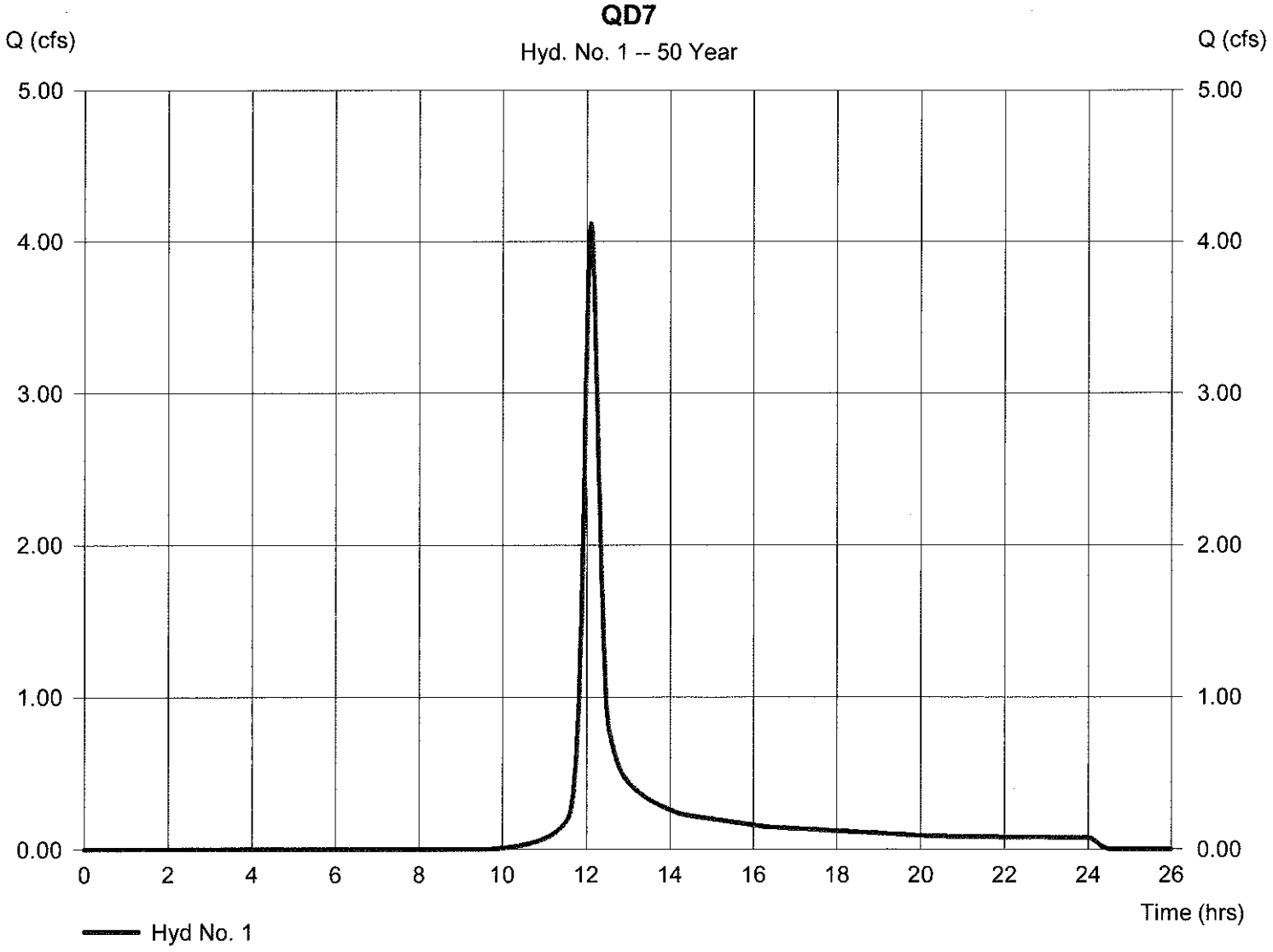
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
38	Combine	19.86	1	719	71,324	36, 37	------	------	TOTAL INFLOW TO POND 3
39	Reservoir	18.39	1	721	71,244	38	6423.31	2,988	OUTFLOW FROM POND 3
41	SCS Runoff	0.877	1	718	1,763	------	------	------	QP13
42	Combine	19.06	1	721	73,007	39, 41	------	------	FLOW TO CHECK DAM 1
44	SCS Runoff	0.487	1	718	978	------	------	------	QP12
45	Combine	19.43	1	721	73,986	42, 44	------	------	FLOW TO CHECK DAM 2
47	SCS Runoff	0.943	1	718	1,927	------	------	------	Q11
48	SCS Runoff	0.348	1	718	699	------	------	------	QD1
49	Combine	20.40	1	721	76,612	45, 47, 48	------	------	FLOW TO CHECK DAM 3 SOUTH E
51	SCS Runoff	1.833	1	718	3,681	------	------	------	QD2 OUTFLOW TO SOUTHEAST
53	SCS Runoff	0.362	1	717	749	------	------	------	QD4 OUTFLOW TO EAST

Hydrograph Report

Hyd. No. 1

QD7

Hydrograph type	= SCS Runoff	Peak discharge	= 4.117 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 13,731 cuft
Drainage area	= 3.010 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



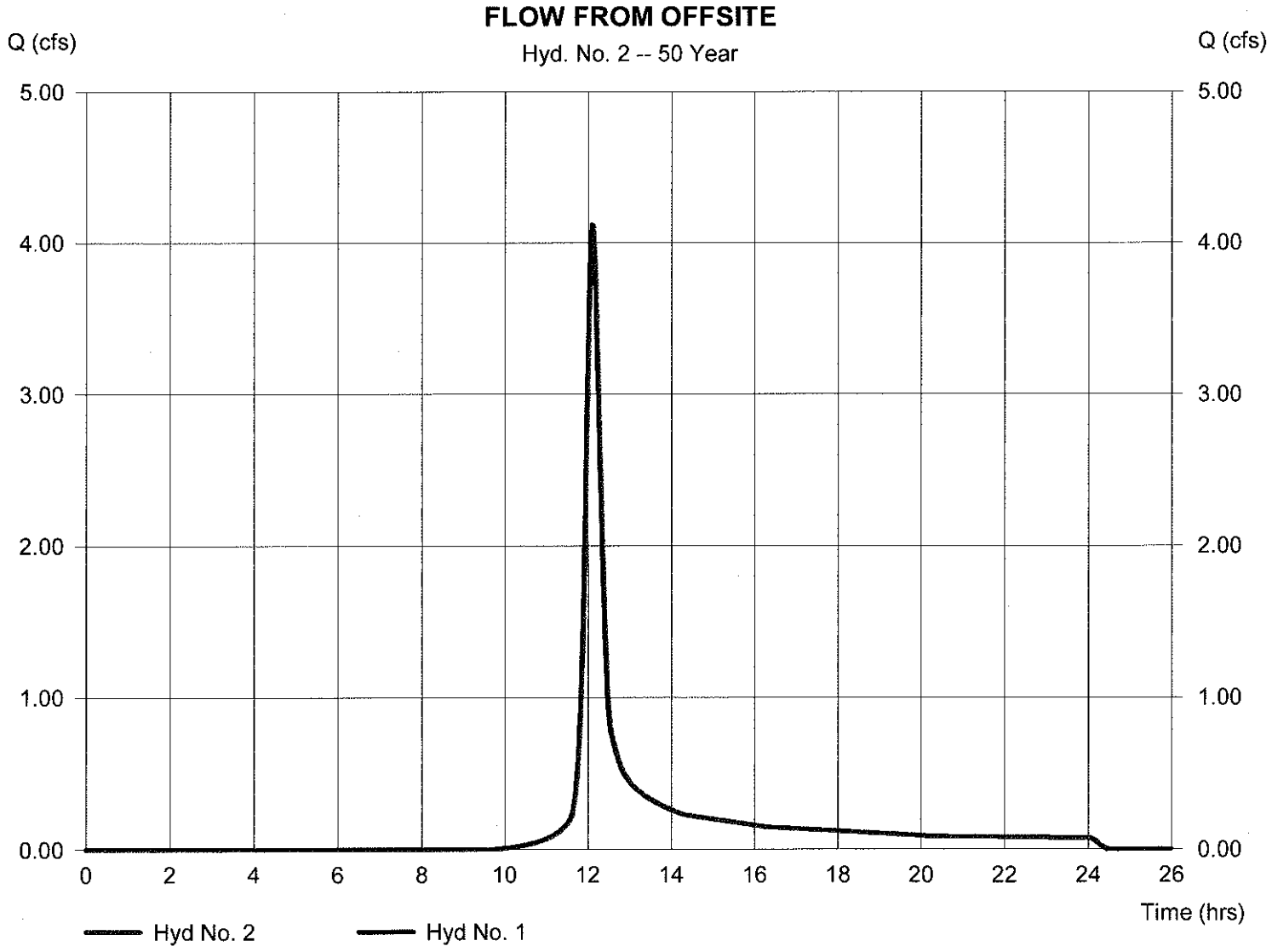
Hydrograph Report

Hyd. No. 2

FLOW FROM OFFSITE

Hydrograph type	= Reach	Peak discharge	= 4.115 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 13,729 cuft
Inflow hyd. No.	= 1 - QD7	Section type	= Circular
Reach length	= 113.8 ft	Channel slope	= 1.0 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 3.441	Rating curve m	= 1.250
Ave. velocity	= 2.33 ft/s	Routing coeff.	= 0.8687

Modified Att-Kin routing method used.

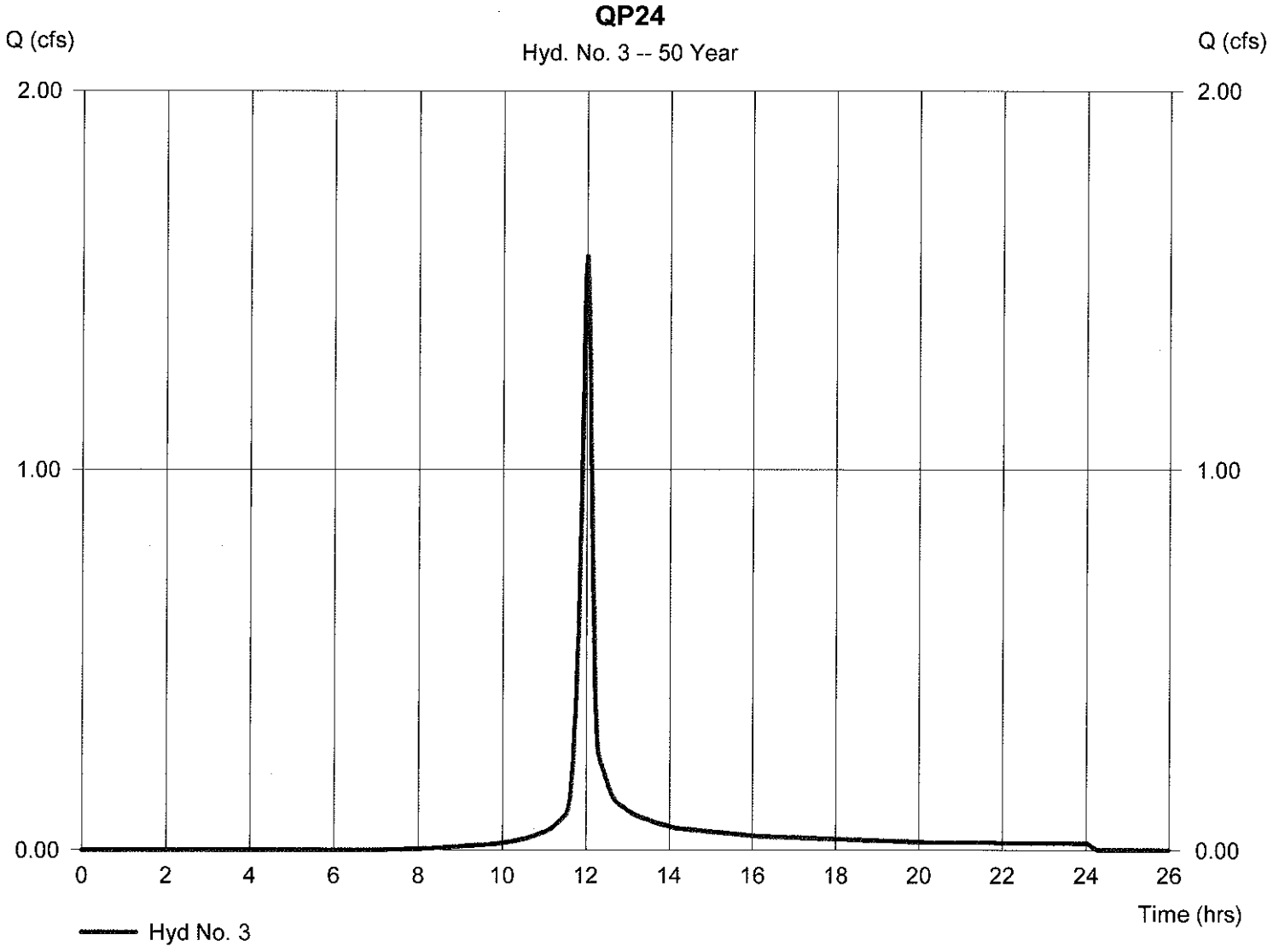


Hydrograph Report

Hyd. No. 3

QP24

Hydrograph type	= SCS Runoff	Peak discharge	= 1.565 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 3,976 cuft
Drainage area	= 0.640 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

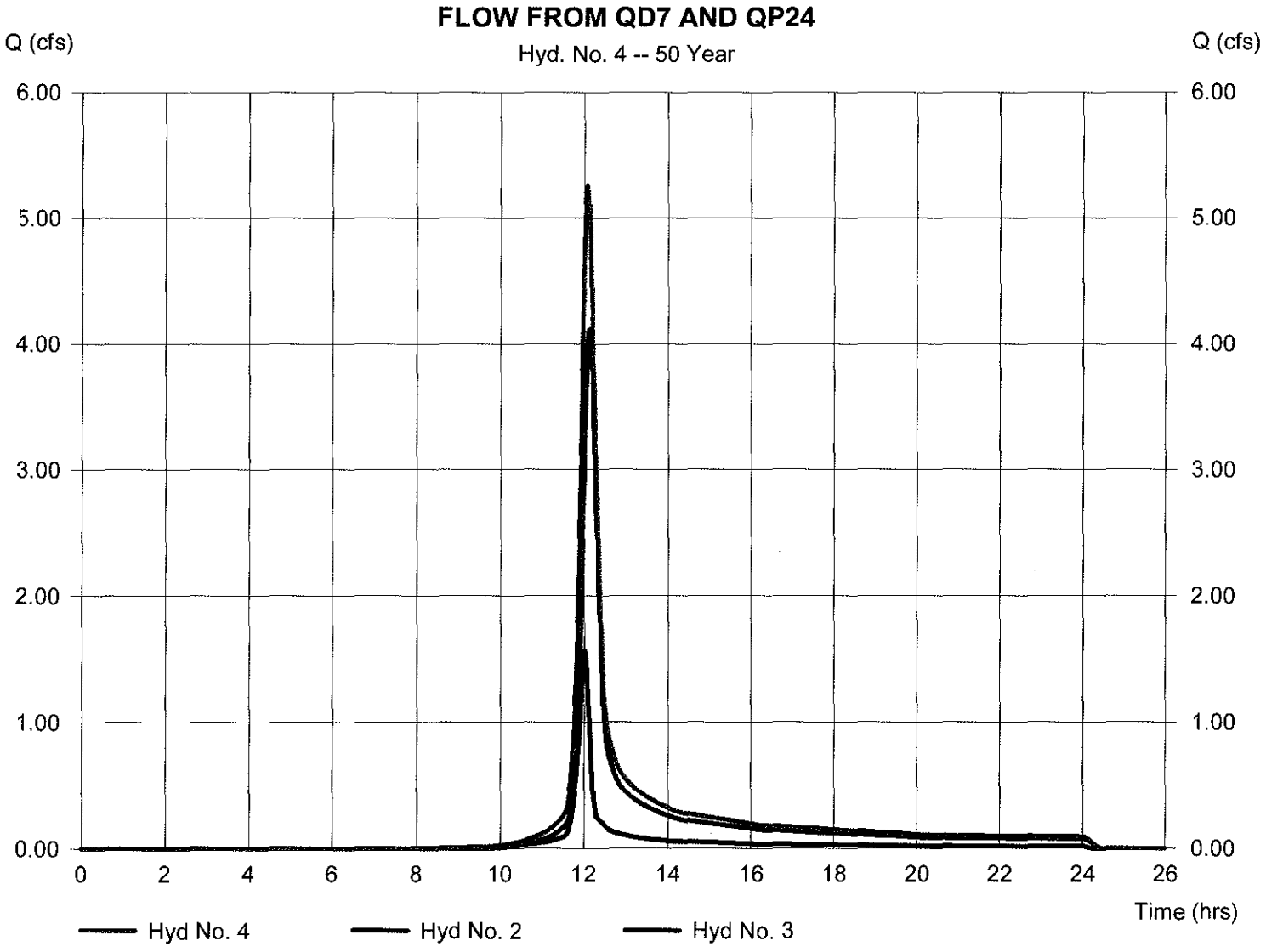


Hydrograph Report

Hyd. No. 4

FLOW FROM QD7 AND QP24

Hydrograph type	= Combine	Peak discharge	= 5.256 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 17,704 cuft
Inflow hyds.	= 2, 3	Contrib. drain. area	= 0.640 ac

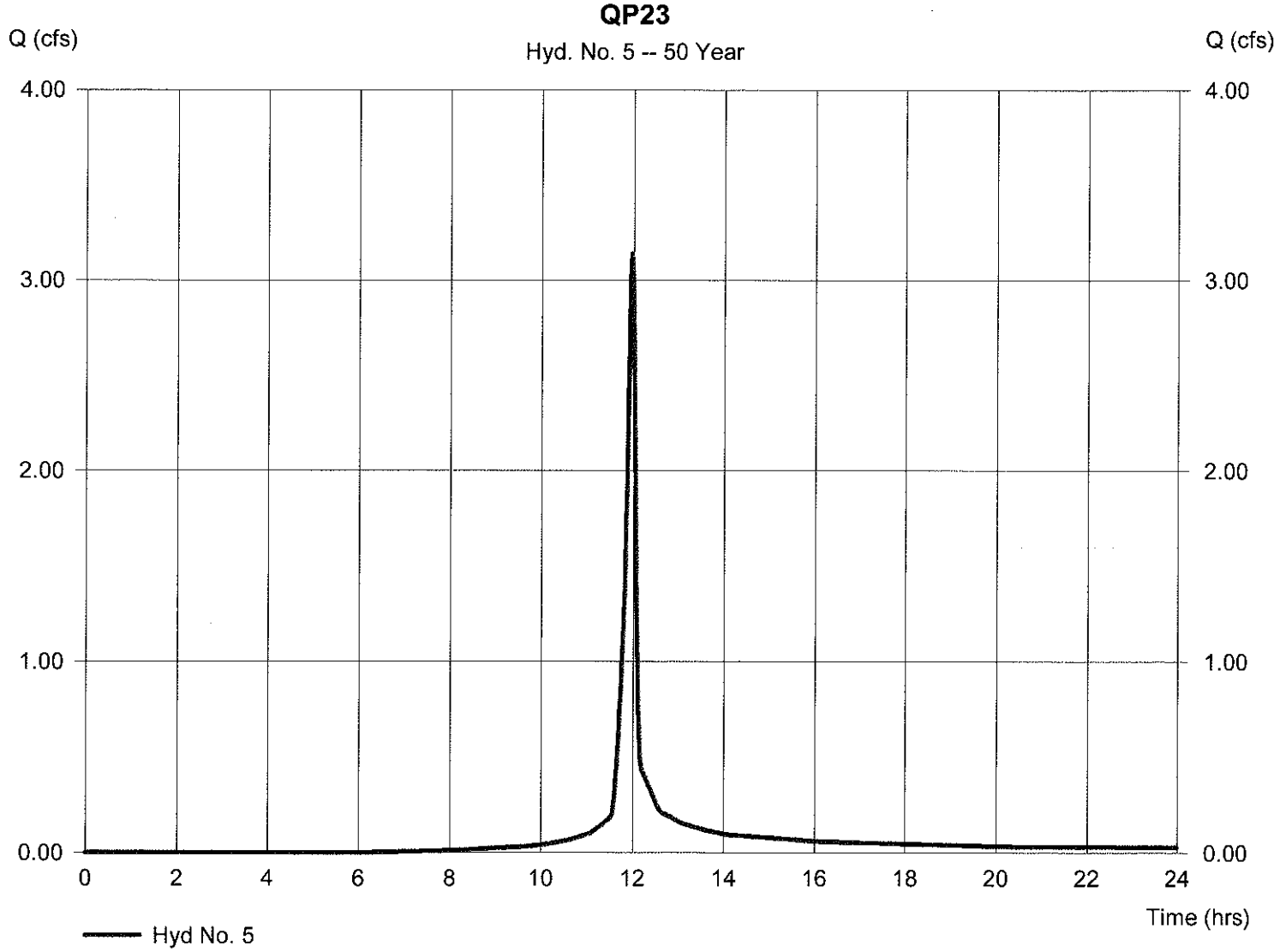


Hydrograph Report

Hyd. No. 5

QP23

Hydrograph type	= SCS Runoff	Peak discharge	= 3.139 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 6,798 cuft
Drainage area	= 1.010 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.32 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

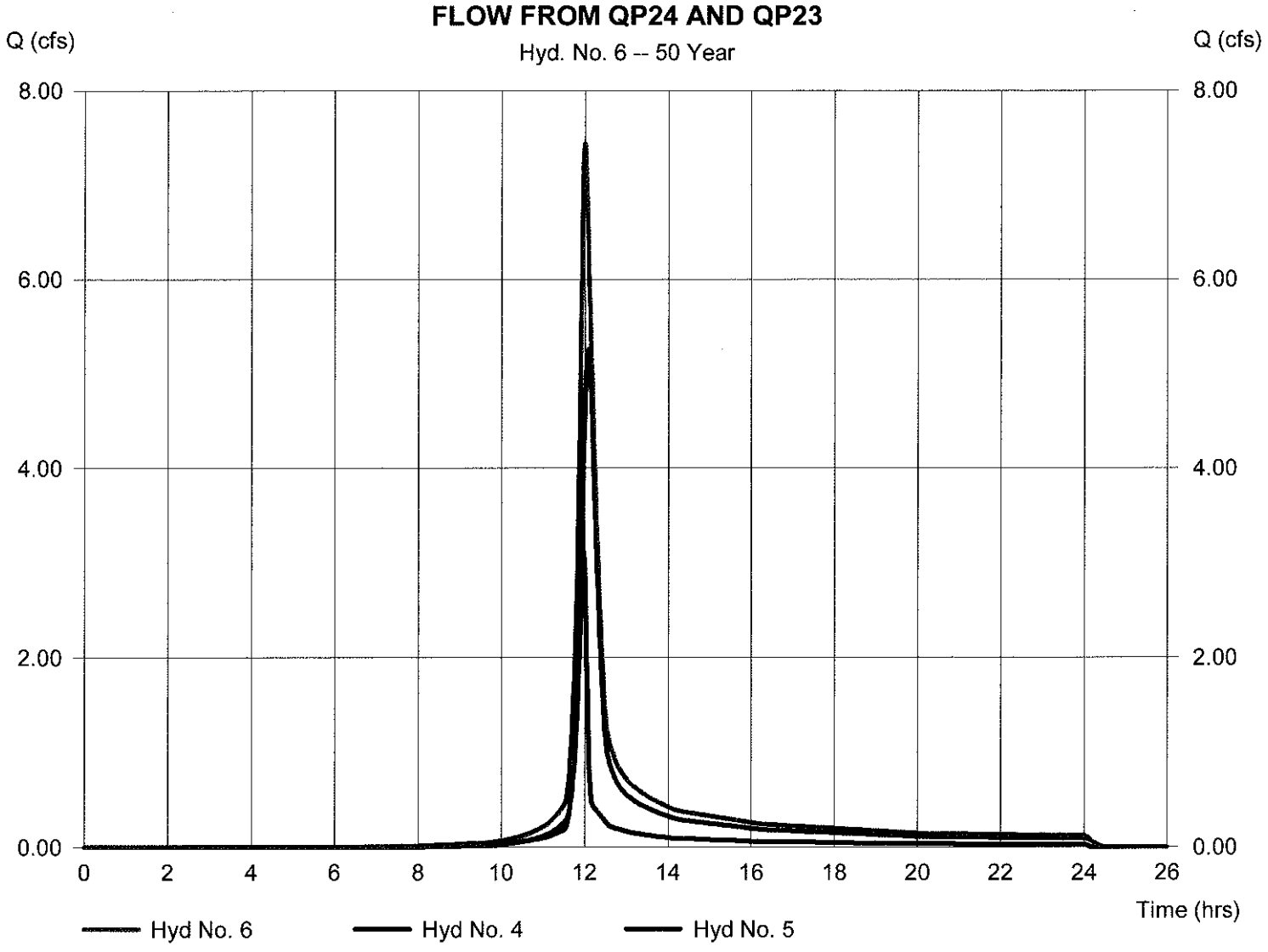


Hydrograph Report

Hyd. No. 6

FLOW FROM QP24 AND QP23

Hydrograph type	= Combine	Peak discharge	= 7.436 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 24,502 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 1.010 ac

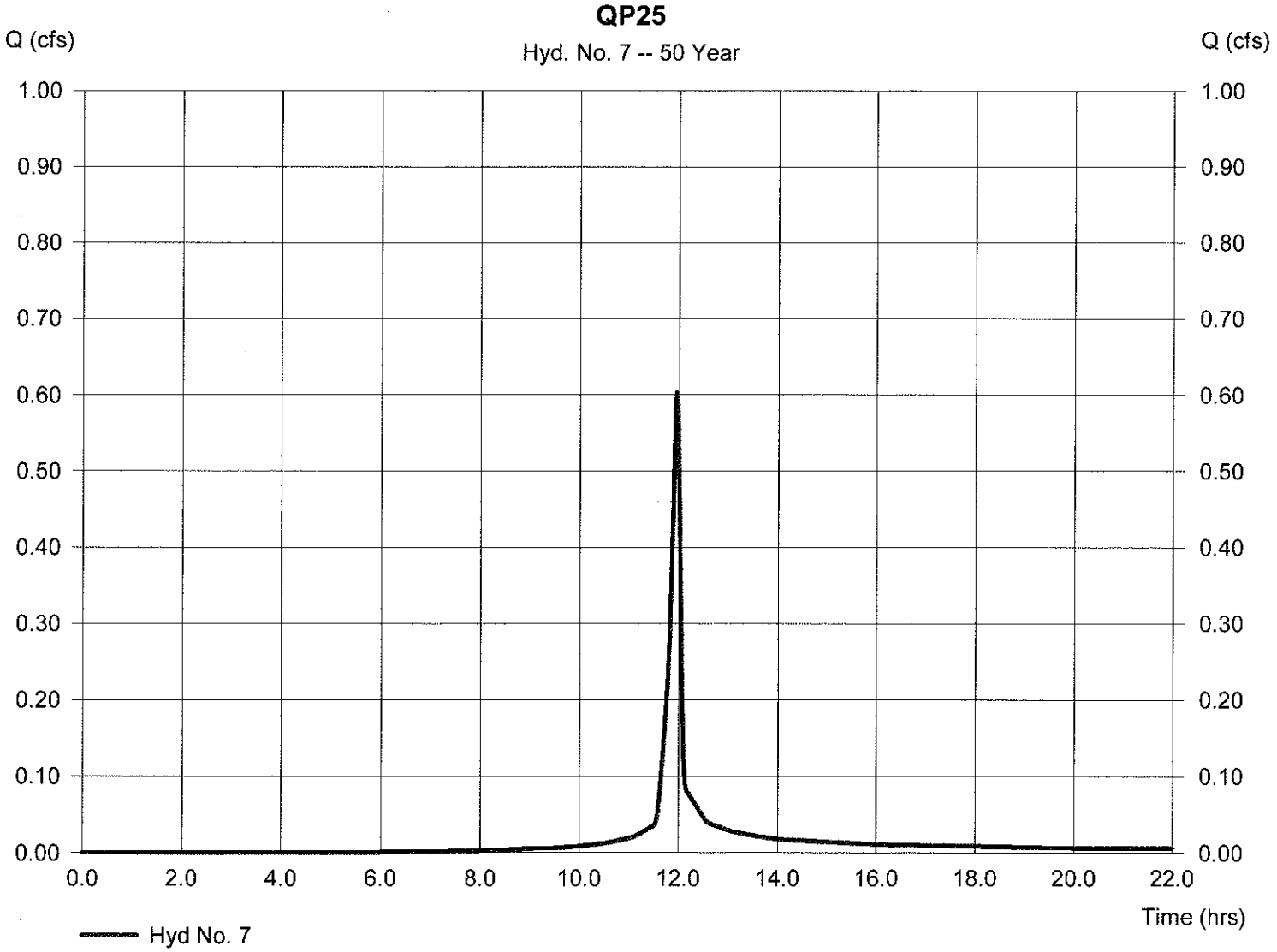


Hydrograph Report

Hyd. No. 7

QP25

Hydrograph type	= SCS Runoff	Peak discharge	= 0.603 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 1,265 cuft
Drainage area	= 0.170 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

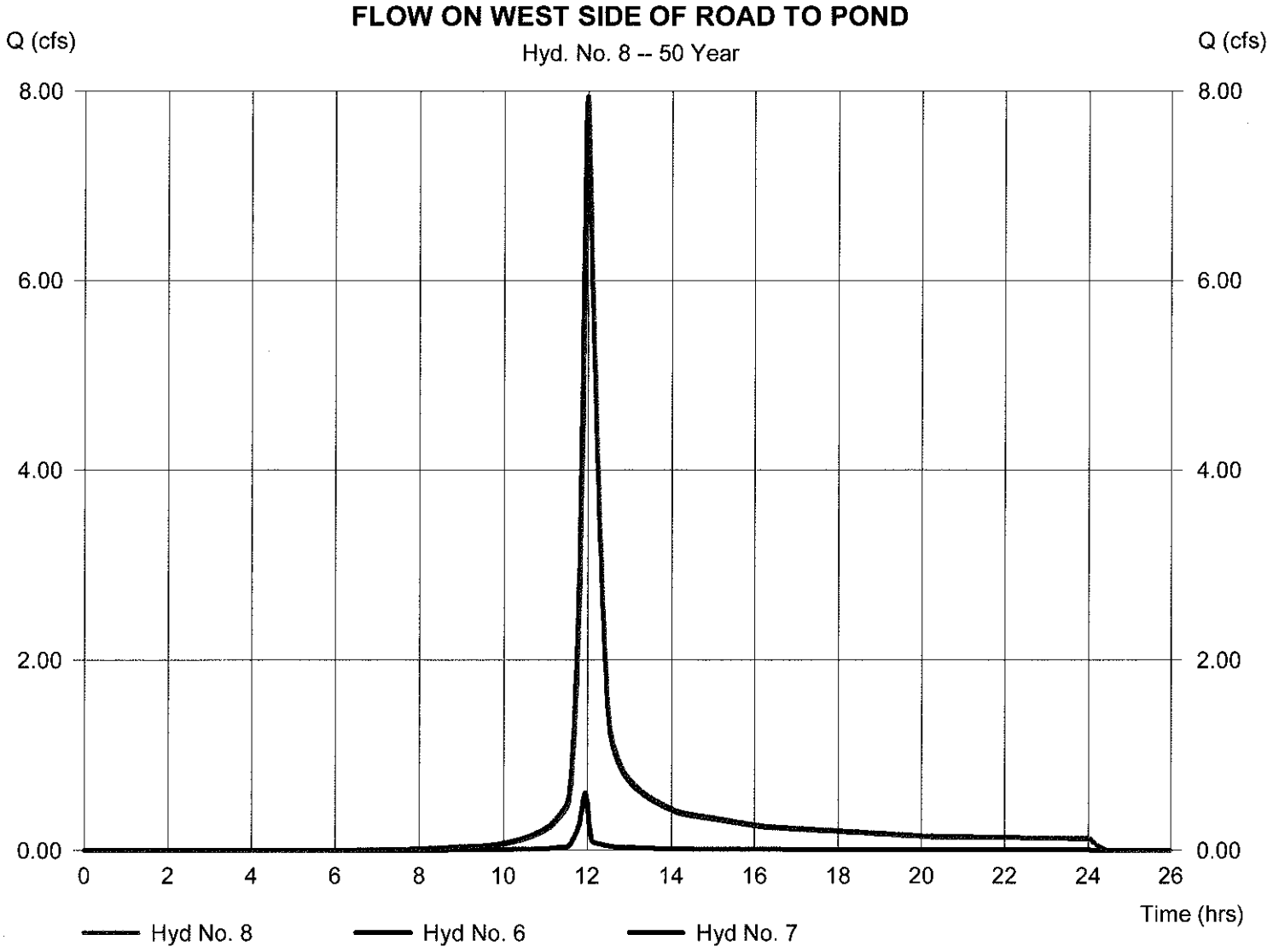


Hydrograph Report

Hyd. No. 8

FLOW ON WEST SIDE OF ROAD TO POND

Hydrograph type	= Combine	Peak discharge	= 7.944 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 25,767 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.170 ac

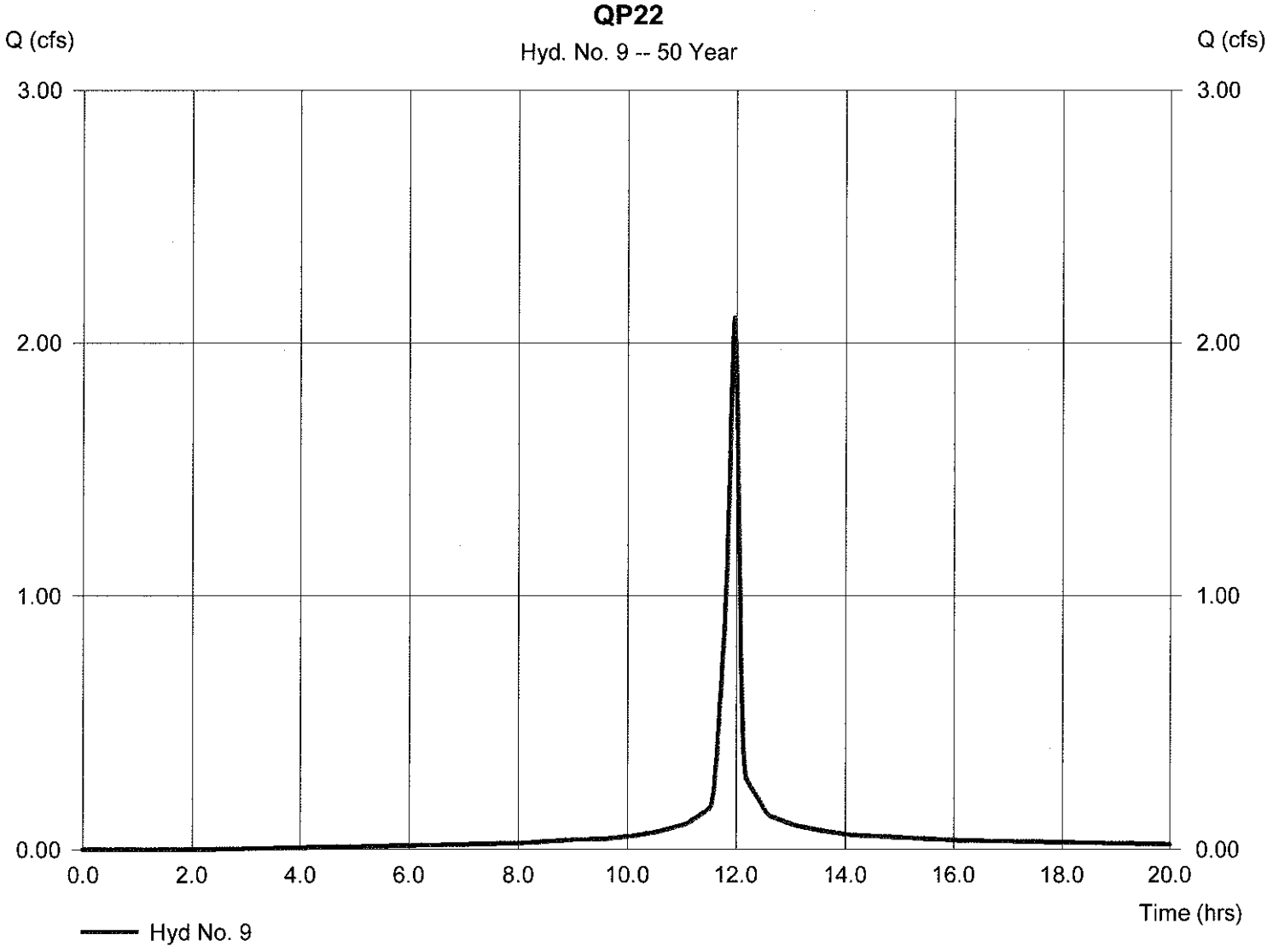


Hydrograph Report

Hyd. No. 9

QP22

Hydrograph type	= SCS Runoff	Peak discharge	= 2.098 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 5,001 cuft
Drainage area	= 0.550 ac	Curve number	= 97
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.28 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

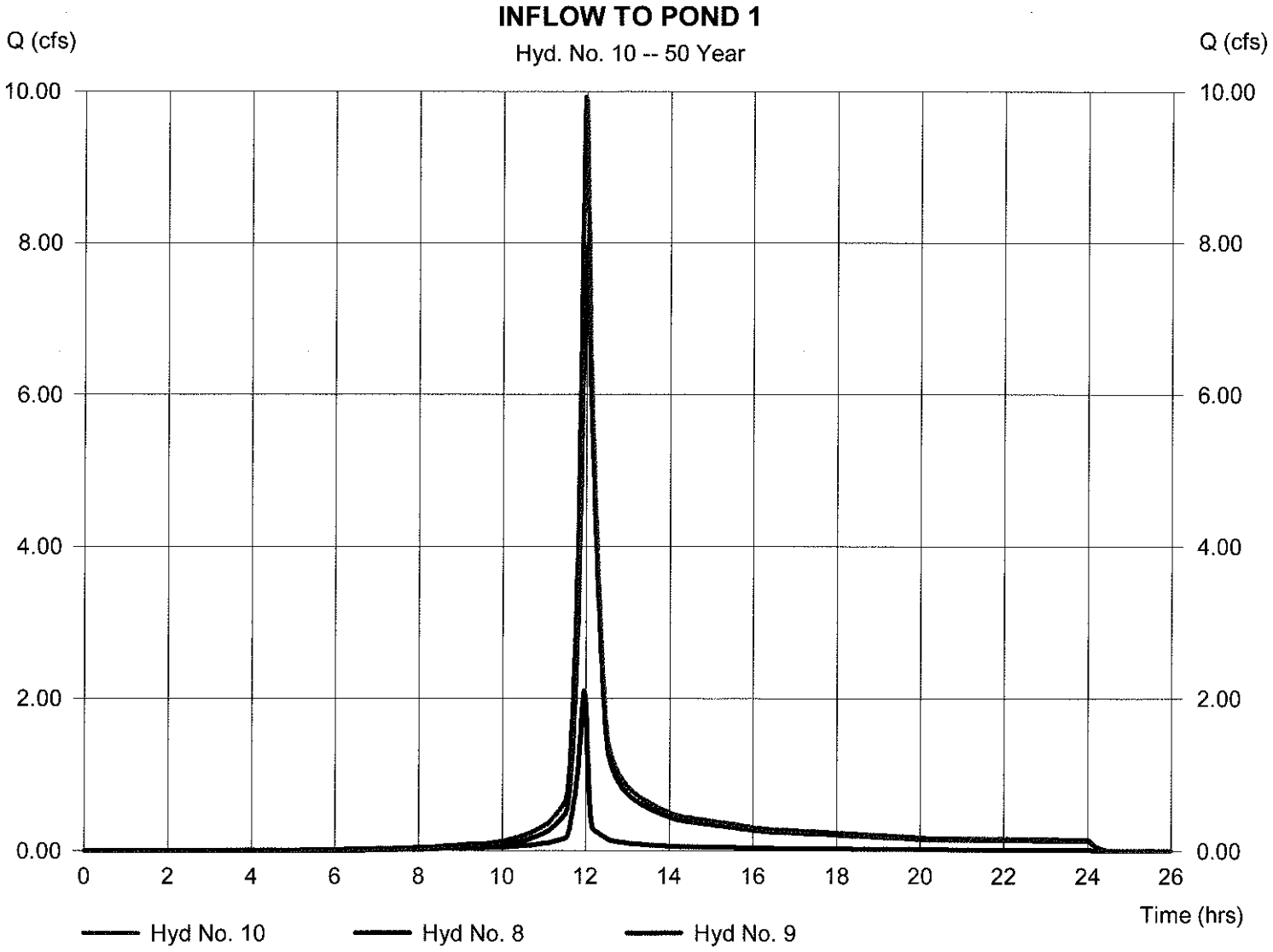


Hydrograph Report

Hyd. No. 10

INFLOW TO POND 1

Hydrograph type	= Combine	Peak discharge	= 9.925 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 30,768 cuft
Inflow hyds.	= 8, 9	Contrib. drain. area	= 0.550 ac

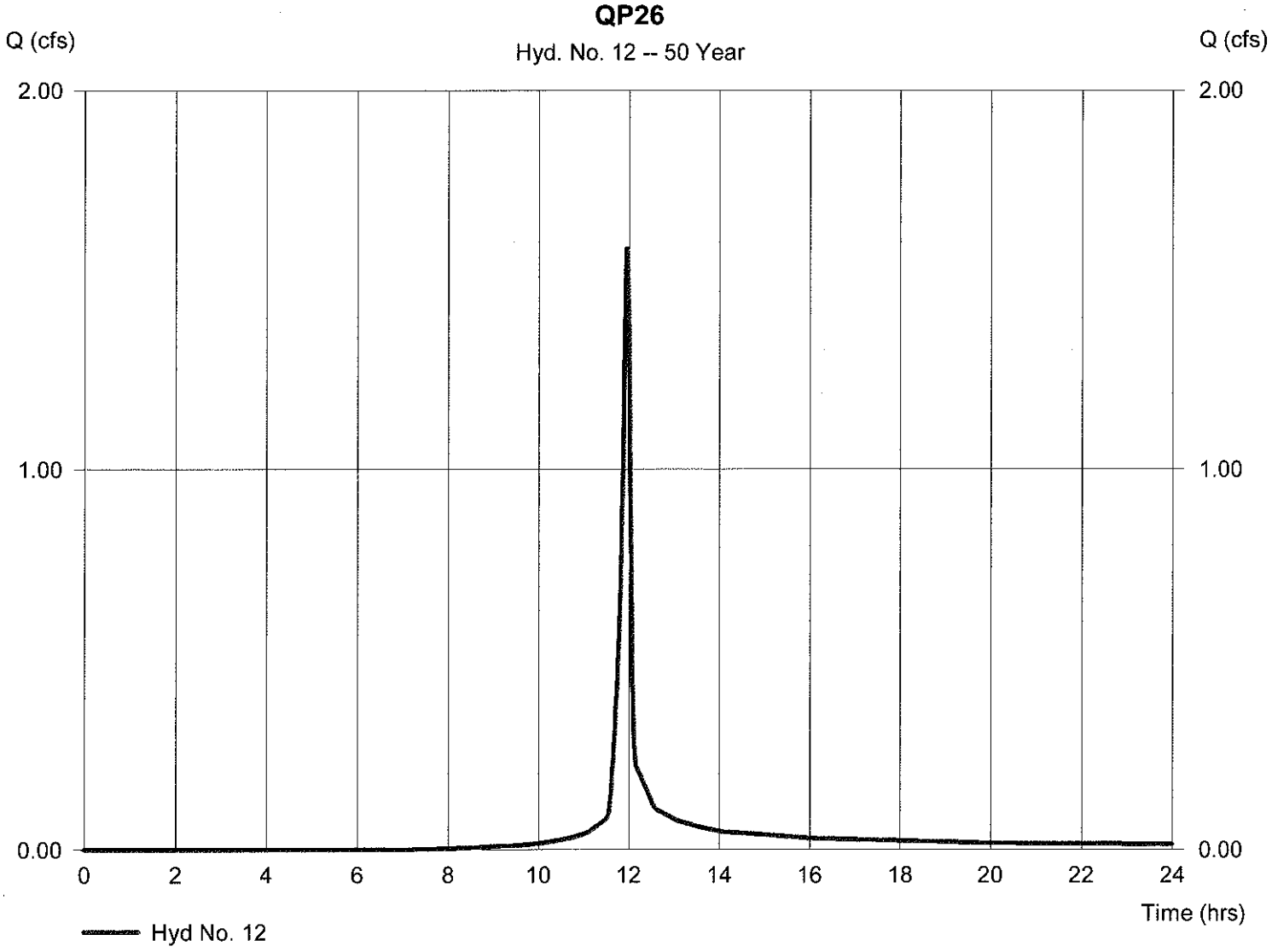


Hydrograph Report

Hyd. No. 12

QP26

Hydrograph type	= SCS Runoff	Peak discharge	= 1.582 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 3,254 cuft
Drainage area	= 0.500 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



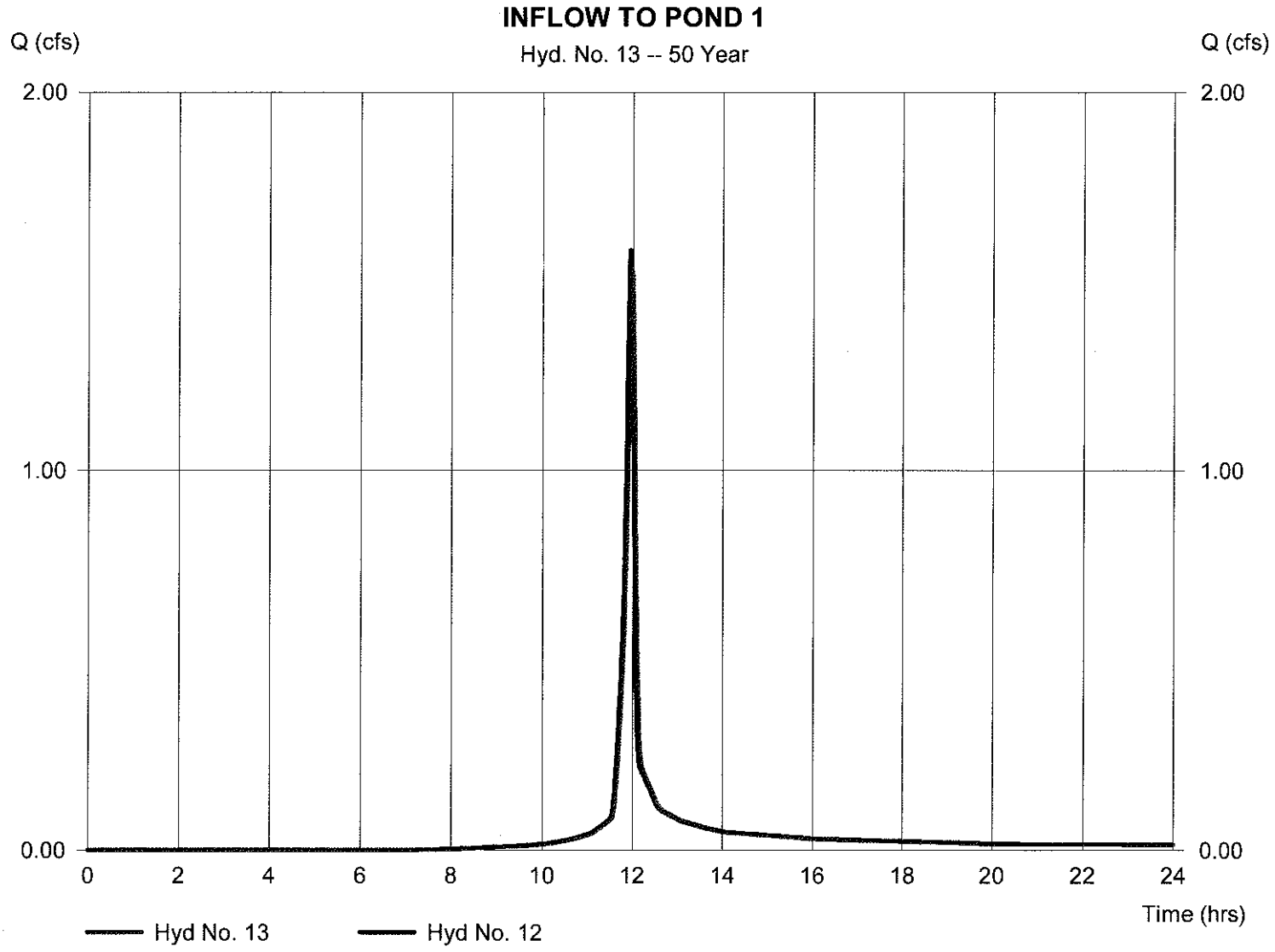
Hydrograph Report

Hyd. No. 13

INFLOW TO POND 1

Hydrograph type	= Reach	Peak discharge	= 1.536 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 3,252 cuft
Inflow hyd. No.	= 12 - QP26	Section type	= Circular
Reach length	= 100.2 ft	Channel slope	= 1.0 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 3.441	Rating curve m	= 1.250
Ave. velocity	= 0.90 ft/s	Routing coeff.	= 0.5020

Modified Att-Kin routing method used.

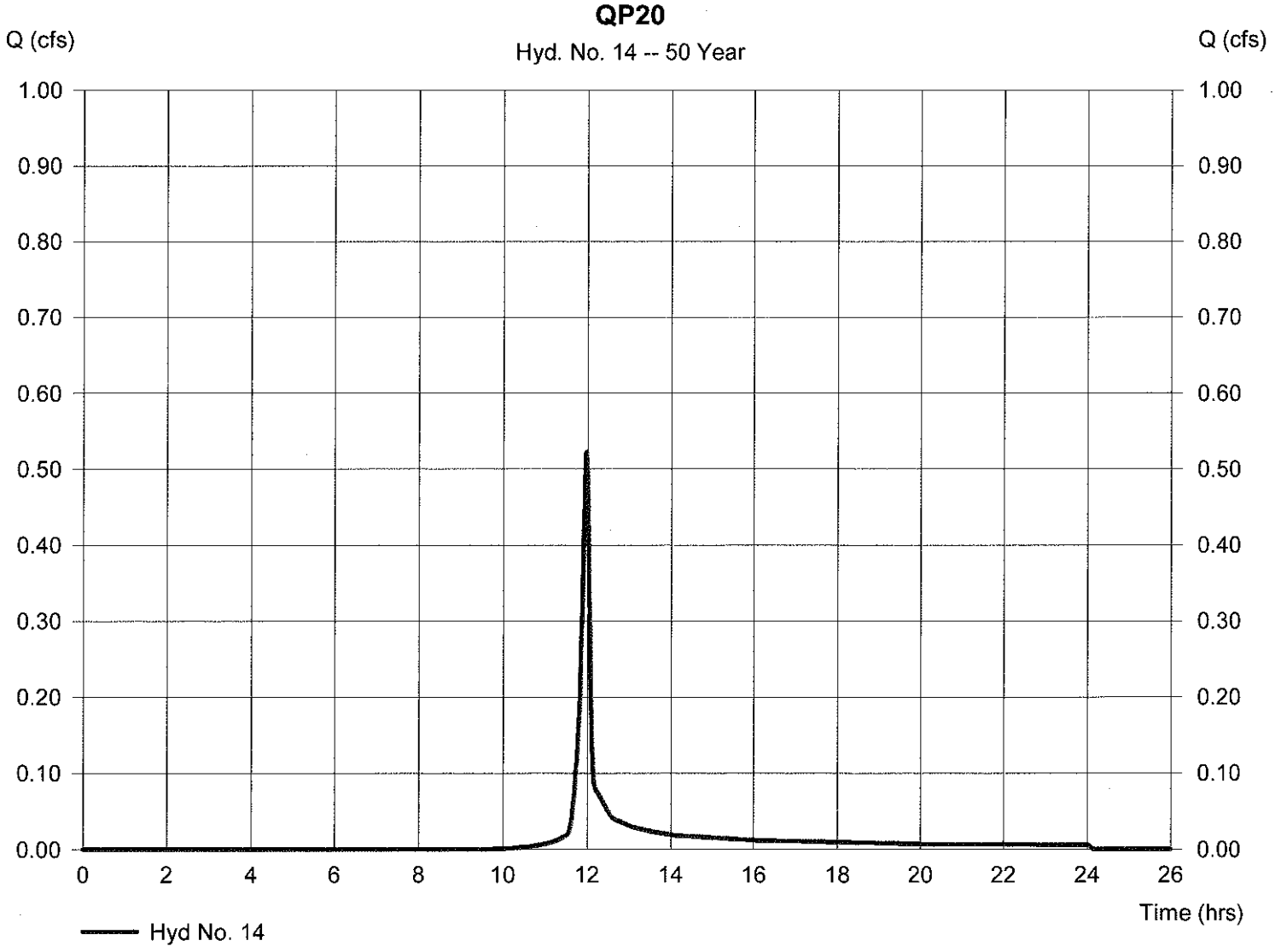


Hydrograph Report

Hyd. No. 14

QP20

Hydrograph type	= SCS Runoff	Peak discharge	= 0.522 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 1,101 cuft
Drainage area	= 0.250 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.98 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

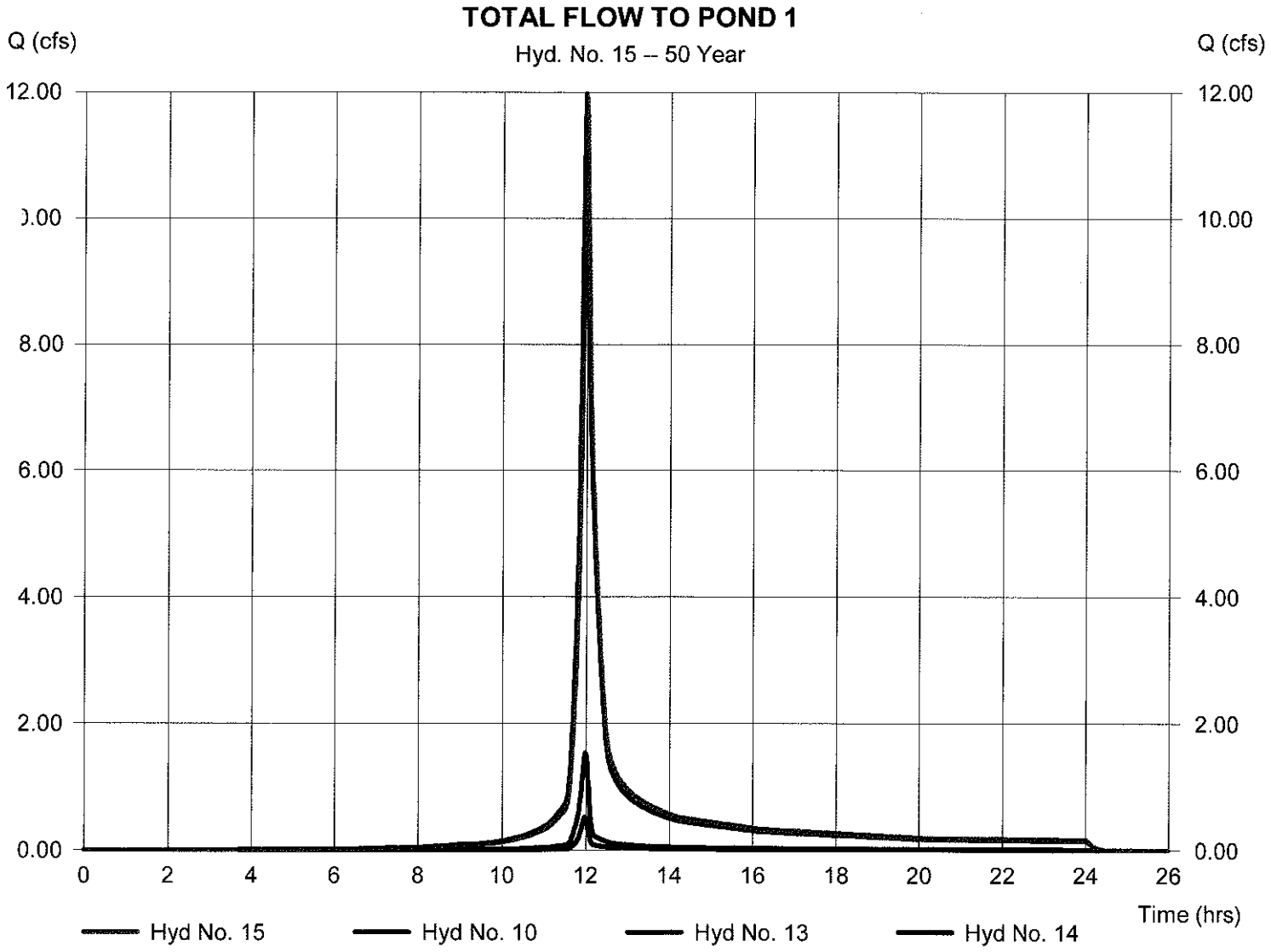


Hydrograph Report

Hyd. No. 15

TOTAL FLOW TO POND 1

Hydrograph type	= Combine	Peak discharge	= 11.98 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 35,122 cuft
Inflow hyds.	= 10, 13, 14	Contrib. drain. area	= 0.250 ac



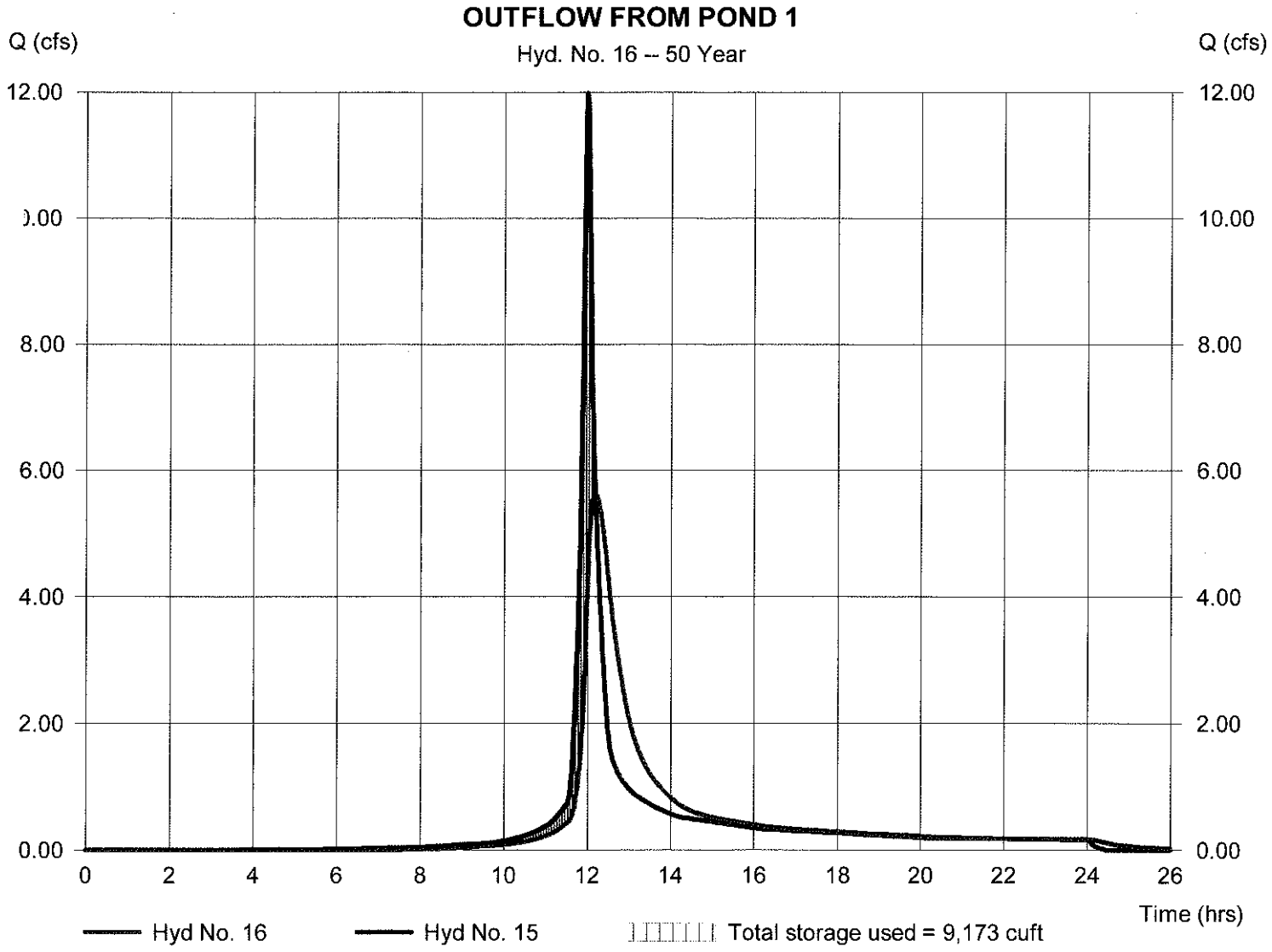
Hydrograph Report

Hyd. No. 16

OUTFLOW FROM POND 1

Hydrograph type	= Reservoir	Peak discharge	= 5.633 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.18 hrs
Time interval	= 1 min	Hyd. volume	= 34,900 cuft
Inflow hyd. No.	= 15 - TOTAL FLOW TO POND	Max. Elevation	= 6437.16 ft
Reservoir name	= POND 1	Max. Storage	= 9,173 cuft

Storage Indication method used.

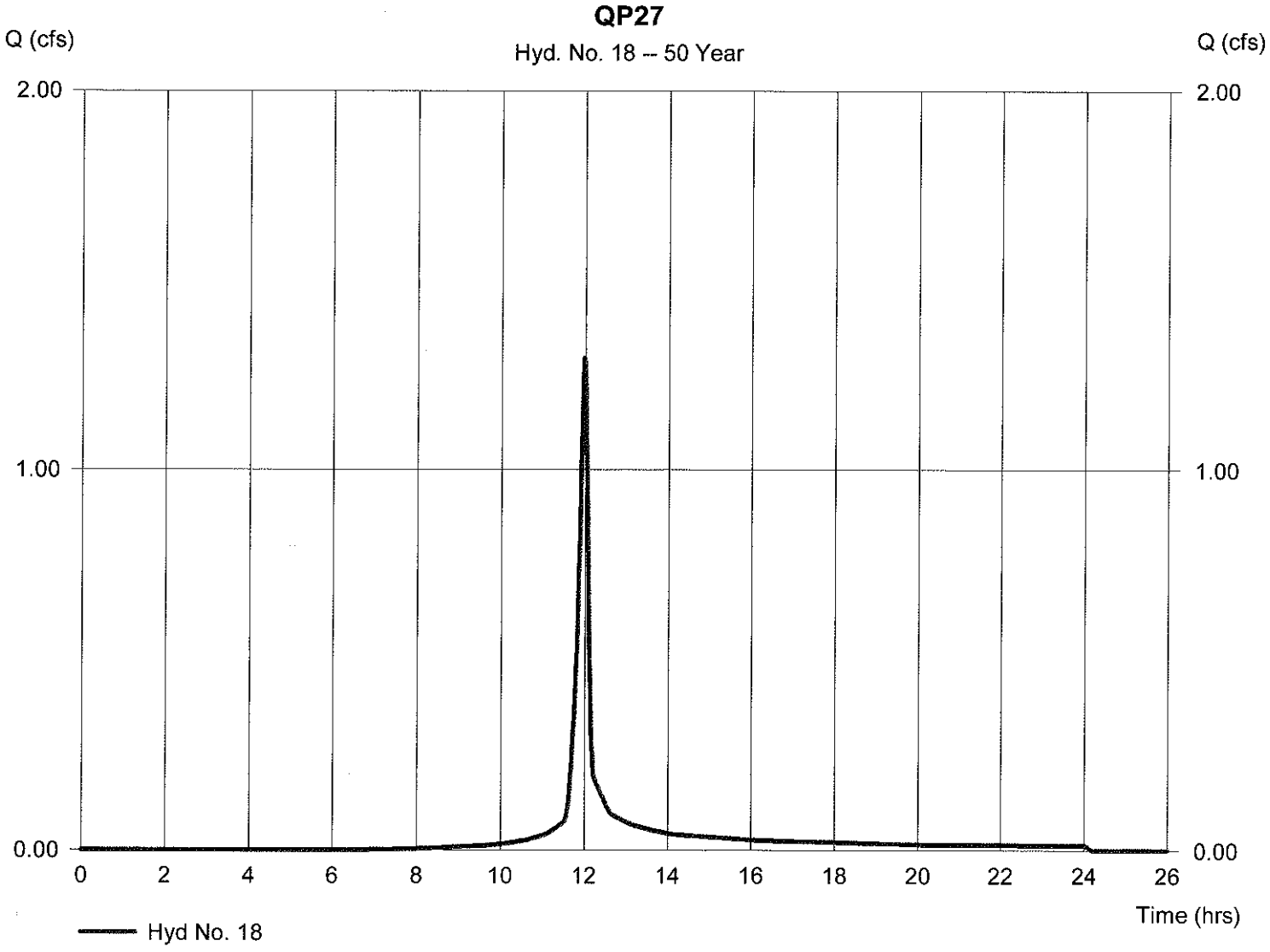


Hydrograph Report

Hyd. No. 18

QP27

Hydrograph type	= SCS Runoff	Peak discharge	= 1.296 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 2,971 cuft
Drainage area	= 0.450 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.70 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

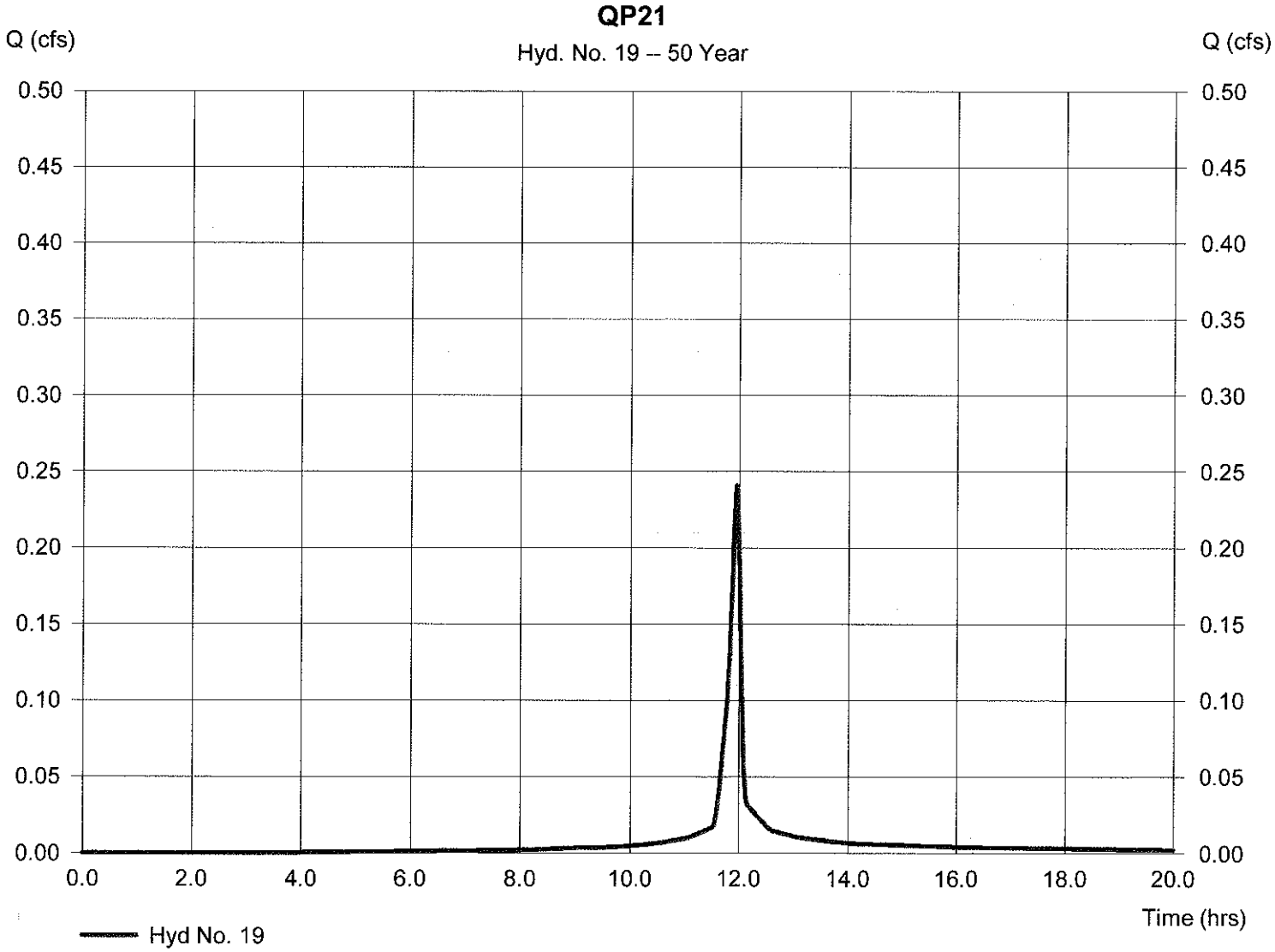


Hydrograph Report

Hyd. No. 19

QP21

Hydrograph type	= SCS Runoff	Peak discharge	= 0.241 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 530 cuft
Drainage area	= 0.060 ac	Curve number	= 95
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

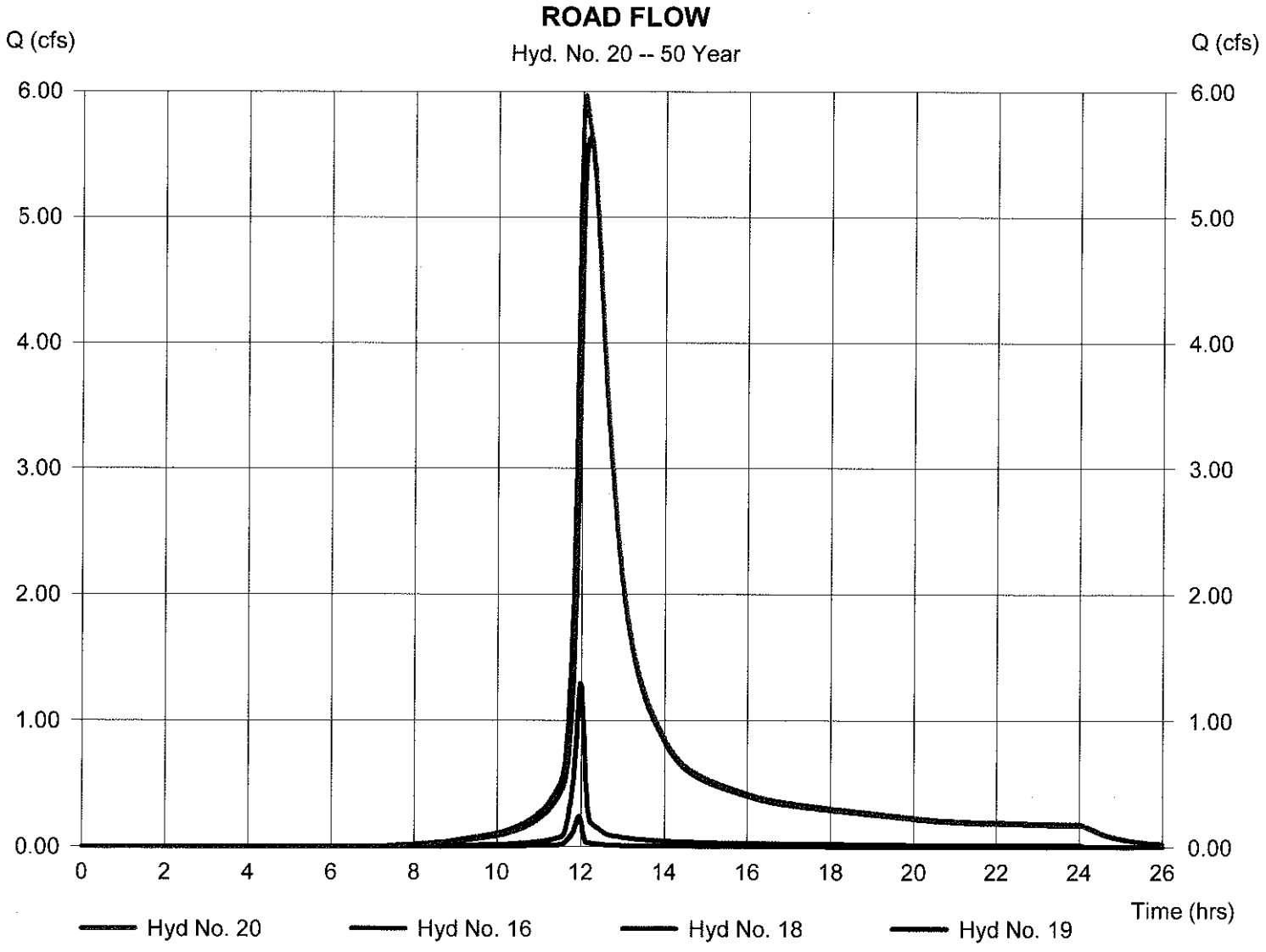


Hydrograph Report

Hyd. No. 20

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 5.968 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 37,300 cuft
Inflow hyds.	= 16, 18, 19	Contrib. drain. area	= 0.510 ac

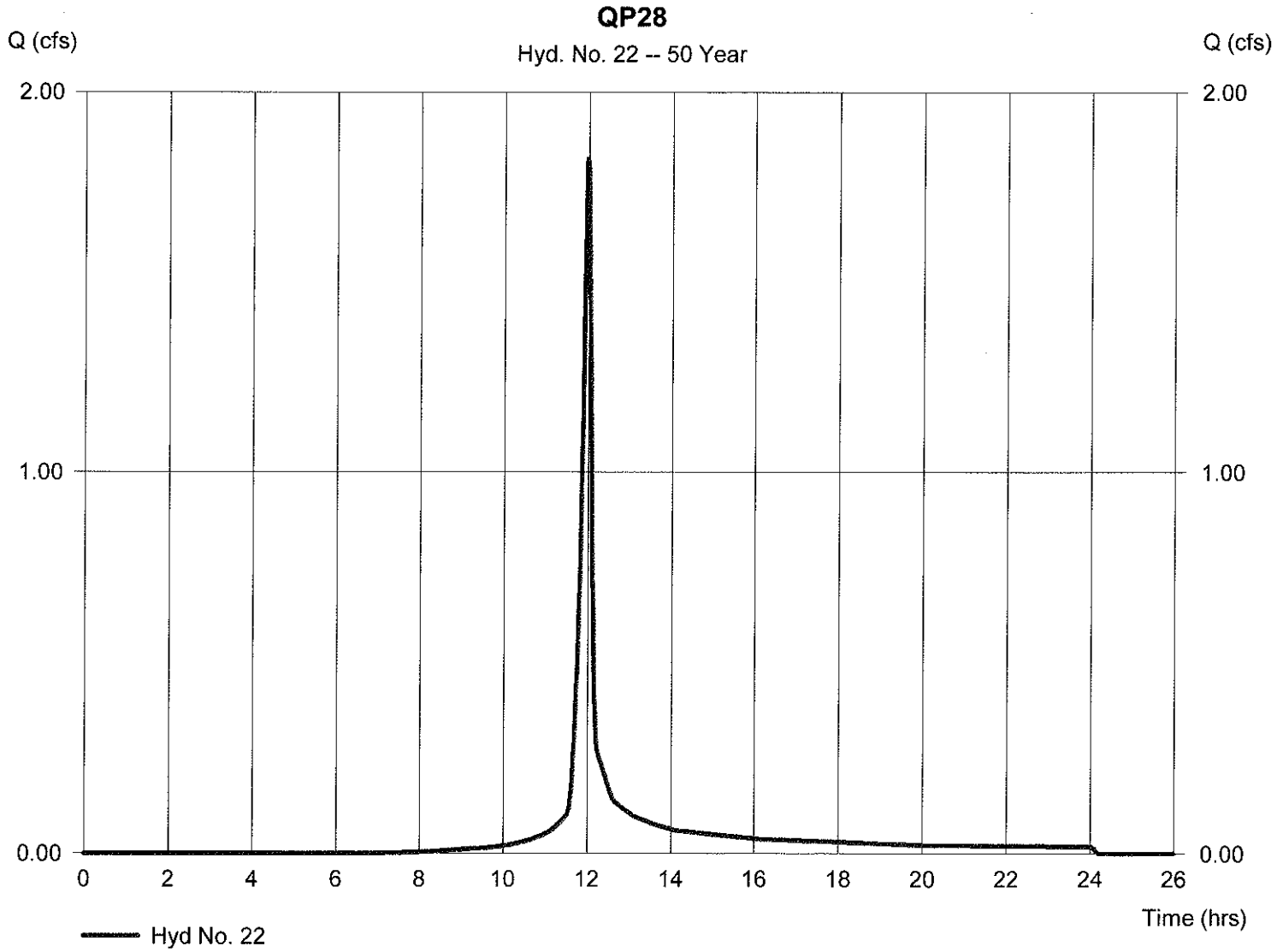


Hydrograph Report

Hyd. No. 22

QP28

Hydrograph type	= SCS Runoff	Peak discharge	= 1.825 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 4,165 cuft
Drainage area	= 0.660 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 9.66 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

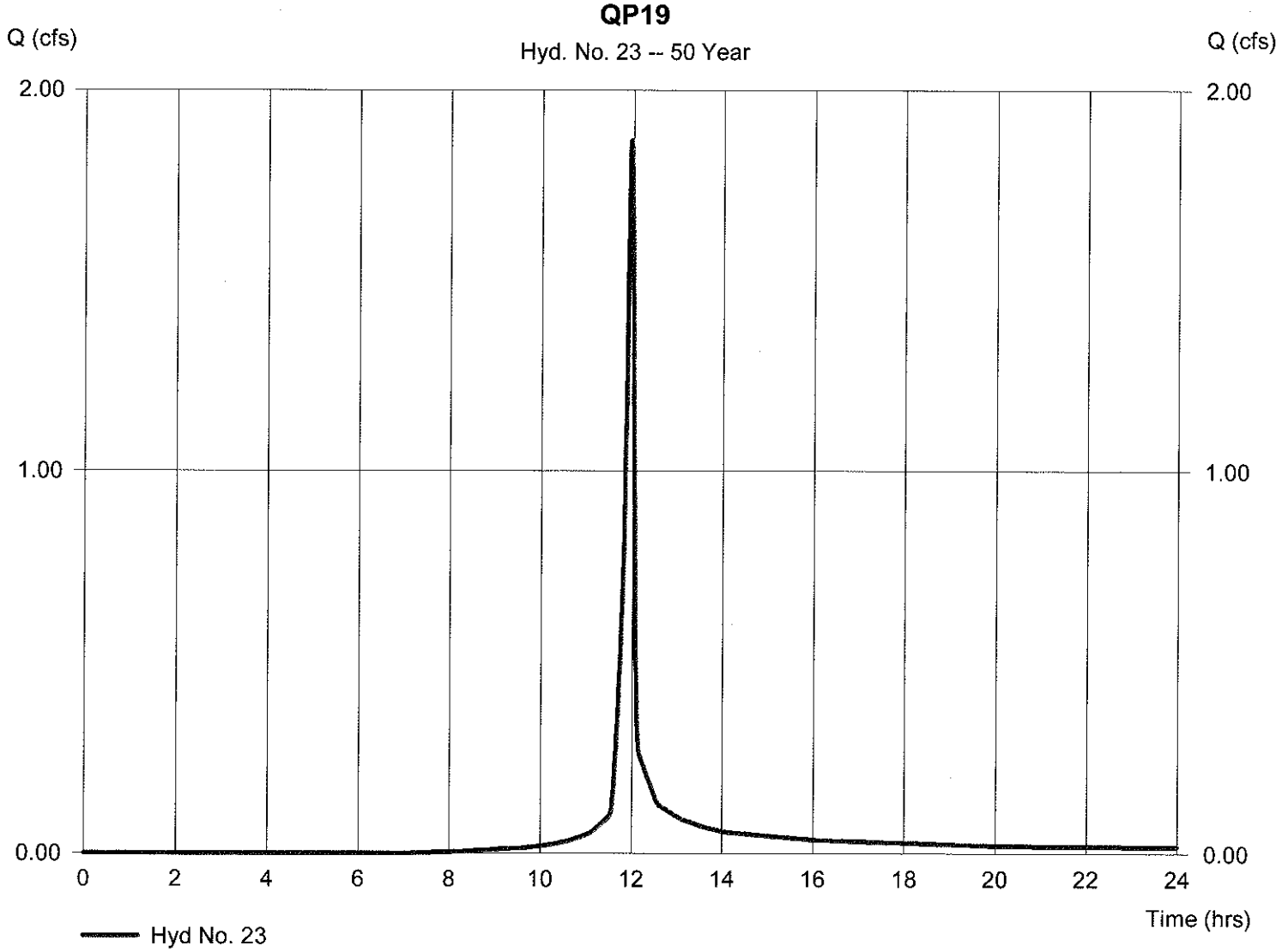


Hydrograph Report

Hyd. No. 23

QP19

Hydrograph type	= SCS Runoff	Peak discharge	= 1.867 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 3,839 cuft
Drainage area	= 0.590 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

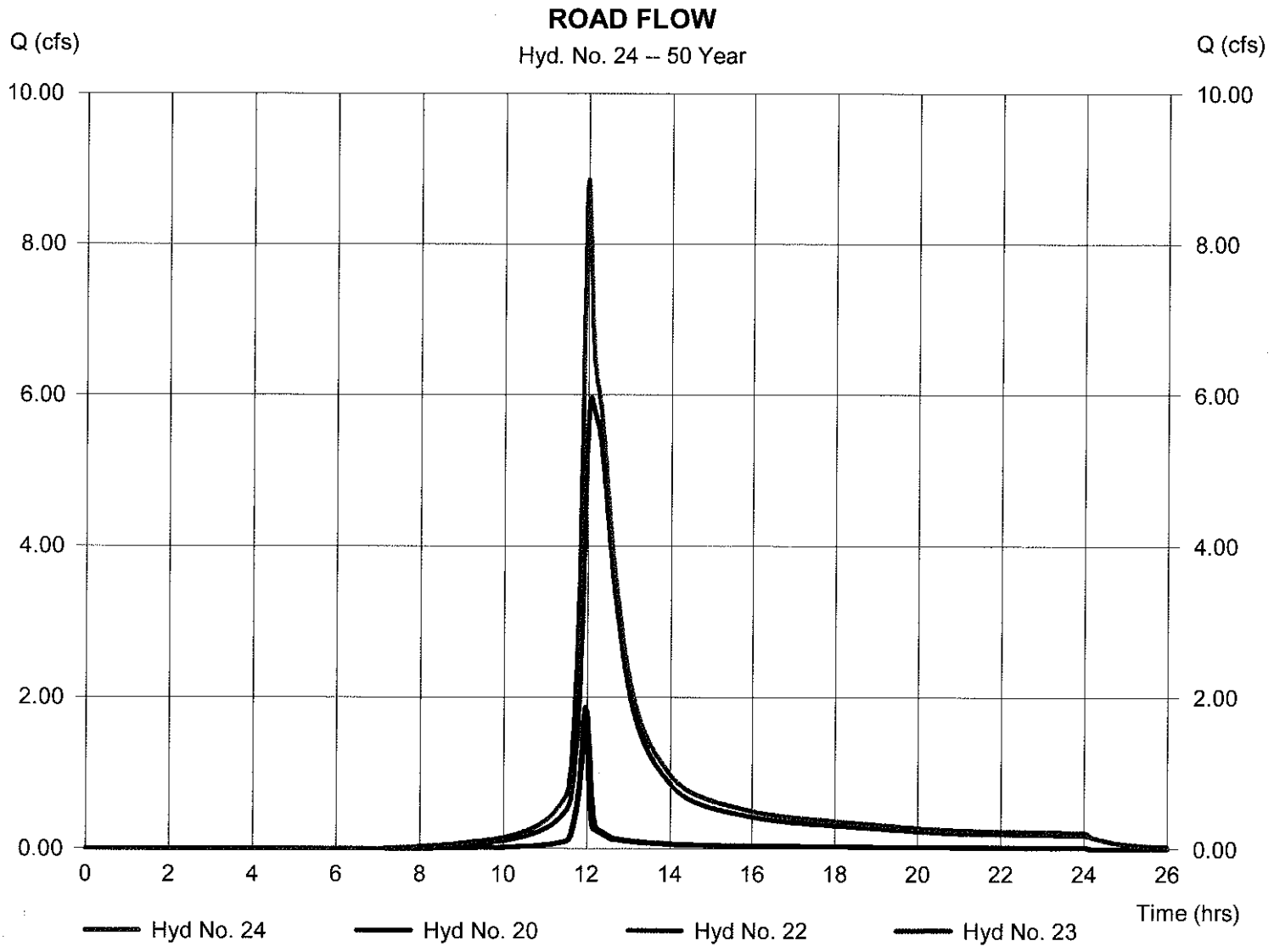


Hydrograph Report

Hyd. No. 24

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 8.852 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 45,305 cuft
Inflow hyds.	= 20, 22, 23	Contrib. drain. area	= 1.250 ac

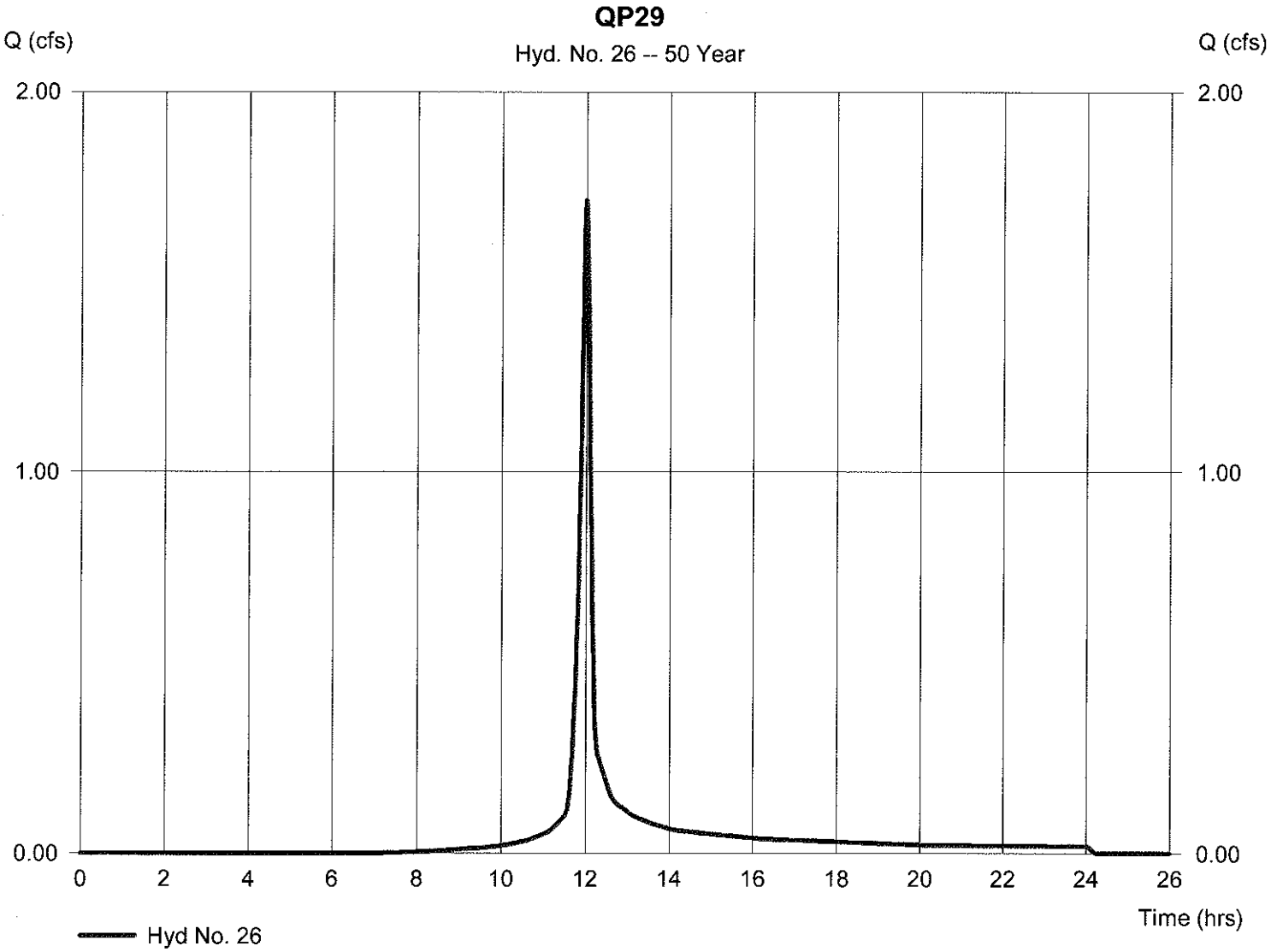


Hydrograph Report

Hyd. No. 26

QP29

Hydrograph type	= SCS Runoff	Peak discharge	= 1.715 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 4,175 cuft
Drainage area	= 0.650 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.62 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

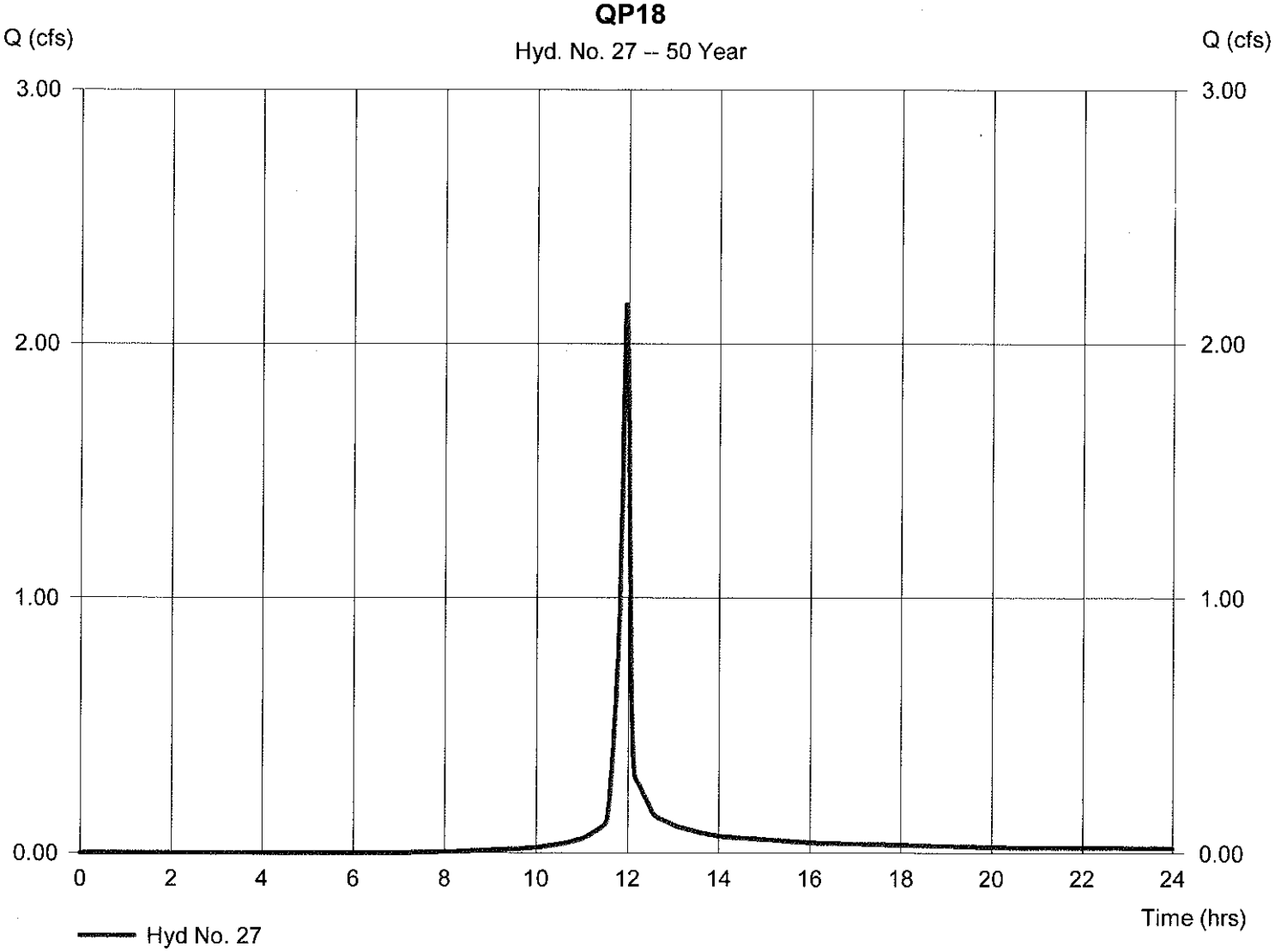


Hydrograph Report

Hyd. No. 27

QP18

Hydrograph type	= SCS Runoff	Peak discharge	= 2.152 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 4,425 cuft
Drainage area	= 0.680 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

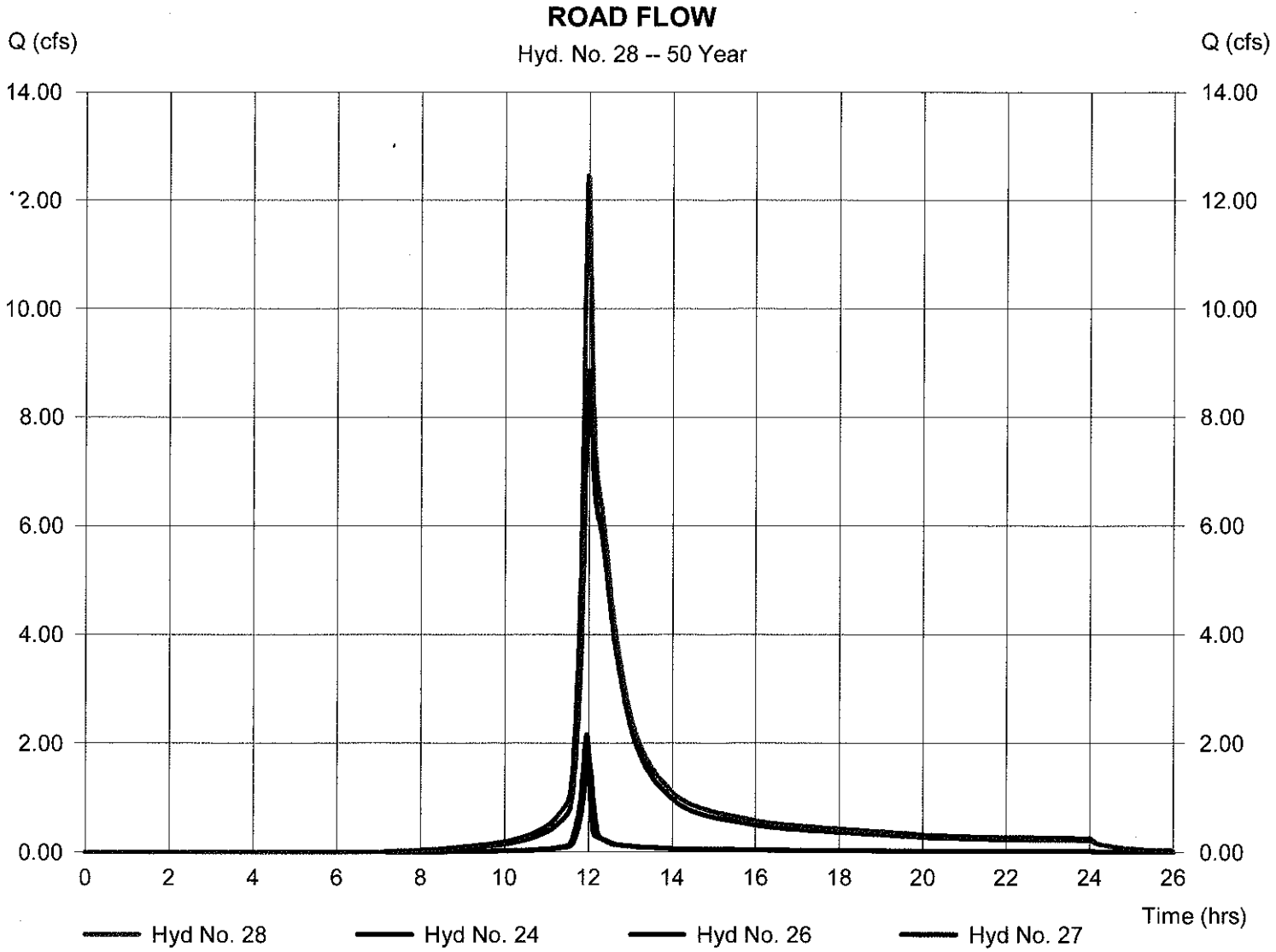


Hydrograph Report

Hyd. No. 28

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 12.46 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 53,905 cuft
Inflow hyds.	= 24, 26, 27	Contrib. drain. area	= 1.330 ac

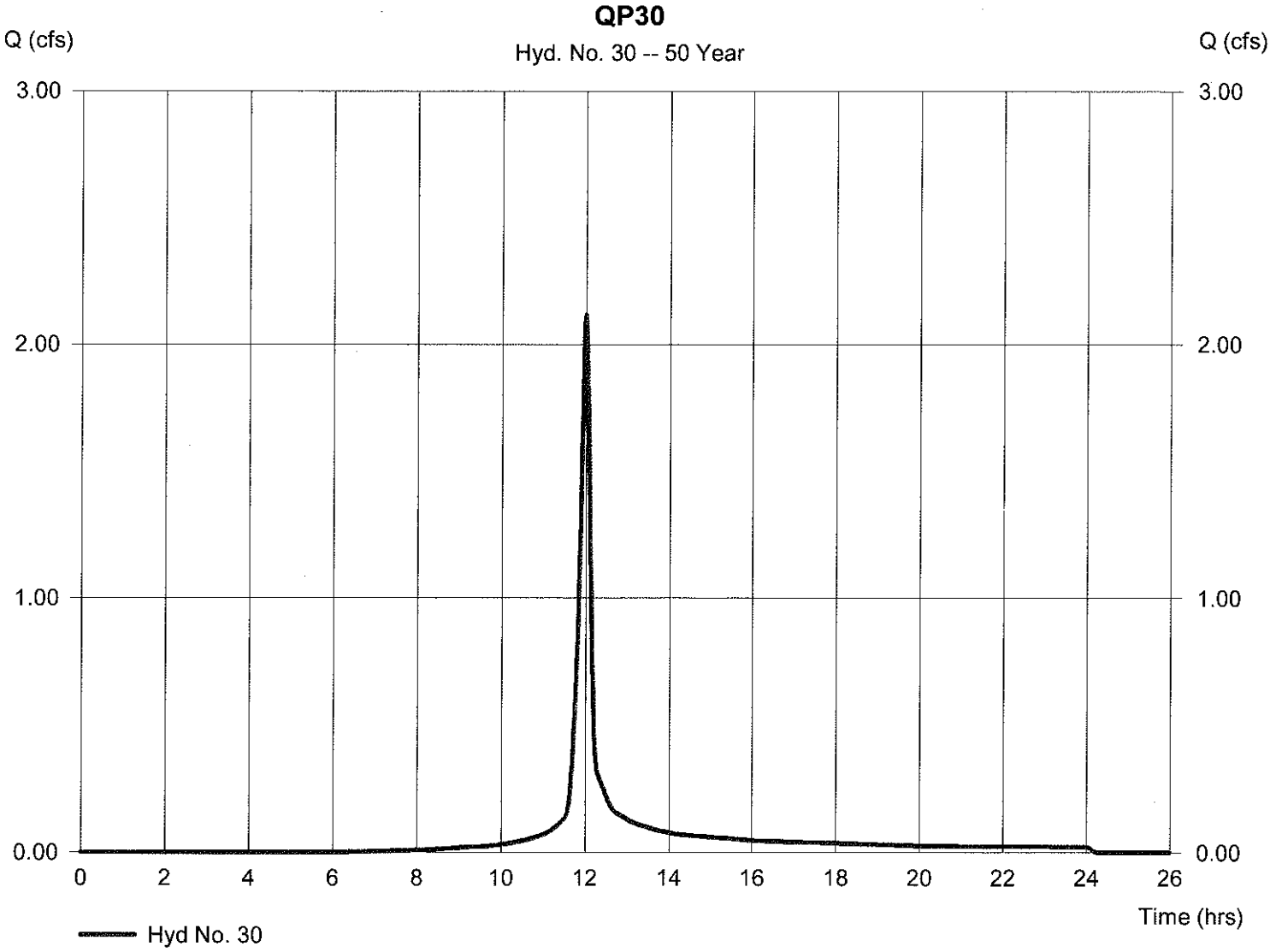


Hydrograph Report

Hyd. No. 30

QP30

Hydrograph type	= SCS Runoff	Peak discharge	= 2.116 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 5,199 cuft
Drainage area	= 0.740 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.40 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

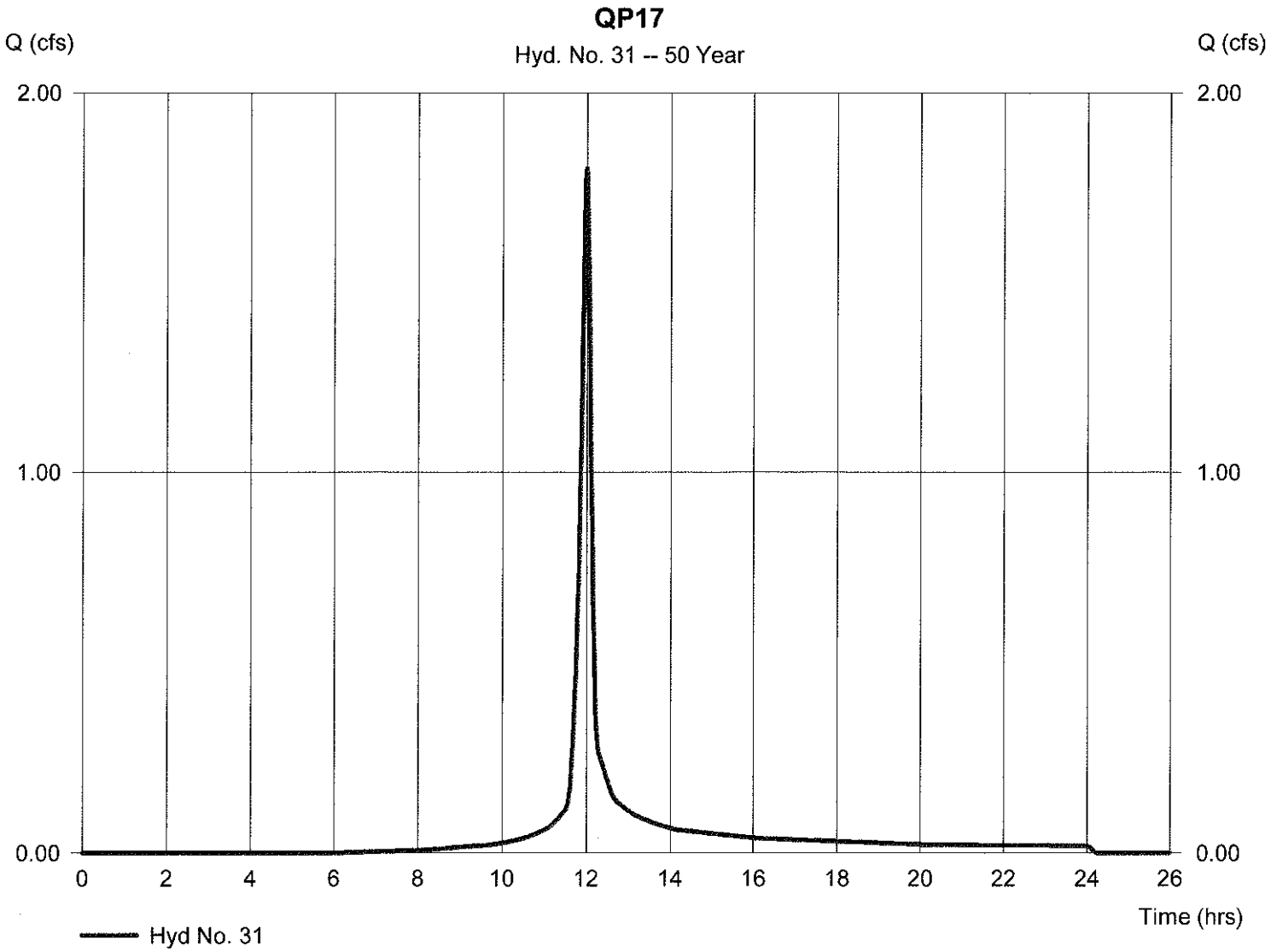


Hydrograph Report

Hyd. No. 31

QP17

Hydrograph type	= SCS Runoff	Peak discharge	= 1.801 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 4,427 cuft
Drainage area	= 0.630 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.92 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



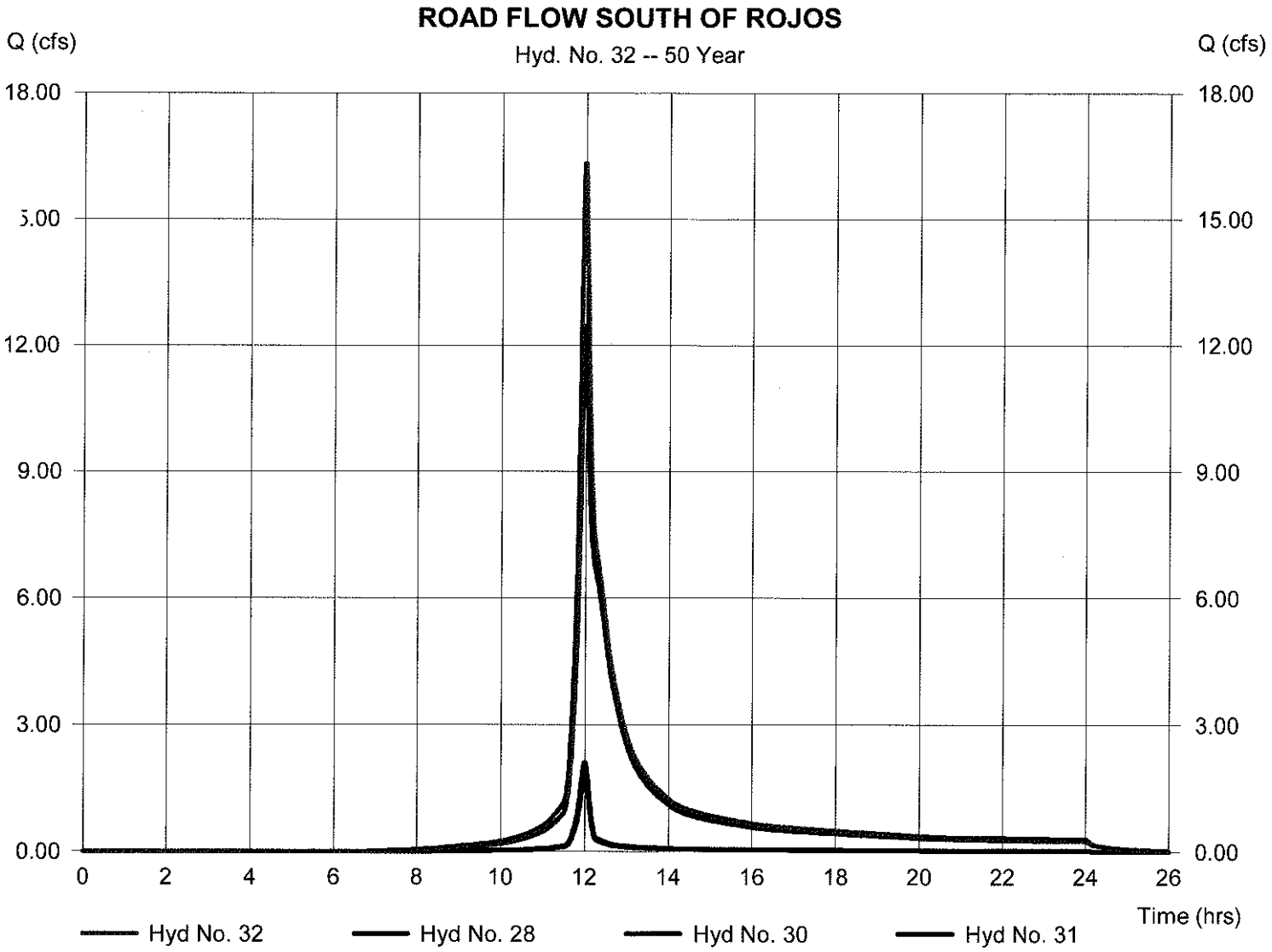
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020 Sunday, 09 / 20 / 2020

Hyd. No. 32

ROAD FLOW SOUTH OF ROJOS

Hydrograph type	= Combine	Peak discharge	= 16.33 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 63,531 cuft
Inflow hyds.	= 28, 30, 31	Contrib. drain. area	= 1.370 ac

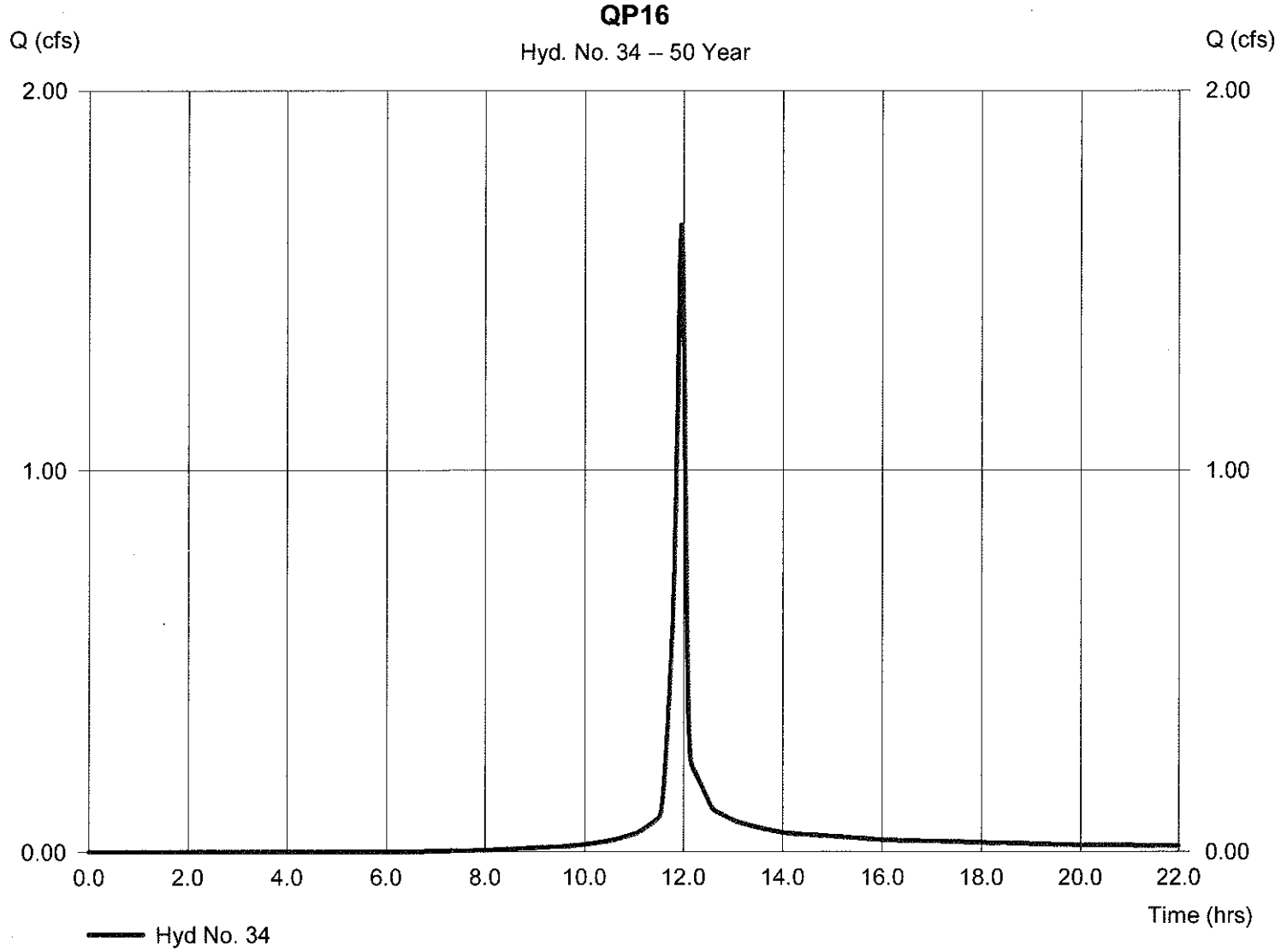


Hydrograph Report

Hyd. No. 34

QP16

Hydrograph type	= SCS Runoff	Peak discharge	= 1.646 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 3,404 cuft
Drainage area	= 0.500 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

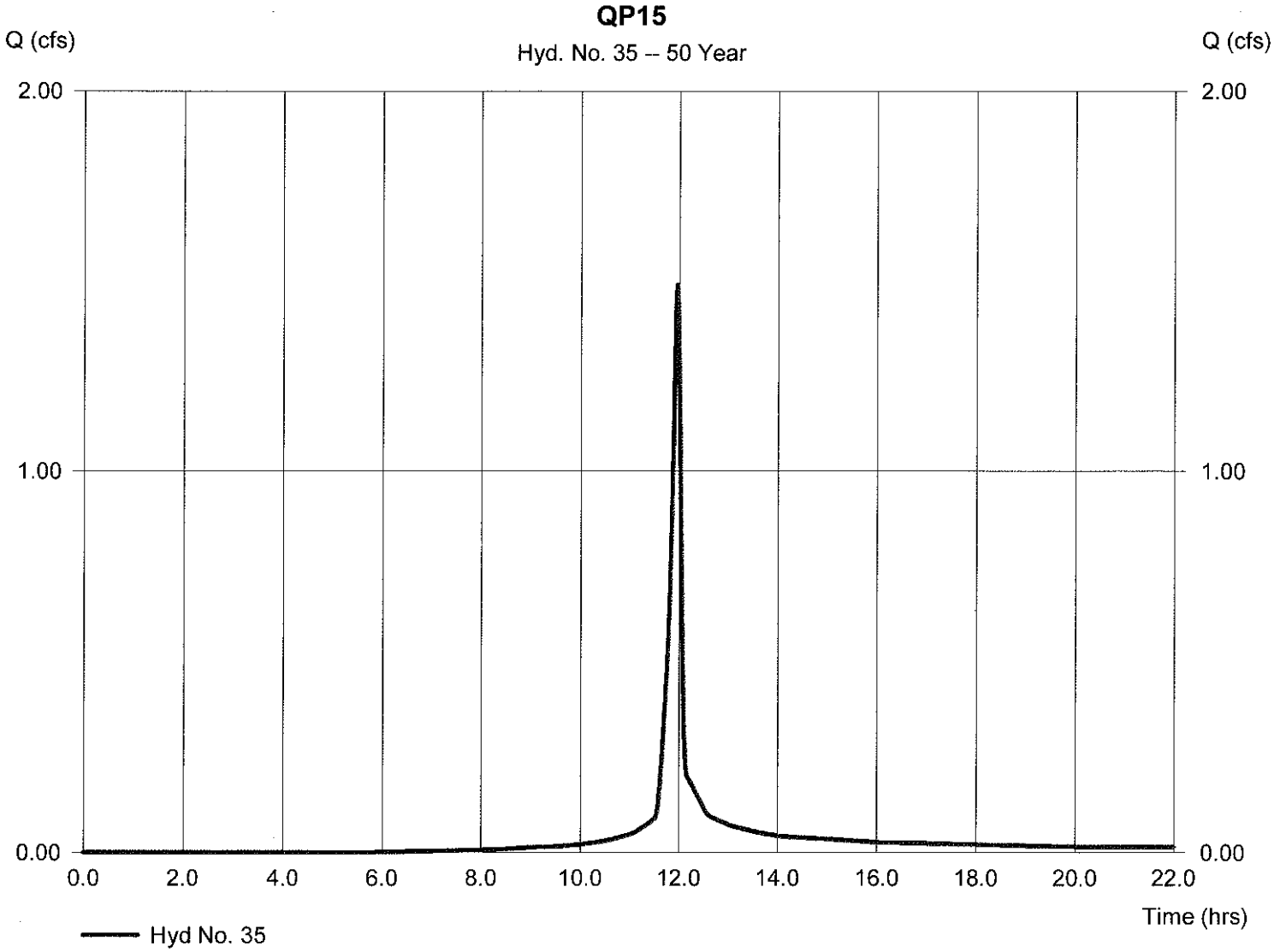


Hydrograph Report

Hyd. No. 35

QP15

Hydrograph type	= SCS Runoff	Peak discharge	= 1.489 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 3,125 cuft
Drainage area	= 0.420 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

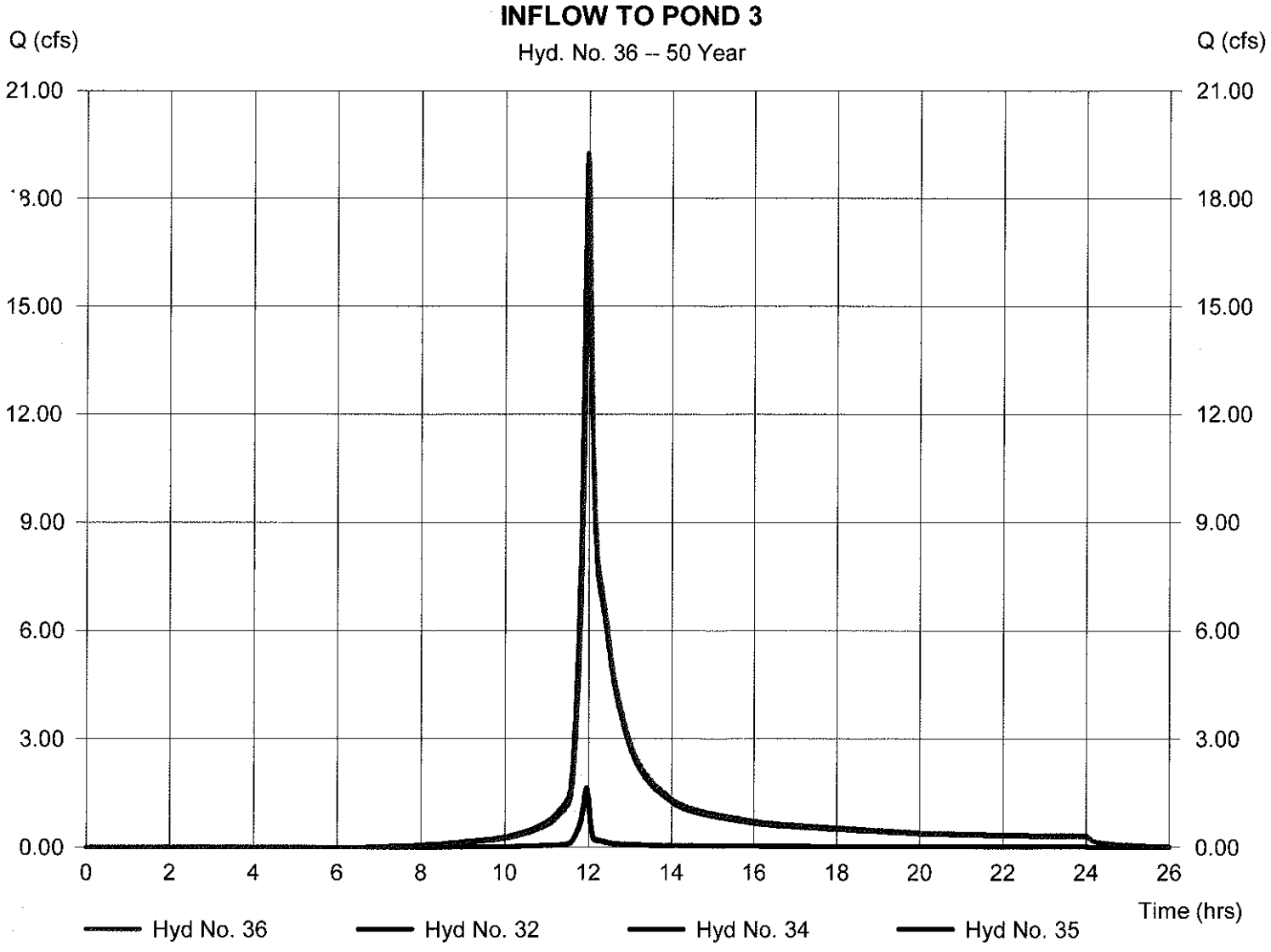


Hydrograph Report

Hyd. No. 36

INFLOW TO POND 3

Hydrograph type	= Combine	Peak discharge	= 19.26 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 70,060 cuft
Inflow hyds.	= 32, 34, 35	Contrib. drain. area	= 0.920 ac

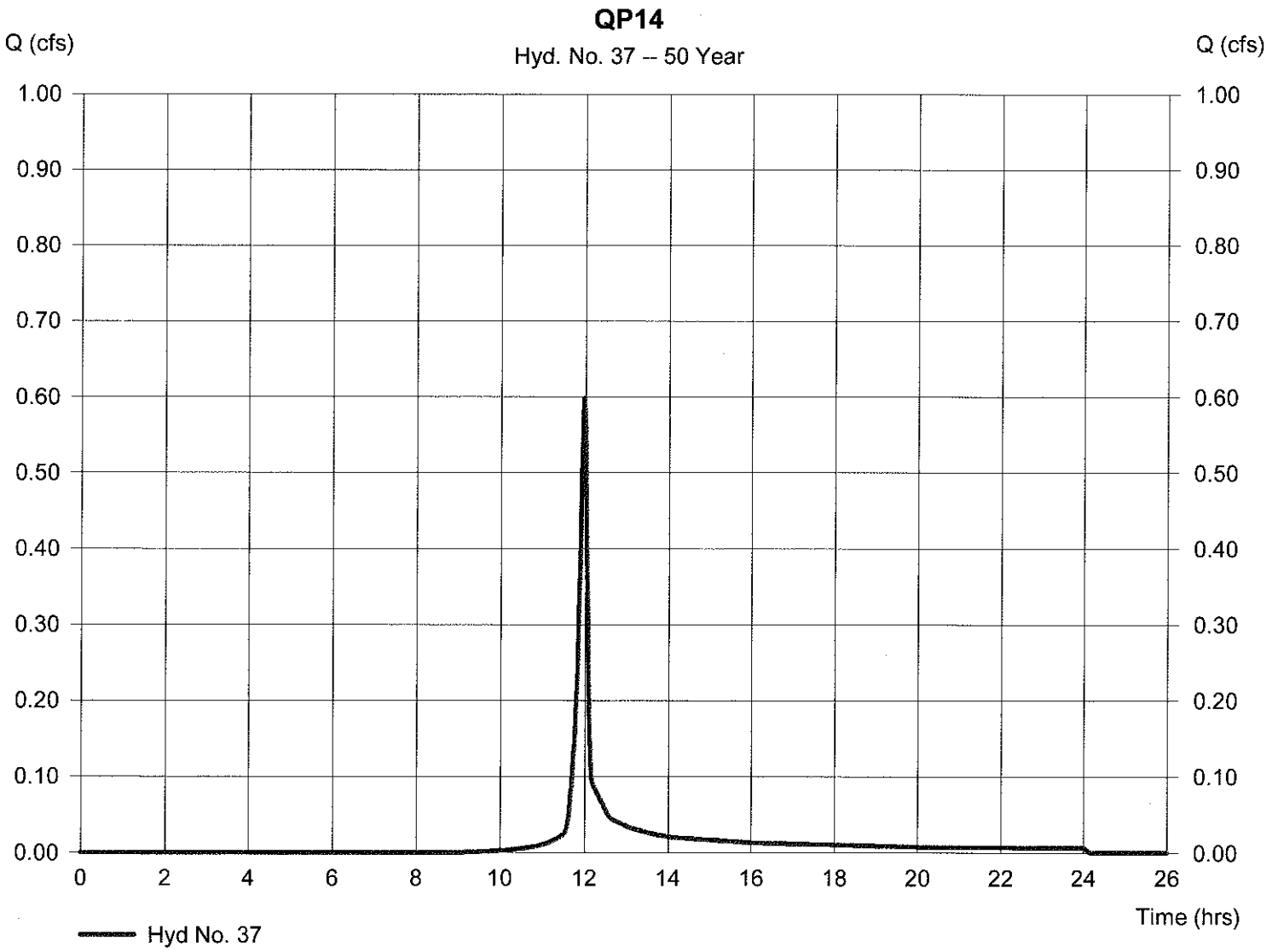


Hydrograph Report

Hyd. No. 37

QP14

Hydrograph type	= SCS Runoff	Peak discharge	= 0.598 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 1,265 cuft
Drainage area	= 0.260 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.20 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

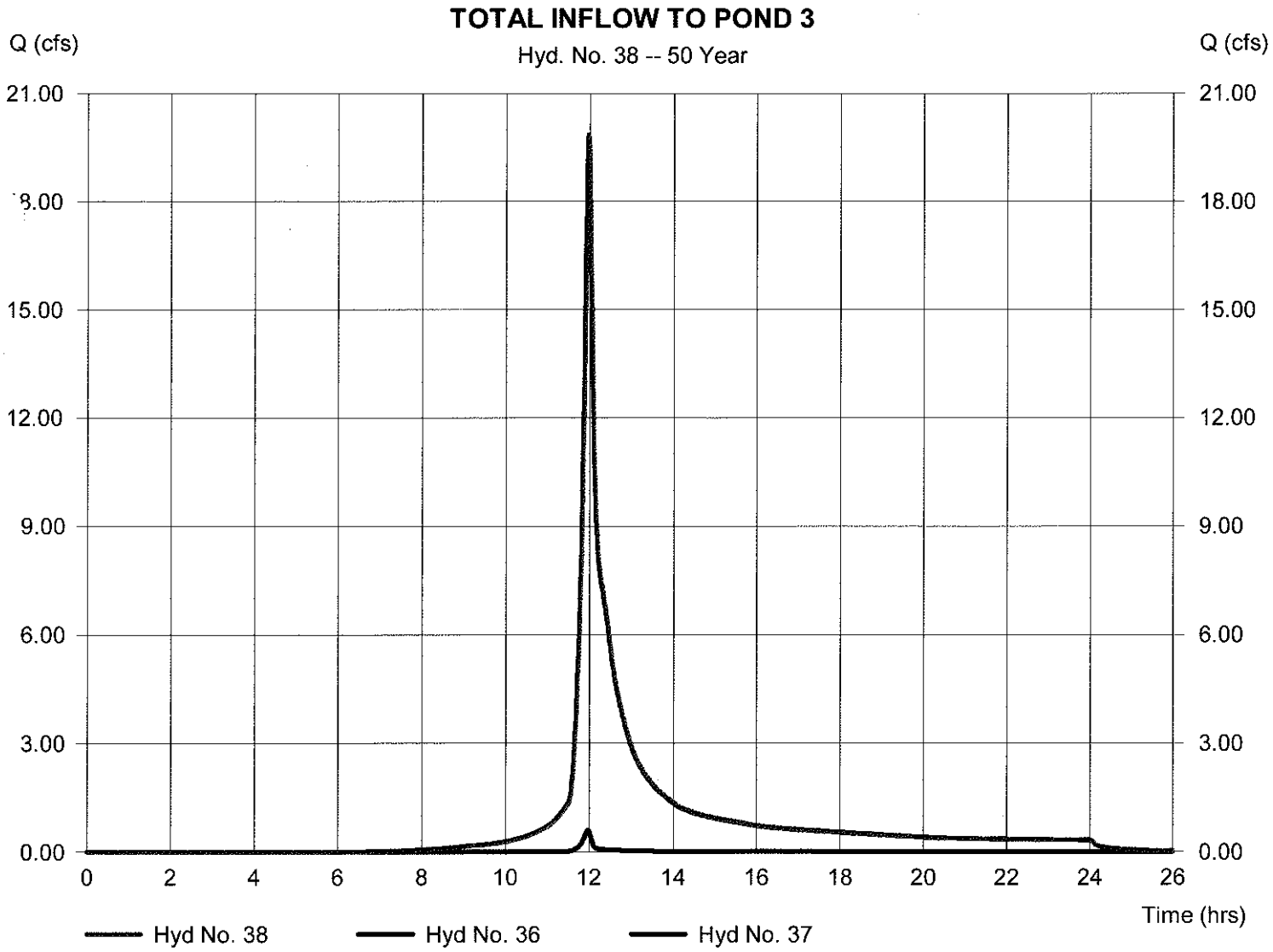


Hydrograph Report

Hyd. No. 38

TOTAL INFLOW TO POND 3

Hydrograph type	= Combine	Peak discharge	= 19.86 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 71,324 cuft
Inflow hyds.	= 36, 37	Contrib. drain. area	= 0.260 ac



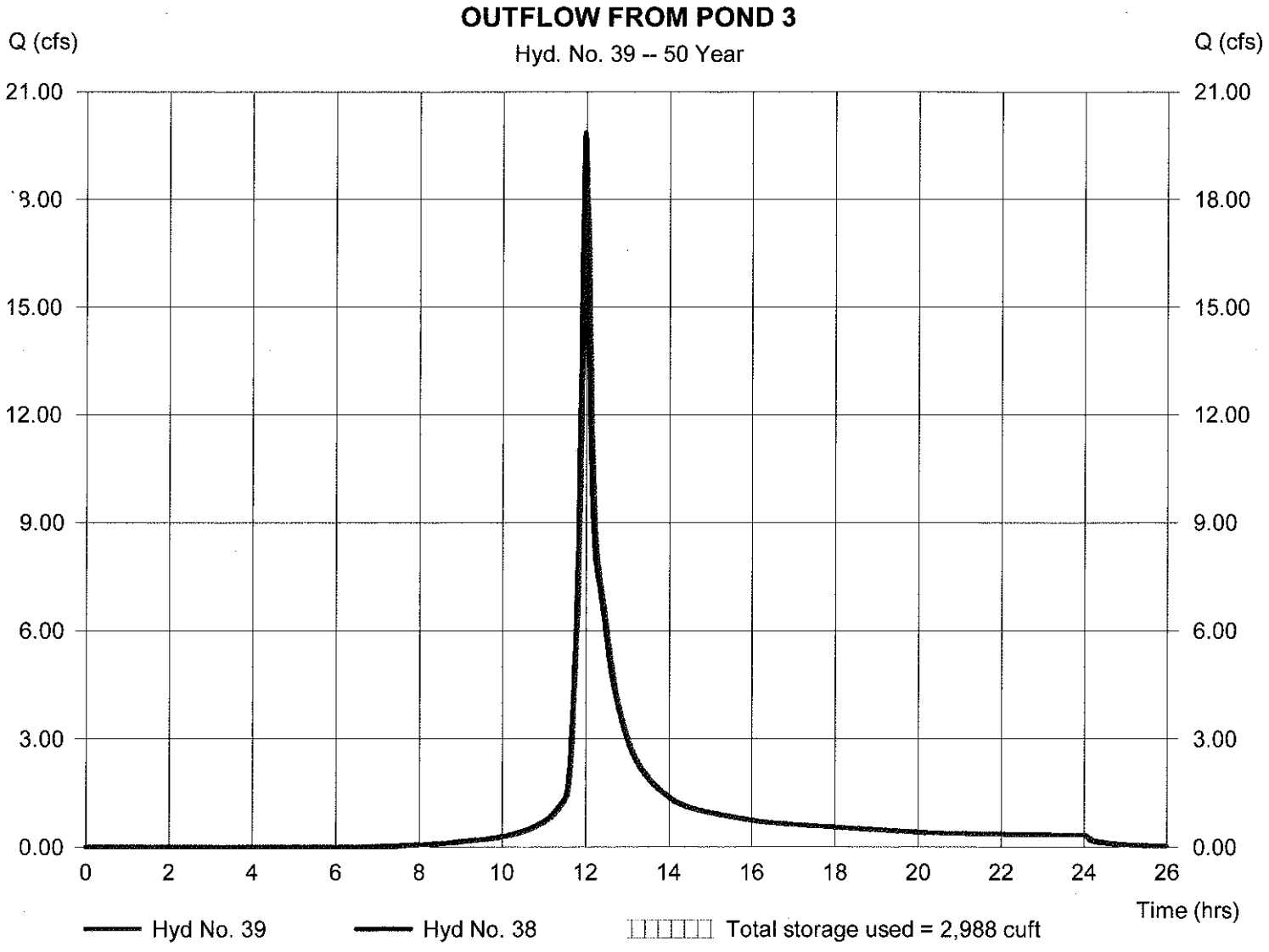
Hydrograph Report

Hyd. No. 39

OUTFLOW FROM POND 3

Hydrograph type	= Reservoir	Peak discharge	= 18.39 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 71,244 cuft
Inflow hyd. No.	= 38 - TOTAL INFLOW TO POND 3	Max. Elevation	= 6423.31 ft
Reservoir name	= POND 3	Max. Storage	= 2,988 cuft

Storage Indication method used.

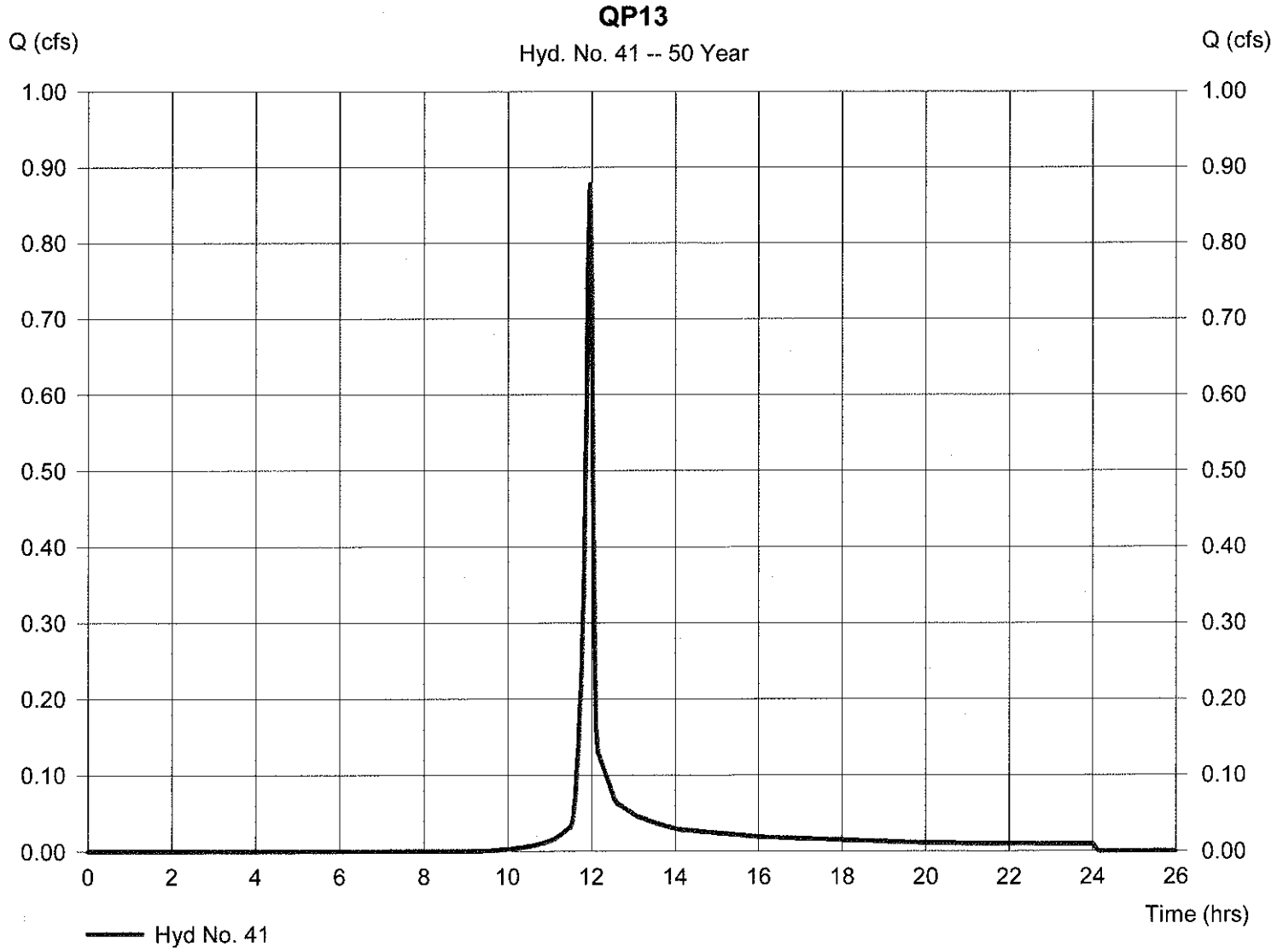


Hydrograph Report

Hyd. No. 41

QP13

Hydrograph type	= SCS Runoff	Peak discharge	= 0.877 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,763 cuft
Drainage area	= 0.360 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

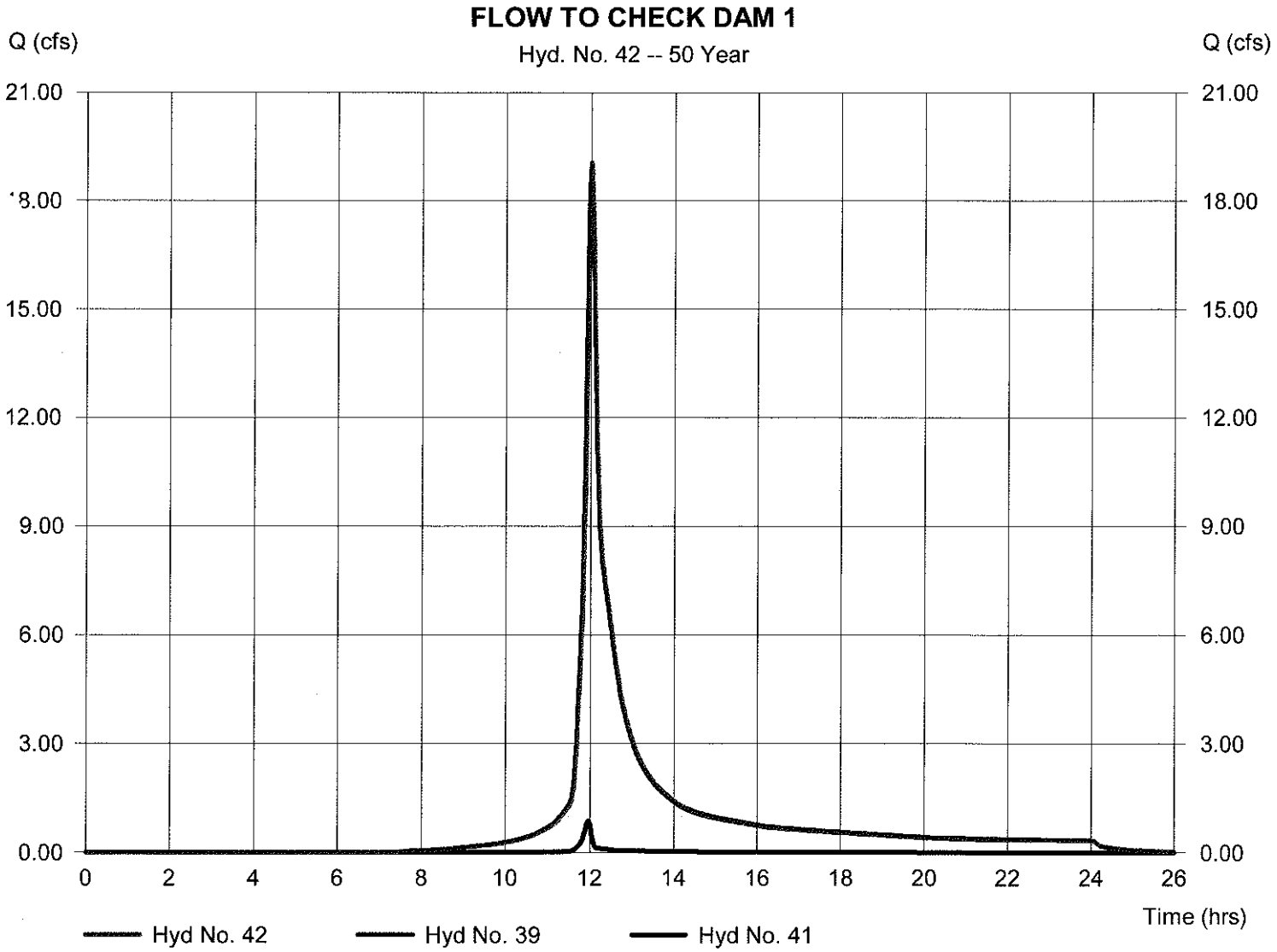


Hydrograph Report

Hyd. No. 42

FLOW TO CHECK DAM 1

Hydrograph type	= Combine	Peak discharge	= 19.06 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 73,007 cuft
Inflow hyds.	= 39, 41	Contrib. drain. area	= 0.360 ac

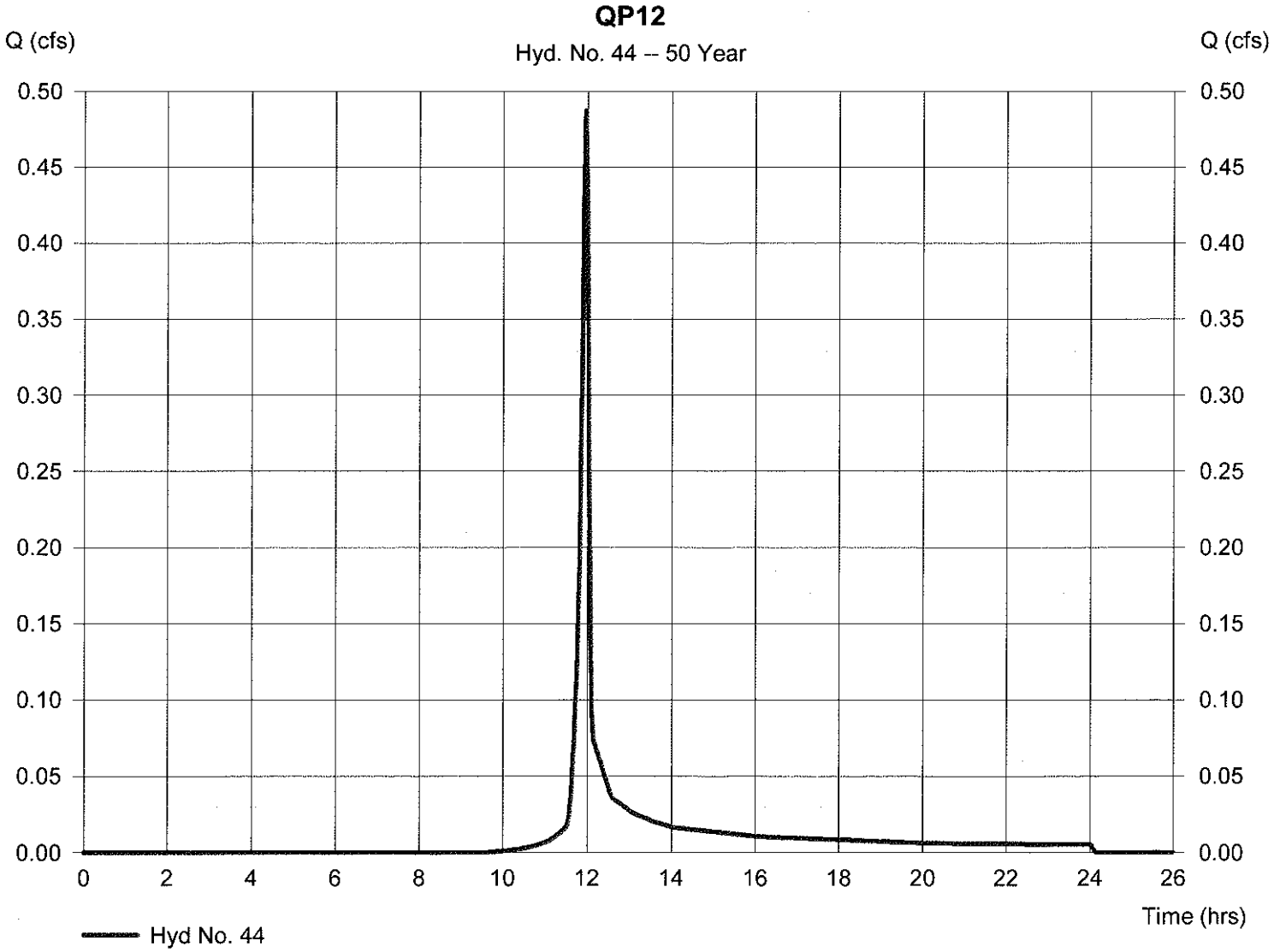


Hydrograph Report

Hyd. No. 44

QP12

Hydrograph type	= SCS Runoff	Peak discharge	= 0.487 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 978 cuft
Drainage area	= 0.210 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

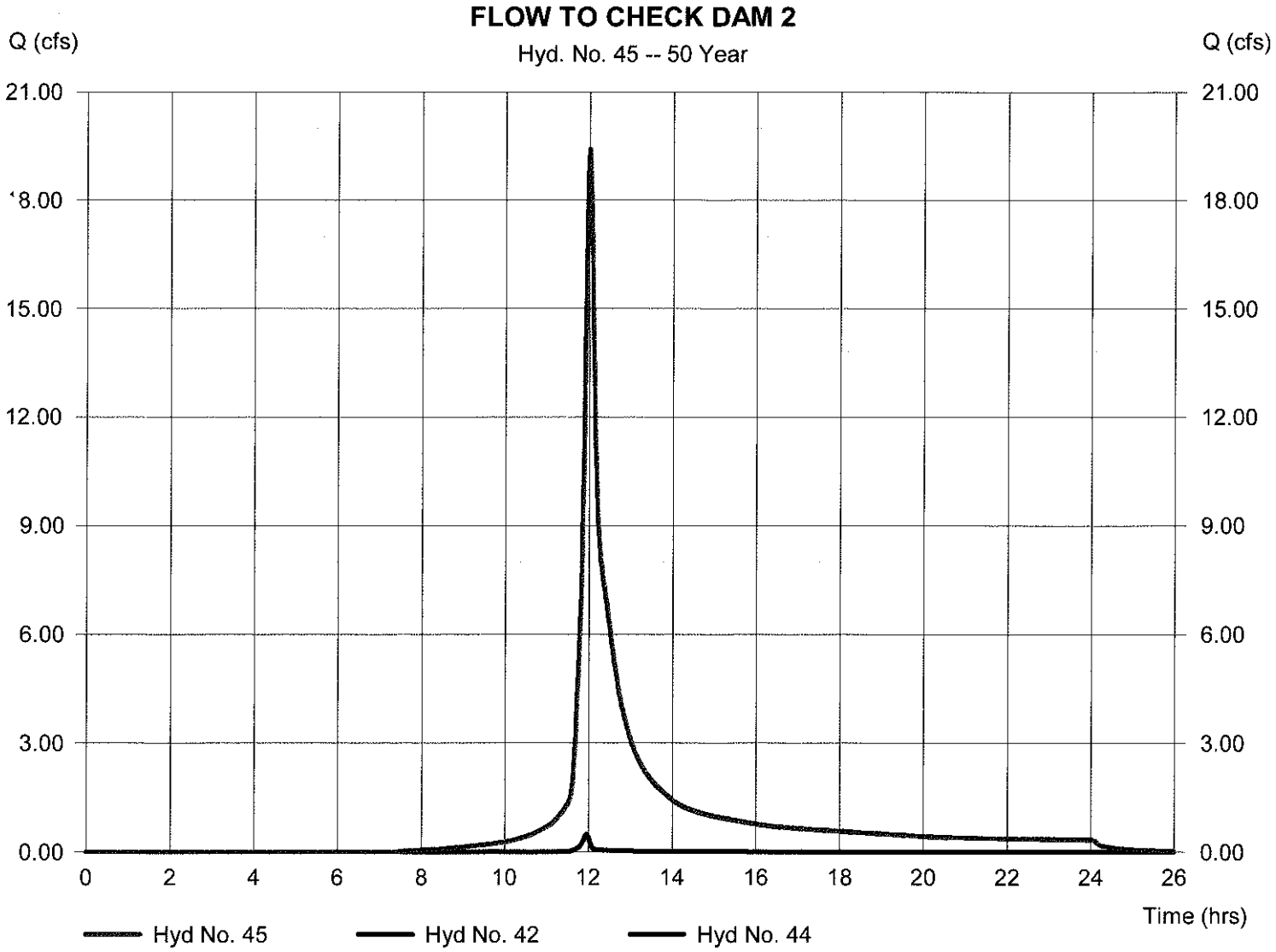


Hydrograph Report

Hyd. No. 45

FLOW TO CHECK DAM 2

Hydrograph type	= Combine	Peak discharge	= 19.43 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 73,986 cuft
Inflow hyds.	= 42, 44	Contrib. drain. area	= 0.210 ac

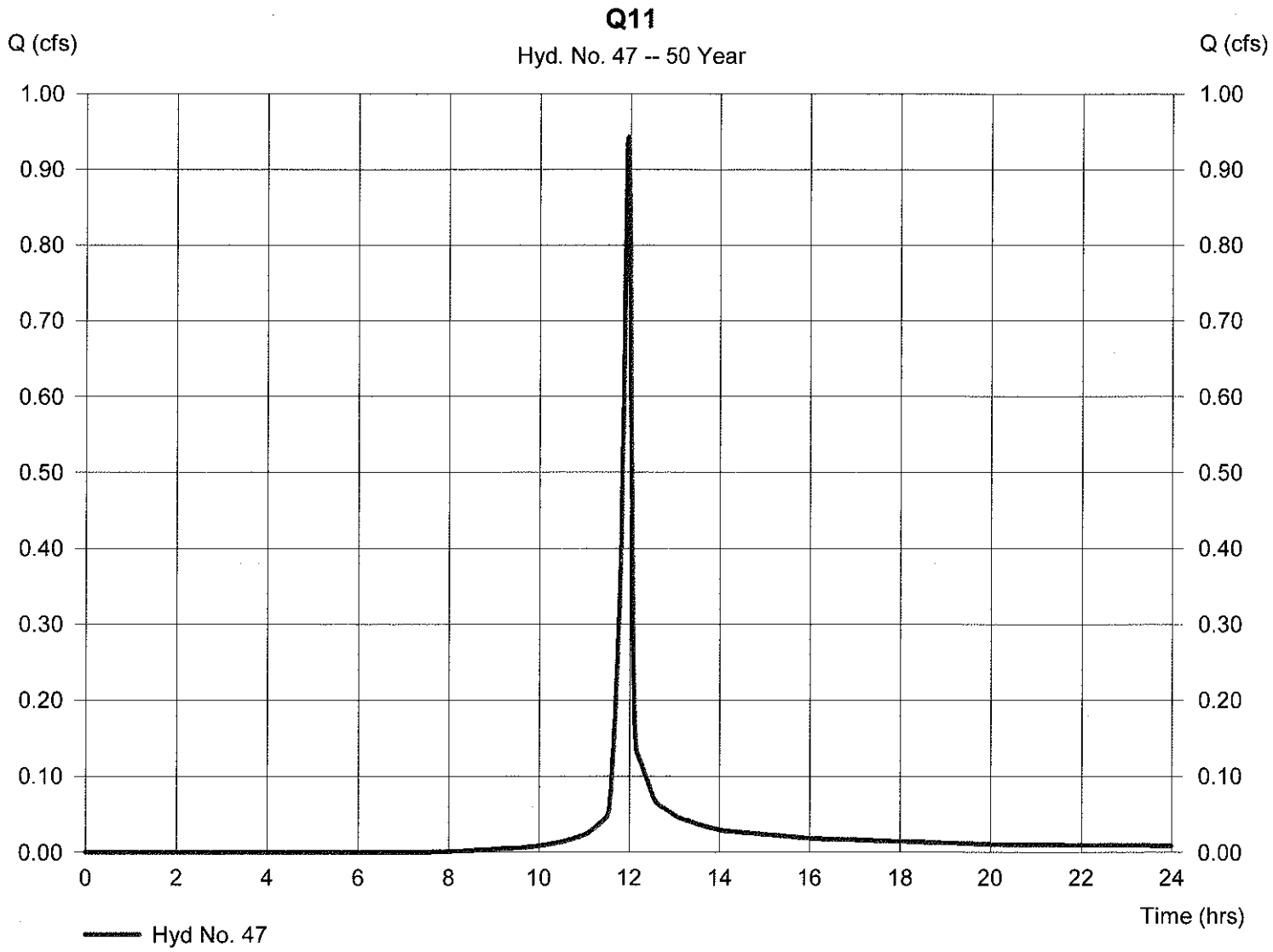


Hydrograph Report

Hyd. No. 47

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 0.943 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,927 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

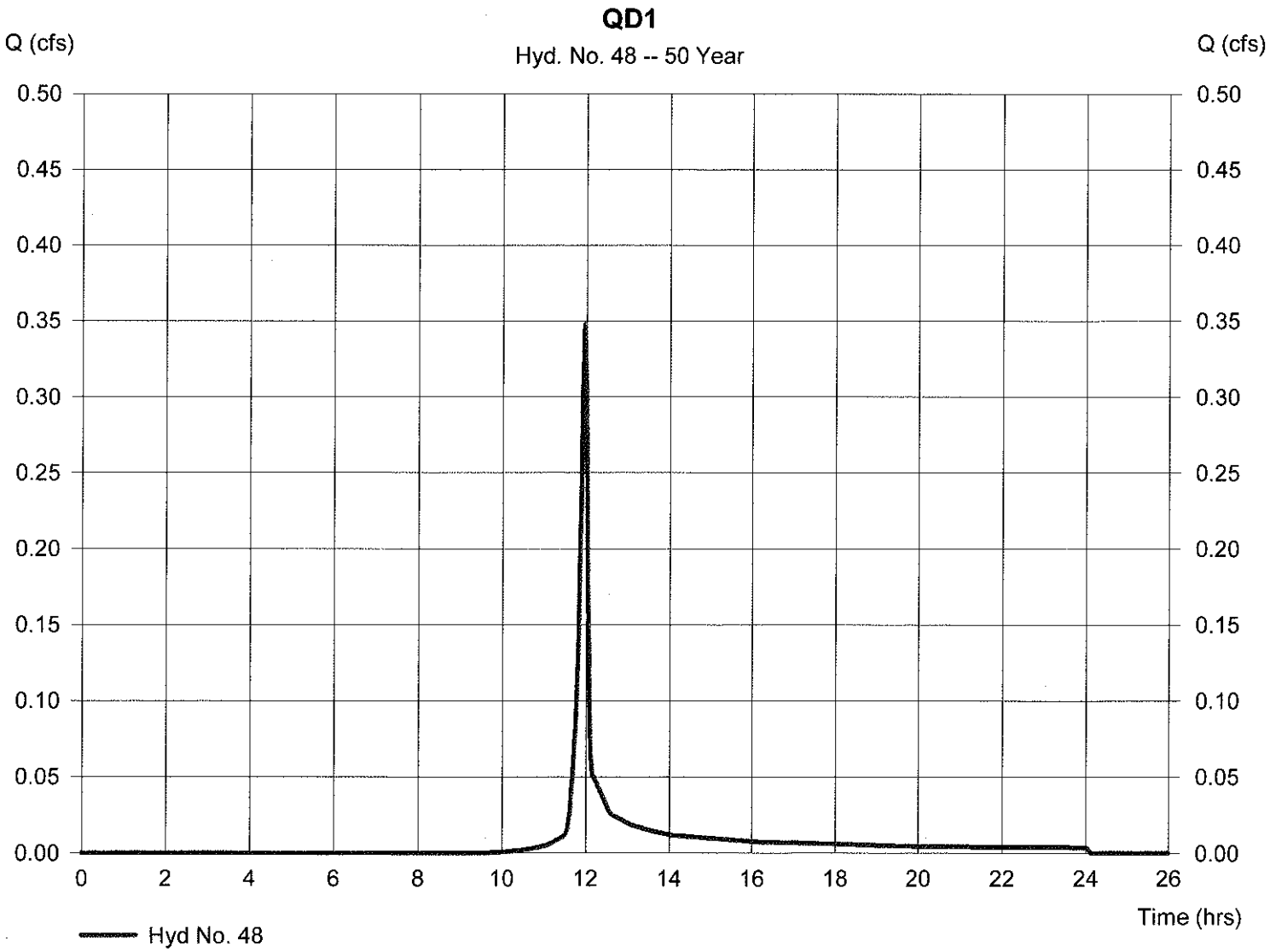


Hydrograph Report

Hyd. No. 48

QD1

Hydrograph type	= SCS Runoff	Peak discharge	= 0.348 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 699 cuft
Drainage area	= 0.150 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

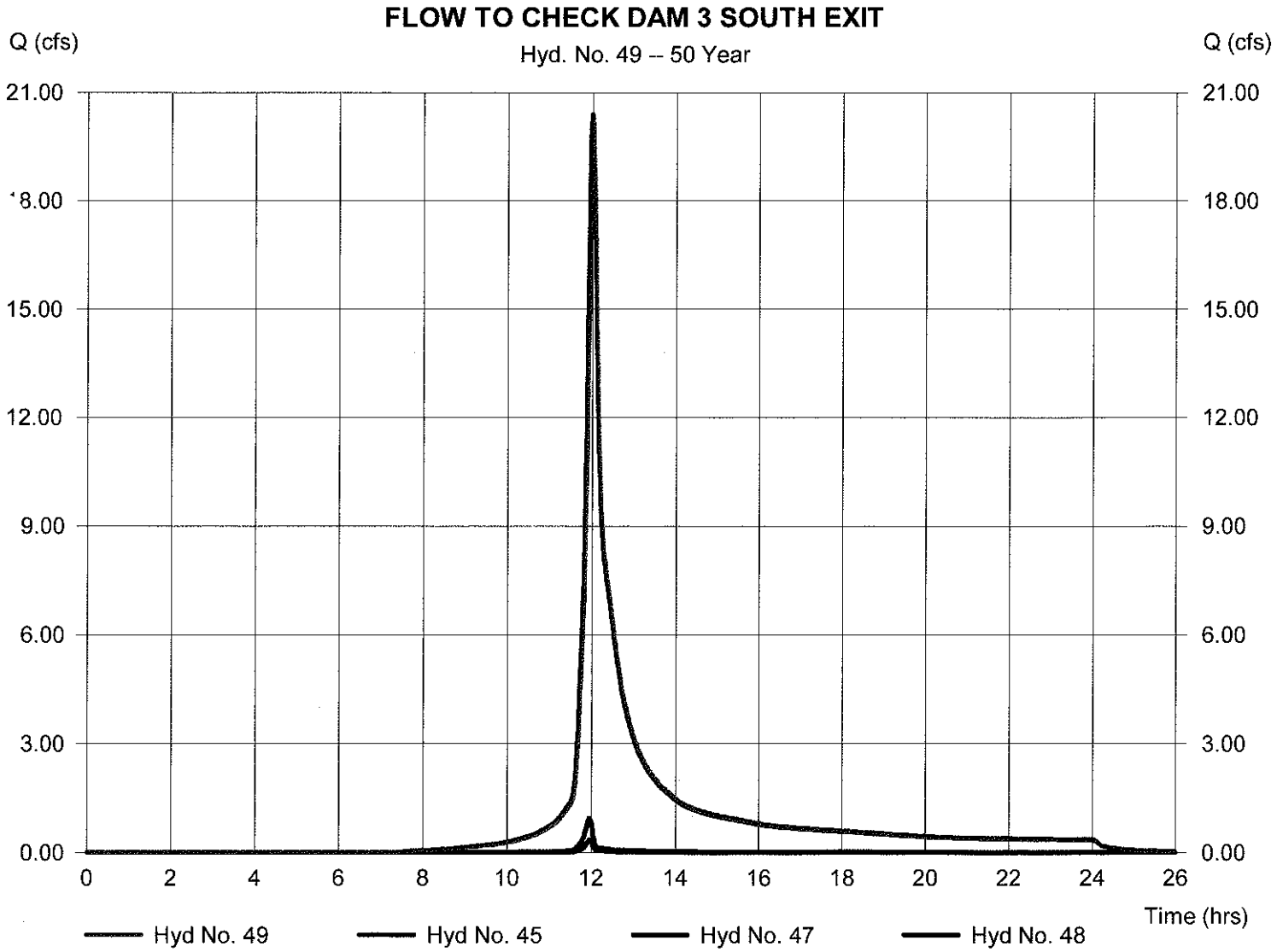


Hydrograph Report

Hyd. No. 49

FLOW TO CHECK DAM 3 SOUTH EXIT

Hydrograph type	= Combine	Peak discharge	= 20.40 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 76,612 cuft
Inflow hyds.	= 45, 47, 48	Contrib. drain. area	= 0.460 ac

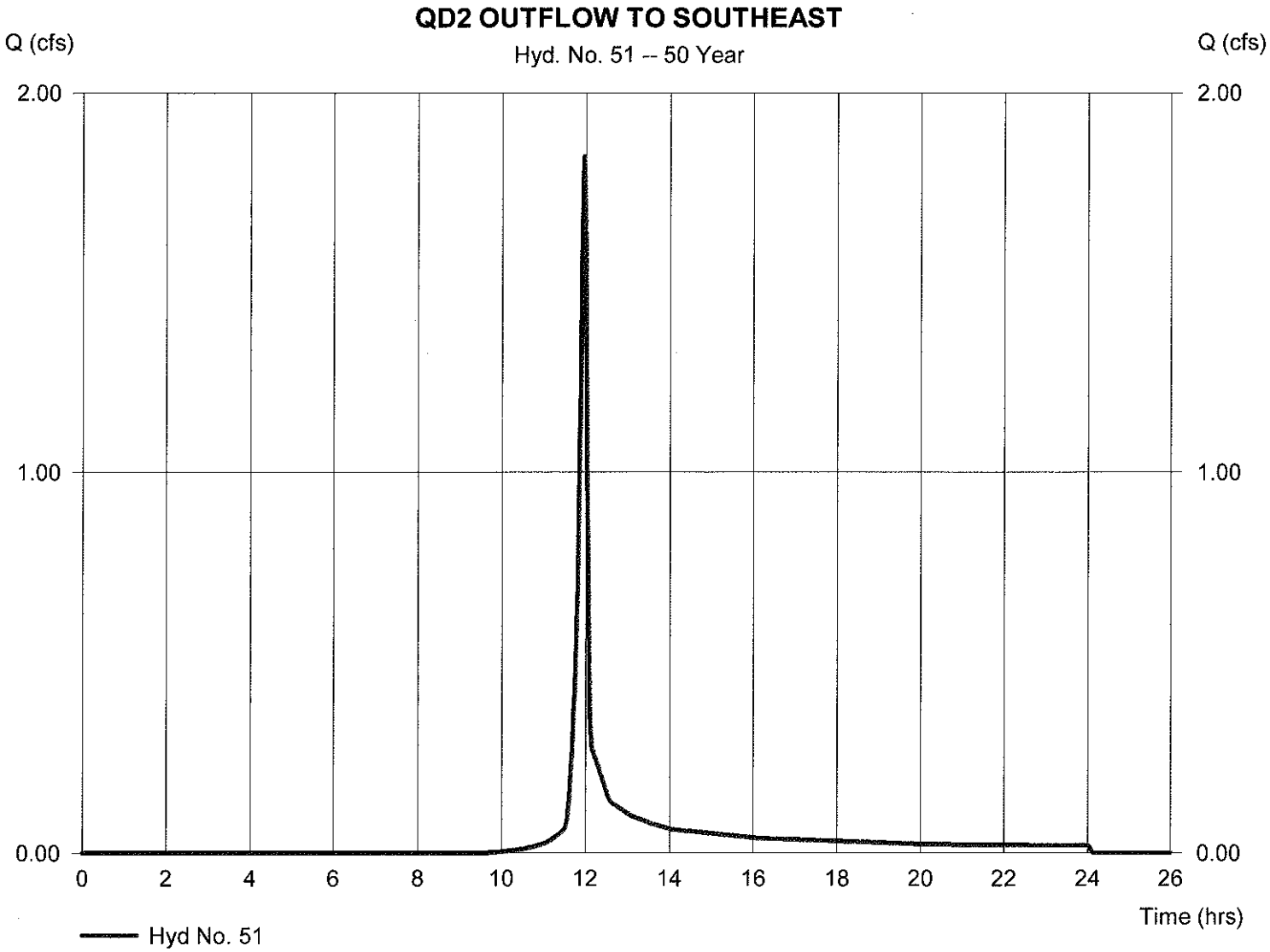


Hydrograph Report

Hyd. No. 51

QD2 OUTFLOW TO SOUTHEAST

Hydrograph type	= SCS Runoff	Peak discharge	= 1.833 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 3,681 cuft
Drainage area	= 0.790 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

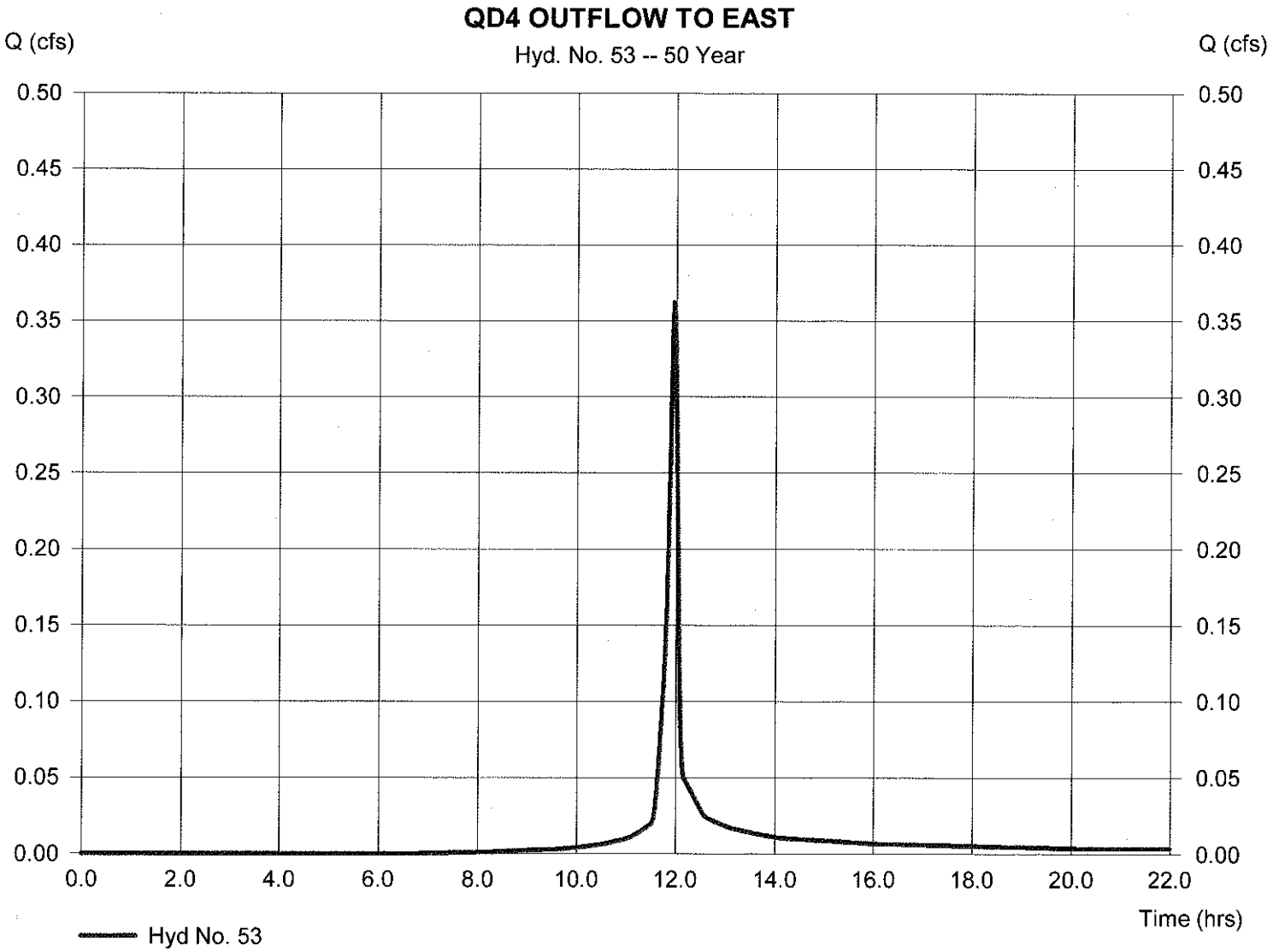


Hydrograph Report

Hyd. No. 53

QD4 OUTFLOW TO EAST

Hydrograph type	= SCS Runoff	Peak discharge	= 0.362 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 749 cuft
Drainage area	= 0.110 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.91 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.946	1	726	16,379	------	------	------	QD7
2	Reach	4.944	1	727	16,378	1	------	------	FLOW FROM OFFSITE
3	SCS Runoff	1.806	1	721	4,608	------	------	------	QP24
4	Combine	6.283	1	725	20,986	2, 3	------	------	FLOW FROM QD7 AND QP24
5	SCS Runoff	3.586	1	718	7,818	------	------	------	QP23
6	Combine	8.772	1	721	28,804	4, 5	------	------	FLOW FROM QP24 AND QP23
7	SCS Runoff	0.686	1	717	1,449	------	------	------	QP25
8	Combine	9.345	1	720	30,253	6, 7	------	------	FLOW ON WEST SIDE OF ROAD T
9	SCS Runoff	2.334	1	718	5,599	------	------	------	QP22
10	Combine	11.54	1	719	35,852	8, 9	------	------	INFLOW TO POND 1
12	SCS Runoff	1.823	1	717	3,771	------	------	------	QP26
13	Reach	1.786	1	719	3,770	12	------	------	INFLOW TO POND 1
14	SCS Runoff	0.622	1	719	1,314	------	------	------	QP20
15	Combine	13.95	1	719	40,936	10, 13, 14	------	------	TOTAL FLOW TO POND 1
16	Reservoir	6.611	1	731	40,715	15	6437.50	10,625	OUTFLOW FROM POND 1
18	SCS Runoff	1.487	1	719	3,430	------	------	------	QP27
19	SCS Runoff	0.269	1	717	598	------	------	------	QP21
20	Combine	6.939	1	724	43,429	16, 18, 19	------	------	ROAD FLOW
22	SCS Runoff	2.105	1	719	4,828	------	------	------	QP28
23	SCS Runoff	2.152	1	717	4,450	------	------	------	QP19
24	Combine	10.34	1	720	52,707	20, 22, 23	------	------	ROAD FLOW
26	SCS Runoff	1.980	1	720	4,839	------	------	------	QP29
27	SCS Runoff	2.480	1	717	5,129	------	------	------	QP18
28	Combine	14.48	1	719	62,676	24, 26, 27	------	------	ROAD FLOW
30	SCS Runoff	2.420	1	720	5,980	------	------	------	QP30
31	SCS Runoff	2.060	1	720	5,091	------	------	------	QP17
32	Combine	18.92	1	720	73,747	28, 30, 31	------	------	ROAD FLOW SOUTH OF ROJOS
34	SCS Runoff	1.889	1	717	3,930	------	------	------	QP16
35	SCS Runoff	1.694	1	717	3,580	------	------	------	QP15
37	Combine	22.25	1	719	81,257	32, 34, 35	------	------	INFLOW TO POND 3
37	SCS Runoff	0.707	1	718	1,496	------	------	------	QP14

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

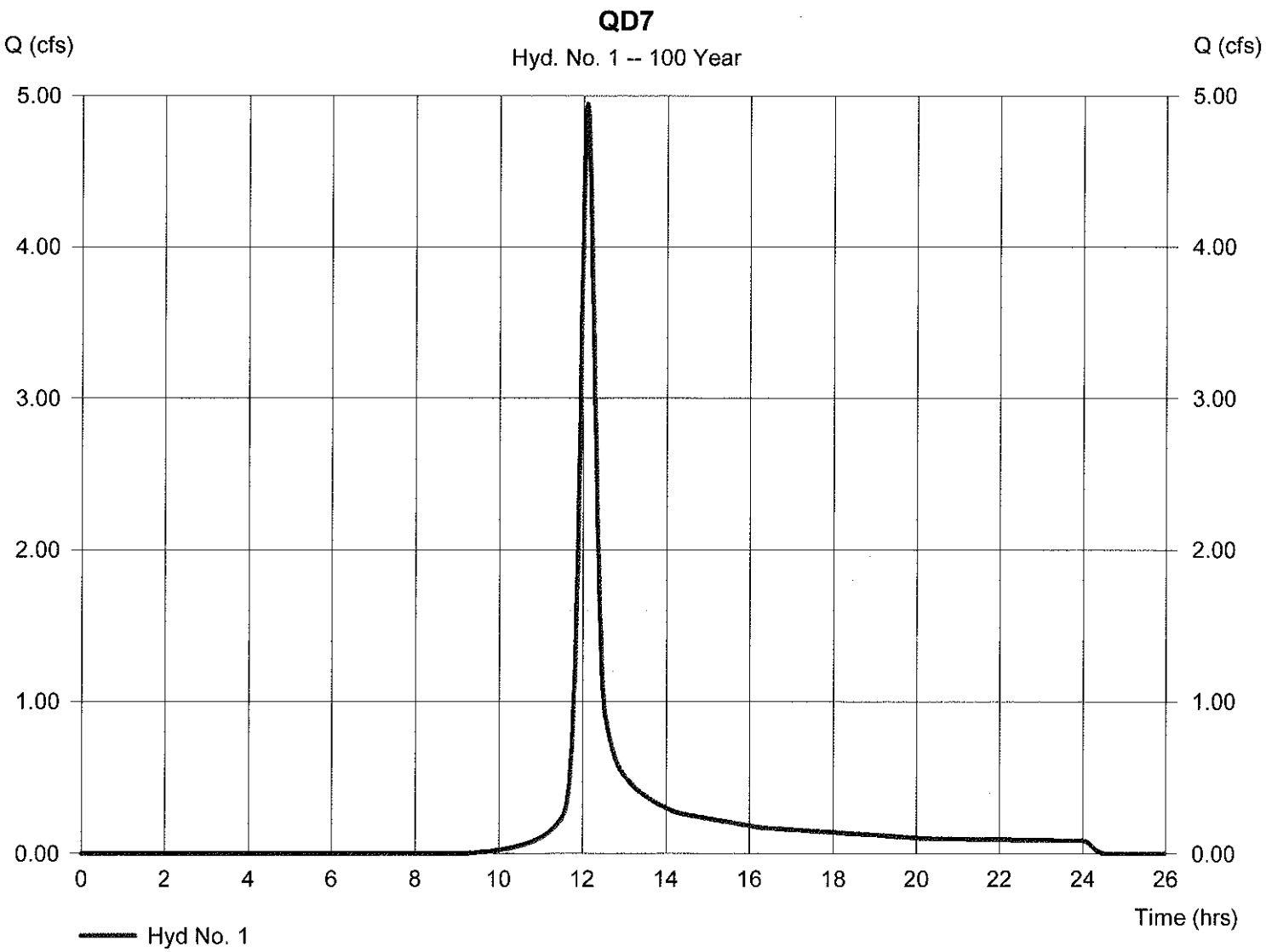
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
38	Combine	22.96	1	719	82,753	36, 37	------	------	TOTAL INFLOW TO POND 3
39	Reservoir	21.27	1	721	82,672	38	6423.54	3,491	OUTFLOW FROM POND 3
41	SCS Runoff	1.039	1	718	2,094	------	------	------	QP13
42	Combine	22.06	1	721	84,767	39, 41	------	------	FLOW TO CHECK DAM 1
44	SCS Runoff	0.580	1	718	1,167	------	------	------	QP12
45	Combine	22.50	1	721	85,934	42, 44	------	------	FLOW TO CHECK DAM 2
47	SCS Runoff	1.090	1	717	2,243	------	------	------	Q11
48	SCS Runoff	0.414	1	718	834	------	------	------	QD1
49	Combine	23.62	1	721	89,010	45, 47, 48	------	------	FLOW TO CHECK DAM 3 SOUTH E
51	SCS Runoff	2.183	1	718	4,391	------	------	------	QD2 OUTFLOW TO SOUTHEAST
53	SCS Runoff	0.415	1	717	865	------	------	------	QD4 OUTFLOW TO EAST

Hydrograph Report

Hyd. No. 1

QD7

Hydrograph type	= SCS Runoff	Peak discharge	= 4.946 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 16,379 cuft
Drainage area	= 3.010 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.94 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



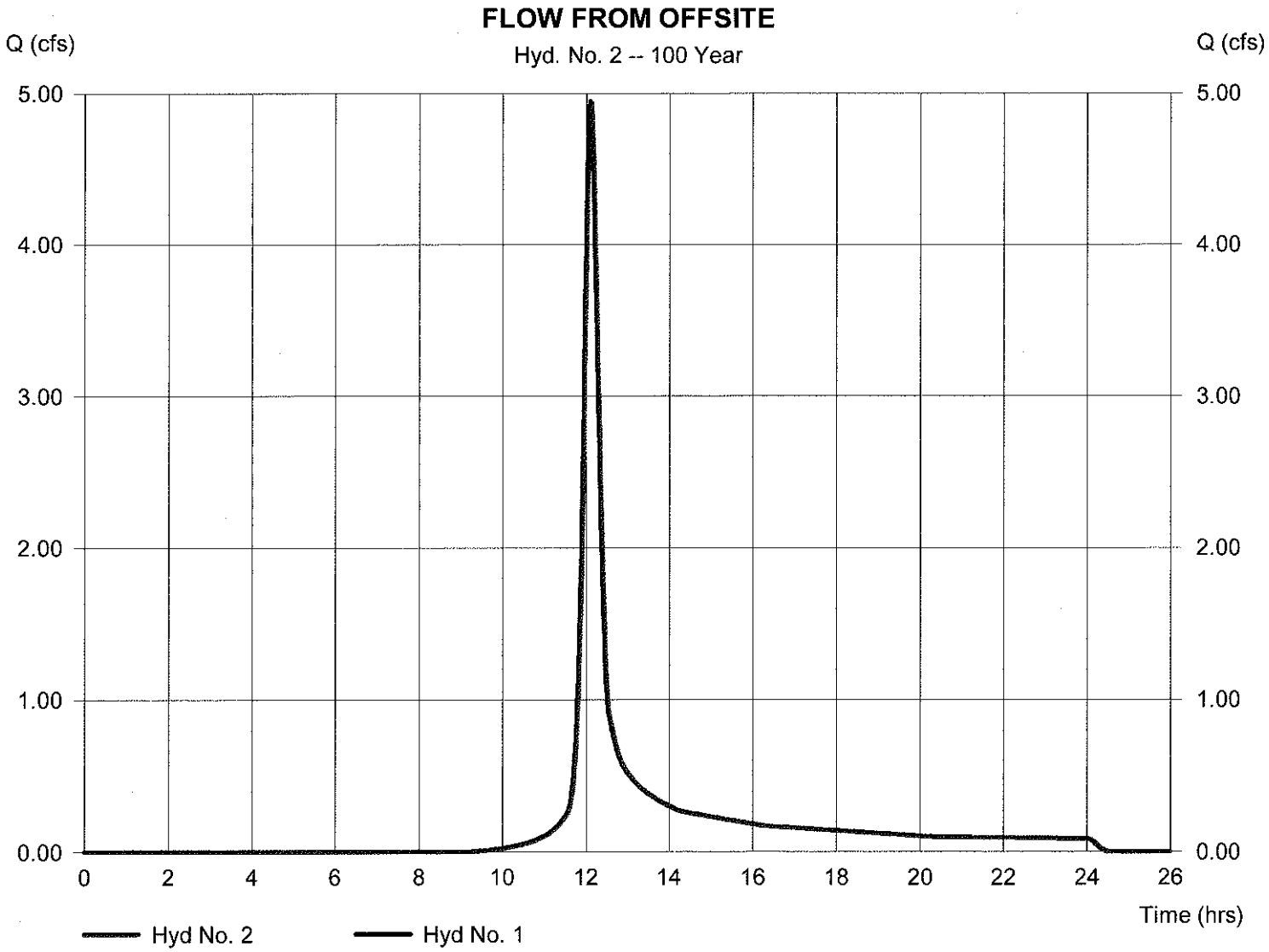
Hydrograph Report

Hyd. No. 2

FLOW FROM OFFSITE

Hydrograph type	= Reach	Peak discharge	= 4.944 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 16,378 cuft
Inflow hyd. No.	= 1 - QD7	Section type	= Circular
Reach length	= 113.8 ft	Channel slope	= 1.0 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 3.441	Rating curve m	= 1.250
Ave. velocity	= 2.80 ft/s	Routing coeff.	= 0.9597

Modified Att-Kin routing method used.

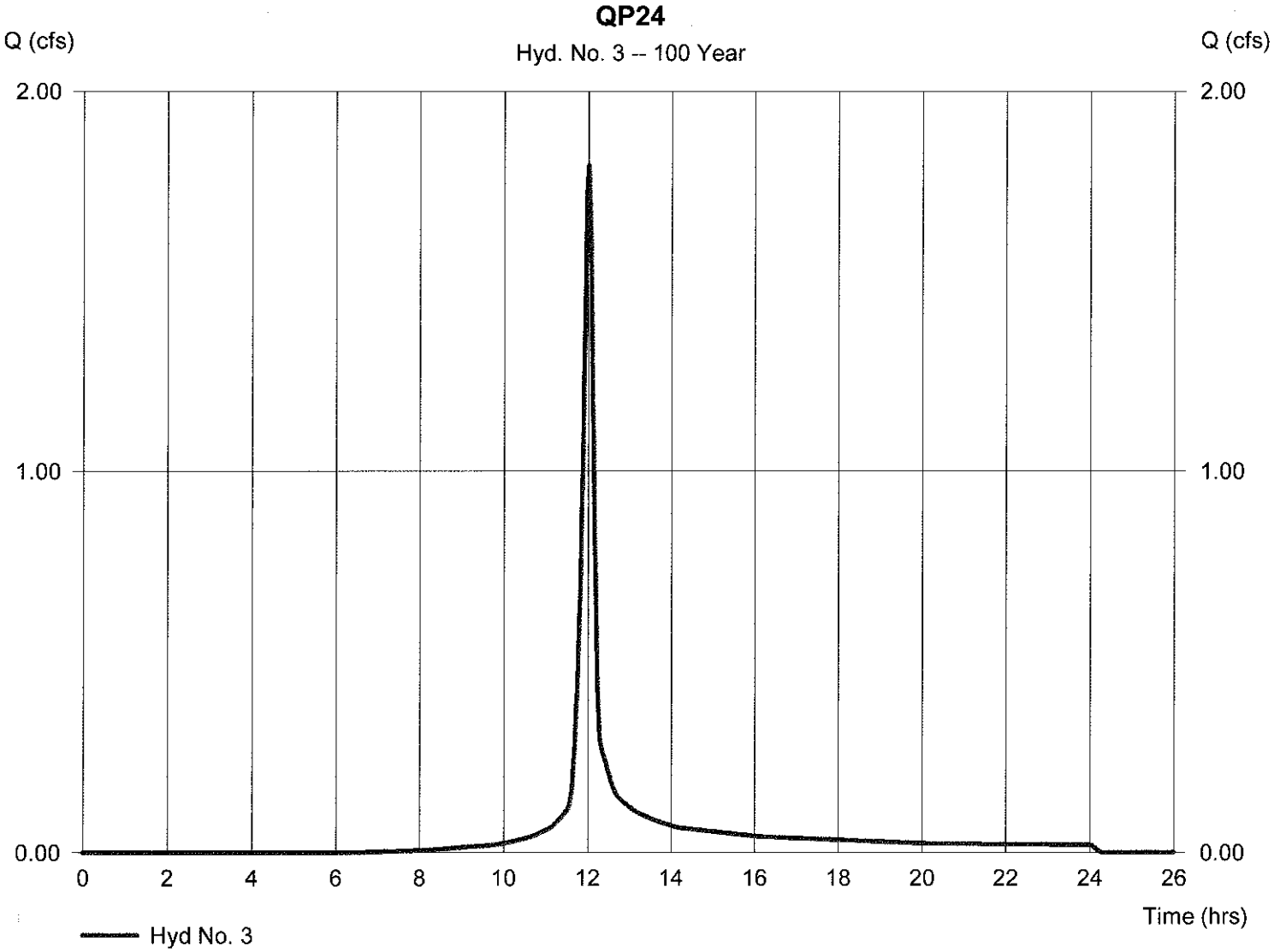


Hydrograph Report

Hyd. No. 3

QP24

Hydrograph type	= SCS Runoff	Peak discharge	= 1.806 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 4,608 cuft
Drainage area	= 0.640 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.42 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

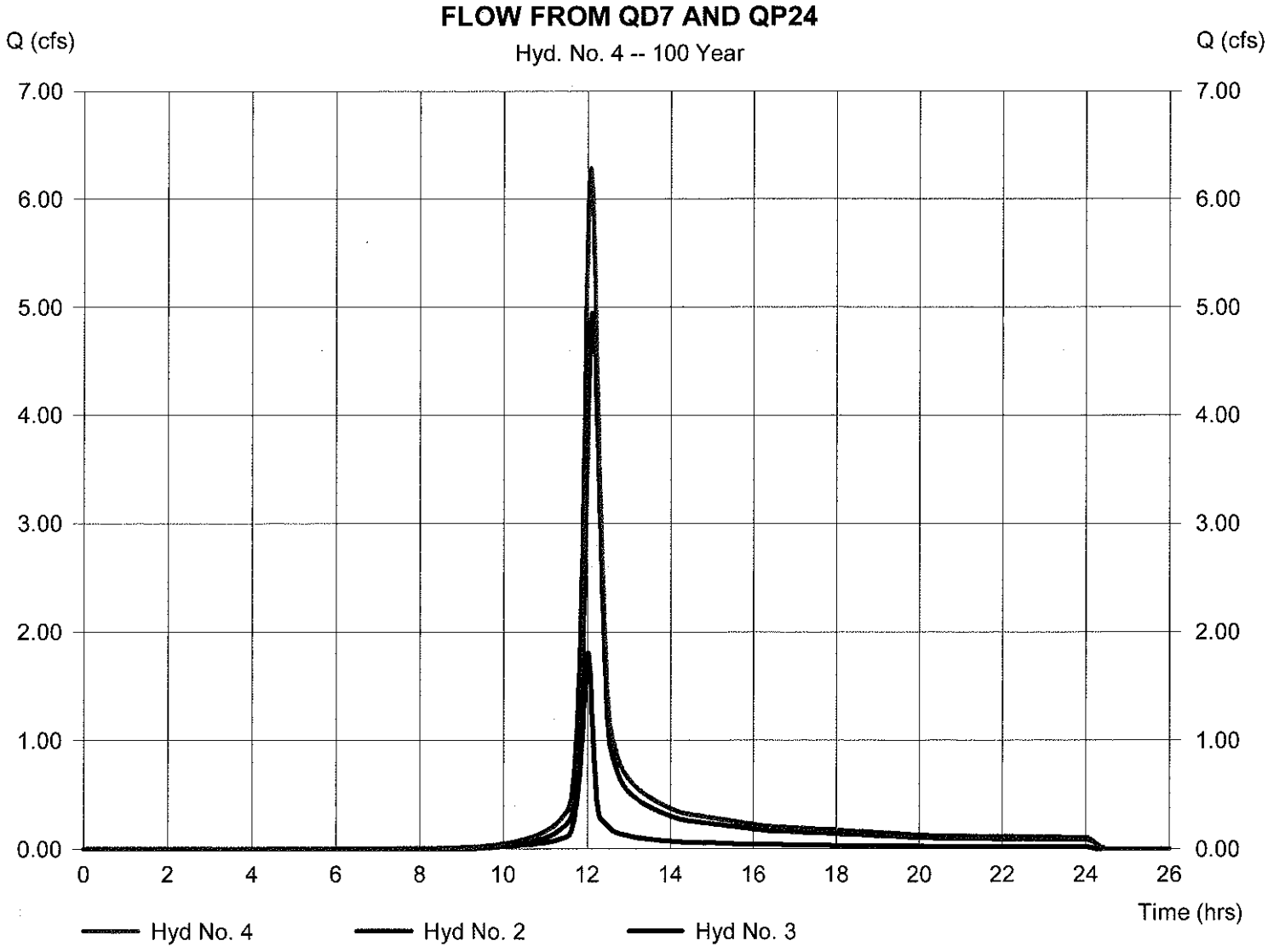


Hydrograph Report

Hyd. No. 4

FLOW FROM QD7 AND QP24

Hydrograph type	= Combine	Peak discharge	= 6.283 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 20,986 cuft
Inflow hyds.	= 2, 3	Contrib. drain. area	= 0.640 ac

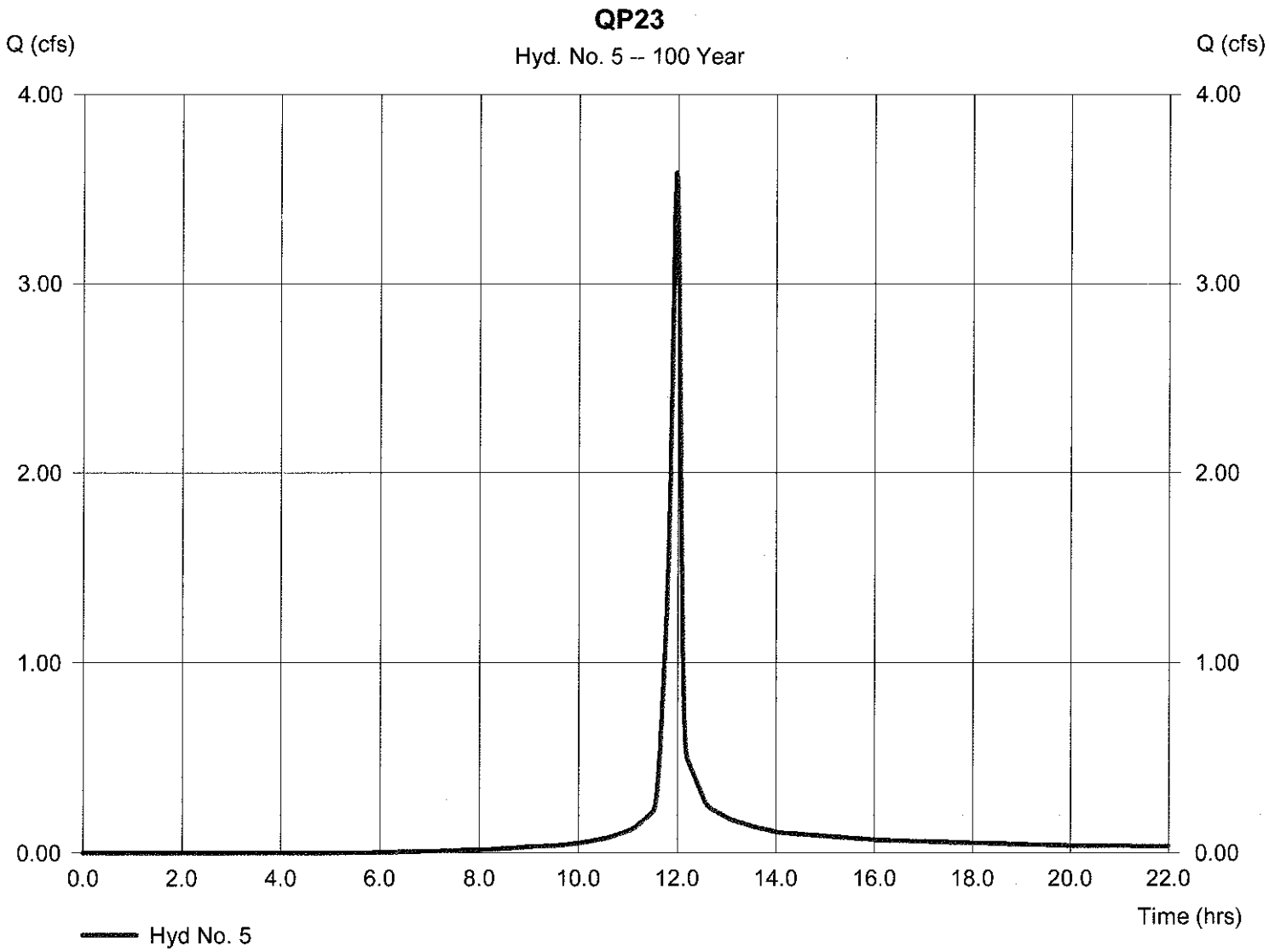


Hydrograph Report

Hyd. No. 5

QP23

Hydrograph type	= SCS Runoff	Peak discharge	= 3.586 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 7,818 cuft
Drainage area	= 1.010 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.32 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

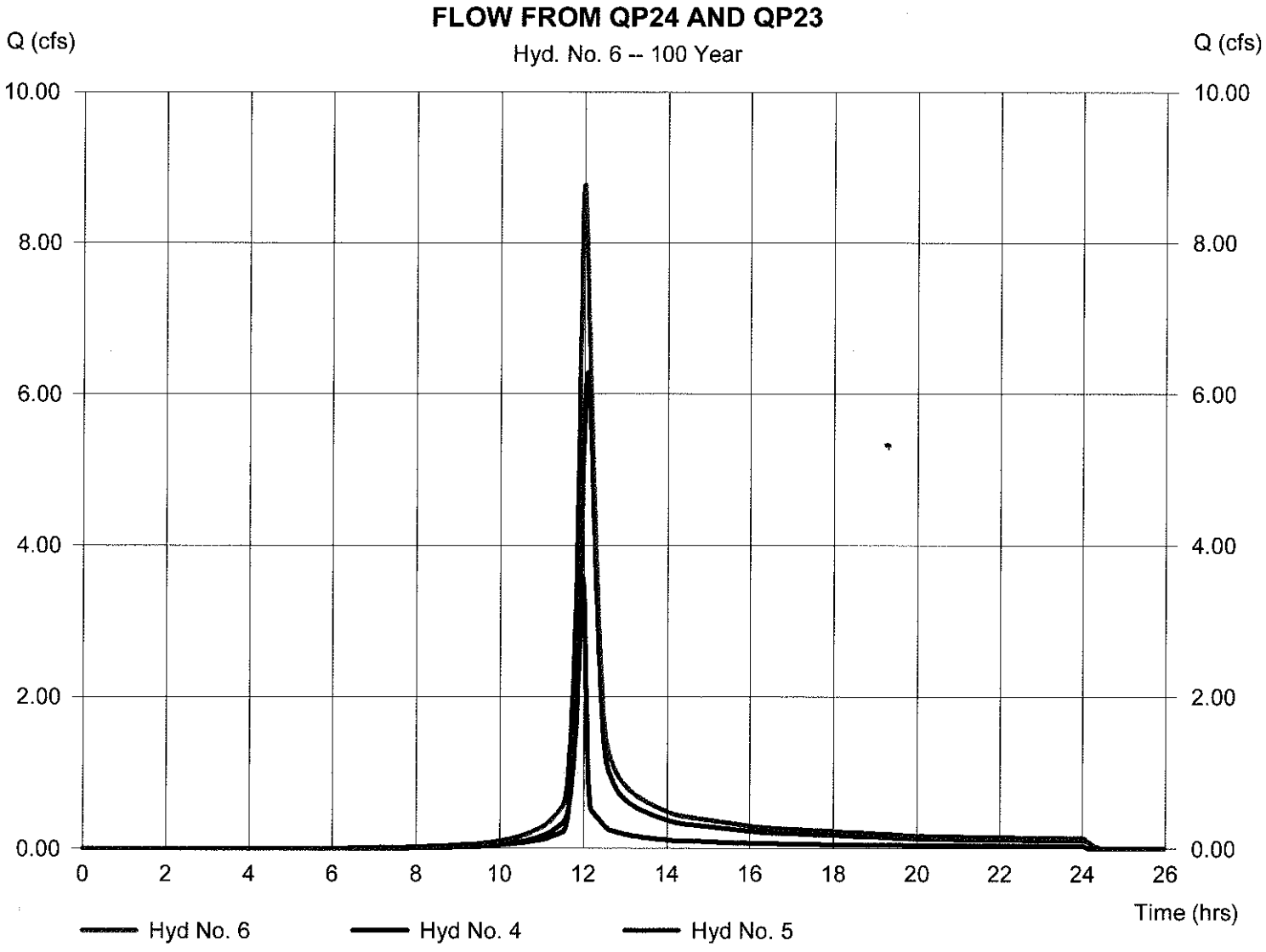


Hydrograph Report

Hyd. No. 6

FLOW FROM QP24 AND QP23

Hydrograph type	= Combine	Peak discharge	= 8.772 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 28,804 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 1.010 ac

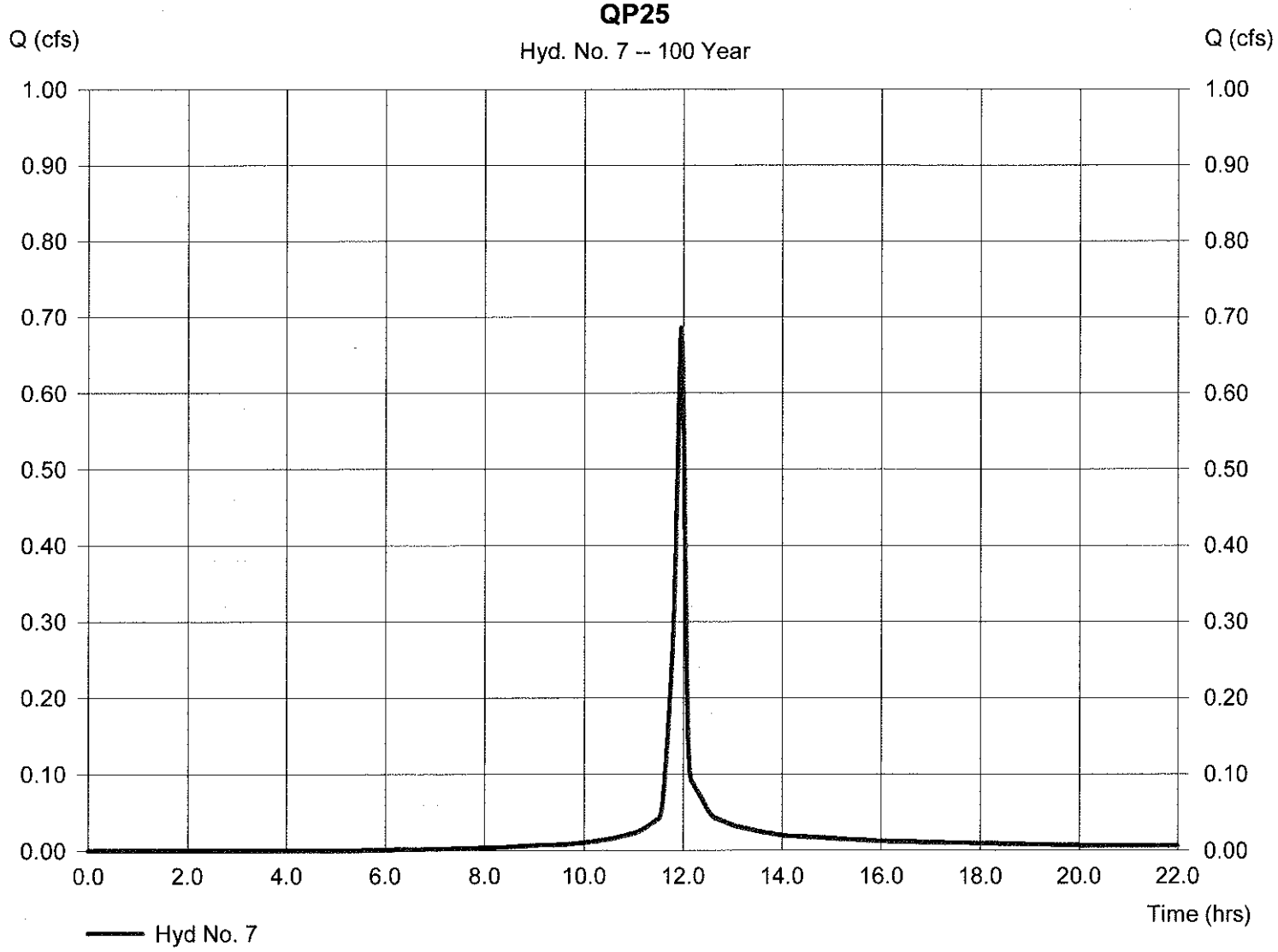


Hydrograph Report

Hyd. No. 7

QP25

Hydrograph type	= SCS Runoff	Peak discharge	= 0.686 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 1,449 cuft
Drainage area	= 0.170 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

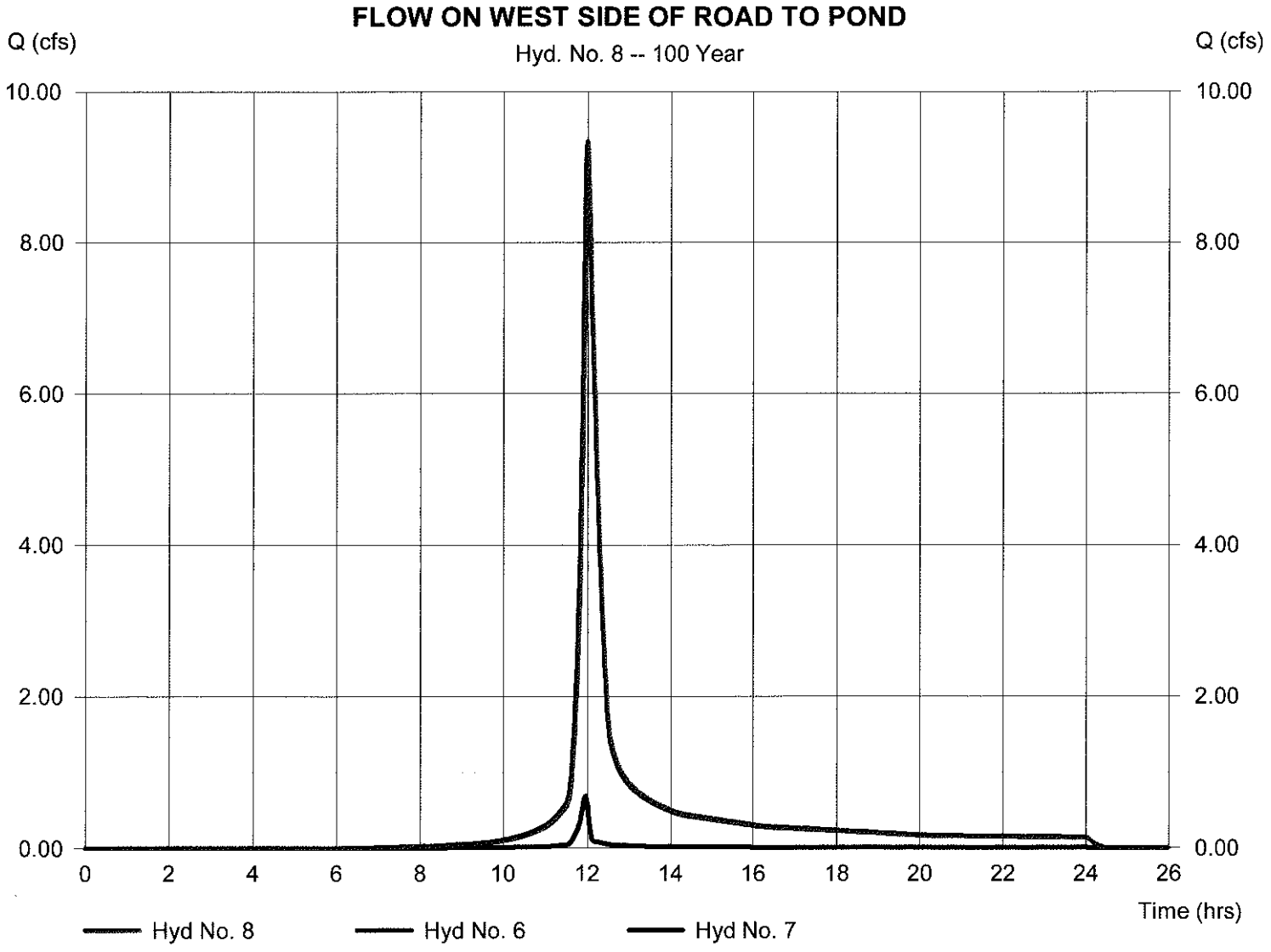


Hydrograph Report

Hyd. No. 8

FLOW ON WEST SIDE OF ROAD TO POND

Hydrograph type	= Combine	Peak discharge	= 9.345 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 30,253 cuft
Inflow hyds.	= 6, 7	Contrib. drain. area	= 0.170 ac

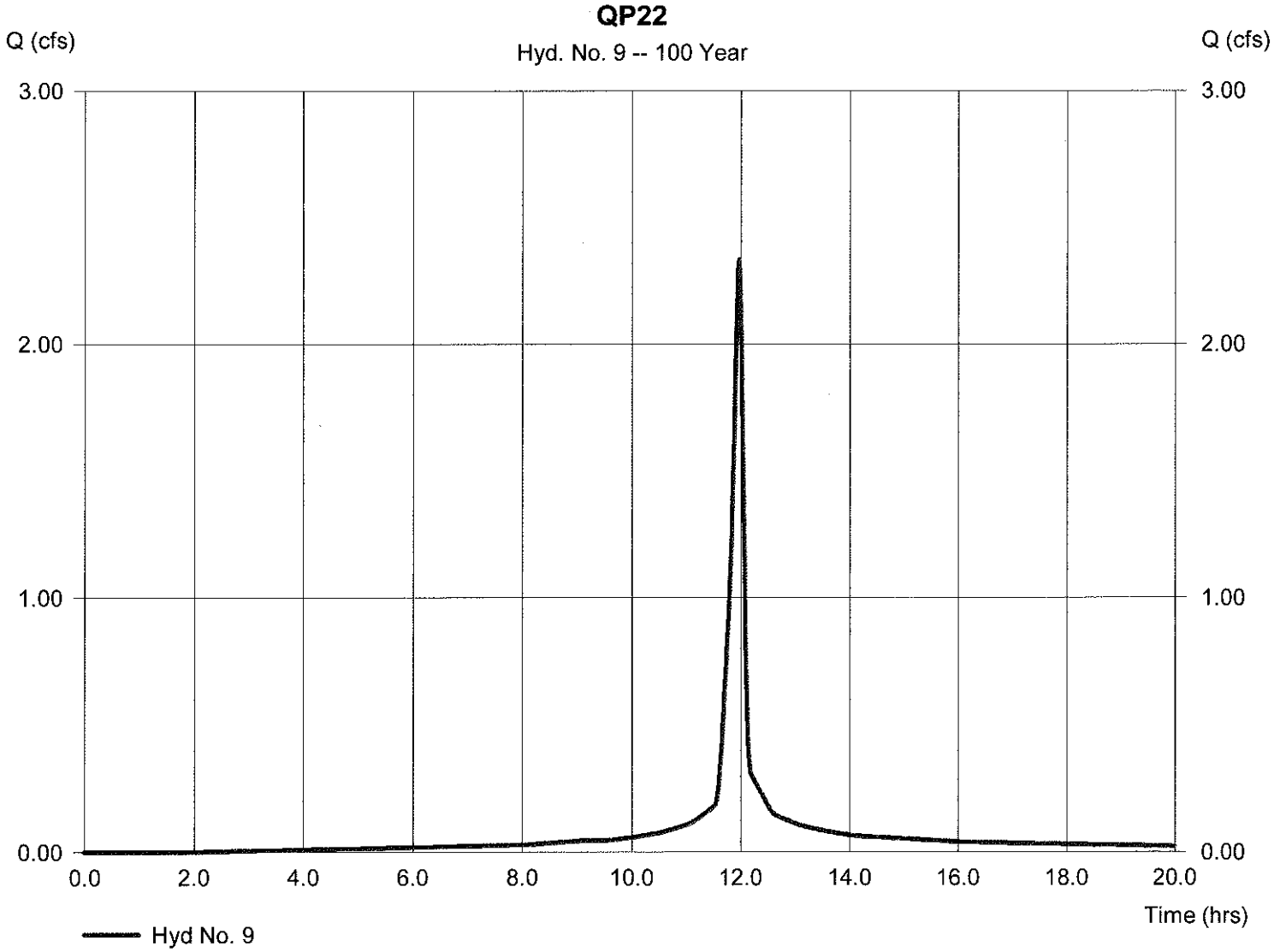


Hydrograph Report

Hyd. No. 9

QP22

Hydrograph type	= SCS Runoff	Peak discharge	= 2.334 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 5,599 cuft
Drainage area	= 0.550 ac	Curve number	= 97
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.28 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

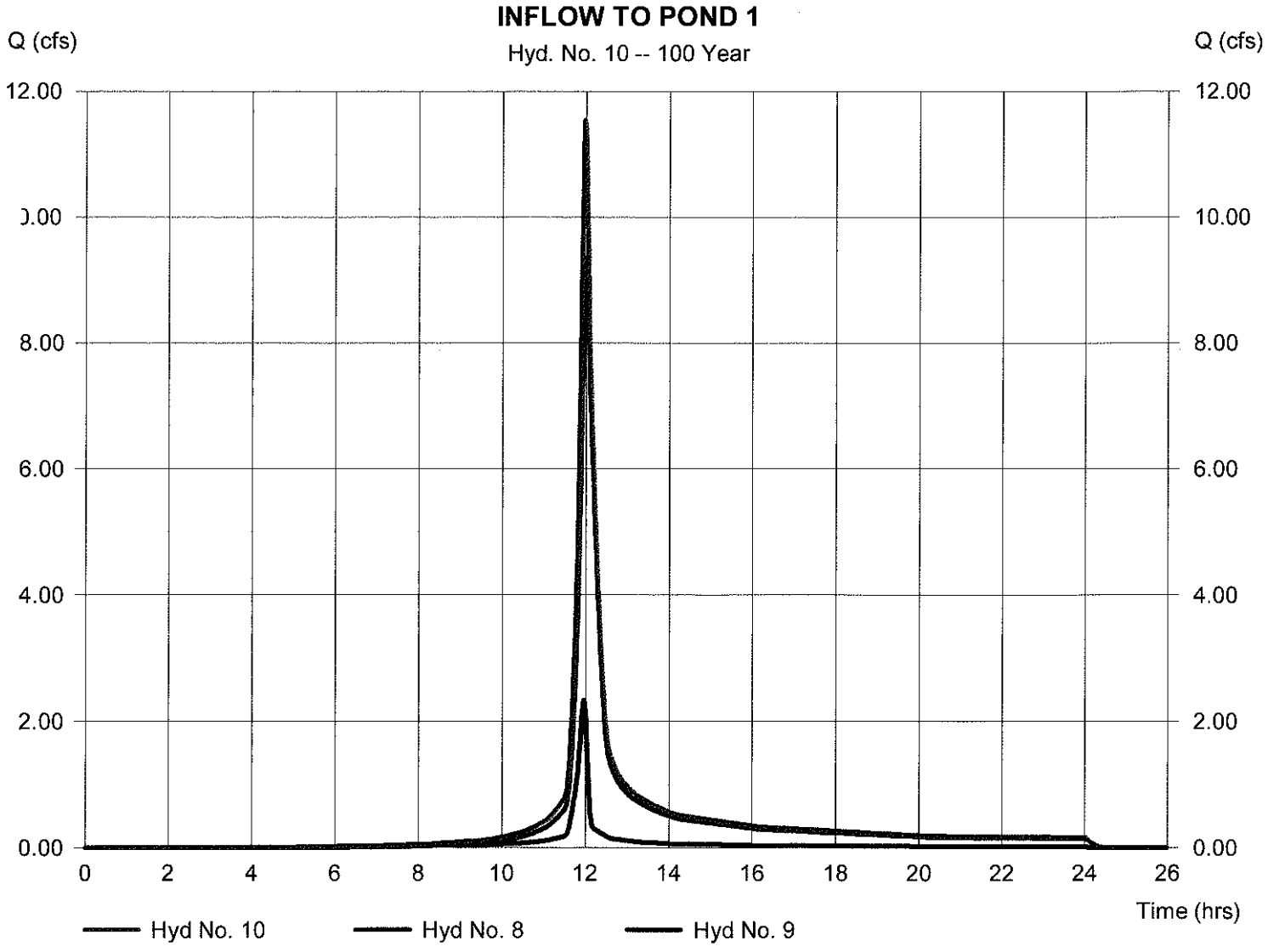


Hydrograph Report

Hyd. No. 10

INFLOW TO POND 1

Hydrograph type	= Combine	Peak discharge	= 11.54 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 35,852 cuft
Inflow hyds.	= 8, 9	Contrib. drain. area	= 0.550 ac

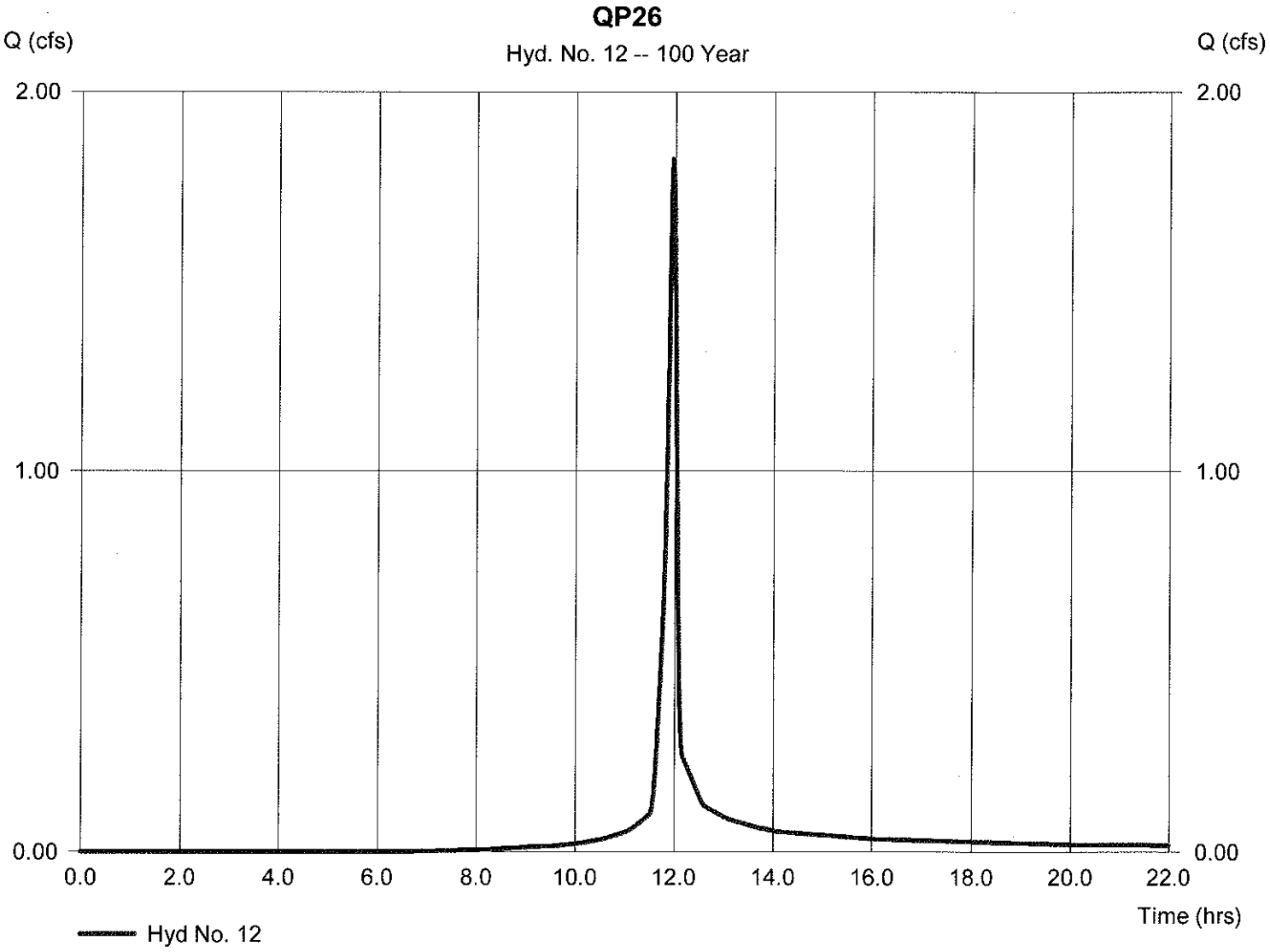


Hydrograph Report

Hyd. No. 12

QP26

Hydrograph type	= SCS Runoff	Peak discharge	= 1.823 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 3,771 cuft
Drainage area	= 0.500 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



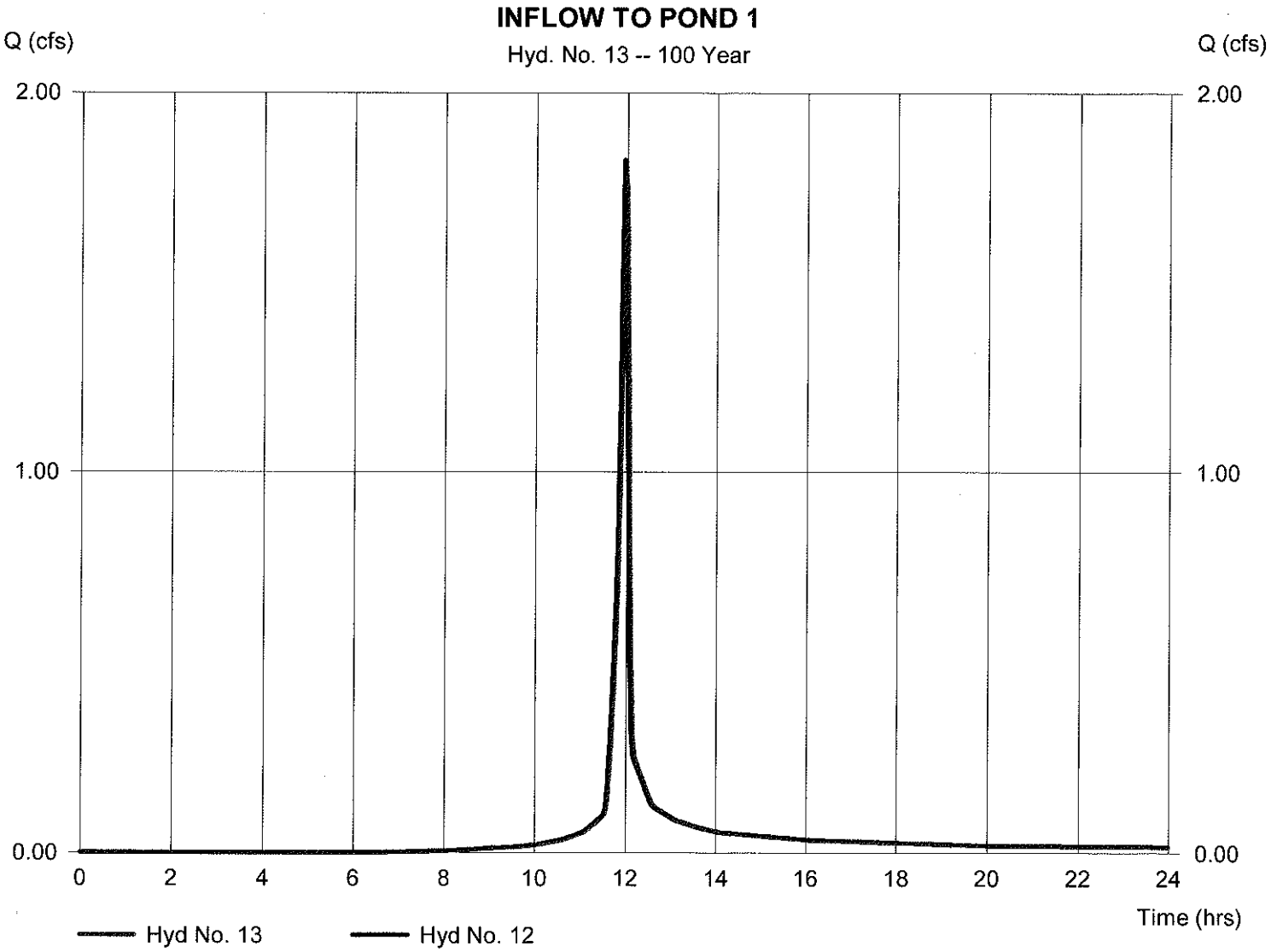
Hydrograph Report

Hyd. No. 13

INFLOW TO POND 1

Hydrograph type	= Reach	Peak discharge	= 1.786 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 3,770 cuft
Inflow hyd. No.	= 12 - QP26	Section type	= Circular
Reach length	= 100.2 ft	Channel slope	= 1.0 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 3.441	Rating curve m	= 1.250
Ave. velocity	= 1.03 ft/s	Routing coeff.	= 0.5572

Modified Att-Kin routing method used.

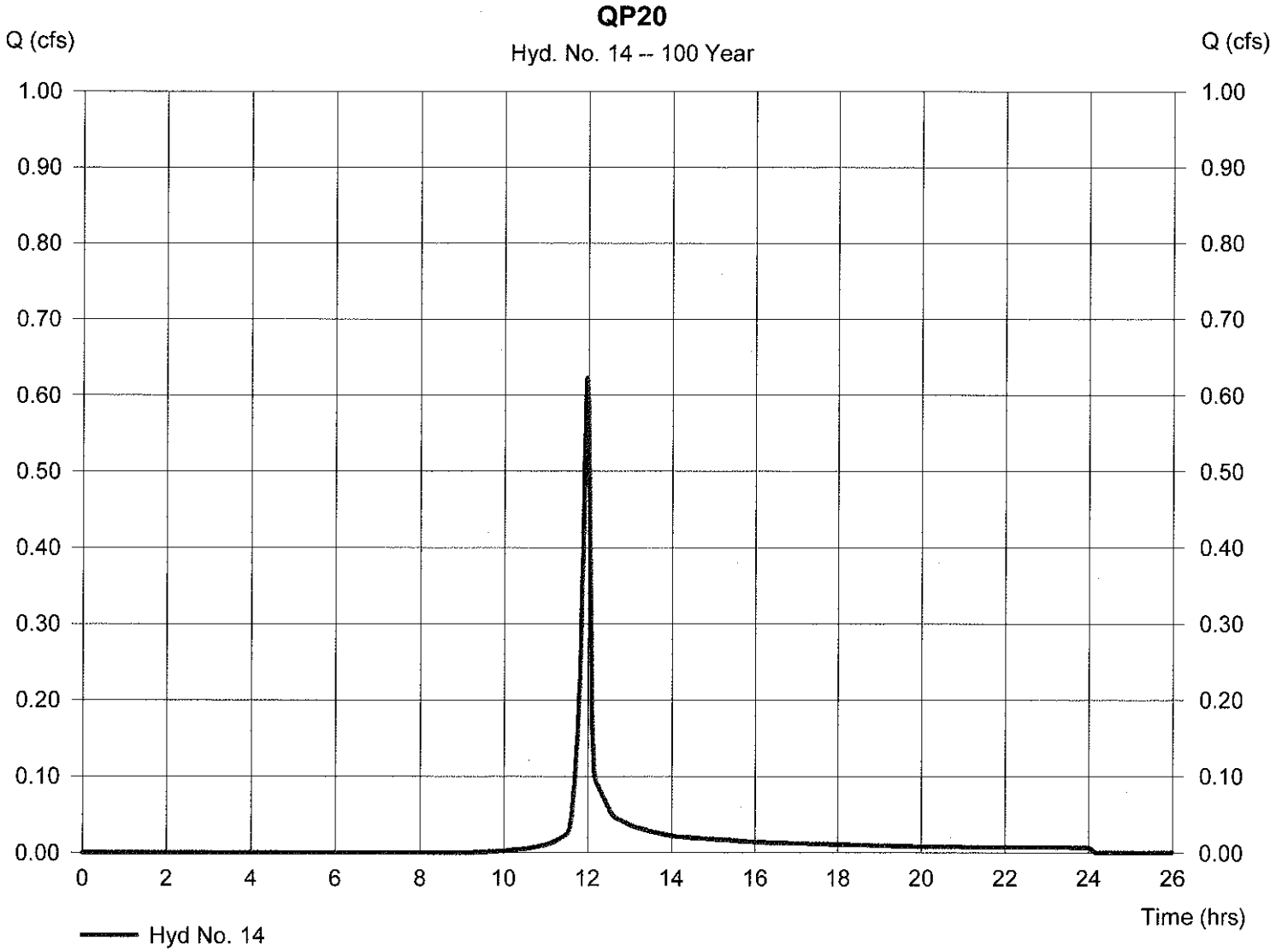


Hydrograph Report

Hyd. No. 14

QP20

Hydrograph type	= SCS Runoff	Peak discharge	= 0.622 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 1,314 cuft
Drainage area	= 0.250 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.98 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

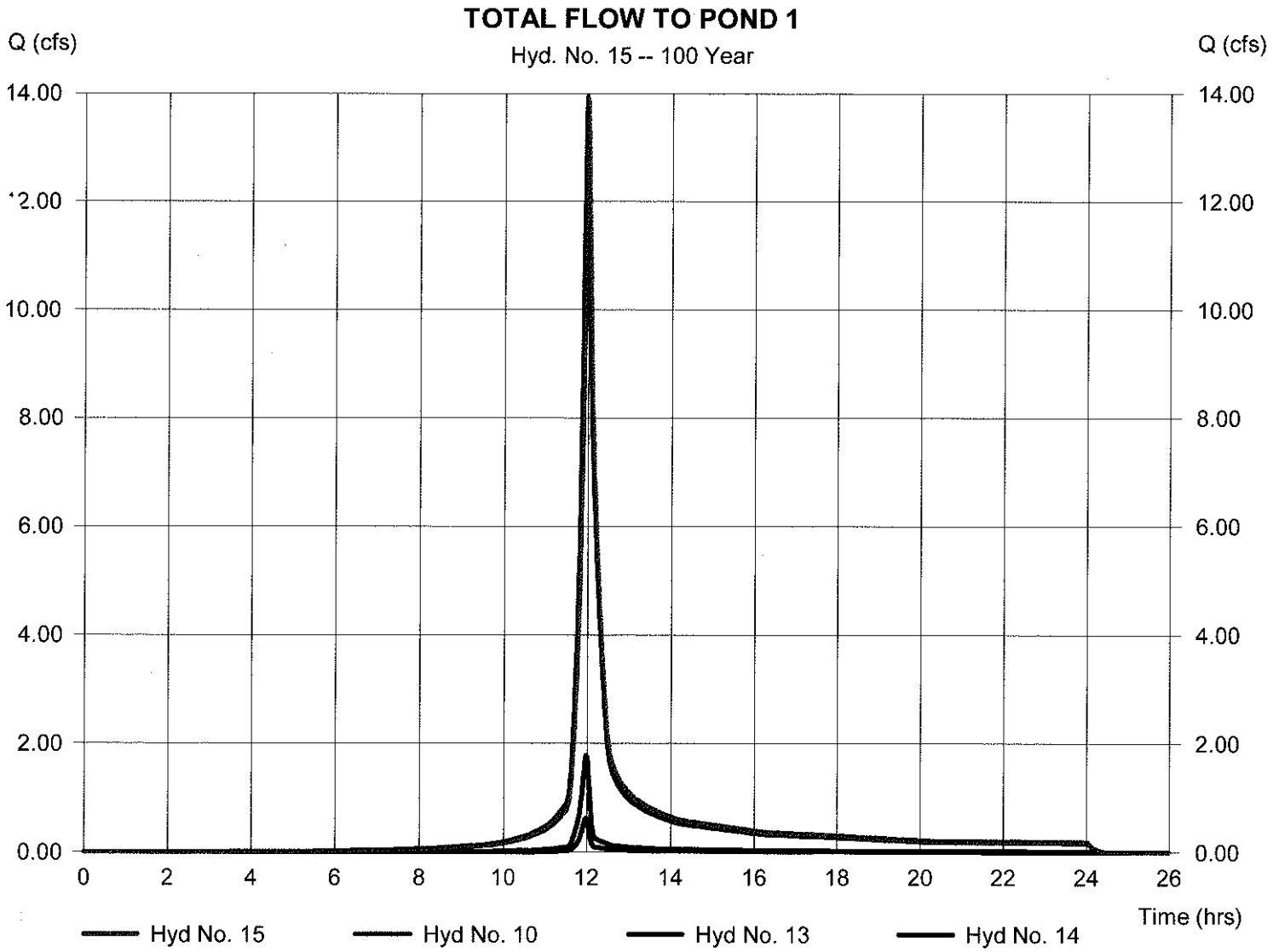


Hydrograph Report

Hyd. No. 15

TOTAL FLOW TO POND 1

Hydrograph type	= Combine	Peak discharge	= 13.95 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 40,936 cuft
Inflow hyds.	= 10, 13, 14	Contrib. drain. area	= 0.250 ac



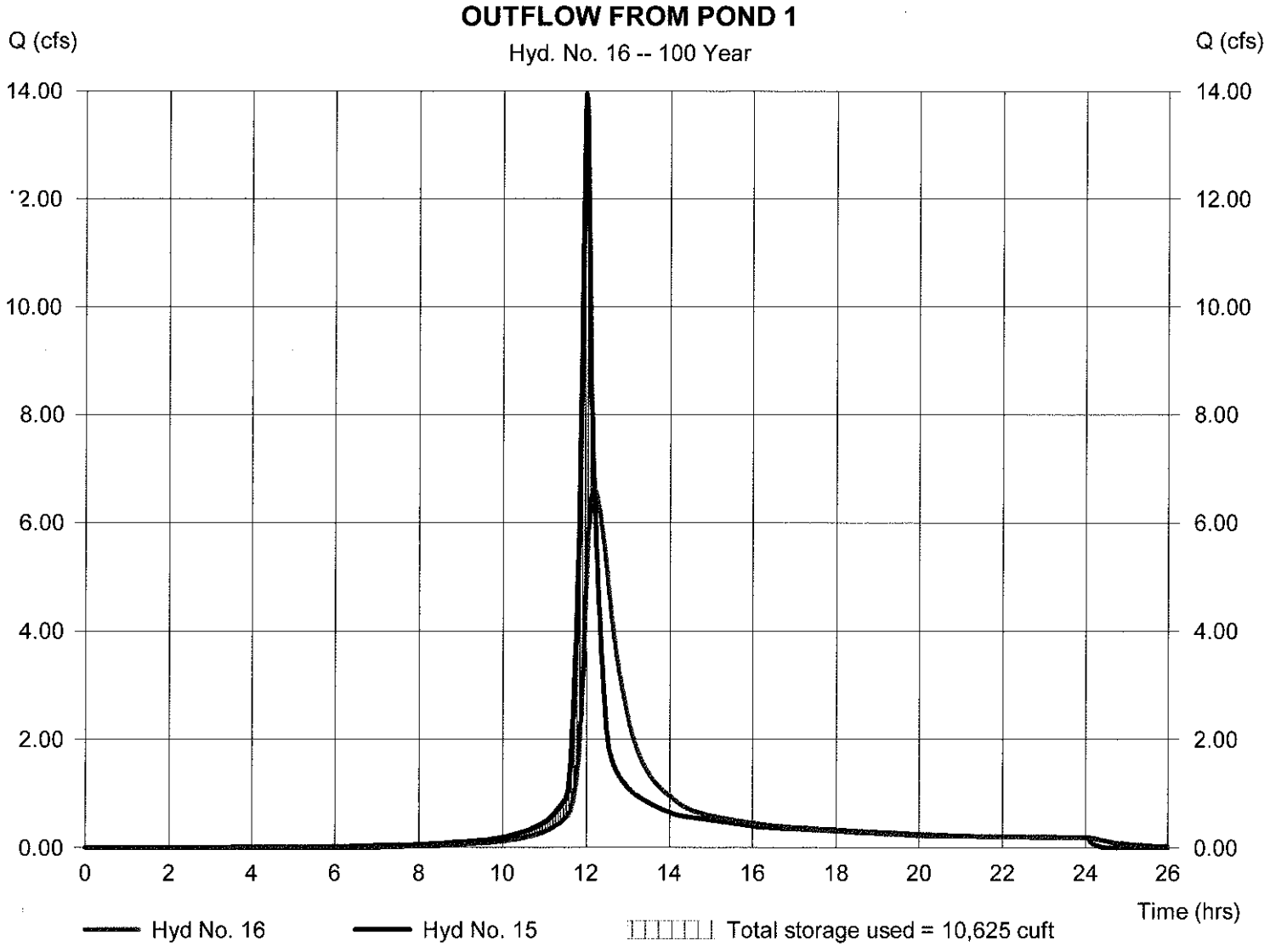
Hydrograph Report

Hyd. No. 16

OUTFLOW FROM POND 1

Hydrograph type	= Reservoir	Peak discharge	= 6.611 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.18 hrs
Time interval	= 1 min	Hyd. volume	= 40,715 cuft
Inflow hyd. No.	= 15 - TOTAL FLOW TO POND	Max. Elevation	= 6437.50 ft
Reservoir name	= POND 1	Max. Storage	= 10,625 cuft

Storage Indication method used.

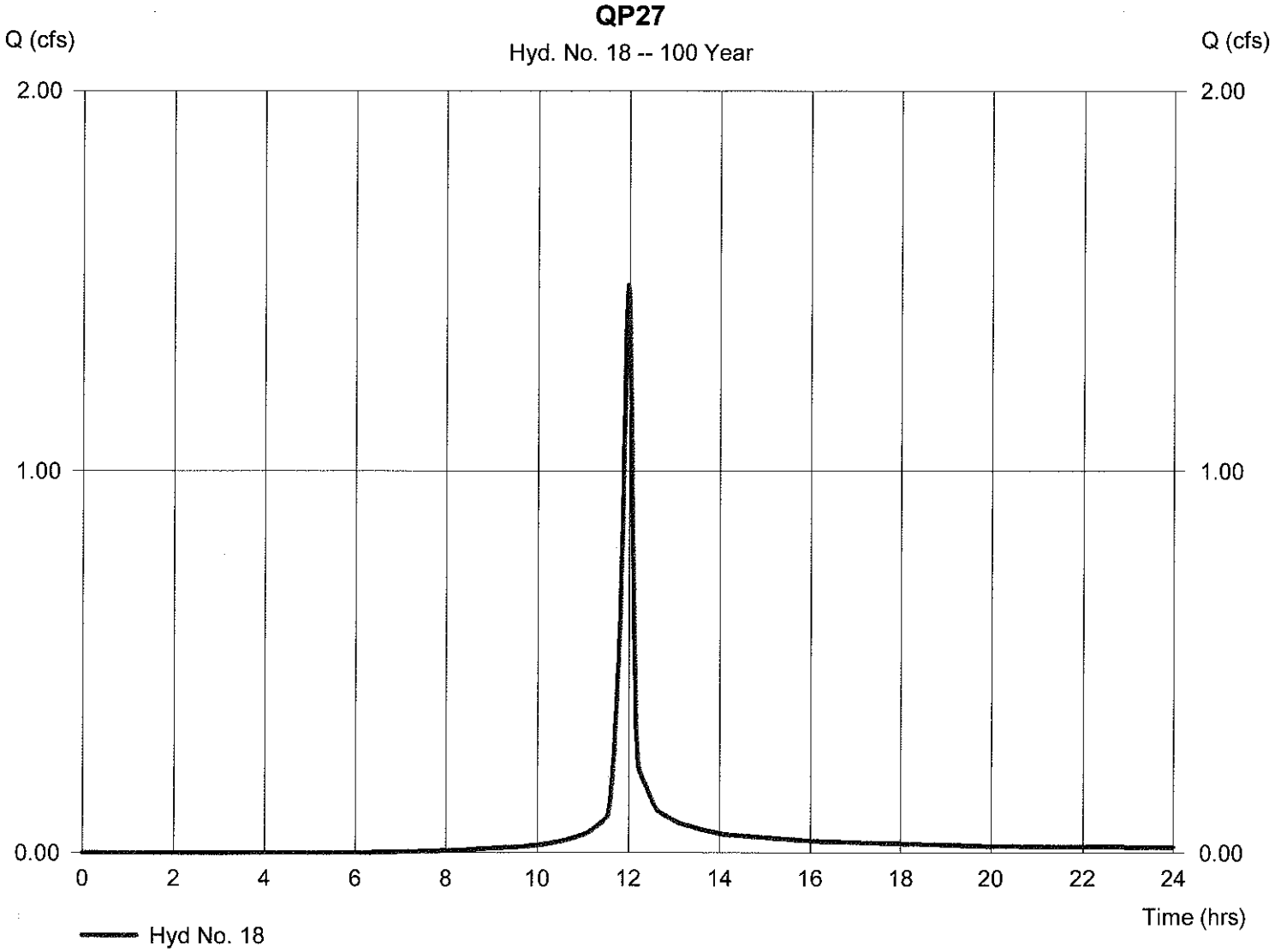


Hydrograph Report

Hyd. No. 18

QP27

Hydrograph type	= SCS Runoff	Peak discharge	= 1.487 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 3,430 cuft
Drainage area	= 0.450 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.70 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

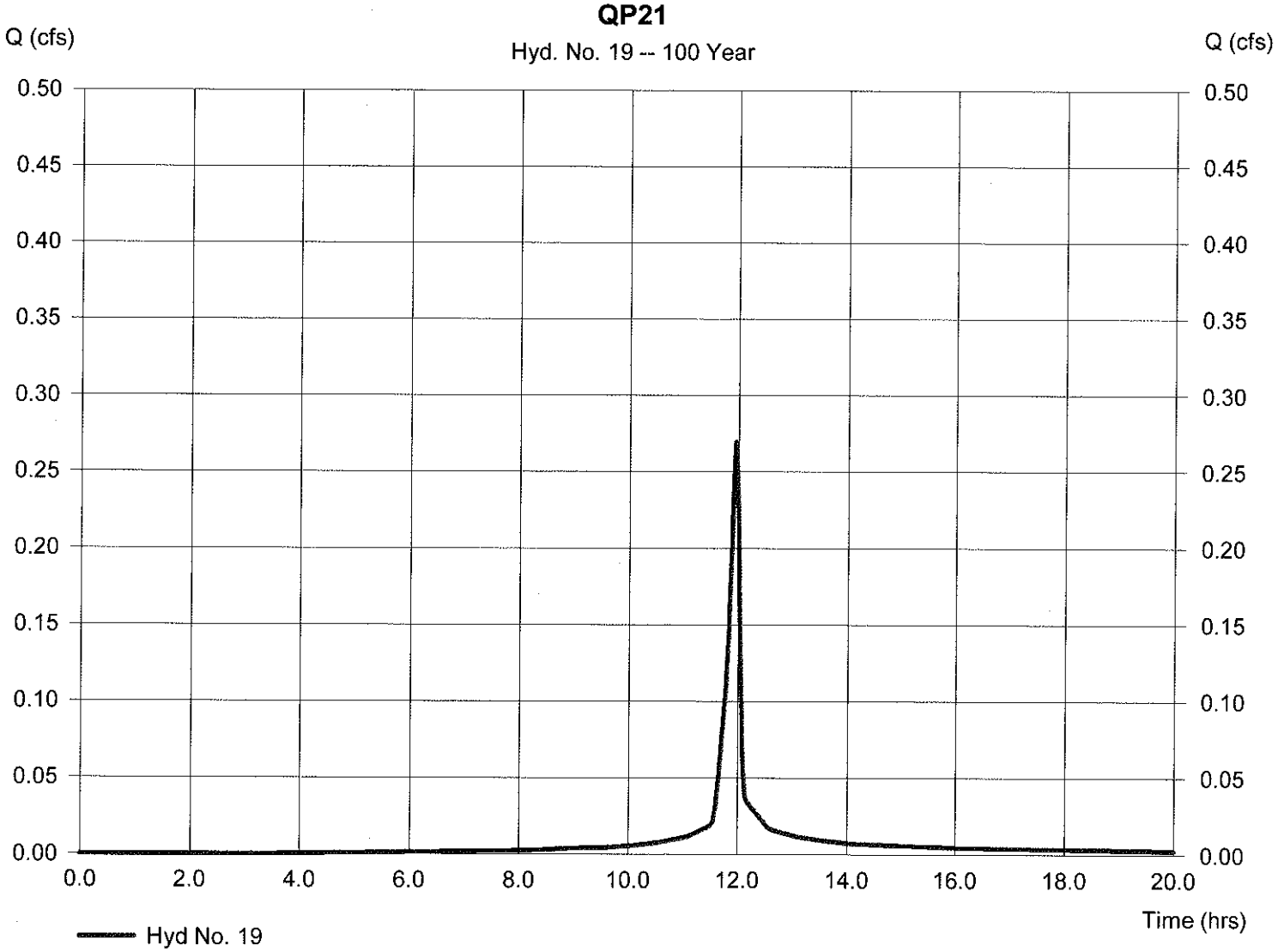


Hydrograph Report

Hyd. No. 19

QP21

Hydrograph type	= SCS Runoff	Peak discharge	= 0.269 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 598 cuft
Drainage area	= 0.060 ac	Curve number	= 95
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

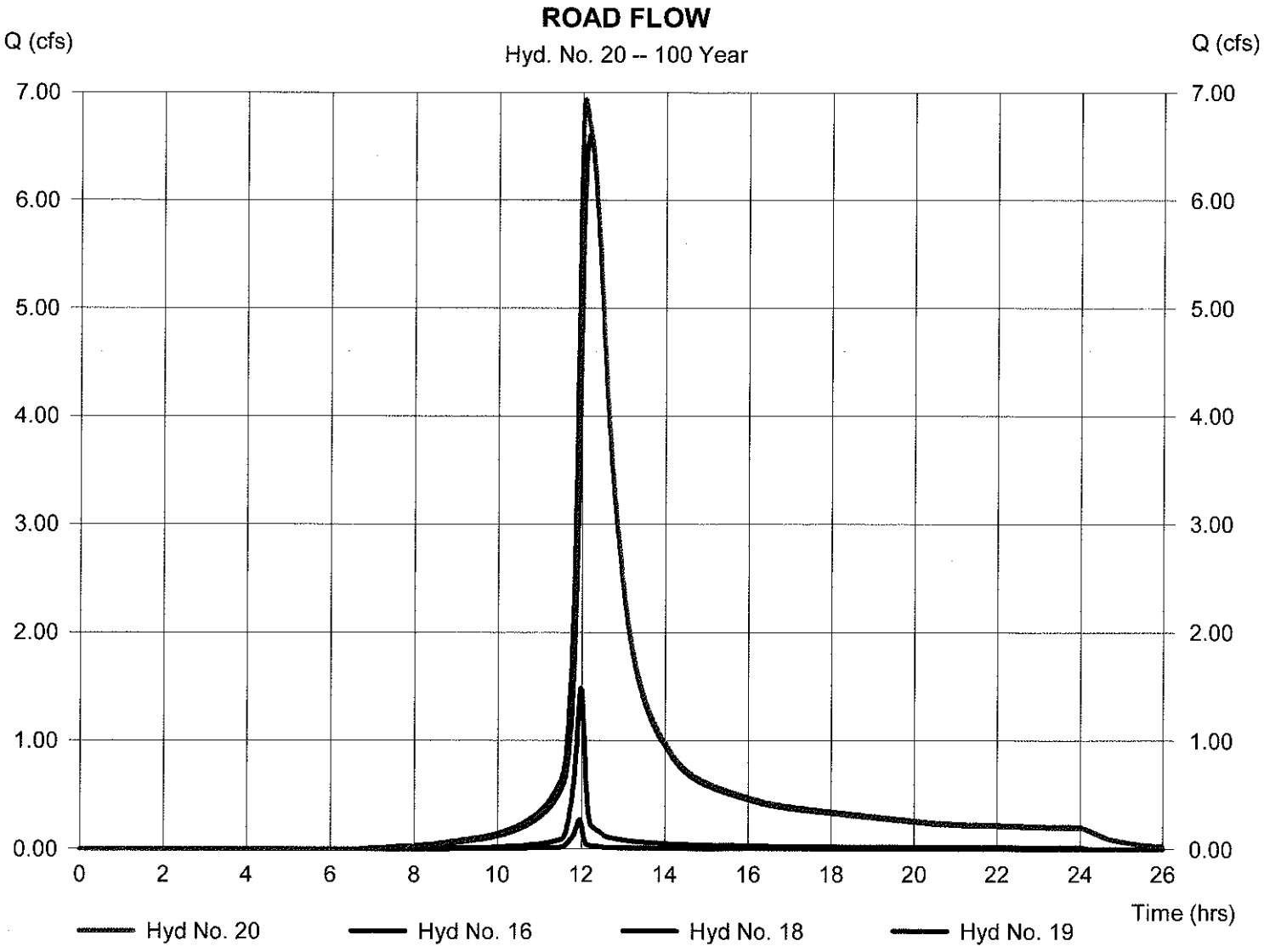


Hydrograph Report

Hyd. No. 20

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 6.939 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 43,429 cuft
Inflow hyds.	= 16, 18, 19	Contrib. drain. area	= 0.510 ac

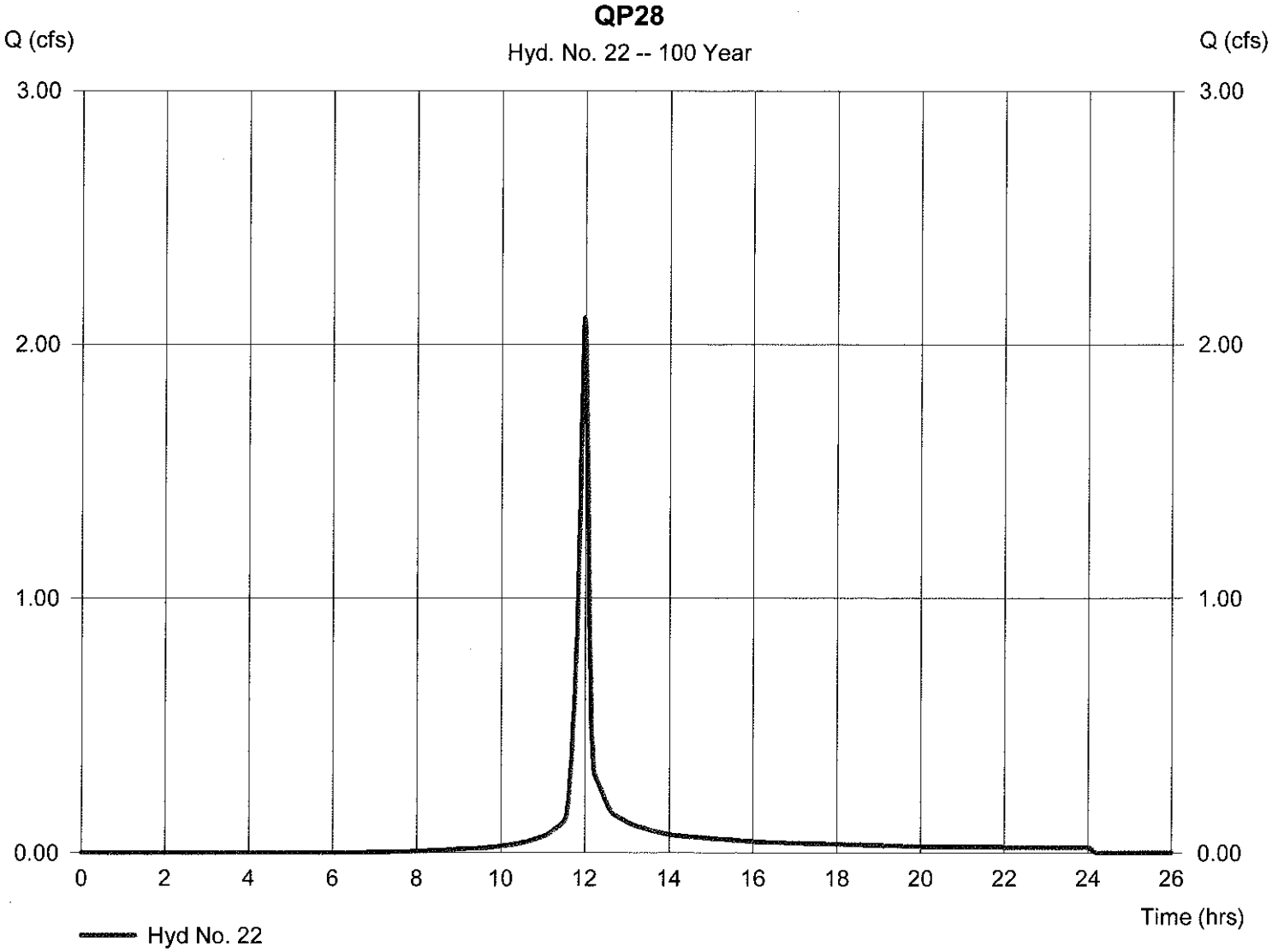


Hydrograph Report

Hyd. No. 22

QP28

Hydrograph type	= SCS Runoff	Peak discharge	= 2.105 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 4,828 cuft
Drainage area	= 0.660 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 9.66 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

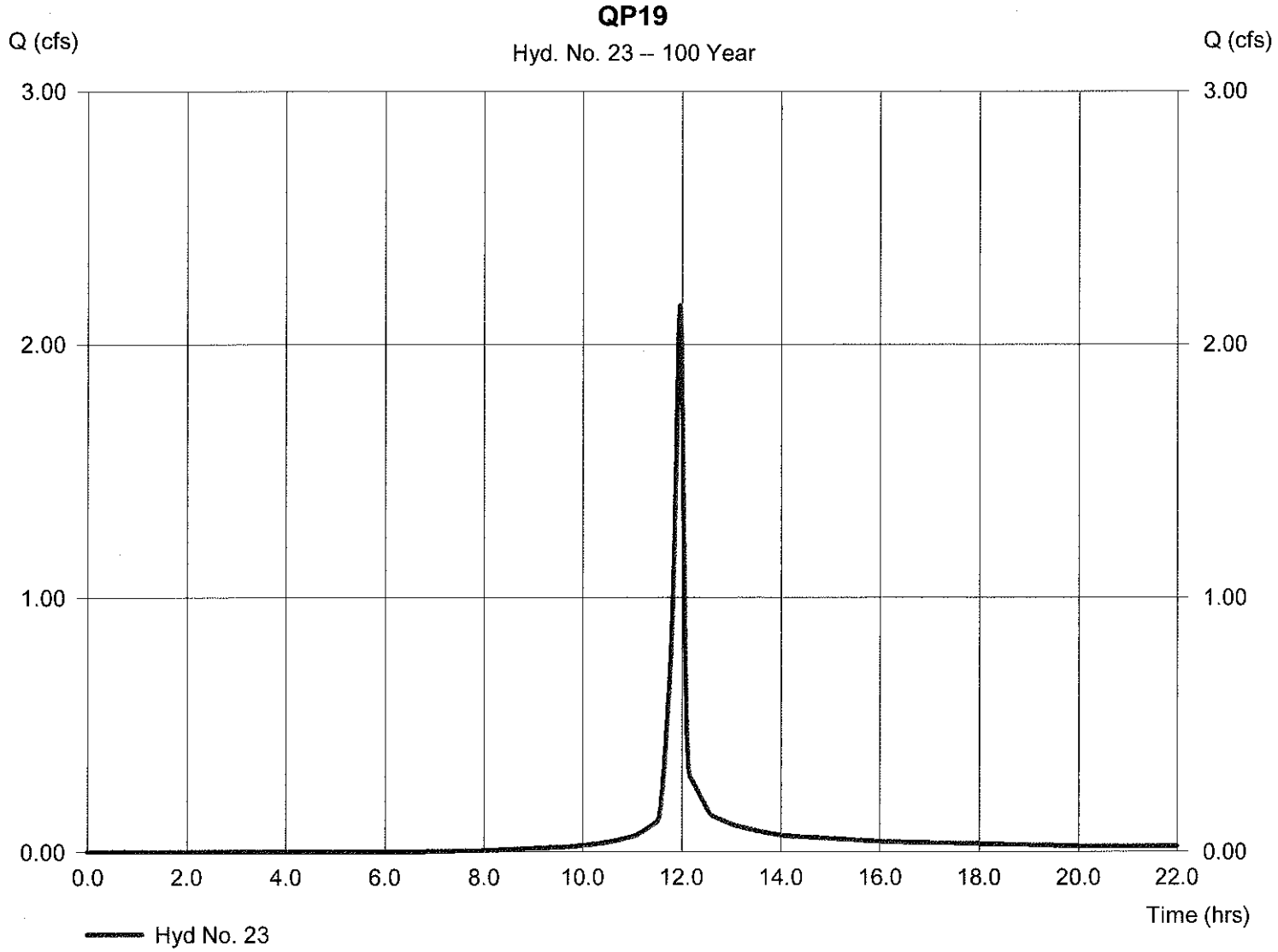


Hydrograph Report

Hyd. No. 23

QP19

Hydrograph type	= SCS Runoff	Peak discharge	= 2.152 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 4,450 cuft
Drainage area	= 0.590 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

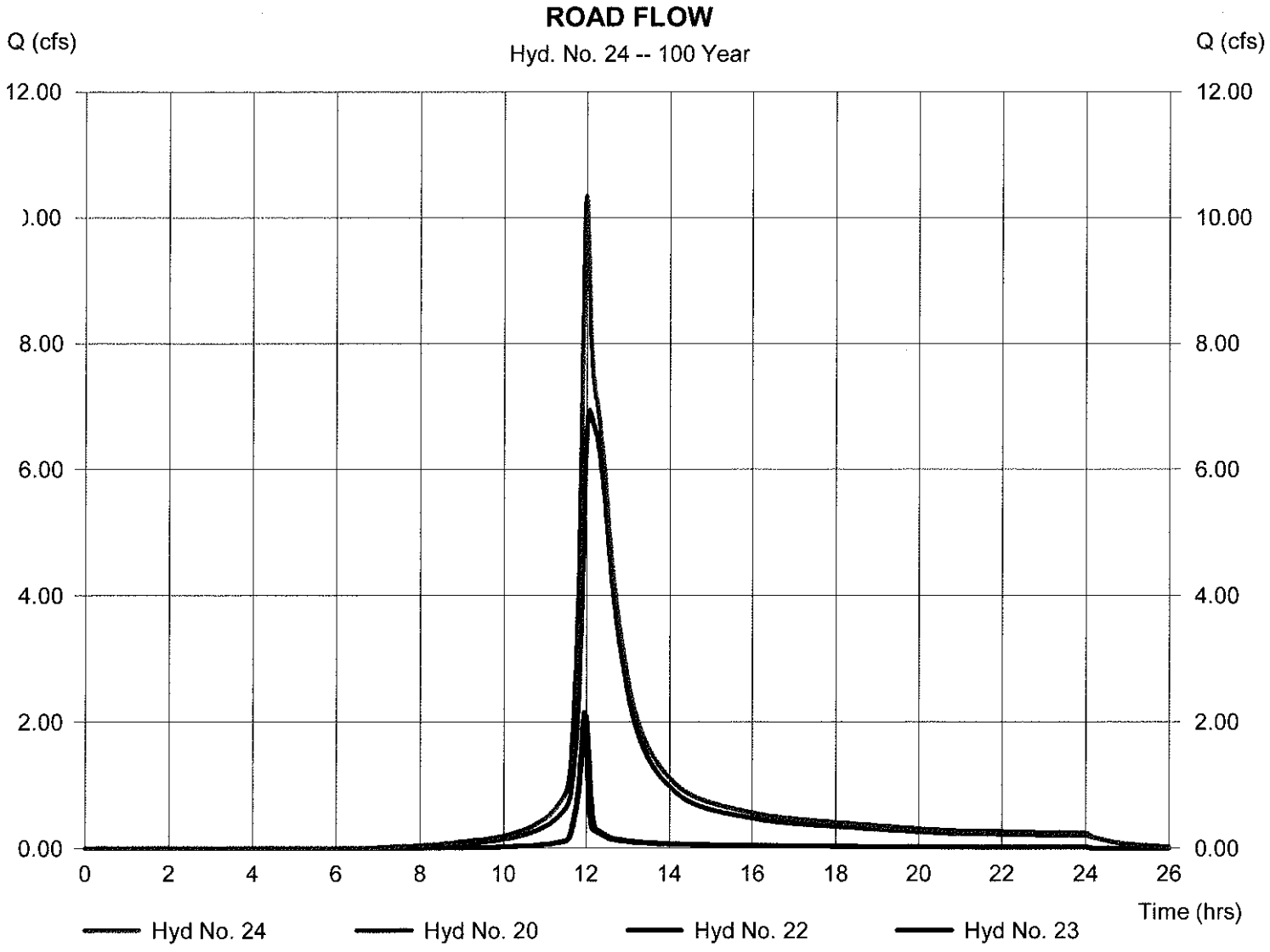


Hydrograph Report

Hyd. No. 24

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 10.34 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 52,707 cuft
Inflow hyds.	= 20, 22, 23	Contrib. drain. area	= 1.250 ac

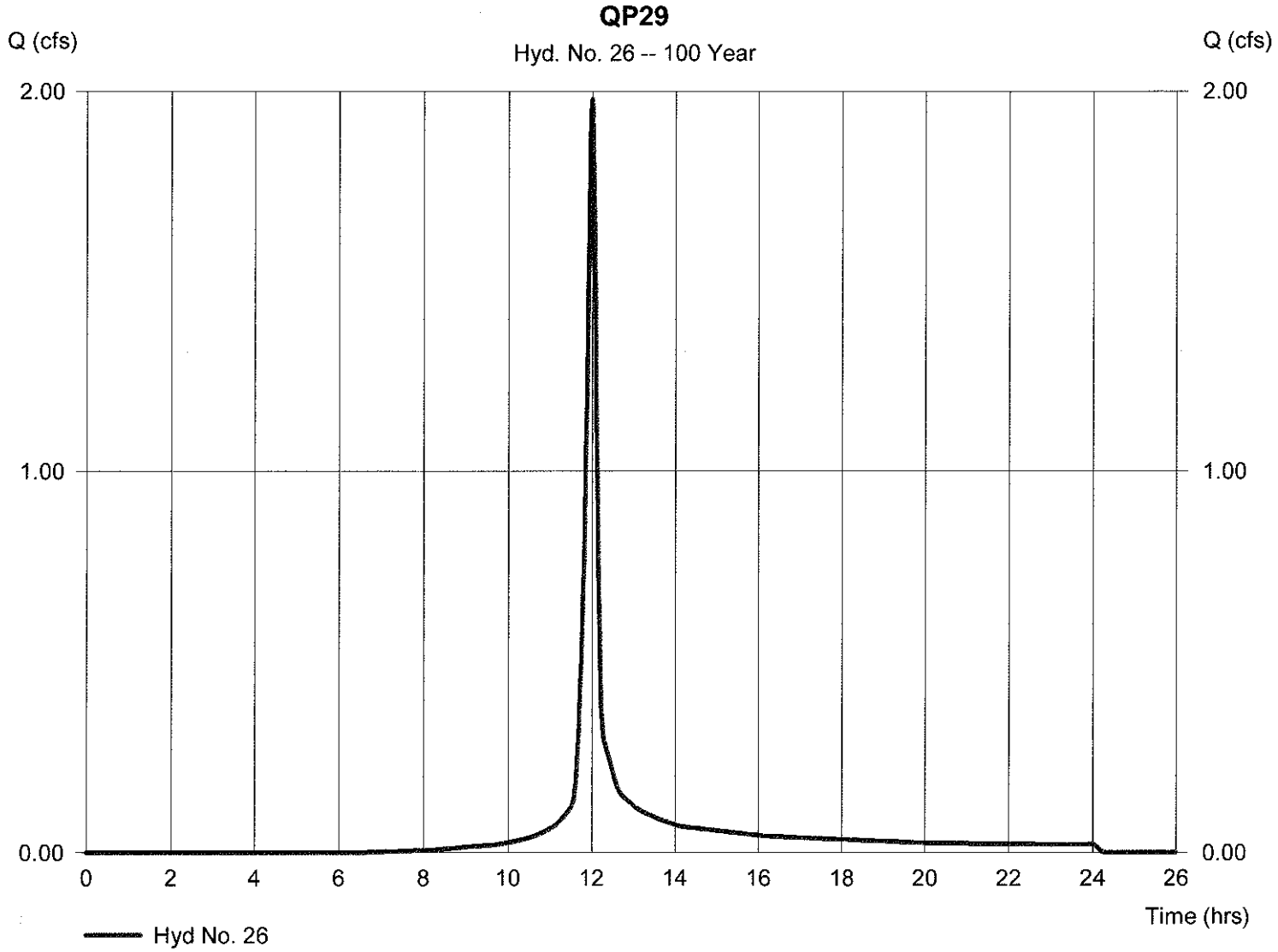


Hydrograph Report

Hyd. No. 26

QP29

Hydrograph type	= SCS Runoff	Peak discharge	= 1.980 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 4,839 cuft
Drainage area	= 0.650 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.62 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

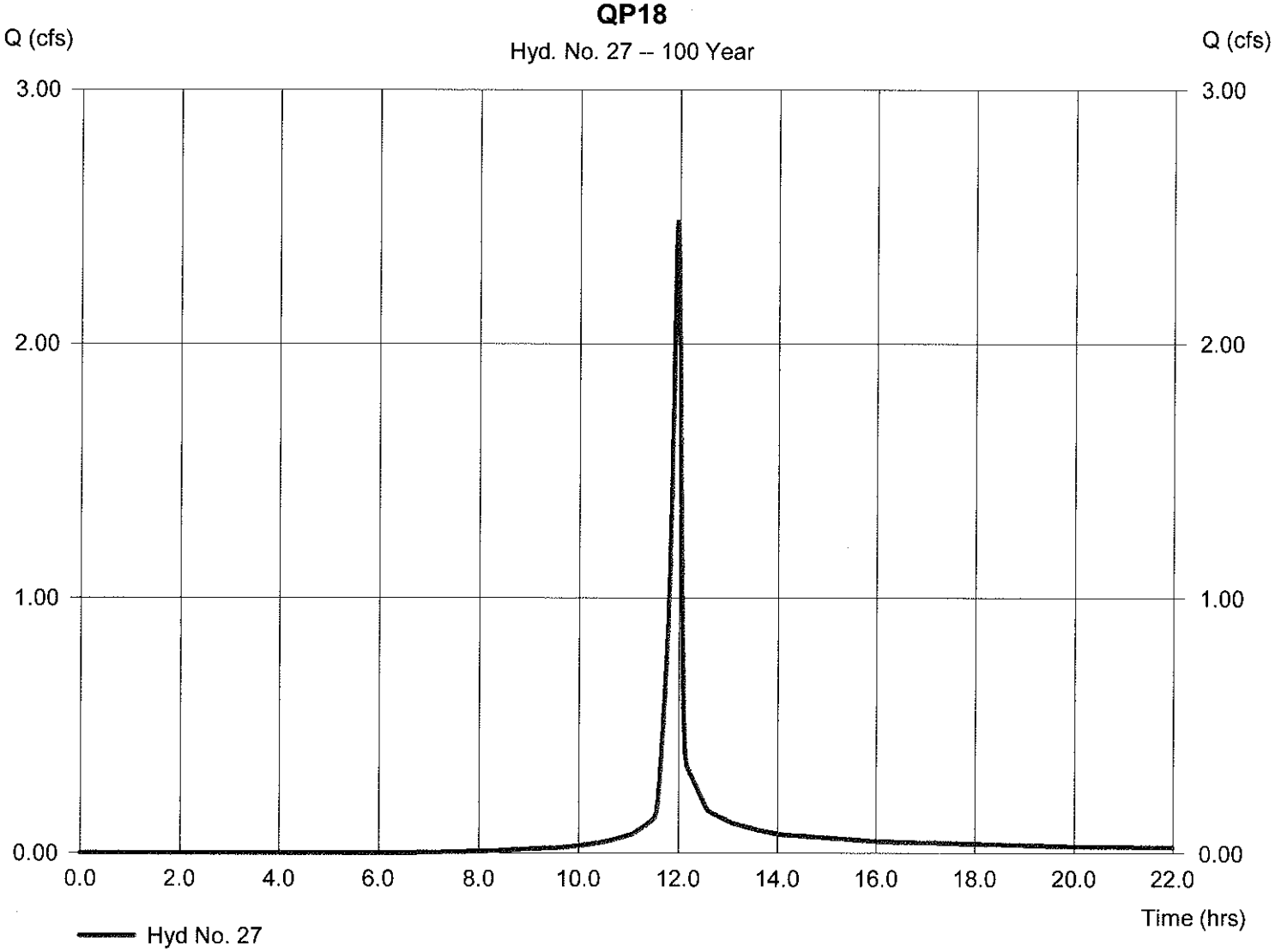


Hydrograph Report

Hyd. No. 27

QP18

Hydrograph type	= SCS Runoff	Peak discharge	= 2.480 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 5,129 cuft
Drainage area	= 0.680 ac	Curve number	= 88
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

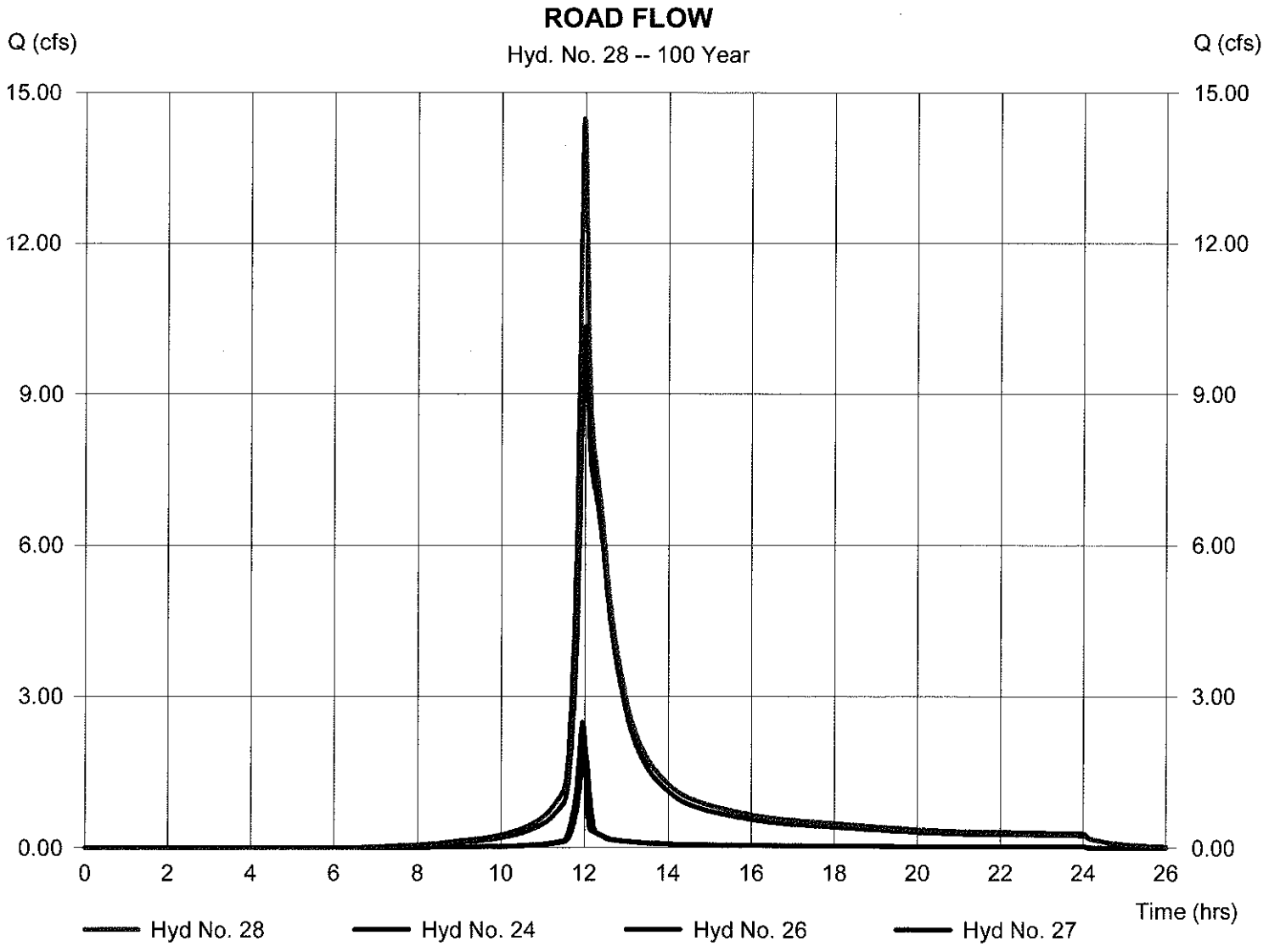


Hydrograph Report

Hyd. No. 28

ROAD FLOW

Hydrograph type	= Combine	Peak discharge	= 14.48 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 62,676 cuft
Inflow hyds.	= 24, 26, 27	Contrib. drain. area	= 1.330 ac

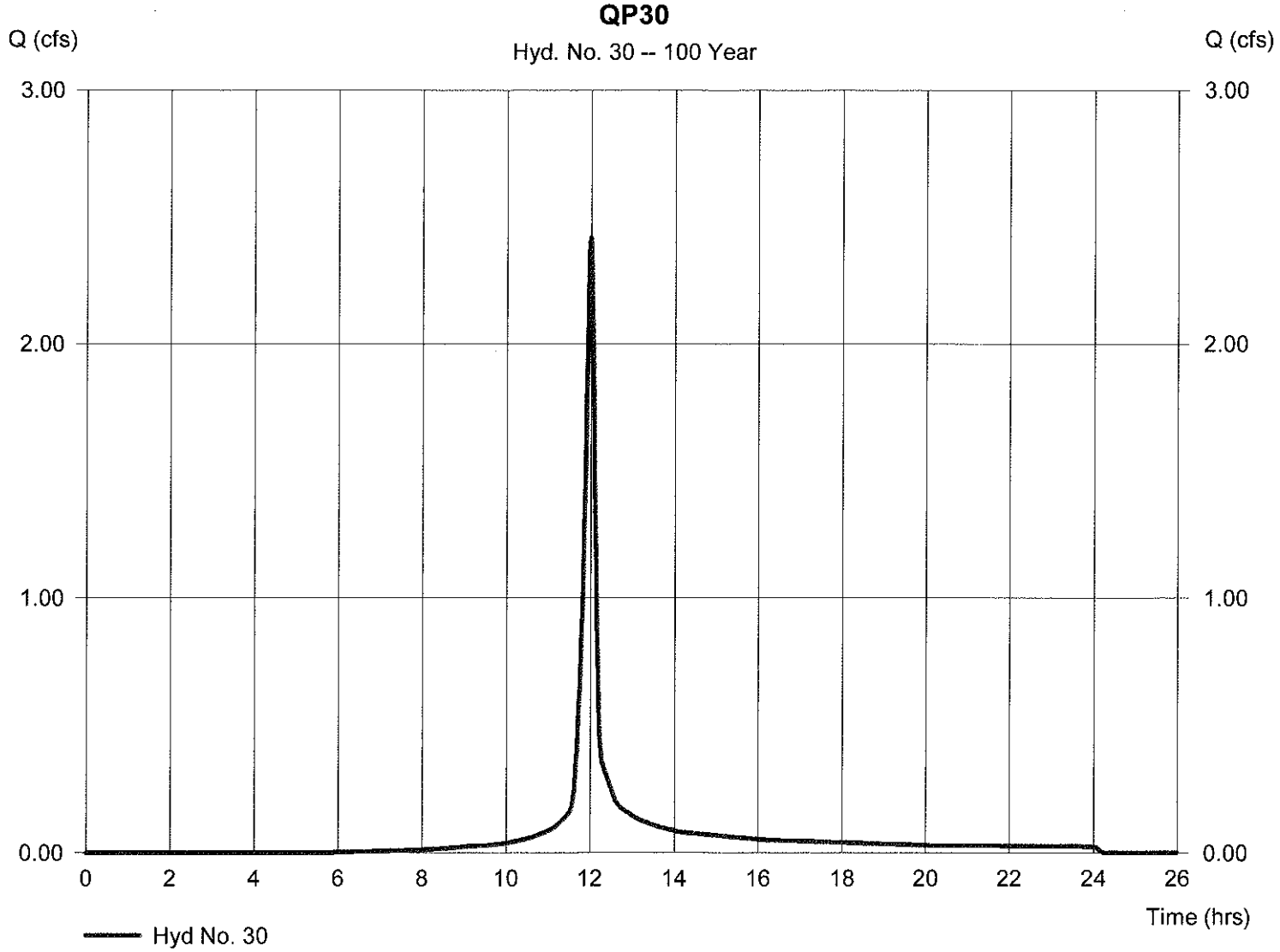


Hydrograph Report

Hyd. No. 30

QP30

Hydrograph type	= SCS Runoff	Peak discharge	= 2.420 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 5,980 cuft
Drainage area	= 0.740 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 11.40 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

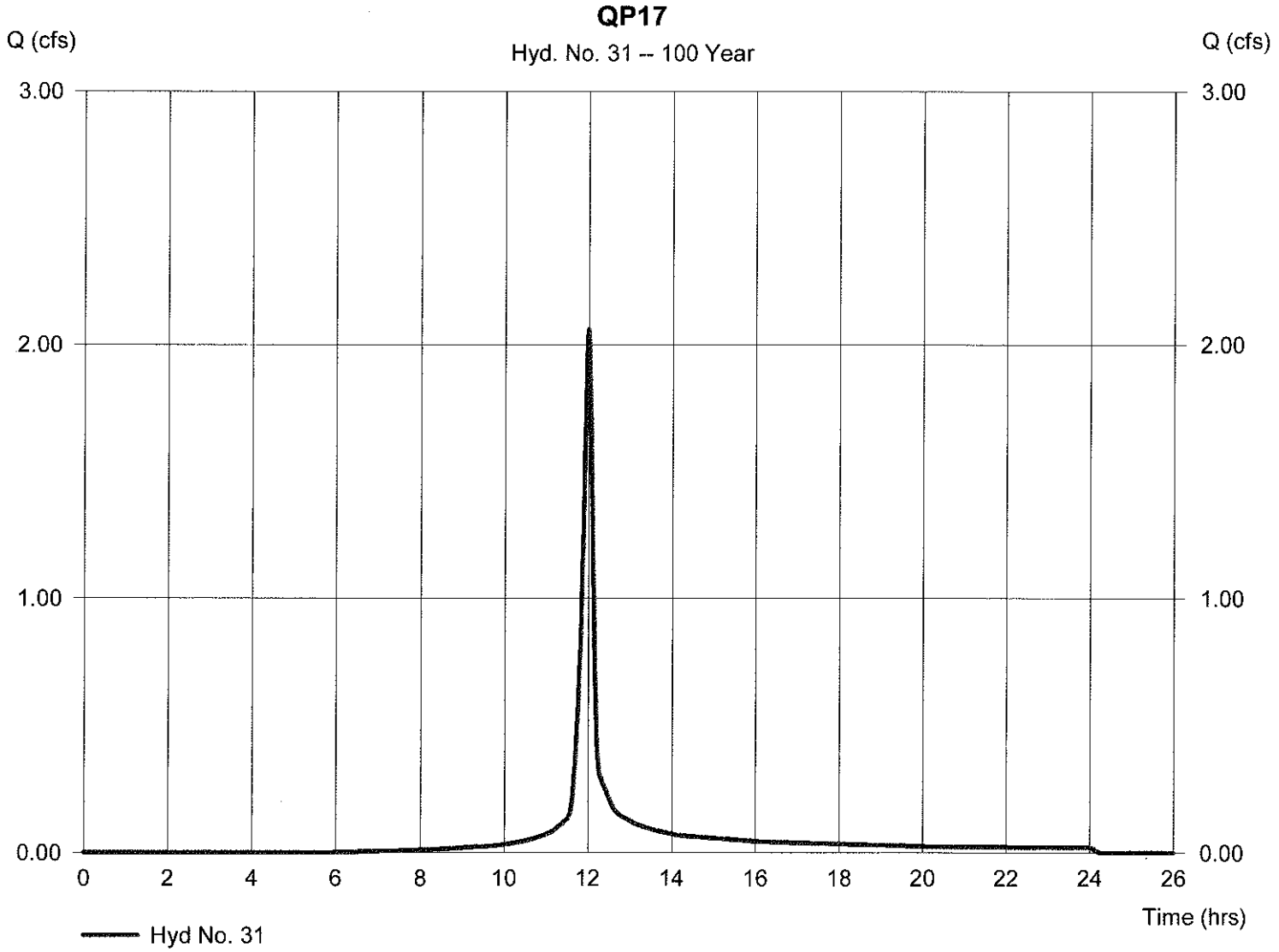


Hydrograph Report

Hyd. No. 31

QP17

Hydrograph type	= SCS Runoff	Peak discharge	= 2.060 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 5,091 cuft
Drainage area	= 0.630 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.92 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

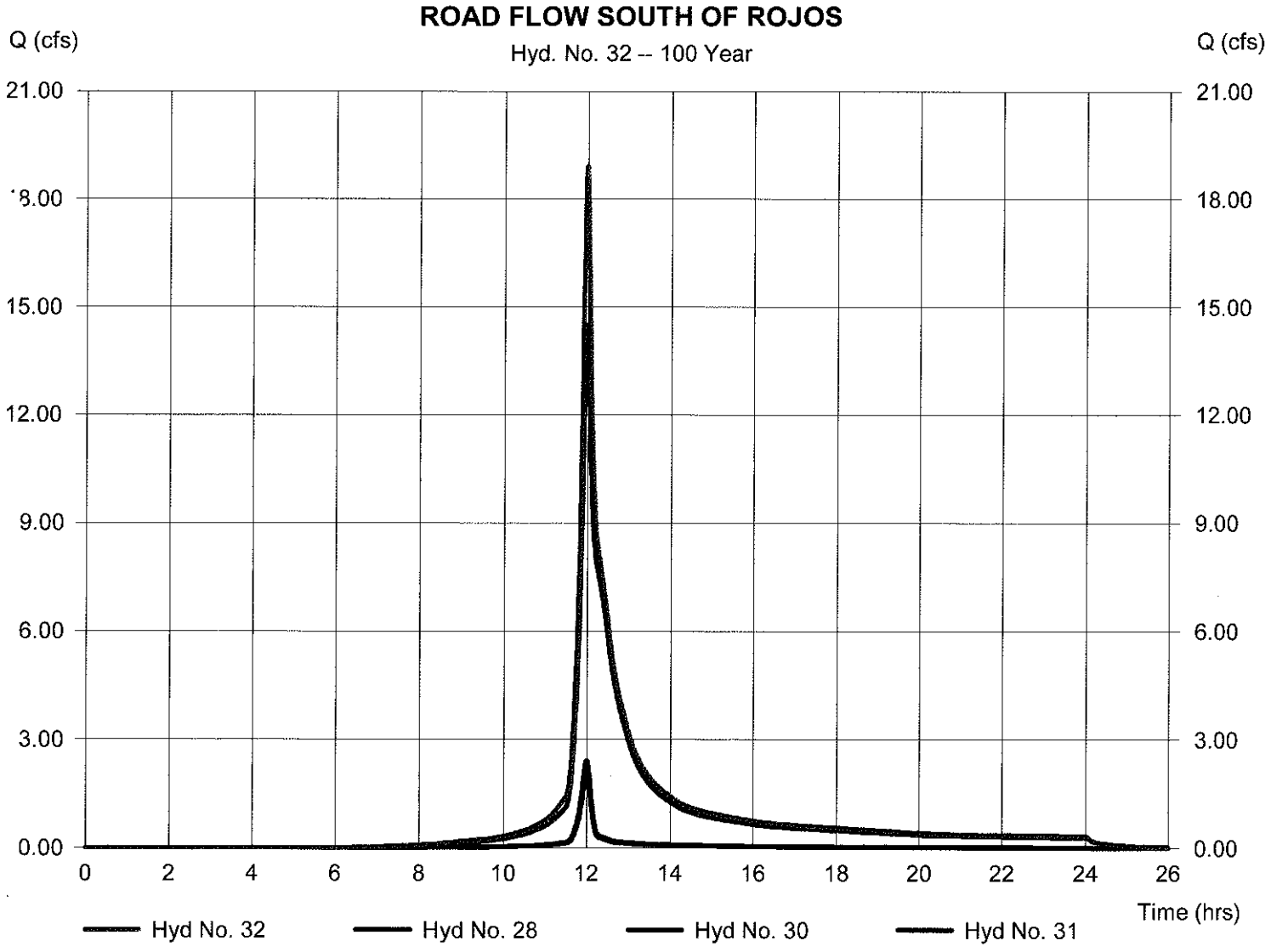


Hydrograph Report

Hyd. No. 32

ROAD FLOW SOUTH OF ROJOS

Hydrograph type	= Combine	Peak discharge	= 18.92 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 73,747 cuft
Inflow hyds.	= 28, 30, 31	Contrib. drain. area	= 1.370 ac

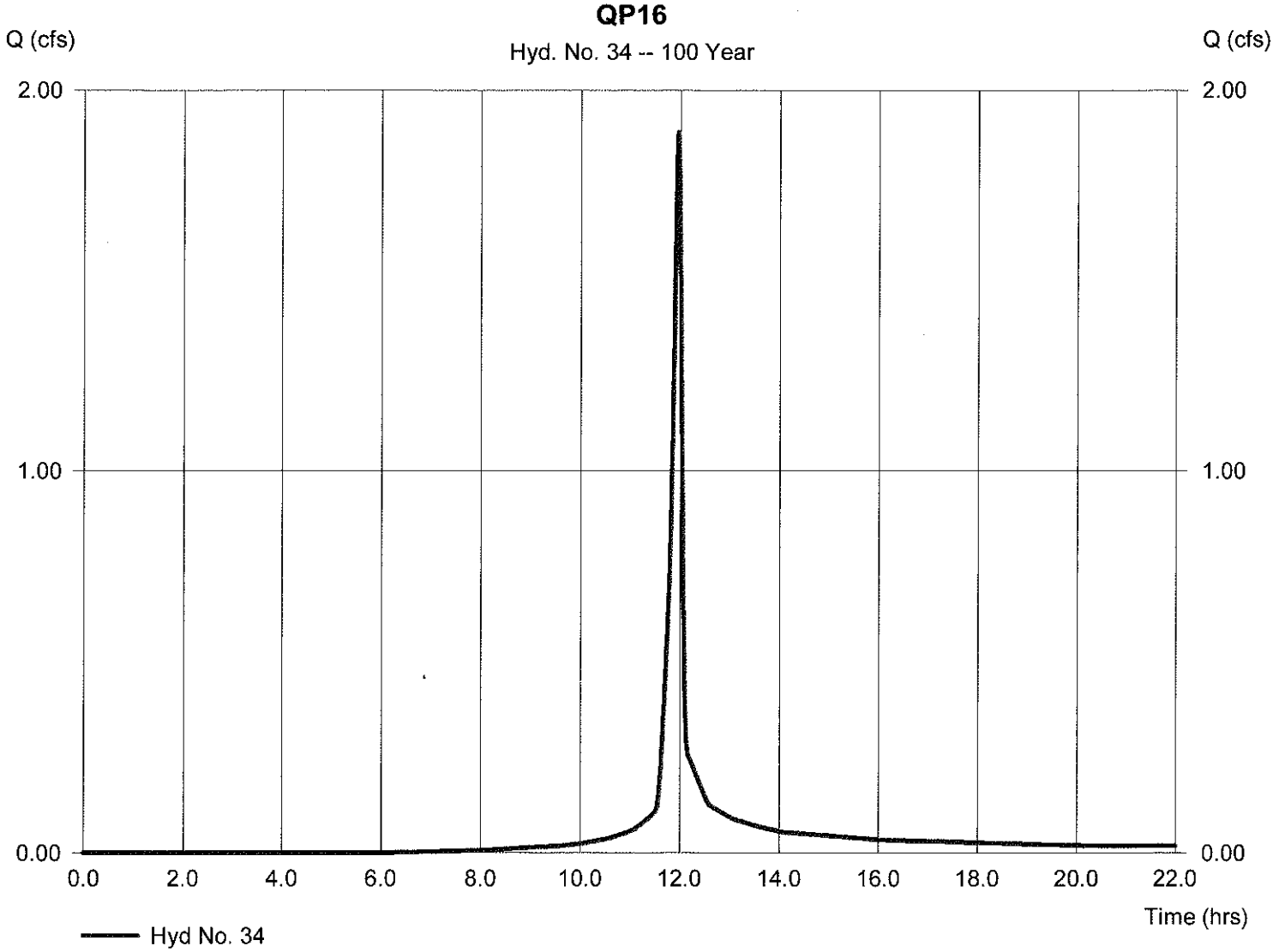


Hydrograph Report

Hyd. No. 34

QP16

Hydrograph type	= SCS Runoff	Peak discharge	= 1.889 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 3,930 cuft
Drainage area	= 0.500 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

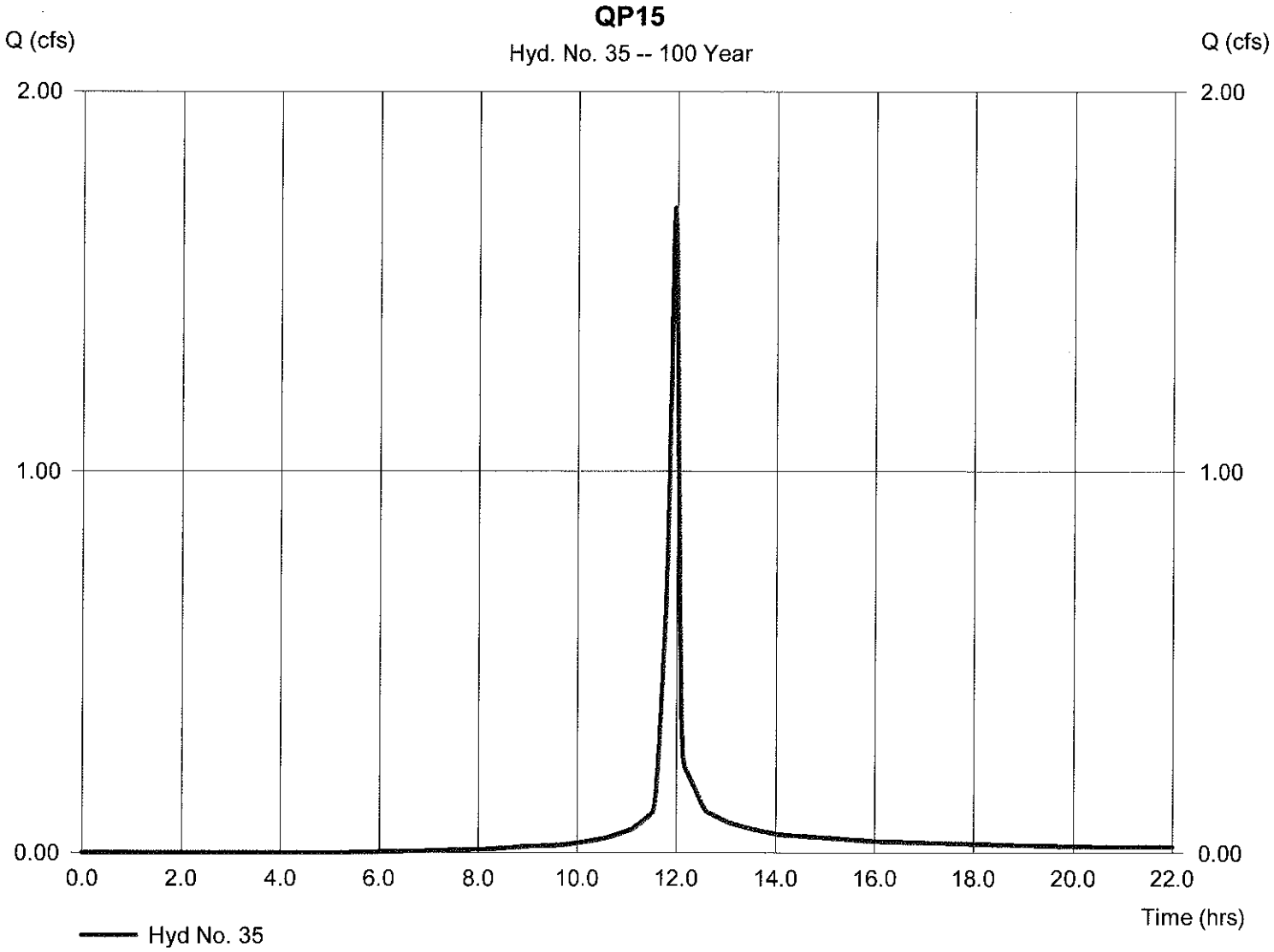


Hydrograph Report

Hyd. No. 35

QP15

Hydrograph type	= SCS Runoff	Peak discharge	= 1.694 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 3,580 cuft
Drainage area	= 0.420 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

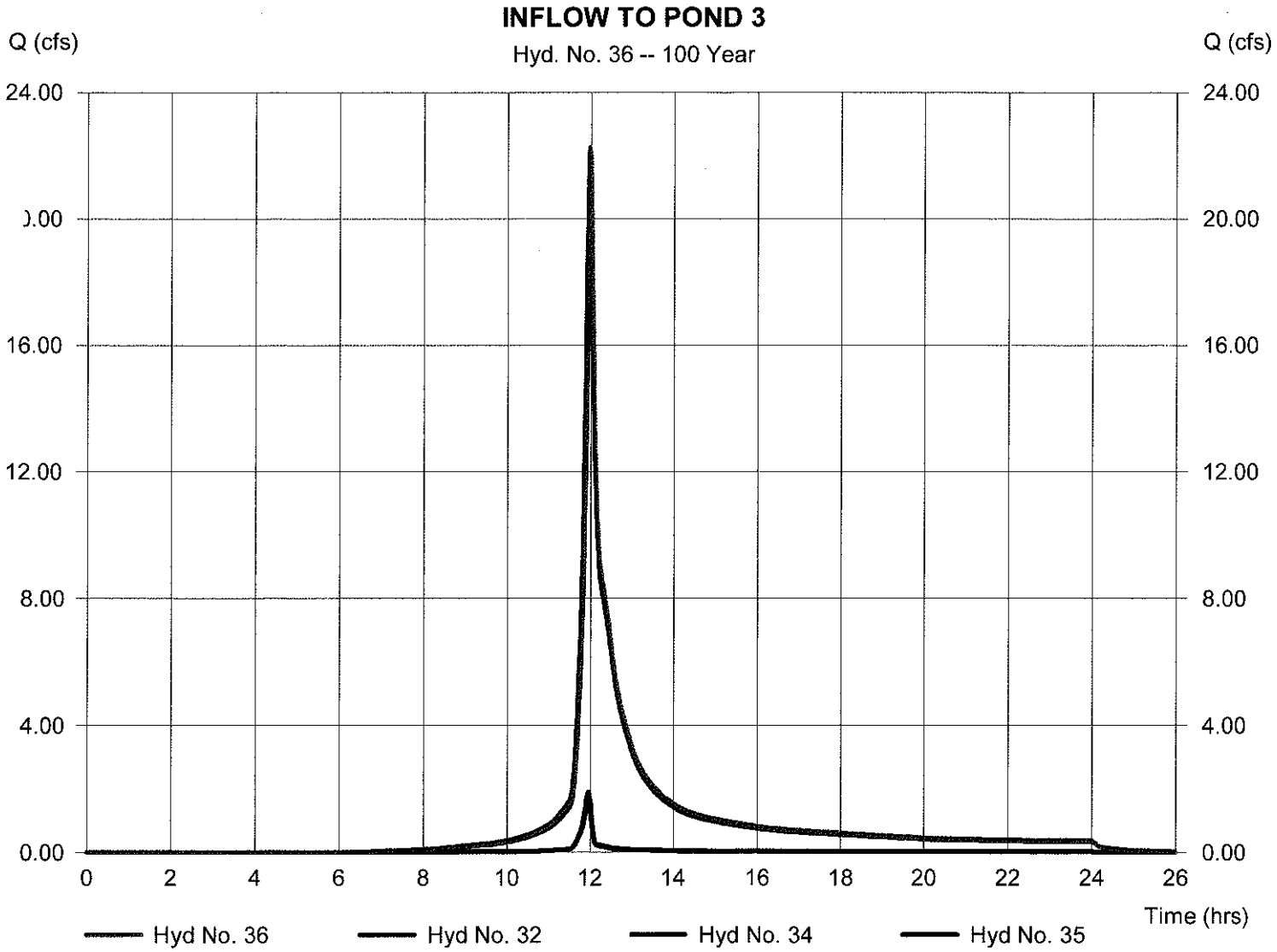


Hydrograph Report

Hyd. No. 36

INFLOW TO POND 3

Hydrograph type	= Combine	Peak discharge	= 22.25 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 81,257 cuft
Inflow hyds.	= 32, 34, 35	Contrib. drain. area	= 0.920 ac

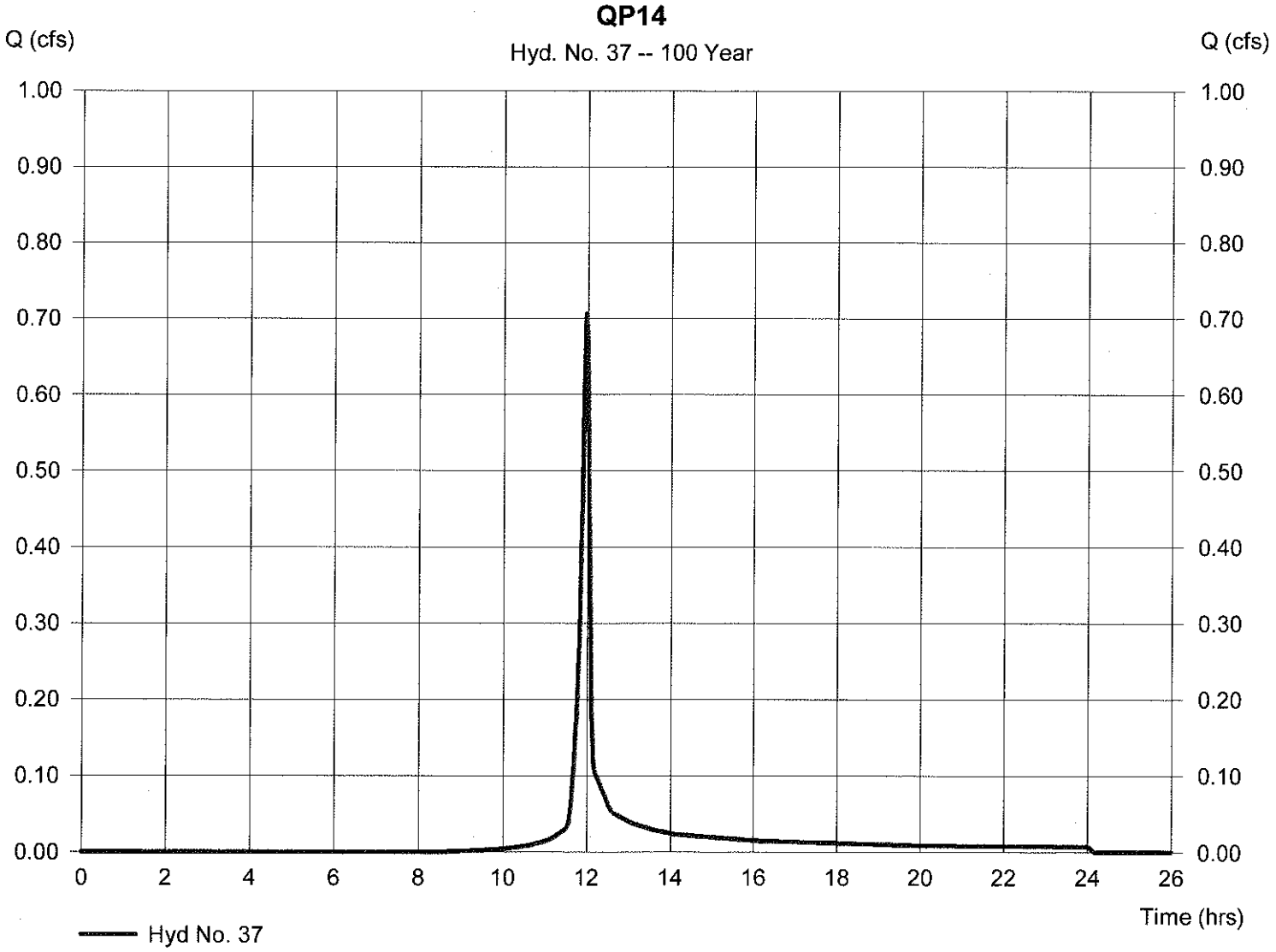


Hydrograph Report

Hyd. No. 37

QP14

Hydrograph type	= SCS Runoff	Peak discharge	= 0.707 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,496 cuft
Drainage area	= 0.260 ac	Curve number	= 83
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 7.20 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

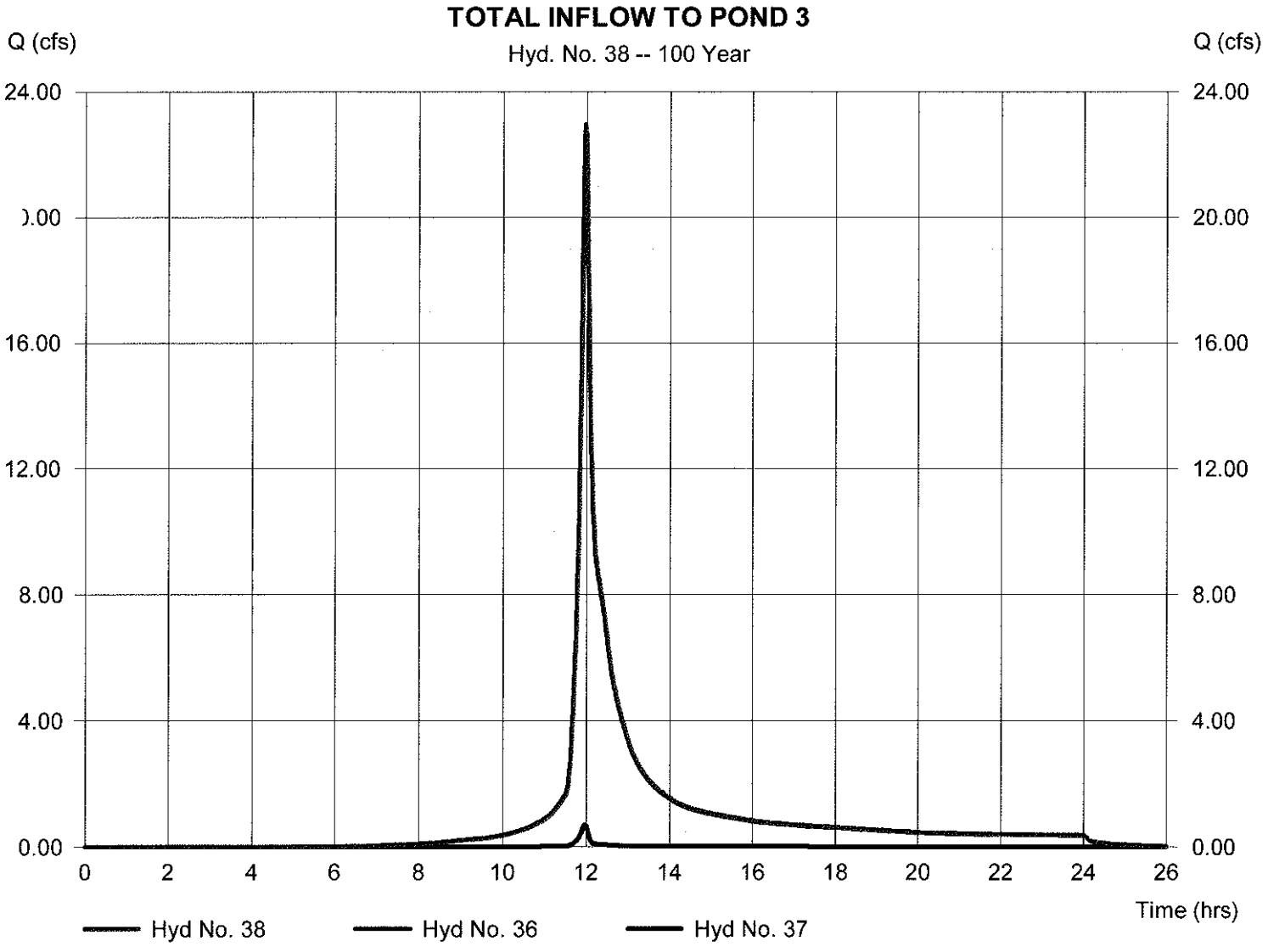


Hydrograph Report

Hyd. No. 38

TOTAL INFLOW TO POND 3

Hydrograph type	= Combine	Peak discharge	= 22.96 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 82,753 cuft
Inflow hyds.	= 36, 37	Contrib. drain. area	= 0.260 ac



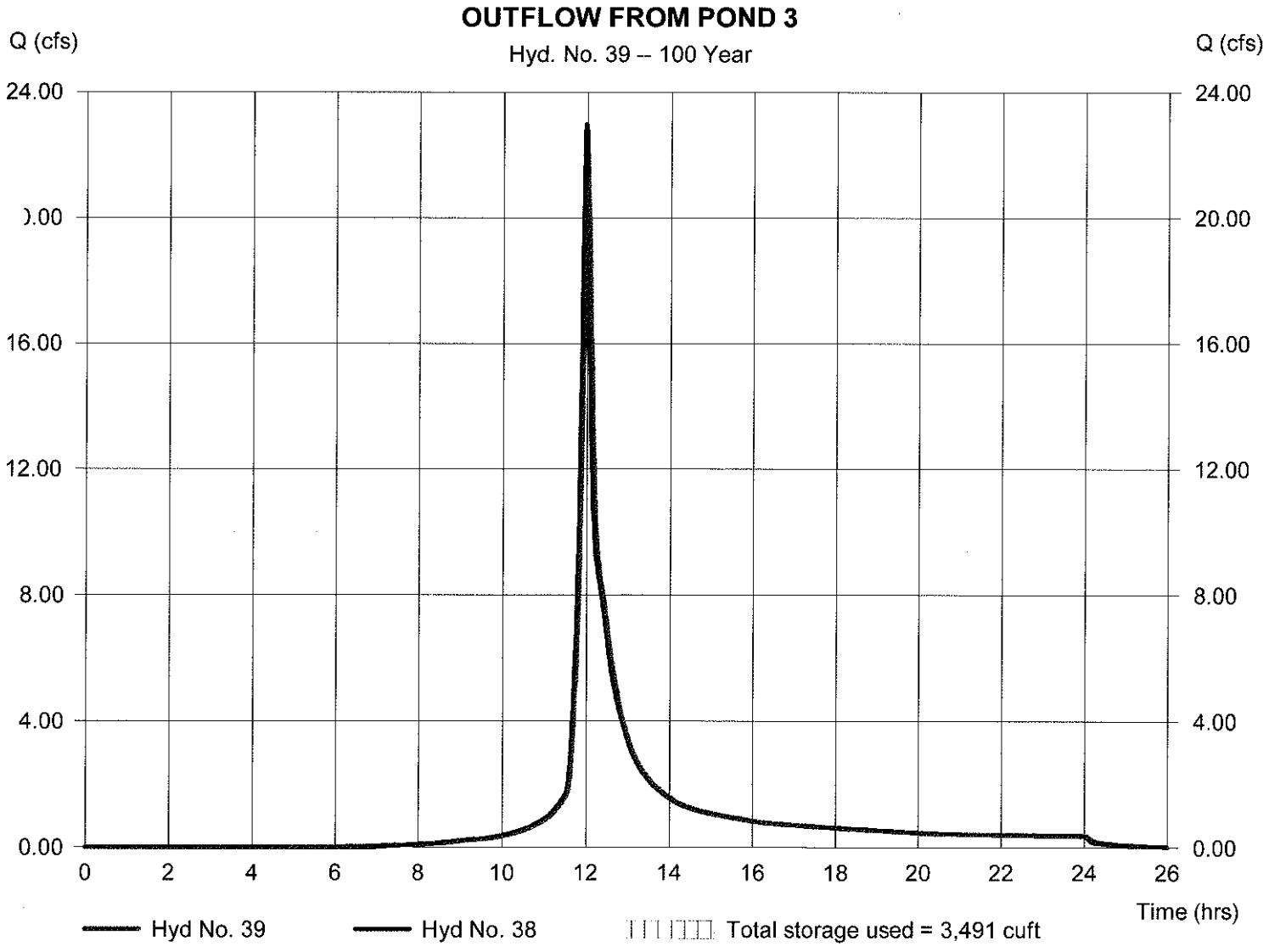
Hydrograph Report

Hyd. No. 39

OUTFLOW FROM POND 3

Hydrograph type	= Reservoir	Peak discharge	= 21.27 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 82,672 cuft
Inflow hyd. No.	= 38 - TOTAL INFLOW TO POND 3	Max. Elevation	= 6423.54 ft
Reservoir name	= POND 3	Max. Storage	= 3,491 cuft

Storage Indication method used.

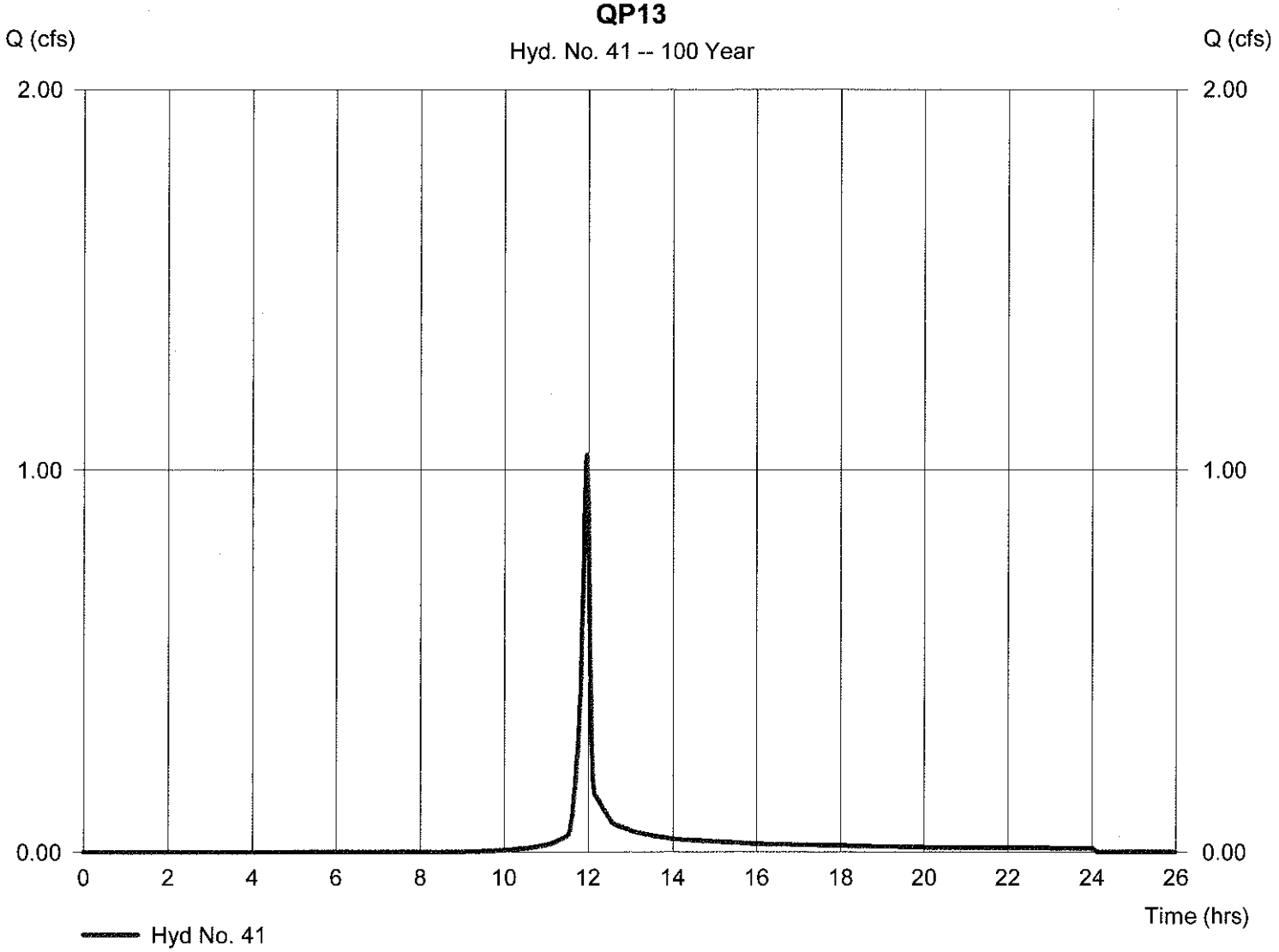


Hydrograph Report

Hyd. No. 41

QP13

Hydrograph type	= SCS Runoff	Peak discharge	= 1.039 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 2,094 cuft
Drainage area	= 0.360 ac	Curve number	= 82
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

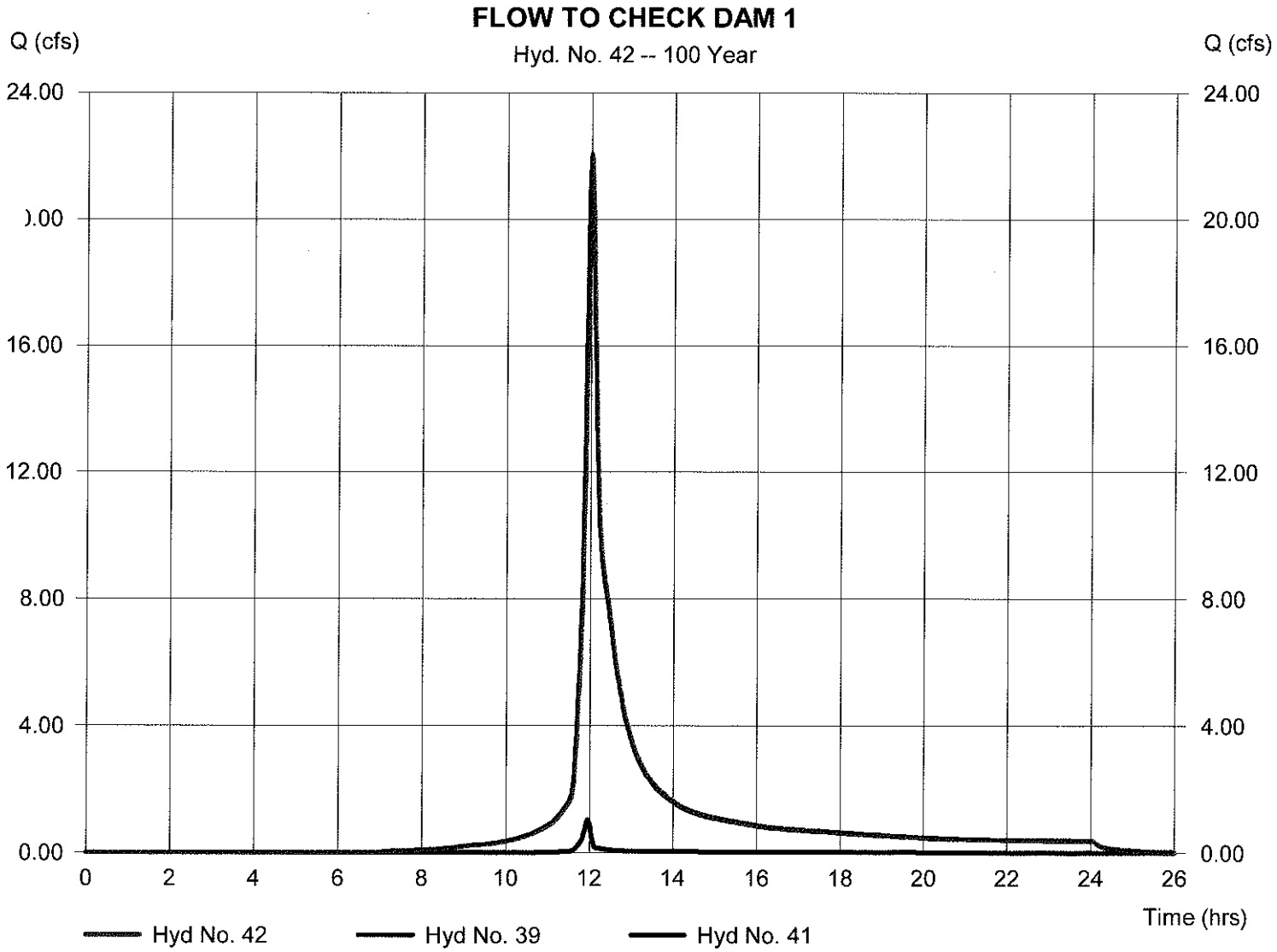


Hydrograph Report

Hyd. No. 42

FLOW TO CHECK DAM 1

Hydrograph type	= Combine	Peak discharge	= 22.06 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 84,767 cuft
Inflow hyds.	= 39, 41	Contrib. drain. area	= 0.360 ac

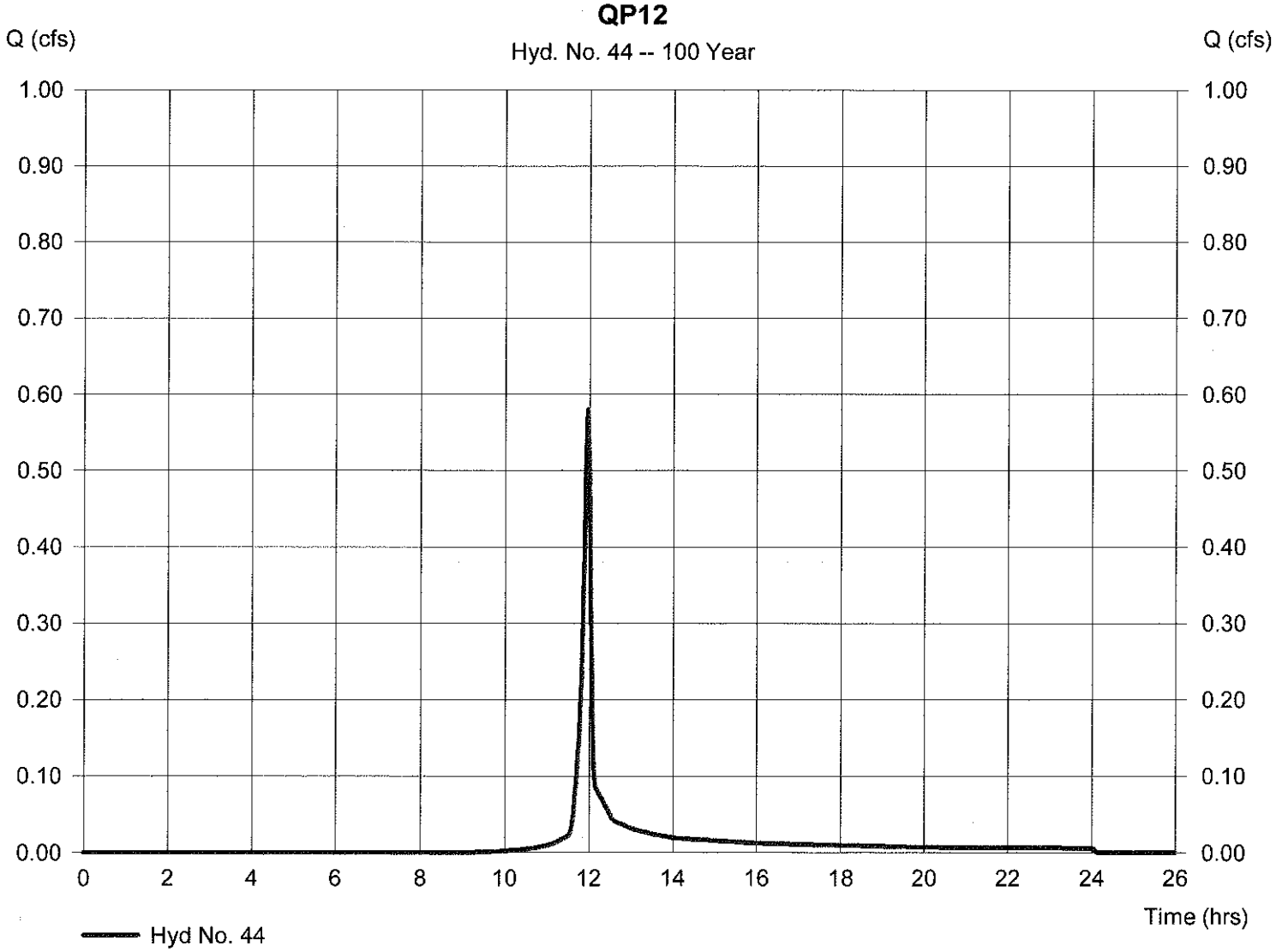


Hydrograph Report

Hyd. No. 44

QP12

Hydrograph type	= SCS Runoff	Peak discharge	= 0.580 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 1,167 cuft
Drainage area	= 0.210 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

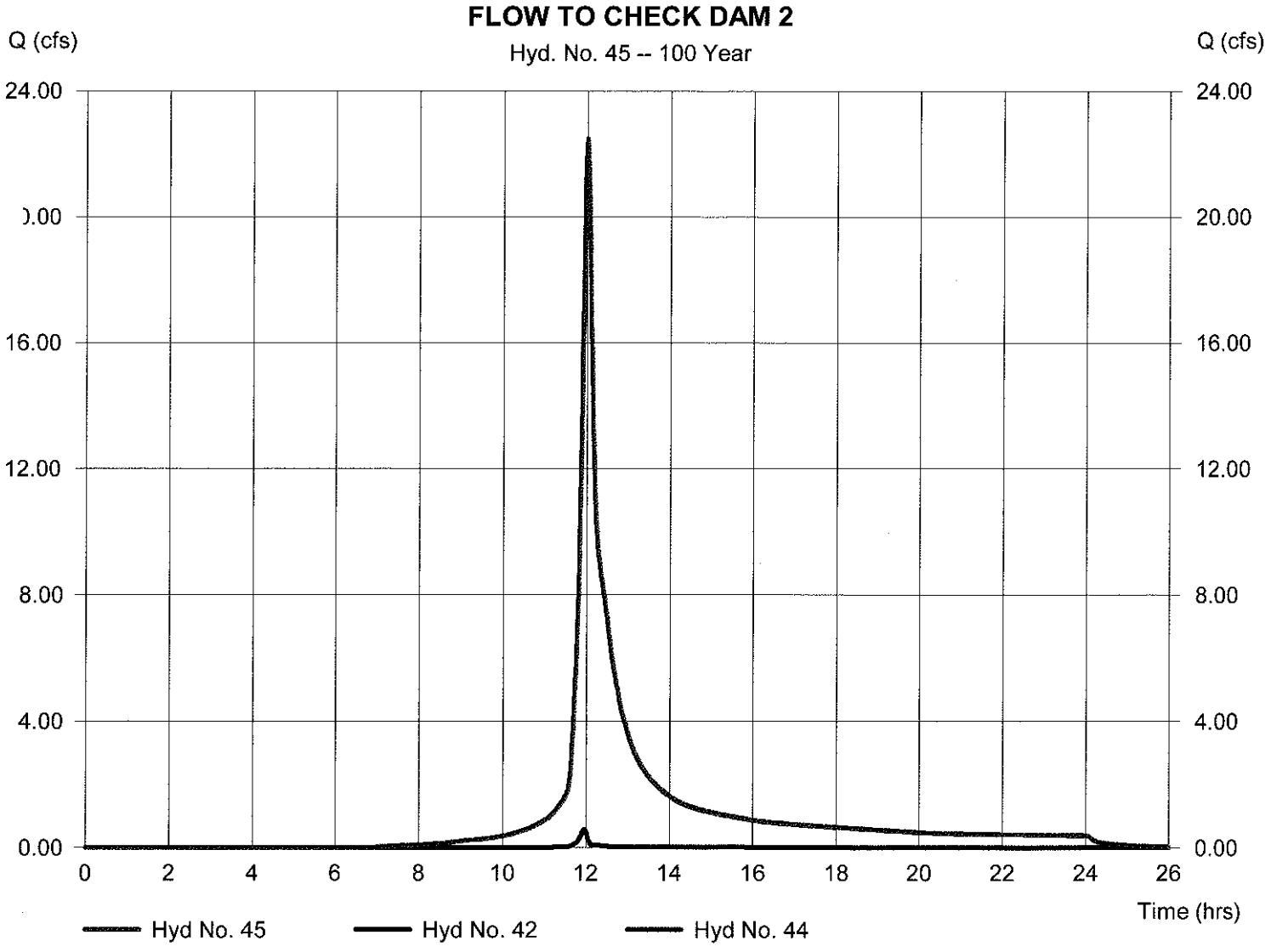


Hydrograph Report

Hyd. No. 45

FLOW TO CHECK DAM 2

Hydrograph type	= Combine	Peak discharge	= 22.50 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 85,934 cuft
Inflow hyds.	= 42, 44	Contrib. drain. area	= 0.210 ac

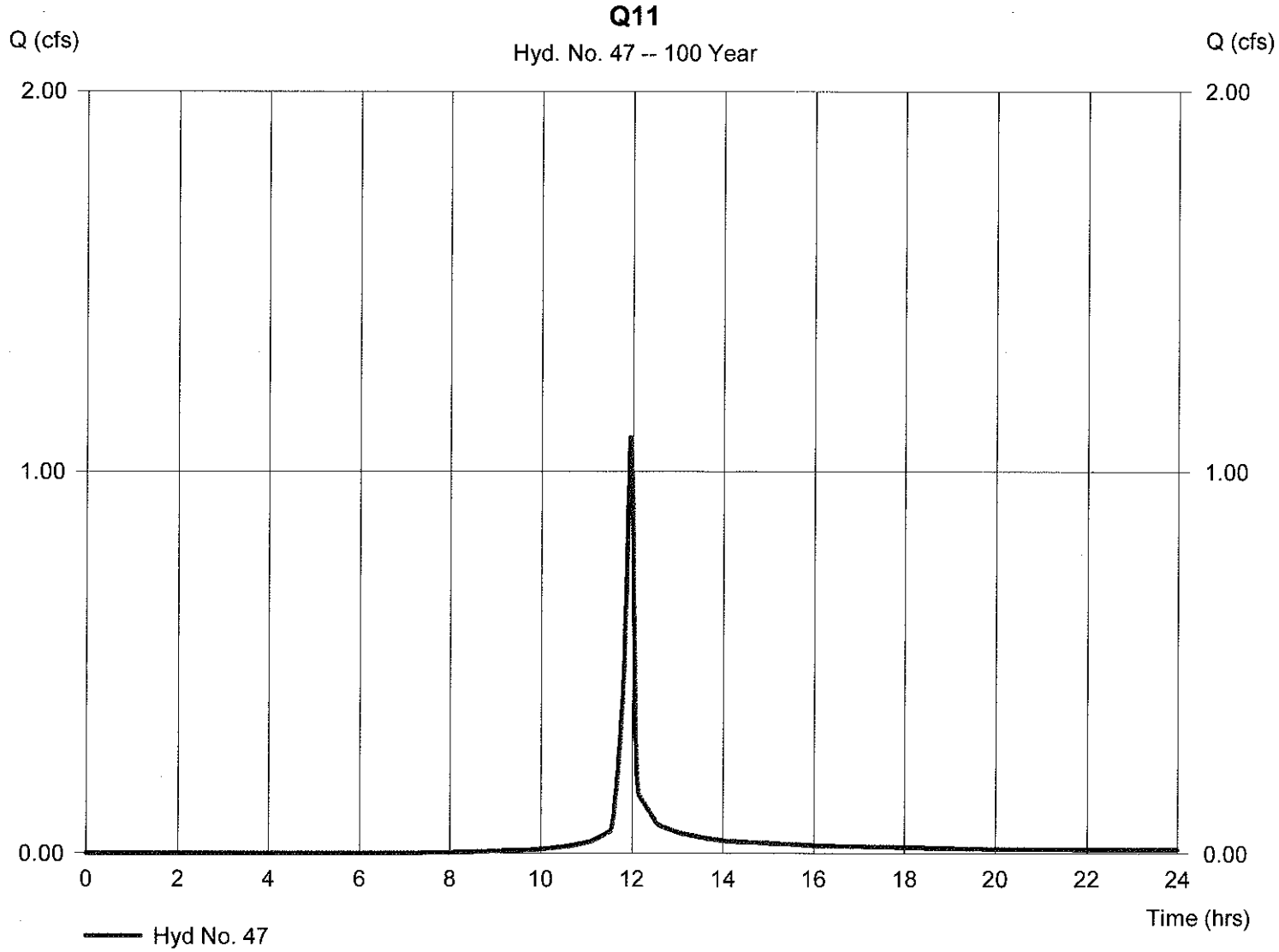


Hydrograph Report

Hyd. No. 47

Q11

Hydrograph type	= SCS Runoff	Peak discharge	= 1.090 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 2,243 cuft
Drainage area	= 0.310 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

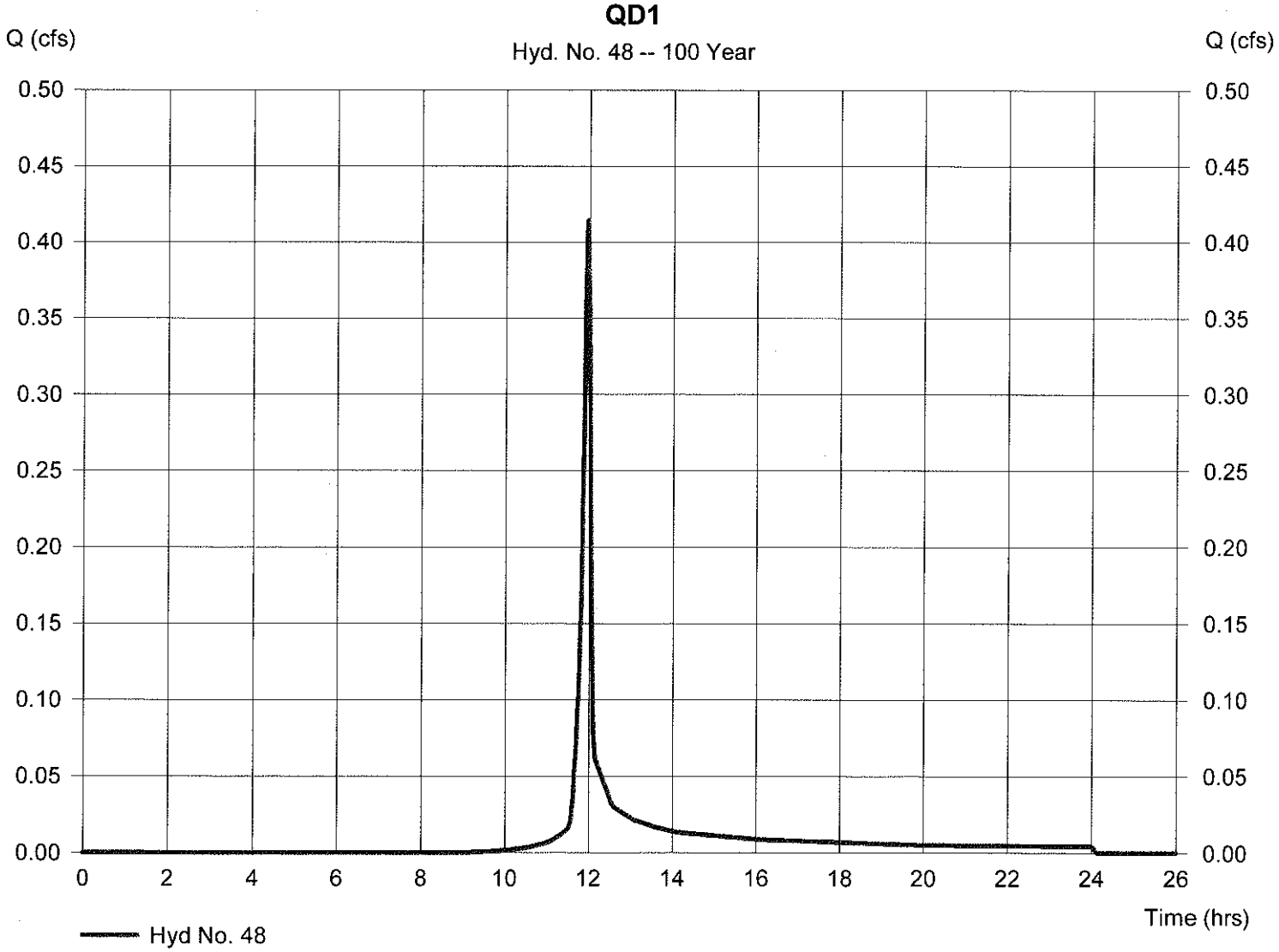


Hydrograph Report

Hyd. No. 48

QD1

Hydrograph type	= SCS Runoff	Peak discharge	= 0.414 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 834 cuft
Drainage area	= 0.150 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

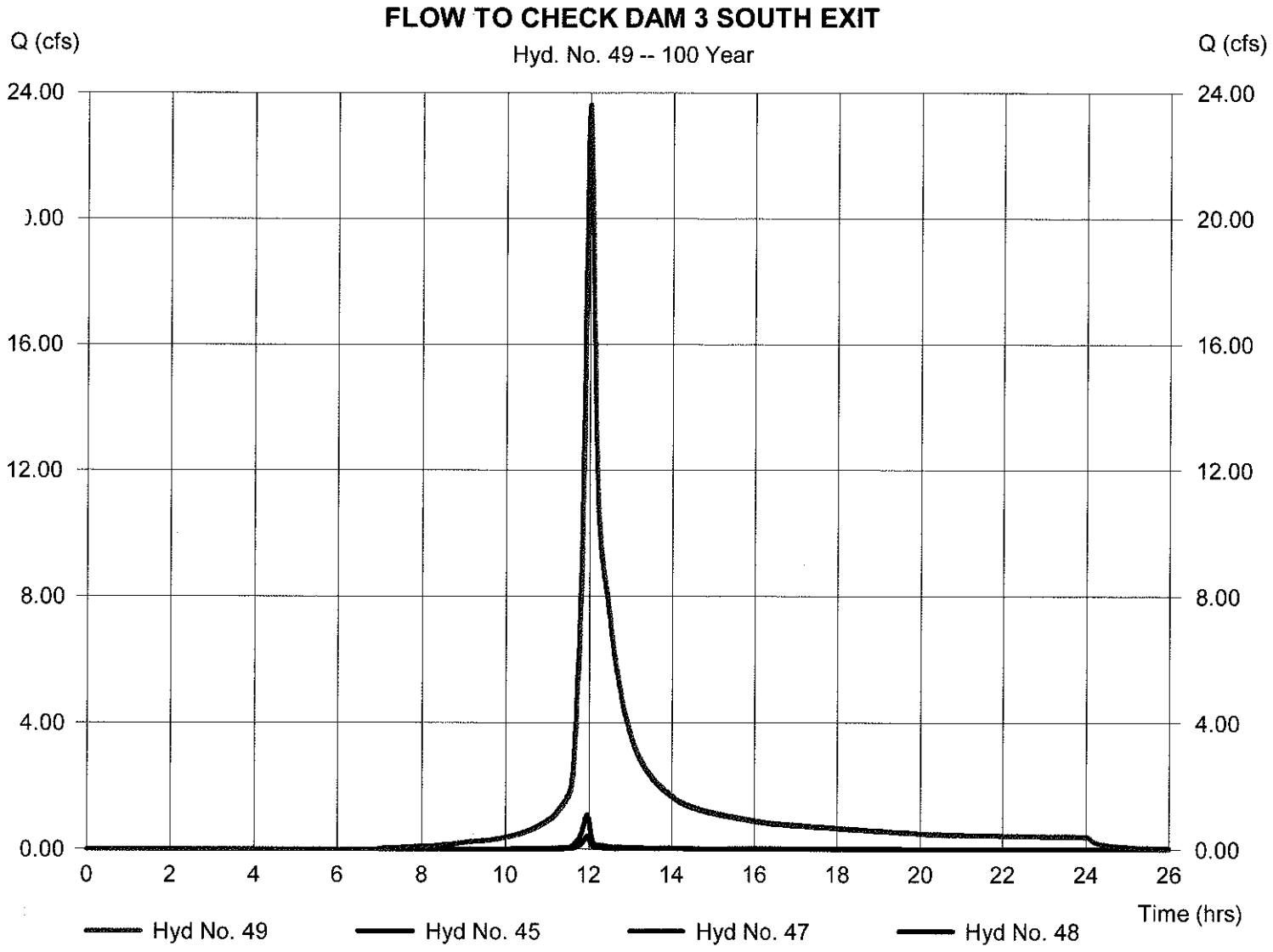


Hydrograph Report

Hyd. No. 49

FLOW TO CHECK DAM 3 SOUTH EXIT

Hydrograph type	= Combine	Peak discharge	= 23.62 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 89,010 cuft
Inflow hyds.	= 45, 47, 48	Contrib. drain. area	= 0.460 ac

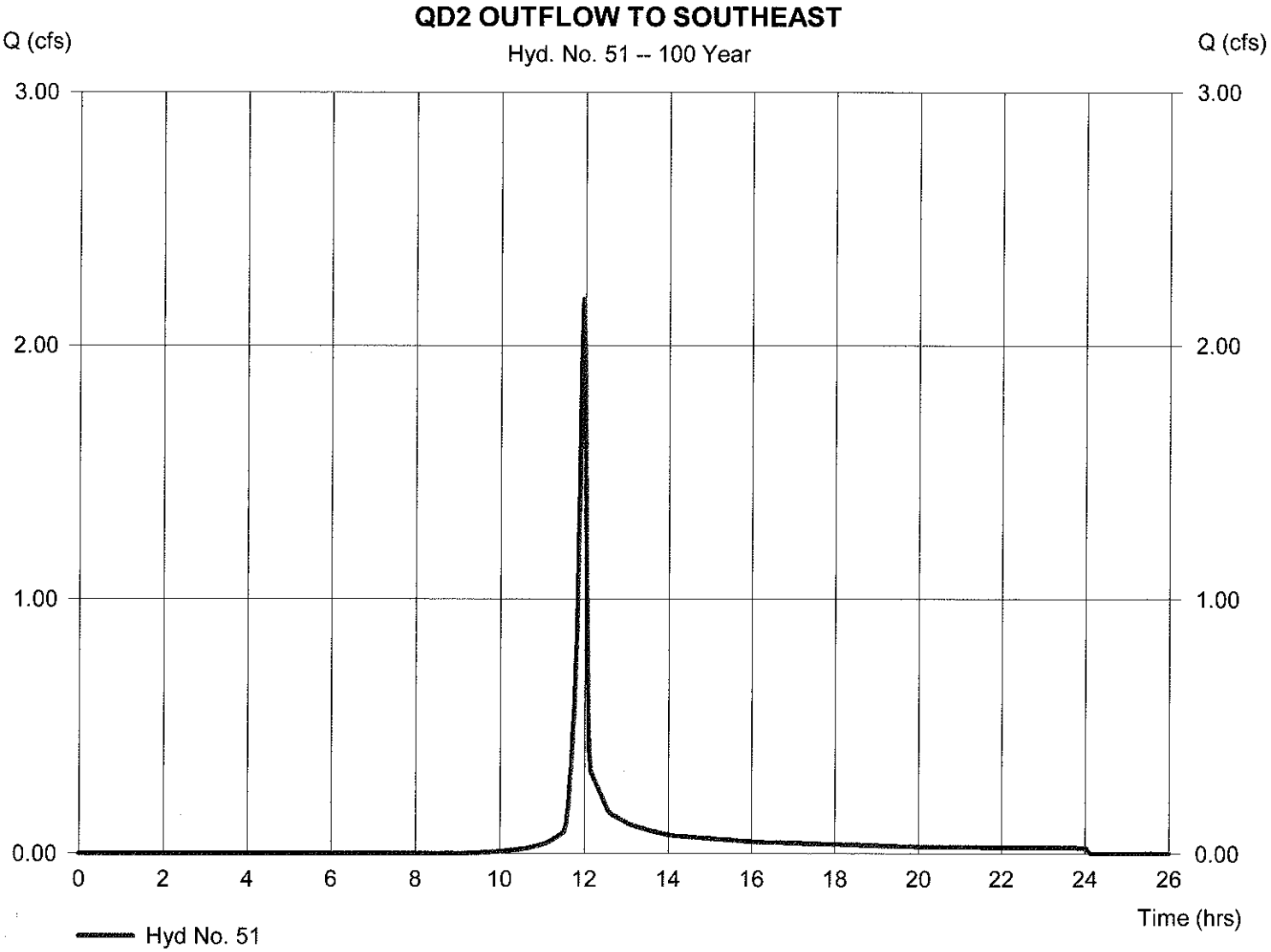


Hydrograph Report

Hyd. No. 51

QD2 OUTFLOW TO SOUTHEAST

Hydrograph type	= SCS Runoff	Peak discharge	= 2.183 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 4,391 cuft
Drainage area	= 0.790 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

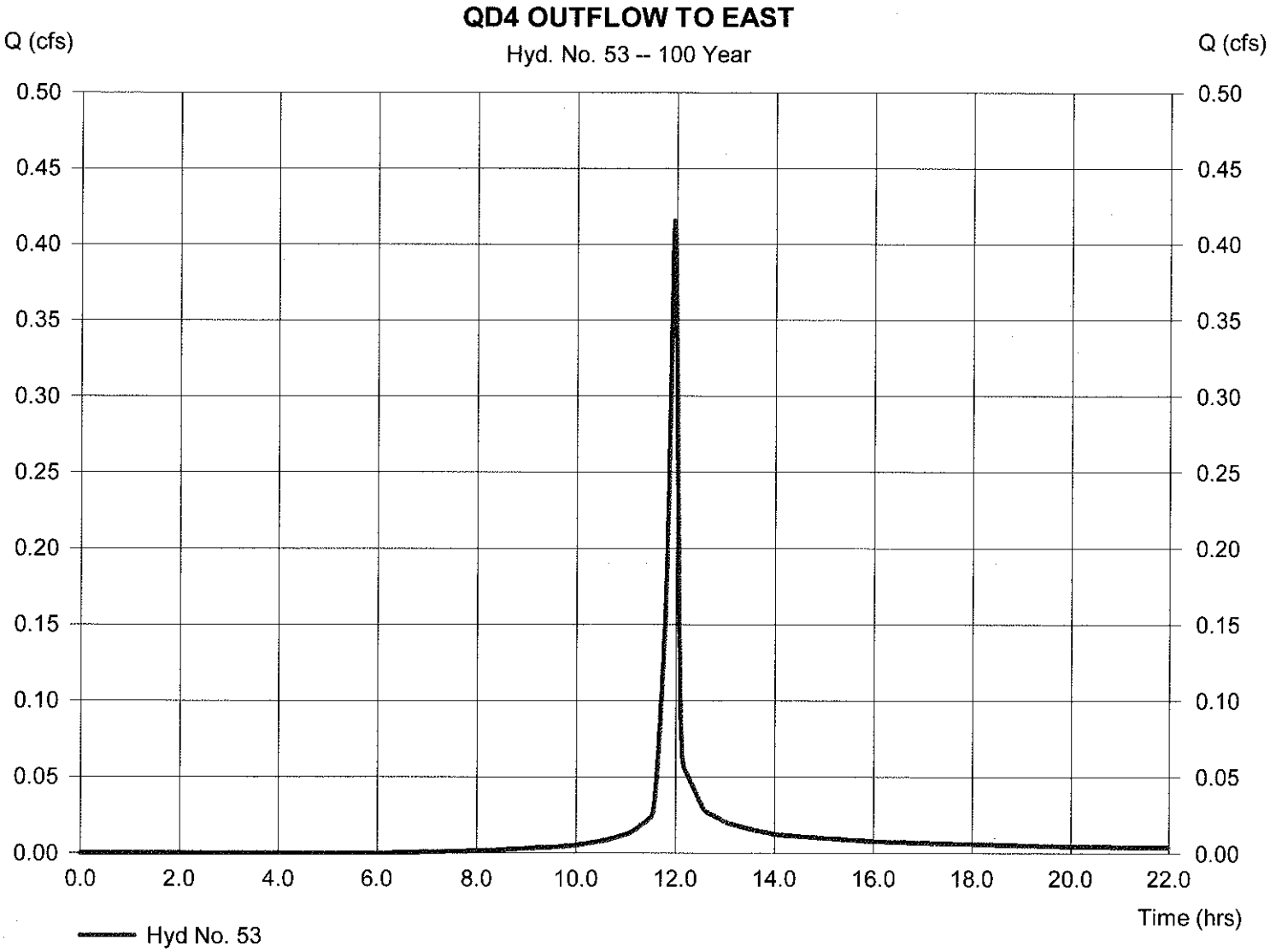


Hydrograph Report

Hyd. No. 53

QD4 OUTFLOW TO EAST

Hydrograph type	= SCS Runoff	Peak discharge	= 0.415 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 865 cuft
Drainage area	= 0.110 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.22 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	--------
2	69.8703	13.1000	0.8658	--------
3	0.0000	0.0000	0.0000	--------
5	79.2597	14.6000	0.8369	--------
10	88.2351	15.5000	0.8279	--------
25	102.6072	16.5000	0.8217	--------
50	114.8193	17.2000	0.8199	--------
100	127.1596	17.8000	0.8186	--------

File name: SampleFHA.idf

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

Precip. file name: K:\FAIRLY ROAD FOR HOMEWISE JENKINS\Drainage\FAIRLY ROAD.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	1.52	0.00	0.00	0.00	2.60	2.91	3.22
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Terry O. Brown P.E.

Fairly Road Subdivision

(Camino Rojo / Fairly Rd.)

Traffic Impact Study

September 18, 2020

DRAFT

Presented to:

City of Santa Fe
Traffic Engineering

Prepared for:

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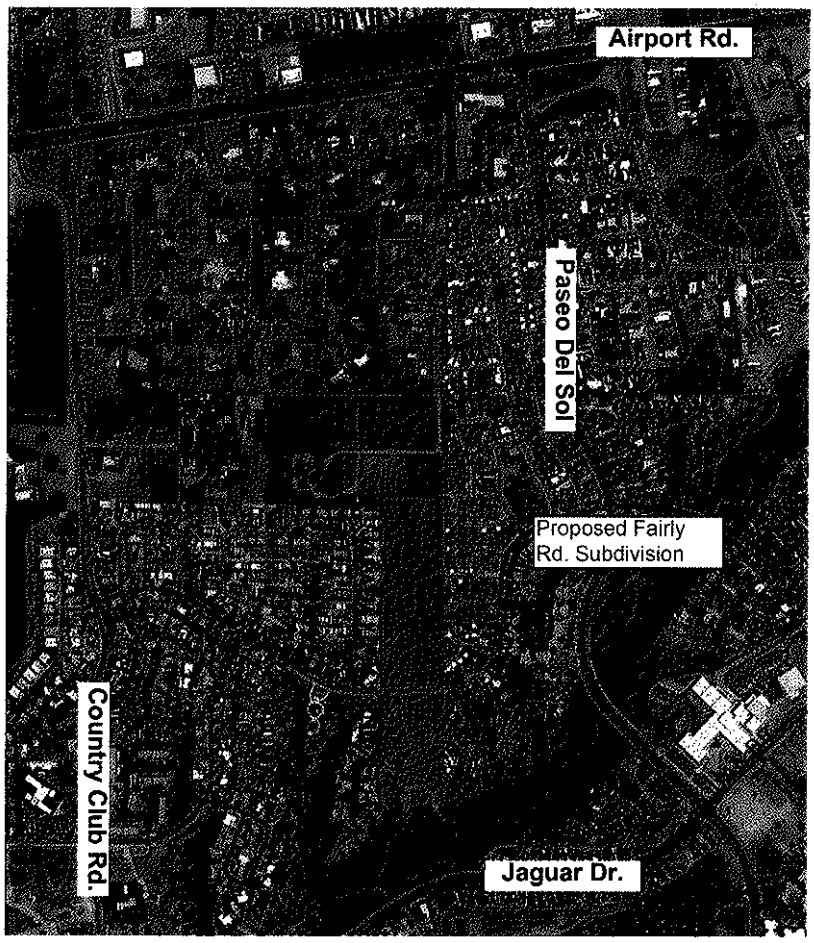
Terry O. Brown P.E.
P.O. Box 92051
Albuquerque, NM 87199
505 · 883 · 8807

Fairly Rd. Subdivision
(Camino Rojo / Fairly Rd.)
Traffic Impact Study

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Fairly Road Subdivision, determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared to meet the requirements of the City of Santa Fe Traffic Engineering Department associated with its review of the Fairly Rd. Subdivision.

The proposed development is located approximately one-half mile south of Airport Rd. approximately midway between Country Club Rd. and Paseo Del Sol. Following is a vicinity map (also see Appendix Page A-1) showing location of the project:



The proposed development is to be developed as a 57-unit single-family detached housing subdivision. The anticipated implementation year for this site is the year 2024. According to the Institute of Traffic Engineers' (ITE) trip generation rates, the weekday AM Peak Hour period is anticipated to generate approximately 11 entering trips and 34 exiting trips. During the weekday PM Peak Hour period, it is anticipated that it will generate approximately 37 entering trips and 22 exiting trips.

The development will be accessed via the existing intersections of Entrada de Milagro / Paseo Del Sol, Camino Rojo / Country Club Rd., and Airport Rd. / Fairly Rd. Both intersections as well as Airport Rd. / Fairly Rd. are unsignalized intersections controlled by two-way stop signs.

Analysis results by analysis year are included in the following tables:

Executive Summary Results Table

			2022 Conditions	
Intersection No. / Name	**Signalization**	**Case**	**AM Peak**	**PM Peak**
1 - Airport Rd. / Country Club Rd.	Signalized	NO BUILD	B - 15.3	B - 14.1
		BUILD	B - 15.5	B - 14.3
2 - Airport Rd. / Paseo Del Sol	Signalized	NO BUILD	B - 13.2	B - 12.4
		BUILD	B - 13.5	B - 12.5
3 - Airport Rd. / Fairly Rd.	Signalized	NO BUILD	B - 13.8	A - 10.1
		BUILD	B - 14.0	B - 10.2
4 - Entrada de Milagro / Paseo Del Sol	Unsignalized	NO BUILD	B - 11.8	B - 13.4
		BUILD	B - 12.0	B - 12.9
5. Camino Rojo / Country Club Rd.	Unsignalized	NO BUILD	B - 12.1	B - 14.6
		BUILD	B - 12.4	B - 15.1

In summary, the proposed development does not have a significant adverse impact to the adjacent transportation system and the minimal impact to the transportation system can be mitigated by the recommended measures described in this report and summarized in the table above. In summary, the recommendations of this study are:

Recommendations

Subdivision intersections and access shall be designed and constructed to preserve adequate sight distances as required by the City of Santa Fe Traffic Engineer.

Fairly Rd. Subdivision
(Camino Rojo / Fairly Rd.)
Traffic Impact Study

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Analysis of Implementation Year Conditions 4

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- Traffic Analysis (Implementation Year – 2024) 9
- Impact Assessment 15
- Access Design Specifications 15

Summary of Deficiencies, Anticipated Impacts, and Recommendations 15

APPENDIX 17

Fairly Rd. Subdivision
(Camino Rojo / Fairly Rd.)
Traffic Impact Study

Introduction

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Fairly Rd. Subdivision and determine the impact of the development on the adjacent transportation system. The recommendations of this study will provide measures to mitigate the impact of the development of the site plan on critical intersections and street segments. This study is prepared to meet the requirements of the City of Santa Fe Traffic Engineering Dept. associated with its review of the Fairly Rd. Subdivision as shown on the plan on Page A-2 in the Appendix of this report.

The proposed development is located approximately one-half mile south of Airport Rd. approximately midway between Country Club Rd. and Paseo Del Sol. Following is a vicinity map showing location of the project:



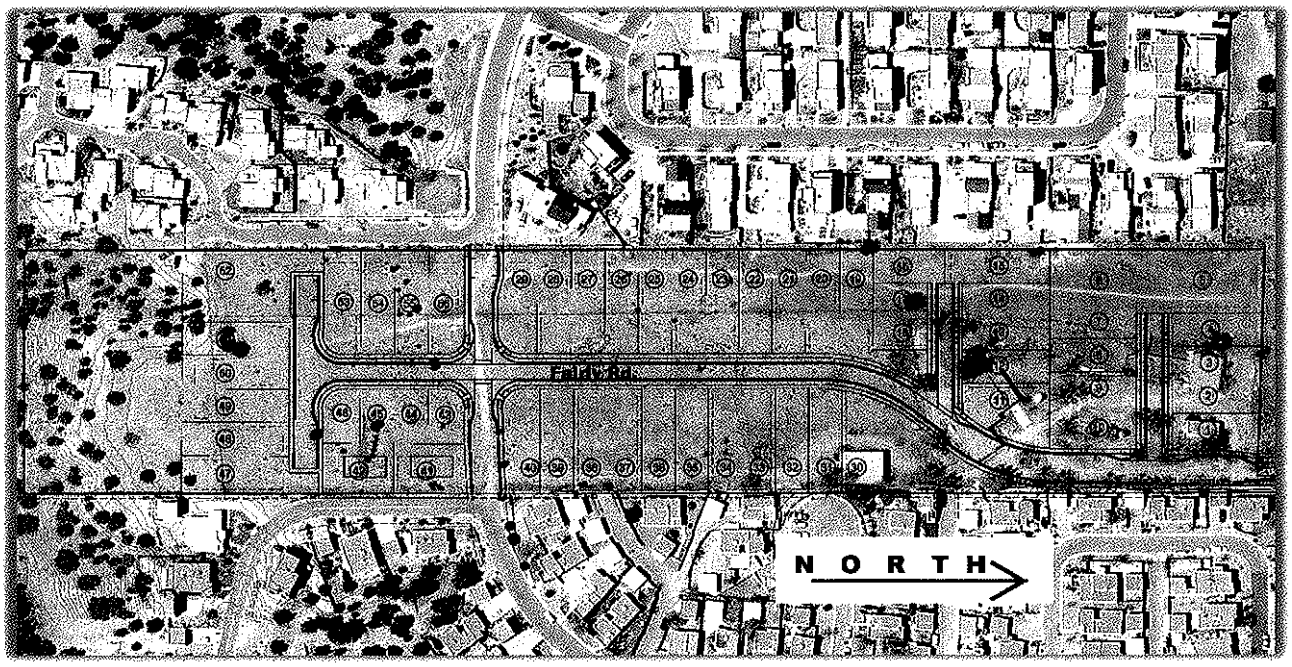
Description of Proposed Development

The proposed project is described as a 57-unit single family detached housing development west of the intersection of Entrada Milagro / Paseo Del Sol. A very recent modification to the subdivision plan has reduced the number of proposed lots to 56, but this Study assumes 57 lots since it will provide a slightly conservative analysis and the difference between 57 lots and 56 lots is only 1 trip per hour during the Peak Hour periods. The project lies in the city limits of Santa Fe, NM. The project funnels to Paseo Del Sol or Country Club Rd. and then to a Regional Principal Arterial Roadway (Airport Rd.) which is maintained by the City of Santa Fe. Therefore, the project will be required to comply with the requirements of the City of Santa Fe.

This development will be constructed in one phase. This study will analyze an implementation year of 2024.

The development will be accessed via the existing intersections of Entrada Milagro / Paseo Del Sol, Camino Rojo / Country Club Rd., and Airport Rd. / Fairly Rd.

Following is the proposed site development plan depicting driveway (access) locations (also, see Appendix Page A-2 for a more complete version of the proposed subdivision plan):



Study Area Conditions

A Traffic Impact Study Scoping Meeting was held by Jennifer Jenkins with the City of Santa Fe Traffic Engineering Department with staff (John Romero). During the exchange, it was determined that the study area would include the following list of intersections to be analyzed in the Traffic Impact Study:

1. Entrada Milagro / Paseo Del Sol (full access)
2. Camino Rojo / Country Club Rd. (full access)
3. Airport Rd. / Fairly Rd. (right-in, right-out, left-in)

This scope of study was based on the assumption that the parcel in question would be developed as a 57-unit residential subdivision as shown on the proposed site plan.

There are no other known land development projects in the area which need to be incorporated into the background traffic model for this study. Also, there are no known Transportation Improvement Program projects in the area that need to be considered in the Traffic Impact Study.

This project is served by public transit services in the area; specifically Routes #1 and #24. These routes run along Airport Rd. (both) or Paseo del Sol (#1). See Appendix pages A-56 thru A-59 for weekday & weekend times.

Airport Rd. and Paseo del Sol are designated on the 2015 Santa Fe Bikeways & Trails Map as Existing Bicycle Lanes. Buffalo Grass Rd. is designated as a future Multi-Use Path.

There are pedestrian facilities in the project area – curb & gutter and sidewalks along the roads, as well as raised medians for pedestrians and bicyclists crossing against traffic on the main thoroughfares.

Paseo del Sol is classified as a Major Collector Roadway on the Functional Classification of Roadways in the Santa Fe MPO Planning Area Map. Paseo del Sol is a two-lane urban-type roadway with raised median, curb and gutter and sidewalk. The posted speed limit along this section of the frontage road is 30 MPH.

Airport Rd. is classified as a Principal Arterial Roadway on the Functional Classification of Roadways in the Santa Fe MPO Planning Area Map. Airport Rd. is a four-lane roadway with curb and gutter with sidewalks. The posted speed limit along this section of Airport Rd. is 45 MPH.

Country Club Rd. is classified as a Major Collector Roadway on the Functional Classification of Roadways in the Santa Fe MPO Planning Area Map.

Analysis of Existing Conditions

Due to the fact that the Implementation Year is only a few years in the future, no existing analysis was performed. Also, we are in the midst of the COVID-19 pandemic in which traffic volumes (AM and PM Peak Hour) are distorted from normal conditions. It is generically estimated that AM and PM Peak Hour traffic volumes are currently reduced by 15% to 40% at the peak of the pandemic period. Conditions have normalized somewhat but we still have not achieve normal conditions due to government mandated shutdowns and societal concerns related to the spread of COVID-19.

To approximate normal base traffic volumes for this Study, new traffic counts were collected for the existing intersections of Airport Rd. / Country Club Rd., Airport Rd. / Paseo Del Sol, Airport Rd. / Fairly Rd., Entrada Milagro / Paseo Del Sol, and Camino Rojo / Country Club Rd. These volumes were collected in July, 2020 and, therefore, represent a COVID-19 volumes data set. However, there are existing 2019 AM and PM Peak Hour turning movements volumes collected on December 4, 2019 (Wednesday) at the intersections of Airport Rd. / Country Club Rd. and for Airport Rd. / Paseo Del Sol. These two traffic counts collected in pre-COVID-19 era provide a comparative analysis to establish the multiplication factor to convert the current COVID-19 volumes collected to approximate pre-COVID-19 turning movements volumes. As a result, a conversion factor was applied to the July, 2020 peak 15-minute turning movements volumes to convert the COVID-19 volumes (July, 2020) to pre-COVID volumes approximations. The pre-COVID-19 / COVID-19 comparison showed that pre-COVID AM volumes were approximately 145.1% or the pre-COVID AM volumes and the pre-COVID PM volumes were approximately 115.7% of the COVID-19 volumes collected in July, 2020. Therefore, the base volumes utilized for this Study are calculated by taking the July, 2020 peak AM and PM Peak Hour 15-minute turning movement volumes and multiplying them by 4 to convert to hourly flow rate and then multiplying by the COVID-19 conversion factor (145.1% for AM and 115.7% for PM).

Analysis of Implementation Year Conditions

Traffic Projections

Background traffic was taken from recent traffic counts (Appendix A-51 thru A-55) conducted on July 1, 2020 for this project and adjusted for COVID-19 conditions based on the previous description discussed under Existing Conditions section.

This study assumes that the development will be implemented in one final phase with an implementation year of 2024.

Projected trips were calculated based on the Institute of Traffic Engineers (ITE) Trip Generation Manual (10th Edition). Trips for the development were determined based on land use defined on

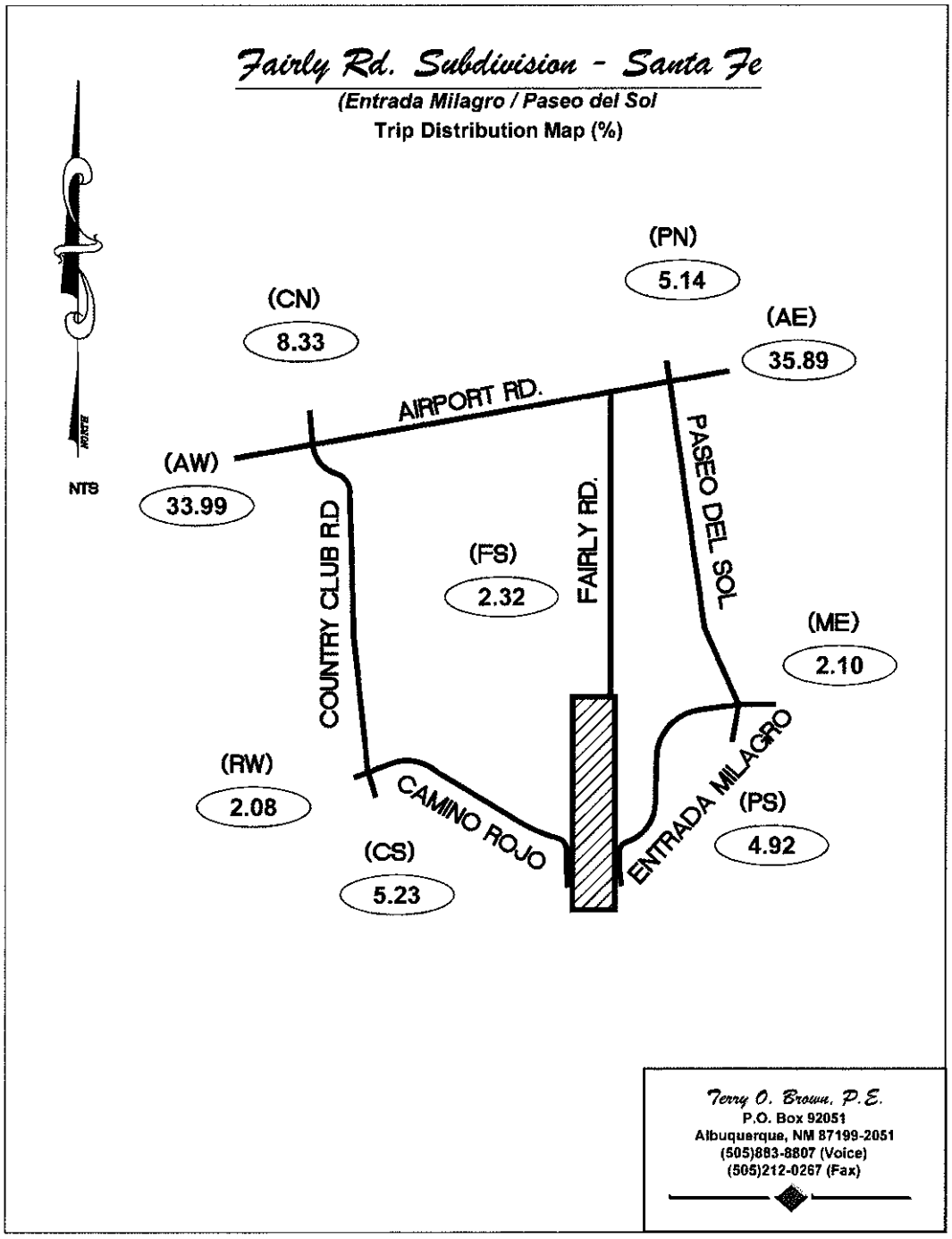
the Conceptual Site Subdivision Plan on Page A-2 in the Appendix of this report. According to ITE, Single-Family Detached Homes demonstrated a high degree of correlation between number of vehicles generated and number of residential units. The following table summarized the trip generation rate for the project:

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

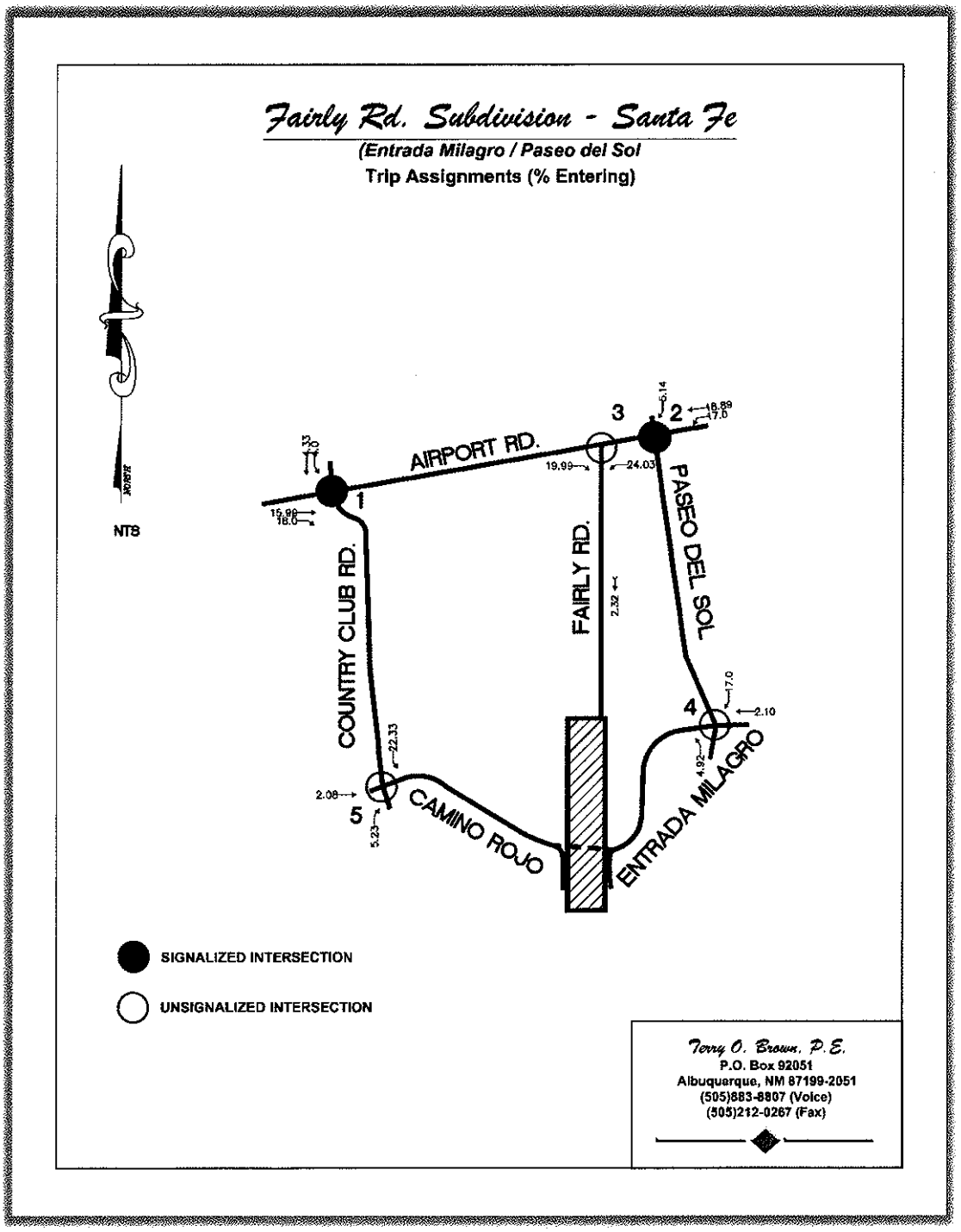
USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Single-Family Detached Housing (210)	57	620	11	34	37	22
	Dwelling Units					

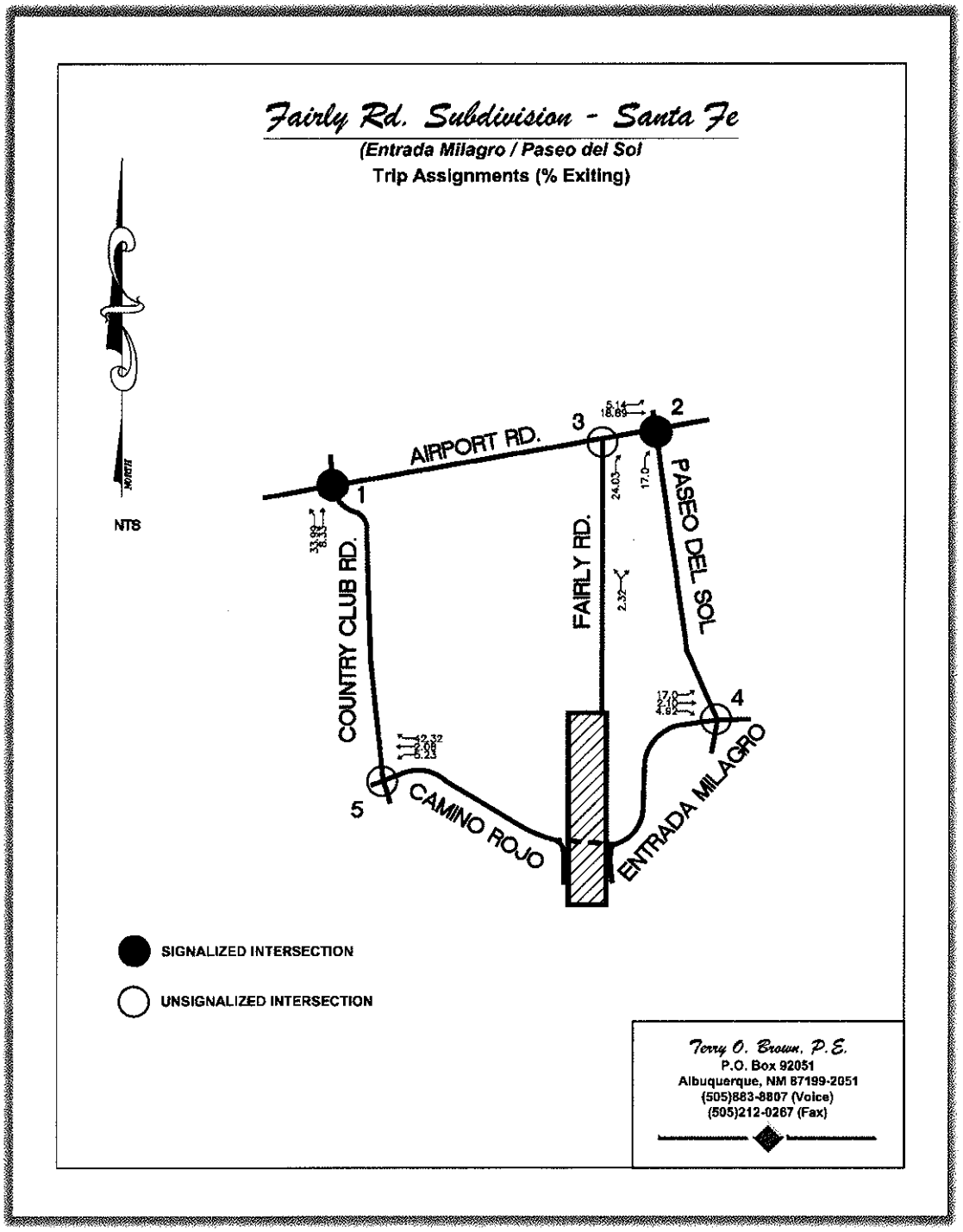
Pass-by trips were not applied to this project. See Appendix Page A-5 for more information regarding the trip generation.

The COVD-19 adjusted traffic counts were used to determine the directional trends of traffic and were grouped based on the most likely major street(s) or route(s) to the subject development. The residential Trip Distribution map can be found below and in the Appendix on Page A-6.


Fairly Rd. Subdivision - Santa Fe
(Entrada Milagro / Paseo del Sol
Trip Distribution Map (%)
NTS
(PN)
5.14
(CN)
8.33
(AE)
35.89
AIRPORT RD.
(AW)
33.99
COUNTRY CLUB RD.
FAIRLY RD.
PASEO DEL SOL
(FS)
2.32
(ME)
2.10
(RW)
2.08
CAMINO ROJO
ENTRADA MILAGRO
(PS)
4.92
(CS)
5.23
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Trip assignments are first made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments for residential trips are shown below and in the Appendix on Pages A-7 thru A-8.





A generic annual background traffic growth rate of 3% per year was used for each individual approach to an intersection targeted for analysis. The growth rate utilized for each approach to an intersection is printed at the top of the Turning Movement sheets for each intersection (Appendix Pages A-11 thru A-19).

The trip generation, trip distribution and trip assignments were utilized along with the adjusted base background traffic volumes and the historical traffic growth rates to determine the Implementation year (2024) NO BUILD and BUILD volumes. See Appendix Pages A-9 thru A-20 for Implementation year AM Peak Hour and PM Peak Hour NO BUILD and BUILD volumes.

Traffic Analysis (Implementation Year – 2024)

Analysis of the intersections targeted in this report were conducted using Trafficware's Synchro software (version 10.3.151.0) which is based on the Highway Capacity Manual, 6th Edition (HCM6) methodology for the most part. Calculated queuing lengths are based on the HCM6 methodology using a 95th Percentile confidence level. The capacity analysis using optimized traffic signal timing (see Appendix Pages A-21 thru A-48) and was conducted for the Implementation Year (2024) NO BUILD and BUILD Conditions. The results are summarized as follows:

#1 – Airport Rd. / Country Club Rd. - Pages A-21 thru A-48

The results of the 2024 analyses of the signalized intersection of Airport Rd. / Country Club Rd. are summarized in the following tables:

The 2024 analysis of the intersection of Airport Rd. / Club Rd. demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. The implementation of the proposed development increases the delay at the intersection by 0.2 seconds during the AM Peak Hour and by 0.2 seconds during the PM Peak Hour. The analysis of Airport Rd. / Country Club Rd. was not required as part of this Study, but was necessary to evaluate the adjacent unsignalized intersection of Airport Rd. / Fairly Rd. Therefore the signalized analysis for Airport Rd. / Country Club Rd. is shown for informational purposes only.

Airport Rd. / Country Club Rd. 2024 Conditions	EB (Airport Rd.)			WB (Airport Rd.)			NB (Country Club Rd.)			SB (Country Club Rd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2>	0	1	2>	0	1	1	1	1	1	1
AM Peak Hour												
2024 NO BUILD Conditions Volumes	118	959	76	35	577	104	28	83	146	97	21	69
V/C Ratio	0.22	0.51	0.51	0.11	0.35	0.35	0.11	0.39	0.82	0.38	0.08	0.29
Level-of-Service	A	B	B	A	A	A	D	D	D	D	D	D
Control Delay (Seconds)	7.5	13.5	13.4	8.9	0.9	0.9	38.7	43.5	53.8	36.5	37.6	39.5
Intersection LOS	**B - 15.3**											
95th Percentile Queue (veh)	1.8	11.2	11.4	0.5	0.5	0.5	1.2	4.0	7.8	4.2	0.9	3.0
2024 BUILD Conditions Volumes	118	961	78	35	577	104	40	86	146	97	21	69
V/C Ratio	0.22	0.52	0.52	0.11	0.35	0.35	0.15	0.41	0.82	0.38	0.08	0.31
Level-of-Service	A	B	B	A	A	A	D	D	D	D	D	D
Control Delay (Seconds)	7.5	13.5	13.5	8.9	0.9	0.9	38.5	43.7	53.8	37.0	38.1	40.1
Intersection LOS	**B - 15.5**											
95th Percentile Queue (veh)	1.8	11.2	11.5	0.5	0.5	0.5	1.8	4.1	7.8	4.2	0.9	3.1

PM Peak Hour												
2024 NO BUILD Conditions Volumes	93	672	44	159	1,006	110	27	33	110	131	71	93
V/C Ratio	0.24	0.35	0.35	0.34	0.54	0.54	0.13	0.21	0.81	0.46	0.27	0.41
Level-of-Service	A	B	B	A	A	A	D	D	E	D	D	D
Control Delay (Seconds)	7.9	12.2	12.2	8.0	1.8	1.8	47.6	50.8	63.3	43.3	45.3	47.0
Intersection LOS	**B - 14.1**											
95th Percentile Queue (veh)	1.6	8.4	8.6	2.5	1.0	1.0	1.4	1.9	7.0	6.8	3.7	4.9
2024 BUILD Conditions Volumes	93	678	51	159	1,006	110	34	35	110	132	73	93
V/C Ratio	0.24	0.36	0.36	0.34	0.54	0.54	0.16	0.22	0.81	0.47	0.28	0.42
Level-of-Service	A	B	B	A	A	A	D	D	E	D	D	D
Control Delay (Seconds)	7.9	12.4	12.4	8.1	1.8	1.8	47.5	50.9	63.3	43.3	45.8	47.4
Intersection LOS	**B - 14.3**											
95th Percentile Queue (veh)	1.6	8.6	8.8	2.5	1.0	1.0	1.8	2.0	7.0	6.8	3.9	4.9

#2 – Airport Rd. / Paseo del Sol - Pages A-21 thru A-48

The results of the 2024 analyses of the signalized intersection of Airport Rd. / Paseo del Sol are summarized in the following tables:

Airport Rd. / Paseo Del Sol	EB (Airport Rd.)			WB (Airport Rd.)			NB (Paseo Del Sol)			SB (Paseo Del Sol)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2>	0	1	2>	0	1	1	1	1	1>	0
AM Peak Hour												
2024 NO BUILD Conditions Volumes	69	1,396	83	76	673	83	63	7	230	56	21	41
V/C Ratio	0.17	0.77	0.77	0.25	0.40	0.40	0.21	0.03	0.75	0.19	0.00	0.25
Level-of-Service	A	A	A	A	B	B	C	D	D	C	A	D
Control Delay (Seconds)	8.6	5.5	5.5	8.3	13.2	13.2	34.7	36.6	47.3	34.8	0.0	38.8
Intersection LOS	**B - 13.2**											
95th Percentile Queue (veh)	1.0	2.8	2.9	1.2	8.6	8.7	2.6	0.3	10.8	2.4	0.0	2.8
2024 BUILD Conditions Volumes	71	1,402	83	78	675	84	63	7	236	56	21	41
V/C Ratio	0.17	0.78	0.78	0.26	0.40	0.40	0.21	0.02	0.75	0.19	0.00	0.24
Level-of-Service	A	A	A	A	B	B	C	D	D	C	A	D
Control Delay (Seconds)	8.8	5.8	5.8	8.5	13.5	13.5	34.4	36.2	47.6	34.5	0.0	38.4
Intersection LOS	**B - 13.5**											
95th Percentile Queue (veh)	1.1	2.9	3.0	1.3	8.7	8.8	2.6	0.3	11.0	2.3	0.0	2.8

PM Peak Hour												
2024 NO BUILD Conditions Volumes	71	979	110	235	924	87	76	6	120	99	27	55
V/C Ratio	0.20	0.53	0.53	0.53	0.47	0.47	0.37	0.04	0.50	0.38	0.00	0.52
Level-of-Service	A	A	A	A	B	B	D	D	D	D	A	D
Control Delay (Seconds)	8.2	1.8	1.8	7.0	11.7	11.7	46.9	49.6	47.2	46.2	0.0	53.4
Intersection LOS	**B - 12.4**											
95th Percentile Queue (veh)	1.1	1.0	1.0	3.6	10.9	11.1	4.1	0.4	6.4	5.3	0.0	4.8
2024 BUILD Conditions Volumes	72	983	110	241	931	89	76	6	124	99	27	55
V/C Ratio	0.20	0.54	0.54	0.54	0.47	0.47	0.36	0.04	0.50	0.37	0.00	0.50
Level-of-Service	A	A	A	A	B	B	D	D	D	D	A	D
Control Delay (Seconds)	8.4	1.9	1.9	7.2	11.9	11.9	46.5	49.3	46.8	45.9	0.0	52.9
Intersection LOS	**B - 12.5**											
95th Percentile Queue (veh)	1.2	1.0	1.0	3.7	11.1	11.3	4.1	0.4	6.6	5.3	0.0	4.8

The 2024 analysis of the intersection of Airport Rd. / Paseo del Sol demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. The implementation of the proposed development increases the delay at the intersection by 0.3 seconds during the AM Peak Hour and by 0.1 seconds during the PM Peak Hour. The signalized analysis for Airport Rd. / Country Club Rd. is shown for informational purposes only.

#3 –Airport Rd. / Fairly Rd. – Pages A-21 thru A-48

The results of the analysis of the right-in, right-out, left-in only unsignalized intersection of Airport Rd. / Fairly Rd. are summarized in the following table:

Airport Rd. / Fairly Rd. 2024 Conditions	EB (Airport Rd.)			WB (Airport Rd.)			NB (Fairly Rd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		2>	0	1	2		0		1
AM Peak Hour									
2024 NO BUILD Conditions Volumes		1,333	7	13	708		0		104
V/C Ratio				0.02					0.22
Level-of-Service				A					B
Control Delay (Seconds)				9.7					13.8
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.1					0.8
2024 BUILD Conditions Volumes		1,333	9	16	708		0		112
V/C Ratio				0.02					0.23
Level-of-Service				A					B
Control Delay (Seconds)				9.7					14.0
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.1					0.9
PM Peak Hour									
2024 NO BUILD Conditions Volumes		886	6	27	1,366		0		17
V/C Ratio				0.03					0.03
Level-of-Service				A					B
Control Delay (Seconds)				8.4					10.1
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.1					0.1
2024 BUILD Conditions Volumes		886	13	36	1,366		0		22
V/C Ratio				0.04					0.03
Level-of-Service				A					B
Control Delay (Seconds)				8.5					10.2
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.1					0.1

The 2024 analysis of the intersection of Airport Rd. / Fairly Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Also, the calculated 95th Percentile Queue lengths are less than one vehicle. Therefore, no recommendations are made for the intersection of Airport Rd. / Fairly Rd.

#4 – Entrada Milagro / Paseo Del Sol – Pages A-21 thru A-48

The results of the analysis of the full access unsignalized intersection of Entrada Milagro / Paseo Del Sol are summarized in the following table:

Entrada Milagro / Paseo Del Sol	EB (Entrada Milagro)			WB (Entrada Milagro)			NB (Paseo Del Sol)			SB (Paseo Del Sol)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2024 NO BUILD Conditions Volumes	56	7	35	7	7	69	7	118	7	21	83	48
V/C Ratio		0.17			0.11		0.01			0.02		
Level-of-Service		B			A		A	A		A	A	
Control Delay (Seconds)		11.8			9.8		7.5	0.0		7.5	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.6			0.4		0.0			0.0		
2024 BUILD Conditions Volumes	62	8	37	7	7	69	8	118	7	21	83	50
V/C Ratio		0.18			0.11		0.01			0.02		
Level-of-Service		B			A		A	A		A	A	
Control Delay (Seconds)		12.0			9.9		7.5	0.0		7.5	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.7			0.4		0.0			0.0		
PM Peak Hour												
2024 NO BUILD Conditions Volumes	27	17	11	6	6	27	11	131	11	49	148	87
V/C Ratio		0.12			0.06		0.01			0.04		
Level-of-Service		B			B		A	A		A	A	
Control Delay (Seconds)		13.4			10.7		7.8	0.0		7.6	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.4			0.2		0.0			0.1		
2024 BUILD Conditions Volumes	31	17	12	6	7	27	13	131	11	49	148	3
V/C Ratio		0.13			0.06		0.01			0.04		
Level-of-Service		B			B		A	A		A	A	
Control Delay (Seconds)		12.9			10.5		7.6	0.0		7.6	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.4			0.2		0.0			0.1		

The 2024 analysis of the intersection of Entrada Milagro / Paseo Del Sol demonstrates that the delays and queuing will be acceptable for all conditions analyzed in this report. Also, the calculated 95th Percentile Queue lengths are less than one vehicle. Therefore, no recommendations are made for the intersection of Entrada Milagro / Paseo Del Sol.

#5 – Camino Rojo / Country Club Rd. - Pages A-21 thru A-48

The results of the 2024 analyses of the proposed full access unsignalized intersection of Camino Rojo / Country Club Rd. are summarized in the following tables:

Camino Rojo / Country Club	EB (Camino Rojo)			WB (Camino Rojo)			NB (Country Club)			SB (Country Club)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	1	1>	0	1	1>	0
AM Peak Hour												
2024 NO BUILD Conditions Volumes	56	7	13	7	7	139	7	152	7	13	7	7
V/C Ratio		0.14			0.20		0.01			0.01		
Level-of-Service		B			B		A			A		
Control Delay (Seconds)		12.1			10.2		7.3			7.6		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.5			0.7		0.0			0.0		
2024 BUILD Conditions Volumes	56	7	13	9	8	153	7	152	8	15	7	7
V/C Ratio		0.15			0.22		0.01			0.01		
Level-of-Service		B			B		A			A		
Control Delay (Seconds)		12.4			10.4		7.3			7.6		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.5			0.8		0.0			0.0		

PM Peak Hour												
2024 NO BUILD Conditions Volumes	33	6	6	11	6	55	6	114	17	71	186	33
V/C Ratio		0.12			0.11		0.01			0.05		
Level-of-Service		B			B		A			A		
Control Delay (Seconds)		14.6			10.6		7.7			7.6		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.4			0.4		0.0			0.2		
2024 BUILD Conditions Volumes	33	7	6	12	6	64	6	114	19	79	186	33
V/C Ratio		0.12			0.12		0.01			0.06		
Level-of-Service		C			B		A			A		
Control Delay (Seconds)		15.1			10.7		7.7			7.7		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.4			0.4		0.0			0.2		

The 2024 analysis of the intersection of Camino Rojo / Country Club Rd. demonstrates that the level-of-service and queuing will be acceptable for both the AM Peak Hour and PM Peak BUILD conditions analyzed in this report. Also, the calculated 95th Percentile Queue lengths are less than one vehicle. Therefore, no recommendations are made for the intersection of Camino Rojo / Country Club Rd.

Impact Assessment

The proposed development will have minimal adverse impact on the adjacent transportation system. All the levels-of-service were determined to be acceptable for the overall intersections.

Access Design Specifications

Sight distances at Airport Rd. / Fairly Rd. are adequate. Additionally, the sight distances at Entrada Milagro / Paseo Del Sol and at Camino Rojo / Country Club Rd. are adequate. There are no significant vertical or horizontal curves along these portions of Country Club Rd. and Paseo del Sol and there are no structures that are blocking sight distance into and out of the driveway. There are only minor horizontal curves along Country Club Rd. and along Camino Entrada.

Summary of Deficiencies, Anticipated Impacts, and Recommendations

The existing 2024 analysis did not determine any significant deficiencies in the adjacent transportation system resulting from implementation of the proposed Fairly Rd. Subdivision.

Recommendations made by this Study are at the end of the Executive Summary.

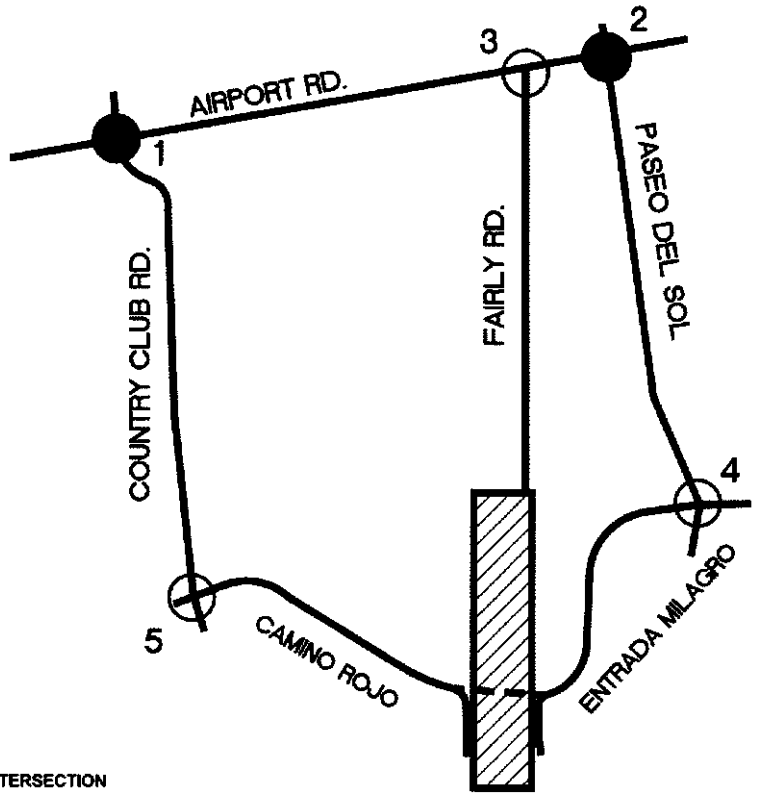
Also, the following pages present a comparative reporting of the levels-of-service, volumes and lane geometries for each intersection in the analysis.

Fairly Rd. Subdivision

(Entrada Milagro / Paseo del Sol)

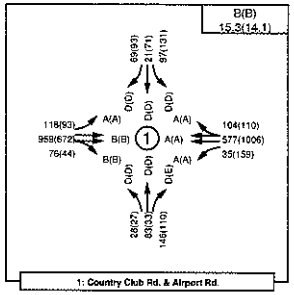
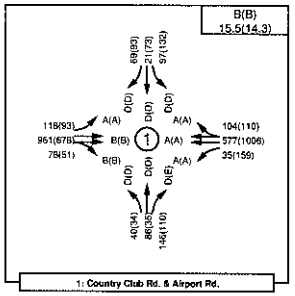
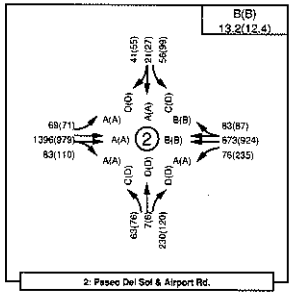
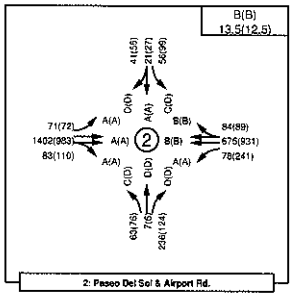
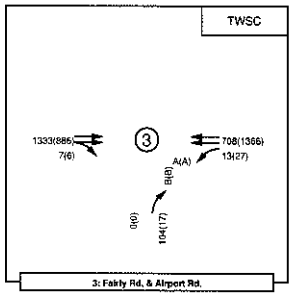
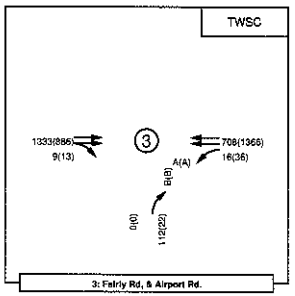
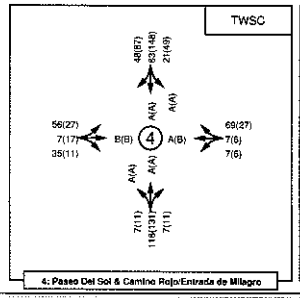
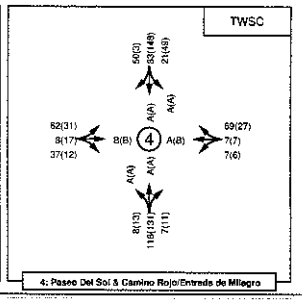
LOS / Volume Analysis Map

NTS



SIGNALIZED INTERSECTION

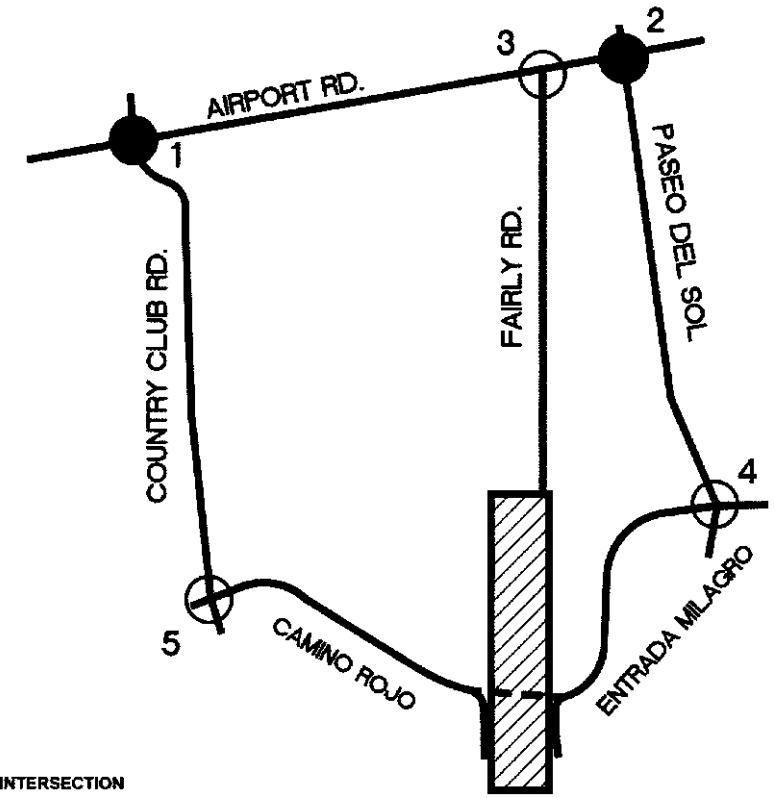
UNSIGNALIZED INTERSECTION

	2024 NO BUILD Conditions	2024 BUILD Conditions	Mitigated
1			NO RECOMMENDATION
2			NO RECOMMENDATION
3			NO RECOMMENDATION
4			NO RECOMMENDATION

AM(PM)



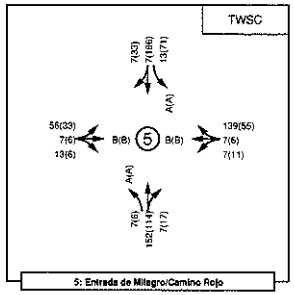
NTS



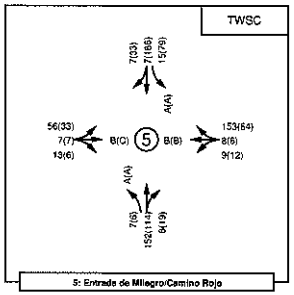
SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

2024 NO BUILD Conditions



2024 BUILD Conditions



Mitigated

NO RECOMMENDATION

Fairly Rd. Subdivision
(Entrada Milagro / Paseo del Sol)
LOS / Volume Analysis Map

AM(PM)

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Traffic Count Data	A-49 thru A-55
Santa Fe Trails Bus Route Schedules	A-56 thru A-59

APPENDIX

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT

2nd EARLY NEIGHBORHOOD NOTIFICATION MEETING:
Fairly Road Subdivision (Miraflores) - 4193 B Fairly Rd & 6450 Camino Rojo

Date: September 16, 2020

Time: 5:30 PM – 7:00 PM (MDT)

Go To Meeting:
https://global.gotomeeting.com/join/758841669

Dial in: +1 (408) 650-3123 **Access Code:** 758-841-669

A second Early Neighborhood Notification meeting to follow up with neighbors regarding questions and concerns raised during the first ENN meeting held in August. The proposed project is a 57-lot single family subdivision on 10.05 acres. The property is zoned R-5 permitting five dwellings per acre, plus a 15% density bonus in accordance with the City's affordable housing regulations.

Presented by: Jennifer Jenkins, JenkinsGavin

Participants:
Owner/Developer: Homewise, Inc.
Planner: JenkinsGavin, Inc.
Civil Engineer: Santa Fe Engineering
Traffic Engineer: Terry Brown, P.E.
Surveyor: Rick Chatroop, L.S.
Landscape Design: The Hilltop Landscape Architects and Contractors

Attendees: Please refer to attached chat log

Start: 5:30 PM MST

End: 7:00 PM MST

Summary: Homewise Presentation followed by a Project Presentation. Questions were submitted via the chat feature and addressed after the presentation.

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT

ENN #2 Chat Log

Date: September 16, 2020

Participants: Listed Below

RE: Fairly Road Subdivision (Miraflores) - 4193 B Fairly Rd & 6450 Camino Rojo

---

Jeri (to Everyone): 5:35 PM: Will there be a solic wall on the Camino Placitas side of the project? The fronts of our houses will be facing back yards of your development. We want an attractive solid wall.

Amy (to Everyone): 5:36 PM: How similar to the de

Amy (to Everyone): 5:37 PM: Will the development be similar in terms of home sizes, pricing etc. to the Vista Serena development?

JOHN THOMPSON (to Everyone): 5:42 PM: Can you give examples of Homewise or other communities that this development will be like?

Lisa Randall (to Everyone): 5:50 PM: duration of construction once started?

Michelle (to Everyone): 5:52 PM: I heard about horrible dust issues during the building of Villa Sonata. The neighbors were/are miserable. Not to mention all the traffic issues we already know will manifest.

Jeri (to Everyone): 5:56 PM: Are the no-parking streets substandard size? Will the city own the streets and maintain them?

JOHN THOMPSON (to Everyone): 5:58 PM: I think you missed the concern or the volume of traffic generated into the adjoining neighborhoods by 56 homes.

Michelle (to Everyone): 5:59 PM: I agree John!

Lisa Randall (to Everyone): 6:00 PM: was the traffic study pre or during Covid?

Amy (to Everyone): 6:00 PM: There is a significant drop in traffic currently due to people being at home working remote.

Kimberly (to Organizer(s) Only): 6:01 PM: When was the road studies done? As this year is not normal for traffic.

barry & lori rochelle (to Everyone): 6:02 PM: Does DOT Traffic crash studies include cars hit while sitting in their driveways.

Lisa Randall (to Everyone): 6:02 PM: traffic counts during a pandemic where people are encouraged/mandated to stay home is highly inaccurate
barry & lori rochelle (to Everyone): 6:04 PM: Your assumption about cars on Avenida Chamisa are mostly homeowners is flawed. More than half of the a.m cars are from Entrada Milagro.

Jeanne Marie Aurnague (to Everyone): 6:05 PM: Crash Data for Avenida Chamisa Is not correct. @0@0 1 car; 2019 2 cars and prior 2 cars all crashe dinto from outside traffic. Also, Pre-Covid traffic was so much higher. Also, Avenida Chamisa is a 10mph road. It's curves & hills, 1600 feet long.

Michelle (to Everyone): 6:06 PM: And the speed on Entrada de Milagro is not moderate!! It's dangerous.

Jeanne Marie Aurnague (to Everyone): 6:06 PM: that's 2020, 1 car crashed into and does have a polic e report.

Kimberly (to Everyone): 6:06 PM: There is already ready traffic flow issues, with south medows. What is going to be done about the increase of vehicles impacting that intersection?

Amy (to Everyone): 6:06 PM: Is there a pre covid traffic study on Entrada and Avenida Chamisa?

JOHN THOMPSON (to Everyone): 6:06 PM: How can you have a significant traffic count on Fairly Road given the current housing on it now? Will Santa Fe and Homewise agree to improve Fairly Rd. to encourage traffic to use Fairly Rd. as the primary entrance/exit?

Andrew sandoval (to Everyone): 6:06 PM: what will be the median home price for the market homes and affordable homes.

barry & lori rochelle (to Everyone): 6:06 PM: How do you address the change in traffic due to the road becoming an artery for the new development.

barry & lori rochelle (to Everyone): 6:07 PM: The two cars hit in 2018/19 were much worse than fender benders.

Lisa Randall (to Everyone): 6:07 PM: will Homewise commit to assisting neighbors in assessing for speed humps on Entrada de Milagro AND Avenida de Chamisa?

Kimberly (to Everyone): 6:08 PM: What about the traffic on country club and camino rojo?

Mike Loftin (to Everyone): 6:09 PM: Yes, Lisa. We will work with the neighborhood to get the city to implement traffic calming measures as well as enforce the no parking rules on street that don't allow on street parking.

Jenni James (to Everyone): 6:09 PM: Will there be parking along Fairly Rd behind the existing homes that back up to Fairly?

Jeanne Marie Aurnague (to Everyone): 6:10 PM: Your Avenida Chamisa Findings are being under stated for our expereinces & concerns.

Ariana (to Everyone): 6:10 PM: Where can we find a copy of the revised plan?

Jenni James (to Everyone): 6:10 PM: Traffic calming will be needed on Fairly as well.

Jeanne Marie Aurnague (to Everyone): 6:11 PM: Are you willing to support our roads will Speed Humps? Avenida Chamisa is primarily a 10mph road..so 48% at 20mph is way too fast.

Jeanne Marie Aurnague (to Everyone): 6:12 PM: Entrada de Milagro and Avenida Chamisa and even Camino De Rojo need Calming Traffic devices from the 100 cars you are putting on our roads which are not designed for such traffic.

Michelle (to Everyone): 6:13 PM: What will happen to all the trees along the fence line to the south of Fairly road? At the end of the "open space" at house lots 30, 31, 32, etc.

Alaina & Andy (to Everyone): 6:13 PM: Is there a way to get site elevations of the proposed construction to help us understand how this will affect current views? How are the lot lines going to affect current views?

Kimberly (to Everyone): 6:13 PM: What about the existing wall along the boarder on colonia prism? I'm concerned about damage to it. Also with my yard sharing with two other yards as shownin your latest diagram

Michelle (to Everyone): 6:14 PM: Jeanne, at least 100 cars, likely 200 if there are up to 4 cars per house!

GREGORY KELLER (to Everyone): 6:14 PM: I would like to make a quick statement regarding the lot reduction

Jeanne Marie Aurnague (to Everyone): 6:15 PM: We need You to be supportive to us and our roads not being desiged for your incoming traffic. We all need calming traffic devices. Are you planning on supporting us?

Jeanne Marie Aurnague (to Everyone): 6:18 PM: You are bringing in 57 cars up to 200 cars on small local roads....how are you going to be proactive in your support to us?

Coleen Dearing (to Everyone): 6:18 PM: Ditto on traffic calming on Fairly, it will be a drag strip without sidewalks or medians...

Jeanne Marie Aurnague (to Everyone): 6:23 PM: We can't have your construction traffic on our little, hilly curvy road...Avenida Chamisa cannot sustain your traffic. How are you ging to help us?

Robert Genoway (to Everyone): 6:24 PM: Has an engineering study been conducted to assess storm drainage and erosion control at the south end of the development?

Jeanne Marie Aurnague (to Everyone): 6:25 PM: The traffic study you showed us is NOT what our expereince has been pre-COVID-19. We need you to Care about using our road infrastructures and provide all of our roads with traffic Calming Devices, wanting Speed Humps was Polled on Avenida Chamisa by 2/3rds of the homes.

barry & lori rochelle (to Everyone): 6:31 PM: How was the assumption that most cars on Avenida Chamisa are street homeowners only?

barry & lori rochelle (to Everyone): 6:31 PM: How was the assumption that most cars on Avenida Chamisa are street homeowners only arrived at?

GREGORY KELLER (to Everyone): 6:35 PM: This is Greg and I would like to make a quick statement, thank you.

Ruth hamilton (to Everyone): 6:37 PM: I see John Romero is on the call. can he tell us the date of the pre-COVID traffic studies that were used to derive the deltas you quote?

Ruth hamilton (to Everyone): 6:38 PM: Camino Rojo WILL need a 4-Way stop at Rojo and Valentine in,place of the current 2-way that does not stop Rojo traffic.

Coleen Dearing (to Everyone): 6:43 PM: Question about Fairly Road and speed humps

Cheri D Vasek (to Everyone): 6:45 PM: Can all of the requests for traffic calming be done as a group application (applied to all roads for which residents agree)? Or does each road need to submit an application individually?

Ariana (to Everyone): 6:45 PM: please add me to the email list: lovevariana@aol.com
Ariana (to Everyone): 6:45 PM: lovevariana@aol.com

Cheri D Vasek (to Everyone): 6:46 PM: Please add me to the email list (traffic calming) cherivasek@mac.com

Alaina & Andy (to Everyone): 6:48 PM: Please add us to the traffic calming list: alaina.calcurian@gmail.com, ajhopkins6177@centurylink.net

Lisa Randall (to Everyone): 6:48 PM: without improvements all the way on Fairly, from the new development to Airport, it won't really serve to alleviate much traffic, as people won't want to use it in its current condition. Will Homewise push the city to develop it it to the surrounding neighborhood standards?

Jeri (to Everyone): 6:48 PM: You skipped the question about drainage. . .

Lisa Randall (to Everyone): 6:49 PM: please add to traffic calming list
Lisa Randall (to Everyone): 6:49 PM: randallita@q.com Entrada de Milagro

Amy (to Everyone): 6:50 PM: amy is at designfarm@hotmail.com for traffic calming info. Entrada de Milagro

Jeanne Marie Aurnague (to Everyone): 6:54 PM: We agree with Ruth about the 4 way stop needed on Rojo and Valentine. Cars flow thru tthere.

Amy (to Everyone): 6:56 PM: Are you able to discuss street lights and other lighting design for homes at this point?

Michelle (to Everyone): 6:57 PM: Please add me to the list. michelle@yantra.us

Jeanne Marie Aurnague (to Everyone): 7:00 PM: The CONCERN is not just concern, You are putting 100 cars on our simple roads not desinged for such upcoming traffic which your studies will not show.

Alaina & Andy (to Everyone): 7:00 PM: What measures are you going to take toward noise control?

Cecilia Martinez (to Everyone): 7:01 PM: Please add me to the email list:

Jeanne Marie Aurnague (to Everyone): 7:02 PM: Mr. Romero, how is putting 100 cars on our road not being taken seriously?

Cecilia Martinez (to Everyone): 7:02 PM: CMtz80@Outlook.com

Jeanne Marie Aurnague (to Everyone): 7:03 PM: We are talking about the upcoming Subdivision, not about the past traffic.

Jeanne Marie Aurnague (to Everyone): 7:04 PM: THE SUBDIVISION IS BRINGING IN THE TRAFFIC AND THAT IS BEING UNDERMINDED.
Jeanne Marie Aurnague (to Everyone): 7:05 PM: WE NEED PRO-ACTIVE SUPPORT. YOU ARE GOING TO HAVE OUR STUDIES SHOW WEAKNESS AND WE WILL HAVE TO WAIT UNTIL THE SUBDIVISION IS IN, TO DO THE HUMPS.

JenkinsGavin, Inc. (to Everyone): 7:07 PM:
https://www.santafenm.gov/media/archive_center/Final_Traffic_Calming_Program_2016.pdf
JenkinsGavin, Inc. (to Everyone): 7:08 PM: Regina Wheeler, Director

Andrew sandoval (to Everyone): 7:09 PM: rayday2@comcast.net

Jeanne Marie Aurnague (to Everyone): 7:10 PM: Include us please on email: jmournog@gmail.com; icescream@cybermesa.com

Ariana (to Everyone): 7:10 PM: Has there been a study of noise increase from increased traffic? When Paseo del Sol opened up to Cerrillos the noise on Paseo del Sol increased tremendously.

Jaime Jaramillo (to Everyone): 7:11 PM: REGINA WHEELER
Public Works Director
Public Works
(505) 955-6622rawheeler@santafenm.gov

Andrew sandoval (to Everyone): 7:14 PM: add me to email list rayday2@comcast.net

JOHN THOMPSON (to Everyone): 7:14 PM: Street trees create problems for trash trucks and delivery trucks.

Lisa Randall (to Everyone): 7:15 PM: thank you for the 2nd meeting, and for the accomodations you made in response to our conversations.

Jeri (to Everyone): 7:21 PM: Are the roads in this development public city roads or are they private roads?

Daniel Slavin (to Everyone): 7:22 PM: Jeri - They will be public roads in this development.

Cheri D Vasek (to Everyone): 7:22 PM: Thank you for this second meeting and the adjustments to the project that you have implemented.

Kimberly (to Organizer(s) Only): 7:22 PM: kkprichard@gmail.com
Amy (to Everyone): 7:24 PM: thank you.

- Unknown
    - Will a proposed electrical site plan be provided to determine light intensity?
        - We are not proposing any street lights at this time.
        - If a street light is required by the city, we will provide a photometric plan for those lights and there is no allowed bleed of those lights outside the community's boundary
    - Is an environmental abatement study required regarding animal displacement?
    - An assessment regarding one story homes should be done.

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT

EARLY NEIGHBORHOOD NOTIFICATION MEETING:
Fairly Road Subdivision (Miraflores) - 4193 B Fairly Rd & 6450 Camino Rojo

Date: August 19, 2020

Time: 5:30 PM (MDT)

Go To Meeting:
https://global.gotomeeting.com/join/178600757

Dial in: +1 (872) 240-3212 **Access Code:** 178-600-757

Meeting to discuss a pending application to the City of Santa Fe for a Preliminary Subdivision Plat.

Presented by: Jennifer Jenkins, JenkinsGavin

Participants: Jaime Jaramillo, Homewise
John Neunuebel, City Case Planner
Jennifer Jenkins, JenkinsGavin

Attendees: Please refer to attached chat log

Start: 5:30 PM MST

End: 8:00 PM MST

Summary: Introductions were made followed by an ENN process review. Slide show was presented online via GoTo Meeting. During the presentation questions were submitted via the chat feature.

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT

ENN Chat Log

Date: August 19, 2020

Participants: Listed Below

RE: Fairly Road Subdivision (Miraflores) - 4193 B Fairly Rd & 6450 Camino Rojo

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- Coleen Dearing
  - 57 lots in R5 10 acres... math doesnt work
    - 10X5 is 50 and 7 additional lots is from the affordable housing density bonus
  - Construction traffic on Fairly Road is a concern
    - We have not determined what construction route will be used
    - It is not determined if a connection through Fairly will be made
- Andrew Hopkins and wife
  - Lives at 6397 Entrada de Milagro
  - Is the roadway design going to be updated?
    - We are not proposing any modifications to Entrada de Milagro
  - Is the overflow parking planned for?
    - We plan for on street parking and driveways and garages will handle the community's parking needs
  - Will there be an environmental impact study completed?
    - City of Santa Fe requires prairie dog relocation
    - Coyotes will take care of themselves
  - How are emergency vehicles planned for?
  - Zero lot line concerns
  - Will the 15' easement be split between existing lots and the proposed lots?
    - 15' setback required in rear yards
    - Front yard setback is 7'
    - Garages must be setback min of 20' from the road
- Lisa Randall
  - Who are the members of the team and the roles?
    - Jenkins Gavin
    - Homewise
    - Mike Gomez - Civil engineer
    - Terry Brown – traffic
    - City of Santa Fe staff – Noah and John
  - When can we get more information on the application?
    - After the application is submitted
  - The process seems disingenuous and does not have the community in mind.

- Berry and Lori Rochelle
  - On street parking and road design on Avenide de Chamisa and Entrada de Milagro
    - The city's priority is connectivity and distributing traffic and will require that the two roads are connected
    - Traffic study details to come
  - Entrada de Milagro has too much parking and people will use Avenida Chamisa instead. Avenida Chamisa is dangerous and many accidents happen here. Can speed bumps be added?
    - Traffic calming program was used in the past
    - Noah said this program requires 2/3 neighborhood signatures before the city can implement infrastructure improvements.
    - Noah also said TIA will direct further improvements.
  - The developer should pay for additional traffic calming measures
    - City's traffic engineer would need to make this requirement. Our team will discuss this with public works.
- Jeanne Marie
  - Have assessment of traffic flow and speed been completed?
    - TIA does not assess the traffic speed
    - Enforcement is the biggest issue related to speed and parking
  - Avenida Chamisa does not have speed bumps now and walking is dangerous
  - Police are not able to enforce the speeds in this neighborhood
  - Entrada de Milagro is dangerous now for bicyclists
  - Trail in the arroyo will be dangerous for the existing communities
    - Connecting to an existing urban trail is city mandated and offers an amenity to Miraflores and TC residents
  - How can residents ask questions about the application?
    - Address questions to city staff
  - Is there a deadline to comment on the subdivision?
    - Prior to November 5 PC hearing the comment deadline is October 14, 2020
  - What is Homewise willing to do regarding added safety measures on Avenida Chamisa?
    - We are investigating all possibilities. Any improvements on public streets will need to be required from the city.
  - Concerned about four homes proposed on Avenida Chamisa
    - The intent is for driveways of those four lots to access Avenida Chamisa
  - It is not appropriate to have 57 homes and not plan for a park

- Cecilia Martinez
  - What is this project going to do to my property value?
    - The purpose of this meeting is to listen to concerns and determine what is appropriate
  - Will some of the lots have two driveways?
    - No. Each of the lots facing Avenida Chamisa will only have one driveway.
  - Concerned about the TIA not including school traffic counts
    - We used pre pandemic traffic counts while school was in session
  - Does the TIA take into account school peak hours?
    - Yes.
  - Will the TIA data be shared?
    - Yes.

- Rob and Amanda
  - Explain why there is not a park for the neighborhood
    - Open space areas are planned that will include a trail and passive recreation space
  - There should be established recreation for the additional 57 units
- Renni Zifferblatt
  - ENN is insufficient to meet the needs of the neighborhood. Please hold another meeting in person.
    - Noah said in person meetings are prohibited by the Governor right now and this is the appropriate platform for all public meetings and board/commission meetings.
    - Noah also stated the code requires only one ENN and this meeting fulfills that requirement.
  - Please also provide copies of the presentation and the schematics of the proposal.
  - What is the definition of affordable housing?
    - Chapter 14 and Chapter 26 of the city code
    - Jennifer offered to provide Renni with the specific code sections
  - 57 lots and 11 affordable homes – what about the other 46 homes?
    - Pricing of 11 affordable homes are established by the city "Santa Fe Homes Program" Chapter 26
    - Remaining homes will likely be market rate homes
  - How long has the Homes Program been in effect?
    - Adopted in early to mid 2000s
  - Who conducts the TIA and what is his contact information?
    - Terri Brown, licensed traffic engineer
    - Jennifer offered to connect Renni with Terri at a later time
  - Where is the water supply coming from?
    - A water budget will be generated based on city determined figures and formulas per City Resolution 2009-116
    - If less than 10 acre feet of annual water is used a connection fee will be paid. We will likely fall into this category. If we are over the 10 acre feet of annual water usage we will be required to provide water rights to the city.
  - What is code citation regarding road connectivity?
    - Chapter 14-9 Section D
  - How is pollution during construction handled?
    - City of Santa Fe has strict dust control requirements and these are enforced
    - City will inspect complaints related to dust and make citations
  - There are many types of animals that will be displaced.
  - When will all application materials be available?
    - Submitting the application September 21, 2020
    - John will make materials available after the application date
  - Please consider holding a second ENN meeting

- Ruth Hamilton
  - East and west side lot backyards – how will these be handled?
    - Backyards are planned against property lines
    - Rear yard fencing will be provided
    - 15' rear yards are required
  - Lot size measurements
    - Smallest lots are 2,500 SF for bungalow style homes
    - Some lots are 40'X 105'
    - Larger lots throughout
    - Lots will be starting at 4,000-4,500 SF
- Amy
  - What school is this subdivision zoned for?
    - We will obtain this information for our submittal and it will be a part of our application
  - Entrada de Milagro and Avenida Chamisa are both dangerous. How many lots will front Avenida Chamisa?
    - Four homes
  - Is Camino Rojo wider than Entrada de Milagro?
    - Camino Rojo has more sidewalk, which may make it feel wider
  - How is the open space going to be used for recreation because of how steep it is?
    - Passive outdoor space will include space for walking, resting, benches
- Ben
  - Avenida Chamisa and Paseo del Sol was not analyzed
    - City's traffic engineer did not require this intersection in our analysis
  - Paseo del Sol and Jaguar should also be analyzed
    - This was also not a part of the study
- Andrew Hopkins
  - Where are the one and two story homes located?
    - This will depend on the market
    - All lots will accommodate single and two story homes
    - Very possible more single story than two story homes
    - Noah stated two story homes require stepbacks on at least one side of the home
    - Maximum height is 24'
  - Disturbance of 30% slopes
    - The trail connection may include 30% slopes or greater
  - Will storm water be collected/detained
    - Two locations on the site will collect storm water
    - Street trees and planting strips will also collect storm water
- John Palomino
  - TIA traffic data should be disclosed
  - Does the team have corporate council?
    - No council is engaged on this particular project right now. Any questions can be sent to Jennifer.
    - Noah stated community residents can also email Noah

- Ruth Hamilton
  - What is the SF of homes?
    - Primarily 3 bed-2 bath
    - Range in SF from 500 SF to 2,000 SF
    - Every garage and driveway will accommodate two vehicles
  - I live on Camino Rojo and am concerned about traffic
  - Why isn't Fairly Road being considered for access to Airport?
    - It is being considered, but it has not been determined at this point
  - What is the intent for the open space areas on the north of the subdivision?
    - We will be keeping some existing trees and plating new trees
  - Who will maintain the subdivision?
    - An HOA will maintain
  - Who is the landscape contractor? A native list of plantings is recommended. She will send to Jennifer the list.
    - Landscape architect has not yet been identified, but will engage one this week
  - How does parking plan coincide with minimum requirements?
    - Min required of off street paring is 2 spaces per dwelling
    - This subdivision will exceed that minimum
    - Noah stated there is no on street parking requirement in this neighborhood
    - This subdivision proposes on street parking
  - Does JenkinsGavin have experience of similar infill projects?
    - Jennifer explained her experience in Santa Fe residential projects
  - Requested to share Tierra Contenta JenkinsGavin experience.
  - Requested to share the presentation

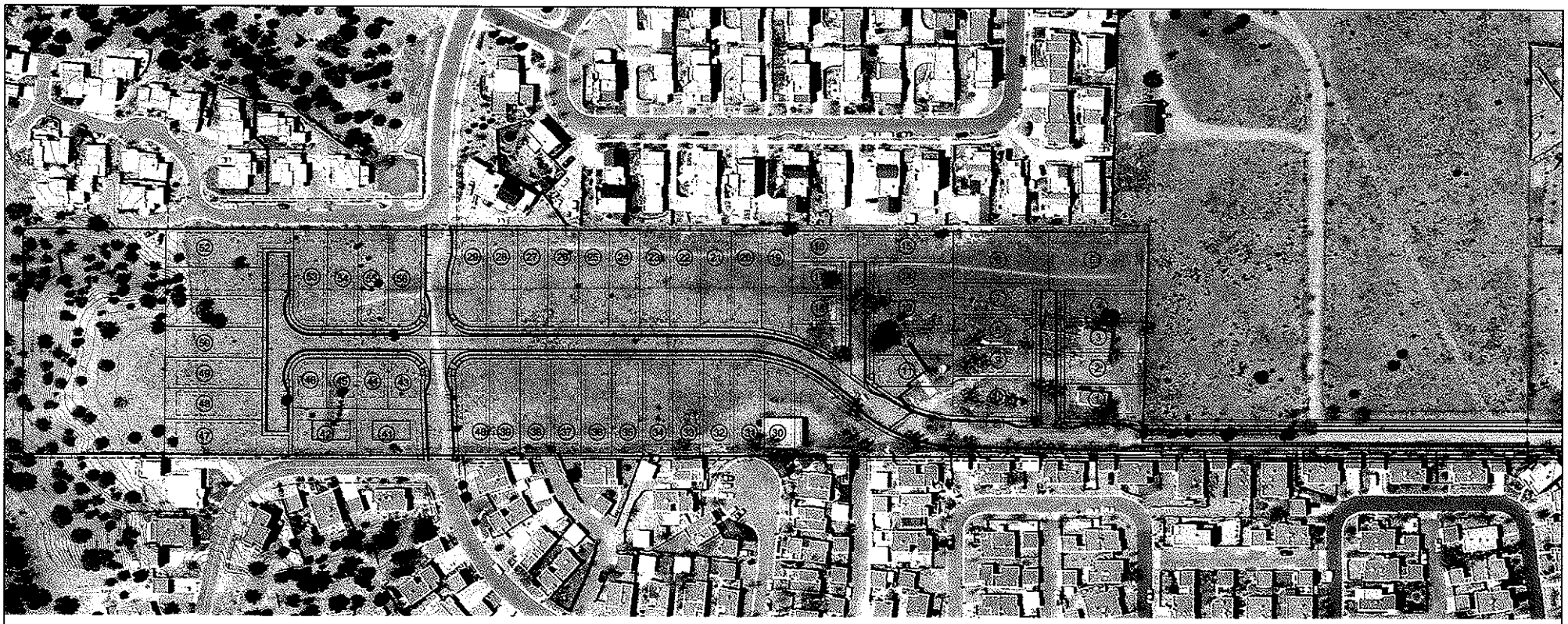
- Coleen Dearing
  - Will disclose be provided about the urban medical marijuana farm?
    - If required, Homewise will provide disclosure
    - Fredrick Lucas is part of the urban farm development and offered information about the urban farm. The lots in Miraflores will back up to the food area of the farm.
- John Saathoff
  - Camino Placitas private lane access
    - We are not proposing any access to this private lane
- Lori Gaumer
  - Will the overhead utility lines on the east boundary be buried?
    - We are exploring the possibility of burring the utility lines
  - Will there be a sound proof fence or retaining wall on the east side?
    - A fence will be built, but we are not proposing a sound proof wall
  - Will reinforcements of existing fencing be provided?
    - We still need to determine feasibility of existing fencing
    - We have no intent to connect to existing alley ways
  - Who owns the property?
    - Homewise is the owner



Fairly Rd. Subdivision - Santa Fe

(Entrada Milagro / Paseo Del Sol)

Aerial Map

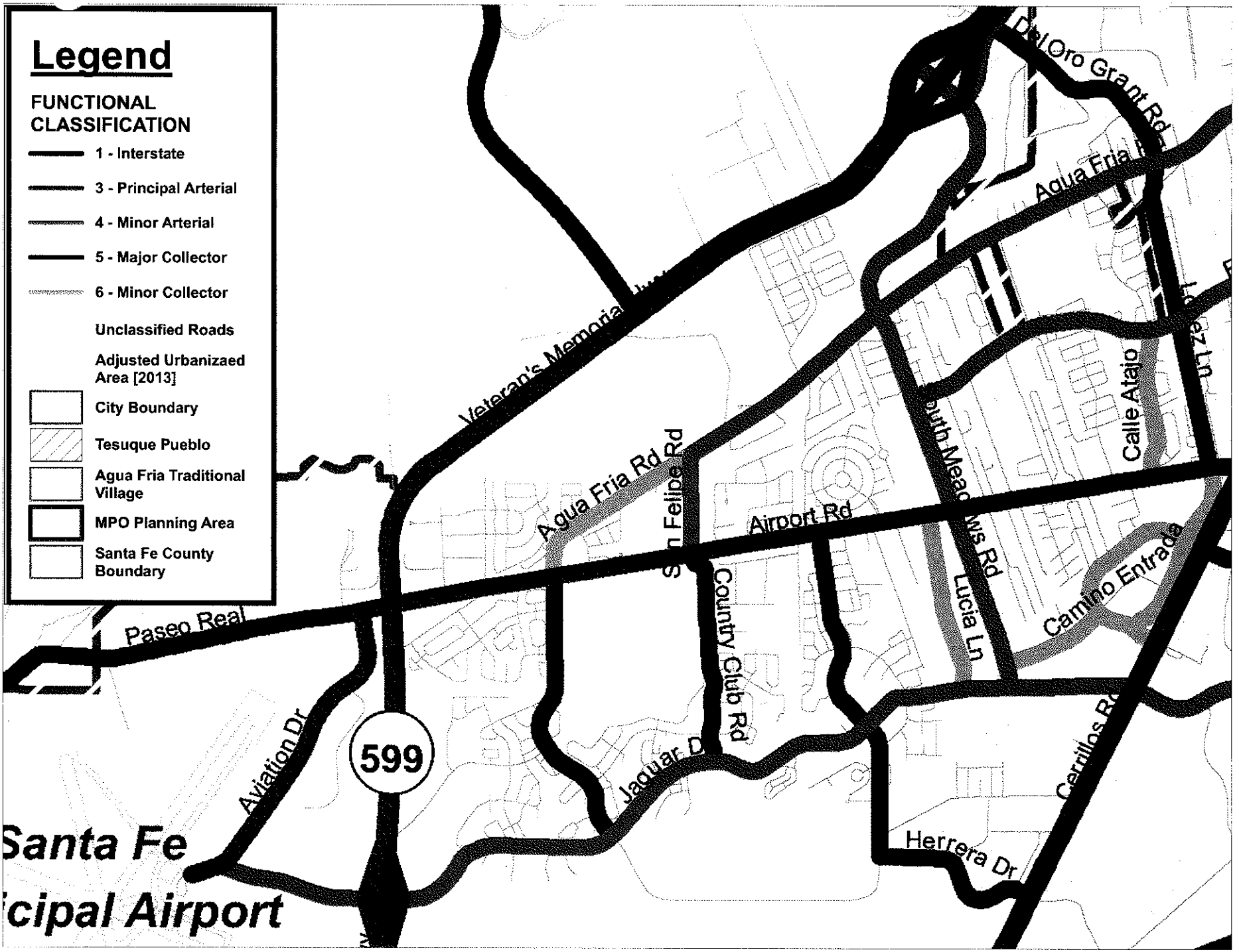


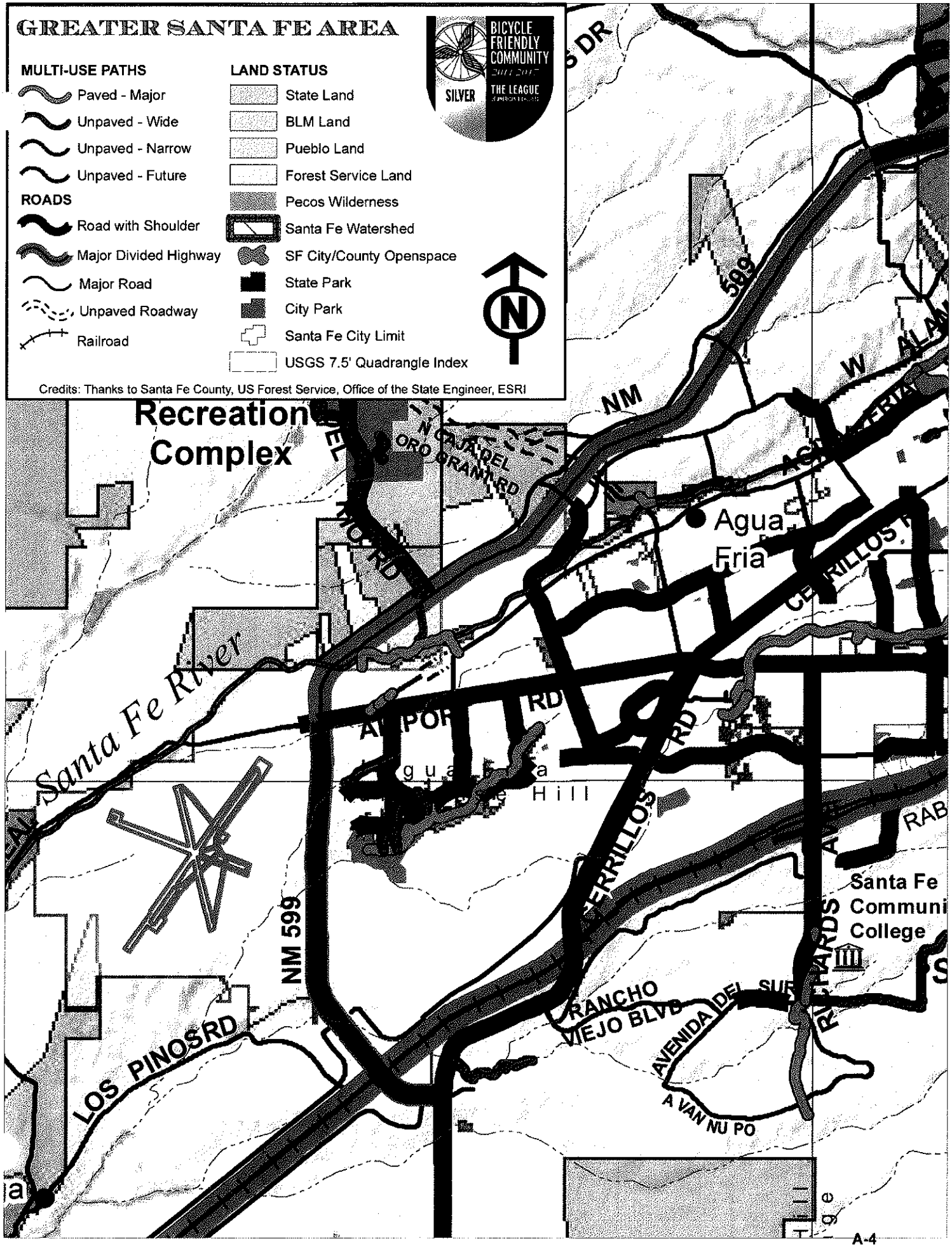
MIRAFLORES SUBDIVISION (Formerly Fairly Rd. Subdivision)
SCALE: 1" = 60'

0 30 60 120
SCALE: 1" = 60'

LEGEND

(29) DENOTES LOT NUMBER


Legend
FUNCTIONAL CLASSIFICATION
1 - Interstate
3 - Principal Arterial
4 - Minor Arterial
5 - Major Collector
6 - Minor Collector
Unclassified Roads
Adjusted Urbanizaed Area [2013]
City Boundary
Tesuque Pueblo
Agua Fria Traditional Village
MPO Planning Area
Santa Fe County Boundary
Veteran's Memorial
Agua Fria Rd
San Felipe Rd
Airport Rd
Paseo Real
Aviation Dr
599
Country Club Rd
Jaguar Dr
South Meadows Rd
Lucia Ln
Camino Entrada
Calle Atajo
Herrera Dr
Cerrillos Rd
Agua Fria
Santa Fe
cipal Airport


GREATER SANTA FE AREA
BICYCLE FRIENDLY COMMUNITY
SILVER
THE LEAGUE
MULTI-USE PATHS
Paved - Major
Unpaved - Wide
Unpaved - Narrow
Unpaved - Future
ROADS
Road with Shoulder
Major Divided Highway
Major Road
Unpaved Roadway
Railroad
LAND STATUS
State Land
BLM Land
Pueblo Land
Forest Service Land
Pecos Wilderness
Santa Fe Watershed
SF City/County Openspace
State Park
City Park
Santa Fe City Limit
USGS 7.5' Quadrangle Index
N
Credits: Thanks to Santa Fe County, US Forest Service, Office of the State Engineer, ESRI
Recreation Complex
Agua Fria
Santa Fe River
NM 599
LOS PINOS RD
RANCHO VIEJO BLVD
AVENIDA DEL SUR
A VAN NU PO
Santa Fe Communi College
CERRILLOS RD
NM

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Single-Family Detached Housing (210)	57	620	11	34	37	22
	Dwelling Units					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

Ln(T) = ***0.92*** **Ln(X) +** ***2.71***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

T = ***0.71*** **(X) +** ***4.8***
25% Enter, ***75%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

Ln(T) = ***0.96*** **Ln(X) +** ***0.2***
63% Enter, ***37%*** Exit

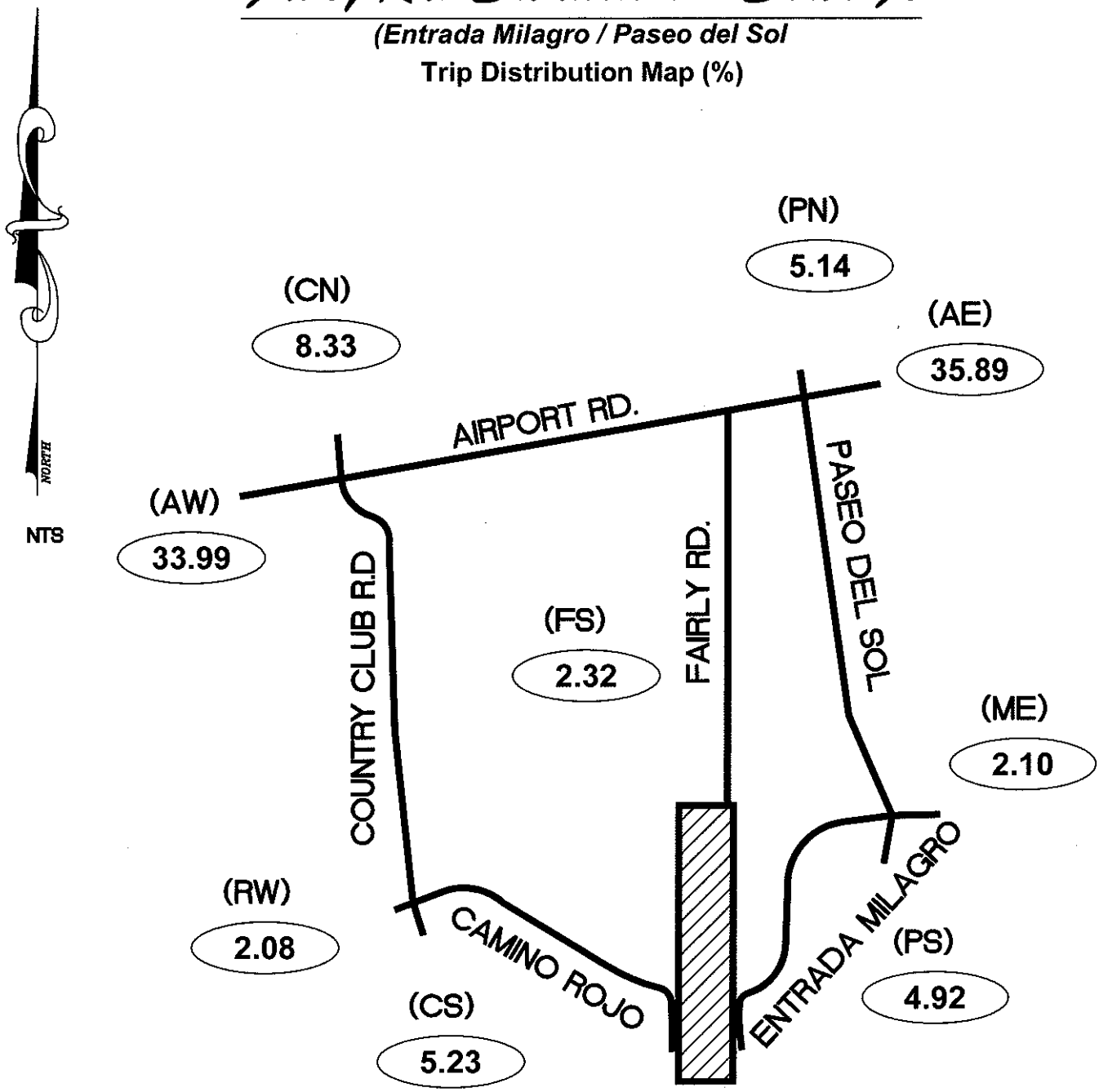
Comments:
Tract No.

Based on ITE Trip Generation Manual - 10th Edition

Fairly Rd. Subdivision - Santa Fe

(Entrada Milagro / Paseo del Sol

Trip Distribution Map (%)



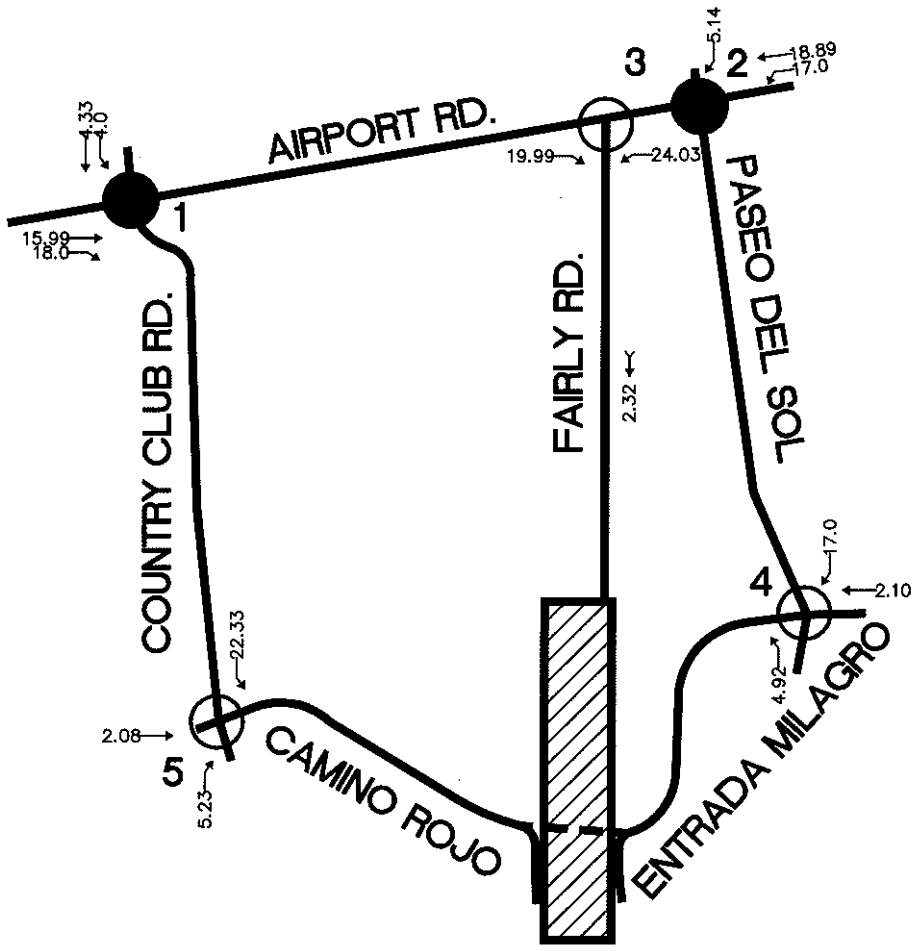
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Fairly Rd. Subdivision - Santa Fe

(Entrada Milagro / Paseo del Sol

Trip Assignments (% Entering)

NTS



SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

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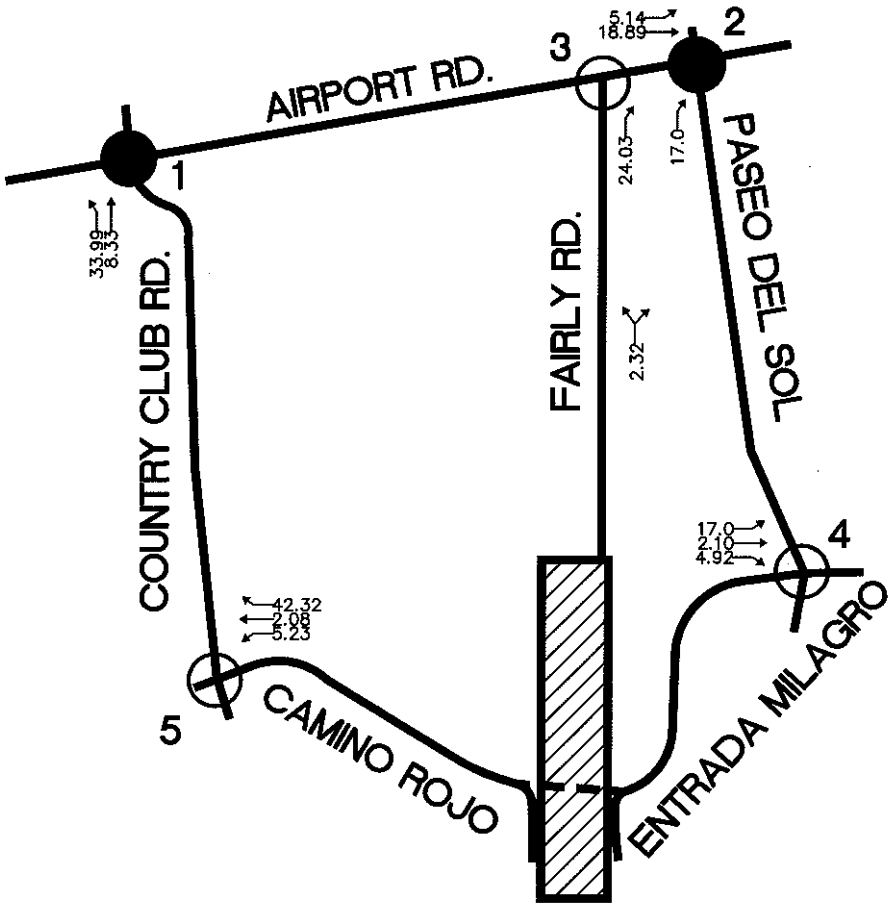
Fairly Rd. Subdivision - Santa Fe

(Entrada Milagro / Paseo del Sol

Trip Assignments (% Exiting)

NORTH

NTS



SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2024) - 100% Development

INTERSECTION: **Summary**

Airport Rd. / Country Club Rd.

(1)

3.0% Truck

	0.92			0.92			0.92			0.92			PHF
	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Country Club Rd.)			Southbound (Country Club Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	105	856	68	31	515	93	25	74	130	87	19	62	
2024 (NO BUILD - A.M.)	*118*	*959*	*76*	*35*	*577*	*104*	*28*	*83*	*146*	*97*	*21*	*69*	
2024 (BUILD - A.M.)	***118***	***961***	***78***	***35***	***577***	***104***	***40***	***86***	***146***	***97***	***21***	***69***	

	0.94			0.94			0.94			0.94			PHF
	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Country Club Rd.)			Southbound (Country Club Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	83	600	39	142	898	98	24	29	98	117	63	83	
2024 (NO BUILD - P.M.)	*93*	*672*	*44*	*159*	*1,006*	*110*	*27*	*33*	*110*	*131*	*71*	*93*	
2024 (BUILD - P.M.)	***93***	***678***	***51***	***159***	***1,006***	***110***	***34***	***35***	***110***	***132***	***73***	***93***	

Airport Rd. / Paseo del Sol

(2)

3.0% Truck

	0.87			0.87			0.87			0.87			PHF
	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Paseo del Sol)			Southbound (Paseo del Sol)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	62	1,246	74	68	601	74	56	6	205	50	19	37	
2024 (NO BUILD - A.M.)	*69*	*1,396*	*83*	*76*	*673*	*83*	*63*	*7*	*230*	*56*	*21*	*41*	
2024 (BUILD - A.M.)	***71***	***1,402***	***83***	***78***	***675***	***84***	***63***	***7***	***236***	***56***	***21***	***41***	

	0.97			0.97			0.97			0.97			PHF
	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Paseo del Sol)			Southbound (Paseo del Sol)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	63	874	98	210	825	78	68	5	107	88	24	49	
2024 (NO BUILD - P.M.)	*71*	*979*	*110*	*235*	*924*	*87*	*76*	*6*	*120*	*99*	*27*	*55*	
2024 (BUILD - P.M.)	***72***	***983***	***110***	***241***	***931***	***89***	***76***	***6***	***124***	***99***	***27***	***55***	

Airport Rd. / Fairly Rd.

(3)

3.0% Truck

	0.91			0.91			0.91			0.91			PHF
	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Fairly Rd.)			Southbound (Fairly Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	0	1,190	6	12	632	0	0	0	93	0	0	0	
2024 (NO BUILD - A.M.)	*0*	*1,333*	*7*	*13*	*708*	*0*	*0*	*0*	*104*	*0*	*0*	*0*	
2024 (BUILD - A.M.)	***0***	***1,333***	***9***	***16***	***708***	***0***	***0***	***0***	***112***	***0***	***0***	***0***	

	0.95			0.95			0.95			0.95			PHF
	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Fairly Rd.)			Southbound (Fairly Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	0	791	5	24	1,220	0	0	0	15	0	0	0	
2024 (NO BUILD - P.M.)	*0*	*886*	*6*	*27*	*1,366*	*0*	*0*	*0*	*17*	*0*	*0*	*0*	
2024 (BUILD - P.M.)	***0***	***886***	***13***	***36***	***1,366***	***0***	***0***	***0***	***22***	***0***	***0***	***0***	

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2024) - 100% Development

INTERSECTION: **Summary**

Entrada Milagro / Paseo del Sol

(4) 3.0% Truck	0.85 Eastbound (Entrada Milagro)			0.85 Westbound (Entrada Milagro)			0.85 Northbound (Paseo del Sol)			0.85 Southbound (Paseo del Sol)			PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	50	6	31	6	6	62	6	105	6	19	74	43	
2024 (NO BUILD - A.M.)	*56*	*7*	*35*	*7*	*7*	*69*	*7*	*118*	*7*	*21*	*83*	*48*	
2024 (BUILD - A.M.)	***62***	***8***	***37***	***7***	***7***	***69***	***8***	***118***	***7***	***21***	***83***	***50***	

	0.96 Eastbound (Entrada Milagro)			0.96 Westbound (Entrada Milagro)			0.96 Northbound (Paseo del Sol)			0.96 Southbound (Paseo del Sol)			PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	24	15	10	5	5	24	10	117	10	44	132	78	
2024 (NO BUILD - P.M.)	*27*	*17*	*11*	*6*	*6*	*27*	*11*	*131*	*11*	*49*	*148*	*87*	
2024 (BUILD - P.M.)	***31***	***17***	***12***	***6***	***7***	***27***	***13***	***131***	***11***	***49***	***148***	***93***	

Camino Rojo / Country Club Rd.

(5) 3.0% Truck	0.93 Eastbound (Camino Rojo)			0.93 Westbound (Camino Rojo)			0.93 Northbound (Country Club Rd.)			0.93 Southbound (Country Club Rd.)			PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	50	6	12	6	6	124	6	136	6	12	6	6	
2024 (NO BUILD - A.M.)	*56*	*7*	*13*	*7*	*7*	*139*	*7*	*152*	*7*	*13*	*7*	*7*	
2024 (BUILD - A.M.)	***56***	***7***	***13***	***9***	***8***	***153***	***7***	***152***	***8***	***15***	***7***	***7***	

	0.96 Eastbound (Camino Rojo)			0.96 Westbound (Camino Rojo)			0.96 Northbound (Country Club Rd.)			0.96 Southbound (Country Club Rd.)			PHF
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2020)	29	5	5	10	5	49	5	102	15	63	166	29	
2024 (NO BUILD - P.M.)	*33*	*6*	*6*	*11*	*6*	*55*	*6*	*114*	*17*	*71*	*186*	*33*	
2024 (BUILD - P.M.)	***33***	***7***	***6***	***12***	***6***	***64***	***6***	***114***	***19***	***79***	***186***	***33***	

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements Worksheet

Airport Rd. / Country Club Rd.

INTERSECTION: E-W Street: **Airport Rd.** (1)
N-S Street: **Country Club Rd.**

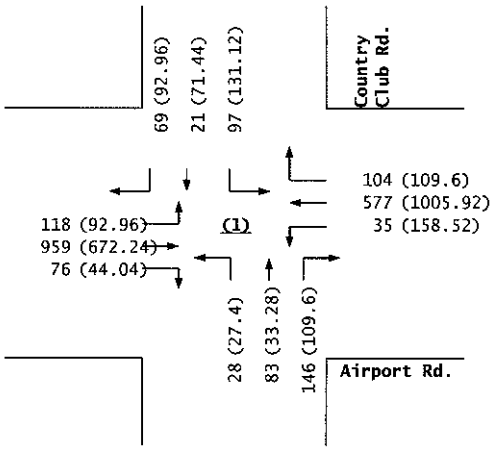
Year of Existing Counts 2020 Adjusted for COVID & highest 15 min. peak hour interval
Horizon Year **2024**

Growth Rates	**3.00%**			**3.00%**			**3.00%**			**3.00%**		
	Eastbound (Airport Rd.)			**Westbound (Airport Rd.)**			**Northbound (Country Club Rd.)**			**Southbound (Country Club Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	105	856	68	31	515	93	25	74	130	87	19	62
Background Traffic Growth	13	103	8	4	62	11	3	9	16	10	2	7
Subtotal (NO BUILD - A.M.)	***118***	***959***	***76***	***35***	***577***	***104***	***28***	***83***	***146***	***97***	***21***	***69***
Percent Residential Trips Generated(Entering)	*0.00%*	*15.99%*	*18.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*4.00%*	*4.33%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*33.99%*	*8.33%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	2	0	0	0	12	3	0	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	**118**	**961**	**78**	**35**	**577**	**104**	**40**	**86**	**146**	**97**	**21**	**69**
Total AM Peak Hour BUILD Volumes	**118**	**961**	**78**	**35**	**577**	**104**	**40**	**86**	**146**	**97**	**21**	**69**

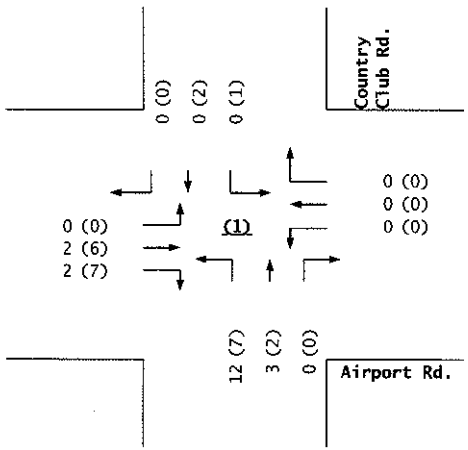
	Eastbound (Airport Rd.)			**Westbound (Airport Rd.)**			**Northbound (Country Club Rd.)**			**Southbound (Country Club Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	83	600	39	142	898	98	24	29	98	117	63	83
Background Traffic Growth	10	72	5	17	108	12	3	4	12	14	8	10
Subtotal (NO BUILD - P.M.)	***93***	***672***	***44***	***159***	***1,006***	***110***	***27***	***33***	***110***	***131***	***71***	***93***
Percent Residential Trips Generated(Entering)	*0.00%*	*15.99%*	*18.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*4.00%*	*4.33%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*33.99%*	*8.33%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	6	7	0	0	0	7	2	0	1	2	0
Subtotal PM Pk Hr. BUILD Volumes	**93**	**678**	**51**	**159**	**1,006**	**110**	**34**	**35**	**110**	**132**	**73**	**93**
Total PM Peak Hour BUILD Volumes	**93**	**678**	**51**	**159**	**1,006**	**110**	**34**	**35**	**110**	**132**	**73**	**93**

	Entering	Exiting		
Number of Residential Trips Generated	**11**	**34**	A.M.	100% Residential Development
	37	**22**	P.M.	

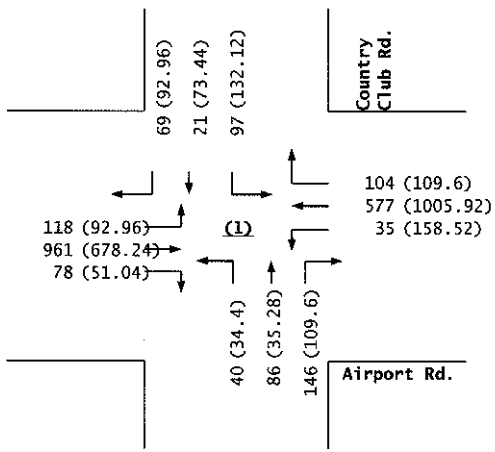
2024
NO BUILD



Trips



2024
BUILD



Airport Rd. / Country Club Rd.

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements Worksheet

Airport Rd. / Paseo del Sol

INTERSECTION: E-W Street: **Airport Rd.** (2)
N-S Street: **Paseo del Sol**

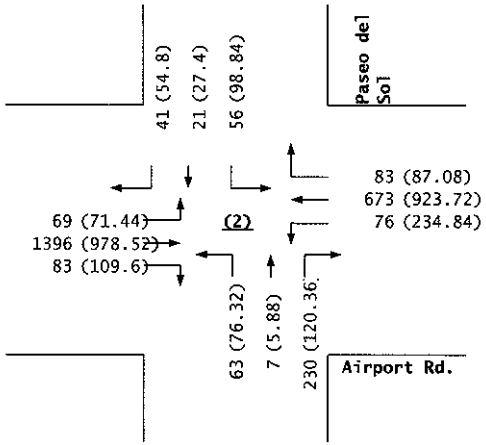
Year of Existing Counts 2020 Adjusted for COVID & highest 15 min. peak hour interval
Horizon Year **2024**

Growth Rates	**3.00%**			**3.00%**			**3.00%**			**3.00%**		
	Eastbound (Airport Rd.)			**Westbound (Airport Rd.)**			**Northbound (Paseo del Sol)**			**Southbound (Paseo del Sol)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	62	1,246	74	68	601	74	56	6	205	50	19	37
Background Traffic Growth	7	150	9	8	72	9	7	1	25	6	2	4
Subtotal (NO BUILD - A.M.)	***69***	***1,396***	***83***	***76***	***673***	***83***	***63***	***7***	***230***	***56***	***21***	***41***
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*17.00%*	*18.89%*	*5.14%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*5.14%*	*18.89%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*17.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	2	6	0	2	2	1	0	0	6	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	**71**	**1,402**	**83**	**78**	**675**	**84**	**63**	**7**	**236**	**56**	**21**	**41**
Total AM Peak Hour BUILD Volumes	**71**	**1,402**	**83**	**78**	**675**	**84**	**63**	**7**	**236**	**56**	**21**	**41**

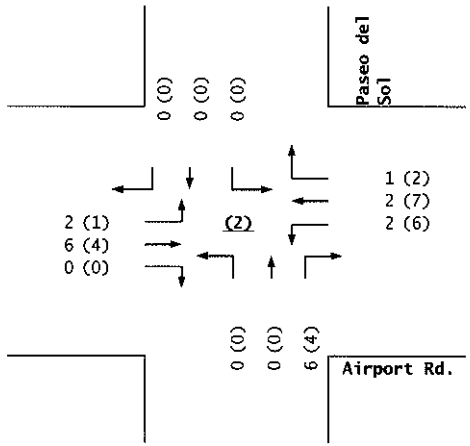
	Eastbound (Airport Rd.)			**Westbound (Airport Rd.)**			**Northbound (Paseo del Sol)**			**Southbound (Paseo del Sol)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	63	874	98	210	825	78	68	5	107	88	24	49
Background Traffic Growth	8	105	12	25	99	9	8	1	13	11	3	6
Subtotal (NO BUILD - P.M.)	***71***	***979***	***110***	***235***	***924***	***87***	***76***	***6***	***120***	***99***	***27***	***55***
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*17.00%*	*18.89%*	*5.14%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*5.14%*	*18.89%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*17.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	1	4	0	6	7	2	0	0	4	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**72**	**983**	**110**	**241**	**931**	**89**	**76**	**6**	**124**	**99**	**27**	**55**
Total PM Peak Hour BUILD Volumes	**72**	**983**	**110**	**241**	**931**	**89**	**76**	**6**	**124**	**99**	**27**	**55**

	Entering	Exiting		
Number of Residential Trips Generated	**11**	**34**	A.M.	100% Residential Development
	37	**22**	P.M.	

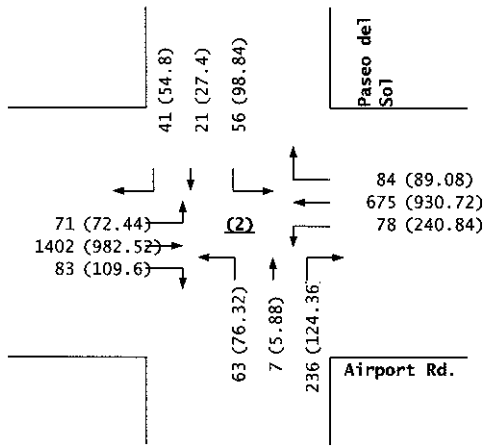
2024
NO BUILD



Trips



2024
BUILD



Airport Rd. / Paseo del Sol

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements Worksheet

Airport Rd. / Fairly Rd.

INTERSECTION: E-W Street: **Airport Rd.** (3)
N-S Street: **Fairly Rd.**

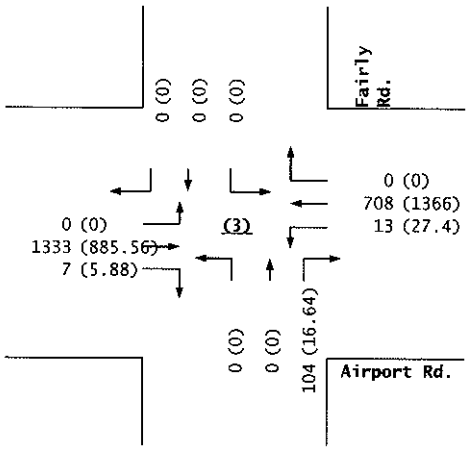
Year of Existing Counts 2020 Adjusted for COVID & highest 15 min. peak hour interval
Horizon Year **2024**

Growth Rates	**3.00%**			**3.00%**			**3.00%**			**3.00%**		
	Eastbound (Airport Rd.)			**Westbound (Airport Rd.)**			**Northbound (Fairly Rd.)**			**Southbound (Fairly Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,190	6	12	632	0	0	0	93	0	0	0
Background Traffic Growth	0	143	1	1	76	0	0	0	11	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***1,333***	***7***	***13***	***708***	***0***	***0***	***0***	***104***	***0***	***0***	***0***
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*19.99%*	*24.03%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*24.03%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	2	3	0	0	0	0	8	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	**0**	**1,333**	**9**	**16**	**708**	**0**	**0**	**0**	**112**	**0**	**0**	**0**
Total AM Peak Hour BUILD Volumes	**0**	**1,333**	**9**	**16**	**708**	**0**	**0**	**0**	**112**	**0**	**0**	**0**

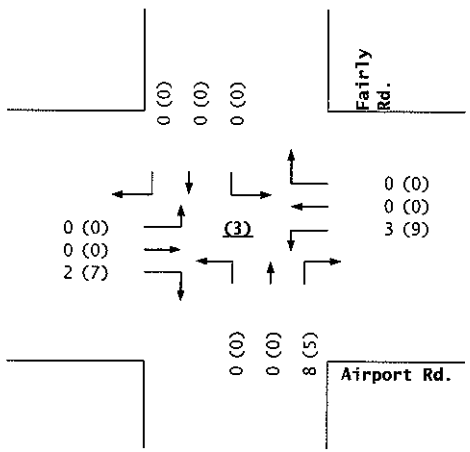
	Eastbound (Airport Rd.)			**Westbound (Airport Rd.)**			**Northbound (Fairly Rd.)**			**Southbound (Fairly Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	791	5	24	1,220	0	0	0	15	0	0	0
Background Traffic Growth	0	95	1	3	146	0	0	0	2	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***886***	***6***	***27***	***1,366***	***0***	***0***	***0***	***17***	***0***	***0***	***0***
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*19.99%*	*24.03%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*24.03%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	7	9	0	0	0	0	5	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	**0**	**886**	**13**	**36**	**1,366**	**0**	**0**	**0**	**22**	**0**	**0**	**0**
Total PM Peak Hour BUILD Volumes	**0**	**886**	**13**	**36**	**1,366**	**0**	**0**	**0**	**22**	**0**	**0**	**0**

	Entering	Exiting		
Number of Residential Trips Generated	**11**	**34**	A.M.	100% Residential Development
	37	**22**	P.M.	

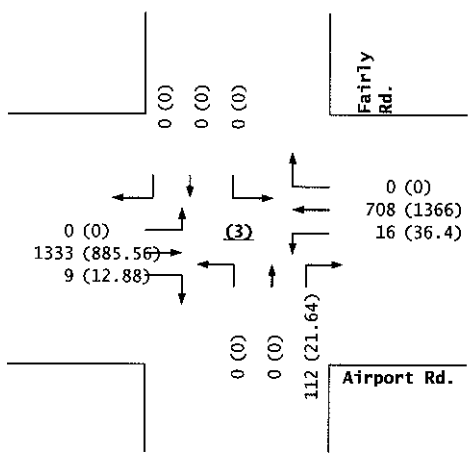
2024
NO BUILD



Trips



2024
BUILD



Airport Rd. / Fairly Rd.

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements Worksheet

Entrada Milagro / Paseo del Sol

INTERSECTION: E-W Street: **Entrada Milagro** (4)
N-S Street: **Paseo del Sol**

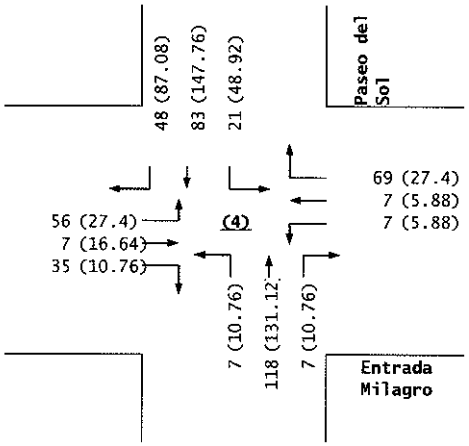
Year of Existing Counts 2020 Adjusted for COVID & highest 15 min. peak hour interval
Horizon Year **2024**

	Growth Rates	3.00%			3.00%			3.00%			3.00%		
		Eastbound (Entrada Milagro)			**Westbound (Entrada Milagro)**			**Northbound (Paseo del Sol)**			**Southbound (Paseo del Sol)**		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		50	6	31	6	6	62	6	105	6	19	74	43
Background Traffic Growth		6	1	4	1	1	7	1	13	1	2	9	5
Subtotal (NO BUILD - A.M.)		***56***	***7***	***35***	***7***	***7***	***69***	***7***	***118***	***7***	***21***	***83***	***48***
Percent Residential Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.10%*	*0.00%*	*4.92%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*17.00%*
Percent Residential Trips Generated(Exiting)		*17.00%*	*2.10%*	*4.92%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		6	1	2	0	0	0	1	0	0	0	0	2
Subtotal AM Pk Hr. BUILD Volumes		**62**	**8**	**37**	**7**	**7**	**69**	**8**	**118**	**7**	**21**	**83**	**50**
Total AM Peak Hour BUILD Volumes		**62**	**8**	**37**	**7**	**7**	**69**	**8**	**118**	**7**	**21**	**83**	**50**

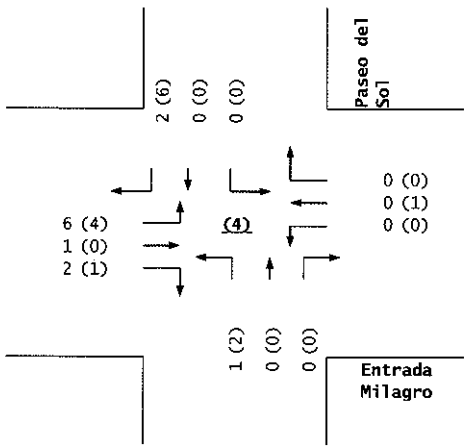
	Eastbound (Entrada Milagro)			**Westbound (Entrada Milagro)**			**Northbound (Paseo del Sol)**			**Southbound (Paseo del Sol)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	24	15	10	5	5	24	10	117	10	44	132	78
Background Traffic Growth	3	2	1	1	1	3	1	14	1	5	16	9
Subtotal (NO BUILD - P.M.)	***27***	***17***	***11***	***6***	***6***	***27***	***11***	***131***	***11***	***49***	***148***	***87***
Percent Residential Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.10%*	*0.00%*	*4.92%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*17.00%*
Percent Residential Trips Generated(Exiting)	*17.00%*	*2.10%*	*4.92%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	4	0	1	0	1	0	2	0	0	0	0	6
Subtotal PM Pk Hr. BUILD Volumes	**31**	**17**	**12**	**6**	**7**	**27**	**13**	**131**	**11**	**49**	**148**	**93**
Total PM Peak Hour BUILD Volumes	**31**	**17**	**12**	**6**	**7**	**27**	**13**	**131**	**11**	**49**	**148**	**93**

	Entering	Exiting		
Number of Residential Trips Generated	**11**	**34**	A.M.	100% Residential Development
	37	**22**	P.M.	

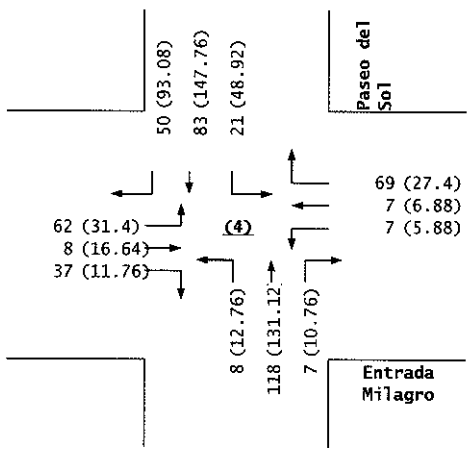
2024
NO BUILD



Trips



2024
BUILD



Entrada Milagro / Paseo del Sol

Fairly Rd. Subdivision - Santa Fe (Entada Milagro / Paseo del Sol)

Projected Turning Movements Worksheet

Camino Rojo / Country Club Rd.

INTERSECTION: E-W Street: **Camino Rojo** (5)
N-S Street: **Country Club Rd.**

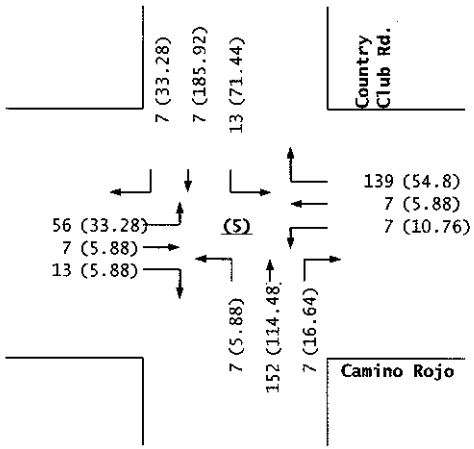
Year of Existing Counts 2020 Adjusted for COVID & highest 15 min. peak hour interval
Horizon Year **2024**

Growth Rates	**3.00%**			**3.00%**			**3.00%**			**3.00%**		
	Eastbound (Camino Rojo)			**Westbound (Camino Rojo)**			**Northbound (Country Club Rd.)**			**Southbound (Country Club Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	50	6	12	6	6	124	6	136	6	12	6	6
Background Traffic Growth	6	1	1	1	1	15	1	16	1	1	1	1
Subtotal (NO BUILD - A.M.)	***56***	***7***	***13***	***7***	***7***	***139***	***7***	***152***	***7***	***13***	***7***	***7***
Percent Residential Trips Generated(Entering)	*0.00%*	*2.08%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*5.23%*	*22.33%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*5.23%*	*2.08%*	*42.32%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	2	1	14	0	0	1	2	0	0
Subtotal AM Pk Hr. BUILD Volumes	**56**	**7**	**13**	**9**	**8**	**153**	**7**	**152**	**8**	**15**	**7**	**7**
Total AM Peak Hour BUILD Volumes	**56**	**7**	**13**	**9**	**8**	**153**	**7**	**152**	**8**	**15**	**7**	**7**

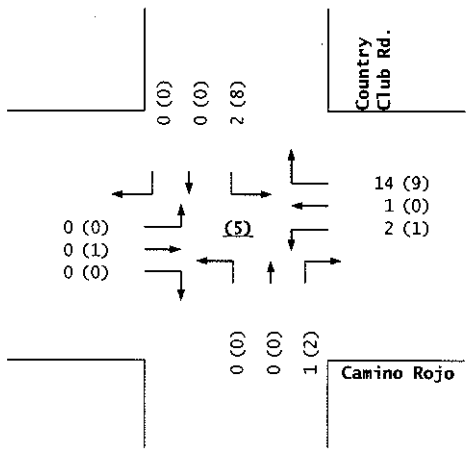
	Eastbound (Camino Rojo)			**Westbound (Camino Rojo)**			**Northbound (Country Club Rd.)**			**Southbound (Country Club Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	29	5	5	10	5	49	5	102	15	63	166	29
Background Traffic Growth	4	1	1	1	1	6	1	12	2	8	20	4
Subtotal (NO BUILD - P.M.)	***33***	***6***	***6***	***11***	***6***	***55***	***6***	***114***	***17***	***71***	***186***	***33***
Percent Residential Trips Generated(Entering)	*0.00%*	*2.08%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*5.23%*	*22.33%*	*0.00%*	*0.00%*
Percent Residential Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*5.23%*	*2.08%*	*42.32%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	1	0	1	0	9	0	0	2	8	0	0
Subtotal PM Pk Hr. BUILD Volumes	**33**	**7**	**6**	**12**	**6**	**64**	**6**	**114**	**19**	**79**	**186**	**33**
Total PM Peak Hour BUILD Volumes	**33**	**7**	**6**	**12**	**6**	**64**	**6**	**114**	**19**	**79**	**186**	**33**

	Entering	Exiting		
Number of Residential Trips Generated	**11**	**34**	A.M.	100% Residential Development
	37	**22**	P.M.	

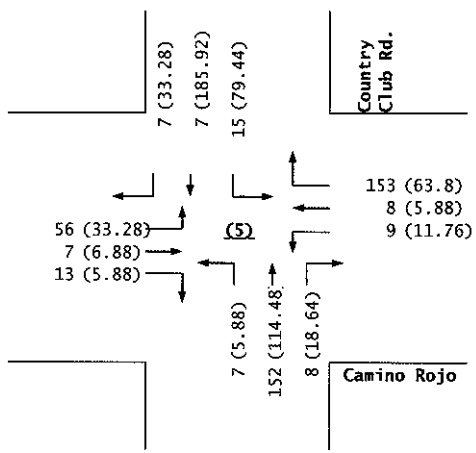
2024
NO BUILD



Trips



2024
BUILD



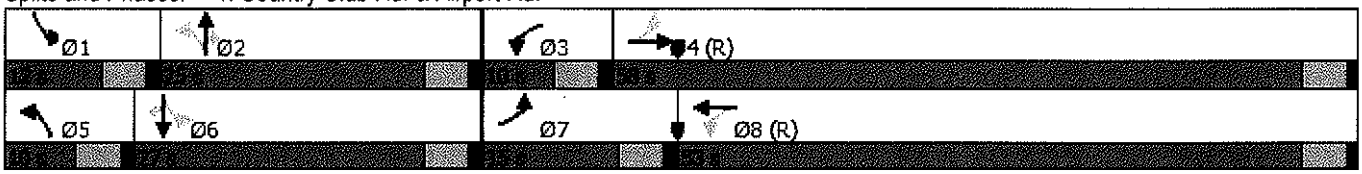
Camino Rojo / Country Club Rd.

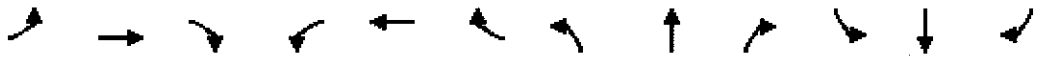
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	118	959	35	577	28	83	146	97	21	69
Future Volume (vph)	118	959	35	577	28	83	146	97	21	69
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8		2		2	6		6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	58.0	10.0	53.0	10.0	25.0	25.0	12.0	27.0	27.0
Total Split (%)	14.3%	55.2%	9.5%	50.5%	9.5%	23.8%	23.8%	11.4%	25.7%	25.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 105
Offset: 100 (95%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 1: Country Club Rd. & Airport Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	959	76	35	577	104	28	83	146	97	21	69
Future Volume (veh/h)	118	959	76	35	577	104	28	83	146	97	21	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	1042	83	38	627	113	30	90	159	105	23	75
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	579	2028	161	341	1785	321	277	229	194	274	301	255
Arrive On Green	0.05	0.61	0.61	0.06	1.00	1.00	0.03	0.12	0.12	0.07	0.16	0.16
Sat Flow, veh/h	1781	3334	265	1781	3009	541	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	128	555	570	38	370	370	30	90	159	105	23	75
Grp Sat Flow(s),veh/h/ln	1781	1777	1823	1781	1777	1773	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.9	18.7	18.7	0.8	0.0	0.0	1.5	4.7	10.3	5.2	1.1	4.4
Cycle Q Clear(g_c), s	2.9	18.7	18.7	0.8	0.0	0.0	1.5	4.7	10.3	5.2	1.1	4.4
Prop In Lane	1.00		0.15	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	579	1081	1109	341	1054	1052	277	229	194	274	301	255
V/C Ratio(X)	0.22	0.51	0.51	0.11	0.35	0.35	0.11	0.39	0.82	0.38	0.08	0.29
Avail Cap(c_a), veh/h	673	1081	1109	377	1054	1052	321	365	309	284	401	340
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	11.7	11.7	8.7	0.0	0.0	38.5	42.5	44.9	35.7	37.4	38.8
Incr Delay (d2), s/veh	0.2	1.7	1.7	0.1	0.9	0.9	0.2	1.1	8.9	0.9	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	11.2	11.4	0.5	0.5	0.5	1.2	4.0	7.8	4.2	0.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	13.5	13.4	8.9	0.9	0.9	38.7	43.5	53.8	36.5	37.6	39.5
LnGrp LOS	A	B	B	A	A	A	D	D	D	D	D	D
Approach Vol, veh/h		1253			778			279			203	
Approach Delay, s/veh		12.8			1.3			48.9			37.7	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	17.4	7.8	68.4	7.4	21.4	9.4	66.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	20.5	5.5	53.5	5.5	22.5	10.5	48.5
Max Q Clear Time (g_c+I1), s	7.2	12.3	2.8	20.7	3.5	6.4	4.9	2.0
Green Ext Time (p_c), s	0.0	0.6	0.0	8.0	0.0	0.2	0.1	4.7

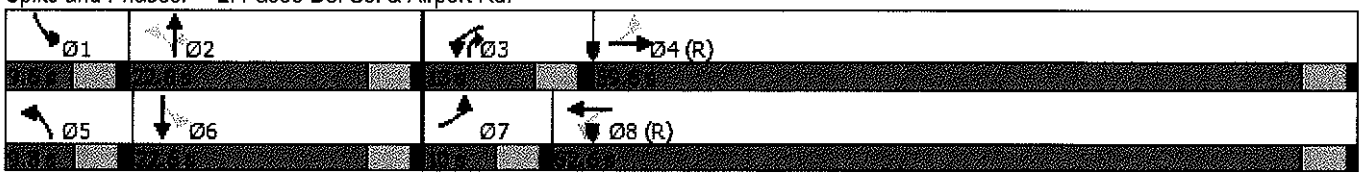
Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

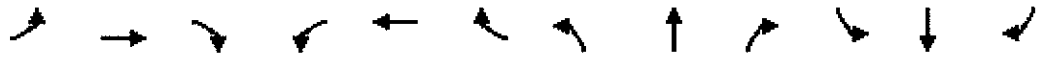
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	69	1396	76	673	63	7	230	56	21
Future Volume (vph)	69	1396	76	673	63	7	230	56	21
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	3	8	5	2	3	1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	9.5	22.5
Total Split (s)	10.0	59.6	13.0	62.6	9.8	22.8	13.0	9.6	22.6
Total Split (%)	9.5%	56.8%	12.4%	59.6%	9.3%	21.7%	12.4%	9.1%	21.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 105
Offset: 104 (99%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 2: Paseo Del Sol & Airport Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	1396	83	76	673	83	63	7	230	56	21	41
Future Volume (veh/h)	69	1396	83	76	673	83	63	7	230	56	21	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	1517	90	83	732	90	68	8	250	61	23	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	446	1971	116	328	1845	227	317	313	334	322	92	181
Arrive On Green	0.08	1.00	1.00	0.04	0.58	0.58	0.04	0.17	0.17	0.04	0.16	0.16
Sat Flow, veh/h	1781	3410	201	1781	3185	391	1781	1870	1585	1781	565	1106
Grp Volume(v), veh/h	75	787	820	83	408	414	68	8	250	61	0	68
Grp Sat Flow(s),veh/h/ln	1781	1777	1834	1781	1777	1800	1781	1870	1585	1781	0	1671
Q Serve(g_s), s	1.8	0.0	0.0	1.9	13.2	13.2	3.3	0.4	15.5	3.0	0.0	3.7
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.9	13.2	13.2	3.3	0.4	15.5	3.0	0.0	3.7
Prop In Lane	1.00		0.11	1.00		0.22	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	446	1027	1060	328	1029	1042	317	313	334	322	0	273
V/C Ratio(X)	0.17	0.77	0.77	0.25	0.40	0.40	0.21	0.03	0.75	0.19	0.00	0.25
Avail Cap(c_a), veh/h	464	1027	1060	395	1029	1042	329	326	345	339	0	288
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	7.9	12.1	12.1	34.4	36.5	38.8	34.5	0.0	38.3
Incr Delay (d2), s/veh	0.2	5.5	5.5	0.4	1.1	1.1	0.3	0.0	8.4	0.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	2.8	2.9	1.2	8.6	8.7	2.6	0.3	10.8	2.4	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.6	5.5	5.5	8.3	13.2	13.2	34.7	36.6	47.3	34.8	0.0	38.8
LnGrp LOS	A	A	A	A	B	B	C	D	D	C	A	D
Approach Vol, veh/h		1682			905			326			129	
Approach Delay, s/veh		5.6			12.8			44.4			36.9	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	22.1	9.1	65.2	9.1	21.7	8.9	65.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	18.3	8.5	55.1	5.3	18.1	5.5	58.1
Max Q Clear Time (g_c+I1), s	5.0	17.5	3.9	2.0	5.3	5.7	3.8	15.2
Green Ext Time (p_c), s	0.0	0.1	0.1	16.3	0.0	0.2	0.0	5.3

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↰	↑↑		↱
Traffic Vol, veh/h	1333	7	13	708	0	104
Future Vol, veh/h	1333	7	13	708	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1449	8	14	770	0	113

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1457	0	-	729
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	*782	-	0	*523
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	1	-		1
Mov Cap-1 Maneuver	-	-	*782	-	-	*523
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	523	-	-	*782	-
HCM Lane V/C Ratio	0.216	-	-	0.018	-
HCM Control Delay (s)	13.8	-	-	9.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	56	7	35	7	7	69	7	118	7	21	83	48
Future Vol, veh/h	56	7	35	7	7	69	7	118	7	21	83	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	8	38	8	8	75	8	128	8	23	90	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	352	314	116	333	336	132	142	0	0	136	0	0
Stage 1	162	162	-	148	148	-	-	-	-	-	-	-
Stage 2	190	152	-	185	188	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	603	601	936	620	585	917	1441	-	-	1448	-	-
Stage 1	840	764	-	855	775	-	-	-	-	-	-	-
Stage 2	812	772	-	817	745	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	538	587	936	578	572	917	1441	-	-	1448	-	-
Mov Cap-2 Maneuver	538	587	-	578	572	-	-	-	-	-	-	-
Stage 1	835	751	-	850	770	-	-	-	-	-	-	-
Stage 2	734	767	-	763	732	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	9.8	0.4	1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1441	-	-	639	833	1448	-	-
HCM Lane V/C Ratio	0.005	-	-	0.167	0.108	0.016	-	-
HCM Control Delay (s)	7.5	0	-	11.8	9.8	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.4	0	-	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↰	↱
Traffic Vol, veh/h	56	7	13	7	7	139	7	152	7	13	7	7
Future Vol, veh/h	56	7	13	7	7	139	7	152	7	13	7	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	8	14	8	8	151	8	165	8	14	8	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	305	229	12	236	229	169	16	0	0	173	0	0
Stage 1	40	40	-	185	185	-	-	-	-	-	-	-
Stage 2	265	189	-	51	44	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	647	671	1069	718	671	875	1602	-	-	1404	-	-
Stage 1	975	862	-	817	747	-	-	-	-	-	-	-
Stage 2	740	744	-	962	858	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	525	661	1069	694	661	875	1602	-	-	1404	-	-
Mov Cap-2 Maneuver	525	661	-	694	661	-	-	-	-	-	-	-
Stage 1	970	853	-	813	743	-	-	-	-	-	-	-
Stage 2	603	740	-	931	849	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	10.2	0.3	3.7
HCM LOS	B	B		

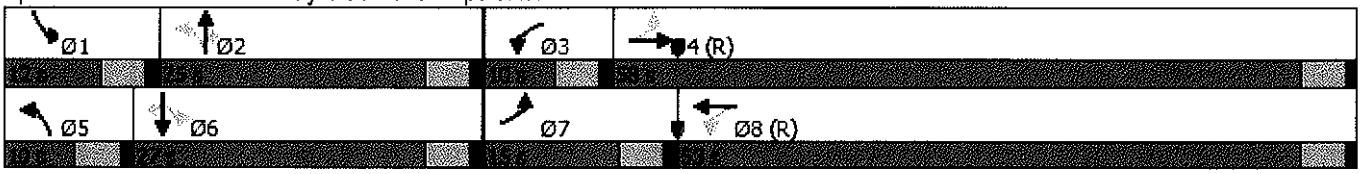
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1602	-	-	587	852	1404	-	-
HCM Lane V/C Ratio	0.005	-	-	0.141	0.195	0.01	-	-
HCM Control Delay (s)	7.3	-	-	12.1	10.2	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.7	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	118	961	35	577	40	86	146	97	21	69
Future Volume (vph)	118	961	35	577	40	86	146	97	21	69
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8		2		2	6		6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	58.0	10.0	53.0	10.0	25.0	25.0	12.0	27.0	27.0
Total Split (%)	14.3%	55.2%	9.5%	50.5%	9.5%	23.8%	23.8%	11.4%	25.7%	25.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 105
Offset: 100 (95%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 1: Country Club Rd. & Airport Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	961	78	35	577	104	40	86	146	97	21	69
Future Volume (veh/h)	118	961	78	35	577	104	40	86	146	97	21	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	1045	85	38	627	113	43	93	159	105	23	75
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	578	2023	164	339	1783	321	288	230	195	273	290	245
Arrive On Green	0.05	0.61	0.61	0.06	1.00	1.00	0.03	0.12	0.12	0.07	0.15	0.15
Sat Flow, veh/h	1781	3328	271	1781	3009	541	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	128	558	572	38	370	370	43	93	159	105	23	75
Grp Sat Flow(s),veh/h/ln	1781	1777	1822	1781	1777	1773	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.9	18.8	18.9	0.8	0.0	0.0	2.2	4.8	10.3	5.3	1.1	4.4
Cycle Q Clear(g_c), s	2.9	18.8	18.9	0.8	0.0	0.0	2.2	4.8	10.3	5.3	1.1	4.4
Prop In Lane	1.00		0.15	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	578	1080	1107	339	1053	1051	288	230	195	273	290	245
V/C Ratio(X)	0.22	0.52	0.52	0.11	0.35	0.35	0.15	0.41	0.82	0.38	0.08	0.31
Avail Cap(c_a), veh/h	673	1080	1107	375	1053	1051	321	365	309	282	401	340
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	11.8	11.8	8.8	0.0	0.0	38.3	42.5	44.9	36.1	38.0	39.4
Incr Delay (d2), s/veh	0.2	1.8	1.7	0.1	0.9	0.9	0.2	1.1	8.9	0.9	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	11.2	11.5	0.5	0.5	0.5	1.8	4.1	7.8	4.2	0.9	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	13.5	13.5	8.9	0.9	0.9	38.5	43.7	53.8	37.0	38.1	40.1
LnGrp LOS	A	B	B	A	A	A	D	D	D	D	D	D
Approach Vol, veh/h		1258			778			295			203	
Approach Delay, s/veh		12.9			1.3			48.4			38.3	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	17.4	7.8	68.3	8.1	20.8	9.4	66.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	20.5	5.5	53.5	5.5	22.5	10.5	48.5
Max Q Clear Time (g_c+I1), s	7.3	12.3	2.8	20.9	4.2	6.4	4.9	2.0
Green Ext Time (p_c), s	0.0	0.6	0.0	8.0	0.0	0.2	0.1	4.7

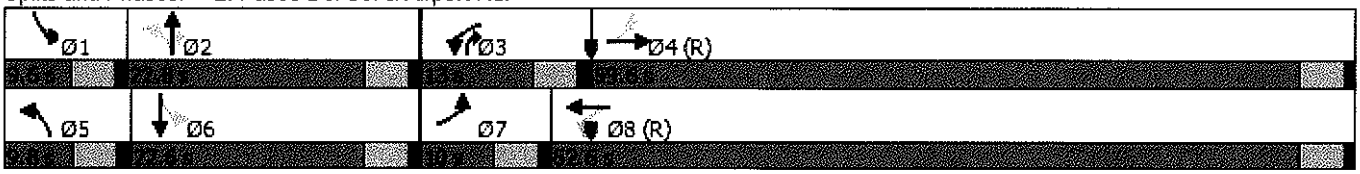
Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

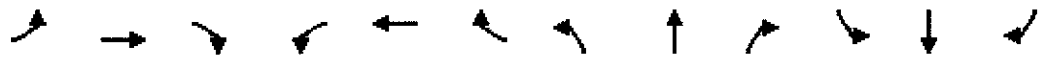
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	71	1402	78	675	63	7	236	56	21
Future Volume (vph)	71	1402	78	675	63	7	236	56	21
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	3	8	5	2	3	1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	9.5	22.5
Total Split (s)	10.0	59.6	13.0	62.6	9.8	22.8	13.0	9.6	22.6
Total Split (%)	9.5%	56.8%	12.4%	59.6%	9.3%	21.7%	12.4%	9.1%	21.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 105
Offset: 104 (99%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 2: Paseo Del Sol & Airport Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	1402	83	78	675	84	63	7	236	56	21	41
Future Volume (veh/h)	71	1402	83	78	675	84	63	7	236	56	21	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	1524	90	85	734	91	68	8	257	61	23	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	442	1958	115	326	1830	227	322	320	341	326	95	185
Arrive On Green	0.09	1.00	1.00	0.04	0.58	0.58	0.04	0.17	0.17	0.04	0.17	0.17
Sat Flow, veh/h	1781	3411	201	1781	3182	394	1781	1870	1585	1781	565	1106
Grp Volume(v), veh/h	77	791	823	85	410	415	68	8	257	61	0	68
Grp Sat Flow(s),veh/h/ln	1781	1777	1834	1781	1777	1799	1781	1870	1585	1781	0	1671
Q Serve(g_s), s	1.8	0.0	0.0	2.0	13.4	13.4	3.3	0.4	16.0	3.0	0.0	3.7
Cycle Q Clear(g_c), s	1.8	0.0	0.0	2.0	13.4	13.4	3.3	0.4	16.0	3.0	0.0	3.7
Prop In Lane	1.00		0.11	1.00		0.22	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	442	1020	1053	326	1022	1035	322	320	341	326	0	280
V/C Ratio(X)	0.17	0.78	0.78	0.26	0.40	0.40	0.21	0.02	0.75	0.19	0.00	0.24
Avail Cap(c_a), veh/h	459	1020	1053	393	1022	1035	335	326	345	342	0	288
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.6	0.0	0.0	8.1	12.3	12.3	34.1	36.2	38.6	34.2	0.0	37.9
Incr Delay (d2), s/veh	0.2	5.8	5.8	0.4	1.2	1.2	0.3	0.0	9.0	0.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	2.9	3.0	1.3	8.7	8.8	2.6	0.3	11.0	2.3	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	5.8	5.8	8.5	13.5	13.5	34.4	36.2	47.6	34.5	0.0	38.4
LnGrp LOS	A	A	A	A	B	B	C	D	D	C	A	D
Approach Vol, veh/h		1691			910			333			129	
Approach Delay, s/veh		5.9			13.0			44.6			36.5	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	22.5	9.1	64.8	9.1	22.1	9.0	64.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	18.3	8.5	55.1	5.3	18.1	5.5	58.1
Max Q Clear Time (g_c+I1), s	5.0	18.0	4.0	2.0	5.3	5.7	3.8	15.4
Green Ext Time (p_c), s	0.0	0.0	0.1	16.4	0.0	0.2	0.0	5.3

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↰	↑↑		↱
Traffic Vol, veh/h	1333	9	16	708	0	112
Future Vol, veh/h	1333	9	16	708	0	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1449	10	17	770	0	122

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1459	0	-	730
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	*782	-	0	*523
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	1	-		1
Mov Cap-1 Maneuver	-	-	*782	-	-	*523
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	523	-	-	*782	-
HCM Lane V/C Ratio	0.233	-	-	0.022	-
HCM Control Delay (s)	14	-	-	9.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	62	8	37	7	7	69	8	118	7	21	83	50
Future Vol, veh/h	62	8	37	7	7	69	8	118	7	21	83	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	9	40	8	8	75	9	128	8	23	90	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	355	317	117	338	340	132	144	0	0	136	0	0
Stage 1	163	163	-	150	150	-	-	-	-	-	-	-
Stage 2	192	154	-	188	190	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	600	599	935	616	582	917	1438	-	-	1448	-	-
Stage 1	839	763	-	853	773	-	-	-	-	-	-	-
Stage 2	810	770	-	814	743	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	535	585	935	572	568	917	1438	-	-	1448	-	-
Mov Cap-2 Maneuver	535	585	-	572	568	-	-	-	-	-	-	-
Stage 1	833	750	-	847	768	-	-	-	-	-	-	-
Stage 2	731	765	-	757	730	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	9.9	0.5	1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1438	-	-	633	832	1448	-	-
HCM Lane V/C Ratio	0.006	-	-	0.184	0.108	0.016	-	-
HCM Control Delay (s)	7.5	0	-	12	9.9	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.4	0	-	-

Intersection												
Int Delay, s/veh	6.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↰	↱
Traffic Vol, veh/h	56	7	13	9	8	153	7	152	8	15	7	7
Future Vol, veh/h	56	7	13	9	8	153	7	152	8	15	7	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	8	14	10	9	166	8	165	9	16	8	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	317	234	12	241	234	170	16	0	0	174	0	0
Stage 1	44	44	-	186	186	-	-	-	-	-	-	-
Stage 2	273	190	-	55	48	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	636	666	1069	713	666	874	1602	-	-	1403	-	-
Stage 1	970	858	-	816	746	-	-	-	-	-	-	-
Stage 2	733	743	-	957	855	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	504	655	1069	689	655	874	1602	-	-	1403	-	-
Mov Cap-2 Maneuver	504	655	-	689	655	-	-	-	-	-	-	-
Stage 1	965	849	-	812	742	-	-	-	-	-	-	-
Stage 2	584	739	-	925	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	10.4	0.3	3.9
HCM LOS	B	B		

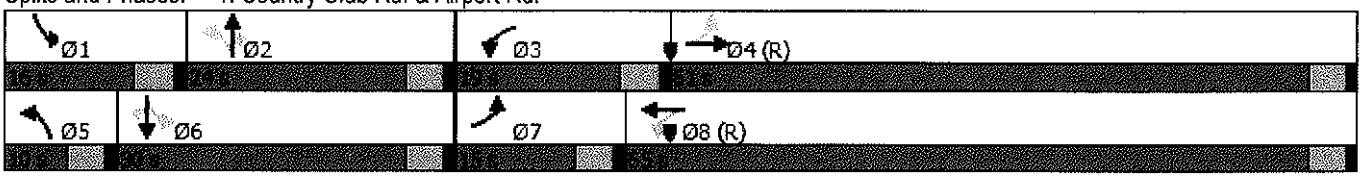
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1602	-	-	567	849	1403	-	-
HCM Lane V/C Ratio	0.005	-	-	0.146	0.218	0.012	-	-
HCM Control Delay (s)	7.3	-	-	12.4	10.4	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.8	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	93	672	159	1006	27	33	110	131	71	93
Future Volume (vph)	93	672	159	1006	27	33	110	131	71	93
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8		2		2	6		6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	61.0	19.0	65.0	10.0	24.0	24.0	16.0	30.0	30.0
Total Split (%)	12.5%	50.8%	15.8%	54.2%	8.3%	20.0%	20.0%	13.3%	25.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 11 (9%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: Country Club Rd. & Airport Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	672	44	159	1006	110	27	33	110	131	71	93
Future Volume (veh/h)	93	672	44	159	1006	110	27	33	110	131	71	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	730	48	173	1093	120	29	36	120	142	77	101
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	415	2080	137	513	2036	223	219	175	148	306	287	243
Arrive On Green	0.04	0.61	0.61	0.11	1.00	1.00	0.03	0.09	0.09	0.09	0.15	0.15
Sat Flow, veh/h	1781	3385	222	1781	3229	354	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	101	383	395	173	601	612	29	36	120	142	77	101
Grp Sat Flow(s),veh/h/ln	1781	1777	1830	1781	1777	1807	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.5	12.7	12.7	4.5	0.0	0.0	1.7	2.1	8.9	8.4	4.4	6.9
Cycle Q Clear(g_c), s	2.5	12.7	12.7	4.5	0.0	0.0	1.7	2.1	8.9	8.4	4.4	6.9
Prop In Lane	1.00		0.12	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	1092	1125	513	1120	1139	219	175	148	306	287	243
V/C Ratio(X)	0.24	0.35	0.35	0.34	0.54	0.54	0.13	0.21	0.81	0.46	0.27	0.41
Avail Cap(c_a), veh/h	499	1092	1125	628	1120	1139	254	304	258	324	397	337
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	11.4	11.4	7.6	0.0	0.0	47.3	50.3	53.3	42.2	44.8	45.9
Incr Delay (d2), s/veh	0.3	0.9	0.9	0.4	1.8	1.8	0.3	0.6	10.0	1.1	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	8.4	8.6	2.5	1.0	1.0	1.4	1.9	7.0	6.8	3.7	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.9	12.2	12.2	8.0	1.8	1.8	47.6	50.8	63.3	43.3	45.3	47.0
LnGrp LOS	A	B	B	A	A	A	D	D	E	D	D	D
Approach Vol, veh/h		879			1386			185			320	
Approach Delay, s/veh		11.7			2.6			58.4			45.0	
Approach LOS		B			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	15.7	11.2	78.3	7.6	22.9	9.3	80.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	14.5	56.5	5.5	25.5	10.5	60.5
Max Q Clear Time (g_c+I1), s	10.4	10.9	6.5	14.7	3.7	8.9	4.5	2.0
Green Ext Time (p_c), s	0.0	0.3	0.3	4.9	0.0	0.6	0.1	9.7

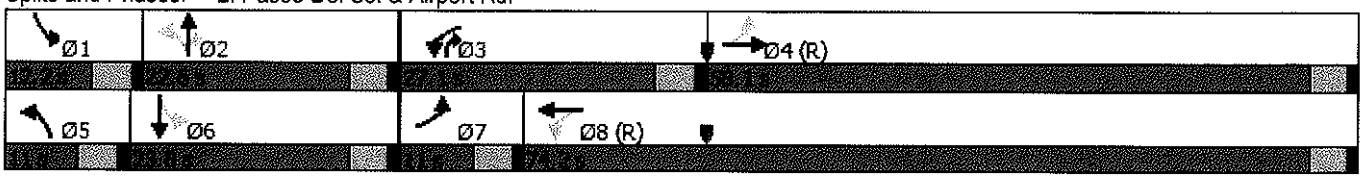
Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	71	979	235	924	76	6	120	99	27
Future Volume (vph)	71	979	235	924	76	6	120	99	27
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	3	8	5	2	3	1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	9.5	22.5
Total Split (s)	11.0	58.1	27.1	74.2	11.0	22.6	27.1	12.2	23.8
Total Split (%)	9.2%	48.4%	22.6%	61.8%	9.2%	18.8%	22.6%	10.2%	19.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 2: Paseo Del Sol & Airport Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	979	110	235	924	87	76	6	120	99	27	55
Future Volume (veh/h)	71	979	110	235	924	87	76	6	120	99	27	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	1064	120	255	1004	95	83	7	130	108	29	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	2002	226	481	2147	203	225	174	260	287	56	116
Arrive On Green	0.08	1.00	1.00	0.07	0.65	0.65	0.05	0.09	0.09	0.06	0.10	0.10
Sat Flow, veh/h	1781	3219	363	1781	3281	310	1781	1870	1585	1781	543	1124
Grp Volume(v), veh/h	77	587	597	255	544	555	83	7	130	108	0	89
Grp Sat Flow(s),veh/h/ln	1781	1777	1805	1781	1777	1814	1781	1870	1585	1781	0	1668
Q Serve(g_s), s	1.9	0.0	0.0	5.9	18.3	18.3	5.0	0.4	9.0	6.5	0.0	6.1
Cycle Q Clear(g_c), s	1.9	0.0	0.0	5.9	18.3	18.3	5.0	0.4	9.0	6.5	0.0	6.1
Prop In Lane	1.00		0.20	1.00		0.17	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	386	1105	1122	481	1163	1187	225	174	260	287	0	172
V/C Ratio(X)	0.20	0.53	0.53	0.53	0.47	0.47	0.37	0.04	0.50	0.38	0.00	0.52
Avail Cap(c_a), veh/h	414	1105	1122	690	1163	1187	225	282	352	287	0	268
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.9	0.0	0.0	6.1	10.3	10.3	45.9	49.5	45.7	45.4	0.0	51.0
Incr Delay (d2), s/veh	0.3	1.8	1.8	0.9	1.4	1.3	1.0	0.1	1.5	0.8	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	1.0	1.0	3.6	10.9	11.1	4.1	0.4	6.4	5.3	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	1.8	1.8	7.0	11.7	11.7	46.9	49.6	47.2	46.2	0.0	53.4
LnGrp LOS	A	A	A	A	B	B	D	D	D	D	A	D
Approach Vol, veh/h		1261			1354			220			197	
Approach Delay, s/veh		2.2			10.8			47.1			49.4	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	15.7	13.0	79.1	11.0	16.9	9.1	83.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.7	18.1	22.6	53.6	6.5	19.3	6.5	69.7
Max Q Clear Time (g_c+I1), s	8.5	11.0	7.9	2.0	7.0	8.1	3.9	20.3
Green Ext Time (p_c), s	0.0	0.2	0.6	9.3	0.0	0.3	0.0	8.1

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↰	↑↑		↱
Traffic Vol, veh/h	886	6	27	1366	0	17
Future Vol, veh/h	886	6	27	1366	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	963	7	29	1485	0	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	970	0	-	485
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	*1078	-	0	*721
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	1	-		1
Mov Cap-1 Maneuver	-	-	*1078	-	-	*721
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	* 1078	-
HCM Lane V/C Ratio	0.026	-	-	0.027	-
HCM Control Delay (s)	10.1	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	27	17	11	6	6	27	11	131	11	49	148	87
Future Vol, veh/h	27	17	11	6	6	27	11	131	11	49	148	87
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	18	12	7	7	29	12	142	12	53	161	95

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	505	493	209	502	534	148	256	0	0	154	0	0
Stage 1	315	315	-	172	172	-	-	-	-	-	-	-
Stage 2	190	178	-	330	362	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	478	477	831	480	452	899	1309	-	-	1426	-	-
Stage 1	696	656	-	830	756	-	-	-	-	-	-	-
Stage 2	812	752	-	683	625	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	438	451	831	440	428	899	1309	-	-	1426	-	-
Mov Cap-2 Maneuver	438	451	-	440	428	-	-	-	-	-	-	-
Stage 1	689	627	-	822	748	-	-	-	-	-	-	-
Stage 2	771	744	-	625	598	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	10.7	0.6	1.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	489	676	1426	-	-
HCM Lane V/C Ratio	0.009	-	-	0.122	0.063	0.037	-	-
HCM Control Delay (s)	7.8	0	-	13.4	10.7	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↰	↱
Traffic Vol, veh/h	33	6	6	11	6	55	6	114	17	71	186	33
Future Vol, veh/h	33	6	6	11	6	55	6	114	17	71	186	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	7	7	12	7	60	7	124	18	77	202	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	555	530	220	528	539	133	238	0	0	142	0	0
Stage 1	374	374	-	147	147	-	-	-	-	-	-	-
Stage 2	181	156	-	381	392	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	442	455	820	461	449	916	1329	-	-	1441	-	-
Stage 1	647	618	-	856	775	-	-	-	-	-	-	-
Stage 2	821	769	-	641	606	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	390	429	820	432	423	916	1329	-	-	1441	-	-
Mov Cap-2 Maneuver	390	429	-	432	423	-	-	-	-	-	-	-
Stage 1	644	585	-	852	771	-	-	-	-	-	-	-
Stage 2	757	765	-	595	574	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.6	10.6	0.3	1.9
HCM LOS	B	B		

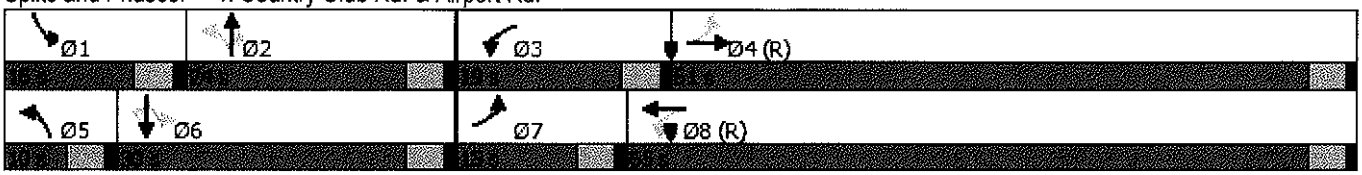
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1329	-	-	425	722	1441	-	-
HCM Lane V/C Ratio	0.005	-	-	0.115	0.108	0.054	-	-
HCM Control Delay (s)	7.7	-	-	14.6	10.6	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0.2	-	-

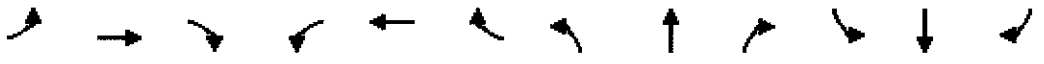
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	93	678	159	1006	34	35	110	132	73	93
Future Volume (vph)	93	678	159	1006	34	35	110	132	73	93
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8		2		2	6		6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	61.0	19.0	65.0	10.0	24.0	24.0	16.0	30.0	30.0
Total Split (%)	12.5%	50.8%	15.8%	54.2%	8.3%	20.0%	20.0%	13.3%	25.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 11 (9%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: Country Club Rd. & Airport Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	678	51	159	1006	110	34	35	110	132	73	93
Future Volume (veh/h)	93	678	51	159	1006	110	34	35	110	132	73	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	737	55	173	1093	120	37	38	120	143	79	101
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	2058	154	506	2034	223	225	175	148	306	281	238
Arrive On Green	0.04	0.61	0.61	0.11	1.00	1.00	0.03	0.09	0.09	0.09	0.15	0.15
Sat Flow, veh/h	1781	3352	250	1781	3229	354	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	101	391	401	173	601	612	37	38	120	143	79	101
Grp Sat Flow(s),veh/h/ln	1781	1777	1825	1781	1777	1807	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.5	13.0	13.1	4.5	0.0	0.0	2.2	2.3	8.9	8.4	4.5	6.9
Cycle Q Clear(g_c), s	2.5	13.0	13.1	4.5	0.0	0.0	2.2	2.3	8.9	8.4	4.5	6.9
Prop In Lane	1.00		0.14	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	1091	1121	506	1119	1138	225	175	148	306	281	238
V/C Ratio(X)	0.24	0.36	0.36	0.34	0.54	0.54	0.16	0.22	0.81	0.47	0.28	0.42
Avail Cap(c_a), veh/h	499	1091	1121	621	1119	1138	254	304	258	323	397	337
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	11.5	11.5	7.7	0.0	0.0	47.1	50.3	53.3	42.2	45.2	46.3
Incr Delay (d2), s/veh	0.3	0.9	0.9	0.4	1.8	1.8	0.3	0.6	10.0	1.1	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	8.6	8.8	2.5	1.0	1.0	1.8	2.0	7.0	6.8	3.9	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.9	12.4	12.4	8.1	1.8	1.8	47.5	50.9	63.3	43.3	45.8	47.4
LnGrp LOS	A	B	B	A	A	A	D	D	E	D	D	D
Approach Vol, veh/h		893			1386			195			323	
Approach Delay, s/veh		11.9			2.6			57.9			45.2	
Approach LOS		B			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	15.7	11.2	78.2	8.0	22.5	9.3	80.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	14.5	56.5	5.5	25.5	10.5	60.5
Max Q Clear Time (g_c+I1), s	10.4	10.9	6.5	15.1	4.2	8.9	4.5	2.0
Green Ext Time (p_c), s	0.0	0.3	0.3	5.0	0.0	0.6	0.1	9.7

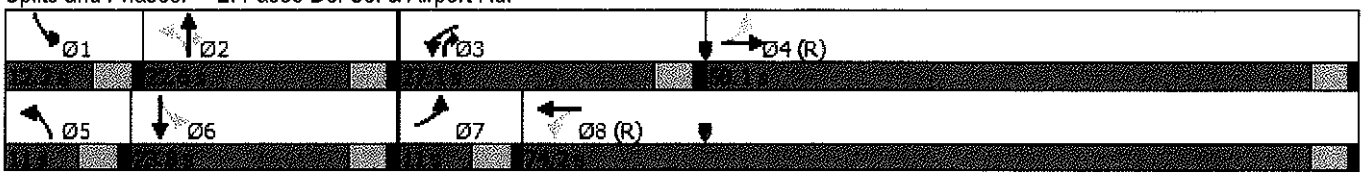
Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	72	983	241	931	76	6	124	99	27
Future Volume (vph)	72	983	241	931	76	6	124	99	27
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA
Protected Phases	7	4	3	8	5	2	3	1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	9.5	22.5
Total Split (s)	11.0	58.1	27.1	74.2	11.0	22.6	27.1	12.2	23.8
Total Split (%)	9.2%	48.4%	22.6%	61.8%	9.2%	18.8%	22.6%	10.2%	19.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 2: Paseo Del Sol & Airport Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	983	110	241	931	89	76	6	124	99	27	55
Future Volume (veh/h)	72	983	110	241	931	89	76	6	124	99	27	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	1068	120	262	1012	97	83	7	135	108	29	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1988	223	481	2135	205	229	179	267	290	58	119
Arrive On Green	0.08	1.00	1.00	0.07	0.65	0.65	0.05	0.10	0.10	0.06	0.11	0.11
Sat Flow, veh/h	1781	3221	362	1781	3277	314	1781	1870	1585	1781	543	1124
Grp Volume(v), veh/h	78	589	599	262	549	560	83	7	135	108	0	89
Grp Sat Flow(s),veh/h/ln	1781	1777	1805	1781	1777	1814	1781	1870	1585	1781	0	1668
Q Serve(g_s), s	1.9	0.0	0.0	6.1	18.7	18.7	5.0	0.4	9.3	6.5	0.0	6.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	6.1	18.7	18.7	5.0	0.4	9.3	6.5	0.0	6.0
Prop In Lane	1.00		0.20	1.00		0.17	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	381	1097	1114	481	1158	1182	229	179	267	290	0	177
V/C Ratio(X)	0.20	0.54	0.54	0.54	0.47	0.47	0.36	0.04	0.50	0.37	0.00	0.50
Avail Cap(c_a), veh/h	408	1097	1114	686	1158	1182	229	282	355	290	0	268
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	0.0	0.0	6.2	10.5	10.5	45.6	49.2	45.3	45.1	0.0	50.7
Incr Delay (d2), s/veh	0.3	1.9	1.9	1.0	1.4	1.4	1.0	0.1	1.5	0.8	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	1.0	1.0	3.7	11.1	11.3	4.1	0.4	6.6	5.3	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	1.9	1.9	7.2	11.9	11.9	46.5	49.3	46.8	45.9	0.0	52.9
LnGrp LOS	A	A	A	A	B	B	D	D	D	D	A	D
Approach Vol, veh/h		1266			1371			225			197	
Approach Delay, s/veh		2.3			11.0			46.8			49.0	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	16.0	13.2	78.6	11.0	17.2	9.1	82.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.7	18.1	22.6	53.6	6.5	19.3	6.5	69.7
Max Q Clear Time (g_c+I1), s	8.5	11.3	8.1	2.0	7.0	8.0	3.9	20.7
Green Ext Time (p_c), s	0.0	0.2	0.6	9.3	0.0	0.3	0.0	8.3

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	17	12	6	7	27	13	131	11	49	148	3
Future Vol, veh/h	31	17	12	6	7	27	13	131	11	49	148	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	18	13	7	8	29	14	142	12	53	161	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	464	451	163	460	446	148	164	0	0	154	0	0
Stage 1	269	269	-	176	176	-	-	-	-	-	-	-
Stage 2	195	182	-	284	270	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	508	504	882	512	507	899	1414	-	-	1426	-	-
Stage 1	737	687	-	826	753	-	-	-	-	-	-	-
Stage 2	807	749	-	723	686	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	466	478	882	471	481	899	1414	-	-	1426	-	-
Mov Cap-2 Maneuver	466	478	-	471	481	-	-	-	-	-	-	-
Stage 1	729	659	-	817	745	-	-	-	-	-	-	-
Stage 2	764	741	-	664	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	10.5	0.6	1.9
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1414	-	-	519 698	1426	-	-
HCM Lane V/C Ratio	0.01	-	-	0.126 0.062	0.037	-	-
HCM Control Delay (s)	7.6	0	-	12.9 10.5	7.6	0	-
HCM Lane LOS	A	A	-	B B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4 0.2	0.1	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↑			↑	
Traffic Vol, veh/h	33	7	6	12	6	64	6	114	19	79	186	33
Future Vol, veh/h	33	7	6	12	6	64	6	114	19	79	186	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	8	7	13	7	70	7	124	21	86	202	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	579	551	220	549	559	135	238	0	0	145	0	0
Stage 1	392	392	-	149	149	-	-	-	-	-	-	-
Stage 2	187	159	-	400	410	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	426	442	820	446	438	914	1329	-	-	1437	-	-
Stage 1	633	606	-	854	774	-	-	-	-	-	-	-
Stage 2	815	766	-	626	595	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	370	413	820	415	410	914	1329	-	-	1437	-	-
Mov Cap-2 Maneuver	370	413	-	415	410	-	-	-	-	-	-	-
Stage 1	630	570	-	850	770	-	-	-	-	-	-	-
Stage 2	743	762	-	576	559	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.1	10.7	0.3	2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1329	-	-	405	722	1437	-	-
HCM Lane V/C Ratio	0.005	-	-	0.123	0.123	0.06	-	-
HCM Control Delay (s)	7.7	-	-	15.1	10.7	7.7	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0.2	-	-

Cleland count

Year Counts Taken: 2020

E-W Street: Airport Rd.

N-S Street: Country Club Rd.

Signalized

Speed Limit (Airport Rd.)= 45

Speed Limit (Country Club Rd.)= 30

7/1/20

Begin Time	End Time	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Country Club Rd.)			Southbound (Country Club Rd.)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	14	62	4	7	49	8	6	2	15	10	1	6
7:15 AM	7:30 AM	16	105	2	6	64	14	1	10	13	8	6	8
7:30 AM	7:45 AM	18	149	5	7	65	16	12	10	17	10	3	12
7:45 AM	8:00 AM	17	138	11	5	83	15	4	12	21	14	3	10
Hourly Totals		65	454	22	25	261	53	23	34	66	42	13	36
8:00 AM	8:15 AM	19	136	4	4	70	15	6	7	16	7	0	7
8:15 AM	8:30 AM	13	115	8	12	60	10	5	3	19	15	5	6
8:30 AM	8:45 AM	12	120	5	16	66	14	8	8	20	9	5	7
8:45 AM	9:00 AM	15	116	4	20	72	18	4	6	26	6	6	7
Hourly Totals		59	487	21	52	268	57	23	24	81	37	16	27
4:00 PM	4:15 PM	9	105	5	23	142	12	10	13	31	19	6	11
4:15 PM	4:30 PM	11	118	10	28	152	22	3	12	22	12	9	20
4:30 PM	4:45 PM	15	127	11	35	111	12	1	9	17	16	14	12
4:45 PM	5:00 PM	10	125	13	33	149	15	5	9	18	13	18	20
Hourly Totals		45	475	39	119	554	61	19	43	88	60	47	63
5:00 PM	5:15 PM	17	123	8	29	184	20	5	6	20	24	13	17
5:15 PM	5:30 PM	7	110	8	27	156	22	7	6	19	21	11	16
5:30 PM	5:45 PM	14	127	20	42	161	18	5	6	26	11	8	15
5:45 PM	6:00 PM	9	120	9	38	150	20	7	6	22	11	8	13
Hourly Totals		47	480	45	136	651	80	24	24	87	67	40	61

Indicates highest 15 min volume per 2 hr period

Lee Engr count

12/4/19

	Percentage to increase	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Country Club Rd.)			Southbound (Country Club Rd.)			
		L	T	R	L	T	R	L	T	R	L	T	R	
		9	127	6	7	67	17	4	7	20	6	3	11	
		13	144	11	13	67	17	8	5	40	14	5	12	
		16	207	4	10	108	16	17	7	44	23	2	21	
		19	197	6	11	135	46	24	9	35	22	6	19	
1,094	149.6%	57	675	27	41	377	96	53	28	139	65	16	63	1,637
		19	165	6	20	125	35	13	10	23	29	10	11	
	145.1%	15	166	19	10	100	22	7	12	23	29	14	10	
	Average AM	21	134	3	15	85	26	11	12	31	17	5	11	
		18	135	4	18	88	21	1	10	33	16	5	7	
1,152	140.6%	73	600	32	63	398	104	32	44	110	91	34	39	1,620
		16	131	5	43	153	24	10	7	25	30	10	24	
		13	127	6	36	177	29	5	11	25	27	5	31	
		13	151	9	37	178	20	5	11	32	16	15	9	
		16	146	12	40	139	23	6	13	32	26	15	27	
1,613	121.6%	58	555	32	156	647	96	26	42	114	99	45	91	1,961
		11	150	8	33	142	16	3	4	26	25	19	31	
	115.7%	12	151	9	28	156	20	11	7	44	15	13	33	
	Average PM	18	126	6	31	173	17	10	3	28	12	17	33	
		11	125	2	46	175	14	7	6	35	14	15	22	
1,742	109.8%	52	552	25	138	646	67	31	20	133	66	64	119	1,913

Cleland count

Year Counts Taken: **2020**

E-W Street: Airport Rd.
N-S Street: Paseo del Sol

Speed Limit (Airport Rd.)= 30
Speed Limit (Paseo del Sol)= 30

Signalized

7/1/20

Begin Time	End Time	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Paseo del Sol)			Southbound (Paseo del Sol)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	6	95	8	4	72	7	7	2	12	4	0	4
7:15 AM	7:30 AM	12	141	11	10	72	6	11	2	24	7	7	8
7:30 AM	7:45 AM	10	201	12	11	97	12	9	4	33	8	2	6
7:45 AM	8:00 AM	13	179	13	13	72	16	7	2	26	11	4	6
Hourly Totals		41	616	44	35	313	41	34	7	95	30	14	21
8:00 AM	8:15 AM	13	139	12	13	83	10	2	4	16	18	4	11
8:15 AM	8:30 AM	9	143	6	7	78	9	5	3	17	13	4	8
8:30 AM	8:45 AM	11	147	8	12	69	7	8	6	32	10	2	6
8:45 AM	9:00 AM	9	143	6	9	78	16	6	3	22	11	9	10
Hourly Totals		42	572	33	41	306	50	22	12	86	53	4	35
4:00 PM	4:15 PM	7	137	10	34	144	20	13	6	27	17	8	10
4:15 PM	4:30 PM	11	139	15	28	191	19	13	5	19	18	3	10
4:30 PM	4:45 PM	11	146	12	33	185	14	15	7	36	17	1	13
4:45 PM	5:00 PM	13	179	20	43	160	15	14	0	22	18	5	10
Hourly Totals		42	601	57	138	689	69	55	18	104	71	17	42
5:00 PM	5:15 PM	9	153	15	30	199	21	14	2	32	22	5	6
5:15 PM	5:30 PM	7	129	9	47	191	19	9	2	26	10	3	8
5:30 PM	5:45 PM	13	166	6	34	172	22	13	5	29	18	4	9
5:45 PM	6:00 PM	12	143	11	26	186	18	12	2	27	16	4	11
Hourly Totals		41	591	43	133	748	80	53	11	114	66	16	37

indicates highest 15 min. volume per 2 hr period

Lee Engr count

12/4/19

	Percentage to increase	Eastbound (Airport Rd.)			Westbound (Airport Rd.)			Northbound (Paseo del Sol)			Southbound (Paseo del Sol)			
		L	T	R	L	T	R	L	T	R	L	T	R	
		7	142	12	16	77	11	8	1	16	6	6	4	
		9	190	34	26	80	6	7	4	22	11	7	5	
		8	240	65	54	108	17	22	6	36	9	2	9	
		9	201	68	68	149	17	44	6	42	15	5	5	
1,291	148.1%	33	773	179	164	414	51	81	17	116	41	20	23	1,912
		9	161	65	59	123	12	46	2	54	11	5	7	
	155.2% Average AM	7	191	42	82	110	17	17	5	64	12	5	6	
		9	183	22	43	117	8	32	2	67	14	5	2	
		12	166	17	23	116	11	13	2	39	13	2	9	
1,256	162.3%	37	701	146	207	466	48	108	11	224	50	17	24	2,039
		11	168	17	49	179	16	48	6	79	22	5	17	
		7	172	20	44	183	18	40	11	57	27	6	11	
		8	200	12	42	179	14	23	3	41	22	4	20	
		7	205	17	33	160	18	26	2	37	18	3	6	
1,903	121.5%	33	745	66	168	701	66	137	22	214	89	18	54	2,313
		8	194	14	31	168	15	19	11	29	14	3	10	
	121.5% Average PM	11	191	22	35	186	15	17	6	51	19	5	16	
		13	138	18	39	210	18	196	0	35	18	7	20	
		12	154	9	56	199	21	20	5	28	23	6	14	
1,933	121.5%	44	677	63	161	763	69	252	22	143	74	21	60	2,349

Traffic Count Data Sheet

Year Counts Taken: **2020**
E-W Street: **Airport Rd.**
N-S Street: **Country Club Rd.**
Signalized

Speed Limit (Airport Rd.)= **30** MPH
Speed Limit (Country Club Rd.)= **30** MPH
7/1/20

Begin Time	End Time	Eastbound (Airport Rd.)				Westbound (Airport Rd.)				Northbound (Country Club Rd.)				Southbound (Country Club Rd.)				
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	
7:00 AM	7:15 AM	~~14~~	~~62~~	~~4~~	~~0~~	~~7~~	~~49~~	~~8~~	~~0~~	~~6~~	~~2~~	~~15~~	~~0~~	~~10~~	~~1~~	~~6~~	~~0~~	0
7:15 AM	7:30 AM	~~16~~	~~105~~	~~2~~	~~0~~	~~6~~	~~64~~	~~14~~	~~0~~	~~1~~	~~10~~	~~13~~	~~0~~	~~8~~	~~6~~	~~8~~	~~0~~	0
7:30 AM	7:45 AM	**18**	**149**	**5**	**0**	**7**	**65**	**16**	**0**	**12**	**10**	**17**	**0**	**10**	**3**	**12**	**0**	324
7:45 AM	8:00 AM	**17**	**138**	**11**	**2**	**5**	**83**	**15**	**0**	**4**	**12**	**21**	**0**	**14**	**3**	**10**	**0**	333
8:00 AM	8:15 AM	**19**	**136**	**4**	**1**	**4**	**70**	**15**	**0**	**6**	**7**	**16**	**0**	**7**	**0**	**7**	**0**	291
8:15 AM	8:30 AM	**13**	**115**	**8**	**0**	**12**	**60**	**10**	**0**	**5**	**3**	**19**	**0**	**15**	**5**	**6**	**0**	271
8:30 AM	8:45 AM	~~12~~	~~120~~	~~5~~	~~0~~	~~16~~	~~66~~	~~14~~	~~0~~	~~8~~	~~8~~	~~20~~	~~0~~	~~9~~	~~5~~	~~7~~	~~0~~	0
8:45 AM	9:00 AM	~~15~~	~~116~~	~~4~~	~~0~~	~~20~~	~~72~~	~~18~~	~~0~~	~~4~~	~~6~~	~~26~~	~~0~~	~~6~~	~~6~~	~~7~~	~~0~~	0
AM Peak Hour Volumes		**67**	**538**	**28**	**3**	**28**	**278**	**56**	**0**	**27**	**32**	**73**	**0**	**46**	**11**	**35**	**0**	1,219
% of Total Traffic		5.5%	44.0%	2.3%		2.3%	22.7%	4.6%		2.2%	2.6%	6.0%		3.8%	0.9%	2.9%		
% Directional			51.8%				29.6%		**Intersection**		10.8%				7.5%			
AM Peak Hour Factor			***0.92***				***0.88***		**0.92**		***0.85***				***0.85***			

Begin Time	End Time	Eastbound (Airport Rd.)				Westbound (Airport Rd.)				Northbound (Country Club Rd.)				Southbound (Country Club Rd.)				
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	
4:00 PM	4:15 PM	~~9~~	~~105~~	~~5~~	~~0~~	~~23~~	~~142~~	~~12~~	~~0~~	~~10~~	~~13~~	~~31~~	~~0~~	~~19~~	~~6~~	~~11~~	~~0~~	0
4:15 PM	4:30 PM	~~11~~	~~118~~	~~10~~	~~0~~	~~28~~	~~152~~	~~22~~	~~0~~	~~3~~	~~12~~	~~22~~	~~0~~	~~12~~	~~9~~	~~20~~	~~0~~	0
4:30 PM	4:45 PM	~~15~~	~~127~~	~~11~~	~~0~~	~~35~~	~~111~~	~~12~~	~~1~~	~~1~~	~~9~~	~~17~~	~~0~~	~~16~~	~~14~~	~~12~~	~~0~~	0
4:45 PM	5:00 PM	**10**	**125**	**13**	**1**	**33**	**149**	**15**	**0**	**5**	**9**	**18**	**0**	**13**	**18**	**20**	**0**	428
5:00 PM	5:15 PM	**17**	**123**	**8**	**0**	**29**	**184**	**20**	**0**	**5**	**6**	**20**	**0**	**24**	**13**	**17**	**0**	466
5:15 PM	5:30 PM	**7**	**110**	**8**	**0**	**27**	**156**	**22**	**0**	**7**	**6**	**19**	**0**	**21**	**11**	**16**	**0**	410
5:30 PM	5:45 PM	**14**	**127**	**20**	**0**	**42**	**161**	**18**	**0**	**5**	**6**	**26**	**0**	**11**	**8**	**15**	**0**	453
5:45 PM	6:00 PM	~~9~~	~~120~~	~~9~~	~~0~~	~~38~~	~~150~~	~~20~~	~~0~~	~~7~~	~~6~~	~~22~~	~~0~~	~~11~~	~~8~~	~~13~~	~~0~~	0
PM Peak Hour Volumes		**48**	**485**	**49**	**1**	**131**	**650**	**75**	**0**	**22**	**27**	**83**	**0**	**69**	**50**	**68**	**0**	1,757
% of Total Traffic		2.7%	27.6%	2.8%		7.5%	37.0%	4.3%		1.3%	1.5%	4.7%		3.9%	2.8%	3.9%		
% Directional			33.1%				48.7%		**Intersection**		7.5%				10.6%			
PM Peak Hour Factor			***0.90***				***0.92***		**0.94**		***0.89***				***0.87***			

Traffic Count Data Sheet

Year Counts Taken: **2020**
E-W Street: **Airport Rd.**
N-S Street: **Paseo del Sol**
Signalized
Speed Limit (Airport Rd.)= **30** MPH
Speed Limit (Paseo del Sol)= **30** MPH
7/1/20

Begin Time	End Time	Eastbound (Airport Rd.) L	T	R	Pedestrians	Westbound (Airport Rd.) L	T	R	Pedestrians	Northbound (Paseo del Sol) L	T	R	Pedestrians	Southbound (Paseo del Sol) L	T	R	Pedestrians	
7:00 AM	7:15 AM	~~6~~	~~95~~	~~8~~	~~0~~	~~1~~	~~72~~	~~7~~	~~1~~	~~7~~	~~2~~	~~12~~	~~1~~	~~4~~	~~0~~	~~1~~	~~0~~	0
7:15 AM	7:30 AM	**12**	**141**	**11**	**1**	**10**	**72**	**6**	**0**	**11**	**2**	**24**	**0**	**7**	**7**	**8**	**0**	311
7:30 AM	7:45 AM	**10**	**201**	**12**	**0**	**11**	**97**	**12**	**0**	**9**	**1**	**33**	**0**	**8**	**3**	**6**	**0**	403
7:45 AM	8:00 AM	**13**	**179**	**13**	**1**	**13**	**72**	**16**	**1**	**7**	**2**	**26**	**0**	**11**	**4**	**6**	**0**	362
8:00 AM	8:15 AM	**13**	**139**	**12**	**0**	**13**	**83**	**19**	**0**	**2**	**1**	**15**	**0**	**19**	**1**	**11**	**0**	328
8:15 AM	8:30 AM	~~9~~	~~143~~	~~6~~	~~1~~	~~7~~	~~78~~	~~9~~	~~0~~	~~5~~	~~3~~	~~17~~	~~0~~	~~13~~	~~1~~	~~8~~	~~0~~	0
8:30 AM	8:45 AM	~~11~~	~~147~~	~~9~~	~~1~~	~~12~~	~~69~~	~~7~~	~~0~~	~~9~~	~~5~~	~~32~~	~~0~~	~~10~~	~~2~~	~~6~~	~~0~~	0
8:45 AM	9:00 AM	~~9~~	~~143~~	~~6~~	~~0~~	~~9~~	~~76~~	~~15~~	~~0~~	~~6~~	~~3~~	~~22~~	~~0~~	~~11~~	~~0~~	~~10~~	~~0~~	0
AM Peak Hour Volumes		**48**	**660**	**48**	**2**	**47**	**324**	**53**	**1**	**29**	**6**	**98**	**0**	**45**	**15**	**31**	**0**	1,404
% of Total Traffic		3.4%	46.9%	3.4%		3.3%	23.0%	3.8%		2.1%	0.4%	7.0%		3.2%	1.1%	2.2%		
% Directional			53.8%				30.2%		**Intersection**		9.5%				6.5%			
AM Peak Hour Factor			***0.85***				***0.88***		**0.87**		***0.77***				***0.73***			

Begin Time	End Time	Eastbound (Airport Rd.) L	T	R	Pedestrians	Westbound (Airport Rd.) L	T	R	Pedestrians	Northbound (Paseo del Sol) L	T	R	Pedestrians	Southbound (Paseo del Sol) L	T	R	Pedestrians	
4:00 PM	4:15 PM	~~7~~	~~137~~	~~10~~	~~0~~	~~34~~	~~144~~	~~20~~	~~0~~	~~13~~	~~6~~	~~27~~	~~0~~	~~17~~	~~8~~	~~10~~	~~0~~	0
4:15 PM	4:30 PM	**11**	**139**	**15**	**0**	**28**	**191**	**19**	**0**	**13**	**5**	**19**	**0**	**19**	**3**	**10**	**0**	472
4:30 PM	4:45 PM	**11**	**146**	**12**	**0**	**33**	**185**	**14**	**0**	**15**	**7**	**36**	**0**	**17**	**1**	**12**	**0**	489
4:45 PM	5:00 PM	**13**	**179**	**20**	**0**	**43**	**169**	**16**	**0**	**14**	**0**	**22**	**0**	**18**	**5**	**10**	**0**	509
5:00 PM	5:15 PM	**9**	**153**	**15**	**0**	**30**	**199**	**21**	**0**	**14**	**2**	**32**	**0**	**22**	**5**	**6**	**0**	508
5:15 PM	5:30 PM	~~7~~	~~129~~	~~9~~	~~0~~	~~47~~	~~191~~	~~19~~	~~0~~	~~9~~	~~2~~	~~26~~	~~0~~	~~10~~	~~3~~	~~8~~	~~0~~	0
5:30 PM	5:45 PM	~~13~~	~~166~~	~~5~~	~~0~~	~~31~~	~~172~~	~~22~~	~~0~~	~~18~~	~~5~~	~~29~~	~~0~~	~~18~~	~~4~~	~~9~~	~~0~~	0
5:45 PM	6:00 PM	~~12~~	~~143~~	~~14~~	~~0~~	~~25~~	~~186~~	~~18~~	~~0~~	~~12~~	~~2~~	~~27~~	~~0~~	~~16~~	~~4~~	~~14~~	~~0~~	0
PM Peak Hour Volumes		**44**	**617**	**62**	**0**	**134**	**744**	**70**	**0**	**56**	**14**	**109**	**0**	**76**	**14**	**38**	**0**	1,978
% of Total Traffic		2.2%	31.2%	3.1%		6.8%	37.6%	3.5%		2.8%	0.7%	5.5%		3.8%	0.7%	1.9%		
% Directional			36.6%				47.9%		**Intersection**		9.0%				6.5%			
PM Peak Hour Factor			***0.85***				***0.95***		**0.97**		***0.77***				***0.97***			

Traffic Count Data Sheet

Year Counts Taken: **2020** E-W Street: **Airport Rd.** Speed Limit (Airport Rd.)= **45** MPH

N-S Street: **Fairly Rd.** Speed Limit (Fairly Rd.)= **30** MPH

Unsignalized 7/1/20

Begin Time	End Time	Eastbound (Airport Rd.) L	T	R	Pedestrians	Westbound (Airport Rd.) L	T	R	Pedestrians	Northbound (Fairly Rd.) L	T	R	Pedestrians	Southbound (Fairly Rd.) L	T	R	Pedestrians	
7:00 AM	7:15 AM	~~0~~	~~114~~	~~0~~	~~0~~	~~1~~	~~54~~	~~0~~	~~2~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
7:15 AM	7:30 AM	~~0~~	~~146~~	~~1~~	~~0~~	~~0~~	~~85~~	~~0~~	~~1~~	~~0~~	~~0~~	~~5~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
7:30 AM	7:45 AM	**0**	**175**	**4**	**0**	**1**	**93**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	276
7:45 AM	8:00 AM	**0**	**192**	**0**	**0**	**2**	**102**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	302
8:00 AM	8:15 AM	**0**	**144**	**0**	**1**	**6**	**103**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	254
8:15 AM	8:30 AM	**0**	**185**	**0**	**2**	**1**	**79**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	271
8:30 AM	8:45 AM	~~0~~	~~150~~	~~0~~	~~0~~	~~1~~	~~70~~	~~0~~	~~0~~	~~0~~	~~0~~	~~8~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
8:45 AM	9:00 AM	~~0~~	~~160~~	~~2~~	~~0~~	~~3~~	~~104~~	~~0~~	~~0~~	~~0~~	~~0~~	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
AM Peak Hour Volumes		**0**	**696**	**4**	**3**	**10**	**377**	**0**	**0**	**1**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	1,103
% of Total Traffic		0.0%	62.9%	0.4%		0.9%	34.1%	0.0%		0.1%	0.0%	1.4%		0.0%	0.0%	0.0%		
% Directional			63.3%				35.0%		**Intersection**		1.4%				0.0%			
AM Peak Hour Factor			***0.91***				***0.89***		**0.91**		***0.67***				***#DIV/0!***			

Begin Time	End Time	Eastbound (Airport Rd.) L	T	R	Pedestrians	Westbound (Airport Rd.) L	T	R	Pedestrians	Northbound (Fairly Rd.) L	T	R	Pedestrians	Southbound (Fairly Rd.) L	T	R	Pedestrians	
4:00 PM	4:15 PM	~~0~~	~~157~~	~~1~~	~~0~~	~~8~~	~~193~~	~~0~~	~~0~~	~~0~~	~~0~~	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
4:15 PM	4:30 PM	~~0~~	~~144~~	~~0~~	~~1~~	~~10~~	~~196~~	~~1~~	~~0~~	~~0~~	~~0~~	~~6~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
4:30 PM	4:45 PM	**0**	**172**	**0**	**0**	**1**	**209**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	383
4:45 PM	5:00 PM	**0**	**183**	**1**	**0**	**8**	**210**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	405
5:00 PM	5:15 PM	**0**	**157**	**0**	**0**	**1**	**226**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	389
5:15 PM	5:30 PM	**0**	**162**	**1**	**0**	**5**	**250**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	421
5:30 PM	5:45 PM	~~0~~	~~144~~	~~0~~	~~0~~	~~2~~	~~203~~	~~0~~	~~0~~	~~0~~	~~0~~	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
5:45 PM	6:00 PM	~~0~~	~~155~~	~~0~~	~~0~~	~~4~~	~~213~~	~~0~~	~~0~~	~~0~~	~~0~~	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	0
PM Peak Hour Volumes		**0**	**674**	**2**	**0**	**15**	**895**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	1,598
% of Total Traffic		0.0%	42.2%	0.1%		0.9%	56.0%	0.0%		0.0%	0.0%	0.8%		0.0%	0.0%	0.0%		
% Directional			42.3%				56.9%		**Intersection**		0.8%				0.0%			
PM Peak Hour Factor			***0.92***				***0.89***		**0.95**		***0.60***				***#DIV/0!***			

Traffic Count Data Sheet

Year Counts Taken: **2020**
E-W Street: **Entrada Milagro**
N-S Street: **Paseo del Sol**
Unsignalized

Speed Limit (Entrada Milagro)= **25** MPH
Speed Limit (Paseo del Sol)= **30** MPH
7/1/20

Begin Time	End Time	Eastbound (Entrada Milagro)				Westbound (Entrada Milagro)				Northbound (Paseo del Sol)				Southbound (Paseo del Sol)				
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	
7:00 AM	7:15 AM	~~2~~	~~0~~	~~0~~	~~0~~	~~1~~	~~0~~	~~4~~	~~0~~	~~3~~	~~11~~	~~0~~	~~0~~	~~1~~	~~8~~	~~0~~	~~1~~	0
7:15 AM	7:30 AM	**11**	**1**	**3**	**0**	**1**	**0**	**3**	**1**	**1**	**15**	**0**	**0**	**0**	**22**	**2**	**0**	59
7:30 AM	7:45 AM	**8**	**0**	**5**	**0**	**0**	**1**	**10**	**1**	**1**	**17**	**1**	**0**	**3**	**12**	**7**	**0**	65
7:45 AM	8:00 AM	**7**	**2**	**3**	**1**	**1**	**0**	**7**	**0**	**0**	**12**	**0**	**0**	**1**	**21**	**1**	**0**	55
8:00 AM	8:15 AM	**5**	**0**	**2**	**1**	**1**	**0**	**3**	**0**	**2**	**5**	**1**	**0**	**2**	**16**	**5**	**0**	42
8:15 AM	8:30 AM	~~6~~	~~1~~	~~1~~	~~0~~	~~1~~	~~0~~	~~4~~	~~0~~	~~1~~	~~16~~	~~0~~	~~0~~	~~1~~	~~11~~	~~2~~	~~0~~	0
8:30 AM	8:45 AM	~~11~~	~~0~~	~~4~~	~~0~~	~~1~~	~~0~~	~~7~~	~~1~~	~~0~~	~~17~~	~~1~~	~~1~~	~~5~~	~~11~~	~~3~~	~~0~~	0
8:45 AM	9:00 AM	~~6~~	~~1~~	~~1~~	~~0~~	~~1~~	~~0~~	~~2~~	~~0~~	~~1~~	~~16~~	~~0~~	~~0~~	~~0~~	~~14~~	~~0~~	~~0~~	0
AM Peak Hour Volumes		**31**	**3**	**13**	**2**	**3**	**1**	**23**	**2**	**4**	**49**	**2**	**0**	**6**	**71**	**15**	**0**	221
% of Total Traffic		13.8%	1.3%	5.8%		1.3%	0.4%	10.3%		1.8%	21.9%	0.9%		2.7%	31.7%	6.7%		
% Directional			21.0%				12.1%		**Intersection**		24.6%				41.1%			
AM Peak Hour Factor			***0.78***				***0.61***		**0.85**		***0.72***				***0.96***			

Begin Time	End Time	Eastbound (Entrada Milagro)				Westbound (Entrada Milagro)				Northbound (Paseo del Sol)				Southbound (Paseo del Sol)				
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	
4:00 PM	4:15 PM	~~2~~	~~0~~	~~3~~	~~0~~	~~2~~	~~1~~	~~6~~	~~0~~	~~1~~	~~33~~	~~0~~	~~0~~	~~8~~	~~19~~	~~8~~	~~2~~	0
4:15 PM	4:30 PM	~~7~~	~~1~~	~~3~~	~~0~~	~~2~~	~~4~~	~~6~~	~~0~~	~~2~~	~~20~~	~~1~~	~~0~~	~~6~~	~~25~~	~~10~~	~~0~~	0
4:30 PM	4:45 PM	**5**	**1**	**2**	**0**	**1**	**0**	**13**	**0**	**1**	**31**	**2**	**0**	**2**	**21**	**12**	**0**	91
4:45 PM	5:00 PM	**3**	**0**	**1**	**0**	**1**	**1**	**7**	**1**	**7**	**20**	**2**	**0**	**4**	**33**	**11**	**0**	90
5:00 PM	5:15 PM	**6**	**0**	**1**	**0**	**0**	**2**	**8**	**0**	**3**	**28**	**1**	**0**	**9**	**26**	**5**	**1**	89
5:15 PM	5:30 PM	**5**	**3**	**2**	**0**	**0**	**0**	**5**	**0**	**2**	**24**	**2**	**0**	**9**	**27**	**16**	**0**	95
5:30 PM	5:45 PM	~~5~~	~~0~~	~~4~~	~~0~~	~~1~~	~~1~~	~~3~~	~~0~~	~~5~~	~~38~~	~~1~~	~~0~~	~~7~~	~~20~~	~~6~~	~~0~~	0
5:45 PM	6:00 PM	~~13~~	~~1~~	~~1~~	~~0~~	~~1~~	~~0~~	~~5~~	~~0~~	~~3~~	~~22~~	~~0~~	~~0~~	~~2~~	~~29~~	~~7~~	~~0~~	0
PM Peak Hour Volumes		**19**	**4**	**6**	**0**	**2**	**3**	**33**	**1**	**13**	**103**	**7**	**0**	**24**	**107**	**44**	**1**	365
% of Total Traffic		5.2%	1.1%	1.6%		0.5%	0.8%	9.0%		3.6%	28.1%	1.9%		6.6%	29.2%	12.0%		
% Directional			7.9%				10.4%		**Intersection**		33.6%				47.8%			
PM Peak Hour Factor			***0.73***				***0.68***		**0.96**		***0.90***				***0.84***			

Traffic Count Data Sheet

Year Counts Taken: **2020**
E-W Street: **Camino Rojo**
N-S Street: **Country Club Rd.**
Unsignalized

Speed Limit (Camino Rojo)= **25** MPH
Speed Limit (Country Club Rd.)= **30** MPH
7/1/20

Begin Time	End Time	Eastbound (Camino Rojo)				Westbound (Camino Rojo)				Northbound (Country Club Rd.)				Southbound (Country Club Rd.)				
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	
7:00 AM	7:15 AM	~~5~~	~~0~~	~~1~~	~~0~~	~~2~~	~~0~~	~~4~~	~~0~~	~~1~~	~~11~~	~~1~~	~~2~~	~~4~~	~~10~~	~~2~~	~~0~~	0
7:15 AM	7:30 AM	~~5~~	~~0~~	~~0~~	~~0~~	~~1~~	~~0~~	~~5~~	~~0~~	~~0~~	~~23~~	~~0~~	~~1~~	~~5~~	~~10~~	~~1~~	~~0~~	0
7:30 AM	7:45 AM	**8**	**0**	**2**	**0**	**0**	**0**	**20**	**0**	**0**	**22**	**2**	**1**	**2**	**6**	**1**	**0**	63
7:45 AM	8:00 AM	**9**	**0**	**0**	**0**	**3**	**0**	**5**	**0**	**0**	**28**	**1**	**0**	**5**	**9**	**0**	**0**	60
8:00 AM	8:15 AM	**6**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**1**	**17**	**0**	**0**	**5**	**15**	**2**	**0**	59
8:15 AM	8:30 AM	**6**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**2**	**20**	**2**	**0**	**6**	**8**	**3**	**0**	52
8:30 AM	8:45 AM	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~10~~	~~0~~	~~0~~	~~25~~	~~1~~	~~0~~	~~1~~	~~11~~	~~0~~	~~0~~	0
8:45 AM	9:00 AM	~~6~~	~~0~~	~~0~~	~~0~~	~~3~~	~~0~~	~~11~~	~~0~~	~~0~~	~~15~~	~~0~~	~~1~~	~~2~~	~~15~~	~~4~~	~~0~~	0
AM Peak Hour Volumes		**29**	**0**	**3**	**0**	**3**	**0**	**42**	**0**	**3**	**87**	**5**	**1**	**18**	**38**	**6**	**0**	234
% of Total Traffic		12.4%	0.0%	1.3%		1.3%	0.0%	17.9%		1.3%	37.2%	2.1%		7.7%	16.2%	2.6%		
% Directional			13.7%				19.2%		**Intersection**		40.6%				26.5%			
AM Peak Hour Factor			***0.80***				***0.56***		**0.93**		***0.82***				***0.70***			

Begin Time	End Time	Eastbound (Camino Rojo)				Westbound (Camino Rojo)				Northbound (Country Club Rd.)				Southbound (Country Club Rd.)				
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	
4:00 PM	4:15 PM	~~3~~	~~0~~	~~1~~	~~0~~	~~1~~	~~0~~	~~12~~	~~0~~	~~0~~	~~22~~	~~3~~	~~0~~	~~6~~	~~30~~	~~4~~	~~1~~	0
4:15 PM	4:30 PM	~~5~~	~~1~~	~~0~~	~~0~~	~~1~~	~~0~~	~~10~~	~~0~~	~~0~~	~~18~~	~~2~~	~~0~~	~~16~~	~~21~~	~~11~~	~~0~~	0
4:30 PM	4:45 PM	~~5~~	~~0~~	~~0~~	~~0~~	~~3~~	~~0~~	~~7~~	~~0~~	~~1~~	~~17~~	~~2~~	~~0~~	~~17~~	~~22~~	~~7~~	~~0~~	0
4:45 PM	5:00 PM	**6**	**0**	**1**	**0**	**2**	**0**	**10**	**1**	**0**	**21**	**3**	**0**	**13**	**34**	**6**	**0**	96
5:00 PM	5:15 PM	**3**	**0**	**2**	**0**	**1**	**0**	**8**	**0**	**0**	**23**	**6**	**1**	**8**	**34**	**11**	**0**	96
5:15 PM	5:30 PM	**6**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**2**	**28**	**1**	**1**	**13**	**24**	**8**	**0**	90
5:30 PM	5:45 PM	**8**	**0**	**0**	**0**	**1**	**1**	**8**	**0**	**1**	**16**	**1**	**0**	**13**	**31**	**7**	**0**	87
5:45 PM	6:00 PM	~~5~~	~~0~~	~~3~~	~~0~~	~~1~~	~~1~~	~~5~~	~~0~~	~~1~~	~~14~~	~~5~~	~~0~~	~~15~~	~~30~~	~~7~~	~~0~~	0
PM Peak Hour Volumes		**23**	**0**	**5**	**0**	**4**	**1**	**32**	**1**	**3**	**88**	**11**	**2**	**47**	**123**	**32**	**0**	369
% of Total Traffic		6.2%	0.0%	1.3%		1.1%	0.3%	8.6%		0.8%	23.7%	3.0%		12.7%	33.2%	8.6%		
% Directional			7.5%				10.0%		**Intersection**		27.5%				54.4%			
PM Peak Hour Factor			***0.88***				***0.77***		**0.96**		***0.82***				***0.95***			

ROUTE 1 - DOWNTOWN - AGUA FRIA - TIERRA CONTENTA - SANTA FE PLACE

WEEKDAY OUTBOUND

Downtown Transit Center ❼	Agua Fria/ Alire ❻	Agua Fria/ Osage ❺	Agua Fria/ Siler ❹	Agua Fria/ Jemez ❸	Airport/ San Felipe ❷	Santa Fe Place ❶
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
6:50a	6:58a	7:02a	7:05a	7:12a	7:15a	7:29a
7:15a	7:24a	7:28a	7:32a	7:41a	7:44a	7:58a
7:45a	7:53a	7:57a	8:00a	8:07a	8:09a	8:23a
8:20a	8:28a	8:32a	8:35a	8:42a	8:44a	8:58a
8:50a	8:58a	9:02a	9:05a	9:12a	9:14a	9:28a
9:20a	9:28a	9:32a	9:35a	9:42a	9:44a	9:58a
9:50a	9:58a	10:02a	10:05a	10:12a	10:14a	10:28a
10:20a	10:28a	10:32a	10:35a	10:42a	10:44a	10:58a
10:50a	10:58a	11:02a	11:05a	11:12a	11:14a	11:28a
11:20a	11:28a	11:32a	11:35a	11:42a	11:44a	11:58a
11:50a	11:58a	12:02p	12:05p	12:12p	12:14p	12:28p
12:20p	12:28p	12:32p	12:35p	12:42p	12:44p	12:58p
12:50p	12:58p	1:02p	1:05p	1:12p	1:14p	1:28p
1:20p	1:28p	1:32p	1:35p	1:42p	1:44p	1:58p
1:50p	1:58p	2:02p	2:05p	2:12p	2:14p	2:28p
2:20p	2:28p	2:32p	2:35p	2:42p	2:44p	2:58p
2:49p	2:58p	3:02p	3:05p	3:12p	3:14p	3:28p
3:19p	3:28p	3:32p	3:35p	3:42p	3:44p	3:58p
3:49p	3:58p	4:02p	4:05p	4:12p	4:14p	4:28p
4:19p	4:28p	4:32p	4:35p	4:42p	4:44p	4:58p
4:49p	4:58p	5:02p	5:05p	5:12p	5:14p	5:28p
5:19p	5:28p	5:32p	5:35p	5:42p	5:44p	5:58p
5:49p	5:58p	6:02p	6:05p	6:12p	6:14p	6:28p
6:20p	6:28p	6:32p	6:35p	6:42p	6:44p	6:58p
6:50p	6:58p	7:02p	7:05p	7:12p	7:14p	7:28p
7:20p	7:28p	7:32p	7:35p	7:42p	7:44p	7:58p
8:[illegible]	8:28p	8:32p	8:35p	8:42p	8:44p	8:58p
9:[illegible]	9:28p	9:32p	9:35p	9:42p	9:44p	9:58p

WEEKDAY INBOUND

Santa Fe Place ❶	Airport/ San Felipe ❷	Agua Fria/ Jemez ❸	Agua Fria/ Siler ❹	Agua Fria/ Osage ❺	Agua Fria/ Alire ❻	Downtown Transit Center ❼
5:56a	6:10a	6:13a	6:20a	6:23a	6:26a	6:34a
6:26a	6:40a	6:43a	6:50a	6:53a	6:56a	7:04a
6:56a	7:10a	7:13a	7:20a	7:23a	7:26a	7:34a
7:36a	7:50a	7:53a	8:00a	8:03a	8:06a	8:14a
8:05a	8:19a	8:22a	8:29a	8:32a	8:35a	8:43a
8:30a	8:44a	8:47a	8:54a	8:57a	9:00a	9:08a
9:05a	9:19a	9:22a	9:29a	9:32a	9:35a	9:43a
9:35a	9:49a	9:52a	9:59a	10:02a	10:05a	10:13a
10:05a	10:19a	10:22a	10:29a	10:32a	10:35a	10:43a
10:35a	10:49a	10:52a	10:59a	11:02a	11:05a	11:13a
11:05a	11:19a	11:22a	11:29a	11:32a	11:35a	11:43a
11:35a	11:49a	11:52a	11:59a	12:02p	12:05p	12:13p
12:05p	12:19p	12:22p	12:29p	12:32p	12:35p	12:43p
12:35p	12:49p	12:52p	12:59p	1:02p	1:05p	1:13p
1:05p	1:19p	1:22p	1:29p	1:32p	1:35p	1:43p
1:35p	1:49p	1:52p	1:59p	2:02p	2:05p	2:13p
2:05p	2:19p	2:22p	2:29p	2:32p	2:35p	2:43p
2:35p	2:49p	2:52p	2:59p	3:02p	3:05p	3:13p
3:05p	3:19p	3:22p	3:29p	3:32p	3:35p	3:43p
3:35p	3:49p	3:52p	3:59p	4:02p	4:05p	4:13p
4:05p	4:19p	4:22p	4:29p	4:32p	4:35p	4:43p
4:35p	4:49p	4:52p	4:59p	5:02p	5:05p	5:13p
5:05p	5:19p	5:22p	5:29p	5:32p	5:35p	5:43p
5:35p	5:49p	5:52p	5:59p	6:02p	6:05p	6:13p
6:05p	6:19p	6:22p	6:29p	6:32p	6:35p	6:41p
6:35p	6:49p	6:52p	6:59p	7:02p	7:05p	7:11p
7:05p	7:19p	7:22p	7:29p	7:32p	7:35p	7:43p
-	-	-	-	-	-	-
8:05p	8:19p	8:22p	8:29p	8:32p	8:35p	8:43p
9:05p	9:19p	9:22p	9:29p	9:32p	9:35p	9:43p
-	-	-	-	-	-	-

ROUTE 1 - DOWNTOWN - AGUA FRIA - TIERRA CONTENTA - SANTA FE PLACE

SATURDAY OUTBOUND

Downtown Transit Center 7	Agua Fria/ Alire 6	Agua Fria/ Osage 5	Agua Fria/ Siler 4	Agua Fria/ Jemez 3	Airport/ San Felipe 2	Santa Fe Place 1
-	-	-	-	-	-	-
8:30a	8:38a	8:42a	8:45a	8:52a	8:54a	9:08a
9:30a	9:38a	9:42a	9:45a	9:52a	9:54a	10:08a
0:30a	10:38a	10:42a	10:45a	10:52a	10:54a	11:08a
1:30a	11:38a	11:42a	11:45a	11:52a	11:54a	12:08p
2:30p	12:38p	12:42p	12:45p	12:52p	12:54p	1:08p
1:30p	1:38p	1:42p	1:45p	1:52p	1:54p	2:08p
2:30p	2:38p	2:42p	2:45p	2:52p	2:54p	3:08p
3:30p	3:38p	3:42p	3:45p	3:52p	3:54p	4:08p
4:30p	4:38p	4:42p	4:45p	4:52p	4:54p	5:08p
5:30p	5:38p	5:42p	5:45p	5:52p	5:54p	6:08p
6:30p	6:38p	6:42p	6:45p	6:52p	6:54p	7:08p

SATURDAY INBOUND

Santa Fe Place 1	Airport/ San Felipe 2	Agua Fria/ Jemez 3	Agua Fria/ Siler 4	Agua Fria/ Osage 5	Agua Fria/ Alire 6	Downtown Transit Center 7
8:11a	8:25a	8:28a	8:35a	8:38a	8:41a	8:49a
9:15a	9:29a	9:32a	9:39a	9:42a	9:45a	9:53a
10:15a	10:29a	10:32a	10:39a	10:42a	10:45a	10:53a
11:15a	11:29a	11:32a	11:39a	11:42a	11:45a	11:53a
12:15p	12:29p	12:32p	12:39p	12:42p	12:45p	12:53p
1:15p	1:29p	1:32p	1:39p	1:42p	1:45p	1:53p
2:15p	2:29p	2:32p	2:39p	2:42p	2:45p	2:53p
3:15p	3:29p	3:32p	3:39p	3:42p	3:45p	3:53p
4:15p	4:29p	4:32p	4:39p	4:42p	4:45p	4:53p
5:15p	5:29p	5:32p	5:39p	5:42p	5:45p	5:53p
6:15p	6:29p	6:32p	6:39p	6:42p	6:45p	6:53p
7:15p	7:29p	7:32p	7:39p	7:42p	7:45p	7:53p

ROUTE 1 - DOWNTOWN - AGUA FRIA - TIERRA CONTENTA - SANTA FE PLACE

SUNDAY OUTBOUND

Downtown Transit Center 7	Agua Fria/ Alire 6	Agua Fria/ Osage 5	Agua Fria/ Siler 4	Agua Fria/ Jemez 3	Airport/ San Felipe 2	Santa Fe Place 1
8:30a	8:38a	8:42a	8:45a	8:52a	8:54a	9:08a
9:30a	9:38a	9:42a	9:45a	9:52a	9:54a	10:08a
0:30a	10:38a	10:42a	10:45a	10:52a	10:54a	11:08a
1:30a	11:38a	11:42a	11:45a	11:52a	11:54a	12:08p
2:30p	12:38p	12:42p	12:45p	12:52p	12:54p	1:08p
1:30p	1:38p	1:42p	1:45p	1:52p	1:54p	2:08p
2:30p	2:38p	2:42p	2:45p	2:52p	2:54p	3:08p
3:30p	3:38p	3:42p	3:45p	3:52p	3:54p	4:08p
4:30p	4:38p	4:42p	4:45p	4:52p	4:54p	5:08p
5:30p	5:38p	5:42p	5:45p	5:52p	5:54p	6:08p

SUNDAY INBOUND

Santa Fe Place 1	Airport/ San Felipe 2	Agua Fria/ Jemez 3	Agua Fria/ Siler 4	Agua Fria/ Osage 5	Agua Fria/ Alire 6	Downtown Transit Center 7
9:15a	9:29a	9:32a	9:39a	9:42a	9:45a	9:53a
10:15a	10:29a	10:32a	10:39a	10:42a	10:45a	10:53a
11:15a	11:29a	11:32a	11:39a	11:42a	11:45a	11:53a
12:15p	12:29p	12:32p	12:39p	12:42p	12:45p	12:53p
1:15p	1:29p	1:32p	1:39p	1:42p	1:45p	1:53p
2:15p	2:29p	2:32p	2:39p	2:42p	2:45p	2:53p
3:15p	3:29p	3:32p	3:39p	3:42p	3:45p	3:53p
4:15p	4:29p	4:32p	4:39p	4:42p	4:45p	4:53p
5:15p	5:29p	5:32p	5:39p	5:42p	5:45p	5:53p
-	-	-	-	-	-	-

NEW SCHEDULE EFFECTIVE - JANUARY 22, 2019
ROUTE 24 - SANTA FE PLACE - TIERRA CONTENTA - COUNTRY CLUB

WEEKDAY INBOUND

Paseo Del Sol West @ Airport Road ❸	Zafarano @ Camino de los Arroyos IB ❷	Santa Fe Place ❶
5:57a	6:09a	6:12a
6:35a	6:47a	6:50a
7:10a	7:22a	7:25a
7:45a	7:57a	8:00a
8:20a	8:32a	8:35a
8:55a	9:07a	9:10a
9:30a	9:42a	9:45a
10:05a	10:17a	10:20a
10:40a	10:52a	10:55a
11:15a	11:27a	11:30a
11:50a	12:02p	12:05p
12:25p	12:37p	12:40p
1:00p	1:12p	1:15p
1:35p	1:47p	1:50p
2:10p	2:22p	2:25p
2:45p	2:57p	3:00p
3:20p	3:32p	3:35p
3:55p	4:07p	4:10p
4:30p	4:42p	4:45p
5:05p	5:17p	5:20p
5:40p	5:52p	5:55p
6:15p	6:27p	6:30p
6:50p	7:02p	7:05p
7:25p	7:37p	7:40p
8:00p	8:12p	8:15p
9:15p	9:27p	9:30p
9:50p	10:02p	10:05p

WEEKDAY OUTBOUND

Santa Fe Place ❶	Zafarano @ Camino de los Arroyos OB ❷	Paseo Del Sol West @ Airport Road ❸
6:20a	6:23a	6:35a
6:55a	6:58a	7:10a
7:30a	7:33a	7:45a
8:05a	8:08a	8:20a
8:40a	8:43a	8:55a
9:15a	9:18a	9:30a
9:50a	9:53a	10:05a
10:25a	10:28a	10:40a
11:00a	11:03a	11:15a
11:35a	11:38a	11:50a
12:10p	12:13p	12:25p
12:45p	12:48p	1:00p
1:20p	1:23p	1:35p
1:55p	1:58p	2:10p
2:30p	2:33p	2:45p
3:05p	3:08p	3:20p
3:40p	3:43p	3:55p
4:15p	4:18p	4:30p
4:50p	4:53p	5:05p
5:25p	5:28p	5:40p
6:00p	6:03p	6:15p
6:35p	6:38p	6:50p
7:10p	7:13p	7:25p
7:45p	7:48p	8:00p
9:00p	9:03p	9:15p
9:35p	9:38p	9:50p
-	-	-

SATURDAY INBOUND

Paseo Del Sol West @ Airport Road ❸	Zafarano @ Camino de los Arroyos IB ❷	Santa Fe Place ❶
8:18a	8:30a	8:33a
9:28a	9:40a	9:43a
10:38a	10:50a	10:53a
11:48a	12:00p	12:03p
12:58p	1:10p	1:13p
2:08p	2:20p	2:23p
3:18p	3:30p	3:33p
4:28p	4:40p	4:43p
5:38p	5:50p	5:53p

SATURDAY OUTBOUND

Santa Fe Place ❶	Zafarano @ Camino de los Arroyos OB ❷	Paseo Del Sol West @ Airport Road ❸
8:13a	8:16a	8:28a
9:23a	9:26a	9:38a
10:33a	10:36a	10:48a
11:43a	11:46a	11:58a
12:53p	12:56p	1:08p
2:03p	2:06p	2:18p
3:13p	3:16p	3:28p
4:23p	4:26p	4:38p
5:33p	5:36p	5:48p

SUNDAY INBOUND

❸	❷	❶
8:18a	8:30a	8:33a
9:28a	9:40a	9:43a
10:38a	10:50a	10:53a
11:48a	12:00p	12:03p
12:58p	1:10p	1:13p
2:08p	2:20p	2:23p
3:18p	3:30p	3:33p
4:28p	4:40p	4:43p

SUNDAY OUTBOUND

❶	❷	❸
8:13a	8:16a	8:28a
9:23a	9:26a	9:38a
10:33a	10:36a	10:48a
11:43a	11:46a	11:58a
12:53p	12:56p	1:08p
2:03p	2:06p	2:18p
3:13p	3:16p	3:28p
4:23p	4:26p	4:38p



All U.S. Veterans Ride for Free with Santa Fe Trails & Santa Fe Ride

The City of Santa Fe would like to acknowledge the brave women and men who have served our great country. In an effort to show appreciation for U.S. Veterans, The City of Santa Fe Transit Division provides free bus service to all U.S. Veterans. Just show your U.S. Veterans Affairs I.D. card or your Transit Veterans I.D. card.

For details on how to acquire a Transit Veterans I.D. card, please contact Santa Fe Trails Administrative office at 955-2008 or visit www.takethetrails.com.

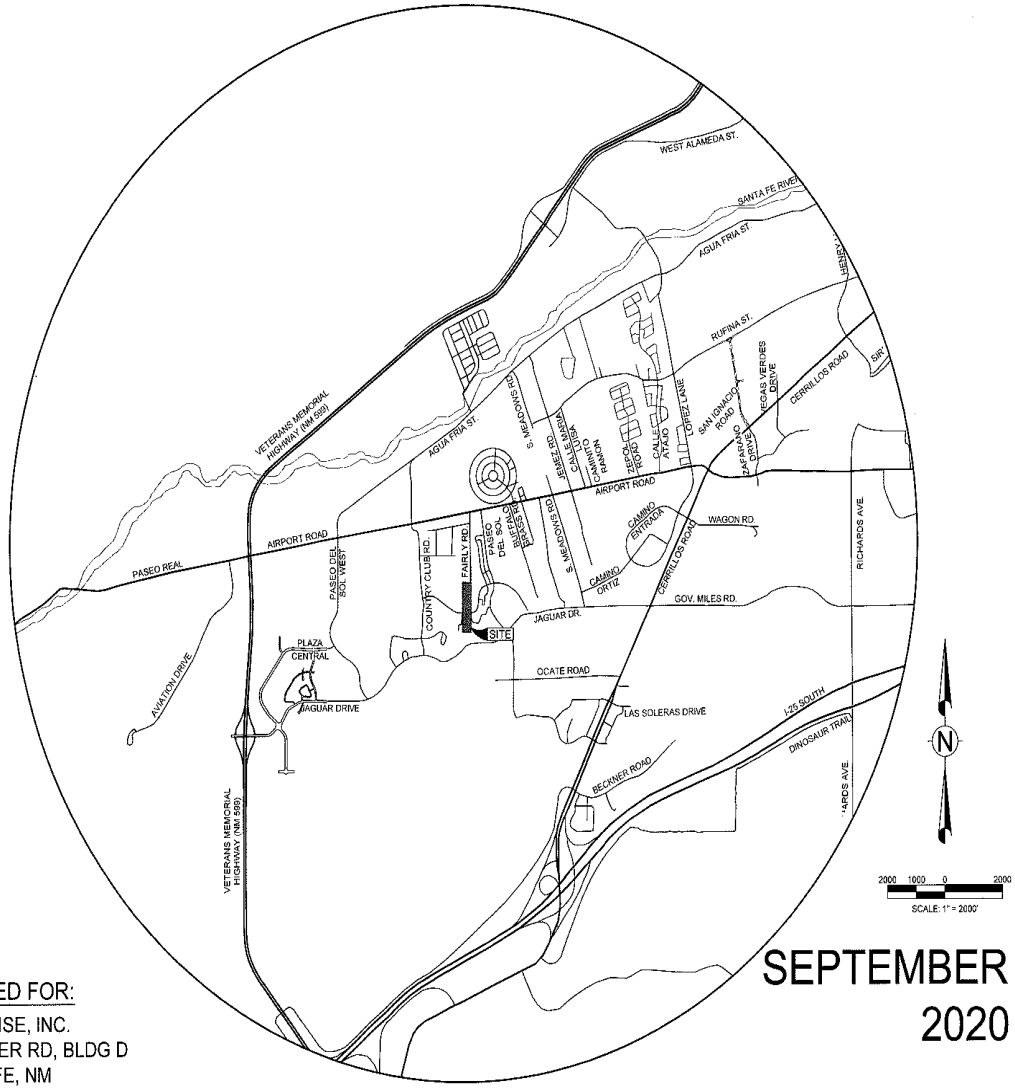
Thank you for your service, we are forever grateful.

A-59

PRELIMINARY PLAT SUBMITTAL
FOR MIRAFLORES SUBDIVISION

4193 B FAIRLY RD & 6450 CAMINO ROJO

CASE # 2020-002040



SEPTEMBER
2020

PREPARED FOR:

HOMEWISE, INC.
1301 SILER RD, BLDG D
SANTA FE, NM
87507

CITY OF SANTA FE, NEW MEXICO

SECTION 12, TOWNSHIP 16N, RANGE 8E

CASE # _____

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BUILDING PERMIT No's: (GRADING)_____ (LANDSCAPE/UTILITIES)_____

INFRASTRUCTURE CONSTRUCTION ADDRESS_____

ENGINEER'S STORMWATER INFRASTRUCTURE CERTIFICATION

I, UNDERSIGNED, BEING A PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE RECORD INFORMATION SHOWN HEREON IS BASED ON ACTUAL FIELD MEASUREMENTS AND VISUAL INSPECTIONS PERFORMED BY MYSELF OR UNDER MY DIRECT SUPERVISION.

I FURTHER CERTIFY THAT THE RECORD CONDITION OF THE SITE AS OF _____ IS IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN PREPARED BY _____, DATED _____.

_____
PRINTED NAME, NMPE NO._____, DATE_____

PROPERTY DEVELOPMENT MUST COMPLY WITH SECTION 14-8.12 (RELOCATION OF GUNNISON'S PRAIRIE DOGS.)

CITY OF SANTA FE DRAINAGE NOTES:

1. SUBJECT TO THE APPROVAL OF CITY OF SANTA FE PERMIT AND DEVELOPMENT REVIEW DIVISION STAFF, STORM DRAINAGE AND EROSION/SEDIMENT CONTROL IMPROVEMENTS SHALL BE EXECUTED IN CONJUNCTION WITH THE CONSTRUCTION OF EACH SEGMENT OF ROADS AND UTILITIES. THESE IMPROVEMENTS SHALL BE COMPLETED AND INSPECTED PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
2. MAINTENANCE OF PRIVATE DRAINAGE EASEMENTS AND DRAINAGE FACILITIES IS THE RESPONSIBILITY OF THE OWNER. THE CITY OF SANTA FE IS HEREBY GRANTED THE RIGHT TO ACCESS AND INSPECT THESE EASEMENTS AND DRAINAGE FACILITIES AT THE DISCRETION OF THE CITY. THE OWNER AGREES TO TO INDEMNIFY AND TO HOLD HARMLESS FROM ALL DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE CITY'S REASONABLE EXERCISE TO THEIR ACCESS AND INSPECTION RIGHT.

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND BASED UPON INFORMATION PROVIDED BY OTHERS, I ACCEPT THE RECORD DATA AS BEING ACCURATE AND APPLICABLE OR EQUAL.

_____
MICHAEL D. GOMEZ, N.M.P.E. NO. 9731
SANTA FE ENGINEERING CONSULTANTS, LLC.

JENKINSGAVIN
LAND USE/PROJECT MANAGEMENT
130 Grant Avenue, Suite 101
Santa Fe, NM 87501
505.820.7444

RICK CHATROOP
PROFESSIONAL LAND SURVEYOR
NEW MEXICO REGISTRATION NO. 11011
110 WAGON TRAIL RD. CERRILLOS, NM. 87010
(505) 470-0037

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

REV.	SHEETS	CITY ENGR.	DATE	REV.	SHEETS	CITY ENGR.	DATE

APPROVAL OF REVISIONS

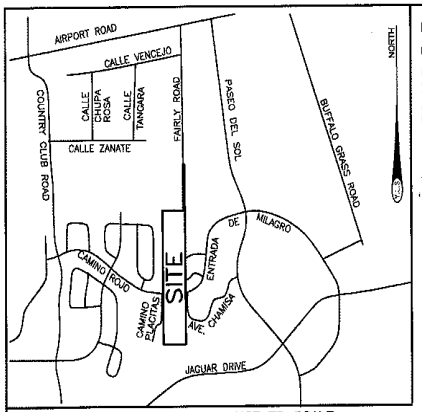
CITY OF SANTA FE

APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

COVER SHEET AND INDEX OF SHEETS

SHEET 1-1



VICINITY MAP – NOT TO SCALE

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:
The foregoing Lot Division of the parcel of land shown hereon, lying and being situate in Santa Fe County, New Mexico, is made in accordance with the wishes and desires of the undersigned owner and proprietor. These tracts are subject to all easements of record, and additional easements are hereby granted to all existing utilities within the boundaries of the shown tracts.

AFFIDAVIT

The proposed Lot Division lies within the planning and platting jurisdiction of the City of Santa Fe.

JOSEPH J. SCHIEL, Power of Attorney for The Marie M. Oglevie Revocable Trust

State of New Mexico)
County of Santa Fe) ss

The foregoing instrument was subscribed, sworn to and acknowledged before me this 1st day of April, 20 10.

My Commission Expires June 23, 2012

Notary Public

SURVEYOR'S CERTIFICATION

I, SCOTT YAGER, a New Mexico registered Professional Surveyor, certify that I conducted and am responsible for this survey, that this survey is true and correct to the best of my knowledge and belief, and that this survey and plat meet the Minimum Standards for Surveying in New Mexico.

Date of field work: March, 2010

SCOTT YAGER, NMLS 8123 — DATE 4/6/10

STATE OF NEW MEXICO)ss
COUNTY OF SANTA FE)ss

I hereby certify that this instrument was filed for record on the 14 day of May A.D., 20 10, at 3:09 PM o'clock P M., and was duly recorded in Book 719, Page 016 of the records of Santa Fe County.

Witness my hand and Seal of Office
VALERIE ESPINOZA
County Clerk, Santa Fe County, NM

Deputy

LEGEND

- ● SURVEY MONUMENT; Found, as noted
- ○ SURVEY MONUMENT; Set this survey; 1/2 inch Rebar, YAGER/8123 aluminum cap
- ✎ UTILITY POLE

SCALE 1"=60' FEET
60 0 60

717016

LOT 1
6.260 Ac±
Address: 4193 B Fairly Road

LOT 2
3.787 Ac±
ADDRESS: 6450 CAMINO ROJO

T. J. HENRY TRACT

BEARING BASE

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:

1. New Mexico Gas Company for installation, maintenance and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.

2. Public Service Company of New Mexico for the installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment, fixtures, structures and related facilities reasonable necessary to provide electrical service.

3. Qwest for installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

4. Cable TV for installation, maintenance and service of such lines, cable and other related equipment and facilities reasonably necessary to provide Cable TV service.

Included, in the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate and maintain facilities for the purposes described above, together with free access to, from, and over said right of way and easement, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, and to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (above ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM) and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

UTILITY COMPANY APPROVALS

Easements are hereby granted for all existing utilities and the tracts shown are subject to all easements of record.

PNM Electric Services — DATE 4/9/10
NEW MEXICO GAS COMPANY — DATE 4-8-10
QWEST Communications Services — DATE 4/8/10

QWEST Communications, Inc. Disclaimer
This plat has been approved for easement purposes only. The signing of this plat by QWEST Communications, Inc. does not in any way guarantee telephone service to the subject tracts.

Comcast Cable Company — DATE 4-8-10

NOTES AND REFERENCE DOCUMENTS

1) THE BEARINGS FOR THIS SURVEY WERE BASED ON THE WEST BOUNDARY LINE OF THE TRACT OF LAND NOTED AS THAT OF "T.J. HENRY," AS SHOWN ON THE PLAT OF SURVEY TITLED "PLAT OF LOTS 8 AND 9, SECTION 12, T.16 N, R.8 E., NMPM&B, SANTA FE COUNTY, NEW MEXICO," AS SAID PLAT WAS PREPARED BY WALTER G. TURLEY, NMPE&LS 95, DATED FEBRUARY 11, 1949.

2) THE PERIMETER BOUNDARY PORTION OF THIS PLATTING IS INTENDED TO REPRESENT A RETRACEMENT SURVEY OF THE TRACTS SHOWN ON THE ABOVE NOTED PLAT OF SURVEY, USING FOUND AND ACCEPTED MONUMENTATION, AS NOTED.

3) THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY YAGER LAND SURVEYS OF THE TRACTS OF LAND SHOWN HEREON. ALL INFORMATION REGARDING RECORD EASEMENTS, ADJOINERS, AND OTHER DOCUMENTS THAT MIGHT AFFECT THE QUALITY OF TITLE TO THE LANDS SHOWN HEREON WAS OBTAINED FROM FILE NO. 1396445-SF-01, PREPARED BY FIRST AMERICAN TITLE COMPANY OF SANTA FE, NEW MEXICO.

4) THE LANDS SHOWN HEREON ARE SUBJECT TO ALL RESERVATIONS, RESTRICTIONS, COVENANTS AND EASEMENTS OF RECORD THAT PERTAIN.

5) PROPERTY DEVELOPEMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.

6) PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH APPLICABLE CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND/OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK, OR SUBMITTAL FOR A BUILDING PERMIT APPLICATION THAT MODIFIES ANY PROVISION OF CHAPTER 14, LAND DEVELOPEMENT CODE, SFCC1987 AND SUBSEQUENT AMENDMENTS.

7) THE LANDS SHOWN HEREON LIE IN A ZONE X, AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN. F.I.R.M. PANEL 35049C393D; EFFECTIVE DATE JUNE 17, 2008.

REVIEWED BY:

CITY OF SANTA FE
CITY ENGINEER FOR LAND USE — DATE 05/19/10
CITY PLANNER — DATE 5.7.10

Approved by the SUMMARY COMMITTEE at their meeting of MARCH 4, 2010 as Case No. 2010-06

Chairperson — Date 4-27-10 — Secretary — Date 5/29/10

INDEXING INFORMATION FOR COUNTY CLERK

MARIE M. OGLEVIE, Trustee of the Marie M. Oglevie Revocable Trust
RECORD DEED: Instrument No. 1107,887
SECTION: SECTION 12 TOWNSHIP: 16 NORTH, RANGE: 8 EAST N.M.P.M.
U.P.C. : 1-048-095-246-139

A LOT SPLIT PLAT
Prepared for
MARIE M. OGLEVIE REVOCABLE TRUST
of a
Tract of Land Previously Surveyed as
A Portion of Lots 8 and 9 of
Section 12, T. 16 N., R. 8 E.
And Identified as the

T. J. HENRY TRACT

Walter G. Turley Plat 49-F-7
Dated February 11, 1949

4193 B FAIRLY ROAD
SANTA FE COUNTY, NEW MEXICO

YAGER LAND SURVEYS
2387 SOUTH ROAD SANTA FE NEW MEXICO
505-983-8172

DATE: 4/8/10
SCALE: 1"=60'
SHEET 1 of 1

SHEET 2-1

P:\MARIE OGLEVIE, FAIRLY ROAD\LOT ... TY\PLAT\FINAL, 4-6-10\FINAL, Co. 3\2010-04-08 OGELVIE.DP ... 5.dwg, 4/8/2010 10:17:31 AM, dleraPDF

NORTH

TRUE

12°

MAG.

SCALE 1"=80'

80' 80'

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT AND THE NOTES HEREON ARE AN ACCURATE DELINEATION OF A FIELD SURVEY COMPLETED BY ME OR UNDER MY DIRECTION ON MAY 15TH, 2020, AND ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEET THE MINIMUM STANDARDS FOR PROFESSIONAL LAND SURVEYORS PRACTICING IN NEW MEXICO.

RICHARD A. CHATROOP N.M.P.L.S. #11011

SANITARY SEWER DATA

MANHOLE	RIM ELEVATION	INVERT ELEVATION
A	6437.6'	6430.5'
B	6429.5'	6419.7'
C	6428.5'	6417.3'
D	6425.2'	6418.6'
E	6427.1'	6420.1'

DENOTES ELM TREE AVG. 1.5' DIA

DENOTES EVERGREEN OVER 8' TALL

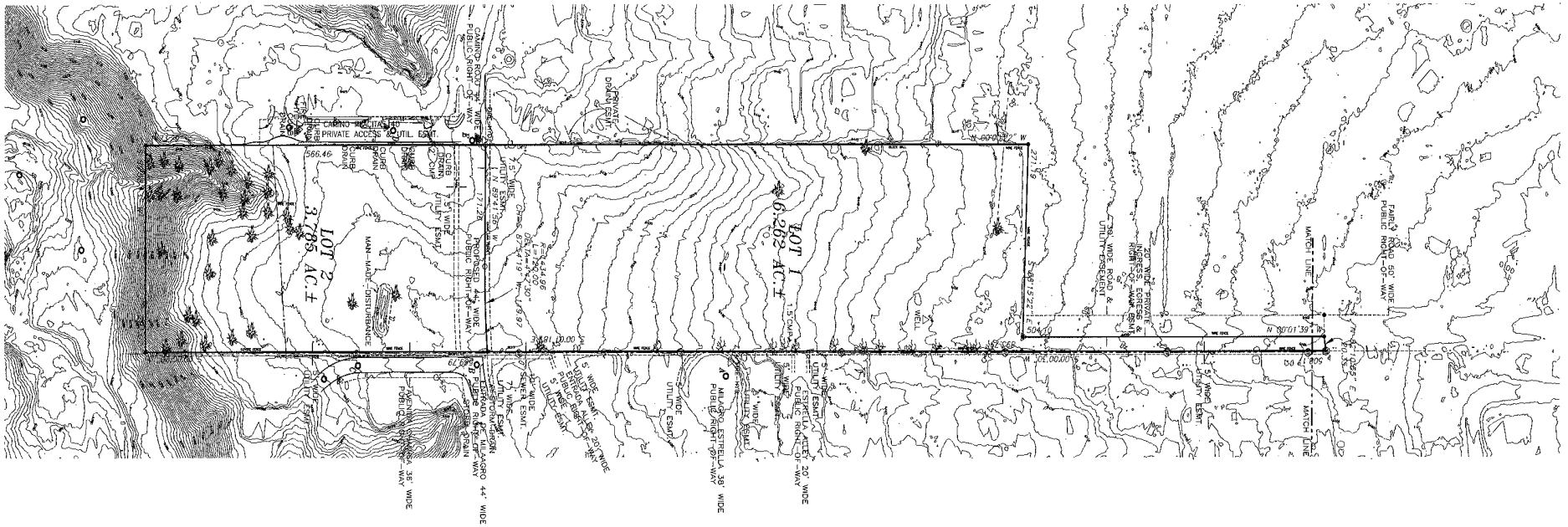
LEGEND AND NOTES

- DENOTES UTILITY BOX
- DENOTES MANHOLE AS NOTED
- DENOTES SPIGOT
- DENOTES TEL RISER OR AS NOTED
- DENOTES WATER VALVE OR MTR.
- DENOTES LAMP
- DENOTES POINT FOUND (AS NOTED)
- DENOTES POINT SET THIS SURVEY
- DENOTES POINT CALCULATED
- DENOTES EDGE OF EASEMENT
- DENOTES UTILITY POLE W/OVERHEAD LINES
- DENOTES FENCE LINE

1. BASIS OF BEARING IS FROM GSP OBSERVATION WGS84

LOT OF RECORD IS FROM "A LOT SPLIT PLAT PREPARED FOR MARIE M. OLGLEVIE REVOCABLE TRUST" BY SCOTT YAGER NMPLS# 8123 AND FILED IN PLAT BOOK 717, PG. 16 IN THE OFFICE OF THE SANTA FE COUNTY CLERK

2. THIS PLAT IS SUBJECT TO ANY EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD.


LOT 2
3.783 AC.±
LOT 1
6.262 AC.±
CAMINO MIRAFLORES
PUBLIC RIGHT-OF-WAY
PRIVATE ACCESS & UTIL. ESMT.
CURB CUT
CURB RAMP
5' WIDE UTILITY ESMT.
MAN-MADE DISTURBANCE
CAMINO DE LA TIERRA
PUBLIC RIGHT-OF-WAY
36' WIDE
CAMINO DE LA ESTRELLA
PUBLIC RIGHT-OF-WAY
44' WIDE
5' WIDE SEWER ESMT.
5' WIDE UTILITY ESMT.
CAMINO DE LA MILAGRO
PUBLIC RIGHT-OF-WAY
30' WIDE
WELL
20' WIDE PRIVATE INGRESS, EGRESS & UTILITY EASEMENT
MATCH LINE
FARM ROAD
PUBLIC RIGHT-OF-WAY
50' WIDE
566.46'
504.10'
271.19'
N 89°41'39" W 1771.28'
N 89°41'39" W 1769.97'
N 00°01'39" W
S 00°00'00" E
S 89°15'22" E
N 00°01'39" W
R=434.96'
Δ=4°42'30"
L=35.71'
CH=35.70'
S 87°19'54" W
CH=1769.97'
N 89°41'39" W 1771.28'
S 00°00'00" E 1991.00'
N 00°01'39" W 1809.00'
S 89°15'22" E 1355.65'
N 00°01'39" W 1809.00'
N 00°01'39" W 504.10

NORTH

TRUE

12°

MAG.

SCALE 1"=80'

60' 80'

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RICHARD A. CHATROOP N.M.P.L.S. #11011

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DENOTES ELM TREE AVG. 1.5' DIA

DENOTES EVERGREEN OVER 8' TALL

LEGEND AND NOTES

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- DENOTES LAMP
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- DENOTES EDGE OF EASEMENT
- DENOTES UTILITY POLE W/OVERHEAD LINES
- DENOTES FENCE LINE

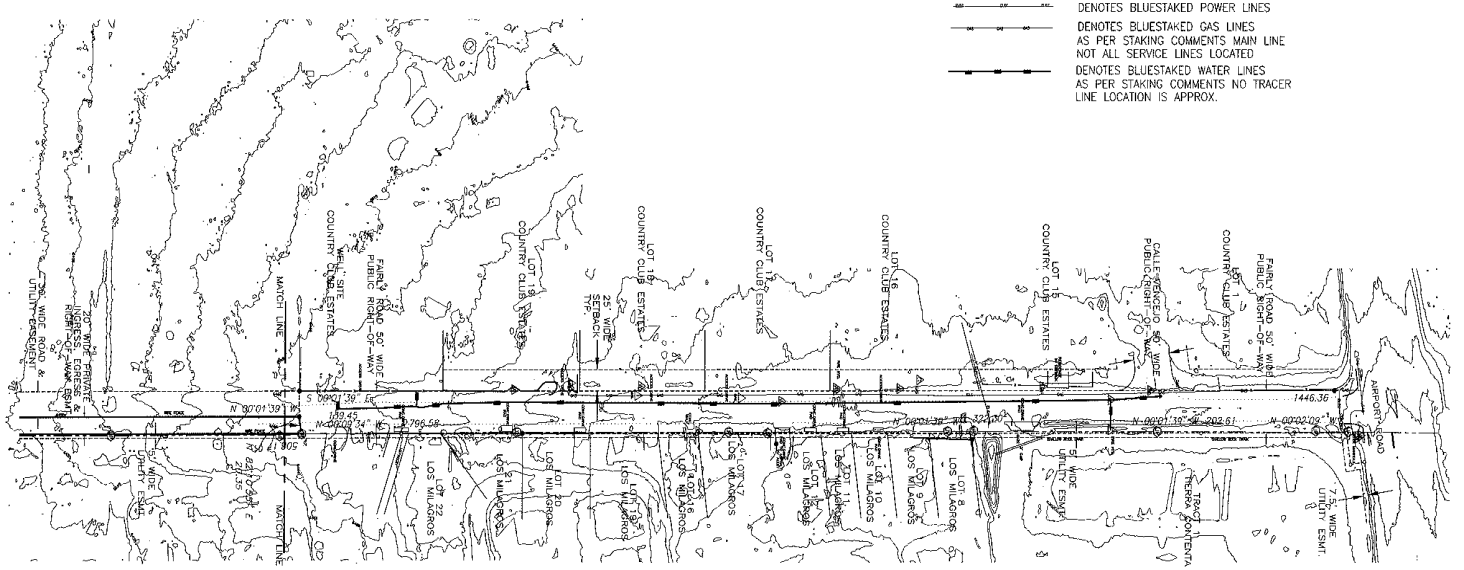
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2. THIS PLAT IS SUBJECT TO ANY EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD.

BLUESTAKE UTILITY LEGEND #20AG040559

- DENOTES BLUESTAKED POWER LINES
- DENOTES BLUESTAKED GAS LINES AS PER STAKING COMMENTS MAIN LINE NOT ALL SERVICE LINES LOCATED
- DENOTES BLUESTAKED WATER LINES AS PER STAKING COMMENTS NO TRACER LINE LOCATION IS APPROX.



TOPOGRAPHIC PLAN
PRELIMINARY PLAT

MIRAFLORES SUBDIVISION

LYING WITHIN SECTION 12, T16N, R8E, NMPM, SANTA FE COUNTY, NEW MEXICO.

RICK CHATROOP
PROFESSIONAL LAND SURVEYOR
NEW MEXICO REGISTRATION NO. 11011
(505) 470-0037 110 WAGON TRAIL RD. CERRILLOS, NM. 87010

INDEXING INFORMATION FOR THE COUNTY CLERK

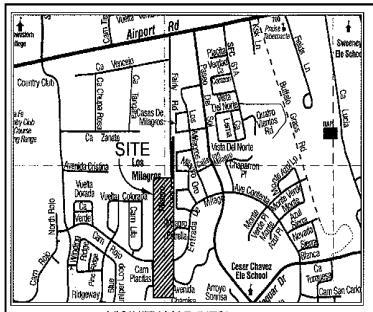
OWNER: HOMEWISE UPC#: 1-048-095-254-170 & 1-048-095-254-094

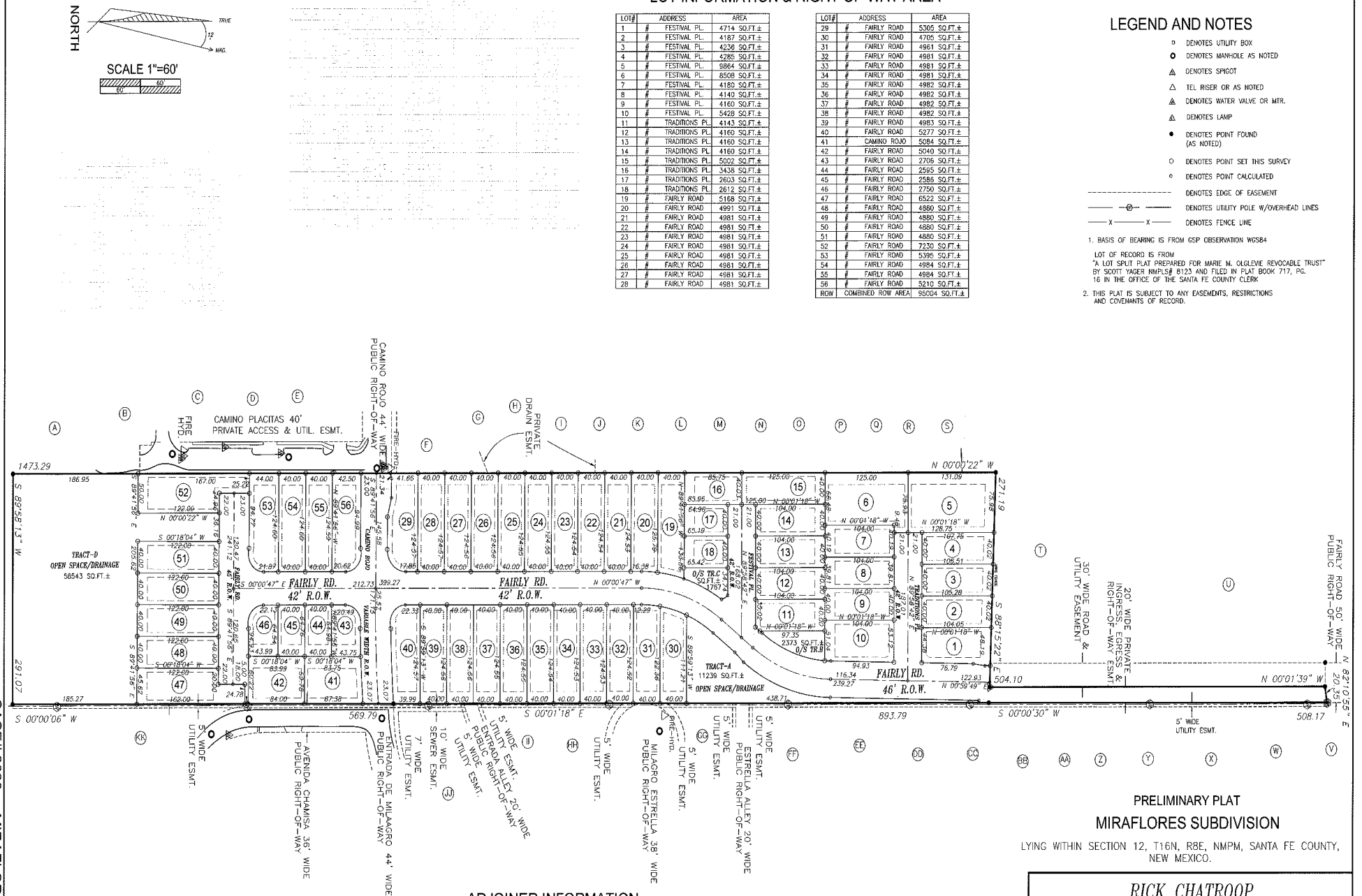
LOCATION: LYING WITHIN SECTION 12, T16N, R8E, NMPM, SANTA FE COUNTY, NEW MEXICO.

SHEET S-4

SHEET 2-3

CASE# 2020- MIRAFLORES SUBDIVISION


Airport Rd
Camino Real
Vereda
Country Club
Ca Vereda
Ca Zanate
SITE
Los Milagros
Avenida Chamisa
Vuelta Dorada
Vuelta Colonia
Ca Perdiz
Ca Paloma
Ca Paisano
Ca Ligero
Ca Tumbado
Ca Tumbaburro
Ca Tumbaburro Pl
Ca Tumbaburro Ct
Ca Tumbaburro Ln
Ca Tumbaburro Cir
Ca Tumbaburro Way
Ca Tumbaburro Trl
Ca Tumbaburro Rd
Ca Tumbaburro Ave
Ca Tumbaburro Blvd
Ca Tumbaburro Pkwy
Ca Tumbaburro Sq
Ca Tumbaburro Ter
Ca Tumbaburro Xing
Ca Tumbaburro Vista
Ca Tumbaburro Hill
Ca Tumbaburro Glen
Ca Tumbaburro Dell
Ca Tumbaburro Grove
Ca Tumbaburro Park
Ca Tumbaburro Plaza
Ca Tumbaburro Square
Ca Tumbaburro Terrace
Ca Tumbaburro Crossing
Ca Tumbaburro Junction
Ca Tumbaburro Bridge
Ca Tumbaburro Tunnel
Ca Tumbaburro Overpass
Ca Tumbaburro Underpass
Ca Tumbaburro Interchange
Ca Tumbaburro Roundabout
Ca Tumbaburro Circle
Ca Tumbaburro Loop
Ca Tumbaburro Cul-de-sac
Ca Tumbaburro Dead End
Ca Tumbaburro Alley
Ca Tumbaburro Lane
Ca Tumbaburro Road
Ca Tumbaburro Street
Ca Tumbaburro Avenue
Ca Tumbaburro Boulevard
Ca Tumbaburro Parkway



LOT INFORMATION & RIGHT-OF-WAY AREA

LOT#	ADDRESS	AREA
1	# FESTIVAL PL.	4714 SQ.FT.±
2	# FESTIVAL PL.	4187 SQ.FT.±
3	# FESTIVAL PL.	4236 SQ.FT.±
4	# FESTIVAL PL.	4285 SQ.FT.±
5	# FESTIVAL PL.	9864 SQ.FT.±
6	# FESTIVAL PL.	8508 SQ.FT.±
7	# FESTIVAL PL.	4180 SQ.FT.±
8	# FESTIVAL PL.	4140 SQ.FT.±
9	# FESTIVAL PL.	4160 SQ.FT.±
10	# FESTIVAL PL.	5428 SQ.FT.±
11	# TRADITIONS PL.	4143 SQ.FT.±
12	# TRADITIONS PL.	4160 SQ.FT.±
13	# TRADITIONS PL.	4160 SQ.FT.±
14	# TRADITIONS PL.	4160 SQ.FT.±
15	# TRADITIONS PL.	5002 SQ.FT.±
16	# TRADITIONS PL.	3438 SQ.FT.±
17	# TRADITIONS PL.	2603 SQ.FT.±
18	# TRADITIONS PL.	2612 SQ.FT.±
19	# FAIRLY ROAD	5168 SQ.FT.±
20	# FAIRLY ROAD	4991 SQ.FT.±
21	# FAIRLY ROAD	4981 SQ.FT.±
22	# FAIRLY ROAD	4981 SQ.FT.±
23	# FAIRLY ROAD	4981 SQ.FT.±
24	# FAIRLY ROAD	4981 SQ.FT.±
25	# FAIRLY ROAD	4981 SQ.FT.±
26	# FAIRLY ROAD	4981 SQ.FT.±
27	# FAIRLY ROAD	4981 SQ.FT.±
28	# FAIRLY ROAD	4981 SQ.FT.±

LOT#	ADDRESS	AREA
29	# FAIRLY ROAD	5305 SQ.FT.±
30	# FAIRLY ROAD	4705 SQ.FT.±
31	# FAIRLY ROAD	4961 SQ.FT.±
32	# FAIRLY ROAD	4981 SQ.FT.±
33	# FAIRLY ROAD	4981 SQ.FT.±
34	# FAIRLY ROAD	4981 SQ.FT.±
35	# FAIRLY ROAD	4982 SQ.FT.±
36	# FAIRLY ROAD	4982 SQ.FT.±
37	# FAIRLY ROAD	4982 SQ.FT.±
38	# FAIRLY ROAD	4982 SQ.FT.±
39	# FAIRLY ROAD	4983 SQ.FT.±
40	# FAIRLY ROAD	5277 SQ.FT.±
41	# CAMINO ROJO	5084 SQ.FT.±
42	# FAIRLY ROAD	5040 SQ.FT.±
43	# FAIRLY ROAD	2706 SQ.FT.±
44	# FAIRLY ROAD	2595 SQ.FT.±
45	# FAIRLY ROAD	2586 SQ.FT.±
46	# FAIRLY ROAD	2750 SQ.FT.±
47	# FAIRLY ROAD	6522 SQ.FT.±
48	# FAIRLY ROAD	4880 SQ.FT.±
49	# FAIRLY ROAD	4880 SQ.FT.±
50	# FAIRLY ROAD	4880 SQ.FT.±
51	# FAIRLY ROAD	4880 SQ.FT.±
52	# FAIRLY ROAD	7230 SQ.FT.±
53	# FAIRLY ROAD	5395 SQ.FT.±
54	# FAIRLY ROAD	4984 SQ.FT.±
55	# FAIRLY ROAD	4984 SQ.FT.±
56	# FAIRLY ROAD	5210 SQ.FT.±
ROW	COMBINED ROW AREA	95004 SQ.FT.±

LEGEND AND NOTES

- DENOTES UTILITY BOX
- DENOTES MANHOLE AS NOTED
- DENOTES SPIGOT
- DENOTES TEL RISER OR AS NOTED
- DENOTES WATER VALVE OR MTR.
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1. BASIS OF BEARING IS FROM GSP OBSERVATION WGS84

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2. THIS PLAT IS SUBJECT TO ANY EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD.

ADJOINER INFORMATION

LETTER	OWNER	DOCUMENT#
A	GENOWAY	1431436
B	ANDERSON	1315722
C	FERNANDEZ	1898071
D	JARAMILLO	1333897
E	ROMERO	1325355
F	MONTOYA	1342288
G	MENDOZA	1482010
H	MEEKS	1834249
I	PEARSON-KRAMER	1348113
J	ORTIZ	1858250

K	LUCERO	1349338
L	STANLEY	1795252
M	LANGDON	1310905
N	ROUGEMONT	1317435
O	DUNETZ	1452886
P	GARCIA	1765793
Q	SALS	1329973
R	PRICHARD	1805920
S	HARVEY	1323043
T	ZZYZX CORP.	1797821
U	ZZYZX CORP.	1797821

V	ARAGONCILLO	BK.2334-PG.326
W	RUDOFF	1858238
X	SVARD	1789816
Y	BLAKE	1584716
Z	CRONEY	1831614
AA	JAMES	BK.1416-PG.986
BB	GAUMER	1495936
CC	WELLS	7868950
DD	PHELAN	1452912
EE	SANDOVAL	BK.1338-PG.314
FF	VASQUEZ	BK.1346-PG.599

GG	LEYENDECKER	1825679
HH	LUCERO	1809156
II	KORONEOS	BK.1317-PG.888
JJ	HOPKINS	BK.1314-PG.523
KK	MORI	1815599

PRELIMINARY PLAT

MIRAFLORES SUBDIVISION

LYING WITHIN SECTION 12, T16N, R8E, NMPM, SANTA FE COUNTY, NEW MEXICO.

RICK CHATROOP
PROFESSIONAL LAND SURVEYOR
NEW MEXICO REGISTRATION NO. 11011
(505) 470-0037 110 WAGON TRAIL RD. CERRILLOS, NM. 87010

INDEXING INFORMATION FOR THE COUNTY CLERK

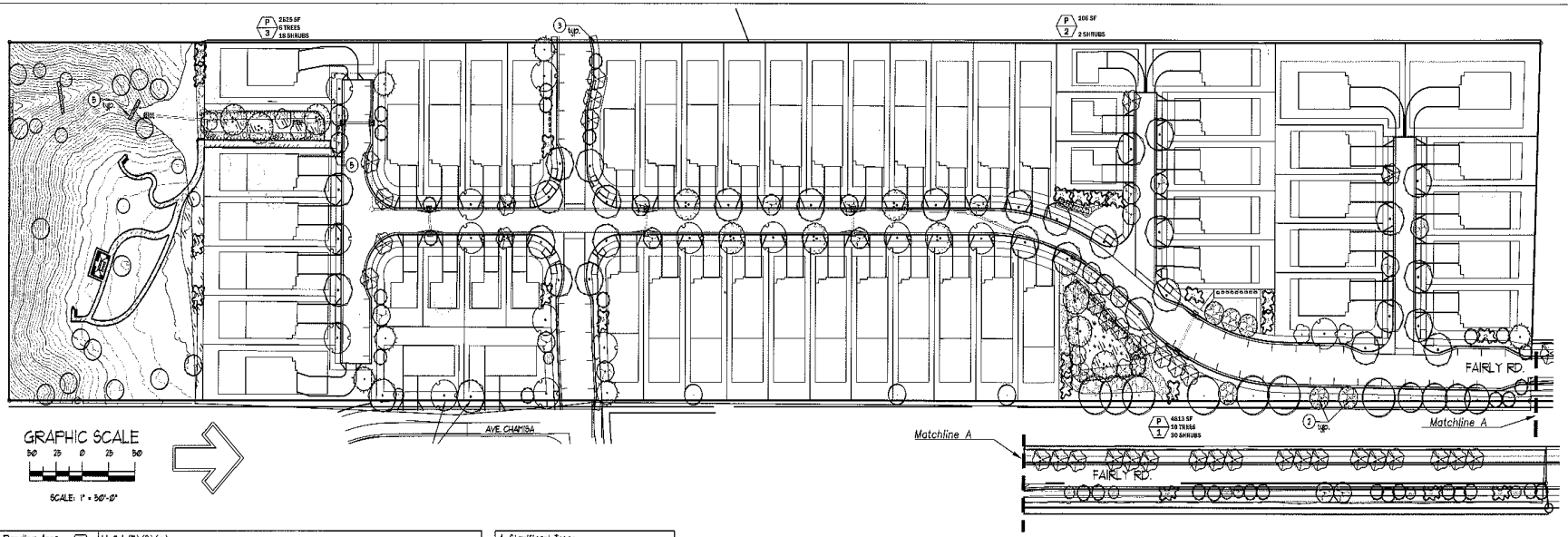
OWNER: HOMEWISE UPC#: 1-048-095-254-170 & 1-048-095-254-094

LOCATION: LYING WITHIN SECTION 12, T16N, R8E, NMPM, SANTA FE COUNTY, NEW MEXICO.

SHEET S-2

SHEET 3-2

CASE# 2020- MIRAFLORES SUBDIVISION

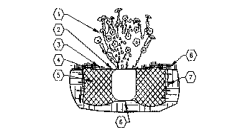


1: Stormwater Ponding Area	P X	14-8.4 (F) (2) (e)	
Ponding Area 1 = 4812 SF Ponding Area 2 = 1016 SF Ponding Area 3 = 2625 SF		"Minimum of one tree and three shrubs per five hundred (500) square feet of required ponding area."	
		Required Trees = 16	Required Shrubs = 46
Total Ponding Area = 7543 SF		Provided Trees = 16	Provided Shrubs = 50
2: Open Space(s)		14-8.4 (H) Open Space Planting Requirements	
		Required Open Space Ø SF Provided Open Space 112430 SF	
3: Right-of-Way Landscape		14-8.4 (G) Street Tree Standards (2)(a-b) On major and secondary arterials, one tree an average of every thirty (30) to forty (40) feet. On major and secondary arterials, on all other streets one tree an average of every twenty-five (25) to thirty-five (35) feet.	
		ROW = 5230 LF	Required Trees = 175
			Provided Trees = 175 (161 new)

4: Significant Trees	
Existing 8" pine/junipers	= 37
Existing 15"+ elm tree	= 14
Preserved 8" pine/juniper	= 23
Preserved 15"+ elm trees	= 14
Removed 8" pine/junipers	= 14
Removed 15"+ elm trees	= Ø
Replacement pines	= 14
Replacement 15"+ elm trees	= Ø

SHEET KEYED NOTES

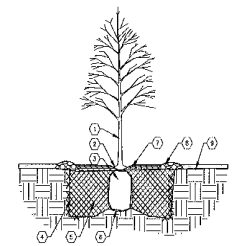
CODE	DESCRIPTION
1.	STREET TREES LOCATED ON PRIVATE PROPERTY WHERE STREET DIMENSIONS CANNOT ACCOMMODATE RIGHT-OF-WAY PLANTING STRIPS.
2.	STREET TREES LOCATED WITHIN THE RIGHT OF WAY SHALL BE PLANTED IN COMPLIANCE WITH CHAPTER 23 SFCC 1987 STREETS, SIDEWALKS AND PUBLIC PLACES AND IN COMPLIANCE WITH ADOPTED MEDIAN AND PARKWAY STANDARDS.
3.	OPEN SPACE AND/OR RIGHT-OF-WAY PLANTING AREAS SHALL BE RECESSED UP TO 6"± BELOW ADJACENT SURFACES TO ENSURE WATER CAPTURE WITHIN LANDSCAPE AREA.
4.	MATCH ADJACENT TRAIL AND SIDEWALK SURFACES.
5.	CHECK DAM. SEE CIVIL.



SHRUB PLANTING KEYED NOTES

1. MINOR LOCATION SHRUBS ARE CONCEIVED AS PER PLAN.
2. INSTALL TOP OF ROOT BALL FLUSH WITH SURROUNDING FINISH OF FINISH.
3. USE LOOSE SOIL BACKFILL TO OVER ROOTBALL, TAMPERED TO A 3" DEPTH AND HOLD BACK 3" FROM CRUBS AND STEMS.
4. 3" MULCH WATER BASIN.
5. BACKFILL PER SPECIFICATIONS. LIGHTLY TAMP IN LIFTS AND WATER IN TO ELIMINATE VOIDS AND AIR POCKETS.
6. AMEND/AERATE NATIVE SOIL.
7. SCARIFY AND LOOSEN EDGES OF PLANTING PIT.
8. FINISH - SEE PLANTING PLAN, 3" DEPTH MULCH OVERHEAD NOTED

1 SHRUB PLANTING
NTS — SHRUB PLANTING DETAIL



TREE PLANTING KEYED NOTES

1. TREE LOCATION, SPECIES, AND CONDITION AS PER PLAN.
2. REMOVING EXISTING SOIL FROM NURSERY AS NEEDED TO EXPOSE ROOT FLARE. INSTALL WITH ROOT FLARE FLUSH WITH SURROUNDING FINISH OF FINISH.
3. INSTALL TREE PLANTING REMOVE WIRE BASKET, BURLAP, TWINE, AND/OR ROPE FROM TOP 50% BACKFILL. REMOVE BURLAP EXCEPT FROM BOTTOM OF ROOT BALL.
4. SCARIFY AND LOOSEN EDGES OF PLANTING PIT.
5. BACKFILL PER SPECIFICATIONS. LIGHTLY TAMP IN LIFTS AND WATER IN TO ELIMINATE VOIDS AND AIR POCKETS.
6. AMEND/AERATE NATIVE SOIL UNDER ROOTBALL TO PREVENT SETTLING.
7. INSTALL GOOD QUALITY ORGANIC PEELOW OVER ROOTBALL AND BELOW DRIP LINE GENERALLY. PEELOW BACKUP BE HELD 4" BACK FROM TREE TRUNK.
8. 4" MULCH 6" WATER BASIN AT DRIP LINE.
9. FINISH - SEE PLANTING PLAN

2 TREE PLANTING
NTS — TREE PLANTING DETAIL

GENERAL NOTES

LANDSCAPE MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE PROPERTY OWNER SHALL MAINTAIN STREET TREES AND LANDSCAPE AREAS IN A LIVING, HEALTHY, AND ATTRACTIVE CONDITION.

POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES IS TO REMAIN AFTER ALL LANDSCAPE WORK IS COMPLETED.

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE OR IMPLY EXEMPTION FROM ANY ORDINANCES INCLUDING BUT NOT LIMITED TO WATER-WASTE PROVISIONS. WATER MANAGEMENT IS THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER.

ALL LANDSCAPING WILL BE IN CONFORMANCE WITH THE CITY OF SANTA FE ZONING CODES, LAND-USE ORDINANCES, AND WATER CONSERVATION ORDINANCES. IN GENERAL, WATER-CONSERVATIVE, ENVIRONMENTALLY-SOUND LANDSCAPE PRINCIPLES WILL BE FOLLOWED IN DESIGN AND INSTALLATION.

GRAVEL OVER FILTER FABRIC TO A MINIMUM DEPTH OF 3" SHALL BE PLACED IN ALL LANDSCAPE AREAS WHICH ARE NOT DESIGNATED TO RECEIVE NATIVE SEED OR OTHER MATCHED GROUNDCOVER AREA. ALL GRAVEL SHALL BE PLACED 3"-1" LOWER THAN ADJACENT HARD SURFACES.

PRIOR TO CONSTRUCTION, LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITY LINES. IN CASE OF A DISCREPANCY BETWEEN UTILITIES INDICATED ON PLAN AND ACTUAL FIELD VERIFICATION, CONTRACTOR SHALL CEASE WORK AND NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY FOR DIRECTIONS ON HOW TO PROCEED.

SQUARE FOOTAGES AND MATERIAL QUANTITIES IN SCHEDULES AND LEGENDS ARE PROVIDED FOR CONVENIENCE ONLY AND ALL DRAWN AND INDICATED PLAN QUANTITIES AND AREAS SHALL PREVAIL. SHOULD DISCREPANCIES EXIST.

LANDSCAPE LEGEND

SYMB.	Size (Install)	Common/Botanical	Size (Mature H x W)	Water Use	QTY.
		Trees			
	2" Cal.	Box Elder *Acer negundo*	30' x 25'	M	11
	2" Cal.	Redbud *Cercis reniformis*	15' x 12'	M	32
	2+ Trunks w/ 2"+ Combined Cal.	Desert Willow *Chilopsis linearis*	20' x 25'	L	36
	Multi-Trunk 2" Comb. Cal.	New Mexico Olive *Forestiera neomexicana*	15' x 15'	VL	9
	Multi-Trunk 2" Comb. Cal	Goldenrain Tree *Koelreuteria paniculata*	20' x 25'	L	6
	6'+ Height	Rocky Mountain Juniper *Juniperus scopulorum*	25' x 10'	L	8
	2" Cal.	Robinson Crabapple *Malus 'Robinson'*	25' x 25'	M	21
	6'+ Height	Pinon Pine *Pinus edulis*	30' x 20'	L	21
	6'+ Height	Austrian Pine *Pinus nigra*	35' x 25'	M	6
	2" Cal.	Texas Red Oak *Quercus buckleyi*	35' x 35'	L	15
	2" Cal.	Lacebark Elm *Ulmus parvifolia*	25' x 25'	L	32
					197
		Existing Tree to Remain Protect trunk, canopy and roots during construction			37
		Removed Significant Tree			14

SYMB.	Size (Install)	Common/Botanical	Size (Mature H x W)	Water Use	QTY.
		Shrubs & Groundcovers			
	5 Gal	Curl-Leaf Mountain Mahogany *Cercocarpus ledifolius*	15' x 15'	VL	4
	5 Gal	Fernbush *Chamaebataria millefolium*	5' x 5'	VL	5
	5 Gal	Chamisa *Ericameria nauseosa*	4' x 4'	VL	2
	5 Gal	Apache Plume *Fallugia paradoxa*	5' x 5'	L	7
	5 Gal	Undaunted Muhly *Muhlenbergia reverchonii*	2' x 2'	L	11
	5 Gal	Prickly Pear Cactus *Opuntia englemanni*	3' x 5'	VL	4
	3 Gal	Switchgrass *Panicum virgatum*	4' x 3'	M	5
	3 Gal	Little Bluestem *Schizachyrium scoparium*	3' x 2'	L	5
	5 Gal	Plains Yucca *Yucca glauca*	3' x 3'	L	7
					50

Other Materials

SYMB.	QTY		TYPE
	13	EA	Large Boulders (3-14 cf) ⅓ Buried
	3080	SF	Crusher Fines Over Aggregate Basecourse
	25680	SF	Landscape Gravel A with Filter Fabric ⅞" Santa Fe Brown Gravel w/ Filter Fabric
	1115	SF	Oversize Landscape Gravel 2-4" Amarello Cobble/RipRap
	5285	SF	Native Seed Area Santa Fe Trails from Curtis & Curtis or Equal
	1125	LF	Landscape Curb
			Stormwater Management Depression
	1		Site Furnishings 12' x 20' Shade Structure
	1		Picnic Table: Ultrasite Dual Pedestal (Beige)
	2		Bench 1: Ultrasite 4' Mall Bench (Beige/beige)
	2		Bench 2: Ultrasite 6' w/ Back (Beige/beige)
	1		Trash Receptacles: Ultrasite (Beige)
	1		Pet Waste Station: Ultrasite (Green/Green)

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STATE OF NEW MEXICO
CRAIG SOLETHER
67
REGISTERED LANDSCAPE ARCHITECT
September 21, 2020

Miraflores - Homewise
Fairly Road
Santa Fe, NM

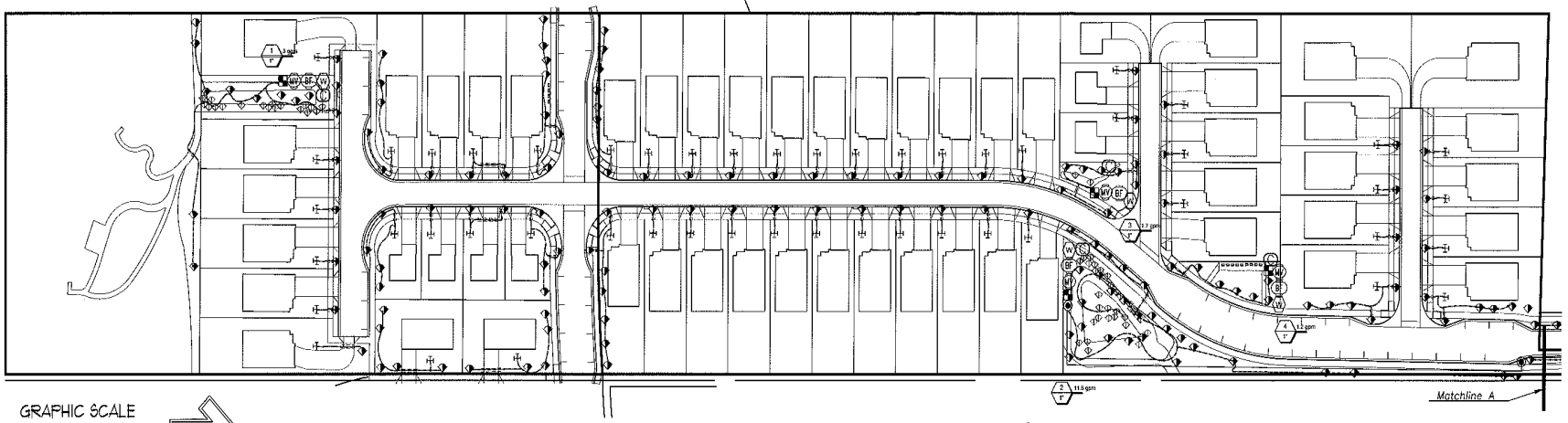
Conceptual Landscape Plan

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Never lower grade or add soil after plants have been placed.

The Hilltop
LANDSCAPE ARCHITECTS & CONTRACTORS

DRAWN BY	REVISION #	DATE
TED	-	09/21/2020

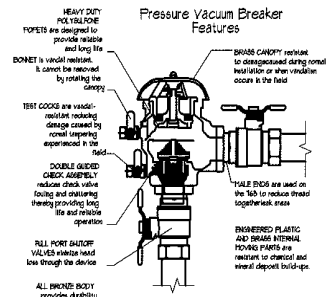
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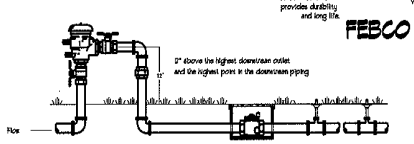
GRAPHIC SCALE

50 25 0 25 50

SCALE: 1" = 50'-0"



FEBCO MODEL 765



FEBCO MODEL 765

Pressure Vacuum Breaker Outside Installation

IRRIGATION LEGEND

SYMB.	DESCRIPTION	NOTES
(W)	WATER METER PROPOSED LOCATION	SEE VALVE KEY FOR IRRIGATION DEMAND.
	IRRIGATION POINT OF CONNECTION - *Connect to Homeowner System per Front Yard Plan*	
(C)	CONTROLLER *RAIN BIRD ESP-ME*	POLE MOUNT. POWER BY OTHERS.
(BF)	BACKFLOW PREVENTER *FEBCO 765 PRESSURE VACUUM BREAKER*	
	VALVES	
	ISOLATION VALVE	
(MV)	MASTER VALVE *RAIN BIRD PGA*	
	ZONE VALVE: LANDSCAPE DRIP *RAIN BIRD XCZ-PGA*	
	PIPE	
	MAINLINE *SCHEDULE 40 PVC*	BELL END, SOLVENT WELD PVC.
	LATERAL *CLASS 200 PVC*	BELL END, SOLVENT WELD PVC.
	PVC TO POLY	
	DRIP SUPPLY TUBING	LDPE, MAX 5 GPM (500 GPH) WITH COMPRESSION FITTINGS
	SLEEVES *CLASS 200 PVC*	EXTEND MIN 2" FROM CURB/SURFACE
	HEADS AND EMITTERS	
	PRESSURE-COMPENSATING DRIP EMITTERS *RAIN BIRD XERIBUG 360-SERIES* *TREES: 6 X 1 GAL* *SHRUBS AND GRASSES: 2 X 1 GAL*	

IRRIGATION CALCULATIONS - LANDSCAPE DEVELOPMENT WATER BUDGET-YEAR 1

Hydrozone 1: Trees and Shrubs 12 gph (6 x 2gph) per tree 207 Irrigated Trees 2 gph (2 x 1 gph) per Shrub 50 Irrigated Shrubs	Drip valve shall run for 1.5 hours per cycle. Frequency will be adjusted according to the season. See seasonal adjustment with approximate dates in chart below.						
	Summer (5/15-9/30)	Fall (10/1-11/21)	Winter (11/22-3/31)	Spring (4/1-5/14)	Cycles Per Year	Gallons Per Cycle	Gallons Per Year
	3x per week	1x per week	1x per month	1x per week	73	3456	252288
							Acre-Ft Per Year
							0.77

IRRIGATION CALCULATIONS - LANDSCAPE DEVELOPMENT WATER BUDGET-YEAR 3

Hydrozone 1: Trees and Shrubs 12 gph (6 x 2gph) per tree 207 Irrigated Trees 2 gph (2 x 1 gph) per Shrub 50 Irrigated Shrubs	Drip valve shall run for 1 hours per cycle. Frequency will be adjusted according to the season. See seasonal adjustment with approximate dates in chart below.						
	Summer (5/15-9/30)	Fall (10/1-11/21)	Winter (11/22-3/31)	Spring (4/1-5/14)	Cycles Per Year	Gallons Per Cycle	Gallons Per Year
	2x per week	2x per month	2x	1x per 2 weeks	50	2304	115200
							Acre-Ft Per Year
							0.35

IRRIGATION NOTES:

ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS, CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.

THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF THE DRAWING, CONSTRUCTION FIELD MODIFICATIONS WILL BE NECESSARY TO IMPLEMENT PLAN. IRRIGATION LATERAL LINES, MAIN LINES AND EQUIPMENT MAY BE SHOWN OUTSIDE PROPERTY LINES ON THIS PLAN, ALL IRRIGATION LINES AND EQUIPMENT ARE TO BE WITHIN AND INSTALLED WITHIN THE LIMITS OF THE PROPERTY LINE.

THE LOCATIONS AND SIZES OF POINTS OF CONNECTIONS FOR THE IRRIGATION SYSTEM SHOWN ARE SCHEMATIC AND THEY REMAIN UNKNOWN AT CURRENT TIME. METER LOCATIONS AND CONNECTIONS TO HOMEOWNER SYSTEMS WILL BE COORDINATED IN THE FIELD.

ALL IRRIGATION WILL BE OPERATED BY AUTOMATIC CONTROLLERS. THE LOCATIONS OF CONTROLLERS ARE TO BE FIELD DETERMINED AND POWER SOURCES FOR CONTROLLERS TO BE PROVIDED BY OTHERS.

IRRIGATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

WATER AND POWER SOURCES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/BUILDER

IRRIGATION SYSTEM MAINTENANCE AND OPERATION SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER. IT SHALL BE THE OWNERS RESPONSIBILITY TO ENSURE THAT FUGITIVE WATER DOES NOT LEAVE THE SITE DUE TO OVERWATERING OR MALFUNCTIONING EQUIPMENT.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK. THE IRRIGATION CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.

SUPPLY LINE AND WATER METER TO BE PROVIDED BY OWNER BACKFLOW PREVENTOR TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN DOWNSTREAM OF THE IRRIGATION WATER METER.

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STATE OF NEW MEXICO
CRAIG SOLETHER
67
REGISTERED LANDSCAPE ARCHITECT

September 21, 2010

Miraflores - Homewise
Fairy Road
Santa Fe, NM

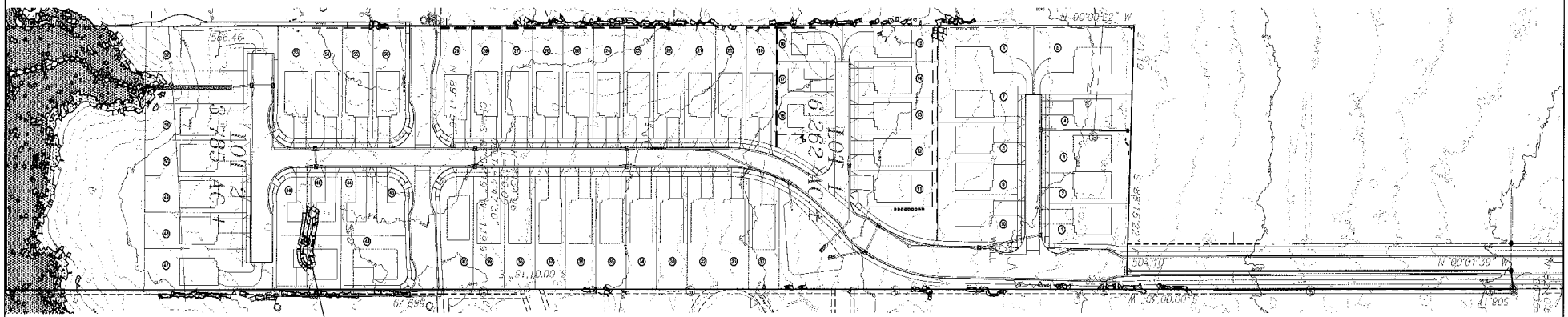
Irrigation Plan

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The Hilltop
LANDSCAPE ARCHITECTS & CONTRACTORS

DRAWN BY: TED
REVISION: -
DATE: 9/21/2010

SHEET #
4-2



SLOPE ANALYSIS MAP

SCALE: 1" = 60'
CONTOUR INTERVAL = 5'

LEGEND

- AREA OF 20% TO 30% SLOPE
- AREA OF 30% AND GREATER SLOPE

NOTE:

1. ALL TOPOGRAPHIC INFORMATION IS PROVIDED BY DAWSON SURVEYS, INC.
2. THIS SLOPE ANALYSIS IS BASED UPON 5 FOOT CONTOUR INTERVALS
3. THE TOTAL AMOUNT OF NATURAL 30% OR GREATER SLOPES DISTURBANCE ON THIS PROJECT IS 0 SQUARE FEET

0 30 60 120
SCALE: 1" = 60'

REVISIONS	DATE	ENGINEER'S SEAL

CASE # _____

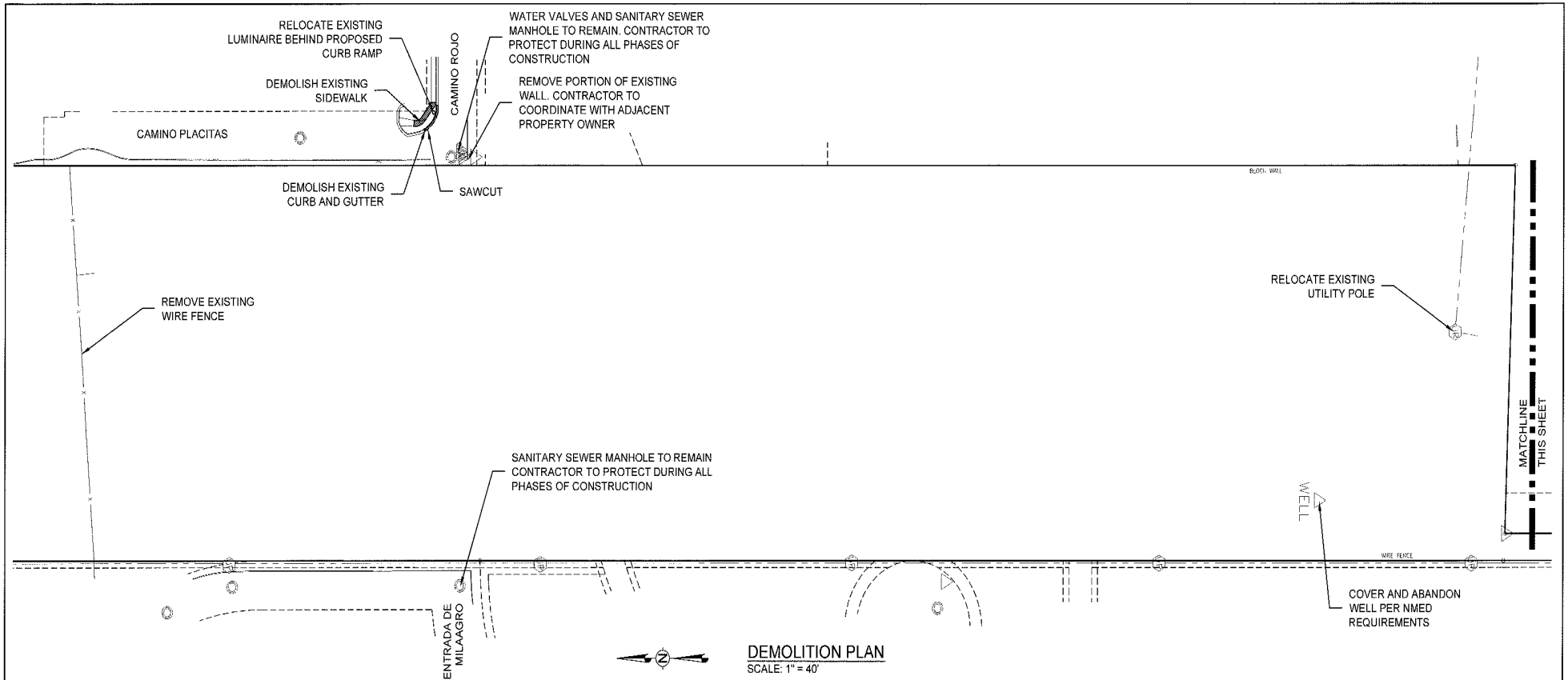
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
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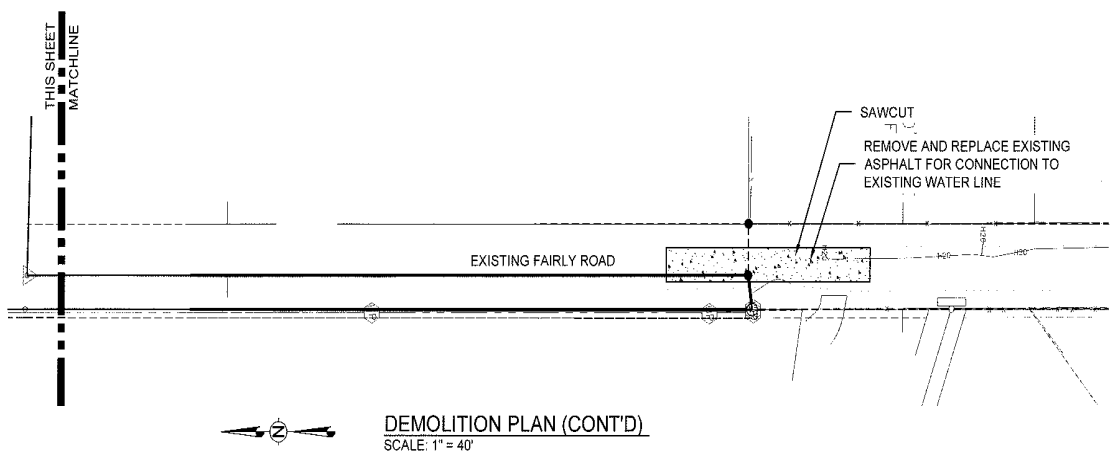
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SLOPE ANALYSIS MAP

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 60'	5-1



DEMOLITION PLAN
SCALE: 1" = 40'



DEMOLITION PLAN (CONT'D)
SCALE: 1" = 40'

0 20 40 80
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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CASE # _____

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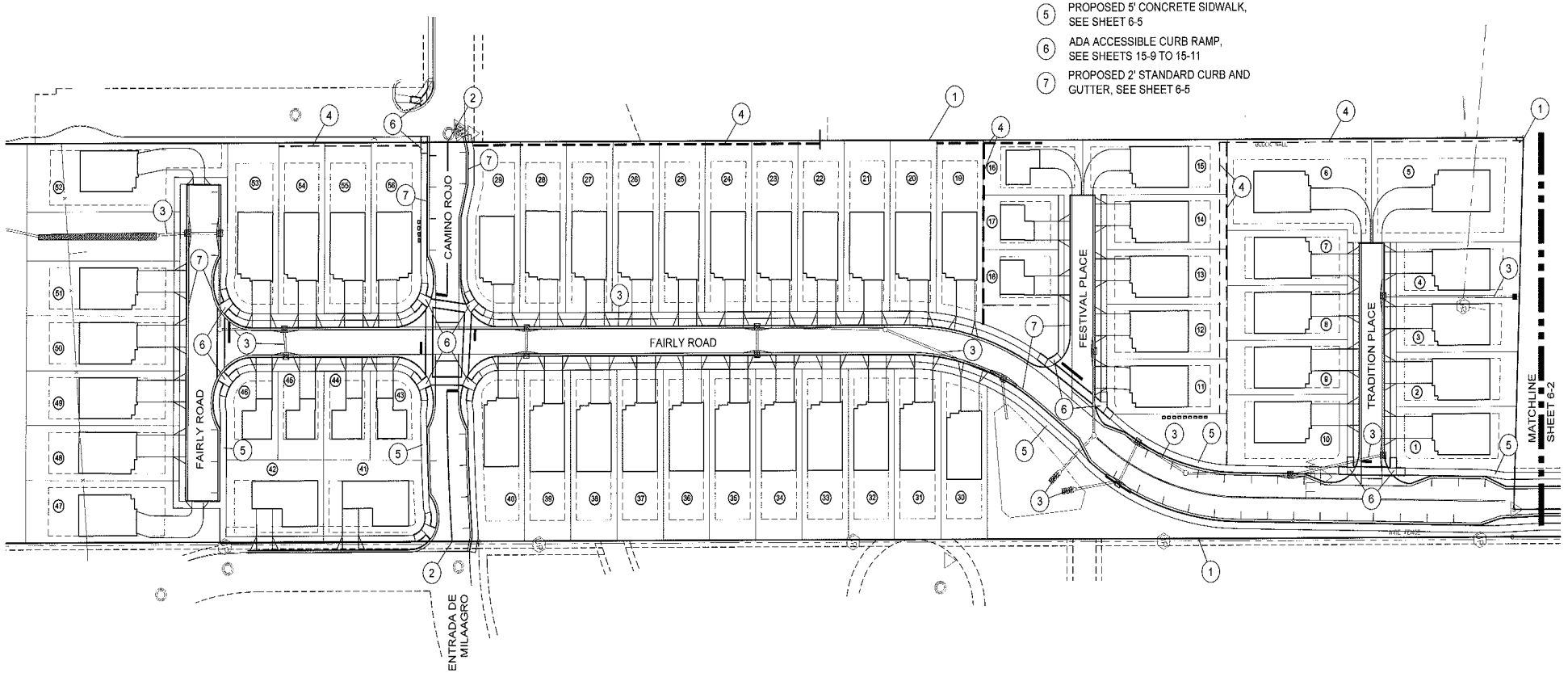
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

DEMOLITION PLAN

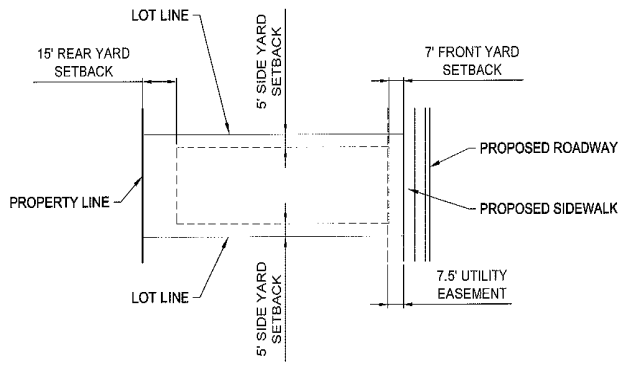
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	5-2

SHEET KEYNOTES

1. PROPERTY LINE
2. TIE TO EXISTING ROADWAY
3. PROPOSED STORM SEWER SEE 12 SERIES SHEETS
4. PROPOSED RETAINING WALL, SEE 8 SERIES SHEETS
5. PROPOSED 5' CONCRETE SIDWALK, SEE SHEET 6-5
6. ADA ACCESSIBLE CURB RAMP, SEE SHEETS 15-9 TO 15-11
7. PROPOSED 2' STANDARD CURB AND GUTTER, SEE SHEET 6-5



CIVIL SITE PLAN
SCALE: 1" = 40'



TYPICAL LOT LAYOUT
SCALE: N.T.S.

LEGEND

(29) DENOTES LOT NUMBER

0 20 40 80
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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CASE # _____

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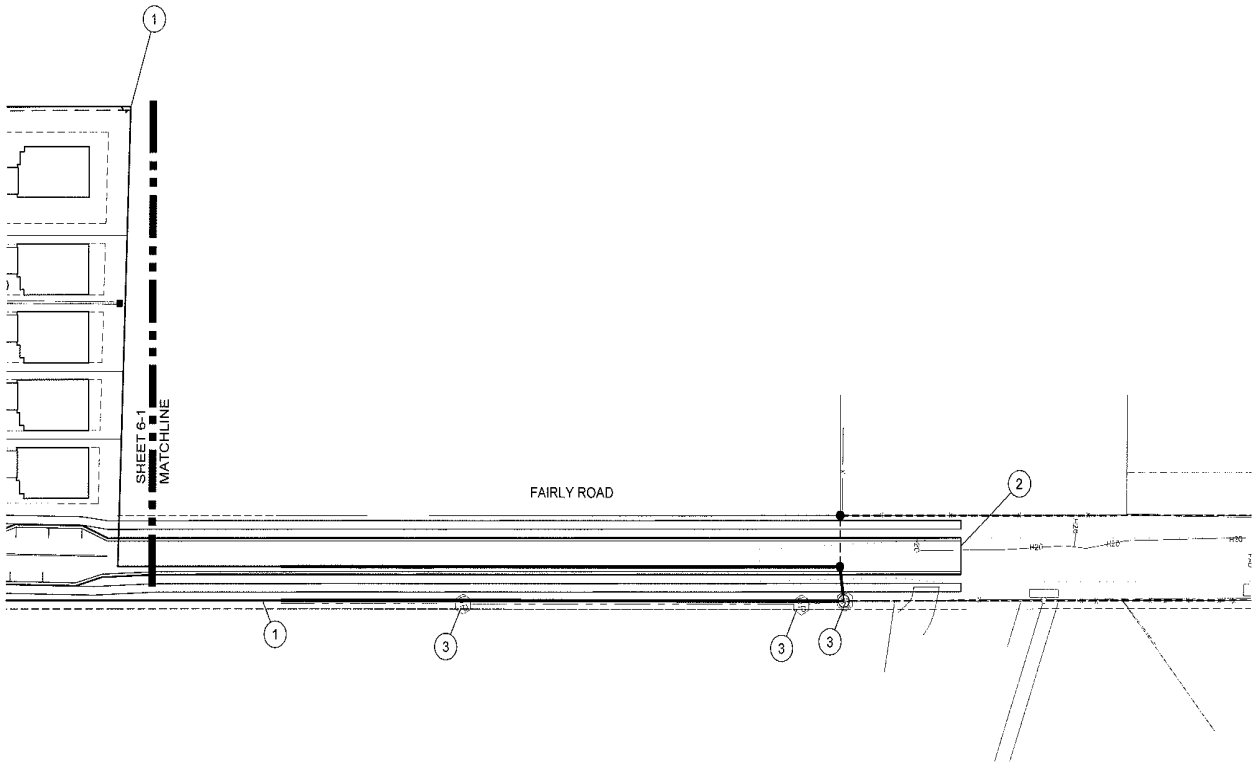
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

CIVIL SITE PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	6-1

SHEET KEYNOTES

1. PROPERTY LINE
2. TIE TO EXISTING ASPHALT
3. EXISTING POWER POLE TO REMAIN



N

CIVIL SITE PLAN (CONT'D)
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEER'S SEAL

0 20 40 80
SCALE: 1" = 40'

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE	ON FILE
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

CASE # _____

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

CIVIL SITE PLAN (CONT'D)

DATE	SCALE	SHEET
SEPTEMBER 2020	1" = 40'	6-2

CITY OF SANTA FE PUBLIC INFRASTRUCTURE GENERAL CONSTRUCTION NOTES

1. All construction shall conform to the requirements of City of Santa Fe Standard Drawings and Specifications as applicable.
2. Utility construction shall conform to applicable sections of the APWA's "New Mexico Standard Specifications for Public Works Construction, 2006 edition including latest published amendments.
3. Infrastructure construction shall conform to applicable sections of the New Mexico Department of Transportation's "Standard Specifications for Highway and Bridge Construction, Current Edition (SSHBC).
4. The order of precedence shall be, listed in order of highest precedence, the project specifications, plans, City of Santa Fe Standard Drawings, SSHBC, and APWA.
5. In the case of conflicts between plans and specifications resolution shall be by using the more restrictive requirement as determined by the project engineer and approved by the City.
6. The project plans shall be approved for construction by the City prior to any construction activity and scheduling a pre-construction meeting.
7. The construction Project Engineer shall be a New Mexico licensed Professional Engineer in the appropriate category for the type of work represented by the project plans. The Project Engineer shall arrange for a pre-construction meeting prior to the start of construction or mobilization of equipment on-site and after receipt of the financial guaranty. At the pre-construction meeting, the Project Engineer shall submit a letter providing the name(s) of specific individuals who will be performing what type of inspections and respective telephone contact number(s); this includes preparation of the record drawings. The pre-construction meeting shall be scheduled a minimum of 10 calendar days in advance of the meeting date.
8. Attendance at the pre-construction meeting is mandatory.
9. The Contractor shall provide a list of contact personnel responsible for site construction including position, telephone numbers, and at least one emergency telephone number active on a 24 hour basis.
10. If an EPA Notice of Intent (NOI) is applicable, a copy of the mailed permit application shall be presented at the pre-construction meeting along with a written statement giving the mailing date.
11. The Contractor shall be responsible for maintaining the integrity of all underground utilities during the course of work regardless of any location shown on the plans or other field evidence, or lack thereof. Notification to New Mexico One Call at 1-800-321-2537 for utility locates a minimum of 48 hours in advance of any excavation is required. Maintenance of utility locates shall be continued throughout the project life.
12. The Owner shall be responsible for all changes in construction deemed necessary for any reason and shall have appropriate plans and/or specifications, including applicable design criteria, prepared by a New Mexico Professional Engineer and submitted to the City for approval. Upon approval, said changes may be incorporated into the project.
13. Final Record Drawings, reflecting substantial changes to the original design drawings, shall be submitted by the Contractor's Surveyor for approval to the Engineer.Said plans shall be approved by applicable City Divisions prior to final acceptance of project work for maintenance responsibility and the beginning of the warranty period. Under no circumstances will partial acceptance and/or warranty commencement begin for any component of project scope be provided.
14. All Contractor work activity shall be confined to the construction limits of the project. There shall be no encroachment onto adjacent properties, either construction or marshaling yard(s) unless legal easements(s)/agreement(s) is/are executed and approved by the Engineering Supervisor.
15. Grading shall be completed under the authority of a Building Permit, the application of which shall show the type of work as "Other" with the notation of Grading, Landscaping, and infrastructure shown thereon. Call 505-955-6945 for permit information.
16. All cut and fill slopes, including setback requirements, shall conform to the requirements of:
    a. Santa Fe City Code's Article 14-8 (Development and Design Standards);
    b. Chapter 33 of the Uniform Building Code, 1997 edition unless otherwise noted on the approved construction plans; and
    c. In the case of conflict between these two specifications, City Code shall prevail.
17. The Contractor is responsible for any damage caused by construction activities to public or private property, including utilities.
18. Material quality testing shall be completed by the Contractor, through a recognized testing laboratory. The laboratory shall be under the auspices of a New Mexico Professional Engineer.
19. All material quality test reports shall be provided directly to the City Planning Department, attention Permits and Development Review Division at P.O. Box 909, Santa Fe, New Mexico 87504-0909 within seven (7) calendar days after laboratory material testing is complete unless otherwise directed during the pre-construction meeting. Field test reports shall be provided directly to the P&DR staff at the time of field testing. In the case of P&DR staff absence, the reports shall be Fax'ed to 505-955-6829. In each case, all test reports and other communication shall carry the applicable P&DR Case and Building Permit project numbers which will be provided at the pre-construction meeting if not noted on the approved project plans.
20. Compaction testing of soil and similar materials, including optimum moisture-density relationships, shall be performed in accordance with the referenced specifications and/or plans. Unless specified in individual project plans, the frequency of compaction testing shall be one (1) test per 1.5 vertical feet of fill or backfill of similar material; within two (2) horizontal feet of structures; for each 500 linear feet of trench backfill or each days compactive effort, whichever results in the greatest quantity of tests; or for each 500 cubic yards of fill of similar material; or as directed by the Engineer.
21. Portland cement concrete (Pcc) proposed to be used for the project shall conform to a mix design prepared by a New Mexico Professional Engineer. The design shall be provided to P&DR staff for approval a minimum of 14 calendar days prior to scheduling the initial casting operation or, alternatively, the project plans shall define a specific mix having a prior approval by P&DR. Each mix shall have the following minimum properties:
    a. Compressive strength of 4,000 psi in 28 calendar days
    b. Seven (7.0) bags of cementitious material per cubic yard of concrete
    c. Twenty (20.0) percent or less of flyash material substitution for cement
    d. Maximum aggregate size of $\frac{3}{4}$"
    e. Air entrainment content ranging between 4.0 and 7.0 percent at the point of concrete delivery into forms
22. Concrete sample set shall consist of a minimum of three (3) cylinders. One sample set shall be obtained for each 500 linear feet cast, 50 cast cubic yards, or one (1) set per calendar day, whichever is greatest; or as directed by the Engineer. Cylinders shall be tested at 7, 28, and 56 day intervals; the 56 day interval need not be tested if any previous test result exceeds the design value.
23. Traffic control devices, as per approved plan, shall be installed, maintained, and removed by the Contractor. Said devices shall conform to the latest published edition of the Manual of Uniform Traffic Control Devices and to written directions from the City Traffic Engineer who may be reached at 505-955-6631.
24. Site erosion and/or sediment control, as per approved plan, shall be installed, maintained, and removed by the Contractor. The Contractor's attention is directed to the SSHBC's Section 603 for other requirements relating to dust abatement and similar issues.
25. Utility lines must be bored under all existing street Pcc street appurtenances. A minimum of 12" separation must be maintained between utility lines. Any curb, gutter, or other damage must be repaired before final inspection will be given.
26. Each City utility division shall provide a letter of completed installation, not necessarily accepted for warranty, at the Contractor's request. Said letters shall be provided to the P&DR staff and received written staff acceptance prior to scheduling either TV inspection of SAS ; and Storm Sewer lines or placement of roadway pavement material.
27. ASTM, ASHTO, or independent laboratory certificates of material compliance are to be provided to P&DR staff prior to bringing applicable material on site.
28. Aggregate base course material shall conform to the SSHBC's Section 304 using Gradation I.
29. Hot Mix Asphalt (HMA) proposed to be used for the project shall conform to a mix design prepared by a New Mexico Professional Engineer conforming to SSHBC's Section 423 using Aggregated Classification(s) called for in the project plans. The design shall be provided to P&DR staff for approval a minimum of 14 calendar days prior to scheduling the initial paving operation or, alternatively, the project plans shall define a specific mix having a prior approval by P&DR.
30. Compaction testing of subgrade, aggregate base course, and each lift of HMA material shall be completed for every 100 linear feet of roadway length excepting for HMA material in which case provide one (1) test for every 100 linear feet of laydown machine pass; or as directed by the Engineer.
31. HMA material quality test samples (wet) shall be obtained and tested for every 500 tons or fraction thereof or one (1) sample per day.
32. Utility appurtenance such as telephone pedestals, electrical transformers, gas, and cable TV pedestals shall be placed outside the public right-of-way and within utility easements. The Owner is responsible for relocating mis-placed utility structures prior to requesting a pre-final inspection. Water meter boxes and fire hydrants may be placed between the sidewalk and curb. Water valve and meter boxes are not to be placed within maintenance areas of semi-improved (gravel or equal) roads.
33. Construction debris and/or excess material shall be stored in an on-site area and appropriately contained. Said debris shall not be a nuisance to the surrounding neighborhood. Disposal of debris shall be either within the city limits under separate grading permit or at a designated NMED approved disposal site. The Contractor shall provide written notice as to proposed debris disposal site location(s). All debris and/or excess material shall be removed from the site prior to scheduling a pre-final inspection with P&DR staff.
34. Interim terrain and stormwater management inspections shall be arranged for at the following events:
    a. Completion of temporary erosion control best management installations and prior to any earthwork (clearing, grubbing, etc.)
    b. Final stormwater management features are constructed
    c. Final site restoration measures are completed
    d. Further construction or issuance of any permit(s) shall not occur until written approval by P&DR staff for each of the above inspections has been obtained. Inspections shall be scheduled by calling 505-955-6646.
35. The Contractor shall make written request for a pre-final inspection of terrain management and infrastructure works a minimum of 14 calendar days in advance with P&DR staff. At this inspection, applicable city division staff will review the final work product. Any deficiencies will be noted in a "punchlist" and provided to the Contractor for correction. When all punchlist items are completed the Contractor shall file a written statement to that effect and a final inspection will be held by P&DR staff. Upon acceptance, an acceptance letter will be provided wherein all work will be accepted for maintenance by the City and the commencement of the warranty period initiated.
36. All surveys to be performed under the supervision of a Professional Land Surveyor, licensed in the State of New Mexico.
37. ADA compliance: The contractor shall ensure ADA compliance for construction of ADA features and appurtenances (including, but not limited to, sidewalk & curb ramp cross slopes, ramp slopes, level landings, etc.) as detailed in the plans and in accordance with referenced standard drawings, specifications and current public right of way accessibility guidelines. The contractor is responsible for field checking slopes and dimensions of all form work for compliance prior to installation of concrete. The City reserves the right to inspect any ADA features and appurtenances at any time before final completion of the project and to have the contractor remove, replace, and/or correct any work at his cost that is not in compliance, as determined by the project manager.

ADDITIONAL CONSTRUCTION NOTES

1. The contractor's surveyor shall coordinate with Rick Chatroop. The contractor's surveyor shall verify proposed grades, Invert elevations, Flow lines, Alignments, Property lines, Right of Way, Setbacks, and topography Prior to construction. Any deviations shall be reported to the engineer.
2. The contractor shall maintain existing fencing, or build new fencing to ensure that the site is secure at all times.
3. It is solely the contractor's responsibility to meet OSHA requirements and to maintain a safe working condition.
4. Santa Fe Engineering Consultants, LLC. waives any and all responsibility and is not liable for problems which arise from failure to follow these plans, Specifications and the design intent they convey or for problems which arise from failure to obtain and/or follow SFEC guidance with respect to any errors, omissions, inconsistencies, ambiguities or conflicts.
5. Television inspection to be provided by private contractor, not the City.
6. Pot holing, construction water, T.V. inspections, flushing and cleaning of sanitary sewer lines or storm sewers are incidental to the work and no separate payment will be made.
7. The existing utility locations shown on these plans have been compiled from multiple sources, including utility locates, and field surveys. It is the contractor's responsibility to verify and pothole any potential utility conflicts. The contractor is responsible for any damage caused by construction activities to public or private property, including utilities.
8. The contractor shall maintain an up to date set of as-built plans for the project. These plans shall be kept current, within two weeks, at all times and shall be subject to review by the project manager throughout the project and will be reviewed by the project manager for accuracy and completeness at least once every 30 days. Upon 50% completion of the project, the contractor shall submit progress as-built plans to the project manager for review. The final as-built plans bearing the signed seal and certification of the contractor's surveyor shall be submitted to the project manager prior to any final payment. This work is considered incidental to completion of the project and no measurement or payment shall be made.

REVISIONS	DATE	ENGINEERS SEAL
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CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

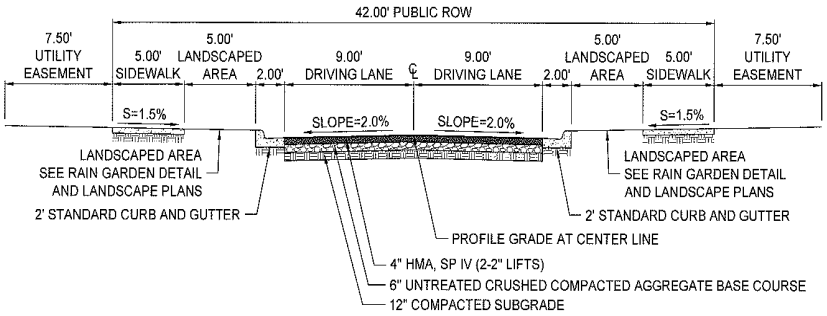
CASE # _____

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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

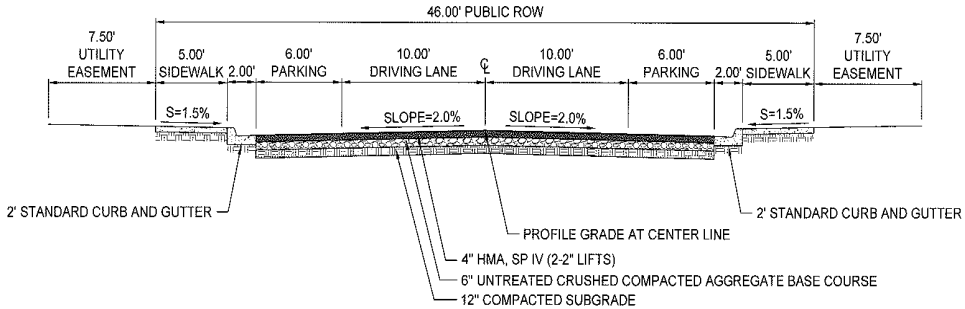
GENERAL NOTES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	N.T.S.	6-3



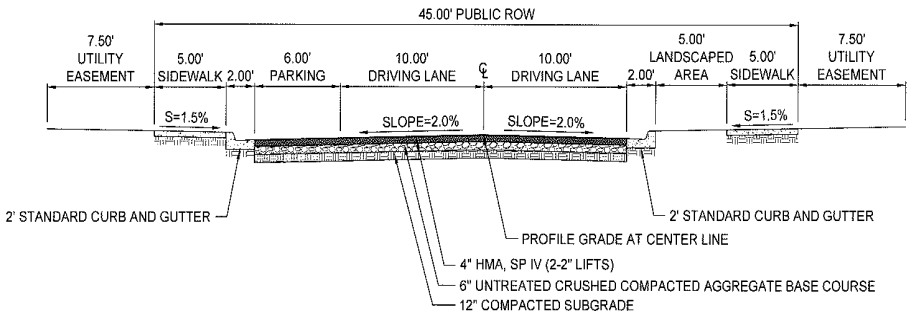
TYPICAL ROADWAY SECTION - SUB COLLECTOR WITHOUT PARKING

FAIRLY ROAD STA: 0+00 TO 5+59.30
FAIRLY ROAD STA: 9+44.10 TO 15+39.81
FESTIVAL PLACE, TRADITION PLACE



TYPICAL ROADWAY SECTION - PARKING ON BOTH SIDES

FAIRLY ROAD STA: 5+69.30 TO 9+44.10
CAMINO ROJO



TYPICAL ROADWAY SECTION - PARKING ON ONE SIDE

FAIRLY ROAD (AT HAMMERHEAD)

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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STREETS DIV.		
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LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

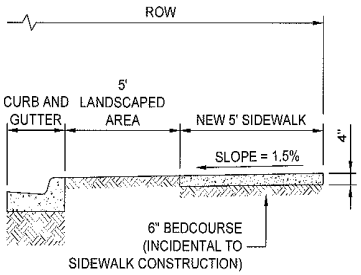
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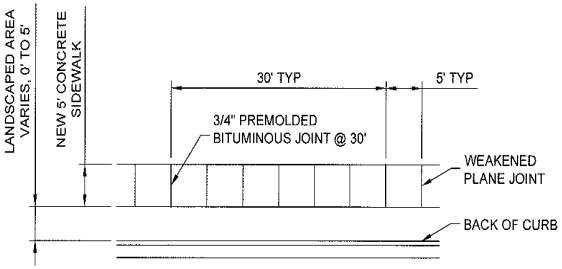
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

TYPICAL SECTIONS

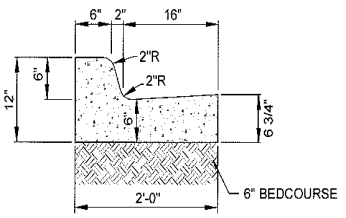
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	N.T.S.	6-4



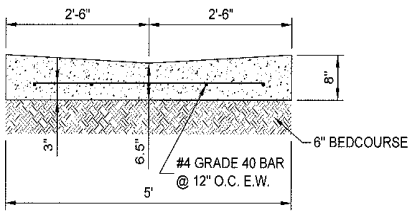
TYPICAL SIDEWALK SECTION



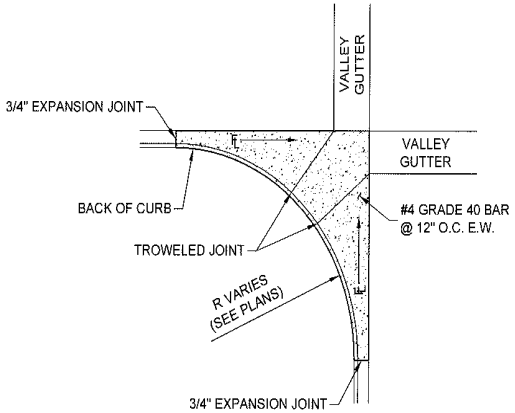
TYPICAL SIDEWALK PLAN



STANDARD CURB AND GUTTER



5' - TYPE II VALLEY GUTTER



NOTES:
1. POUR FILLETS MONOLITHICALLY
2. PROVIDE A REINFORCING CONTINUATION BETWEEN FILLETS AND VALLEY GUTTERS WITH A 30" REBAR LAP BETWEEN FILLETS AND VALLEY GUTTERS BEING CAST WITHIN 30 CALENDAR DAYS.

FILLET CURB RETURN

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

TYPICAL DETAILS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	N.T.S.	6-5

CITY OF SANTA FE WASTEWATER MANAGEMENT DIVISION GENERAL NOTES

1. Prior to the Wastewater Management Division approval of the plan set, a letter will be required from the project engineer indicating they are providing the inspection and record drawing services for the project.
2. The Contractor must obtain all sewer hookup permits from the City's Building Permits Section (sewer lines) prior to commencing any sewer line construction. A copy of the permit must be kept at the construction site.
3. All manholes shall be constructed in accordance with the "Standard Manhole Detail Sheet" shown on the City Standard Drawings.
4. A copy of the approved plans shall be available at the construction site at all times during working hours.
5. All modifications to the sanitary sewer plans must be reviewed and approved by the City's Wastewater Management Division prior to construction.
6. Additional general notes are contained in the standard City detail sheets for sanitary sewer construction.
7. All public gravity sewer lines shall be a minimum 8 inch diameter with a minimum Class C bedding (2006 New Mexico American Public Works Association).
8. All 4 inch and 6 inch diameter gravity sewer pipe shall be private. No private sewer system shall use larger than a 6 inch diameter pipe. No public gravity sewer line to be accepted by the City of Santa Fe for permanent maintenance shall be less than 8 inches diameter.
9. No concrete encasement of new or existing public sewer pipe will be allowed unless approved by the City of Santa Fe Wastewater Management Division.
10. Core drilling is required for all new connections to an existing manhole.
11. No public sewer main line or manhole will be allowed under or within a storm water detention/retention pond.
12. Prior to paving over any sanitary sewer lines, submit T.V.tapes and logs, pressure tests, and the engineer's certification to the City's Wastewater Management Division. After the Wastewater Management Division reviews the above listed information, a preliminary manhole inspection will be conducted. When all the items listed above are completed to meet the standards of the Wastewater Management Division, a letter approving paving will be issued in relation to the sanitary sewer. Note: A final manhole inspection will be conducted after the final paving is completed.
13. All sewer manholes with sewer lines 12 inches in diameter and larger are required to have approved vented and locking manhole covers.
14. Locate wires shall be installed for all sanitary sewers (gravity/force mains). The locate wire must be visible in the manhole or access structure. This will be verified during the preliminary manhole inspection prior to paving. The locate wire is to be a continuous, 12 gauge, solid strand insulated copper wire.
15. Off-road public sewer access will be provided for all public sewer lines and manholes. Access roads are to be a minimum 12 feet wide with a driving surface of 6 inches of compacted base course. No access road shall have a grade greater than 15%. Manholes are to be aligned with the center line of the access road. Sewer easements are to be a minimum of 20 feet in width.
16. Off road sanitary sewer - Call the Wastewater Management Division at 955-4631 for a field review of the grading of all off road sanitary sewer to ensure that the City's maintenance vehicles can access all manholes. The grades may be required to be adjusted based upon this inspection. Additional bank protection may be required based upon a final inspection by the Wastewater Management Division and the project engineer.
17. For Record Drawings, tie manhole to a City of Santa Fe survey monument as part of the final record drawings. Show corrected as-built bearing and distances, slopes, rim and invert elevations and sewer services along the horizontal alignment of the sanitary sewer.
18. The Owner/Developer will be responsible for maintaining, repairing and locating the sewer system until City acceptance for maintenance. Damages resulting from a stoppage in any gravity and/or pressure sewer system will be the sole responsibility of the Owner/Developer until a final acceptance letter for permanent maintenance has been issued by the Wastewater Management Division.
19. Water meters will not be placed until a final acceptance letter has been issued by the Wastewater Division for all on-site sanitary sewer needed in order for the project to connect to the sanitary sewer system.
20. 20 foot wide access gates shall be provided at all fences, walls or other obstructions that cross a public sewer line. Access gates to be located within the sanitary sewer Easement.
21. The Owner/Developer will be responsible for locating each sewer service at the time each lot is ready to connect to the sewer. It is suggested that the Owner/ Developer retain a copy of the television inspection video along with the video logs. Each service shall be clearly marked for each lot at point of connection. All calls received by this Division regarding the location of service will be forwarded to the Owner/Developer.
22. The Contractor shall call the Wastewater Management Division (Douglas Flores at telephone # 955-4613) for a final manhole inspection. This inspection will be isolated to the manholes. The City's Plumbing and Mechanical Inspector's will conduct all other necessary plumbing inspections. Note: The City's Plumbing and Mechanical Inspectors will inspect the individual sewer service taps and laterals, which connect to the public sanitary sewer.
23. The existing sanitary sewer line must be T.V. taped prior to a new service connection being placed as well as taped after the services have been completed. This is to ensure that the existing sanitary sewer line is not damaged and the new service is installed correctly.
24. All costs associated with the operation, maintenance and replacement of grinder pumps for individual lots shall be the responsibility of the lot owner and/or Owners Association. For grinder pumps that connect to a pressure sewer main, the grinder pump will be a model manufactured by Environment-One or a type approved by the City of Santa Fe Wastewater Management Division. For grinder pumps that connect to a gravity main, the grinder pump shall be of a type approved by the City of Santa Fe Plumbing Code.
25. A minimum 12 inches of vertical clearance shall be provided between the sewer line and any storm drain piping.
26. All pressure sewer systems shall be air or hydrostatically pressure tested @ 120 psi for 2 hours minimum. The test is to be witnessed and certified by the project engineer. Prior to being put into service and acceptance by the City of Santa Fe, all pressure sewer system main lines will be filled with water.
27. No public pressure sewer system piping may be installed in a common trench with other utilities.
28. Sewer backflow check valves will be required for all sewer service lateral connections to sewer mains 12 inches or greater in diameter. The sewer service connection must be made at an existing or new manhole. Sewer service connections to sewer mains with pipe size diameter of 12 inches and greater will not be made without approval from the Wastewater Management Division.
29. Sewer backwater check valves shall be required on private sewer service laterals per the City of Santa Fe Plumbing Code.
30. Any 8 inch public sanitary sewer main line placed with a grade of less than 0.60% shall be removed and reconstructed at the Contractor's expense. All public sanitary sewer main lines with slopes of less than 1% require a minimum Class C bedding with select granular material foundation.
31. All as-built sewer line and manhole data shall be obtained and certified by a licensed surveyor or engineer. As-built data supplied by other than a licensed surveyor or engineer shall not be valid for final as-builts.
32. All existing and new public manholes within a project shall have access for City sewer maintenance equipment. All access is subject to field verification and modification as required by the Wastewater Division prior to final project close out with the City of Santa Fe.
33. All sewer line crossings of rivers, streams, arroyos, drainage channels, etc. shall require a basis of design analysis prepared by a licensed engineer.
34. An approved backflow valve and isolation valve are required on all low pressure sewer service lines as per the City of Santa Fe Standard Sewer Specifications.
35. Terminal flushing connections and in-line flushing connections are required on all low pressure sewer systems. The maximum spacing between in-line flushing connections shall be 500 feet. Distances greater the 500 feet between low pressure sewer in-line flushing connections shall be approved by the Wastewater Division.
36. Sewer backflow check valves are required on private sewer service laterals per the City's Plumbing Code. Final determination shall be made by the City of Santa Fe Plumbing Inspection Division

WASTEWATER NOTES:
WASTEWATER UEC CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.

SANITARY SEWER NOTE:
NO FENCES, WALLS, OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS

STREET LIGHTING NOTE:
PROPOSED LUMINAIRES SHALL BE METERED AND INCLUDE LED TYPE FIXTURES EQUIVALENT TO CONVENTIONAL 250 HIGH PRESSURE SODIUM. THE DESIGN AND FIXTURE TYPES SHALL BE REVIEWED AND APPROVED BY THE CITY OF SANTA FE TRAFFIC ENGINEERING DIVISION.

GENERAL NOTES:
GAS SERVICES AND METERS TO BE DESIGNED BY NEW MEXICO GAS COMPANY.

WATER SERVICES TO BE DESIGNED BY SANGRE DE CRISTO WATER COMPANY.

ELECTRIC TRANSFORMERS AND SERVICES TO BE DESIGNED BY PUBLIC SERVICE COMPANY OF NEW MEXICO.

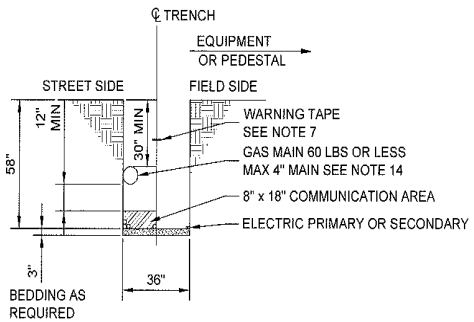
CABLE TELEVISION SERVICE TO BE DESIGNED BY COMCAST.

JOINT TRENCH NOTES:

1. Compaction in city or state right-of-ways shall meet or exceed minimum specified requirements.
2. Shading and bedding materials to be type IV. Class 1 for direct buried cable and Type IV, Class 2 for cable in conduit. Type III material is suitable for either type of installation. Refer to DS-10-12.4 for fill material requirements.
3. If trench-run material meets back fill material type requirements, 3" bedding may be omitted provided the trench bottom is smooth, flat and without surface irregularities.
4. Maximum change in the trench bottom elevation shall not exceed 2" over a 10' length.
5. Spoil pile shall be placed on the field side a minimum of 2" from the trench edge.
6. Latest OSHA trench safety requirements shall be strictly observed.
7. Warning tape shall be placed a minimum of 12" above gas line.
8. When bringing cables to pedestals, 12" separation must be maintained from the gas line.
9. PNM owned or maintained street lights may be installed in trench, next to electric cable.
10. Private area lighting or private streetlight circuits must maintain 12" separation from all other joint occupants..
11. Gas service must be 12" away from where it will pass equipment or pedestals.
12. All parties agree that 12" separation between electric and communication may not be met when transitioning up to transformers and or pedestals.
13. Typical subdivision where property line is 9' from back of curb and 10' Public Utility Easements (PUE).
14. Depth of gas measured from final grade.

REFERENCES

1. NESC rule 352, 353, 354



TYPICAL JOINT TRENCH DETAIL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

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Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

UTILITY NOTES AND DETAILS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	N.T.S.	7-1

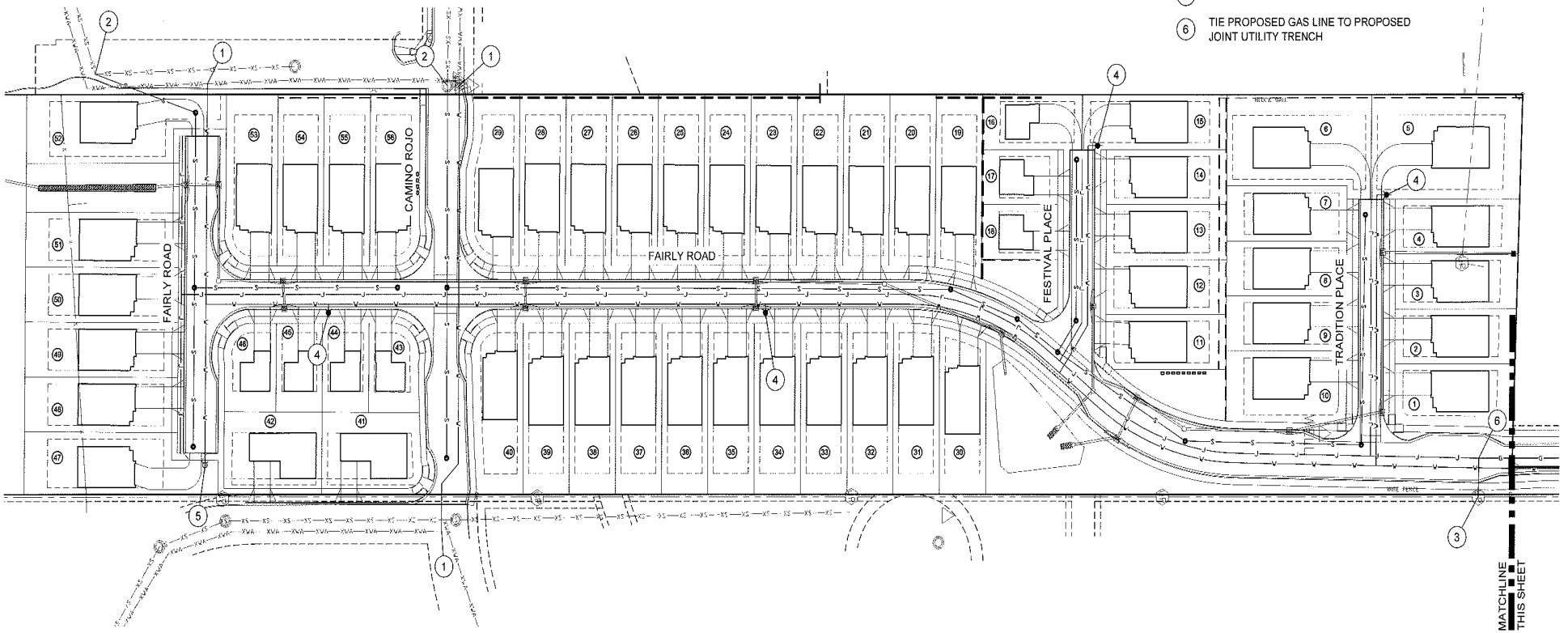
REVISIONS | DATE | ENGINEER'S SEAL

UTILITY CONTACT INFORMATION

COMPANY	CONTACT	PHONE NUMBER
PNM	AMANDA MONTANO	(505) 473-3241
CENTURY LINK	DOUG DALE	(505) 473-2194
COMCAST	DAVID AIKIN	(505) 438-1930
NM GAS COMPANY	FRANK ARAGON	(505) 470-0668
SANGRE DE CRISTO WATER COMPANY	BRIAN SNYDER	(505) 955-4277
CITY OF SANTA FE WASTE WATER DIVISION	STAN HOLLAND	(505) 955-4637

SHEET KEYNOTES

1. TIE TO EXISTING WATER LINE
2. TIE TO EXISTING SANITARY SEWER MANHOLE
3. TIE TO EXISTING POWER POLE
4. PROPOSED FIRE HYDRANT
5. PROPOSED FLUSH HYDRANT
6. TIE PROPOSED GAS LINE TO PROPOSED JOINT UTILITY TRENCH



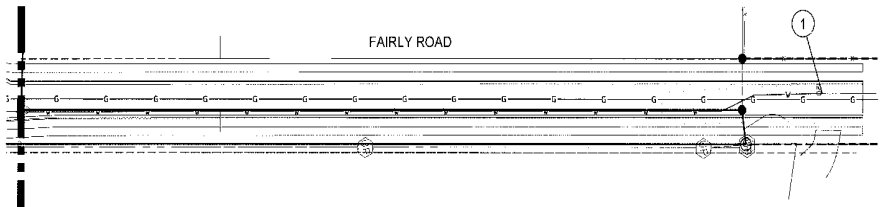
MASTER UTILITY PLAN
SCALE: 1" = 40'

LEGEND

EASEMENTS

EXISTING UTILITIES
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE (ASSUMED)
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING MANHOLE
- EXISTING UTILITY POLE

PROPOSED UTILITIES
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED JOINT UTILITY TRENCH
- PROPOSED GAS LINE
- PROPOSED ELECTRIC LINE
- PROPOSED TELEPHONE LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT



MASTER UTILITY PLAN (CONT'D)
SCALE: 1" = 40'

0 20 40 80
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

MASTER UTILITY PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	7-2

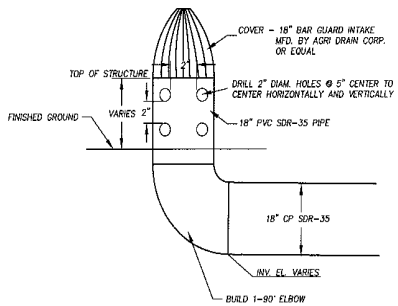
GRADING NOTES

1. THE LIMITS OF CONSTRUCTION AND LOCATIONS OF THE CONTRACTORS STAGING AREAS SHALL BE IDENTIFIED BY THE CONTRACTOR AND APPROVED BY THE OWNER. THE LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED AND SHALL BE THE MINIMUM REQUIRED TO MAINTAIN ALL WORKERS IN A SAFE CONDITION, TO PROVIDE ACCESS, AND TO MEET O.S.H.A. REGULATIONS.
2. CONTRACTOR IS REQUIRED TO PROVIDE DUST AND EROSION CONTROL PROTECTION.
3. GRADING SETBACKS TO EXTERIOR PROPERTY LINES ARE AS FOLLOWS:
   TOP OF VERTICAL SLOPE = ONE FIFTH THE VERTICAL HEIGHT OF CUT WITH A MINIMUM OF 2 FEET AND A MAXIMUM OF 15 FEET.
   TOE OF FILL SLOPE = ONE HALF THE HEIGHT OF THE SLOPE WITH A MINIMUM OF 2 FEET AND A MAXIMUM OF 15 FEET.
4. THE SURVEYOR SHALL VERIFY SETBACKS, TIE IN ELEVATIONS, AND TOPOGRAPHY WHEN STAKING PROJECT.
5. UNSUITABLE MATERIAL FROM SITE GRADING AND REMOVAL OPERATIONS, SHALL BE DISPOSED OF AT AN APPROVED LANDFILL.
6. ALL DISTURBED AREAS SHALL BE REVEGETATED AND COORDINATED WITH THE LANDSCAPING PLAN.
7. ALL FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE N.M.D.O.T. OR SITE SPECIFIC GEOTECHNICAL SPECIFICATIONS. THE FILL SHALL BE COMPACTED AS PER N.M.D.O.T. SPECIFICATIONS.
8. PROPERTY DEVELOPMENT MUST COMPLY WITH SECTION 14-8.12 (RELOCATION OF GUNNISON'S PRAIRIE DOGS.)
9. PONDS SHALL BE LINED WITH FILTER FABRIC AND SLOPES SHALL BE LINED WITH 3"-5" COBBLE OR AS SHOWN ON THE APPROVED LANDSCAPE PLAN.
10. ALL EXTERIOR CONCRETE SIDEWALK ELEVATIONS AT DOOR OPENINGS SHALL BE ½" LOWER THAN THE FLOOR SLAB ELEVATION.
11. THE MAXIMUM CROSS SLOPE OF WALKING SURFACES SHALL NOT EXCEED 2%.

CITY OF SANTA FE DRAINAGE NOTES

1. SUBJECT TO THE APPROVAL OF CITY OF SANTA FE PERMIT AND DEVELOPMENT REVIEW DIVISION STAFF. STORM DRAINAGE AND EROSION/SEDIMENT CONTROL IMPROVEMENTS SHALL BE EXECUTED IN CONJUNCTION WITH THE CONSTRUCTION OF EACH SEGMENT OF ROADS AND UTILITIES. THESE IMPROVEMENTS SHALL BE COMPLETED AND INSPECTED PRIOR TO THE ISSUANCE OF BUILDING PERMITS FOR INDIVIDUAL BUILDINGS.

2. MAINTENANCE OF PRIVATE DRAINAGE EASEMENTS AND DRAINAGE FACILITIES IS THE RESPONSIBILITY OF THE PROPERTY'S MANAGEMENT COMPANY. THE CITY OF SANTA FE IS HEREBY GRANTED THE RIGHT TO ACCESS AND INSPECT THESE EASEMENTS AND DRAINAGE FACILITIES AT THE DISCRETION OF THE CITY. THE OWNER AGREES TO HOLD HARMLESS FROM ALL DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE CITY'S REASONABLE EXERCISE TO THEIR ACCESS AND INSPECTION RIGHT. STORMWATER DRAINAGE FACILITIES AND EASEMENTS SHALL BE CLEARED AND MAINTAINED TO REMOVE SEDIMENT BUILD UP, TRASH, AND OTHER DEBRIS THAT CONTRIBUTE TO CLOGGING AND POLLUTION LOADING AND SHALL BE MANAGED IN ACCORDANCE WITH SFCC 13-2. SEASONAL INSPECTION SPRING, FALL, AND AFTER SIGNIFICANT STORM EVENTS IS RECOMMENDED.



TYPICAL CONTROLLED INLET DETAIL
N.T.S.

DUST CONTROL:

All onsite soil disturbing construction activities shall be addressed and provide measures to mitigate or control dust from being transported offsite and polluting neighboring properties.

Any person, owner, contractor, or operator who conducts earthmoving and/or dust generating activities is responsible for implementing Best Management Practices (BMPs) in order to mitigate off-property transport of fugitive dust emissions.

A plan, or storm water prevention plan (SWPPP) when applicable, listing the Best Management Practices (BMPs), shall be provided to the City Engineer or his designee for review and approval. The approved BMPs shall be applied to the graded and/or disturbed soil in order to stabilize the site.

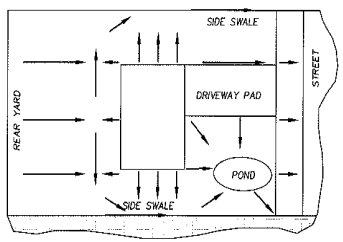
The initial BMP shall address how the Contractor will minimize the amount of disturbed soil and how the Contractor will stabilize the disturbed surface area exposed to wind or vehicle traffic during construction.

Some BMPs shall include:

- The reduction of vehicle speeds: establish a maximum speed limit or install traffic calming devices to reduce speeds to a rate to mitigate off-property transport of dust entrained by vehicles.
- The minimization of drop height: Drivers and operators shall unload truck beds and loader or excavator buckets slowly and minimize drop height of materials to the lowest height possible, including screening operations.
- High winds restriction: temporarily halt work activities during high wind events greater than 30 mph if operations would result in off-property transport.
- Restrict access: restrict access to the work area to only authorized vehicles and personnel.

In the event the above practices are ineffective to prevent off-property transport, the contractor, owner, or operator shall use at least one or more of the following Best Management Practices (BMPS):

- Wet suppression: apply water to disturbed soil surfaces, backfill materials, screenings, and other dust generating operations as necessary and appropriate considering current weather conditions, and prevent water used for dust control from entering any public right-of-way, storm water drainage facility, or watercourse.
- Wind barrier: construct a fence or other type of wind barrier to prevent wind erosion of the graded or disturbed surface.
- Vegetation: plant vegetation appropriate for retaining soils or creating a wind break.
- Surface roughening: stabilize an active construction area during periods of inactivity or when vegetation cannot be immediately established.
- Cover: install cover materials such as tackifiers, erosion control blankets, gravel, vegetation (when appropriate), cold-millings, etc., during periods of inactivity and properly anchor the cover.
- Soil retention: stabilize disturbed or exposed soil surface areas that will be inactive for more than 30 days or while vegetation is being established.



TYPICAL FRONT DRAINING LOT W WATER HARVESTING

CITY OF SANTA FE REQUIREMENTS

1. THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. CITY CODE ALLOWS PASSIVE WATER HARVESTING TECHNIQUES, SWALES, BERMS, CHECK DAMS, VEGETATED GROUND COVER, PERMEABLE PAVEMENTS, TREE WELLS, DRY WELLS, CISTERNS, AND OTHER TECHNIQUES APPROPRIATE FOR RETAINING AND INFILTRATING WATER ON SITE. EXCESS RUNOFF FROM NEW IMPERVIOUS AREAS (ROOFS, SIDEWALKS, PATIOS, ETC.) WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS AND SWALES AS DETAILED IN THE "TERRAIN MANAGEMENT REPORT, SOILS, DRAINAGE, AND GRADING FOR PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION, SANTA FE, NM, PREPARED BY SANTA FE ENGINEERING CONSULTANTS, DATED SEPTEMBER 2020".

2. AT THE TIME OF PERMITTING, ALL REQUIREMENTS OF SFCC 14-8.2 TERRAIN AND STORMWATER MANAGEMENT MUST BE MET.

POND INFORMATION				
NAME	BOTTOM ELEV.	TOP ELEV.	AREA (SF)	VOLUME (CF)
POND 1	6434	6438	4,660	12,749
POND 2	6435	6437	524	574.50
POND 3	6421	6424	2,625	4,536.50

EARTHWORK NOTES:

1. ALL WORK SHALL CONFORM TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
2. APPROXIMATE UNADJUSTED EARTHWORK VOLUMES (NOT INCLUDING SUB/OVER EXCAVATION IF REQUIRED):

2.1. CUT = 21,075 C.Y.
2.2. FILL = 9,901 C.Y.

I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE PROJECT WAS BUILT IN ACCORDANCE WITH THE SPECIFICATIONS AND THAT THESE RECORD DRAWINGS ARE TRUE AND CORRECT TO THE BEST OF MY BELIEF.

MICHAEL D. GOMEZ, N.M.P.E. NO. 8731
SANTA FE ENGINEERING CONSULTANTS, LLC.

REVISIONS	DATE	ENGINEER'S SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

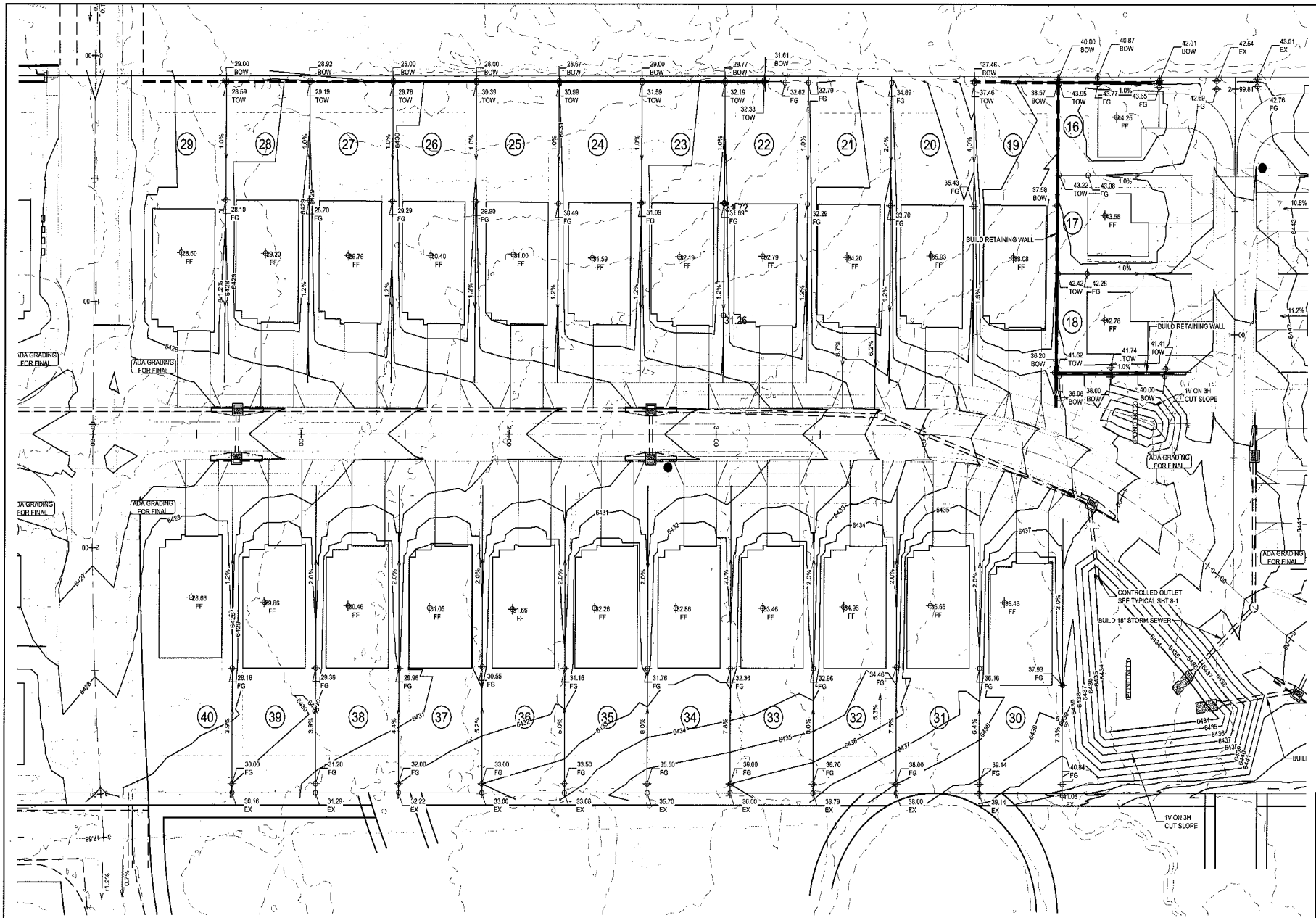
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

GRADING AND DRAINAGE NOTES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	NTS	8-1



GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'

0 10 20 40

SCALE: 1" = 20'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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STREETS DIV.		
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FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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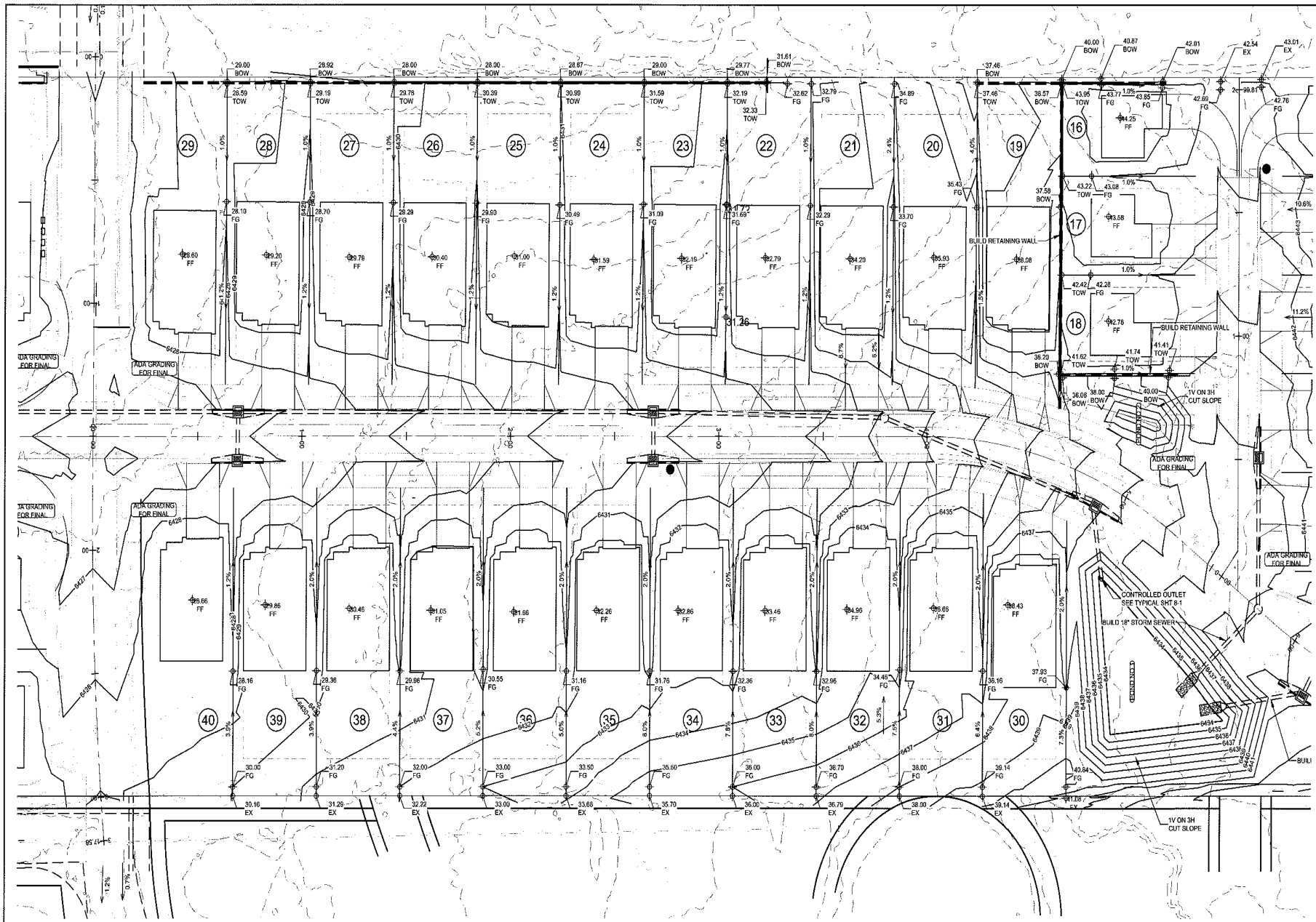
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	8-3



GRADING AND DRAINAGE PLAN
SCALE: 1" = 20'

0 10 20 40
SCALE: 1" = 20'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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CITY USE ONLY

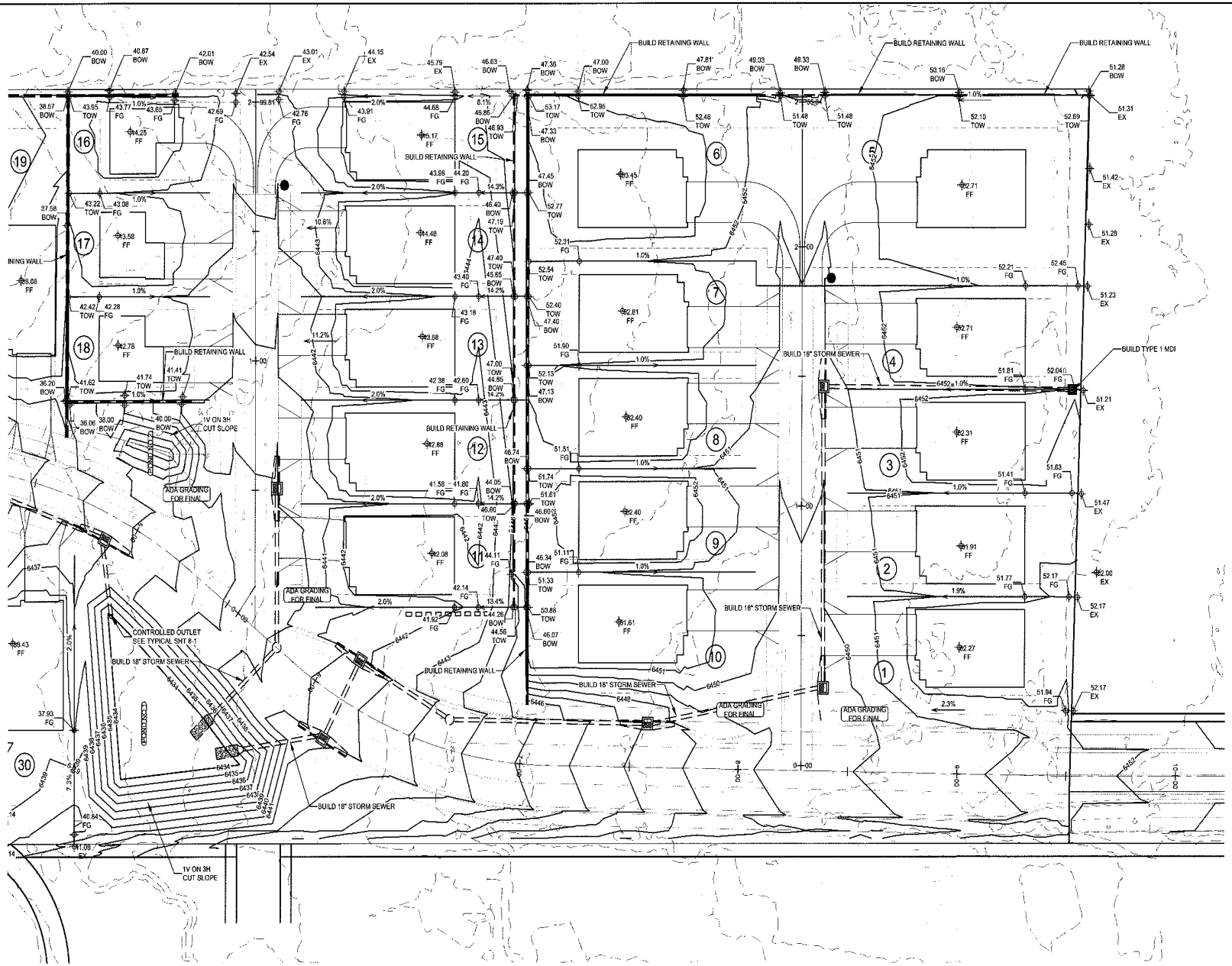
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	8-3



GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'

0 10 20 40

SCALE: 1" = 20'

REVISIONS	DATE	ENGINEERS SEAL

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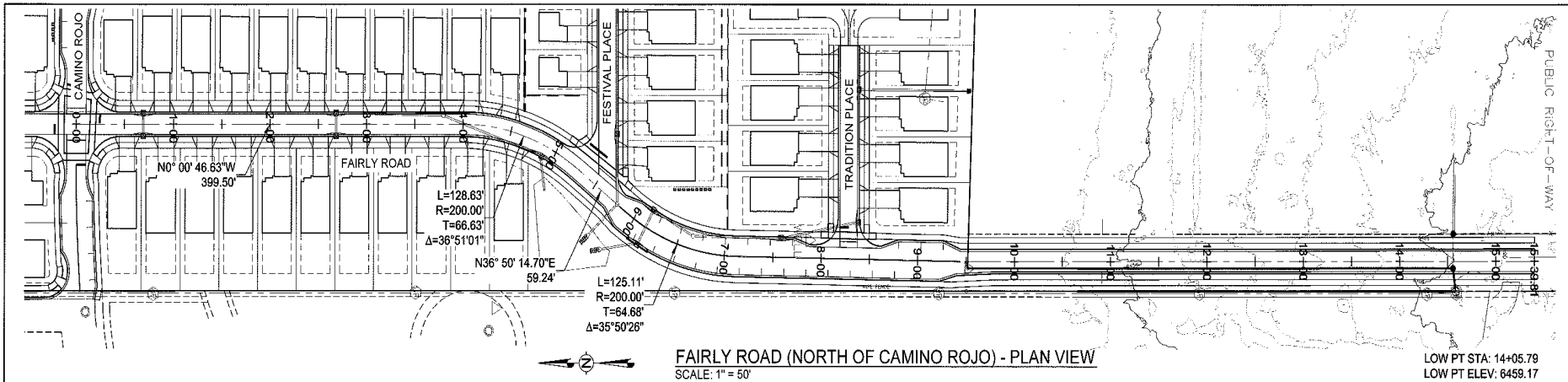
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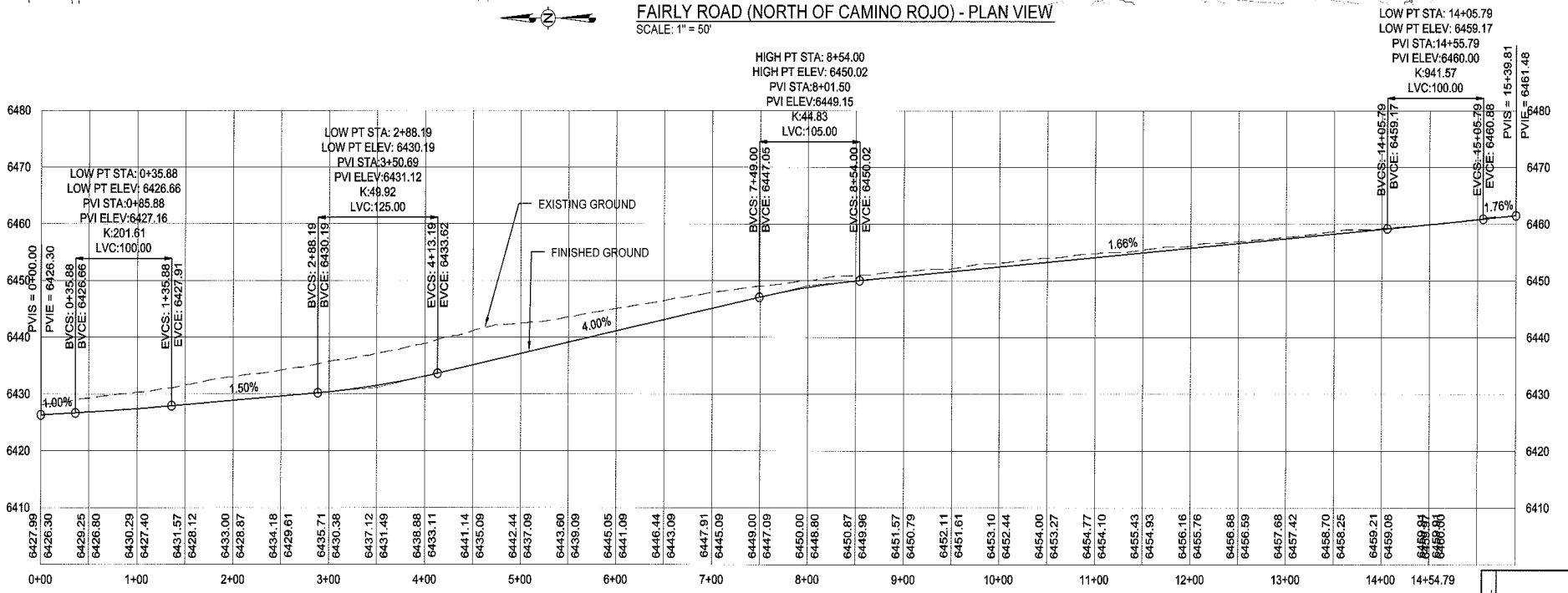
GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	8-4



FAIRLY ROAD (NORTH OF CAMINO ROJO) - PLAN VIEW

SCALE: 1" = 50'



FAIRLY ROAD (NORTH OF CAMINO ROJO) - PROFILE VIEW

SCALE HORIZ: 1" = 50'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 25 50 100
SCALE: 1" = 50'

CITY REVIEW		
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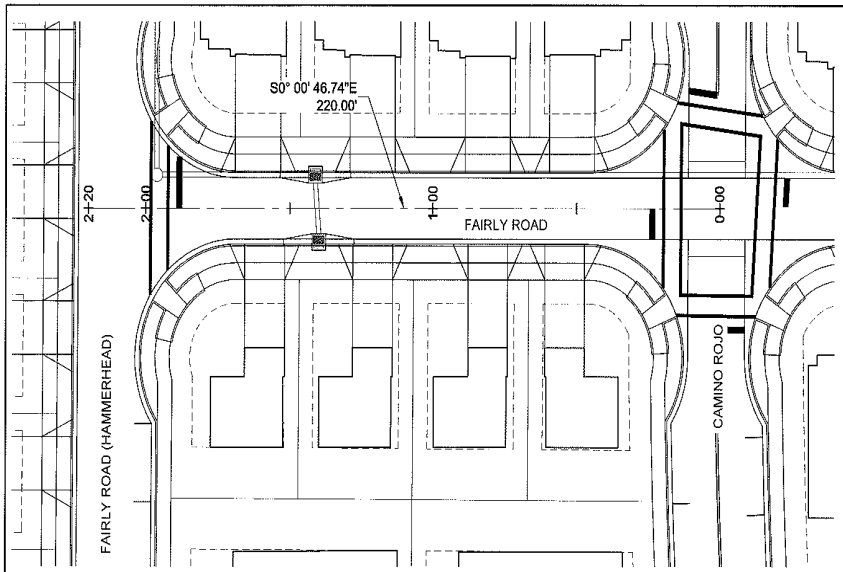
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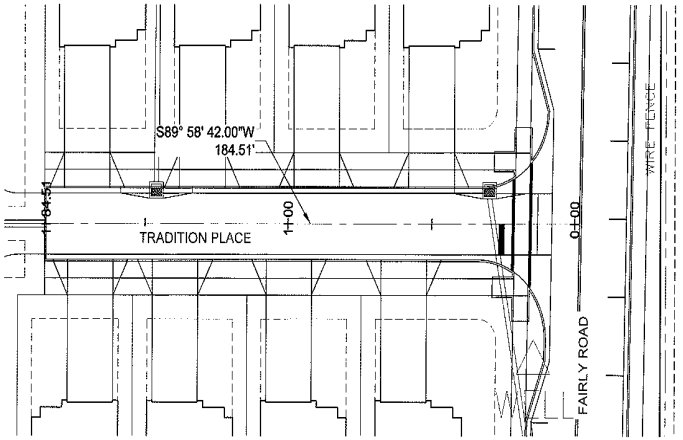
ROADWAY PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 50'	9-1

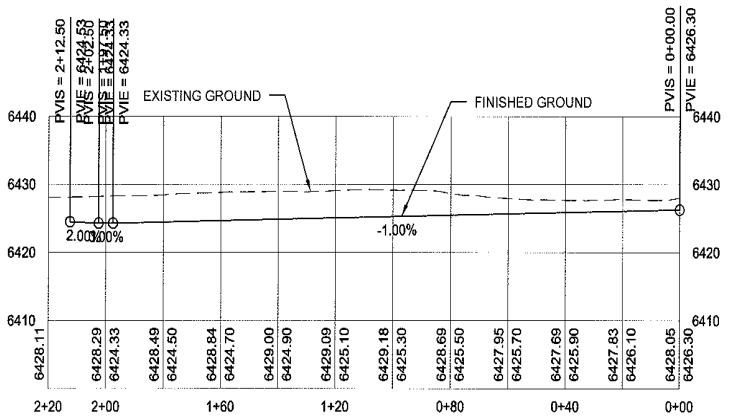
REVISIONS | DATE | ENGINEER'S SEAL



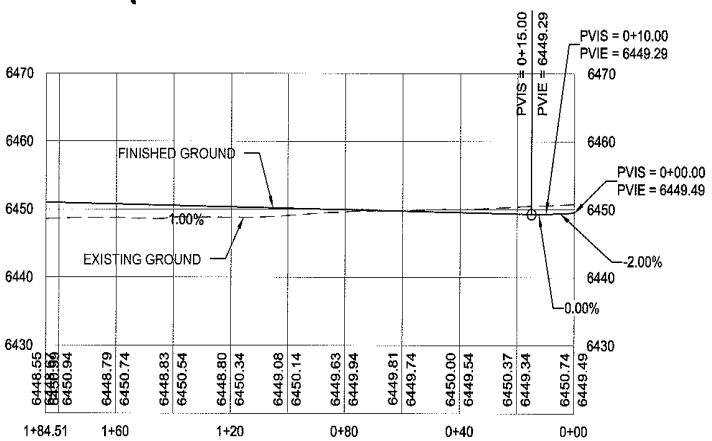
FAIRLY ROAD (SOUTH OF CAMINO ROJO) - PLAN VIEW
SCALE: 1" = 20'



TRADITION PLACE - PLAN VIEW
SCALE: 1" = 20'



FAIRLY ROAD (SOUTH OF CAMINO ROJO) - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'



TRADITION PLACE - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

CITY REVIEW		
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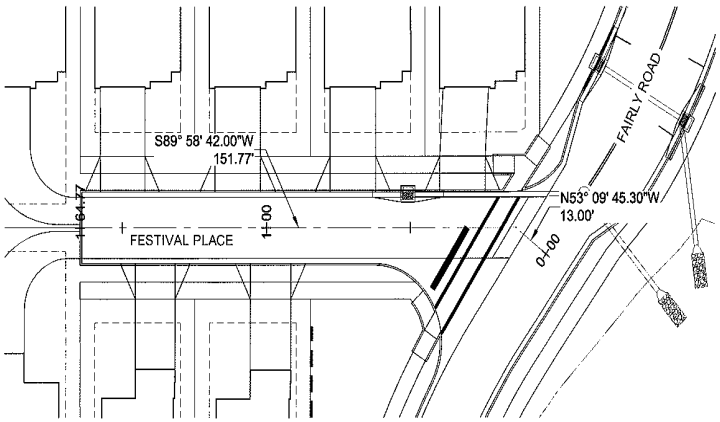
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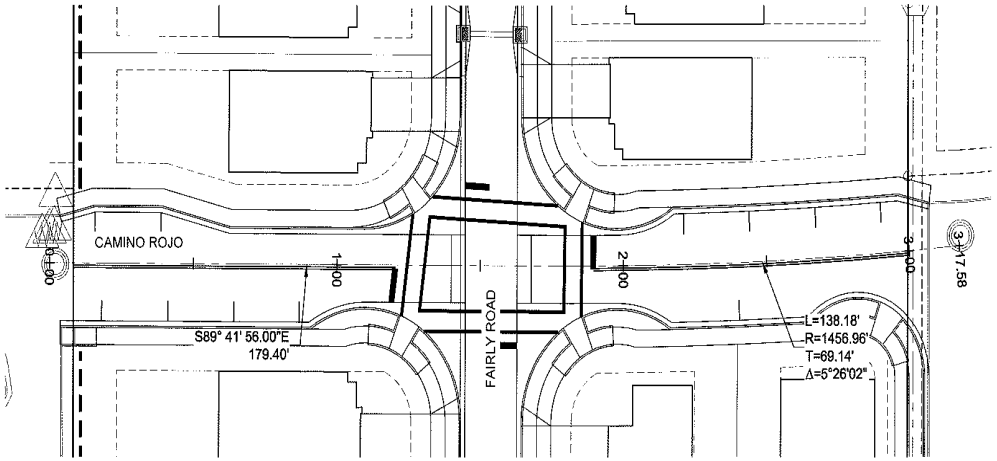
ROADWAY PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	9-2

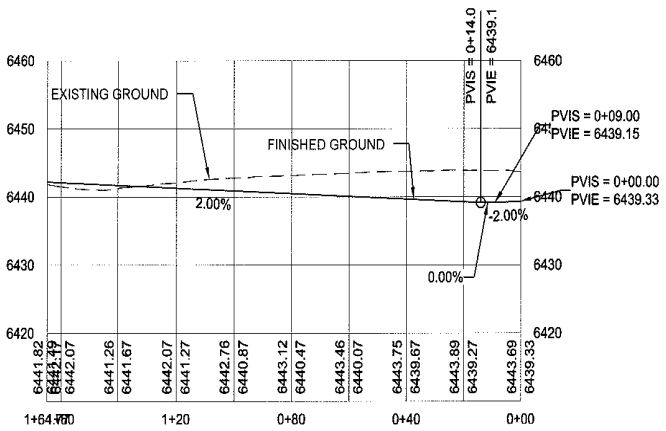
ENGINEERS SEAL
DATE
REVISIONS



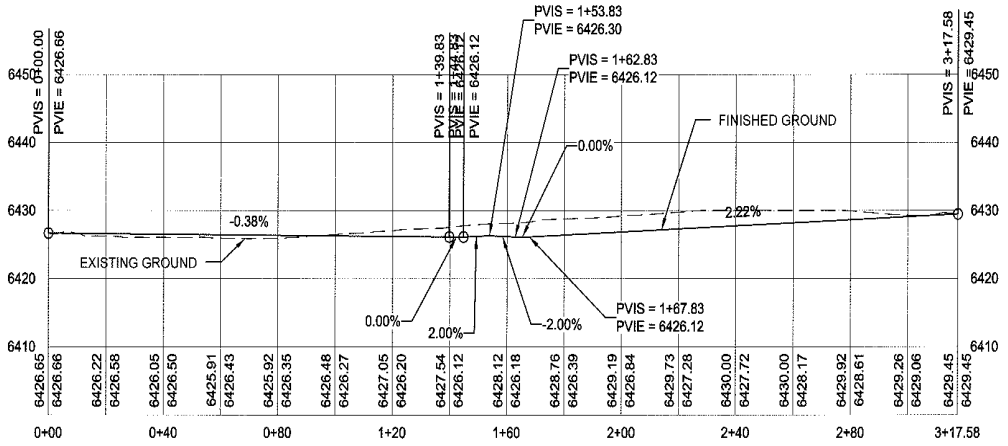
FESTIVAL PLACE - PLAN VIEW
SCALE: 1" = 20'



CAMIINO ROJO - PLAN VIEW
SCALE: 1" = 20'



FESTIVAL PLACE - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'



CAMINO ROJO - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

ENGINEERS SEAL

DATE

REVISIONS

CITY REVIEW		
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LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

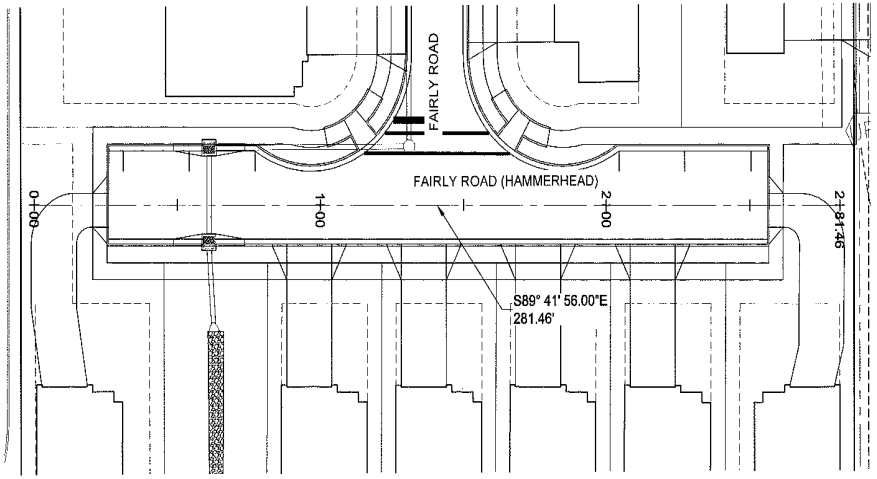
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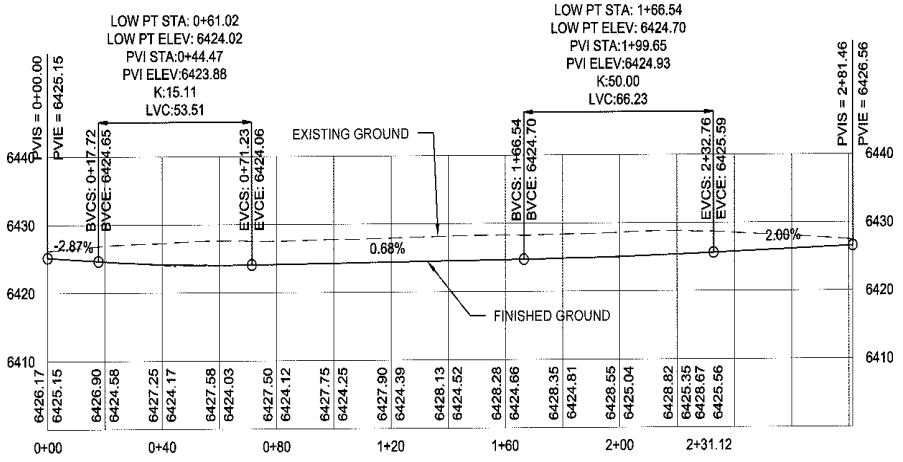
ROADWAY PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	9-3



FAIRLY ROAD (HAMMERHEAD) - PLAN VIEW

SCALE: 1" = 20'



FAIRLY ROAD (HAMMERHEAD) - PROFILE VIEW

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

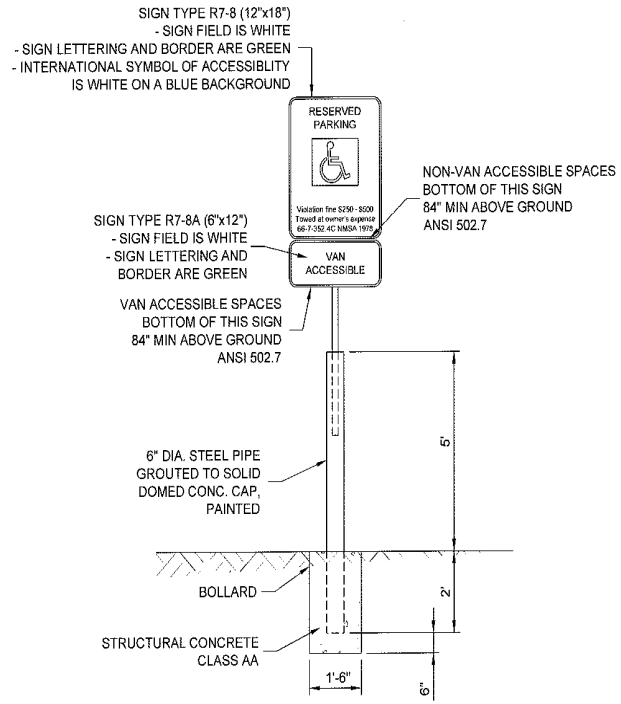
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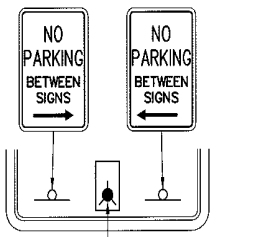
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

ROADWAY PLAN AND PROFILES

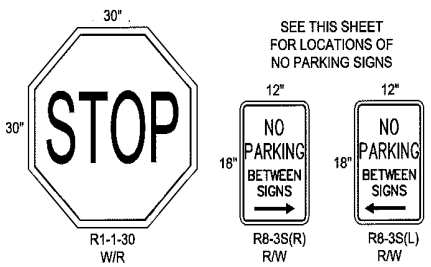
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	9-4



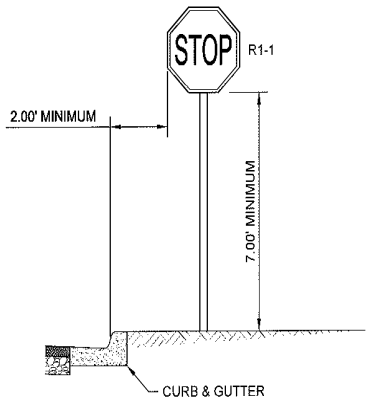
ACCESSIBLE SIGN DETAIL
SCALE: N.T.S.



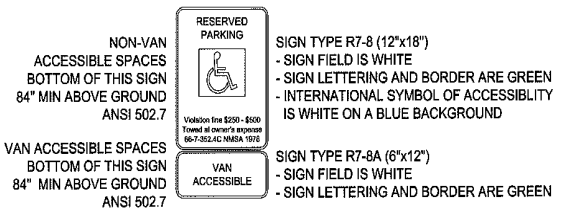
SIGN LAYOUT DETAIL
SCALE: N.T.S.



SIGN FACE DETAILS
SCALE: N.T.S.



TYPICAL SIGN PLACEMENT
SCALE: N.T.S.



ACCESSIBLE SIGN DETAIL
SCALE: N.T.S.

CITY OF SANTA FE SIGNING AND STRIPING NOTES:

SIGN AND POST REQUIREMENTS

1. ALL ALUMINUM PANEL SIGNING AND STEEL POSTS SHALL COMPLY WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION (NMDOT); *CURRENT* EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (SSHBC).
2. ALL SIGNING SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - *CURRENT* EDITION.
3. SIGNPOSTS WITH APPROVED BREAKAWAY DEVICE SHALL BE "MARION" BRAND 4 LB. / FT. U CHANNEL - BLACK; NO SUBSTITUTES ALLOWED.
4. SIGN SHEETING SHALL BE "3M" BRAND HIGH INTENSITY; NO SUBSTITUTIONS ALLOWED.
5. SIGN HEIGHT SHALL BE A MINIMUM OF 7' HIGH FROM THE BOTTOM OF THE LOWEST SIGN ABOVE THE TOP OF CURB, UNLESS OTHERWISE NOTED; AND SHALL BE PLACED IN ACCORDANCE WITH NMDOT STANDARD DRAWINGS AND SPECIFICATIONS.
6. STREET NAME LETTERING SHALL COMPLY WITH THE STANDARDS IN THE CURRENT EDITION OF THE MUTCD; THAT IS THE LETTERING SHALL BE LOWER CASE LETTERS WITH UPPERCASE INITIAL LETTERS.

STRIPING AND PAINT NOTES

1. ALL RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE SHALL BE 380 IES BY "3M", NO SUBSTITUTIONS.
2. STOP BARS SHALL BE A MINIMUM 12" WIDE; WHITE RETROREFLECTIVE PREFORMED PATTERED PAVEMENT STRIPE; AND SHALL BE 380 IES BY "3M", NO SUBSTITUTIONS.
3. CROSSWALK STRIPES SHALL BE 12" WIDE; WHITE RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE, ARRANGED IN A CONTINENTAL PATTERN, THAT IS, LONGITUDINAL LINES PARALLEL TO THE FLOW OF TRAFFIC AND ARRANGED TO AVOID WHEEL PATHS, (MUTCD P. 384, SECTION 3B.18); AND SHALL BE 380 IES BY "3M", NO SUBSTITUTIONS.
4. ALL RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT MARKINGS (WORD OR SYMBOL) SHALL BE 380 IES BY "3M", NO SUBSTITUTIONS.
5. *RETRO-REFLECTORIZED PAINTED PAVEMENT MARKING STRIPES* - FOR HIGH-BUILT *PAINT*, USE TWO COATS AND FOR REGULAR PAINT USE THREE COATS. (DOUBLE APPLICATION TO BE APPLIED WITHIN 14 DAYS.)
6. ALL STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) - CURRENT EDITION, AND THE NMDOT SSHBC.

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURS ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____

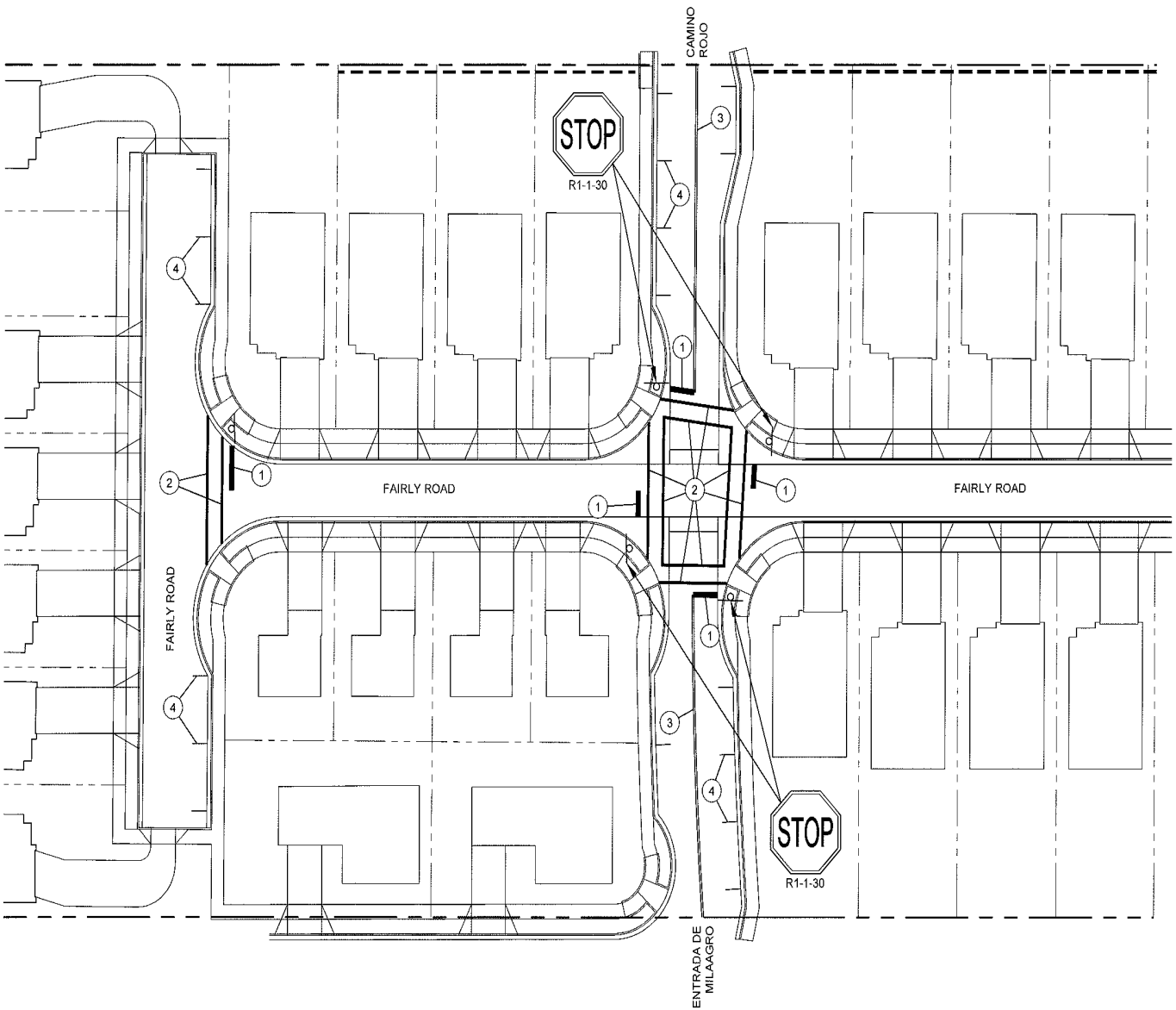
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SIGNING AND STRIPING NOTES AND DETAILS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	10-1



STRIPING KEY (X)	
1	24" WHITE STOP BAR - RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE
2	12" WHITE CROSSWALK - RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE
3	4" YELLOW STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
4	4" WHITE STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS

SIGNING AND STRIPING PLAN

SCALE: 1" = 20'

0 10 20 40

SCALE: 1" = 20'

REVISIONS | DATE | ENGINEER'S SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

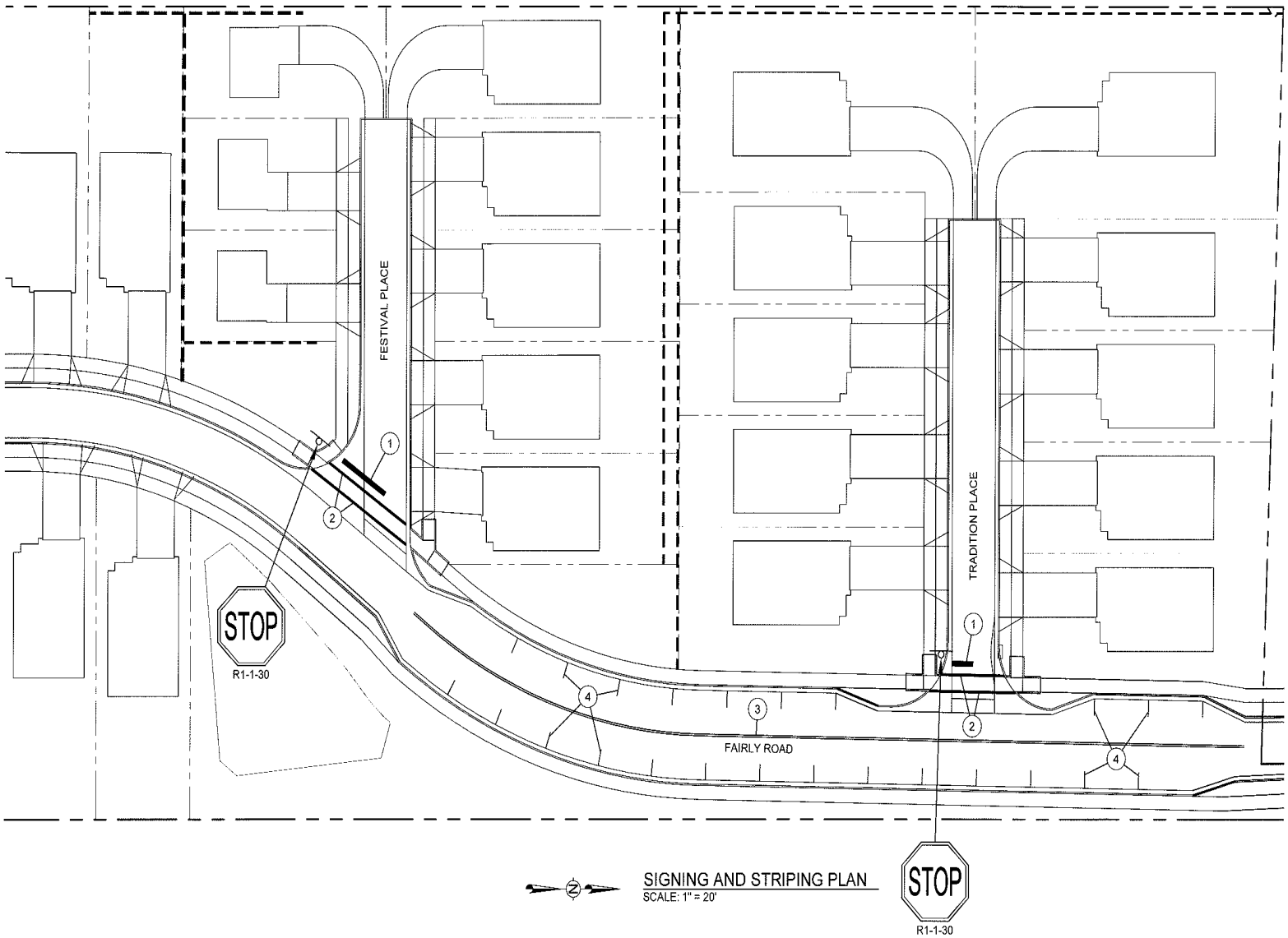
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SIGNING AND STRIPING PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	10-2



STRIPING KEY (X)

1	24" WHITE STOP BAR - RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE
2	12" WHITE CROSSWALK - RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE
3	4" YELLOW STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
4	4" WHITE STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS

N

SIGNING AND STRIPING PLAN
SCALE: 1" = 20'

0 10 20 40
SCALE: 1" = 20'

REVISIONS | DATE | ENGINEER'S SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

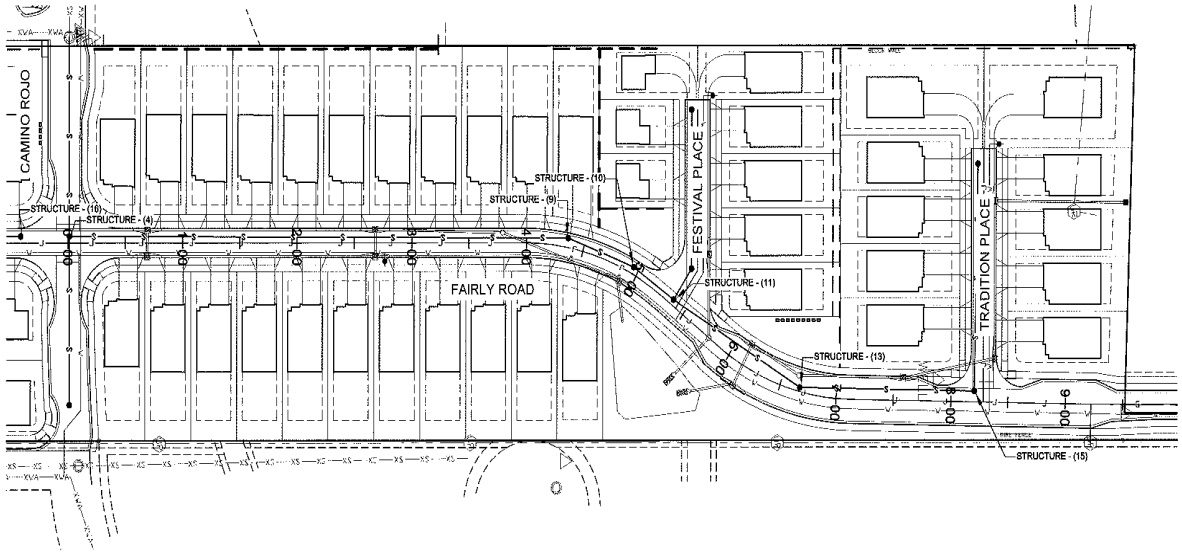
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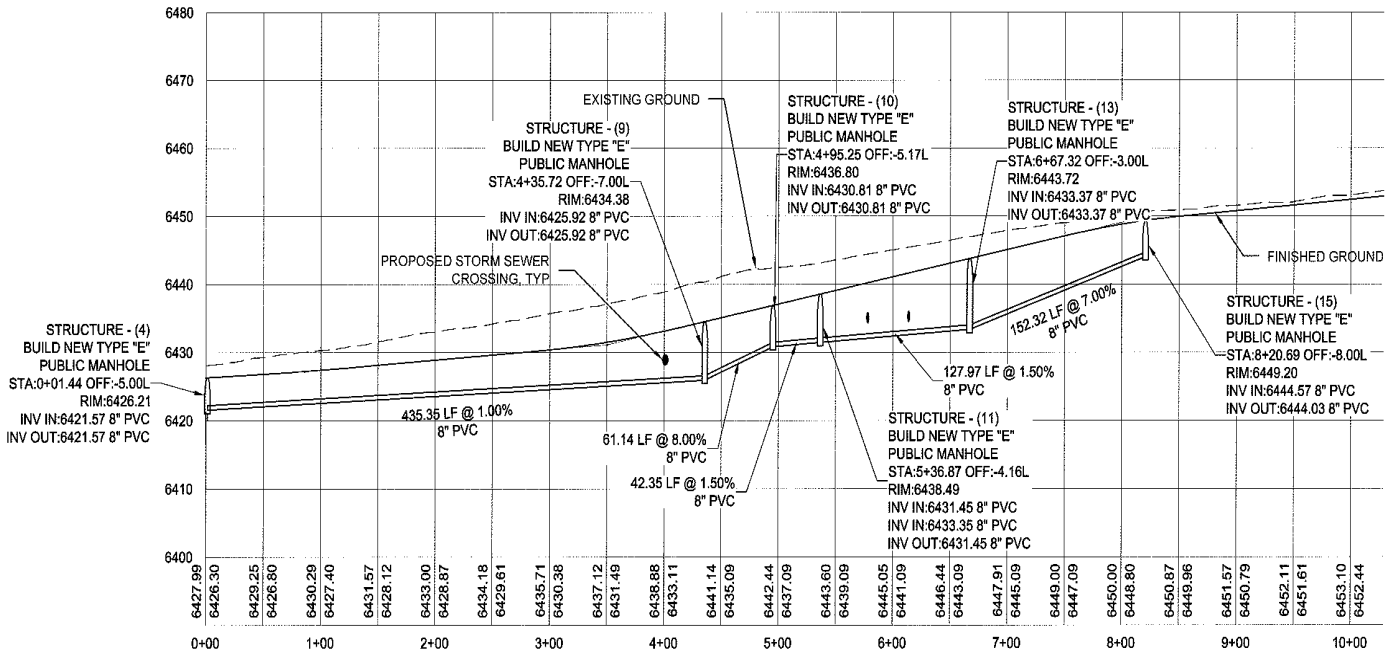
SIGNING AND STRIPING PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	10-3



FAIRLY ROAD (NORTH OF CAMINO ROJO) - PLAN VIEW

SCALE: 1" = 50'



FAIRLY ROAD (NORTH OF CAMINO ROJO) - PROFILE VIEW

SCALE HORIZ: 1" = 50'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 25 50 100
SCALE: 1" = 50'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

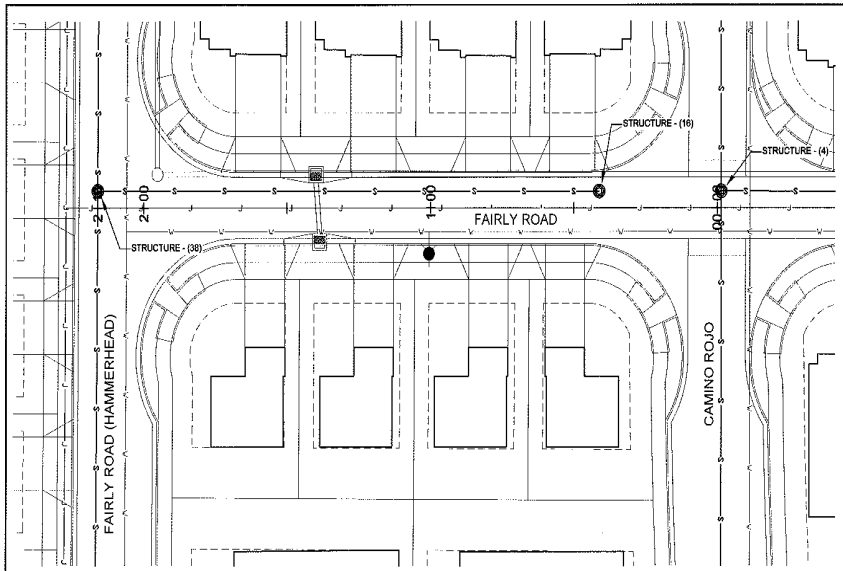
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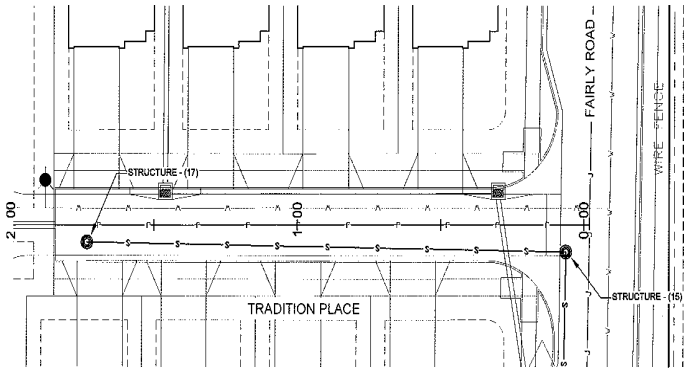
SANITARY SEWER PLAN AND PROFILES

DATE	SCALE	SHEET
SEPTEMBER 2020	1" = 50'	11-1



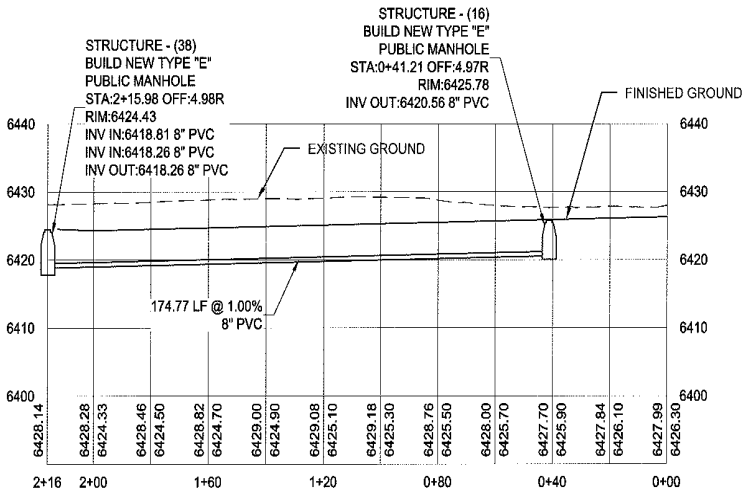
FAIRLY ROAD (SOUTH OF CAMINO ROJO) - PLAN VIEW

SCALE: 1" = 20'



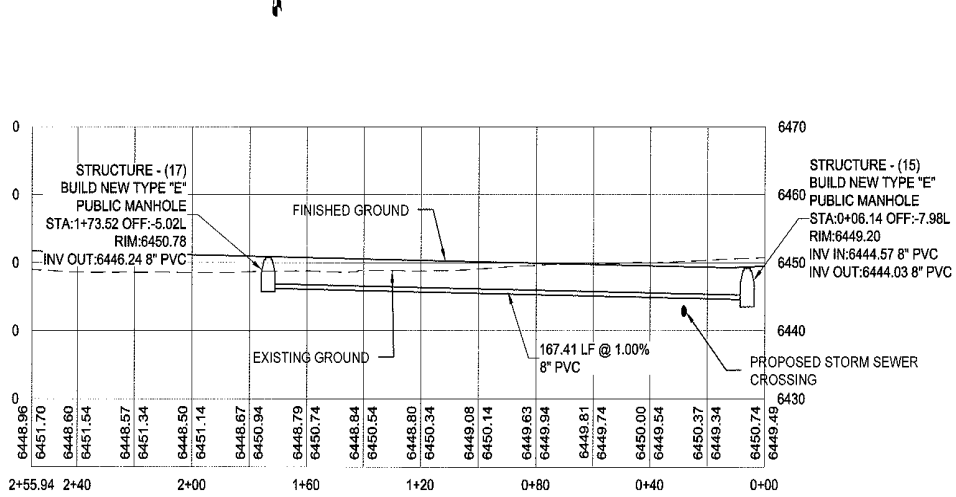
TRADITION PLACE - PLAN VIEW

SCALE: 1" = 20'



FAIRLY ROAD (SOUTH OF CAMINO ROJO) - PROFILE VIEW

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'



TRADITION PLACE - PROFILE VIEW

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 25 50 100
SCALE: 1" = 50'

ENGINEER'S SEAL

DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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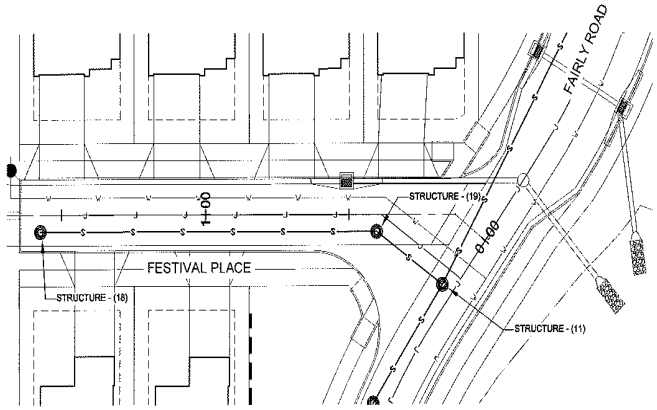
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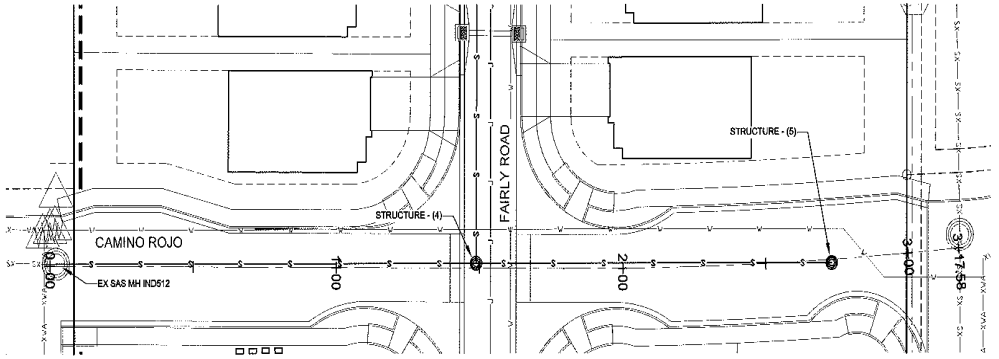
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SANITARY SEWER PLAN AND PROFILES

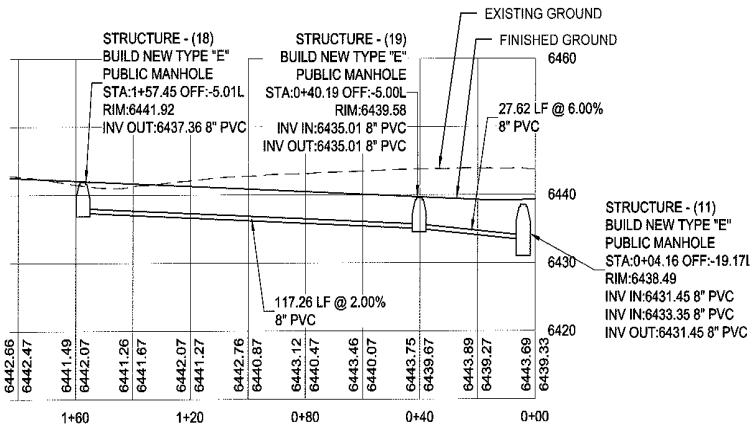
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	11-2



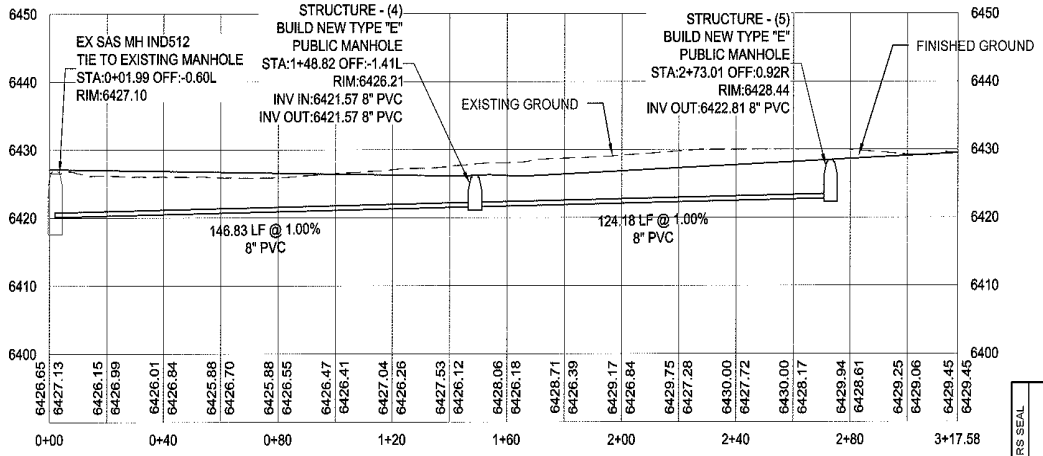
FESTIVAL PLACE - PLAN VIEW
SCALE: 1" = 20'



CAMIINO ROJO - PLAN VIEW
SCALE: 1" = 20'



FESTIVAL PLACE - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'



CAMINO ROJO - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 25 50 100
SCALE: 1" = 50'

ENGINEER'S SEAL

REVISIONS	DATE

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____

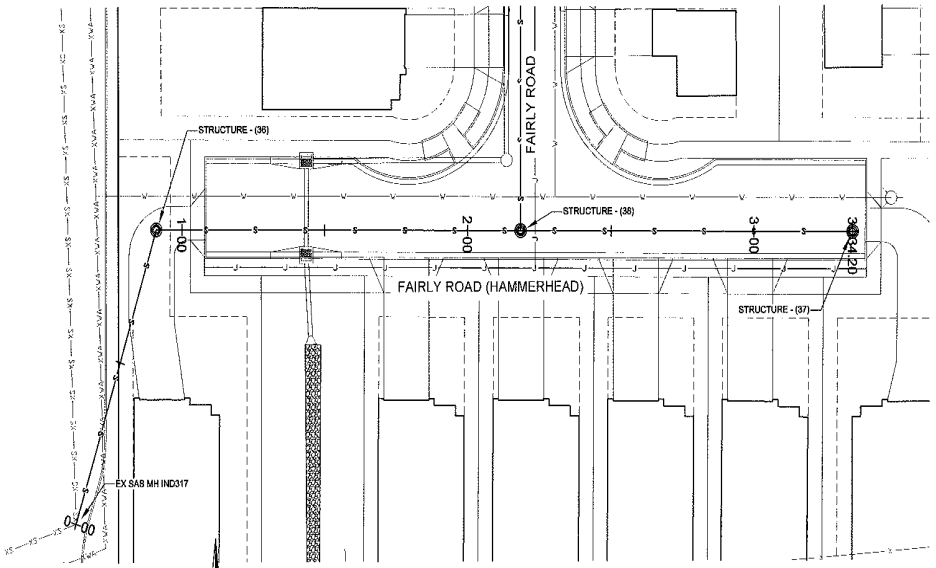
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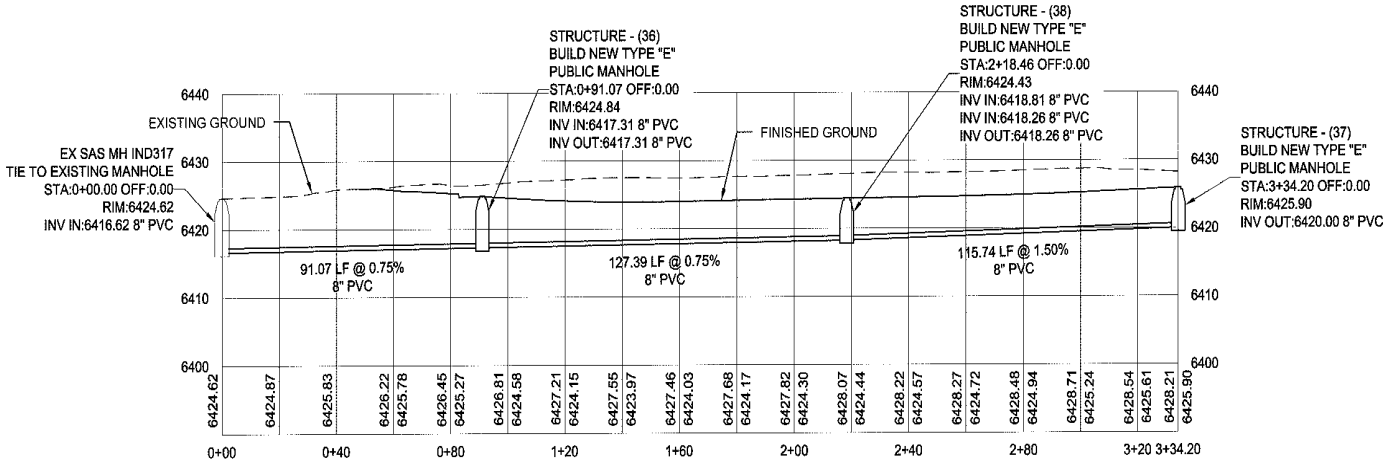
SANITARY SEWER PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	11-3



OFFSITE SANITARY SEWER - PLAN VIEW

SCALE: 1" = 20'



OFFSITE SANITARY SEWER - PROFILE VIEW

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

ENGINEER'S SEAL

DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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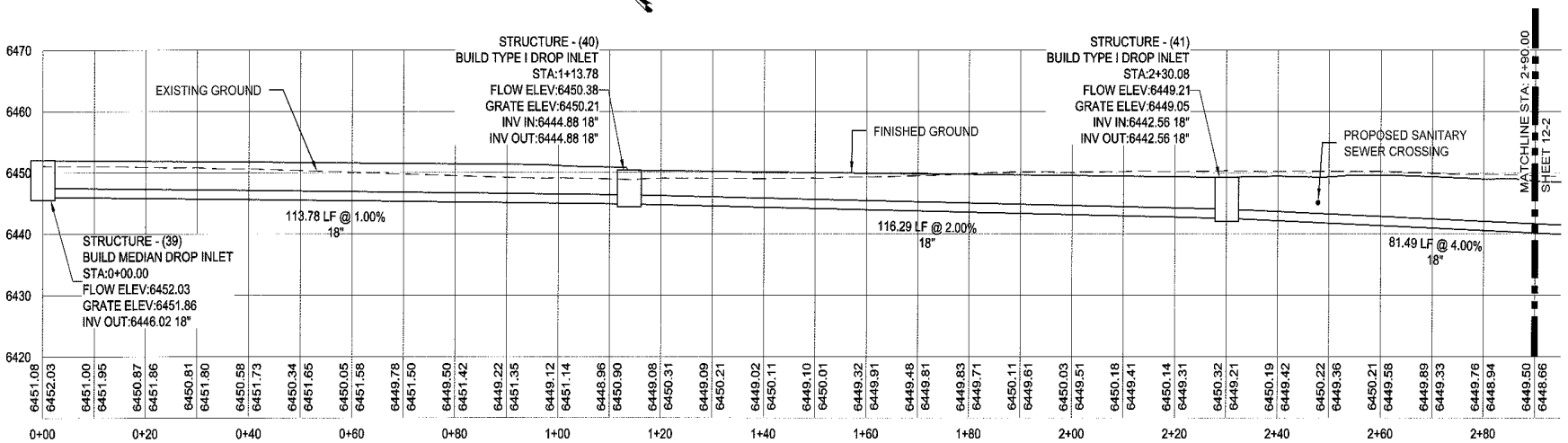
SANITARY SEWER PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 20'	11-4



STORM SEWER 1 - PLAN VIEW

SCALE: 1" = 10'



STORM SEWER 1 - PROFILE VIEW

SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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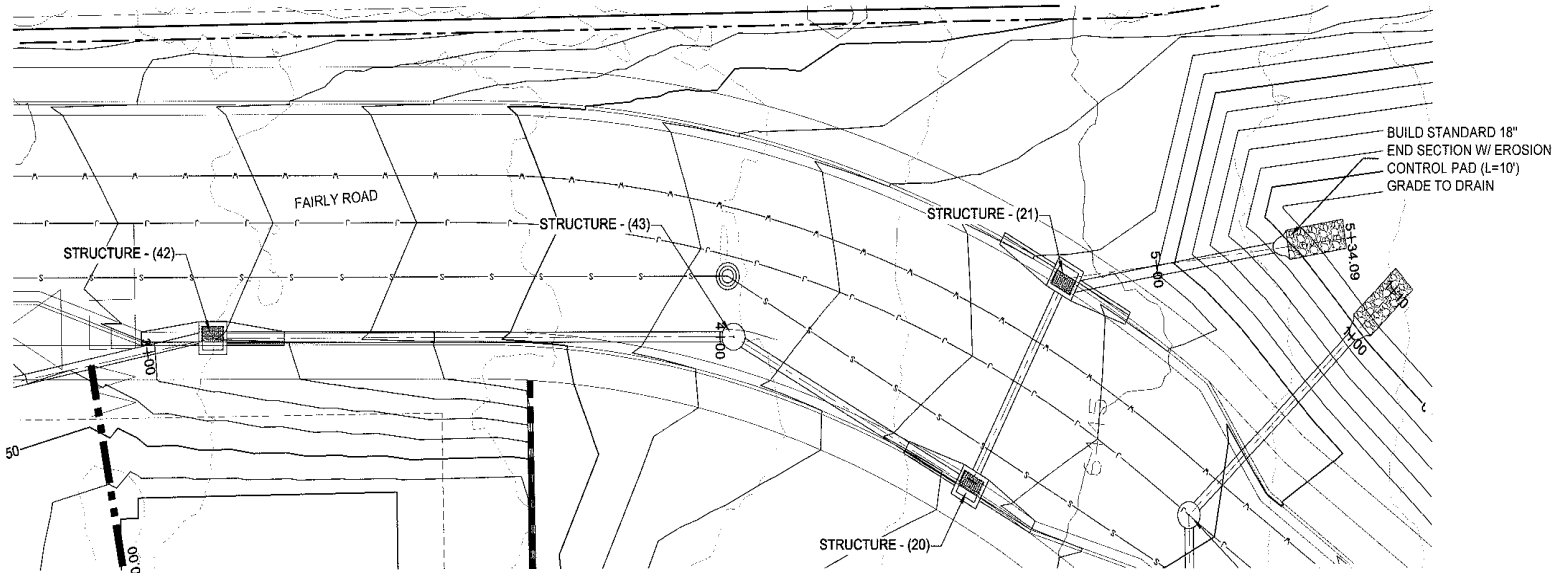
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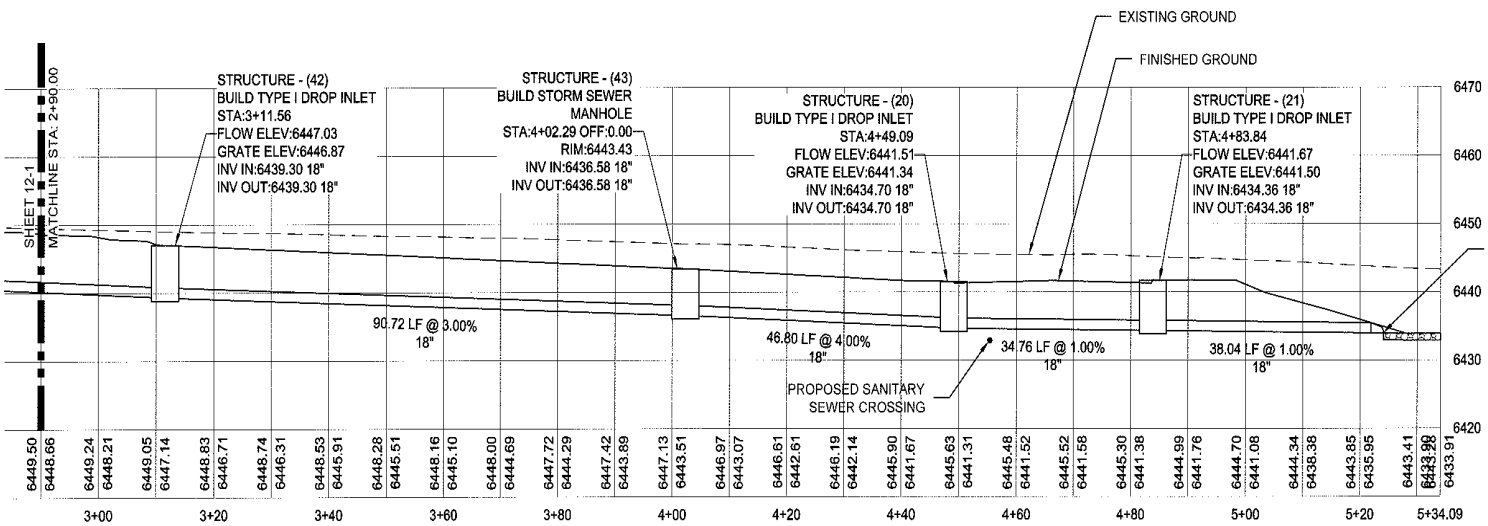
STORM SEWER PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 10'	12-1

REVISIONS | DATE | ENGINEERS SEAL



STORM SEWER 1 - PLAN VIEW (CONT'D)
SCALE: 1" = 10'



STORM SEWER 1 - PROFILE VIEW (CONT'D)
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
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LANDSCAPE		
SUBDIVISION ENGINEER		

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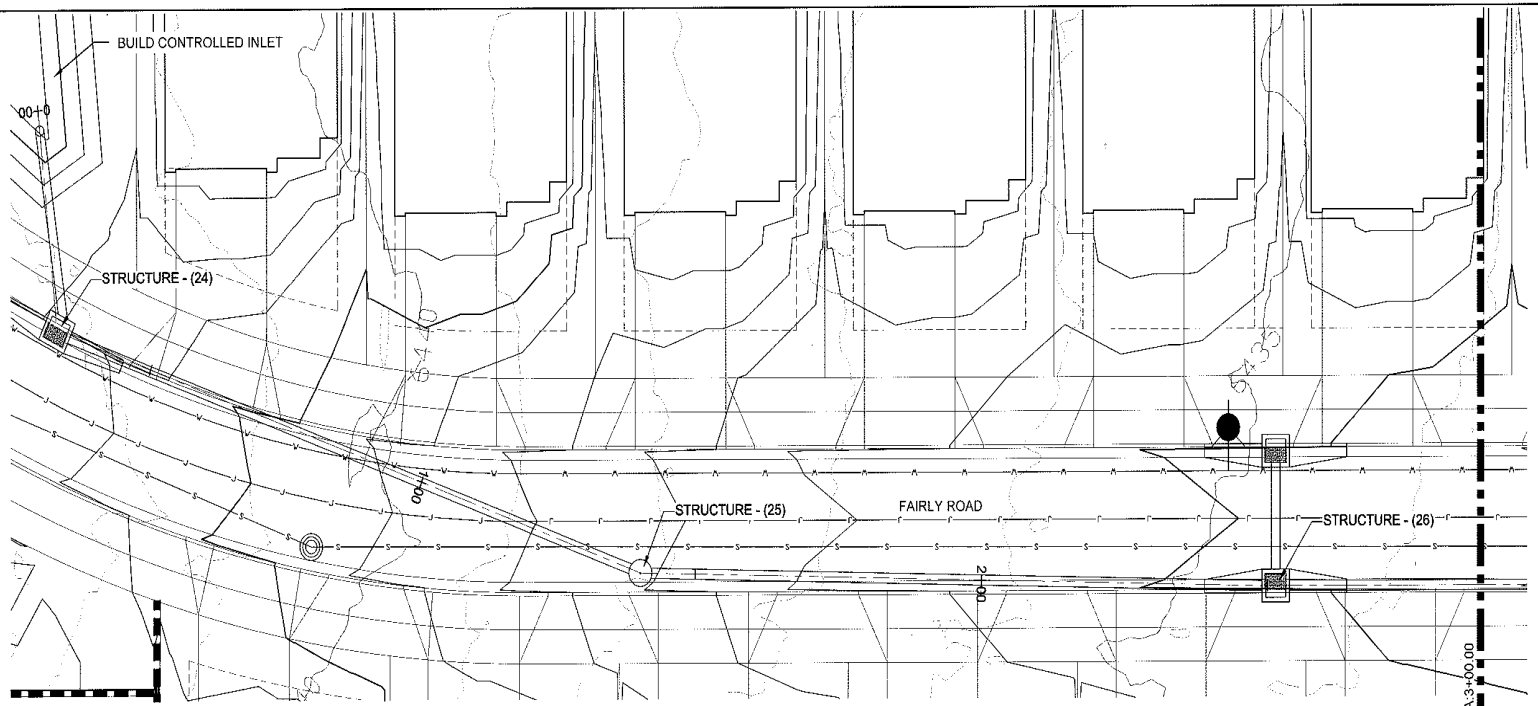
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STORM SEWER PLAN AND PROFILES

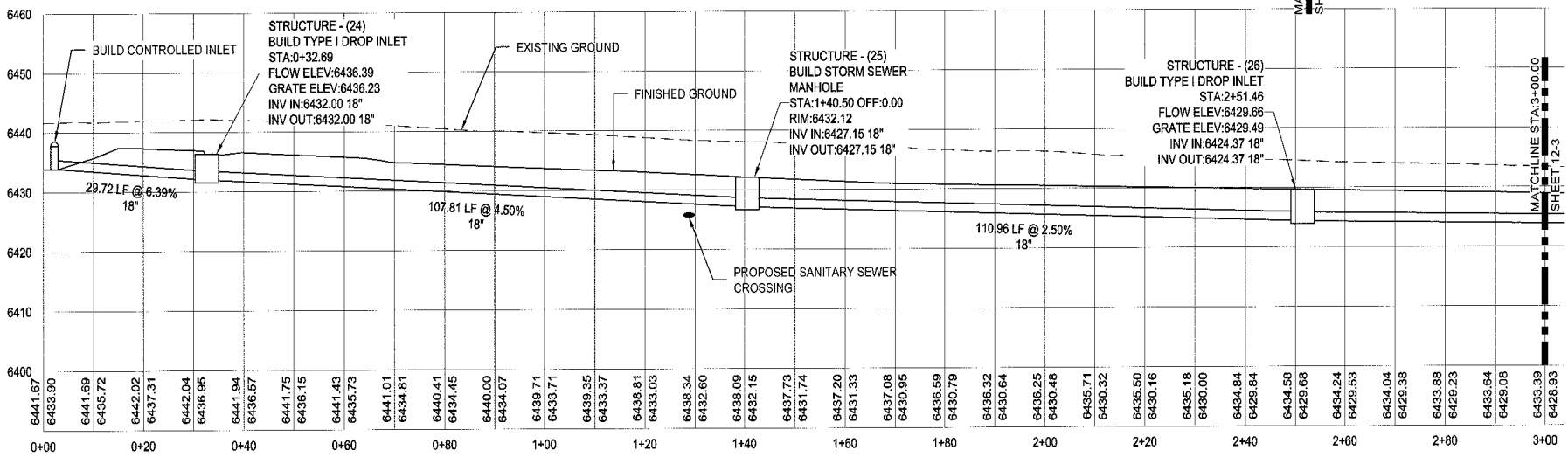
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 10'	12-2

ENGINEERS SEAL
DATE
REVISIONS



STORM SEWER 2 - PLAN VIEW

SCALE: 1" = 10'



STORM SEWER 2 - PROFILE VIEW

SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

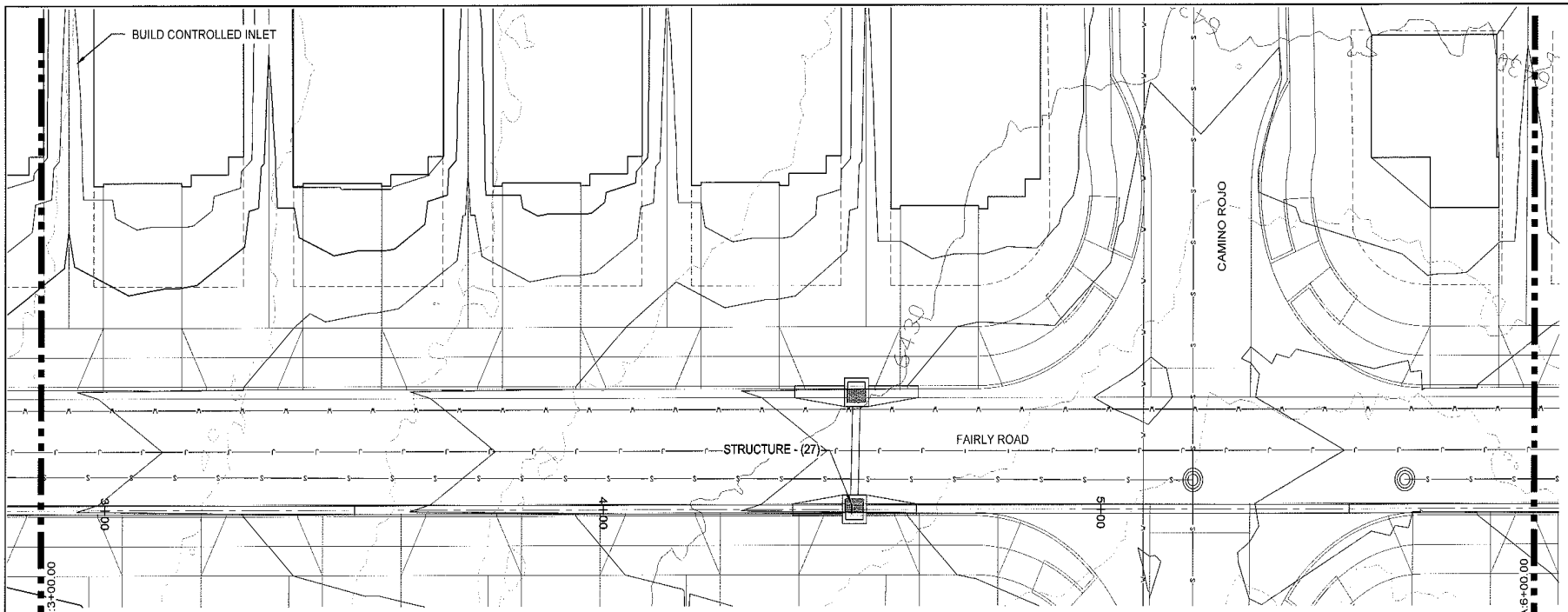
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STORM SEWER PLAN AND PROFILES

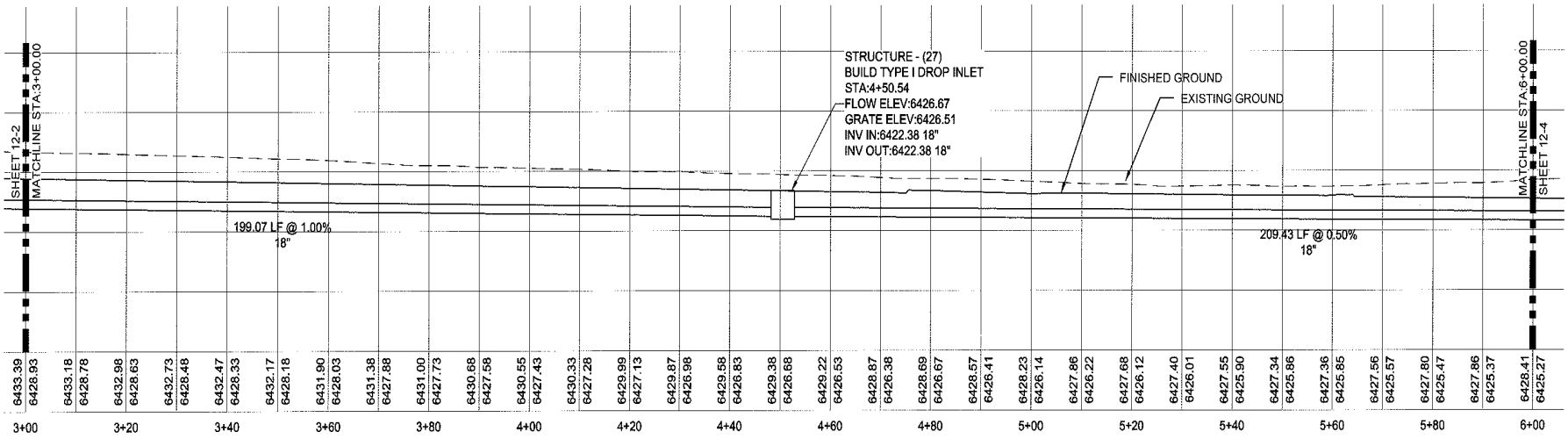
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 10'	12-3

REVISIONS | DATE | ENGINEERS SEAL



STORM SEWER 2 - PLAN VIEW

SCALE: 1" = 10'



STORM SEWER 2 - PROFILE VIEW

SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
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LANDSCAPE		
SUBDIVISION ENGINEER		

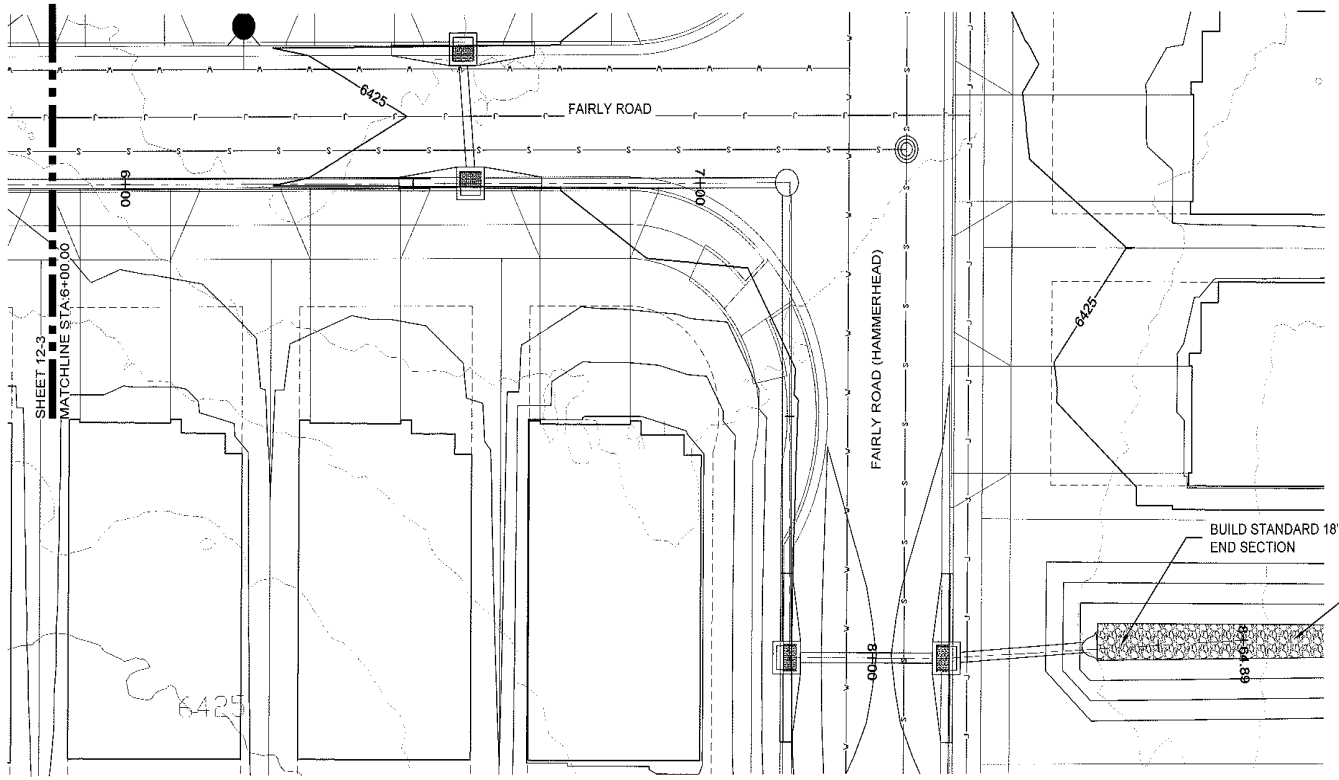
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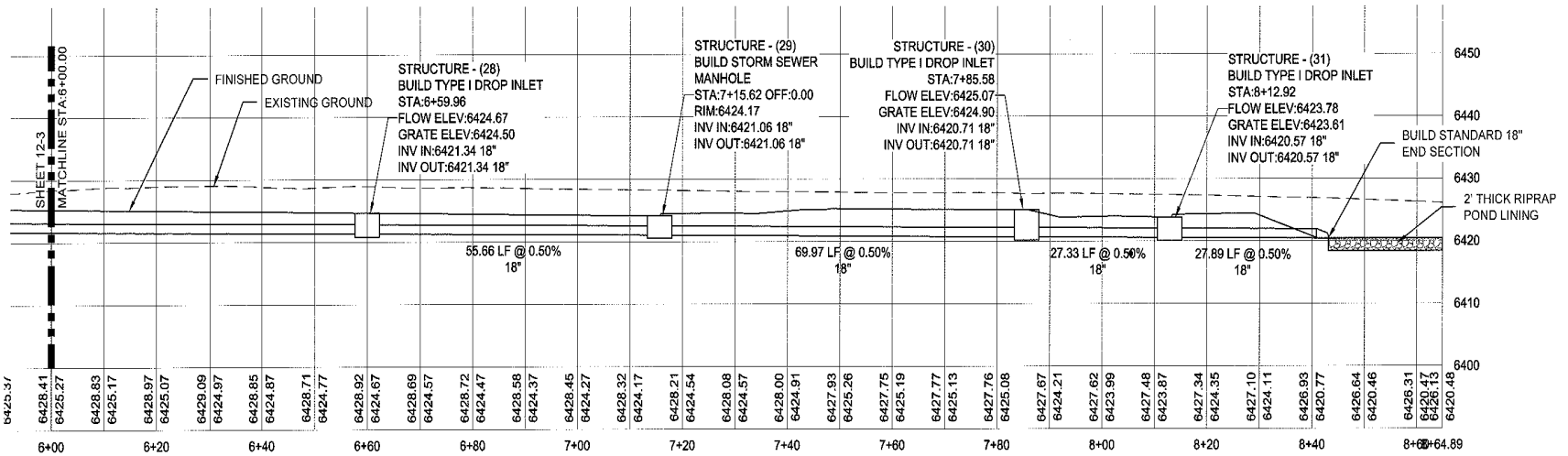
STORM SEWER PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 10'	12-4



STORM SEWER 2 - PLAN VIEW

SCALE: 1" = 10'



STORM SEWER 2 - PROFILE VIEW

SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

CASE # _____

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TRAFFIC DIV.		
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SUBDIVISION ENGINEER		
CITY USE ONLY		

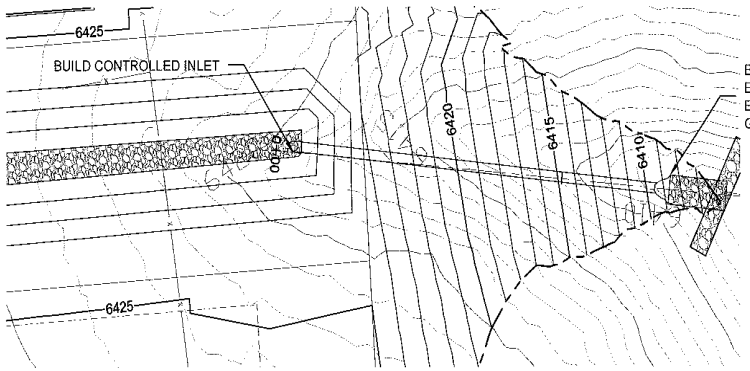
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STORM SEWER PLAN AND PROFILES

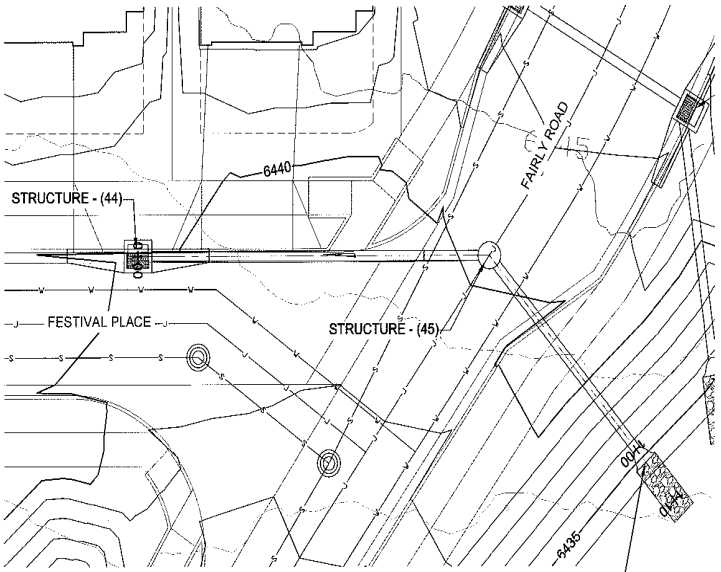
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SEPTEMBER 2020	1" = 10'	12-5

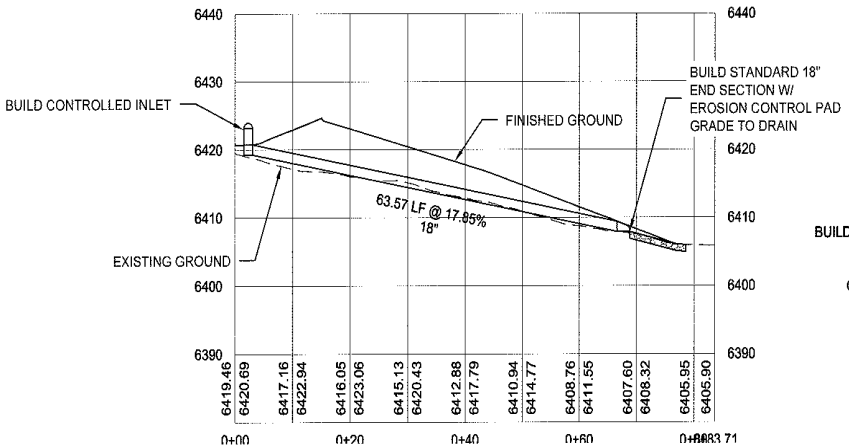
REVISIONS	DATE	ENGINEERS SEAL



STORM SEWER 3 - PLAN VIEW

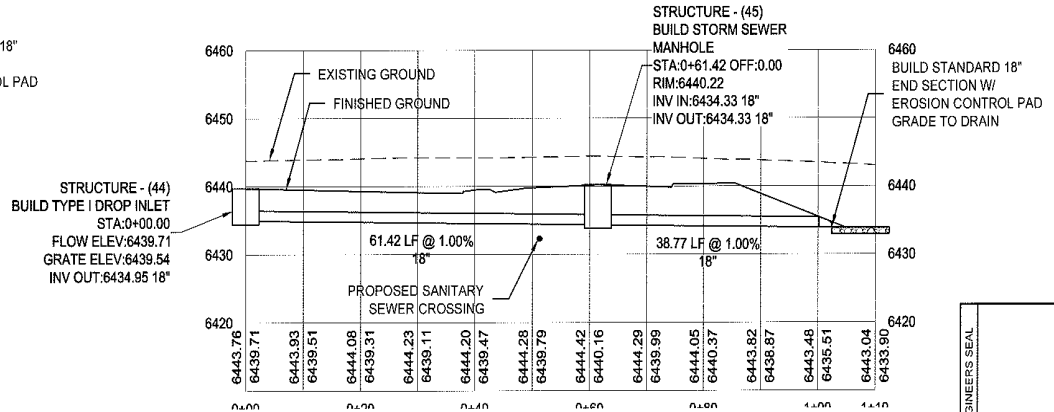
SCALE: 1" = 10'





STORM SEWER 3 - PROFILE VIEW

SCALE HORIZ: 1" = 10'
VERT: 1" = 10'



STORM SEWER 4 - PROFILE VIEW

SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

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SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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WATER SERVICES		
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LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

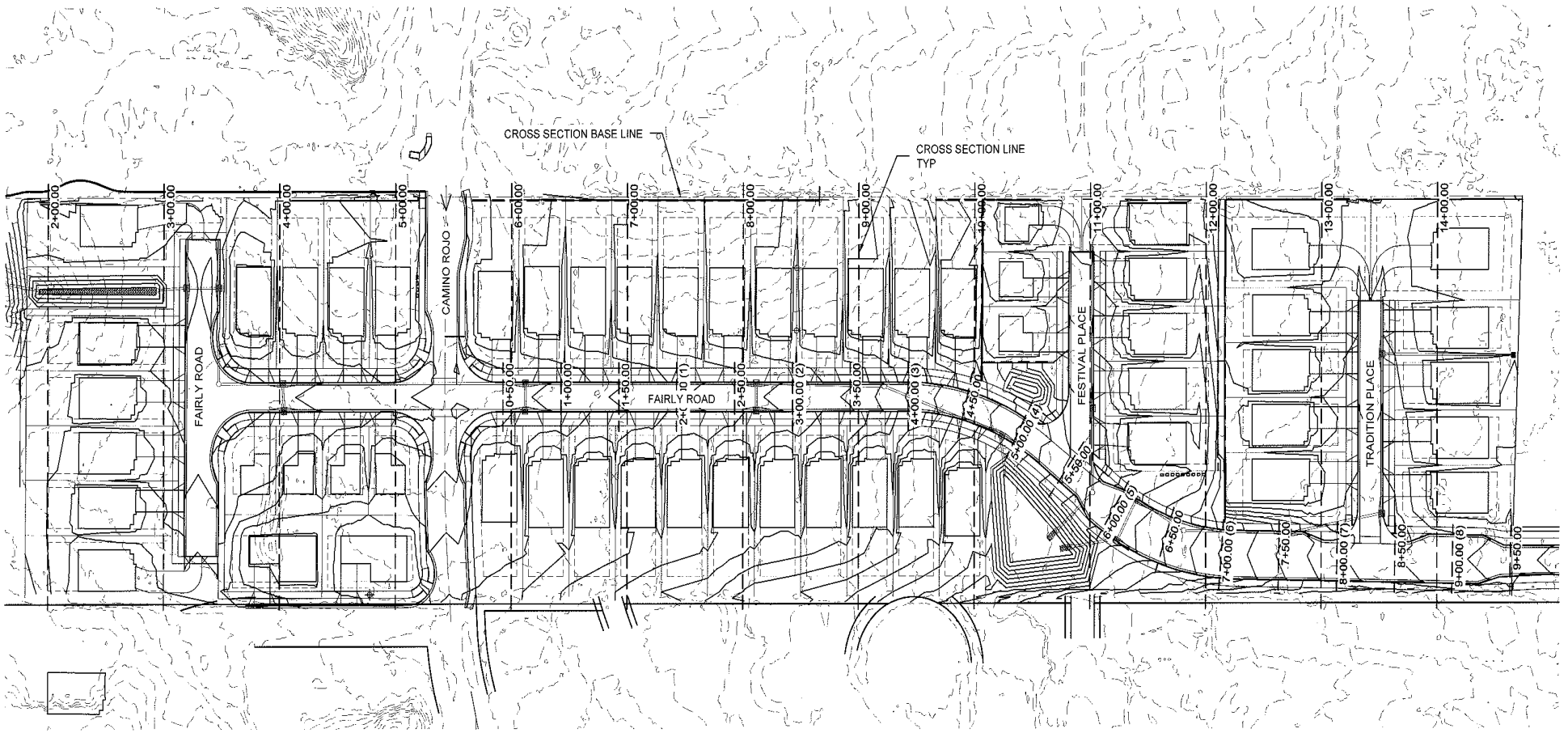
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

STORM SEWER PLAN AND PROFILES

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 10'	12-6

REVISIONS	DATE	ENGINEERS SEAL



CROSS SECTION LOCATION PLAN

SCALE: 1" = 40'

0 20 40 80

SCALE: 1" = 40'

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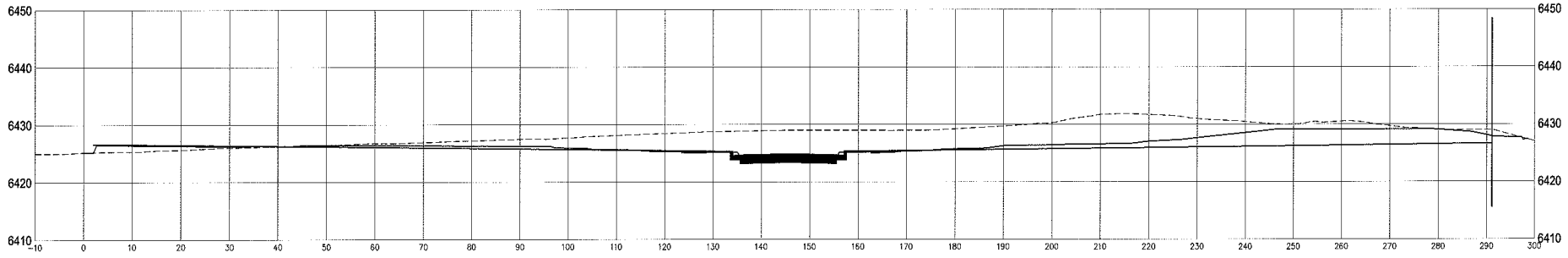
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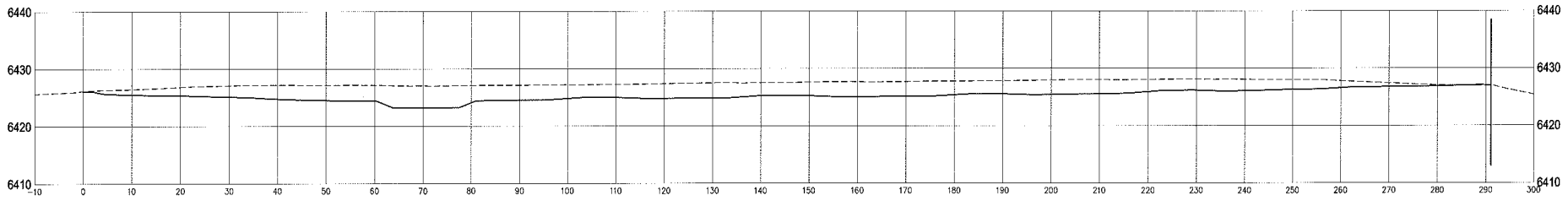
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CROSS SECTION LOCATION PLAN

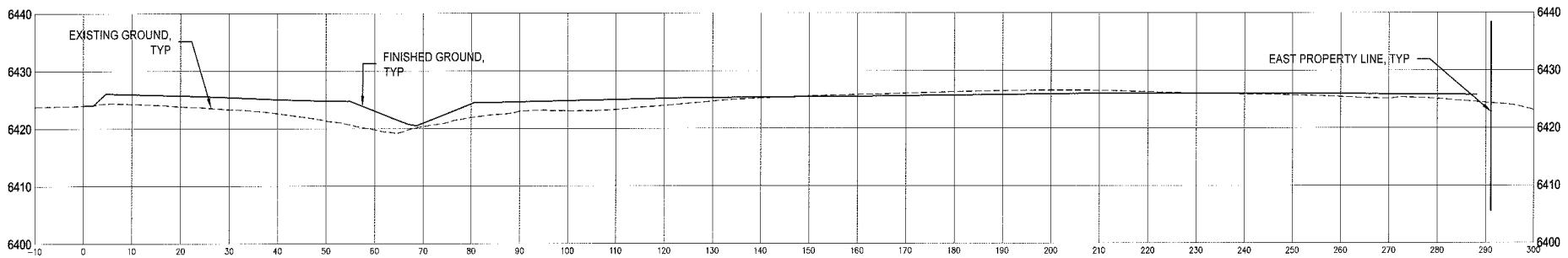
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	13-1



4+00



3+00



2+00

0 20 40 80

SCALE: 1" = 40'

REVISIONS	DATE	ENGINEERS SEAL
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CASE # _____

CITY REVIEW		
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WATER SERVICES		
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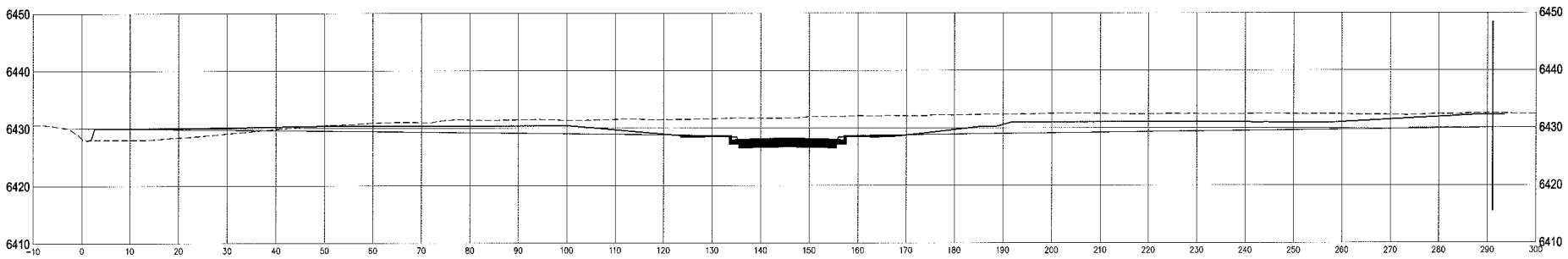
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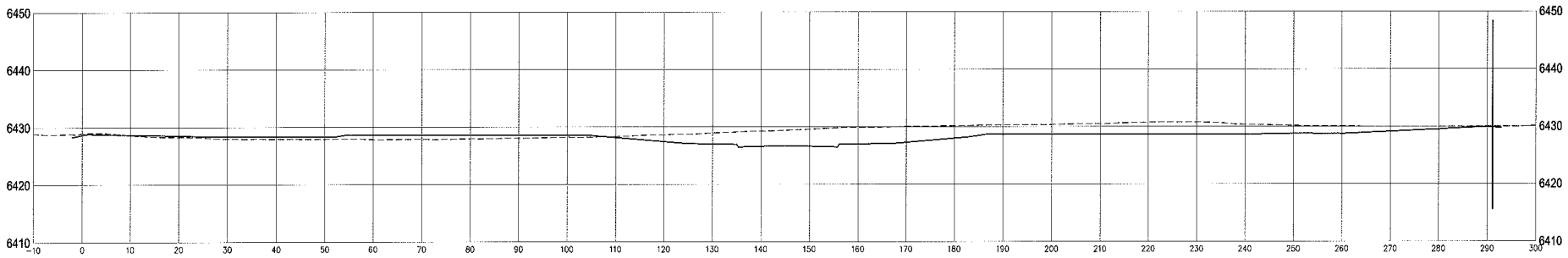
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SITE CROSS SECTIONS

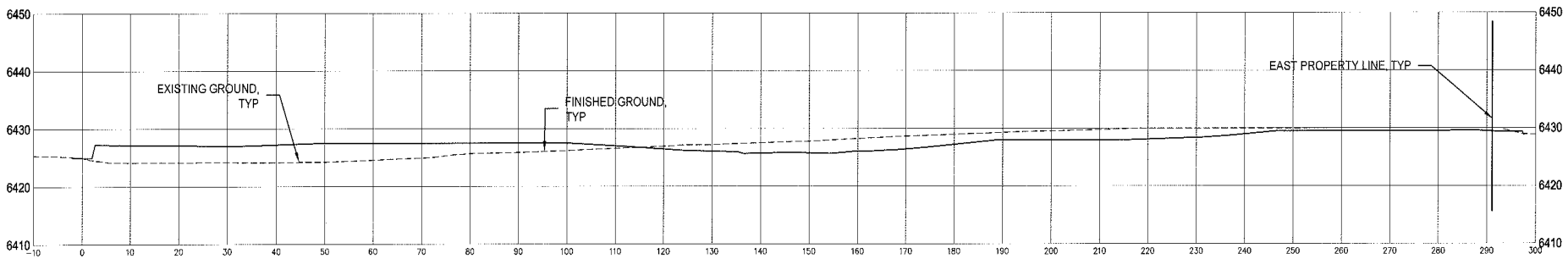
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	13-2



7+00



6+00



5+00

0 20 40 80

SCALE: 1" = 40'

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CASE # _____

CITY REVIEW		
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WATER SERVICES		
STREETS DIV.		
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SUBDIVISION ENGINEER		

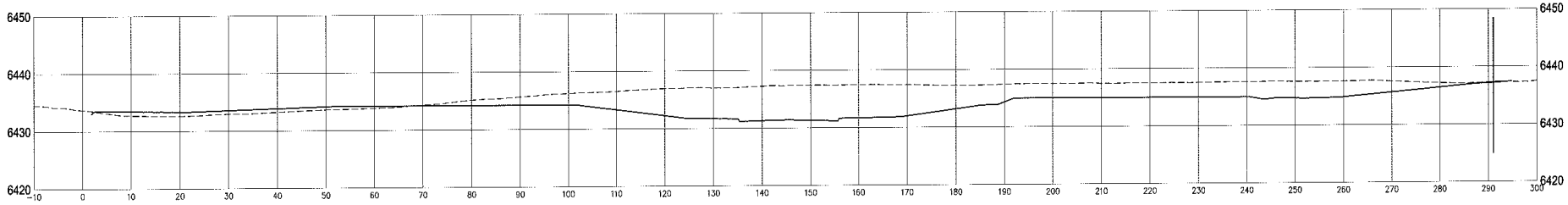
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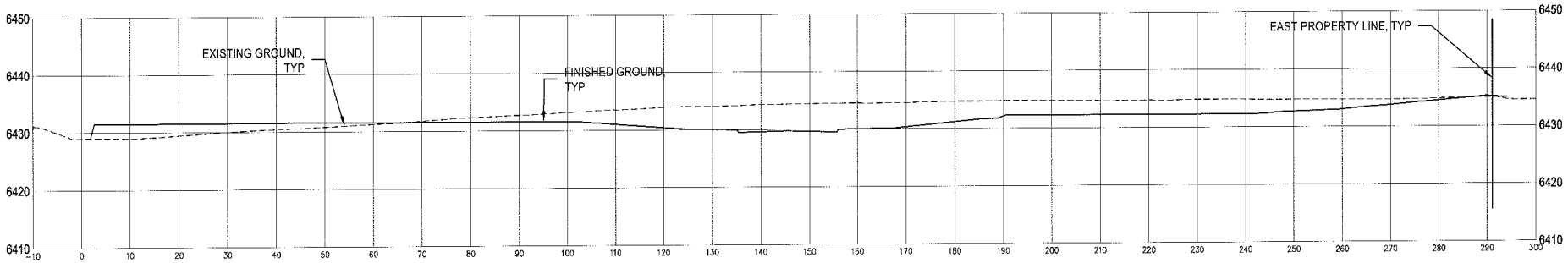
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SITE CROSS SECTIONS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	13-3



9+00



8+00

0 20 40 80
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEERS SEAL
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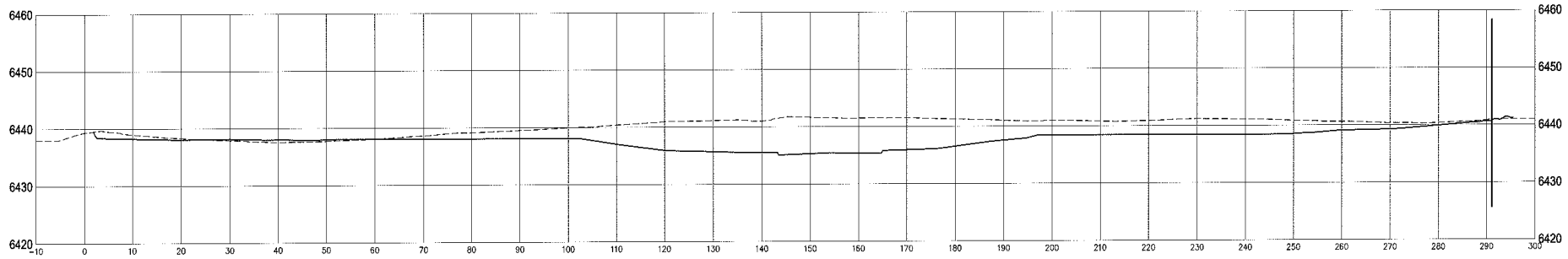
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DEPARTMENT	SIGN-OFF	DATE
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WATER SERVICES		
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SUBDIVISION ENGINEER		
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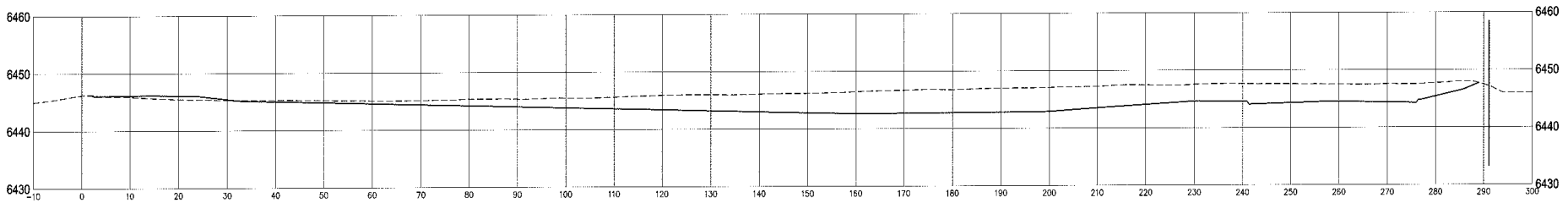
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SITE CROSS SECTIONS

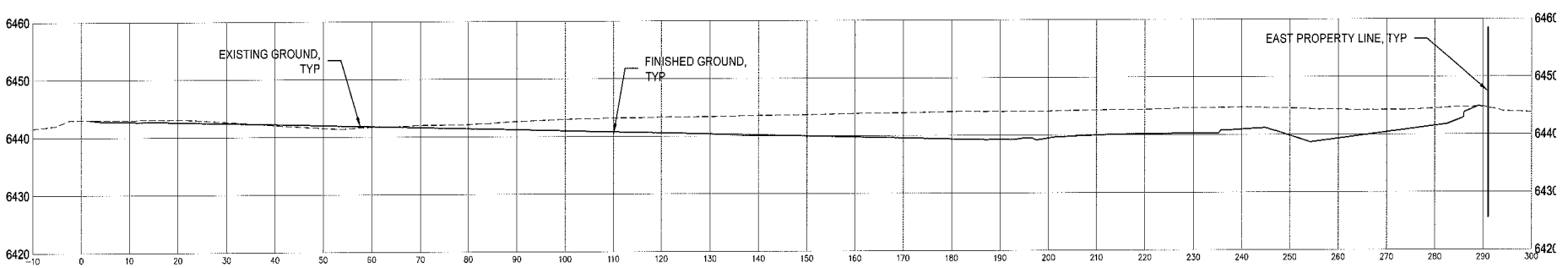
DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	13-4



10+00



12+00



11+00

0 20 40 80

SCALE: 1" = 40'

REVISIONS	DATE	ENGINEERS SEAL
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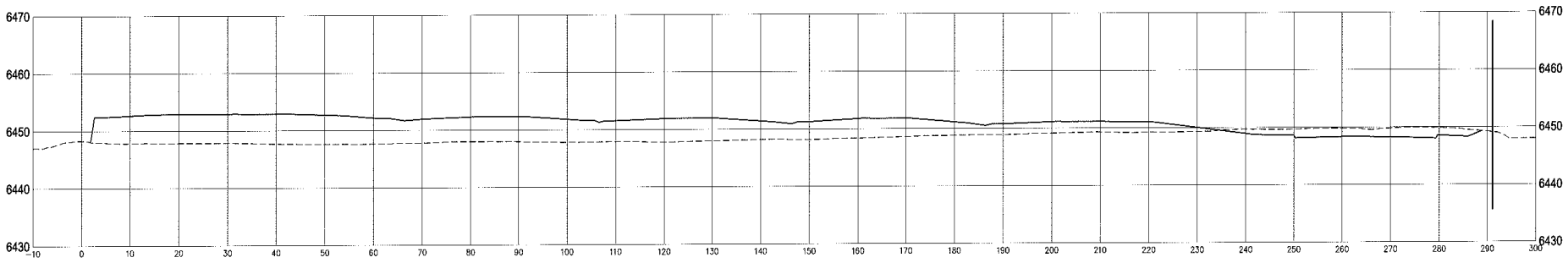
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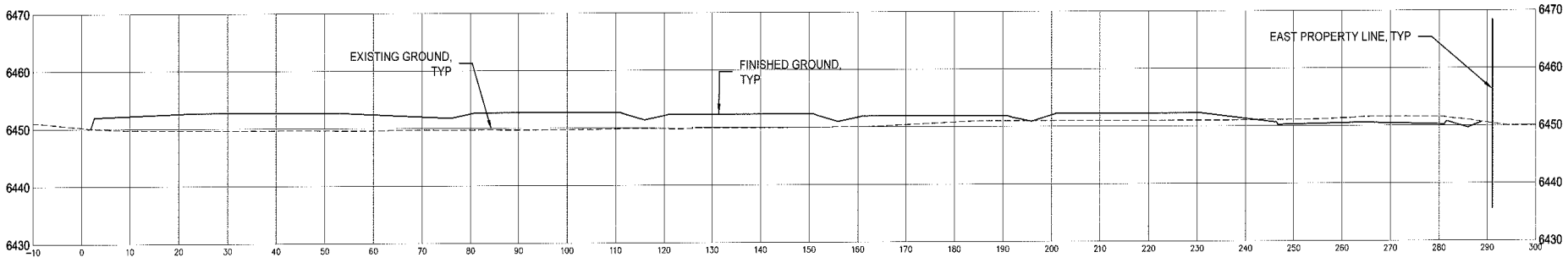
PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SITE CROSS SECTIONS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	13-5



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14+00

0 20 40 80

SCALE: 1" = 40'

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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

SITE CROSS SECTIONS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	13-6

STORM WATER POLLUTION PREVENTION PLAN
MIRAFLORES SUBDIVISION
SANTA FE, NEW MEXICO

1. SITE AND PROJECT DESCRIPTION

The project site is currently undeveloped and mainly in its natural condition. There are no arroyos adjacent to the site. The property is bordered by undeveloped property to the North, Jaguar Drive to the South, and existing residential to East and West.

1.1 Owner Operator:

Construction Operator (Separate NPDES Permit needed).

_____

_____

_____

_____

Telephone: _____

Fax: _____

1.2 Location of the site:

The site is located in Township 17 North, Range 9 East, Section 33, in Santa Fe, New Mexico.

The latitude and longitude are as follows:

Latitude: 35°37'39" N
Longitude: 106°02'44" W

1.3 The total area of the site:

10.047 ± acres

1.4 The area of the site that is expected to be disturbed:

9.290 ± acres

1.5 Endangered Species:

Based on the instruction provided by the EPA Compliance Assurance and Enforcement Division Water Enforcement Branch, Region 6 "Storm Water Region 6 NPDES General Permit for Storm Water Discharge from Construction Activity," there are no endangered or threaten species, or designated critical habitat, which are likely to be adversely affected by the construction activity's storm water discharge or storm water discharge related activities.

1.6 Intended sequence of major construction activities:

1. Install Best Management Practices (BMP's). The contractor shall minimize soil disturbance and insure the proper stockpiling of materials.

2. Site Grading. The contractors shall use site-specific controls as shown on the Temporary Erosion Control Plans and Grading and Drainage Plans. Soil disturbance shall be minimized.

3. Installation of Utilities including trenching, stockpiling of excavated materials and backfilling. The contractors shall use site-specific controls as shown on the Temporary Erosion Control Plans.

4. Stabilization. The contractors shall use site-specific controls as shown on the Permanent Erosion Control Plans.

1.7 The following maps have been prepared:

1.7.1 Vicinity Map

See sheet 1-1.

1.7.2 Drainage patterns:

Grading and Drainage Plans, 8-1 to 8-4.

1.7.3 Approximate slopes after major grading.

Permanent Erosion Control Plan, 14-3.

1.7.4 Outline area of disturbance:

Permanent Erosion Control Plan, sheet 14-3.

1.7.5 Outline of areas which won't be disturbed:

See SWPPP Plan, this sheet.

1.7.6 Location of major structural and non-structural concepts:

Temporary Erosion Control Plan, sheet 14-2.

1.7.7 Areas where stabilization practices are expected to occur.

Permanent Erosion Control Plan, sheet 14-3.

2. DESCRIPTION OF CONTROLS

2.1 Posting Requirements:

The Contractor will post conspicuously near the entrance to the site the following items:

Copies of NOIs
Name and telephone number of contact persons.

2.2 "Good Housekeeping":

The contractors shall practice "Good Housekeeping." This includes the proper disposal of construction and demolition debris on a daily basis, proper wash down methods of construction vehicles, the proper stockpiling of materials. The construction site shall be kept in a neat and orderly manner and exposure of material to storm water will be minimized to the extent practicable.

2.3 Concrete Washout

Concrete washout is a process wastewater and must be controlled in a designated area (e.g. bermed pit) and disposed of properly and noted on the Temporary Erosion Control Plans.

2.4 Minimize Disturbance and Preserve Natural Vegetation:

The Contractor shall minimize disturbance. The limits of construction shall be clearly delineated and enforced. Special attention will be given to protecting established vegetation. The contractor will be responsible for replacing vegetation that is unnecessarily disturbed.

2.5 Inspections:

Disturbed areas, stabilization and structural control measures shall be inspected as required and at least once every two weeks, and within 24 hours or the next working day of the end of a storm event. If a portion of the site has been finally or temporarily stabilized, and runoff is unlikely due to winter conditions, or during seasonal arid periods, inspections shall be conducted on a monthly basis.

Inspections shall be documented on the inspection and maintenance form. Inspections shall be continued by the Owner and final stabilization of an area is achieved and/or the Notice of Termination is submitted.

2.6 Record Keeping:

A copy of the SWPP Plan will be maintained onsite for the use of all Operators and those identified in the SWPP Plan as having on site responsibilities. Items that will be maintained and attached to the SWPPP include:

Inspection Reports: The inspection reports shall be signed by a qualified inspector assigned by the Contractor. The SWPPP package and reports shall be available to EPA representatives at all times during construction.

Land Disturbance Log containing: dates when major soil disturbing activities occur, dates when construction activities temporarily or permanently cease on a portion of the site, and dates when stabilization measures are initiated.

Spill Tracking

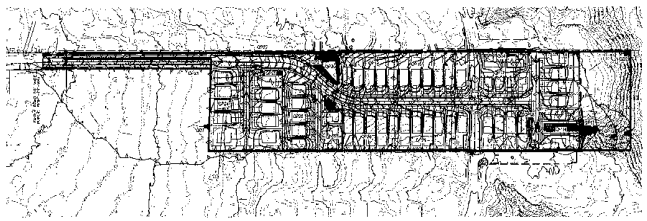
Copies of SWPP Plans, inspection records, spill reports, all reports required by NPDES Permit coverage, and data used to complete the NOI shall be retained by the permitees.

2.7 Plan Amendment:

This SWPP Plan will be amended when:

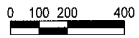
There is a change in design, construction, operation, or maintenance.

If the inspection report identifies problems or inadequacies with the current BMPs, the SWPP Plan shall be modified as necessary to include additional or modified BMP's designed to correct the problems.



DEVELOPED CONDITIONS DRAINAGE MAP
SCALE: 1" = 50'





SCALE: 1" = 200'

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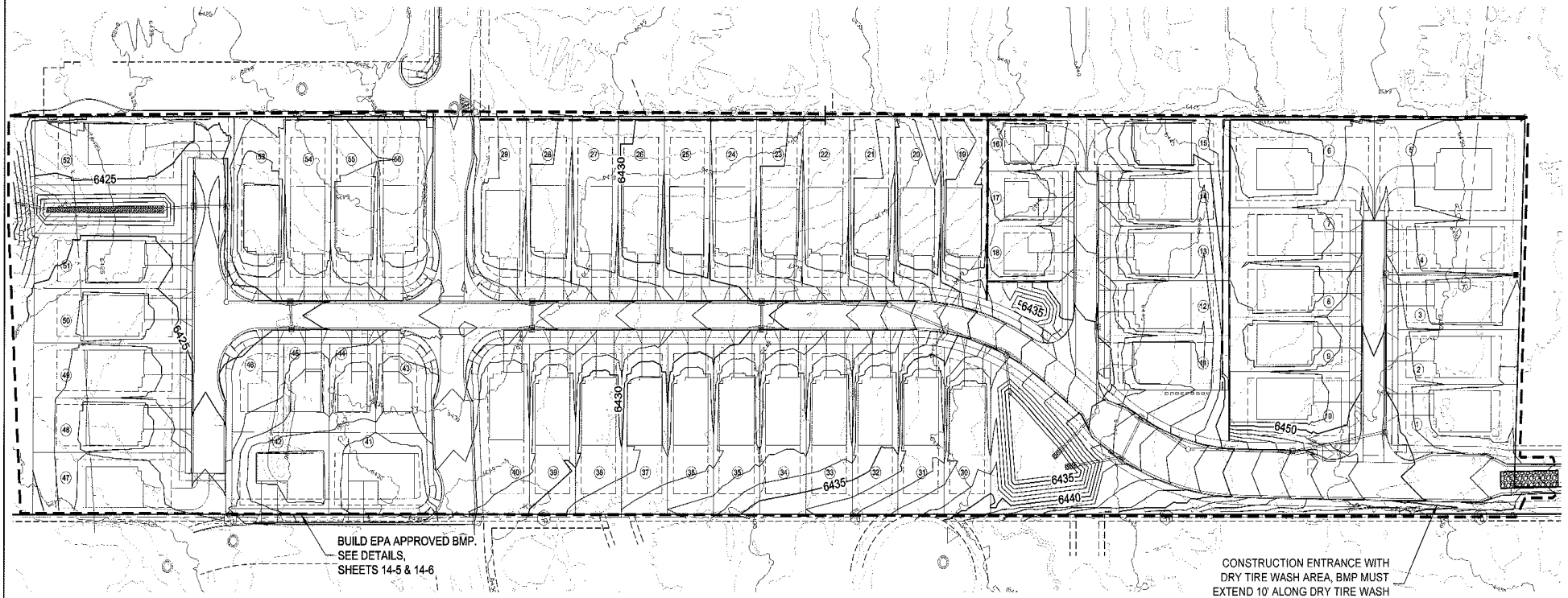
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

STORM WATER POLLUTION PREVENTION PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	14-1



TEMPORARY EROSION CONTROL PLAN

SCALE: 1" = 40'

BEST MANAGEMENT PRACTICES - NOTES

1. DISTURBED AREAS SHALL BE PROTECTED FROM EROSION DURING CONSTRUCTION BY MEANS ADEQUATE TO RETAIN SOIL ON SITE.
2. EXCEPT AS NECESSARY TO INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES, LAND SHALL NOT BE GRADED OR CLEARED UNTIL ALL SUCH TEMPORARY DEVICES HAVE BEEN PROPERLY INSTALLED AND INSPECTED. CONTROL DEVICES SHALL BE KEPT IN PLACE AND USED UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
3. SIGNIFICANT TREES, AREAS WITH SUBSTANTIAL GRASS COVERAGE, AND DRAINAGE WAYS THAT ARE TO REMAIN UNDISTURBED SHALL BE FENCED OFF PRIOR TO THE USE OF ANY HEAVY MACHINERY ON-SITE AND DURING THE ENTIRE CONSTRUCTION PROCESS. FENCING SHALL BE PLACED FIVE FEET TO THE OUTSIDE OF THE DRIP LINE OF SIGNIFICANT TREES.
4. SOIL STOCKPILES SHALL BE PROTECTED FROM EROSION THROUGHOUT CONSTRUCTION BY USING APPROPRIATE EROSION CONTROL TECHNIQUES. STAGING AND SOIL STOCKPILE AREAS SHALL BE CLEARLY DESIGNATED ON THE SITE. ALL TOPSOIL SHALL BE KEPT ON SITE, WITHIN THE DISTURBANCE ZONE OF CONSTRUCTION, AND REINTRODUCED IN TO PLANTING AREAS TO THE EXTENT POSSIBLE. THERE ARE NO SOIL STOCKPILES ASSOCIATED WITH THIS PROJECT.
5. WATERING DOWN EXPOSED AREAS IS REQUIRED TO PREVENT THE BLOWING OF DUST OR SEDIMENT.
6. PROTECTION FOR STORM DRAIN INLETS SHALL BE PROVIDED TO PREVENT THE ENTRY OF SEDIMENT WHILE STILL ALLOWING THE ENTRY OF STORM WATER.
7. EROSION AND SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY WATERING AND/OR FIBER MULCH WITH TACKIFIER.
8. ALL CONSTRUCTION TRAFFIC SHALL USE TIRE WASHES.

MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

1. DISTURBED AREAS, STABILIZATION AND STRUCTURAL CONTROL MEASURES SHALL BE INSPECTED AS REQUIRED AND AT LEAST ONCE EVERY TWO WEEKS, AND WITHIN 24 HOURS OR THE NEXT WORKING DAY OF THE END OF A STORM EVENT. IF A PORTION OF THE SITE HAS BEEN FINALLY OR TEMPORARILY STABILIZED, AND RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS, OR DURING SEASONAL ARID PERIODS, INSPECTIONS SHALL BE CONDUCTED ON A MONTHLY BASIS.
2. THE STORM WATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED TO ENSURE THAT THE SYSTEM IS MAINTAINED IN PROPER WORKING CONDITION.
3. IF AFTER NOTICE BY THE CITY TO CORRECT A VIOLATION REQUIRING MAINTENANCE WORK, SATISFACTORY CORRECTIONS ARE NOT MADE WITHIN A REASONABLE PERIOD OF TIME. THE CITY MAY PERFORM ALL NECESSARY WORK TO PLACE THE FACILITY IN PROPER WORKING CONDITION. THE CONTRACTOR SHALL BE ASSESSED THE ASSOCIATED COSTS OF THE WORK.

LEGEND

EPA APPROVED BMP. SEE SHEET 14-5 & 14-6 FOR DETAILS

0 20 40 80

SCALE: 1" = 40'

REVISIONS	DATE	ENGINEER'S SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____

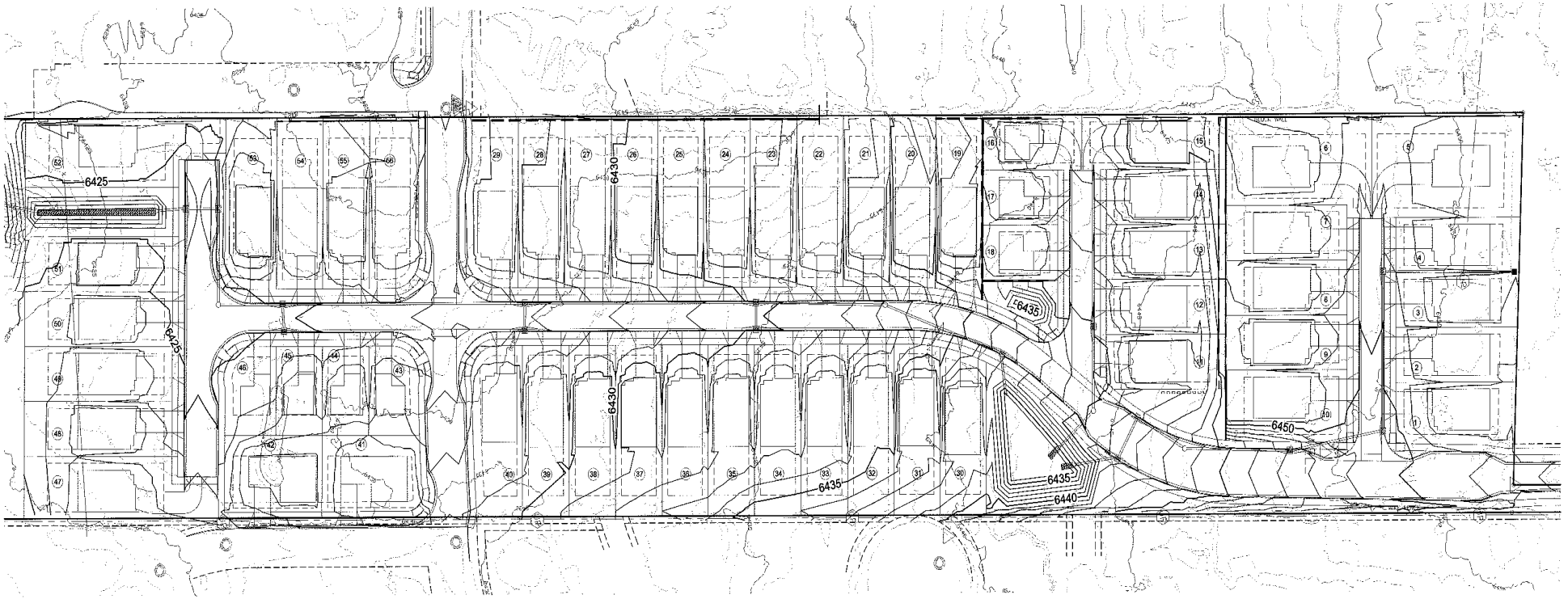
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(505) 982-2845 Fax (505) 982-2641
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

TEMPORARY EROSION CONTROL PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	14-2



PERMANENT EROSION CONTROL PLAN
SCALE: 1" = 40'

LONG TERM MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

1. ALL STORM WATER FACILITIES SHALL BE MAINTAINED BY MIRAFLORES SUBDIVISION.
2. THE STORM WATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED.
3. THE CITY OR ITS AUTHORIZED AGENT MAY ENTER UPON THE PROPERTY, AT REASONABLE TIMES TO ENSURE THAT THE SYSTEM IS MAINTAINED IN PROPER WORKING CONDITION.
4. IF AFTER NOTICE BY THE CITY TO CORRECT A VIOLATION REQUIRING MAINTENANCE WORK, SATISFACTORY CORRECTIONS ARE NOT MADE WITHIN A REASONABLE PERIOD OF TIME. THE CITY MAY PERFORM ALL NECESSARY WORK TO PLACE THE FACILITY IN PROPER WORKING CONDITION. THE OWNER(S) OR RESPONSIBLE PARTY OF THE FACILITY SHALL BE ASSESSED THE ASSOCIATED COSTS OF THE WORK.

INSPECTIONS AND VIOLATIONS DURING CONSTRUCTION PROCESS

1. INSPECTIONS BY CITY ARE DUE WHEN STORM WATER MANAGEMENT MEASURES ARE COMPLETED AND WHEN THE FINAL SITE RESTORATION MEASURES ARE COMPLETED. HOWEVER, IF FINAL SITE RESTORATION MEASURES ARE BEING DELAYED DUE TO THE SEASON, THE CITY SHALL BE NOTIFIED WHEN TEMPORARY EROSION CONTROL MEASURES FOR USE UNTIL RESTORATION IS COMPLETE, IN PLACE AND READY FOR INSPECTION.
2. FURTHER CONSTRUCTION OR ISSUANCE OF ANY PERMITS SHALL NOT OCCUR UNTIL WRITTEN APPROVAL HAS BEEN GRANTED BY THE CITY.

STORMWATER FACILITIES MAINTENANCE SCHEDULE

SPRING MAINTENANCE:	MARCH 21st	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF DATE. REMOVE SEDIMENT BUILD UP IN IN ALL PONDS AND RESEED.
FALL MAINTENANCE:	SEPTEMBER 18th	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF DATE.
PERIODIC MAINTENANCE:	AFTER SIGNIFICANT STORMS	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF STORM.

SFCC 13-2 PROHIBITS THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, VEGETATION, SLURRIES, MUD, PLASTERS, CONCRETE RESINATES AND ANY CONSTRUCTION MATERIALS, WASTES AND GARBAGE, ETC. TO THE STORM DRAIN SYSTEM. THE STORM DRAIN SYSTEM INCLUDES ROADS, STREETS, CURBS, GUTTERS, DROP INLETS, PIPED STORM DRAINS, CULVERTS, RETENTION AND DETENTION BASINS, NATURAL AND MAN-MADE DRAINAGE CHANNELS, ARROYOS, RIVERS, AND ANY FACILITY AND APPURTENANCE BY WHICH STORMWATER IS COLLECTED AND/OR CONVEYED. CULVERT AND DRAIN FLUSHING SHALL BE CAREFULLY DONE. POLLUTANTS AND DEBRIS SHALL BE CAREFULLY REMOVED AND DISPOSED OF AT THE LANDFILL.

0 20 40 80
SCALE: 1" = 40'

REVISIONS	DATE	ENGINEER'S SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____

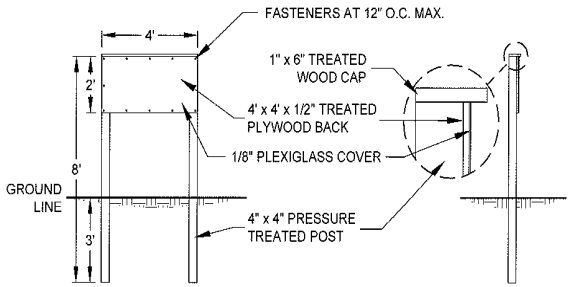
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

PERMANENT EROSION CONTROL PLAN

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	1" = 40'	14-3



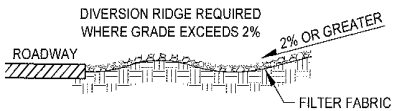
N.P.D.E.S. PERMIT POSTING BOARD
(LOCATED AT MAIN ENTRANCE)

CITY OF SANTA FE NPDES STORMWATER MANAGEMENT NOTES

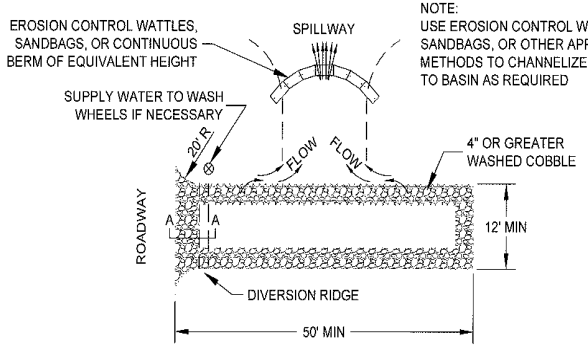
1. DEVELOPMENT IS SUBJECT TO THE REQUIREMENTS OF THE SFCC CHAPTER XIII STORMWATER UTILITY INCLUDING THE STORMWATER UTILITY SERVICE CHARGE AND STORMWATER ILLICIT DISCHARGE CONTROL REQUIREMENTS.
2. DEVELOPMENT IS SUBJECT TO THE REQUIREMENTS OF NPDES GENERAL MS4 DISCHARGE PERMIT NO. NMR040000 AND NPDES CONSTRUCTION GENERAL PERMIT NO. NMR 100000.
3. CONSTRUCTION GENERAL DISCHARGE PERMIT NO. NMR100000- A STORMWATER POLLUTION PREVENTION PLAN MUST BE PREPARED BY A QUALIFIED PROFESSIONAL AND A NOTICE OF INTENT (NOI) FOR COVERAGE MUST BE FILED WITH THE EPA. CONSTRUCTION STORMWATER DISCHARGES **ARE NOT PERMITTED** UNTIL A MINIMUM OF SEVEN (7) CALENDAR DAYS AFTER EPA ACKNOWLEDGEMENT OF A COMPLETE NOI.
4. CITY OF SANTA FE STORMWATER ILLICIT DISCHARGE CONTROL- SFCC 13-2 PROHIBITS THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, SLURRIES, MUD, PLASTERS, CONCRETE RINSATES AND ANY CONSTRUCTION MATERIALS, WASTES AND GARBAGE, ETC. TO THE STORM DRAIN SYSTEM. THE STORM DRAIN SYSTEM INCLUDES ROADS, STREETS, CURBS, GUTTERS, DROP INLETS, PIPED STORM DRAINS, CULVERTS, RETENTION AND DETENTION BASINS, NATURAL AND MAN-MADE DRAINAGE CHANNELS, ARROYOS, RIVERS AND ANY FACILITY AND APPURTENANCE BY WHICH STORMWATER IS COLLECTED AND/OR CONVEYED.
5. CITY OF SANTA FE TERRAIN AND STORMWATER REGULATIONS- SFCC 14-8.2 REQUIRES THAT CONSTRUCTION DISTURBED AREA SHALL BE PROTECTED AGAINST EROSION. SEDIMENT MUST BE CONTAINED ON THE DISTURBED AREA BY THE USE OF TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES SUCH AS SILT FENCING, SWALES, BERMS, GEOTEXTILES, SEDIMENT BASINS AND TRAPS. PROTECTION FOR STORM DRAIN INLETS SHALL BE PROVIDED TO PREVENT THE ENTRY OF SEDIMENT FROM THE SITE WHILE STILL ALLOWING THE ENTRY OF STORMWATER. CONTROL DEVICES SHALL BE KEPT IN PLACE AND USED UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
6. THE CONTRACTOR SHALL NOT REMOVE SILT FENCE AND MULCH SOCKS OR OTHER TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES UNTIL DISTURBED AREAS ARE STABILIZED. SOIL STABILIZATION AND EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER COMPLETION OF CONSTRUCTION OR OTHER SOIL DISTURBANCE ACTIVITIES ON THE SITE. IF THE TIME OF YEAR IS NOT CONDUCIVE TO PLANTING, THEN PLANTING MAY BE DELAYED UNTIL THE NEXT APPROPRIATE PLANTING SEASON PROVIDED THAT ALL TEMPORARY EROSION CONTROL MEASURES ARE MAINTAINED UNTIL PERMANENT EROSION CONTROL MEASURES ARE IMPLEMENTED. TEMPORARY EROSION CONTROL MEASURES SHALL BE SELECTED, DESIGNED AND INSTALLED WITH AN APPROPRIATE SEED BASE TO PROVIDE EROSION CONTROL FOR AT LEAST THREE YEARS WITHOUT ACTIVE MAINTENANCE. TEMPORARY EROSION CONTROL MEASURES SHALL BE SELECTED, DESIGNED AND INSTALLED TO ACHIEVE 70 PERCENT VEGETATIVE COVER WITHIN THREE YEARS.

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL MINIMIZE SEDIMENT TRACKING OR TRANSPORT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE ADDING ADDITIONAL LAYERS OF GRAVEL, REPAIR AND/OR CLEANOUT OF MEASURE USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS.
3. VEHICLE WASHING SHALL BE CONDUCTED IN A STABILIZED AREA WITH APPROPRIATE STORM WATER CONTROLS IN PLACE.



SECTION A-A



PLAN VIEW

0 20 40 80
SCALE: 1" = 40'

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

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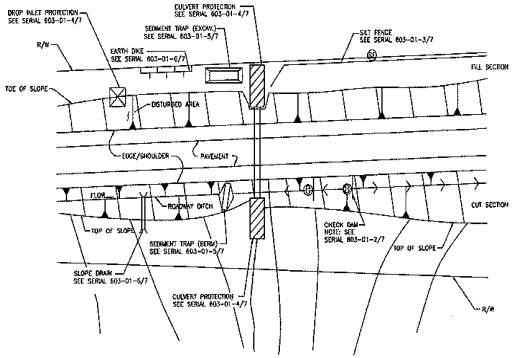
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PRELIMINARY PLAT SUBMITTAL FOR MIRAFLORES SUBDIVISION

STORM WATER CONTROL DETAILS

DATE:	SCALE:	SHEET:
SEPTEMBER 2020	N.T.S.	14-4

REVISIONS	DATE	ENGINEER'S SEAL



TYPICAL USAGE OF SELECTED EROSION AND SEDIMENT CONTROL MEASURES

STANDARD SYMBOLS FOR EROSION AND SEDIMENT CONTROL MEASURES

SILT FENCE
STRAW BALE
EARTH DIKE
DIVERSION CHANNEL (SWALE)
PIPE SLOPE DRAIN
DROP INLET PROTECTION
CULVERT PROTECTION
CHECK DAM
SEDIMENT TRAP, BERM
SEDIMENT TRAP, EXCAVATED
SEDIMENT BASIN
TRIANGULAR SEDIMENT FILTER DIKE
TSFD

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES (T.E.S.C.M.)

GENERAL NOTES

1. THE SOIL RETENTION BLANKET INSTALLATION DETAILS SHOWN FOR CULVERT PROTECTION SHALL BE USED FOR ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES UTILIZING SOIL RETENTION BLANKETS UNLESS OTHERWISE NOTED.
2. ROCK PLAINING USED IN THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THESE SHEETS SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES UNLESS OTHERWISE INDICATED.
3. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES PLACED WITHIN THE CONSTRUCTION CLEAR ZONE SHALL BE INSTALLED WITH 6:1 SLOPES PARALLEL TO TRAFFIC AND 4:1 SLOPES PERPENDICULAR TO TRAFFIC.
4. SEDIMENT TRAPS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED.
5. CHECK DAMS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE CHECK DAM.
6. CULVERT PROTECTIONS SHALL BE INSTALLED UPON INITIATION OF EARTH WORK ACTIVITIES AND MAINTAINED AS MUCH AS PRACTICAL UNTIL STABILIZATION IS COMPLETED AND ACCEPTED. CULVERT PROTECTIONS MAY BE REMOVED FOR PERIODS OF TIME AS REQUIRED DURING CONSTRUCTION TO COMPLETE ADJACENT IMPROVEMENTS.
7. THE CONTRACTOR MAY CONSTRUCT AN EARTH DIKE AS SHOWN, OR RELOCATE THE CHECK DAMS AS CONSTRUCTION PROGRESSES. NO DIRECT PAYMENT SHALL BE MADE FOR RELOCATION OF THE CHECK DAMS.
8. STRAW BALES ARE NOT INTENDED FOR USE ON NEW MEXICO DEPARTMENT OF TRANSPORTATION PROJECTS.

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

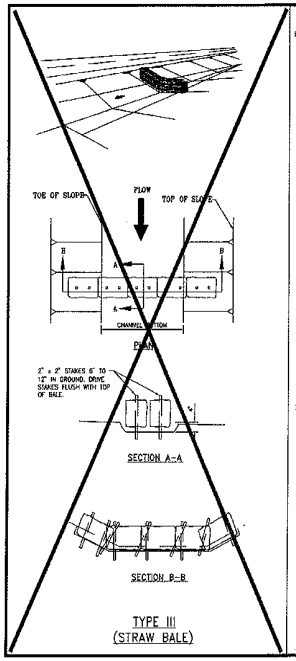
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES

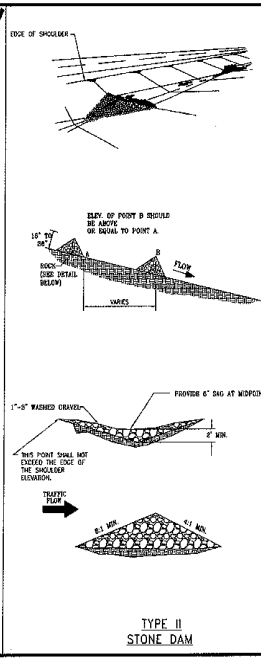
APPROVED: Raymundo Flores 11/15/07 DESIGN ENGINEER DATE

DESIGNED BY___ DRAWN BY ___ CHECKED BY___

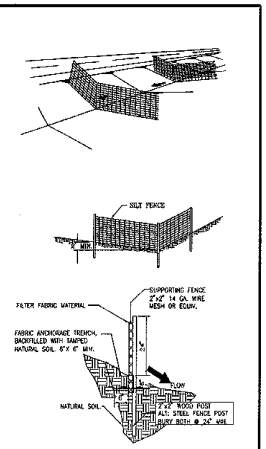
603-01-1/7 SERIAL 1 OF 7



TYPE III (STRAW BALE)



TYPE II STONE DAM



TYPE I SILT FENCE

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

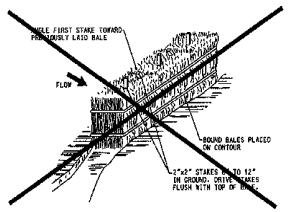
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES CHECK DAMS

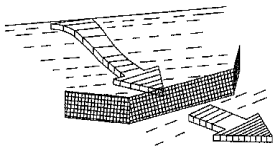
APPROVED: Raymundo Flores 11/15/07 WATER ENGINEER DATE

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603-01-2/7 SHEET 2 OF 7



TYPE II STRAW BALE OPTION



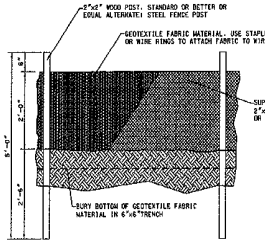
TYPE I SILT FENCE

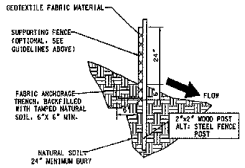
NOTES: SILT FENCE AND CHECK DAM

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE POST SPACING FOR SILT FENCES TO MINIMIZE MAINTENANCE.

1. POST SPACING SHALL BE 4 FT. MAXIMUM WITHOUT SUPPORTING FENCE. 10 FT. MAXIMUM WITH SUPPORTING FENCE.
2. POSTS FOR 4 FT. MAXIMUM POST SPACING SHALL BE 2 INCH SQUARE NOMINAL SIZE OR HEAVIER WOOD POSTS. OR STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 2 LBS. PER LINEAR FOOT.

   POSTS FOR 10 FT. MAXIMUM POST SPACING SHALL BE 4 INCH SQUARE NOMINAL SIZE OR HEAVIER WOOD POSTS. OR STEEL POSTS AS SPECIFIED ABOVE.
3. SUPPORTING FENCE SHALL BE WIRE MESH (14 GA. MIN., 1 INCH MAX. MESH OPENINGS). SNOW FENCE, PLASTIC FENCE OR APPROVED.
4. SUPPORTING FENCE SHALL BE FASTENED SECURELY TO POSTS WITH STAPLES OR WIRE TIES. GEOTEXTILE FABRIC SHALL BE FASTENED SECURELY TO SUPPORTING FENCE WITH WIRE TIES SPACED AT 2 FT. CENTERS ALONG THE TOP AND MID-SECTION. WHEN A SUPPORTING FENCE IS NOT USED, GEOTEXTILE FABRIC SHALL BE SECURELY FASTENED TO POSTS WITH STAPLES OR WIRE TIES.
5. WHEN SILT FENCE IS USED FOR CHECK DAMS INSTALLED IN DITCHES, A SUPPORTING FENCE SHALL BE PROVIDED, WITH MAXIMUM POST SPACING OF 10 FT.
6. STANDARD "T" OR "U" SECTION STEEL POSTS SHALL NOT BE USED WITHIN THE CONSTRUCTION CLEAR ZONE RECOVERY AREA.
7. STRAW BALES ARE NOT INTENDED FOR USE ON NEW MEXICO DEPARTMENT OF TRANSPORTATION PROJECTS.





NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

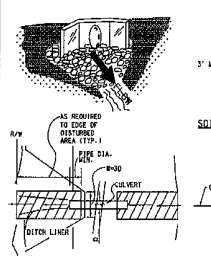
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES SILT FENCE

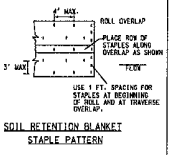
APPROVED: Raymundo Flores 11/15/07 DESIGN ENGINEER DATE

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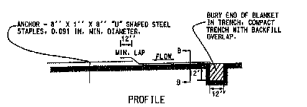
603-01-3/7



TYPICAL DITCH LINER INSTALLATIONS AT CULVERTS



SOIL RETENTION BLANKET STAPLE PATTERN



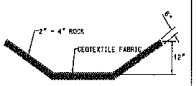
PROFILE DITCH LINER



SECTION B-B

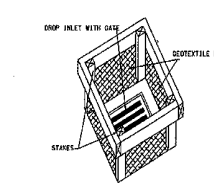
NOTES: CULVERT PROTECTION

1. WHEN CULVERT PROTECTION IS SPECIFIED, EITHER SOIL RETENTION BLANKETS OR SOIL RETENTION ROCK MAY BE PROVIDED.
2. THE CULVERT PROTECTION WIDTH REQUIRED SHALL BE IN ACCORDANCE WITH THESE DETAILS UNLESS SPECIFIED OTHERWISE.
3. THE SOIL RETENTION BLANKET INSTALLATION SHOWN OUTLINES MINIMUM REQUIREMENTS. MANUFACTURER'S RECOMMENDATIONS SHALL BE USED IF THEY ARE MORE STRINGENT.



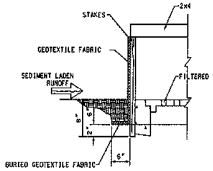
SECTION B-B

CULVERT PROTECTION

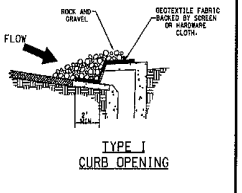


TYPE I

NOTE: WHEN SPECIFIED, ROCKS OR STRAW BALES CAN BE SUBSTITUTED FOR SILT FENCE.



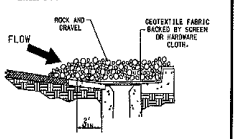
DROP INLET PROTECTION



TYPE I CURB OPENING

NOTES: GRAVEL INLET PROTECTION

1. THIS INSTALLATION IS FOR A TYPE I CURB DROP INLET ONLY. THE TYPE II, III TO "N" INSTALLATION IS SIMILAR.
2. THE SPACING OF THE LONGITUDINAL BRACING SHALL NOT EXCEED 5 FT.



TYPE II CURB DROP INLET

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

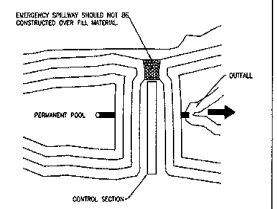
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES CULVERT & DROP INLET PROTECTION

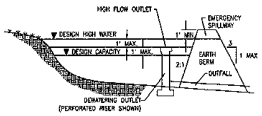
APPROVED: Raymundo Flores 11/15/07 DESIGN ENGINEER DATE

DESIGNED BY___ DRAWN BY___ CHECKED BY___

603-01-4/7

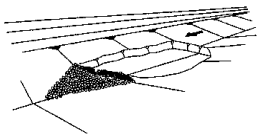


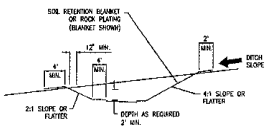
PLAN VIEW



CROSS SECTION

SEDIMENT BASIN



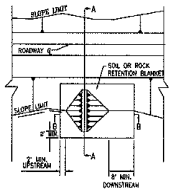


SEDIMENT BASIN, EXCAVATED

NOTES: SEDIMENT TRAP

1. TEMPORARY SEDIMENT TRAPS MAY BE CONSTRUCTED BY EXCAVATION ALONE OR BY EXCAVATION IN COMBINATION WITH AN EMBANKMENT.
2. TEMPORARY SEDIMENT TRAPS ARE OFTEN USED IN CONJUNCTION WITH A DIVERSION DIKE OR SWELL.
3. THE DRAINAGE AREA FOR THE SEDIMENT TRAP SHOULD NOT EXCEED 5 DISTURBED ACRES.
4. THE TRAP MUST BE ACCESSIBLE FOR EASE OF REGULAR MAINTENANCE, WHICH IS CRITICAL TO ITS PROPER FUNCTIONING.
5. SEDIMENT TRAPS ARE TEMPORARY MEASURES AND SHOULD NOT REMAIN IN PLACE LONGER THAN 18 TO 24 MONTHS.
6. THE EMBANKMENT MAY NOT EXCEED 5 FT. IN HEIGHT.
7. THE RECOMMENDED MINIMUM WIDTH AT THE TOP OF THE EMBANKMENT IS BETWEEN 2 FT. AND 5 FT.

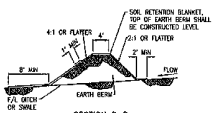
SEDIMENT TRAP



PLAN



SECTION A-A



SECTION B-B

EARTH DIKE (BERM)

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

T.E.S.C.M.
SEDIMENT BASIN, SEDIMENT TRAP & EARTH DIKE

APPROVED _____ DESIGN ENGINEER _____ DATE

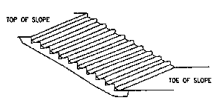
DESIGNED BY___ DRAWN BY___ CHECKED BY___

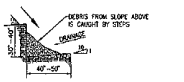
603-01-5/7 SHEET 5 OF 7



GROOVING SLOPES

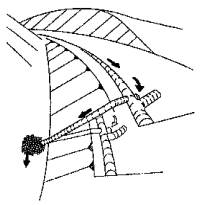
GROOVING IS CUTTING FURROWS ALONG THE CONTOUR OF A SLOPE. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND PROVIDE SOME RETENTION OF LIME, FERTILIZER AND SEED.

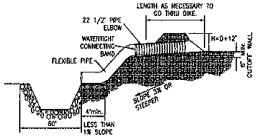


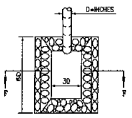


STAIR STEPPING CUT SLOPE

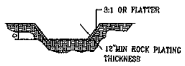
SURFACE ROUGHENING







RIPRAP APRON PLAN



SECTION F-F

SLOPE DRAIN

NOTES: PIPE SLOPE DRAIN

1. THE FLEXIBLE PIPE SHALL BE THE SAME DIAMETER AS THE INLET PIPE AND SHALL BE CONSTRUCTED OF A DURABLE MATERIAL WITH HOLD-DOWN GROMMETS SPACED AT 10 FT. ON CENTER.
2. THE FLEXIBLE PIPE SHALL BE SECURELY FASTENED TO THE CORRUGATED METAL OR HIGH DENSITY POLYETHYLENE PIPE WITH METAL STRAPPING OR WATERTIGHT CONNECTING COLLARS.
3. THE FLEXIBLE PIPE SHALL BE STAKED AT 10 FT. CENTERS ALONG THE SLOPE USING MINIMUM 4 INCH SQUARE WOOD POSTS OR STANDARD STEEL POSTS DRIVEN 2 FT. MINIMUM INTO THE GROUND.
4. RIGID PIPE SHALL BE ANCHORED AT BENDS. ANCHORAGE SHALL CONSIST OF A MINIMUM 4 INCH SQUARE WOOD POSTS OR STANDARD STEEL POSTS DRIVEN 2 FT. MINIMUM INTO GROUND, OR EARTHEN THRUST BLOCK.
5. PAYMENT OF BASIN ITEMS ARE INCIDENTAL TO THE COST OF FLEXIBLE STORM DRAIN PIPE.
6. FOR PIPE DIAMETER ON TEMPORARY SLOPE DRAIN SEE TABLE BELOW

TEMPORARY SLOPE DRAIN PIPES

Manett Flow Rate (cfs)	Pipe Diameter Required (inches)
0 - 6.0	18
6.0 - 9.0	21
9.0 - 12.0	24
12.0 - 20.0	30

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

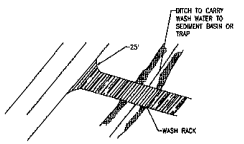
NEW MEXICO
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STANDARD DRAWING

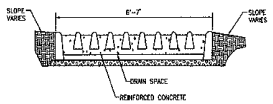
TEMPORARY EROSION & SEDIMENT CONTROL MEASURES PIPE SLOPE DRAIN & SURFACE ROUGHENING

APPROVED _____ DESIGN ENGINEER _____ DATE

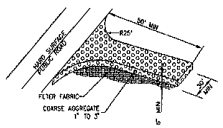
DESIGNED BY___ DRAWN BY___ CHECKED BY___

603-01-6/7 SHEET 6 OF 7

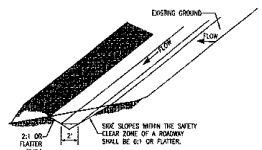




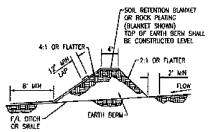
WASH RACK



OFFSITE TRACKING PREVENTION



TYPICAL SWALE CONFIGURATION



FILTER FABRIC DIVERSION DIKE

DIVERSION DIKE

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

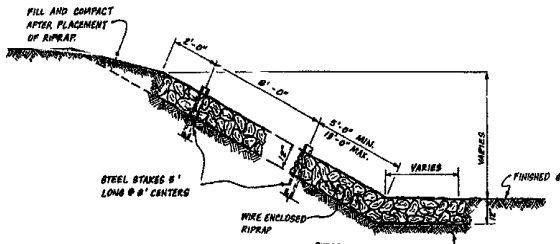
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

T.E.S.C.M.
OFFSITE TRACKING PREVENTION & DIVERSION DIKE

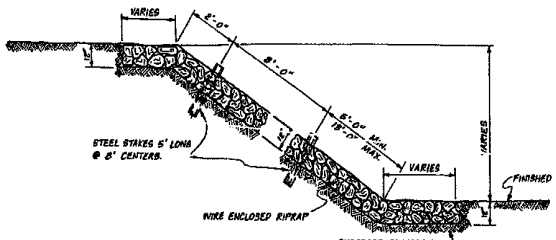
APPROVED _____ DESIGN ENGINEER _____ DATE

DESIGNED BY___ DRAWN BY___ CHECKED BY___

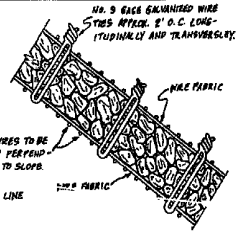
603-01-7/7 SHEET 7 OF 7



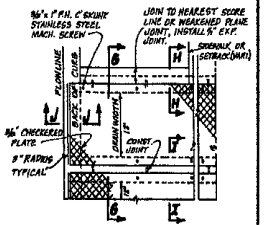
RIPRAP SECTION TYPE A



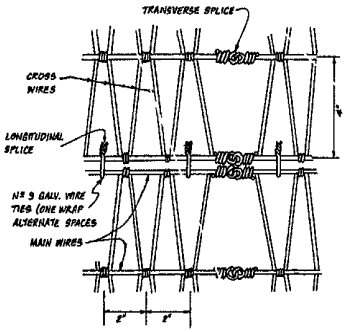
RIPRAP SECTION TYPE B



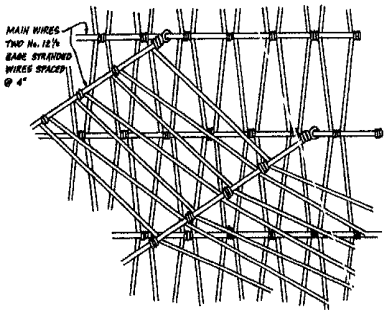
TYPICAL SECTION



SINGLE AND OR MULTIPLE CULVERT PLAN



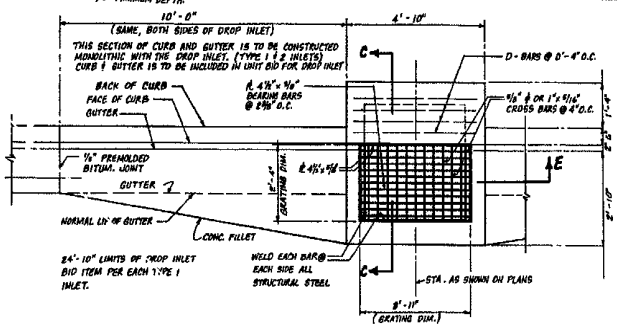
DETAIL OF WIRE FABRIC AND NORMAL SPLICE



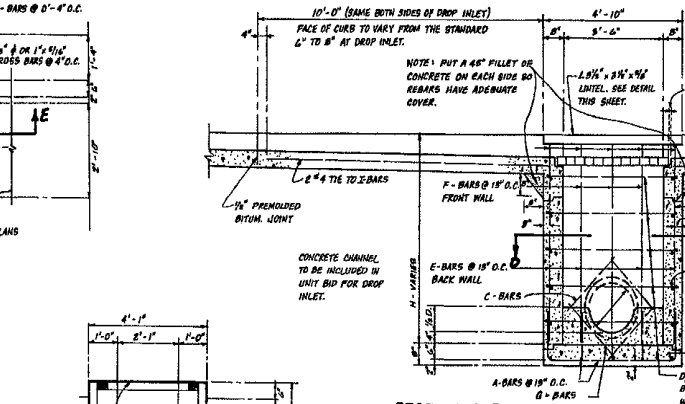
DETAIL OF SPLICE @ SKEWED INTERSECTION

RIPRAP - GENERAL NOTES:

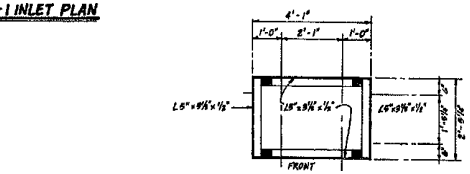
1. WIRE FABRIC IS TO BE GALVANIZED "V" MESH OF THE FOLLOWING CONSTRUCTION: MAIN WIRES: TWO No. 12½ GAGE STRANDED WIRES SPACED AT 4". CROSS WIRES: SINGLE No. 18½ GAGE WIRES SPACED AT 2" WITH NOT LESS THAN TWO TURNS AROUND THE MAIN WIRES. APPROXIMATE WEIGHT: 48 POUNDS PER 100 SQUARE FEET.
2. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS. PER YARD, 4" O.D. STANDARD STRENGTH GALVANIZED STEEL PIPE OR 6 x 6 x ⅜ STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
3. IF LENGTH OF SLOPE IS 15 FEET OR LESS ONLY ONE ROW OF STEEL STAKES, 2 FEET FROM THE TOP EDGE OF THE RIPRAP, WILL BE REQUIRED UNLESS OTHERWISE NOTED ON PLANS.
4. AS AN ALTERNATE, WIRE FABRIC MAY BE GALVANIZED STEEL WIRE MEETING THE REQUIREMENTS FOR CLASS B, FINISH B, MEDIUM TENSILE STRENGTH COATED WIRE AS SET FORTH IN FEDERAL SPECIFICATION QQ-W-461. THE WIRES SHALL BE CONTINUOUS, HAVE A DIAMETER OF NOT LESS THAN 0.118 INCH AND SHALL BE TRIPLE TWISTED TO FORM A UNIFORM HEXAGONAL MESH PATTERN WITH A MAXIMUM OPENING SIZE OF 3" x 4½".
5. DETAIL FROM N.M.S.H.D. DETAIL, SERIAL BRR-001-05.



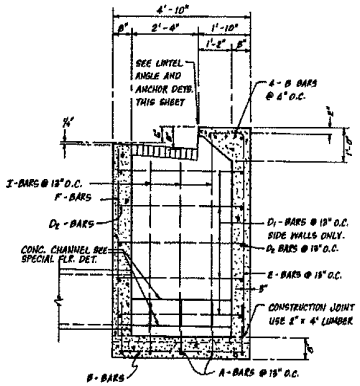
TYPE-I INLET PLAN



SECTION E-E



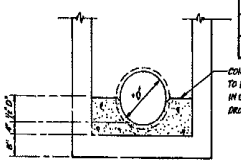
GRATING FRAME DETAIL



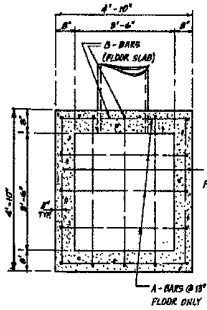
SECTION C-C

RE-BAR SCHEDULE

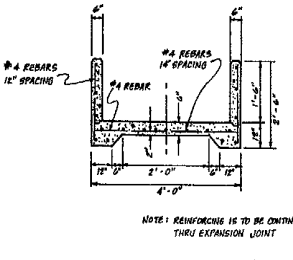
BAR TYPE	SIZE & SHAPE	BAR NO.	BAR TYPE & QUANTITY
A	2'-1"	#4	TYPE-1-B REQUIRED TYPE-2-B REQUIRED TYPE-2-A REQUIRED
B	4'-6" 3'-6"	#4	TYPE-1-A REQUIRED TYPE-2-A REQUIRED
C	8'-4"	#4	TYPE-1-A REQ'D PER FOOT TYPE-2-A REQ'D PER FOOT
D1	4'-6"	#4	TYPE-1-A REQ'D PER FT. BY. TYPE-2-A REQ'D PER FT. BY.
D2	4'-6" 3'-6"	#4	TYPE-1-A REQ'D PER 18" BY. TYPE-2-A REQ'D PER 18" BY.
E	3'-6"	#4	TYPE-1-A REQUIRED TYPE-2-A REQUIRED
F	3'-6"	#4	TYPE-1-A REQUIRED TYPE-2-A REQUIRED
G	8'-4"	#4	TYPE-1-A REQ'D, TWO OUTLET TYPE-2-A REQ'D, TWO OUTLET
H	3'-6"	#4	TYPE-1-A REQ'D FIELD BEND TYPE-2-A REQ'D WITH CURB



SPECIAL FLOOR DETAIL

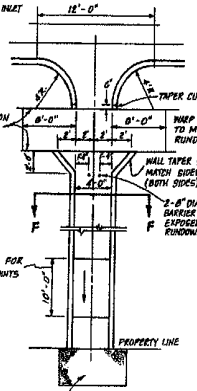


SECTION D-D

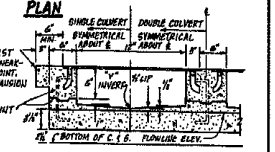


NOTE: REINFORCING IS TO BE CONTINUOUS THRU EXPANSION JOINT

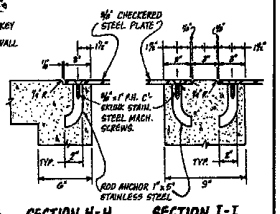
TYPICAL RUNDOWN DETAIL SECTION F-F



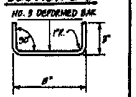
CONCRETE DRAINAGE RUNDOWN



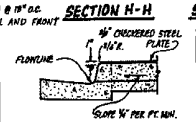
SECTION G-G



SECTION H-H



SECTION I-I



SECTION J-J DOWEL DETAIL

SIDEWALK CULVERT DETAIL

GENERAL NOTES:

1. PLACING OF DRAIN THRU EXIST. SIDEWALK, C & G. REQUIRE THAT ENTIRE SIDEWALK, C & G. STONES BE REMOVED & REPLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE COLOR, FINISH AND COARING OF ADJACENT CURB AND SIDEWALK.
4. SIDEWALK REPLACED DURING CONSTRUCTION TO BE POURED MONOLITHICALLY WITH CULVERT WALLS.
5. FOR ALL CONCRETE, THE MINIMUM DESIGN COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 4000 POUNDS PER SQUARE INCH, 7 - BAG MIX AND THAT THE MINIMUM COARSE AGGREGATE SIZE ALLOWED WILL BE 1 INCH. PERCENTAGE OF AIR - ENTRAINMENT IN THE CONCRETE AT THE PROJECT SITE SHALL BE IN THE RANGE OF 4 TO 7 PERCENT.
6. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

REVISION		
SYMBOL	DATE:	BY:

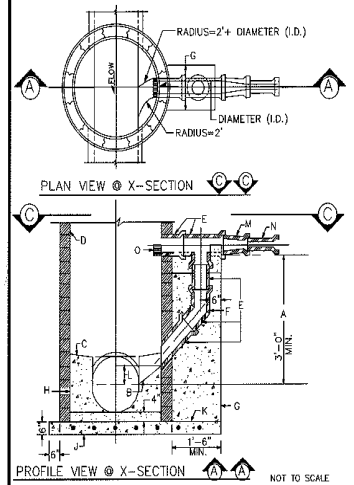
CITY OF SANTA FE

DRAINAGE DETAILS

DRAWN BY: Charlie Gmz. CHECKED BY: DATE: SHT

LEGEND

ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with suitable sized openings, refer to general note CM-2A
6	CONCRETE BASE, refer to concrete base detail Dwg. No. SAS-7
7	SEWER PIPE, refer to general note CM-1
8	6"(in) GROUT FILLET, on upper half of pipe and around base
9	ADAPTER, MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
10	PIPE PENETRATION INTO MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
11	PIPE SUPPORT, CONCRETE, shall extend out-side of manhole a maximum of 18"(in) to bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CR-6
13	SHELF, to be 9"(in) minimum width with 1"(in) per 1'-0" slope, from crown of pipe
14	CUT UPPER HALF OF PIPE, after manhole has been completed and inspected by engineer
15	HAND FORMED CHANNELS, shall be on a uniform radius and shall not hold water
16	INVERT ELEVATIONS OF LATERAL LINES, shall be the same as the springline elevation of the sewer main, where possible
17	CHANGE SLOPE OF PIPE, at center of manhole
18	APPROVED WATER STOP, to be with type of pipe



NOT TO SCALE

CONSTRUCTION NOTES

A. 3' (FT) MINIMUM DISTANCE OF VERTICAL DROP. LESS THAN 3'(FT) DISALLOWS DROP MANHOLE.

B. FORM PIPE INVERT IN SHELF. INVERT TO SPRINGLINE.

C. SHELF SLOPE, 1"(IN) PER FT.

D. MANHOLE TYPE FOR UPPER PORTION IS SPECIFIED IN MANHOLE TYPE "E" DETAIL DWG NO. SAS-2.

E. USE D.I. OR P.V.C.(SDR 35) PIPE THROUGHOUT DROP. ALL PIPING IN DROP STRUCTURE FROM THE TEE IS INCREASED ONE PIPE SIZE FROM THE SERVICE LINE. (SERVICE=8" DROP=10")

F. USE BELL AND SPIGOT 45° LONG RADIUS BEND.

G. CONCRETE SUPPORT WIDTH EQUALS PIPE O.D. PLUS 6"(IN) MINIMUM EACH SIDE.

H. CONCRETE FILL.

J. CAST IN PLACE REINFORCED CONCRETE BASE REQUIRED. CONCRETE BASE TO BE POURED IN PLACE USING NO.4 BARS AT 6"(IN) O.C. EACH WAY FOR MANHOLE DEPTH OF 10'(FT) OR GREATER. NO.4 BARS AT 12"(IN) O.C. EACH WAY FOR MANHOLE DEPTH LESS THAN 10'(FT) IN DEPTH.

K. FOR NEW DROP ON EXISTING MANHOLE CONSTRUCT 3X3 REINFORCED CONCRETE BASE BEFORE CONSTRUCTING DROP SUPPORT.

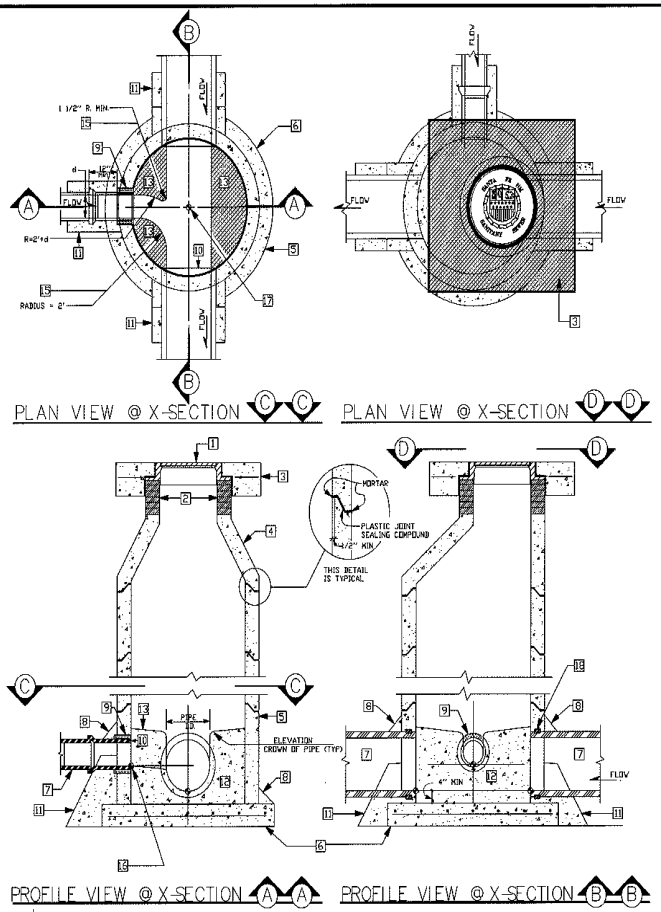
L. MINIMUM 2"(IN) ABOVE SPRINGLINE OR AS SHOWN ON PLAN.

M. REDUCER

N. SERVICE LINE

O. EXTEND PIPE 3"(IN) MINIMUM 6"(IN) MAXIMUM INTO MANHOLE TOP. 1/2 PIPE REMOVED.

DROP MANHOLE DETAIL DWG. #: SAS-1



NOT TO SCALE

MANHOLE TYPE "E" DETAIL/DWG # SAS-2 (See Dwg. # SAS-14 for Type "C" Flat Top)

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK:
CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS:
USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT:
OBTAIN PERMITS FOR THE PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OBTAINING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 SUBSTITUTIONS OR CHANGES:
ALL SUBSTITUTIONS OR CHANGES MUST BE APPROVED BY THE CITY WATER QUALITY DIVISION OR CITY APPROVED REPRESENTATIVE PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS OR CHANGES MUST BE SUBMITTED BY THE DESIGN ENGINEER TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. WHERE APPROPRIATE, SUBMITTAL MUST INCLUDE FABRICATION DRAWINGS, WORKING DRAWINGS AND MATERIAL SPECIFICATIONS OR TEST DATA TO JUSTIFY SUBSTITUTIONS OR CHANGES. DESIGN ENGINEER SHALL AUTHORIZE ANY DRAWINGS FOR SUBSTITUTIONS AND CHANGES AND SUBMIT THEM TO THE CITY WATER QUALITY DIVISION FOR APPROVAL. UNAUTHORIZED SUBMITTALS WILL BE REJECTED.

CR-5 MANUFACTURER'S CERTIFICATES:
WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA; PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 9'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASE:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA: SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. 4" THRU 15" (Inch) DIAMETER, ASTM D-3034 OR ASTM F-789 PIPE, MINIMUM PS-46 STRENGTH. SDR-35 OR EQUAL.
2. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
C. HDPE PIPE PER ASTM D-1248 CLASS III WHEN APPROVED BY WATER QUALITY DIVISION ENGINEER.
D. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1380 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "FELLOWMATIC" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
E. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
F. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
G. SERVICE CONNECTIONS:
1. VCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "QUICK-WAY",GENECO, MERSEY "PIONEER", OR APPROVED EQUAL.
H. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 820.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 80 STEEL BY M.A. INC. OR APPROVED EQUAL: 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTING: SHALL CONFORM TO SECTION 160, 161 & 162, NM APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
2. MINIMUM COVER WEIGHT: 165 POUNDS
3. MINIMUM COMBINED WEIGHT: 365 POUNDS +/- 5%
4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
5. COATING: NONE
6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
A. REQUIREMENTS:
1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
2. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

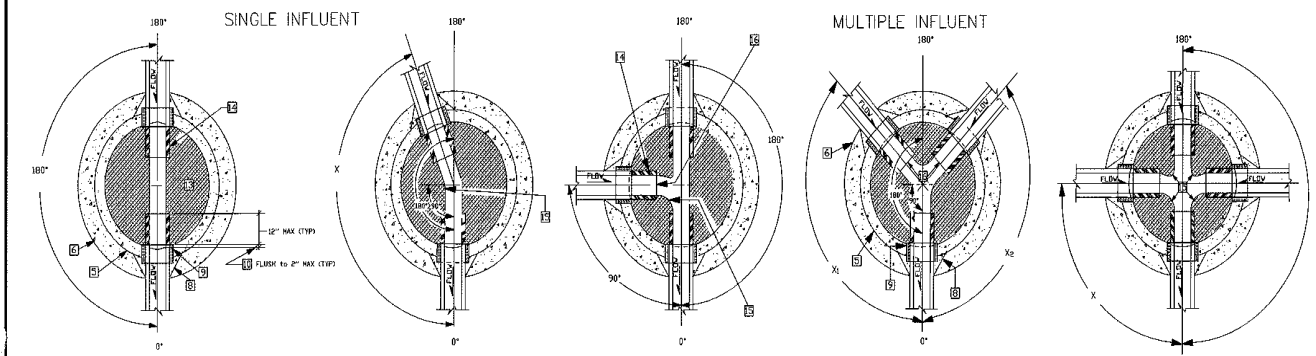
FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
A. LINE: 0.20 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.



180° or STRAIGHT THROUGH

DIRECTIONAL CHANGE
X ≥ 90°
ANGLE X MEASURED FROM EFFLUENT CENTERLINE

TEE, 90° & 180°
ANGLE MEASURED FROM EFFLUENT CENTERLINE

WYE
MINIMUM BEND 90°
MAXIMUM BEND 150°
ANGLE X MEASURED FROM EFFLUENT CENTERLINE

4-WAY TEE
ANGLE X MEASURED FROM EFFLUENT CENTERLINE
MINIMUM BEND 90°

PLAN VIEW OF MANHOLE BASE CONNECTION/DWG. # SAS-3

NOT TO SCALE

CITY OF SANTA FE
WATER QUALITY DIVISION

TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

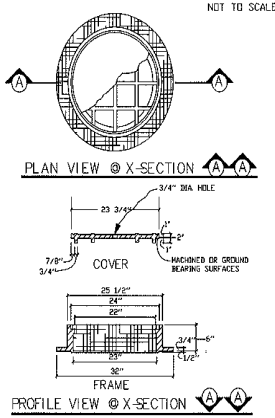
DATE: JULY 1982	REVISIONS	FILE #: E:\AUTO\DWG\SCDTI-4
DRAWN BY: G. CHAVEZ	1 6-3-92	
CHKD HORIZ/VERT BY: G. CHAVEZ	2 12-14-92	SHEET 15-2
APPROVED BY: E. BROWN	3 11-16-94	

SCDTI-4 - 5/7/00

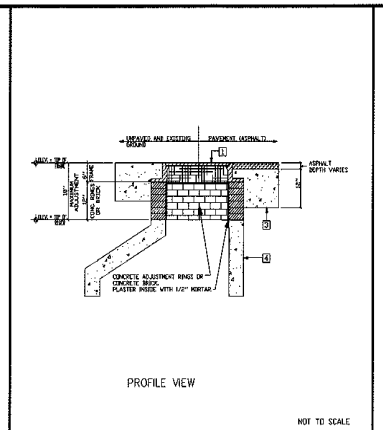
LEGEND

ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with suitable sized openings, refer to general note CM-2A
6	CONCRETE BASE, refer to concrete base detail Dwg. No. SAS-7
7	SEWER PIPE, refer to general note CM-1
8	6"(in) GROUT FILLET, on upper half of pipe and around base
9	ADAPTER, MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
10	PIPE PENETRATION INTO MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
11	PIPE SUPPORT, CONCRETE, shall extend out-side of manhole a maximum of 18"(in) to bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CR-6
13	SHELF, to be 9"(in) minimum width with 1"(in) per 1'-0" slope, from crown of pipe
14	CUT UPPER HALF OF PIPE, after manhole has been completed and inspected by engineer
15	HAND FORMED CHANNELS, shall be on a uniform radius and shall not hold water
16	INVERT ELEVATIONS OF LATERAL LINES, shall be the same as the springline elevation of the sewer main, where possible
17	CHANGE SLOPE OF PIPE, at center of manhole
18	APPROVED WATER STOP, to be with type of pipe

NOT TO SCALE

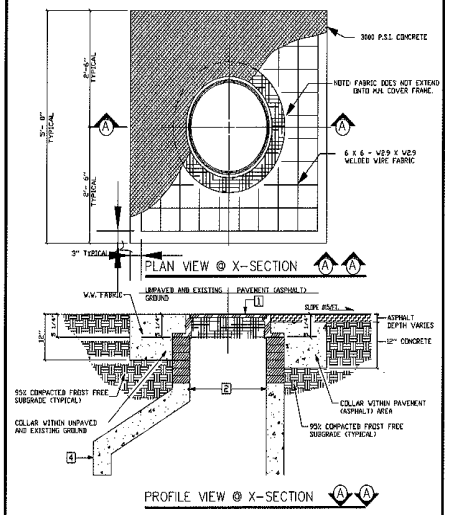


MANHOLE FRAME & COVER DETAIL/DWG # SAS-4

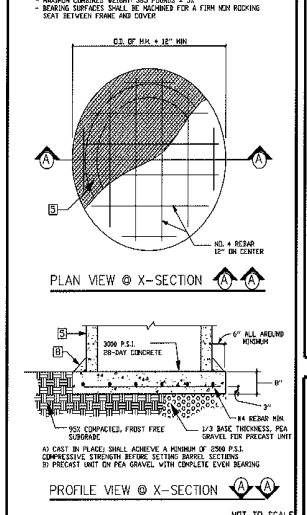


NOT TO SCALE

MANHOLE ADJUSTMENT DETAIL/DWG # SAS-5

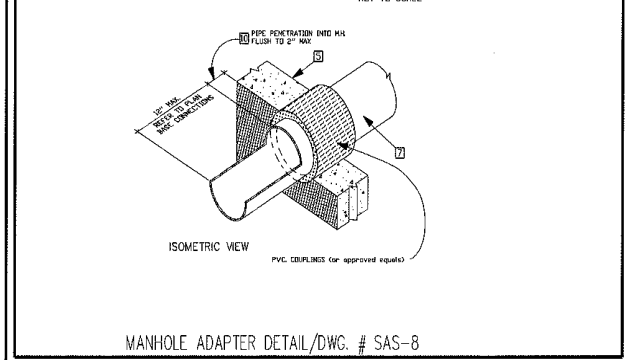


CONCRETE COLLAR DETAIL/DWG. # SAS-6 NOT TO SCALE

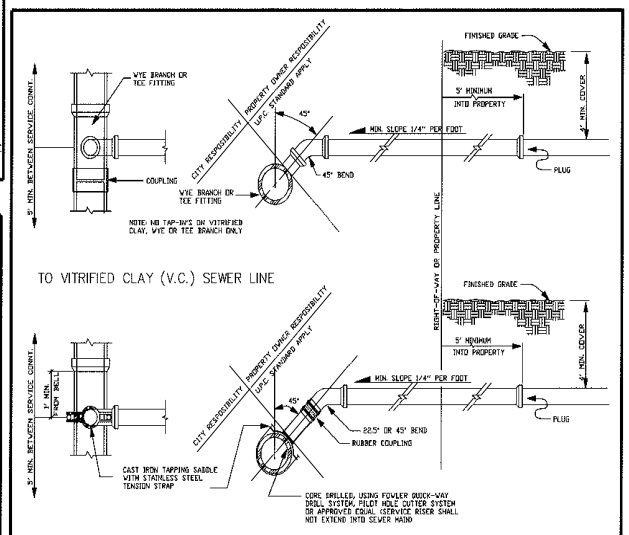


NOT TO SCALE

CONCRETE BASE DETAIL/DWG. # SAS-7

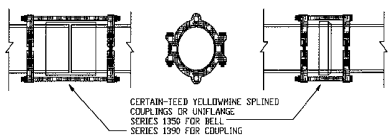


MANHOLE ADAPTER DETAIL/DWG. # SAS-8



NOT TO SCALE

SERVICE CONNECTION DETAILS/DWG. # SAS-10



NOTE: AT RIVER AND ARROYO CROSSINGS

RESTRAINED JOINT DETAIL/DWG. # SAS-9 NOT TO SCALE

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK:
CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS:
USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT:
OBTAIN PERMITS FOR THIS PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OBTAINING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 SUBSTITUTIONS OR CHANGES:
ALL SUBSTITUTIONS OR CHANGES MUST BE APPROVED BY THE CITY WATER QUALITY DIVISION OR CITY APPROVED REPRESENTATIVE PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS OR CHANGES MUST BE SUBMITTED BY THE DESIGN ENGINEER TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. WHERE APPROPRIATE, SUBMITTAL MUST INCLUDE FABRICATION DRAWINGS, WORKING DRAWINGS AND MATERIAL SPECIFICATIONS OR TEST DATA TO JUSTIFY SUBSTITUTIONS OR CHANGES. DESIGN ENGINEER SHALL AUTHORIZE ANY DRAWINGS FOR SUBSTITUTIONS AND CHANGES AND SUBMIT THEM TO THE CITY WATER QUALITY DIVISION FOR APPROVAL. UNAUTHORIZED SUBMITTALS WILL BE REJECTED.

CR-5 MANUFACTURER'S CERTIFICATES:
WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA: PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASE:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA; SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. 4" THRU 15" (inch) DIAMETER, ASTM D-3034 OR ASTM F-789 PIPE, MINIMUM PS-46 STRENGTH. SDR-35 OR EQUAL
2. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
C. HDPE PIPE PER ASTM D-1248 CLASS III WHEN APPROVED BY WATER QUALITY DIVISION ENGINEER.
D. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1390 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLOK SPLINES, MARKETED AS "YELLOWLOK" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
E. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
F. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
G. SERVICE CONNECTIONS:
1. VCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "QUICKWAY", GENECO, MERSEY "PIONEER", OR APPROVED EQUAL.
H. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 920.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL; 14"(IN.) WIDE, 18"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTING: SHALL CONFORM TO SECTION 180, 181 & 183, NM APWA CLASS 30B.
2. MINIMUM COVER WEIGHT: 165 POUNDS
3. MINIMUM COMBINED WEIGHT: 365 POUNDS +/- 5%
4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
5. COATING: NONE
6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
A. REQUIREMENTS:
1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
2. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
A. LINE: 0.20 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

CITY OF SANTA FE
WATER QUALITY DIVISION

TITLE: SANITARY SEWER
STANDARD CONSTRUCTION DETAILS

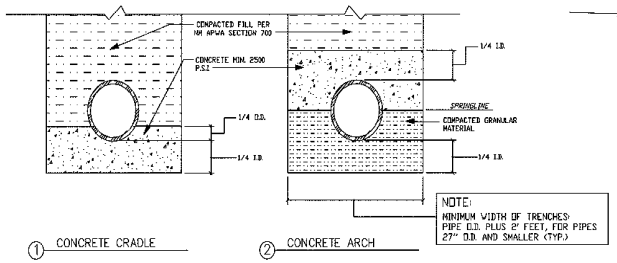
DATE: JULY 1992	REVISIONS	FILE # C:\AUTO\DWG\SCDT2-4
DRAWN BY: O. CHAVEZ	1 8-3-92	
CADD RENDITION BY: G. CHAVEZ	2 12-10-92	SHEET 15-3
APPROVED BY: E. BROWN	3 11-16-94	

SCDT2-4 - 6/7/00

TRENCH BEDDING AND INSTALLATION DETAILS/DWG. # SAS-11

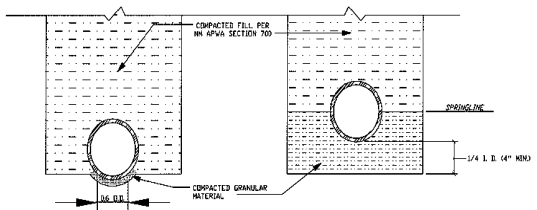
NOT TO SCALE

CLASS "A"



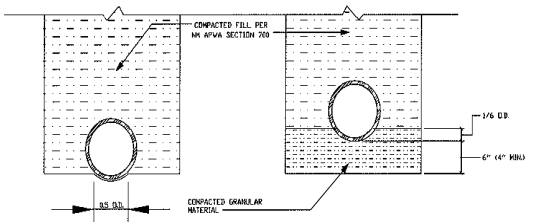
① CONCRETE CRADLE ② CONCRETE ARCH

CLASS "B"

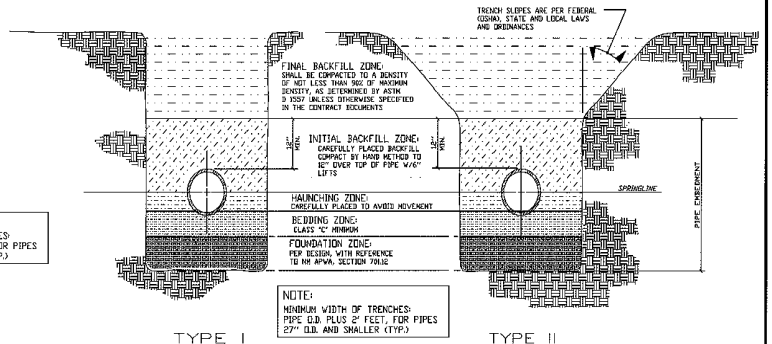


① SHAPED SUBGRADE WITH GRANULAR FOUNDATION ② GRANULAR FOUNDATION

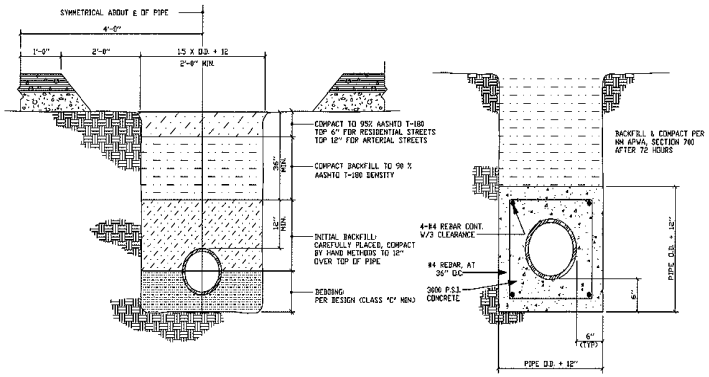
CLASS "C"



① SHAPED SUBGRADE ② GRANULAR FOUNDATION



TYPE I TYPE II



PAVED AREAS CONCRETE ENCASEMENT

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK:
CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS:
USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT:
OBTAIN PERMITS FOR THE PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OBTAINING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 SUBSTITUTIONS OR CHANGES:
ALL SUBSTITUTIONS OR CHANGES MUST BE APPROVED BY THE CITY WATER QUALITY DIVISION OR CITY APPROVED REPRESENTATIVE PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS OR CHANGES MUST BE SUBMITTED BY THE DESIGN ENGINEER TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. WHERE APPROPRIATE, SUBMITTAL MUST INCLUDE FABRICATION DRAWINGS, WORKING DRAWINGS AND MATERIAL SPECIFICATIONS OR TEST DATA TO JUSTIFY SUBSTITUTIONS OR CHANGES. DESIGN ENGINEER SHALL AUTHORIZE ANY DRAWINGS FOR SUBSTITUTIONS AND CHANGES AND SUBMIT THEM TO THE CITY WATER QUALITY DIVISION FOR APPROVAL. UNAUTHORIZED SUBMITTALS WILL BE REJECTED.

CR-5 MANUFACTURER'S CERTIFICATES:
WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA; PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASE:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA; SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC PIPE(PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. 4" THRU 15" (Inch) DIAMETER, ASTM D-3034 OR ASTM F-789 PIPE. MINIMUM PS-46 STRENGTH: SDR-35 OR EQUAL
2. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
C. HDPE PIPE PER ASTM D-1248 CLASS III WHEN APPROVED BY WATER QUALITY DIVISION ENGINEER.
D. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1390 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "YELLOWMINE" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
E. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
F. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
G. SERVICE CONNECTIONS:
1. VCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "QUICKWAY",GENECO, HERSEY "PIONEER", OR APPROVED EQUAL.
H. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 920.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTING: SHALL CONFORM TO SECTION 160, 161 & 162, NM APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
2. MINIMUM COVER WEIGHT: 165 POUNDS
3. MINIMUM COMBINED WEIGHT: 365 POUNDS +/- 3%
4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
5. COATING: NONE
6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
A. REQUIREMENTS:
1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
2. WHEN VERIFIED CLAY CROSSES AN ARROYO.
3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
B. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
A. LINE: 0.20 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

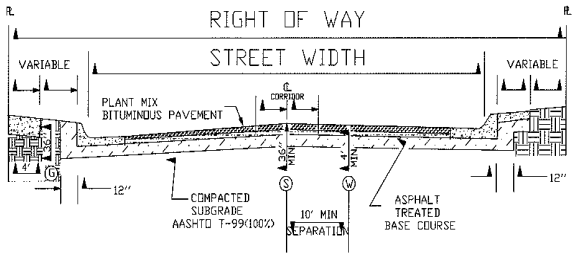
FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED: REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

TYPICAL UTILITIES SEPARATION DETAIL/DWG. # SAS-12

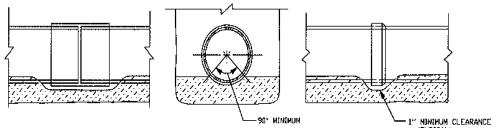


LEGEND

S SEWER R. PROPERTY LINE
G GAS ℄ CENTER LINE
W WATER

NOT TO SCALE

BELL OR COUPLING INSTALLATION DETAIL/DWG. # SAS-13



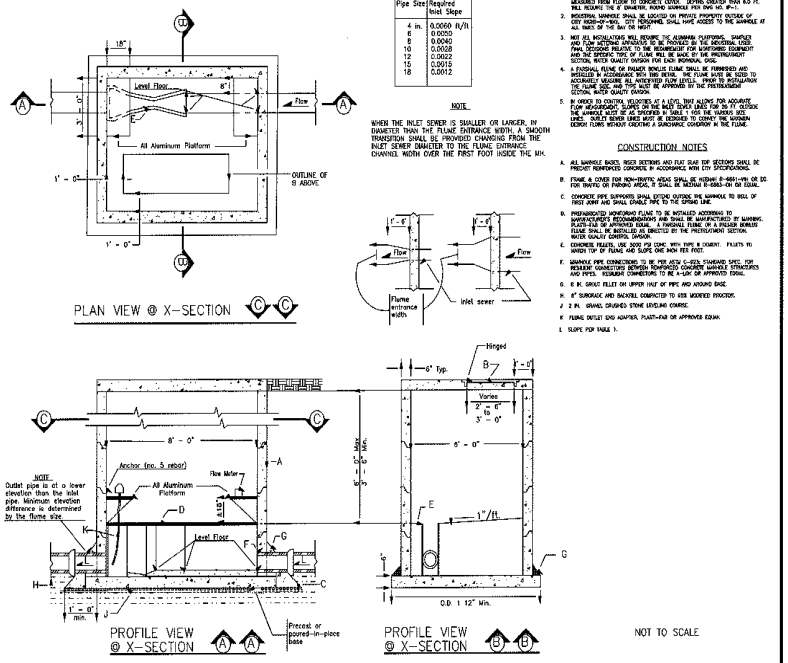
NOT TO SCALE

CITY OF SANTA FE
WATER QUALITY DIVISION

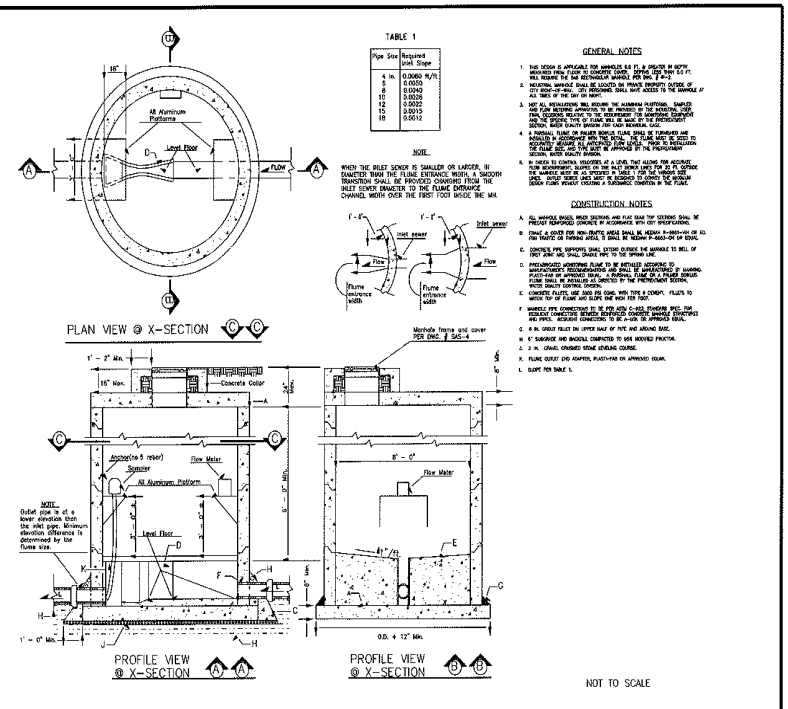
TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

DATE: JULY 1992	REVISIONS		FILE #: E:\WATER\DWG\SCD13-4
DRAWN BY: G. CHAVEZ	1 8-4-92		
CADD REVISION BY: G. CHAVEZ	2 12-14-92		SHEET 15-4
APPROVED BY: E. BROWN	3 11-15-94		

SCD13-4 - 6/7/00

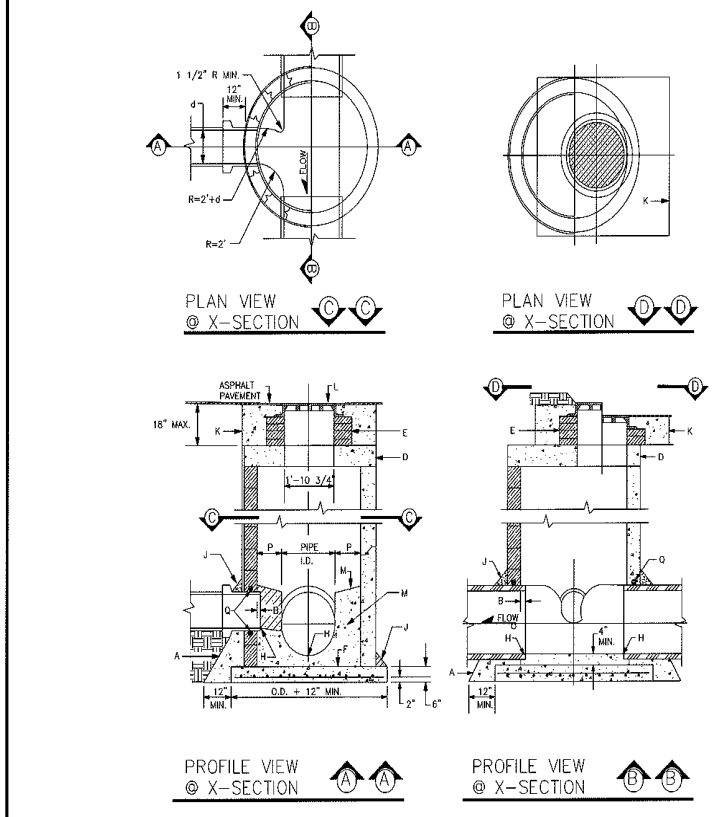


SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (6x8 RECTANGULAR)/DWG # IP-2



SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (8 FT. DIA.)/DWG. # IP-1

SCDT4-4X - 6/7/00



GENERAL NOTES

1. USE APPROVED MASTIC JOINT MATERIAL FOR ALL JOINTS.
2. CONTRACTOR HAS OPTION TO CONSTRUCT TYPE "C" M.H. IN LIEU OF TYPE "E" M.H. FOR DEPTHS OF 6' OR MORE.
3. DESIGN APPLIES TO 4', 6' & 8' MANHOLES.
4. M.H. GREATER THAN 18' IN DEPTH SHALL ONLY BE CONSTRUCTED OF PRECAST CONCRETE SECTION.
5. USE NON-SHRINK GROUT FOR FILLETS AND PENETRATIONS.
6. POSITION M.H. OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.

CONSTRUCTION NOTES

A. CONCRETE PIPE SUPPORT SHALL EXTEND OUTSIDE OF M.H. TO BELL OF FIRST JOINT & SHALL CRADLE PIPE TO SPRING LINE. NOT APPLICABLE FLEXIBLE PIPE.
B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAX., MEASURED AT SPRING LINE OF PIPE.
D. PRECAST CONCRETE COVER
E. USE MAX. 4 COURSES GR. MS BRICK ON UNPAVED STREET FOR FUTURE ADJ. OF M.H. FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2" MORTAR.
F. CONCRETE BASE TO BE POURED IN PLACE USING NO. 4 BARS AT 6" O.C. EA. WAY FOR M.H. DEPTH OF 16' OR GREATER. NO 4 BARS AT 12" O.C. EA. WAY FOR M.H. LESS THAN 16' IN DEPTH.
H. INV. ELEV. OF STUB OR LATERAL AS SHOWN ON PLANS.
J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
K. USE A 5'x 5' CONCRETE PAD IN ALL AREAS SLOPE FOR GRADER USE UNPAVED AREAS.
L. FRAME AND COVER, SEE DWG. # SAS-4
M. CONCRETE FILL, 3000 PSI
N. SLOPE 1" PER FT. FROM PIPE CROWN
P. SHELF TO BE 9" WIDE MIN.
Q. APPROVED WATERSTOP TO BE COMPATIBLE WITH TYPE OF PIPE.

MANHOLE TYPE "C" DETAIL/DWG. # SAS-14 NOT TO SCALE

CITY OF SANTA FE
WATER QUALITY DIVISION

TITLE: SANITARY SEWER
STANDARD CONSTRUCTION DETAILS

DATE: JULY 1992	REVISIONS		FILE #: E:\AUTO\DWG\SCDT4-4
DRAWN BY: O. CHAVEZ	1 8-4-92		
CADD RENDITION BY: O. CHAVEZ			SHEET 15-5
APPROVED BY: E. BROWN			

TABLE 1-R

HELICAL CORRUGATED STEEL PIPE-2 2/3" X 1/2" CORRUGATION

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16-20	21-25	26-30	31-35	36-40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
12	0.064	0.064	0.064	0.064	0.064	0.064	12
18	0.064	0.064	0.064	0.064	0.064	0.064	12
24	0.064	0.064	0.064	0.064	0.064	0.064	12
30	0.064	0.064	0.064	0.064	0.064	0.064	12
36	0.064	0.064	0.064	0.064	0.064	0.064	12
42	0.064	0.064	0.064	0.064	0.064	0.064	12
48	0.064	0.064	0.064	0.064	0.064	0.064	12
54	0.079	0.079	0.079	0.079	0.079	0.079	12
60	0.109	0.109	0.109	0.109	0.109	0.109	12
66	0.135	0.135	0.135	0.135	0.135	0.135	12
72	0.138	0.138	0.138	0.138	0.138	0.138	12
78	0.168	0.168	0.168	0.168	0.168	0.168	12
84	0.168	0.168	0.168	0.168	0.168	0.168	12

TABLE 2-R

HELICAL CORRUGATED STEEL PIPE - 3" X 1" CORRUGATION

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16-20	21-25	26-30	31-35	36-40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
54	0.064	0.064	0.064	0.064	0.064	0.064	12
60	0.064	0.064	0.064	0.064	0.064	0.064	12
66	0.064	0.064	0.064	0.064	0.064	0.064	12
72	0.064	0.064	0.064	0.064	0.064	0.072	12
78	0.064	0.064	0.064	0.064	0.064	0.079	12
84	0.064	0.064	0.064	0.064	0.079	0.079	12
90	0.064	0.064	0.064	0.064	0.079	0.109	12
96	0.079	0.079	0.079	0.079	0.079	0.109	12
102	0.079	0.079	0.079	0.079	0.109	0.109	18
108	0.109	0.109	0.109	0.109	0.109	0.109	18
114	0.109	0.109	0.109	0.109	0.109	0.109	18
120	0.109	0.109	0.109	0.109	0.109	0.109	18
126	0.109	0.109	0.109	0.109	0.109	0.109	18
132	0.109	0.109	0.109	0.109	0.109	0.109	18
138	0.109	0.109	0.109	0.109	0.109	0.109	18
144	0.109	0.109	0.109	0.109	0.109	0.109	18

TABLE 3-R

HELICAL CORRUGATED STEEL PIPE - 6" X 1" CORRUGATION

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16-20	21-25	26-30	31-35	36-40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
54	0.064	0.064	0.064	0.064	0.064	0.064	12
60	0.064	0.064	0.064	0.064	0.064	0.064	12
66	0.064	0.064	0.064	0.064	0.064	0.079	12
72	0.064	0.064	0.064	0.064	0.064	0.079	12
78	0.064	0.064	0.064	0.064	0.079	0.079	12
84	0.064	0.064	0.064	0.064	0.079	0.109	12
90	0.064	0.064	0.064	0.064	0.079	0.109	12
96	0.079	0.079	0.079	0.079	0.079	0.109	12
102	0.079	0.079	0.079	0.079	0.109	0.109	18
108	0.109	0.109	0.109	0.109	0.109	0.109	18
114	0.109	0.109	0.109	0.109	0.109	0.138	18
120	0.109	0.109	0.109	0.109	0.109	0.138	18
126	0.109	0.109	0.109	0.109	0.138	0.138	18
132	0.138	0.138	0.138	0.138	0.138	0.138	18
138	0.138	0.138	0.138	0.138	0.138	0.138	18
144	0.168	0.168	0.168	0.168	0.168	0.168	18

NOTES: 1. BACKFILL AROUND PIPE MUST BE COMPACTED TO SPECIFIED ASHTO T-99 DENSITY OF WORK.
2. USE PERFORMANCE CURE IN HANDLING AND INSTALLATION.

TABLE 4-R

STEEL SPIRAL RIB PIPE - 3/4" X 3/4" X 7 1/2"

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 3/4" X 3/4" X 7 1/2" CORRUGATION 0.064	0.079	0.109	0.138	MIN. CVR (INCHES)
24	67	95	156		12
30	54	76	126		12
36	45	63	103		12
42	38	54	90		12
48	# 33	47	78	114	12
54	29	41	70	101	15
60		37	63	91	15
66		# 34	57	83	18
72			52	76	18
78			48	70	21
84			# 44	65	21
90				60	24
96				# 56	24
102				# 50	27

TABLE 5-R

STEEL SPIRAL RIB PIPE - 3/4" X 1" X 11 1/2"

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 3/4" X 1" X 11 1/2" CORRUGATION 0.064	0.079	0.109	MIN. CVR (INCHES)
24	40	40	40	12
30	39	40	40	12
36	32	40	40	12
42	28	39	40	12
48	24	34	40	12
54	21	30	40	18
60		27	40	18
66		25	40	18
72		# 22	38	18
78			35	24
84			33	24
90			# 31	24

NOTES: 1. FOR RADIUS 4-R AND 5-R, DOWED RIVETS INDICATED WITH + ARE FOR TRENCH INSTALLATION ONLY. FOR EMBANKMENT CONDITIONS, USE NEXT HEAVIER GAGE IF AVAILABLE.
2. SEE "INSTALLATION AND BACKFILL OF SPIRAL RIB PIPE" SECTION OF "MODIFICATION OF STEEL STANDARDS" & HIGHWAY CONSTRUCTION PRODUCTS" BY AIS OF 1994 EDITION FOR MORE DETAILS ON INSTALLATION.

GAUGE	THICKNESS (INCHES)
1	0.250
3	0.240
5	0.218
7	0.186
8	0.168
10	0.140
12	0.109
14	0.079
16	0.064
18	0.052

NOTE: GAUGES SHOWN ARE "US STANDARD GAUGE" FOR LAGGOVED STEEL SHEETS AND PLATES. THICKNESS SHOWN IN INCHES INCLUDE GALVANIZED COATING.

R = ROUND PIPE

DESIGN DATA:

SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12, EDDY CATION, WITH 2006 INTERIM REVISIONS

DEAD LOAD: 120 POUNDS PER CUBIC FOOT EARTH.

LIVE LOAD: HL-93

SAFETY FACTORS: APPROXIMATELY 3.0 FOR CONVENTIONAL SOIL STRENGTH 2.0, FOR PIPE WALL BUCKLING.

BACKFILL: SOIL STIFFNESS COEFFICIENT (K) = 0.22.

DENOTES THAT THE FURNISHED TABLE 3 STILL BASED ON DESIGN SPECIFICATION OF L-0, NOT LRFD YET.

TABLE 6-R

STRUCTURAL PLATE PIPE - 6" X 2" CORRUGATION

DIAMETER OF PIPE (FEET)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16-20	21-25	26-30	31-35	36-40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
5.0	0.111	0.111	0.111	0.111	0.111	0.111	12
5.5	0.111	0.111	0.111	0.111	0.111	0.111	12
6.0	0.111	0.111	0.111	0.111	0.111	0.111	12
6.5	0.111	0.111	0.111	0.111	0.111	0.111	12
7.0	0.111	0.111	0.111	0.111	0.111	0.111	12
7.5	0.111	0.111	0.111	0.111	0.111	0.111	12
8.0	0.111	0.111	0.111	0.111	0.111	0.111	12
8.5	0.111	0.111	0.111	0.111	0.111	0.111	18
9.0	0.111	0.111	0.111	0.111	0.111	0.111	18
9.5	0.111	0.111	0.111	0.111	0.111	0.111	18
10.0	0.111	0.111	0.111	0.111	0.111	0.111	18
10.5	0.111	0.111	0.111	0.111	0.111	0.140	18
11.0	0.111	0.111	0.111	0.111	0.111	0.140	18
11.5	0.111	0.111	0.111	0.111	0.111	0.140	18
12.0	0.111	0.111	0.111	0.111	0.111	0.140	18
12.5	0.111	0.111	0.111	0.111	0.111	0.140	24
13.0	0.111	0.111	0.111	0.111	0.111	0.140	24
13.5	0.111	0.111	0.111	0.111	0.140	0.140	24
14.0	0.111	0.111	0.111	0.111	0.140	0.140	24
14.5	0.111	0.111	0.111	0.111	0.140	0.140	24
15.0	0.111	0.111	0.111	0.111	0.140	0.140	24
15.5	0.111	0.111	0.111	0.140	0.140	0.170	24
16.0	0.111	0.111	0.111	0.140	0.140	0.170	24
16.5	0.111	0.111	0.111	0.140	0.140	0.170	30
17.0	0.111	0.111	0.111	0.140	0.140	0.170	30
17.5	0.111	0.111	0.111	0.140	0.140	0.170	30
18.0	0.111	0.111	0.111	0.140	0.140	0.170	30
18.5	0.111	0.111	0.111	0.140	0.140	0.170	30
19.0	0.111	0.111	0.111	0.140	0.140	0.170	30
19.5	0.111	0.111	0.111	0.140	0.140	0.170	30
20.0	0.111	0.111	0.111	0.140	0.140	0.170	30
20.5	0.111	0.111	0.111	0.140	0.140	0.170	30
21.0	0.111	0.111	0.111	0.140	0.140	0.170	30
21.5	0.111	0.111	0.111	0.140	0.140	0.170	30
22.0	0.111	0.111	0.111	0.140	0.140	0.170	30
22.5	0.111	0.111	0.111	0.140	0.140	0.170	30
23.0	0.111	0.111	0.111	0.140	0.140	0.170	30
23.5	0.111	0.111	0.111	0.140	0.140	0.170	30
24.0	0.111	0.111	0.111	0.140	0.140	0.170	30
24.5	0.111	0.111	0.111	0.140	0.140	0.170	30
25.0	0.111	0.111	0.111	0.140	0.140	0.170	30
25.5	0.111	0.111	0.111	0.140	0.140	0.170	30
26.0	0.111	0.111	0.111	0.140	0.140	0.170	30
26.5	0.111	0.111	0.111	0.140	0.140	0.170	30
27.0	0.111	0.111	0.111	0.140	0.140	0.170	30
27.5	0.111	0.111	0.111	0.140	0.140	0.170	30
28.0	0.111	0.111	0.111	0.140	0.140	0.170	30
28.5	0.111	0.111	0.111	0.140	0.140	0.170	30
29.0	0.111	0.111	0.111	0.140	0.140	0.170	30
29.5	0.111	0.111	0.111	0.140	0.140	0.170	30
30.0	0.111	0.111	0.111	0.140	0.140	0.170	30
30.5	0.111	0.111	0.111	0.140	0.140	0.170	30
31.0	0.111	0.111	0.111	0.140	0.140	0.170	30
31.5	0.111	0.111	0.111	0.140	0.140	0.170	30
32.0	0.111	0.111	0.111	0.140	0.140	0.170	30
32.5	0.111	0.111	0.111	0.140	0.140	0.170	30
33.0	0.111	0.111	0.111	0.140	0.140	0.170	30
33.5	0.111	0.111	0.111	0.140	0.140	0.170	30
34.0	0.111	0.111	0.111	0.140	0.140	0.170	30
34.5	0.111	0.111	0.111	0.140	0.140	0.170	30
35.0	0.111	0.111	0.111	0.140	0.140	0.170	30
35.5	0.111	0.111	0.111	0.140	0.140	0.170	30
36.0	0.111	0.111	0.111	0.140	0.140	0.170	30

NOTES: 1. BACKFILL AROUND PIPE MUST BE COMPACTED TO SPECIFIED ASHTO T-99 DENSITY OF WORK.
2. USE PERFORMANCE CURE IN HANDLING AND INSTALLATION.

GENERAL NOTES:

1. WHERE ABRASIVE OR CORROSIVE CONDITIONS EXIST, A HEAVIER WALL THICKNESS OR A PROTECTIVE COATING MAY BE REQUIRED. SEE SECTION 205 OF STANDARD SPECIFICATIONS FOR CONSIDERATIONS.
2. THE CONTRACTOR MAY FURNISH A HEAVIER WALL THICKNESS THAN THE MINIMUM SHOWN IN THE TABLES AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. ALL PIPES SHALL BE PROTECTED BY A COVER OF AT LEAST 4 FEET BEFORE PERMITTING HEAVY CONSTRUCTION EQUIPMENT TO PASS OVER THEM DURING CONSTRUCTION.
4. MINIMUM COVERS SHOWN IN THE TABLES SHALL BE MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE THE FLEXIBLE PAVEMENT OR TO THE TOP OF THE RIGID PAVEMENT, FOR MINIMUM COVERS, A MINIMUM 6" CUSHION OF BACKFILL MATERIAL SHALL BE PROVIDED BETWEEN THE BOTTOM OF THE RIGID PAVEMENT AND THE TOP OF THE PIPE.
5. ALL STEEL CORRUGATED METAL AND AND STRUCTURAL PLATE SHALL CONFORM TO AASHTO SPECIFICATION M-36 AND M-167.
6. ALL PIPES ARE TO BE CAUSERED TO ACCOMMODATE SOIL SETTLEMENT AND CONSOLIDATION. THE AMOUNT OF CAMBER WILL DEPEND ON SOIL CHARACTERISTICS, GRADE, LENGTH OF CULVERT, SLOPE, AND OTHER FACTORS AND SHALL BE APPROVED BY THE PROJECT MANAGER.
7. SEE 206-07-1/1 - CORRUGATED METAL CULVERTS AND PIPE ARCHES BEDDING AND BACKFILL DETAILS FOR INSTALLATION.
8. SEE SECTION 820 PIPE CULVERT SPECIFICATIONS AND SECTION 671 STRUCTURAL PLATE STRUCTURES SPECIFICATIONS.
9. FOR PIPE SIZES NOT SHOWN, THE GAUGE WILL BE THAT REQUIRED BY THE MINIMUM AND MAXIMUM COVERS FOR THE NEXT LARGER TABULATED PIPE SIZE.
10. OTHER HEIGHTS OVER 44 FEET SHALL BE USED ONLY AFTER A THOROUGH INVESTIGATION OF THE FOUNDATION MATERIALS.

TIMOTHY A. DARNO, NEW MEXICO, 14072, REGISTERED PROFESSIONAL ENGINEER, 10-14-05

NO.	DATE	BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

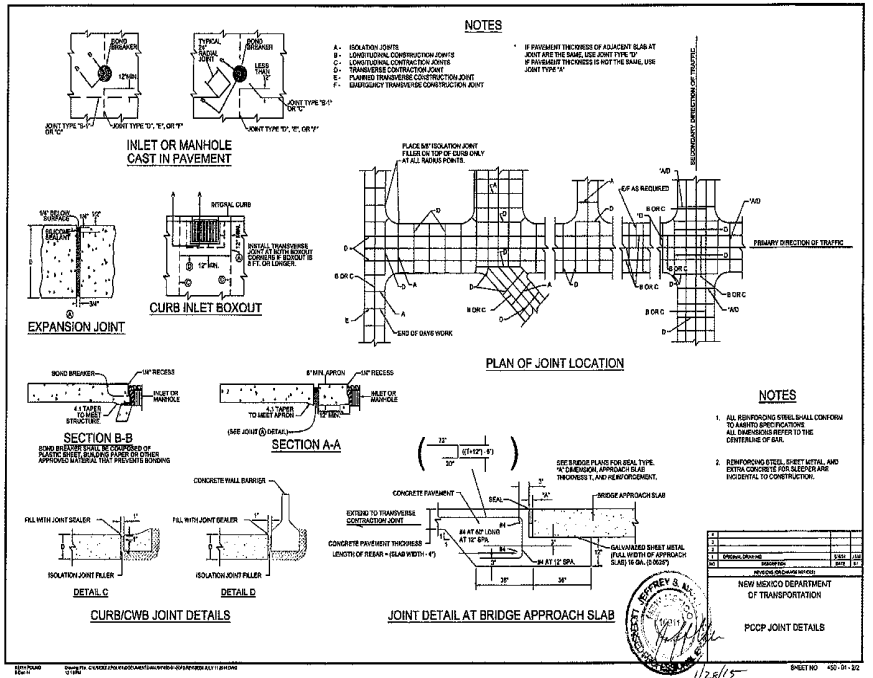
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

MAXIMUM AND MINIMUM COVER STEEL-ROUND PIPES HELICAL CORRUGATED METAL AND STRUCTURAL PLATES

DESIGNED BY: DRAWN BY: SIG. CHECKED BY: TML/TM

206-03-1/1 1 of 1

Sheet 206-03



NO.	DATE	BY	DESCRIPTION
1	2/10/05	TML	REVISIONS (OR CHANGE NOTICES)
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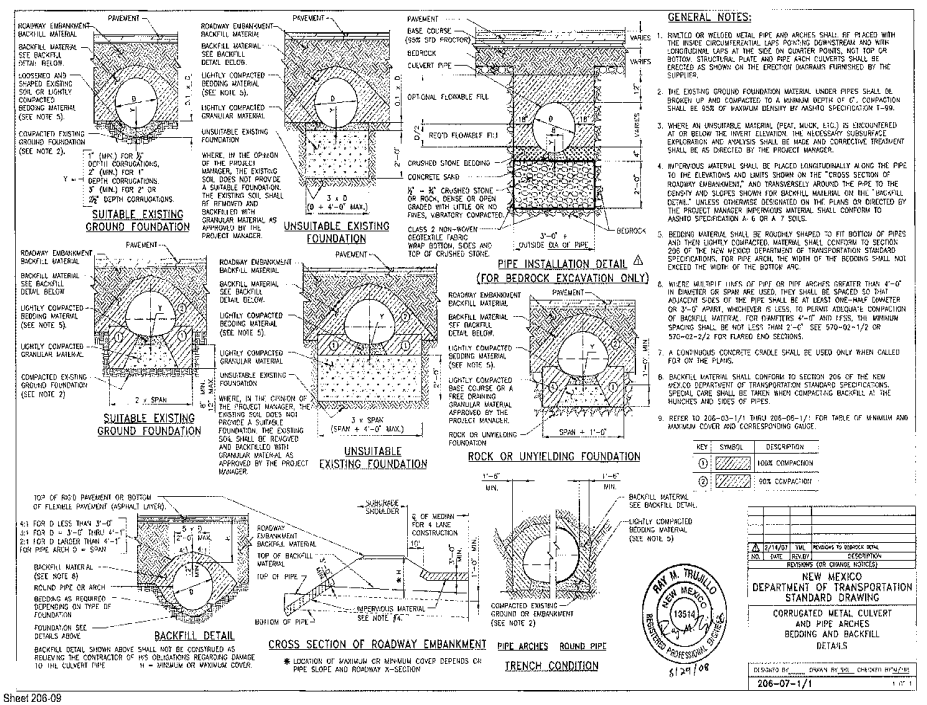
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

PCCP JOINT DETAILS

DESIGNED BY: DRAWN BY: SIG. CHECKED BY: TML/TM

450-01-1/2 1 of 2

Sheet 450-02



GENERAL NOTES:

1. RIVETED OR WELDED METAL PIPE AND ARCHES SHALL BE PLACED WITH THE INSIDE CIRCUMFERENTIAL LAPS POINTING DOWNSTREAM AND WITH LONGITUDINAL LAPS AT THE SIDE OR QUARTER POINTS, NOT TOP OR BOTTOM. STRUCTURAL PLATE AND PIPE ARCH CULVERTS SHALL BE ERECTED AS SHOWN ON THE ERECTION DIAGRAMS FURNISHED BY THE SUPPLIER.
2. THE EXISTING GROUND FOUNDATION MATERIAL UNDER PIPES SHALL BE BROKEN UP AND COMPACTED TO A MINIMUM DEPTH OF 6". COMPACTION SHALL BE 95% OF MAXIMUM DENSITY BY AASHTO SPECIFICATION T-99.
3. WHERE AN UNSUITABLE MATERIAL (PEAT, MUCK, ETC.) IS ENCOUNTERED AT OR BELOW THE INVERT ELEVATION OF NECESSARY, SUBSURFACE EXPLORATION AND ANALYSIS SHALL BE MADE AND CORRECTIVE TREATMENT SHALL BE AS DIRECTED BY THE PROJECT MANAGER.
4. IMPERVIOUS MATERIAL SHALL BE PLACED LONGITUDINALLY ALONG THE PIPE TO THE ELEVATIONS AND LIMITS SHOWN ON THE "CROSS SECTION OF ROADWAY EMBANKMENT," AND TRANSVERSELY AROUND THE PIPE TO THE DENSITY AND SLOPES SHOWN FOR BACKFILL MATERIAL ON THE BACKFILL DETAIL. UNLESS OTHERWISE DESIGNATED ON THE PLANS OR DIRECTED BY THE PROJECT MANAGER IMPERVIOUS MATERIAL SHALL CONFORM TO AASHTO SPECIFICATION A-6 OR A-7 SOILS.
5. BEDDING MATERIAL SHALL BE ROUGHLY SHAPED TO FIT BOTTOM OF PIPES AND THEN LIGHTLY COMPACTED. MATERIAL SHALL CONFORM TO SECTION 206 OF THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. FOR PIPE ARCH, THE WIDTH OF THE BEDDING SHALL NOT EXCEED THE WIDTH OF THE BOTTOM ARC.
6. WHERE MULTIPLE LINES OF PIPE OR PIPE ARCHES GREATER THAN 4'-0" IN DIAMETER OR SPAN ARE USED, THEY SHALL BE SPACED SO THAT ADJACENT SIDES OF THE PIPE SHALL BE AT LEAST ONE-HALF DIAMETER OR 3'-0" APART, WHICHEVER IS LESS, TO PERMIT ADEQUATE COMPACTION OF BACKFILL MATERIAL. FOR DIAMETERS 4'-0" AND LESS, THE MINIMUM SPACING SHALL BE NOT LESS THAN 2'-0". SEE 570-02-1/2 OR 570-02-2/2 FOR FLARED END SECTIONS.
7. A CONTINUOUS CONCRETE CRADLE SHALL BE USED ONLY WHEN CALLED FOR ON THE PLANS.
8. BACKFILL MATERIAL SHALL CONFORM TO SECTION 206 OF THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. SPECIAL CARE SHALL BE TAKEN WHEN COMPACTING BACKFILL AT THE HAUNCHES AND SIDES OF PIPES.
9. REFER TO 206-03-1/1 THRU 206-06-1/1 FOR TABLE OF MINIMUM AND MAXIMUM COVER AND CORRESPONDING GAUGE.

KEY	SYMBOL	DESCRIPTION
1		100% COMPACTION
2		90% COMPACTION

TIMOTHY A. DARNO, NEW MEXICO, 12514, REGISTERED PROFESSIONAL ENGINEER, 5/29/08

NO.	DATE	BY	DESCRIPTION
1	2/10/05	TML	REVISIONS (OR CHANGE NOTICES)
0	9/14/07	TML	REVISIONS TO BEDROCK NOTE

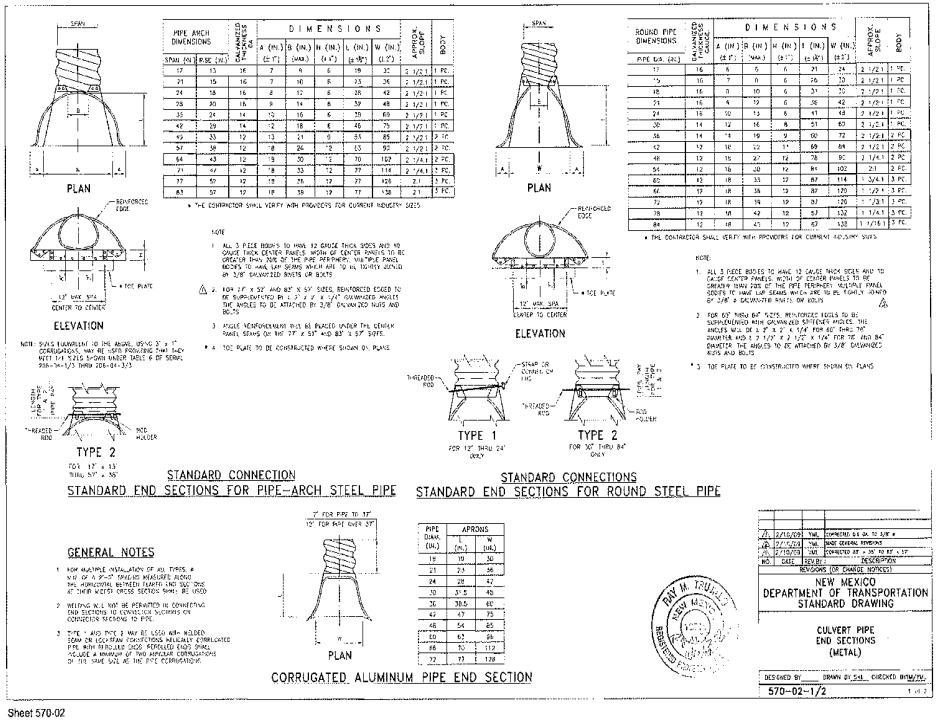
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

CORRUGATED METAL CULVERT AND PIPE ARCHES BEDDING AND BACKFILL DETAILS

DESIGNED BY: DRAWN BY: SIG. CHECKED BY: TML/TM

206-07-1/1 1 of 1

Sheet 206-09



PIPE ARCH DIMENSIONS SPAN (IN)	RISE (IN)	GALVANIZED THICKNESS GAUGE	DIMENSIONS A (IN.) (±2")	B (IN.) (MAX.)	N (IN.) (±4")	T (IN.) (±8")	W (IN.) (±2")	APPROX. SLOPE	BOLTS
17	13	16	7	9	6	18	32	2 1/2:1	1 PC.
21	15	16	7	10	8	23	36	2 1/2:1	1 PC.
24	18	16	8	12	8	26	42	2 1/2:1	1 PC.
28	20	16	9	14	8	29	48	2 1/2:1	1 PC.
35	24	14	12	16	8	35	60	2 1/2:1	1 PC.
42	29	14	12	18	8	40	71	2 1/2:1	1 PC.
49	33	12	13	21	8	53	85	2 1/2:1	2 PC.
57	38	12	14	24	12	63	97	2 1/2:1	2 PC.
64	43	12	15	30	12	70	102	2 1/4:1	2 PC.
71	47	12	18	33	12	77	114	2 1/4:1	3 PC.
77	52	12	18	35	12	77	126	2:1	3 PC.
83	57	12	18	39	12	77	138	2:1	3 PC.

* THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CURRENT INDUSTRY SIZES

NOTE
1. ALL 3 PIECE BODIES TO HAVE 12 GAUGE THICK SIDES AND NO. GAUGE THICK CENTER PANELS. WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE DIAMETER. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED RIVETS OR BOLTS.
2. FOR 60" THRU 84" SIZES, REINFORCED EDGES TO BE SUPPLEMENTED BY 1 1/2" X 1 1/2" GALVANIZED ANGLES THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.
3. ANGLE REINFORCEMENTS MUST BE PLACED UNDER THE CENTER PANEL SEAMS ON THE 72" X 52" AND 83" X 57" SIZES.
* A TOE PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS

ROUND PIPE DIMENSIONS	GALVANIZED THICKNESS GAUGE	DIMENSIONS A (IN.) (±2")	B (IN.) (±2")	H (IN.) (±2")	T (IN.) (±8")	W (IN.) (±2")	APPROX. SLOPE	BODY
PIPE DIA. (IN.)								
12	16	6	5	6	21	24	2 1/2:1	1 PC.
15	16	7	6	7	26	30	2 1/2:1	1 PC.
18	16	8	7	10	6	32	2 1/2:1	1 PC.
21	16	9	8	12	6	36	2 1/2:1	1 PC.
24	16	10	9	13	6	41	2 1/2:1	1 PC.
30	14	12	11	16	6	51	2 1/2:1	1 PC.
36	14	14	13	19	6	60	2 1/2:1	2 PC.
42	14	16	15	22	6	69	2 1/2:1	2 PC.
48	12	18	17	25	12	78	96	2 1/4:1	2 PC.
54	12	19	18	28	12	87	102	2:1	2 PC.
60	12	21	20	31	12	87	114	1 3/4:1	3 PC.
66	12	18	17	34	12	87	120	1 1/2:1	3 PC.
72	12	19	18	37	12	87	126	1 1/2:1	3 PC.
78	12	18	17	40	12	87	132	1 1/4:1	3 PC.
84	12	18	17	43	12	87	138	1 1/4:1	3 PC.

* THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CURRENT INDUSTRY SIZES

NOTE
1. ALL 3 PIECE BODIES TO HAVE 12 GAUGE THICK SIDES AND 10 GAUGE CENTER PANELS. WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE DIAMETER. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED RIVETS OR BOLTS.
2. FOR 60" THRU 84" SIZES, REINFORCED EDGES TO BE SUPPLEMENTED BY 1 1/2" X 1 1/2" GALVANIZED ANGLES THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.
3. TOE PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS

PIPE DIA. (IN.)	APRONS L (IN.)	W (IN.)
18	19	30
21	21	36
24	23	42
30	31.5	48
36	38.5	60
42	45	72
48	54	84
54	60	96
60	67	108
66	80	120
72	93	132

NO.	DATE	BY	DESCRIPTION
1	2/10/05	TML	COMMENTED 24 GA. TO 3/08 #
2	2/15/06	TML	ROUND CULVERT REVISIONS
3	2/15/06	TML	CHANGED 18" = 30" TO 48" = 72"
NO.	DATE	REVISED	DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

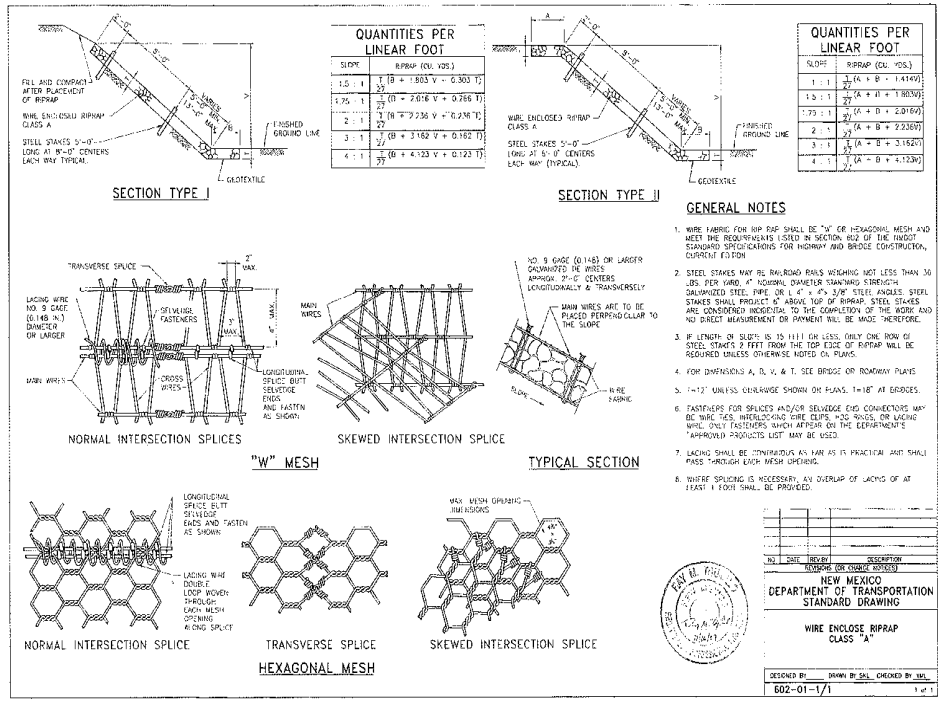
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

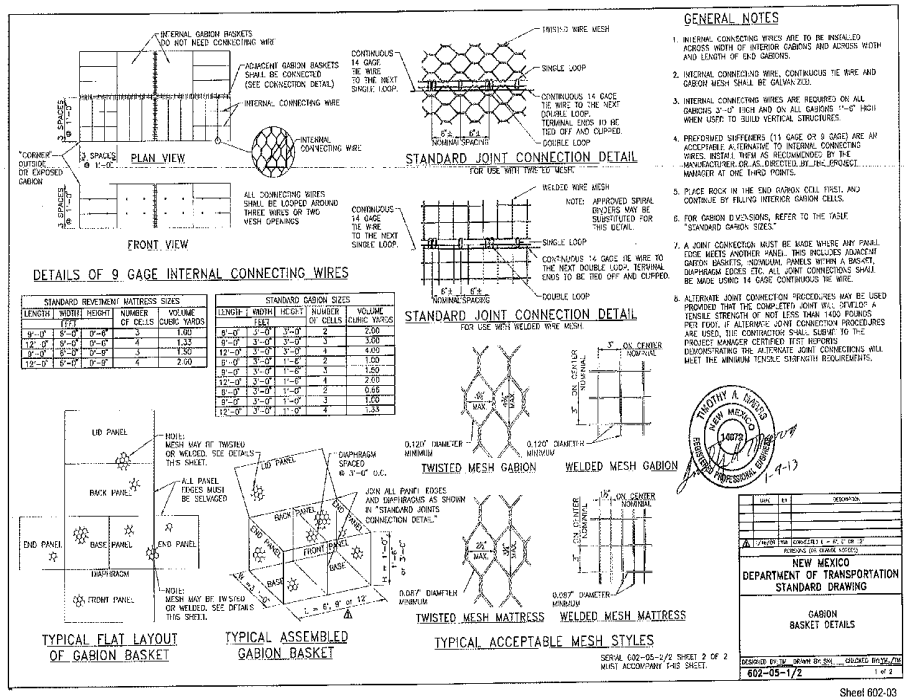
CULVERT PIPE END SECTIONS (METAL)

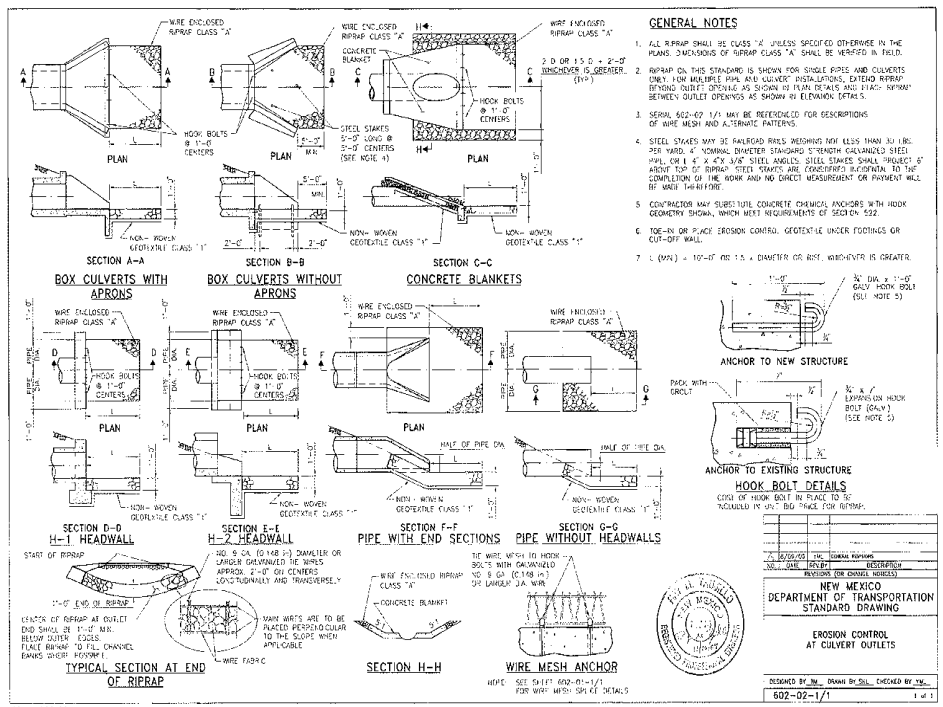
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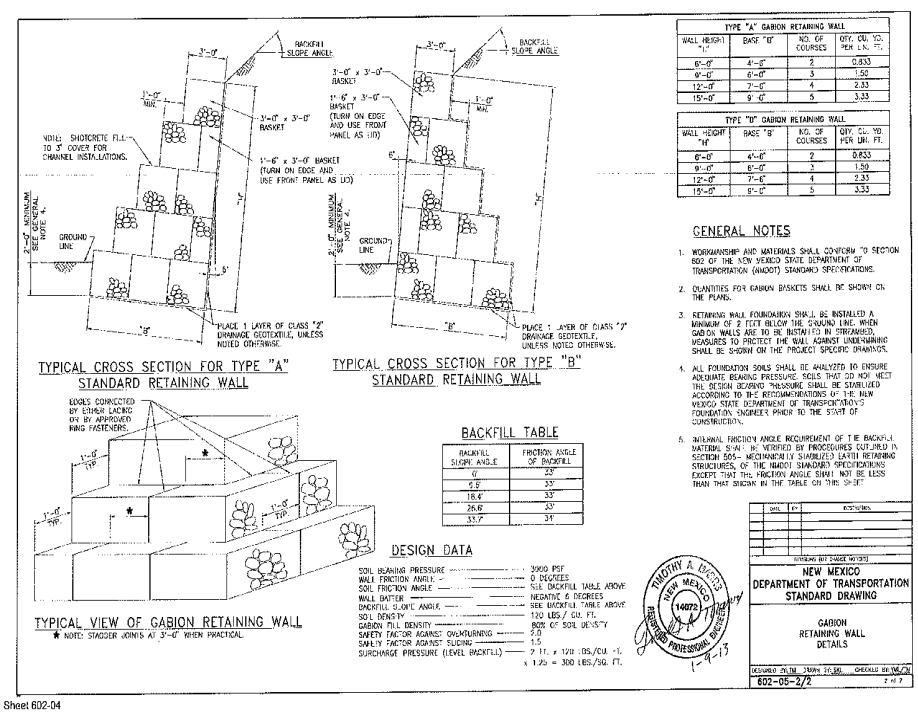
570-02-1/2 1 of 2

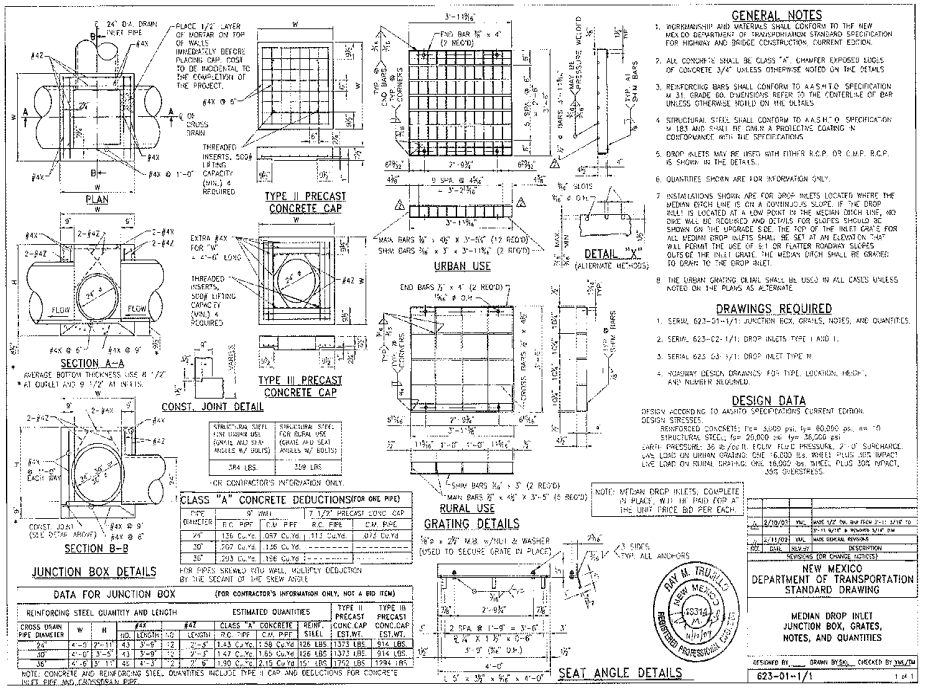
Sheet 570-02


QUANTITIES PER LINEAR FOOT
SLOPE
RIPRAP (CU. YDS.)
1:1
1.5 : 1
2 : 1
3 : 1
4 : 1
SECTION TYPE I
SECTION TYPE II
GENERAL NOTES
1. WIRE FABRIC FOR RIP RAP SHALL BE "W" OR HEXAGONAL MESH AND MEET THE REQUIREMENTS LISTED IN SECTION 602 OF THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION
2. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS. PER YARD, 4" NOMINAL DIAMETER STANDARD STRENGTH GALVANIZED STEEL PIPE, OR L 4" x 4" x 3/8" STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
3. IF LENGTH OR SLOPE IS 15 FEET OR LESS, ONLY ONE ROW OF STEEL STAKES 3 FEET FROM THE TOP EDGE OF RIPRAP WILL BE REQUIRED UNLESS OTHERWISE NOTED ON PLANS.
4. FOR DIMENSIONS A, D, V, & T, SEE BRIDGE OR ROADWAY PLANS
5. T=12" UNLESS OTHERWISE SHOWN ON PLANS. T=18" AT BRIDGES.
6. FASTENERS FOR SPLICES AND/OR SELVEDGE END CONNECTORS MAY BE WIRE TIES, INTERLOCKING WIRE CLIPS, H-ZD RINGS, OR LACING WIRE. ONLY FASTENERS WHICH APPEAR ON THE DEPARTMENT'S "APPROVED PRODUCTS LIST" MAY BE USED.
7. LACING SHALL BE CONTINUOUS AS FAR AS IS PRACTICAL AND SHALL PASS THROUGH EACH MESH OPENING.
8. WHERE SPLICING IS NECESSARY, AN OVERLAP OF LACING OF AT LEAST 1 FOOT SHALL BE PROVIDED.
NORMAL INTERSECTION SPLICES
SKEWED INTERSECTION SPLICE
"W" MESH
TYPICAL SECTION
NORMAL INTERSECTION SPLICE
TRANSVERSE SPLICE
SKEWED INTERSECTION SPLICE
HEXAGONAL MESH
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
WIRE ENCLOSE RIPRAP
CLASS "A"
602-01-1/1
Sheet 602-01

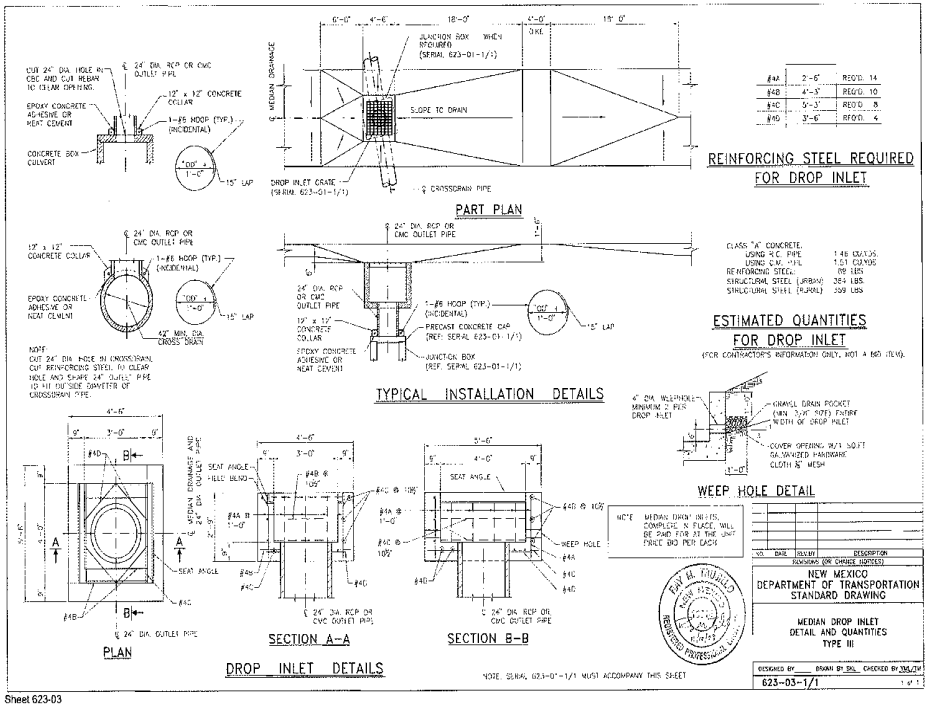

GENERAL NOTES
1. INTERNAL CONNECTING WIRES ARE TO BE INSTALLED ACROSS WIDTH OF INTERIOR GABIONS AND ACROSS WIDTH AND LENGTH OF END GABIONS.
2. INTERNAL CONNECTING WIRE, CONTINUOUS TIE WIRE AND GABION MESH SHALL BE GALVAN.ZED.
3. INTERNAL CONNECTING WIRES ARE REQUIRED ON ALL GABIONS 3'-0" HIGH AND ON ALL GABIONS 1'-6" HIGH WHEN USED TO BUILD VERTICAL STRUCTURES.
4. PREFORMED STIFFENERS (11 GAGE OR 9 GAGE) ARE AN ACCEPTABLE ALTERNATIVE TO INTERNAL CONNECTING WIRES. INSTALL THEM AS RECOMMENDED BY THE MANUFACTURER, OR AS DIRECTED BY THE PROJECT MANAGER AT ONE THIRD POINTS.
5. PLACE ROCK IN THE END GABION CELL FIRST, AND CONTINUE BY FILLING INTERIOR GABION CELLS.
6. FOR GABION DIMENSIONS, REFER TO THE TABLE "STANDARD GABION SIZES."
7. A JOINT CONNECTION MUST BE MADE WHERE ANY PANEL EDGE MEETS ANOTHER PANEL. THIS INCLUDES ADJACENT GABION BASKETS, NONDIUM PANELS WITHIN A BASKET, DIAPHRAGM EDGES ETC. ALL JOINT CONNECTIONS SHALL BE MADE USING 14 GAGE CONTINUOUS TIE WIRE.
8. ALTERNATE JOINT CONNECTION PROCEDURES MAY BE USED PROVIDED THAT THE COMPLETED JOINT WILL DEVELOP A TENSILE STRENGTH OF NOT LESS THAN 1400 POUNDS PER FOOT. IF ALTERNATE JOINT CONNECTION PROCEDURES ARE USED, THE CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER CERTIFIED TEST REPORTS DEMONSTRATING THE ALTERNATE JOINT CONNECTIONS WILL MEET THE MINIMUM TENSILE STRENGTH REQUIREMENTS.
INTERNAL GABION BASKETS DO NOT NEED CONNECTING WIRE
ADJACENT GABION BASKETS SHALL BE CONNECTED (SEE CONNECTION DETAIL)
INTERNAL CONNECTING WIRE
PLAN VIEW
STANDARD JOINT CONNECTION DETAIL
FOR USE WITH TWIS-TED MESH
FRONT VIEW
ALL CONNECTING WIRES SHALL BE LOOPED AROUND THREE WIRES OR TWO MESH OPENINGS
DETAILS OF 9 GAGE INTERNAL CONNECTING WIRES
STANDARD REVETMENT MATTRESS SIZES
STANDARD GABION SIZES
STANDARD JOINT CONNECTION DETAIL
FOR USE WITH WELDED WIRE MESH
TWISTED MESH GABION
WELDED MESH GABION
LID PANEL
BACK PANEL
END PANEL
BASE PANEL
DIAPHRAGM
FRONT PANEL
TYPICAL FLAT LAYOUT OF GABION BASKET
TYPICAL ASSEMBLED GABION BASKET
TWISTED MESH MATTRESS
WELDED MESH MATTRESS
TYPICAL ACCEPTABLE MESH STYLES
SERIAL 602-05-2/2 SHEET 2 OF 2 MUST ACCOMPANY T-48 SHEET.
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
GABION
BASKET DETAILS
602-05-1/2
Sheet 602-03


GENERAL NOTES
1. ALL RIPRAP SHALL BE CLASS "A" UNLESS SPECIFIED OTHERWISE IN THE PLANS. DIMENSIONS OF RIPRAP CLASS "A" SHALL BE VERIFIED IN FIELD.
2. RIPRAP ON THIS STANDARD IS SHOWN FOR SINGLE PIPES AND CULVERTS ONLY. FOR MULTIPLE PIPE AND CULVERT INSTALLATIONS, EXTEND RIPRAP BEYOND OUTLET OPENINGS AS SHOWN IN PLAN DETAILS AND PLACE RIPRAP BETWEEN OUTLET OPENINGS AS SHOWN IN ELEVATION DETAILS.
3. SERIAL 602-07 1/1 MAY BE REFERENCED FOR DESCRIPTIONS OF WIRE MESH AND ALTERNATE PATTERNS.
4. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS PER YARD, 4" NOMINAL DIAMETER STANDARD STRENGTH GALVANIZED STEEL PIPE, OR L 4" X 4"X 3/8" STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
5. CONTRACTOR MAY SUBSTITUTE CONCRETE CHEMICAL ANCHORS WITH HOOK GEOMETRY SHOWN, WHICH MEET REQUIREMENTS OF SECTION 522
6. TOE-IN OR PLACE EROSION CONTROL GEOTEXTILE UNDER FOOTINGS OR CUT-OFF WALL.
7. L (MIN.) = 10'-0" OR 1.5 x DIAMETER OR RISE, WHICHEVER IS GREATER.
SECTION A-A
SECTION B-B
SECTION C-C
BOX CULVERTS WITH APRONS
BOX CULVERTS WITHOUT APRONS
CONCRETE BLANKETS
ANCHOR TO NEW STRUCTURE
ANCHOR TO EXISTING STRUCTURE
HOOK BOLT DETAILS
SECTION D-D
H-1 HEADWALL
SECTION E-E
H-2 HEADWALL
SECTION F-F
PIPE WITH END SECTIONS
SECTION G-G
PIPE WITHOUT HEADWALLS
TYPICAL SECTION AT END OF RIPRAP
SECTION H-H
WIRE MESH ANCHOR
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
EROSION CONTROL
AT CULVERT OUTLETS
602-02-1/1
Sheet 602-02

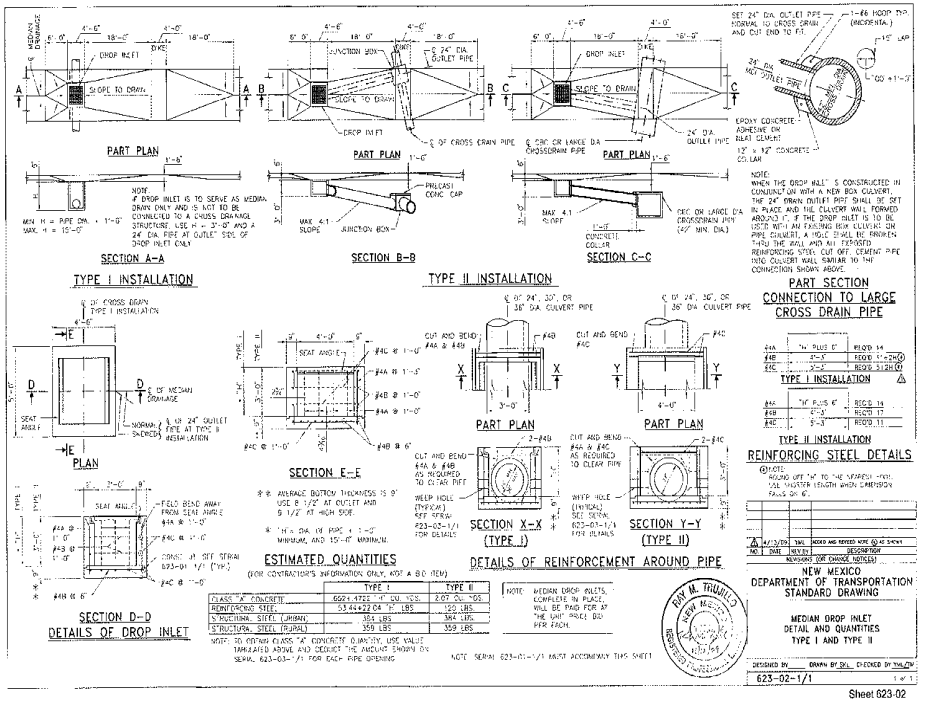

TYPE "A" GABION RETAINING WALL
TYPE "B" GABION RETAINING WALL
GENERAL NOTES
1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO SECTION 602 OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION (NMDOT) STANDARD SPECIFICATIONS.
2. QUANTITIES FOR GABION BASKETS SHALL BE SHOWN ON THE PLANS.
3. RETAINING WALL FOUNDATIONS SHALL BE INSTALLED A MINIMUM OF 2 FEET BELOW THE GROUND LINE. WHEN GABION WALLS ARE TO BE INSTALLED IN STREAMBED, MEASURES TO PROTECT THE WALL AGAINST UNDERMINING SHALL BE SHOWN ON THE PROJECT SPECIFIC DRAWINGS.
4. ALL FOUNDATION SOILS SHALL BE ANALYZED TO ENSURE ADEQUATE BEARING PRESSURE. SOILS THAT DO NOT MEET THE DESIGN BEARING PRESSURE SHALL BE STABILIZED ACCORDING TO THE RECOMMENDATIONS OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION'S FOUNDATION ENGINEER PRIOR TO THE START OF CONSTRUCTION.
5. INTERNAL FRICTION ANGLE REQUIREMENT OF THE BACKFILL MATERIAL SHALL BE VERIFIED BY PROCEDURES OUTLINED IN SECTION 505- MECHANICALLY STABILIZED EARTH RETAINING STRUCTURES, OF THE NMDOT STANDARD SPECIFICATIONS EXCEPT THAT THE FRICTION ANGLE SHALL NOT BE LESS THAN THAT SHOWN IN THE TABLE ON THIS SHEET
TYPICAL CROSS SECTION FOR TYPE "A" STANDARD RETAINING WALL
TYPICAL CROSS SECTION FOR TYPE "B" STANDARD RETAINING WALL
BACKFILL TABLE
TYPICAL VIEW OF GABION RETAINING WALL
★ NOTE: STAGGER JOINTS AT 3'-0" WHEN PRACTICAL.
DESIGN DATA
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
GABION
RETAINING WALL
DETAILS
602-05-2/2
Sheet 602-04



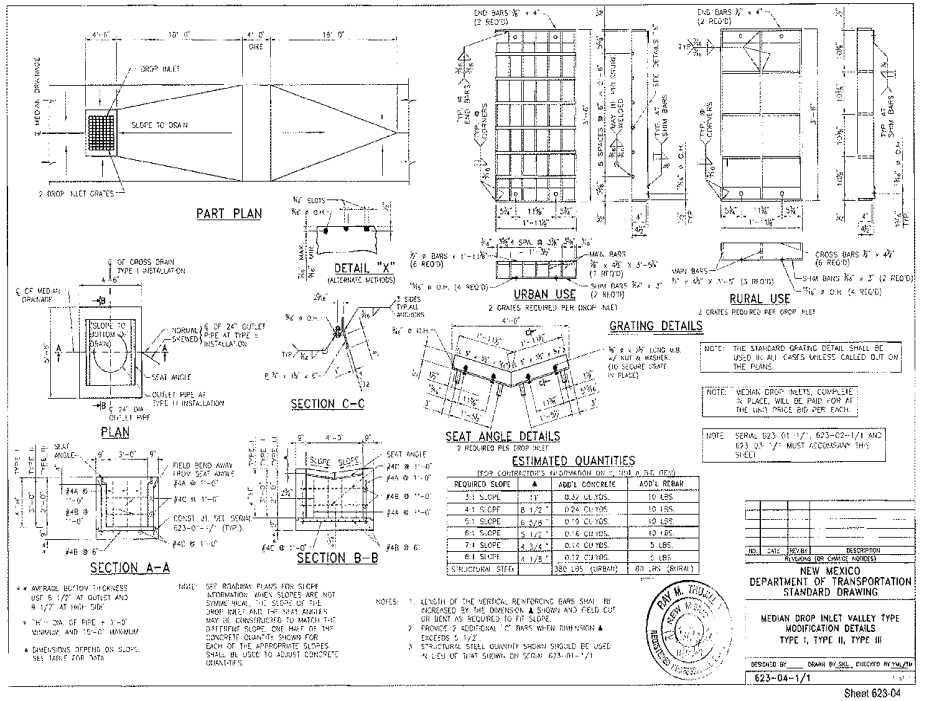
Sheet 623-01



Sheet 623-03



Sheet 623-02



Sheet 623-04

GENERAL NOTES:

1. NMDOT IS RECOGNIZED AS A TITLE II PUBLIC ENTITY UNDER THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 (PUBLIC LAW 101-336). A TITLE II ENTITY IS DEFINED AS ANY STATE OR LOCAL GOVERNMENT ENTITY AND PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY. THE ADA EXTENDS THE PRINCIPLES OF SECTION 504 OF THE REHABILITATION ACT, OF 1973, AS AMENDED, TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRESPECTIVE OF THE FUNDING SOURCE.
2. THESE DRAWINGS PROVIDE GUIDANCE FOR CURB RAMPS WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROWAG), (US 36, 2011, OR LATEST EDITION. THESE GUIDELINES SHALL APPLY TO ALL NEW AND ALTERED PEDESTRIAN ACCESS ROUTES (PAR).
3. REFER TO CONSTRUCTION PLANS FOR THE DETAILED LAYOUTS AND DETAILS.
4. PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE FIRM, STABLE, AND SLIP-RESISTANT. PROVIDE SLIP-RESISTANT TEXTURE ON SIDEWALKS AND CURB RAMPS BY BROOMED TRANSVERSE TO THE SLOPE OF THE RAMP AND/OR PERPENDICULAR TO PEDESTRIAN TRAVEL. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
5. VERTICAL SURFACE DISCONTINUITIES SHALL BE 0.5 INCHES MAXIMUM. VERTICAL DISCONTINUITIES BETWEEN 0.25 INCHES AND 0.5 INCHES SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 50 PERCENT. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE VERTICAL SURFACE DISCONTINUITY.
6. HORIZONTAL OPENINGS IN GRATINGS AND JOINTS SHALL NOT PERMIT PASSAGE OF A SPHERE MORE THAN 0.5 INCHES IN DIAMETER. ELONGATED OPENINGS IN GRATES SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.
7. PROVIDE EXPANSION JOINT MATERIAL AT ALL BACK TO BACK CURB RAMP ALIGNED ANY FIXED PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
8. SEAL ALL JOINTS WITH AN APPROVED SEALING MATERIAL.
9. INSTALL JOINTS WHERE CURB RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT. ALL JOINTS AND TRANSITIONS SHALL BE FLUSH.
10. VERTICAL WALLS OR HEADER CURBS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY CURB RAMP FLARES OR GRADING. GRADE NON-WALK AREAS AT 3:1 OR FLATTER.
11. CONSTRUCTION TOP / BOTTOM OF CURB TO BE FLUSH WITH ADJACENT SURFACES (CURB RAMPS, SIDEWALK, AND FLARES). VERTICAL LIPS NOT PERMITTED AT THE BOTTOM OF CURB RAMP WHERE THE RAMP MEETS STREET LEVEL.

SIDEWALKS

12. SIDEWALK AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 609-01-3A.
13. SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1.6% TYPICAL, BUT SHALL NOT EXCEED 2.0% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).
14. SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT, EXCLUSIVE OF THE WIDTH OF THE CURB RETURN.
    EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.0 FT, PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT MAXIMUM. PASSING SPACE SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM.
15. ANY SIGNS POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.
16. THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5.0 FT MINIMUM.

CURB RAMPS

17. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE PRACTICAL. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMP STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMP STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REMOVED AND RECONSTRUCTED.
18. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 16.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 1.5 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
19. CONSTRUCT THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES AS TYPICAL 5.0 FT X 5.0 FT AND MINIMUM 4.0 FT X 4.0 FT. CLEAR SPACE BE WITHIN THE WIDTH OF THE GROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
20. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
21. THE GRADE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.5% (THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP RUNS, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.0%.
22. CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE
23. CRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
24. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMP IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.0 FT FOR AN 8.3% SLOPE)

CROSSWALKS

25. PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED CROSSWALK. CURB RAMP LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.

DETECTABLE WARNING

26. DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE UTILIZED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACE PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CROSSES A STREET, ALLEY, TRAFFIC ISLAND, MEDIAN, OR RAILROAD. DETECTABLE WARNING SURFACES (DWS) WILL NOT BE INSTALLED AT RESIDENTIAL DRIVEWAYS. DETECTABLE WARNING SURFACE MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP OR YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.
27. DETAILS OF DETECTABLE WARNING SURFACE ARE SHOWN IN CONTRACT PLANS AND SHEET 608-001-912 OF THE STANDARD DRAWINGS.

ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS

28. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT PRACTICABLE. INSTALL PEDESTRIAN STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS. REFER TO THE MUTCD FOR FURTHER GUIDANCE.
29. PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCATED WITHIN A HORIZONTAL REACH OF 0" TO 10" AND SHALL BE WITHIN 36" TO 48" ABOVE THE SIDEWALK SURFACE.
30. PEDESTRIAN SIGNAL SHALL HAVE 4" THAT MIN TURNING SPACE TO PROVIDE ACCESS TO PUSH BUTTONS.

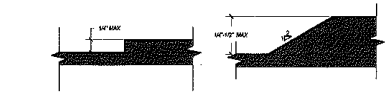
ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES:

ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE NMDOT PEDESTRIAN ACCESS STANDARDS AND PROWAG 2011 OR LATEST EDITION. ANY DESIGN / CONSTRUCTION DEVIATION THAT IS DEEMED AN HAZARDOUS OR TECHNICALLY INFEASIBLE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITTAL AND APPROVAL OF AN EXCEPTION / VARIANCE PROCEDURES.

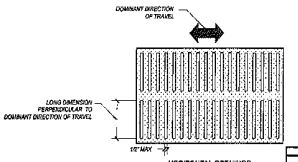
31. EXCEPTION: IN ALTERATION WORK, IF COMPLIANCE IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT PRACTICABLE. ANY ELEMENTS OR FEATURES OF THE BUILDING OR FACILITY THAT IS BEING ALTERED AND CAN BE MADE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SCOPE OF THE ALTERATION.

32. TECHNICAL INFEASIBILITY: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE LIKELIHOOD OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WOULD REQUIRE REMOVING OR ALTERING A LOAD-BEARING MEMBER WHICH IS AN ESSENTIAL PART OF THE STRUCTURAL FRAME; OR BECAUSE OTHER EXISTING PHYSICAL OR SITE CONSTRAINTS PROHIBIT.

33. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.



VERTICAL SURFACE DISCONTINUITIES
SCALE NONE



HORIZONTAL OPENINGS
SCALE NONE



NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS / ERRATA / ADDENDA

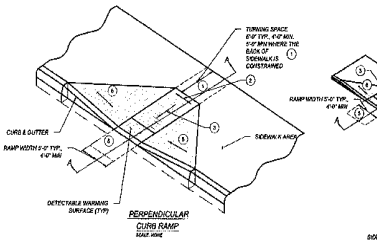
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN ACCESS ROUTE GENERAL NOTES

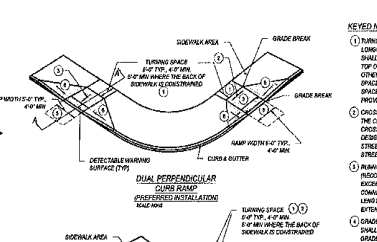
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608-001-1 | 605-1 of 12

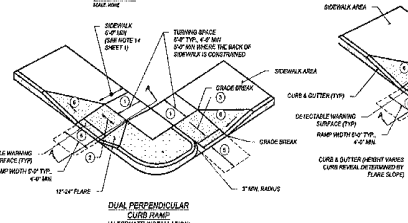
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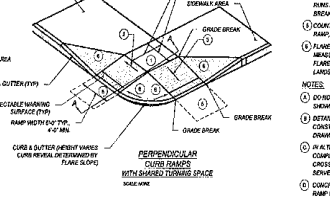
PERPENDICULAR CURB RAMP
SCALE NONE



DUAL PERPENDICULAR CURB RAMP (PREFERRED INSTALLATION)
SCALE NONE



DUAL PERPENDICULAR CURB RAMP (ALTERNATE INSTALLATION)
SCALE NONE



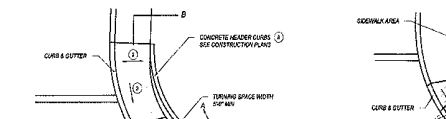
PERPENDICULAR CURB RAMPS WITH SHARED TURNING SPACE
SCALE NONE

KEYED NOTES

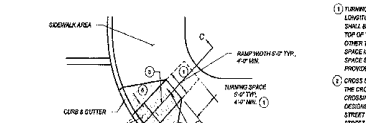
1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMENDED 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMENDED 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
2. CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 16.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE
4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX
6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMENDED 8%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

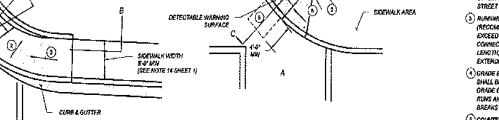
A. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-912 OF THE STANDARD DRAWINGS.
C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 609004 AND NO SEPARATE PAYMENT WILL BE MADE.



SECTION A-A
SCALE NONE



SECTION B-B
SCALE NONE



SECTION C-C
SCALE NONE

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS / ERRATA / ADDENDA

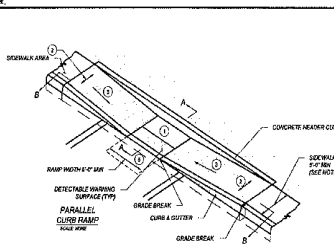
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PERPENDICULAR CURB RAMPS

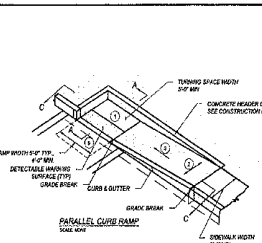
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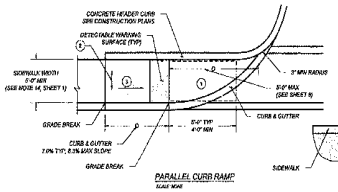
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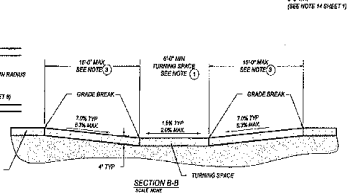
PARALLEL CURB RAMP
SCALE NONE



PARALLEL CURB RAMP
SCALE NONE



PARALLEL CURB RAMP
SCALE NONE



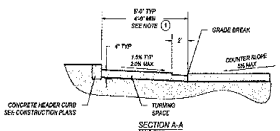
SECTION B-B
SCALE NONE

KEYED NOTES

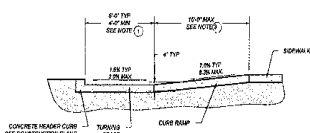
1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMENDED 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMENDED 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
2. CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 16.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE
4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX
6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMENDED 8%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

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B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-912 OF THE STANDARD DRAWINGS.
C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 609004 AND NO SEPARATE PAYMENT WILL BE MADE.



SECTION A-A
SCALE NONE



SECTION C-C
SCALE NONE



NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS / ERRATA / ADDENDA

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PARALLEL CURB RAMPS

APPROVED: _____ DATE: 1-13-15

608-001-3 | 606-3 of 12

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SECTION A-A
SCALE NONE

SECTION B-B
SCALE NONE

SECTION C-C
SCALE NONE

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS / ERRATA / ADDENDA

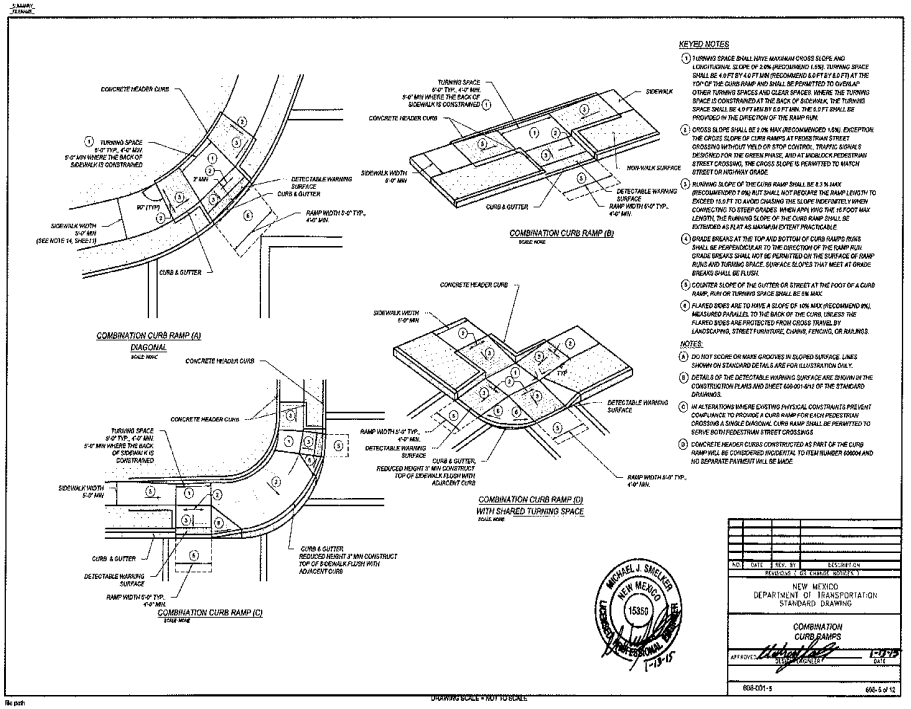
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

DIAGONAL CURB RAMPS

APPROVED: _____ DATE: 1-13-15

608-001-4 | 606-4 of 12

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KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
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3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THIS SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
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REVISIONS / IN CHANGE ORDER)			

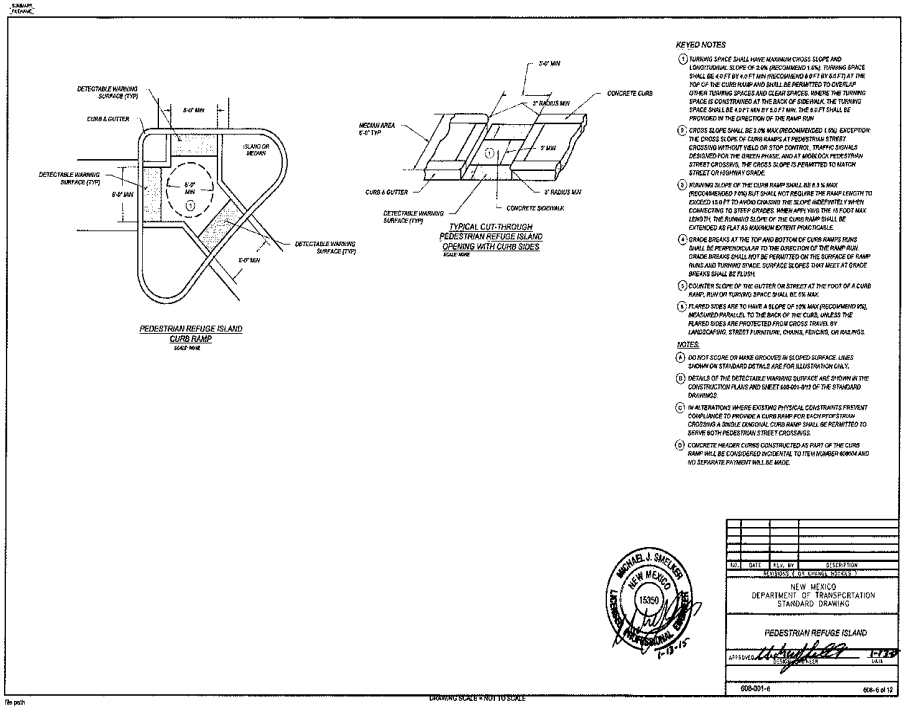
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

COMBINATION CURB RAMPS

APPROVED: STATE ENGINEER — DATE: 1-15-15

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DRAWING SCALE = NOT TO SCALE



KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
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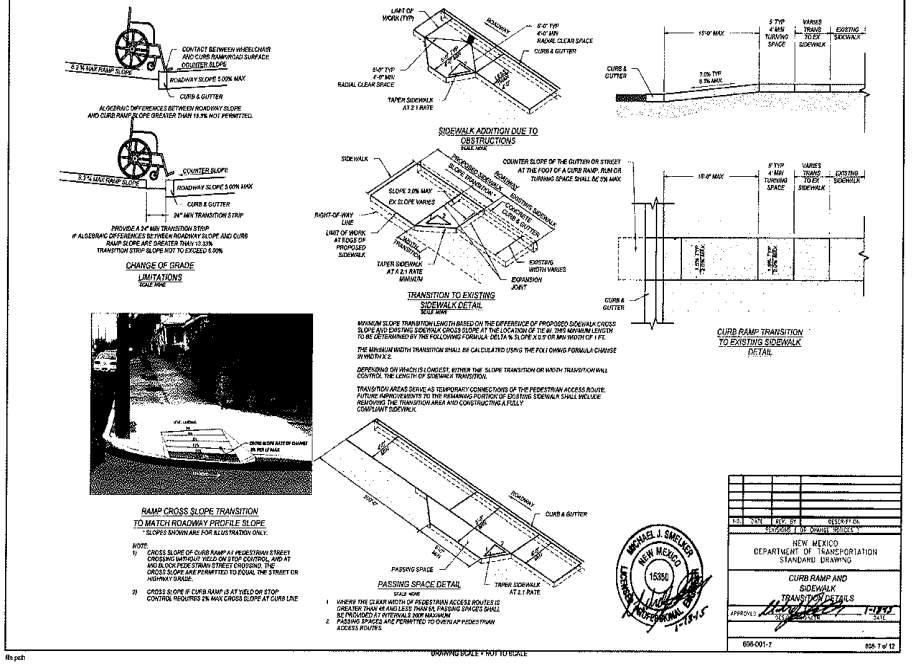
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN REFUGE ISLAND

APPROVED: STATE ENGINEER — DATE: 1-15-15

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DRAWING SCALE = NOT TO SCALE



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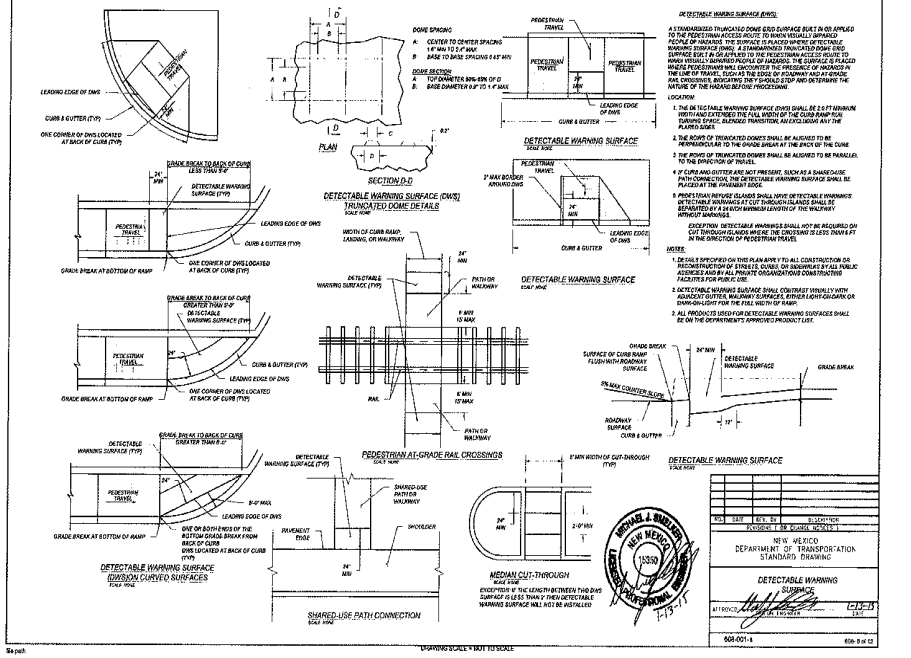
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

CURB RAMP AND SIDEWALK TRANSITION DETAILS

APPROVED: STATE ENGINEER — DATE: 1-15-15

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DRAWING SCALE = NOT TO SCALE



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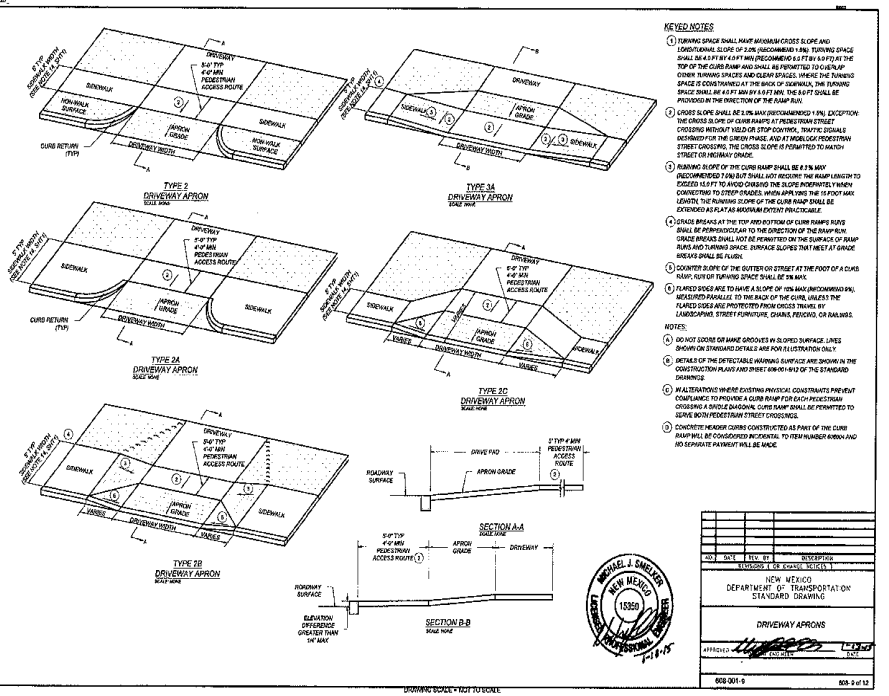
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

DETECTABLE WARNING SURFACE

APPROVED: STATE ENGINEER — DATE: 1-15-15

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DRAWING SCALE = NOT TO SCALE



KEYED NOTES

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STANDARD 1 OF CHANGE NOTICES 1

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

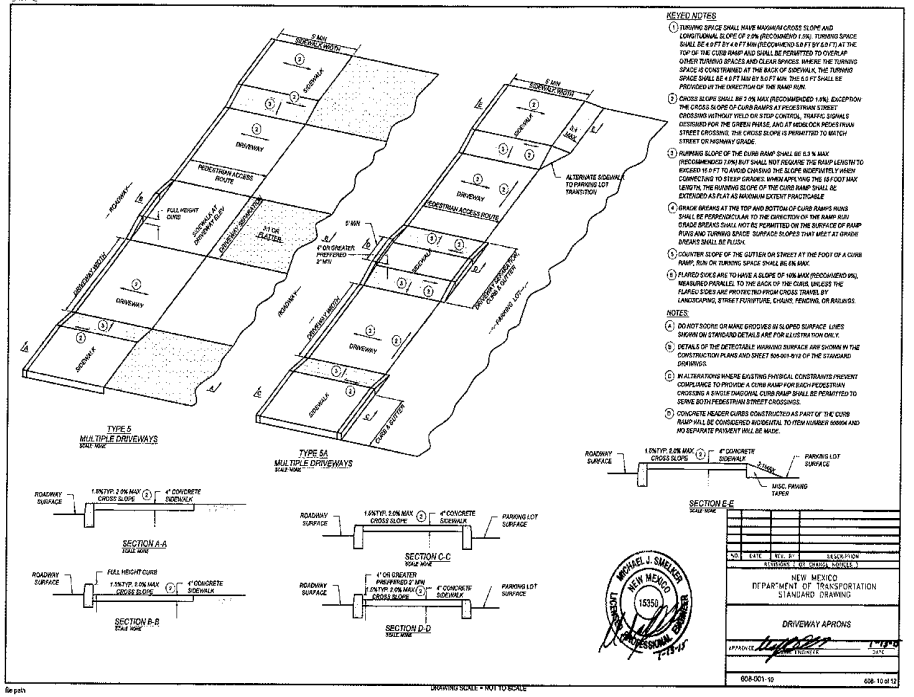
DRIVEWAY APRONS

APPROVED [signature] CHIEF ENGINEER — DATE 1-10-13

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MICHAEL J. SMELKER — NEW MEXICO — 15350 — REGISTERED PROFESSIONAL ENGINEER — 1-7-13

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DRAWING SCALE = NOT TO SCALE



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STANDARD 1 OF CHANGE NOTICES 1

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

DRIVEWAY APRONS

APPROVED [signature] CHIEF ENGINEER — DATE 1-10-13

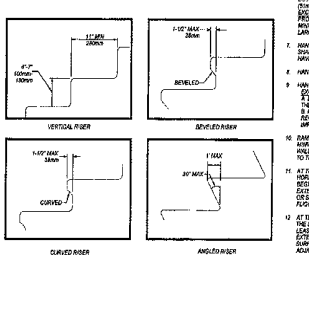
608-001-10 | 608-10 of 12

MICHAEL J. SMELKER — NEW MEXICO — 15350 — REGISTERED PROFESSIONAL ENGINEER — 1-7-13

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DRAWING SCALE = NOT TO SCALE

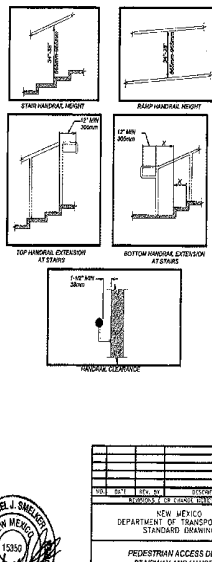
STAIRWAY REQUIREMENTS

1. STAIRWAYS SHALL BE 4 FT WIDE MINIMUM BETWEEN HANDRAILS.
2. ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTH. RISERS SHALL BE 4 INCHES (100mm) HIGH MINIMUM AND 7 INCHES (180mm) MAXIMUM. TREADS SHALL BE 11 INCHES (280mm) DEEP MINIMUM MEASURED FROM RISER TO RISER.
3. OPEN RISERS SHALL NOT BE PERMITTED.
4. STAIR TREADS SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
5. THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE ½ INCH (13mm) MAXIMUM. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LEADING EDGE CURVED OR BEVELED. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM THE VERTICAL. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 INCHES (38mm) MAXIMUM BEYOND THE TREAD BELOW.
6. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS.
7. OUTDOOR STAIRS AND OUTDOOR APPROACHES TO STAIRS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



HANDRAIL REQUIREMENTS

1. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS.
2. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS OR SWITCH BACK OR DOGLEG STAIRS OR RAMPS SHALL BE CONTINUOUS BETWEEN LANDINGS OR RUNS.
3. THE GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865mm) MINIMUM AND 38 INCHES (965mm) MAXIMUM VERTICALLY ABOVE STAIR NOSINGS AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSINGS AND RAMP SURFACES.
4. CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE 1 INCH (38mm) MINIMUM.
5. GRIPPING SURFACES SHALL BE CONTINUOUS WITHOUT INTERRUPTION BY NEWPOSTS, OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.
   EXCEPTION:
   TRUSSTYPE BRACKETS OR BALUSTERS ATTACHED TO THE BOTTOM SURFACE OF THE HANDRAIL SHALL NOT BE CONSIDERED OBSTRUCTIONS PROVIDED THEY COMPLY WITH THE FOLLOWING CRITERIA:
   A. NOT MORE THAN 20 PERCENT OF THE HANDRAIL LENGTH IS OBSTRUCTED.
   B. HORIZONTAL PROJECTIONS BEYOND THE SIDES OF THE HANDRAIL OCCUR 2 INCHES (51mm) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL.
   C. EDGES HAVE 0.01 INCH (0.25mm) MINIMUM RADIUS.
6. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OF 1¼ INCH (32mm) MINIMUM AND 2 INCH (51mm) MAXIMUM OR SHALL PROVIDE EQUIVALENT GRASPABILITY.
   EXCEPTION: HANDRAILS WITH OTHER SHAPES SHALL BE PERMITTED PROVIDED THEY HAVE A PERIMETER DIMENSION OF 4 INCH (101mm) MINIMUM AND 6 ¼ INCH (160mm) MAXIMUM AND PROVIDED THEIR LARGEST CROSS SECTION DIMENSION IS 2 ¼ INCH (57mm) MAXIMUM.
7. HANDRAILS AND ANY WALL OR OTHER SURFACES ADJACENT TO THEM SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE 1 INCH (2mm) MINIMUM RADIUS.
8. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
9. HANDRAILS FOR STAIRS AND RAMPS SHALL HAVE EXTENSIONS.
   EXCEPTIONS:
   1. EXTENSIONS ARE NOT REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF STAIRS AND RAMPS.
   2. IN ALTERATIONS FULL EXTENSIONS OF HANDRAILS SHALL NOT BE REQUIRED WHERE SUCH EXTENSIONS WOULD BE HAZARDOUS OR IMPOSSIBLE DUE TO PLAN CONFIGURATION.
10. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY 12 INCHES (305mm) MINIMUM BEYOND OF RAMP RUNS. EACH EXTENSION SHALL RETURN TO WALL, GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.
11. AT THE TOP OF A STAIR FLIGHT HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305mm) MINIMUM BEGINNING WHEN LOCATED WITHIN THE FIRST RISER NOSING. STAIR HANDRAILS SHALL RETURN TO A WALL, GUARD, OR LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.
12. AT THE BOTTOM OF THE STAIR FLIGHT HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ONE TREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENDING SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.



NO. | DATE | REV. BY | DESCRIPTION
STANDARD 1 OF CHANGE NOTICES 1

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN ACCESS DETAILS
STAIRWAY AND HANDRAILS

APPROVED [signature] CHIEF ENGINEER — DATE 1-10-13

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MICHAEL J. SMELKER — NEW MEXICO — 15350 — REGISTERED PROFESSIONAL ENGINEER — 1-7-13

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DRAWING SCALE = NOT TO SCALE

ACCESSIBLE ROUTES

ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE OR FACILITY.

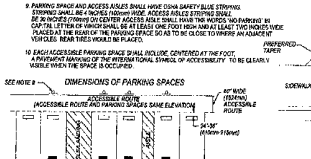
ACCESSIBLE PARKING REQUIREMENTS:

1. EACH FACILITY SHALL PROVIDE ACCESSIBLE PARKING SPACES IN COMPLIANCE WITH THE FOLLOWING TABLE:

NUMBER OF ACCESSIBLE PARKING SPACES

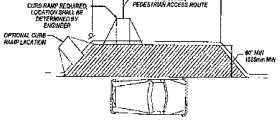
TOTAL PARKING SPACES	TOTAL REQUIRED ACCESSIBLE PARKING SPACES	NUMBER REQUIRED TO BE VAN ACCESSIBLE
1-25	1	1
26-50	2	1
51-150	4	1
151-300	8	2
301-500	12	2
501-800	16	3
801-1000	20	4
OVER 1,000	20 SPACES PLUS 1 SPACE FOR EVERY 100 SPACES, OR FRACTION THEREOF, OVER 1,000	1 OF EVERY 8 ACCESSIBLE PARKING SPACES, OR FRACTION THEREOF

2. CAR SPACES SHALL BE 96 INCHES (2440mm) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES AND SHALL HAVE AN ADJACENT ACCESS AISLE.
3. ACCESS AISLES SERVING PARKING SPACES SHALL CONNECT TO THE BUILDING OR FACILITY ENTRANCES BY AN ACCESSIBLE ROUTE(S). TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE. THE VAN ACCESS AISLE IS PREFERRED TO BE AT THE RIGHT SIDE PASSENGER SIDE OF THE PARKING SPACE. (NO ACCESSIBLE SIDEWALK IS 60 INCHES (1524mm) MINIMUM CLEAR WIDTH, 60 / MAXIMUM CROSS SLOPE WITH A RUNNING SLOPE OF 2% MAXIMUM OR THE RUNNING SLOPE MAY FOLLOW THE ADJACENT ROAD PROFILE GRADE.) PARKED CARS OVERHANGING SHALL NOT REDUCE THE MINIMUM 48 INCH CLEAR WIDTH OF AN ACCESSIBLE ROUTE.
4. ACCESS AISLES SERVING CAR PARKING SPACES SHALL BE 60 INCHES (1524mm) WIDE MINIMUM. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96 INCHES (2440mm) WIDE MINIMUM.
5. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE.
6. PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 1V:48 H. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.
7. PARKING SPACES FOR VANS SHALL HAVE A VERTICAL CLEARANCE OF 98 INCHES (2490mm) MINIMUM AT THE SPACE AND ALONG THE VEHICULAR ROUTE THERETO.
8. EACH ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. THE CLEARANCE TO THE BOTTOM OF THE SIGN (FINAL GRADE) SHALL BE AT LEAST 7 FEET (2100mm). LOCATED AT THE HEAD OF THE PARKING SPACE. VAN ACCESSIBLE PARKING SPACES SHALL HAVE AN ADDITIONAL SIGN (FIFTY-SIX) MOUNTED BELOW THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN, THE SPACE AS "VAN ACCESSIBLE." SIGNS MUST INCLUDE THE WARNING "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING."
9. PARKING SPACE AND ACCESS AISLES SHALL HAVE OSHA SAFETY BLUE STRIPPING. STRIPPING SHALL BE 4 INCHES (100mm) WIDE. ACCESS AISLES STRIPED SHALL BE 36 INCHES (700mm) ON CENTER ACCESS AISLE SHALL HAVE THE WORDS "NO PARKING" IN CAPITAL LETTER OR WHERE SHALL BE AT LEAST ONE FOOT HIGH AND AT LEAST TWO INCHES WIDE. VEHICLES REAR TIRES WOULD BE PLACED.
10. EACH ACCESSIBLE PARKING SPACE SHALL INCLUDE, CENTERED AT THE FOOT, A PAVEMENT MARKING OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY TO BE CLEARLY VISIBLE WHEN THE SPACE IS OCCUPIED.



ACCESSIBLE PASSENGER LOADING ZONE REQUIREMENTS

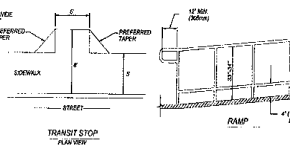
1. PASSENGER LOADING ZONES SHALL PROVIDE A 60 INCH (1524mm) WIDE ACCESS AISLE ADJACENT AND PARALLEL TO A VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL BE 20 FEET (6100mm) LONG MINIMUM.
2. ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE, AND MARKED TO DISCOURAGE PARKING.
3. NONFACILITY PULL-UP SPACES IN PASSENGER LOADING ZONES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 1V:48 H. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE.
4. VERTICAL CLEARANCE OF 114 INCHES (2896mm) MINIMUM SHALL BE PROVIDED AT PASSENGER LOADING ZONES AND ALONG VEHICLE ACCESS ROUTES TO SUCH AREAS FROM SITE ENTRANCES.
5. EACH ACCESSIBLE PASSENGER LOADING ZONE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.



ACCESSIBLE PASSENGER LOADING ZONE
PLAN VIEW

TRANSIT STOP REQUIREMENTS

1. TRANSIT STOPS SHOULD BE LOCATED SO THAT THERE IS A LEVEL AND STABLE SURFACE FOR BOARDING VEHICLES.
2. LOCATING TRANSIT STOPS AT SIGNALIZED INTERSECTIONS INCREASE THE USABILITY FOR PEDESTRIANS WITH DISABILITIES.
3. WHERE SECURITY BOLLARDS ARE INSTALLED AT TRANSIT STOPS, THEY MUST NOT OBSTRUCT SIDE CLEAR SPACES AT BOARDING AND ALIGHTING AREAS OR REDUCE THE REQUIRED CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES.
4. TRANSIT STOPS SHALL COMPLY WITH PROWAG SECTION R 306 TRANSIT STOPS AND TRANSIT SHELTERS.



RAMP REQUIREMENTS:

1. RAMP RUNS SHALL HAVE A RUNNING SLOPE GREATER THAN 5.0% AND NOT STEEPER THAN 8.3%. THE EXCEPTION SHALL BE AS SHOWN, INCLUDING THE TABLE FOR EXISTING BUILDINGS AND FACILITIES.
2. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 12:1. EXCEPTION, RAMPS IN OR ON EXISTING BUILDINGS OR FACILITIES SHALL BE PERMITTED TO HAVE SLOPES STEEPER THAN 12:1 AND SHALL COMPLY WITH THE FOLLOWING TABLE AND BUT SHALL SLOPES STEEPER THAN 8:1 SHALL NOT BE PERMITTED.

TABLE FOR EXISTING SITES, BUILDINGS AND FACILITIES

SLOPE	MAXIMUM RISE
STEEPER THAN 10:1 BUT NOT STEEPER THAN 8:1	3 INCHES (76mm)
STEEPER THAN 12:1 BUT NOT STEEPER THAN 10:1	6 INCHES (150mm)

3. CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1V:48 H.
4. FLOOR OR GROUND SURFACES OF RAMP RUN SHALL BE STABLE, FIRM AND SLIP RESISTANT.
5. THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES (915mm) MINIMUM MEASURED BETWEEN HANDRAILS.
6. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES (760mm) MAXIMUM.
7. RAMPS SHALL HAVE LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. LANDINGS SHALL COMPLY WITH THE FOLLOWING:
   A. LANDINGS SHALL HAVE A SLOPE NOT STEEPER THAN 1V:48 H.
   B. CLEAR WIDTH OF LANDINGS SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.
   C. LANDING LENGTH SHALL BE 60 INCHES (1524mm) MINIMUM CLEAR.
   D. RAMPS THAT CHANGE DIRECTION AT LANDINGS SHALL HAVE A MINIMUM LANDING WIDTH OF 60 INCHES (1524mm).
   E. WHERE DOORS OPEN ONTO A RAMP LANDING, MANEUVERING CLEARANCES SHALL COMPLY WITH THE LANDINGS REQUIREMENTS ADJACENT TO DOORS FROM PEDESTRIAN CROSSING AND FOR ALL.
8. RAMPS WITH A RISE GREATER THAN 6 INCHES (150mm) SHALL HAVE HANDRAILS. HANDRAILS SHALL NOT REDUCE THE REQUIRED CLEARANCES OF A RAMP RUN OR LANDINGS.
9. EDGE PROTECTION SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND AT EACH SIDE OF RAMP LANDINGS.
   EXCEPTIONS:
   A. RAMPS NOT REQUIRED TO HAVE HANDRAILS WHERE SIDE FLARES ARE PROVIDED.
   B. SIDES OF RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY.
   C. SIDES OF RAMP TOOD SPACE HAVING A VERTICAL DROP-OFF OF 1/2 INCH (13mm) MAXIMUM WITHIN 10 INCHES (254mm) HORIZONTALLY OF THE MINIMUM LANDING AREA.
10. EDGE PROTECTION MAY BE PROVIDED BY EXTENDING A FLOOR OR GROUND SURFACE, OF THE RAMP RUN OR LANDING 12 INCHES (305mm) MINIMUM BEYOND THE INSIDE FACE OF A HANDRAIL OR AN EDGE PROTECTION CURB OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4-INCH (100mm) DIAMETER SPHERE BELOW A HEIGHT OF 4 INCHES (100mm).
11. OUTDOOR RAMPS AND APPROACHES TO RAMPS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

NO. | DATE | REV. BY | DESCRIPTION
STANDARD 1 OF CHANGE NOTICES 1

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN ACCESS DETAILS PARKING AND PASSENGER LOADING ZONES

APPROVED [signature] CHIEF ENGINEER — DATE 1-10-13

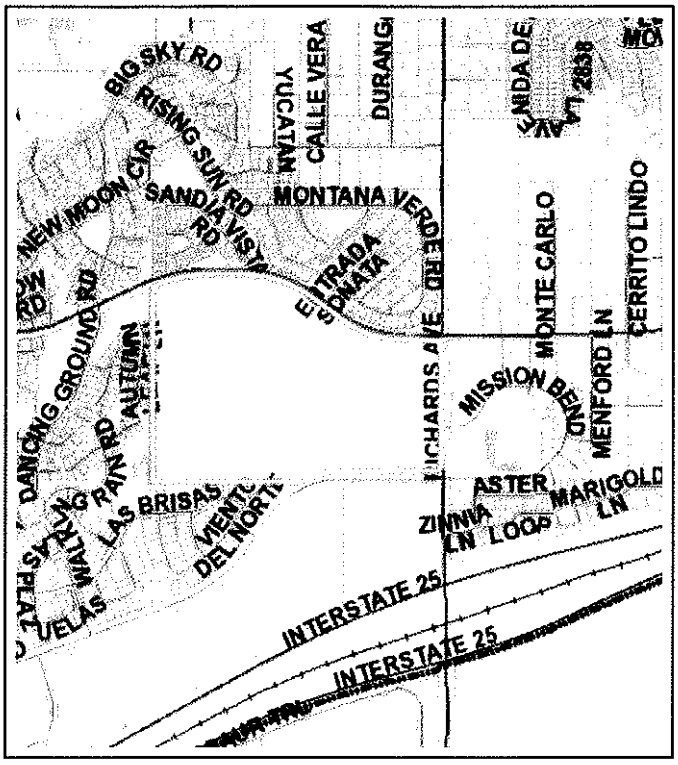
608-001-12 | 608-12 of 12

MICHAEL J. SMELKER — NEW MEXICO — 15350 — REGISTERED PROFESSIONAL ENGINEER — 1-7-13

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DRAWING SCALE = NOT TO SCALE

Land Use Department
Planning Commission Staff Report

Case No:	2020- 2642 – Prelim Sub Plat 2020- 2720 – Variance Request
Hearing Date:	November 19, 2020
Applicant:	JenkinsGavin, Inc.
Request:	Preliminary Subdivision
Location:	SW corner of Governor Miles Rd. & Richards Avenue
Case Mgr.:	Donna Wynant, AICP
Zoning:	R-5 (Residential, five dwelling units per acre)
Overlay:	None
Pre-app Mtg:	October 24, 2019
ENN Mtg:	March 9, 2020
PC Hearing:	November 19, 2020
Proposal:	Preliminary Subdivision Plat Request for 393 lots on approximately 94.07 acres and Variance Request to Table 14-7.2-1 (Note 6)



Case #2020-2642. Vista de La Sierra Preliminary Subdivision Plat. JenkinsGavin, Inc., Agent, for Branch Family Holdings, LLC, Owner, requests a preliminary subdivision plat for a 393 single family residential lot subdivision. The property located at 3800 Governor Miles Road, is approximately 94.07 acres and is zoned R-5 (Residential- five dwelling units per acre). (Donna Wynant, AICP, Case Manager, djwynant@santafenm.gov, 955-6325).

Case #2020-2720 Vista de La Sierra Preliminary Subdivision Setback Variance. JenkinsGavin, Inc., Agent, for Branch Family Holdings, LLC, Owner, requests a variance from SFCC Table 14-7.2-1 (Note 6), which requires an additional 5-foot side yard setback for any portion of a structure over 14 feet in height. The property located at 3800 Governor Miles Road, is approximately 94.07 acres and is zoned R-5 (Residential- five dwelling units per acre). (Donna Wynant, AICP, Case Manager, djwynant@santafenm.gov, 955-6325).

I. RECOMMENDATION:

Staff recommends **APPROVAL** of the preliminary subdivision plat request (Case #2020-2642) and recommends **DENIAL** of the setback variance request (Case #2020-2720) with the conditions of approval and technical corrections listed in this report.

Four motions will be required in this case:

- *Approve or deny the preliminary subdivision plat for Case 2020-2642 subject to the technical corrections recommended by staff.*
- *Approve or deny the variance request for Case 2020-2720 subject to the conditions of approval and technical corrections recommended by staff.*
- *Approve or deny the Findings of Fact and Conclusions of Law for Case 2020-2642 as proposed in Exhibit A(2).*
- *Approve or deny the Findings of Fact and Conclusions of Law for Case 2020-2720 as proposed in Exhibit A(2).*

II. CONDITIONS OF APPROVAL

Staff recommends the following conditions of approval for the Case #2020-2119:

#	Condition of Approval	Dept. or Division	To be completed by
1	Draft Homeowners Association Covenants for City and Land Use and Legal review.	Land Use/Current Planning	Prior to Final Subdivision Approval
2	The Developer shall construct a roundabout at its main intersection with Beckner Road. The roundabout shall be constructed as a single-lane roundabout designed in a manner so that it can be expanded to a multi-lane roundabout in the future	Public Works/Traffic Engineering	Prior to Final Subdivision Plat Recordation or Provide Financial Guarantee
3	The Developer shall revise the traffic study prior to implementing Phase-2 of the development. The purpose of the revision is to include revised actual traffic counts in a hope to better account for typical traffic patterns post COVID, including school traffic.	Public Works/Traffic Engineering	Prior to of the Subdivision Plat Phase 2
4	An approved water plan from the Water Division will be required. Water plan comments will be submitted to the design engineer.	Public Utilities/Water Division	Prior to Final Subdivision Plat Submittal
5	No re-grading of site over existing 16-inch water traversing site without adjusting grade of existing water main to have 4-feet cover.	Public Utilities/Water Division	Prior to Final Subdivision Plat Submittal
6	(Phase 3) One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section D104.3.	Fire Marshall	Prior to Final Subdivision Plat

#	Condition of Approval	Dept. or Division	To be completed by
7	Require phasing of the construction as proposed by the developer to control the stormwater and dust from the site The infrastructure for each phase must be completed prior to the start of any grading for the next phase.	Technical Review	Each Phase of the Proposed Development
8	The required phasing and dust control measures should be adequate to reduce detrimental effects of mass grading this site.	Technical Review	Each Phase of the Proposed Development
9	After a field investigation of the existing culvert under Beckner, the elimination of the culvert had not been justified by existing conditions. More information is required on the proposed storm drain in Beckner Road for our review.	Technical Review	Provide with Final Plat submittal

Should the Commission approve the preliminary subdivision plat request, the Applicant will make corrections prior to submitting the final subdivision plat.

III. EXECUTIVE SUMMARY

The Branch Family Holdings, LLC requests preliminary subdivision plat approval for a 393 residential lot subdivision, to be developed in three phases, and a variance from SFCC Table 14-7.2-1. This proposal therefore consists of the following two applications:

- **Preliminary Subdivision Plat**: Proposed 393 single family residential lots, and
- **Variance**: To allow setbacks of the second stories of homes to be 5 feet from the side property line instead of the required 10 foot setback

Each lot will accommodate a single family residence meeting the dimensional standards for the R-5 zoning district including front, rear and side yard setbacks, maximum 24 foot height of structures, minimum number of two off-street parking spaces per lot, and will not exceed 40% lot coverage. The preliminary subdivision plat meets approval criteria and does not create or increase any non-conformities with Chapter 14 and is compatible with residential subdivisions in the surrounding area.

The overall plan for the preliminary subdivision is in accordance with the Annexation Agreement Conditions of Approval as listed in Section VI of this report.

The proposed preliminary subdivision meets all relevant development standards and approval criteria, and does not create or increase any non-conformities with Chapter 14; therefore, staff recommends **approval** of the subdivision.

The request for a variance from the required minimum 10 foot second story setback/stepbacks from the side lot lines does not meet the variance criteria; therefore, staff recommends **denial** of the variance request.

IV. BACKGROUND

The 94.07 acre subject property is located at the southwest corner of Richards Ave. and Governor Miles Road and is zoned R-5. The property was annexed into the City and rezoned in 2007 to the R-5 zoning district (See Exhibit E-2) "Ordinance 2007-30 Annexation Agreement and Rezone Ordinance"). The project was previously known as "Beaty South", which was originally proposed as a 523 residential lot subdivision. Under the Annexation Agreement there was a Master Plan that was "conceptual in nature and that the design may be modified through the subdivision platting process without the necessity for a Master Plan amendment." Therefore Staff has determined that this proposal is a modification of the Master Plan and can be approved or denied by the Planning Commission without an amendment to the Master Plan.

As part of this subdivision plat, the Applicant proposes two tracts at the northwest part of the site to be developed at a later time. The 393 single family lot subdivision will be developed on the remaining 79.69 acres in three phases with a proposed density of 4.93 dwellings/per acre. There are three lots, identified in Phase I that total 14.38 acres that are not part of this subdivision proposal: two lots at the northwest part of the site to be developed at a later time (11.19 acres) and a lot at the southwest corner of the property (3.14 acres) to be dedicated to the Santa Fe Public Schools.

V. EXISTING CONDITIONS

The overall site is 94.07 acres of vacant land located south of Governor Miles Road and west of Richards Avenue. It is bounded by the Nava Ade neighborhood to the west, Beckner Road and Estancias de Las Soleras subdivision to the south, and is across from Villa Sonata to the north. The land is fairly flat with slopes ranging from 0-20% as depicted on the *Slope Analysis Map* with some 30 slopes along an arroyo that traverses the northern part of the property. The property does not include any flood plain.

As part of this subdivision plat, two remainder tracts will be created at the northwest portion of the site to be developed at a later time leaving 79.69 acres to be developed with the proposed 393-lot subdivision.

Surrounding densities include: the Villa Sonata at 5 lots per acre, Nava Ade to the west at 4 units per acre, and Estancias de Los Soleras at four units per acre

	Existing Development	**Zoning**
North	Single family residential (Villa Sonata subdivision)	R-5 (Residential-five dwelling units per acre)
West	Single family residential (Nava Ade subdivision)	PRC (Planned Residential Community)

	Existing Development	Zoning
South	Single family residential (Estancias de Los Soleras & vacant land south of Beckner Road)	R-12 (Residential-twelve dwelling units per acre), C-2 (General Commercial), and SC-2 (Planned Shopping Center District)
East	Single family residential (Mission Viejo subdivision, school & church)	R-5 (Residential- five dwelling units per acre)

VI. PROJECT DESCRIPTION AND ANALYSIS

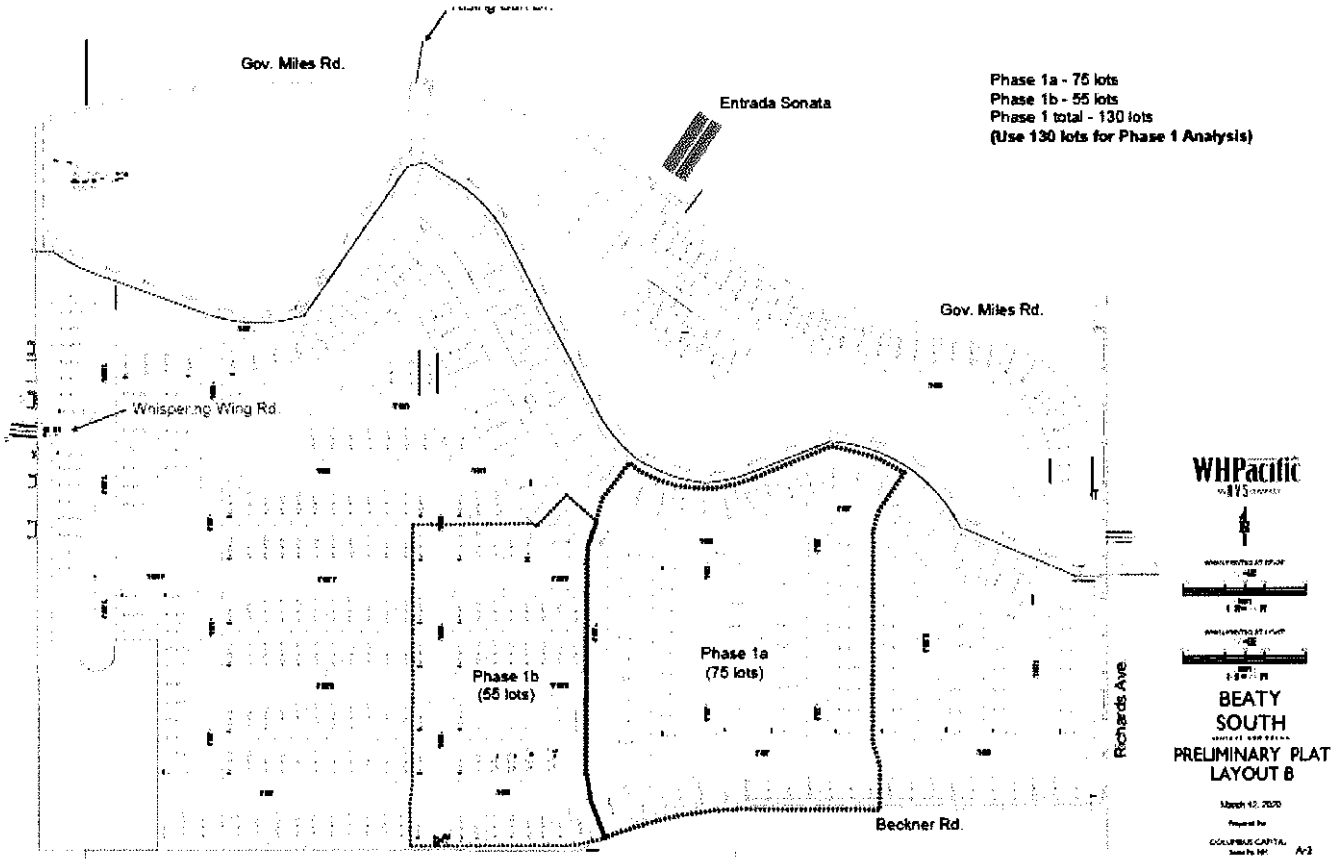
Zoning	R-5 (Residential – five dwelling units per acre)
Total Units	393 units at a density of 4.93 dwellings/per acre.
Affordable Units	In accordance with Santa Fe Homes Program, 79 lots will be developed for affordable homes (20% of the 393 lots).
Gross Density	4.9 units/acre (393 units/79.69 acres)
Average Lot Size	Lots will range in size from 4,200 sq. ft. to 5,500 sq. ft
Street Setback	15' or 20' for front facing garages
Side Setback	5' from side property line for the first floor and 5' for the second story if variance is granted.
Rear Setback	15' or 20% average lot depth
Maximum Height	24' max
Required parking per parcel	Min. 2 off street spaces
Extra street parking	.5 spaces x 393 lots = 196.5 spaces required for on-street guest parking.

Access and Traffic:

The project will be accessed at several points from surrounding streets as shown on the map below, all of which are public streets including those proposed internal to the development. No streets will be gated, except at the two points described below to be used exclusively for emergency access only. New full access roadway connections are located at Governor Miles Road and Beckner Road. In addition, Phase 1 will connect to Viento del Norte, an existing stub street in Estancias de Las Soleras and Phase 2 will connect to Whispering Wing, an existing stub street in Nava Adé. A roundabout will be constructed at the Beckner Road access in Phase 1. The Governor Miles access will not be constructed until Phase 3. Since two access points are required for more than thirty lots, a secondary 20-foot emergency-only access drive will be constructed as part of Phase 1 where Estrella Noche terminates at Richards Ave. just north of the Beckner Road intersection. Similarly, the lots north of the arroyo in

Phase 3 will be served with an emergency-only drive connecting the cul-de-sac to Richards Ave. The access points will be gated and equipped with Opticom strobes.

The subdivision roads will be built to sub-collector standards within a 50-foot right-of-way with parking on one side of the street. Per the requirements of SFCC Table 14-8.6-1: Parking and Loading Requirements, a minimum of two off-street parking spaces will be provided for each dwelling unit.



A Traffic Impact Study was conducted by Terry Brown, P.E. with the following recommendations:

Phase 1

- Construct the intersection of Beckner Rd./Calle de La Alegra as a standard at-grade unsignalized intersection (future volumes will require a single lane circulating roundabout, so developer may opt to construct the roundabout at the onset of the project)
- If not a roundabout, construct an eastbound left turn deceleration lane on Beckner Rd. at Calle de La Alegra. The new eastbound left turn deceleration lane should be designed and constructed to a length of 400 feet including transition (150 ft. long transition)
- If not a roundabout, construct a westbound right turn deceleration lane on Beckner Rd. Calle de La Alegra. The new westbound right turn deceleration lane should be designed and constructed to a length of 370 feet including transition (150 ft. long transition).

Full Buildout (2034 Horizon Year)

- Adjust signal timing at the intersection of Governor Miles Rd./Richards Ave. Existing geometry with adjusted signal timing will accommodate forecast 2034 AM and PM Peak Hour volumes.
- Construct dual lane circulating roundabout at the intersection of Beckner Rd./Richards Ave.
- Convert the intersection of Beckner Rd./ Calle de La Alegra to a single lane circulating roundabout (it not already done)
- Construct the Governor Miles Road access points for Vista de La Sierra to align with Rising Sun Dr. and Entrada Sonata. Both access points should be full access unsignalized intersections. The access aligned with Entrada Sonata can be a single approach (northbound) access. It is suggested that the access aligned with Rising Sun Dr. be constructed with two approach lanes (northbound) – one for exclusive left turns and one for through/right turns. A westbound left turn deceleration lane on Governor Miles Rd. already exists for this access point.
- Construct a westbound left turn deceleration lane on Governor Miles Rd. at the new access that aligns with Rising Sun Dr. The westbound left turn deceleration lane should be designed and constructed to a length of 150 feet long including 50 ft. long transition.

Ultra-Horizon Year (2040)

- Construct a northbound right-turn lane on Richards Ave. at Governor Miles Rd. (northbound right turn movements can be signalized or not signalized).

The following evaluation is provided from former City Traffic Engineer John Romero regarding the various intersections and requirements to mitigate needed improvements:

Intersection	Anticipated Delay and needed Improvements	Developer led Mitigation Measure
Richards/Governor Miles	This intersection shows minor delays at full build out of this entire area, including both Las Soleras and the Community College District. Full build out of this area, also referred to as the Ultra Horizon Year, is expected to occur over 20 years from now. Modeling traffic this far out incurs more estimation and is considered to be conservative. The delay modeled in the traffic study can be mitigated by 4-laning Richards Avenue. This is an improvement that the City plans to perform once warranted.	The developer provided right-of-way for the widening of Richards Avenue at the time of annexation. The developer will also be providing impact fees which is the mechanism used to obtain the developers contributions for this type of improvement. No further mitigation measure is needed from the developer.

Intersection	Anticipated Delay and needed Improvements	Developer led Mitigation Measure
Richards/Beckner	This intersection is currently failing as a Two-Way Stop intersection. Another developer is in the process of placing a signal at this intersection. This signal will remedy the issue at this intersection, not only in the near term, but taking into account the traffic generated by the proposed development. The signal will be operational prior to the proposed development being constructed.	The developer does not need to provide additional mitigation measures.
Beckner/Beaty Main Access	This intersection shows minor delay at full buildout of the development, assuming a Two-Way stop at this intersection. The developer is planning to construct a roundabout at this intersection during Phase-1 of the development. This roundabout will provide adequate capacity for this intersection.	Construct roundabout during Phase-1 of the Development
Beckner/La Puerta	The traffic study shows delays for the southbound left-turn during the 20+ Year analysis. The study incorrectly showed this intersection as being a full-access. This intersection currently prohibits southbound left-turns. With this in mind, the intersection will not experience any notable delay in the future.	The developer does not need to provide additional mitigation measures.

Terrain Management:

The property slopes from the southeast to the northwest with an overall grade change of approximately 55 feet. An arroyo traverses the northern part of the property flowing from east to west. The attached Preliminary Storm Water Report (see Exhibit E for further information) shows that the development will control storm water using a series of onsite storm water ponds to collect, detain and release storm water runoff at pre-developed flow rates. Drainage structures will be constructed to release storm water into the arroyo in a stable manner. Other drainage structures will be constructed to address existing erosion and slope stability issues and to stabilize the arroyo. Existing storm drains that discharge to the property that are causing erosion are also being addressed, such as the crossing structure of Richards Avenue. Currently some adjacent areas are subject to flooding either by upstream basins or by the arroyo itself. The proposed improvements will intercept and redirect these flows and provide the necessary drainage way protection.

The storm water runoff from the arroyo is of great concern to the Nava Ade neighborhood to the west as expressed in the attached letter from their Nava Ade Homeowners Association. The Estancias de los Soleras Homeowners Association also expressed their concerns in their attached email. (See Exhibit D: ENN materials)

The Applicant has indicated that the proposed improvements include extending bank protection and stabilization (which includes gabions) at least to the boundary of Nava Ade. The proposed improvements will not increase flow rate (cubic ft. per second) or increase flow velocity (ft per second) or increase scour potential. The added protection will better contain surging flows from leaving the arroyo banks and flooding and damaging Nava Ade, but does not infringe on the arroyo flow area directly. The proposed improvements will provide added protection to Nava Ade that is not present today. (See the Preliminary Storm Water Report from the Applicant's engineer is attached)

Water, Sewer and Dry Utilities:
The Project will be served with City water, sewer and dry utilities. There is an existing water main on the property adjacent to the overhead utility easement. New 10" and 8" public waterlines will be constructed in the roadways connected to this line, as well as existing off-site water mains at the following locations: Governor Miles Road (two locations), Beckner Road, Richards Ave. (two locations), and Whispering Wing. New 8" public sewer lines will be constructed in the roadways, which will connect to the public trunk line adjacent to the arroyo. In addition, sewer connections are proposed at Viento del Norte and an existing line in Nava Ade.

Water Budget:
The water budget is calculated based on the three phases of development and is included in the Applicant's materials (See Exhibit E-2)

Fire Protection:
Where the number of dwelling units exceeds 30 in any given single family residential subdivision, the Fire Marshal requires separate and approved fire apparatus access roads that meet the requirements of Section D104.3 of the Fire Code. The preliminary subdivision plat is therefore designed with an emergency access to Richards Avenue at two points; at the east end of Cielo Hermosa where it ends in a cul-de-sac and where Estrella Noche terminates at Richards Avenue just north of the Beckner Road intersection. These emergency access connections will be gated and equipped with Opticom strobes.

Landscaping:
Street trees will be provided along the roadways and the open space, parks, and detention ponds will be landscaped in accordance with Code requirements. All disturbed areas will be reseeded with a native grass seed mix. The Applicant is required to show the location of significant trees on-site and all irrigation details.

Parks, Open Space and Trails:
In accordance with §14-8.15(C), the site is required to provide 9.43 acres of open space and 2.36 acres of parks space. The subdivision exceeds those requirements as calculated below:

Open Space	Required:	0.024 acres/dwelling unit or 9.43 acres
	Provided:	13.88 acres
Parks	Required:	0.006 acres/dwelling unit or 2.36 acres
	Provided:	2.97 acres

The park areas include a passive recreational area and an active play area, which are accessible via the trail network within the open space. Asphalt trails will be constructed within 20' public trail easements with two connection points to the existing Nava Adé trail network at each end of Autumn Leaf Lane. (See Exhibit E-2: Sheets L-200 to L-205 Landscaping Plans for further information.)

Lighting and Signage:
A lighting plan and signage plan are included in the Applicant's plan set (See Exhibit E-2: pp C1-301 to C3-309). Two monument signs are proposed for the subdivision at the main entrance to the subdivision; one at the Beckner/Calle de la Alegria entrance and one at the Governor Miles/Calle de la Paz entrance. A conceptual sign illustration is shown on the Landscape Plan in the Applicant's plan set (See Exhibit E-2). The sign will be more closely evaluated with the Final Plat and at the time of permit application. The development is allowed a permanent identification sign, not to exceed 32 square feet and is allowed a second sign at the second main entrance into the development. The Applicant is required to show the street lights and hydrants on the landscape plan.

Environmental Review, Archaeology and Prairie Dogs:
The property is located in the Suburban Archaeological District and an Archaeological Clearance Permit was issued as part of the Las Soleras project. Subsequently, a Clearance Permit was issued by the City on March 5, 2020 (See Exhibit E-2) for a previously un-surveyed 4 acre portion of the property.

Schools:
The Applicant notified the Santa Fe Public Schools Property & Asset Management Division of the proposed development which is required at the preliminary subdivision phase, per Ordinance 2007-30.

In accordance with the provisions of the Annexation Agreement (as stated below) the 3.14 acre Tract, located in the southwest corner of the property, will be dedicated to the Santa Fe Public Schools/Monte del Sol Charter School at the time the final subdivision plat is recorded.

> ***"School Site Dedication*** *The Landowner will dedicate a 3.14-acre school site to the Santa Fe Public Schools (the "District") subject to the following conditions:*
> *I. The 3.14 acres will be contiguous with open space;*
> *II. The Landowner and/or his representatives will work with the partners in the adjacent lots surrounding the Property to assist the District in obtain an appropriate school site of fifteen (15) acres; and*
> *III. If it is not possible to identify a total of fifteen (15) contiguous acres, the District is allowed to develop or sell for fair market value the 3.14 acres of land in the Beaty South Annexation."*

The Tierra Encantada Charter School is located directly across Richards Avenue from the property and Pinon Elementary School is located less than a mile to the northeast of the property.

Santa Fe HOMES Program:
In accordance with the provisions of the Santa Fe Homes Program ("SFHP"), the Project will provide 79 lots for affordable homes (20% of the lot total). (See Exhibit E: SFHP Proposal)

Homeowners Association and Private Covenants:
Homeowners Association (HOA) assessments will pay for community expenses for maintaining common areas such as the retention pond, drainage facilities, and park areas. The Applicant will provide the HOA documents with the final subdivision plat, prior to recordation.

Annexation Agreement Beaty South Conditions of Approval:
Conditions. The following conditions of approval shall be satisfied as part of the subdivision plat approval process for the relevant phase or subphase of development of the Property:

"(i) the Landowner will study erosion and drainage issues along Governor Miles Road adjacent to the Property and agrees to address whatever issues come out of the study during construction of subdivision improvements on the Property:"

The Applicant submitted a "Preliminary Storm Water Report which is under review by the Land Use Department.

"(ii) a one hundred and fifty-foot (150') open space buffer will be provided at the northeast corner of the property that mirrors the open space area on the north side of Governor Miles Road at Richards Avenue; a thirty-foot (30') open space buffer will be provided adjacent to the Governor Miles Road and Richards Avenue rights of way; trees will be planted in the open space buffer along the Property's west boundary adjacent to the Nava Ade neighborhood;"

These three buffers are shown on the Landscape Plan. (See Exhibit E-2)

"(iii) the roadway plan will be amended to create a more direct access to both the proposed school site for the Santa Fe Public Schools and the Monte del Sol Charter School, for the express purpose of taking school traffic out of the Nava Ade neighborhood; and"

The 3.14 acre vacant tract that lies to the east of the Monte del Sol School abuts two Vista de la Sierra streets that will serve to take school traffic out of the Nava Ade neighborhood: Soledad and Estrella Noche as shown in the Phase 2B plat (See Exhibit E(2), Sheet S-107 in the plan set.)

"(iv) the homes to be built on the Property will be constructed to Energy Star standards"

Homes are required to be built to the Green Building Code standards.

VII. PRELIMINARY SUBDIVISION PLAT

Subsection 14-3.7 governs the authority, procedures and restrictions for the division of land. The criteria for approval of a subdivision plat are detailed below:

Criterion 1: In all subdivisions, due regard shall be shown for all natural features such as vegetation, water courses, historical sites and structures, and similar community assets that, if preserved, will add attractiveness and value to the area or to Santa Fe.	**Criterion Met:** (Yes/No/N/A) **YES**
The property is located in the Suburban Archaeological District and an Archaeological Clearance Permit was issued as part of the Las Soleras project. Subsequently, a Clearance Permit was issued by the City on March 5, 2020 (See Exhibit E-2) for a previously un-surveyed 4 acre portion of the property by the City on March 5, 2020. The Project shows due regard for natural features and enhancement of community assets through the provision of parks, open space, and public trail improvements. The Project also preserves waterways throughout the site. In addition, bank stabilization and erosion mitigation measures are being constructed along the arroyo to address potential flood hazards for downstream properties.	
Criterion 2: The planning commission shall give due regard to the opinions of public agencies and shall not approve the plat if it determines that in the best interest of the public health, safety or welfare the land is not suitable for platting and development purposes of the kind proposed. Land subject to flooding and land deemed to be topographically unsuited for building, or for other reasons uninhabitable, shall not be platted for residential occupancy, nor for other uses that may increase danger to health, safety or welfare or aggravate erosion or flood hazard. Such land shall be set aside within the plat for uses that will not be endangered by periodic or occasional inundation or produce unsatisfactory living conditions. See also Section 14-5.9 (Ecological Resource Protection Overlay District) and Section 14-8.3 (Flood Regulations).	**Criterion Met:** (Yes/No/N/A) **YES**
There is no FEMA flood plain on the property. The site is gently sloped and suitable for development. Areas that are in waterways prone to flooding are not platted for residential occupancy.	
Criterion 3: All plats shall comply with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements and Dedication Standards).	**Criterion Met:** (Yes/No/N/A) **YES**
The Subdivision Plat complies with the standards of Chapter 14, Article 9.	
Criterion 4: A plat shall not be approved that creates nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat.	**Criterion Met:** (Yes/No/N/A) **YES**

The property contains no existing nonconformities. Nonconformities are not being created with this subdivision plat.	
Criterion 5: A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with applicable provisions of other chapters of the Santa Fe City Code unless an exception is approved pursuant to the procedures provided in that chapter prior to approval of the plat.	**Criterion Met:** (Yes/No/N/A) **YES**
The property contains no existing nonconformities. Nonconformities are not being created with this subdivision plat.	

VIII. VARIANCE

The approval criteria for a variance are detailed below:

(1) One or more of the following special circumstances applies: **(a)** unusual physical characteristics exist that distinguish the land or structure from others in the vicinity that are subject to the same relevant provisions of Chapter 14, characteristics that existed at the time of the adoption of the regulation from which the variance is sought, or that were created by natural forces or by government action for which no compensation was paid; **(b)** the parcel is a legal nonconforming lot created prior to the adoption of the regulation from which the variance is sought, or that was created by government action for which no compensation was paid; **(c)** there is an inherent conflict in applicable regulations that cannot be resolved by compliance with the more-restrictive provision as provided in Section 14-1.7; or **(d)** the land or structure is nonconforming and has been designated as a landmark , contributing or significant property pursuant to Section 14-5.2 (Historic Districts).	**Criterion Met:** (Yes/No/N/A) **NO**

Applicant Response:
(a) In addition to the requisite affordable homes, the market rate homes will be moderately priced. Several factors are critical in order to achieve accessible home prices, including adequate density and home constructability. The unintended consequence of the additional second story setback is increased construction costs, resulting in increased home prices. This is contrary to the City's oft stated goal of expanding the supply of affordable housing.
(b) N/A
(c) N/A
(d) N/A

Staff Response:
There are no unusual physical characteristics exist that distinguish the land or structure from others in the vicinity that are subject to the same relevant provisions of Chapter 14, characteristics that existed at the time of the adoption of the regulation from which the variance is sought, or that were created by natural forces or by government action for which no compensation was paid and the Applicants response doesn't support this.

(2) The special circumstances make it infeasible, for reasons other than financial cost, to develop the property in compliance with the standards of Chapter 14.	**Criterion Met:** (Yes/No/N/A) **NO**

Applicant Response:
The financial implications of the additional construction costs are higher home prices. It is the developer's intention to provide moderately priced homes and is seeking some modest relief from the City in support of this effort.

Staff Response:
The reason given by the Applicant is strictly higher construction costs from having to step back the second story, instead of building straight up from the first story. Financial costs cannot be used as a reason to not comply with the code. The lots range from 40 to 50 feet wide. Stepping back an additional 5 feet on the second floor will yield a smaller building 'envelop' from the first story but it could still feasibly build a second story.

(3) The intensity of development shall not exceed that which is allowed on other properties in the vicinity that are subject to the same relevant provisions of Chapter 14.	**Criterion Met:** (Yes/No/N/A) **YES**

Applicant Response:
The proposed R-5 subdivision is consistent with the existing surrounding neighborhoods. This variance request does not increase the intensity of development.

Staff Response:
Staff concurs with this statement. Intensity of development deals with density (i.e. number of dwelling units per acre). The surrounding neighborhoods were developed to similar densities – 4 to 5 dwelling units per acre. The requested variance to allow the second story to be set back the same as the first story will create more of a wall, not allowing as much light into a property.

(4) **The variance is the minimum variance that will make possible the reasonable use of the land or structure. The following factors shall be considered:** **(a) whether the property has been or could be used without variances for a different category or lesser intensity of use;** **(b) consistency with the purpose and intent of Chapter 14, with the purpose and intent of the articles and sections from which the**	**Criterion Met:** (Yes/No/N/A) **NO**

Applicant Response:
(a) The property has not been previously developed. The proposed subdivision is consistent with the property's R-5 zoning and the highest and best use given the current housing shortage in Santa Fe. Therefore a different category or lesser intensity of use is not in the best interest of the community.

Staff Response
The Applicant is requesting a variance from the second story stepback requirement to blanket the entire development, when in fact, all properties do not warrant such a variance. The Applicant could still make reasonable use of the land without a variance and granting this variance is not consistent with the purpose and intent of the yard, setback, and stepback regulations.

(5) The variance is not contrary to the public interest.	**Criterion Met:** (Yes/No/N/A) **NO**

Applicant Response: The public interest is served by an increased supply of affordable and moderately priced homes. **Staff Response:** While staff would agree that increased affordable and moderately priced homes are in the public interest, cost of construction is not a criterion to justify a variance from code requirements. Two story buildings with no stepbacks does not provide relief to an adjacent house from the shadow of a more 'boxy style of architecture. The stepback of the second story, sometimes referred to as a" wedding cake" style of architecture allows for more light and air at the second story level. Stepbacks and setbacks also create yard space. Chapter 14 and all the provisions within it are deemed the public interest as they are approved by the Governing Body, whom represent the public as elected officials.	
(6) There may be additional requirements and supplemental or special findings required by other provisions of Chapter 14.	**Criterion Met:** (Yes/No/N/A) **NO**
Applicant Response: (No response) **Staff Response:** N/A	

IX. EARLY NEIGHBORHOOD NOTIFICATION

An Early Neighborhood Notification meeting was held on March 9, 2020 and subsequent meetings were held with HOA representatives and residents from Nava Adé and Estancias de Las Soleras. Much of the discussion focused on arroyo/flooding. The Applicant's engineer pointed out how the proposed arroyo improvements would mitigate erosion and the potential for downstream flooding. The applicant addressed the proposed access points and off-site roadway improvements. Concerns were raised regarding grading activities and dust; access to existing neighborhood streets; and the intersections of Richards Avenue/Beckner Road and Governor Miles Road/Dancing Ground. Other questions/concerns included the price range of the homes, density and view impacts, etc. (See Exhibit D-3: ENN meeting notes.)

The Board of Directors of the Nava Ade Homeowners Association submitted their report "Issues and Requests Regarding the Proposed Vista de la Sierra Subdivision Plan" on November 2, 2020 (See Exhibit D(5)). Also received was an email from the Estancias de Los Soleras subdivision on October 23rd requesting several conditions they would like the Planning Commission to place on the subdivision approval.

X. EXPIRATION

Approval of a preliminary subdivision plat shall expire three years after final action and adoption of the Findings of Fact and Conclusions of Law. Therefore, if approved, the preliminary subdivision plat will expire on November 19, 2023.

Since the variance is for a subdivision dimensional standard, the requested variance is subject to the same expiration as the preliminary subdivision plat approval.

ATTACHMENTS

EXHIBIT A:

1. Technical Corrections
2. Draft Findings of Fact/Conclusions of Law

EXHIBIT B: Development Review Team Memoranda

1. Traffic Engineering Division email, John Romero, P.E
2. Technical Review Memorandum, Dee Beingessner, P.E.
3. Wastewater Division Memorandum, Stan Holland, P.E.
4. Fire/FirePrevention, Geronimo Griego
5. Water Engineering Division Memorandum, Brian Snyder
6. Landscape Memorandum, Lawrence Rivera
7. ADA - Site Review, Jason Kluck
8. Solid Waste, Eric Lucero
9. Affordable Housing, Alexandra Ladd

EXHIBIT C: Maps and Photos

1. Future Land Use Map
2. Current Zoning Map
3. Aerial Map
4. Google Street Views

EXHIBIT D: Early Neighborhood Notification

1. ENN Sign-In Sheet
2. ENN Packet
3. Meeting Notes
4. School Notification
5. Communications from Neighbors to the Development Site
   - Nava Ade Home Owners Association report (received 11-2-20) and Addendum (received 11-12-20)
   - Estancias de Los Soleras

EXHIBIT E: Applicant Materials

1. Letter of Application
2. Preliminary Subdivision Plat
   - Subdivision Application

- Letters of Owner & Applicant Authorization
- Warranty Deed & Lot of Record Plat
- Annexation Ordinance/Agreement
- Rezone Ordinance
- Traffic Impact Study
- Preliminary Stormwater Report
- SFHP Proposal
- Archaeological Clearance Permit
- Subdivision Plans
    - (Full Plan Set in Planning Commissioners Binder and as a separate pdf)

APPROVED BY:

Title	**Name**	**Initials**
Land Use Department Director	Elias Isaacson, AICP	ESI
Land Use Planner Manager	Noah Berke, AICP, CFM	NLB
Land Use Department Case Manager	Donna Wynant, AICP	*DJW*

City of Santa Fe, New Mexico

Planning Commission

Exhibit A

Technical Corrections

&

Draft Findings of Fact/Conclusions of Law

TECHNICAL CORRECTIONS
Vista de la Sierra
Preliminary Subdivision Plat

Staff recommends the following technical corrections for Case #2020-2642 & Case #2020-2720

#	DRT Comments	Dept. or Division	To be completed by:
1	Insufficient information for complete review. Please provide final subdivision documents for review graphically demonstrating compliance with all applicable ADA regulations.	LUD- ADA Review	Prior to recording
2	COSF Code 3.19.1 requires landscape irrigation plans for large projects not to exceed 20 scale, 1 inch equals 20 feet.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
3	Provide a complete set of installation details, notes and specifications for the irrigation system. Show on the detail drawings the installation of all assemblies without any questions for size or type of materials to use for said irrigation system.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
4	No stop & waste valves or King Drains permitted per COSF Irrigation Design Standards. Replace Flush Caps with manual drain (sch80 Ball Valv	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
5	Due to the Emerald Ash Beetle, please replace the FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH with another approved tree variety from the City of Santa Fe plant list.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
6	RHAPHIOLEPIS INDICA INDIA HAWTHORN, not on COSF 2019 plant list.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
7	Filter fabric under all Gravel Mulches and rip rap rock. Mulch to be two inches below top of concrete walkway or curb and noted on landscape plan.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
8	Please show light standards and fire hydrants on the landscape plan. Street trees shall be located at least fifteen (15) feet from fire hydrants and light standards.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review
9	Provide irrigation to all revegetation native seed areas. (Per COSF Code 14-8.2 D(5)(c) Add a heat treated compost material one inch (1") to all seeded areas. Test soil: Contractor shall have seeded areas soil tested for nutrient deficiencies and amend soil according to testing lab recommendations. Seeded areas shall be graded two inches (2") below top of concrete curbs and sidewalks.	Terrain Mgt.- Landscape/ Irrigation Review	Prior to permit review

10	Cool season turf shall be limited to areas with relatively low evaporation from wind and heat or in locations used for active or passive recreational use. The total area of cool season turf shall be limited as follows: multiple-family residential developments shall not have cool season turf in excess of twenty per cent of the required common open space;	Terrain Mgt.-Landscape/ Irrigation Review	Prior to permit review
11	Stormwater Ponding: A water level measuring device with zero set at finish grade located at the center of each pond is required. Storm water storage ponds are not to exceed 1 foot in depth without a verification that storm water will drain within 24 hrs. A percolation test is required for each pond. A security fence around ponds three feet and deeper with a maintenance gate is required.	Terrain Mgt.-Landscape/ Irrigation Review	Prior to permit review
12	Provide significant tree information on the landscape plan.	Terrain Mgt.-Landscape/ Irrigation Review	Prior to permit review
13	**a.** Fire apparatus access shall have an unobstructed width of not less than 20 feet exclusive of shoulders and an unobstructed vertical clearance of not less than 13 feet 6 inches (IFC 2009 Section 503.2.1) **b.** Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4) **c.** Shall comply with table D103.4 Requirements for Dead-End Fire Apparatus Access Roads. **d.** Fire Department shall have 150 feet distance to any portion of the building on any new construction. (IFC 2009 section 503.1.1) **e.** 507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6. **f.** 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. **g.** Shall have water supply that meets fire flow requirements as per IFC (Appendix B) **h.** Shall comply with Section D102.1 Access and Loading (75,000 lbs). **i.** Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall	Fire Marshal	At the time of any new construction or remodel.

	be provided. (Appendix D Table D103.4) **j.** Shall comply with IFC 2009 Section D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade. **k.** Shall comply with IFC 2009 Section D103.5 Fire apparatus access road gates. **l.** Shall comply with IFC 2009, Appendix D, Aerial Fire Apparatus Access Roads. **m.** Shall meet the IFC code requirements 2009 edition or the most current edition the governing body has adopted at the time of permitting.		
14	On-Site General ADA Compliance Requirements: **a.** Accessibility feature design within the Site shall comply with NMDOT Pedestrian Access Route Details (Serial 608) or demonstrate compliance with applicable ADA regulations by other means as provided in the permitted Construction Documents. **b.** All Sidewalks and Walkways along the accessible path of travel shall be firm, stable and slip resistant and shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Provide detectable warning surfaces at curb ramps and transitions to driveway crossings along the accessible paths of travel as applicable. **c.** Sidewalks and Walkways along the accessible path of travel shall not exceed 1:20 (5%) running slopes without handrail(s) in accordance with current ANSI 117.1 standards 505 & 2015 IBC 1014. Cross slopes shall not exceed 2% staff recommends 1% to 1.5% as a target cross slope. Walkways shall provide 5' diameter turning space every 200 linear feet of run. It is preferred to have marked crossings where the accessible route crosses vehicular traffic lanes. **d.** Ramps within the site shall have 1:12 (8.33%) running slope and 1:48 (2%) cross slope max. With a max. rise of 30" and with 5' clear length landings where straight. Changes in direction shall comply with 304.3. Landing typical slope is 1.5% and shall not exceed 2% running and cross slope. **e.** Curb Ramps shall have the required 5' clear length landing and turning space. Changes in direction shall comply with 304.3. Curb Ramps within the	ADA Review	Prior to construction permit application

	site shall have a target running slope of 7% or less typical and 1:12 (8.33%) maximum. Curb Ramp landing target slope is 1.5% and shall not exceed 2% running and cross slope maximum in any direction. **f.** At time of construction, the Contractor shall ensure ADA compliance for construction of required ADA accessible features and appurtenances, as detailed in, and in addition to, the approved construction permit documents. Improvements shall comply with ICC ANSI A117.1-2009 Chapters 1-5 and Chapter 7, 2015 New Mexico Accessible Parking Checklist, MUTCD, NMDOJ, and NM State Statute and Code as applicable. **g.** Vertical clearance: Provide and maintain 80" of vertical clearance for the full width of all sidewalks/pedestrian routes. Rails or other barriers shall be provided where the vertical clearance is less than 80". The leading edge of such rails or barrier shall be located 27" max. above the floor. (307.4) **h.** Provide and maintain 98" vertical clearance at access aisles and routes. (502.6) At Passenger Loading Zones, provide and maintain 114" min. vertical clearance at the exterior vehicular route and access aisles serving the vehicle pull-up space. (503.5) **i.** Accessible path(s) of travel route shall be provided from the Public Right-of-Way and accessible parking aisle(s) to accessible building entrance(s) as applicable and shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Ensure accessible route(s) from the Public Right-of-Way and accessible parking space aisle(s) to building entrance(s) are provided and maintained. Provide detectable warning surfaces at curb ramps and transitions to the vehicular way along the accessible path of travel routes as applicable. **j.** IBC 1104.1 Site arrival points: At least one (firm, stable, slip resistant) accessible route within the		

	site shall be provided from: public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance served. **k.** Off-Site PROW Compliance Requirements: **l.** Accessibility feature design within the Public Right-of-Way shall comply with NMDOT Pedestrian Access Route Details (Serial 608). **m.** Driveway and intersection crossings shall not exceed 2% cross slope, shall have a level maneuvering space, shall have 1/4" max. vertical deflections, and 10% max. flare slope. **n.** Curb Ramps shall have the required 5' clear length landing and turning space. Changes in direction shall comply with 304.3. Curb Ramps shall have a target running slope of 7% or less typical and 1:12 (8.33%) maximum. Curb Ramp landing target slope is 1.5% and shall not exceed 2% running and cross slope maximum in any direction. **o.** Sidewalks and Walkways along the accessible path of travel route shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Provide detectable warning surfaces at curb ramps and transitions to the vehicular way along the accessible paths of travel as applicable. **p.** All walk surfaces along the accessible path of travel shall be firm, stable and slip resistant. Sidewalks and Walkways along the accessible path of travel shall not exceed 1:20 (5%) running slopes without handrail(s) in accordance with current ANSI 117.1 standards 505 & 2015 IBC 1014. Cross slopes shall not exceed 2% staff recommends 1% to 1.5% as a target cross slope. Walkways shall provide 5' diameter turning space every 200 linear feet of run. It is preferred to have marked crossings where the accessible route crosses vehicular traffic lanes. **q.** "HC", "Handicapped", "Handicap", or similar terms		

	are erroneous, derogatory descriptors for ADA accessible or Disabled accessible features. Please remove or modify any references in the plans accordingly. **r.** At time of construction, the Contractor shall ensure ADA compliance for construction of required ADA accessible features and appurtenances, as detailed in, and in addition to, the approved construction permit documents. Improvements shall comply with ICC ANSI A117.1-2009 Chapters 1-5 and Chapter 7, 2015 New Mexico Accessible Parking Checklist, MUTCD, NMDOJ, and NM State Statute and Code as applicable.		
	The following are preliminary comments by Dee Beingessner /Technical Review Division in review of the Applicant's Grading Plan (Comments subject to change after review of the Applicant's "Preliminary Stormwater Report" received 10/29/10)		
15	Note must be placed on plat prior to recording that states the square feet of impervious surface allowed for each lot before on-lot ponding is required for future impervious surface.	LUD- Technical Review	
16	Need plans to be updated to include off-site improvements such as construction plans for roundabout on Beckner Road and any other Beckner road improvements. Also include plans for Governor Miles Road intersection. Include plans for any improvements to Richard's Avenue road and intersection if they are to be constructed with this development. As discussed, the roundabout for Beckner entrance to the subdivision will be constructed in phase one and all references in the plans to a 90 degree intersection must be updated to the roundabout design.	LUD- Technical Review	
17	Temporary pond proposed for phase one needs to have a more permanent design in case the remaining phases are not built in a timely manner.	LUD- Technical Review	
18	Plans must be very specific that the infrastructure for each phase will be finalized prior to allowing the next phase to begin construction. No grading will be allowed across phases. Phase one contains cut amounts that will be stockpiled and stockpile plan must be submitted with these plans. Cut and fill quantities and any required stockpile plans must be included for each phase.	LUD- Technical Review	

19	Perform percolation tests on ponding areas prior to construction of the ponds and also after the ponds are constructed to show how much water the ponds are expected to percolate, even if the ponds are detention only. This will help alleviate concerns of residents in neighboring developments. Also consider pond improvements that will allow for additional infiltration of water.	LUD- Technical Review	
20	Not discussed in the meeting but consider rain gardens in drainage patterns.	LUD- Technical Review	
21	HOA documents must contain clear instructions to the homeowners regarding their responsibilities for drainage facilities and pond maintenance. We would like to see additional information provided to the HOA than is normally required to provide specific items to review for pond maintenance and a specific drainage maintenance schedule.	LUD- Technical Review	
22	Provide written responses to the City for the Nava Ade HOA letter sent to the City with their concerns regarding this subdivision.	LUD- Technical Review	
	The following are comments by Dee Beingessner/Technical Review Division of PHASE 1 of Vista de la Sierra ("*Although some comments have been provided for phase 2 and 3, these comments were only a thorough review of phase 1 due to time constraints for review*" (Dee Beingessner)		
23	Sheet G-001. Provide Storm water certification note on plat.	LUD- Technical Re LUD-	
24	Sheet S-101. Modify note under Drainage Facilities Maintenance to read, The drainage facilities are private and shall be maintained by the property owners as per Article 14-8.2(K). Add note which states; All basins/ponds to be designed to empty within no more than 24 hours as per Article 14-8.2(D)(4)(c)(ii) of the City Code. There should also be a note about on lot or central ponding required. (This same note should be placed on sheet S-104, phase 2 and sheet S-108, phase 3).	LUD- Technical Review	
25	Sheet S-109. Is there a phase line between 1A and 1B? If so, please indicate.	LUD- Technical Review	
26	Sheet S-115. Show the location of proposed ponds and drainage structures. Identify the square footage of 30% slopes and greater proposed to be disturbed. Label the street names, Governor Miles, Richard's Avenue and Beckner Road on the plans. Delineate phase lines and show contour elevations. Reference proposed round about on Beckner Road. (Sheet C2-212?)	LUD- Technical Review	

27	Sheet S-120. Reference proposed round about on Beckner Road. (Sheet C2-212?)	LUD- Technical Review	
28	Sheet C-100. Label proposed/existing arroyo stabilization, gabions, rip-rap, etc.., or show on legend provide details. Indicate name of arroyo, limits of arroyo, flowline and banks. Assign numbers or letters for proposed ponds. Provide overall terrain management/drainage plan for all phases on one sheet. Provide a terrain management plan for each phase indicating drainage calculations for on lot or central ponding, including proposed storm water conveyance systems. Reference proposed round about on Beckner Road. (Sheet C2-212?)	LUD- Technical Review	
29	Sheet C1-101. Provide sections/details for temporary cul-de-sac and proposed swales. Indicate sheet number of detail. Label high points of asphalt with HP and elevation throughout. Staff needs more information from the engineer and also needs to conduct an inspection of existing storm drain proposed to be abandoned and removed. Reference proposed round about on Beckner Road.	LUD- Technical Review	
30	Sheet C1-102. Provide locations of ponds with overflows and proposed contours on all phases. Include, sections/details of ponds and overflows. Provide section/detail of temporary retention pond, reference sheet number. Label high points (HP) and elevations.		
31	Sheet C1-103. Label high points (HP) and elevations of roadway. Show grading for the proposed round about on Beckner Road or reference sheet with grading/construction information.	LUD- Technical Review	
32	Sheet C1-104. Label high points (HP) and elevations and proposed pond numbers or letters.	LUD- Technical Review	
33	Sheet C1-105. Label high points (HP) and elevations and provide detail of temporary emergency access.	LUD- Technical Review	
34	Sheet C1-106. Provide sections/details for all temporary, permanent ponds and swales. Reference sheet numbers. Item numbers 6 & 7 need to be changed to reflect City's Sequence of Construction (SOC) document. Use City approved seed mix for note number 12. Provide temporary and permanent storm water and erosion control plan. Show locations of SWPPP permit with rain gauge and location of concrete wash out. Provide detail.	LUD- Technical Review	

35	Sheet C2-101. Label high points (HP) and elevations of roadway. (PHASE 2)	LUD- Technical Review	
36	Sheet C2-102. Label pond numbers. Provide correct sheet number for timber slope protection, provide and reference section/detail. Explain reference to 100 year water surface. This reference can be confusing since this is a zone X area. Provide detail for proposed sidewalk drain or culvert. (PHASE 2)	LUD- Technical Review	
37	Sheet C2-106. Same as note for sheet C1-106 above. Show phase boundary lines.	LUD- Technical Review	
38	Sheet C1-200. Explain overall paving plan. Show and reference road sections for roadways, temporary cul-de-sacs and temporary emergency access road.	LUD- Technical Re LUD- Technical Review view	
39	Sheet C1-201 thru C-208. Label proposed sidewalk drains/culverts, valley gutters, fillets and curb and gutter on all sheets. Show proposed driveway locations and provide note if driveways will be installed or cut out later.	LUD- Technical Re LUD- Technical Revie LUD- Technical Review w view	
40	Sheet C2-212. Legend numbers need to correspond to proposed construction locations.	LUD- Technical Review	
41	Sheet C-300. Indicated proposed round about location on Beckner Road.	LUD- Technical Review	
42	Sheets C-500 thru C1-600. Provide signage and striping for proposed round about.	LUD- Technical Review	
43	Sheet C-900. Provide untreated base coarse under roadway. Provide more detailed pond sections for each pond with overflow. Need to discuss sides and bottoms of proposed ponds. Provide 4" to 6" rock for drainage swales.	LUD- Technical Review	
44	Remove sheets COA-DWG2420 and COA-DWG2510 (City of Albuquerque standards) replace with City of Santa Fe details or Department of Transportation (DOT) details.	LUD- Technical Review	
45	All cuts to be 2:1 or stabilized all fill to be 3:1 or stabilized.	LUD- Technical Review	

City of Santa Fe
Planning Commission
Findings of Fact and Conclusions of Law

Case #2020-2642
Vista de la Sierra Preliminary Subdivision Plat
Case #2020- 2720
Vista de la Sierra Variance

Owner's/Applicant's Name - Branch Family Holdings, LLC
Agent's Name - JenkinsGavin, Inc.

THIS MATTER came before the Planning Commission (Commission) for hearing on November 19, 2020 upon the applications (Applications) of JenkinsGavin, Inc., as agent for owners Branch Family Holdings, LLC (Applicant).

The Applications pertain to a vacant parcel located at 3800 Governor Miles, located at the southwest corner of Richards Avenue and Governor Miles Road, totaling approximately 94.07 acres (Property). In these cases, the Applicant seeks approval of a preliminary subdivision plat and associated setback variance. As part of the subdivision plat, two remainder tracts will be created at the northwest portion of the Property to be developed at a later time. The Applicant requests preliminary subdivision approval for 393 residential lots (Project) on the remaining 79.69 acres. The Property is zoned R-5 (Residential- five dwelling units per acre).

After conducting a public hearing and having heard from staff and all interested persons, the Commission hereby FINDS, as follows:

FINDINGS OF FACT

General

1. At the hearing, the Commission received reports from staff, testimony and evidence from the Applicant, and testimony offered by any interested members of the public.
2. The Santa Fe City Code (SFCC) Section 14-3.1 sets out certain procedures to be followed on the Application, including, without limitation, (a) a pre-application conference [SFCC Section 14-3.l(E)]; (b) an Early Neighborhood Notification (ENN) meeting [SFCC Section 14-3.1(F)(2)(a)(v)&(vii)]; and (c) compliance with notice and public hearing requirements [SFCC Section 14-3.1(H)-(I)].
3. A pre-application conference was held on October 24, 2019 in accordance with SFCC Section 14-3.l(E).
4. Pursuant to SFCC Section 14-3.1(H), notice of the ENN meeting was properly given.
5. Pursuant to SFCC Section 14-3.1(F), the ENN meeting was held on March 9, 2020 at the South Side Public Library, 6599 Jaguar Drive, Santa Fe, New Mexico 87507. The ENN meeting was attended by four representatives of the Applicant, one City staff member, and approximately 33 members of the public. Members of the public raised questions about

traffic, access to existing neighborhood streets, density, arroyo/flooding concerns, view impact, etc.

6. City staff reviewed the Application and related materials and information submitted by the Applicant for conformity with applicable SFCC requirements and provided the Commission with a written report of its findings (Staff Report), which evaluates the factors relevant to the Application.
7. Staff recommended that the Commission approve the preliminary subdivision plat, subject to the conditions of approval and technical corrections set forth in the Staff Report and exhibits.
8. Staff recommended that the Commission deny the setback variance request.

Preliminary Subdivision Plat; Case #2020-2642

9. Pursuant to SFCC Sections 14-2.3(C)(1) and 14-3.7(B)(3)(d), the Commission has the authority to review and approve or disapprove preliminary subdivision plats.
10. SFCC Section 14-3.7(B) establishes certain procedures for preliminary subdivision plat approval including, without limitation, a public hearing by the Commission, review of the preliminary plat, and a decision based on the criteria set out in SFCC Section 14-3.7(C).
11. SFCC Section 14-3.7(B)(3)(b) requires the Applicant to submit a preliminary plat prepared by a professional land surveyor, together with improvement plans and other specified supplementary material that demonstrates conformance with the standards of SFCC Section 14-9 (Submittal Requirements).
12. SFCC Section 14-3.7(C) sets out approval criteria and requires the Commission to make complete findings of fact sufficient to show that these criteria have been met before approving a preliminary subdivision plat.
13. Pursuant to SFCC Section 14-3.7(C)(1), the Commission finds that due regard has been shown for all natural features and enhancement of community assets through the provision of parks, open space, and public trail improvements. The Project also preserves waterways throughout the site and addresses potential flood hazards for downstream properties with bank stabilization and erosion mitigation measures along the arroyo. The Property is located in the Suburban Archaeological District and has received the necessary archeological clearance permits.
14. Pursuant to SFCC Section 14-3.7(C)(2), the Commission finds that the land is suitable for platting and development purposes of the kind proposed. The subject parcel does not lie within a flood zone. The site is gently sloped and suitable for development. Areas that are in waterways prone to flooding are not platted for residential occupancy.
15. Pursuant to SFCC Section 14-3.7(C)(3), the Commission finds that the plat complies with the infrastructure design, improvement, and dedication standards set forth in SFCC Section 14-9.
16. Pursuant to SFCC Section 14-3.7(C)(4)-(5), the Commission finds that no existing nonconformities would be increased by approval of this subdivision. The only nonconformities would be created by the approval of this subdivision are the second-story setbacks, which would not conform to SFCC Table 14-7.2-1, Note 6, which requires an additional 5-foot side yard setback for any portion of a structure over 14 feet in height. The

Applicant is requesting a variance to SFCC Table 14-7.2-1, Note 6, in related Case #2020-2720.

Variance; Case #2020-2720

17. The Applicant requests a variance to SFCC Table 14-7.2-1, Note 6, which requires an additional 5-foot side yard setback for any portion of a structure over 14 feet in height.
18. Pursuant to SFCC Sections 14-2.3(C)(3) and 14-3.16(B)(1), the Commission has the authority to review and approve or disapprove a request for variance that is part of a subdivision requiring Commission approval.
17. SFCC Section 14-3.16(B) sets out procedures for variances and requires the Commission to hold a public hearing and approve, approve with conditions, or deny the variance application.
18. SFCC Section 14-3.16(C) sets out approval criteria and requires the Commission to make complete findings of fact sufficient to show that these criteria have been met before granting a variance.
19. Pursuant to SFCC Section 14-3.16(C)(1)(a), the Commission finds that there are no unusual physical characteristics that distinguish the land or structure from others in the vicinity that are subject to the same relevant provisions of Chapter 14, characteristics that existed at the time of the adoption of the regulation from which the variance is sought, or that were created by natural forces or by government action for which no compensation was paid and the Applicants response doesn't support this.
20. Pursuant to SFCC Section 14-3.16(C)(2), the Commission finds that there are no special circumstances that make it infeasible to develop the property in compliance with the standards of Chapter 14. The reason given by the Applicant is strictly higher construction costs from having to step back the second story, instead of building straight up from the first story. Financial costs cannot be used as a reason to not comply with the code. The lots range from 40 to 50 feet wide. Stepping back an additional 5 feet on the second floor will yield a smaller building 'envelop' from the first story, but the Applicant could still feasibly build a second story.
21. Pursuant to SFCC Section 14-3.16(C)(3), the Commission finds that the intensity of development does not exceed that which is allowed on other properties in the vicinity. Intensity of development deals with density (i.e. number of dwelling units per acre). The surrounding neighborhoods were developed to similar densities – 4 to 5 dwelling units per acre. Although the requested variance would not increase density of units, the requested variance would allow the second story to be set back the same as the first story, which would create more of a wall, not allowing as much light into a property.
22. Pursuant to SFCC Section 14-3.16(C)(4), the Commission finds that the variance is not the minimum that will make possible the reasonable use of the property. The Applicant is requesting a variance from the second story stepback requirement to blanket the entire development, when in fact, all properties do no warrant such a variance. The Applicant could still make reasonable use of the land without a variance, and granting this variance would be inconsistent with the purpose and intent of the yard, setback, and stepback regulations.

23. Pursuant to SFCC Section 14-3.16(C)(5), the Commission finds that increasing the supply of affordable and moderately priced homes is in the public interest, however, an increased cost of construction does not justify a variance from code requirements. Two story buildings with no stepbacks do not provide relief to an adjacent house from the shadow of a more boxy style of architecture. The stepback of the second story, sometimes referred to as a "wedding cake" style of architecture, allows for more light and air at the second story level. Stepbacks and setbacks also create yard space. Chapter 14 and all the provisions within it were adopted with the intent of furthering the public interest and were approved by the Governing Body, which represents the public through its elected officials.
24. Pursuant to SFCC Section 14-3.16(C)(6), the Commission finds that there are no additional requirements or supplemental or special findings required by other provisions of Chapter 14.

CONCLUSIONS OF LAW

Under the circumstances and given the evidence and testimony submitted during the hearing, the Commission CONCLUDES as follows:

General

1. Pursuant to SFCC Section 14-3.1, all procedures regarding the pre-application conference, ENN meeting, notice, and public hearing requirements have been followed.

Preliminary Subdivision

2. The Commission has the authority to review and approve the preliminary subdivision plat subject to conditions.
3. The Applicant met the applicable Submittal Requirements.
4. The preliminary subdivision plat should be approved, subject to the Conditions and technical corrections set forth in the Staff Report and exhibits, because all applicable code requirements and criteria for preliminary subdivision plat approval have been met.

Variance

5. The Commission has the power and authority at law and under the Code to review the requested variance and to approve, approve with conditions, or deny the variance application.
6. The variance should not be granted because all applicable code requirements and criteria for approval of the variance have not been met.

WHEREFORE, IT IS ORDERED ON THE 19th DAY OF NOVEMBER, 2020 BY THE PLANNING COMMISSION OF THE CITY OF SANTA FE:

Considering the foregoing findings and conclusions, the Commission approves the preliminary subdivision plat as requested in Case #2020-2642, subject to the Conditions and the technical

corrections set forth in the Staff Report and attached exhibits, and the Commission denies the variance, as requested in Case #2019-2720. The preliminary subdivision plat shall expire three years after issuance of this final action unless an extension is granted or a final subdivision plat is approved pursuant to SFCC Section 14-3.19.

John B. Hiatt
Chairperson

Date

FILED:

Yolanda Y. Vigil
City Clerk

Date

APPROVED AS TO FORM:

Sally A. Paez
Assistant City Attorney

November 19, 2020
Date

City of Santa Fe, New Mexico

Planning Commission

Exhibit B

DRT Memos

1. Traffic Engineering Division Memorandum, John Romero, P.E
2. Technical Review Memorandum, Dee Beingessner, P.E.
3. Wastewater Division Memorandum, Stan Holland, P.E.
4. Fire/FirePrevention, Geronimo Griego
5. Water Engineering Division Memorandum, Brian Snyder
6. Landscape Memorandum, Lawrence Rivera
7. ADA - Site Review, Jason Kluck

City of Santa Fe, New Mexico

memo

DATE: October 1, 2020

TO: Donna Wynant, Senior Planner

FROM: John J. Romero, Engineering Division Director JR

CASE: **2020-1778: Vista de La Sierra Subdivision**

ISSUE:

JenkinsGavin, Inc., Agent, for Branch Family Holdings, LLC, Owner, requests a preliminary subdivision plat for a 393 single family residential lot subdivision and a variance from SFCC Table 14-7.2-1 (Note 6), which requires an additional 5-foot side yard setback for any portion of a structure over 14 feet in height. The property located at 3800 Governor Miles Road, is approximately 79.69 acres and is zoned R-5 (Residential- five dwelling units per acre)

TRAFFIC:

The TIA demonstrated that the proposed subdivision has moderate impacts to the surrounding roadway network. The traffic study shows excessive delay at four intersection at different points in time. These delays can be mitigated. Below is a summary of the intersections shown in the study to have excessive delay, with the applicable mitigation measures recommended of the developer:

Intersection	Anticipated Delay and needed Improvements	Developer led Mitigation Measure
Richards/Governor Miles	This intersection shows minor delays at full build out of this entire area, including both Las Soleras and the Community College District. Full build out of this area, also referred to as the Ultra Horizon Year, is expected to occur over 20 years from now. Modeling traffic this far out incurs more estimation and is considered to be conservative. The delay modeled in the traffic study can be mitigated by 4-laning Richards Avenue. This is an improvement that the City plans to perform once warranted.	The developer provided right-of-way for the widening of Richards Avenue at the time of annexation. The developer will also be providing impact fees which is the mechanism used to obtain the developers contributions for this type of improvement. No further mitigation measure is needed from the developer.

Intersection	Anticipated Delay and needed Improvements	Developer led Mitigation Measure
Richards/Beckner	This intersection is currently failing as a Two-Way Stop intersection. Another developer is in the process of placing a signal at this intersection. This signal will remedy the issue at this intersection, not only in the near term, but taking into account the traffic generated by the proposed development. The signal will be operational prior to the proposed development being constructed.	The developer does not need to provide additional mitigation measures.
Beckner/Beaty Main Access	This intersection shows minor delay at full buildout of the development, assuming a Two-Way stop at this intersection. The developer is planning to construct a roundabout at this intersection during Phase-1 of the development. This roundabout will provide adequate capacity for this intersection.	Construct roundabout during Phase-1 of the Development
Beckner/La Puerta	The traffic study shows delays for the southbound left-turn during the 20+ Year analysis. The study incorrectly showed this intersection as being a full-access. This intersection currently prohibits southbound left-turns. With this in mind, the intersection will not experience any notable delay in the future.	The developer does not need to provide additional mitigation measures.

RECOMMENDED ACTION:

	Conditions of Approval:	Completed By
1	The Developer shall construct a roundabout at its main intersection with Beckner Road. The roundabout shall be constructed as a single-lane roundabout designed in a manner so that it can be expanded to a multi-lane roundabout in the future.	Prior to Subsequent Submittal
2	The Developer shall revise the traffic study prior to implementing Phase-2 of the development. The purpose of the revision is to include revised actual traffic counts in a hope to better account for typical traffic patterns post COVID, including school traffic.	Prior to Phase-2

	Technical Corrections:	Must be Completed By
1	None	N/A

(Per Dee Beingessner- I10-21-20)

VISTA DE LA SIERRA SUBDIVISION PHASE 1, REDLINES

Although some comments have been provided for phase 2 and 3, these comments were only a thorough review of phase 1 due to time constraints for review.

Sheet G-001. Provide Storm water certification note on plat.

Sheet S-101. Modify note under Drainage Facilities Maintenance to read, The drainage facilities are private and shall be maintained by the property owners as per Article 14-8.2(K). Add note which states; All basins/ponds to be designed to empty within no more than 24 hours as per Article 14-8.2(D)(4)(c)(ii) of the City Code. There should also be a note about on lot or central ponding required. (This same note should be placed on sheet S-104, phase 2 and sheet S-108, phase 3).

Sheet S-109. Is there a phase line between 1A and 1B? If so, please indicate.

Sheet S-115. Show the location of proposed ponds and drainage structures. Identify the square footage of 30% slopes and greater proposed to be disturbed. Label the street names, Governor Miles, Richard's Avenue and Beckner Road on the plans. Delineate phase lines and show contour elevations. Reference proposed round about on Beckner Road. (Sheet C2-212?)

Sheet S-120. Reference proposed round about on Beckner Road. (Sheet C2-212?)

Sheet C-100. Label proposed/existing arroyo stabilization, gabions, rip-rap, etc.., or show on legend provide details. Indicate name of arroyo, limits of arroyo, flowline and banks. Assign numbers or letters for proposed ponds. Provide overall terrain management/drainage plan for all phases on one sheet. Provide a terrain management plan for each phase indicating drainage calculations for on lot or central ponding, including proposed storm water conveyance systems. Reference proposed round about on Beckner Road. (Sheet C2-212?)

Sheet C1-101. Provide sections/details for temporary cul-de-sac and proposed swales. Indicate sheet number of detail. Label high points of asphalt with HP and elevation throughout. Staff needs more information from the engineer and also needs to conduct an inspection of existing storm drain proposed to be abandoned and removed. Reference proposed round about on Beckner Road.

Sheet C1-102. Provide locations of ponds with overflows and proposed contours on all phases. Include, sections/details of ponds and overflows. Provide section/detail of temporary retention pond, reference sheet number. Label high points (HP) and elevations.

Sheet C1-103. Label high points (HP) and elevations of roadway. Show grading for the proposed round about on Beckner Road or reference sheet with grading/construction information.

Sheet C1-104. Label high points (HP) and elevations and proposed pond numbers or letters.

Sheet C1-105. Label high points (HP) and elevations and provide detail of temporary emergency access.

Sheet C1-106. Provide sections/details for all temporary, permanent ponds and swales. Reference sheet numbers. Item numbers 6 & 7 need to be changed to reflect City's Sequence of Construction (SOC) document. Use City approved seed mix for note number 12. Provide temporary and permanent

storm water and erosion control plan. Show locations of SWPPP permit with rain gauge and location of concrete wash out. Provide detail.

Sheet C2-101. Label high points (HP) and elevations of roadway. (PHASE 2)

Sheet C2-102. Label pond numbers. Provide correct sheet number for timber slope protection, provide and reference section/detail. Explain reference to 100 year water surface. This reference can be confusing since this is a zone X area. Provide detail for proposed sidewalk drain or culvert. (PHASE 2)

Sheet C2-106. Same as note for sheet C1-106 above. Show phase boundary lines.

Sheet C1-200. Explain overall paving plan. Show and reference road sections for roadways, temporary cul-de-sacs and temporary emergency access road.

Sheet C1-201 thru C-208. Label proposed sidewalk drains/culverts, valley gutters, fillets and curb and gutter on all sheets. Show proposed driveway locations and provide note if driveways will be installed or cut out later.

Sheet C2-212. Legend numbers need to correspond to proposed construction locations.

Sheet C-300. Indicated proposed round about location on Beckner Road.

Sheets C-500 thru C1-600. Provide signage and striping for proposed round about.

Sheet C-900. Provide untreated base coarse under roadway. Provide more detailed pond sections for each pond with overflow. Need to discuss sides and bottoms of proposed ponds. Provide 4" to 6" rock for drainage swales.

Remove sheets COA-DWG2420 and COA-DWG2510 (City of Albuquerque standards) replace with City of Santa Fe details or Department of Transportation (DOT) details.

All cuts to be 2:1 or stabilized all fill to be 3:1 or stabilized.

(per Dee Beingessner 10-21-20)
ISSUES TO BE ADDRESSED AS
DISCUSSED IN THE 10/20 GOTOMEETING ARE:

- Note must be placed on plat prior to recording that states the square feet of impervious surface allowed for each lot before on-lot ponding is required for future impervious surface.

- Need plans to be updated to include off-site improvements such as construction plans for roundabout on Beckner Road and any other Beckner road improvements. Also include plans for Governor Miles Road intersection. Include plans for any improvements to Richard's Avenue road and intersection if they are to be constructed with this development. As discussed, the roundabout for Beckner entrance to the subdivision will be constructed in phase one and all references in the plans to a 90 degree intersection must be updated to the roundabout design.

- Temporary pond proposed for phase one needs to have a more permanent design in case the remaining phases are not built in a timely manner.

- Plans must be very specific that the infrastructure for each phase will be finalized prior to allowing the next phase to begin construction. No grading will be allowed across phases. Phase one contains cut amounts that will be stockpiled and stockpile plan must be submitted with these plans. Cut and fill quantities and any required stockpile plans must be included for each phase.

- Perform percolation tests on ponding areas prior to construction of the ponds and also after the ponds are constructed to show how much water the ponds are expected to percolate, even if the ponds are detention only. This will help alleviate concerns of residents in neighboring developments. Also consider pond improvements that will allow for additional infiltration of water.

- Not discussed in the meeting but consider rain gardens in drainage patterns.

- HOA documents must contain clear instructions to the homeowners regarding their responsibilities for drainage facilities and pond maintenance. We would like to see additional information provided to the HOA than is normally required to provide specific items to review for pond maintenance and a specific drainage maintenance schedule.

- Provide written responses to the City for the Nava Ade HOA letter sent to the City with their concerns regarding this subdivision.

WYNANT, DONNA J.

From: HOLLAND, TOWNSEND S.
Sent: Monday, November 9, 2020 2:49 PM
To: WYNANT, DONNA J.
Cc: BERKE, NOAH L.
Subject: Case 2020-2642
Attachments: Case #2020-2642-Vista De La Sierra.docx

Donna
Hope you are doing well.
Overall a pretty good design on the sewer system.
Call with any questions

T. Stanley Holland, P.E.
Wastewater Management Division
73 Paseo Real
Santa Fe, NM 87507
505-955-4637
tsholland@santafenm.gov

Development Review Team

Comment Form

Date: 10/02/2020

Staff person: Geronimo Griego

Dept/Div: Fire Prevention

Case: 2020-2642 Vista de La Sierra Preliminary Subdivision Plat and Setback Variance

Case Mgr Donna Wynant

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:
(Phase 3) One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section D104.3.	Prior to planning commission.

Technical Corrections*:	Must be completed by:
1. Fire apparatus access shall have an unobstructed width of not less than 20 feet exclusive of shoulders and an unobstructed vertical clearance of not less than 13 feet 6 inches (IFC 2009 Section 503.2.1) 2. Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4) 3. Shall comply with table D103.4 Requirements for Dead-End Fire Apparatus Access Roads. 4. Fire Department shall have 150 feet distance to any portion of the building on any new construction. (IFC 2009 section 503.1.1) 5. 507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6. 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route	At the time of any new construction or remodel.

around the exterior of the facility or building. 6. Shall have water supply that meets fire flow requirements as per IFC (Appendix B) 7. Shall comply with Section D102.1 Access and Loading (75,000 lbs). 8. Shall meet the 150 feet driveway requirements must be met as per IFC, or an emergency turn-around that meets the IFC requirements shall be provided. (Appendix D Table D103.4) 9. Shall comply with IFC 2009 Section D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade. 10. Shall comply with IFC 2009 Section D103.5 Fire apparatus access road gates. 11. Shall comply with IFC 2009, Appendix D, Aerial Fire Apparatus Access Roads. 12. Shall meet the IFC code requirements 2009 edition or the most current edition the governing body has adopted at the time of permitting.	

*Must made prior to recording and/or permit issuance

Development Review Team

Comment Form

Date: 09/28/2020

Staff person: Brian Snyder

Dept/Div: Public Utilities/Water

Case: **Case #2020-2642. Vista de La Sierra Preliminary Subdivision Plat and Setback Variance.**

Case Mgr: Donna Wynant

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:
1 An approved Water Plan from the Water Division will be required. Water Plan comments will be submitted to the design engineer.	Prior to final plat approval.
2 No re-grading of site over existing 16-inch water main traversing site without adjusting grade of existing water main to have **4**-feet cover.	Prior to final plat approval.
3	
4	

Technical Corrections*:	Must be completed by:
1	
2	
3	
4	

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project:

1. [list any additional items]

Explanation of Conditions or Corrections (if needed):

Development Review Team

Comment Form

Date: 10/07/2020

Staff person: Lawrence Rivera

Dept. /Div.: Land Use/Terrain Management- Landscape/Irrigation Review

Case: 2020-2642 Vista de La Sierra Subdivision

Case Mgr.: Donna Wynant

Review by this division/department **of the 9/18/2020 plan set** has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:

Technical Corrections*:	Must be completed by:
1. COSF Code 3.19.1 requires landscape irrigation plans for large projects not to exceed 20 scale, 1 inch equals 20 feet.	Prior to permit review
2. Provide a complete set of installation details, notes and specifications for the irrigation system. Show on the detail drawings the installation of all assemblies without any questions for size or type of materials to use for said irrigation system.	
3. No stop & waste valves or King Drains permitted per COSF Irrigation Design Standards. Replace Flush Caps with manual drain (sch80 Ball Valve)	
4. Due to the Emerald Ash Beetle, please replace the FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH with another approved tree variety from the City of Santa Fe plant list.	
5. RHAPHIOLEPIS INDICA INDIA HAWTHORN, not on COSF 2019 plant list.	
6. Filter fabric under all Gravel Mulches and rip rap rock. Mulch to be two inches below top of concrete walkway or curb and noted on landscape plan.	
7. Please show light standards and fire hydrants on the landscape plan. Street trees shall be located at least fifteen (15) feet from fire hydrants and light standards.	
8.Provide irrigation to all revegetation native seed areas. (Per COSF Code 14-8.2 D(5)(c) Add a heat treated compost material one inch (1") to all seeded areas. Test soil: Contractor shall have seeded areas soil tested for nutrient deficiencies and amend soil according to testing lab recommendations. Seeded areas shall be graded two inches (2") below top of concrete curbs and sidewalks.	
9. Cool season turf shall be limited to areas with relatively low evaporation from wind and heat or in locations used for active or passive recreational use. The total area of cool season turf shall be limited as follows: multiple-family residential developments shall not have cool season turf in excess of	

twenty per cent of the required common open space;	
10. Stormwater Ponding: A water level measuring device with zero set at finish grade located at the center of each pond is required. Storm water storage ponds are not to exceed 1 foot in depth without a verification that storm water will drain within 24 hrs. A percolation test is required for each pond. A security fence around ponds three feet and deeper with a maintenance gate is required.	
11. Provide significant tree information on the landscape plan.	

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project:

1. [list any additional items]

Explanation of Conditions or Corrections (if needed):

DEVELOPMENT REVIEW TEAM

COMMENT FORM

Date: 9/18/2020

Staff person: Jason M. Kluck

Dept/Div: Land Use – ADA Site Review

Case: **Case #2020-2642 Vista de la Sierra – Preliminary Subdivision Plat**

3800 Governor Miles Road

Case Mgr: Donna Wynant

Review by this division/department has determined that this application will meet applicable standards if the following are met:

Conditions of Approval:	Must be completed by:
Approval Comments: On-Site General ADA Compliance Requirements: Accessibility feature design within the Site shall comply with NMDOT Pedestrian Access Route Details (Serial 608) or demonstrate compliance with applicable ADA regulations by other means as provided in the permitted Construction Documents. All Sidewalks and Walkways along the accessible path of travel shall be firm, stable and slip resistant and shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Provide detectable warning surfaces at curb ramps and transitions to driveway crossings along the accessible paths of travel as applicable. Sidewalks and Walkways along the accessible path of travel shall not exceed 1:20 (5%) running slopes without handrail(s) in accordance with current ANSI 117.1 standards 505 & 2015 IBC 1014. Cross slopes shall not exceed 2% staff recommends 1% to 1.5% as a target cross slope. Walkways shall provide 5' diameter turning space every 200 linear feet of run. It is preferred to have marked crossings where the accessible route crosses vehicular traffic lanes. Ramps within the site shall have 1:12 (8.33%) running slope and 1:48 (2%) cross slope max. With a max. rise of 30" and with 5' clear length landings where straight. Changes in direction shall comply with 304.3. Landing typical slope is 1.5% and shall not exceed 2% running and cross slope. Curb Ramps shall have the required 5' clear length landing and turning space. Changes in direction shall comply with 304.3. Curb Ramps within the site	Prior to construction permit application

shall have a target running slope of 7% or less typical and 1:12 (8.33%) maximum. Curb Ramp landing target slope is 1.5% and shall not exceed 2% running and cross slope maximum in any direction. At time of construction, the Contractor shall ensure ADA compliance for construction of required ADA accessible features and appurtenances, as detailed in, and in addition to, the approved construction permit documents. Improvements shall comply with ICC ANSI A117.1-2009 Chapters 1-5 and Chapter 7, 2015 New Mexico Accessible Parking Checklist, MUTCD, NMDOJ, and NM State Statute and Code as applicable. Vertical clearance: Provide and maintain 80" of vertical clearance for the full width of all sidewalks/pedestrian routes. Rails or other barriers shall be provided where the vertical clearance is less than 80". The leading edge of such rails or barrier shall be located 27" max. above the floor. (307.4) Provide and maintain 98" vertical clearance at access aisles and routes. (502.6) At Passenger Loading Zones, provide and maintain 114" min. vertical clearance at the exterior vehicular route and access aisles serving the vehicle pull-up space. (503.5) Accessible path(s) of travel route shall be provided from the Public Right-of-Way and accessible parking aisle(s) to accessible building entrance(s) as applicable and shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes, 403 Walking surfaces, 405 ramps. Ensure accessible route(s) from the Public Right-of-Way and accessible parking space aisle(s) to building entrance(s) are provided and maintained. Provide detectable warning surfaces at curb ramps and transitions to the vehicular way along the accessible path of travel routes as applicable. IBC 1104.1 Site arrival points: At least one (firm, stable, slip resistant) accessible route within the site shall be provided from: public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance served. Off-Site PROW Compliance Requirements: Accessibility feature design within the Public Right-of-Way shall comply with NMDOT Pedestrian Access Route Details (Serial 608). Driveway and intersection crossings shall not exceed 2% cross slope, shall have a level maneuvering space, shall have 1/4" max. vertical deflections, and 10% max. flare slope. Curb Ramps shall have the required 5' clear length landing and turning space. Changes in direction shall comply with 304.3. Curb Ramps shall have a target running slope of 7% or less typical and 1:12 (8.33%) maximum. Curb Ramp landing target slope is 1.5% and shall not exceed 2% running and cross slope maximum in any direction. Sidewalks and Walkways along the accessible path of travel route shall comply with Section 302, floor surface, 303.4 Ramps, 401 Accessible routes,	

403 Walking surfaces, 405 ramps. Provide detectable warning surfaces at curb ramps and transitions to the vehicular way along the accessible paths of travel as applicable. All walk surfaces along the accessible path of travel shall be firm, stable and slip resistant. Sidewalks and Walkways along the accessible path of travel shall not exceed 1:20 (5%) running slopes without handrail(s) in accordance with current ANSI 117.1 standards 505 & 2015 IBC 1014. Cross slopes shall not exceed 2% staff recommends 1% to 1.5% as a target cross slope. Walkways shall provide 5' diameter turning space every 200 linear feet of run. It is preferred to have marked crossings where the accessible route crosses vehicular traffic lanes. "HC", "Handicapped", "Handicap", or similar terms are erroneous, derogatory descriptors for ADA accessible or Disabled accessible features. Please remove or modify any references in the plans accordingly. At time of construction, the Contractor shall ensure ADA compliance for construction of required ADA accessible features and appurtenances, as detailed in, and in addition to, the approved construction permit documents. Improvements shall comply with ICC ANSI A117.1-2009 Chapters 1-5 and Chapter 7, 2015 New Mexico Accessible Parking Checklist, MUTCD, NMDOJ, and NM State Statute and Code as applicable.	

Technical Corrections*:	Must be completed by:
Insufficient information for complete review. Please provide final subdivision documents for review graphically demonstrating compliance with all applicable ADA regulations.	Prior to recording

*Must made prior to recording and/or permit issuance

The applicant should be aware that the following code provisions or other requirements will apply to future phases of development of this project: As noted above.

Explanation of Conditions or Corrections (if needed): N/A

City of Santa Fe, New Mexico

Planning Commission

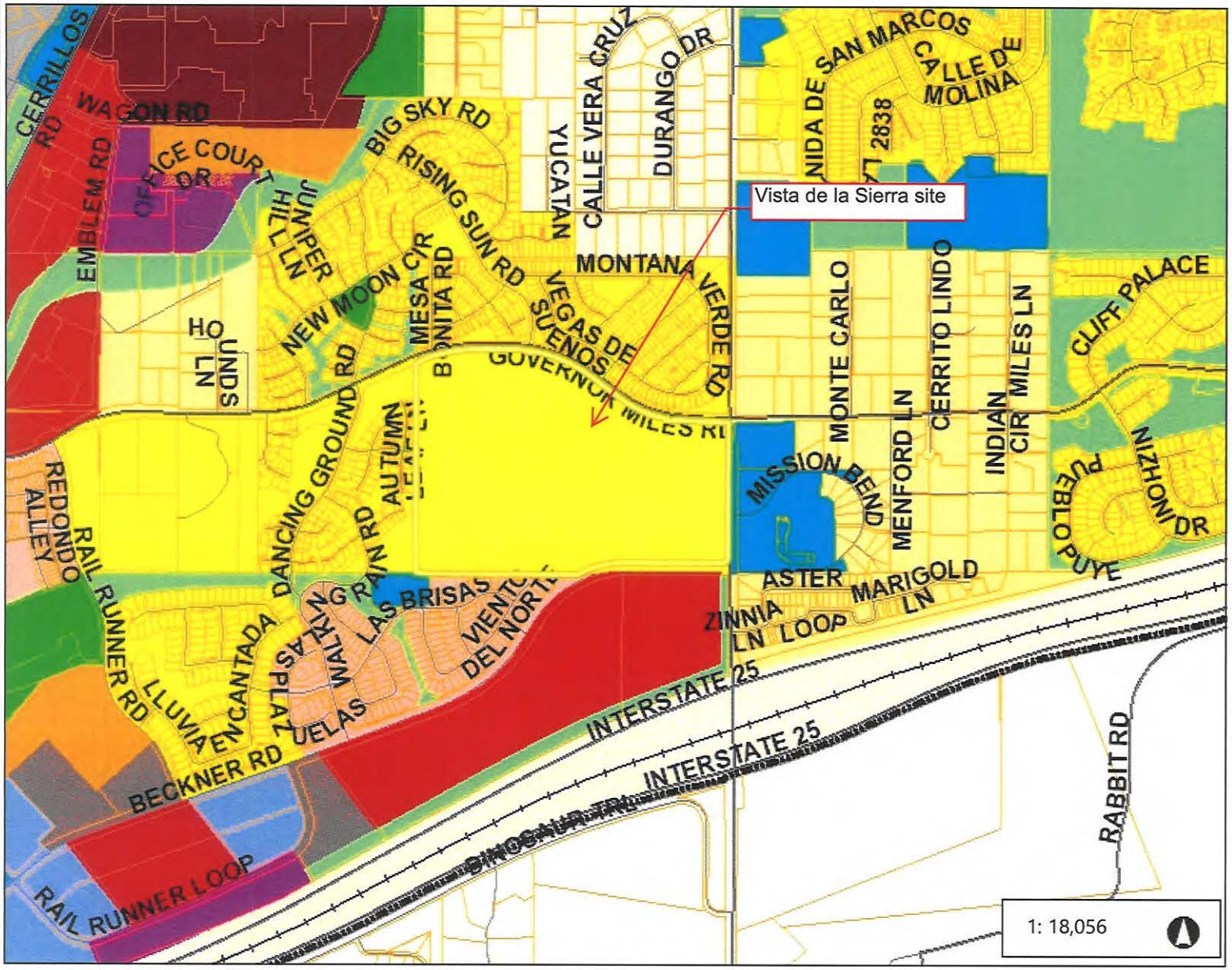
Exhibit C

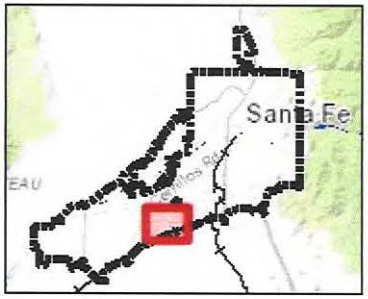
Maps and Photos

1. Future Land Use Map
2. Current Zoning Map
3. Aerial Photo
4. Google Street Views

City of Santa Fe
Mapping the City Different

Future Land Use Map





Legend

- City Limits
- Address Points
- Roads
- Major Roads
- Santa Fe County Parcels
- Santa Fe River
- Rail Road

Future Land Use

- 1 dwelling per acre
- 1-3 dwellings per acre
- 3-7 dwellings per acre
- 7-9 dwellings per acre
- 7-12 dwellings per acre
- 12-29 dwellings per acre
- Regional Commercial
- Community Commercial
- Neighborhood Center
- Transitional Mixed Use
- Business Park
- Office
- Industrial
- Public/Institutional
- Open Space
- Parks

Notes

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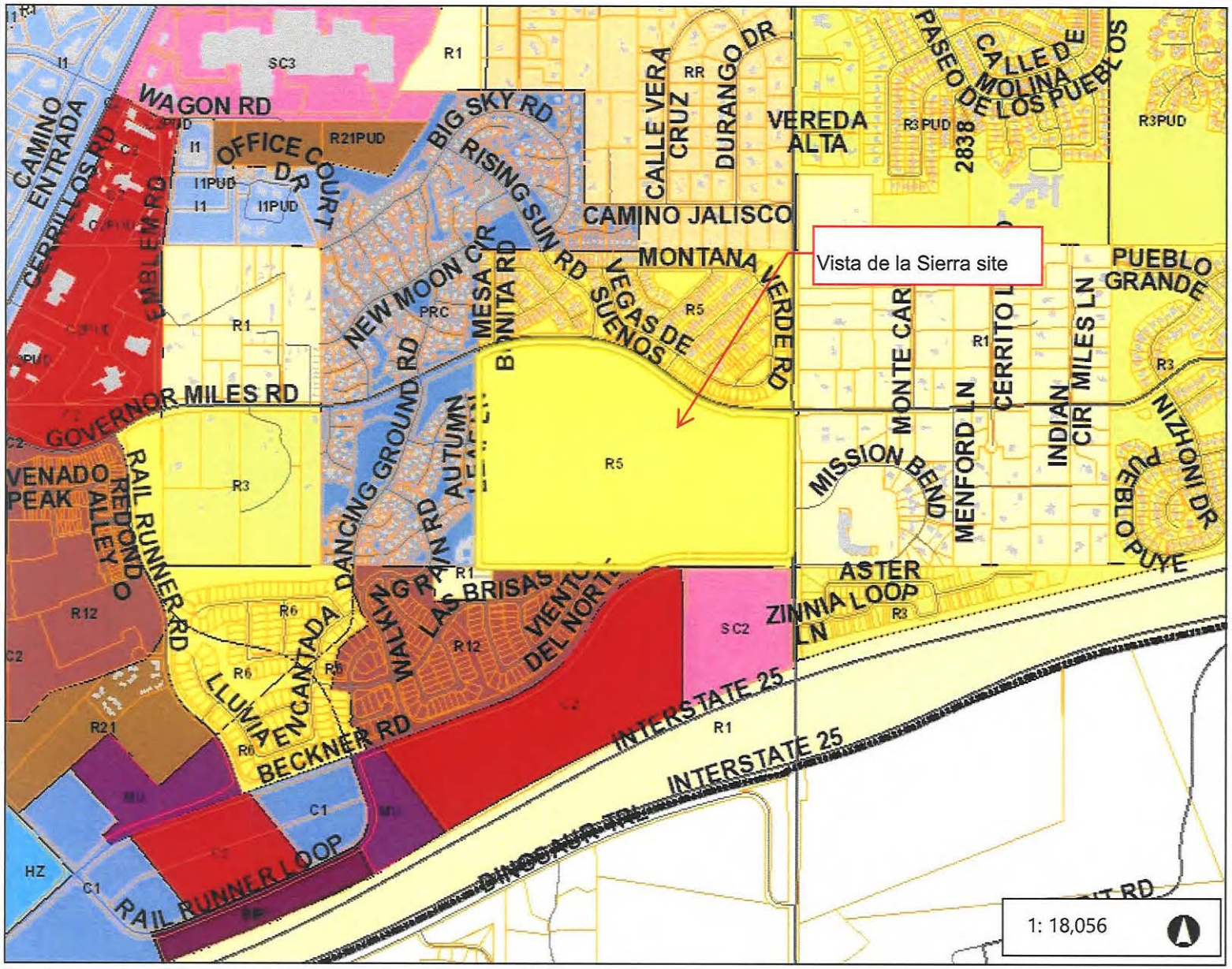
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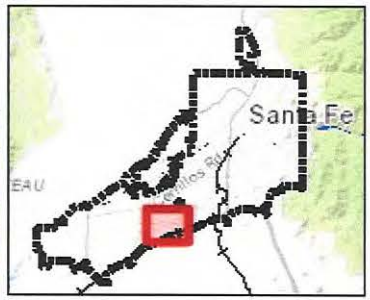
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This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Vista de La Sierra - Zoning Map

City of Santa Fe
Mapping the City Different





Legend

- City Limits
- Address Points
- Building Footprint
- Roads
- Major Roads
- Santa Fe County Parcels

Zoning

- RR Rural Residential
- R1, (PUD) Single- Family 1du/ac.
- R2, (DT), (PUD),(AC) Single - Fami
- R3, (PUD) Single - Family 3du/ac
- R4 Single - Family 4du/ac
- R5, (DT), (PUD), (AC), R6, (PUD) S
- R7, (I), (PUD), R8 Single - Family 7
- RC5, RC5AC Compound 5du/ac
- RC8, RC8AC Compound 8du/ac
- R10, (PUD) Multiple - Family 10du/
- R12, (PUD) Multiple - Family 12du/
- R21, (PUD) Multiple - Family 21du/
- R29, (PUD),(AC) Multiple - Family 2
- RAC Residential Arts & Crafts
- MHP Mobile Home Park
- C1, (PUD) Office and Related Com
- C2, (PUD) General Commercial
- C4 Limited Office and Retail
- HZ Hospital Zone

1: 18,056

Notes

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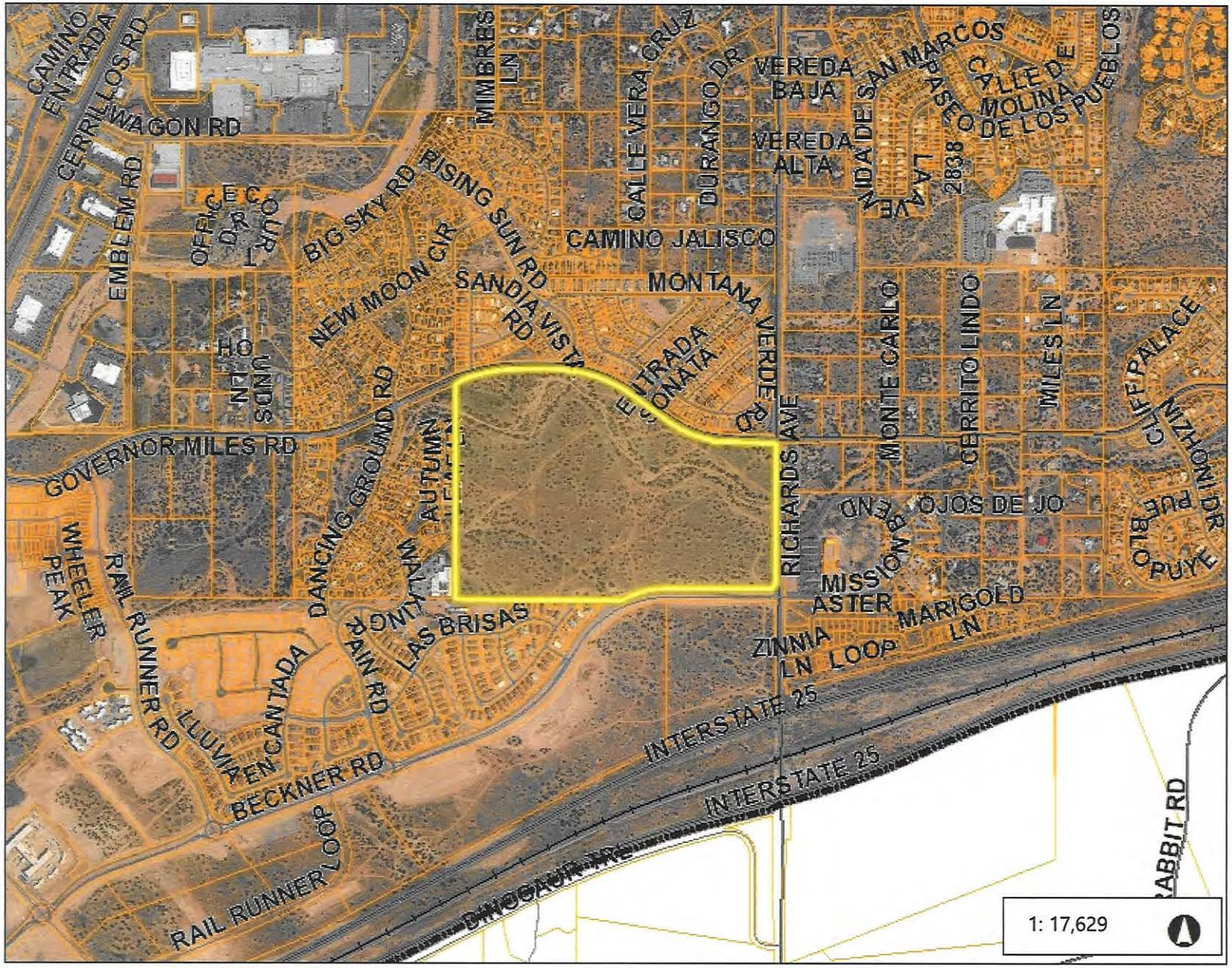
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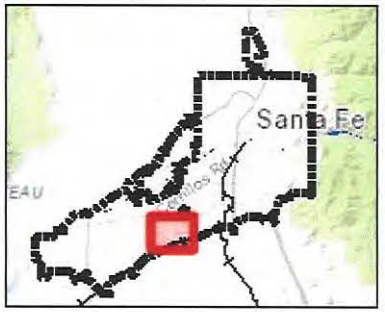
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Santa Fe
Mapping the City Different

Vista de la Sierra Aerial Map





Legend

- City Limits
- Address Points
- Roads
- Major Roads
- Santa Fe County Parcels
- Santa Fe River
- Rail Road

1: 17,629

Notes

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2,938.2 0 1,469.10 2,938.2 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

VISTA DE LA SIERRA – (Google Street Views)



Figure 1: View of the Vista de la Sierra site, looking southwest from the Governor Miles/Richards Ave. intersection.



Figure 2: View of the Vista de la Sierra site, looking across Governor Miles from Rising Sun Drive.

City of Santa Fe, New Mexico

Planning Commission

Exhibit D

Early Neighborhood Notification Materials

1. ENN Sign-In Sheet
2. ENN Packet
3. Meeting Notes
4. School Notification
5. Communications from Neighbors to the Development Site:
   - Nava Ade Home Owners Association report (rec'd. 11-2-20)
   - Estancias de Los Soleras

City of Santa Fe
Early Neighborhood Notification Meeting
Sign-In Sheet

Project Name: Vista del Sierra Subdivision **Meeting Date:** March 9, 2020

Meeting Place: Southside Library, 6599 Jaguar Drive **Meeting Time:** 5:30 p.m.

Applicant or Representative Check Box below

↓		Name	Address	Phone #	Email
☐	1	Kurt Reltromo	6901 Homeridge Pkwy, NW, ABQ	505 948-7194	rbeltromo@WHPacific.com
☐	2	Deirdre Crockett	4100 Soaring Eagle Ln	617. 821.0680	dpcrockett@gmail
☐	3	Barbara Gaerlan	4466 Juniper Hill Lane SF	323-954-0401	bsgaerlan@gmail.com
☐	4	MARY Rankovich	4150 Raindance Ln	248-935-3254	mranko@comcast.net
☐	5	Dennis Kanka	4150 Raindance Ln	586-419-5423	dmkanka@attanet
☐	6	Jefferson BAUM	4405 Autumn Leaf Ln	616-507-0496	baumjefferson@yahoo.com
☐	7	MARY REINALD	4224 Luz De Estrella	502 295 3684	mejir@mac.com
☐	8	[illegible]	4200 Cactus [illegible]	2B591 5383	
☐	9	Leslie Finegan	4414 Long Shadow Lane	405-603-8843	lamoorls@gmail.com
☐	10	Becky Stamm	4136 Soaring Eagle	505-795-2704	becky.stamm@gmail
☐	11	Mark Kolokoff	4161 Las Brisas	970-302-6111	mrkolokoff@gmail.com
☐	12	Adrienne Fox	4409 Autumnleaf La	505 377-7935	adriennefb@gmail.com

For City use: I hereby certify that the ENN meeting for the above named project took place at the time and place indicated.

Printed Name of City Staff in Attendance _____ Signature of City Staff in Attendance _____ Date _____

This sign-in sheet is public record and shall not be used for commercial purposes.

City of Santa Fe
Early Neighborhood Notification Meeting
Sign-In Sheet

Project Name: Vista del Sierra Subdivision **Meeting Date:** March 9, 2020

Meeting Place: Southside Library, 6599 Jaguar Drive **Meeting Time:** 5:30 p.m.

Applicant or Representative Check Box below

↓		Name	Address	Phone #	Email
☐	1	[illegible]	Monte del Sol	930-1251	
☐	2	[illegible]	4421 Autumn Leaf Ln	577-9967	[illegible]
☐	3	ROY GEORGE	4113 SOARING EAGLE LN	575-808-1482	INFO@DEERCROSSINGRVPARK.COM
☐	4	Kathleen McKenzie	4209 Cactus Flower Lane	919-8827	katmckenzieart@gmail.com
☐	5	Leah Siegel	4408 Autumn Leaf Ln	505-490-3203	leahsiegelsantafe@gmail.com
☐	6	JOHN URBANOWSKI	4449 Dancing Ground Rd	503 720 4245	jurbanowski@comcast.net
☐	7	DONN WIESE	4105 Soaring Eagle Ln	505-690-0240	donnsr@msn.com
☐	8	Fred Pearson	4121 New Moon Cir	505 474 6834	—
☐	9	Karen Baker	4448 Autumn Leaf Lane	505-699-3087	ksbaker505@gmail.com
☐	10	George Baker	"	208-869-4235	sawtoothbooks@gmail.com
☐	11	[illegible]			
☐	12	Jeannette Kolkoff	4121 Las Brisas	970-302-1715	—

For City use: I hereby certify that the ENN meeting for the above named project took place at the time and place indicated.

Printed Name of City Staff in Attendance _____ Signature of City Staff in Attendance _____ Date _____

This sign-in sheet is public record and shall not be used for commercial purposes.

City of Santa Fe
Early Neighborhood Notification Meeting
Sign-In Sheet

Project Name: Vista del Sierra Subdivision **Meeting Date:** March 9, 2020

Meeting Place: Southside Library, 6599 Jaguar Drive **Meeting Time:** 5:30 p.m.

Applicant or Representative Check Box below

↓		Name	Address	Phone #	Email
☐	1	Kathryn McIntosh	3816 Montana Verde Rd	518 727 7361	katiemac1713@yahoo.com
☐	2	Jeanne Braka	4400 Autumn Lf Ln	970 946 6954	jeannebraka@gmail.com
☐	3				
☐	4				
☐	5				
☐	6				
☐	7				
☐	8				
☐	9				
☐	10				
☐	11				
☐	12				

For City use: I hereby certify that the ENN meeting for the above named project took place at the time and place indicated.

Donna Wynant
Printed Name of City Staff in Attendance

Donna Wynant
Signature of City Staff in Attendance

3/9/20
Date

This sign-in sheet is public record and shall not be used for commercial purposes.

City of Santa Fe
Early Neighborhood Notification Meeting
Sign-In Sheet

Project Name: Vista del Sierra Subdivision **Meeting Date:** March 9, 2020

Meeting Place: Southside Library, 6599 Jaguar Drive **Meeting Time:** 5:30 p.m.

Applicant or Representative Check Box below

↓		Name	Address	Phone #	Email
☐	1	LORRAINE/GARY LASSWELL	4713 LAS PLAZUELAS	505/471-9142	GFLASSWELL@MSN.COM
☐	2	Mary Jane Fox	4409 Autumn leaf la		Foxel936@aol.com
☐	3	Maria Pruett	4135 Las Brisas	719 244-6343	emariapruett@gmail.com
☐	4	Elizabeth VanDenzen	4444 Autumn Leaf Lane	505-204-6658	lizvandenzen@gmail.com
☐	5	KAREN HELDMEYER	3216 DE ROER	982-3968	KHELD@EARTHLINK.NET
☐	6	Jena Miloserich	4217 Cactus El Lane		
☐	7				
☐	8				
☐	9				
☐	10				
☐	11				
☐	12				

For City use: I hereby certify that the ENN meeting for the above named project took place at the time and place indicated.

Printed Name of City Staff in Attendance _____ Signature of City Staff in Attendance _____ Date _____

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City of Santa Fe
Early Neighborhood Notification Meeting
Sign-In Sheet

Project Name: Vista del Sierra Subdivision **Meeting Date:** March 9, 2020

Meeting Place: Southside Library, 6599 Jaguar Drive **Meeting Time:** 5:30 p.m.

Applicant or Representative Check Box below

↓		Name	Address	Phone #	Email
☐	1	Julia Faber	4445 Autumn Leaf	505-913-0445	TGFeher@aol.com
☐	2	Marie Hoffman	4144 Soaring Eagle	505-795-9779	mimi@mimihoffman.com
☐	3	JoAnn Bethel	4305 Dancing Ground	505-424-3207	jvbethel@gmail.com
☐	4	Richard Carrige	4401 Autumn Leaf	424-1919	richardmst@gmail.com
☐	5	Shirley McDougall		690-8210	mcdougal188@gmail.com
☐	6	JAMES FLYNN	4431 LONG SHADOW LN	471-2235	jpflynn@gmx.com
☐	7	Mike Harris	2683 Via Caballero del Norte	470-9213	mike@harrisnm.com
☐	8	PATRICIA JACKSON	4155 LAS BRISAS	928-221-9827	jackson.1785@osu.edu
☐	9				
☐	10				
☐	11				
☐	12				

For City use: I hereby certify that the ENN meeting for the above named project took place at the time and place indicated.

Printed Name of City Staff in Attendance _____ Signature of City Staff in Attendance _____ Date _____

This sign-in sheet is public record and shall not be used for commercial purposes.

SOMMER, KARNES & ASSOCIATES, LLP

Mailing Address
Post Office Box 2476
Santa Fe, New Mexico 87504-2476

Street Address
125 Lincoln Avenue, Suite 221
Santa Fe, New Mexico 87501

Telephone:(505) 989-3800
Facsimile:(505) 288-3601

Karl H. Sommer, Attorney at Law
khs@sommerkarnes.com
Joseph M. Karnes, Attorney at Law
jmk@sommerkarnes.com

John R. Fox Attorney at Law
johnf@sommerkarnes.com
Of Counsel

EARLY NEIGHBORHOOD NOTIFICATION MEETING

February 20, 2020

Re: Vista del Sierra Subdivision

Dear Neighbor:

Columbus Capital, LLC is preparing to request approval from the City of Santa Fe for entitlements to subdivide the 94.07 acre property to create approximately 385 lots for single family development, a 3.14 acre site adjacent to the existing Monte del Sol Charter School to be donated for future school expansion and a 9.6 acre lot in the northwestern corner of the property intended for future development of an assisted living facility. The Property is located west of and adjacent to Richards Avenue between Governor Miles and Beckner Roads. The application is anticipated to include requests for variances to zoning provisions including connectivity, grading, stepbacks for two-story residences and park and open space, along with a request to modify the existing annexation agreement. The application is expected to propose development of the property in 4 phases.

In accord with the requirements of the City of Santa Fe's Early Neighborhood Notification (ENN) regulations, this is to inform you that a meeting is scheduled for:

Time: **5:30 p.m.**
When : **Monday, March 9, 2020**
Where: **Santa Fe Public Library – Southside Branch**
6599 Jaguar Drive, Santa Fe, NM 87507

The ENN meeting is intended to provide for an exchange of information between prospective applicants for development projects and the project's neighbors before plans become too firm to respond meaningfully to community input.

Attached, please find a vicinity map and proposed site plan. If you have any questions or comments, please contact Joseph M. Karnes, Sommer Karnes & Associates, LLP, 505-989-3800, joseph@sommerkarnes.com.

Sincerely,

Joseph M. Karnes

ENN GUIDELINES

Applicant Information

Project Name: **Vista del Sierra Subdivision**

Name: **Columbus Capital, LLC** (Last) **Agent – Sommer Karnes & Associates, LLP** (First) (M.I.)

Address: **PO Box 2476** (Street Address) (Suite/Unit #)

Santa Fe (City) **NM** (State) **87504** (ZIP Code)

Phone: **(505) 989-3800** E-mail Address: **joseph@sommerkarnes.com**

Please address each of the criteria below. Each criterion is based on the Early Neighborhood Notification (ENN) guidelines for meetings, and can be found in Section 14-3.1(F)(5) SFCC 2001, as amended, of the Santa Fe City Code. A short narrative should address each criterion (if applicable) in order to facilitate discussion of the project at the ENN meeting. These guidelines should be submitted with the application for an ENN meeting to enable staff enough time to distribute to the interested parties. For additional detail about the criteria, consult the Land Development Code.

(a) EFFECT ON CHARACTER AND APPEARANCE OF THE SURROUNDING NEIGHBORHOODS *For example: number of stories, average setbacks, mass and scale, landscaping, lighting, access to public places, open spaces and trails.*

The 94.07 acre subject property is located adjacent to and north of the Estancias del Sol subdivision, east of the Nava Ade Subdivision and south of the Villa Sonata subdivision. The property is bordered by Beckner Road, Richards Avenue and Governor Miles Road. The property was annexed to the City in 2007. The Annexation Agreement provided for a maximum density of 523 dwelling units. The applicant plans to create a subdivision that is similar in character, design and density to the existing residential development in the vicinity with respect to average setbacks, mass and scale, landscaping and lighting. To address current market conditions, the project is planned to include approximately 385 single family lots and a +/- 9.6 acre site in the northwestern corner of the property for future development of an assisted living facility. The homes are planned to be a mix of one and two-story dwellings. The arroyo in the northern portion of the property provides an opportunity for provision of open space and a trail connecting the existing community to the west to Governor Miles and points east as well as an amenity for future residents of the project. A trail along the west side of Richards Avenue is also planned as part of the project.

As required by the Annexation Agreement, the applicant plans to donate 3.14 acres in the southwest corner of the property adjacent to the existing Monte del Sol Charter school to facilitate future expansion of that school.

(b) EFFECT ON PROTECTION OF THE PHYSICAL ENVIRONMENT *For example: trees, open space, rivers, arroyos, floodplains, rock outcroppings, escarpments, trash generation, fire risk, hazardous materials, easements, etc.*

The property is characterized by substantial flat open space with a scattering of juniper trees, crisscrossed by use trails. The primary feature is an arroyo in the northern portion of the property that has suffered from erosion and scouring over the years. As required by the Annexation Agreement, the application will include an erosion and drainage report along with mitigation measures designed to ensure compatibility of the arroyo with the planned development and to take advantage of the opportunity to create a trail and open space along the arroyo. There are no identifiable constraints to development on the property or physical features of note, other than the arroyo, which will be protected and improved.

EARLY NEIGHBORHOOD NOTIFICATION MEETING

Request for Staff Attendance

Project Information	
Project Name:	VISTA del SIERRA subdivision
Address:	3800 Governor Miles Rd
Parcel Size:	94.07 AC
Zoning:	R-5
Future Land Use:	Residential 3-7 units/AC
Preapplication Conference Date:	
Detailed Project Description:	See ATTACHED

Property Owner Information	
Name:	Building Services of SANTA FE, LLP
Address:	PO BOX 4496 SANTA FE NM 87502
Phone:	(505) ~~455-8786~~ 438-8785
E-mail Address:	TSEDERD@AOL.COM

Applicant/Agent Information (if different from owner):	
Name:	SOMMER KARNES & ASSOCIATES LLP
Address:	PO BOX 2476 SANTA FE NM 87504
Phone:	(505) 989-3800
E-mail Address:	JOSEPH@SOMMERKARNES.COM

Agent Authorization (if applicable): ATTACHED

I am/We are the owner(s) and record title holder(s) of the property located at:

I/We authorize _____ to act as my/our agent to execute this application.

Signed: _____ Date: _____

Signed: _____ Date: _____

Proposed ENN Meeting Dates:		
Provide 2 options:	*Preferred Option*	*Alternative*
DATE:	3/9/20	
TIME:	5:30	
LOCATION:	SOUTHSIDE LIBRARY 6599 JAGUAR DR SANTA FE NM 87507	

(c) IMPACTS ON ANY PREHISTORIC, HISTORIC, ARCHAEOLOGICAL OR CULTURAL SITES OR STRUCTURES, INCLUDING ACEQUIAS AND THE HISTORIC DOWNTOWN *For example: the project's compatibility with historic or cultural sites located on the property where the project is proposed.*

There are no known historic or cultural sites located on the property. An archaeological reconnaissance covering the westerly +/- 98% of the property was prepared in 1993 and was approved by the City. That study did not identify any archaeological sites within the property. Archaeologist Ron Winters is carrying out a supplemental archaeological reconnaissance on the balance of the property (approximately 5 acres) and his report will be considered by the City's Archaeological Committee in March. The reports provide that any resources discovered during construction will be handled in compliance with the reconnaissance and applicable law and conditions will be required of the project to ensure the proper protocols are in place and followed during construction.

(d) RELATIONSHIP TO EXISTING DENSITY AND LAND USE WITHIN THE SURROUNDING AREA AND WITH LAND USES AND DENSITIES PROPOSED BY THE CITY GENERAL PLAN *For example: how are existing City Code requirements for annexation and rezoning, the Historic Districts, and the General Plan and other policies being met.*

The property has a General Plan designation of Residential 3-7 dwellings/acre and is zoned R-5. The Annexation Agreement provided for a maximum density of 523 dwelling units. The applicant plans approximately 385 dwelling units, which is consistent with the general plan and zoning designations and will provide for greater compatibility with adjacent developments than a higher density and will be more consistent with current market conditions.

(e) EFFECTS ON PARKING, TRAFFIC PATTERNS, CONGESTION, PEDESTRIAN SAFETY, IMPACTS OF THE PROJECT ON THE FLOW OF PEDESTRIAN OR VEHICULAR TRAFFIC AND PROVISION OF ACCESS FOR THE DISABLED, CHILDREN, LOW-INCOME AND ELDERLY TO SERVICES *For example: increased access to public transportation, alternate transportation modes, traffic mitigation, cumulative traffic impacts, pedestrian access to destinations and new or improved pedestrian trails.*

The property is adjacent to major streets on three sides: Governor Miles Road on the north, Richards Avenue on the east and Beckner Road on the south. These streets provide excellent access to the property and, as development of this area continues, will provide opportunities for enhanced service by public transportation. Currently, route 21 provides service from Cerrillos Road along Governor Miles and Richards to points south, including the Santa Fe Community College. There are existing bike trails/shoulders along these streets as well, according to the City's trails map. The planned pedestrian trails along the arroyo and the west side of Richards will provide off-street connections across the project site to Richards Avenue on the east and then south along the west side of Richards Avenue.

The Traffic Impact Analysis will inform the location and number of access points into the project. Access is planned from Governor Miles Road on the north and Beckner Avenue on the South. Based on communications with the City Traffic Engineer and Fire Department, no direct vehicular access from Richards Avenue is planned, except that an emergency access gate is planned to be provided.

(f) IMPACT ON THE ECONOMIC BASE OF SANTA FE *For example: availability of jobs to Santa Fe residents; market impacts on local businesses; and how the project supports economic development efforts to improve living standards of neighborhoods and their businesses.*

The project will help meet the existing demand for housing in Santa Fe while creating construction jobs and providing both affordable and market rate medium density affordable single-family housing. The planned assisted living facility is intended to help meet the expanding demand for these services in Santa Fe.

(g) EFFECT ON THE AVAILABILITY OF AFFORDABLE HOUSING AND AVAILABILITY OF HOUSING CHOICES FOR ALL SANTA FE RESIDENTS *For example: creation, retention, or improvement of affordable housing; how the project contributes to serving different ages, incomes, and family sizes; the creation or retention of affordable business space.*

The project will provide on-site affordable housing in compliance with the Santa Fe Homes program. Based on the City's 20% requirement, it is projected that approximately 77 affordable for sale homes will be provided, distributed throughout the project.

(h) EFFECT UPON PUBLIC SERVICES SUCH AS FIRE, POLICE PROTECTION, SCHOOL SERVICES AND OTHER PUBLIC SERVICES OR INFRASTRUCTURE ELEMENTS SUCH AS WATER, POWER, SEWER, COMMUNICATIONS, BUS SYSTEMS, COMMUTER OR OTHER SERVICES OR FACILITIES *For example: whether or how the project maximizes the efficient use or improvement of existing infrastructure; and whether the project will contribute to the improvement of existing public infrastructure and services.*

The project is located in an area where substantial residential and commercial development has occurred in recent years and will continue in coming years. An existing sewer trunk line and major water line traverse the property, so no off-site extensions will be needed. The project will provide an additional 3.14 acres to the Monte del Sol Charter School that will facilitate expansion of school services. The Tierra Encantada Charter School is located directly across Richards Avenue from the property and Piñon Elementary School is located less than a mile to the northeast of the property.

(i) IMPACTS UPON WATER SUPPLY, AVAILABILITY AND CONSERVATION METHODS *For example: conservation and mitigation measures; efficient use of distribution lines and resources; effect of construction or use of the project on water quality and supplies.*

The project will meet all applicable City standards for water conservation and will make efficient use of the major existing water line and wastewater line crossing the property.

(j) EFFECT ON THE OPPORTUNITIES FOR COMMUNITY INTEGRATION AND SOCIAL BALANCE THROUGH MIXED LAND USE, PEDESTRIAN ORIENTED DESIGN, AND LINKAGES AMONG NEIGHBORHOODS AND RECREATIONAL ACTIVITY AND EMPLOYMENT CENTERS *For example: how the project improves opportunities for community integration and balance through mixed land uses, neighborhood centers and/or pedestrian-oriented design.*

The arroyo running east-west through the northern portion of the property provides and opportunity for provision of a pedestrian and bike trail, enhancing off-street connectivity and recreational opportunities. Also, a north-south trail is planned along the west side of Richards Avenue.

(k) EFFECT ON SANTA FE'S URBAN FORM *For example: how are policies of the existing City General Plan being met? Does the project promote a compact urban form through appropriate infill development? Discuss the project's effect on intra-city travel and between employment and residential centers.*

The property is designated by the General Plan for residential development and the project will be consistent with the existing R-5 zoning. The City annexed this property along with the adjacent las Soleras property to address the City's housing and employment needs. Residents of the project will enjoy convenient access to employment centers within Las Soleras including Presbyterian Hospital and businesses along Cerrillos Road. The convenient access to Cerrillos Road and I-25 will facilitate access to travel employment centers while minimizing impacts on the City street system. The property's location between las Soleras and the balance of the City to the north and east provides an opportunity for infill development which, as addressed above, already enjoys existing public services. Provision of an opportunity for a new assisted living facility on the 9.6 acre parcel in the northwest corner of the property will address the growing need for such services in Santa Fe and the area.

(I) ADDITIONAL COMMENTS (optional)

The City annexed the subject property along with Las Soleras with the intent that the area north of I-25 accommodate a substantial portion of the City's residential and employment demand in coming decades. The City General Plan and zoning ordinance designate this property for medium density residential development and the proposed project will comply with these designations while providing amenities for future residents.

City of Santa Fe
Land Use Department
Early Neighborhood Notification
Meeting Notes

Project Name	Vista de la Sierra
Project Location	3800 Governor Miles
Project Description	Vista de la Sierra- Preliminary Subdivision Plat
Applicant / Owner	Columbus Capital, LLC
Agent	JenkingsGavin, Inc.
Pre-App Meeting Date	October 24, 2019
ENN Meeting Date	March 9, 2020
ENN Meeting Location	Southside Library
Application Type	Preliminary Subdivision and
Land Use Staff	Donna Wynant
Other Staff	Eli Isaacson (in attendance)
Attendance	33 neighbors, 1 city staff person & 5 on the developer's team

Notes/Comments:

See attached notes.

Vista de La Sierra

Early Neighborhood Notification Meeting

March 9, 2020

Meeting Notes:

Applicant provided a historic overview of the property and previous entitlements, explaining that the project was originally proposed with 523 lots based on the R-5 zoning. The current proposal is approximately 370 lots on +/-80 acres

Attendees expressed concern about the height of the trees in the 30-foot buffer adjacent to Nava Adé.

Attendees asked why the layout does not mirror the Nava Adé design.

Questions were raised regarding the potential assisted living facility referenced in the ENN notice. The applicant explained that this is not part of the current subdivision application and that if this project moves forward, it would be a separate entitlement effort with the requisite ENN process.

The engineer addressed proposed arroyo improvements to mitigate erosion and the potential for downstream flooding.

Questions were raised regarding ponding locations and the applicant explained that ponding will primarily be located on the southside of the arroyo. The ponds will be designed to maximize percolation and will be landscaped in accordance with Code requirements.

In response to questions raised about traffic, the applicant addressed the proposed access points and off-site roadway improvements.

A question was raised regarding the price range of the homes. The applicant responded that ,in addition to the requisite 20% affordable homes, the market rate homes will be moderately priced with a maximum price of around $375,000.

Estancias del Norte residents requested a buffer between their lots and the subject property.

Concern was expressed regarding the Richards Ave./Beckner Rd. intersection and the difficulty with eastbound left turns. The applicant explained that a temporary traffic signal is being constructed as part of the Villa Sendero apartment project.

An attendee commented that the elementary school is very crowded.

A Nava Adé resident expressed concern about the functionality of the Governor Miles Rd./Dancing Ground intersection.

K. Heldemeyer – is concerned about flooding – asks for report to be posted and seen before application.

A question was raised re: the arroyo flow estimate. The engineer stated that the flow rate is approximately 500 cfs. Skepticism was expressed as to whether City drainage requirements are appropriate now considering the 2018 storm event.

Concern was expressed regarding climate changing and that the potential assisted living facility area should remain as a natural buffer. A request was made for a FEMA flood plan study.

Concern was expressed regarding grading activities and dust. The applicant responded that the City imposes stringent dust control requirements, which the developer will fully comply with.

What is full buildout? +/- 5 years.

Concern expressed by drainage impacting Nava Adé. The engineer responded that the project will drain to the east.

An attendee commented that the project's density is much higher that the surrounding neighborhood, in not compatible, and would depress home values in Estancias del Norte and Nava Adé.

A comment was made that the proposed lots are less generous than Habitat houses in Los Soleras and the lot sizes should be increased.

An attendee commented that the traffic study needs to include Desert Sage, Presbyterian Hospital, and the Villa Sendero Apartments.

Concerns were raised regarding access to Monte de Sol. The applicant responded that direct access to Monte del Sol is being provided in accordance with the provisions of the Annexation Agreement.

A complaint was expressed regarding the lack of open space amenities on the south side of the project.

What is planned sequence of access?

1. Phase1, Beckner Road with secondary emergency access, potentially to Governor Miles Rd.

Presentation made by Richard Lange on behalf of the Nava Adé HOA:

1. Density – calculation is off, because it includes arroyo which can't be built on and shouldn't be counted

The applicant responded that the arroyo is not a designated FEMA flood plain, so this area counts toward the density calculation.

2. They are concerned about adequacy of drainage ponds.
3. Assisted living in NW corner adjacent to Nava Adé will be strenuously opposed.

A comment was made that the City process doesn't lead to best practices.

1. How far along are we with this plan? There is not enough flexibility at this point.
2. Wants terrain management ordinance to be upheld and applied.

Santa Fe Public Schools

Property & Asset Management
Residential Development Impact Information Form
School Notification as required by City Ordinance 14-8.18 AFCC 1987

1. Project Name: Vista del Sierra Subdivision
2. Location of Property: 3800 General Miles Road west of Richards and north of Beckner
3. Owner/Agent Name: Columbus Capital LLC

Mailing Address: c/o Sommer Karnes & Associates, LLC (Agent); PO Box 2476, Santa Fe, NM 87504

Phone & Fax: 505-989-3800

4. Unit Matrix

PROJECT EFFECT ON STUDENT POPULATION

Unit Type	Unit Quantity	Average Price
Single Family (detached) Single Family (attached) Townhome/ Apartment Multi-Family Commercial **NO AFFECT ON STUDENT POPULATION**	385	TBD

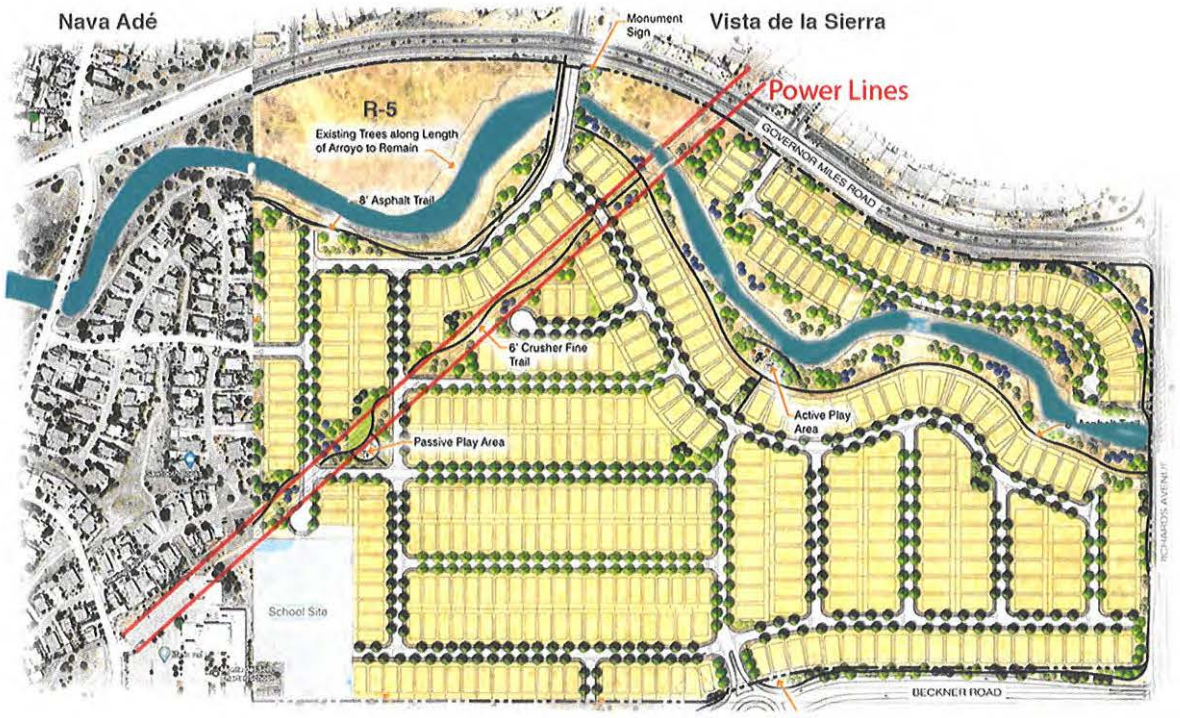
5. Elementary School Zone for Proposed Development: Pinon Elementary
6. Middle School Zone for Proposed Development: Milagro Middle School
7. High School Zone for Proposed Development: Santa Fe High School/Monte del Sol Charter School
8. Build-out Timeline (i.e. year(s); #/yr): 2025

Educational Services Center
610 Alta Vista
Santa Fe, NM 87505
Telephone (505) 467-2000
www.sfps.info

Submit completed form directly to:
Property & Asset Management,
Santa Fe Public Schools, 610 Alta Vista, Santa Fe, NM 87505

Nava Adé Homeowners Association
Board of Directors
November 2020

Issues and Requests Regarding the Proposed **Vista de la Sierra Subdivision Plan**



November 2, 2020

Planning Commissioners, Land Use Staff, Traffic Engineering and City Planners
City of Santa Fe
Santa Fe, NM

RE: Issues and Requests Regarding the Vista de la Sierra Subdivision Application

Dear Planning Commissioners, Land Use Staff, Traffic Engineering and City Planners,

I am writing at the request, and on behalf, of the Nava Adé HOA Board of Directors (NAHOA). This letter is in response to the ENN presentation on the proposed Vista de la Sierra subdivision (VdlS), follow-up meetings between the applicant and members of the Nava Adé HOA Task Force and the applicants submittal to the city. It is being sent to inform you about issues regarding the proposed plan's impact on Nava Adé and the larger community to which we belong.

Due to their gravity, we respectfully request your consideration regarding the following five matters, and that the development standards involved be based on worst-case scenarios including 100-year storm events:

1) ARROYO FLOODING AND DRAINAGE: The arroyo winding through Nava Adé is "downstream" of the Beaty South Tract (VdlS) where our neighborhood bears the impact of the volume and force of its Flash Flood water. In 2018 the repercussions of the Flash Flood included substantial damage to Nava Adé properties. (See Exhibit-1A and 1B) Due to the potential for Climate Change to increase the frequency and magnitude of Flash Floods here, historical predictions for dire Flash Floods need to be viewed accordingly.

In light of this and the impact that the proposed VdlS gabions and drainage ponds will have on the arroyo—combined with the fact that despite Pulte's resources, expertise and city approval Estancias De Las Soleras is having to reengineer their new-but-failed drainage ponds—NAHOA is gravely concerned. Consequently, we request that a thorough analysis of VdlS's proposed Erosion-Control Improvements and Retention-Drainage Ponds be conducted that takes into account the effects of these modifications and their impact on flood water volume and velocity that could result in damaging Flash Floods into Nava Adé.

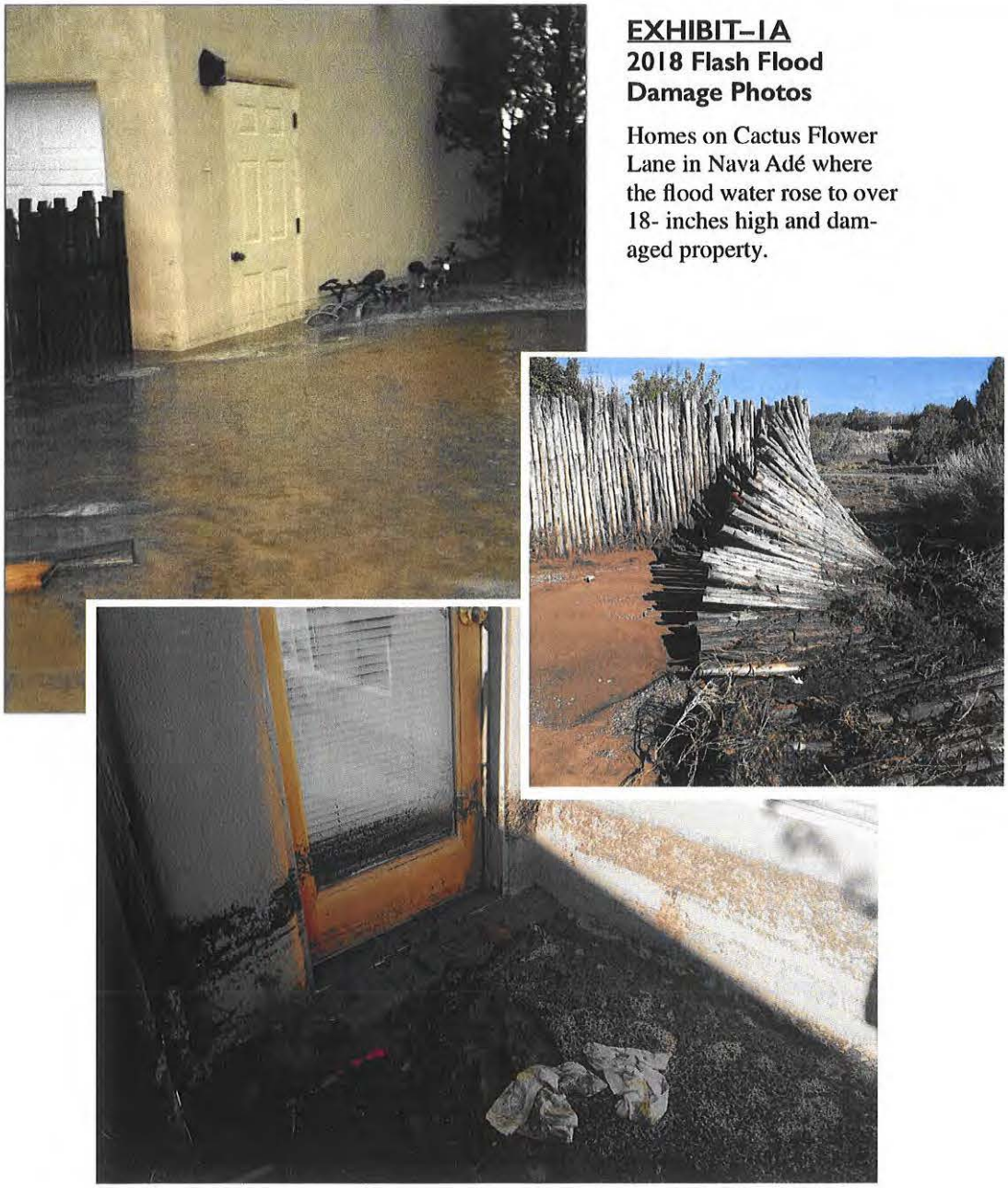
In addition, we ask that another engineering firm specializing in these matters be consulted for a "second opinion" if the slightest possibility exists that the applicant's engineering analyses may not be rigorous enough. Based on the above considerations, we therefore request that the following matters be evaluated accordingly and appropriate Conditions of Approval be made.

a) **The proposed Erosion Control Improvement (ECI)** gabions along the arroyo banks will likely result in channeling, which could increase flood water velocity. (Exhibit-1C) Combined with the ECI's hindrance of naturally occurring arroyo movement, this could increase damaging Flash Flooding in Nava Adé in spite of the city-proposed Arroyo Chamiso Nava Adé Berm.

b) **The release of stormwater run-off into the arroyo**—*at or above pre-development rates* via the retention-drainage ponds, land and street water run-off from VdlS—could increase the potential for damaging Flash Flooding downstream due to their ECIs, especially given the property's loss of permeable land due to the subdivision's development.

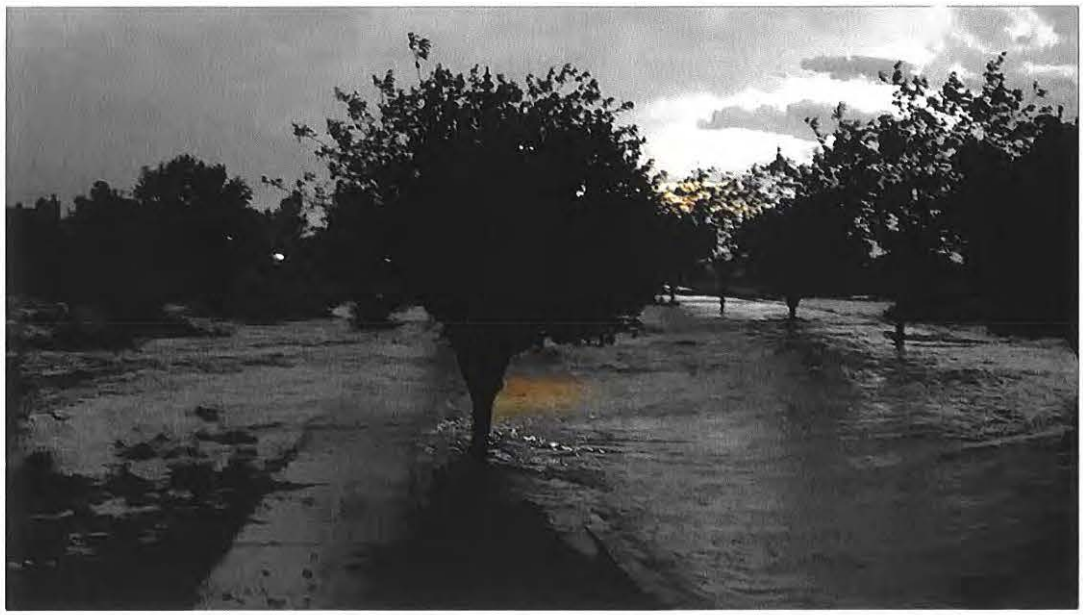
c) **Linear retention-drainage ponds** are being proposed alongside the arroyo which, if inadequately engineered and/or constructed, could be vulnerable to failure due to storm water erosion over time, rendering them useless and causing them to spill-over.

d) **Engineering standards for the proposed retention-drainage ponds** need to take into account factors that caused the failure in Pulte's drainage ponds, including environmental ones such as silt and dust from the area's ongoing construction.



EXHIBIT–1A
2018 Flash Flood Damage Photos

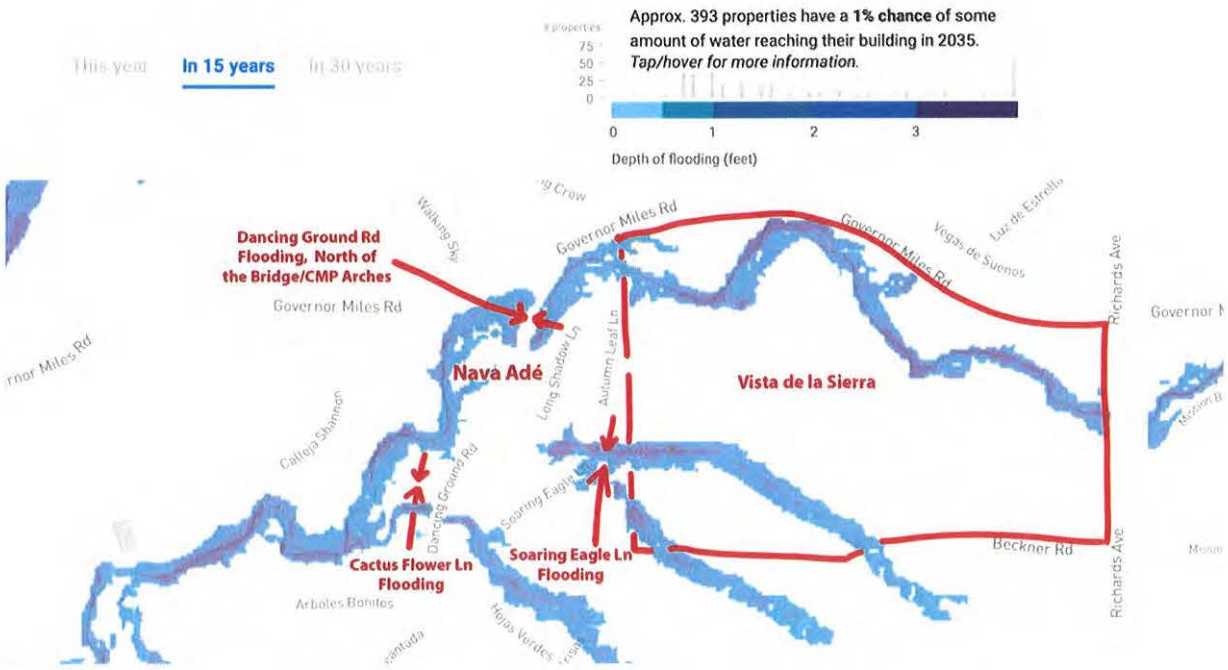
Homes on Cactus Flower Lane in Nava Adé where the flood water rose to over 18- inches high and damaged property.



2018 Flash Flood continues to surge over Dancing Ground Rd after storm ends.

EXHIBIT–1B

Flash Flood-Damaged Areas in Nava Adé



The First Street Foundation Flood Model Map, https://floodfactor.com/

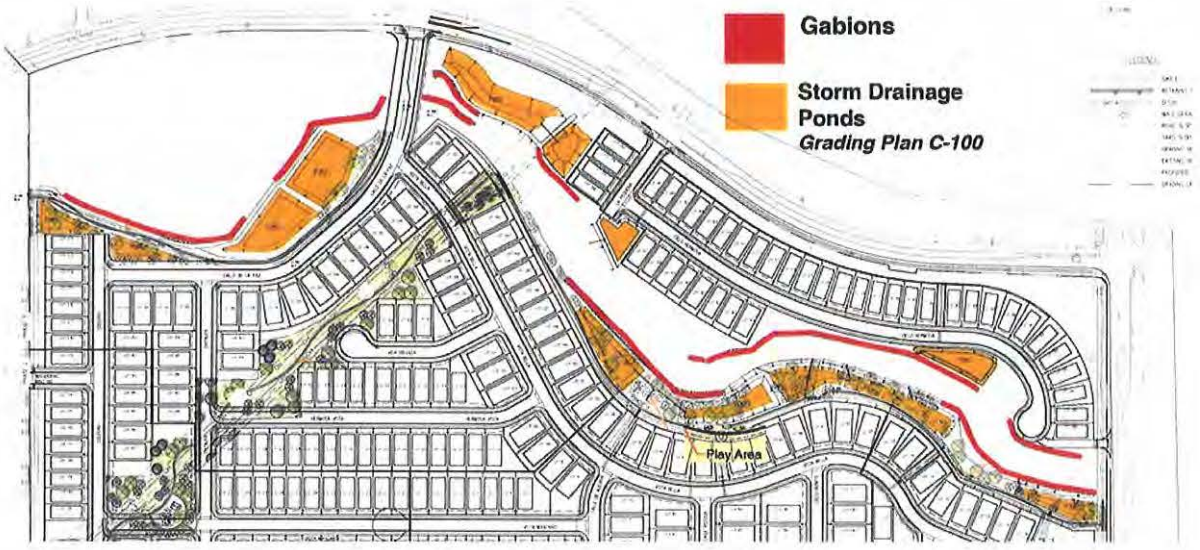
"Flood risk is increasing for 87507 (Nava Adé). As the environment and weather patterns change, flood risks will increase. Approximately 705 properties are already at risk in 87507, and within 30 years, about 706 will be at risk."

NOTE: this map model does not include 100-year flood data, nor does it include the flooding that happened in 2018 on Cactus Flower Ln or Dancing Ground Rd.

EXHIBIT-1C

Gabions & Linear Drainage Ponds

Gabions will likely channel Stormwater and possibly increase Flash Flooding into Nava Ade.



2) AN ACTUAL TRAFFIC IMPACT ANALYSIS (TIA) that includes post-COVID peak-hour school traffic as recommended by John Romero is essential. Such a study will better determine the effect of the increase in traffic from VdlS through Nava Adé streets and on Governor Miles Rd (GMR). It will also incorporate problematic and longstanding pre-COVID traffic conditions in Nava Adé and point to appropriate solutions for them.

Specifically, when Monte del Sol (MDS) School and nearby schools are in full session Nava Adé has been burdened by standstill traffic and gridlock at the intersection of GMR and Dancing Ground Rd (DGR). The severity of this fourteen-year old issue led to Traffic Engineering proposing and designing a roundabout at the intersection in 2015.[1] Converging traffic from multiple schools at the primary access road for Nava Adé and the intersection that bisects it point to a need for an actual TIA, one that starts at 3:45 PM when school traffic is at a peak. This, therefore, will better inform the city and developer on traffic mitigation solutions that may be needed such as the above-mentioned roundabout. A peak school-hour TIA is crucial prior to the Phase-2 road connection with Nava Ade, in which northwestern bound VdlS traffic will likely

[1] The roundabout was proposed in 2015 when Pulte's Subdivision in Las Soleras was being planned. However, due to the longstanding danger of having but a singular ingress and egress into Nava Adé via Dancing Ground Rd (south of Governor Miles Rd), NAHOA advocated for resolving the lack of secondary access by having Beckner Rd extended beyond Pulte's subdivision to Richards Ave. Without any commitment as to when another development in Las Soleras would happen (and, therefore, have some future development tasked with constructing the Beckner Rd extension), NAHOA chose to not postpone the opportunity further. That decision resulted in the roundabout not getting built. Instead, it was hoped that the road extension, and connecting Nava Adé roads to it, would eliminate most of the gridlock on DGR. Unfortunately, it did not.

cut through Nava Ade to GMR and west to Cerrillos Rd thereby potentially adding to gridlock on DGR.

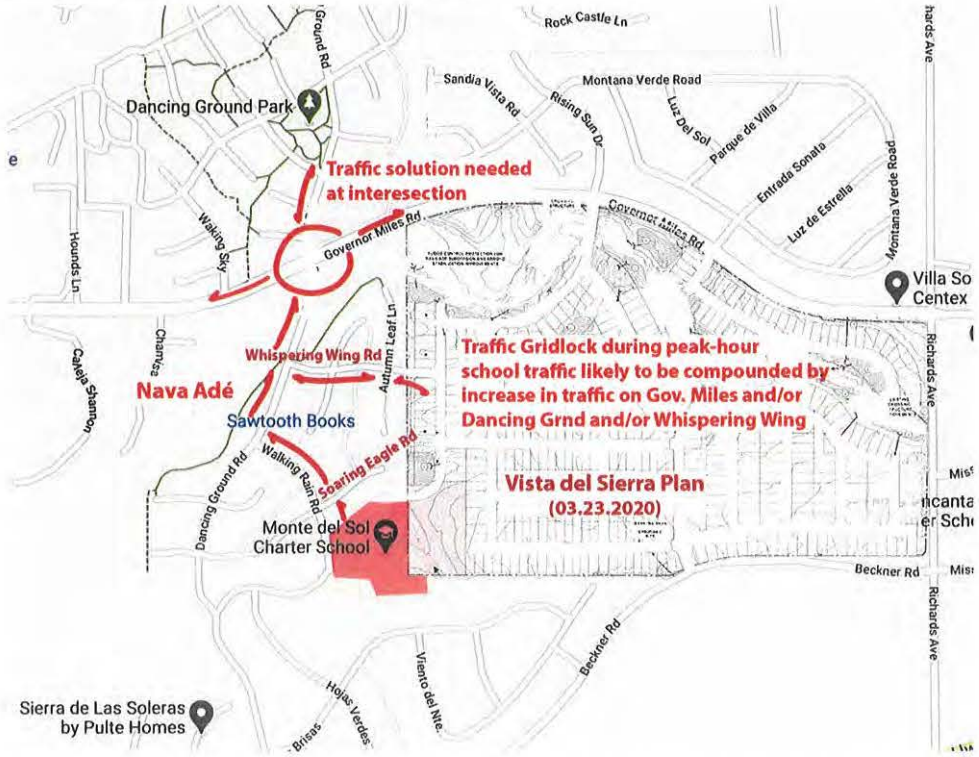
Consequently, as a Condition of Approval, we ask that any traffic mitigation solutions indicated in this TIA be in place prior to opening the road connections in Phase-2 and Phase-3. The rationale for this request includes the following factors:

a) **Gridlock on Dancing Ground Rd at Governor Miles Rd:** When schools reopen, post-COVID gridlock will only increase as VdlS gets built and traffic from it cuts through Nava Adé or uses GMR. Moreover, crossing GMR is dangerous for pedestrians as no traffic controls or crosswalk exists. Exacerbating the danger is that Nava Adé's clubhouse and pool are south of GMR, which means residents and their children living north of GMR must cross the intersection to use those facilities. (Exhibit-2A)



EXHIBIT-2A
Traffic Gridlock in Nava Adé

Peak hour Monte del Sol School Traffic at a stand-still on Dancing Ground from Governor Miles to Walking Rain.



b) **Blocked Access on Soaring Eagle Lane:** In addition, residents on Soaring Eagle Lane often have been blocked from accessing Walking Rain Rd by gridlocked school traffic.

c) **Traffic on Whispering Wing Rd:** Whispering Wing Rd is a narrow residential street with driveways opening onto it. An increase in traffic on Whispering Wing by northbound VdlS drivers traveling to and from GMR and DGR, especially at peak traffic hours, could create significant problems for its residents when Phase-2 provides VdlS it's only northbound road access. (Exhibit-2B)

EXHIBIT– 2B

Phase 2b opens Northbound road access for VdlS thru Nava Adé



3) CONSTRUCTION & DUST MITIGATION: Nava Adé residents suffered property damage and health issues as a result of horrific Dust Storms from grading operations during Las Soleras's construction. The severity of this issue was well covered at a 2017 Planning Commission Hearing. (See Exhibit-3) Based on Nava Adé having already experienced the consequences of inadequate dust mitigation measures, we request that the following measures be included in the VdlS Conditions of Approval:

a) The developer will only implement the grading of one phase of the development at a time, and not grade another phase until the previous one has been completed.

b) Due to the proximity of Nava Adé homes, grading-contractor operations stop when wind speeds cause excessive dust bleeding into the neighborhood as determined by the City Land Use department.

c) If only one water truck is on duty, and excessive dust bleeds into the neighborhood due to the time it takes to refill the tanker, that a second water truck be employed.

d) All staging, parking areas and roads used as part of the development shall be appropriately stabilized and/or graveled to mitigate dust, and that all such areas shall be included in the building permit grading plans for review and approval.

e) Tackifier will be used on exposed non-traffic parcels under development.

f) Code-enforcement officers are to be on site every day of operations to ensure city code and the grading plan are adhered to, including the ground being stabilized, and that construction be shut down when no water trucks, or code-enforcement officers, are on site.

g) No construction vehicles for VdlS be permitted to use Nava Adé streets.

h) Drainage issues during construction are to be included in the city's drainage analysis, including any potential for a sluiceway between our subdivisions that might funnel rainwater into the yards of homeowners on Autumn Leaf Lane, particularly those at either end of the street.

i) The Land Use Director or his/her designee may suspend construction of any development for up to 30 days for multiple violations of these conditions.

EXHIBIT– 3 Severity of Grading Dust Issues affecting Nava Adé



Dust from Las Soleras Grading, Howling Wolf Lane, Spring 2016

PLANNING COMMISSION, July 6, 2017

Case #2017-25. Estancias de Las Soleras Unit 2-B Preliminary Subdivision Plat

Excerpts from the Hearing Minutes:

"Mr. Chavez (Nava Adé resident) said, Three neighbors have recently moved out and many who remain are also suffering from respiratory issues. It is not healthy, and we have property damage occurring. No one pays to clean the carpets and upholstery. It is a constant nightmare. This is a regular occurrence and we don't know when it will happen next. The developers said they would increase the water trucks. But one of the graders said they have to wait for the trucks to line up when there is a big wind event. And there is not enough water. By the time the trucks fill up with water, it is too late and the residents have all been enveloped in the dirt."

" Commissioner Hochberg said it was frustrating. He pointed out that these parties are responsible and this citizen (Mr. Chavez) shows the Commission photos of a very bad condition … this is a public health situation that affects people's respiration. If it is a public nuisance, someone should go to court for the power to shut things down when they occur with various degrees of severity. <snip> He asked what the Commission could do. Somebody has to have that power when it gets out of hand."

" Commissioner Hiatt: It didn't occur to him when they approved that project that dust would be a problem and this is not a few weeks but a few years. He <snip> was not satisfied it (what dust mitigation has been done) is enough, especially for those developments coming down the pike."

4) PARKS & TRAIL: Given the limited dimensions of residential lots in VdlS and the surrounding community, many of which are merely patio size, Parkland Spaces for recreational purposes are vitally important. In view of this, the proposed location of the larger of two separate Parks (both of which total 2.97-acres) is sited under, and alongside, PNM Power Lines. Due to the Power Lines ominous structures and electromagnetic fields, the location is uninviting at best, and dangerous at worse.[2] Moreover, the community recreational opportunities and associated psychological benefits are severely restricted by having the proposed Open Space tracts situated under Power Lines, in the extensively gabion-lined arroyo, and on asphalt trails over drainage ponds. Therefore, the neighborhood's need for a single, full-size and safe improved Park is important in fulfilling the recreational needs of the future community. (See Exhibit-4A) Not doing so could result in VdlS residents relying on the only two available improved Parks in the area that are outside of the proposed development and necessitate crossing GMR (which lacks pedestrian crossings) to use them. (See Exhibit-4B)

We therefore request that the following measures be considered for Conditions of Approval:

a) Require that the improved Park be extended and moved further away from PNM Power Lines.

b) Require that the improved Park be a single 2.97-acre tract.

c) Ensure the proposed retention-drainage ponds will enable the above-mentioned Trail path to be useable and positioned well above stormwater levels.

d) Connect the trail in the northwestern corner of VdlS in the same location as the existing 20-year old dirt trail which is in the Open Space above Nava Adé, north of Manholes 19 and 20 and the existing clusters of piñons and junipers situated there. (Exhibit-4C)

e) Connect the trail under the power lines on VdlS's southwestern corner to the Las Soleras trail system via Soaring Eagle Lane in Nava Adé.

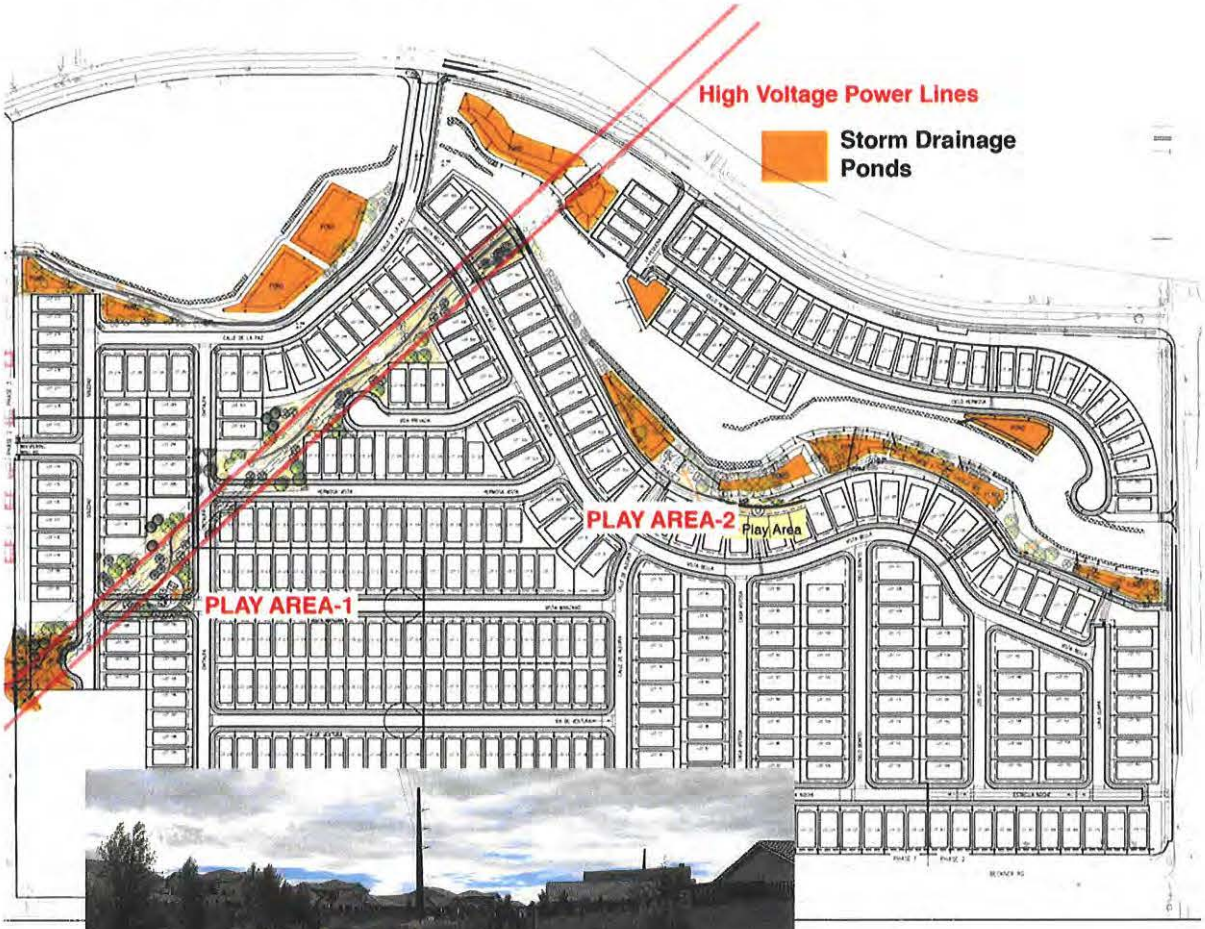
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[2] **Dangers of High-Voltage Power Lines:** *Tom Dominguez, Northern Operations Engineering Supervisor:* "The lines (over the Beaty South Tract) are **PNM's 115 kV transmission lines**."
www.hud.gov/sites/documents/41502HBHSGH.DOC Valuation Analysis for Single Family One- to Four-Unit Dwellings: For the purpose of this Handbook, a High-Voltage Electric Transmission Line is a power line that carries high voltage between a generating plant and a substation. These lines are usually 60 Kilovolts (kV) and greater, and **are considered hazardous**.
https://www.niehs.nih.gov Childhood Leukemia Close to High-Voltage Power Lines – the Geocap study, 2002–2007 British Journal of Cancer(April 4 2013)
"The National Institute of Environmental Health Sciences concluded … that **ELF-EMF exposures cannot be recognized as entirely safe** because of weak scientific evidence that exposure may pose a leukemia hazard."

EXHIBIT–4A

Split Park & Drainage Ponds

The Park is split into two "play Areas' with Storm Drainage Ponds and Power Lines making up most all of the proposed Parkland tracts. In addition…





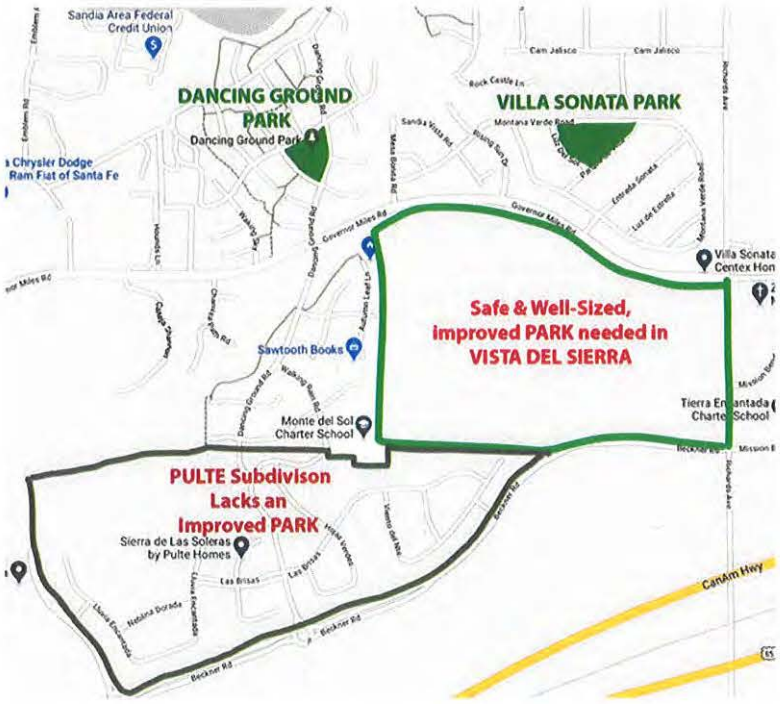
…a Storm Drainage Pond's designation and use for recreational purposes is most restrictive—and worrisome when located on both sides of the 'Play Area' above.

(Photo of Drainage Pond in Pulte's Las Soleras Subdivision)

c

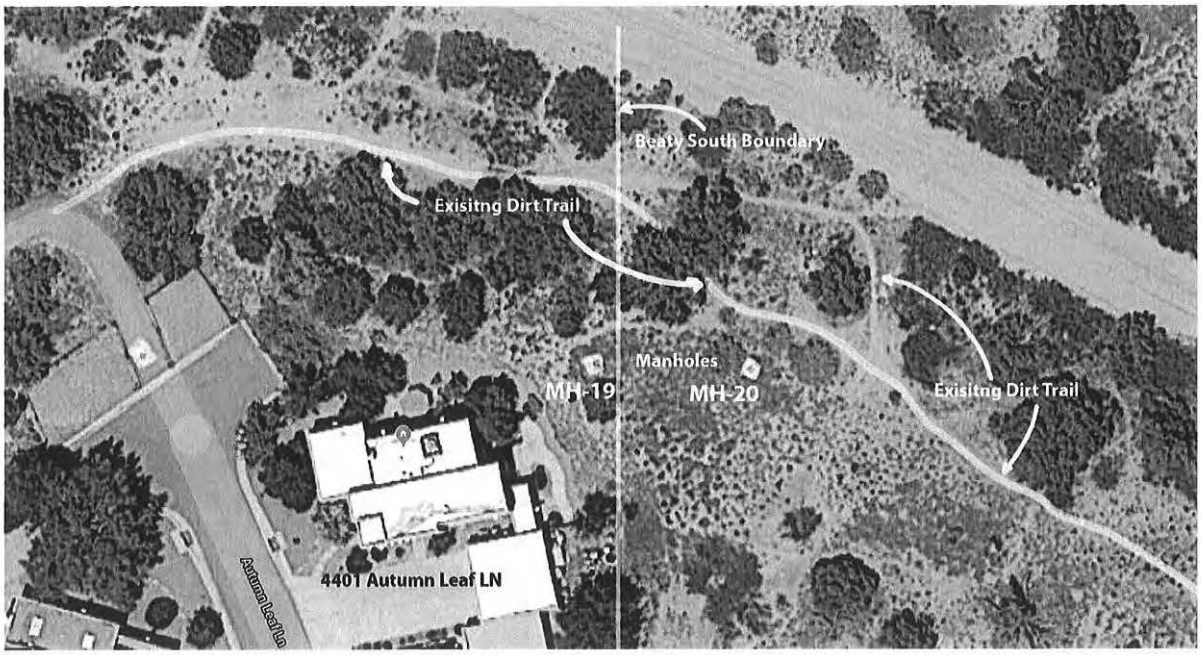
EXHIBIT– 4B Limited Community Park Availability

Because Las Soleras lacks a Neighborhood Park, Villa Sonata Park and Dancing Ground Park are the only parks currently available for the neighboring communities.



EXHIBIT– 4C Satellite Map - Trail Connection to Nava Ade

The existing dirt Trail is positioned north of Manhole Covers 19 and 20 and a cluster of eight Pinions and Junipers on Open Space that provides homeowners a natural barrier to Governor Miles Rd traffic and privacy for both homeowners and trail users.



5) TRACT-B, RELATED FLOODING: In 2018 rainwater from Monte de Sol's (MdS) parking lot ran into Nava Adé, contributing to the failure of our drainage easements that caused Soaring Eagle streets and yards to flood. We believe the school's inadequate drainage design was approved by the City of Santa Fe, and that an adjacent structure built atop their water-pathway to the drainage pond is the primary problem. We therefore ask that the city:

a) Confirm that the additional structures on the lower parking area were constructed under a city building permit.
b) Confirm that potential impacts on existing drainage ponds are reviewed as part of this review process.
c) If potential impacts are confirmed in item b) above, include the drainage issue in the city's analysis of the VdlS application in view of Monte de Sol receiving exemptions from the developer.
d) Review the 3.2-acres provided by VdlS, given that the school is making modifications to their property that could exacerbate drainage issues, potentially damaging our community again.

In conclusion, we respectfully ask that above-mentioned measures be included in the Conditions of Approval for Vista de la Sierra's application. Your consideration on these matters is deeply appreciated.

Sincerely,

Richard Lange
Chairman, Nava Adé HOA Task Force on the Beaty South Plan

Mary Rankovich
Director and Task Force Liaison, Nava Adé HOA Board of Directors

cc: Noah Berke, Planner Manager, City Land Use Department
Donna Wynant, Case Manager, City Land Use Department
Elias Isaacson, Land Use Director, City of Santa Fe
Melissa McDonald, Acting Director, City Parks Division
Dee Beingessner, City Engineer, Engineering Division Manager
Erick Aune, Senior Planner, Metropolitan Planning Organization
Jeremy Martinez, Administrator, City Traffic Engineering
Karen Heldmeyer, Santa Fe Neighborhood Network
Jennifer Jenkins, JenkinsGavin Land Use Management

Addendum to
Nava Ade HOA's Issues and Requests Regarding the Proposed Vista de la Sierra Subdivision Plan

This is in regard to Issue Number One on Arroyo Flooding and Drainage in our submittal to Planning Commissioners.

The 2018 Flash Flood that did substantial damage to Nava Adé is not officially seen or calculated as a hundred-year event. Nevertheless, due to its occurrence and Climate Change considerations, Nava Ade has requested that Vista de la Sierra (VdlS) plans for arroyo improvements and drainage ponds be engineered in terms of worst-case scenarios, i.e. those that are beyond one-hundred year events.

Because we received the VdlS Stormwater Report after our submittal was sent to the city, we have the following comment and request to make on this issue.

Although drainage ponds in a subdivision are understandably required to be maintained by them, Vista de la Sierra ponds and arroyo improvements present an exception. First, some arroyo improvements and stabilization are needed regardless of VdIS's being developed. Second, other improvements ostensibly include all drainage ponds that border the arroyo. These pond are specifically intended to control stormwater runoff into the arroyo and prevent Flash Flood damage to Nava Ade and other downstream properties. Therefore, the outcome of the ponds maintenance directly affects Nava Ade, and not VdlS properties. To adequately maintain those improvements by volunteer homeowners on a HOA board that can become underfunded, could result in dire Flash Flood consequences for Nava Ade.

As a Condition of Approval we therefore ask that the arroyo improvements, which includes the drainage ponds that border the development, and responsibility for their maintenance, be dedicated to the city.

Thank you for your consideration,

Richard Lange

Richard Lange
Chairman, NAHOA Task Force on Beaty South Plan
--
505.204.6358
4401 Autumn Leaf Lane
Santa Fe, NM 87507

City of Santa Fe, New Mexico

Planning Commission

Exhibit E

Applicant Submittals

- Letter of Application
- Preliminary Subdivision Plat Application
- Variance Application
- Letters of Owner & Applicant Authorization
- Warranty Deed & Lot of Record Plat
- Annexation Ordinance/Agreement
- Rezone Ordinance
- Drainage Report
- Traffic Impact Study
- SFHP Proposal
- Archaeological Clearance Permit
- ENN Meeting Notes
- Utility Service Application
- Traffic Impact Analysis
- Subdivision Plans
  - (Full Plan Set in Planning Commissioners Binder and as a separate pdf)

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT

September 21, 2020

Donna Wynant, Senior Planner
City of Santa Fe Current Planning Division
200 Lincoln Ave.
Santa Fe, NM 87501

RE: Vista de La Sierra Preliminary Plat & Variance Applications
3800 Governor Miles Road

Dear Donna:

This letter is respectfully submitted on behalf of Branch Family Holdings, LLC in application for Preliminary Subdivision Plat approval for a 393-lot residential subdivision to be developed in three phases and a Variance from SFCC Table 14-7.2-1, for consideration by the Planning Commission at their meeting of November 5, 2020.

Project Summary

The 94.07-acre subject property is located at the southwest corner of Richards Ave. and Governor Miles Road and is zoned R-5. The property was annexed into the City and rezoned in 2007. The project, previously known as "Beaty South", was originally proposed as a 523-lot subdivision, with an overall density of 5.56 dwellings per acre resulting from application of the Santa Fe Homes Program 15% density bonus. The Annexation Agreement and Rezone Ordinance are attached for your reference. As part of this subdivision plat, two remainder tracts will be created at the northwest part of the site to be developed at a later time. This proposed 393-lot single family subdivision will be developed on the remaining 79.69 acres in three phases with a proposed density of 4.93 dwellings/per acre. In accordance with the Santa Fe Homes Program, 20% of the lots (79) will be developed with affordable homes.

Subdivision Approval Criteria

Our responses to the Subdivision Approval Criteria are outlined below.

(1) In all subdivisions, due regard shall be shown for all natural features such as vegetation, water courses, historical sites and structures, and similar community assets that, if preserved, will add attractiveness and value to the area or to Santa Fe.

The property is located in the Suburban Archaeological District and an Archaeological Clearance Permit was issued as part of the Las Soleras project. Subsequently, a Clearance Permit was issued by the City on March 5, 2020 (see attached) for a previously unsurveyed 4-acre portion of the property.

The Project shows due regard for natural features and enhancement of community assets through the provision of parks, open space, and public trail improvements. In addition, bank stabilization and erosion mitigation measures are being constructed along the arroyo to address potential flood hazards for downstream properties.

(2) The planning commission shall give due regard to the opinions of public agencies and shall not approve the plat if it determines that in the best interest of the public health, safety or welfare the land is not suitable for platting and development purposes of the kind proposed. Land subject to flooding and land deemed to be topographically unsuited for building, or for other reasons uninhabitable, shall not be platted for residential occupancy, nor for other uses that may increase danger to health, safety or welfare or aggravate erosion or flood hazard. Such land shall be set aside within the plat for uses that will not be endangered by periodic or occasional inundation or produce unsatisfactory living conditions. See also Section 14-5.9 (Ecological Resource Protection Overlay District) and Section 14-8.3 (Flood Regulations).

There is no FEMA flood plain on the property. The site is gently sloped and suitable for development.

(3) All plats shall comply with the standards of Chapter 14, Article 9 (Infrastructure Design, Improvements and Dedication Standards).

The Subdivision Plat complies with the standards of Chapter 14, Article 9.

(4) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with the provisions of Chapter 14 unless a variance is approved concurrently with the plat.

The property contains no existing nonconformity. No nonconformity is being created with this Subdivision Plat.

(5) A plat shall not be approved that creates a nonconformity or increases the extent or degree of an existing nonconformity with applicable provisions of other chapters of the Santa Fe City Code unless an exception is approved pursuant to the procedures provided in that chapter prior to approval of the plat.

Please refer to the answer to (4) above.

Access and Traffic

The project will be accessed via new full access roadway connections to Governor Miles Road and Beckner Road. In addition, Phase 1 will connect to Viento del Norte, an existing stub street in Estancias de Las Soleras and Phase 2 will connect to Whispering Wing, an existing stub street in Nava Adé. A roundabout will be constructed at the Beckner Road access in Phase 1 and Beckner Road will be urbanized east to Richards Avenue. The Governor Miles access will be

constructed in Phase 3. Since two access points are required for more than thirty lots, a secondary 20-foot emergency-only access drive will be constructed as part of Phase 1 where Estrella Noche terminates at Richards Ave. just north of the Beckner Road intersection. Similarly, the lots north of the arroyo in Phase 3 will be served with an emergency-only drive connecting the cul-de-sac to Richards Ave. The access points will be gated and equipped with Opticom strobes.

The subdivision roads will be built to sub-collector standards within a 50-foot right-of-way with parking on one side of the street. Per the requirements of SFCC Table 14-8.6-1: Parking and Loading Requirements, a minimum of two off-street parking spaces will be provided for each dwelling unit.

A Traffic Impact Study was conducted by Terry Brown, P.E. and is submitted herewith for your reference. The Study's recommendations are as follows:

Phase 1

- Construct the intersection of Beckner Rd./Calle de La Alegra as a standard at-grade unsignalized intersection (future volumes will require a single lane circulating roundabout, so developer may opt to construct the roundabout at the onset of the project)
- If not a roundabout, construct an eastbound left turn deceleration lane on Beckner Rd. at Calle de La Alegra. The new eastbound left turn deceleration lane should be designed and constructed to a length of 400 feet including transition (150 ft. long transition)
- If not a roundabout, construct a westbound right turn deceleration lane on Beckner Rd. Calle de La Alegra. The new westbound right turn deceleration lane should be designed and constructed to a length of 370 feet including transition (150 ft. long transition).

Full Buildout (2034 Horizon Year)

- Adjust signal timing at the intersection of Governor Miles Rd./Richards Ave. Existing geometry with adjusted signal timing will accommodate forecast 2034 AM and PM Peak Hour volumes.
- Construct dual lane circulating roundabout at the intersection of Beckner Rd./Richards Ave.
- Convert the intersection of Beckner Rd./ Calle de La Alegra to a single lane circulating roundabout (it not already done)
- Construct the Governor Miles Road access points for Vista de La Sierra to align with Rising Sun Dr. and Entrada Sonata. Both access points should be full access unsignalized intersections. The access aligned with Entrada Sonata can be a single approach (northbound) access. It is suggested that the access aligned with Rising Sun Dr. be constructed with two approach lanes (northbound) – one for exclusive left turns and one for through/right turns. A westbound left turn deceleration lane on Governor Miles Rd. already exists for this access point.
- Construct a westbound left turn deceleration lane on Governor Miles Rd. at the new access that aligns with Rising Sun Dr. The westbound left turn deceleration lane should be designed and constructed to a length of 150 feet long including 50 ft. long transition.

Ultra-Horizon Year (2040)

- Construct a northbound right-turn lane on Richards Ave. at Governor Miles Rd. (northbound right turn movements can be signalized or not signalized).

As stated above, the roundabout will be constructed in Phase 1. In addition, a temporary traffic signal is planned for the Richards Ave./Beckner Rd. intersection to be constructed as part of the Villa Sendero apartment project.

Terrain Management

The property slopes from the southeast to the northwest with an overall grade change of approximately 55 feet. An arroyo traverses the northern part of the property flowing from east to west. The Drainage Management Plan for the development and the arroyo properly addresses all aspects of drainage and complies with the City of Santa Fe terrain management regulations. The development will control storm water using a series of onsite storm water ponds to collect, detain and release storm water runoff at pre-developed flow rates. Drainage structures will be constructed to release storm water into the arroyo in a stable manner. Other drainage structures will be constructed to address existing erosion and slope stability issues and to stabilize the arroyo. Existing storm drains that discharge to the property that are causing erosion are also being addressed, such as the crossing structure of Richards Avenue. Currently some adjacent areas are subject to flooding either by upstream basins or by the arroyo itself. The proposed improvements will intercept and redirect these flows and provide the necessary drainageway protection.

Landscaping, Open Space & Trails

Street trees will be provided along the roadways and the open space, parks, and detention ponds will landscaped in accordance with Code requirements. All disturbed areas will be reseeded with a native grass seed mix.

In accordance with §14-8.15(C), parks and open space are being provided as outlined below:

Open Space	Required:	0.024 acres/dwelling unit or 9.43 acres
	Provided:	13.88 acres
Parks	Required:	0.006 acres/dwelling unit or 2.36 acres
	Provided:	2.97 acres

The park areas include a passive recreational area and an active play area, which are accessible via the trail network within the open space. Asphalt trails will be constructed within 20' public trail easements with two connection points to the existing Nava Adé trail network at each end of Autumn Leaf Lane. Please refer to the Landscape Plans for further information.

Water and Wastewater

The Project will be served with City of Santa Fe public water and sewer. There is an existing water main on the property adjacent to the overhead utility easement. New 10" and 8" public waterlines will be constructed in the roadways connected to this line, as well as existing off-site water mains at the following locations: Governor Miles Road (two locations) , Beckner Road, Richards Ave. (two locations), and Whispering Wing.

New 8" public sewer lines will be constructed in the roadways, which will connect to the public trunk line adjacent to the arroyo. In addition, sewer connections are proposed at Viento del Norte and an existing line in Nava Adé.

Archaeology

The property is located in the Suburban Archaeological District and an Archaeological Clearance Permit was issued as part of the Las Soleras project. Subsequently, a Clearance Permit was issued by the City on March 5, 2020 (see attached) for a previously unsurveyed 4-acre portion of the property.

School Site Dedication

In accordance with the provisions of the Annexation Agreement, the 3.14-acre Tract W will be dedicated to the Santa Fe Public Schools following recordation of the Phase 2 plat that creates this parcel.

Santa Fe Homes Program

In accordance with the provisions of the Santa Fe Homes Program ("SFHP"), the Project will provide 79 affordable homes (20% of the lot total). Please refer to the attached SFHP Proposal for more information.

Variance Request

With this application, we are requesting a variance from Table 14-7.2-1, Note 6 requiring an additional 5-foot side yard setback for any portion of a structure over 14 feet in height. The Variance Approval Criteria in §14-3.16(C) are addressed below.

(1) One or more of the following special circumstances applies:

(a) *unusual physical characteristics exist that distinguish the land or structure from others in the vicinity that are subject to the same relevant provisions of Chapter 14, characteristics that existed at the time of the adoption of the regulation from which the variance is sought, or that were created by natural forces or by government action for which no compensation was paid;*

In addition to the requisite affordable homes, the market rate homes will be moderately priced. Several factors are critical in order to achieve accessible home prices, including adequate density and home constructability. The unintended consequence of the additional second story setback is increased construction costs, resulting in increased home prices. This is contrary to the City's oft stated goal of expanding the supply of affordable housing.

(b) the parcel is a legal nonconforming lot created prior to the adoption of the regulation from which the variance is sought, or that was created by government action for which no compensation was paid;

N/A

(c) there is an inherent conflict in applicable regulations that cannot be resolved by compliance with the more-restrictive provision as provided in Section 14-1.7; or

N/A

(d) the land or structure is nonconforming and has been designated as a landmark , contributing or significant property pursuant to Section 14-5.2 (Historic Districts).

N/A

(2) The special circumstances make it infeasible, for reasons other than financial cost, to develop the property in compliance with the standards of Chapter 14.

The financial implications of the additional construction costs are higher home prices. It is the developer's intention to provide moderately priced homes and is seeking some modest relief from the City in support of this effort.

(3) The intensity of development shall not exceed that which is allowed on other properties in the vicinity that are subject to the same relevant provisions of Chapter 14.

The proposed R-5 subdivision is consistent with the existing surrounding neighborhoods. This variance request does not increase the intensity of development.

(4) The variance is the minimum variance that will make possible the reasonable use of the land or structure . The following factors shall be considered:

(a) whether the property has been or could be used without variances for a different category or lesser intensity of use;

The property has not been previously developed. The proposed subdivision is consistent with the property's R-5 zoning and the highest and best use given the

current housing shortage in Santa Fe. Therefore, a different category or lesser intensity of use is not in the best interest of the community.

(b) consistency with the purpose and intent of Chapter 14, with the purpose and intent of the articles and sections from which the variance is granted and with the applicable goals and policies of the general plan .

The provision of affordable housing and homes accessible to moderate income families is a key goal of the General Plan. Furthermore, it has been demonstrated that broad access to quality housing and increased home ownership are vital components of the health, safety, and welfare of the community.

(5) The variance is not contrary to the public interest.

As stated above, the public interest is served by an increased supply of affordable and moderately priced homes.

Early Neighborhood Notification

An Early Neighborhood Notification meeting was held on March 9, 2020 and subsequent meetings were held with HOA representatives and residents from Nava Adé and Estancias de Las Soleras. Discussions included questions about traffic, access to existing neighborhood streets, density, arroyo/flooding concerns, view impacts, etc. Notes from the meeting are attached for your review.

In support of these requests, the following documentation is submitted herewith for your review and consideration:

- Preliminary Plat Application
- Letter of Owner Authorization
- Warranty Deed & Lot of Record Plat
- Annexation Ordinance/Agreement
- Rezone Ordinance
- Drainage Report
- Traffic Study
- SFHP Proposal
- Archaeological Clearance Permit
- ENN Meeting Notes
- Drainage Report
- Preliminary Subdivision Plans

Please let me know if you have any questions or need additional information. Thank you for your consideration.

Sincerely,

Jennifer Jenkins, Principal

SUBDIVISION APPLICATION

Parcel Information

Project Name: **Vista de La Sierra Subdivision**

Address: **3800 Governor Miles Rd** Property Size: **79.69 acres**

Current Use of Land: **Vacant** Proposed Use of Land: **393 Residential Lots**

Does a Rezoning application accompany this application?	YES	NO	Are any variances required?	YES	NO
	☐	☒		☐	☒

Preapplication Conference Date: _____

Early Neighborhood Notice (ENN) meeting date: **March 9, 2020** Zoning: **R-5**

Check One: Preliminary Plat ☒ Final Plat ☐ UPC Number: **1-050-095-387-083**

Property Owner Information

Company Name: **Building Services of Santa Fe, LLP**

Name: _____
First *Last*

Address: **PO Box 4496**
Street Address *Suite/Unit #*

Santa Fe **New Mexico 87502**
City *State* *ZIP Code*

Phone: ( ) _____ E-mail Address: _____

Applicant/Agent Information (if different from owner)

Company Name: **Jenkins Gavin, Inc**

Name: **Jennifer Jenkins**
First *Last*

Address: **130 Grant Ave., #101**
Street Address *Suite/Unit #*

Santa Fe, NM 87501
City *State* *ZIP Code*

Phone: **(505) 820-7444** E-mail Address: **jennifer@jenkinsgavin.com**

Correspondence Directed to: ☐ Owner ☒ Applicant ☐ Both

Agent Authorization (if applicable)

I am are the owner and record title holder of the property located at: _____

I authorize **See attached letters of authorization.** to act as my agent to execute this application.

Submittal Checklist (Requirements found in Section 14-3.7 SFCC 1987)

☒ *Three (3) 24"x36" plan sets and one CD containing the same information as the paper set (PDF) are required. Please include the following:*

☒	Letter of Application (intent, location, acreage)	☐	Legal Lot of Record, Legal Description	☐	Preliminary Plat or Final Plat	☐	Landscape, Parking and Lighting Plan, Signage Specifications	☐	Terrain Management Plans (as required by Section 14-8.2 SFCC 2001)
☒	Traffic Impact Analysis (if required) **N/A**	☐	Sewer and Water Plan (Profiles and details – Final Plat only)	☐	Phasing Plan (if applicable) **N/A**	☐	Archaeological Clearance (if applicable)	☐	
Subdivisions per Section 14-3.7 SFCC 1987:									

Preliminary Plat (Section 14-3.7(B)(3) SFCC 1987)
See above for submittal requirements. See also Section 14-9 Infrastructure Design, Improvement and Dedication Standards.

Final Plat (Section 14-3.7(B)(4) SFCC 1987)
The final plat shall conform substantially to the preliminary plat as approved.

Signature

I hereby certify that the documents submitted for review and consideration by the City of Santa Fe have been prepared to meet the minimum standards outlined in the Land Development Code, Chapter 14 SFCC 1987. Failure to meet these standards may result in rejection of my application. I also certify that I have met with the City's Current Planning staff in a preapplication meeting to verify that the attached proposal is in compliance with the City's zoning and development plan requirements.

Signature: _____ Date: 9/21/20

A case manager will be assigned to your project and will notify you within 10 business days if any additional information is needed. After your application has been reviewed by City staff, you will be contacted by us regarding public notice requirements. A packet of information and instructions will be provided regarding the required mailing and sign posting. Please contact the Land Use Department staff at (505) 955-6585 with any questions.

PLANNING COMMISSION

VARIANCE APPLICATION

SUBDIVISION OR DEVELOPMENT PLAN STANDARDS

Parcel Information

Project Name: **Vista de la Sierra**

Address: **3800 Governor Miles Rd** Property Size: **79.69 acres**

Zoning: R-5 Proposed Use of Land: **Residential**

Does this project have a Final Development Plan approval? YES ☐ NO ☐ Case Number:

Early Neighborhood Notice (ENN) meeting date: Uniform Parcel Code Number: **1-050-095-387-083**

Preapplication Conference Date:

Property Owner Information

Company Name: Building Services of Santa Fe, LLP

Name: *First* *Last*

Address: **PO Box 4496** *Street Address* *Suite/Unit #*

Santa Fe, NM 87502 *City* *State* *ZIP Code*

Phone: ( ) E-mail Address:

Applicant/Agent Information (if different from owner)

Company Name: JenkinsGavin

Name: **Jennifer Jenkins** *First* *Last*

Address: **130 Grant Ave, Ste 101** *Street Address* *Suite/Unit #*

Santa Fe, NM 87501 *City* *State* *ZIP Code*

Phone: **(505) 820-7444** E-mail Address: **jennifer@jenkinsgavin.com**

Correspondence Directed to: ☐ Owner ☐ Applicant ☐ Both

Affidavit to Authorize Agent (if applicable)

I am/We are the owner(s) and record title holder(s) of the property located at:

I/We authorize See attached letter of authorization to act as my/our agent to execute this application.

Signed: Date:

Signed: Date:

Submittal Checklist

☐ *Six (6) 24"x36" plan sets and one (1) CD are required. Please include the following:*

☐	Letter of Application (intent, location, acreage)	☐	Statement addressing approval criteria	☐	Legal Lot of Record, Legal Description	☐	Development Plan (as defined by Section 14-3.8 SFCC 2001)	☐	Landscape, Parking and Lighting Plan, Signage Specifications
☐	Terrain Management Plans (as required by Section 14-8.2 SFCC 2001)	☐	Traffic Impact Analysis (if required)	☐	Proof of Compliance with Conditions of Annexation Approval (if applicable)	☐	Sewer and Water Plan (including profiles and details)	☐	ENN Meeting Notes

Variances from Subdivision Regulations (Section 14-3.16 (C) SFCC 1987)

(C) Approval Criteria

Subsections 14-3.16(C)(1) through (5) and, if applicable, Subsection 14-3.15(C)(6), are required to grant a variance.

(1) One or more of the following special circumstances applies:
   (a) unusual physical characteristics exist that distinguish the land or *structure* from others in the vicinity that are subject to the same relevant provisions of Chapter 14, characteristics that existed at the time of the adoption of the regulation from which the variance is sought, or that were created by natural forces or by government action for which no compensation was paid;
   (b) the *parcel* is a *legal nonconforming lot* created prior to the adoption of the regulation from which the variance is sought, or that was created by government action for which no compensation was paid;
   (c) there is an inherent conflict in applicable regulations that cannot be resolved by compliance with the more-restrictive provision as provided in Section 14-1.7; or
   (d) the land or *structure* is *nonconforming* and has been designated as a *landmark, contributing* or *significant property* pursuant to Section 14-5.2 (Historic Districts).

(2) The special circumstances make it infeasible, for reasons other than financial cost, to develop the *property* in compliance with the standards of Chapter 14.

(3) The *intensity* of *development* shall not exceed that which is allowed on other *properties* in the vicinity that are subject to the same relevant provisions of Chapter 14.

(4) The variance is the minimum variance that will make possible the reasonable use of the land or *structure*. The following factors shall be considered:
   (a) whether the *property* has been or could be used without variances for a different category or lesser *intensity* of use;
   (b) consistency with the purpose and intent of Chapter 14, with the purpose and intent of the articles and sections from which the variance is granted and with the applicable goals and policies of the *general plan.*

(5) The variance is not contrary to the public interest.

(6) There may be additional requirements and supplemental or special findings required by other provisions of Chapter 14.

Note: If application is being made for Development in Special Flood Hazard Areas, then justification must be provided with the above approval criteria and the criteria found in Section 14-3.10(E) SFCC 1987.

Signature

I hereby certify that the documents submitted for review and consideration by the City of Santa Fe have been prepared to meet the minimum standards outlined in the Land Development Code, Chapter 14 SFCC 2001. Failure to meet these standards may result in the rejection of my application. I also certify that I have met with the City's Current Planning staff in a preapplication meeting to verify that the attached proposal is in compliance with the City's zoning and development plan requirements.

Signature: _____ Date: 9/21/20

A case manager will be assigned to your project and will notify you within 10 business days if any additional information is needed. After you application has been reviewed by City staff, you will be contacted by us regarding public notice requirements. A packet of information and instructions will be provided regarding the required mailing and sign posting. Thank you, and feel free to contact the Land Use Department staff at (505) 955-6585 with any questions.

Vista de La Sierra Subdivision
Water Budget
September 21, 2020

TOTAL LOTS	**393**
SFHP LOTS	**79**
MARKET LOTS	**314**

PHASE 1 **128 LOTS** **26 SFHP LOTS** **102 MARKET LOTS**

LOT SIZE	QUANTITY	AFY/LOT	TOTAL AFY
< 6,000 sf	108	0.15	16.2
6,000 - 10,890 sf	20	0.17	3.4
PHASE 1	*128*		*19.6*
LESS SFHP LOTS	*26*	*0.15*	*3.9*
MARKET SUBTOTAL			*15.70*
COMMON AREA IRRIGATION			*0.67*
MARKET SUBTOTAL			*16.37*
9.8% LINE LOSS CONTINGENCY			*1.60*
PHASE 1 WATER DEMAND OFFSET			***17.98***

PHASE 2 **143 LOTS** **29 SFHP LOTS** **114 MARKET LOTS**

LOT SIZE	QUANTITY	AFY/LOT	TOTAL AFY
< 6,000 sf	130	0.15	19.5
6,000 - 10,890 sf	13	0.17	2.21
PHASE 2	*143*		*21.71*
LESS SFHP LOTS	*29*	*0.15*	*4.35*
MARKET SUBTOTAL	*114*		*17.36*
COMMON AREA IRRIGATION			*0.96*
PHASE 2 SUBTOTAL			*18.32*
9.8% LINE LOSS CONTINGENCY			*1.80*
PHASE 2 WATER DEMAND OFFSET			***20.12***

PHASE 3 **122 LOTS** **24 SFHP LOTS** **98 MARKET LOTS**

LOT SIZE	QUANTITY	AFY/LOT	TOTAL AFY
< 6,000 sf	108	0.15	16.2
6,000 - 10,890 sf	14	0.17	2.38
PHASE 3	*122*		*18.58*
LESS SFHP LOTS	*24*	*0.15*	*3.60*
MARKET SUBTOTAL	*98*		*14.98*
COMMON AREA IRRIGATION			*3.32*
PHASE 2 SUBTOTAL			*18.30*
9.8% LINE LOSS CONTINGENCY			*1.79*
PHASE 3 WATER DEMAND OFFSET			***20.09***

PROJECT BUDGET	393 LOTS	59.89

TOTAL WATER DEMAND OFFSET	58.19

SF-1 SHORT FORM WARRANTY DEED—Rev. 5-75—New Mexico Statutory Form THE VALLIANT CO. ALBUQUERQUE, N. M.

WARRANTY DEED

462621

John Ardissone and May T. Ardissone, whose address is 1009 Tierra Drive, Santa Fe, New Mexico 87501, for consideration paid, grant to Building Services of Santa Fe, a partnership

whose address is c/o J. H. Burttram, Esq., P.O. Box 2402 Santa Fe, New Mexico 87501

the following described real estate in Santa Fe County, New Mexico:

SE 1/4 of Section 8, Township 16 North, Range 9 East, N.M.P.M., more particularly described on Exhibit "A" attached hereto and made a part hereof.

Subject to easements, restrictions exceptions and reservations of record.

with warranty covenants.

WITNESS their hand and seal this 30 day of March, 1983

X John Ardissone (Seal) (Seal)

May T. Ardissone (Seal) (Seal)

ACKNOWLEDGMENT FOR NATURAL PERSONS

STATE OF NEW MEXICO }
ss.
COUNTY OF Santa Fe }

The foregoing instrument was acknowledged before me this 30 day of March, 1983,

by John Ardissone and May T. Ardissone.
(Name or Names of Person or Persons Acknowledging)

My commission expires:
(Seal)

OFFICIAL SEAL
Signature [illegible]
JAMES V. HOBBS, JR.
NOTARY PUBLIC-NEW MEXICO
My Commission Expires: 2/20/83

FOR RECORDER'S USE ONLY
COUNTY OF [illegible] STATE OF NEW MEXICO 516,336
I hereby certify that this instrument was filed for record on the 16th day of May, 1983 at 2:96 o'clock P.M. and was duly recorded in book 462 page 622 of the records of Santa Fe County
Witness my hand and seal of office
County Clerk, Santa Fe, New Mexico
By Mabel S. Salazar Deputy

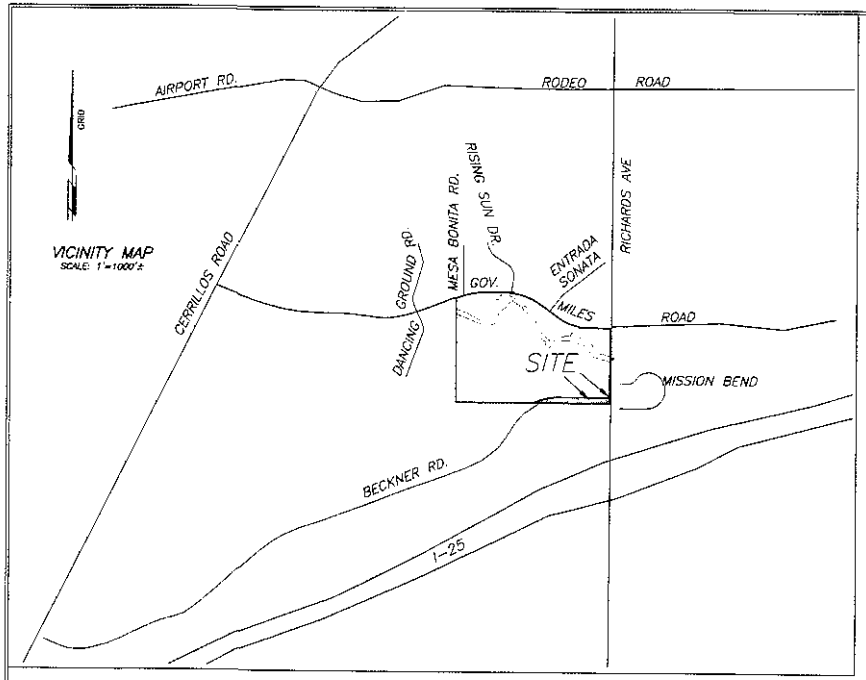
ACKNOWLEDGMENT FOR CORPORATION

STATE OF NEW MEXICO }
ss.
COUNTY OF }

The foregoing instrument was acknowledged before me this
day of , 19 ,
by
(Name of Officer)
(Title of Officer) of
(Name of Corporation Acknowledging)
a corporation, on behalf of said corporation.
(State of Incorporation)

My commission expires:
(Seal)

804009



DEDICATION AND AFFIDAVIT

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED OWNER(S) HAVE CAUSED TO DEDICATE THOSE LANDS SHOWN HEREON FROM LOT 3 AND THAT SAID PARENT LOT IS NOW KNOWN AS LOT 3A.

PURSUANT TO THE IRREVOCABLE OFFER TO DEDICATE PUBLIC RIGHT-OF-WAY AS SET FORTH ON PLAT ENTITLED OFFER TO DEDICATE RIGHT-OF-WAYS FOR RICHARDS AVE. AND BECKNER ROAD RECORDED IN PLAT BOOK 710, PAGES 21-22 IN THE OFFICE OF THE SANTA FE COUNTY CLERK ON NOVEMBER 9, 2009 THE BECKNER ROAD EXTENSION IS HEREBY DEDICATED AS PUBLIC RIGHT-OF-WAY IN FEE SIMPLE TO THE CITY OF SANTA FE. THE OFFER TO DEDICATE LAND AND EASEMENTS FOR RICHARDS AVENUE AS SET FORTH ON THE ABOVE REFERENCED PLAT SHALL REMAIN IN EFFECT. FOR RICHARDS AVENUE THIS OFFER TO DEDICATE SHALL INCLUDE A CONTINUOUS STRIP OF LAND 10 FEET IN WIDTH ADJOINING RICHARDS AVENUE WITHIN LOT 3. THE OFFER TO DEDICATE SHALL INCLUDE CONSTRUCTION MAINTENANCE EASEMENTS AS NEEDED FOR ROADWAY APPURTENANCES INCLUDING BUT NOT LIMITED TO THE SLOPES AND DRAINAGE STRUCTURES. SAID OFFER TO DEDICATE MAY BE ACCEPTED BY THE GOVERNING BODY UPON THEIR DETERMINATION THAT SAID DEDICATION IS NEEDED FOR AN APPROVED PROJECT FOR RICHARDS AVE. OWNERS ACKNOWLEDGE THAT REASONABLE ADJUSTMENTS TO THE PRECISE LIMITS OF RIGHT-OF-WAY BASED ON THE FINAL ROADWAY DESIGN MAY BE REQUIRED BY THE PLANNING COMMISSION AT THE TIME OF SUBDIVISION PLAT APPROVAL.

STORM DRAIN EASEMENT HEREBY GRANTED TO LAS SOLERAS VILLAGE, LLC. FOR CONSTRUCTION OF STORM DRAINAGE STRUCTURES AND TO THE CITY OF SANTA FE FOR MAINTENANCE OF A STORM DRAIN STRUCTURES AND MITIGATION OF STORM WATERS.

THE SLOPE CONSTRUCTION AND MAINTENANCE EASEMENT IS HEREBY GRANTED TO THE LAS SOLERAS VILLAGE, LLC. FOR THE CONSTRUCTION OF ROADWAY SLOPES AND TO THE CITY OF SANTA FE FOR MAINTENANCE OF SAID SLOPES UPON THE ACCEPTANCE OF THE ROAD EXTENSION.

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:
PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM"), A NEW MEXICO CORPORATION, (PNM ELECTRIC) FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.

NEW MEXICO GAS COMPANY FOR INSTALLATION, MAINTENANCE, AND SERVICE FOR NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.

CENTURY LINK FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES.

COMCAST FOR THE INSTALLATION, MAINTENANCE, AND SERVICE SUCH LINES, CABLE AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE SERVICES.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE WITHIN THE EASEMENT, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENT, WITH THE RIGHT AND PRIVILEGE OF GOING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT OF WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRICAL TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN, POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS FOR ELECTRIC TRANSFORMERS/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMERS/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

EASEMENTS SHALL BE BINDING UPON THE UNDERSIGNED AND THEIR SUCCESSORS AND ASSIGNS

THIS PLAT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNER(S). THIS PLAT CONTAINS 98.73 ACRES, MORE OR LESS. THIS DEDICATION LIES WITHIN THE PLATTING JURISDICTION OF THE CITY OF SANTA FE, N.M.

UNDIVIDED INTEREST OWNERS OF LOT 3

Linda C. Zemke, Trustee for LCZ Trust
LINDA C. ZEMKE, GENERAL PARTNER
BUILDING SERVICES OF SANTA FE

STATE OF NEW MEXICO)SS
COUNTY OF Bernalillo)
ON THIS 10 DAY OF May 2016 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY LINDA C. ZEMKE, GENERAL PARTNER OF BUILDING SERVICES OF SANTA FE Trustee.

NOTARY PUBLIC 12-4-19 COMMISSION EXPIRES

OFFICIAL SEAL
DIANE ROSSETTI
Notary Public
State of New Mex.
My Comm. Expires 12-4-19

TOM BEATY
FOR: BUILDING SERVICES OF SANTA FE & BEATY FAMILY LTD CO.

STATE OF NEW MEXICO)SS
COUNTY OF SANTA FE)
ON THIS 2 DAY OF June 2016 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY TOM BEATY FOR BUILDING SERVICES OF SANTA FE & BEATY FAMILY LTD CO.

NOTARY PUBLIC 5/23/19 COMMISSION EXPIRES

OFFICIAL SEAL
Victoria M. Dalton
NOTARY PUBLIC-STATE OF NEW MEXICO
My Commission Expires 5/23/19

Margaret Gardner Ward, Co-Trustee
MARGARET GARDNER WARD, CO-TRUSTEE

Kathryn Gardner Getz, Co-trustee
KATHRYN GARDNER GETZ, CO-TRUSTEE

AS CO-TRUSTEES OF THE GRG GRANDCHILDRENS TRUST U/A DATED 12/26/77 AS GENERAL PARTNER OF BUILDING SERVICES OF SANTA FE

STATE OF NEW MEXICO)SS
COUNTY OF BERNALILLO)
ON THIS 7 DAY OF JUNE 2016 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MARGARET GARDNER WARD AND KATHRYN GARDNER GETZ AS CO-TRUSTEES

NOTARY PUBLIC 12-4-19 COMMISSION EXPIRES

OFFICIAL SEAL
DIANE ROSSETTI
Notary Public
State of New Mexico
My Comm. Expires 12-4-19

DAVID BEATY
FOR: BUILDING SERVICES OF SANTA FE & BEATY FAMILY LTD CO.

STATE OF NEW MEXICO)SS
COUNTY OF SANTA FE)
ON THIS 2nd DAY OF June 2016 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY TOM BEATY FOR BUILDING SERVICES OF SANTA FE & BEATY FAMILY LTD CO.

NOTARY PUBLIC 5/23/19 COMMISSION EXPIRES

OFFICIAL SEAL
Victoria M. Dalton
NOTARY PUBLIC-STATE OF NEW MEXICO
My Commission Expires 5/23/19

UTILITY COMPANIES

COMCAST 4-22-2016 DATE

IN APPROVING THIS PLAT, PNM PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM) AND NEW MEXICO GAS COMPANY (NMGC) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM AND NMGC DO NOT WAIVE NOR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT, OR OTHER DOCUMENT WHICH ARE NOT SHOWN ON THIS PLAT.

PNM ELECTRIC SERVICES 4/22/2016 DATE

NM GAS COMPANY 4-22-16 DATE

CENTURY LINK DISCLAIMER.

THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICE TO THE SUBDIVISION.

QWEST CORPORATION, d/b/a Century Link QC 4-27-16 DATE

CITY OF SANTA FE APPROVAL

CITY ENGINEER FOR LAND USE 6/8/16 DATE

CITY PLANNER 6/8/2016 DATE

CITY TRAFFIC ENGINEER 6/13/16 DATE

CITY OF SANTA FE-ACCEPTANCE OF DEDICATION

BY: BRIAN K. SNYDER, CITY MANAGER 6/16/16 DATE

ATTEST:

BY: YOLANDA Y. VIGIL, CITY CLERK 6-14-16 DATE

CITY OF SANTA FE SEAL

NOTES

1. PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.

2. PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK OR SUBMITTAL FOR A BUILDING PERMIT APPLICATION THAT MODIFIES ANY PROVISION OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.

3. BUILDABLE AREAS FOR PLATTED PARCELS WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION AS DETAILED IN THE LAND DEVELOPMENT CODE.

CONTROL REFERENCE

BEARINGS ARE REFERRED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, NAD83 CENTRAL ZONE. DISTANCES SHOWN ARE REFERRED TO GROUND. MSL. TO CONVERT TO GRID DISTANCES MULTIPLY BY A SCALE FACTOR OF 0.9995883983.

DEDICATION NOTE

ROAD DEDICATION SUMMARY

PARENT PARCEL:	ADDED TO:	AREA:
LOT 3	BECKNER RD.	2.65Ac.±

REFERENCE DOCUMENTS

LOT LINE ADJUSTMENT PLAT PREPARED FOR BECKNER ROAD EQUITIES, INC. BY GARY E. DAWSON, NMLS 7014, PLAT RECORDED AS INSTRUMENT NUMBER 1592455 ON THE 4TH DAY OF MARCH, 2010 AND PLAT BOOK 714 PAGES 14-26, IN THE SANTA FE COUNTY CLERKS OFFICE.

ROADWAY & UTILITY RIGHT OF WAY GOVERNOR MILES ROAD NAVA ADE SUBD. TO RICHARDS AVE. SEC/4 S8, T16N, R9E, NMPM SANTA FE COUNTY, N.M. PREPARED BY RICHARD A. MORRIS, L.S.#10277, RECORDED IN PLAT BK. 362 PG.07.

WARRANTY DEED, JOHN ARDISSONE AND MAY T. ARDISSONE TO BUILDING SERVICES OF SANTA, BK 462 PAGE 621.

ALL OTHER REFERENCE DOCUMENTS AS NOTED HEREON.

FLOOD ZONE

THIS PROPERTY LIES WITHIN OTHER AREAS ZONE "X", AREAS OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAPS (F.I.R.M.) #350490C0940, EFFECTIVE DATE JUNE 17, 2008.

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE REPRESENTATION OF A SURVEY COMPLETED UNDER MY PERSONAL SUPERVISION ON THE 15TH DAY OF JAN., 2016, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAT ARE CORRECT, TRUE AND MEET THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO.

DIEGO J. SISNEROS, NMPS#13986 4/5/2016

DIEGO J. SISNEROS NEW MEXICO 13986 REGISTERED PROFESSIONAL LAND SURVEYOR

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the 16 day of June 2016 A.D. at 12:52 o'clock and was duly recorded in book 807 page(s) 915 of the records of Santa Fe County
1791166
Witness my Hand and Seal of office
GERALDINE SALAZAR
County Clerk, Santa Fe County, N.M.

Deputy

COUNTY CLERK SANTA FE COUNTY NEW MEXICO

PURPOSE: TO DEDICATE A PORTION OF LOT 3 FOR THE BECKNER RD. EXTENSION.

"TITLE AND INDEXING INFORMATION FOR COUNTY CLERK"

CURRENT OWNER: BUILDING SERVICES OF SANTA FE & BEATY LTD. CO.

LOT 3 UPC: 1-050-095-387-083

LEGAL DESCRIPTION: LOT 3 BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE PLAT BK. 560 PG. 40

PLSS LOCATION: LYING WITHIN SECTION 8, T16N, R9E, NMPM

CITY: SANTA FE

COUNTY: SANTA FE

STATE: NEW MEXICO

BECKNER ROAD EXTENSION DEDICATION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD CO. AND THE CITY OF SANTA FE SHOWING PUBLIC R/W DEDICATION OF A PORTION OF LOT 3 AS SHOWN ON PLAT RECORDED IN BOOK 710 PAGES 21-22

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2512 B CAMINO ENTRADA
SANTA FE, N.M., 87507
FILE# 9754DED DATE: 4/5/2016

804010

BECKNER ROAD EXTENSION DEDICATION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD CO. AND THE CITY OF SANTA FE SHOWING PUBLIC R/W DEDICATION OF A PORTION OF LOT 3 AS SHOWN ON PLAT RECORDED IN BOOK 710 PAGES 21-22

LEGEND

BEARINGS ARE REFERRED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, NAD83 CENTRAL ZONE. DISTANCES SHOWN ARE REFERRED TO GROUND AND/OR TO CONVERT TO GRID DISTANCES MULTIPLY BY A SCALE FACTOR OF 0.99958388.
SYMBOLS ARE SCHEMATIC AND NOT TO SCALE.

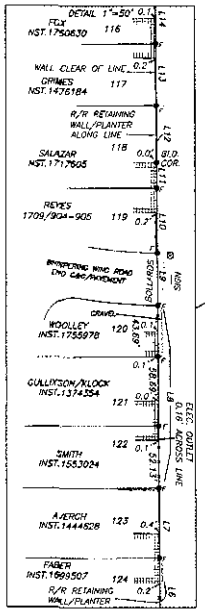
- ●F DENOTES REBAR L.S. 10277
- ● DENOTES 1/2" REBAR WITH CAP 13986 SET OR AS SHOWN FOUND
- • DENOTES CALCULATED POINT, NOT SET.
- ⌀ DENOTES UTILITY POLE
- Ⓢ DENOTES S.A.S. MANHOLE
- M DENOTES UTILITY PEDESTAL
- DENOTES FENCE LINE
- OH DENOTES OVERHEAD UTILITY LINE
- SDE DENOTES STORM DRAIN EASEMENT
- DE DENOTES DRAINAGE EASEMENT
- DENOTES BOUNDARY OF LANDS DEALT WITH BY THIS PLAT. INFORMATION OUTSIDE OF THIS BOUNDARY IS BACKGROUND INFORMATION ONLY, NOT VERIFIED FOR ACCURACY AND IS NOT PART OF THIS PLAT.

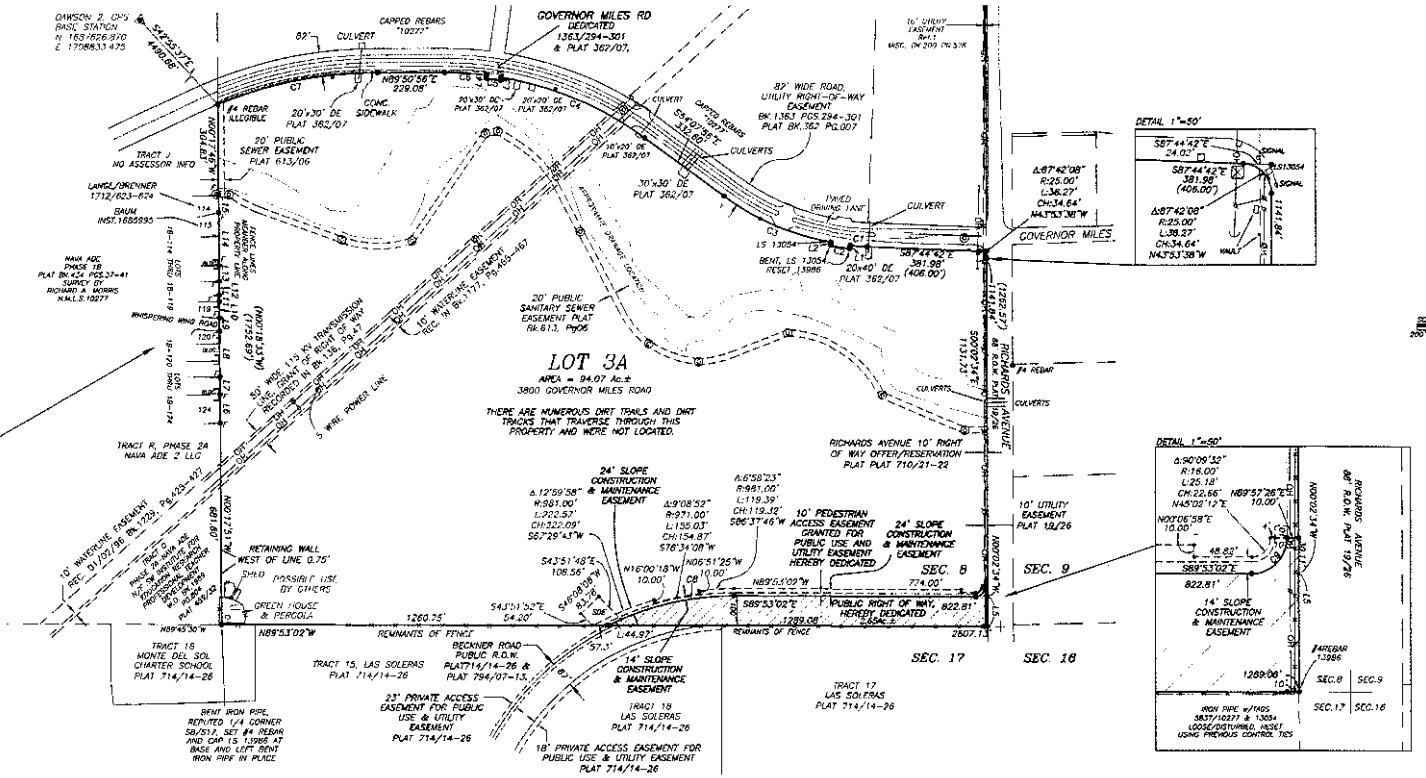
DEDICATION NOTE

PORTION OF LOT 3 HEREBY DEDICATED AS PUBLIC RIGHT OF WAY

ROAD DEDICATION SUMMARY

PARENT PARCEL:	ADDED TO:	AREA:
LOT 3	BECKNER RD.	2.65Ac.±





LINE TABLE		
LINE	BEARING	DIST.
L1	N08°07'45"E	10.01'
L2	S08°07'45"W	10.01'
L3	N05°24'15"E	10.00'
L4	S06°55'36"W	10.00'
L5	S00°02'24"E	139.08'
L6	N00°21'48"W	96.14'
L7	N00°21'48"W	59.78'
L8	N00°17'43"W	154.51'
L9	N00°17'43"W	44.01'
L10	N00°17'30"W	54.85'
L11	N00°02'03"W	21.23'
L12	N00°25'47"W	47.81'
L13	N00°20'58"W	51.96'
L14	N00°17'00"W	178.76'
L15	N00°30'02"W	56.84'

CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CHD BRG
C1	3°45'06"	891.00'	58.34'	58.33'	S85°52'09"E
C2	4°11'53"	901.00'	66.01'	66.00'	S81°52'15"E
C3	25°36'27"	891.00'	398.35'	395.04'	S86°56'35"E
C4	26°27'49"	1159.00'	535.32'	530.57'	S87°21'51"E
C5	2°28'18"	1149.00'	49.57'	49.57'	S81°49'53"E
C6	7°03'58"	1159.00'	142.93'	142.84'	S86°36'03"E
C7	21°50'45"	1459.00'	556.29'	552.92'	N78°55'14"E
C8	26°25'35"	957.00'	441.40'	437.49'	S76°54'10"W
C9	90°09'32"	30.00'	47.21'	42.49'	N45°02'12"E

Diego J. Sisneros, NMPS#13986 4/5/2016

"TITLE AND INDEXING INFORMATION FOR COUNTY CLERK"

CURRENT OWNER: BUILDING SERVICES OF SANTA FE & BEATY LTD. CO.

LOT 3 UPC: 1-050-095-387-083

LEGAL DESCRIPTION: LOT 3 BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE PLAT BK. 560 PG. 40

PLSS LOCATION: LYING WITHIN SECTION 8, T16N, R9E, NMPM

CITY: SANTA FE

COUNTY: SANTA FE

STATE: NEW MEXICO

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507
FILE# 9754DED DATE=4/5/2016

CITY OF SANTA FE, NEW MEXICO

ORDINANCE NO. 2007-30

AN ORDINANCE

ANNEXING A TRACT OF LAND CONTIGUOUS WITH THE SANTA FE CORPORATE LIMITS WITHIN SEC. 8 & 9 T16N, R9E, NMPM COUNTY OF SANTA FE, NEW MEXICO, LOCATED SOUTH OF GOVERNOR MILES ROAD AND WEST OF RICHARDS AVENUE, COMPRISING 96.73± ACRES; AND ALSO ANNEXING 2.55± ACRES OF RICHARDS AVENUE RIGHT-OF-WAY. ("BEATY SOUTH" ANNEXATION CASE NO. M 2007-14)

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF SANTA FE:

Section 1. Pursuant to Section 3-7-17 NMSA 1978 , the following described land (the "Property") is annexed to the City of Santa Fe, thereby extending the corporate limits of the city:

A certain parcel of land lying within Sec. 8 & 9 T16N, R9E, NMPM and a portion of Richards Avenue, both as more particularly described in the attached legal description (Exhibit A) and as shown on the attached Annexation Plat (Exhibit B) and incorporated herein by reference.

Section 2. A petition (the "Petition") executed by all the owners of the Property has been presented to the governing body of the city of Santa Fe requesting annexation of the Property, an area of land contiguous to the city's corporate limits, which annexation is accomplished pursuant to the provisions of the annexation agreement between the City of Santa Fe and the owners of the Property sought to be annexed attached hereto and referenced herein as "Exhibit C."

CITY CLERK RECORDED 11/27/2007

Section 3. The Petition was accompanied by an annexation plat showing the external boundaries of the Property proposed to be annexed and the relationship of the Property proposed to be annexed to the existing boundary of the city, as well as the Annexation Agreement.

Section 4. The annexation effected by this Ordinance shall be subject to the conditions of approval attached hereto and referenced herein as "Exhibit D."

Section 5. It is in the best interest of the City of Santa Fe and the owners and inhabitants of such contiguous Property that the Property be annexed.

Section 6. This ordinance shall be published one time by title and general summary and shall become effective five days after publication.

PASSED, APPROVED AND ADOPTED this 27th day of August, 2007.

DAVID COSS, MAYOR

ATTEST:

SEAL

11-5-09

YOLANDA Y. VIGIL, CITY CLERK

APPROVED AS TO FORM:

FRANK D. KATZ, CITY ATTORNEY

SFC CLERK RECORDED 11/13/2009

SFC CLERK RECORDED 11/13/2007

Beaty South Annexation
Ordinance No. 2007-30
Exhibit A
Legal Description

DESCRIPTION OF LOT 3 TO BE ANNEXED

LOT 3 A 96.73 ACRE LOT AS SHOWN ON "BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE", RECORDED IN BOOK 560, PAGE 040 LYING WITHIN SECTION 8, T16N, R9E, NMPM, SANTA FE COUNTY, NEW MEXICO, ALL AS SHOWN HEREON;

WHICH MAY BE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH EAST CORNER OF THE HEREIN DESCRIBED ANNEXATION AREA FROM WHICH "DAWSON 2" LIES N56°19'37"W, 6818.07 FEET;

THENCE FROM SAID POINT OF BEGINNING;
S00°02'34"E, 1265.86 FEET;
THENCE N89°53'02"W, 2607.19 FEET;
THENCE N00°18'33"W, 1752.69 FEET;
THENCE CLOCKWISE 556.29 FEET ON A CURVE HAVING A RADIUS OF 1459.00 FEET AND A CHORD OF N78°55'34"E, 552.92 FEET;
THENCE N89°50'56"E, 229.08 FEET;
THENCE CLOCKWISE 142.93 FEET ON A CURVE HAVING A RADIUS OF 1159.00 FEET AND A CHORD OF S86°36'03"E, 142.84 FEET;
THENCE S06°55'56"W, 10.00 FEET;
THENCE CLOCKWISE 49.57 FEET ON A CURVE HAVING A RADIUS OF 1149.00 FEET AND A CHORD OF S81°49'55"E, 49.57.11 FEET;
THENCE N09°24'15"E, 10.00 FEET;
THENCE CLOCKWISE 535.32 FEET ON A CURVE HAVING A RADIUS OF 1159.00 FEET AND A CHORD OF S67°21'51"E, 530.57 FEET;
THENCE S54°07'56"E, 332.60 FEET;
THENCE N09°24'15"E, 10.00 FEET;
THENCE COUNTERCLOCKWISE 66.01 FEET ON A CURVE HAVING A RADIUS OF 901.00 FEET AND A CHORD OF S81°52'15"E, 66.00 FEET;
THENCE N08°07'45"E, 10.01 FEET;
THENCE COUNTERCLOCKWISE 58.34 FEET ON A CURVE HAVING A RADIUS OF 891.00 FEET AND A CHORD OF S85°52'09"E, 58.33 FEET;
THENCE S87°44'42"E, 406.00 FEET TO THE POINT OF BEGINNING, ALL AS SHOWN HEREON CONTAINING 96.73 ACRES, MORE OR LESS.

DESCRIPTION OF RIGHT-OF-WAY TO BE ANNEXED

INTENDED TO BE A PORTION OF RICHARDS AVENUE, THE 88 FOOT RIGHT-OF-WAY AREA ADJOINING LOT 3 AS RECORDED IN BOOK 560, PAGE 040, LYING WITHIN SECTION 9, T16N, R9E, NMPM, SANTA FE COUNTY, NEW MEXICO, ALL AS SHOWN HEREON;

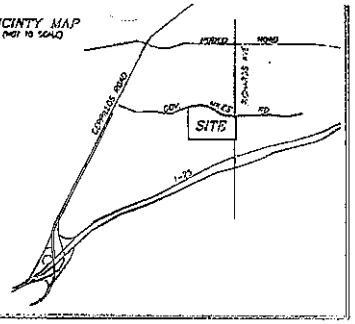
WHICH MAY BE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

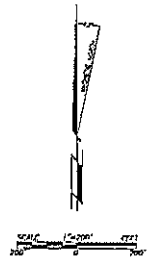
BEGINNING AT THE NORTH EAST CORNER OF THE HEREIN DESCRIBED ANNEXATION AREA FROM WHICH "DAWSON 2" LIES N56°19'37"W, 6818.07 FEET;

THENCE FROM SAID POINT OF BEGINNING;
S00°02'34"E, 1256.86 FEET;
THENCE S89°53'02"E, 88.00 FEET;
THENCE N00°02'34"W, 1262.57 FEET;
THENCE N87°44'42"W, 88.07 FEET TO THE POINT OF BEGINNING, ALL AS SHOWN HEREON CONTAINING 2.55 ACRES, MORE OR LESS.

Exhibit A
for Ordinance No. 2007-30

VICINITY MAP
(NOT TO SCALE)





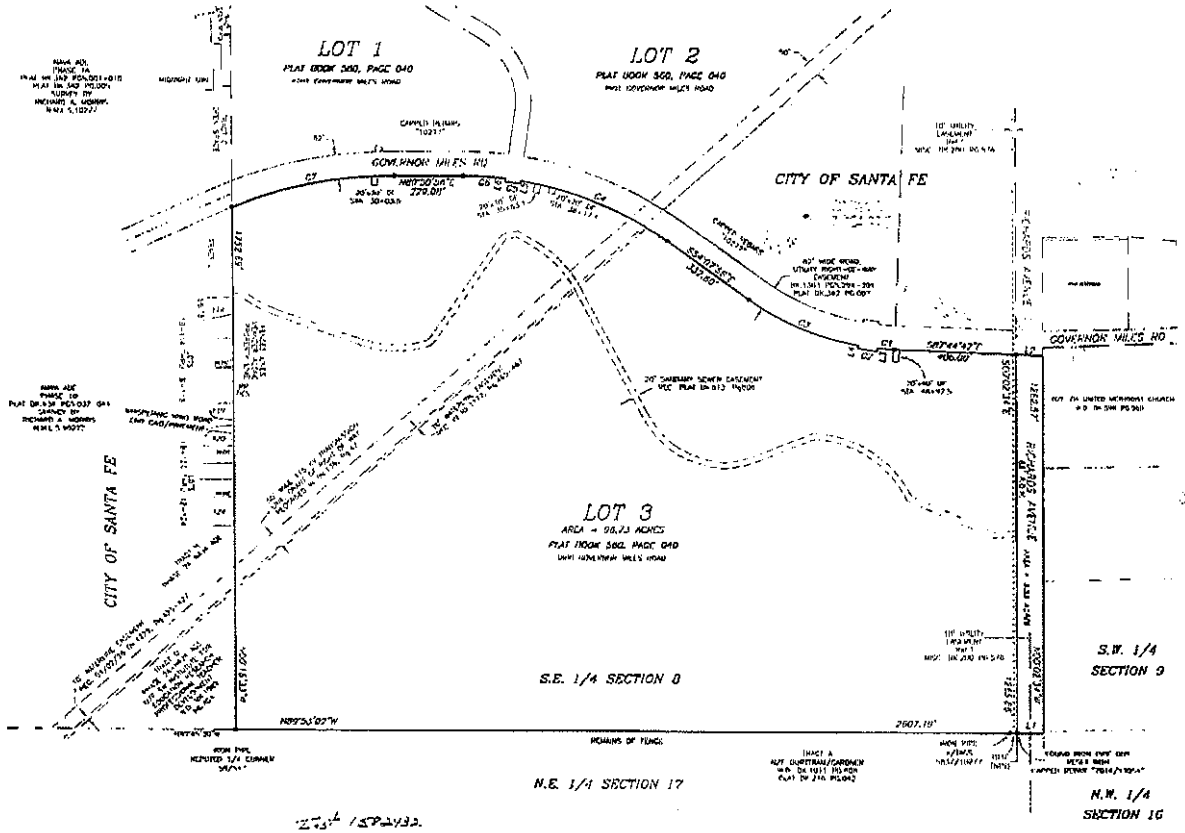
LINE TABLE		
LINE	BEARING	DIST
L1	S89°53'02"E	89.00'
L2	N87°44'42"W	89.02'
L3	N00°07'34"E	16.01'
L4	S89°07'49"W	19.91'
L5	N02°24'15"E	10.09'
L6	S06°55'56"W	10.00'

CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CHD DIRC
C1	1°49'00"	901.00'	28.14'	28.13'	S89°32'02"E
C2	4°11'24"	901.00'	66.01'	66.00'	S81°02'15"E
C3	25°38'41"	801.00'	358.35'	355.39'	S68°56'25"E
C4	20°27'50"	1159.00'	413.97'	411.73'	S67°21'51"E
C5	2°28'15"	1149.00'	49.54'	49.54'	S81°49'05"E
C6	7°03'36"	1159.00'	142.93'	142.84'	S86°36'03"E
C7	21°50'45"	1450.00'	356.29'	353.97'	N72°25'34"E

LEGEND/DEED-PLAT REFERENCES

1. REFERENCE A PLAT OF SURVEY TITLED, "BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, A PARTNERSHIP WITHIN SECTION 8, T-16-N, R-9-E, N.M.P.M., COUNTY OF SANTA FE, NEW MEXICO," DATED 09/29/04 BY JEFFERY L. BURNS, N.M.L.S.13034 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 590 PAGE 040 AS DOC. No.1330986.
2. REFERENCE A WARRANTY DEED FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN BOOK 462, PAGES 621-622.
3. REFERENCE A PLAT OF SURVEY DEDICATING RICHARDS AVENUE BY JACK G. HORNE, N.M.L.S.6410 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 619, PAGE 020 AS DOC. No.1011103.

- ⊙F MONUMENT FOUND AND USED AS NOTED.
- ● CAPPED REBAR "DAWSON SURVEYS" SET.
- ▸ COMPUTED POINT, NOT SET
- DE DRAINAGE EASEMENT
- WE WATER LINE



DESCRIPTION OF LOT 3 TO BE ANNEXED

LOT 3 A 96.73 ACRE LOT AS SHOWN ON "BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE", RECORDED IN BOOK 560, PAGE 040 LYING WITHIN SECTION 8, T16N, R9E, NMPM, SANTA FE COUNTY, NEW MEXICO, ALL AS SHOWN HEREON;

WHICH MAY BE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH EAST CORNER OF THE HEREIN DESCRIBED ANNEXATION AREA FROM WHICH "DAWSON 2" LICS N56°19'37"W, 6818.07 FEET;

THENCE FROM SAID POINT OF BEGINNING;
S00°07'34"E, 1265.88 FEET;
THENCE N89°53'02"W, 2607.19 FEET;
THENCE N00°18'33"W, 1252.69 FEET;
THENCE CLOCKWISE, 556.79 FEET ON A CURVE HAVING A RADIUS OF 1459.00 FEET AND A CHORD OF N78°53'14"E, 552.93 FEET;
THENCE N89°58'06"E, 229.68 FEET;
THENCE CLOCKWISE, 142.93 FEET ON A CURVE HAVING A RADIUS OF 1159.00 FEET AND A CHORD OF S86°36'03"E, 142.84 FEET;
THENCE S86°55'56"W, 10.00 FEET;
THENCE CLOCKWISE, 49.54 FEET ON A CURVE HAVING A RADIUS OF 1149.00 FEET AND A CHORD OF S81°49'05"E, 49.54 FEET;
THENCE N09°24'19"E, 10.00 FEET;
THENCE CLOCKWISE, 329.12 FEET ON A CURVE HAVING A RADIUS OF 1159.00 FEET AND A CHORD OF S67°21'51"E, 330.97 FEET;
THENCE S34°03'56"E, 332.80 FEET;
THENCE N89°24'19"E, 10.00 FEET;
THENCE COUNTERCLOCKWISE 66.01 FEET ON A CURVE HAVING A RADIUS OF 901.00 FEET AND A CHORD OF S81°30'15"E, 66.00 FEET;
THENCE N89°07'45"E, 10.01 FEET;
THENCE COUNTERCLOCKWISE 58.34 FEET ON A CURVE HAVING A RADIUS OF 1951.00 FEET AND A CHORD OF S00°53'09"E, 58.33 FEET;
THENCE S01°44'42"E, 100.00 FEET TO THE POINT OF BEGINNING, ALL AS SHOWN HEREON CONTAINING 96.73 ACRES, MORE OR LESS.

DESCRIPTION OF RIGHT-OF-WAY TO BE ANNEXED

INTENDED TO BE A PORTION OF RICHARDS AVENUE, THE 66 FOOT RIGHT-OF-WAY AREA ADJOINING LOT 3 AS RECORDED IN BOOK 560, PAGE 040, LYING WITHIN SECTION 9, T16N, R9E, NMPM, SANTA FE COUNTY, NEW MEXICO, ALL AS SHOWN HEREON;

WHICH MAY BE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH EAST CORNER OF THE HEREIN DESCRIBED ANNEXATION AREA FROM WHICH "DAWSON 2" LICS N56°19'37"W, 6818.07 FEET;

THENCE FROM SAID POINT OF BEGINNING;
S00°07'34"E, 1256.88 FEET;
THENCE S89°53'02"E, 66.00 FEET;
THENCE N00°07'34"W, 1262.27 FEET;
THENCE N87°44'42"W, 66.02 FEET TO THE POINT OF BEGINNING, ALL AS SHOWN HEREON CONTAINING 2.55 ACRES, MORE OR LESS.

NOTES & CONDITIONS

AREA OF LOT 3 TO BE ANNEXED = 96.73 ACRES±
AREA OF RICHARDS AVENUE TO BE ANNEXED = 2.55 ACRES±
TOTAL AREA TO BE ANNEXED = 99.28 ACRES±

TOTAL PERIMETER OF LANDS TO BE ANNEXED = 8810.0 FEET
TOTAL LENGTH OF PERIMETER CONTIGUOUS TO CURRENT CITY LIMITS = 4855.2 FEET
PERCENT OF PERIMETER CONTIGUOUS WITH CITY LIMITS = 54%

NOTES:
BEARINGS ARE NM STATE PLANE CENTRAL ZONE - NAD83
DISTANCES ARE REFERED TO GROUND DISTANCES ARE GROUND
COMBINED SCALE FACTOR 0.9999838613

THERE ARE NUMEROUS DIRT TRAILS AND DIRT TRACKS THAT TRAVERSE THROUGH THIS PROPERTY AND WERE NOT LOCATED.

THIS PROPERTY LIES WITHIN ZONE X AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODING, AS SHOWN ON FIRM PANEL 35049C0304-D WITH AN EFFECTIVE DATE OF JUNE 17, 2008.

"2007 1572432"
COUNTY OF SANTA FE } SS
STATE OF NEW MEXICO }
I hereby certify that this instrument was filed for record on the 5 day of Nov A.D. 2007 at 2:16 o'clock PM. and was duly recorded as instrument No. 1572432 of the records of County
Witness my hand and Seal of Office
VALERIE ESPINOZA
County Clerk, Santa Fe County, N.M.
Deputy

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS ANNEXATION & REZONING SURVEY PLAT AND THE FIELD SURVEY ON WHICH IT IS BASED WAS COMPLETED BY ME OR UNDER MY PERSONAL DIRECTION AND CONTROL ON THE 12th DAY OF APRIL, 2007, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS SURVEY MEETS THE MINIMUM REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

GARY L. DAWSON, NMPS#7014

DEDICATION / AFFIDAVIT

KNOW ALL PERSONS BY THESE PRESENTS:

THAT THE UNDERSIGNED OWNERS AND PROPRIETORS HAVE REVIEWED THIS PLAT. SAID PLAT WAS PREPARED TO SHOW THE LANDS TO BE ANNEXED INTO THE CITY OF SANTA FE, AND TO CHANGE THE EXISTING ZONING OF LOT 3 FROM R-1 TO R-5 ALL AS SHOWN HEREON, LYING WITHIN THE COUNTY OF SANTA FE, NEW MEXICO, ALL THAT APPEARS ON THIS PLAT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS AND PROPRIETORS. THESE LANDS LIE WITHIN THE PLANNING AND PLATTING JURISDICTION OF THE CITY AND COUNTY OF SANTA FE, NEW MEXICO

UNDIVIDED INTEREST OWNERS OF LOT 3

F. Richard Zemke

STATE OF NEW MEXICO } SS
COUNTY OF Bernalillo }
ON THIS 1st DAY OF June, 2009 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY F. RICHARD ZEMKE

NOTARY PUBLIC 05-15-12 COMMISSION EXPIRES

Jay E. Gardner

JAY E. GARDNER

STATE OF NEW MEXICO } SS
COUNTY OF Bernalillo }
ON THIS 21st DAY OF June, 2009 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY JAY E. GARDNER.

NOTARY PUBLIC 3/15/10 COMMISSION EXPIRES

O.L. Beatty

O.L. BEATTY
FOR: UNFLOWING SERVICES, Inc. & BEATTY FAMILY REVOCABLE TRUST

STATE OF NEW MEXICO } SS
COUNTY OF SANTA FE }
ON THIS 18 DAY OF June, 2009 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY O.L. BEATTY FOR BUILDING SERVICES, INC. & BEATTY FAMILY REVOCABLE TRUST.

Robert A. Delgado
NOTARY PUBLIC 7/31/2009 COMMISSION EXPIRES

OFFICIAL SEAL
Robert A. Delgado
Notary Public
State of New Mexico
My Commission Expires 7/31/2009

CITY OF SANTA FE APPROVAL

REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SANTA FE AT IT'S MEETING ON: 8/26/09
AS CASE No. A 2007-14 Annexation & Z 2007-09 Rezone

David Coss 11/5/09
MAYOR DATE

Yolanda Y. Vigil 11-5-09
ATTEST CITY CLERK DATE

REVIEWED AND APPROVED BY THE PLANNING COMMISSION OF THE CITY SANTA FE AT IT'S MEETING ON: 9/22/09
AS CASE No. A 2007-14 Annexation & ZE 2007-09 Rezoning

10-9-09
PLANNING COMMISSION CHAIRPERSON DATE

10-16-09
PLANNING COMMISSION SECRETARY DATE

07/08/09
LAND USE CITY ENGINEER DATE

10/22/2009
CITY PLANNER DATE

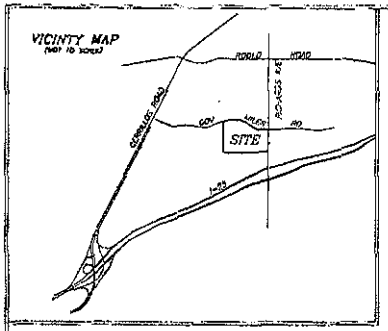
RECORDING INFORMATION FOR COUNTY CLERK

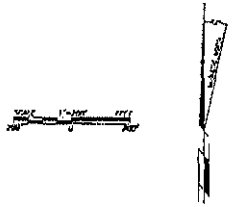
ANNEXATION & REZONING SURVEY PLAT PREPARED FOR
BUILDING SERVICES OF SANTA FE
A PARTNERSHIP
COVERING LOT 3, PLAT BOOK 560, PAGE 040 AND A PORTION OF RICHARDS AVENUE, WITHIN SEC. 8 & 9 T16N, R9E, NMPM, COUNTY OF SANTA FE, NEW MEXICO

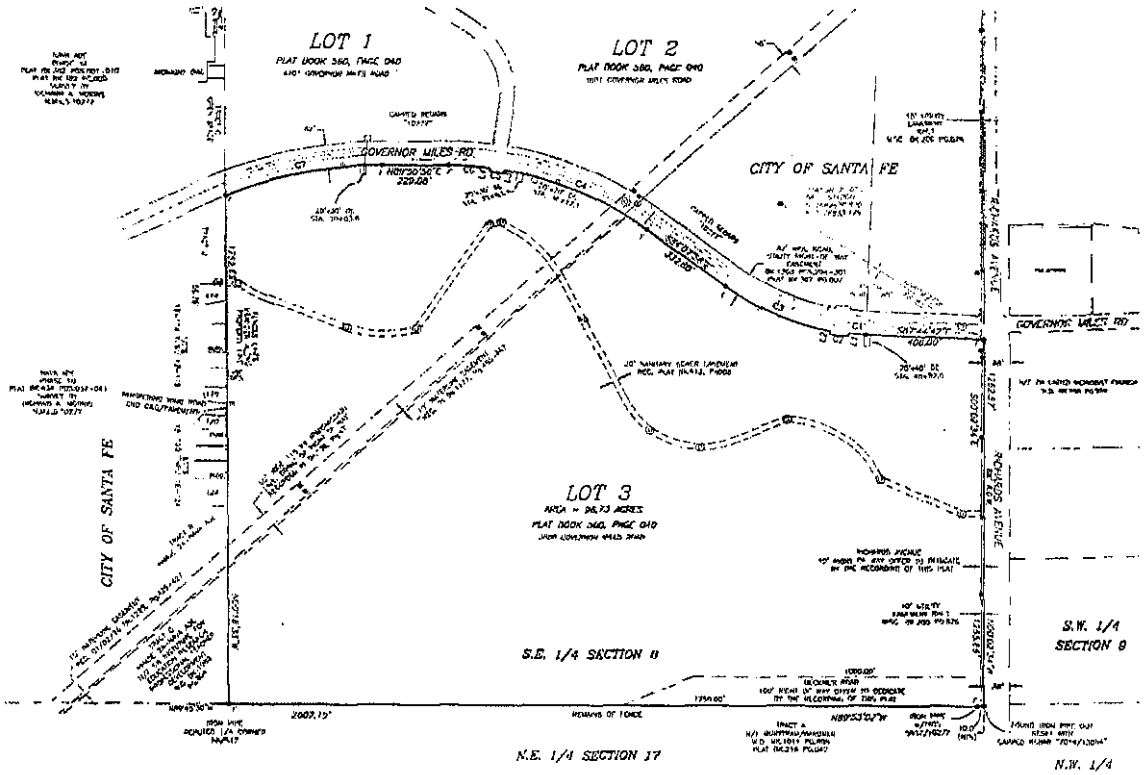
DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYING
2500A CAMINO CHIMAYO
SANTA FE, N.M. 505-471-8001
FILE: 10/PLANNING DATE: 06/10/07

Exhibit B
for Ordinance No. 2007-30
Page 1 of 2

RECORDED 11/13/2009 12:00:00 PM
SFC CLERK RECORDED 11/13/2009







NOTES:
BEARINGS ARE NM STATE PLANE CENTRAL ZONE - NAD83
DISTANCES ARE REFERED TO GROUP AREA.
DISTANCES ARE GROUND
COMBINED SCALE FACTOR 0.99962383

THERE ARE NUMEROUS DIRT TRAILS AND DIRT ROADS THAT TRAVERSE THROUGH THIS PROPERTY AND WERE NOT LOCATED.

THIS PROPERTY LIES WITHIN ZONE X AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FIRM PANEL 350040C0540D WITH AN EFFECTIVE DATE OF JUNE 17, 2008.

LINE TABLE		
LINE	BEARING	DIST
L1	N00°30'56"E	10.01'
L2	S89°57'43"W	10.01'
L3	N89°57'43"E	10.00'
L4	S00°32'50"W	10.00'

CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CHD BRG
C1	2°45'05"	1021.00'	49.14'	49.13'	S85°52'09"E
C2	6°11'39"	901.00'	97.39'	97.34'	S81°52'13"E
C3	90°26'52"	180.00'	284.19'	255.84'	S00°34'26"E
C4	26°37'58"	1138.00'	528.82'	524.07'	S76°21'31"E
C5	2°49'19"	1149.00'	49.34'	49.33'	S88°49'19"E
C6	7°01'26"	1439.00'	176.41'	176.30'	N82°35'03"E
C7	21°30'45"	1439.00'	540.29'	537.22'	N78°39'54"E

CITY OF SANTA FE REVIEWS

PUBLIC WORKS — DATE 10/15/09

CITY PLANNER — DATE 10/15/09

CITY ENGINEER FOR LAND USE — DATE 10/15/09

PUBLIC NOTICE

THIS SURVEY IS BASED ON BASIS, RECORDED DOCUMENTS. NOTED IN MUCH CITY OF SANTA FE STAFF MUST APPROVE ALL DOCUMENTS SUBMITTED WITH AN APPLICATION FOR A BUILDING PERMIT AND MAY REQUEST SUBMITTAL OF ADDITIONAL DOCUMENTATION TO PROVE LEGAL LOT OF RECORD.

Inst 1582432

COUNTY OF SANTA FE } SS
STATE OF NEW MEXICO }
I hereby certify that this instrument was filed for record on the 5 day of November, 2009 A.D. at 2:46 o'clock PM., and was duly recorded in book 910, page(s) 21-22 of the records of Santa Fe County.

Witness my Hand and Seal of office
VALERIE ESPINOZA
County Clerk, Santa Fe County, N.M.

Deputy

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS SUBDIVISION & REZONING SURVEY PLAT AND THE FIELD SURVEY ON WHICH IT IS BASED WAS COMPLETED BY ME OR UNDER MY PERSONAL DIRECTION AND CONTROL ON THE 12th DAY OF APRIL, 2007, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS SURVEY MEETS THE MINIMUM REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

GARY C. DAWSON, NMPS #7014

DEDICATION / AFFIDAVIT

KNOW ALL PERSONS BY THESE PRESENTS:

UNDIVIDED INTEREST OWNERS OF LOT 3

F. RICHARD ZIMMER

STATE OF NEW MEXICO } SS
COUNTY OF Bernalillo }
ON THIS 26th DAY OF September 2009, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY F. RICHARD ZIMMER.

NOTARY PUBLIC — 8/31/12 COMMISSION EXPIRES

FAYE C. DAWSON

STATE OF NEW MEXICO } SS
COUNTY OF Bernalillo }
ON THIS 21st DAY OF September 2009, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY FAYE C. DAWSON.

NOTARY PUBLIC — 5-10-10 COMMISSION EXPIRES

O.L. BEATY
FOR: BUILDING SERVICES INC. & BEATY FAMILY REVOCABLE TRUST

STATE OF NEW MEXICO } SS
COUNTY OF SANTA FE }
ON THIS 22nd DAY OF October 2009, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY O.L. BEATY FOR BUILDING SERVICES, INC. AND BEATY FAMILY REVOCABLE TRUST.

NOTARY PUBLIC — 4-3-10 COMMISSION EXPIRES

OFFICIAL SEAL
Melissa Bell Begay-Martinez
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 4-3-2010

LEGEND/DEED-PLAT REFERENCES

1. REFERENCE A PLAT OF SURVEY TITLED, "BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, A PARTNERSHIP WITHIN SECTION 8, T-16-N, R-9-E, N.M.P.M., COUNTY OF SANTA FE, NEW MEXICO," DATED 09/09/04 BY JEFFREY L. LUDWIG, N.M.L.S.13034, AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 560 PAGE 040 AS DOC. No.1JJ0986.
2. REFERENCE A WARRANTY DEED FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN BOOK 463, PAGE(S) 071-072.
3. REFERENCE A PLAT OF SURVEY DESCRIBING BOUNDARIES PREPARED BY JACK G. HORNE, N.M.L.S.3910 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 019, PAGE 026 AS DOC. No.381103.

● MONUMENT FOUND AND USED AS NOTED.
○ CAPPED REBAR "DAWSON SURVEYS" SET.

"FILE AND INDEXING INFORMATION FOR COUNTY CLERK"

OFFER TO DEDICATE RIGHT-OF-WAYS FOR RICHARDS AVENUE & BECKNER ROAD PREPARED FOR BUILDING SERVICES OF SANTA FE

COVERING LOT 3, PLAT BOOK 560, PAGE 040 AND A PORTION OF RICHARDS AVENUE, WITHIN SEC. 8 & 9 T16N, R9E, NMPM, COUNTY OF SANTA FE, NEW MEXICO

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2000A CAMINO CARLOS
SANTA FE, N.M. 505-471-0660
FILE # 07500Y DATE: 09/17/09

EC CLERK RECORDED 11/13/2009

Exhibit B
Ordinance No. 2009-32
Case #

SFC CLERK RECORDED 11/13/2009

ANNEXATION AGREEMENT

BEATY SOUTH

This Annexation Agreement ("Agreement") is made and entered into this 5th day of November 2009 by and between the City of Santa Fe, New Mexico, a New Mexico Municipal Corporation ("City") and Building Services of Santa Fe, a New Mexico partnership (the "Landowner").

RECITALS

A. The Landowner is the owner of certain property (the "Property") situated in Santa Fe County, New Mexico, said property and adjacent rights of way consisting of approximately 99.28 acres being located in Section 8, Township 16 North, Range 9 East, New Mexico Prime Meridian, as more fully described in the Annexation Plat (the "Annexation Plat"), attached hereto as Exhibit 1 and incorporated herein by reference.

B. The Landowner desires to obtain annexation of, and the City agrees to annex, the Property to the City subject to and upon the terms and conditions of this Agreement.

C. The Landowner desires to develop, and the City agrees to the development of, the Property subject to and upon the terms and conditions of this Agreement and subject to such other terms and conditions as may be applicable or imposed by relevant laws, rules and regulations.

AGREEMENTS

NOW, THEREFORE, in consideration of the premises and the following agreements and undertakings of the parties, the parties agree as follows:

1. ANNEXATION

1.1 Annexation Plat. The Landowner represents that the Annexation Plat was prepared in accordance with and complies with the Santa Fe City Code (the "Code") and all other applicable laws, rules, regulations, standards and ordinances.

1.2 Annexation of the Property to the City. As of the Effective Date (as defined below), the Annexation Plat will be executed on behalf of the City and filed with the City and recorded in the records of Santa Fe County, New Mexico; whereupon, the Property will be deemed annexed to the City and will lie within the municipal boundaries of the City.

2. MASTER PLAN, PHASING

2.1 Master Plan Submittal. The Master Plan for the Property is attached to this Agreement as Exhibit 2. In executing this Agreement, the City approves the Master Plan as and for the Master Plan for the Property and confirms that the Master Plan is in accordance with the City's General Plan (the "General Plan"), which designates the property as Low Density Residential (3-7 dwelling units per acre). The Parties

Exhibit C
for Ordinance

5682/21/11 09:20:20 AM 1 of 3

acknowledge that the Master Plan is somewhat conceptual in nature and that the design may be modified through the subdivision platting process without the necessity for a Master Plan amendment.

2.2 Land Use and Phasing. The Master Plan contemplates a single family subdivision with R-5 zoning, for a maximum density of 523 dwelling units on 96.73 acres. The Phases set forth below are conceptual and the number of lots may be modified through the subdivision platting process, without the necessity for a Master Plan amendment. The Property will be developed in phases, or in sub-phases of such phases, as shown on the Master Plan and generally described below:

Phase I: The eastern part of the property, west Richards Avenue. Construction should commence on or around spring 2010.

Phase II: The part of the property west of Phase I. Construction should commence on or around the spring of 2012.

Phase III: The northernmost part of the Property north of the arroyo and adjacent to Governor Miles Road. Construction should commence on or around the summer of 2013.

The phasing, timing, and lot count in each phase may be modified from time to time as part of the subdivision platting process. Such changes will not necessitate a Master Plan amendment.

3. DEVELOPMENT OF THE PROPERTY

3.1 Rezoning. The Property is to be rezoned R-5, allowing five dwelling units per acre, and a 15% density bonus in accordance with the Santa Fe Homes Program, for a maximum allowable density of 523 dwelling units.

3.2 Subdivision. The City Planning Commission will approve a Final Subdivision Plat of the specific phase or subphase being developed before the Landowner may begin development of that phase or subphase of the Property. The Property will be developed in three principal phases as shown on the Master Plan, as may be modified from time to time as part of the subdivision platting process.

3.3 Conditions. The following conditions of approval shall be satisfied as part of the subdivision plat approval process for the relevant phase of subphase of development of the Property:

(i) the Landowner will study erosion and drainage issues along Governor Miles Road adjacent to the Property and agrees to address whatever issues come out of the study during construction of subdivision improvements on the Property;

(ii) a one hundred and fifty-foot (150') open space buffer will be provided at the northeast corner of the property that mirrors the open space area on the north side of Governor Miles Road at Richards Avenue; a thirty-foot (30') open space buffer will be provided adjacent to the Governor Miles Road and Richards

CITY CLERK RECORDED 11/13/2008

Avenue rights of way; trees will planted in the open space buffer along the Property's west boundary adjacent to the Nava Adé neighborhood;

(iii) the roadway plan will be amended to create a more direct access to both the proposed school site for the Santa Fe Public Schools and the Monte del Sol Charter School, for the express purpose of taking school traffic out of the Nava Adé neighborhood; and

(iv) the homes to be built on the Property will be constructed to Energy Star standards.

3.3 School Site Dedication. The Landowner will dedicate a 3.14-acre school site to the Santa Fe Public Schools (the "District") at the time the final subdivision plat is recorded for the phase in which the school site is located, subject to the following conditions:

(i) the 3.14 acres will be contiguous with open space;

(ii) the Landowner and/or his representatives will work with the partners in the adjacent lots surrounding the Property to assist the District in obtaining an appropriate school site of fifteen (15) acres; and

(iii) if it is not possible to identify a total of fifteen (15) contiguous acres, the District is allowed to develop or sell for fair market value the 3.14 acres of land in the Beaty South Annexation.

4. CITY SERVICES AND INFRASTRUCTURE

4.1 Fire and Police Protection. Fire and Police protection of the development of the Property will be provided by the City Police and Fire Department facilities and personnel. A fire protection plan submitted with the application for final plat approval for each phase or subphase of the Property shall show the size of the water mains and fire hydrant locations.

4.2 Refuse. Refuse disposal services shall be provided in accordance with applicable City ordinances.

4.3 Water Service. Water service will be provided for the development of the Property by the City of Santa Fe. Prior to the development of each phase or subphase of the Property, the Landowner agrees to connect the proposed development to the City's water delivery system using dedicated easements for the benefit of the City or such other person or persons designated by the City. The Landowner agrees that no well shall be drilled on the Property. The Landowner will transfer water rights to the City to serve the market rate homes in the development of the Property in compliance with Ordinance No.'s 2005-39 and 2006-39, the Water Rights Transfer Ordinance and amendments thereto.

4.4 Drainage Improvements. As part of the development of each phase, the Landowner shall construct drainage improvements to serve the Property in accordance

SFC CLERK RECORDED 11/13/2008

with the Santa Fe City Code, providing easements on the final subdivision plat for each phase or subphase of the Property. Upon completion of construction and satisfactory inspection of such construction by the City, all drainage structures will be maintained by the homeowners association at its expense.

4.5 Wastewater Collection. As part of the development of each phase, the Landowner shall construct wastewater improvements to serve the Property in accordance with Santa Fe City Code, providing easements on the final subdivision plat for each phase or subphase of the Property. No on-site wastewater treatment facilities, including, without limitation, septic systems, shall be installed or constructed on the Property.

4.6 Utilities. All new utilities serving the Property shall be underground.

4.7 Streets and Other Rights of Way. All streets on the Property will be built to the minimum standards set forth in the Master Plan submitted as part of the annexation and rezoning and as set forth below. In all respects, the streets shall be constructed in accordance with City standards, applicable laws, rules, regulations, City approvals and the Santa Fe City Code. Upon completion of construction and approval by the City, the streets delineated on the Plat as public streets shall be dedicated to the City as public rights of way and maintained by the City at its expense. The Landowner shall be responsible for the construction and shall bear all expenses associated with construction.

(i) An irrevocable offer that dedicates sufficient right of way to the approval of the Public Works Director for the widening of Richards Avenue and for the creation of Beckner Road, as shown on the Annexation Master Plan, shall be recorded concurrently with the annexation plat, with acceptance of the offer at the discretion of the Governing Body.

(ii) The Landowner is responsible for paying a proportionate share in the corresponding phases of the expense to construct the following off-site improvements:

a. Intersection of Rodeo Road and Richards Avenue. (Proportionate Share to be paid to the City at the time the plat is recorded for Phase I.)

b. Widening of Richards Avenue between Governor Miles Road and Beckner Road. (Proportionate Share to be paid to the City at the time the plat is recorded for Phase II.)

(iii) The portion of the Richards Avenue right of way adjacent to the Property is included in this annexation. Following recordation of the annexation agreement and annexation plat, the City will convey this portion of Richards Avenue back to Santa Fe County. [NOTE: Agreement to convey Richards Avenue ROW to County superseded by Settlement Agreement between City and County May, 2008 Item No. 08-0382].

2002/11/13 RECORDED

4.8 Dedication and Letter of Credit. Then Landowner shall provide a surety bond, set aside letter, or letter of credit, in a form acceptable to the City, for the required improvements to the Property prior to the recordation of the final subdivision plat for each phase or subphase of the Property's development. The amount of the surety shall be based on a certified engineer's estimate acceptable to the City.

5. TRAFFIC REPORT

In compliance with City regulations, a Traffic Impact Analysis prepared by Walker Engineering is submitted under separate cover as part of the Master Plan and this Agreement.

6. PARKS AND OPEN SPACE

The Landowner shall meet the City's park dedication requirements by dedicating to the City open space and park land within the Property as generally shown on the Master Plan and more specifically on the subdivision plats for each phase or subphase of the development of the Property. The Landowner shall dedicate and improve one active park as shown on the Annexation Master Plan, in the appropriate phase of development of the Property. In consideration of all parks and open space being provided on-site in conformance with City Code requirements, Neighborhood and Regional Parks Impact Fees are hereby waived.

7. IMPACT FEES AND APPLICATION FEES

The Landowner agrees to pay impact fees as required by City Code, except for those fees to be waived for the Affordable Units in accordance with the Santa Fe Homes Program and the Neighborhood and Regional Parks Impact Fees that are waived pursuant to Paragraph 6 above.

8. AFFORDABLE HOUSING

Affordable housing shall be provided in accordance with the Santa Fe Homes Program.

9. ASSIGNMENT

The Landowner may sell, transfer or assign this Agreement and Landowner's rights and obligations hereunder, provided such transferee shall execute and deliver an agreement by which such transferee assumes liability and agrees to perform all obligations of the Landowner under this Agreement, without further liability hereunder, and provided the City consents to such sale, transfer or assignment, which consent shall not be unreasonably withheld, delayed, or denied. Any assignee(s) shall be bound to the terms and conditions of this Agreement to the same extent that the Landowner was originally bound. Without limiting the foregoing, this Agreement runs with the land and binds and shall bind each and every owner of the Property, whether such person is the Landowner or any successor-in-interest to the Property.

10. CAPTIONS

The captions and paragraph headings of this Agreement are not necessarily descriptive, or intended or represented to be descriptive, of all the provisions thereunder, and in no manner shall such captions or paragraph headings be deemed or interpreted to limit the provisions of this Agreement.

5382/2/11/2023 RECORDED OFFICIAL

11. FURTHER ASSURANCES

The Landowner will take all actions, and will execute and deliver all documents, which may be necessary or appropriate to give effect to the transactions contemplated expressly or impliedly by this Agreement.

12. SEVERABILITY

If any provision of this Agreement, or the application of such provisions to any person or circumstance, shall be held invalid, the remainder of this Agreement, or the application of such provisions to persons or circumstances other than those to which it is held invalid, shall not be affected thereby.

13. NO WAIVER

No waiver of a breach of any of the terms of this Agreement shall be construed to be a waiver of any succeeding breach of the same or any other term.

14. NUMBERS AND GENDERS

Whenever used herein, unless the context shall otherwise provide, the singular number shall include the plural, the plural the singular, and the use of any gender shall include all genders.

15. GOVERNING LAW

This Agreement and the rights of the parties hereunder shall be governed by and interpreted in accordance with the laws of the State of New Mexico.

16. BINDING EFFECT

This Agreement shall be binding upon, and inure to the benefit of, the parties, their respective successors and permitted assigns.

17. AGREEMENT

This Agreement states the entire agreement of the parties. The provisions of this Agreement shall be severable and may be modified only in writing. This Agreement shall not relieve the Landowner from complying with present or future City ordinances, duly adopted resolutions or regulations applicable to the development.

18. AMENDMENTS

Any amendments to this Agreement or the Master Plan shall be reviewed by the City's Planning Commission (or successor or replacement body) and sent to the City Council for approval.

19. ENFORCEMENT

In addition to any other remedy available to the City, the City may undertake to cure any material breach of this Agreement by the Landowner and the City may impose a lien against the

SFC CLERK RECORDED 11/13/2008

Property in an amount equal to the cost to the City to cure such material breach and the City may foreclose such lien in accordance with applicable law.

In witness whereof, this Agreement is entered into the day and year written above.

CITY OF SANTA FE:

Mayor

ATTEST:

Yolanda Y. Vigil, City Clerk

APPROVED AS TO FORM:

Frank Katz, City Attorney

LANDOWNER:

BUILDING SERVICES OF SANTA FE

O.L. Beaty
For Building Services, Inc. and Beaty Family Revocable Trust

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

The foregoing instrument was acknowledged before me this 20 day of October, 2009 by O.L. Beaty.

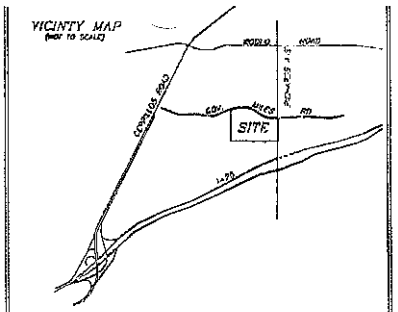
Notary Public

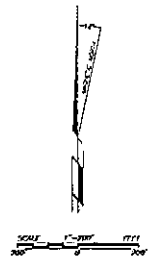
My commission expires: 7/31/2012

OFFICIAL SEAL
Robert A. Delgado
Notary Public
State of New Mexico
My Commission Expires 7/31/12

SF CLERK RECORDED 11/12/2009

VICINITY MAP
(not to scale)





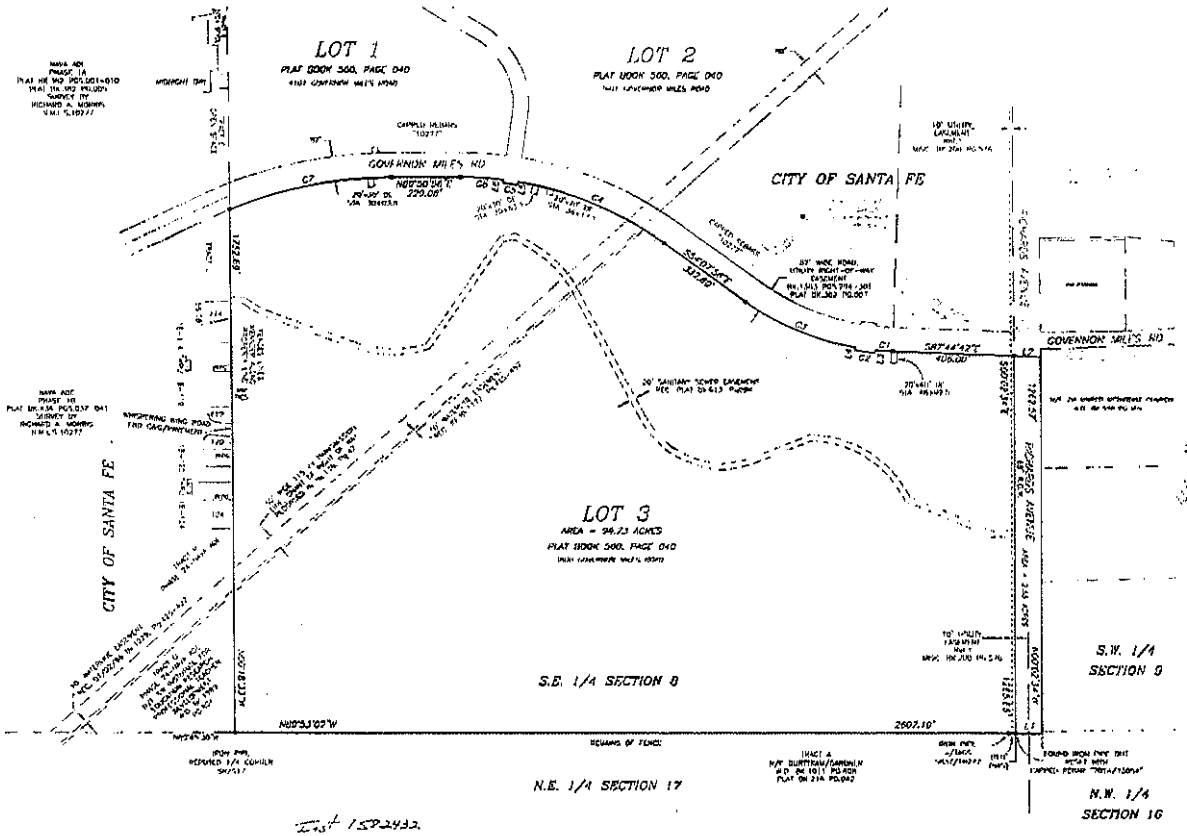
LINE TABLE		
LINE	BEARING	DIST.
L1	S89°53'02"E	88.00'
L2	N87°44'42"W	88.97'
L3	N00°07'45"E	10.01'
L4	S00°07'45"W	10.01'
L5	N89°24'15"E	10.00'
L6	S00°03'36"W	10.00'

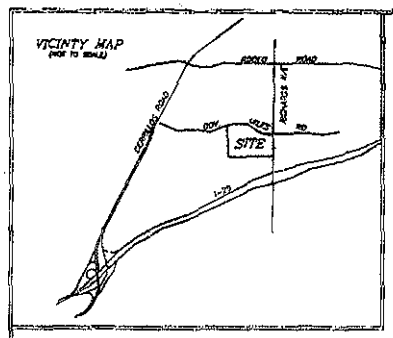
CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CHD BRNG
C1	7°57'38"	801.00'	111.26'	111.17'	S83°32'09"E
C2	2°11'54"	761.00'	29.21'	29.20'	S81°52'13"E
C3	79°48'37"	801.00'	1115.35'	1029.04'	S41°58'25"E
C4	28°27'49"	1139.00'	565.37'	559.51'	S87°31'51"E
C5	7°08'12"	1149.00'	49.57'	49.57'	S81°49'55"E
C6	7°03'36"	1139.00'	142.93'	142.84'	S88°36'03"E
C7	21°30'45"	1458.00'	546.29'	543.07'	N78°39'26"E

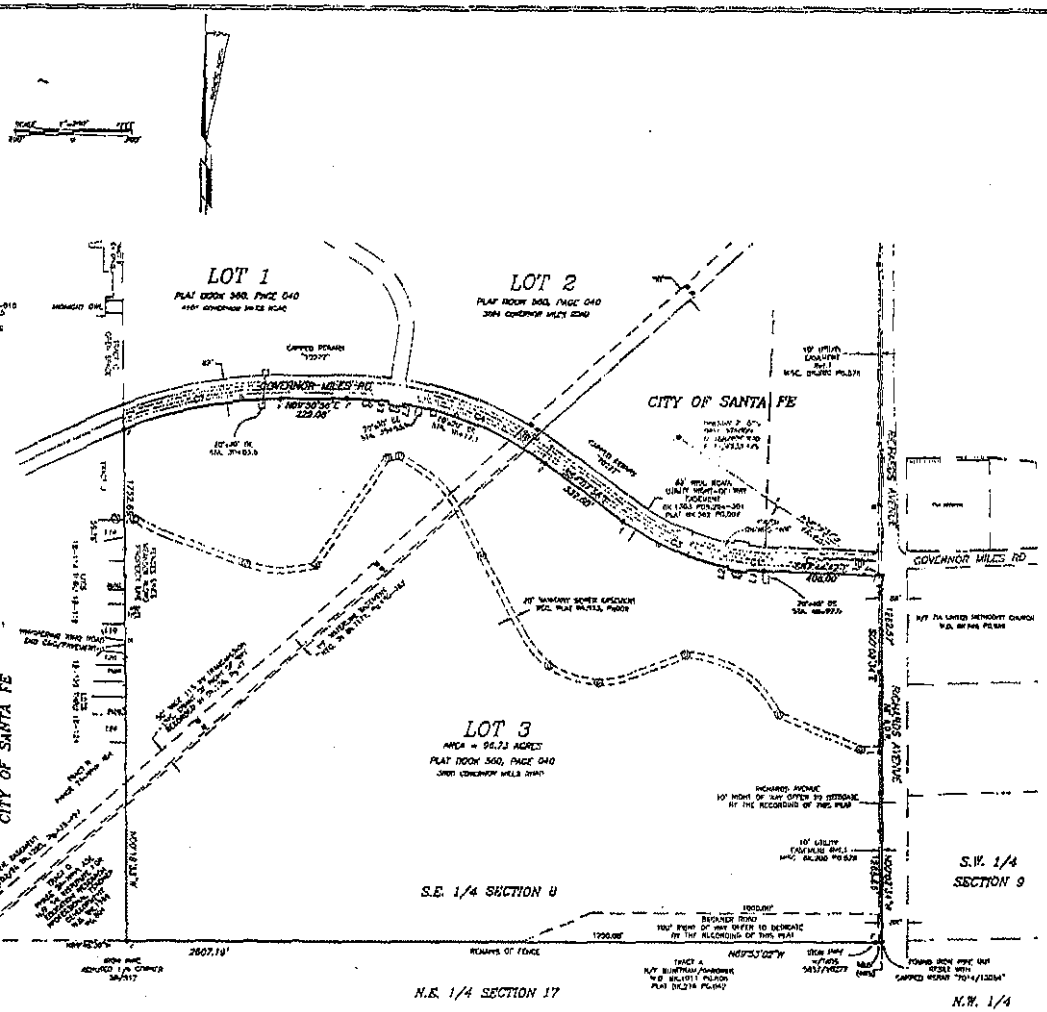
LEGEND/DEED-PLAT REFERENCES

1. REFERENCE A PLAT OF SURVEY FILED, "BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, A PARTNERSHIP WITHIN SECTION 9, T-11-N, R-9-E, N.M.P.M., COUNTY OF SANTA FE, NEW MEXICO," DATED 05/20/08 BY JEFFREY L. LUDWIG, N.M.L.S.13264 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 740 PAGE 040 AS DOC. No.1530196.
2. REFERENCE A WARRANTY DEED FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN BOOK 463, PAGES 621-622.
3. REFERENCE A PLAT OF SURVEY DEDICATING RICHARDS AVENUE BY JACK G. HOBBS, N.M.L.S.5910 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 019, PAGE 026 AS DOC. No.301183

- ● 8" MONUMENT FOUND AND USED AS NOTED.
- ○ CAPPED REBAR "DAWSON SURVEYS" SET.
- + COMPUTED POINT, NOT SET
- DE DRAINAGE EASEMENT
- W WATER LINE


LOT 1
PLAT BOOK 560, PAGE 040
4501 GOVERNOR MILES ROAD
LOT 2
PLAT BOOK 560, PAGE 040
GOVERNOR MILES RD
CITY OF SANTA FE
LOT 3
AREA = 96.73 ACRES
PLAT BOOK 560, PAGE 040
S.E. 1/4 SECTION 8
S.W. 1/4 SECTION 9
N.E. 1/4 SECTION 17
N.W. 1/4 SECTION 16
N89°53'02"W
2607.10'
BEARING OF TONE
S87°44'42"E
400.00'
N00°07'45"E
1320.52'
S00°07'45"W
1320.52





NOTES:
BEARINGS ARE NM STATE PLANE, CENTRAL ZONE - NAD83
DISTANCES ARE REFERED TO 5600' AMSL
DISTANCES ARE GROUND
COMBINED SCALE FACTOR 0.99953381

THERE ARE NUMEROUS DIRT TRAILS AND DIRT TRACKS THAT TRAVERSE THROUGH THIS PROPERTY AND WERE NOT LOCATED.

THIS PROPERTY LIES WITHIN ZONE X AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODING, AS SHOWN ON FEMA PANEL 350003C0340 WITH AN EFFECTIVE DATE OF JUNE 17, 2008.

LINE TABLE		
LINE	BEARING	DIST
L1	N08°07'45"E	10.01'
L2	S81°07'42"W	10.01'
L3	S08°21'53"E	10.00'
L4	S81°38'07"W	10.00'

CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CHD BRG
C1	3°45'06"	821.00'	53.77'	53.76'	S85°32'09"E
C2	6°11'53"	801.00'	86.61'	86.57'	S81°32'15"E
C3	21°34'22"	891.00'	335.37'	333.45'	S88°38'23"E
C4	26°27'49"	1159.00'	535.42'	530.57'	S87°21'31"E
C5	2°39'19"	1149.00'	53.27'	53.27'	S81°49'35"E
C6	7°01'08"	1159.00'	142.04'	142.04'	S85°38'03"E
C7	21°30'42"	1459.00'	536.29'	532.96'	N88°39'34"E

CITY OF SANTA FE REVIEWS

PUBLIC WORKS — DATE 10/5/09

CITY PLANNER — DATE 10/6/2009

CITY ENGINEER FOR LAND USE — DATE 10/05/09

PUBLIC NOTICE

THIS SURVEY IS BASED ON THOSE RECORDED DOCUMENTS NOTED HEREON. CITY OF SANTA FE STAFF MUST APPROVE ALL DOCUMENTS SUBMITTED WITH AN APPLICATION FOR A BUILDING PERMIT AND MAY REQUIRE SUBMITTAL OF ADDITIONAL DOCUMENTATION TO PROVE LEGAL LOT OF RECORD.

Last 1582/32

COUNTY OF SANTA FE } SS
STATE OF NEW MEXICO }
I hereby certify that this instrument was filed for record on the 5th day of November, 2009 A.D. at 2:16 o'clock PM and was duly recorded in book 710 page(s) 21-37 of the records of Santa Fe County.

Witness my Hand and Seal of office
VALERIE ESPINOZA
County Clerk, Santa Fe County, N.M.
Deputy

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS ANNEXATION & REZONING SURVEY PLAT AND THE FIELD SURVEY ON WHICH IT IS BASED WAS COMPLETED BY ME OR UNDER MY PERSONAL DIRECTION AND CONTROL ON THE 13th DAY OF APRIL, 2007, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS SURVEY MEETS THE MINIMUM REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS OF NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

GARY E. DAWSON, NMPS #7014

DEDICATION / AFFIDAVIT

KNOW ALL PERSONS BY THESE PRESENTS:

UNDIVIDED INTEREST OWNERS OF LOT 3

F. RICHARD ZEMKE

STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO }
ON THIS 26th DAY OF September 2009, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY F. RICHARD ZEMKE.

NOTARY PUBLIC — COMMISSION EXPIRES 11/13/10

FAYE E. GARDNER

STATE OF NEW MEXICO } SS
COUNTY OF Bernalillo }
ON THIS 21st DAY OF September 2009, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY FAYE E. GARDNER.

NOTARY PUBLIC — COMMISSION EXPIRES 3-10-10

O.L. BEATY
FOR BUILDING SERVICES INC. & BEATY FAMILY REVOCABLE TRUST

STATE OF NEW MEXICO } SS
COUNTY OF SANTA FE }
ON THIS 21st DAY OF September 2009, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY O.L. BEATY FOR BUILDING SERVICES, INC. AND BEATY FAMILY REVOCABLE TRUST.

NOTARY PUBLIC — COMMISSION EXPIRES 4-3-10

OFFICIAL SEAL

LEGEND/DEED-PLAT REFERENCES

1. REFERENCE A PLAT OF SURVEY ENTITLED "BOUNDARY SURVEY PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, A PARCEL/LOT WITHIN SECTION 8, T-16-N, R-9-E, N.M.P.M., COUNTY OF SANTA FE, NEW MEXICO," DATED 03/30/04 BY JEFFERY L. LUDWIG, N.M.L.S.13954 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 560 PAGE 040 AS DOC. No.1320898.
2. REFERENCE A WARRANTY DEED FILED FOR RECORDED IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN BOOK 1582, PAGES 027-032.
3. REFERENCE A PLAT OF SURVEY DEDICATING RICHARDS AVENUE BY JACK C. HORNE, N.M.L.S.4990 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 128, PAGE 026 AS DOC. No.381183.

⊙ MONUMENT FOUND AND USED AS NOTED.
● CAPPED REBAR "DAWSON SURVEYS" SET.

"TITLE AND RECORDING INFORMATION FOR COUNTY CLERK"

OFFER TO DEDICATE RIGHT-OF-WAYS FOR RICHARDS AVENUE & BECKNER ROAD

PREPARED FOR

BUILDING SERVICES OF SANTA FE

COVERING LOT 3, PLAT BOOK 560, PAGE 040 AND A PORTION OF RICHARDS AVENUE, WITHIN SEC. 8 & 9 T16N, R9E, NMPM, COUNTY OF SANTA FE, NEW MEXICO

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2308A CAMINO ENTRADA
SANTA FE, N.M. 505-471-6650
FILE/07500Y DATE:09\17\09

Exhibit 1
Ordinance No. 2009-30
Page 2 of 2

5582/21/11 RECORDED IN CLERK'S OFFICE

BEATY SOUTH
MASTER PLAN

SANTA FE
NEW MEXICO

Exhibit 2
for Ordinance
No. 2007-70

SFC CLERK RECORDED 11/13/2007

SFC CLERK RECORDED 11/13/2007

EXHIBIT D:

Beaty South
Case No. M 2007-14
Annexation
Ordinance No. 2007- 30

Conditions of Approval
(The following staff memos are attached)

Prior to submittal for final development plan, the plan must comply with requirements as provided by the following City Departments at the time of subdivision:

- **Exhibit D-1**: Public Works Dept- Traffic Review Memo
- **Exhibit D-2:** Fire Dept. Review Memo
- **Exhibit D-3:** Technical Review Division- Engineer Review Memo
- **Exhibit D-4**: Technical Review Division- Landscape Review Memo
- **Exhibit D-5**: Water Division Review Memo
- **Exhibit D-6:** Trails and Open Space Review Memo
- **Exhibit D-7:** Additional City Council Conditions of Approval per 8/17/07 City Council meeting.
- **Exhibit D-8:** SF Public Schools Letter 8/20/2007
- **Exhibit D-9:** Letter from Santa Fe County Manager- July 23, 2007

Exhibit D
for Ordinance
No. 2007-30

SC CLERK RECORDED 11/13/2007

City of Santa Fe, New Mexico

memo

DATE: June 8, 2007

TO: Donna Wynant, Planning and Land Use Department

FROM: John Romero, Public Works Dpt/Engineering Div/Traffic Impacts Section JR

SUBJECT: **Case #M-2007-13, Beaty South General Plan Amendment**
Case #M-2007-14, Beaty South Annexation
Case #ZA-2007-03, Beaty South Rezoning from R-1 to R-5

ISSUE

Request for approval of a General Plan future land use map amendment to change the designation of 96.73± acres of land to Low Density (3-7 dwelling units per acre), for annexation of the 96.73± acres of land as well as the adjacent Richards Avenue right-of-way, for a total of 99.28± acres, and to rezone the 96.73± acres of land from R-1 (Residential – 1 dwelling units per acre) to R-5 (Residential – 5 dwelling units per acre). The property is located west of Richards Avenue and south of Governor Mile Road.

RECOMMENDED ACTION:

Review comments are based on submittals received on April 18, 2007 and additional submittals received on June 4, 2007. The comments below should be considered as Conditions of Approval to be addressed in a satisfactory manner prior to subsequent submittals:

1. It is the Public Works Department's understanding that by annexing this property, the City will in affect take over ownership and responsibility of Richards Avenue along the property's frontage. The City currently owns Richards Avenue from Rodeo Road to Governor Mile Road and from the proposed Beckner Road to Interstate 25. By approval of this annexation and based on the above mentioned assumption the City would own and be responsible for Richards Avenue from Rodeo Road to Interstate 25.
2. The proposed development will not be granted direct access onto Richards Avenue other than the proposed Richards Avenue/Beckner Road intersection and will only be granted one access off of Governor Miles Road.
3. The developer shall provide fair share monetary contributions for:
   a. The Rodeo/Richards Intersection improvements project
   b. The Rodeo Road Widening Project.
4. The following comments pertain to the Traffic Impact Analysis (TIA) revised on June 4, 2007:

(p. 1 of 3)

Exhibit D-1
for Ordinance
No. 2007-30

SEC CLERK RECORDED 11/13/2007

a. The trip distribution figures show a very high number of development traffic (30% for Phase 1 &2, and 25% for Phase 1, 2, &3) turning right towards the south at the future Richards Avenue/Beckner Road intersection. The Public Works Department feels that this is too high and needs to be reevaluated.
b. The Horizon Year was not looked at for all identified intersections and only for the Richards Avenue/Beckner Road intersection and for Richards Avenue itself. As stated in my email sent to the applicant on May 18, 2007, a Horizon Year analysis must be performed for all intersections. This Horizon Year analysis is important in determining what ultimate improvements need to be performed at all areas of interest identified in the TIA.
c. Provide clarification on whether the VISUM model used for the 2030 traffic estimates included Beckner Road from Cerrillos Road to Richards Avenue.
d. A safety analysis was not provided, which was requested in my email sent to the applicant on May 18, 2007. The developer shall provide a safety analysis as described in the State Access Management Manual.
e. The TIA identifies the need, at Phase 3 of the development, for a right-turn lane for the westbound traffic at the Governor Miles Road/Entrada Sonata intersection. What is this based on?
f. The Capacity Analysis performed for the Governor Miles/Richards Avenue intersection shows several failures. In addition to the entire intersection functioning at a Level of Service (LOS) "D" or better, each individual movement must at a minimum operate at a LOS "E". The TIA shows several movements that operate at a LOS F. Mitigation measures must be recommended and analyzed to resolve any failing movement.
g. The TIA illustrates that in the Horizon Year (2030), Richards Avenue as a 2-lane facility will not be capable of accommodate traffic based on existing and anticipated development. The TIA shows that in order for Richards avenue, as well as the Richards Avenue/Beckner Road intersection (Richards Avenue/Governor Miles intersection was not looked at but is required per comment 4.b) to experience acceptable LOS, Richards Avenue will have to be a four-lane facility.
h. The TIA shows that in order for the Richards Avenue/Beckner Road intersection to function at an acceptable LOS for both the Implementation Year (2014) and the Horizon Year (2030), it must be signalized. The current Metropolitan Transportation Plan identifies this intersection as a possible candidate for a roundabout. A roundabout is not recommended at this location because of the fact that in the future it will have to accommodate four lanes of traffic.

5. As the Beaty South development progresses, the City will identify those traffic mitigation measures the developer must provide and those it must contribute to. This will depend on where other developments in the area are in the development process and how much has already been contributed to each specific area needing mitigation.
6. The developer shall construct its portion of Beckner Road in accordance with the Metropolitan Planning Organization's recommendations. This will ensure consistency with the proposed Extraterritorial Zone development to the east.

(p. 2 of 3)

Exhibit D-1
for Ordinance
No. 2007-30

If you have any questions or need any more information, feel free to contact me at 955-6638. Thank you.

M:\Traffic Impacts\01-TIAs\2007\Beaty South\Beaty South 06-08-07.doc

CITY CLERK RECORDED 11/13/2007

(p. 3 of 3)

Exhibit D-1
for Ordinance
NO. 2007-30

DATE: May 1, 2007
TO: Donna Wynant, Case Manager

FROM: J.T. Bolleter, Assistant Chief
SUBJECT: DRT Case: Beaty South
Case # M 2007-13 M 2007-14 ZA 2007-03

I have conducted a preliminary review of the above mentioned case(s) for compliance with the 2003 International Fire Code® (IFC). I am recommending approval for the above mentioned case(s). During the Subdivision approval process, the following shall be addressed prior to approval by the Planning Commission. *(All IFC Section shown in Italics)*

Shall provide two separate fire apparatus access roads as per IFC § D107. Both access roads shall be shown to connect to City Right of Way.

> ***D107.1 One- or two-family dwelling residential developments.***
> ***Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.***
>
> ***D104.3 Remoteness.***
> ***Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.***

Fire Hydrants shall be relocated to a location acceptable to the Fire Code Official. Contact Fire Department for clarification and approval of fire hydrant locations.

All Fire Department Access Roads shall be marked with signs in accordance with IFC § D103.6. Development plans shall include a signage plan with fire access roads marked with appropriate signs spaced not more than 40 ft. apart.

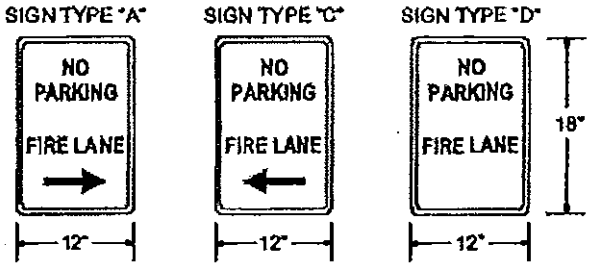
Exhibit D-2

(p. 1 of 2)

for Ordinance No. 2007-30

D103.6 Signs.
Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

FIGURE D103.6
FIRE LANE SIGNS.



D103.6.1 Roads 20 to 26 feet in width.
Fire apparatus access roads 20 to 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a fire lane.
D103.6.2 Roads more than 26 feet in width.
Fire apparatus access roads more than 26 feet wide (7925 mm) to 32 feet wide (9754 mm) shall be posted on one side of the road as a fire lane.

Proposed infrastructure shall be sufficient to accommodate the fire flow requirements set forth in IFC § B105.

Development Plan General Notes shall indicate the following provisions:

- Fire Department Access shall be maintained throughout all development construction phases § 1410.1.
- An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site. IFC § 1412.1.
- Secondary fire access road shall be installed prior to issuance of any building permits.

Exhibit D-2
for Ordinance
No. 2007-30

(p. 2 of 2)

City of Santa Fe, New Mexico

memo

DATE: May 14, 2007

TO: Donna Wynant, Land Use Senior Planner
Case Manager

FROM: Risana Zaxus, M.S., PE RBZ
City Engineer

RE: Case # M 2007-13, # M 2007-14, and # ZA 2007-03
Beatty South General Plan Amendment, Annexation, & Rezoning

I reviewed a 9-sheet plan set dated April, 2007. These are conceptual plans submitted for a General Plan Amendment, Annexation, and Rezoning. The engineering drawings are not stamped by a professional engineer.

I have the following *preliminary comments* at this time:

1. The subdivision shall meet ANSI requirements for Americans with disabilities Act (ADA).
2. Provide NMDOT standard drawings for curb ramps and drive pads.
3. Provide FIRM panel related to 100-year floodplain and plot floodplain boundaries on the plat.

A complete review of this project will be required when it proceeds to the Development Plan phase.

(p. 1 of 1)

Exhibit D-3

for Ordinance No. 2007-30

5982/51/11 RECORDED 11/13/2007 01:42:26 PM

City of Santa Fe, New Mexico

memo

DATE: May 14, 2007

TO: Ms, Donna Wynant, Land Use Senior Planner
Planning Division

CC: R. B. Zaxus, City Engineer
Engineering Development Review Division

FROM: Charlie Gonzales, Land Use Senior Planner, Charlie
Engineering Development Review Division

RE: **Landscaping Comments for cases #M 2007-13, Beaty South General Plan Amendment, #M 2007-14, Beaty South Annexation and #ZA 2007-03, Beaty South Rezoning from R-1 to R-5.**

Below are comments for the Beaty South requests. These comments are based on the plan set dated April, 2007.

Landscaping : A Landscape Plan was not submitted. Please provide a Landcaping Plan, indicating compliance with Article 14-8.4, Landscape and Site Design.

1. Show compliance or noncompliance with Article 14-8.4 (E) (1) (4). Water Harvesting and Irrigation Standards. Provide more detailed information such as location of improvements, size, surface storage for trees.
2. Show compliance with Article 14-8.4 (E) (4) (a) - (l). Irrigation Standards. Provide more information on proposed irrigation.
3. Show compliance with Article 14-8.4 (F) (a) (i). Plant Material Standards. More information needs to be submitted in order to conduct a thorough review of the plans. (Preferably on a chart or table)
   - Plant size, (height and caliper),
   - Mature size, (height and spread),
   - Shrubs to be 5 gallons minimum,
   - 2" of mulch, seed mix design and fertilization.
4. Show compliance with Article 14-8.4 (F) (5). Existing Vegetation. Explain and show how many trees/shrubs will be removed, replaced or added.
5. Show compliance with Article 14-8.4 (G) (2) (b). Street Tree Standards.
6. Show compliance with Article 14-8.4 (H). Open Space Landscaping Requirements.

Exhibit D-4

(p. 1 of 1)

for Ordinance No. 2007-30

5082/11/11 DETACHED MEMO SE

SC CLERK RECORDED 11/13/2007

City of Santa Fe, New Mexico

memo

DATE: June 13, 2007

TO: Donna Wynant, Senior Land Use Planner
Amanda Martinez, Administrative Assistant, WBAO

FROM: Antonio Trujillo, Engineer, Water Division

SUBJECT: Water offsets/water rights budget for Beaty Subdivision South
DRT CASE NO. #M 2007-14

The agent for Beaty Subdivision South submitted the attached water budget for the subject project. The proposed water use per year is 102.2 acre feet per year (AFY). The development consist of 511 single family dwelling units that consume 0.20 AFY each on lots sized less than 6,000 square feet. The water budget includes irrigation on a per unit basis. The amount of water budgeted for this project exceeds 10 AFY. The project will have to be reviewed for compliance with SFCC Section 14-8.16.

cc: Gregory Smith, Permit and Development Review
Brian Snyder, Engineer Supervisor
Frank Katz, City Attorney
Ron Pacheco, Community Services
Water Offset/ Water Rights File

(p. 1 of 1)

Exhibit D-5
for Ordinance No. 2007-130

SFC CLERK RECORDED 11/13/2007

From: MCLAUGHLIN, ANNE M.
Sent: Saturday, June 23, 2007 2:31 PM
To: Jennifer Jenkins
Cc: WYNANT, DONNA J
Subject: RE: Beaty South Annexation
Jennifer and Donna,

This language, and tying the dedication to the first phase subdivision is acceptible to me.

Anne

-----Original Message-----
From: Jennifer Jenkins [mailto:jennifer@jenkinsgavin.com]
Sent: Thu 6/21/2007 2:32 PM
To: MCLAUGHLIN, ANNE M.
Cc: WYNANT, DONNA J
Subject: Beaty South Annexation

Anne,

In response to your staff memo and per our discussion, I would like to suggest the following amendment to your request for a 30' trail easement along the arroyo:

Provide a minimum 20'-wide public, non-motorized trail easement, measured from the edge of the arroyo bank. A maximum of 30' may be required if slope and grade conditions warrant, which will be determined at the preliminary subdivision plat stage.

We are in agreement to provide a 30' trail easement within the power line easement.

Please let me know if this is acceptable.

Thank you!

Jennifer

Jennifer Jenkins
JenkinsGavin Design & Development, Inc.
128 Grant Avenue, Suite 227
Santa Fe, New Mexico 87501
Ph. 505.820.7444, Fax 505.820.7445
jennifer@jenkinsgavin.com

Exhibit D-6
for Ordinance No. 2007-30

(p. 1 of 1)

SFC CLERK RECORDED 11/13/2008

EXHIBIT D-7:

Beaty South
Case No. M 2007-14
Annexation
Ordinance No. 2007- 30

Additional City Council Conditions of Approval made at the 8/17/07 City Council meeting

1. Per the Conditions of Approval as stated in the letter from the School Board:
    - The 3.14 additional acres for the school site will be contiguous with open space;
    - The Beaty representatives will work with the partners in the adjacent lots surrounding the development to assist the district in obtaining an appropriate site of 15 acres;
    - A 15-acre site will be necessary to accommodate the future K-8 school within the area known as the Beaty Annexation and Las Soleras, based on current student yield calculations; and
    - If it is not possible to identify a total of 15 contiguous acres, the District is allowed to develop or sell for fair market value the 3.14 acres of land in the Beaty Annexation.
2. In accordance with the letter received from the County, the Santa Fe County is willing to agree to the inclusion of Richards Avenue in the annexation, and the City agrees to immediately convey this portion of Richards Avenue back to Santa Fe County once the annexation is complete. [NOTE: Requirement to convey Richards Avenue ROW to County superseded by Settlement Agreement between City and County May, 2008 Item No. 08-0382.]
3. The developer agrees to study erosion and drainage issues along Governor Miles and for the development, and agrees to address whatever issues come out of the study during its construction.
4. The developer shall provide a 150-foot buffer that matches or mirrors the north side of Governor Miles Road and shall provide at least a 30-foot buffer along Governor Miles and Richards Avenue.
5. The developer shall amend the roadway plan as a part of the subdivision plat approval process to have a more direct access to both the school site for the public schools as well as the Monte del Sol Charter School behind it for the express purpose of taking the school traffic which currently exists now in Nava Ade out of the neighborhood, and that the developer shall work with City staff as a part of the subdivision plat approval process.
6. Additional trees shall be planted in the open space along west property line as a buffer to homes along Autumn Leaf Lane.
7. All the homes shall be built to a minimum of energy star rating.

(p. 1 of 2)

Exhibit D-7
for Ordinance
No. 2007-30

8. An irrevocable offer to dedicate sufficient right-of-way to the approval of the City Public Works Director for widening of Richards Avenue, and for creation of Beckner Road as shown on the Annexation Master Plan, shall be recorded concurrently with the annexation plat, with acceptance of the offer at the discretion of the Governing Body.

FILED FOR RECORD 11/13/2007

Exhibit D-7
for Ordinance
No. 2007-30

SFC CLERK RECORDED 11/13/2007

SANTA FE PUBLIC SCHOOLS

Leslie Carpenter, EdD
Superintendent of Schools

Educational Services Center
610 Alta Vista
Santa Fe, NM 87505
Telephone (505) 467-2003
Facsimile (505) 467-2072

August 20, 2007

Mayor David Coss
Members of City Council:
Councilor Karen Heldemeyer
Councilor Patti Bushee
Councilor Miguel Chavez
Councilor Carmichael Dominguez
Councilor Chris Calvert
Councilor Matthew Ortiz
Councilor Rebecca Wurzburger
Councilor Ronald Trujillo

Dear Mayor Coss and City Councilors:

The purpose of this letter is to let you know that the Santa Fe Public Schools' Board of Education has reached an agreement with representatives from the housing development known as the Beaty Annexation, and will accept their offer of 3.14 acres of land as the developers' "fair share" contribution toward a school site in the area, with the following understandings:

1. The 3.14 acres will be contiguous with open space;
2. The Beaty representatives will work with the partners in the adjacent Las Soleras Development to assist the district in obtaining an appropriate school site of 15 acres;
3. A 15-acre site will be necessary to accommodate a future K-8 school within the area known as the Beaty Annexation and Las Soleras, based on our current student yield calculations; and
4. If it is not possible to identify a total of 15 acres contiguous with the Beaty land contribution of 3.14 acres, the district will be allowed to develop, or sell for fair market value, its 3.14 acres of land within the Beaty Annexation.

The Santa Fe Public Schools' Board of Education wishes to inform the City Council that the acceptance of this donation of 3.14 acres of land as a "fair share" contribution from the Beaty developers does not mean that this amount of land will necessarily be an acceptable amount for future developments of this size. The district is currently engaged in writing policies and protocols that will address the amount of land required in the future from developers as a "fair share

Exhibit D-8
(p 1 of 2)
for Ordinance No. 2007-30

contribution" for school sites. These new projections will take into account. not just census data, but the amount of community use that will impact our schools, as well as space required for playgrounds, athletic fields and parking, curricular and programmatic requirements, and Public Schools Facility Authority standards for new school sites.

The district is pleased to have reached agreement with the Beaty Annexation representatives. We hope that you will consider the district's needs and planning for our children's future as you consider any other new developments that come before the City Council. The school district will be providing you with its policies regarding planning standards and student yields within the next few months.

Sincerely,

Leslie Carpenter

Dr. Leslie Carpenter,
Superintendent

Frank Montano

Frank Montano, President
Board of Education

cc: Board of Education

Exhibit D-6
for Ordinance No. 2007-30
(p. 2 of 2)

CLERK RECORDED 11/13/2007

Harry B. Montoya
Commissioner, District 1

Virginia Vigil
Commissioner, District 2

\aael D. Anaya
issioner, District 3

Paul Campos
Commissioner, District 4

Jack Sullivan
Commissioner, District 5

Roman Abeyta
County Manager

July 23, 2007

COUNTY OF SANTA FE) ORDINANCE
STATE OF NEW MEXICO) ss PAGES: 31

I Hereby Certify That This Instrument Was Filed for Record On The 13TH Day Of November, 2009 at 01:39:59 PM And Was Duly Recorded as Instrument # 1583128 Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Valerie Espinoza
Deputy _____ County Clerk, Santa Fe, NM

Otis Beaty
Building Services of Santa Fe
P.O. Box 4496
Santa Fe, NM 87502

Dear Mr.Otis:

The purpose of this letter is to provide you with direction regarding the Beaty South development off Richards Avenue. Santa Fe County is currently in discussion with the City of Santa Fe regarding annexation and it has been established that Richards Avenue, that adjoins your property, belongs to Santa Fe County and thus consent from Santa Fe County is required.

Santa Fe County is willing to agree to your inclusion of Richard's Avenue, in your annexation request, provided that the City of Santa Fe immediately conveys that portion of Richard's Avenue back to Santa Fe County.

In the event that the City of Santa Fe does not agree to this, Santa Fe County is willing to discuss other options such as the creation of an open space tract along Richard's Avenue, so that Richard's Avenue will no longer adjoin your proposed development and therefore would not need to be included in your annexation petition.

If you have any questions feel free to contact me at (505) 986-6200.

Sincerely,

Roman Abeyta
Santa Fe County Manager

Exhibit D-9
for Ordinance No. 2007-30

SFC CLERK RECORDED 11/13/2009

CITY OF SANTA FE, NEW MEXICO

BILL NO. 2007-39

AN ORDINANCE

AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF SANTA FE; CHANGING THE CLASSIFICATION FROM R-1 TO R-5; AND PROVIDING AN EFFECTIVE DATE WITH RESPECT TO A CERTAIN PARCEL OF LAND COMPRISING 96.73 ACRES MORE OR LESS LYING WITHIN SECTION 8, T.16N, R.9E N.M.P.M., SANTA FE COUNTY, NEW MEXICO ("BEATY SOUTH" ZONING CASE NO. Case #ZA 2007-03)

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF SANTA FE:

Section 1. The following real property (the "Property") located within the municipal boundaries of the city of Santa Fe, which has been annexed pursuant to Case No. M 2006-53 is restricted to and classified as R-3 (Residential, three units per acre).

A parcel of land comprising 96.73 acres, lying within Section 8, T.16N, R.9E N.M.P.M. as more fully described in "Exhibit A" attached hereto and incorporated by reference.

Section 2. The official zoning map of the City of Santa Fe adopted by Ordinance No. 2001-27 is amended to conform to the changes of zoning classifications for the property set forth in Section 1 of this Ordinance.

Section 3. The rezoning action effected by this ordinance is subject to the conditions of approval set forth in "Exhibit B" attached hereto and incorporated by reference.

Section 4. This Ordinance shall be published one time by the title and general summary and shall become effective five days after such publication.

Section 5. The rezoning action with respect to the Property affected by this Ordinance is subject to the time restrictions set forth in Section 14-3.5(D)(1) SFCC 2001 (Two-year Review/Rescission).

APPROVED AS TO FORM:

FRANK D. KATZ, CITY ATTORNEY

Vista De La Sierra - Drainage Management Plan

A Drainage Management Plan for the development and the arroyo will properly address all aspects of drainage, will comply with the City of Santa Fe Drainage and Grading ordinances. In general, all Federal, State, County and City regulations will be adhered to.

The development will control storm water using a series of onsite storm water ponds to collect, detain and release storm water runoff at pre-developed flow rates. Drainage structures will be constructed to release storm water into the arroyo in a stable manner.

Other drainage structures will be constructed to address existing erosion and slope stability issues and to stabilize the arroyo. Existing storm drains that discharge to the property, that are causing erosion will also be addressed, such as the crossing structure of Richards Avenue.

Currently some adjacent areas are subject to flooding either by upstream basins or by the arroyo itself. The proposed improvements will intercept and redirect these flows and provide the necessary floodplain protection.

Terry O. Brown P.E.

Vista de la Sierra Subdvision

(Governor Miles Rd. / Richards Ave.)

Traffic Impact Study

October 19, 2020

FINAL

Presented to:

City of Santa Fe
Traffic Engineering

Prepared for:

Columbus Capital LLC
Greg Gonzales COO
P. O. Box 2328
Santa Fe, NM 87504

TERRY O. BROWN
NEW MEXICO
6407
LICENSED PROFESSIONAL ENGINEER

Terry O. Brown P.E.
P.O. Box 92051
Albuquerque, NM 87199
505 · 883 · 8807

Vista de la Sierra Subdivision - Santa Fe, NM
(Governor Miles Rd. / Richards Ave.)
Traffic Impact Study

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Vista de la Sierra Subdivision (formerly called "Beaty Subdivision"), determine the impact of the Beaty Subdivision on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared to meet the requirements of the City of Santa Fe Traffic Engineering Dept. associated with its review of the Vista de la Sierra Subdivision.

The proposed Vista de la Sierra Subdivision is located southwest of Governor Miles Rd. / Richards Ave. The study area includes the intersections of Governor Miles Rd. / Richards Ave., Entrada Sonata / Governor Miles Rd., Governor Miles Rd. / Rising Sun Dr., Governor Miles Rd. / Mesa Bonita Rd., Governor Miles Rd. / Dancing Ground Rd., Whispering Wing Rd. / Dancing Ground Rd., La Puerta / Beckner Rd., Beckner Rd. / Richards Ave. and the proposed driveway on Beckner Rd. (Driveway "A").

The proposed project, which will be constructed in phases, will be analyzed through the year 2040. It includes approximately 390 single family detached homes, the first phase of which will be accessed with a driveway ("A") on Beckner Rd. The first phase of the project (comprised of Phase 1a and Phase 1b) will contain approximately 130 single family residential lots. The anticipated implementation year for this phase is 2024.

The subsequent phases of the Vista de la Sierra Subdivision will be accessed via three additional driveways: two full access intersections with Governor Miles Rd. (the eastbound leg of Entrada Sonata and the northbound leg of Rising Sun Dr.) and the extension of Whispering Wing Rd. east from Dancing Ground. Rd. The horizon year for this phase is 2034. In addition, an ultra-horizon year (2040) will be analyzed. The purpose of the ultra-horizon year is primarily to determine future right-of-way needs and not to establish required infrastructure improvements for which the proposed Vista de la Sierra Subdivision should be financially responsible. Improvements recommended in this Study as a result of the ultra-horizon year analysis are for planning purposes only and should be funded by impact fees.

Analysis results by analysis year are included in the following tables:

Executive Summary Results Table

			2024 Conditions		2034 Conditions		2040 Conditions	
Intersection No. / Name	**Signalization**	**Case**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**
1 - Governor Miles Rd. / Richards Ave.	Signalized	NO BUILD	C - 21.2	C - 21.5	C - 26.0	C - 28.3	C - 33.6	F - 94.2
		BUILD	C - 22.8	C - 23.1	C - 28.4	D - 49.8	D - 36.9	F - 98.8
		BLD [MIT]	**N/A**	**N/A**	**C - 28.4**	**C - 25.4**	**A - 32.2**	**C - 28.9**
2 - Entrada Sonata / Gov. Miles Rd.	Unsignalized	NO BUILD	B - 11.2	B - 12.0	B - 11.9	B - 12.9	B - 12.1	B - 13.1
		BUILD	B - 11.5	B - 12.7	B - 14.2	C - 17.1	C - 14.0	C - 16.1
3 - Governor Miles Rd / Rising Sun Dr	Unsignalized	NO BUILD	B - 11.6	B - 12.5	B - 12.5	B - 13.7	B - 13.1	B - 14.7
		BUILD	B - 11.8	B - 13.0	B - 14.9	C - 17.1	C - 15.3	C - 17.8
4 - Gov Miles Rd. / Mesa Bonita Rd	Unsignalized	NO BUILD	A - 9.3	A - 9.9	A - 9.7	B - 10.3	A - 9.9	B - 10.4
		BUILD	A - 9.5	B - 10.2	A - 9.9	B - 10.5	B - 10.2	B - 10.7
5 - Gov Miles Rd. / Dancing Ground	Unsignalized	NO BUILD	C - 15.4	C - 15.1	C - 20.4	C - 19.2	C - 23.9	C - 24.5
		BUILD	C - 19.3	C - 17.8	D - 26.7	C - 24.3	F - 33.2	D - 34.0
6 - Whispering Wing / Dancing Grnd	Unsignalized	NO BUILD	A - 9.6	A - 9.2	B - 10.3	A - 9.7	B - 11.0	A - 9.8
		BUILD	B - 10.1	C - 23.1	B - 10.8	B - 10.3	B - 11.5	B - 10.4
7 - Beckner Rd. / La Puerta	Unsignalized	NO BUILD	A - 9.1	B - 11.4	B - 13.1	C - 20.3	C - 16.1	E - 37.6
		BUILD	B - 10.5	B - 12.1	B - 12.2	C - 17.9	B - 14.3	D - 29.6
8 - Beckner Rd. / Richards Ave.	Unsignalized	NO BUILD	**F - 66.8**	**F - 400.0**	**F - 812.0**	**F - 999**	**F-999**	**F - 999**
		BUILD	**F - 137.0**	**F - 610.0**	**F - 999**	**F - 999**	**F - 999**	**F - 999**
		BLD [RND]*	**A - 9.9**	**B - 10.7**	**B - 14.3**	**A - 9.7**	**A - 8.1**	**B - 14.1**
		BLD [SIG]*	**B - 13.8**	**B - 15.7**	**B - 13.8**	**B - 18.9**	**N/A**	**N/A**
9. Beckner Rd. / Beaty Access	Unsignalized	NO BUILD	A - 9.9	B - 11.3	B - 13.2	D - 32.7	C - 17.6	**F - 284.0**
		BUILD	B - 12.5	B - 14.6	C - 20.0	**F - 64.1**	C - 23.4	**F - 597.0**
		BLD [MIT]	**A - 4.5**	**A - 5.0**	**A - 5.7**	**A - 8.0**	**A - 6.7**	**B - 12.1**

*** - RND - Roundabout**

*** - SIG - Signalized**

In summary, the proposed Vista de la Sierra Subdivision does have a moderate adverse impact to the adjacent transportation system and the minimal impact to the transportation system can be mitigated by the recommended measures described in this report and summarized in the table above.

In summary, the recommendations of this study are:

2024 (Implementation Year Recommendations) – Phase 1 ONLY:

- *Another development project has committed to designing and constructing a new temporary traffic signal at the intersection of Beckner Rd. / Richards Ave. This Study assumes that temporary signal will be implemented by 2024.*
- *Construct the intersection of Beckner Rd. / Beaty access as a single lane circulating roundabout. (mandated by City of Santa Fe Traffic Engineer).*

2034 (Horizon Year Recommendations) – FULL BUILDOUT:

- *Adjust signal timing at the intersection of Governor Miles Rd. / Richards Ave. Existing geometry with adjusted signal timing will accommodate forecast 2034 AM and PM Peak Hour volumes.*
- *This Study assumes that a temporary traffic signal will be controlling the intersection of Beckner Rd. / Richards Ave. prior to the implementation year of this project (2024). The operation of the traffic signal is expected to handle the forecast 2034 (horizon year) volumes of AM and PM Peak Hour Traffic provided that the following geometry is provided at each approach to the intersection:*
    - *Eastbound approach – one left turn and one thru / right turn lane. (LT Lane should be 250 feet long)*
    - *Westbound approach – one single approach for left / thru / right turns.*
    - *Northbound approach – one left turn lane and one thru / right turn lane (LT Lane should be 250 feet long)*
    - *Southbound approach – one left turn lane, one thru lane, and one right turn lane (LT and RT Lanes should be 300 feet long)*
- *The intersection of Beckner Rd. / Beaty Access as a single lane circulating roundabout can continue. No further recommendation is associated with the horizon year analysis.*
- *Construct the access for Vista de la Sierra Subdivision to align with Rising Sun Dr. and Entrada Sonata. Both access points should be full access unsignalized intersections. The access aligned with Entrada Sonata can be a single approach (northbound) access. It is suggested that the access aligned with Rising Sun Dr. be constructed with two approach lanes (northbound) – one for exclusive left turns and one for thru / right turns. A westbound left turn deceleration lane on Governor Miles Rd. already exists for this access point.*
- *Construct a westbound left turn deceleration lane on Governor Miles Rd. at the new access that aligns with Rising Sun Dr. The westbound left turn deceleration lane should be designed and constructed to a length of 150 feet long including 50 ft. long transition.*

2040 (Ultra Horizon Year Recommendations):

- *Construct a northbound right turn lane on Richards Ave. at Governor Miles Rd. (northbound right turn movements can be signalized or not signalized)*

Recommendations for the Ultra Horizon Year (2040) should not be considered when determining the financial responsibility of this development. The ultra-horizon year analysis was required by the City of Santa Fe Traffic Engineer for the sole purpose of determining 1) right-of-way needs and 2) public infrastructure requirements at that time. The recommendations made associated with the Ultra Horizon Year analysis as assumed to be funded by impact fees and public funds.

Vista de la Sierra Subdivision - Santa Fe, NM
(Governor Miles Rd. / Richards Ave.)
Traffic Impact Study

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Executive Summary i

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??Impact Assessment 33

Access Design Specifications 33

Summary of Deficiencies, Anticipated Impacts, and Recommendations 34

APPENDIX 36

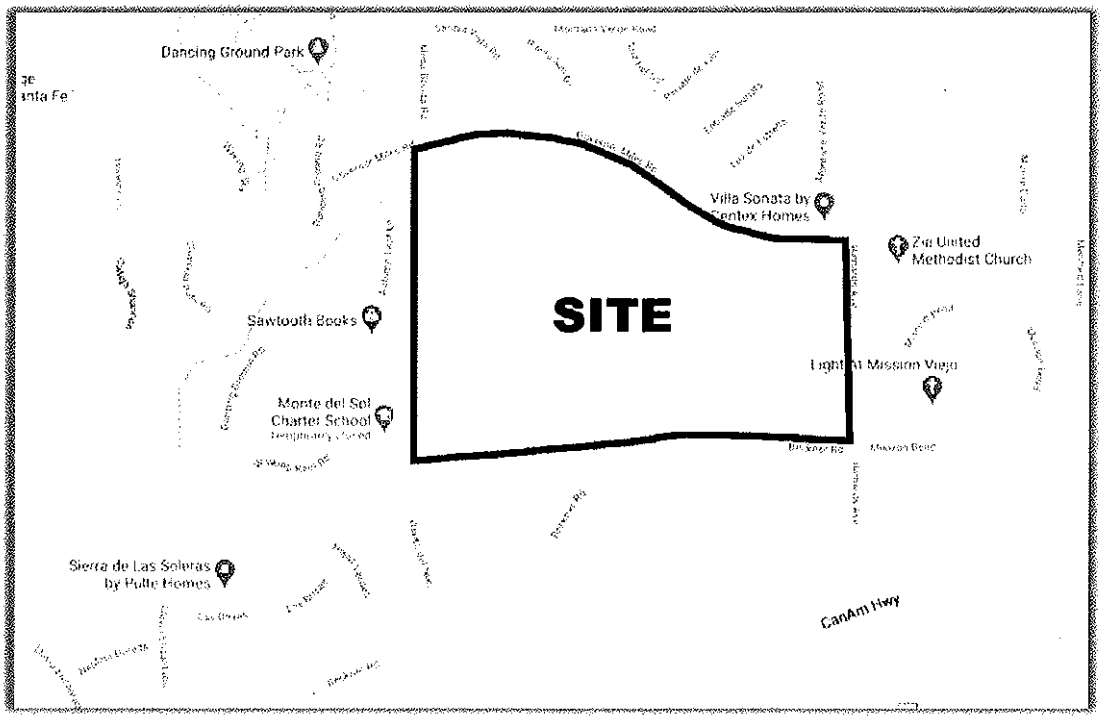
Vista de la Sierra Subdivision - Santa Fe, NM
(Governor Miles Rd. / Richards Ave.)
Traffic Impact Study

Introduction

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Vista de la Sierra Subdivision (formerly called Beaty Subdivision) and determine the impact of the Vista de la Sierra Subdivision on the adjacent transportation system. The recommendations of this study will provide recommended measures to mitigate the impact of the Vista de la Sierra Subdivision on critical intersections and street segments. This study is prepared to meet the requirements of the City of Santa Fe Traffic Engineering Department associated with its review of the Vista de la Sierra Subdivision as shown on the plan on Page A-3 in the Appendix of this report.

The proposed Vista de la Sierra Subdivision is located southwest of the signalized intersection of Governor Miles Rd. / Richards Ave. in Santa Fe, New Mexico. If the property were to develop in a manner significantly different than the proposed plan considered in this report such that the number of generated trips is significantly greater, then an update to this study may be required by the City of Santa Fe Traffic Engineering Dept.

Following is a vicinity map depicting the location of the proposed project:



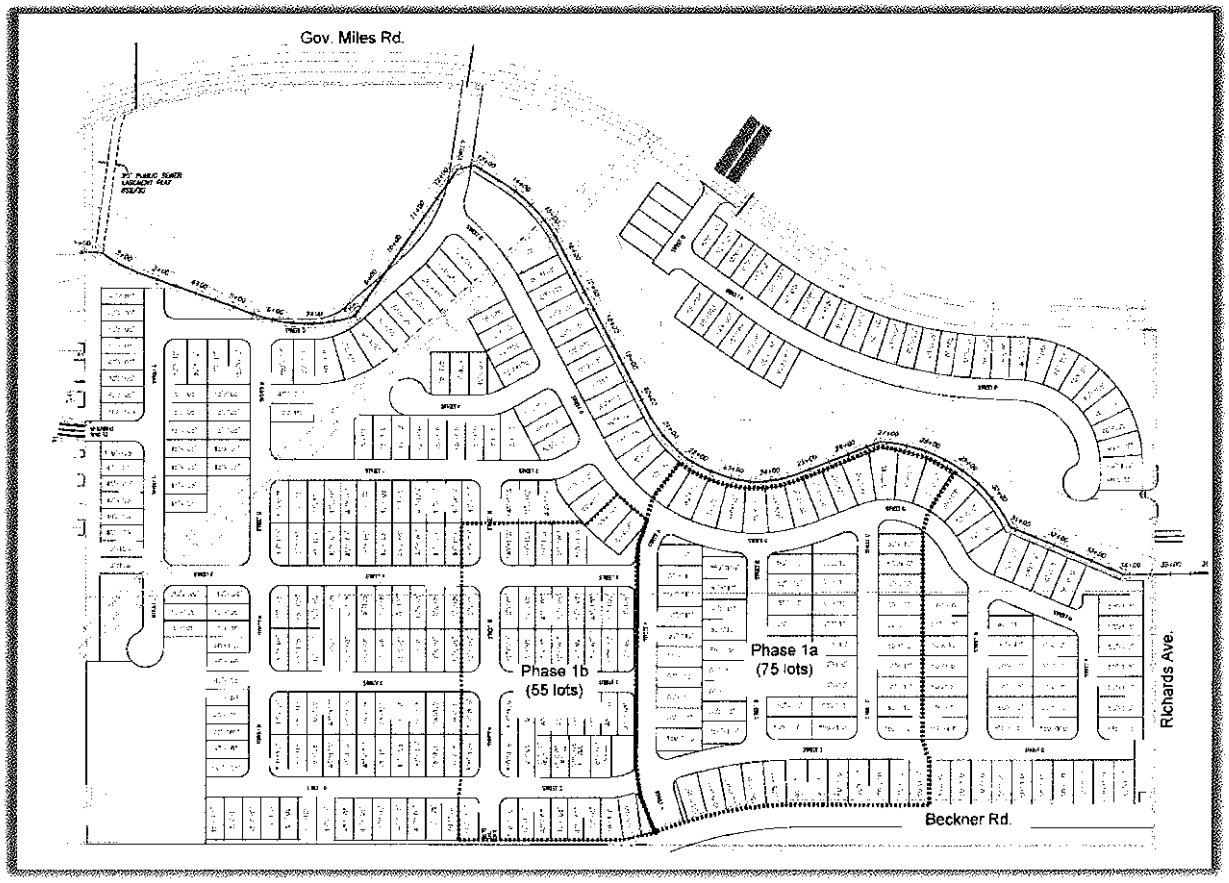
Description of Proposed Development

The proposed project is described as an approximately 390 single family detached homes subdivision southwest of Governor Miles Rd. / Richards Ave. The project lies in the city limits of Santa Fe, NM. The project fronts on a Minor Arterial Roadway (Governor Miles Rd.), a Principal Arterial Roadway (Richards Ave.), and another Minor Arterial Roadway (Beckner Rd.) which are maintained by the City of Santa Fe. Therefore, the project will be required to comply with the requirements of the City of Santa Fe with regard to transportation issues along City roads.

The first phase of the Vista de la Sierra Subdivision will be constructed with an anticipated implementation year of 2024. The full buildout will be evaluated with a horizon year of 2034. In addition, an ultra-horizon year of 2040 will be analyzed assuming full buildout of the proposed subdivision.

The Vista de la Sierra Subdivision will be accessed via one driveway for Phase 1 and three additional access intersections for full buildout.

Following is the proposed site plan depicting driveway (access) locations (also, see Appendix Page A-3 for a more complete version of the proposed Vista de la Sierra Subdivision site plan):



Study Area Conditions

A Traffic Impact Study Scoping Meeting was held at the City of Santa Fe Traffic Engineering Department with John Romero. At the Scoping Meeting, it was determined that the study area would include the following list of intersections to be analyzed in the Traffic Impact Study:

1. Governor Miles Rd. / Richards Ave.
2. Entrada Sonata / Governor Miles Rd.
3. Governor Miles Rd. / Rising Sun Rd.
4. Governor Miles Rd. / Mesa Bonita Rd.
5. Governor Miles Rd. / Dancing Ground Rd.
6. Whispering Wing Rd. / Dancing Ground Rd.
7. La Puerta / Beckner Rd.
8. Richards Ave. / Beckner Rd.
9. Beckner Rd. / Driveway "A"

This scope of study was based on the assumption that the parcel in question would be developed as 390 single family detached homes as shown on the proposed site plan.

The volume forecasts in this Study assume the following:

1) The southeast connector has been constructed and implemented.
2) Trips generated by Nava Ade and Boggs subdivisions have been built into the background (NO BUILD) scenarios as well as the BUILD scenarios.

There is one public transit route in the area: Bus Route #21 – see the Appendix for further detail.

There are some pedestrian facilities in the project area – since this is a developing area of the city, it is expected that pedestrians will be accommodated as vacant parcels of land continue to develop in the future.

Governor Miles Rd. is classified as a Minor Arterial Roadway on the City of Santa Fe Regional Roadway Functional Class Map. It is a two-lane divided highway w/ medians, curb & gutter and sidewalk. The posted speed limit along this section of the Governor Miles Rd. is 30 MPH.

Richards Ave. is classified as a Principal Arterial Roadway on the City of Santa Fe Regional Roadway Functional Class Map. Richards Ave. is a two-lane roadway throughout the area with curb & gutter. The posted speed limit along this section of Richards Ave. is 35 MPH.

Beckner Rd. is classified as a Minor Arterial Roadway on the City of Santa Fe Regional Roadway Functional Class Map. It is a four lane and two-lane divided roadway w/ medians, curb & gutter and sidewalk from Cerrillos Rd. to Richards Ave. Ultimately, Beckner Rd. will be a four-land divided roadway from Cerrillos Rd. to Railrunner Rd. At some point east of Railrunner Rd., it may reduce to a two-lane roadway in the future. The posted speed limit along this section of the Governor Miles Rd. is 45 MPH.

Analysis of Existing Conditions

Due to the recent and current COVID-19 crisis, existing traffic counts (turning movements volumes) were not able to be collected for this Study. The impact of the COVID-19 crisis as a result of school and business shutdowns (temporary), traffic volumes have been reduced by up to 50%. All governmental reviewing agencies have taken the position that traffic counts are not valid and will not be accepted during the COVID-19 crisis period. It is not anticipated that traffic conditions will return to near normal until September 2020 or after. Therefore, in lieu of the use of actual traffic counts to evaluate conditions for this analysis, a Regional Transportation Model was utilized. The 2020 (Existing), 2024 (Implementation Year), 2034 (Horizon Year), and 2040 (Ultra Horizon Year) turning movements volumes utilized in this Study were furnished by Bob Shull, President of Eco Resources Management Systems, Inc. based on the current Santa Fe Metropolitan Planning Organization's regional transportation model (2040 data set).

The City of Santa Fe defers to Table 15.C-1 (Minimum Acceptable Levels of Service Standards) in the New Mexico Department of Transportation's *State Access Management Manual* to establish the minimum requirements for Level-of-Service / Delay for intersections in this analysis. Therefore, the Levels-of-Service and calculated control delays determined in this Study will be required to meet the requirements of the New Mexico Department of Transportation's *State Access Management Manual* Table 15.C-1 (Minimum Acceptable Level of Service Standards) as follows:

Table 15.C-1
Minimum Acceptable Level of Service Standards

Facility Type[1]	Access Categories							
	UINT	UPA	UMA	UCOL	RINT	RPA	RMA	RCOL
Freeway Sections	D	-	-	-	C	-	-	-
Ramp Junctions	D	-[2]	-[2]	-[2]	C	-[2]	-[2]	-[2]
Weaving Areas	D	-[2]	-[2]	-[2]	C	-[2]	-[2]	-[2]
Multi-Lane Highways	-	D	D	C	-	C	C	B
Two-Lane Highways	-	D	D	C	-	C	C	B
Signalized Intersections	-	D	D	D	-	C	C	C
Unsignalized Intersections	-	D	D	D	-	D	D	C

Based on the above table, signalized intersections along Richards Ave., Governor Miles Rd., and Beckner Rd. should be level-of-service D or better.

The existing conditions analysis of the adjacent street system for this project was performed and is included in the Appendix of the report but is not summarized in the text of the report (Appendix Pages A-33 through A-49). The Implementation Year (2024) analysis demonstrates that all the adjacent street system operates acceptably for the NO BUILD and BIULD Conditions except for Beckner Rd. / Richards Ave. Therefore, it can be concluded that the existing conditions are generally similar.

Analysis of Implementation Year Conditions (2024)

#1 – Governor Miles Rd. / Richards Ave. - Pages A-50 *thru* A-92

The results of the implementation year (2024) analysis of the signalized intersection of Governor Miles Rd. / Richards Ave. are summarized in the following table:

Gov Miles Rd. / Richards Ave.	EB (Gov Miles Rd.)			WB (Gov Miles Rd.)			NB (Richards Ave.)			SB (Richards Ave.)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	1	1>	0	1	1	1
AM Peak Hour												
2024 NO BUILD Conditions Volumes	134	28	74	66	27	27	45	341	51	32	464	83
V/C Ratio	0.41	0.00	0.66	0.24	0.00	0.38	0.12	0.00	0.60	0.08	0.69	0.15
Level-of-Service	C	A	C	C	A	C	B	A	B	A	C	B
Control Delay (Seconds)	24.8	0.0	34.1	24.1	0.0	31.0	10.4	0.0	18.8	9.5	21.2	12.8
Intersection LOS	**C - 21.2**											
95th Percentile Queue (veh)	4.0	0.0	3.7	1.9	0.0	1.9	0.6	0.0	9.6	0.4	11.8	1.7
2024 BUILD Conditions Volumes	178	30	93	66	26	27	52	372	51	32	464	90
V/C Ratio	0.50	0.00	0.65	0.23	0.00	0.38	0.15	0.00	0.66	0.09	0.71	0.16
Level-of-Service	C	A	C	C	A	C	B	A	C	B	C	B
Control Delay (Seconds)	24.8	0.0	32.8	25.0	0.0	32.1	11.4	0.0	21.6	10.7	23.0	13.8
Intersection LOS	**C - 22.8**											
95th Percentile Queue (veh)	5.5	0.0	4.5	2.0	0.0	1.9	0.8	0.0	11.2	0.5	12.5	2.0

PM Peak Hour

2024 NO BUILD Conditions Volumes	98	20	59	56	34	26	109	446	58	28	476	152
V/C Ratio	0.32	0.00	0.56	0.19	0.00	0.41	0.31	0.00	0.76	0.08	0.70	0.26
Level-of-Service	C	A	C	C	A	C	B	A	C	B	C	B
Control Delay (Seconds)	24.3	0.0	32.8	23.4	0.0	30.9	11.2	0.0	23.3	10.6	21.1	13.6
Intersection LOS	**C - 21.5**											
95th Percentile Queue (veh)	2.8	0.0	2.8	1.6	0.0	2.1	1.5	0.0	13.1	0.4	11.9	3.3
2024 BUILD Conditions Volumes	129	20	67	57	35	25	122	466	57	28	521	211
V/C Ratio	0.41	0.00	0.59	0.20	0.00	0.41	0.39	0.00	0.79	0.08	0.77	0.37
Level-of-Service	C	A	C	C	A	C	B	A	C	B	C	B
Control Delay (Seconds)	24.8	0.0	32.9	23.7	0.0	31.1	12.7	0.0	25.2	11.1	24.2	15.1
Intersection LOS	**C - 23.1**											
95th Percentile Queue (veh)	3.9	0.0	3.1	1.6	0.0	2.1	1.8	0.0	14.1	0.4	13.8	4.9

The analysis of the intersection of Governor Miles Rd. / Richards Ave. demonstrates that the delays will be acceptable for both the AM Peak Hour and PM Peak implementation year (2024) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2024 Implementation Year operational analysis of the signalized intersection of Governor Miles Rd. / Richards Ave.

#2 through #6 – Operation of Intersections #2 through #6 are not impacted by implementation of Phase 1 of Vista de la Sierra Subdivision since sole access to Phase 1 is onto Beckner Rd.

#7 – La Puerta. / Beckner Rd. - Pages A-50 *thru* A-92

The results of the implementation year (2024) analysis of the unsignalized driveway of La Puerta. / Beckner Rd. is summarized in the following tables:

Beckner Rd. / La Puerta	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (La Puerta)			SB (La Puerta)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2024 NO BUILD Conditions Volumes	0	0	7	0	0	12	2	163	11	17	130	6
V/C Ratio		0.01			0.02		0.00			0.02		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.1			9.3		7.5	0.0		7.7	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.1		0.0			0.0		
2024 BUILD Conditions Volumes	0	0	18	0	0	13	6	201	11	17	142	13
V/C Ratio		0.02			0.03		0.01			0.02		
Level-of-Service		A			B		A	A		A	A	
Control Delay (Seconds)		9.3			10.5		7.6	0.0		7.8	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.1		0.0			0.0		

PM Peak Hour

2024 NO BUILD Conditions Volumes	0	0	3	0	0	31	5	197	15	29	158	29
V/C Ratio		0.00			0.09		0.00			0.03		
Level-of-Service		A			B		A	A		A	A	
Control Delay (Seconds)		9.3			11.4		7.7	0.0		7.8	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.3		0.0			0.1		
2024 BUILD Conditions Volumes	0	0	8	0	0	31	15	220	15	30	162	60
V/C Ratio		0.01			0.10		0.01			0.03		
Level-of-Service		A			B		A	A		A	A	
Control Delay (Seconds)		9.5			12.1		7.8	0.0		7.9	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.3		0.0			0.1		

The unsignalized intersection of Beckner Rd. / La Puerta was recently converted to a right-in, right-out, left-in only intersection. The forecast volumes generated by VISSUM assumed full access. Therefore, the left turns from the side street were redirected as right turns which would negotiate a U-Turn to achieve their desired direction of travel. The analysis of the intersection of Beckner Rd. / La Puerta. demonstrates that the delays will be acceptable implementation year (2024) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2024 Implementation Year operational analysis of the signalized intersection of Beckner Rd. / La Puerta.

#8 – Beckner Rd. / Richards Ave. - Pages A-50 *thru* A-92

The results of the implementation year (2024) analysis of the unsignalized driveway of Beckner Rd. / Richards Ave. is summarized in the following tables:

Beckner Rd. / Richards Ave.	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (Richards Ave.)			SB (Richards Ave.)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	1	1	1	1	1>	0
AM Peak Hour												
2024 NO BUILD Conditions Volumes	77	3	100	10	5	20	60	320	3	18	475	103
V/C Ratio	0.64	0.26		0.11	0.07		0.08			0.02		
Level-of-Service	F	C		E	B		A			A		
Control Delay (Seconds)	66.8	15.5		43.6	14.5		9.3			8.1		
Intersection LOS	**TWSC**											
2024 BUILD Conditions Volumes	115	3	13	10	5	20	63	321	3	17	483	112
V/C Ratio	0.99	0.05		0.08	0.07		0.08			0.02		
Level-of-Service	F	C		D	B		A			A		
Control Delay (Seconds)	137.0	15.7		33.1	14.8		9.4			8.1		
Intersection LOS	**TWSC**											
Mitigage Lane Geometry (Sigalized)	1	1	>	<	1	>	1	1	>	1	1	>
2024 BUILD Cond [MITIGATED] Volumes	115	3	13	10	5	20	63	321	3	17	483	112
V/C Ratio	0.31	0.05			0.27		0.78	0.33		0.03	0.82	
Level-of-Service	C	B	B	C	C	C	D	A	A	A	B	B
Control Delay (Seconds)	20.2	16.5	16.5	26.0	26.0	26.0	38.0	5.2	5.2	7.6	14.0	14.0
Intersection LOS	**B - 13.8**											
95th Percentile Queue (veh)	2.5	0.3	0.3	0.9	0.9	0.9	2.1	2.4	2.4	0.2	9.8	9.8

PM Peak Hour												
2024 NO BUILD Conditions Volumes	158	3	85	2	2	12	86	436	2	16	421	142
V/C Ratio	1.66	0.22		0.03	0.05		0.11			0.02		
Level-of-Service	F	B		E	C		A			A		
Control Delay (Seconds)	400.0	14.8		48.0	15.2		9.4			8.5		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	14.2	0.8		0.1	0.1		0.4			0.1		
2024 BUILD Conditions Volumes	185	3	88	1	2	12	93	441	2	16	421	194
V/C Ratio	2.13	0.24		0.02	0.05		0.12			0.02		
Level-of-Service	F	C		F	C		A			A		
Control Delay (Seconds)	610.0	15.5		52.5	16.0		9.7			8.5		
Intersection LOS	**TWSC**											
Mitigage Lane Geometry (Sigalized)	1	1	>	<	1	>	1	1	>	1	1	>
2024 BUILD Cond [MITIGATED] Volumes	185	3	88	1	2	12	93	441	2	16	421	194
V/C Ratio	0.44	0.26			0.12		0.38	0.47		0.04	0.86	
Level-of-Service	C	A	B	C	A	A	B	A	A	B	A	B
Control Delay (Seconds)	22.9	19.3	19.3	30.0	30.0	30.0	13.6	7.7	7.7	10.5	18.9	18.9
Intersection LOS	**B - 15.7**											
95th Percentile Queue (veh)	5.1	2.3	2.3	0.5	0.5	0.5	1.1	5.7	5.7	0.3	13.6	13.6

The Villa Sendero project has made a commitment to construct a temporary traffic signal at the intersection of Beckner Rd. / Richards Ave. The temporary signal is assumed in this report to be in operation during the implementation year (2024) and probably the horizon year (2034). However, beyond the lifetime of the temporary signal, it is advisable to conduct an updated

study to determine if a dual lane circulating roundabout may be a better option than a traffic signal at this intersection. Therefore, this Study assumes the operation of the temporary traffic signal for the implementation year and the horizon year analysis while leaving the option to implement either a dual lane circulating roundabout or a permanent traffic signal, whichever is deemed to be the better option based on an updated study at the time.

The existing analysis of the intersection of Beckner Rd.. / Richards Ave. demonstrates that the delays will be excessive for some turning movements during the AM Peak Hour and PM Peak implementation year (2024) conditions analyzed in this report. The excessive delays are forecast for the 2024 NO BUILD Conditions as well as for the BUILD Conditions. Additional traffic generated by Phase 1 of the Vista de la Sierra Subdivision will increase those already excessive delays. Recommended mitigation is to construct a new single lane circulating roundabout by the year 2024. A roundabout is recommended over a signalized intersection for the following reasons:

1) Roundabout are almost always safer than signalized intersections (i.e., there are less crashes as well as less severe crashes when they occur).
2) Modern Roundabouts are designed with specific geometric parameters that encourage drivers to reduce operating speed of their vehicles.
3) Roundabout maintenance costs are significantly less than that of a traffic signal.
4) Roundabouts generally require less stops than signalized and standard two-way stop-controlled intersections. The only vehicles required to stop at a roundabout are those that experience an impending real imminent conflict with another vehicle or pedestrian.
5) Pedestrian safety is enhanced at Modern Roundabouts due to the reduced vehicle speeds and pedestrian refuge areas in the splitter islands.
6) There is less environmental impact resulting from a Modern Roundabout since there are less stopped vehicles.

However, the City of Santa Fe has negotiated with another developer nearby to construct a temporary traffic signal at the intersection of Beckner Rd. / Richards Ave. This Study demonstrates that the temporary traffic signal will provide capacity and good operation of the intersection until the horizon year (2034). After that, the City may opt to construct a permanent traffic signal or construct a roundabout based on engineering studies at the time.

The design of the intersection as a signalized intersection should meet the requirement outlined in the Recommendations of this Study found at the end of the Executive Summary.

#9 – Beckner Rd. / Driveway "A" - Pages A-50 *thru* A-92

The results of the existing analysis of the unsignalized driveway of Beckner Rd. / Driveway "A" is summarized in the following tables:

Beckner Rd. / Beaty Access	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (Beaty Access)			SB (Beaty Access)		
2024 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		1>	0	0	<1		1>		0			
AM Peak Hour												
2024 BUILD Conditions Volumes	3	202	9	19	154	7	4	0	13	34	0	12
V/C Ratio	0.00			0.02				0.03			0.10	
Level-of-Service	A	A		A	A			B			B	
Control Delay (Seconds)	7.6	0.0		7.8	0.0			10.4			12.5	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.1				0.1			0.3	
Mitigated Geometry (Roundabout)	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
2024 BUILD Cond [MITIGATED] Volumes	3	202	9	19	154	7	4	0	13	34	0	12
V/C Ratio		0.19			0.16			0.02			0.05	
Level-of-Service		A			A			B			B	
Control Delay (Seconds)		4.5			4.0			3.7			3.7	
Intersection LOS	**A - 4.2**											
95th Percentile Queue (veh)		1.0		1.0				0.0			0.0	

PM Peak Hour												
2024 BUILD Conditions Volumes	9	228	14	31	228	31	18	0	31	16	0	6
V/C Ratio	0.01			0.03				0.11			0.07	
Level-of-Service	A	A		A	A			B			B	
Control Delay (Seconds)	7.9	0.0		7.9	0.0			12.4			14.6	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.1				0.4			0.2	
Mitigated Geometry (Roundabout)	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
2024 BUILD Cond [MITIGATED] Volumes	9	228	14	31	228	31	18	0	31	16	0	6
V/C Ratio		0.23			0.26			0.06			0.03	
Level-of-Service		A			A			A			A	
Control Delay (Seconds)		4.8			5.0			4.1			3.9	
Intersection LOS	**A - 4.8**											
95th Percentile Queue (veh)		1.0		0.0	1.0			0.0			0.0	

The analysis of the intersection of Beckner Rd. / Beaty Access demonstrates that the delays will be acceptable implementation year (2024) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2024 Implementation Year operational analysis of the unsignalized intersection of Beckner Rd. / Beaty Access. The City of Santa Fe, however, has required that the intersection of Beckner Rd. / Driveway "A" be constructed as a single lane circulating roundabout upon implementation of Phase 1 of the subdivision. In order to be consistent with the requirements of the City of Santa Fe, this report will recommend that a single lane circulating roundabout be constructed upon implementation of Phase 1 of this development.

Analysis of Horizon Year Conditions (2034)

#1 – Governor Miles Rd. / Richards Ave. - Pages A-93 *thru* A-139

The results of the horizon year (2034) analysis of the signalized intersection of Governor Miles Rd. / Richards Ave. are summarized in the following table:

Gov Miles Rd. / Richards Ave. 2034 Conditions	EB (Gov Miles Rd.)			WB (Gov Miles Rd.)			NB (Richards Ave.)			SB (Richards Ave.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	1	1>	0	1	1	1
AM Peak Hour												
2034 NO BUILD Conditoins Volumes	149	32	88	79	33	24	60	451	59	31	560	104
V/C Ratio	0.44	0.00	0.71	0.29	0.00	0.39	0.21	0.00	0.78	0.09	0.84	0.18
Level-of-Service	C	A	C	C	A	C	B	A	C	B	C	B
Control Delay (Seconds)	24.9	0.0	34.8	24.7	0.0	31.3	12.8	0.0	25.6	11.5	29.1	13.5
Intersection LOS	**C - 26.0**											
2034 BUILD Conditions Volumes	200	33	108	78	32	24	66	468	60	31	557	108
V/C Ratio	0.54	0.00	0.69	0.28	0.00	0.40	0.24	0.00	0.84	0.10	0.86	0.20
Level-of-Service	C	A	C	C	A	C	B	A	C	B	C	B
Control Delay (Seconds)	24.3	0.0	33.2	25.8	0.0	32.7	14.1	0.0	30.2	12.9	32.1	14.6
Intersection LOS	**C - 28.4**											
Mitigage Lane Geometry	1	1>	0	1	1>	0	1	1>	0	1	1	1
2034 BUILD Cond [MITIGATED] Volumes	200	33	108	78	32	24	66	468	60	31	557	108
V/C Ratio	0.54	0.00	0.69	0.28	0.00	0.40	0.24	0.00	0.84	0.10	0.86	0.20
Level-of-Service	C	A	C	C	A	C	B	A	C	B	C	B
Control Delay (Seconds)	24.3	0.0	33.2	25.8	0.0	32.7	14.1	0.0	30.2	12.9	32.1	14.6
Intersection LOS	**C - 28.4**											
PM Peak Hour												
2034 NO BUILD Conditoins Volumes	117	25	76	73	54	25	131	367	75	27	639	149
V/C Ratio	0.39	0.00	0.68	0.26	0.00	0.50	0.51	0.00	0.67	0.07	0.94	0.26
Level-of-Service	C	A	C	C	A	C	B	A	C	A	D	B
Control Delay (Seconds)	24.7	0.0	34.7	23.8	0.0	31.5	16.0	0.0	20.7	9.9	40.1	13.8
Intersection LOS	**C - 28.3**											
95th Percentile Queue (veh)	3.5	0.0	3.7	2.1	0.0	2.7	2.0	0.0	11.1	0.4	21.0	3.2
2034 BUILD Conditions Volumes	143	25	87	74	67	24	147	636	75	27	668	189
V/C Ratio	0.47	0.00	0.70	0.27	0.00	0.61	0.62	0.00	1.08	0.12	1.00	0.33
Level-of-Service	C	A	C	C	A	C	B	A	F	B	D	B
Control Delay (Seconds)	25.2	0.0	34.6	24.5	0.0	33.9	17.5	0.0	77.0	14.7	51.9	15.0
Intersection LOS	**D - 49.8**											
95th Percentile Queue (veh)	4.3	0.0	4.1	2.2	0.0	3.3	2.5	0.0	32.8	0.4	25.0	4.4
Mitigage Lane Geometry	1	1>	0	1	1>	0	1	1>	0	1	1	1
2034 BUILD Cond [MITIGATED] Volumes	143	25	87	74	67	24	147	636	75	27	668	189
V/C Ratio	0.64	0.00	0.78	0.37	0.00	0.59	0.52	0.00	0.82	0.10	0.75	0.25
Level-of-Service	D	A	D	D	A	D	B	A	C	B	C	B
Control Delay (Seconds)	42.8	0.0	50.0	36.0	0.0	44.6	15.8	0.0	24.5	13.8	21.2	11.5
Intersection LOS	**C - 25.4**											
95th Percentile Queue (veh)	1.4	0.0	6.1	3.3	0.0	4.6	2.7	0.0	21.9	0.4	19.3	0.3

NOTE: 95th % Queues omitted for 2034 AM analysis to save space.

The analysis of the intersection of Governor Miles Rd. / Richards Ave. demonstrates that the delays will be acceptable for both the AM Peak Hour and PM Peak horizon year (2034) conditions analyzed in this report except that the northbound right turn movement on Richards Ave. at Governor Miles Rd. dropped to Level-of-Service "F" with a 77.0-second delay and a v/c ratio of 1.08 during the 2034 PM Peak Hour period. Therefore, a recommendation is made to optimize the signal timing splits to mitigate the long delay relative to the 2024 Implementation Year operational analysis of the signalized intersection of Governor Miles Rd. / Richards Ave.

#2 – Governor Miles Rd. / Entrada Sonata. - Pages A-93 *thru* A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of Governor Miles Rd. / Entrada Sonata. is summarized in the following tables:

Entrada Sonata / Gov Miles Rd	EB (Entrada Sonata)			WB (Entrada Sonata)			NB (Gov Miles Rd)			SB (Gov Miles Rd)		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry				1>		0		1>	0	1	1	
AM Peak Hour												
2034 NO BUILD Conditoins Volumes				34		16		189	8	6	235	
V/C Ratio				0.10						0.01		
Level-of-Service				B						A		
Control Delay (Seconds)				11.9						7.7		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.3						0.0		
2034 BUILD Conditions Volumes	14	5	32	33	5	16	5	193	8	6	275	5
V/C Ratio		0.11			0.14		0.01			0.01		
Level-of-Service		B			B		A			A		
Control Delay (Seconds)		12.3			14.2		7.9			7.7		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.4			0.5		0.0			0.0		

PM Peak Hour												
2034 NO BUILD Conditoins Volumes				21		9		299	35	12	197	
V/C Ratio				0.07						0.01		
Level-of-Service				B						A		
Control Delay (Seconds)				12.9						8.1		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.2						0.0		
2034 BUILD Conditions Volumes	5	5	17	21	5	9	30	338	35	12	217	10
V/C Ratio		0.07			0.12		0.03			0.01		
Level-of-Service		B			C		A			A		
Control Delay (Seconds)		12.9			17.1		7.9			8.3		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.4		0.1			0.0		

The analysis of the intersection of Governor Miles Rd. / Entrada Sonata demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Therefore, no

recommendation is made relative to the 2034 Horizon Year operational analysis of the unsignalized intersection of Entrada Sonata / Governor Miles Rd.

#3 – Governor Miles Rd. / Rising Sun Dr. - Pages A-93 *thru* A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of Governor Miles Rd. / Rising Sun Dr. is summarized in the following tables:

Gov Miles Rd. / Rising Sun	EB (Gov Miles Rd.)			WB (Gov Miles Rd.)			NB (Rising Sun)			SB (Rising Sun)		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1			1>	0				1		1
AM Peak Hour												
2034 NO BUILD Conditoins Volumes	7	229			201	3				24		11
V/C Ratio	0.01									0.06		0.02
Level-of-Service	A									B		A
Control Delay (Seconds)	7.7									12.5		9.6
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0									0.2		0.0
Volumes	7	248	5	5	214	5	20	5	26	23	5	12
V/C Ratio	0.01			0.01				0.11		0.07	0.03	
Level-of-Service	A			A				B		B	B	
Control Delay (Seconds)	7.8			7.9				12.7		14.9	11.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.0				0.4		0.2	0.1	

PM Peak Hour

2034 NO BUILD Conditoins Volumes	19	202			293	15				15		7
V/C Ratio	0.02									0.04		0.01
Level-of-Service	A									B		B
Control Delay (Seconds)	8.1									13.7		10.3
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1									0.1		0.0
Volumes	5	5	17	21	5	9	30	338	35	12	217	10
V/C Ratio		0.07			0.12		0.03			0.01		
Level-of-Service		B			C		A			A		
Control Delay (Seconds)		12.9			17.1		7.9			8.3		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.1				0.2		0.2	0.1	

The analysis of the intersection of Governor Miles Rd. / Rising Sun Dr. demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2034 Horizon Year operational analysis of the unsignalized intersection of Governor Miles Rd. / Rising Sun Dr.

#4 – Governor Miles Rd. / Mesa Bonita Rd. - Pages A-93 thru A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of Governor Miles Rd. / Mesa Bonita Rd. is summarized in the following tables:

Gov Miles Rd. / Mesa Bonita 2034 Conditions	EB (Gov Miles Rd.)			WB (Gov Miles Rd.)			NB (Mesa Bonita)			SB (Mesa Bonita)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	1			1>	0				0		1
AM Peak Hour												
2034 NO BUILD Conditoins Volumes	0	221			210	3				0		13
V/C Ratio												0.02
Level-of-Service												A
Control Delay (Seconds)												9.7
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.1
2034 BUILD Conditions Volumes	0	246			243	5				0		13
V/C Ratio												0.02
Level-of-Service												A
Control Delay (Seconds)												9.9
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.1
PM Peak Hour												
2034 NO BUILD Conditoins Volumes	0	203			288	12				0		8
V/C Ratio												0.01
Level-of-Service												B
Control Delay (Seconds)												10.3
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.0
2034 BUILD Conditions Volumes	0	236			319	12				0		8
V/C Ratio												0.01
Level-of-Service												B
Control Delay (Seconds)												10.5
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.0

The analysis of the intersection of Governor Miles Rd. / Mesa Bonita Rd. demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2034 Horizon Year operational analysis of the unsignalized intersection of Governor Miles Rd. / Mesa Bonita Rd.

#5 – Governor Miles Rd. / Dancing Ground Rd. - Pages A-93 thru A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of Governor Miles Rd. / Dancing Ground Rd. is summarized in the following tables:

Gov Miles Rd. / Dancing Grnd	EB (Gov Miles Rd.)			WB (Gov Miles Rd.)			NB (Dancing Grnd)			SB (Dancing Grnd)		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2034 NO BUILD Conditoins Volumes	7	111	98	86	130	6	124	5	97	16	5	28
V/C Ratio	0.01			0.08				0.54			0.11	
Level-of-Service	A			A				C			B	
Control Delay (Seconds)	7.6			8.0				20.4			12.9	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.2				3.1			0.4	
2034 BUILD Conditions Volumes	7	116	98	94	156	6	140	5	118	15	5	29
V/C Ratio	0.01			0.08				0.66			0.12	
Level-of-Service	A			A				D			B	
Control Delay (Seconds)	7.6			8.0				26.7			13.6	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				4.8			0.4	

PM Peak Hour

2034 NO BUILD Conditoins Volumes	21	140	89	74	201	22	81	5	61	12	5	15
V/C Ratio	0.02			0.07				0.41			0.09	
Level-of-Service	A			A				C			B	
Control Delay (Seconds)	7.8			8.0				19.2			14.6	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.2				1.9			0.3	
2034 BUILD Conditions Volumes	21	159	104	94	211	22	89	5	75	12	5	15
V/C Ratio	0.02			0.09				0.52			0.11	
Level-of-Service	A			A				C			C	
Control Delay (Seconds)	7.9			8.2				24.3			16.3	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.3				2.9			0.4	

The analysis of the intersection of Governor Miles Rd. / Dancing Ground Rd. demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2034 Horizon Year operational analysis of the unsignalized intersection of Governor Miles Rd. / Dancing Ground Rd.

#6 – Whispering Wing Rd. / Dancing Ground Rd. - Pages A-93 thru A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of Whispering Wing Rd. / Dancing Ground Rd. is summarized in the following tables:

Whisprng Wing / Dancing Grnd	EB (Whisprng Wing)			WB (Whisprng Wing)			NB (Dancing Grnd)			SB (Dancing Grnd)		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry				1>		0		1>	0	0	<1	
AM Peak Hour												
2034 NO BUILD Conditoins Volumes				13		83		140	8	67	122	
V/C Ratio				0.14						0.06		
Level-of-Service				B						A	A	
Control Delay (Seconds)				10.3						7.7	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.5						0.2		
2034 BUILD Conditions Volumes				21		120		139	11	74	123	
V/C Ratio				0.21						0.06		
Level-of-Service				B						A	A	
Control Delay (Seconds)				10.8						7.8	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.8						0.2		
PM Peak Hour												
2034 NO BUILD Conditoins Volumes				11		45		103	12	50	116	
V/C Ratio				0.08						0.04		
Level-of-Service				A						A	A	
Control Delay (Seconds)				9.7						7.6	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.3						0.1		
2034 BUILD Conditions Volumes				17		62		106	20	83	119	
V/C Ratio				0.12						0.07		
Level-of-Service				B						A	A	
Control Delay (Seconds)				10.3						7.7	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.4						0.2		

The analysis of the intersection of Whispering Wing Rd. / Dancing Ground Rd. demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2034 Horizon Year operational analysis of the unsignalized intersection of Whispering Wing Rd. / Dancing Ground Rd.

#7 – La Puerta. / Beckner Rd. - Pages A-93 *thru* A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of La Puerta. / Beckner Rd. is summarized in the following tables:

La Puerta / Beckner Rd.	EB (La Puerta)			WB (La Puerta)			NB (Beckner Rd.)			SB (Beckner Rd.)		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2034 NO BUILD Conditoins Volumes	0	5	8	0	5	33	5	271	37	48	275	5
V/C Ratio		0.03			0.08		0.01			0.05		
Level-of-Service		B			B		A	A		A	A	
Control Delay (Seconds)		13.1			11.5		7.9	0.0		8.2	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.2		0.0			0.1		
2034 BUILD Conditions Volumes	0	5	21	0	5	33	7	300	36	48	289	11
V/C Ratio		0.06			0.08		0.01			0.05		
Level-of-Service		B			B		A	A		A	A	
Control Delay (Seconds)		12.2			11.9		8.0	0.0		8.2	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.3		0.0			0.2		

PM Peak Hour

2034 NO BUILD Conditoins Volumes	0	5	5	0	5	82	7	418	54	76	387	25
V/C Ratio		0.05			0.21		0.01			0.09		
Level-of-Service		C			B		A	A		A	A	
Control Delay (Seconds)		20.3			14.4		8.4	0.0		8.9	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.8		0.0			0.3		
2034 BUILD Conditions Volumes	0	5	11	0	5	83	19	428	53	77	380	52
V/C Ratio		0.06			0.22		0.01			0.09		
Level-of-Service		C			B		A	A		A	A	
Control Delay (Seconds)		17.9			14.8		8.5	0.0		8.9	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.8		0.1			0.3		

The analysis of the intersection of Beckner Rd. / La Puerta. demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2034 Horizon Year operational analysis of the signalized intersection of Beckner Rd. / La Puerta.

#8 – Beckner Rd. / Richards Ave. - Pages A-93 *thru* A-139

The results of the horizon year (2034) analysis of the unsignalized driveway of Beckner Rd. / Richards Ave. is summarized in the following table:

Beckner Rd. / Richards Ave.	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (Richards Ave.)			SB (Richards Ave.)		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	1	1	1	1	1>	0
AM Peak Hour												
2034 NO BUILD Conditoins Volumes	154	5	149	5	6	23	135	378	5	17	498	206
V/C Ratio	2.52	0.47		0.15	0.13		0.20			0.02		
Level-of-Service	F	C		F	C		B			A		
Control Delay (Seconds)	812.0	22.1		110.0	21.1		10.6			8.3		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	17.5	2.4		0.5	0.5		0.7			0.1		
2034 BUILD Conditions Volumes	178	5	179	5	7	23	135	378	5	17	505	215
V/C Ratio	3.08	0.56		0.18	0.15		0.20			0.02		
Level-of-Service	F	D		F	C		B			A		
Control Delay (Seconds)	999.0	25.3		136.0	22.9		10.7			8.3		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	21.4	3.3		0.6	0.5		0.7			0.1		
Mitigage Lane Geometry (Sigalized)	1	1	>	<	1	>	1	1	>	1	1	>
2024 BUILD Cond [MITIGATED] Volumes	178	5	179	5	7	23	135	378	5	17	505	215
V/C Ratio	0.60	0.75			0.30		0.81	0.34		0.03	0.90	
Level-of-Service	C	C	C	D	D	D	D	A	A	A	C	C
Control Delay (Seconds)	34.6	33.8	33.8	36.8	36.8	36.8	47.5	4.7	4.7	8.6	23.5	23.5
Intersection LOS	**C - 23.6**											
95th Percentile Queue (veh)		4.0			0.0			4.0			8.0	

PM Peak Hour

2034 NO BUILD Conditoins Volumes	339	5	194	5	5	11	169	488	5	14	490	275
V/C Ratio	8.49	0.64		0.31	0.14		0.26			0.02		
Level-of-Service	F	D		F	E		B			A		
Control Delay (Seconds)	999.0	30.9		264.0	36.8		11.5			8.7		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	47.1	4.3		0.9	0.5		1.1			0.1		
2034 BUILD Conditions Volumes	350	5	195	5	5	11	176	493	5	14	489	318
V/C Ratio	9.80	0.67		0.37	0.16		0.29			0.02		
Level-of-Service	F	D		F	E		B			A		
Control Delay (Seconds)	999.0	34.0		327.0	41.2		12.0			8.7		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	49.4	4.6		1.0	0.5		1.2			0.1		
Mitigage Lane Geometry (Sigalized)	1	1	>	<	1	>	1	1	>	1	1	>
2024 BUILD Cond [MITIGATED] Volumes	350	5	195	5	5	11	176	493	5	14	489	318
V/C Ratio	0.89	0.59			0.21		0.85	0.46		0.03	0.98	
Level-of-Service	D	C	C	D	D	D	D	A	A	B	D	D
Control Delay (Seconds)	54.3	31.6	31.6	43.5	43.5	43.5	44.0	8.2	8.2	11.5	44.9	44.9
Intersection LOS	**D - 36.2**											
95th Percentile Queue (veh)	17.0	8.2			1.0		6.2	8.2		0.3	30.4	

The Villa Sendano project has made a commitment to construct a temporary traffic signal at the intersection of Beckner Rd. / Richards Ave. The temporary signal is assumed in this report to be in operation during the implementation year (2024) and probably the horizon year (2034).

However, beyond the lifetime of the temporary signal, it is advisable to conduct an updated study to determine if a dual lane circulating roundabout may be a better option than a traffic signal at this intersection. Therefore, this Study assumes the operation of the temporary traffic signal for the implementation year and the horizon year analysis while leaving the option to implement either a dual lane circulating roundabout or a permanent traffic signal, whichever is deemed to be the better option based on an updated study at the time.

The horizon year (2034) analysis of the intersection of Beckner Rd. / Richards Ave. demonstrates that the delays will be excessive for some turning movements during the AM Peak Hour and PM Peak horizon year (2034) conditions analyzed in this report. The excessive delays are forecast for the 2034 NO BUILD Conditions as well as for the BUILD Conditions. Additional traffic generated by full development of the Vista de la Sierra Subdivision will increase those already excessive delays. Recommended mitigation is to construct a new dual lane circulating roundabout by the year 2034. A roundabout is preferred for the following reasons:

1) Roundabout are almost always safer than signalized intersections (i.e., there are less crashes as well as less severe crashes when they occur).
2) Modern Roundabouts are designed with specific geometric parameters that encourage drivers to reduce operating speed of their vehicles.
3) Roundabout maintenance costs are significantly less than that of a traffic signal.
4) Roundabouts generally require less stops than signalized and standard two-way stop-controlled intersections. The only vehicles required to stop at a roundabout are those that experience an impending real imminent conflict with another vehicle or pedestrian.
5) Pedestrian safety is enhanced at Modern Roundabouts due to the reduced vehicle speeds and pedestrian refuge areas in the splitter islands.
6) There is less environmental impact resulting from a Modern Roundabout since there are less stopped vehicles.

As described in the Implementation Year analysis section, the City of Santa Fe has negotiated with another developer nearby to construct a temporary traffic signal at this intersection This Study demonstrates that the temporary traffic signal will provide capacity and good operation of the intersection until the horizon year (2034). After that, the City may opt to construct a permanent traffic signal or construct a roundabout based on engineering studies at the time.

The design of the intersection as a signalized intersection should meet the requirement outlined in the Recommendations of this Study found at the end of the Executive Summary. Note that the southbound thru / right turn lanes are calculated to have long queuing during the PM Peak Hour in the horizon year. Mitigation of the long queuing for that approach consists of constructing a southbound exclusive right turn lane on Richards Ave. at Beckner Rd. That is part of the recommendations of this report in the Executive Summary. The southbound right turn lane will improve the overall operation of the intersection and will reduce the PM Peak Hour Queuing (95th Percentile) from 30.4 vehicles to 7.8 vehicles.

#9 – Beckner Rd. / Driveway "A" - Pages A-93 thru A-139

The results of the horizon year analysis of the unsignalized driveway of Beckner Rd. / Driveway "A" is summarized in the following tables:

Beckner Rd. / Driveway "A"	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (Driveway "A")			SB (Driveway "A")		
2034 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		1>	0	0	<1		1>		0			
AM Peak Hour												
2034 NO BUILD Conditoins Volumes		274	31	55	292		18		35			
V/C Ratio				0.05			0.12					
Level-of-Service				A	A		B					
Control Delay (Seconds)				8.2	0.0		13.2					
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.2			0.4					
Volumes	5	298	31	54	297	6	17	5	35	29	5	16
V/C Ratio	0.01			0.05				0.17			0.20	
Level-of-Service	A	A		A	A			C			C	
Control Delay (Seconds)	8.0	0.0		8.3	0.0			15.6			20.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.2				0.6			0.7	
Mitigage Lane Geometry	<	1	>	<	1	>	<	1	>	<	1	>
2034 BUILD Cond [MITIGATED] Volumes	5	298	31	54	297	6	17	5	35	29	5	16
V/C Ratio		0.32			0.32			0.07			0.07	
Level-of-Service		A			A			A			A	
Control Delay (Seconds)		6.0			5.6			4.7			4.8	
Intersection LOS	**ROUNDABOUT (SINGLE LANE CIRCULATING)**											
95th Percentile Queue (veh)		1.0			1.0			0.0			0.0	

PM Peak Hour

2034 NO BUILD Conditoins Volumes		452	49	82	367		60		85			
V/C Ratio				0.10			0.58					
Level-of-Service				A	A		D					
Control Delay (Seconds)				9.1	0.0		32.7					
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.3			3.4					
Volumes	12	450	49	81	389	27	60	5	85	14	5	8
V/C Ratio	0.01			0.10				0.80			0.23	
Level-of-Service	A	A		A	A			F			E	
Control Delay (Seconds)	8.4	0.0		9.0	0.0			64.1			38.4	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				5.8			0.8	
Mitigage Lane Geometry	<	1	>	<	1	>	<	1	>	<	1	>
2034 BUILD Cond [MITIGATED] Volumes	12	450	49	81	389	27	60	5	85	14	5	8
V/C Ratio		0.50			0.48			0.23			0.04	
Level-of-Service		A			A			A			A	
Control Delay (Seconds)		8.5			7.9			7.4			5.4	
Intersection LOS	**ROUNDABOUT (SINGLE LANE CIRCULATING)**											
95th Percentile Queue (veh)		3.0			3.0			1.0			0.0	

The analysis of the intersection of Beckner Rd. / Beaty Access demonstrates that the delays will be acceptable for the horizon year (2034) conditions analyzed in this report except that the southbound approach is expected to operate at LOS "E" for the 2034 PM Peak Hour BUILD Condition. The northbound approach (if it exists) is expected to operate at LOS "F". Therefore, it is recommended that the intersection of Beckner Rd. / Driveway "A" (Beaty Access) be designed and constructed as the 2034 Horizon Year operational analysis of the signalized intersection of Beckner Rd. / Beaty Access. Also, this was the requirement of the City of Santa Fe Traffic Engineer for the Implementation Year as well.

Analysis of Horizon Year Conditions (2040)

#1 – Governor Miles Rd. / Richards Ave. - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the signalized intersection of Governor Miles Rd. / Richards Ave. are summarized in the following table:

Gov Miles Rd. / Richards Ave. 2040 Conditions	EB (Gov Miles Rd.)			WB (Gov Miles Rd.)			NB (Richards Ave.)			SB (Richards Ave.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	1	1>	0	1	1	1
AM Peak Hour												
2040 NO BUILD Conditions Volumes	109	33	89	88	39	22	70	520	65	30	633	113
V/C Ratio	0.33	0.00	0.72	0.32	0.00	0.34	0.28	0.00	0.90	0.11	0.95	0.20
Level-of-Service	C	A	C	C	A	C	B	A	C	B	D	B
Control Delay (Seconds)	23.9	0.0	34.8	23.8	0.0	29.5	15.1	0.0	34.6	13.2	42.5	13.7
Intersection LOS	**C - 33.6**											
95th Percentile Queue (veh)	3.3	0.0	4.9	2.7	0.0	2.3	2.2	0.0	59.6	0.9	69.3	3.5
2040 BUILD Conditions Volumes	160	34	109	87	38	22	76	537	66	30	630	117
V/C Ratio	0.45	0.00	0.75	0.32	0.00	0.37	0.31	0.00	0.94	0.12	0.97	0.21
Level-of-Service	C	A	C	C	A	C	B	A	D	B	D	B
Control Delay (Seconds)	24.6	0.0	34.9	25.0	0.0	31.1	15.8	0.0	41.9	14.4	45.7	14.4
Intersection LOS	**D - 36.9**											
95th Percentile Queue (veh)	4.9	0.0	5.4	2.6	0.0	2.1	1.2	0.0	20.9	0.5	22.6	2.7
Mitigage Lane Geometry	1	1>	0	1	1>	0	1	1	1	1	1	1
2040 BUILD Cond [MITIGATED] Volumes	160	34	109	87	38	22	76	537	66	30	630	117
V/C Ratio	0.45	0.00	0.75	0.32	0.00	0.37	0.31	0.82	0.12	0.10	0.97	0.21
Level-of-Service	C	A	C	C	A	C	B	C	B	B	D	B
Control Delay (Seconds)	24.6	0.0	34.9	25.0	0.0	31.1	15.8	28.6	13.5	12.5	45.7	14.4
Intersection LOS	**C - 32.2**											
95th Percentile Queue (veh)	4.9	0.0	5.4	2.6	0.0	2.1	1.2	15.7	1.4	0.5	22.6	2.7

PM Peak Hour												
2040 NO BUILD Conditions Volumes	112	29	84	101	64	25	113	778	86	26	709	123
V/C Ratio	0.37	0.00	0.70	0.37	0.00	0.51	0.48	0.00	1.31	0.11	1.06	0.22
Level-of-Service	C	A	C	C	A	C	B	A	F	B	F	B
Control Delay (Seconds)	24.3	0.0	34.8	24.3	0.0	31.3	16.3	0.0	170.0	14.7	69.1	13.6
Intersection LOS	**F - 94.2**											
95th Percentile Queue (veh)	3.3	0.0	4.2	3.0	0.0	3.1	1.8	0.0	64.3	0.4	30.8	2.7
2040 BUILD Conditions Volumes	138	29	95	102	77	24	129	777	86	26	738	163
V/C Ratio	0.45	0.00	0.72	0.37	0.00	0.60	0.55	0.00	1.32	0.11	1.11	0.29
Level-of-Service	C	A	C	C	A	C	B	A	F	B	F	B
Control Delay (Seconds)	24.8	0.0	34.9	24.9	0.0	33.1	17.1	0.0	176.0	14.9	88.4	14.8
Intersection LOS	**F - 98.8**											
95th Percentile Queue (veh)	4.2	0.0	4.7	3.1	0.0	3.7	2.2	0.0	65.7	0.4	37.0	3.8
Mitigage Lane Geometry	1	1>	0	1	1>	0	1	1	1	1	1	1
2040 BUILD Cond [MITIGATED] Volumes	138	29	95	102	77	24	129	777	86	26	738	163
V/C Ratio	0.62	0.00	0.80	0.52	0.00	0.60	0.53	0.89	0.12	0.12	0.84	0.22
Level-of-Service	D	A	D	D	A	D	B	C	B	B	C	B
Control Delay (Seconds)	41.5	0.0	50.3	37.6	0.0	44.2	19.7	30.1	10.6	16.7	26.4	11.6
Intersection LOS	**C - 28.9**											
95th Percentile Queue (veh)	1.2	0.0	6.9	4.7	0.0	5.2	3.1	0.0	26.5	1.9	0.5	3.9

The analysis of the intersection of Governor Miles Rd. / Richards Ave. demonstrates that the delays will be acceptable for both the AM Peak Hour and PM Peak ultra-horizon year (2040) conditions analyzed in this report except that the northbound right turn movement on Richards Ave. at Governor Miles Rd. dropped to Level-of-Service "F" with a 176.0-second delay and a v/c ratio of 1.32 during the 2040 PM Peak Hour period. The long delay associated with the 2040 PM Peak Hour BUILD Condition cannot be mitigated by adjusting the signal timing splits as was recommended for the horizon year analysis. Mitigation of the ultra-horizon year would consist of designing and constructing a new northbound right turn lane on Richards Ave. at Governor Miles Rd. The new northbound right turn lane can be signalized or not signalized. Thus, the new northbound right turn lane can be constructed to by-pass the signal by providing a mini-right turn ramp with yield control at the intersection with Governor Miles Rd. Constructing the new northbound right turn lane as a signalized turning movement would require significant reconstruction of the existing traffic signal.

#2 – Governor Miles Rd. / Entrada Sonata. - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of Governor Miles Rd. / Entrada Sonata. is summarized in the following tables:

Entrada Sonata / Gov Miles Rd.	EB (Entrada Sonata)			WB (Entrada Sonata)			NB (Gov Miles Rd.)			SB (Gov Miles Rd.)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry				1>		0		1>	0	1	1	
AM Peak Hour												
2040 BUILD Conditions Volumes	14	5	5	35	5	18	5	221	9	7	263	5
V/C Ratio		0.07			0.15		0.01			0.01		
Level-of-Service		B			B		A			A		
Control Delay (Seconds)		14.0			14.0		7.9			7.8		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.5		0.0			0.0		

PM Peak Hour												
2040 BUILD Conditions Volumes	8	5	5	22	5	10	5	328	36	15	238	13
V/C Ratio		0.06			0.12		0.01			0.02		
Level-of-Service		C			C		A			A		
Control Delay (Seconds)		15.1			16.1		7.9			8.2		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.4		0.0			0.0		

NOTE: 2040 NO BUILD Conditions values are not reported to save space.

The analysis of the intersection of Governor Miles Rd. / Entrada Sonata demonstrates that the delays will be acceptable ultra-horizon year (2040) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2040 Ultra-Horizon Year operational analysis of the unsignalized intersection of Entrada Sonata / Governor Miles Rd.

#3 – Governor Miles Rd. / Rising Sun Dr. - Pages A-140 *thru* A-188

The results of the horizon year (2034) analysis of the unsignalized driveway of Governor Miles Rd. / Rising Sun Dr. is summarized in the following tables:

Gov Miles Rd / Rising Sun Dr	EB (Gov Miles Rd)			WB (Gov Miles Rd)			NB (Rising Sun Dr)			SB (Rising Sun Dr)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1			1>	0				1		1
AM Peak Hour												
2040 NO BUILD Conditions Volumes	8	235			237	5				26		12
V/C Ratio	0.01									0.07		0.02
Level-of-Service	A									B		A
Control Delay (Seconds)	7.9									13.1		9.9
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0									0.2		0.1
Volumes	8	254	5	5	250	5	15	5	5	25	5	13
V/C Ratio	0.01			0.01				0.07		0.08	0.04	
Level-of-Service	A			A				B		C	B	
Control Delay (Seconds)	7.9			7.9				14.3		15.3	11.3	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.0				0.2		0.3	0.1	

PM Peak Hour

2040 NO BUILD Conditions Volumes	22	241			309	15				15		8
V/C Ratio	0.02									0.05		0.01
Level-of-Service	A									B		B
Control Delay (Seconds)	8.1									14.7		10.4
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1									0.1		0.0
Volumes	22	257	15	5	330	15	9	5	5	15	5	8
V/C Ratio	0.02			0.01				0.06		0.06	0.03	
Level-of-Service	A			A				C		C	B	
Control Delay (Seconds)	8.2			7.9				15.7		17.8	13.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.0				0.2		0.2	0.1	

The analysis of the intersection of Governor Miles Rd. / Rising Sun Dr. demonstrates that the delays will be acceptable ultra-horizon year (2040) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2040 Ultra-Horizon Year operational analysis of the unsignalized intersection of Governor Miles Rd. / Rising Sun Dr.

#4 – Governor Miles Rd. / Mesa Bonita Rd. - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of Governor Miles Rd. / Mesa Bonita Rd. is summarized in the following tables:

Gov Miles Rd / Mesa Bonita	EB (Gov Miles Rd)			WB (Gov Miles Rd)			NB (Mesa Bonita)			SB (Mesa Bonita)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	1			1>	0				0		1
AM Peak Hour												
2040 NO BUILD Conditions Volumes	0	223			241	5				0		15
V/C Ratio												0.02
Level-of-Service												A
Control Delay (Seconds)												9.9
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.1
2040 BUILD Conditions Volumes	0	248			274	5				0		15
V/C Ratio												0.03
Level-of-Service												B
Control Delay (Seconds)												10.2
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.1

PM Peak Hour												
2040 NO BUILD Conditions Volumes	0	242			303	13				0		9
V/C Ratio												0.02
Level-of-Service												B
Control Delay (Seconds)												10.4
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.0
2040 BUILD Conditions Volumes	0	275			334	13				0		9
V/C Ratio												0.02
Level-of-Service												B
Control Delay (Seconds)												10.7
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)												0.1

The analysis of the intersection of Governor Miles Rd. / Mesa Bonita Rd. demonstrates that the delays will be acceptable ultra-horizon year (2040) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2040 Ultra-Horizon Year operational analysis of the unsignalized intersection of Governor Miles Rd. / Mesa Bonita Rd.

#5 – Governor Miles Rd. / Dancing Ground Rd. - Pages A-140 thru A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of Governor Miles Rd. / Dancing Ground Rd. is summarized in the following tables:

Gov Miles Rd / Dancing Grnd	EB (Gov Miles Rd)			WB (Gov Miles Rd)			NB (Dancing Grnd)			SB (Dancing Grnd)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2040 NO BUILD Conditions Volumes	7	126	117	90	159	6	124	5	85	17	6	29
V/C Ratio	0.01			0.08				0.58			0.13	
Level-of-Service	A			A				C			B	
Control Delay (Seconds)	7.6			8.1				23.9			13.8	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				3.6			0.4	
2040 BUILD Conditions Volumes	7	131	117	98	185	6	140	5	106	16	6	30
V/C Ratio	0.01			0.09				0.72			0.14	
Level-of-Service	A			A				D			B	
Control Delay (Seconds)	7.7			8.1				33.1			14.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				5.5			0.5	

PM Peak Hour

2040 NO BUILD Conditions Volumes	23	181	101	69	222	22	95	6	61	12	5	15
V/C Ratio	0.02			0.07				0.51			0.10	
Level-of-Service	A			A				C			C	
Control Delay (Seconds)	7.9			8.2				24.5			15.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.2				2.8			0.3	
2040 BUILD Conditions Volumes	23	200	116	89	232	22	103	6	75	12	5	15
V/C Ratio	0.02			0.09				0.65			0.12	
Level-of-Service	A			A				D			C	
Control Delay (Seconds)	7.9			8.3				34.0			17.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.3				4.3			0.4	

The analysis of the intersection of Governor Miles Rd. / Dancing Ground Rd. demonstrates that the delays will be acceptable ultra-horizon year (2040) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2040 Ultra-Horizon Year operational analysis of the unsignalized intersection of Governor Miles Rd. / Dancing Ground Rd.

#6 – Governor Miles Rd. / Dancing Ground Rd. - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of Whispering Wing Rd. / Dancing Ground Rd. is summarized in the following tables:

Gov Miles Rd / Dancing Grnd	EB (Gov Miles Rd)			WB (Gov Miles Rd)			NB (Dancing Grnd)			SB (Dancing Grnd)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2040 NO BUILD Conditions Volumes	7	126	117	90	159	6	124	5	85	17	6	29
V/C Ratio	0.01			0.08				0.58			0.13	
Level-of-Service	A			A				C			B	
Control Delay (Seconds)	7.6			8.1				23.9			13.8	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				3.6			0.4	
2040 BUILD Conditions Volumes	7	131	117	98	185	6	140	5	106	16	6	30
V/C Ratio	0.01			0.09				0.72			0.14	
Level-of-Service	A			A				D			B	
Control Delay (Seconds)	7.7			8.1				33.1			14.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				5.5			0.5	

PM Peak Hour

2040 NO BUILD Conditions Volumes	23	181	101	69	222	22	95	6	61	12	5	15
V/C Ratio	0.02			0.07				0.51			0.10	
Level-of-Service	A			A				C			C	
Control Delay (Seconds)	7.9			8.2				24.5			15.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.2				2.8			0.3	
2040 BUILD Conditions Volumes	23	200	116	89	232	22	103	6	75	12	5	15
V/C Ratio	0.02			0.09				0.65			0.12	
Level-of-Service	A			A				D			C	
Control Delay (Seconds)	7.9			8.3				34.0			17.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.3				4.3			0.4	

The analysis of the intersection of Whispering Wing Rd. / Dancing Ground Rd. demonstrates that the delays will be acceptable ultra-horizon year (2040) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2040 Ultra-Horizon Year operational analysis of the unsignalized intersection of Whispering Wing Rd. / Dancing Ground Rd.

#7 – La Puerta. / Beckner Rd. - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of La Puerta. / Beckner Rd. is summarized in the following tables:

La Puerta / Beckner Rd.	EB (La Puerta)			WB (La Puerta)			NB (Beckner Rd.)			SB (Beckner Rd.)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2040 NO BUILD Conditions Volumes	0	5	9	0	5	42	5	338	55	66	390	5
V/C Ratio		0.05			0.11		0.01			0.07		
Level-of-Service		C			B		A	A		A	A	
Control Delay (Seconds)		16.1			12.9		8.3	0.0		8.5	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.4		0.0			0.2		
2040 BUILD Conditions Volumes	0	5	22	0	5	42	5	343	54	66	404	5
V/C Ratio		0.08			0.11		0.01			0.07		
Level-of-Service		B			B		A	A		A	A	
Control Delay (Seconds)		14.3			13.0		8.3	0.0		8.5	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.4		0.0			0.2		

PM Peak Hour

2040 NO BUILD Conditions Volumes	0	5	5	0	5	108	7	609	82	98	548	5
V/C Ratio		0.10			0.39		0.01			0.14		
Level-of-Service		E			C		A	A		B	A	
Control Delay (Seconds)		37.6			22.5		8.9	0.0		10.2	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.3			1.8		0.0			0.5		
2040 BUILD Conditions Volumes	0	5	12	0	5	109	19	605	81	99	550	8
V/C Ratio		0.12			0.40		0.02			0.14		
Level-of-Service		D			C		A	A		B	A	
Control Delay (Seconds)		29.6			22.8		9.0	0.0		10.1	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.4			1.9		0.1			0.5		

The analysis of the intersection of Beckner Rd. / La Puerta. demonstrates that the delays will be acceptable horizon year (2034) conditions analyzed in this report. Also, providing a westbound left turn deceleration lane will improve the theoretical conditions. However, this should not be the responsibility of the Vista de la Sierra Subdivision since the problem exists in the 2040 NO BUILD Condition. Therefore, no recommendation is made relative to the 2040 Ultra-Horizon Year operational analysis of the signalized intersection of Beckner Rd. / La Puerta.

#8 – Beckner Rd. / Richards Ave. - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of Beckner Rd. / Richards Ave. is summarized in the following table:

Beckner Rd. / Richards Ave.	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (Richards Ave.)			SB (Richards Ave.)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1>	0	1	1	1	1	1>	0
AM Peak Hour												
2040 NO BUILD Conditions Volumes	186	5	140	5	6	20	207	436	5	16	536	253
V/C Ratio	6.08	0.53		0.29	0.21		0.33			0.02		
Level-of-Service	F	D		F	E		B			A		
Control Delay (Seconds)	999.0	28.4		248.0	36.9		12.3			8.5		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	26.0	3.0		0.8	0.8		1.4			0.1		
2040 BUILD Conditions Volumes	210	5	170	5	7	20	207	436	5	16	543	262
V/C Ratio	7.27	0.63		0.37	0.25		0.34			0.02		
Level-of-Service	F	D		F	E		B			A		
Control Delay (Seconds)	999.0	33.4		327.0	42.2		12.5			8.5		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	29.7	4.1		1.0	0.9		1.5			0.1		
Mitigage Lane Geometry	<	1	1	<	1	>	1	1	>	<	2	>
2040 BUILD Cond [MITIGATED] Volumes	210	5	170	5	7	20	207	436	5	16	543	262
V/C Ratio		0.36	0.26		0.59		0.24	0.47		0.44		0.46
Level-of-Service		A	A		A		A	A		A		A
Control Delay (Seconds)		9.6	7.4		6.8		5.8	8.5		8.3		8.2
Intersection LOS	**ROUNDABOUT (DUAL LANE CIRCULATING)**											
95th Percentile Queue (veh)		2.0	1.0		1.0		1.0	3.0		2.0		2.0

PM Peak Hour												
2040 NO BUILD Conditions Volumes	432	5	299	5	5	11	231	529	5	13	578	298
V/C Ratio	23.10	1.17			0.26		0.40			0.02		
Level-of-Service	F	F			F		B			A		
Control Delay (Seconds)	999.0	142.0			71.8		13.9			8.8		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	63.8	15.2			0.9		2.0			0.0		
2040 BUILD Conditions Volumes	443	5	300	5	5	11	238	534	5	13	577	341
V/C Ratio	27.43	1.23			0.29		0.43			0.02		
Level-of-Service	F	F			F		B			A		
Control Delay (Seconds)	999.0	166.0			83.2		14.8			8.9		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	65.7	16.5			1.1		2.2			0.0		
Mitigage Lane Geometry	<	1	1	<	1	>	1	1	>	<	2	>
2040 BUILD Cond [MITIGATED] Volumes	443	5	300	5	5	11	238	534	5	13	577	341
V/C Ratio		0.76	0.47		0.06		0.35	0.73		0.51		0.54
Level-of-Service		C	B		A		A	C		A		A
Control Delay (Seconds)		23.6	11.3		9.7		8.7	18.0		9.8		9.8
Intersection LOS	**ROUNDABOUT (DUAL LANE CIRCULATING)**											
95th Percentile Queue (veh)		7.0	3.0		0.0		2.0	7.0		3.0		3.0

The ultra-horizon year (2040) analysis of the intersection of Beckner Rd. / Richards Ave. demonstrates that the delays will be excessive for some turning movements during the AM Peak Hour and PM Peak ultra-horizon year (2040) conditions analyzed in this report. The excessive delays are forecast for the 2040 NO BUILD Conditions as well as for the BUILD Conditions. Additional traffic generated by full development of the Vista de la Sierra Subdivision will increase those already excessive delays. Recommended mitigation is to construct a new dual lane circulating roundabout by the year 2040. A roundabout is recommended over a signalized intersection for the following reasons:

1) Roundabout are almost always safer than signalized intersections (i.e., there are less crashes as well as less severe crashes when they occur).
2) Modern Roundabouts are designed with specific geometric parameters that encourage drivers to reduce operating speed of their vehicles.
3) Roundabout maintenance costs are significantly less than that of a traffic signal.
4) Roundabouts generally require less stops than signalized and standard two-way stop-controlled intersections. The only vehicles required to stop at a roundabout are those that experience an impending real imminent conflict with another vehicle or pedestrian.
5) Pedestrian safety is enhanced at Modern Roundabouts due to the reduced vehicle speeds and pedestrian refuge areas in the splitter islands.
6) There is less environmental impact resulting from a Modern Roundabout since there are less stopped vehicles.

As previously discussed in this Study, the intersection of Beckner Rd. / Richards Ave. will be equipped with a temporary traffic signal designed and constructed by another developer in the area. This Study has demonstrated that the temporary traffic signal will serve the forecast implementation year and horizon year volumes through the year 2034. The intersection of Beckner Rd. / Richards Ave. should be analyzed again sometime beyond the year 2034 to determine if would be a better option to then construct a permanent traffic signal at that location or rather to construct a dual lane circulating roundabout. This Study suggests that both would be valid options, but a roundabout would have definite benefits as outlined above. With this possibility in mind, sufficient right-of-way should be provided to allow the option of a dual lane circulating roundabout in the distance future.

#9 – Beckner Rd. / Driveway "A" - Pages A-140 *thru* A-188

The results of the ultra-horizon year (2040) analysis of the unsignalized driveway of Beckner Rd. / Driveway "A" is summarized in the following tables:

Beckner Rd. / Beaty Access	EB (Beckner Rd.)			WB (Beckner Rd.)			NB (Beaty Access)			SB (Beaty Access)		
2040 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		1>	0	0	<1		1>		0			
AM Peak Hour												
2040 NO BUILD Conditions Volumes		313	45	76	395		30		43			
V/C Ratio				0.08			0.23					
Level-of-Service				A	A		C					
Control Delay (Seconds)				8.4	0.0		17.6					
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.3			0.9					
Volumes	5	337	45	75	400	5	29	5	43	5	5	14
V/C Ratio	0.01			0.08				0.32			0.10	
Level-of-Service	A	A		A	A			C			C	
Control Delay (Seconds)	8.3	0.0		8.5	0.0			23.4			18.9	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.3				1.3			0.3	
Mitigage Lane Geometry	<	1	>	<	1	>	<	1	>	<	1	>
2040 BUILD Cond [MITIGATED] Volumes	5	337	45	75	400	5	29	5	43	5	5	14
V/C Ratio		0.37			0.44			0.10			0.04	
Level-of-Service		A			A			A			A	
Control Delay (Seconds)		6.6			7.1			5.1			5.2	
Intersection LOS	**ROUNDABOUT (SINGLE LANE CIRCULATING)**											
95th Percentile Queue (veh)		2.0			2.0			0.0			0.0	

PM Peak Hour												
2040 NO BUILD Conditions Volumes		632	71	111	447		87		116			
V/C Ratio				0.16			1.45					
Level-of-Service				B	A		F					
Control Delay (Seconds)				10.4	0.0		284.0					
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)				0.6			15.1					
Volumes	12	630	71	110	469	5	87	5	116	5	5	8
V/C Ratio	0.01			0.16				2.13			0.26	
Level-of-Service	A	A		B	A			F			F	
Control Delay (Seconds)	8.6	0.0		10.3	0.0			597.0			64.5	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.6				20.7			0.9	
Mitigage Lane Geometry	<	1	>	<	1	>	<	1	>	<	1	>
2040 BUILD Cond [MITIGATED] Volumes	12	630	71	110	469	5	87	5	116	5	5	8
V/C Ratio		0.72			0.58			0.40			0.03	
Level-of-Service		B			A			B			A	
Control Delay (Seconds)		14.1			9.9			11.7			6.3	
Intersection LOS	**ROUNDABOUT (SINGLE LANE CIRCULATING)**											
95th Percentile Queue (veh)		7.0			4.0			2.0			0.0	

The analysis of the intersection of Beckner Rd. / Beaty Access demonstrates that the delays will be acceptable ultra-horizon year (2040) conditions analyzed in this report. Therefore, no recommendation is made relative to the 2024 Implementation Year operational analysis of the signalized intersection of Beckner Rd. / Beaty Access.

Impact Assessment

The proposed Vista de la Sierra Subdivision will have minimal to moderate adverse impact on the adjacent transportation system. All the levels-of-service were determined to be acceptable for the overall intersections except for the existing unsignalized intersection of Beckner Rd. / Richards Ave., the existing signalized intersection of Governor Miles Rd. / Richards Ave., the existing unsignalized intersection of Beckner Rd. / La Puerta, and the proposed unsignalized intersection of Beckner Rd. / Driveway "A" (Beaty access). The long delays at the intersection of Beckner Rd. / La Puerta (an unsignalized access to the Pulte Subdivision) is primarily due to background traffic volumes and not a result of traffic generated by the Vista de la Sierra Subdivision. Also, the long delays at Beckner Rd. / La Puerta as associated with horizon year and ultra-horizon year volumes which assume a four-legged intersection at La Puerta. It is currently a three-legged intersection. This Study concludes that the long delays at Beckner Rd. / La Puerta are not a result of Vista de la Sierra Subdivision and, therefore, mitigation of the delays should not be a responsibility of the Vista de la Sierra Subdivision developer. The long delays projected at the existing intersection unsignalized of Beckner Rd. / Richards Ave., the existing signalized intersection of Governor Miles Rd. / Richards Ave., and the proposed unsignalized intersection of Beckner Rd. / Driveway "A" (Beaty access) can be mitigated as described in the Recommendations section of the Executive Summary of this report. The Recommendations made successfully mitigated all of the operational / delay issues at those intersections.

Access Design Specifications

Left turn deceleration lanes are warranted at both of the two access intersections for this project along Governor Miles Rd. (i.e., the proposed access aligning with Entrada Sonata and the access aligning with Rising Sun Dr) Both access intersections along Governor Miles Rd. are proposed to be full access unsignalized intersections. The left turn deceleration lanes should be designed and constructed to a length of 150 feet including transition. Right turn deceleration lanes are not warranted.

Driveway "A" (Beaty access) is located approximately 1,100 feet west of Richards Ave. (centerline to centerline). It is proposed to be a full access unsignalized intersection. It is a tee-intersection when the Vista de la Sierra Phase 1 plan is constructed, but it is expected to be a four-legged unsignalized intersection when the property on the south side of Beckner Rd. develops. Driveway "A" can initially be constructed as a standard unsignalized tee intersection

but will need to be converted to a single lane circulating roundabout near full development of the Vista de la Sierra Subdivision project. However, the developer may opt to construct the single lane circulating roundabout at the onset of the project to avoid reconstruction at a later date.

The cost of constructing the access for the Vista de la Sierra Subdivision should be the responsibility of the developer. However, there may be an opportunity to share the cost of the single lane circulating roundabout at Driveway "A" with the developer across the street on the south side of Beckner Rd.

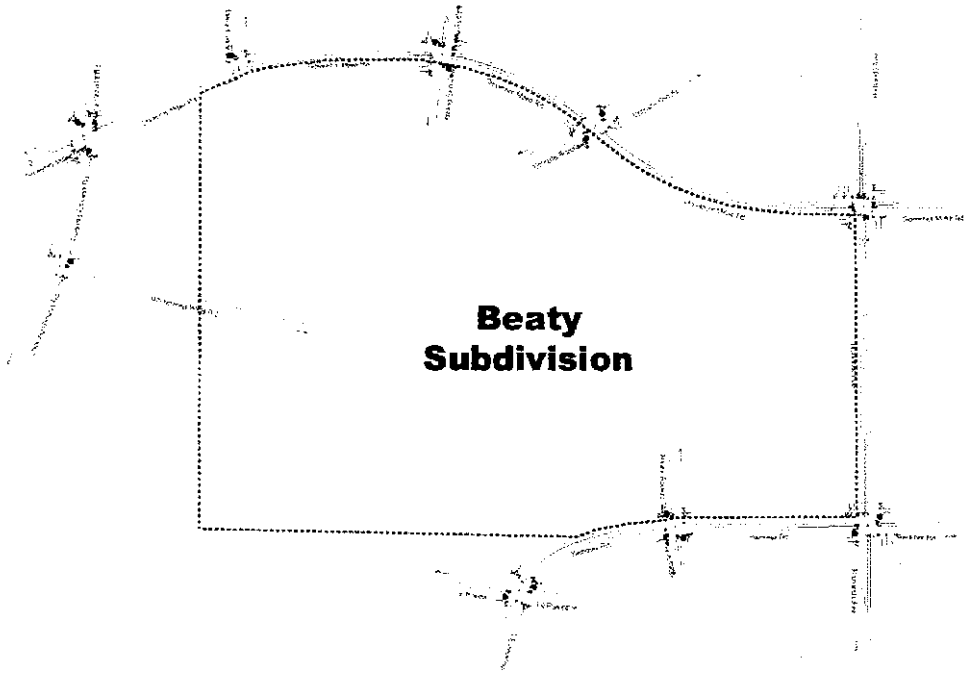
Summary of Deficiencies, Anticipated Impacts, and Recommendations

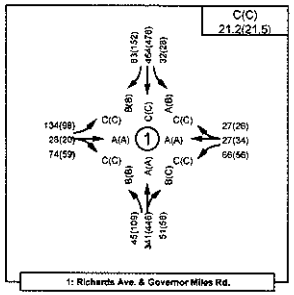
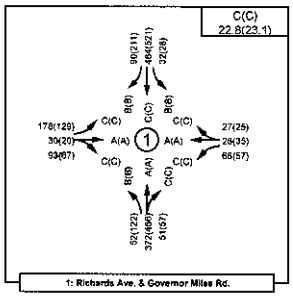
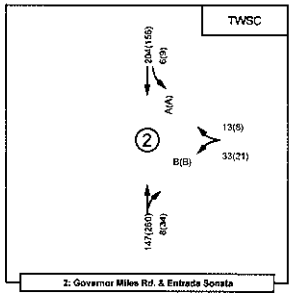
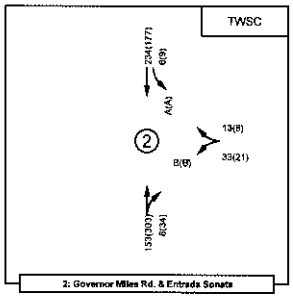
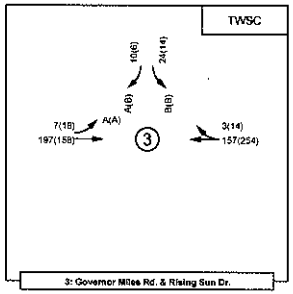
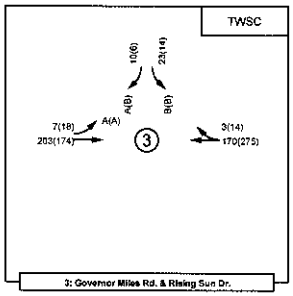
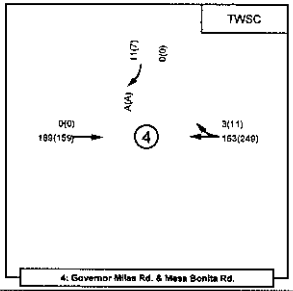
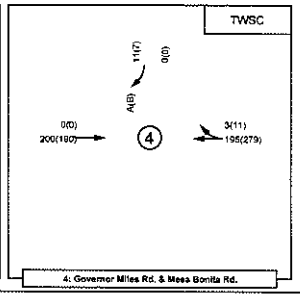
The 2024 (Implementation Year) analysis assumed implementation of Vista de la Sierra Subdivision Phase 1 (Phases 1a and 1b) only with one access point on Beckner Rd. and did not determine any significant deficiencies in the adjacent transportation system except at the intersection of Beckner Rd. / Richards Ave. The unsignalized intersection of Beckner Rd. / Richards Ave. is projected to experience long delays associated with the 2024 NO BUILD and BUILD Conditions. The proposed Vista de la Sierra Subdivision will generate a substantial volume of traffic at the intersection and, therefore, will have a significant impact.

The 2034 (Horizon Year) analysis assumed implementation of all Vista de la Sierra Subdivision. The horizon year analysis assumed four access points into the subdivision – one full access unsignalized intersection on Beckner Rd. (Driveway "A"), two full access unsignalized intersections on Governor Miles Rd., and one access via Whispering Wing Rd. connecting to Dancing Ground Rd. to the west of the subdivision. The horizon year analysis revealed excessive delays at the unsignalized intersection of Beckner Rd. / Richards Ave., the signalized intersection of Governor Miles Rd. / Richards Ave., and the unsignalized intersection of Beckner Rd. / Driveway "A" (Beaty access).

The 2040 (Ultra-Horizon Year) analysis also assumed implementation of all Vista de la Sierra Subdivision. The ultra-horizon year analysis assumed the exact same access to the subdivision as was assumed in the horizon year analysis. The ultra-horizon year analysis also revealed excessive delays at the unsignalized intersection of Beckner Rd. / Richards Ave., the signalized intersection of Governor Miles Rd. / Richards Ave., and the unsignalized intersection of Beckner Rd. / Driveway "A" (Beaty access).

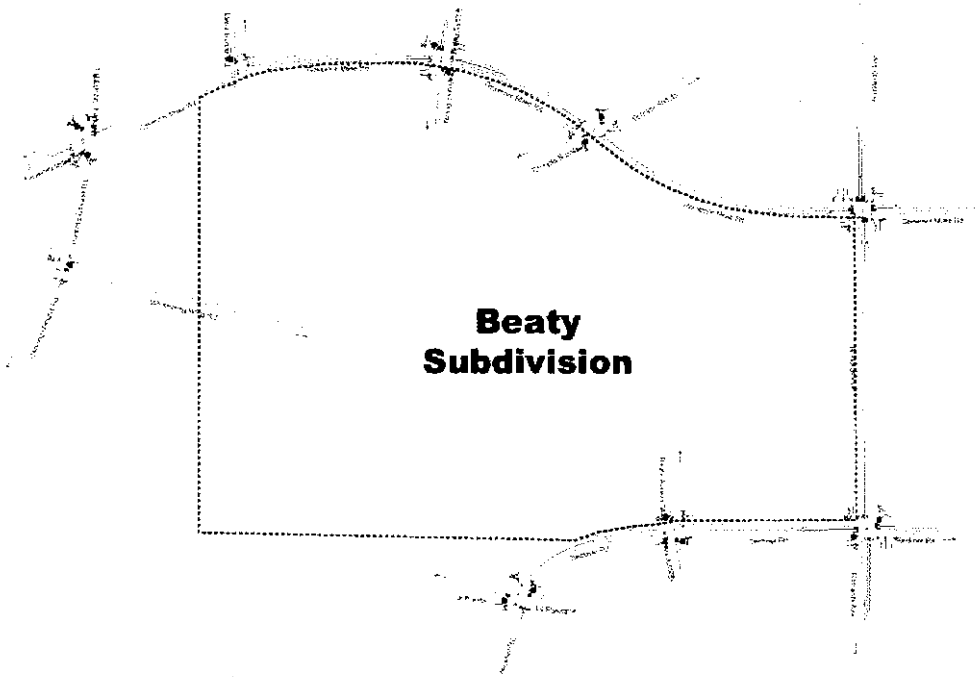
The impacts to the adjacent transportation system can be mitigated by following the recommendation of this Study which are listed at the end of the Executive Summary.

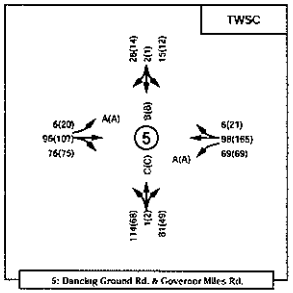
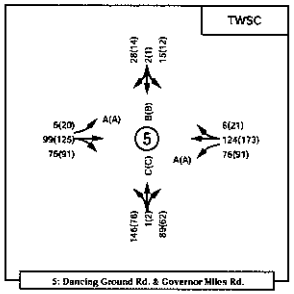
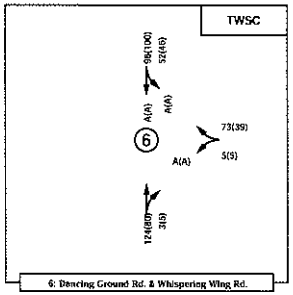
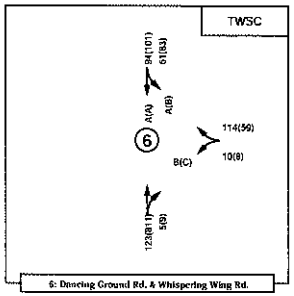
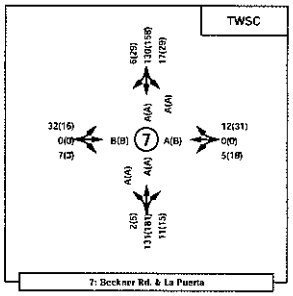
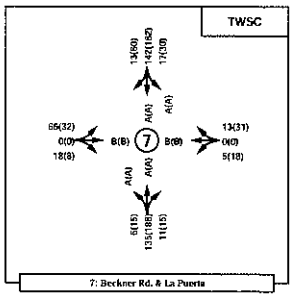
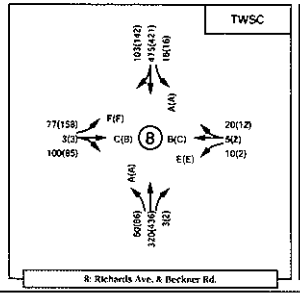
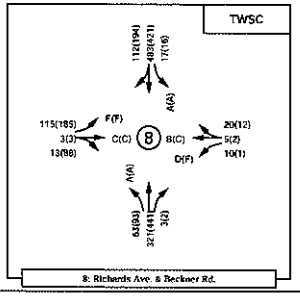


2024 NO BUILD Conditions	2024 BUILD Conditions	2024 BUILD Conditions [MITIGATED]
		NO RECOMMENDATIONS
		NO RECOMMENDATIONS
		NO RECOMMENDATIONS
		NO RECOMMENDATIONS

Beaty Subdivision
(Governor Miles Rd. / Richards Ave.)
LOS / Volume Analysis Map

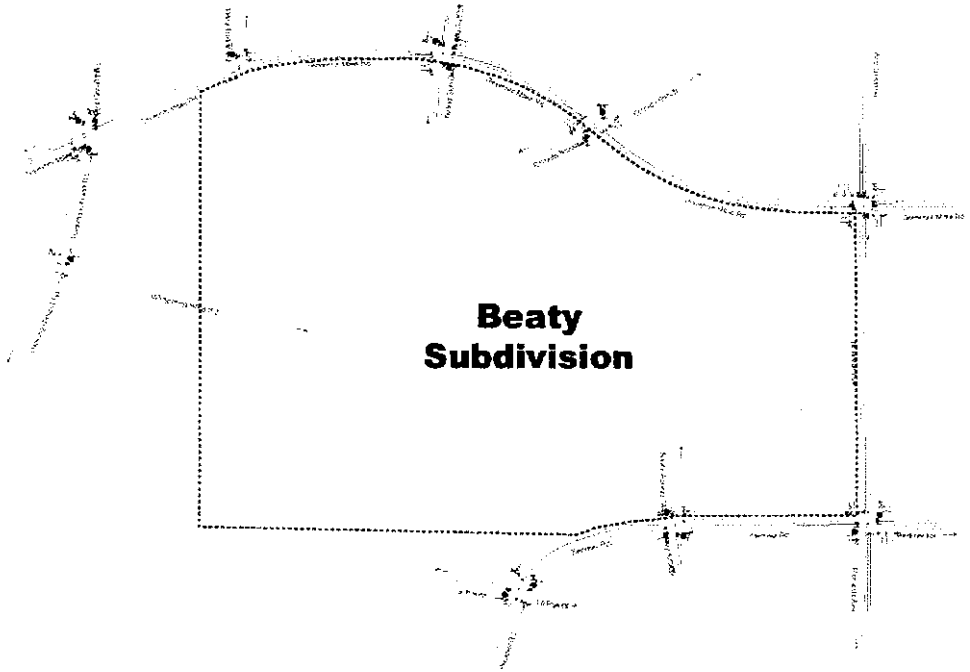
AM(PM)



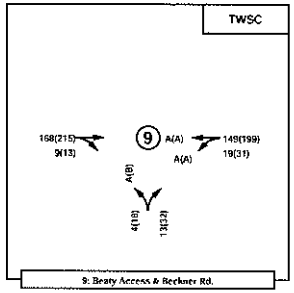
2024 NO BUILD Conditions	2024 BUILD Conditions	2024 BUILD Conditions [MITIGATED]
		NO RECOMMENDATIONS
		NO RECOMMENDATIONS
		Beckner / La Puerta has been converted to a right-in, right-out, left-in only unsignalized intersection. (See Table on Page 6)
		A temporary traffic signal is being designed and constructed by another developer. (See Table on Page 7)

Beaty Subdivision
(Governor Miles Rd. / Richards Ave.)
LOS / Volume Analysis Map

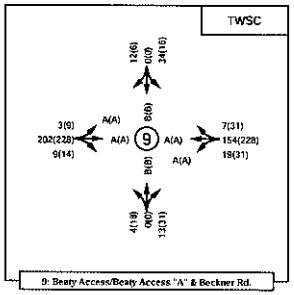
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2024 NO BUILD Conditions



2024 BUILD Conditions

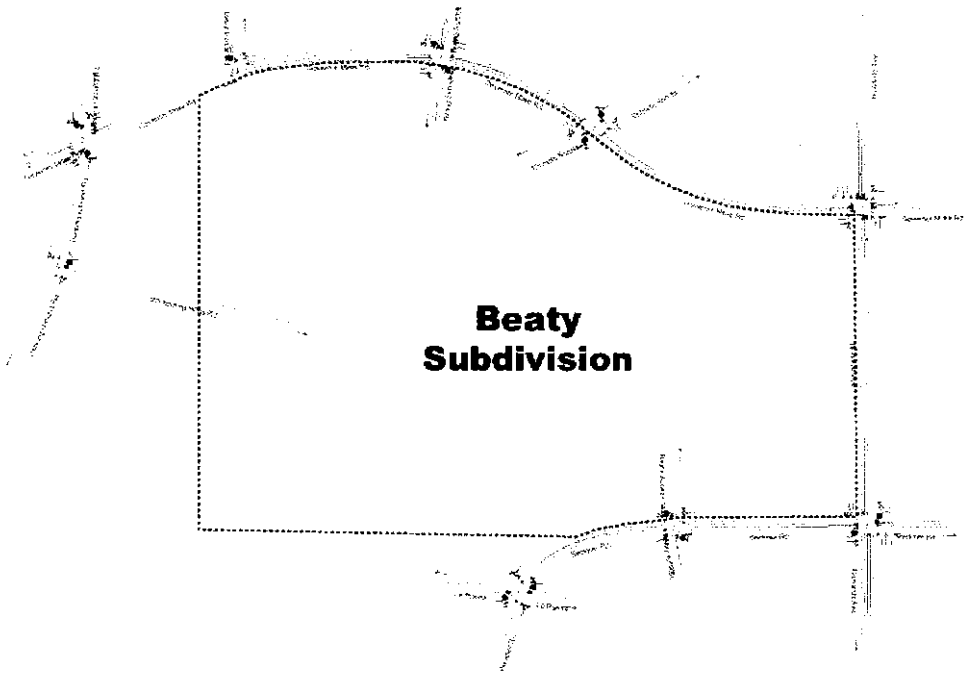


2024 BUILD Conditions [MITIGATED]

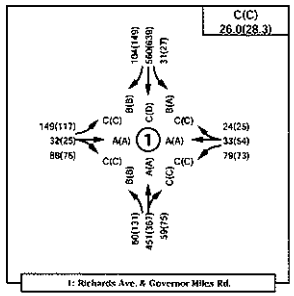
Beaty Access to be constructed as a single lane roundabout
(See Table on Page 9)

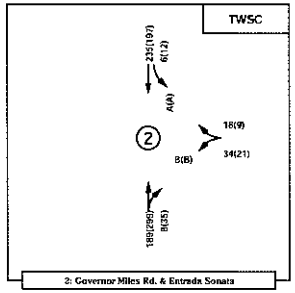
Beaty Subdivision
(Governor Miles Rd. / Richards Ave.)
LOS / Volume Analysis Map

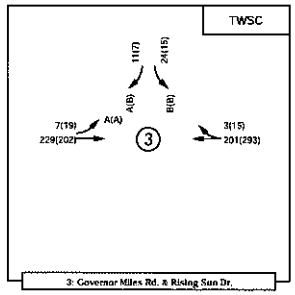
AM(PM)

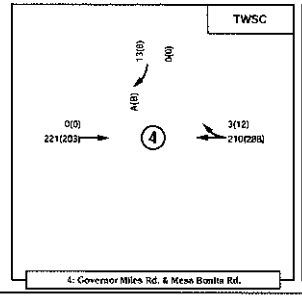


2034 NO BUILD Conditoins

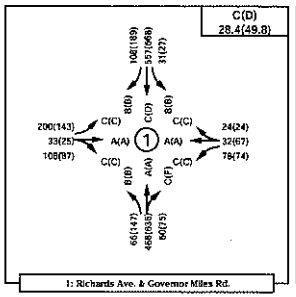


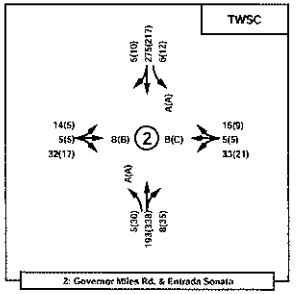


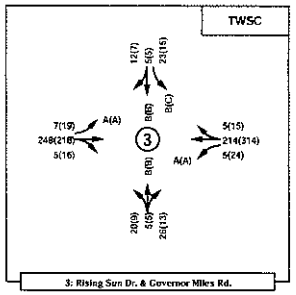


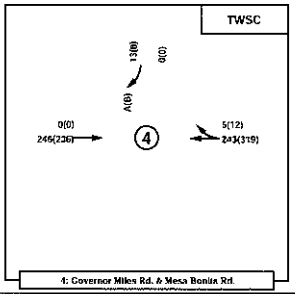


2034 BUILD Conditions

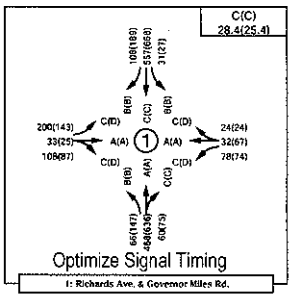








2034 BUILD Conditions (MITIGATED)



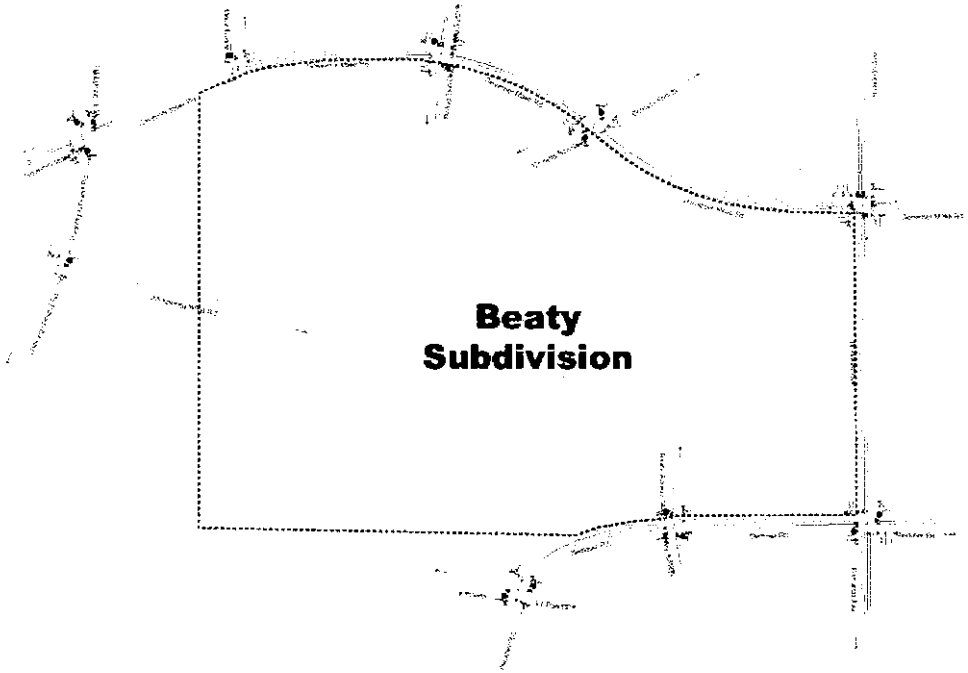
NO RECOMMENDATIONS

NO RECOMMENDATIONS

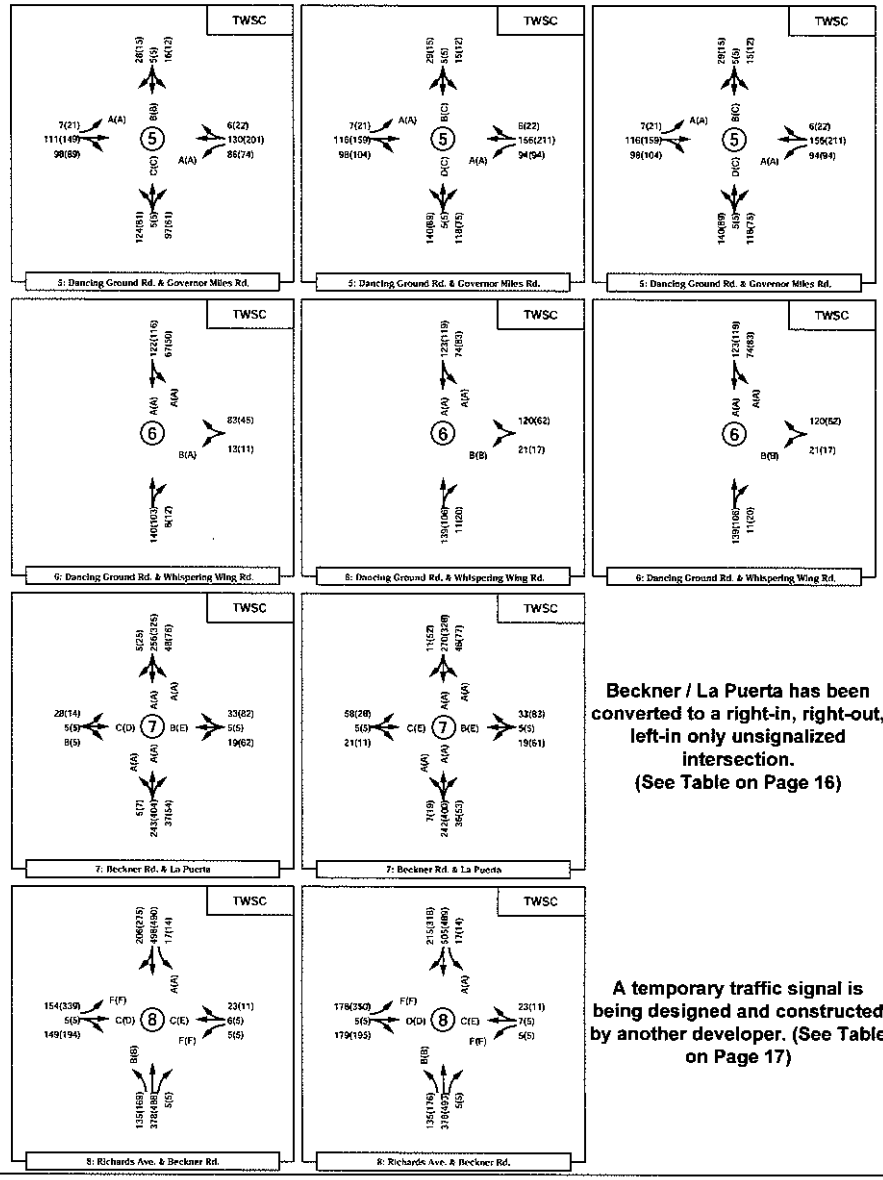
NO RECOMMENDATIONS

Beaty Subdivision
(Governor Miles Rd. / Richards Ave.)
LOS / Volume Analysis Map

AM(PM)



2034 NO BUILD Conditoins | 2034 BUILD Conditions | 2034 BUILD Conditions (MITIGATED)

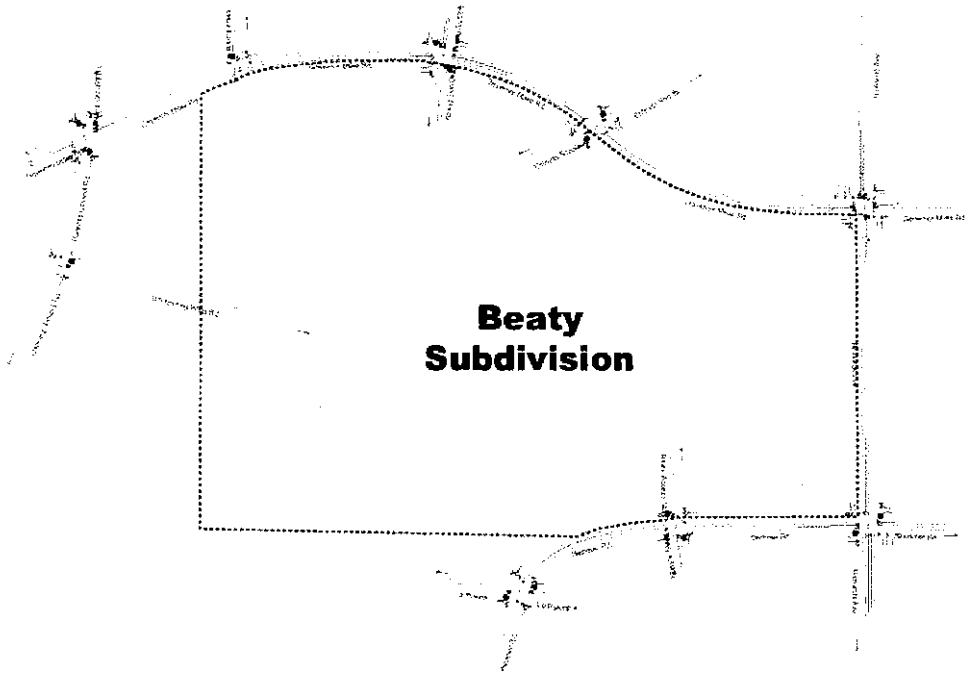


Beckner / La Puerta has been converted to a right-in, right-out, left-in only unsignalized intersection.
(See Table on Page 16)

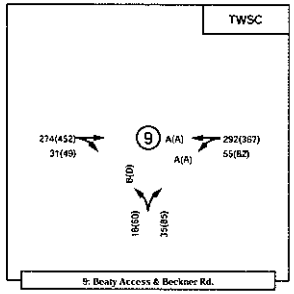
A temporary traffic signal is being designed and constructed by another developer. (See Table on Page 17)

Beaty Subdivision
(Governor Miles Rd. / Richards Ave.)
LOS / Volume Analysis Map

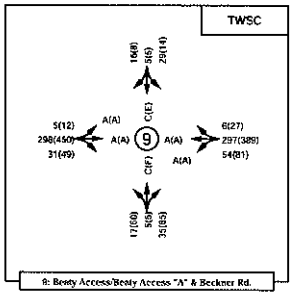
AM(PM)



2034 NO BUILD Conditoins



2034 BUILD Conditions



2034 BUILD Conditions (MITIGATED)

Beaty Access to be constructed as a single lane roundabout
(See Table on Page 19)

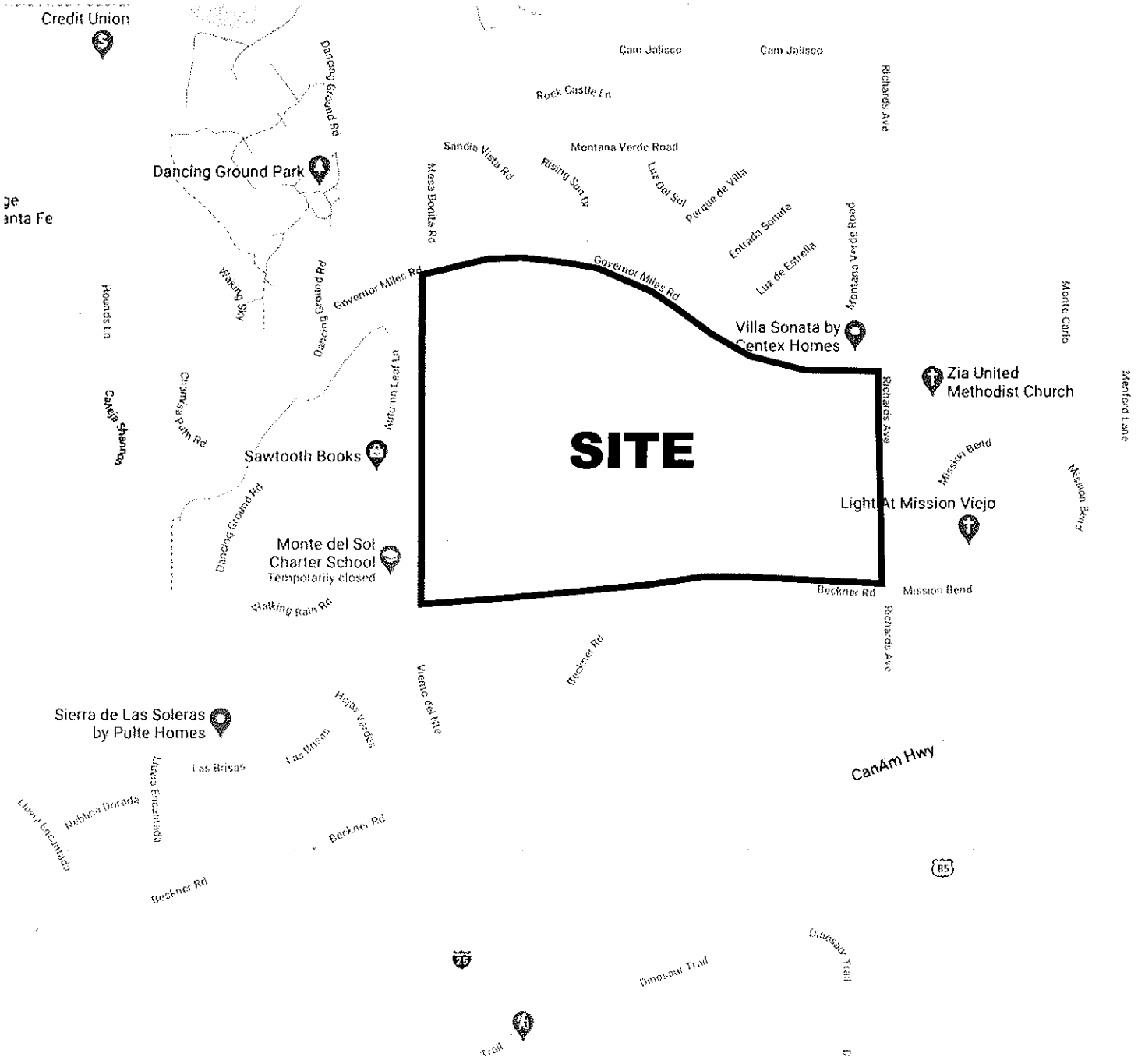
Beaty Subdivision
(Governor Miles Rd. / Richards Ave.)
LOS / Volume Analysis Map

AM(PM)

Appendix

SITE INFORMATION	
Vicinity Map	A-1
Aerial Map	A-2
Proposed Subdivision Plan	A-3
TRIP GENERATION	
Trip Generation Worksheet	A-4
TURNING MOVEMENTS VOLUMES (from Transportation Model)	
2020 AM and PM Peak Hour Volumes	A-5 thru A-8
2024 (Implementation Year) AM and PM Peak Hour Volumes (Phase 1 ONLY)	A-9 thru A-16
2034 (Horizon Year) AM and PM Peak Hour Volumes (Full Buildout)	A-17 thru A-24
2040 (Ultra-Horizon Year) AM and PM Peak Hour Volumes (Full Buildout)	A-25 thru A-32
EXISTING / IMPLEMENTATION YEAR (2024) / HORIZON YEAR (2034) / ULTRA HORIZON YEAR ANALYSES	
2020 (Existing) Analysis	A-33 thru A-49
2024 (Implementation Year) Analysis	A-50 thru A-92
2034 (Horizon Year) Analysis	A-93 thru A-139
2040 (Ultra-Horizon Year) Analysis	A-140 thru A-188

APPENDIX

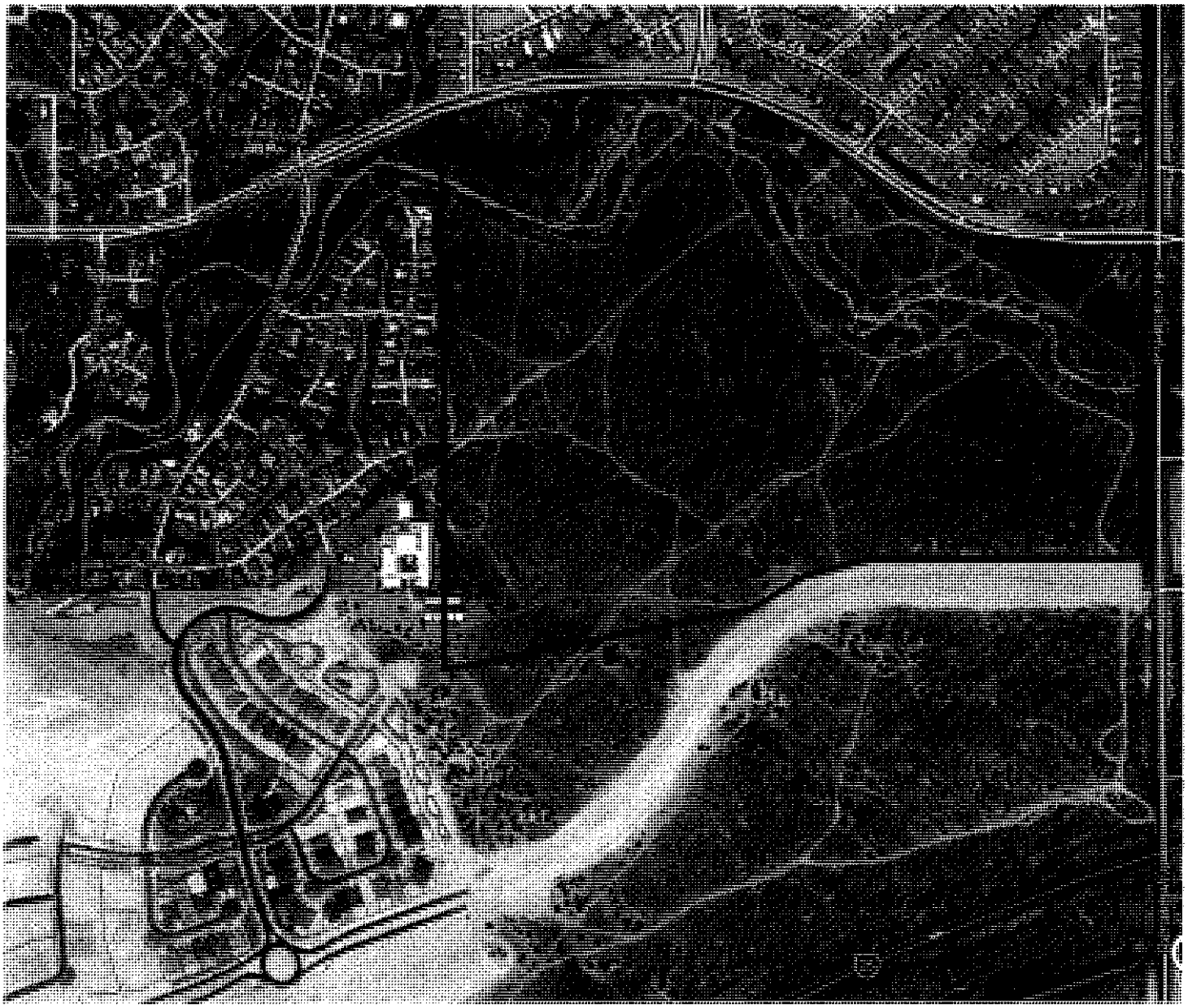


Vista de la Sierra Subdivsion

Beaty Subdivision - Santa Fe, NM

(Gov. Miles Rd. / Richards Ave.)

Vicinity Map

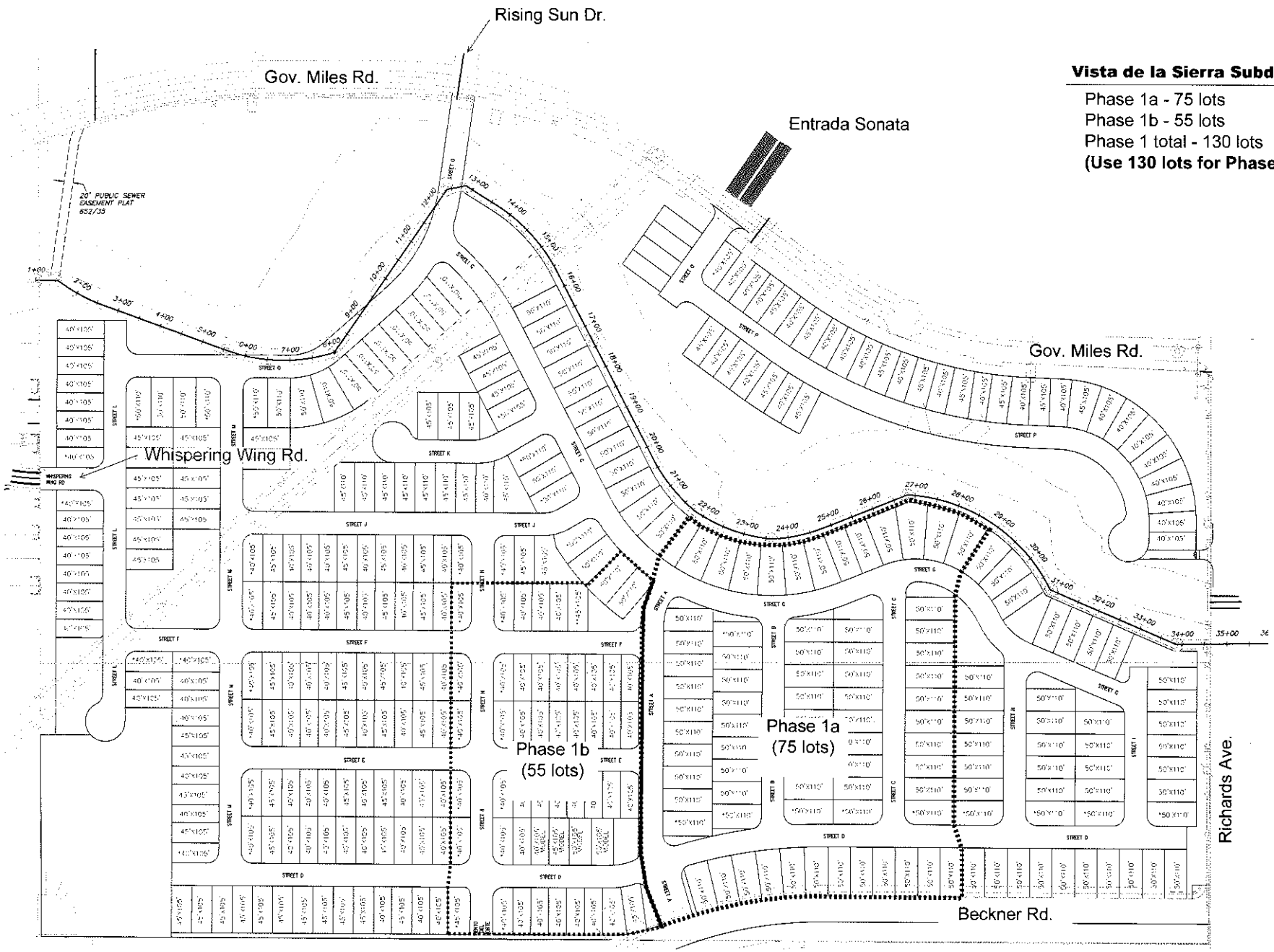


Vista de la Sierra Subdivsion

Beaty Subdivision - Santa Fe, NM

(Gov. Miles Rd. / Richards Ave.)

Aerial Map



Vista de la Sierra Subdivision

Phase 1a - 75 lots
Phase 1b - 55 lots
Phase 1 total - 130 lots
(Use 130 lots for Phase 1 Analysis)

WHPacific
AN NV5 COMPANY

N

WHEN PRINTED AT 22"x34"
SCALE
100 0 50 100 200
(FEET)
1 INCH = 100 FT.

WHEN PRINTED AT 11"x17"
SCALE
200 0 100 200 400
(FEET)
1 INCH = 200 FT.

BEATY SOUTH

SANTA FE, NEW MEXICO

PRELIMINARY PLAT LAYOUT B

March 12, 2020

Prepared For:

COLUMBUS CAPITAL
Santa Fe, NM

Beaty Subdivision - Santa Fe (Gov. Miles Rd. / Richards Ave.)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Single-Family Detached Housing (210)	*390*	3,637	70	211	236	139
	Dwelling Units					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

Ln(T) = ***0.92*** **Ln(X) +** ***2.71***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = ***0.71*** **(X) +** ***4.8***
25% Enter, ***75%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

Ln(T) = ***0.96*** **Ln(X) +** ***0.2***
63% Enter, ***37%*** Exit

Comments:

Based on ITE Trip Generation Manual - 10th Edition

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	122	94
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	64	59
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	27	18
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	39	101
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	48	52
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	389	432
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	33	30
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	71	146
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	563	456
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	62	50
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	28	26
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	25	33
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	0	0
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	0	0
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	0	0
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	10	41
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	125	240
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	7	11
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	0	0
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	175	146
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	39	25
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	15	9
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	0	0
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	0	0
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	181	157

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	0	0
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	0	0
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	0	0
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	0	0
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	0	0
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	0	0
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	140	248
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	12
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	167	149
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	14	8
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	13	8
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	4	14
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	136	235
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	8	25
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	66	73
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	86	96
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	117	63
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	66	49
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	1	1
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	18	15
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	33	17
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	2	1
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	59	69
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	8	25
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	83	149

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	2	2
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	116	75
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	45	47
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	82	97
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	3	3
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	68	38
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	13	6
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	2	1
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	0	0
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	0	1
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	0	0
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	110	127
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	0	0
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	SBR	2	11
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	98	115
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	0	0
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	0	0
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	0
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	63	82
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	57	48

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	3	2
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	38	55
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	2	1
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	363	482
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	19	18
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	58	70
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	600	463
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	3	1
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	28	13
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	4	2
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	0	0
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	0	0
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	123	133
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	0	0
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	0	0
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	0	0
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	0	0
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	0	0
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	0	0
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	101	127

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	134	98
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	74	59
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	28	20
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	45	109
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	51	58
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	341	446
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	32	28
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	83	152
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	464	476
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	66	56
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	27	26
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	27	34
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	0	0
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	0	0
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	0	0
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	8	34
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	147	260
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	6	9
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	0	0
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	204	156
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	33	21
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	13	8
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	3	8
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	0	0
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	197	158

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	0	0
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	0	0
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	13	7
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	10	6
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	0	0
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	3	14
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	157	254
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	10
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	189	159
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	11	7
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	11	7
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	3	11
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	163	249
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	6	20
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	76	75
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	96	107
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	114	68
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	81	49
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	1	2
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	15	12
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	28	14
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	2	1
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	69	69
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	6	21
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	98	165

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	3	5
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	124	80
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	52	46
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	96	100
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	5	5
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	73	39
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	32	16
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	7	3
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	0	0
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	2	5
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	11	15
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	131	181
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	17	29
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	SBR	6	29
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	130	158
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	5	18
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	12	31
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	0
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	77	158
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	100	85

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	3	3
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	60	86
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	3	2
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	320	436
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	18	16
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	103	142
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	475	421
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	10	2
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	20	12
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	5	2
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	0	0
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	9	13
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	168	215
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	4	18
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	13	32
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	0	0
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	0	0
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	19	31
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	0	0
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	149	199

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	178	129
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	93	67
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	30	20
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	52	122
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	51	57
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	372	466
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	32	28
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	90	211
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	464	521
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	66	57
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	27	25
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	26	35
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	12	5
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	34	18
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	6	31
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	8	34
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	153	303
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	6	9
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	4	9
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	234	177
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	33	21
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	13	8
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	3	8
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	5	14
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	203	174

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	18	8
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	28	14
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	12	7
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	10	6
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	5	26
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	3	14
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	170	275
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	10
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	200	190
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	11	7
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	11	7
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	3	11
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	195	279
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	6	20
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	76	91
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	99	125
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	146	76
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	89	62
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	1	2
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	15	12
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	28	14
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	2	1
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	76	91
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	6	21
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	124	173

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	5	9
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	123	81
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	61	83
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	94	101
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	10	8
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	114	59
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	66	32
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	18	8
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	0	0
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	6	15
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	11	15
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	135	188
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	17	30
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	SBR	13	60
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	142	162
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	5	18
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	13	31
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	0
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	115	185
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	130	88

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	3	3
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	63	93
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	3	2
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	321	441
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	17	16
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	112	194
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	483	421
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	10	1
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	20	12
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	5	2
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	3	9
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	9	14
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	202	228
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	4	18
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	13	31
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	34	16
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	12	6
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	19	31
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	7	31
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	154	228

2034 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	149	117
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	88	76
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	32	25
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	60	131
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	59	75
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	451	637
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	31	27
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	104	149
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	560	639
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	79	73
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	24	25
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	33	54
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	0	0
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	0	0
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	0	0
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	8	35
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	189	299
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	6	12
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	0	0
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	235	197
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	34	21
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	16	9
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	3	8
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	0	0
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	229	202

2034 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	0	0
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	0	0
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	13	8
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	11	7
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	0	0
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	3	15
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	201	293
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	11
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	221	203
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	11	7
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	13	8
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	3	12
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	210	288
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	7	21
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	98	89
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	111	140
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	124	81
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	97	61
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	1	4
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	16	12
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	28	15
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	5	3
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	86	74
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	6	22
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	130	201

2034 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	8	12
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	140	103
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	67	50
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	122	116
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	13	11
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	83	45
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	28	14
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	8	4
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	0	0
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	2	7
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	37	54
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	243	404
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	48	76
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	SBR	5	25
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	256	325
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	19	62
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	33	82
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	1
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	154	339
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	149	194

2034 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	4	5
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	135	169
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	3	2
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	378	488
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	17	14
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	206	275
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	498	490
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	4	2
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	23	11
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	6	4
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	0	0
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	31	49
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	274	452
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	18	60
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	35	85
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	0	0
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	0	0
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	55	82
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	0	0
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	292	367

2034 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	200	143
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	108	87
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	33	25
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	66	147
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	60	75
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	468	636
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	31	27
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	108	189
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	557	668
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	78	74
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	24	24
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	32	67
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	14	5
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	32	17
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	5	30
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	8	35
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	193	338
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	6	12
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	4	10
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	275	217
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	33	21
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	16	9
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	3	8
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	5	16
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	248	218

2034 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	20	9
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	26	13
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	12	8
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	12	7
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	5	24
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	3	15
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	214	314
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	11
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	246	236
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	11	7
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	13	8
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	3	12
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	243	319
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	7	21
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	98	104
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	116	159
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	140	89
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	118	75
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	1	4
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	15	12
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	29	15
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	5	3
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	94	94
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	6	22
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	156	211

2034 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	11	20
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	139	106
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	74	83
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	123	119
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	21	17
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	120	62
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	58	28
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	21	11
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	1	1
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	7	19
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	36	53
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	242	400
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	48	77
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	SBR	11	52
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	270	328
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	19	61
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	33	83
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	1
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	178	350
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	179	195

2034 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	4	5
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	135	176
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	3	2
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	378	493
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	17	14
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	215	318
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	505	489
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	4	2
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	23	11
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	7	4
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	4	12
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	31	49
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	298	450
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	17	60
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	35	85
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	29	14
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	16	8
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	54	81
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	6	27
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	297	389

2040 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	109	112
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	89	84
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	33	29
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	70	113
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	65	86
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	520	778
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	30	26
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	113	123
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	633	709
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	88	101
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	22	25
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	39	64
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	0	3
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	-27	-15
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	-4	-26
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	9	36
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	217	289
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	7	15
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	-2	3
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	223	218
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	36	22
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	18	10
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	4	10
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	-3	-1
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	235	241

2040 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	-5	0
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	-21	-12
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	15	8
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	12	8
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	-4	-22
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	3	15
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	237	309
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	12
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	223	242
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	11	7
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	15	9
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	3	13
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	241	303
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	7	23
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	117	101
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	126	181
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	124	95
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	85	61
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	2	6
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	17	12
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	29	15
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	6	4
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	90	69
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	6	22
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	159	222

2040 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	9	10
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	152	121
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	72	39
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	142	136
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	24	11
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	60	43
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	-19	-9
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	9	5
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	-1	-1
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	-2	7
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	55	82
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	333	604
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	66	98
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	5BR	-4	-19
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	361	454
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	29	94
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	42	108
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	0
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	186	432
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	140	299

2040 NO BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	5	5
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	207	231
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	4	2
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	436	529
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	16	13
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	253	298
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	536	578
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	4	2
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	20	11
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	6	5
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	-2	0
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	45	71
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	313	632
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	30	87
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	43	116
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	-24	-12
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	-2	0
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	76	111
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	-5	-23
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	395	447

2040 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
973	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBL	160	138
973	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	EBR	109	95
973	974	975	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	EBT	34	29
1654	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBL	76	129
1654	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	NBR	66	86
1654	974	935	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	NBT	537	777
935	974	975	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBL	30	26
935	974	973	1	Governor Miles Rd & Richards Ave	Richards Avenue	Governor Miles Road	SBR	117	163
935	974	1654	1	Governor Miles Rd & Richards Ave	Richards Avenue	Richards Avenue	SBT	630	738
975	974	1654	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBL	87	102
975	974	935	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Richards Avenue	WBR	22	24
975	974	973	1	Governor Miles Rd & Richards Ave	Governor Miles Road	Governor Miles Road	WBT	38	77
3473	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBL	14	8
3473	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	EBR	5	2
3473	973	3246	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	EBT	0	0
974	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBL	1	4
974	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	NBR	9	36
974	973	3470	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	NBT	221	328
3470	973	3246	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBL	7	15
3470	973	3473	2	Governor Miles & Entrada Sonata	Governor Miles Road	Entrada Sonata	SBR	2	13
3470	973	974	2	Governor Miles & Entrada Sonata	Governor Miles Road	Governor Miles Road	SBT	263	238
3246	973	974	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBL	35	22
3246	973	3470	2	Governor Miles & Entrada Sonata	Entrada Sonata	Governor Miles Road	WBR	18	10
3246	973	3473	2	Governor Miles & Entrada Sonata	Entrada Sonata	Entrada Sonata	WBT	0	0
972	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBL	4	10
972	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	EBR	2	15
972	3470	973	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	EBT	254	257

2040 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3472	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBL	15	9
3472	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	NBR	5	1
3472	3470	3471	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	NBT	0	0
3471	3470	973	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBL	14	8
3471	3470	972	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Governor Miles Road	SBR	13	8
3471	3470	3472	3	Governor Miles & Rising Sun Dr.	Rising Sun Drive	Rising Sun Drive	SBT	0	0
973	3470	3472	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBL	1	2
973	3470	3471	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Rising Sun Drive	WBR	3	15
973	3470	972	3	Governor Miles & Rising Sun Dr.	Governor Miles Road	Governor Miles Road	WBT	250	330
971	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	EBL	4	12
971	972	3470	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	EBT	248	275
3247	972	3470	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBL	11	7
3247	972	971	4	Governor Miles & Mesa Bonito Rd	Mesa Bonita Rd	Governor Miles Road	SBR	15	9
3470	972	3247	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Mesa Bonita Rd	WBR	3	13
3470	972	971	4	Governor Miles & Mesa Bonito Rd	Governor Miles Road	Governor Miles Road	WBT	274	334
3488	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBL	7	23
3488	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	EBR	117	116
3488	971	972	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	EBT	131	200
3474	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBL	140	103
3474	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	NBR	106	75
3474	971	3248	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	2	6
3248	971	972	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBL	16	12
3248	971	3488	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Governor Miles Road	SBR	30	15
3248	971	3474	5	Governor Miles & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	6	4
972	971	3474	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBL	98	89
972	971	3248	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Dancing Ground Rd	WBR	6	22
972	971	3488	5	Governor Miles & Dancing Ground Rd.	Governor Miles Road	Governor Miles Road	WBT	185	232

2040 BUILD Volumes

$TURN:FROMNODENO	VIANODENO	TONODENO	VIANODE\TIA_ID	VIANODE\NAME	FROMLINK\NAME	TOLINK\NAME	ORIENTATION	AM_TURNS	PM_TURNS
3249	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	NBR	12	18
3249	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBT	151	124
3249	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	NBU	0	0
971	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Whispering Wing Rd	SBL	79	72
971	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBT	143	139
971	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Dancing Ground Rd	Dancing Ground Rd	SBU	0	0
3490	3474	3249	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBL	32	17
3490	3474	971	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Dancing Ground Rd	WBR	97	60
3490	3474	3490	6	Whispering Wing Rd & Dancing Ground Rd.	Whispering Wing Rd	Whispering Wing Rd	WBU	0	0
3481	3477	3412	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBL	11	5
3481	3477	3319	7	Beckner & La Puerta	La Puerta	Beckner Rd	EBR	22	12
3481	3477	3486	7	Beckner & La Puerta	La Puerta	La Puerta S	EBT	0	0
3481	3477	3481	7	Beckner & La Puerta	La Puerta	La Puerta	EBU	0	0
3319	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	NBL	3	19
3319	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	NBR	54	81
3319	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBT	332	600
3319	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	NBU	0	0
3412	3477	3486	7	Beckner & La Puerta	Beckner Rd	La Puerta S	SBL	66	99
3412	3477	3481	7	Beckner & La Puerta	Beckner Rd	La Puerta	SBR	2	8
3412	3477	3319	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBT	375	457
3412	3477	3412	7	Beckner & La Puerta	Beckner Rd	Beckner Rd	SBU	0	0
3486	3477	3319	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBL	29	93
3486	3477	3412	7	Beckner & La Puerta	La Puerta S	Beckner Rd	WBR	42	109
3486	3477	3481	7	Beckner & La Puerta	La Puerta S	La Puerta	WBT	0	0
3486	3477	3486	7	Beckner & La Puerta	La Puerta S	La Puerta S	WBU	0	0
3412	989	1654	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBL	210	443
3412	989	999	8	Beckner & Richards	Beckner Rd	Richards Avenue	EBR	170	300

2040 BUILD Volumes

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3412	989	3476	8	Beckner & Richards	Beckner Rd	Mission Bend	EBT	5	5
999	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	NBL	207	238
999	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	NBR	4	2
999	989	1654	8	Beckner & Richards	Richards Avenue	Richards Avenue	NBT	436	534
1654	989	3476	8	Beckner & Richards	Richards Avenue	Mission Bend	SBL	16	13
1654	989	3412	8	Beckner & Richards	Richards Avenue	Beckner Rd	SBR	262	341
1654	989	999	8	Beckner & Richards	Richards Avenue	Richards Avenue	SBT	543	577
3476	989	999	8	Beckner & Richards	Mission Bend	Richards Avenue	WBL	4	2
3476	989	1654	8	Beckner & Richards	Mission Bend	Richards Avenue	WBR	20	11
3476	989	3412	8	Beckner & Richards	Mission Bend	Beckner Rd	WBT	7	5
3477	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	EBL	2	12
3477	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	EBR	45	71
3477	3412	989	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	EBT	337	630
3485	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBL	29	87
3485	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beckner Rd	NBR	43	116
3485	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiv	NBT	0	0
3485	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiiv S	Beaty Subdiiv S	NBU	0	0
3484	3412	989	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBL	5	2
3484	3412	3477	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beckner Rd	SBR	14	8
3484	3412	3485	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiiv S	SBT	0	0
3484	3412	3484	9	Beckner & Beaty Subdivision	Beaty Subdiv	Beaty Subdiv	SBU	0	0
989	3412	3485	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiiv S	WBL	75	110
989	3412	3484	9	Beckner & Beaty Subdivision	Beckner Rd	Beaty Subdiv	WBR	1	4
989	3412	3477	9	Beckner & Beaty Subdivision	Beckner Rd	Beckner Rd	WBT	400	469

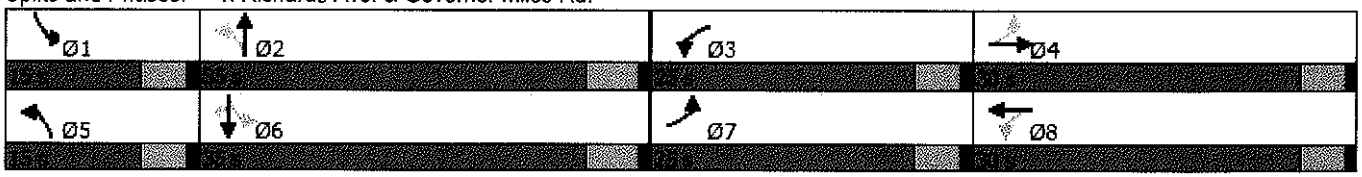
2020 (Existing Conditions) Analysis

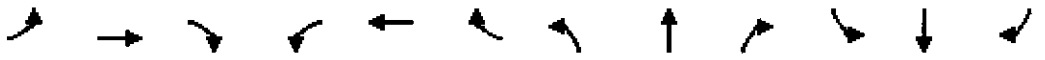
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	122	27	62	25	39	389	33	563	71
Future Volume (vph)	122	27	62	25	39	389	33	563	71
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 73.7
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	27	64	62	25	28	39	389	48	33	563	71
Future Volume (veh/h)	122	27	64	62	25	28	39	389	48	33	563	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	144	32	75	73	29	33	46	458	56	39	662	84
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	374	51	120	333	80	90	382	698	85	462	798	677
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.43	0.43	0.10	0.43	0.43
Sat Flow, veh/h	1767	493	1155	1767	792	901	1767	1622	198	1767	1856	1572
Grp Volume(v), veh/h	144	0	107	73	0	62	46	0	514	39	662	84
Grp Sat Flow(s),veh/h/ln	1767	0	1648	1767	0	1693	1767	0	1820	1767	1856	1572
Q Serve(g_s), s	4.9	0.0	4.3	2.4	0.0	2.4	0.9	0.0	15.6	0.7	22.0	2.2
Cycle Q Clear(g_c), s	4.9	0.0	4.3	2.4	0.0	2.4	0.9	0.0	15.6	0.7	22.0	2.2
Prop In Lane	1.00		0.70	1.00		0.53	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	374	0	171	333	0	170	362	0	783	462	798	677
V/C Ratio(X)	0.38	0.00	0.63	0.22	0.00	0.36	0.13	0.00	0.66	0.08	0.83	0.12
Avail Cap(c_a), veh/h	711	0	603	676	0	619	451	0	783	551	798	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	30.0	23.4	0.0	29.3	11.6	0.0	15.8	9.7	17.6	12.0
Incr Delay (d2), s/veh	0.6	0.0	3.8	0.3	0.0	1.3	0.2	0.0	4.3	0.1	9.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	3.3	1.8	0.0	1.8	0.5	0.0	10.8	0.4	15.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	33.7	23.7	0.0	30.6	11.8	0.0	20.0	9.8	27.3	12.3
LnGrp LOS	C	A	C	C	A	C	B	A	C	A	C	B
Approach Vol, veh/h		251			135			560			785	
Approach Delay, s/veh		28.6			26.9			19.4			24.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	11.7	11.5	35.0	11.7	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	17.6	4.4	6.3	2.9	24.0	6.9	4.4
Green Ext Time (p_c), s	0.0	2.6	0.1	0.5	0.0	2.3	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	39	15	125	10	7	175
Future Vol, veh/h	39	15	125	10	7	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	18	147	12	8	206

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	375	153	0	0	159	0
Stage 1	153	-	-	-	-	-
Stage 2	222	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	626	893	-	-	1420	-
Stage 1	875	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	622	893	-	-	1420	-
Mov Cap-2 Maneuver	622	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	810	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	679	1420	-
HCM Lane V/C Ratio	-	-	0.094	0.006	-
HCM Control Delay (s)	-	-	10.8	7.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	181	140	0	14	0
Future Vol, veh/h	4	181	140	0	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	213	165	0	16	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	165	0	-	0	388	165
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	223	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1407	-	-	-	614	877
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1407	-	-	-	612	877
Mov Cap-2 Maneuver	-	-	-	-	612	-
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1407	-	-	-	612	-
HCM Lane V/C Ratio	0.003	-	-	-	0.027	-
HCM Control Delay (s)	7.6	-	-	-	11	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↱			↱
Traffic Vol, veh/h	0	167	136	4	0	13
Future Vol, veh/h	0	167	136	4	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	196	160	5	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	163
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	879
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	879
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	879
HCM Lane V/C Ratio	-	-	-	0.017
HCM Control Delay (s)	-	-	-	9.2
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	86	66	59	83	8	117	1	66	18	2	33
Future Vol, veh/h	8	86	66	59	83	8	117	1	66	18	2	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	101	78	69	98	9	138	1	78	21	2	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	107	0	0	179	0	0	419	403	140	439	438	103
Stage 1	-	-	-	-	-	-	158	158	-	241	241	-
Stage 2	-	-	-	-	-	-	261	245	-	198	197	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1478	-	-	1391	-	-	543	535	905	526	511	949
Stage 1	-	-	-	-	-	-	842	765	-	760	704	-
Stage 2	-	-	-	-	-	-	742	702	-	802	736	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1478	-	-	1391	-	-	497	505	905	460	482	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	497	505	-	460	482	-
Stage 1	-	-	-	-	-	-	837	760	-	755	669	-
Stage 2	-	-	-	-	-	-	674	667	-	728	732	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	3	14.5	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	593	1478	-	-	1391	-	-	679
HCM Lane V/C Ratio	0.365	0.006	-	-	0.05	-	-	0.092
HCM Control Delay (s)	14.5	7.5	-	-	7.7	-	-	10.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	68	116	2	45	82
Future Vol, veh/h	3	68	116	2	45	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	80	136	2	53	96

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	339	137	0	0	138	0
Stage 1	137	-	-	-	-	-
Stage 2	202	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	655	909	-	-	1440	-
Stage 1	887	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	629	909	-	-	1440	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	892	1440	-
HCM Lane V/C Ratio	-	-	0.094	0.037	-
HCM Control Delay (s)	-	-	9.5	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	3	57	3	4	28	3	363	2	19	600	58
Future Vol, veh/h	63	3	57	3	4	28	3	363	2	19	600	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	4	67	4	5	33	4	427	2	22	706	68

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1239	1221	740	1255	1253	427	774	0	0	429	0	0
Stage 1	784	784	-	435	435	-	-	-	-	-	-	-
Stage 2	455	437	-	820	818	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	152	180	417	148	172	628	842	-	-	1130	-	-
Stage 1	386	404	-	600	580	-	-	-	-	-	-	-
Stage 2	585	579	-	369	390	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	138	176	417	120	168	628	842	-	-	1130	-	-
Mov Cap-2 Maneuver	138	176	-	120	168	-	-	-	-	-	-	-
Stage 1	384	396	-	597	577	-	-	-	-	-	-	-
Stage 2	547	576	-	301	383	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.6	15.3	0.1	0.2
HCM LOS	E	C		

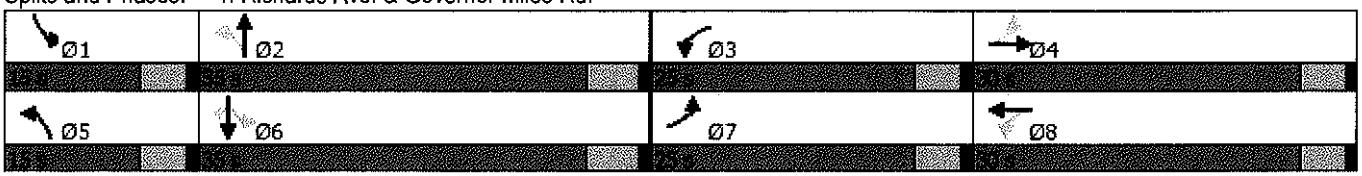
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	842	-	-	138	390	120	468	1130	-	-
HCM Lane V/C Ratio	0.004	-	-	0.537	0.181	0.029	0.08	0.02	-	-
HCM Control Delay (s)	9.3	-	-	57.9	16.3	35.9	13.4	8.2	-	-
HCM Lane LOS	A	-	-	F	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.6	0.7	0.1	0.3	0.1	-	-

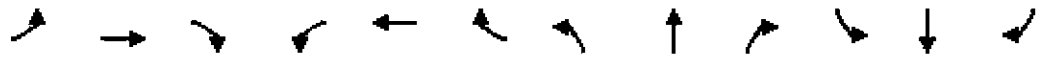
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	94	18	50	33	101	432	30	456	146
Future Volume (vph)	94	18	50	33	101	432	30	456	146
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 74.1
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	18	59	50	33	26	101	432	52	30	456	146
Future Volume (veh/h)	94	18	59	50	33	26	101	432	52	30	456	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	111	21	69	59	39	31	119	508	61	35	536	172
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	364	38	126	344	96	77	429	702	84	426	801	679
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.43	0.43	0.10	0.43	0.43
Sat Flow, veh/h	1767	380	1250	1767	957	761	1767	1625	195	1767	1856	1572
Grp Volume(v), veh/h	111	0	90	59	0	70	119	0	569	35	536	172
Grp Sat Flow(s),veh/h/ln	1767	0	1631	1767	0	1719	1767	0	1820	1767	1856	1572
Q Serve(g_s), s	3.7	0.0	3.7	1.9	0.0	2.7	2.3	0.0	18.0	0.7	16.0	4.9
Cycle Q Clear(g_c), s	3.7	0.0	3.7	1.9	0.0	2.7	2.3	0.0	18.0	0.7	16.0	4.9
Prop In Lane	1.00		0.77	1.00		0.44	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	364	0	164	344	0	173	429	0	786	426	801	679
V/C Ratio(X)	0.30	0.00	0.55	0.17	0.00	0.40	0.28	0.00	0.72	0.08	0.67	0.25
Avail Cap(c_a), veh/h	707	0	598	687	0	631	518	0	786	515	801	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	29.7	23.0	0.0	29.3	10.4	0.0	16.3	10.2	15.8	12.6
Incr Delay (d2), s/veh	0.5	0.0	2.8	0.2	0.0	1.5	0.3	0.0	5.7	0.1	4.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	0.0	2.7	1.4	0.0	2.0	1.4	0.0	12.3	0.4	11.2	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	0.0	32.6	23.3	0.0	30.8	10.7	0.0	22.1	10.3	20.2	13.5
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	C	B
Approach Vol, veh/h		201			129			688			743	
Approach Delay, s/veh		27.9			27.4			20.1			18.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	11.5	11.5	35.0	11.5	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	20.0	3.9	5.7	4.3	18.0	5.7	4.7
Green Ext Time (p_c), s	0.0	2.6	0.1	0.4	0.1	3.2	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	9	240	41	11	146
Future Vol, veh/h	25	9	240	41	11	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	11	282	48	13	172

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	504	306	0	0	330	0
Stage 1	306	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	528	734	-	-	1229	-
Stage 1	747	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	522	734	-	-	1229	-
Mov Cap-2 Maneuver	522	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	565	1229	-
HCM Lane V/C Ratio	-	-	0.071	0.011	-
HCM Control Delay (s)	-	-	11.9	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	157	248	0	8	0
Future Vol, veh/h	12	157	248	0	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	14	185	292	0	9	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	505	292
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1264	-	-	-	525	745
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	820	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1264	-	-	-	519	745
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	820	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1264	-	-	-	519	-
HCM Lane V/C Ratio	0.011	-	-	-	0.018	-
HCM Control Delay (s)	7.9	-	-	-	12.1	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	149	235	14	0	8
Future Vol, veh/h	0	149	235	14	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	175	276	16	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	284
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	753
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	753
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	753
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	9.8
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	96	73	69	149	25	63	1	49	15	1	17
Future Vol, veh/h	25	96	73	69	149	25	63	1	49	15	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	29	113	86	81	175	29	74	1	58	18	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	204	0	0	199	0	0	576	580	156	596	609	190
Stage 1	-	-	-	-	-	-	214	214	-	352	352	-
Stage 2	-	-	-	-	-	-	362	366	-	244	257	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1362	-	-	1367	-	-	427	424	887	414	408	849
Stage 1	-	-	-	-	-	-	786	724	-	663	630	-
Stage 2	-	-	-	-	-	-	655	621	-	757	693	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1362	-	-	1367	-	-	391	391	887	363	376	849
Mov Cap-2 Maneuver	-	-	-	-	-	-	391	391	-	363	376	-
Stage 1	-	-	-	-	-	-	769	709	-	649	593	-
Stage 2	-	-	-	-	-	-	600	584	-	692	678	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	2.2	14.4	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	516	1362	-	-	1367	-	-	516
HCM Lane V/C Ratio	0.258	0.022	-	-	0.059	-	-	0.075
HCM Control Delay (s)	14.4	7.7	-	-	7.8	-	-	12.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1	0.1	-	-	0.2	-	-	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	38	75	2	47	97
Future Vol, veh/h	3	38	75	2	47	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	45	88	2	55	114

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	313	89	0	0	90	0
Stage 1	89	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	678	966	-	-	1499	-
Stage 1	932	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	652	966	-	-	1499	-
Mov Cap-2 Maneuver	652	-	-	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	2.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	933	1499	-
HCM Lane V/C Ratio	-	-	0.052	0.037	-
HCM Control Delay (s)	-	-	9.1	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	2	48	1	2	13	55	482	1	18	463	70
Future Vol, veh/h	82	2	48	1	2	13	55	482	1	18	463	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	96	2	56	1	2	15	65	567	1	21	545	82

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1334	1326	586	1354	1366	567	627	0	0	568	0	0
Stage 1	628	628	-	697	697	-	-	-	-	-	-	-
Stage 2	706	698	-	657	669	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	131	156	510	127	147	523	955	-	-	1004	-	-
Stage 1	471	476	-	431	443	-	-	-	-	-	-	-
Stage 2	427	442	-	454	456	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	117	142	510	104	134	523	955	-	-	1004	-	-
Mov Cap-2 Maneuver	117	142	-	104	134	-	-	-	-	-	-	-
Stage 1	439	466	-	402	413	-	-	-	-	-	-	-
Stage 2	384	412	-	393	446	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	73.7	16.6	0.9	0.3
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	955	-	-	117	462	104	377	1004	-	-
HCM Lane V/C Ratio	0.068	-	-	0.825	0.127	0.011	0.047	0.021	-	-
HCM Control Delay (s)	9	-	-	110.2	13.9	40	15	8.7	-	-
HCM Lane LOS	A	-	-	F	B	E	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4.9	0.4	0	0.1	0.1	-	-

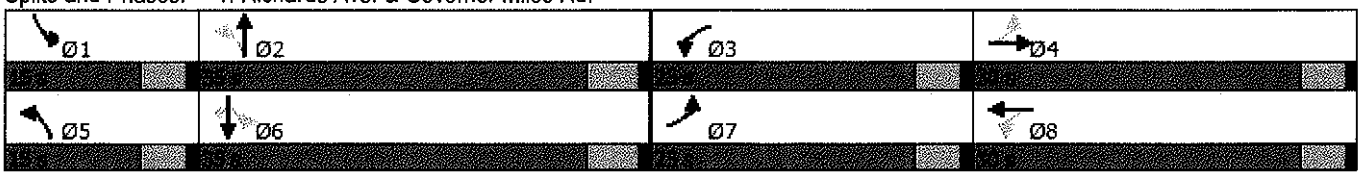
2024 Conditions Analysis
(Implementation Year)

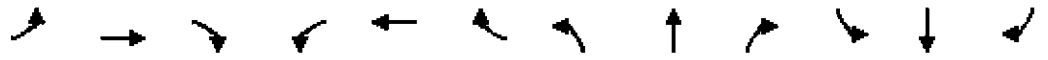
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	134	28	66	27	45	341	32	464	83
Future Volume (vph)	134	28	66	27	45	341	32	464	83
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 74.5
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	28	74	66	27	27	45	341	51	32	464	83
Future Volume (veh/h)	134	28	74	66	27	27	45	341	51	32	464	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	158	33	87	78	32	32	53	401	60	38	546	98
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	383	50	132	330	85	85	425	673	101	492	792	671
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.43	0.43	0.10	0.43	0.43
Sat Flow, veh/h	1767	451	1190	1767	851	851	1767	1577	236	1767	1856	1572
Grp Volume(v), veh/h	158	0	120	78	0	64	53	0	461	38	546	98
Grp Sat Flow(s),veh/h/ln	1767	0	1641	1767	0	1702	1767	0	1813	1767	1856	1572
Q Serve(g_s), s	5.4	0.0	4.9	2.6	0.0	2.5	1.0	0.0	13.7	0.7	16.8	2.7
Cycle Q Clear(g_c), s	5.4	0.0	4.9	2.6	0.0	2.5	1.0	0.0	13.7	0.7	16.8	2.7
Prop In Lane	1.00		0.73	1.00		0.50	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	383	0	182	330	0	170	425	0	774	492	792	671
V/C Ratio(X)	0.41	0.00	0.66	0.24	0.00	0.38	0.12	0.00	0.60	0.08	0.69	0.15
Avail Cap(c_a), veh/h	704	0	596	669	0	618	513	0	774	580	792	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	30.0	23.7	0.0	29.6	10.3	0.0	15.5	9.4	16.4	12.3
Incr Delay (d2), s/veh	0.7	0.0	4.1	0.4	0.0	1.4	0.1	0.0	3.4	0.1	4.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	0.0	3.7	1.9	0.0	1.9	0.6	0.0	9.6	0.4	11.8	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	34.1	24.1	0.0	31.0	10.4	0.0	18.8	9.5	21.2	12.8
LnGrp LOS	C	A	C	C	A	C	B	A	B	A	C	B
Approach Vol, veh/h		278			142			514			682	
Approach Delay, s/veh		28.8			27.2			18.0			19.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	12.3	11.5	35.0	12.3	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	15.7	4.6	6.9	3.0	18.8	7.4	4.5
Green Ext Time (p_c), s	0.0	2.4	0.1	0.6	0.0	2.9	0.3	0.3

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	13	147	8	6	204
Future Vol, veh/h	33	13	147	8	6	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	15	173	9	7	240

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	432	178	0	0	182	0
Stage 1	178	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	581	865	-	-	1393	-
Stage 1	853	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	578	865	-	-	1393	-
Mov Cap-2 Maneuver	578	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	784	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	638	1393	-
HCM Lane V/C Ratio	-	-	0.085	0.005	-
HCM Control Delay (s)	-	-	11.2	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	197	157	3	24	10
Future Vol, veh/h	7	197	157	3	24	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	232	185	4	28	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	189	0	-	0	435	187
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	248	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1379	-	-	-	576	852
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	791	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1379	-	-	-	573	852
Mov Cap-2 Maneuver	-	-	-	-	573	-
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	791	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1379	-	-	-	573	852
HCM Lane V/C Ratio	0.006	-	-	-	0.049	0.014
HCM Control Delay (s)	7.6	-	-	-	11.6	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↱			↱
Traffic Vol, veh/h	0	189	163	3	0	11
Future Vol, veh/h	0	189	163	3	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	222	192	4	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	194
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	845
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	845
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	845
HCM Lane V/C Ratio	-	-	-	0.015
HCM Control Delay (s)	-	-	-	9.3
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	96	76	69	98	6	114	1	81	15	2	28
Future Vol, veh/h	6	96	76	69	98	6	114	1	81	15	2	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	113	89	81	115	7	134	1	95	18	2	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	122	0	0	202	0	0	470	456	158	501	497	119
Stage 1	-	-	-	-	-	-	172	172	-	281	281	-
Stage 2	-	-	-	-	-	-	298	284	-	220	216	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1459	-	-	1364	-	-	502	499	885	479	473	930
Stage 1	-	-	-	-	-	-	828	755	-	724	677	-
Stage 2	-	-	-	-	-	-	709	675	-	780	722	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1459	-	-	1364	-	-	459	467	885	406	443	930
Mov Cap-2 Maneuver	-	-	-	-	-	-	459	467	-	406	443	-
Stage 1	-	-	-	-	-	-	824	751	-	720	637	-
Stage 2	-	-	-	-	-	-	641	635	-	692	718	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	3.1	15.4	11.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	573	1459	-	-	1364	-	-	629
HCM Lane V/C Ratio	0.402	0.005	-	-	0.06	-	-	0.084
HCM Control Delay (s)	15.4	7.5	-	-	7.8	-	-	11.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.9	0	-	-	0.2	-	-	0.3

Intersection						
Int Delay, s/veh	3.3					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	73	124	3	52	96
Future Vol, veh/h	5	73	124	3	52	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	6	86	146	4	61	113

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	383	148	0	0	150	0
Stage 1	148	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	618	896	-	-	1425	-
Stage 1	877	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	590	896	-	-	1425	-
Mov Cap-2 Maneuver	590	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	867	1425	-
HCM Lane V/C Ratio	-	-	0.106	0.043	-
HCM Control Delay (s)	-	-	9.6	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↱	
Traffic Vol, veh/h	0	0	7	0	0	12	2	163	11	17	130	6
Future Vol, veh/h	0	0	7	0	0	12	2	163	11	17	130	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	8	0	0	14	2	192	13	20	153	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	407	406	157	404	403	199	160	0	0	205	0	0
Stage 1	197	197	-	203	203	-	-	-	-	-	-	-
Stage 2	210	209	-	201	200	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	555	534	889	557	536	842	1419	-	-	1366	-	-
Stage 1	805	738	-	799	733	-	-	-	-	-	-	-
Stage 2	792	729	-	801	736	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	538	524	889	544	526	842	1419	-	-	1366	-	-
Mov Cap-2 Maneuver	538	524	-	544	526	-	-	-	-	-	-	-
Stage 1	803	726	-	797	732	-	-	-	-	-	-	-
Stage 2	777	728	-	781	724	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.3	0.1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	889	842	1366	-	-
HCM Lane V/C Ratio	0.002	-	-	0.009	0.017	0.015	-	-
HCM Control Delay (s)	7.5	0	-	9.1	9.3	7.7	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	6.9											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	3	100	10	5	20	60	320	3	18	475	103
Future Vol, veh/h	77	3	100	10	5	20	60	320	3	18	475	103
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	4	118	12	6	24	71	376	4	21	559	121

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1197	1184	620	1241	1240	376	680	0	0	380	0	0
Stage 1	662	662	-	518	518	-	-	-	-	-	-	-
Stage 2	535	522	-	723	722	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	163	189	488	152	175	670	912	-	-	1178	-	-
Stage 1	451	459	-	541	533	-	-	-	-	-	-	-
Stage 2	529	531	-	417	431	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	142	171	488	105	158	670	912	-	-	1178	-	-
Mov Cap-2 Maneuver	142	171	-	105	158	-	-	-	-	-	-	-
Stage 1	416	451	-	499	491	-	-	-	-	-	-	-
Stage 2	465	490	-	308	423	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.4	22.8	1.5	0.2
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	912	-	-	142	463	105	407	1178	-	-
HCM Lane V/C Ratio	0.077	-	-	0.638	0.262	0.112	0.072	0.018	-	-
HCM Control Delay (s)	9.3	-	-	66.8	15.5	43.6	14.5	8.1	-	-
HCM Lane LOS	A	-	-	F	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	3.4	1	0.4	0.2	0.1	-	-

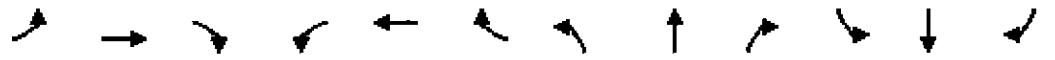
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	115	3	10	5	63	321	17	483
Future Volume (vph)	115	3	10	5	63	321	17	483
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Perm	NA
Protected Phases	7	4		8	5	2		6
Permitted Phases	4		8				6	
Detector Phase	7	4	8	8	5	2	6	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.5	22.5	22.5	22.5	8.5	22.5	22.5	22.5
Total Split (s)	10.0	32.5	22.5	22.5	15.4	72.5	57.1	57.1
Total Split (%)	9.5%	31.0%	21.4%	21.4%	14.7%	69.0%	54.4%	54.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 65.7
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Richards Ave. & Beckner Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	3	13	10	5	20	63	321	3	17	483	112
Future Volume (veh/h)	115	3	13	10	5	20	63	321	3	17	483	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	4	15	12	6	24	74	378	4	20	568	132
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	436	76	284	106	10	40	95	1130	12	610	697	162
Arrive On Green	0.09	0.22	0.22	0.04	0.04	0.04	0.05	0.61	0.61	0.47	0.47	0.47
Sat Flow, veh/h	1781	345	1293	445	223	890	1781	1847	20	1001	1468	341
Grp Volume(v), veh/h	135	0	19	42	0	0	74	0	382	20	0	700
Grp Sat Flow(s),veh/h/ln	1781	0	1638	1558	0	0	1781	0	1867	1001	0	1809
Q Serve(g_s), s	3.6	0.0	0.5	1.4	0.0	0.0	2.2	0.0	5.3	0.6	0.0	17.7
Cycle Q Clear(g_c), s	3.6	0.0	0.5	1.4	0.0	0.0	2.2	0.0	5.3	0.6	0.0	17.7
Prop In Lane	1.00		0.79	0.29		0.57	1.00		0.01	1.00		0.19
Lane Grp Cap(c), veh/h	436	0	360	156	0	0	95	0	1142	610	0	858
V/C Ratio(X)	0.31	0.00	0.05	0.27	0.00	0.00	0.78	0.00	0.33	0.03	0.00	0.82
Avail Cap(c_a), veh/h	457	0	858	611	0	0	363	0	2374	1120	0	1780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	16.5	25.1	0.0	0.0	25.0	0.0	5.1	7.5	0.0	12.0
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.9	0.0	0.0	13.0	0.0	0.2	0.0	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	0.3	0.9	0.0	0.0	2.1	0.0	2.4	0.2	0.0	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.2	0.0	16.5	26.0	0.0	0.0	38.0	0.0	5.2	7.6	0.0	14.0
LnGrp LOS	C	A	B	C	A	A	D	A	A	A	A	B
Approach Vol, veh/h		154			42			456			720	
Approach Delay, s/veh		19.7			26.0			10.6			13.8	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	2	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	16.3	7.3	29.9	9.4	6.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	68.0	28.0	10.9	52.6	5.5	18.0
Max Q Clear Time (g_c+I1), s	7.3	2.5	4.2	19.7	5.6	3.4
Green Ext Time (p_c), s	2.5	0.0	0.1	5.6	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	168	9	19	149	4	13
Future Vol, veh/h	168	9	19	149	4	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	198	11	22	175	5	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	209	0	423	204
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	219	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1362	-	588	837
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1362	-	577	837
Mov Cap-2 Maneuver	-	-	-	-	577	-
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	802	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	757	-	-	1362	-
HCM Lane V/C Ratio	0.026	-	-	0.016	-
HCM Control Delay (s)	9.9	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

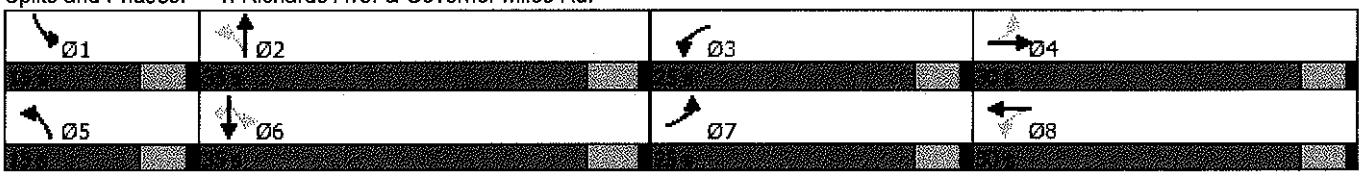


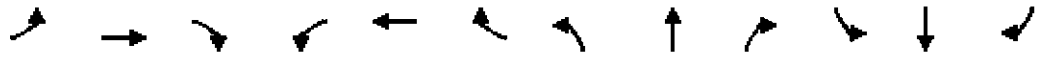
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	178	30	66	26	52	372	32	464	90
Future Volume (vph)	178	30	66	26	52	372	32	464	90
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 77
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	30	93	66	26	27	52	372	51	32	464	90
Future Volume (veh/h)	178	30	93	66	26	27	52	372	51	32	464	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	209	35	109	78	31	32	61	438	60	38	546	106
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	422	54	168	335	81	84	403	663	91	443	770	652
Arrive On Green	0.14	0.14	0.14	0.10	0.10	0.10	0.10	0.41	0.41	0.10	0.41	0.41
Sat Flow, veh/h	1767	397	1236	1767	837	864	1767	1597	219	1767	1856	1572
Grp Volume(v), veh/h	209	0	144	78	0	63	61	0	498	38	546	106
Grp Sat Flow(s),veh/h/ln	1767	0	1633	1767	0	1700	1767	0	1816	1767	1856	1572
Q Serve(g_s), s	7.4	0.0	6.0	2.7	0.0	2.5	1.3	0.0	16.0	0.8	17.6	3.1
Cycle Q Clear(g_c), s	7.4	0.0	6.0	2.7	0.0	2.5	1.3	0.0	16.0	0.8	17.6	3.1
Prop In Lane	1.00		0.76	1.00		0.51	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	422	0	222	335	0	165	403	0	753	443	770	652
V/C Ratio(X)	0.50	0.00	0.65	0.23	0.00	0.38	0.15	0.00	0.66	0.09	0.71	0.16
Avail Cap(c_a), veh/h	683	0	576	665	0	599	488	0	753	529	770	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	29.6	24.7	0.0	30.6	11.3	0.0	17.1	10.7	17.6	13.3
Incr Delay (d2), s/veh	0.9	0.0	3.2	0.4	0.0	1.5	0.2	0.0	4.5	0.1	5.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	0.0	4.5	2.0	0.0	1.9	0.8	0.0	11.2	0.5	12.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	32.8	25.0	0.0	32.1	11.4	0.0	21.6	10.7	23.0	13.8
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	C	B
Approach Vol, veh/h		353			141			559			690	
Approach Delay, s/veh		28.1			28.2			20.5			20.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	14.3	11.5	35.0	14.3	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.8	18.0	4.7	8.0	3.3	19.6	9.4	4.5
Green Ext Time (p_c), s	0.0	2.4	0.1	0.7	0.1	2.8	0.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	13	153	8	6	234
Future Vol, veh/h	33	13	153	8	6	234
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	15	180	9	7	275

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	474	185	0	0	189	0
Stage 1	185	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	549	857	-	-	1385	-
Stage 1	847	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	546	857	-	-	1385	-
Mov Cap-2 Maneuver	546	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	756	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	608	1385	-
HCM Lane V/C Ratio	-	-	0.089	0.005	-
HCM Control Delay (s)	-	-	11.5	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	203	170	3	23	10
Future Vol, veh/h	7	203	170	3	23	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	239	200	4	27	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	204	0	-	0	457	202
Stage 1	-	-	-	-	202	-
Stage 2	-	-	-	-	255	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1362	-	-	-	560	836
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1362	-	-	-	557	836
Mov Cap-2 Maneuver	-	-	-	-	557	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	785	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1362	-	-	-	557	836
HCM Lane V/C Ratio	0.006	-	-	-	0.049	0.014
HCM Control Delay (s)	7.7	-	-	-	11.8	9.4
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	200	195	3	0	11
Future Vol, veh/h	0	200	195	3	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	235	229	4	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	231
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	806
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	806
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	806
HCM Lane V/C Ratio	-	-	-	0.016
HCM Control Delay (s)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	99	76	76	124	6	146	1	89	15	2	28
Future Vol, veh/h	6	99	76	76	124	6	146	1	89	15	2	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	7	116	89	89	146	7	172	1	105	18	2	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	153	0	0	205	0	0	520	506	161	556	547	150
Stage 1	-	-	-	-	-	-	175	175	-	328	328	-
Stage 2	-	-	-	-	-	-	345	331	-	228	219	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1421	-	-	1360	-	-	465	468	881	440	443	894
Stage 1	-	-	-	-	-	-	824	752	-	683	645	-
Stage 2	-	-	-	-	-	-	668	643	-	772	720	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1421	-	-	1360	-	-	422	435	881	366	412	894
Mov Cap-2 Maneuver	-	-	-	-	-	-	422	435	-	366	412	-
Stage 1	-	-	-	-	-	-	820	748	-	680	603	-
Stage 2	-	-	-	-	-	-	599	601	-	676	716	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	2.9	19.3	11.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	525	1421	-	-	1360	-	-	583
HCM Lane V/C Ratio	0.529	0.005	-	-	0.066	-	-	0.091
HCM Control Delay (s)	19.3	7.5	-	-	7.8	-	-	11.8
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	3.1	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	114	123	5	61	94
Future Vol, veh/h	10	114	123	5	61	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	12	134	145	6	72	111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	403	148	0	0	151	0
Stage 1	148	-	-	-	-	-
Stage 2	255	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	601	896	-	-	1424	-
Stage 1	877	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	569	896	-	-	1424	-
Mov Cap-2 Maneuver	569	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	743	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	856	1424	-
HCM Lane V/C Ratio	-	-	0.17	0.05	-
HCM Control Delay (s)	-	-	10.1	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	18	5	0	13	6	201	11	17	142	13
Future Vol, veh/h	0	0	18	5	0	13	6	201	11	17	142	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	21	6	0	15	7	236	13	20	167	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	479	478	175	482	479	243	182	0	0	249	0	0
Stage 1	215	215	-	257	257	-	-	-	-	-	-	-
Stage 2	264	263	-	225	222	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	497	486	868	495	486	796	1393	-	-	1317	-	-
Stage 1	787	725	-	748	695	-	-	-	-	-	-	-
Stage 2	741	691	-	778	720	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	479	475	868	475	475	796	1393	-	-	1317	-	-
Mov Cap-2 Maneuver	479	475	-	475	475	-	-	-	-	-	-	-
Stage 1	782	713	-	744	691	-	-	-	-	-	-	-
Stage 2	722	687	-	746	708	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	10.5	0.2	0.8
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1393	-	-	868	670	1317	-	-
HCM Lane V/C Ratio	0.005	-	-	0.024	0.032	0.015	-	-
HCM Control Delay (s)	7.6	0	-	9.3	10.5	7.8	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	14.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	115	3	13	10	5	20	63	321	3	17	483	112
Future Vol, veh/h	115	3	13	10	5	20	63	321	3	17	483	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	135	4	15	12	6	24	74	378	4	20	568	132

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1217	1204	634	1210	1266	378	700	0	0	382	0	0
Stage 1	674	674	-	526	526	-	-	-	-	-	-	-
Stage 2	543	530	-	684	740	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	158	184	479	159	169	669	897	-	-	1176	-	-
Stage 1	444	454	-	535	529	-	-	-	-	-	-	-
Stage 2	524	527	-	439	423	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	137	166	479	140	152	669	897	-	-	1176	-	-
Mov Cap-2 Maneuver	137	166	-	140	152	-	-	-	-	-	-	-
Stage 1	408	446	-	491	486	-	-	-	-	-	-	-
Stage 2	458	484	-	414	416	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	121.8	20	1.5	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	897	-	-	137	354	140	398	1176	-	-
HCM Lane V/C Ratio	0.083	-	-	0.988	0.053	0.084	0.074	0.017	-	-
HCM Control Delay (s)	9.4	-	-	136.6	15.7	33.1	14.8	8.1	-	-
HCM Lane LOS	A	-	-	F	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	7	0.2	0.3	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	154	42	456	720
Demand Flow Rate, veh/h	157	42	465	734
Vehicles Circulating, veh/h	611	599	162	93
Vehicles Exiting, veh/h	216	28	606	548
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.4	5.4	7.2	9.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	157	42	465	734
Cap Entry Lane, veh/h	740	749	1170	1255
Entry HV Adj Factor	0.980	0.997	0.982	0.980
Flow Entry, veh/h	154	42	456	720
Cap Entry, veh/h	725	747	1148	1230
V/C Ratio	0.212	0.056	0.398	0.585
Control Delay, s/veh	7.4	5.4	7.2	9.9
LOS	A	A	A	A
95th %tile Queue, veh	1	0	2	4

Intersection												
Int Delay, s/veh	2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	202	9	19	154	7	4	0	13	34	0	12
Future Vol, veh/h	3	202	9	19	154	7	4	0	13	34	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	238	11	22	181	8	5	0	15	40	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	189	0	0	249	0	0	488	485	244	488	486	185
Stage 1	-	-	-	-	-	-	252	252	-	229	229	-
Stage 2	-	-	-	-	-	-	236	233	-	259	257	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1385	-	-	1317	-	-	490	482	795	490	481	857
Stage 1	-	-	-	-	-	-	752	698	-	774	715	-
Stage 2	-	-	-	-	-	-	767	712	-	746	695	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1385	-	-	1317	-	-	474	471	795	472	470	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	474	471	-	472	470	-
Stage 1	-	-	-	-	-	-	750	696	-	772	701	-
Stage 2	-	-	-	-	-	-	740	698	-	729	693	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.8	10.4	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	686	1385	-	-	1317	-	-	535
HCM Lane V/C Ratio	0.029	0.003	-	-	0.017	-	-	0.101
HCM Control Delay (s)	10.4	7.6	0	-	7.8	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.3

Intersection	
Intersection Delay, s/veh	4.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	253	211	20	54
Demand Flow Rate, veh/h	258	215	20	55
Vehicles Circulating, veh/h	63	9	288	212
Vehicles Exiting, veh/h	204	299	33	12
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.5	4.0	3.7	3.7
Approach LOS	A	A	A	A

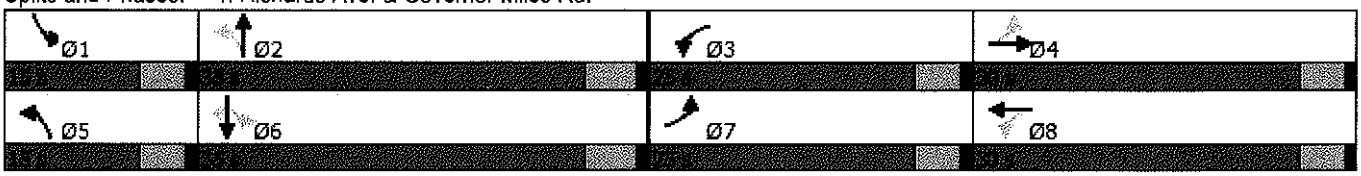
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	258	215	20	55
Cap Entry Lane, veh/h	1294	1367	1029	1112
Entry HV Adj Factor	0.982	0.983	1.000	0.982
Flow Entry, veh/h	253	211	20	54
Cap Entry, veh/h	1270	1344	1029	1091
V/C Ratio	0.199	0.157	0.019	0.049
Control Delay, s/veh	4.5	4.0	3.7	3.7
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	98	20	56	34	109	446	28	476	152
Future Volume (vph)	98	20	56	34	109	446	28	476	152
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 74.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	20	59	56	34	26	109	446	58	28	476	152
Future Volume (veh/h)	98	20	59	56	34	26	109	446	58	28	476	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	115	24	69	66	40	31	128	525	68	33	560	179
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	363	43	122	342	98	76	414	695	90	410	801	679
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.43	0.43	0.10	0.43	0.43
Sat Flow, veh/h	1767	422	1214	1767	969	751	1767	1610	208	1767	1856	1572
Grp Volume(v), veh/h	115	0	93	66	0	71	128	0	593	33	560	179
Grp Sat Flow(s),veh/h/ln	1767	0	1637	1767	0	1720	1767	0	1818	1767	1856	1572
Q Serve(g_s), s	3.9	0.0	3.8	2.2	0.0	2.7	2.5	0.0	19.1	0.6	17.1	5.1
Cycle Q Clear(g_c), s	3.9	0.0	3.8	2.2	0.0	2.7	2.5	0.0	19.1	0.6	17.1	5.1
Prop In Lane	1.00		0.74	1.00		0.44	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	363	0	165	342	0	173	414	0	785	410	801	679
V/C Ratio(X)	0.32	0.00	0.56	0.19	0.00	0.41	0.31	0.00	0.76	0.08	0.70	0.26
Avail Cap(c_a), veh/h	707	0	601	685	0	631	503	0	785	499	801	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	29.8	23.1	0.0	29.3	10.7	0.0	16.7	10.5	16.1	12.7
Incr Delay (d2), s/veh	0.5	0.0	3.0	0.3	0.0	1.5	0.4	0.0	6.7	0.1	5.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	2.8	1.6	0.0	2.1	1.5	0.0	13.1	0.4	11.9	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	32.8	23.4	0.0	30.9	11.2	0.0	23.3	10.6	21.1	13.6
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	C	B
Approach Vol, veh/h		208			137			721			772	
Approach Delay, s/veh		28.1			27.3			21.2			18.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	11.5	11.5	35.0	11.5	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.6	21.1	4.2	5.8	4.5	19.1	5.9	4.7
Green Ext Time (p_c), s	0.0	2.5	0.1	0.4	0.1	3.2	0.2	0.3

Intersection Summary		
HCM 6th Ctrl Delay		21.5
HCM 6th LOS		C

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	8	260	34	9	156
Future Vol, veh/h	21	8	260	34	9	156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	9	306	40	11	184

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	532	326	0	0	346	0
Stage 1	326	-	-	-	-	-
Stage 2	206	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	508	715	-	-	1213	-
Stage 1	731	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	503	715	-	-	1213	-
Mov Cap-2 Maneuver	503	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	822	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 548	1213	-
HCM Lane V/C Ratio	-	- 0.062	0.009	-
HCM Control Delay (s)	-	- 12	8	-
HCM Lane LOS	-	- B	A	-
HCM 95th %tile Q(veh)	-	- 0.2	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	158	254	14	14	6
Future Vol, veh/h	18	158	254	14	14	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	21	186	299	16	16	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	315	0	-	0	535	307
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	228	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1240	-	-	-	504	731
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1240	-	-	-	495	731
Mov Cap-2 Maneuver	-	-	-	-	495	-
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1240	-	-	-	495	731
HCM Lane V/C Ratio	0.017	-	-	-	0.033	0.01
HCM Control Delay (s)	8	-	-	-	12.5	10
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	159	249	11	0	7
Future Vol, veh/h	0	159	249	11	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	187	293	13	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	300
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	737
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	737
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	737
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s)	-	-	-	9.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	107	75	69	165	21	68	2	49	12	1	14
Future Vol, veh/h	20	107	75	69	165	21	68	2	49	12	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	126	88	81	194	25	80	2	58	14	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	219	0	0	214	0	0	595	599	170	617	631	207
Stage 1	-	-	-	-	-	-	218	218	-	369	369	-
Stage 2	-	-	-	-	-	-	377	381	-	248	262	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1344	-	-	1350	-	-	415	414	871	401	397	831
Stage 1	-	-	-	-	-	-	782	721	-	649	619	-
Stage 2	-	-	-	-	-	-	642	612	-	754	690	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1344	-	-	1350	-	-	382	382	871	351	366	831
Mov Cap-2 Maneuver	-	-	-	-	-	-	382	382	-	351	366	-
Stage 1	-	-	-	-	-	-	768	708	-	637	582	-
Stage 2	-	-	-	-	-	-	590	575	-	689	678	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	2.1	15.1	12.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	497	1344	-	-	1350	-	-	502
HCM Lane V/C Ratio	0.282	0.018	-	-	0.06	-	-	0.063
HCM Control Delay (s)	15.1	7.7	-	-	7.8	-	-	12.7
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.2	-	-	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	39	80	5	46	100
Future Vol, veh/h	5	39	80	5	46	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	6	46	94	6	54	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	323	97	0	0	100	0
Stage 1	97	-	-	-	-	-
Stage 2	226	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	669	956	-	-	1486	-
Stage 1	924	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	643	956	-	-	1486	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	777	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	2.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	906	1486	-
HCM Lane V/C Ratio	-	-	0.057	0.036	-
HCM Control Delay (s)	-	-	9.2	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	3	18	0	31	5	197	15	29	158	29
Future Vol, veh/h	0	0	3	18	0	31	5	197	15	29	158	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	21	0	36	6	232	18	34	186	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	542	533	203	526	541	241	220	0	0	250	0	0
Stage 1	271	271	-	253	253	-	-	-	-	-	-	-
Stage 2	271	262	-	273	288	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	451	453	838	462	448	798	1349	-	-	1316	-	-
Stage 1	735	685	-	751	698	-	-	-	-	-	-	-
Stage 2	735	691	-	733	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	419	437	838	448	432	798	1349	-	-	1316	-	-
Mov Cap-2 Maneuver	419	437	-	448	432	-	-	-	-	-	-	-
Stage 1	731	664	-	747	695	-	-	-	-	-	-	-
Stage 2	698	688	-	708	654	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	11.4	0.2	1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1349	-	-	838	620	1316	-	-
HCM Lane V/C Ratio	0.004	-	-	0.004	0.093	0.026	-	-
HCM Control Delay (s)	7.7	0	-	9.3	11.4	7.8	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	48.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	158	3	85	2	2	12	86	436	2	16	421	142
Future Vol, veh/h	158	3	85	2	2	12	86	436	2	16	421	142
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	186	4	100	2	2	14	101	513	2	19	495	167

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1341	1334	579	1384	1415	513	662	0	0	515	0	0
Stage 1	617	617	-	715	715	-	-	-	-	-	-	-
Stage 2	724	717	-	669	700	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 129	154	515	121	137	561	927	-	-	1051	-	-
Stage 1	477	481	-	422	434	-	-	-	-	-	-	-
Stage 2	417	434	-	447	441	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 112	135	515	86	120	561	927	-	-	1051	-	-
Mov Cap-2 Maneuver	~ 112	135	-	86	120	-	-	-	-	-	-	-
Stage 1	425	472	-	376	387	-	-	-	-	-	-	-
Stage 2	360	387	-	351	433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	262.3	19.3	1.5	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	927	-	-	112	470	86	368	1051	-	-
HCM Lane V/C Ratio	0.109	-	-	1.66	0.22	0.027	0.045	0.018	-	-
HCM Control Delay (s)	9.4	-	-	$ 400.1	14.8	48	15.2	8.5	-	-
HCM Lane LOS	A	-	-	F	B	E	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	14.2	0.8	0.1	0.1	0.1	-	-

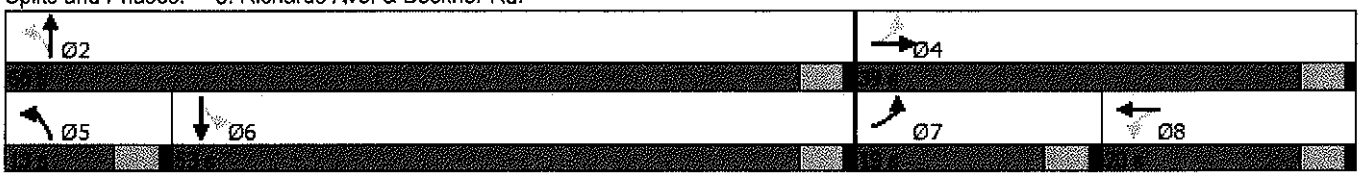
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

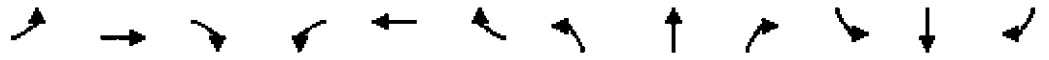
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	185	3	1	2	93	441	16	421
Future Volume (vph)	185	3	1	2	93	441	16	421
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	7	4		8	5	2		6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	8	8	5	2	6	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.5	22.5	22.5	22.5	8.5	22.5	22.5	22.5
Total Split (s)	19.0	39.0	20.0	20.0	13.0	66.0	53.0	53.0
Total Split (%)	18.1%	37.1%	19.0%	19.0%	12.4%	62.9%	50.5%	50.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 74.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Richards Ave. & Beckner Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	3	88	1	2	12	93	441	2	16	421	194
Future Volume (veh/h)	185	3	88	1	2	12	93	441	2	16	421	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	218	4	104	1	2	14	109	519	2	19	495	228
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	498	16	408	61	12	72	287	1112	4	499	577	266
Arrive On Green	0.14	0.27	0.27	0.05	0.05	0.05	0.05	0.60	0.60	0.48	0.48	0.48
Sat Flow, veh/h	1781	59	1535	58	225	1322	1781	1862	7	881	1212	558
Grp Volume(v), veh/h	218	0	108	17	0	0	109	0	521	19	0	723
Grp Sat Flow(s),veh/h/ln	1781	0	1594	1606	0	0	1781	0	1869	881	0	1770
Q Serve(g_s), s	7.1	0.0	3.5	0.0	0.0	0.0	1.9	0.0	10.2	0.8	0.0	23.7
Cycle Q Clear(g_c), s	7.1	0.0	3.5	0.7	0.0	0.0	1.9	0.0	10.2	3.1	0.0	23.7
Prop In Lane	1.00		0.96	0.06		0.82	1.00		0.00	1.00		0.32
Lane Grp Cap(c), veh/h	498	0	423	146	0	0	287	0	1116	499	0	843
V/C Ratio(X)	0.44	0.00	0.26	0.12	0.00	0.00	0.38	0.00	0.47	0.04	0.00	0.86
Avail Cap(c_a), veh/h	638	0	838	435	0	0	424	0	1752	731	0	1308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.3	0.0	19.0	29.6	0.0	0.0	12.7	0.0	7.4	10.5	0.0	15.2
Incr Delay (d2), s/veh	0.6	0.0	0.3	0.4	0.0	0.0	0.8	0.0	0.3	0.0	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	0.0	2.3	0.5	0.0	0.0	1.1	0.0	5.7	0.3	0.0	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	19.3	30.0	0.0	0.0	13.6	0.0	7.7	10.5	0.0	18.9
LnGrp LOS	C	A	B	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		326			17			630			742	
Approach Delay, s/veh		21.7			30.0			8.7			18.6	
Approach LOS		C			C			A			B	

Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		43.7		21.9	8.0	35.7	13.8	8.1				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		61.5		34.5	8.5	48.5	14.5	15.5				
Max Q Clear Time (g_c+I1), s		12.2		5.5	3.9	25.7	9.1	2.7				
Green Ext Time (p_c), s		3.7		0.6	0.1	5.5	0.3	0.0				

Intersection Summary		
HCM 6th Ctrl Delay	15.7	
HCM 6th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	215	13	31	199	18	32
Future Vol, veh/h	215	13	31	199	18	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	253	15	36	234	21	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	268	0	567	261
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1296	-	485	778
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1296	-	469	778
Mov Cap-2 Maneuver	-	-	-	-	469	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	723	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	11.3
HCM LOS			B

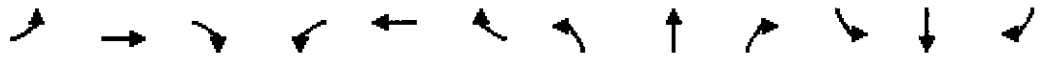
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	629	-	-	1296	-
HCM Lane V/C Ratio	0.094	-	-	0.028	-
HCM Control Delay (s)	11.3	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Act Effct Green (s)	21.7	11.0	15.9	8.0	40.8	31.7	37.7	30.1	30.1
Actuated g/C Ratio	0.28	0.14	0.21	0.10	0.54	0.42	0.49	0.40	0.40
v/c Ratio	0.39	0.34	0.21	0.34	0.45	0.81	0.11	0.84	0.32
Control Delay	23.2	14.3	21.2	26.7	13.1	30.8	9.3	35.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	14.3	21.2	26.7	13.1	30.8	9.3	35.0	3.9
LOS	C	B	C	C	B	C	A	C	A
Approach Delay		19.6		24.0		27.4		25.4	
Approach LOS		B		C		C		C	

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 76.2
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 25.4 Intersection LOS: C
Intersection Capacity Utilization 59.7% ICU Level of Service B
Analysis Period (min) 15



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	20	67	57	35	25	122	466	57	28	521	211
Future Volume (veh/h)	129	20	67	57	35	25	122	466	57	28	521	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	152	24	79	67	41	29	144	548	67	33	613	248
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	375	41	135	340	101	72	373	695	85	389	795	674
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.43	0.43	0.10	0.43	0.43
Sat Flow, veh/h	1767	380	1251	1767	1011	715	1767	1622	198	1767	1856	1572
Grp Volume(v), veh/h	152	0	103	67	0	70	144	0	615	33	613	248
Grp Sat Flow(s),veh/h/ln	1767	0	1630	1767	0	1727	1767	0	1820	1767	1856	1572
Q Serve(g_s), s	5.2	0.0	4.2	2.2	0.0	2.7	2.9	0.0	20.4	0.6	19.7	7.5
Cycle Q Clear(g_c), s	5.2	0.0	4.2	2.2	0.0	2.7	2.9	0.0	20.4	0.6	19.7	7.5
Prop In Lane	1.00		0.77	1.00		0.41	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	375	0	175	340	0	173	373	0	780	389	795	674
V/C Ratio(X)	0.41	0.00	0.59	0.20	0.00	0.41	0.39	0.00	0.79	0.08	0.77	0.37
Avail Cap(c_a), veh/h	702	0	594	681	0	629	461	0	780	477	795	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	29.8	23.4	0.0	29.6	12.1	0.0	17.3	11.0	17.1	13.6
Incr Delay (d2), s/veh	0.7	0.0	3.1	0.3	0.0	1.5	0.7	0.0	8.0	0.1	7.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	0.0	3.1	1.6	0.0	2.1	1.8	0.0	14.1	0.4	13.8	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	32.9	23.7	0.0	31.1	12.7	0.0	25.2	11.1	24.2	15.1
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	C	B
Approach Vol, veh/h		255			137			759			894	
Approach Delay, s/veh		28.1			27.5			22.9			21.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	12.0	11.5	35.0	12.0	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.6	22.4	4.2	6.2	4.9	21.7	7.2	4.7
Green Ext Time (p_c), s	0.0	2.4	0.1	0.5	0.2	3.1	0.3	0.3

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	8	303	34	9	177
Future Vol, veh/h	21	8	303	34	9	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	9	356	40	11	208

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	606	376	0	0	396	0
Stage 1	376	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	460	670	-	-	1163	-
Stage 1	694	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	456	670	-	-	1163	-
Mov Cap-2 Maneuver	456	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 500	1163	-
HCM Lane V/C Ratio	-	- 0.068	0.009	-
HCM Control Delay (s)	-	- 12.7	8.1	-
HCM Lane LOS	-	- B	A	-
HCM 95th %tile Q(veh)	-	- 0.2	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	174	275	14	14	6
Future Vol, veh/h	18	174	275	14	14	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	21	205	324	16	16	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	340	0	-	0	579	332
Stage 1	-	-	-	-	332	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1214	-	-	-	475	707
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1214	-	-	-	467	707
Mov Cap-2 Maneuver	-	-	-	-	467	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1214	-	-	-	467	707
HCM Lane V/C Ratio	0.017	-	-	-	0.035	0.01
HCM Control Delay (s)	8	-	-	-	13	10.1
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	190	279	11	0	7
Future Vol, veh/h	0	190	279	11	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	224	328	13	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	335
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	705
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	705
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	705
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	10.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	125	91	91	173	21	76	2	62	12	1	14
Future Vol, veh/h	20	125	91	91	173	21	76	2	62	12	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	147	107	107	204	25	89	2	73	14	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	229	0	0	254	0	0	688	692	201	717	733	217
Stage 1	-	-	-	-	-	-	249	249	-	431	431	-
Stage 2	-	-	-	-	-	-	439	443	-	286	302	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1333	-	-	1305	-	-	359	366	837	343	347	820
Stage 1	-	-	-	-	-	-	753	699	-	601	581	-
Stage 2	-	-	-	-	-	-	595	574	-	719	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1333	-	-	1305	-	-	324	330	837	288	313	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	324	330	-	288	313	-
Stage 1	-	-	-	-	-	-	739	686	-	590	533	-
Stage 2	-	-	-	-	-	-	534	527	-	642	650	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	2.6	17.8	13.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	1333	-	-	1305	-	-	436
HCM Lane V/C Ratio	0.37	0.018	-	-	0.082	-	-	0.073
HCM Control Delay (s)	17.8	7.7	-	-	8	-	-	13.9
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0.3	-	-	0.2

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	59	811	9	83	101
Future Vol, veh/h	8	59	811	9	83	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	9	69	954	11	98	119

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1275	960	0	0	965	0
Stage 1	960	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	183	310	-	-	710	-
Stage 1	370	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	156	310	-	-	710	-
Mov Cap-2 Maneuver	156	-	-	-	-	-
Stage 1	370	-	-	-	-	-
Stage 2	629	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.1	0	4.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	277	710	-
HCM Lane V/C Ratio	-	-	0.285	0.138	-
HCM Control Delay (s)	-	-	23.1	10.9	0
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0.5	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	8	18	0	31	15	220	15	30	162	60
Future Vol, veh/h	0	0	8	18	0	31	15	220	15	30	162	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	9	21	0	36	18	259	18	35	191	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	619	610	227	605	636	268	262	0	0	277	0	0
Stage 1	297	297	-	304	304	-	-	-	-	-	-	-
Stage 2	322	313	-	301	332	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	401	409	812	410	395	771	1302	-	-	1286	-	-
Stage 1	712	668	-	705	663	-	-	-	-	-	-	-
Stage 2	690	657	-	708	644	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	368	390	812	391	376	771	1302	-	-	1286	-	-
Mov Cap-2 Maneuver	368	390	-	391	376	-	-	-	-	-	-	-
Stage 1	701	647	-	694	652	-	-	-	-	-	-	-
Stage 2	647	646	-	677	623	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	12.1	0.5	0.9
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1302	-	-	812	568	1286	-	-
HCM Lane V/C Ratio	0.014	-	-	0.012	0.101	0.027	-	-
HCM Control Delay (s)	7.8	0	-	9.5	12.1	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	79.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	3	88	1	2	12	93	441	2	16	421	194
Future Vol, veh/h	185	3	88	1	2	12	93	441	2	16	421	194
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	218	4	104	1	2	14	109	519	2	19	495	228

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1393	1386	609	1438	1498	519	723	0	0	521	0	0
Stage 1	647	647	-	737	737	-	-	-	-	-	-	-
Stage 2	746	739	-	701	761	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 119	143	495	111	122	557	879	-	-	1045	-	-
Stage 1	460	467	-	410	425	-	-	-	-	-	-	-
Stage 2	405	424	-	429	414	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 102	123	495	77	105	557	879	-	-	1045	-	-
Mov Cap-2 Maneuver	~ 102	123	-	77	105	-	-	-	-	-	-	-
Stage 1	403	459	-	359	372	-	-	-	-	-	-	-
Stage 2	344	371	-	331	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 414	18.4	1.7	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	879	-	-	102	450	77	345	1045	-	-
HCM Lane V/C Ratio	0.124	-	-	2.134	0.238	0.015	0.048	0.018	-	-
HCM Control Delay (s)	9.7	-	-	$ 610	15.5	52.5	16	8.5	-	-
HCM Lane LOS	A	-	-	F	C	F	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	18.8	0.9	0	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	326	17	630	742
Demand Flow Rate, veh/h	332	17	642	757
Vehicles Circulating, veh/h	525	862	245	114
Vehicles Exiting, veh/h	346	25	612	765
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.7	6.6	11.3	10.7
Approach LOS	A	A	B	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	332	17	642	757
Cap Entry Lane, veh/h	808	573	1075	1228
Entry HV Adj Factor	0.982	0.998	0.981	0.980
Flow Entry, veh/h	326	17	630	742
Cap Entry, veh/h	793	572	1054	1204
V/C Ratio	0.411	0.030	0.597	0.616
Control Delay, s/veh	9.7	6.6	11.3	10.7
LOS	A	A	B	B
95th %tile Queue, veh	2	0	4	4

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	228	14	31	228	31	18	0	31	16	0	6
Future Vol, veh/h	9	228	14	31	228	31	18	0	31	16	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	268	16	36	268	36	21	0	36	19	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	304	0	0	284	0	0	660	674	276	674	664	286
Stage 1	-	-	-	-	-	-	298	298	-	358	358	-
Stage 2	-	-	-	-	-	-	362	376	-	316	306	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1257	-	-	1278	-	-	376	376	763	368	381	753
Stage 1	-	-	-	-	-	-	711	667	-	660	628	-
Stage 2	-	-	-	-	-	-	657	616	-	695	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1257	-	-	1278	-	-	360	359	763	339	364	753
Mov Cap-2 Maneuver	-	-	-	-	-	-	360	359	-	339	364	-
Stage 1	-	-	-	-	-	-	704	660	-	653	607	-
Stage 2	-	-	-	-	-	-	629	595	-	655	655	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.8	12.4	14.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	541	1257	-	-	1278	-	-	399
HCM Lane V/C Ratio	0.107	0.008	-	-	0.029	-	-	0.065
HCM Control Delay (s)	12.4	7.9	0	-	7.9	0	-	14.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.2

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	295	340	57	26
Demand Flow Rate, veh/h	300	347	58	26
Vehicles Circulating, veh/h	56	32	303	331
Vehicles Exiting, veh/h	301	329	53	48
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	5.0	4.1	3.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	300	347	58	26
Cap Entry Lane, veh/h	1303	1336	1013	985
Entry HV Adj Factor	0.982	0.979	0.983	1.000
Flow Entry, veh/h	295	340	57	26
Cap Entry, veh/h	1280	1307	996	985
V/C Ratio	0.230	0.260	0.057	0.026
Control Delay, s/veh	4.8	5.0	4.1	3.9
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

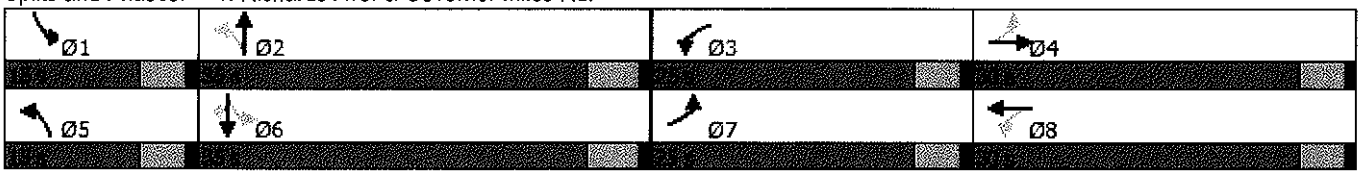
2034 Conditions Analysis
(Horizon Year)

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	149	32	79	33	60	451	31	560	104
Future Volume (vph)	149	32	79	33	60	451	31	560	104
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 75.7
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	32	88	79	33	24	60	451	59	31	560	104
Future Volume (veh/h)	149	32	88	79	33	24	60	451	59	31	560	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	175	38	104	93	39	28	71	531	69	36	659	122
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	397	53	145	322	101	73	346	679	88	386	783	663
Arrive On Green	0.12	0.12	0.12	0.10	0.10	0.10	0.10	0.42	0.42	0.10	0.42	0.42
Sat Flow, veh/h	1767	439	1201	1767	1005	721	1767	1609	209	1767	1856	1572
Grp Volume(v), veh/h	175	0	142	93	0	67	71	0	600	36	659	122
Grp Sat Flow(s),veh/h/ln	1767	0	1639	1767	0	1726	1767	0	1818	1767	1856	1572
Q Serve(g_s), s	6.1	0.0	5.9	3.2	0.0	2.6	1.4	0.0	20.3	0.7	22.6	3.5
Cycle Q Clear(g_c), s	6.1	0.0	5.9	3.2	0.0	2.6	1.4	0.0	20.3	0.7	22.6	3.5
Prop In Lane	1.00		0.73	1.00		0.42	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	397	0	199	322	0	174	346	0	767	386	783	663
V/C Ratio(X)	0.44	0.00	0.71	0.29	0.00	0.39	0.21	0.00	0.78	0.09	0.84	0.18
Avail Cap(c_a), veh/h	696	0	588	657	0	619	433	0	767	473	783	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	30.1	24.2	0.0	29.9	12.5	0.0	17.7	11.4	18.4	12.9
Incr Delay (d2), s/veh	0.8	0.0	4.7	0.5	0.0	1.4	0.3	0.0	7.8	0.1	10.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	0.0	4.5	2.4	0.0	2.0	0.9	0.0	14.1	0.4	16.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	34.8	24.7	0.0	31.3	12.8	0.0	25.6	11.5	29.1	13.5
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	C	B
Approach Vol, veh/h		317			160			671			817	
Approach Delay, s/veh		29.3			27.5			24.2			26.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	13.1	11.5	35.0	13.0	11.7
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	22.3	5.2	7.9	3.4	24.6	8.1	4.6
Green Ext Time (p_c), s	0.0	2.4	0.2	0.7	0.1	2.2	0.4	0.3

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	16	189	8	6	235
Future Vol, veh/h	34	16	189	8	6	235
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	19	222	9	7	276

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	517	227	0	0	231	0
Stage 1	227	-	-	-	-	-
Stage 2	290	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	518	812	-	-	1337	-
Stage 1	811	-	-	-	-	-
Stage 2	759	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	515	812	-	-	1337	-
Mov Cap-2 Maneuver	515	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	755	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	583	1337	-
HCM Lane V/C Ratio	-	-	0.101	0.005	-
HCM Control Delay (s)	-	-	11.9	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	229	201	3	24	11
Future Vol, veh/h	7	229	201	3	24	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	269	236	4	28	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	240	0	-	0	523	238
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	285	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1321	-	-	-	513	798
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1321	-	-	-	510	798
Mov Cap-2 Maneuver	-	-	-	-	510	-
Stage 1	-	-	-	-	794	-
Stage 2	-	-	-	-	761	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1321	-	-	-	510	798
HCM Lane V/C Ratio	0.006	-	-	-	0.055	0.016
HCM Control Delay (s)	7.7	-	-	-	12.5	9.6
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	221	210	3	0	13
Future Vol, veh/h	0	221	210	3	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	260	247	4	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	249
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	787
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	787
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	787
HCM Lane V/C Ratio	-	-	-	0.019
HCM Control Delay (s)	-	-	-	9.7
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	111	98	86	130	6	124	5	97	16	5	28
Future Vol, veh/h	7	111	98	86	130	6	124	5	97	16	5	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	131	115	101	153	7	146	6	114	19	6	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	160	0	0	246	0	0	583	567	189	624	621	157
Stage 1	-	-	-	-	-	-	205	205	-	359	359	-
Stage 2	-	-	-	-	-	-	378	362	-	265	262	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1413	-	-	1314	-	-	422	432	850	396	402	886
Stage 1	-	-	-	-	-	-	795	730	-	657	625	-
Stage 2	-	-	-	-	-	-	642	623	-	738	690	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	1314	-	-	376	396	850	318	369	886
Mov Cap-2 Maneuver	-	-	-	-	-	-	376	396	-	318	369	-
Stage 1	-	-	-	-	-	-	790	726	-	653	577	-
Stage 2	-	-	-	-	-	-	565	575	-	630	686	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.1	20.4	12.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	495	1413	-	-	1314	-	-	513
HCM Lane V/C Ratio	0.537	0.006	-	-	0.077	-	-	0.112
HCM Control Delay (s)	20.4	7.6	-	-	8	-	-	12.9
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	3.1	0	-	-	0.2	-	-	0.4

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	83	140	8	67	122
Future Vol, veh/h	13	83	140	8	67	122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	98	165	9	79	144

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	472	170	0	0	174	0
Stage 1	170	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	549	871	-	-	1397	-
Stage 1	857	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	516	871	-	-	1397	-
Mov Cap-2 Maneuver	516	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	2.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 797	1397	-
HCM Lane V/C Ratio	-	- 0.142	0.056	-
HCM Control Delay (s)	-	- 10.3	7.7	0
HCM Lane LOS	-	- B	A	A
HCM 95th %tile Q(veh)	-	- 0.5	0.2	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑			↑	
Traffic Vol, veh/h	0	5	8	0	5	33	5	271	37	48	275	5
Future Vol, veh/h	0	5	8	0	5	33	5	271	37	48	275	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	9	0	6	39	6	319	44	56	324	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	815	814	327	800	795	341	330	0	0	363	0	0
Stage 1	439	439	-	353	353	-	-	-	-	-	-	-
Stage 2	376	375	-	447	442	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	296	312	714	303	320	701	1229	-	-	1196	-	-
Stage 1	597	578	-	664	631	-	-	-	-	-	-	-
Stage 2	645	617	-	591	576	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	262	292	714	280	300	701	1229	-	-	1196	-	-
Mov Cap-2 Maneuver	262	292	-	280	300	-	-	-	-	-	-	-
Stage 1	593	545	-	660	627	-	-	-	-	-	-	-
Stage 2	600	613	-	544	543	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	11.5	0.1	1.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1229	-	-	459	596	1196	-	-
HCM Lane V/C Ratio	0.005	-	-	0.033	0.075	0.047	-	-
HCM Control Delay (s)	7.9	0	-	13.1	11.5	8.2	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	83

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	154	5	149	5	6	23	135	378	5	17	498	206
Future Vol, veh/h	154	5	149	5	6	23	135	378	5	17	498	206
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	181	6	175	6	7	27	159	445	6	20	586	242

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1530	1516	707	1601	1631	445	828	0	0	451	0	0
Stage 1	747	747	-	763	763	-	-	-	-	-	-	-
Stage 2	783	769	-	838	868	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 96	119	435	85	101	613	803	-	-	1109	-	-
Stage 1	405	420	-	397	413	-	-	-	-	-	-	-
Stage 2	387	411	-	361	370	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 72	94	435	40	80	613	803	-	-	1109	-	-
Mov Cap-2 Maneuver	~ 72	94	-	40	80	-	-	-	-	-	-	-
Stage 1	325	412	-	318	331	-	-	-	-	-	-	-
Stage 2	290	330	-	209	363	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s$	417.1	34.2	2.8	0.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	803	-	-	72	389	40	258	1109	-	-
HCM Lane V/C Ratio	0.198	-	-	2.516	0.466	0.147	0.132	0.018	-	-
HCM Control Delay (s)	10.6	-	-	$ 812.1	22.1	109.9	21.1	8.3	-	-
HCM Lane LOS	B	-	-	F	C	F	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	17.5	2.4	0.5	0.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↰↑	↰↑	
Traffic Vol, veh/h	274	31	55	292	18	35
Future Vol, veh/h	274	31	55	292	18	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	322	36	65	344	21	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	358	0	814	340
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	474	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1201	-	347	702
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	626	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1201	-	324	702
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	584	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	503	-	-	1201	-
HCM Lane V/C Ratio	0.124	-	-	0.054	-
HCM Control Delay (s)	13.2	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

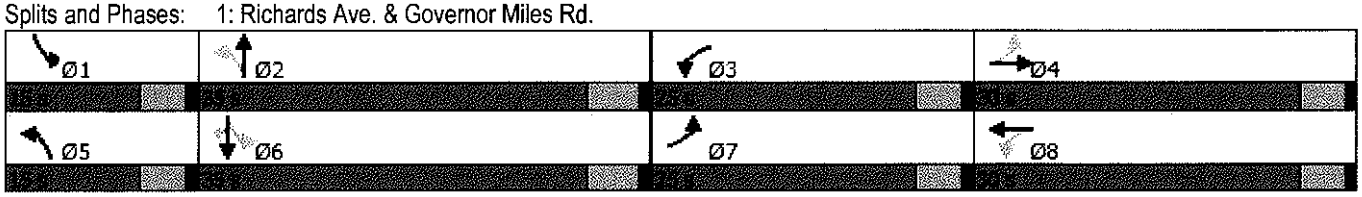


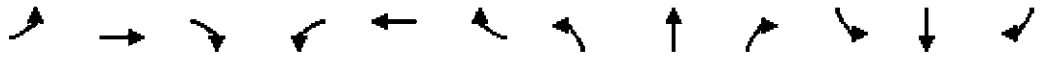
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	200	33	78	32	66	468	31	557	108
Future Volume (vph)	200	33	78	32	66	468	31	557	108
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 78.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	33	108	78	32	24	66	468	60	31	557	108
Future Volume (veh/h)	200	33	108	78	32	24	66	468	60	31	557	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	235	39	127	92	38	28	78	551	71	36	655	127
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	437	56	184	328	95	70	327	659	85	348	760	644
Arrive On Green	0.15	0.15	0.15	0.10	0.10	0.10	0.10	0.41	0.41	0.10	0.41	0.41
Sat Flow, veh/h	1767	383	1248	1767	993	731	1767	1611	208	1767	1856	1572
Grp Volume(v), veh/h	235	0	166	92	0	66	78	0	622	36	655	127
Grp Sat Flow(s),veh/h/ln	1767	0	1631	1767	0	1724	1767	0	1818	1767	1856	1572
Q Serve(g_s), s	8.3	0.0	7.1	3.3	0.0	2.6	1.7	0.0	22.5	0.8	23.6	3.8
Cycle Q Clear(g_c), s	8.3	0.0	7.1	3.3	0.0	2.6	1.7	0.0	22.5	0.8	23.6	3.8
Prop In Lane	1.00		0.77	1.00		0.42	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	437	0	240	328	0	165	327	0	744	348	760	644
V/C Ratio(X)	0.54	0.00	0.69	0.28	0.00	0.40	0.24	0.00	0.84	0.10	0.86	0.20
Avail Cap(c_a), veh/h	671	0	567	654	0	600	411	0	744	433	760	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	29.7	25.4	0.0	31.2	13.7	0.0	19.4	12.8	19.8	13.9
Incr Delay (d2), s/veh	1.0	0.0	3.5	0.5	0.0	1.6	0.4	0.0	10.7	0.1	12.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	0.0	5.2	2.4	0.0	2.0	1.1	0.0	16.0	0.5	17.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	33.2	25.8	0.0	32.7	14.1	0.0	30.2	12.9	32.1	14.6
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	C	B
Approach Vol, veh/h		401			158			700			818	
Approach Delay, s/veh		28.0			28.7			28.4			28.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	15.3	11.5	35.0	15.3	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.8	24.5	5.3	9.1	3.7	25.6	10.3	4.6
Green Ext Time (p_c), s	0.0	1.9	0.2	0.8	0.1	1.9	0.5	0.3

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	5	32	33	5	16	5	193	8	6	275	5
Future Vol, veh/h	14	5	32	33	5	16	5	193	8	6	275	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	6	38	39	6	19	6	227	9	7	324	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	597	589	327	607	588	232	330	0	0	236	0	0
Stage 1	341	341	-	244	244	-	-	-	-	-	-	-
Stage 2	256	248	-	363	344	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	415	421	714	408	421	807	1229	-	-	1331	-	-
Stage 1	674	639	-	760	704	-	-	-	-	-	-	-
Stage 2	749	701	-	656	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	398	417	714	379	417	807	1229	-	-	1331	-	-
Mov Cap-2 Maneuver	398	417	-	379	417	-	-	-	-	-	-	-
Stage 1	671	636	-	756	700	-	-	-	-	-	-	-
Stage 2	722	697	-	612	634	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	14.2	0.2	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1229	-	-	554	454	1331	-	-
HCM Lane V/C Ratio	0.005	-	-	0.108	0.14	0.005	-	-
HCM Control Delay (s)	7.9	-	-	12.3	14.2	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.5	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	248	5	5	214	5	20	5	26	23	5	12
Future Vol, veh/h	7	248	5	5	214	5	20	5	26	23	5	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	225	-	-	-	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	2	2	3	3	2	2	2	3	2	3
Mvmt Flow	8	292	6	6	252	6	24	6	31	27	6	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	258	0	0	298	0	0	588	581	295	597	581	255
Stage 1	-	-	-	-	-	-	311	311	-	267	267	-
Stage 2	-	-	-	-	-	-	277	270	-	330	314	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.13	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.527	4.018	3.327
Pot Cap-1 Maneuver	1301	-	-	1263	-	-	421	425	744	413	425	781
Stage 1	-	-	-	-	-	-	699	658	-	736	688	-
Stage 2	-	-	-	-	-	-	729	686	-	681	656	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1301	-	-	1263	-	-	405	420	744	389	420	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	405	420	-	389	420	-
Stage 1	-	-	-	-	-	-	695	654	-	732	685	-
Stage 2	-	-	-	-	-	-	706	683	-	643	652	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	12.7	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	530	1301	-	-	1263	-	-	389	623
HCM Lane V/C Ratio	0.113	0.006	-	-	0.005	-	-	0.07	0.032
HCM Control Delay (s)	12.7	7.8	-	-	7.9	-	-	14.9	11
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	246	243	5	0	13
Future Vol, veh/h	0	246	243	5	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	289	286	6	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	289
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	748
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	748
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	748
HCM Lane V/C Ratio	-	-	-	0.02
HCM Control Delay (s)	-	-	-	9.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	10.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	116	98	94	156	6	140	5	118	15	5	29
Future Vol, veh/h	7	116	98	94	156	6	140	5	118	15	5	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	136	115	111	184	7	165	6	139	18	6	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	251	0	0	640	623	194	692	677	188
Stage 1	-	-	-	-	-	-	210	210	-	410	410	-
Stage 2	-	-	-	-	-	-	430	413	-	282	267	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1377	-	-	1309	-	-	387	401	845	357	373	851
Stage 1	-	-	-	-	-	-	790	727	-	617	594	-
Stage 2	-	-	-	-	-	-	601	592	-	723	686	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1377	-	-	1309	-	-	341	365	845	275	339	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	341	365	-	275	339	-
Stage 1	-	-	-	-	-	-	785	723	-	613	544	-
Stage 2	-	-	-	-	-	-	522	542	-	596	682	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.9	26.7	13.6
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	466	1377	-	-	1309	-	-	474
HCM Lane V/C Ratio	0.664	0.006	-	-	0.084	-	-	0.122
HCM Control Delay (s)	26.7	7.6	-	-	8	-	-	13.6
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	4.8	0	-	-	0.3	-	-	0.4

Intersection						
Int Delay, s/veh	4.3					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	120	139	11	74	123
Future Vol, veh/h	21	120	139	11	74	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	25	141	164	13	87	145

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	490	171	0	0	177	0
Stage 1	171	-	-	-	-	-
Stage 2	319	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	536	870	-	-	1393	-
Stage 1	857	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	500	870	-	-	1393	-
Mov Cap-2 Maneuver	500	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	685	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 784	1393	-
HCM Lane V/C Ratio	-	- 0.212	0.062	-
HCM Control Delay (s)	-	- 10.8	7.8	0
HCM Lane LOS	-	- B	A	A
HCM 95th %tile Q(veh)	-	- 0.8	0.2	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	21	0	5	33	7	300	36	48	289	11
Future Vol, veh/h	0	5	21	0	5	33	7	300	36	48	289	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	25	0	6	39	8	353	42	56	340	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	872	870	347	864	855	374	353	0	0	395	0	0
Stage 1	459	459	-	390	390	-	-	-	-	-	-	-
Stage 2	413	411	-	474	465	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	271	290	696	274	296	672	1206	-	-	1164	-	-
Stage 1	582	566	-	634	608	-	-	-	-	-	-	-
Stage 2	616	595	-	571	563	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	238	270	696	246	276	672	1206	-	-	1164	-	-
Mov Cap-2 Maneuver	238	270	-	246	276	-	-	-	-	-	-	-
Stage 1	577	532	-	628	603	-	-	-	-	-	-	-
Stage 2	570	590	-	512	529	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	11.9	0.2	1.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1206	-	-	534	565	1164	-	-
HCM Lane V/C Ratio	0.007	-	-	0.057	0.079	0.049	-	-
HCM Control Delay (s)	8	0	-	12.2	11.9	8.2	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0.2	-	-

Intersection	
Int Delay, s/veh	119.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	5	179	5	7	23	135	378	5	17	505	215
Future Vol, veh/h	178	5	179	5	7	23	135	378	5	17	505	215
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	209	6	211	6	8	27	159	445	6	20	594	253

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1545	1530	721	1632	1650	445	847	0	0	451	0	0
Stage 1	761	761	-	763	763	-	-	-	-	-	-	-
Stage 2	784	769	-	869	887	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 93	117	427	81	99	613	790	-	-	1109	-	-
Stage 1	398	414	-	397	413	-	-	-	-	-	-	-
Stage 2	386	411	-	347	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 68	92	427	33	78	613	790	-	-	1109	-	-
Mov Cap-2 Maneuver	~ 68	92	-	33	78	-	-	-	-	-	-	-
Stage 1	318	407	-	317	330	-	-	-	-	-	-	-
Stage 2	287	328	-	170	355	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 537.3	39.1	2.8	0.2
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	790	-	-	68	389	33	236	1109	-	-
HCM Lane V/C Ratio	0.201	-	-	3.08	0.556	0.178	0.15	0.018	-	-
HCM Control Delay (s)	10.7	-	-	$ 1066.5	25.3	136.4	22.9	8.3	-	-
HCM Lane LOS	B	-	-	F	D	F	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	21.4	3.3	0.6	0.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

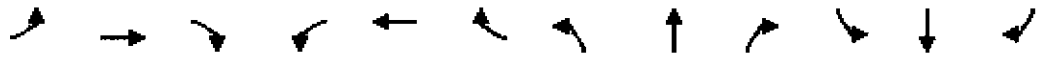
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	178	5	5	7	135	378	17	505
Future Volume (vph)	178	5	5	7	135	378	17	505
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Perm	NA
Protected Phases	7	4		8	5	2		6
Permitted Phases	4		8				6	
Detector Phase	7	4	8	8	5	2	6	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.5	22.5	22.5	22.5	8.5	22.5	22.5	22.5
Total Split (s)	10.0	32.5	22.5	22.5	15.4	72.5	57.1	57.1
Total Split (%)	9.5%	31.0%	21.4%	21.4%	14.7%	69.0%	54.4%	54.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 81.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Richards Ave. & Beckner Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	5	179	5	7	23	135	378	5	17	505	215
Future Volume (veh/h)	178	5	179	5	7	23	135	378	5	17	505	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	6	211	6	8	27	159	445	6	20	594	253
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	8	281	62	20	54	197	1292	17	594	663	283
Arrive On Green	0.07	0.18	0.18	0.05	0.05	0.05	0.11	0.70	0.70	0.53	0.53	0.53
Sat Flow, veh/h	1781	44	1548	162	380	1043	1781	1841	25	940	1245	530
Grp Volume(v), veh/h	209	0	217	41	0	0	159	0	451	20	0	847
Grp Sat Flow(s),veh/h/ln	1781	0	1592	1585	0	0	1781	0	1866	940	0	1775
Q Serve(g_s), s	5.5	0.0	10.0	0.7	0.0	0.0	6.7	0.0	7.3	0.8	0.0	32.9
Cycle Q Clear(g_c), s	5.5	0.0	10.0	1.9	0.0	0.0	6.7	0.0	7.3	0.8	0.0	32.9
Prop In Lane	1.00		0.97	0.15		0.66	1.00		0.01	1.00		0.30
Lane Grp Cap(c), veh/h	346	0	289	135	0	0	197	0	1309	594	0	946
V/C Ratio(X)	0.60	0.00	0.75	0.30	0.00	0.00	0.81	0.00	0.34	0.03	0.00	0.90
Avail Cap(c_a), veh/h	346	0	578	417	0	0	252	0	1647	735	0	1212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	29.9	35.5	0.0	0.0	33.5	0.0	4.5	8.6	0.0	16.1
Incr Delay (d2), s/veh	3.0	0.0	3.9	1.2	0.0	0.0	14.0	0.0	0.2	0.0	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.0	0.0	7.2	1.4	0.0	0.0	6.4	0.0	3.6	0.3	0.0	19.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	33.8	36.8	0.0	0.0	47.5	0.0	4.7	8.6	0.0	23.5
LnGrp LOS	C	A	C	D	A	A	D	A	A	A	A	C
Approach Vol, veh/h		426			41			610			867	
Approach Delay, s/veh		34.2			36.8			15.8			23.2	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	2	4	5	6	7	8
Phs Duration (G+Y+Rc), s	58.6	18.5	13.0	45.6	10.0	8.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	68.0	28.0	10.9	52.6	5.5	18.0
Max Q Clear Time (g_c+I1), s	9.3	12.0	8.7	34.9	7.5	3.9
Green Ext Time (p_c), s	3.1	1.2	0.1	6.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

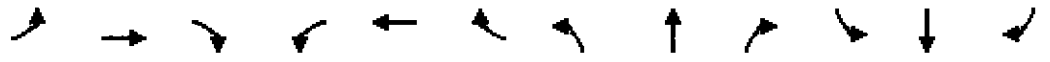
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	178	5	5	7	135	378	17	505	215
Future Volume (vph)	178	5	5	7	135	378	17	505	215
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA	Perm
Protected Phases	7	4		8	5	2		6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	8	8	5	2	6	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.5	22.5	22.5	22.5	8.5	22.5	22.5	22.5	22.5
Total Split (s)	10.3	32.9	22.6	22.6	13.0	72.1	59.1	59.1	59.1
Total Split (%)	9.8%	31.3%	21.5%	21.5%	12.4%	68.7%	56.3%	56.3%	56.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min	Min

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 62
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Richards Ave. & Beckner Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	5	179	5	7	23	135	378	5	17	505	215
Future Volume (veh/h)	178	5	179	5	7	23	135	378	5	17	505	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	6	211	6	8	27	159	445	6	20	594	253
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	522	12	426	92	29	79	345	1013	14	498	714	605
Arrive On Green	0.11	0.28	0.28	0.08	0.08	0.08	0.08	0.55	0.55	0.38	0.38	0.38
Sat Flow, veh/h	1781	44	1548	154	388	1046	1781	1841	25	940	1870	1585
Grp Volume(v), veh/h	209	0	217	41	0	0	159	0	451	20	594	253
Grp Sat Flow(s),veh/h/ln	1781	0	1592	1588	0	0	1781	0	1866	940	1870	1585
Q Serve(g_s), s	5.3	0.0	5.9	0.0	0.0	0.0	2.5	0.0	7.4	0.7	14.8	6.1
Cycle Q Clear(g_c), s	5.3	0.0	5.9	1.2	0.0	0.0	2.5	0.0	7.4	0.7	14.8	6.1
Prop In Lane	1.00		0.97	0.15		0.66	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	522	0	438	200	0	0	345	0	1026	498	714	605
V/C Ratio(X)	0.40	0.00	0.50	0.20	0.00	0.00	0.46	0.00	0.44	0.04	0.83	0.42
Avail Cap(c_a), veh/h	522	0	877	627	0	0	494	0	2446	1134	1980	1678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	15.7	22.6	0.0	0.0	10.7	0.0	6.9	10.1	14.4	11.7
Incr Delay (d2), s/veh	0.5	0.0	0.9	0.5	0.0	0.0	1.0	0.0	0.3	0.0	2.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	3.6	0.8	0.0	0.0	1.4	0.0	3.7	0.2	9.4	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	16.5	23.1	0.0	0.0	11.6	0.0	7.2	10.1	17.0	12.2
LnGrp LOS	B	A	B	C	A	A	B	A	A	B	B	B
Approach Vol, veh/h		426			41			610			867	
Approach Delay, s/veh		17.2			23.1			8.3			15.5	
Approach LOS		B			C			A			B	

Timer - Assigned Phs	2	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.9	18.7	8.7	24.2	10.3	8.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	67.6	28.4	8.5	54.6	5.8	18.1
Max Q Clear Time (g_c+I1), s	9.4	7.9	4.5	16.8	7.3	3.2
Green Ext Time (p_c), s	3.1	1.3	0.1	2.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Added SB RT Lane to mitigate long queuing southbound

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	426	41	610	867
Demand Flow Rate, veh/h	434	42	622	884
Vehicles Circulating, veh/h	632	829	239	176
Vehicles Exiting, veh/h	428	32	827	695
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	15.3	7.1	10.8	16.6
Approach LOS	C	A	B	C

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	434	42	622	884
Cap Entry Lane, veh/h	724	592	1081	1153
Entry HV Adj Factor	0.981	0.972	0.981	0.981
Flow Entry, veh/h	426	41	610	867
Cap Entry, veh/h	711	576	1061	1131
V/C Ratio	0.599	0.071	0.575	0.767
Control Delay, s/veh	15.3	7.1	10.8	16.6
LOS	C	A	B	C
95th %tile Queue, veh	4	0	4	8

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	298	31	54	297	6	17	5	35	29	5	16
Future Vol, veh/h	5	298	31	54	297	6	17	5	35	29	5	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	351	36	64	349	7	20	6	41	34	6	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	356	0	0	387	0	0	874	865	369	886	880	353
Stage 1	-	-	-	-	-	-	381	381	-	481	481	-
Stage 2	-	-	-	-	-	-	493	484	-	405	399	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1203	-	-	1171	-	-	270	292	677	265	286	691
Stage 1	-	-	-	-	-	-	641	613	-	566	554	-
Stage 2	-	-	-	-	-	-	558	552	-	622	602	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1203	-	-	1171	-	-	244	270	677	231	265	691
Mov Cap-2 Maneuver	-	-	-	-	-	-	244	270	-	231	265	-
Stage 1	-	-	-	-	-	-	637	609	-	563	516	-
Stage 2	-	-	-	-	-	-	500	514	-	575	598	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.2	15.6	20
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	407	1203	-	-	1171	-	-	298
HCM Lane V/C Ratio	0.165	0.005	-	-	0.054	-	-	0.197
HCM Control Delay (s)	15.6	8	0	-	8.3	0	-	20
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	0.7

Intersection	
Intersection Delay, s/veh	5.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	393	420	67	59
Demand Flow Rate, veh/h	401	428	68	60
Vehicles Circulating, veh/h	106	32	399	441
Vehicles Exiting, veh/h	395	435	108	19
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.0	5.6	4.7	4.8
Approach LOS	A	A	A	A

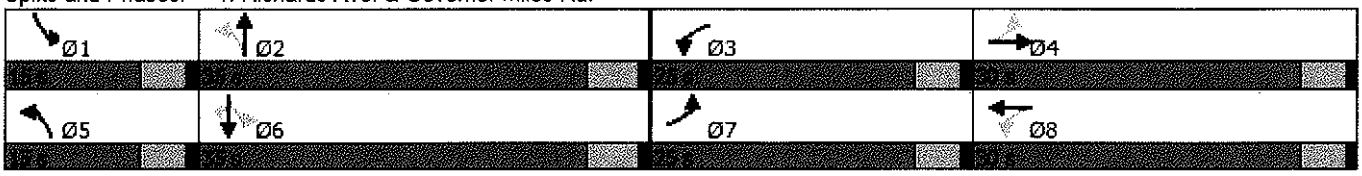
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	401	428	68	60
Cap Entry Lane, veh/h	1238	1336	919	880
Entry HV Adj Factor	0.980	0.981	0.984	0.981
Flow Entry, veh/h	393	420	67	59
Cap Entry, veh/h	1214	1311	903	864
V/C Ratio	0.324	0.320	0.074	0.068
Control Delay, s/veh	6.0	5.6	4.7	4.8
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

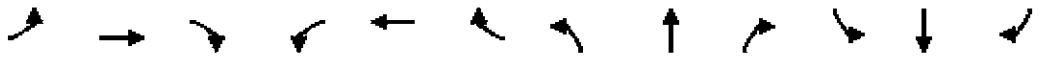
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	117	25	73	54	131	367	27	639	149
Future Volume (vph)	117	25	73	54	131	367	27	639	149
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 76.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	25	76	73	54	25	131	367	75	27	639	149
Future Volume (veh/h)	117	25	76	73	54	25	131	367	75	27	639	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	138	29	89	86	64	29	154	432	88	32	752	175
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	353	43	131	326	128	58	304	642	131	452	796	675
Arrive On Green	0.10	0.11	0.11	0.10	0.11	0.11	0.10	0.43	0.43	0.10	0.43	0.43
Sat Flow, veh/h	1767	402	1232	1767	1209	548	1767	1496	305	1767	1856	1572
Grp Volume(v), veh/h	138	0	118	86	0	93	154	0	520	32	752	175
Grp Sat Flow(s),veh/h/ln	1767	0	1634	1767	0	1757	1767	0	1801	1767	1856	1572
Q Serve(g_s), s	4.7	0.0	4.9	2.8	0.0	3.5	3.1	0.0	16.2	0.6	27.2	5.0
Cycle Q Clear(g_c), s	4.7	0.0	4.9	2.8	0.0	3.5	3.1	0.0	16.2	0.6	27.2	5.0
Prop In Lane	1.00		0.75	1.00		0.31	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	353	0	173	326	0	187	304	0	773	452	796	675
V/C Ratio(X)	0.39	0.00	0.68	0.26	0.00	0.50	0.51	0.00	0.67	0.07	0.94	0.26
Avail Cap(c_a), veh/h	694	0	596	667	0	641	392	0	773	541	796	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	30.1	23.3	0.0	29.5	14.7	0.0	16.0	9.8	19.2	12.8
Incr Delay (d2), s/veh	0.7	0.0	4.6	0.4	0.0	2.1	1.3	0.0	4.7	0.1	21.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	3.7	2.1	0.0	2.7	2.0	0.0	11.1	0.4	21.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	34.7	23.8	0.0	31.5	16.0	0.0	20.7	9.9	40.1	13.8
LnGrp LOS	C	A	C	C	A	C	B	A	C	A	D	B
Approach Vol, veh/h		256			179			674			959	
Approach Delay, s/veh		29.3			27.8			19.6			34.3	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	11.9	11.5	35.0	11.5	11.9
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.6	18.2	4.8	6.9	5.1	29.2	6.7	5.5
Green Ext Time (p_c), s	0.0	2.6	0.2	0.6	0.2	0.5	0.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	9	299	35	12	197
Future Vol, veh/h	21	9	299	35	12	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	11	352	41	14	232

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	633	373	0	0	393	0
Stage 1	373	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	444	673	-	-	1166	-
Stage 1	696	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	439	673	-	-	1166	-
Mov Cap-2 Maneuver	439	-	-	-	-	-
Stage 1	696	-	-	-	-	-
Stage 2	774	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	490	1166	-
HCM Lane V/C Ratio	-	-	0.072	0.012	-
HCM Control Delay (s)	-	-	12.9	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	202	293	15	15	7
Future Vol, veh/h	19	202	293	15	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	22	238	345	18	18	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	363	0	-	0	636	354
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	282	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1190	-	-	-	440	688
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1190	-	-	-	432	688
Mov Cap-2 Maneuver	-	-	-	-	432	-
Stage 1	-	-	-	-	695	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1190	-	-	-	432	688
HCM Lane V/C Ratio	0.019	-	-	-	0.041	0.012
HCM Control Delay (s)	8.1	-	-	-	13.7	10.3
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	203	288	12	0	8
Future Vol, veh/h	0	203	288	12	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	239	339	14	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	346
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	695
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	695
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	695
HCM Lane V/C Ratio	-	-	-	0.014
HCM Control Delay (s)	-	-	-	10.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	140	89	74	201	22	81	5	61	12	5	15
Future Vol, veh/h	21	140	89	74	201	22	81	5	61	12	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	25	165	105	87	236	26	95	6	72	14	6	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	262	0	0	270	0	0	703	704	218	730	743	249
Stage 1	-	-	-	-	-	-	268	268	-	423	423	-
Stage 2	-	-	-	-	-	-	435	436	-	307	320	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1296	-	-	1288	-	-	351	360	819	337	342	787
Stage 1	-	-	-	-	-	-	735	685	-	607	586	-
Stage 2	-	-	-	-	-	-	598	578	-	701	651	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1296	-	-	1288	-	-	316	329	819	283	313	787
Mov Cap-2 Maneuver	-	-	-	-	-	-	316	329	-	283	313	-
Stage 1	-	-	-	-	-	-	721	672	-	595	546	-
Stage 2	-	-	-	-	-	-	539	539	-	622	639	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	2	19.2	14.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	425	1296	-	-	1288	-	-	413
HCM Lane V/C Ratio	0.407	0.019	-	-	0.068	-	-	0.091
HCM Control Delay (s)	19.2	7.8	-	-	8	-	-	14.6
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.9	0.1	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	45	103	12	50	116
Future Vol, veh/h	11	45	103	12	50	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	13	53	121	14	59	136

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	382	128	0	0	135	0
Stage 1	128	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	618	919	-	-	1443	-
Stage 1	895	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	591	919	-	-	1443	-
Mov Cap-2 Maneuver	591	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	751	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	2.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	829	1443	-
HCM Lane V/C Ratio	-	-	0.079	0.041	-
HCM Control Delay (s)	-	-	9.7	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	5	0	5	82	7	418	54	76	387	25
Future Vol, veh/h	0	5	5	0	5	82	7	418	54	76	387	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	6	0	6	96	8	492	64	89	455	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1239	1220	470	1194	1202	524	484	0	0	556	0	0
Stage 1	648	648	-	540	540	-	-	-	-	-	-	-
Stage 2	591	572	-	654	662	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	152	180	594	163	185	553	1079	-	-	1015	-	-
Stage 1	459	466	-	526	521	-	-	-	-	-	-	-
Stage 2	493	504	-	456	459	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	156	594	141	161	553	1079	-	-	1015	-	-
Mov Cap-2 Maneuver	110	156	-	141	161	-	-	-	-	-	-	-
Stage 1	454	410	-	520	515	-	-	-	-	-	-	-
Stage 2	398	498	-	391	403	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.3	14.4	0.1	1.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1079	-	-	247	485	1015	-	-
HCM Lane V/C Ratio	0.008	-	-	0.048	0.211	0.088	-	-
HCM Control Delay (s)	8.4	0	-	20.3	14.4	8.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.8	0.3	-	-

Intersection	
Int Delay, s/veh	604.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	339	5	194	5	5	11	169	488	5	14	490	275
Future Vol, veh/h	339	5	194	5	5	11	169	488	5	14	490	275
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	399	6	228	6	6	13	199	574	6	16	576	324

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1755	1748	738	1859	1904	574	900	0	0	580	0	0
Stage 1	770	770	-	972	972	-	-	-	-	-	-	-
Stage 2	985	978	-	887	932	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 67	86	418	56	69	518	755	-	-	994	-	-
Stage 1	~ 393	410	-	304	331	-	-	-	-	-	-	-
Stage 2	~ 299	329	-	339	345	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 47	62	418	19	50	518	755	-	-	994	-	-
Mov Cap-2 Maneuver	~ 47	62	-	19	50	-	-	-	-	-	-	-
Stage 1	~ 289	403	-	224	244	-	-	-	-	-	-	-
Stage 2	~ 210	242	-	149	339	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	2238.7	90.9	2.9	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	755	-	-	47	365	19	132	994	-	-
HCM Lane V/C Ratio	0.263	-	-	8.486	0.641	0.31	0.143	0.017	-	-
HCM Control Delay (s)	11.5	-	-	$ 3534.8	30.9	263.9	36.8	8.7	-	-
HCM Lane LOS	B	-	-	F	D	F	E	A	-	-
HCM 95th %tile Q(veh)	1.1	-	-	47.1	4.3	0.9	0.5	0.1	-	-

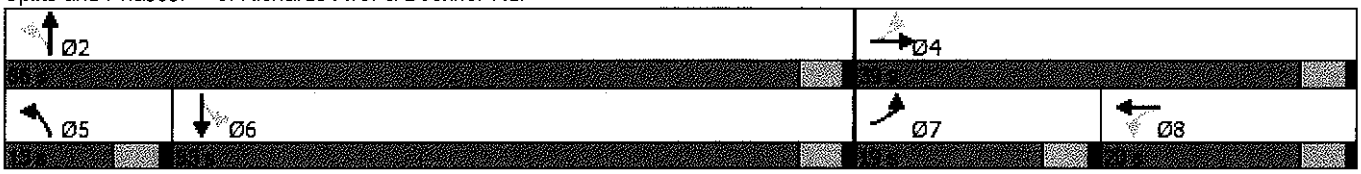
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

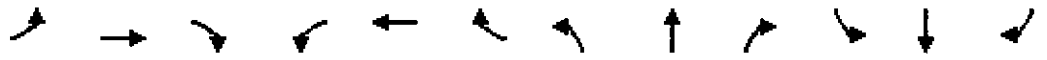
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	350	5	5	5	176	493	14	489
Future Volume (vph)	350	5	5	5	176	493	14	489
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	7	4		8	5	2		6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	8	8	5	2	6	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.5	22.5	22.5	22.5	8.5	22.5	22.5	22.5
Total Split (s)	19.0	39.0	20.0	20.0	13.0	66.0	53.0	53.0
Total Split (%)	18.1%	37.1%	19.0%	19.0%	12.4%	62.9%	50.5%	50.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 89.9
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Richards Ave. & Beckner Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	5	195	5	5	11	176	493	5	14	489	318
Future Volume (veh/h)	350	5	195	5	5	11	176	493	5	14	489	318
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	412	6	229	6	6	13	196	548	6	16	543	353
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	465	10	388	60	21	35	231	1203	13	509	557	362
Arrive On Green	0.16	0.25	0.25	0.04	0.04	0.04	0.08	0.65	0.65	0.53	0.53	0.53
Sat Flow, veh/h	1781	41	1551	264	484	810	1781	1847	20	854	1058	688
Grp Volume(v), veh/h	412	0	235	25	0	0	196	0	554	16	0	896
Grp Sat Flow(s),veh/h/ln	1781	0	1591	1557	0	0	1781	0	1867	854	0	1747
Q Serve(g_s), s	14.5	0.0	11.9	0.3	0.0	0.0	5.0	0.0	13.5	0.9	0.0	45.8
Cycle Q Clear(g_c), s	14.5	0.0	11.9	1.3	0.0	0.0	5.0	0.0	13.5	2.9	0.0	45.8
Prop In Lane	1.00		0.97	0.24		0.52	1.00		0.01	1.00		0.39
Lane Grp Cap(c), veh/h	465	0	399	116	0	0	231	0	1216	509	0	918
V/C Ratio(X)	0.89	0.00	0.59	0.21	0.00	0.00	0.85	0.00	0.46	0.03	0.00	0.98
Avail Cap(c_a), veh/h	465	0	598	305	0	0	260	0	1251	511	0	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.0	0.0	30.2	42.6	0.0	0.0	23.4	0.0	7.9	11.5	0.0	21.2
Incr Delay (d2), s/veh	18.2	0.0	1.4	0.9	0.0	0.0	20.6	0.0	0.3	0.0	0.0	23.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.0	0.0	8.2	1.0	0.0	0.0	6.2	0.0	8.2	0.3	0.0	30.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.0	31.6	43.5	0.0	0.0	44.0	0.0	8.2	11.5	0.0	44.9
LnGrp LOS	D	A	C	D	A	A	D	A	A	B	A	D
Approach Vol, veh/h		647			25			750			912	
Approach Delay, s/veh		46.1			43.5			17.6			44.3	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	2	4	5	6	7	8
Phs Duration (G+Y+Rc), s	64.3	27.5	11.5	52.8	19.0	8.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	61.5	34.5	8.5	48.5	14.5	15.5
Max Q Clear Time (g_c+I1), s	15.5	13.9	7.0	47.8	16.5	3.3
Green Ext Time (p_c), s	4.0	1.4	0.1	0.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Add SB RT Lane to alleive long queuing.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	350	5	5	5	176	493	14	489	318
Future Volume (vph)	350	5	5	5	176	493	14	489	318
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	NA	Perm
Protected Phases	7	4		8	5	2		6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	8	8	5	2	6	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.5	22.5	22.5	22.5	8.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	45.5	22.5	22.5	14.0	59.5	45.5	45.5	45.5
Total Split (%)	21.9%	43.3%	21.4%	21.4%	13.3%	56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lead		Lag	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min	Min

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 73.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 8: Richards Ave. & Beckner Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	5	195	5	5	11	176	493	5	14	489	318
Future Volume (veh/h)	350	5	195	5	5	11	176	493	5	14	489	318
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	412	6	229	6	6	13	196	548	6	16	543	353
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	677	15	569	82	30	49	318	919	10	352	623	528
Arrive On Green	0.24	0.37	0.37	0.06	0.06	0.06	0.10	0.50	0.50	0.33	0.33	0.33
Sat Flow, veh/h	1781	41	1551	251	500	814	1781	1847	20	854	1870	1585
Grp Volume(v), veh/h	412	0	235	25	0	0	196	0	554	16	543	353
Grp Sat Flow(s),veh/h/ln	1781	0	1591	1565	0	0	1781	0	1867	854	1870	1585
Q Serve(g_s), s	13.4	0.0	7.3	0.0	0.0	0.0	4.4	0.0	14.0	0.9	18.1	12.7
Cycle Q Clear(g_c), s	13.4	0.0	7.3	0.9	0.0	0.0	4.4	0.0	14.0	4.1	18.1	12.7
Prop In Lane	1.00		0.97	0.24		0.52	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	677	0	583	161	0	0	318	0	929	352	623	528
V/C Ratio(X)	0.61	0.00	0.40	0.16	0.00	0.00	0.62	0.00	0.60	0.05	0.87	0.67
Avail Cap(c_a), veh/h	749	0	985	479	0	0	401	0	1550	597	1158	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	15.6	29.7	0.0	0.0	14.9	0.0	11.9	17.2	20.8	19.0
Incr Delay (d2), s/veh	1.2	0.0	0.4	0.4	0.0	0.0	1.9	0.0	0.6	0.1	4.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	0.0	4.5	0.7	0.0	0.0	3.0	0.0	8.7	0.3	12.3	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	0.0	16.0	30.2	0.0	0.0	16.8	0.0	12.5	17.3	24.7	20.4
LnGrp LOS	C	A	B	C	A	A	B	A	B	B	C	C
Approach Vol, veh/h		647			25			750			912	
Approach Delay, s/veh		19.0			30.2			13.6			22.9	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	2	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.5	28.8	10.9	26.6	20.3	8.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	55.0	41.0	9.5	41.0	18.5	18.0
Max Q Clear Time (g_c+I1), s	16.0	9.3	6.4	20.1	15.4	2.9
Green Ext Time (p_c), s	3.9	1.6	0.2	2.0	0.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Added SB RT Lane to mitigate long queuing southbound

Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	452	49	82	367	60	85
Future Vol, veh/h	452	49	82	367	60	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	532	58	96	432	71	100

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	590	0	1185	561
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	624	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	985	-	209	527
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	534	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	985	-	182	527
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	466	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	32.7
HCM LOS			D

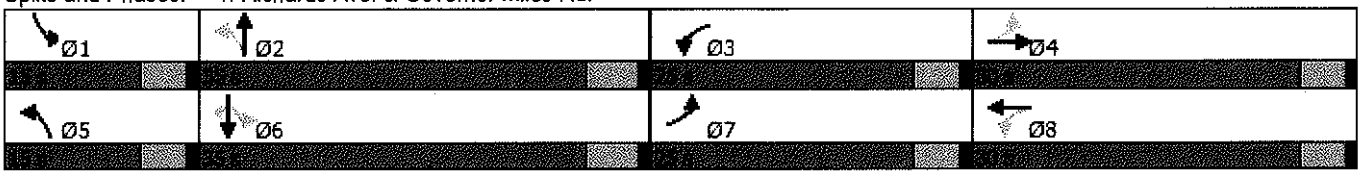
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	295	-	-	985	-
HCM Lane V/C Ratio	0.578	-	-	0.098	-
HCM Control Delay (s)	32.7	-	-	9.1	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3.4	-	-	0.3	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	143	25	74	67	147	636	27	668	189
Future Volume (vph)	143	25	74	67	147	636	27	668	189
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 79.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	25	87	74	67	24	147	636	75	27	668	189
Future Volume (veh/h)	143	25	87	74	67	24	147	636	75	27	668	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	168	29	102	87	79	28	173	748	88	32	786	222
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	359	42	147	325	130	46	278	692	81	277	788	667
Arrive On Green	0.12	0.12	0.12	0.10	0.10	0.10	0.10	0.42	0.42	0.10	0.42	0.42
Sat Flow, veh/h	1767	360	1267	1767	1308	464	1767	1629	192	1767	1856	1572
Grp Volume(v), veh/h	168	0	131	87	0	107	173	0	836	32	786	222
Grp Sat Flow(s),veh/h/ln	1767	0	1627	1767	0	1772	1767	0	1821	1767	1856	1572
Q Serve(g_s), s	5.8	0.0	5.5	2.9	0.0	4.1	3.7	0.0	30.0	0.6	29.9	6.7
Cycle Q Clear(g_c), s	5.8	0.0	5.5	2.9	0.0	4.1	3.7	0.0	30.0	0.6	29.9	6.7
Prop In Lane	1.00		0.78	1.00		0.26	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	359	0	188	325	0	176	278	0	773	277	788	667
V/C Ratio(X)	0.47	0.00	0.70	0.27	0.00	0.61	0.62	0.00	1.08	0.12	1.00	0.33
Avail Cap(c_a), veh/h	667	0	587	662	0	639	365	0	773	364	788	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	30.1	24.0	0.0	30.5	15.3	0.0	20.3	14.5	20.3	13.6
Incr Delay (d2), s/veh	1.0	0.0	4.6	0.4	0.0	3.4	2.3	0.0	56.7	0.2	31.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.0	4.1	2.2	0.0	3.3	2.5	0.0	32.8	0.4	25.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	0.0	34.6	24.5	0.0	33.9	17.5	0.0	77.0	14.7	51.9	15.0
LnGrp LOS	C	A	C	C	A	C	B	A	F	B	D	B
Approach Vol, veh/h		299			194			1009			1040	
Approach Delay, s/veh		29.3			29.7			66.8			42.9	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	12.7	11.5	35.0	12.7	11.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.6	32.0	4.9	7.5	5.7	31.9	7.8	6.1
Green Ext Time (p_c), s	0.0	0.0	0.2	0.6	0.2	0.0	0.3	0.5

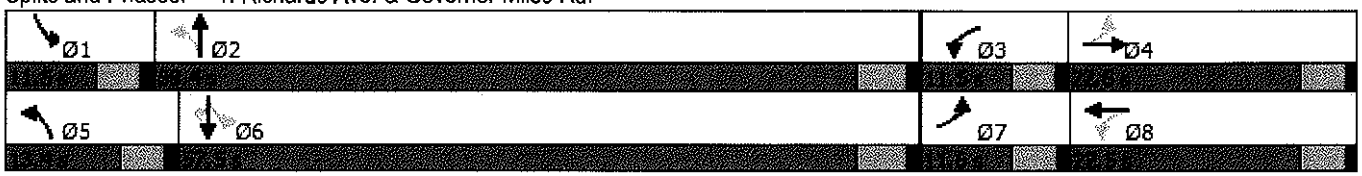
Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	143	25	74	67	147	636	27	668	189
Future Volume (vph)	143	25	74	67	147	636	27	668	189
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	11.6	22.6	11.5	22.5	13.4	59.4	11.5	57.5	57.5
Total Split (%)	11.0%	21.5%	11.0%	21.4%	12.8%	56.6%	11.0%	54.8%	54.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 97.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.



Mitigation: Re-Time Signal



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	25	87	74	67	24	147	636	75	27	668	189
Future Volume (veh/h)	143	25	87	74	67	24	147	636	75	27	668	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	168	29	102	87	79	28	173	748	88	32	786	222
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	261	37	131	233	134	47	335	915	108	325	1042	883
Arrive On Green	0.07	0.10	0.10	0.07	0.10	0.10	0.07	0.56	0.56	0.07	0.56	0.56
Sat Flow, veh/h	1767	360	1267	1767	1308	464	1767	1629	192	1767	1856	1572
Grp Volume(v), veh/h	168	0	131	87	0	107	173	0	836	32	786	222
Grp Sat Flow(s),veh/h/ln	1767	0	1627	1767	0	1772	1767	0	1821	1767	1856	1572
Q Serve(g_s), s	7.1	0.0	7.6	4.1	0.0	5.6	3.9	0.0	36.1	0.7	31.2	7.0
Cycle Q Clear(g_c), s	7.1	0.0	7.6	4.1	0.0	5.6	3.9	0.0	36.1	0.7	31.2	7.0
Prop In Lane	1.00		0.78	1.00		0.26	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	261	0	168	233	0	181	335	0	1022	325	1042	883
V/C Ratio(X)	0.64	0.00	0.78	0.37	0.00	0.59	0.52	0.00	0.82	0.10	0.75	0.25
Avail Cap(c_a), veh/h	261	0	304	233	0	329	369	0	1022	325	1042	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	42.4	35.0	0.0	41.6	14.5	0.0	17.2	13.7	16.2	10.9
Incr Delay (d2), s/veh	5.4	0.0	7.6	1.0	0.0	3.1	1.2	0.0	7.3	0.1	5.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	0.0	6.1	3.3	0.0	4.6	2.7	0.0	21.9	0.4	19.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	0.0	50.0	36.0	0.0	44.6	15.8	0.0	24.5	13.8	21.2	11.5
LnGrp LOS	D	A	D	D	A	D	B	A	C	B	C	B
Approach Vol, veh/h		299			194			1009			1040	
Approach Delay, s/veh		46.0			40.8			23.0			18.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	59.4	11.5	14.5	11.5	59.4	11.5	14.4
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	7.0	54.4	7.0	10.1	7.0	54.5	7.1	10.0
Max Q Clear Time (g_c+I1), s	2.7	38.1	6.1	9.6	5.9	33.2	9.1	7.6
Green Ext Time (p_c), s	0.0	5.6	0.0	0.4	0.1	6.3	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Mitigation: Re-Time Signal

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑	↱		↑	↱
Traffic Vol, veh/h	5	5	17	21	5	9	30	338	35	12	217	10
Future Vol, veh/h	5	5	17	21	5	9	30	338	35	12	217	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	6	20	25	6	11	35	398	41	14	255	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	786	798	261	791	784	419	267	0	0	439	0	0
Stage 1	289	289	-	489	489	-	-	-	-	-	-	-
Stage 2	497	509	-	302	295	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	310	319	778	307	325	634	1297	-	-	1121	-	-
Stage 1	719	673	-	561	549	-	-	-	-	-	-	-
Stage 2	555	538	-	707	669	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	291	307	778	286	312	634	1297	-	-	1121	-	-
Mov Cap-2 Maneuver	291	307	-	286	312	-	-	-	-	-	-	-
Stage 1	700	665	-	546	534	-	-	-	-	-	-	-
Stage 2	525	523	-	674	661	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	17.1	0.6	0.4
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1297	-	-	488	338	1121	-	-
HCM Lane V/C Ratio	0.027	-	-	0.065	0.122	0.013	-	-
HCM Control Delay (s)	7.9	-	-	12.9	17.1	8.3	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.4	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	218	16	24	314	15	9	5	13	15	5	7
Future Vol, veh/h	19	218	16	24	314	15	9	5	13	15	5	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	225	-	-	-	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	2	2	3	3	2	2	2	3	2	3
Mvmt Flow	22	256	19	28	369	18	11	6	15	18	6	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	387	0	0	275	0	0	751	753	266	754	753	378
Stage 1	-	-	-	-	-	-	310	310	-	434	434	-
Stage 2	-	-	-	-	-	-	441	443	-	320	319	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.13	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.527	4.018	3.327
Pot Cap-1 Maneuver	1166	-	-	1288	-	-	327	339	773	324	339	667
Stage 1	-	-	-	-	-	-	700	659	-	598	581	-
Stage 2	-	-	-	-	-	-	595	576	-	690	653	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1166	-	-	1288	-	-	309	325	773	304	325	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	309	325	-	304	325	-
Stage 1	-	-	-	-	-	-	687	646	-	587	568	-
Stage 2	-	-	-	-	-	-	569	563	-	658	641	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.5	13.8	15.6
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	440	1166	-	-	1288	-	-	304	464
HCM Lane V/C Ratio	0.072	0.019	-	-	0.022	-	-	0.058	0.03
HCM Control Delay (s)	13.8	8.1	-	-	7.9	-	-	17.6	13
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	236	319	12	0	8
Future Vol, veh/h	0	236	319	12	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	278	375	14	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	382
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	663
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	663
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	663
HCM Lane V/C Ratio	-	-	-	0.014
HCM Control Delay (s)	-	-	-	10.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	159	104	94	211	22	89	5	75	12	5	15
Future Vol, veh/h	21	159	104	94	211	22	89	5	75	12	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	25	187	122	111	248	26	105	6	88	14	6	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	274	0	0	309	0	0	793	794	248	828	842	261
Stage 1	-	-	-	-	-	-	298	298	-	483	483	-
Stage 2	-	-	-	-	-	-	495	496	-	345	359	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1283	-	-	1246	-	-	305	320	788	289	300	775
Stage 1	-	-	-	-	-	-	709	665	-	563	551	-
Stage 2	-	-	-	-	-	-	555	544	-	668	625	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1283	-	-	1246	-	-	269	286	788	232	268	775
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	286	-	232	268	-
Stage 1	-	-	-	-	-	-	696	652	-	552	502	-
Stage 2	-	-	-	-	-	-	488	496	-	576	613	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	2.3	24.3	16.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	381	1283	-	-	1246	-	-	357
HCM Lane V/C Ratio	0.522	0.019	-	-	0.089	-	-	0.105
HCM Control Delay (s)	24.3	7.9	-	-	8.2	-	-	16.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.9	0.1	-	-	0.3	-	-	0.4

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	62	106	20	83	119
Future Vol, veh/h	17	62	106	20	83	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	73	125	24	98	140

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	473	137	0	0	149	0
Stage 1	137	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	548	909	-	-	1426	-
Stage 1	887	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	507	909	-	-	1426	-
Mov Cap-2 Maneuver	507	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	668	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	3.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 777	1426	-
HCM Lane V/C Ratio	-	- 0.12	0.068	-
HCM Control Delay (s)	-	- 10.3	7.7	0
HCM Lane LOS	-	- B	A	A
HCM 95th %tile Q(veh)	-	- 0.4	0.2	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	11	0	5	83	19	428	53	77	380	52
Future Vol, veh/h	0	5	11	0	5	83	19	428	53	77	380	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	13	0	6	98	22	504	62	91	447	61

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1291	1270	478	1248	1269	535	508	0	0	566	0	0
Stage 1	660	660	-	579	579	-	-	-	-	-	-	-
Stage 2	631	610	-	669	690	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	140	168	587	150	168	545	1057	-	-	1006	-	-
Stage 1	452	460	-	501	501	-	-	-	-	-	-	-
Stage 2	469	485	-	447	446	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	98	142	587	125	142	545	1057	-	-	1006	-	-
Mov Cap-2 Maneuver	98	142	-	125	142	-	-	-	-	-	-	-
Stage 1	438	402	-	485	485	-	-	-	-	-	-	-
Stage 2	369	470	-	376	389	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.9	14.8	0.3	1.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1057	-	-	297	469	1006	-	-
HCM Lane V/C Ratio	0.021	-	-	0.063	0.221	0.09	-	-
HCM Control Delay (s)	8.5	0	-	17.9	14.8	8.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.8	0.3	-	-

Intersection	
Int Delay, s/veh	707.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	350	5	195	5	5	11	176	493	5	14	489	318
Future Vol, veh/h	350	5	195	5	5	11	176	493	5	14	489	318
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	412	6	229	6	6	13	207	580	6	16	575	374

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1801	1794	762	1906	1975	580	949	0	0	586	0	0
Stage 1	794	794	-	994	994	-	-	-	-	-	-	-
Stage 2	1007	1000	-	912	981	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 62	80	405	52	62	514	724	-	-	989	-	-
Stage 1	~ 381	400	-	295	323	-	-	-	-	-	-	-
Stage 2	~ 290	321	-	328	328	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 42	56	405	16	44	514	724	-	-	989	-	-
Mov Cap-2 Maneuver	~ 42	56	-	16	44	-	-	-	-	-	-	-
Stage 1	~ 272	394	-	211	231	-	-	-	-	-	-	-
Stage 2	~ 197	229	-	138	323	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	2650.5	109.3	3.1	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	724	-	-	42	350	16	118	989	-	-
HCM Lane V/C Ratio	0.286	-	-	9.804	0.672	0.368	0.16	0.017	-	-
HCM Control Delay (s)	12	-	-	$ 4145.7	34	$ 327.4	41.2	8.7	-	-
HCM Lane LOS	B	-	-	F	D	F	E	A	-	-
HCM 95th %tile Q(veh)	1.2	-	-	49.4	4.6	1	0.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	647	25	783	945
Demand Flow Rate, veh/h	660	25	809	983
Vehicles Circulating, veh/h	608	1223	442	223
Vehicles Exiting, veh/h	598	28	826	1025
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.0	7.8	11.0	7.8
Approach LOS	B	A	B	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	TR	LTR	L	TR	LT	TR
Assumed Moves	L	TR	LTR	L	TR	LT	TR
RT Channelized							
Lane Util	0.636	0.364	1.000	0.261	0.739	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	420	240	25	211	598	462	521
Cap Entry Lane, veh/h	772	847	502	899	975	1099	1175
Entry HV Adj Factor	0.981	0.979	0.995	0.981	0.981	0.981	0.981
Flow Entry, veh/h	412	235	25	207	586	453	511
Cap Entry, veh/h	757	829	500	882	956	1079	1153
V/C Ratio	0.544	0.283	0.050	0.235	0.613	0.420	0.443
Control Delay, s/veh	13.0	7.5	7.8	6.5	12.6	7.8	7.8
LOS	B	A	A	A	B	A	A
95th %tile Queue, veh	3	1	0	1	4	2	2

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	450	49	81	389	27	60	5	85	14	5	8
Future Vol, veh/h	12	450	49	81	389	27	60	5	85	14	5	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	529	58	95	458	32	71	6	100	16	6	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	490	0	0	587	0	0	1258	1266	558	1303	1279	474
Stage 1	-	-	-	-	-	-	586	586	-	664	664	-
Stage 2	-	-	-	-	-	-	672	680	-	639	615	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1073	-	-	988	-	-	148	169	529	138	166	590
Stage 1	-	-	-	-	-	-	496	497	-	450	458	-
Stage 2	-	-	-	-	-	-	445	451	-	464	482	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1073	-	-	988	-	-	125	144	529	96	141	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	144	-	96	141	-
Stage 1	-	-	-	-	-	-	486	487	-	441	397	-
Stage 2	-	-	-	-	-	-	374	391	-	364	472	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.5	64.1	38.4
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	222	1073	-	-	988	-	-	139
HCM Lane V/C Ratio	0.795	0.013	-	-	0.096	-	-	0.229
HCM Control Delay (s)	64.1	8.4	0	-	9	0	-	38.4
HCM Lane LOS	F	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	5.8	0	-	-	0.3	-	-	0.8

Intersection	
Intersection Delay, s/veh	8.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	601	585	177	31
Demand Flow Rate, veh/h	613	597	180	31
Vehicles Circulating, veh/h	119	92	570	636
Vehicles Exiting, veh/h	548	658	162	53
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.5	7.9	7.4	5.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	613	597	180	31
Cap Entry Lane, veh/h	1222	1256	772	721
Entry HV Adj Factor	0.981	0.980	0.983	0.996
Flow Entry, veh/h	601	585	177	31
Cap Entry, veh/h	1199	1231	758	719
V/C Ratio	0.502	0.475	0.233	0.043
Control Delay, s/veh	8.5	7.9	7.4	5.4
LOS	A	A	A	A
95th %tile Queue, veh	3	3	1	0

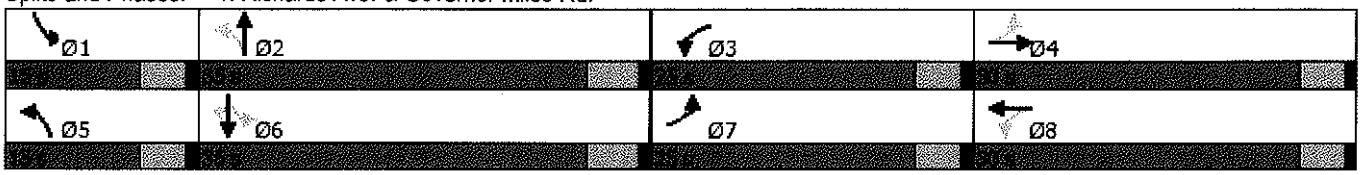
2040 Conditions Analysis
(Ultra-Horizon Year)

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	109	33	88	39	70	520	30	633	113
Future Volume (vph)	109	33	88	39	70	520	30	633	113
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 74.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	33	89	88	39	22	70	520	65	30	633	113
Future Volume (veh/h)	109	33	89	88	39	22	70	520	65	30	633	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	128	39	105	104	46	26	82	612	76	35	745	133
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	386	54	146	322	136	77	296	682	85	327	782	662
Arrive On Green	0.10	0.12	0.12	0.10	0.12	0.12	0.10	0.42	0.42	0.10	0.42	0.42
Sat Flow, veh/h	1767	444	1196	1767	1113	629	1767	1618	201	1767	1856	1572
Grp Volume(v), veh/h	128	0	144	104	0	72	82	0	688	35	745	133
Grp Sat Flow(s),veh/h/ln	1767	0	1640	1767	0	1742	1767	0	1819	1767	1856	1572
Q Serve(g_s), s	4.3	0.0	6.0	3.5	0.0	2.7	1.7	0.0	25.1	0.7	27.6	3.8
Cycle Q Clear(g_c), s	4.3	0.0	6.0	3.5	0.0	2.7	1.7	0.0	25.1	0.7	27.6	3.8
Prop In Lane	1.00		0.73	1.00		0.36	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	386	0	201	322	0	213	296	0	766	327	782	662
V/C Ratio(X)	0.33	0.00	0.72	0.32	0.00	0.34	0.28	0.00	0.90	0.11	0.95	0.20
Avail Cap(c_a), veh/h	721	0	587	657	0	624	382	0	766	414	782	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	30.1	23.3	0.0	28.6	14.6	0.0	19.2	13.0	19.9	13.0
Incr Delay (d2), s/veh	0.5	0.0	4.7	0.6	0.0	0.9	0.5	0.0	15.4	0.1	22.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	0.0	4.6	2.6	0.0	2.1	1.1	0.0	18.3	0.4	21.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	34.8	23.8	0.0	29.5	15.1	0.0	34.6	13.2	42.5	13.7
LnGrp LOS	C	A	C	C	A	C	B	A	C	B	D	B
Approach Vol, veh/h		272			176			770			913	
Approach Delay, s/veh		29.7			26.2			32.5			37.2	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	13.2	11.5	35.0	11.5	13.2
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	27.1	5.5	8.0	3.7	29.6	6.3	4.7
Green Ext Time (p_c), s	0.0	1.3	0.2	0.7	0.1	0.2	0.3	0.3

Intersection Summary	
HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	18	217	9	7	223
Future Vol, veh/h	36	18	217	9	7	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	21	255	11	8	262

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	539	261	0	0	266	0
Stage 1	261	-	-	-	-	-
Stage 2	278	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	503	778	-	-	1298	-
Stage 1	783	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	500	778	-	-	1298	-
Mov Cap-2 Maneuver	500	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	764	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 568	1298	-
HCM Lane V/C Ratio	-	- 0.112	0.006	-
HCM Control Delay (s)	-	- 12.1	7.8	-
HCM Lane LOS	-	- B	A	-
HCM 95th %tile Q(veh)	-	- 0.4	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	235	237	5	26	12
Future Vol, veh/h	8	235	237	5	26	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	9	276	279	6	31	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	285	0	-	0	576	282
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1271	-	-	-	477	755
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	754	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1271	-	-	-	474	755
Mov Cap-2 Maneuver	-	-	-	-	474	-
Stage 1	-	-	-	-	758	-
Stage 2	-	-	-	-	754	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1271	-	-	-	474	755
HCM Lane V/C Ratio	0.007	-	-	-	0.065	0.019
HCM Control Delay (s)	7.9	-	-	-	13.1	9.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↱			↱
Traffic Vol, veh/h	0	223	241	5	0	15
Future Vol, veh/h	0	223	241	5	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	262	284	6	0	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	287
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	750
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	750
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	750
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	-	9.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection												
Int Delay, s/veh	8.6											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	126	117	90	159	6	124	5	85	17	6	29
Future Vol, veh/h	7	126	117	90	159	6	124	5	85	17	6	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	148	138	106	187	7	146	6	100	20	7	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	194	0	0	286	0	0	656	639	217	689	705	191
Stage 1	-	-	-	-	-	-	233	233	-	403	403	-
Stage 2	-	-	-	-	-	-	423	406	-	286	302	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1373	-	-	1270	-	-	377	393	820	359	360	848
Stage 1	-	-	-	-	-	-	768	710	-	622	598	-
Stage 2	-	-	-	-	-	-	607	596	-	719	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1373	-	-	1270	-	-	332	358	820	290	328	848
Mov Cap-2 Maneuver	-	-	-	-	-	-	332	358	-	290	328	-
Stage 1	-	-	-	-	-	-	763	706	-	618	548	-
Stage 2	-	-	-	-	-	-	527	547	-	622	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.9	23.9	13.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	436	1373	-	-	1270	-	-	468
HCM Lane V/C Ratio	0.577	0.006	-	-	0.083	-	-	0.131
HCM Control Delay (s)	23.9	7.6	-	-	8.1	-	-	13.8
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	3.6	0	-	-	0.3	-	-	0.4

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	60	152	9	72	142
Future Vol, veh/h	24	60	152	9	72	142
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	28	71	179	11	85	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	522	185	0	0	190	0
Stage 1	185	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	513	855	-	-	1378	-
Stage 1	844	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	478	855	-	-	1378	-
Mov Cap-2 Maneuver	478	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	672	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	698	1378	-
HCM Lane V/C Ratio	-	-	0.142	0.061	-
HCM Control Delay (s)	-	-	11	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	9	0	5	42	5	338	55	66	390	5
Future Vol, veh/h	0	5	9	0	5	42	5	338	55	66	390	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	11	0	6	49	6	398	65	78	459	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1088	1093	462	1070	1064	431	465	0	0	463	0	0
Stage 1	618	618	-	443	443	-	-	-	-	-	-	-
Stage 2	470	475	-	627	621	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	193	214	600	199	223	624	1096	-	-	1098	-	-
Stage 1	477	481	-	594	576	-	-	-	-	-	-	-
Stage 2	574	557	-	471	479	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	160	192	600	176	200	624	1096	-	-	1098	-	-
Mov Cap-2 Maneuver	160	192	-	176	200	-	-	-	-	-	-	-
Stage 1	474	435	-	590	572	-	-	-	-	-	-	-
Stage 2	519	553	-	413	433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.1	12.9	0.1	1.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1096	-	-	341	509	1098	-	-
HCM Lane V/C Ratio	0.005	-	-	0.048	0.109	0.071	-	-
HCM Control Delay (s)	8.3	0	-	16.1	12.9	8.5	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0.2	-	-

Intersection	
Int Delay, s/veh	261.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	186	5	140	5	6	20	207	436	5	16	536	253
Future Vol, veh/h	186	5	140	5	6	20	207	436	5	16	536	253
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	219	6	165	6	7	24	244	513	6	19	631	298

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1838	1825	780	1905	1968	513	929	0	0	519	0	0
Stage 1	818	818	-	1001	1001	-	-	-	-	-	-	-
Stage 2	1020	1007	-	904	967	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 58	77	395	52	63	561	736	-	-	1047	-	-
Stage 1	370	390	-	293	321	-	-	-	-	-	-	-
Stage 2	285	319	-	331	333	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 36	51	395	20	41	561	736	-	-	1047	-	-
Mov Cap-2 Maneuver	~ 36	51	-	20	41	-	-	-	-	-	-	-
Stage 1	247	383	-	196	214	-	-	-	-	-	-	-
Stage 2	~ 177	213	-	187	327	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1419.7	70.9	3.9	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	736	-	-	36	320	20	143	1047	-	-
HCM Lane V/C Ratio	0.331	-	-	6.078	0.533	0.294	0.214	0.018	-	-
HCM Control Delay (s)	12.3	-	-	$ 2504.3	28.4	247.6	36.9	8.5	-	-
HCM Lane LOS	B	-	-	F	D	F	E	A	-	-
HCM 95th %tile Q(veh)	1.4	-	-	26	3	0.8	0.8	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	313	45	76	395	30	43
Future Vol, veh/h	313	45	76	395	30	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	368	53	89	465	35	51

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	421	0	1038	395
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	643	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1138	-	256	654
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	523	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1138	-	229	654
Mov Cap-2 Maneuver	-	-	-	-	229	-
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	468	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	17.6
HCM LOS			C

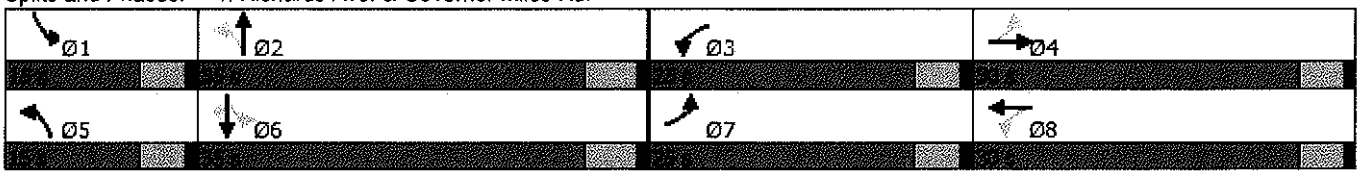
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	371	-	-	1138	-
HCM Lane V/C Ratio	0.231	-	-	0.079	-
HCM Control Delay (s)	17.6	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.3	-

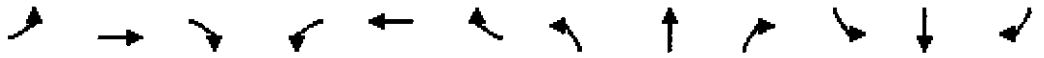
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	160	34	87	38	76	537	30	630	117
Future Volume (vph)	160	34	87	38	76	537	30	630	117
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 76.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	34	109	87	38	22	76	537	66	30	630	117
Future Volume (veh/h)	160	34	109	87	38	22	76	537	66	30	630	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	188	40	128	102	45	26	89	632	78	35	741	138
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	414	54	171	317	122	70	285	670	83	298	768	651
Arrive On Green	0.12	0.14	0.14	0.10	0.11	0.11	0.10	0.41	0.41	0.10	0.41	0.41
Sat Flow, veh/h	1767	389	1243	1767	1103	637	1767	1620	200	1767	1856	1572
Grp Volume(v), veh/h	188	0	168	102	0	71	89	0	710	35	741	138
Grp Sat Flow(s),veh/h/ln	1767	0	1632	1767	0	1741	1767	0	1820	1767	1856	1572
Q Serve(g_s), s	6.6	0.0	7.2	3.5	0.0	2.7	1.9	0.0	27.2	0.7	28.3	4.1
Cycle Q Clear(g_c), s	6.6	0.0	7.2	3.5	0.0	2.7	1.9	0.0	27.2	0.7	28.3	4.1
Prop In Lane	1.00		0.76	1.00		0.37	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	414	0	225	317	0	192	285	0	753	298	768	651
V/C Ratio(X)	0.45	0.00	0.75	0.32	0.00	0.37	0.31	0.00	0.94	0.12	0.97	0.21
Avail Cap(c_a), veh/h	695	0	574	646	0	612	370	0	753	384	768	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	30.0	24.4	0.0	29.9	15.2	0.0	20.4	14.2	20.7	13.7
Incr Delay (d2), s/veh	0.8	0.0	4.9	0.6	0.0	1.2	0.6	0.0	21.5	0.2	25.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	5.4	2.6	0.0	2.1	1.2	0.0	20.9	0.5	22.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	0.0	34.9	25.0	0.0	31.1	15.8	0.0	41.9	14.4	45.7	14.4
LnGrp LOS	C	A	C	C	A	C	B	A	D	B	D	B
Approach Vol, veh/h		356			173			799			914	
Approach Delay, s/veh		29.5			27.5			39.0			39.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	14.5	11.5	35.0	13.5	12.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	29.2	5.5	9.2	3.9	30.3	8.6	4.7
Green Ext Time (p_c), s	0.0	0.4	0.2	0.8	0.1	0.0	0.4	0.3

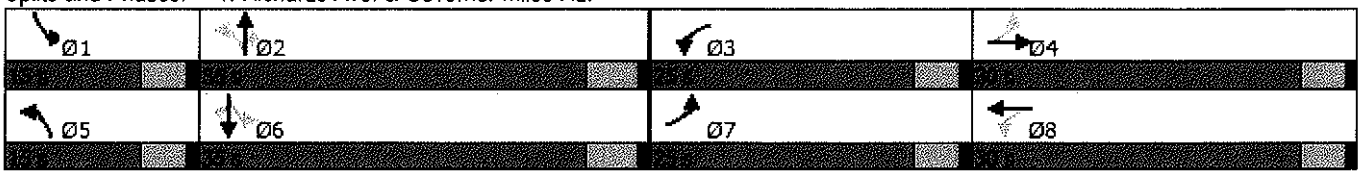
Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	160	34	87	38	76	537	66	30	630	117
Future Volume (vph)	160	34	87	38	76	537	66	30	630	117
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8		2		2	6		6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Max	Min	Max	Max

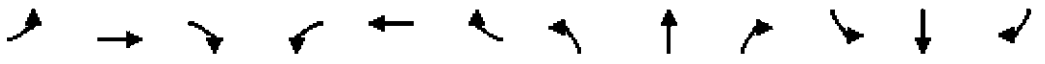
Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 76.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.



Mitigation: New NB Right Turn Lane / Signal Re-timing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	34	109	87	38	22	76	537	66	30	630	117
Future Volume (veh/h)	160	34	109	87	38	22	76	537	66	30	630	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	188	40	128	102	45	26	89	632	78	35	741	138
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	414	54	171	317	122	70	285	768	651	351	768	651
Arrive On Green	0.12	0.14	0.14	0.10	0.11	0.11	0.10	0.41	0.41	0.10	0.41	0.41
Sat Flow, veh/h	1767	389	1243	1767	1103	637	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	188	0	168	102	0	71	89	632	78	35	741	138
Grp Sat Flow(s),veh/h/ln	1767	0	1632	1767	0	1741	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	6.6	0.0	7.2	3.5	0.0	2.7	1.9	22.0	2.2	0.7	28.3	4.1
Cycle Q Clear(g_c), s	6.6	0.0	7.2	3.5	0.0	2.7	1.9	22.0	2.2	0.7	28.3	4.1
Prop In Lane	1.00		0.76	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	0	225	317	0	192	285	768	651	351	768	651
V/C Ratio(X)	0.45	0.00	0.75	0.32	0.00	0.37	0.31	0.82	0.12	0.10	0.97	0.21
Avail Cap(c_a), veh/h	695	0	574	646	0	612	370	768	651	437	768	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	30.0	24.4	0.0	29.9	15.2	18.9	13.1	12.4	20.7	13.7
Incr Delay (d2), s/veh	0.8	0.0	4.9	0.6	0.0	1.2	0.6	9.7	0.4	0.1	25.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	5.4	2.6	0.0	2.1	1.2	15.7	1.4	0.5	22.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	0.0	34.9	25.0	0.0	31.1	15.8	28.6	13.5	12.5	45.7	14.4
LnGrp LOS	C	A	C	C	A	C	B	C	B	B	D	B
Approach Vol, veh/h		356			173			799			914	
Approach Delay, s/veh		29.5			27.5			25.7			39.7	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	14.5	11.5	35.0	13.5	12.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	24.0	5.5	9.2	3.9	30.3	8.6	4.7
Green Ext Time (p_c), s	0.0	2.0	0.2	0.8	0.1	0.0	0.4	0.3

Intersection Summary	
HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

Mitigation: New NB Right Turn Lane / Signal Re-timing

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↰	↱
Traffic Vol, veh/h	14	5	5	35	5	18	5	221	9	7	263	5
Future Vol, veh/h	14	5	5	35	5	18	5	221	9	7	263	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	6	6	41	6	21	6	260	11	8	309	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	619	611	312	612	609	266	315	0	0	271	0	0
Stage 1	328	328	-	278	278	-	-	-	-	-	-	-
Stage 2	291	283	-	334	331	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	401	409	728	405	410	773	1245	-	-	1292	-	-
Stage 1	685	647	-	728	680	-	-	-	-	-	-	-
Stage 2	717	677	-	680	645	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	383	405	728	394	405	773	1245	-	-	1292	-	-
Mov Cap-2 Maneuver	383	405	-	394	405	-	-	-	-	-	-	-
Stage 1	682	643	-	724	677	-	-	-	-	-	-	-
Stage 2	688	674	-	664	641	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	14	0.2	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1245	-	-	430	466	1292	-	-
HCM Lane V/C Ratio	0.005	-	-	0.066	0.146	0.006	-	-
HCM Control Delay (s)	7.9	-	-	14	14	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	254	5	5	250	5	15	5	5	25	5	13
Future Vol, veh/h	8	254	5	5	250	5	15	5	5	25	5	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	225	-	-	-	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	2	2	3	3	2	2	2	3	2	3
Mvmt Flow	9	299	6	6	294	6	18	6	6	29	6	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	300	0	0	305	0	0	640	632	302	635	632	297
Stage 1	-	-	-	-	-	-	320	320	-	309	309	-
Stage 2	-	-	-	-	-	-	320	312	-	326	323	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.13	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.527	4.018	3.327
Pot Cap-1 Maneuver	1255	-	-	1256	-	-	388	398	738	390	398	740
Stage 1	-	-	-	-	-	-	692	652	-	699	660	-
Stage 2	-	-	-	-	-	-	692	658	-	684	650	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1256	-	-	372	393	738	379	393	740
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	393	-	379	393	-
Stage 1	-	-	-	-	-	-	687	647	-	694	657	-
Stage 2	-	-	-	-	-	-	668	655	-	668	645	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	14.3	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	418	1255	-	-	1256	-	-	379	594
HCM Lane V/C Ratio	0.07	0.007	-	-	0.005	-	-	0.078	0.036
HCM Control Delay (s)	14.3	7.9	-	-	7.9	-	-	15.3	11.3
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.3	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	248	274	5	0	15
Future Vol, veh/h	0	248	274	5	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	292	322	6	0	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	325
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	714
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	714
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	714
HCM Lane V/C Ratio	-	-	-	0.025
HCM Control Delay (s)	-	-	-	10.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	131	117	98	185	6	140	5	106	16	6	30
Future Vol, veh/h	7	131	117	98	185	6	140	5	106	16	6	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	8	154	138	115	218	7	165	6	125	19	7	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	225	0	0	292	0	0	712	694	223	757	760	222
Stage 1	-	-	-	-	-	-	239	239	-	452	452	-
Stage 2	-	-	-	-	-	-	473	455	-	305	308	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1338	-	-	1264	-	-	346	365	814	323	334	815
Stage 1	-	-	-	-	-	-	762	706	-	585	569	-
Stage 2	-	-	-	-	-	-	570	567	-	702	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1338	-	-	1264	-	-	301	330	814	250	302	815
Mov Cap-2 Maneuver	-	-	-	-	-	-	301	330	-	250	302	-
Stage 1	-	-	-	-	-	-	757	702	-	581	517	-
Stage 2	-	-	-	-	-	-	489	515	-	586	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	33.1	14.7
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	411	1338	-	-	1264	-	-	431
HCM Lane V/C Ratio	0.718	0.006	-	-	0.091	-	-	0.142
HCM Control Delay (s)	33.1	7.7	-	-	8.1	-	-	14.7
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	5.5	0	-	-	0.3	-	-	0.5

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	97	151	12	79	143
Future Vol, veh/h	32	97	151	12	79	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	38	114	178	14	93	168

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	539	185	0	0	192	0
Stage 1	185	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	502	855	-	-	1375	-
Stage 1	844	-	-	-	-	-
Stage 2	708	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	464	855	-	-	1375	-
Mov Cap-2 Maneuver	464	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	655	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	2.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	707	1375	-
HCM Lane V/C Ratio	-	-	0.215	0.068	-
HCM Control Delay (s)	-	-	11.5	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.2	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	22	0	5	42	5	343	54	66	404	5
Future Vol, veh/h	0	5	22	0	5	42	5	343	54	66	404	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	26	0	6	49	6	404	64	78	475	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1110	1114	478	1098	1085	436	481	0	0	468	0	0
Stage 1	634	634	-	448	448	-	-	-	-	-	-	-
Stage 2	476	480	-	650	637	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	187	208	587	190	217	620	1082	-	-	1094	-	-
Stage 1	467	473	-	590	573	-	-	-	-	-	-	-
Stage 2	570	554	-	458	471	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	155	186	587	163	194	620	1082	-	-	1094	-	-
Mov Cap-2 Maneuver	155	186	-	163	194	-	-	-	-	-	-	-
Stage 1	463	427	-	585	568	-	-	-	-	-	-	-
Stage 2	515	550	-	390	425	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.3	13	0.1	1.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1082	-	-	420	503	1094	-	-
HCM Lane V/C Ratio	0.005	-	-	0.076	0.11	0.071	-	-
HCM Control Delay (s)	8.3	0	-	14.3	13	8.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0.2	-	-

Intersection	
Int Delay, s/veh	345.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	210	5	170	5	7	20	207	436	5	16	543	262
Future Vol, veh/h	210	5	170	5	7	20	207	436	5	16	543	262
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	247	6	200	6	8	24	244	513	6	19	639	308

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1851	1838	793	1935	1986	513	947	0	0	519	0	0
Stage 1	831	831	-	1001	1001	-	-	-	-	-	-	-
Stage 2	1020	1007	-	934	985	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 57	76	389	50	61	561	725	-	-	1047	-	-
Stage 1	364	384	-	293	321	-	-	-	-	-	-	-
Stage 2	285	319	-	319	326	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 34	49	389	16	40	561	725	-	-	1047	-	-
Mov Cap-2 Maneuver	~ 34	49	-	16	40	-	-	-	-	-	-	-
Stage 1	~ 241	377	-	194	213	-	-	-	-	-	-	-
Stage 2	~ 174	211	-	150	320	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1678.1	86.8	4	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	725	-	-	34	325	16	128	1047	-	-
HCM Lane V/C Ratio	0.336	-	-	7.266	0.633	0.368	0.248	0.018	-	-
HCM Control Delay (s)	12.5	-	-	$ 3048.6	33.4	$ 327.4	42.2	8.5	-	-
HCM Lane LOS	B	-	-	F	D	F	E	A	-	-
HCM 95th %tile Q(veh)	1.5	-	-	29.7	4.1	1	0.9	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	453	38	763	966
Demand Flow Rate, veh/h	462	38	778	985
Vehicles Circulating, veh/h	677	1024	277	263
Vehicles Exiting, veh/h	571	31	862	799
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.7	6.8	7.6	8.3
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	L	TR	LT	TR
Assumed Moves	LT	R	LTR	L	TR	LT	TR
RT Channelized							
Lane Util	0.558	0.442	1.000	0.320	0.680	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	258	204	38	249	529	463	522
Cap Entry Lane, veh/h	724	799	595	1046	1122	1060	1136
Entry HV Adj Factor	0.980	0.980	0.996	0.980	0.981	0.981	0.981
Flow Entry, veh/h	253	200	38	244	519	454	512
Cap Entry, veh/h	710	783	592	1025	1100	1039	1114
V/C Ratio	0.356	0.255	0.064	0.238	0.471	0.437	0.460
Control Delay, s/veh	9.6	7.4	6.8	5.8	8.5	8.3	8.2
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	2	1	0	1	3	2	2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	337	45	75	400	5	29	5	43	5	5	14
Future Vol, veh/h	5	337	45	75	400	5	29	5	43	5	5	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	396	53	88	471	6	34	6	51	6	6	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	477	0	0	449	0	0	1096	1088	423	1113	1111	474
Stage 1	-	-	-	-	-	-	435	435	-	650	650	-
Stage 2	-	-	-	-	-	-	661	653	-	463	461	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1085	-	-	1111	-	-	191	216	631	186	209	590
Stage 1	-	-	-	-	-	-	600	580	-	458	465	-
Stage 2	-	-	-	-	-	-	452	464	-	579	565	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1085	-	-	1111	-	-	165	191	631	153	185	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	165	191	-	153	185	-
Stage 1	-	-	-	-	-	-	596	576	-	455	415	-
Stage 2	-	-	-	-	-	-	386	414	-	523	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.3	23.4	18.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	285	1085	-	-	1111	-	-	288
HCM Lane V/C Ratio	0.318	0.005	-	-	0.079	-	-	0.098
HCM Control Delay (s)	23.4	8.3	0	-	8.5	0	-	18.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0.3	-	-	0.3

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	455	565	91	28
Demand Flow Rate, veh/h	464	576	93	28
Vehicles Circulating, veh/h	102	47	416	605
Vehicles Exiting, veh/h	531	462	150	18
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.6	7.1	5.1	5.2
Approach LOS	A	A	A	A

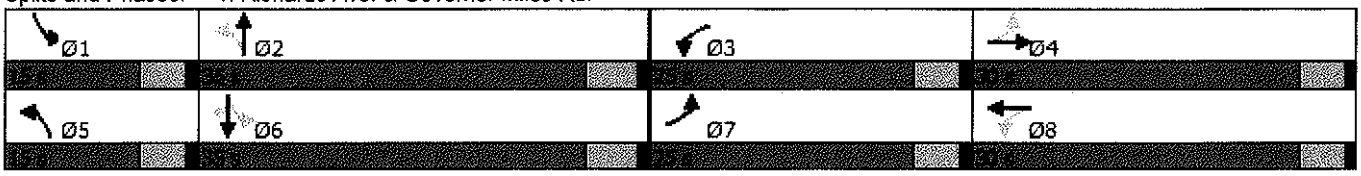
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	464	576	93	28
Cap Entry Lane, veh/h	1244	1315	903	744
Entry HV Adj Factor	0.981	0.980	0.977	0.996
Flow Entry, veh/h	455	565	91	28
Cap Entry, veh/h	1220	1289	882	741
V/C Ratio	0.373	0.438	0.103	0.038
Control Delay, s/veh	6.6	7.1	5.1	5.2
LOS	A	A	A	A
95th %tile Queue, veh	2	2	0	0

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	112	29	101	64	113	778	26	709	123
Future Volume (vph)	112	29	101	64	113	778	26	709	123
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 76.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	29	84	101	64	25	113	778	86	26	709	123
Future Volume (veh/h)	112	29	84	101	64	25	113	778	86	26	709	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	132	34	99	119	75	29	133	915	101	31	834	145
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	354	48	141	324	147	57	277	697	77	277	788	668
Arrive On Green	0.10	0.12	0.12	0.10	0.12	0.12	0.10	0.42	0.42	0.10	0.42	0.42
Sat Flow, veh/h	1767	418	1218	1767	1274	493	1767	1642	181	1767	1856	1572
Grp Volume(v), veh/h	132	0	133	119	0	104	133	0	1016	31	834	145
Grp Sat Flow(s),veh/h/ln	1767	0	1636	1767	0	1767	1767	0	1823	1767	1856	1572
Q Serve(g_s), s	4.5	0.0	5.5	4.0	0.0	3.9	2.7	0.0	30.0	0.6	30.0	4.1
Cycle Q Clear(g_c), s	4.5	0.0	5.5	4.0	0.0	3.9	2.7	0.0	30.0	0.6	30.0	4.1
Prop In Lane	1.00		0.74	1.00		0.28	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	354	0	189	324	0	204	277	0	774	277	788	668
V/C Ratio(X)	0.37	0.00	0.70	0.37	0.00	0.51	0.48	0.00	1.31	0.11	1.06	0.22
Avail Cap(c_a), veh/h	692	0	590	661	0	638	364	0	774	364	788	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	30.1	23.6	0.0	29.4	15.0	0.0	20.3	14.5	20.3	12.9
Incr Delay (d2), s/veh	0.7	0.0	4.7	0.7	0.0	2.0	1.3	0.0	150.0	0.2	48.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	0.0	4.2	3.0	0.0	3.1	1.8	0.0	64.3	0.4	30.8	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	34.8	24.3	0.0	31.3	16.3	0.0	170.3	14.7	69.1	13.6
LnGrp LOS	C	A	C	C	A	C	B	A	F	B	F	B
Approach Vol, veh/h		265			223			1149			1010	
Approach Delay, s/veh		29.6			27.6			152.5			59.5	
Approach LOS		C			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	12.7	11.5	35.0	11.5	12.7
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.6	32.0	6.0	7.5	4.7	32.0	6.5	5.9
Green Ext Time (p_c), s	0.0	0.0	0.2	0.6	0.1	0.0	0.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	94.2
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	10	289	36	15	218
Future Vol, veh/h	22	10	289	36	15	218
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	12	340	42	18	256

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	653	361	0	0	382	0
Stage 1	361	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	432	684	-	-	1176	-
Stage 1	705	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	426	684	-	-	1176	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	747	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 483	1176	-
HCM Lane V/C Ratio	-	- 0.078	0.015	-
HCM Control Delay (s)	-	- 13.1	8.1	-
HCM Lane LOS	-	- B	A	-
HCM 95th %tile Q(veh)	-	- 0.3	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	241	309	15	15	8
Future Vol, veh/h	22	241	309	15	15	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	26	284	364	18	18	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	382	0	-	0	709	373
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	336	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1171	-	-	-	399	671
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1171	-	-	-	390	671
Mov Cap-2 Maneuver	-	-	-	-	390	-
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	722	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1171	-	-	-	390	671
HCM Lane V/C Ratio	0.022	-	-	-	0.045	0.014
HCM Control Delay (s)	8.1	-	-	-	14.7	10.4
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑↱			↱
Traffic Vol, veh/h	0	242	303	13	0	9
Future Vol, veh/h	0	242	303	13	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	285	356	15	0	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	364
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	679
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	679
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	679
HCM Lane V/C Ratio	-	-	-	0.016
HCM Control Delay (s)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	181	101	69	222	22	95	6	61	12	5	15
Future Vol, veh/h	23	181	101	69	222	22	95	6	61	12	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	213	119	81	261	26	112	7	72	14	6	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	287	0	0	332	0	0	775	776	273	802	822	274
Stage 1	-	-	-	-	-	-	327	327	-	436	436	-
Stage 2	-	-	-	-	-	-	448	449	-	366	386	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1269	-	-	1222	-	-	314	327	763	301	308	762
Stage 1	-	-	-	-	-	-	684	646	-	597	578	-
Stage 2	-	-	-	-	-	-	588	571	-	651	608	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1269	-	-	1222	-	-	282	299	763	250	282	762
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	299	-	250	282	-
Stage 1	-	-	-	-	-	-	670	632	-	584	540	-
Stage 2	-	-	-	-	-	-	530	533	-	571	595	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.8	24.5	15.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	371	1269	-	-	1222	-	-	375
HCM Lane V/C Ratio	0.514	0.021	-	-	0.066	-	-	0.1
HCM Control Delay (s)	24.5	7.9	-	-	8.2	-	-	15.7
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.8	0.1	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	43	121	10	39	136
Future Vol, veh/h	11	43	121	10	39	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	13	51	142	12	46	160

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	400	148	0	0	154	0
Stage 1	148	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	604	896	-	-	1420	-
Stage 1	877	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	582	896	-	-	1420	-
Mov Cap-2 Maneuver	582	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	807	1420	-
HCM Lane V/C Ratio	-	-	0.079	0.032	-
HCM Control Delay (s)	-	-	9.8	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	5	0	5	108	7	609	82	98	548	5
Future Vol, veh/h	0	5	5	0	5	108	7	609	82	98	548	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	6	0	6	127	8	716	96	115	645	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1725	1706	648	1664	1661	764	651	0	0	812	0	0
Stage 1	878	878	-	780	780	-	-	-	-	-	-	-
Stage 2	847	828	-	884	881	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	70	91	470	77	97	404	935	-	-	814	-	-
Stage 1	343	366	-	388	406	-	-	-	-	-	-	-
Stage 2	357	386	-	340	365	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	37	70	470	59	74	404	935	-	-	814	-	-
Mov Cap-2 Maneuver	37	70	-	59	74	-	-	-	-	-	-	-
Stage 1	338	285	-	382	400	-	-	-	-	-	-	-
Stage 2	237	380	-	256	284	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.6	22.5	0.1	1.5
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	935	-	-	122	337	814	-	-
HCM Lane V/C Ratio	0.009	-	-	0.096	0.394	0.142	-	-
HCM Control Delay (s)	8.9	0	-	37.6	22.5	10.2	0	-
HCM Lane LOS	A	A	-	E	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.8	0.5	-	-

Intersection	
Int Delay, s/veh	1861.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	432	5	299	5	5	11	231	529	5	13	578	298
Future Vol, veh/h	432	5	299	5	5	11	231	529	5	13	578	298
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	508	6	352	6	6	13	272	622	6	15	680	351

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2065	2058	856	2231	2227	622	1031	0	0	628	0	0
Stage 1	886	886	-	1166	1166	-	-	-	-	-	-	-
Stage 2	1179	1172	-	1065	1061	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 40	55	357	30	43	487	674	-	-	954	-	-
Stage 1	~ 339	363	-	236	268	-	-	-	-	-	-	-
Stage 2	~ 232	266	-	269	300	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 22	32	357	0	25	487	674	-	-	954	-	-
Mov Cap-2 Maneuver	~ 22	32	-	0	25	-	-	-	-	-	-	-
Stage 1	~ 202	357	-	141	160	-	-	-	-	-	-	-
Stage 2	~ 130	159	-	~ 4	295	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	6094.1		4.2	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	674	-	-	22	306	-	72	954	-	-
HCM Lane V/C Ratio	0.403	-	-	23.102	1.169	-	0.261	0.016	-	-
HCM Control Delay (s)	13.9	-	-	$ 10282.6	142.1	-	71.8	8.8	-	-
HCM Lane LOS	B	-	-	F	F	-	F	A	-	-
HCM 95th %tile Q(veh)	2	-	-	63.8	15.2	-	0.9	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection						
Int Delay, s/veh	40.1					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↰↑	↰↱	
Traffic Vol, veh/h	632	71	111	447	87	116
Future Vol, veh/h	632	71	111	447	87	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	744	84	131	526	102	136

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	828	0	1574	786
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	788	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	803	-	121	392
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	448	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	803	-	~ 93	392
Mov Cap-2 Maneuver	-	-	-	-	~ 93	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	345	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	283.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	165	-	-	803	-
HCM Lane V/C Ratio	1.447	-	-	0.163	-
HCM Control Delay (s)	283.5	-	-	10.4	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	15.1	-	-	0.6	-

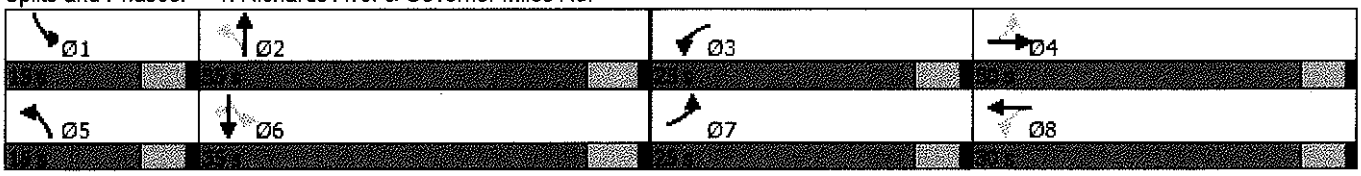
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	138	29	102	77	129	777	26	738	163
Future Volume (vph)	138	29	102	77	129	777	26	738	163
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	7	4	3	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	11.5	23.0	23.0
Total Split (s)	25.0	30.0	25.0	30.0	15.0	35.0	15.0	35.0	35.0
Total Split (%)	23.8%	28.6%	23.8%	28.6%	14.3%	33.3%	14.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 79.4
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	29	95	102	77	24	129	777	86	26	738	163
Future Volume (veh/h)	138	29	95	102	77	24	129	777	86	26	738	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	162	34	112	120	91	28	152	914	101	31	868	192
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	357	47	155	321	151	47	274	690	76	274	780	661
Arrive On Green	0.11	0.12	0.12	0.10	0.11	0.11	0.10	0.42	0.42	0.10	0.42	0.42
Sat Flow, veh/h	1767	380	1251	1767	1361	419	1767	1641	181	1767	1856	1572
Grp Volume(v), veh/h	162	0	146	120	0	119	152	0	1015	31	868	192
Grp Sat Flow(s),veh/h/ln	1767	0	1630	1767	0	1780	1767	0	1823	1767	1856	1572
Q Serve(g_s), s	5.6	0.0	6.1	4.1	0.0	4.5	3.2	0.0	30.0	0.6	30.0	5.8
Cycle Q Clear(g_c), s	5.6	0.0	6.1	4.1	0.0	4.5	3.2	0.0	30.0	0.6	30.0	5.8
Prop In Lane	1.00		0.77	1.00		0.24	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	357	0	202	321	0	198	274	0	766	274	780	661
V/C Ratio(X)	0.45	0.00	0.72	0.37	0.00	0.60	0.55	0.00	1.32	0.11	1.11	0.29
Avail Cap(c_a), veh/h	668	0	583	655	0	636	361	0	766	361	780	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	30.1	24.2	0.0	30.2	15.4	0.0	20.7	14.7	20.7	13.7
Incr Delay (d2), s/veh	0.9	0.0	4.8	0.7	0.0	2.9	1.7	0.0	155.0	0.2	67.8	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	4.7	3.1	0.0	3.7	2.2	0.0	65.7	0.4	37.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	34.9	24.9	0.0	33.1	17.1	0.0	175.7	14.9	88.4	14.8
LnGrp LOS	C	A	C	C	A	C	B	A	F	B	F	B
Approach Vol, veh/h		308			239			1167			1091	
Approach Delay, s/veh		29.6			29.0			155.1			73.4	
Approach LOS		C			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	35.0	11.5	13.4	11.5	35.0	12.4	12.4
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.5	30.0	20.5	25.5	10.5	30.0	20.5	25.5
Max Q Clear Time (g_c+I1), s	2.6	32.0	6.1	8.1	5.2	32.0	7.6	6.5
Green Ext Time (p_c), s	0.0	0.0	0.2	0.7	0.2	0.0	0.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	98.8
HCM 6th LOS	F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	138	29	102	77	129	777	86	26	738	163
Future Volume (vph)	138	29	102	77	129	777	86	26	738	163
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8		2		2	6		6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	15.0	7.0	15.0	15.0
Minimum Split (s)	11.5	22.5	11.5	22.5	11.5	23.0	23.0	11.5	23.0	23.0
Total Split (s)	11.5	22.5	11.5	22.5	11.5	59.5	59.5	11.5	59.5	59.5
Total Split (%)	11.0%	21.4%	11.0%	21.4%	11.0%	56.7%	56.7%	11.0%	56.7%	56.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	5.0	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min	Min	Min	Max	Max	Min	Max	Max

Intersection Summary

Cycle Length: 105
Actuated Cycle Length: 98.4
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Richards Ave. & Governor Miles Rd.



Mitigation: New NB Right Turn Lane / Signal Re-timing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	29	95	102	77	24	129	777	86	26	738	163
Future Volume (veh/h)	138	29	95	102	77	24	129	777	86	26	738	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	162	34	112	120	91	28	152	914	101	31	868	192
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	261	43	140	230	152	47	288	1032	875	269	1032	875
Arrive On Green	0.07	0.11	0.11	0.07	0.11	0.11	0.07	0.56	0.56	0.07	0.56	0.56
Sat Flow, veh/h	1767	380	1251	1767	1361	419	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	162	0	146	120	0	119	152	914	101	31	868	192
Grp Sat Flow(s),veh/h/ln	1767	0	1630	1767	0	1780	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	7.0	0.0	8.6	5.8	0.0	6.2	3.4	42.2	3.0	0.7	38.2	6.0
Cycle Q Clear(g_c), s	7.0	0.0	8.6	5.8	0.0	6.2	3.4	42.2	3.0	0.7	38.2	6.0
Prop In Lane	1.00		0.77	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	0	183	230	0	199	288	1032	875	269	1032	875
V/C Ratio(X)	0.62	0.00	0.80	0.52	0.00	0.60	0.53	0.89	0.12	0.12	0.84	0.22
Avail Cap(c_a), veh/h	261	0	300	230	0	327	288	1032	875	269	1032	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	42.4	35.5	0.0	41.4	17.9	19.0	10.3	16.5	18.1	11.0
Incr Delay (d2), s/veh	4.5	0.0	7.8	2.1	0.0	2.8	1.8	11.1	0.3	0.2	8.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	0.0	6.9	4.7	0.0	5.2	3.1	26.5	1.9	0.5	23.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	0.0	50.3	37.6	0.0	44.2	19.7	30.1	10.6	16.7	26.4	11.6
LnGrp LOS	D	A	D	D	A	D	B	C	B	B	C	B
Approach Vol, veh/h		308			239			1167			1091	
Approach Delay, s/veh		45.6			40.9			27.1			23.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	59.5	11.5	15.5	11.5	59.5	11.5	15.5
Change Period (Y+Rc), s	4.5	5.0	4.5	4.5	4.5	5.0	4.5	4.5
Max Green Setting (Gmax), s	7.0	54.5	7.0	18.0	7.0	54.5	7.0	18.0
Max Q Clear Time (g_c+I1), s	2.7	44.2	7.8	10.6	5.4	40.2	9.0	8.2
Green Ext Time (p_c), s	0.0	4.5	0.0	0.4	0.1	6.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

Mitigation: New NB Right Turn Lane / Signal Re-timing

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑			↑	
Traffic Vol, veh/h	8	5	5	22	5	10	5	328	36	15	238	13
Future Vol, veh/h	8	5	5	22	5	10	5	328	36	15	238	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized		-	None		-	None		-	None		-	None
Storage Length	-	-	-	-	-	-	250	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	6	6	26	6	12	6	386	42	18	280	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	752	764	288	749	750	407	295	0	0	428	0	0
Stage 1	324	324	-	419	419	-	-	-	-	-	-	-
Stage 2	428	440	-	330	331	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	327	334	751	328	340	644	1266	-	-	1131	-	-
Stage 1	688	650	-	612	590	-	-	-	-	-	-	-
Stage 2	605	578	-	683	645	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	312	327	751	316	333	644	1266	-	-	1131	-	-
Mov Cap-2 Maneuver	312	327	-	316	333	-	-	-	-	-	-	-
Stage 1	685	640	-	609	587	-	-	-	-	-	-	-
Stage 2	585	575	-	661	635	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.1	16.1	0.1	0.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1266	-	-	378	369	1131	-	-
HCM Lane V/C Ratio	0.005	-	-	0.056	0.118	0.016	-	-
HCM Control Delay (s)	7.9	-	-	15.1	16.1	8.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	257	15	5	330	15	9	5	5	15	5	8
Future Vol, veh/h	22	257	15	5	330	15	9	5	5	15	5	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	225	-	-	-	-	-	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	2	2	3	3	2	2	2	3	2	3
Mvmt Flow	26	302	18	6	388	18	11	6	6	18	6	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	406	0	0	320	0	0	780	781	311	778	781	397
Stage 1	-	-	-	-	-	-	363	363	-	409	409	-
Stage 2	-	-	-	-	-	-	417	418	-	369	372	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.13	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.13	5.52	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.527	4.018	3.327
Pot Cap-1 Maneuver	1147	-	-	1240	-	-	313	326	729	312	326	650
Stage 1	-	-	-	-	-	-	656	625	-	617	596	-
Stage 2	-	-	-	-	-	-	613	591	-	649	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1147	-	-	1240	-	-	298	317	729	299	317	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	298	317	-	299	317	-
Stage 1	-	-	-	-	-	-	641	611	-	603	593	-
Stage 2	-	-	-	-	-	-	595	588	-	623	605	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	15.7	15.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	360	1147	-	-	1240	-	-	299	463
HCM Lane V/C Ratio	0.062	0.023	-	-	0.005	-	-	0.059	0.033
HCM Control Delay (s)	15.7	8.2	-	-	7.9	-	-	17.8	13
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Vol, veh/h	0	275	334	13	0	9
Future Vol, veh/h	0	275	334	13	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	324	393	15	0	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	401
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.327
Pot Cap-1 Maneuver	0	-	-	-	0	647
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	647
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	647
HCM Lane V/C Ratio	-	-	-	0.016
HCM Control Delay (s)	-	-	-	10.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection												
Int Delay, s/veh	8.6											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	200	116	89	232	22	103	6	75	12	5	15
Future Vol, veh/h	23	200	116	89	232	22	103	6	75	12	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	80	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	235	136	105	273	26	121	7	88	14	6	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	299	0	0	371	0	0	865	866	303	901	921	286
Stage 1	-	-	-	-	-	-	357	357	-	496	496	-
Stage 2	-	-	-	-	-	-	508	509	-	405	425	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1256	-	-	1182	-	-	273	290	734	258	269	751
Stage 1	-	-	-	-	-	-	659	627	-	554	544	-
Stage 2	-	-	-	-	-	-	546	536	-	620	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1256	-	-	1182	-	-	240	259	734	204	240	751
Mov Cap-2 Maneuver	-	-	-	-	-	-	240	259	-	204	240	-
Stage 1	-	-	-	-	-	-	645	614	-	542	496	-
Stage 2	-	-	-	-	-	-	480	488	-	528	573	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	2.2	34	17.7
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	332	1256	-	-	1182	-	-	321
HCM Lane V/C Ratio	0.652	0.022	-	-	0.089	-	-	0.117
HCM Control Delay (s)	34	7.9	-	-	8.3	-	-	17.7
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	4.3	0.1	-	-	0.3	-	-	0.4

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	60	124	18	72	139
Future Vol, veh/h	17	60	124	18	72	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	71	146	21	85	164

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	491	157	0	0	167	0
Stage 1	157	-	-	-	-	-
Stage 2	334	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	535	886	-	-	1405	-
Stage 1	869	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	499	886	-	-	1405	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 756	1405	-
HCM Lane V/C Ratio	-	- 0.12	0.06	-
HCM Control Delay (s)	-	- 10.4	7.7	0
HCM Lane LOS	-	- B	A	A
HCM 95th %tile Q(veh)	-	- 0.4	0.2	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	12	0	5	109	19	605	81	99	550	8
Future Vol, veh/h	0	5	12	0	5	109	19	605	81	99	550	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	14	0	6	128	22	712	95	116	647	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1755	1735	652	1698	1692	760	656	0	0	807	0	0
Stage 1	884	884	-	804	804	-	-	-	-	-	-	-
Stage 2	871	851	-	894	888	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	67	88	468	73	93	406	931	-	-	818	-	-
Stage 1	340	363	-	377	396	-	-	-	-	-	-	-
Stage 2	346	376	-	336	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	34	65	468	53	69	406	931	-	-	818	-	-
Mov Cap-2 Maneuver	34	65	-	53	69	-	-	-	-	-	-	-
Stage 1	325	282	-	360	379	-	-	-	-	-	-	-
Stage 2	223	359	-	248	281	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.6	22.8	0.2	1.5
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	931	-	-	166	334	818	-	-
HCM Lane V/C Ratio	0.024	-	-	0.12	0.402	0.142	-	-
HCM Control Delay (s)	9	0	-	29.6	22.8	10.1	0	-
HCM Lane LOS	A	A	-	D	C	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.9	0.5	-	-

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	880	25	914	1095
Demand Flow Rate, veh/h	897	25	933	1117
Vehicles Circulating, veh/h	714	1458	552	298
Vehicles Exiting, veh/h	701	27	1059	1185
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	18.6	9.7	15.2	9.8
Approach LOS	C	A	C	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	TR	LTR	L	TR	LT	TR
Assumed Moves	L	TR	LTR	L	TR	LT	TR
RT Channelized							
Lane Util	0.592	0.408	1.000	0.307	0.693	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	531	366	25	286	647	525	592
Cap Entry Lane, veh/h	700	774	411	812	888	1026	1102
Entry HV Adj Factor	0.981	0.981	0.995	0.979	0.981	0.981	0.981
Flow Entry, veh/h	521	359	25	280	634	515	581
Cap Entry, veh/h	687	759	409	795	871	1006	1081
V/C Ratio	0.759	0.473	0.061	0.352	0.728	0.512	0.537
Control Delay, s/veh	23.6	11.3	9.7	8.7	18.0	9.8	9.8
LOS	C	B	A	A	C	A	A
95th %tile Queue, veh	7	3	0	2	7	3	3

Intersection	
Int Delay, s/veh	2218.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	443	5	300	5	5	11	238	534	5	13	577	341
Future Vol, veh/h	443	5	300	5	5	11	238	534	5	13	577	341
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	70	-	-	320	-	300	320	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	521	6	353	6	6	13	280	628	6	15	679	401

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2111	2104	880	2277	2298	628	1080	0	0	634	0	0
Stage 1	910	910	-	1188	1188	-	-	-	-	-	-	-
Stage 2	1201	1194	-	1089	1110	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 37	51	~ 346	28	39	483	646	-	-	949	-	-
Stage 1	~ 329	353	-	230	262	-	-	-	-	-	-	-
Stage 2	~ 226	260	-	261	285	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 19	28	~ 346	-	22	483	646	-	-	949	-	-
Mov Cap-2 Maneuver	~ 19	28	-	-	22	-	-	-	-	-	-	-
Stage 1	~ 187	347	-	130	149	-	-	-	-	-	-	-
Stage 2	~ 120	147	-	-	280	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	7341.5		4.5	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	646	-	-	19	292	-	64	949	-	-
HCM Lane V/C Ratio	0.433	-	-	27.43	1.229	-	0.294	0.016	-	-
HCM Control Delay (s)	14.8	-	-	$ 12281.6	166.1	-	83.2	8.9	-	-
HCM Lane LOS	B	-	-	F	F	-	F	A	-	-
HCM 95th %tile Q(veh)	2.2	-	-	65.7	16.5	-	1.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	83.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	630	71	110	469	5	87	5	116	5	5	8
Future Vol, veh/h	12	630	71	110	469	5	87	5	116	5	5	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	741	84	129	552	6	102	6	136	6	6	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	558	0	0	825	0	0	1632	1627	783	1695	1666	555
Stage 1	-	-	-	-	-	-	811	811	-	813	813	-
Stage 2	-	-	-	-	-	-	821	816	-	882	853	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1013	-	-	805	-	-	~ 81	102	394	73	97	531
Stage 1	-	-	-	-	-	-	373	393	-	372	392	-
Stage 2	-	-	-	-	-	-	369	391	-	341	376	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1013	-	-	805	-	-	~ 60	76	394	36	73	531
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 60	76	-	36	73	-
Stage 1	-	-	-	-	-	-	363	383	-	362	301	-
Stage 2	-	-	-	-	-	-	273	300	-	214	366	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.9	$ 597.3	64.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	115	1013	-	-	805	-	-	81
HCM Lane V/C Ratio	2.128	0.014	-	-	0.161	-	-	0.261
HCM Control Delay (s)	$ 597.3	8.6	0	-	10.3	0	-	64.5
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	20.7	0	-	-	0.6	-	-	0.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	839	687	244	21
Demand Flow Rate, veh/h	856	701	249	21
Vehicles Circulating, veh/h	144	124	776	799
Vehicles Exiting, veh/h	676	901	224	26
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	14.1	9.9	11.7	6.3
Approach LOS	B	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	856	701	249	21
Cap Entry Lane, veh/h	1191	1216	625	611
Entry HV Adj Factor	0.980	0.980	0.979	0.994
Flow Entry, veh/h	839	687	244	21
Cap Entry, veh/h	1168	1192	612	607
V/C Ratio	0.718	0.577	0.398	0.034
Control Delay, s/veh	14.1	9.9	11.7	6.3
LOS	B	A	B	A
95th %tile Queue, veh	7	4	2	0

PRELIMINARY STORM WATER MASTER PLAN

VISTA DE LA SIERRA SUBDIVISION MASTER PLAN

Santa Fe, New Mexico



Prepared for

Columbus Capital Corporation

October 2020

Prepared by

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1 Executive summary

The proposed Vista De La Sierra subdivision is located on 97 acres, southwest of the intersection of Richards Avenue and Governor Miles Road. A minor arroyo crosses the property, bisecting the property into north and south usable parcels. The arroyo is a major component of the Storm Water Master Plan.

Storm water enters the project at several location, 5 points from Governor Miles road to the north, 1 location form Richards Ave. to the east (arroyo crossing structure), and 2 locations from the south (Beckner Road and Los Solera residential subdivision. Storm water exists the project from 3 locations, West boundary (Arroyo), West Boundary at Nava Ade Subdivision, west boundary at City Open space, and west boundary at School site. A primary design criterion is to reduce developed flow to be equal to or less than existing conditions. The proposed plan does that. In addition, the area near the school site, the storm water release rate is significantly less than existing.

The Storm Water plan proposes to create open space and park areas along the arroyo to take advantage of the unique terrain that is the arroyo. Proposed drainage ponds will be located adjacent to the arroyo, between the arroyo and the sanitary sewer line. The ponds are designed to be shallow, to allow the pond areas to also function as usable open space. The ponds combined with the added improved park areas, along with the bike and pedestrian trail located in the sanitary sewer easement, and the arroyo all come together as a liner park. All these areas are integrated and landscaped such that one may not initially realize they have functions for storm water management.

An important aspect of the project is that the Homeowners Association (HOA) will be fully responsible for maintaining all ponds, crossing structures, arroyo improvements and landscaping. Having an HOA allows for more options in the management of the storm water facilities.

Many locations in the project are experiencing erosion and slope stability issues. The Annexation Agreement specifically calls out the requirement to address these issues. In particular, the construction of past subdivisions and construction of Governor Miles Road to the north have created several locations that currently need corrections. Most of the problems are due to culvert pipes extending beyond the roadway and releasing developed and concentrated flows onto the steep manmade slopes. This has resulted in scouring and erosion at all locations. All these locations are addressed by the Storm Master Water Plan.

The arroyo too has slope stability and erosion issues that are addressed by the Storm Water Master Plan. In one location, the arroyo is meandering north into Governor Miles Road, causing significant erosion, scour, and undermining, and is threatening Governor Miles Road. An existing sanitary sewer main line is located parallel to and south of the arroyo. The arroyo is meandering and curving near the 10-inch sanitary sewer line is several locations. The sewer line will be exposed if the erosion is not addressed. In those areas the arroyo is being slightly realigned and being reinforced to permanently protect the sanitary sewer line.

Richards Ave. is also experiencing potential damage due to erosion around the arroyo crossing structure. The Master Plan proposes extending the existing culverts and including a more permanent outlet structure.

Major storm events in the recent past have damaged the Nava Ade Subdivision. In some areas the arroyo exceeded the existing banks and flooded adjacent properties. In other areas, existing basins to the east, outside of the arroyo basins, carried storm water to the Nava Ade Subdivision, also causing flooding and damage. The Master Storm Water Plan address these areas and corrects these deficiencies.

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- Hydrologic parameters
- NOAA Atlas 14 Point Precipitation Frequency Estimates

B: Hydraulics

- HEC-RAS Drainage Model Output – Existing Conditions
- HEC-RAS Drainage Model Output – Proposed Conditions
- Beckner Road Storm drain Plan and Profile
- Calle de la Paz Arroyo Crossing Detail
- Timber-Crib Wall Detail

2 Introduction

This Storm Water Management Plan has been prepared for the Columbus Capital Corporation in support of the proposed Vista De La Sierra Subdivision project located in Santa Fe, New Mexico. The proposed Vista De La Sierra Subdivision consists of approximately 97 acres; 393 lots are planned to be built in 3 phases. An existing arroyo crosses the property, draining from east to west. The arroyo is to remain in a naturalistic condition, as required by the City of Santa Fe development regulations. Several areas of the arroyo or inflows to the arroyo are experiencing erosion. An Annexation Agreement between this subdivision and the City of Santa Fe requires erosion and slope stability concerns be addressed by the development. Erosion and flood control protection are planned within the arroyo and in the surrounding area following the naturalistic intent of the City's regulations, while providing safe drainage solutions. A Vicinity Map is shown on Figure 1. Figure 2 shows the site and the surrounding contributing watershed.

The purpose of this report is to analyze the existing drainage conditions and the conditions proposed for development. The adequacy of the existing structures is evaluated and site solutions for rainfall runoff are developed for the proposed subdivision that meets the Santa Fe drainage criteria for both MS4 ponding and runoff release criteria.

The site is situated between Governor Miles Road on the North, Desert Sage subdivision and Beckner Rd on the South, Richards Avenue on the east, and subdivisions to the west. An existing Site Map with a closer view of the property is shown on Figure 3. Two site visits were made by WHPacific to investigate existing site conditions.

3 Existing Conditions

3.1 General

Vista De La Sierra is located in the southern half of district 4 within Santa Fe City limits. The site is currently undeveloped, and slopes from the southeast to the northwest, ranging from 1.5 percent to 3 percent. The elevations on the eastern edge of the site range from 6574 to 6598 and from 6525 to 6550 on the western edge. Vegetation on site consists of native grasses, weeds, shrubs, and small trees. Many unofficial dirt roads and tire tracks crisscross the site. The surrounding area consist of undeveloped land, residential developments, some commercial development, and schools.

Figure 2 shows the site and contributing watersheds. Figure 3 provides a closer view of the only the project area.

Soils within the site are loam and loamy sands. Based on information obtained from USDA Natural Resources Conservation Service (NRCS), soil types throughout the site and off-site watershed consist of Alire loam, Buckhorse-Altazano complex, Predawn loam, and Alire-Urban land complex. These soil types are primarily within hydrologic soil group B and C, allowing for moderate infiltration and medium surface runoff potential, although some pockets of "hydrologic soil group A" soil exist in the watershed. A copy of the on-site and off-site reports are included in Appendix A. Figure 4 is a Land Use and Soil Type Map.

3.2 On-Site Conditions

3.2.1 Arroyo

An unimproved arroyo meanders through the northern portion of the site and is an unnamed tributary that ultimately drains to the Arroyo de Los Chamisos (beyond the project boundary). Minor tributaries located throughout the southern portions of the site drain northward into the main arroyo.

The arroyo enters the project from the east crossing under Richards Avenue at Analysis Point 10 (AP10) through three corrugated metal pipe (CMP) culverts (1-72-inch and 2-66-inch CMPs. On the upstream side of the crossing, the arroyo splits into several tributaries and is in good condition. There is roughly 1-foot of sediment in the culverts. On the downstream side, the culverts extend only a short distance from the edge of roadway and erosion is occurring that has potential to encroach into Richards Avenue.

As the arroyo meanders westward, the southern channel bank has eroded and in two locations is coming near a 10-inch sanitary sewer line that runs parallel to the arroyo. If the erosion continues, it will expose the line.

Farther westward at AP13, the existing arroyo has migrated to a location dangerously close to Governor Miles Road. The road is at risk of being undermined by erosion caused by the arroyo if corrections are not made soon. At this location, the arroyo bottom widens and the runoff splits. This is addressed in the proposed condition section below.

The arroyo meanders through the northern part of the project site and exits the site at AP4.

3.2.2 Existing utilities

Existing utilities that cross the site include overhead powerlines, a 16-inch waterline, and a 10-inch sanitary sewer line. The overhead powerlines traverse the site from the southwest corner to the north central border, then turn east, running along Governor Miles Road. The existing water line is parallel to the powerlines, sharing the same easement. The sanitary sewer line parallels the existing arroyo, generally at a distance of 40 to70 feet south of the arroyo, however in two locations, the arroyo is eroding and comes very near the sewer line. A connecting sewer line crosses the arroyo from the subdivision north of Vista De La Sierra to connect to the 10-inch line south of the arroyo.

The existing utility lines are shown on Figure 2.

3.3 Off-Site Runoff

Off-Site storm water drains onto the site from the north, east, and south at seven locations. The eastern inflow at Richards Avenue was described above.

Runoff from the north enters the site at five locations (Analysis Points – AP6, AP7, AP8, AP9, and AP11) via differing sizes of CMP culverts running under Governor Miles Road. Natural drainage-ways convey the storm water from the culverts into the project arroyo. All five culvert outlets are terminated just beyond Governor Miles Road and drain onto the steep embankment slope of the roadway. Each of these outlets as well as much of the embankment slope, are experiencing erosion, and scour has become a major concern at the culverts. If left unchecked, the erosion at these locations could threaten Governor Miles Road or may cause instability of the steep embankment on the southern side of Governor Miles Road. AP11 is an area of particular concerns. Drop inlets are located on each side of Governor Miles connecting to the culvert at AP11. On the south side of the road, storm water collects at this low point in the street and overwhelms the single grate drop inlet, overtops the curb, and flows south over the road embankment into the small drainage way. Erosion at this location is severe.

Runoff from the south flows into the project in two locations: from Los Soleras Subdivision and roughly in the center of the property at Beckner Road (AP5). Storm flows at AP5 are a combination of storm water generated south of I25, conveyed under the highway via a culvert, and storm water generated in areas south of the project labeled OFF-4, OFF-5, and partial runoff from Desert Sage subdivision. (See Figure 2). An existing storm drain culvert is located AP5 where the storm water crosses Beckner Road. Historically, a significant amount of offsite runoff entered the project. Recently the adjacent property owner constructed an earthen diversion that collects and conveys the offsite storm water to the west, along the south side of existing Beckner Road.

Los Soleras, a residential subdivision south of and adjacent to Vista De La Sierra, intercepts existing and developed flows, detains and retains those flows in a detention/retention pond and releases approximately 18cfs during the 100-year storm event.

The remaining Desert Sage subdivision drains directly into a pond in OFF1 and drains to the Richards Road culvert crossing at AP10. Drainage from Desert Sage and the runoff generated south of I25 is described and quantified in the original drainage report for the Desert Sage Subdivision and a Letter Amendment that revised the ponding conditions.

Runoff from OFF6, also south of the site drains from an on-site pond into ON-3.

3.4 Discharge points

Water is currently exiting the site in three locations (AP1 AP2, and AP4), all of which are along the western boundary. Runoff ponds along the adjacent subdivision at AP3, also on the western boundary.

AP1 - Most of the runoff draining from the site is contained in the arroyo, quantified at AP1. It is the largest and most significant discharge point of the project. At this location the arroyo is fairly straight and confined in a relatively uniform channel. Existing and proposed flow rates are shown in Table 1 below.

AP2 – Runoff draining to AP2 originates south of Beckner Road, crossing into this site via the culvert at AP5. the offsite flows combined with on-site basins ON-2 and ON-4 drain due west and terminate along the east wall of Nava Ade Subdivision. Existing topography indicated that the minor drainage way in ON-2 drains to the rear fences of homes along Autumn Leaf Lane (AP3) where runoff ponds adjacent to the property boundary. The situation was confirmed by local residents at a public hearing noting that flooding had occurred in the past as this location, and the situation was also confirmed at a site visit made by WHPacific.

AP4 - Runoff to AP4 originates from Los Soleras subdivision where is it ponded as described above, passes through Basin 27 and drains to Monte del Sol Charter School.

4 Design Criteria

Drainage Design criteria for the project complies with the *Santa Fe Cade of Ordinances Chapter 14- Land Development article 14-8.2 Terrain and Stormwater*. The *Drainage Design Manual New Mexico Department of Transportation July 2018* (Drainage Manual was used as a supplementary guideline.

The Storm Frequency requirement criteria from the *Santa Fe Code of Ordinances Chapter 14- Land Development article 14-8.2 Terrain and Stormwater (4) Stormwater Management: (b) Discharge Standards* states: *(i)* "the stormwater runoff peak flow rate discharged from a site shall not exceed pre-development conditions for any frequency storm event up to the one percent chance, twenty-four-hour storm event at each discharge point."

Based on the project criteria the design storm for the hydrologic analysis is the 100yr-24hr rainfall event for both pre- and post-developed runoff, but as noted in Santa Fe drainage requirements, proposed condition runoff must be released at pre-development rates.

The existing and proposed hydrologic analyses were performed using the United States Army Corps of Engineers (USACE) Hydrologic Modeling System (HEC-HMS) (Reference 4), using the NRCS (previously Soil Conservation Service) unit hydrograph with a Type II rainfall distribution and curve number methodology. Data acquired from the approved Desert Sage Subdivision Drainage Report was incorporated into the HEC-HMS analyses for this project.

Hydraulic analysis is based on development criteria of the City. Existing and proposed arroyo hydraulic characteristics were analyzed using USCOE HEC-RAS. Bentley Culvert Master was used for culvert analysis.

5 Hydrology

Project topography was established using topography obtained from the City of Santa Fe. Analysis points were set based on locations where water enters the site and where storm water leaves the site. Other points of interest have been assigned an AP number as well. Off-site watershed basins were delineated with sub-basins created as required as shown on Figure 2. On-site existing and proposed condition drainage basins were delineated as shown on Figures 2 (existing) and Figure 3 for proposed.

Weighted curve numbers were estimated based on the NRCS soil types overlain with land cover conditions. Curve numbers were taken from the NMDOT Hydrology Manual, Tables 3-1 for natural areas and 3-4 for the developed areas. Soil type, vegetation, land use distribution and the corresponding weighted Curve Numbers for each basin are shown in the Appendix A and are illustrated in Figure 4.

Supporting calculations for the SCS Unit Hydrograph methodology including Time of Concentration and Lag Time were performed using the NMDOT procedures and are shown in Appendix A. The results from the HEC-HMS analysis are included in the Appendix, along with the model schematic. Basin IDs with corresponding areas, and 100-year flow rates and volumes are shown on this summary table extracted from the model.

Precipitation values were obtained from the Point Precipitation Frequency Estimates from NOAA Atlas 14 (Reference 3).

Hydrology for the Desert Sage subdivision southeast of the site and for the basins draining to the culvert under I-25 were not calculated in this report. This hydrology was developed in the Desert Sage Drainage Report. The City has reviewed and approved this report. A letter supplement to the report was submitted describing some modifications to the drainage scenario. This drainage supplement was also approved by the City. Desert Sage is planned for constructed prior to construction for this project, thus proposed condition calculations presented in the Desert Sage supplement were incorporated in the existing condition hydrology model for this project.

The modeling parameters are summarized below:

- Precipitation: the 100-year, 24-hour is 3.20 inches.
- Drainage area: Existing basins are annotated with OFF-# or ON-# for historic off-site and on-site basins respectively.
- Runoff Curve Numbers: existing runoff curve numbers between 73.5 and 85 were used based on soils with fair vegetation condition used. Proposed runoff curve number of 87 was used based on proposed development.

- Time of Concentration: For this Draft report, the time of concentration from the basins were calculated using methods shown in the NMDOT Drainage Design Manual with a minimum time of concentration of 10 minutes. A table of these values is shown in the appendix.
- Lag time is calculated using 0.6*(time of concentration)

Existing and proposed flowrates at analysis points are shown in Table 1 below and HEC-HMS results for the individual basins is included in the Appendix.

Table 1: Existing & Proposed Hydrology Summary (100YR-24HR)

Analysis Points	Existing 100-year Peak Discharge (cfs)	Proposed 100-year Peak Discharge (cfs)
Analysis Point 1	460	458
Analysis Point 2	19	0
Analysis Point 3	60	26
Analysis Point 4	49	41
Analysis Point 5	40	0
Analysis Point 6	5	5
Analysis Point 7	23	23
Analysis Point 8	67	67
Analysis Point 9	13	13
Analysis Point 10	425	425
Analysis Point 11	8	8
Analysis Point 12	331	331
Analysis Point 13	463	415

6 Proposed Conditions

6.1 General

The proposed storm water master plan scenario will maintain the existing drainage patterns and release runoff at the same or less than the existing 100-year peak flow. This will be done using a series of on-site detention ponds with pipes sized to release the flows at a controlled rate back into the arroyo and one retention pond (Pond 14). The ponding plan is described in detail below.

Santa Fe requires that each lot retain a certain volume for their MS4 requirements. Vista De La Sierra will use the on-site ponds to contain the MS4 requirement, and on-site lot ponding will not be required for most of the subdivision. The exception is at Pond 12 in which the lots will need to have an on-site pond.

The project will be constructed in phases, consisting of Units I, II, and III. Each phase will add portions of the overall design and include temporary ponds on the adjacent units to detain the storm water from the undeveloped parcels.

Arroyo stabilization is needed at several locations, and this is planned using Timber Crib-walls where stabilization is needed. This stabilization consists of short walls created using timbers (such as railroad timbers) placed in a stair step manner with flat areas for vegetation between the steps. Gabions are placed

below the surface to protect the arroyo during large, high-velocity storm events. See the Timber Crib-wall detail in Appendix B.

One channel crossing is proposed at AP13, thus minimizing the impact to the existing arroyo.

All maintenance of the drainage improvements, culverts, crossing structures, channel protection, etc. is the responsibility of the association, at no cost to the City.

The arroyo analysis and proposed stabilization measures, the ponding plan, and drainage solutions for individual areas are described in the sections below.

6.2 Arroyo analysis and Improvements

As discussed in the existing conditions section, this tributary arroyo has been undeveloped in the section of this project and has meandered and avulsed prior to entering the next downstream area, causing flooding from offsite.

The existing conditions and proposed conditions were modeled in HEC-RAS v. 5.0.7. The proposed conditions adjust the channel to minimize further erosion of the sanitary sewer line, contain the flows without the avulsion to protect downstream properties, and provide other erosion protection measures. Sediment transport was not modeled. Velocities are shown on the model output attached to this report.

The single crossing and roadway added to the model enables a secondary access to the subdivision. To maintain the existing 100-year water surface elevation, 6 culverts of 5.5ft diameter are recommended for the design.

Within the subdivision, adjacent and parallel to the arroyo, ponding is used to detain and retain the flows to reduce the runoff flow rate. These are discussed in detail in the following section. They are included in the topography used for the proposed conditions HEC-RAS model but are designated as ineffective flow areas. This allows the reviewer to see how the ponds coexist with the arroyo, but do not retain arroyo flows, until the discharge point. The discrete points of discharge are listed in the appendices and are included in the flow regime of both the existing and proposed hydraulic model.

6.3 Ponding Plan

The reduction of flow rates is accomplished by the use of drainage ponds to Detain or Retain runoff to the extent that the flow rates leaving the project are equal to or less than existing flow rates. Ponds were analyzed in HEC-HMS as noted below.

15 ponds are proposed to receive, detain, retain and release storm water to downstream locations at the required lessor flow rates. The retention pond volumes provided are generally meant to provide all the EPA MS4 retention ponding required, with no on-lot retention being required, unless the buildings constructed exceed the impervious area assumed for each lot. One exception is the outfall of Pond 12 at Analysis Point AP3. The contributing area to Pond 12 requires on-lot impervious volumes be accommodated by ponding on lot. However, all MS4 runoff volumes generated by the street row is accommodated by Pond-12.

The ponds are designed to be functioning open space tracts. All the ponds will be landscaped as shown in the Landscape Plan. The ponds along the south side of the arroyo are bordered by the existing 10-inch sanitary sewer line. A paved pedestrian trail is planned to be placed within the SAS easement. The trials and the ponds combined, are to make up a linear open space and park area. Ponds 5, 6,7, 7A, 8, and 11 all receive runoff via surface flow. As such the ponds are 2-feet to 3-feet in depth, including freeboard. The ponds are graded with 4:1 or flatter slopes to accommodate pedestrian activities. The area between the ponds and the

arroyo have a 10-foot top width. In areas where the arroyo could be subject to scour or erosion forces, arroyo channel lining is proposed consisting of Timber-crib Wall Slope Protection.

Where necessary culverts connect the various ponds. At appropriate locations culverts release flow from the ponds to the arroyo in a highly controlled manner. Between Ponds 5 and 6 is a storm drain, under the improved park site.

Ponds 1A and 1B receive storm water from conventional catch basins and storm drains and therefore are deeper ponds. These ponds are also much larger in area. The ponds will retain the required MS4 volume and function as detention ponds above this volume.

Pond 13 mostly accommodated MS4 volumes.

Pond 14 is all retention pond. At this location a storm drain connection would allow for the arroyo to fill the pond. In order to provide additional flood protection for Nava Ade subdivision, this pond will not be connected to the arroyo, and will function as a retention pond only.

Ponds 2A and 2B collect storm water from AP 7, 8 and 11. The storm drains are in areas where significant erosion has occurred. The culverts may be extended down the slope and runoff released at a location where scour on the slope is not factor. The culverts will include flared end sections and rip-rap erosion protection pads where needed. The ponds essentially are berms along the north side of the arroyo. Storm water is detained and released a controlled rate, to eliminate the scour problem. The flows are released up stream of the arroyo crossing structure.

Ponds 3 and 10 collect developed flows from Unit 3B, and provide the necessary detention and retention volume, and detains offsite flows form AP9, Governor Miles Road. Ponds 3 and 10 are landscaped and intended to be usable Open Space areas adjacent to Unit 3B.

All ponds and pond structures are to be maintained by the Vista De La Sierra Homeowners Association.

Table 2 includes the pond design data.

Table 2: Pond Summary

Pond	Full Pond Depth (feet)	Pond Bottom Elevation (feet)	Pond Top Elevation (feet)	100-year Elevation (feet)	Freeboard (feet)	Peak Inflow (cfs)	Peak Outflow (cfs)	MS 4 Volume Retained (acre-ft)	Inflow Volume (acre-ft)	Peak Storage (acre-ft)
1A	2.25	6534.75	6537	6535.7	1.3	20.5	5.2	0.4423	1.4	0.5
						To Pond 1B	4.9			
1B	2.25	6532.75	6535	6534.8	0.2	16	5.6	0.3449	2.0	0.6
2A	4	6549	6553	6552.4	0.6	86.8	48.9	0.1023	17.2	0.4
						To Pond 2B	33.9			
2B	4	6545	6549	6546.8	2.2	52.6	39.1	0.2814	12.5	1.4
3	2.25	6552.75	6555	6554.5	0.5	9.4	4.6	0.1518	0.6	0.2
5	3.25	6556	6559.25	6558.9	0.35	13.3	4.1	0.1635	2.2	0.5
6	3.25	6559	6562.25	6562	0.25	21.9	3.8	0.2263	1.5	0.7
7	2.25	6562.25	6564.5	6563.1	1.4	3.3	1.8	0.1781	0.4	0.1
7A	2.25	6564.75	6567	6566.6	0.4	4.9	3.3	0.0278	0.5	0.1
8	2.25	6567.25	6569.5	6569.2	0.3	8.7	4.9	0.0632	0.6	0.2
10	2.25	6565.75	6568	6567.9	0.1	11.1	9.3	0.0857	1.6	0.3
11	2.25	6572.75	6575	6574.5	0.5	6.2	3.3	0.0693	0.4	0.1
12	6	6524	6530	6528.4	1.6	37.3	26.1	0.6223	2.7	0.7
13	2.25	6532.75	6535	6534.8	0.2	6.6	2.7	0.0871	0.5	0.1
14	2	6526	6528	6527.5	0.5	0.5	0	0.0000	0.04	0.04
							Total Volume Retained =	2.8461		
							Volume Required to meet MS4 criteria =	2.08		

6.4 Individual drainage solutions

AP 10 – The existing culverts need to be extended and proper headwalls constructed for a permanent crossing structure. The annexation agreement calls for a 30 ft. wide open space tract be dedicated adjacent to Richards Ave. A minimum proposed improvement includes extending the culverts past the 30-foot Open Space tract, then sloping down to the arroyo bed at a slope no greater than 3.33ft/ to 1ft (30%). At the outlet of the culvert, an improved headwall is proposed.

Other than the headwall slope issue, no evidence of scour or erosion is evident at the culverts. In fact, it appears that some aggradation is occurring at this location, resulting in about 1 ft of accumulation of bed material in the culverts. Exist velocities at the culvert discharge point are reasonable. A timber crib-wall is proposed as a headwall, with a buried gabion structure under the flared end section to provide additional erosion and scour protection The timber crib-wall slope protection is intended to be landscaped with native plant material, consistent with the development ordinance and the landscape plan design. The Vista De La Sierra Neighborhood Association (VDLSNA) will be responsible for long-term maintenance of the crossing structure and the landscaping. Should any damage to the crossing structure occur, either from a large storm event, or long-term erosion, shall be repaired or improved by the VDLSNA.

Encroachment on sewer line – Timber Crib walls are planned at specific location where the channel is encroaching on the sewer line.

AP 6,7,8,9, and 11 along Governor Miles Road – Culverts will be extended to allow a flatter slope off Governor Miles Road and an end section and rip rap erosion control are planned.

AP13 – This crossing of the arroyo is planned at a location currently experiencing erosion and arroyo migration into Governor Miles Road. Five 60-inch culvert pipes are proposed to convey the stormwater. The invert of the pipes is being adjusted to allow the water surface to remain the same as under the existing

condition. The alignment of the culvert pipes will also direct the arroyo slightly away from Governor Miles Road and the erosion stabilized using the timber-crib walls.

AP3 / Pond 12 - A pond is proposed at this location. The pond includes retention to meet the MS4 requirement and detention ponding. The flow rate is reduced from 8.7cfs under existing conditions to 3.5cfs under proposed conditions. **AP4, Los Soleras subdivision, AP3** – The offsite drainage from Los Soleras has been greatly reduced (18cfs) and this combined with runoff from Basin 27 are less than existing condition flow rate to this location. The drainage from Las Soleras was described in a drainage study prepared by Isaacson & Arfman, P.A. for Sierra de Las Soleras Subdivision.

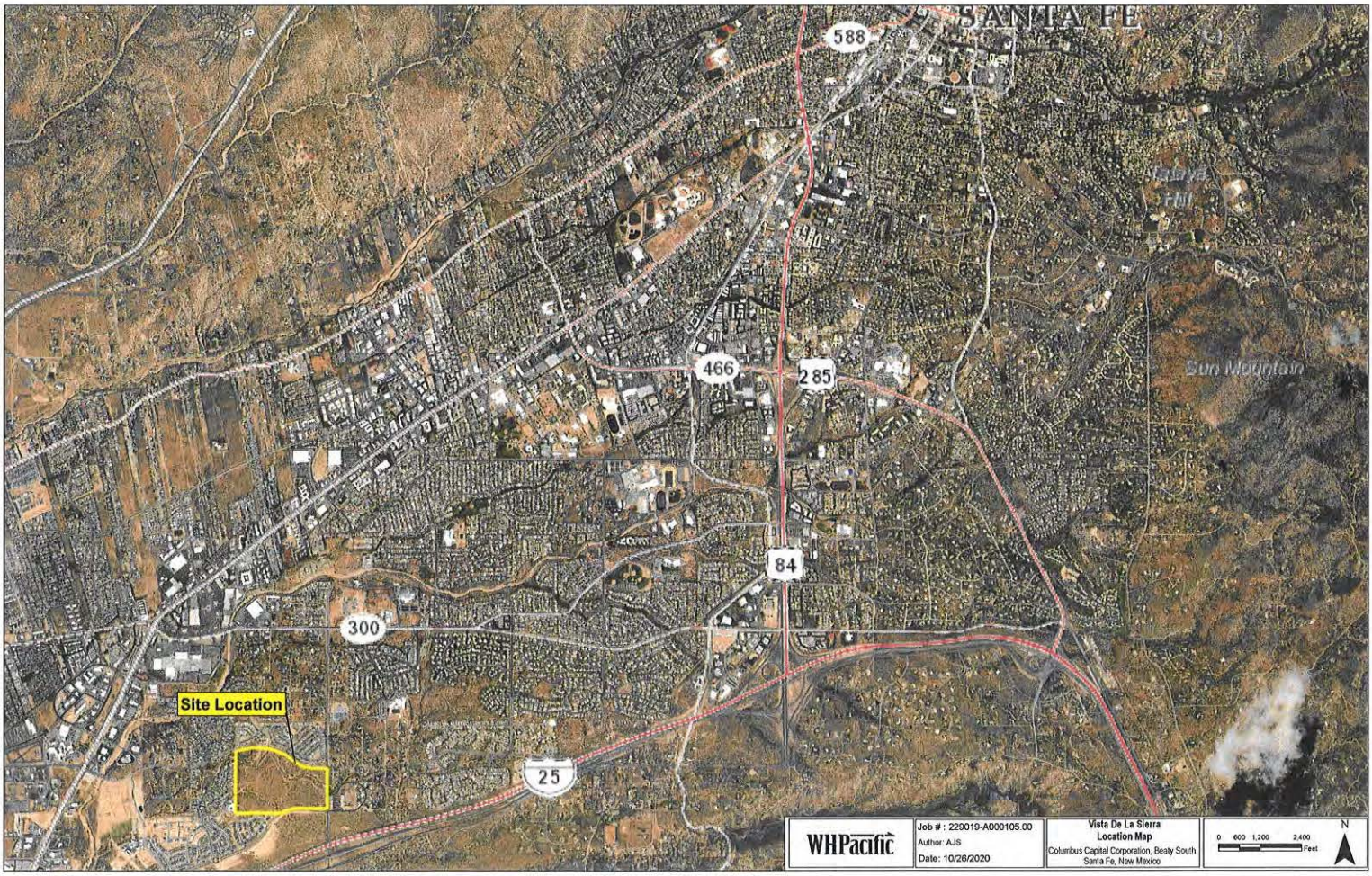
AP3+4 Downstream of existing Monte del Sol Charter School - Storm runoff draining at AP4 and AP3 combines approximately as shown on Figure 3. The planned Vista De La Sierra improvements greatly reduce the flow exiting Pond 12 and thus reduce the flow at the confluence of AP3 and AP4, improving the drainage function. By casual observation it looks as though this existing drainage way may be inadequate for the runoff reaching it under existing conditions.

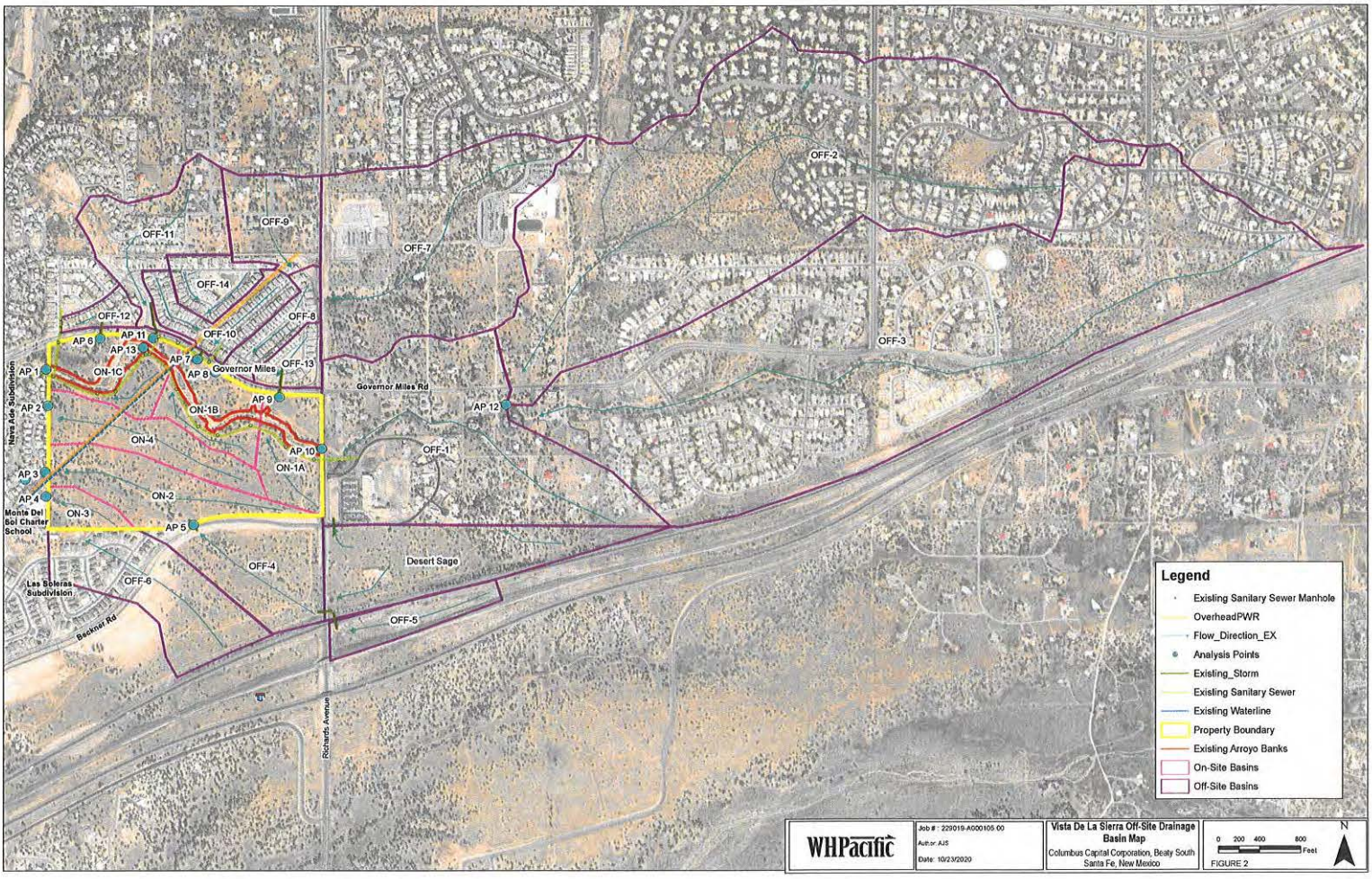
Beckner Road Storm Drain - Vista De La Sierra will be constructing portions of Beckner Road, including storm drain. The proposed storm drain is designed to accept offsite flows from the south and developed flows from adjacent Tracts 17 and 18, adjacent to and south of Beckner Road. The storm drain will be connected to an existing 60" storm drain, located approximately 1,500 ft. east of the south entrance to Vista De La Sierra (see Beckner Storm Drain Plan and Profile under exhibits). The proposed storm drain ranges from 18" diameter pipe to 60" diameter storm sewer pipe at the outfall. Hydrologic analysis from the contributing areas is based on the "Beckner Roadway Plans and Reports", by Isaacson and Arfman Engineering. The peak flow rate at the connection is approximately 139 cfs, based on the study by Isaacson and Arfman. A revised and final analysis will be provided by Isaacson and Arfman for use on the final design of the construction plans.

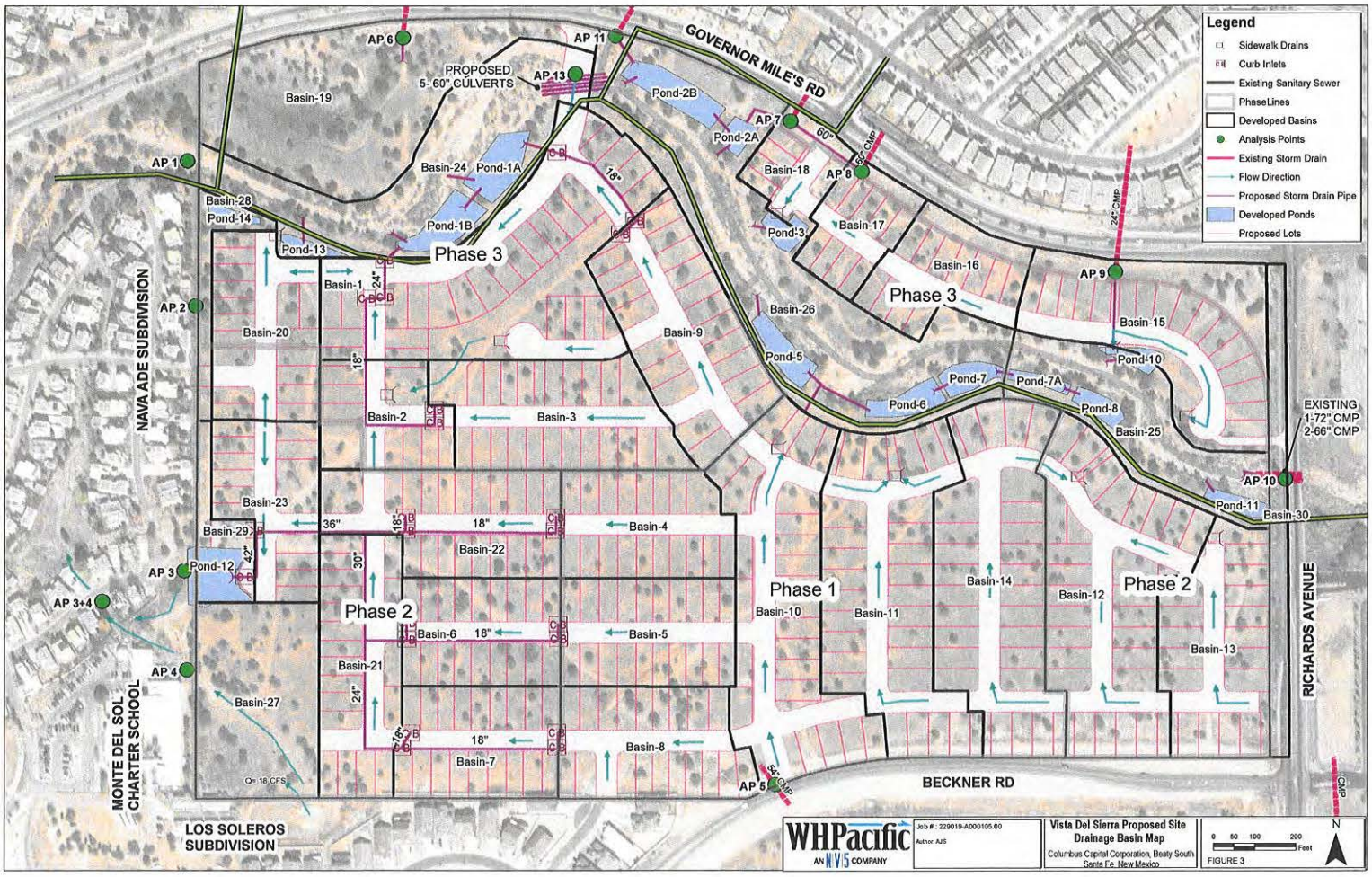
Conclusion - The analysis and recommendations herein provide a comprehensive storm water management plan for the proposed Vista De La Sierra Subdivision. The storm water management plan provided is consistent with the requirements stated in the City of Santa Fe Drainage Ordinance and discussions with staff and in the New Mexico State Highway and Transportation Department's Drainage Manual. Based on the proposed storm water management plan, the downstream properties of the Vista De La Sierra Subdivision will see no adverse impacts and will receive a reduction of the peak discharge rate for 100-year, 24-hour storm event from existing to developed conditions.

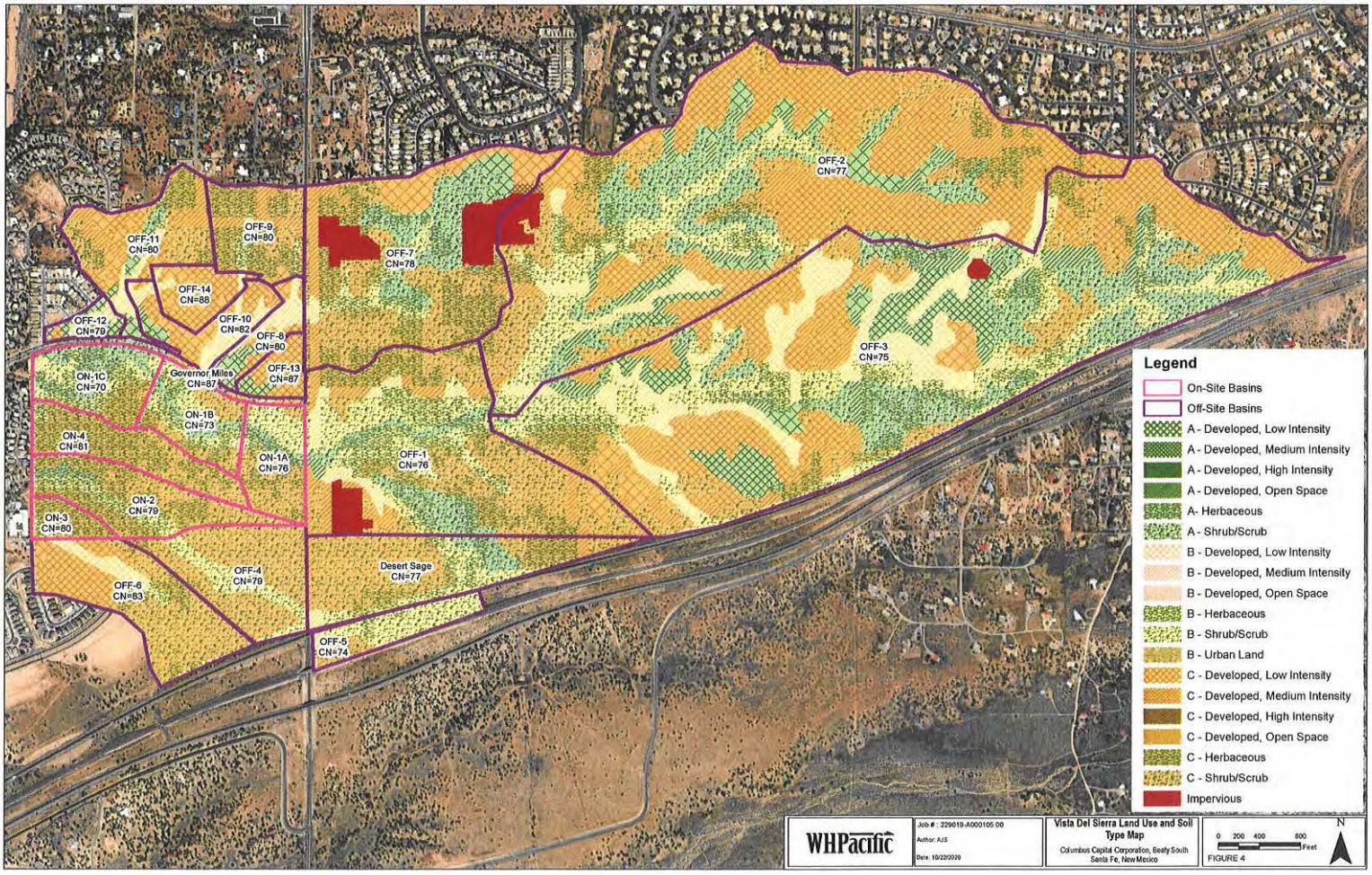
7 References

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2. *Precipitation Frequency Data Server (PFDS)*, NOAA Atlas 14 Hydrometeorological Design Studies Center – NOAA's National Weather Service.
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11. Desert Sage Subdivision Letter Amendment No. 1 to Drainage Report, prepared for Homewise LLC, by WHPacific, August 19, 2019.


SANTA FE
588
466
285
84
300
25
Site Location
Sun Mountain
WHPacific
Job # : 229019-A000105.00
Author: AJS
Date: 10/26/2020
Vista De La Sierra
Location Map
Columbus Capital Corporation, Beaty South
Santa Fe, New Mexico
0 600 1,200 2,400
Feet
N


OFF-2
OFF-3
OFF-7
OFF-8
OFF-9
OFF-10
OFF-11
OFF-12
OFF-13
OFF-14
OFF-1
OFF-4
OFF-5
OFF-6
AP 1
AP 2
AP 3
AP 4
AP 5
AP 6
AP 7
AP 8
AP 9
AP 10
AP 11
AP 12
AP 13
ON-1A
ON-1B
ON-1C
ON-2
ON-3
ON-4
Governor Miles
Governor Miles Rd
Desert Sage
Becknor Rd
Richards Avenue
Nava Ade Subdivision
Monte Del Sol Charter School
Les Soleras Subdivision
Legend
Existing Sanitary Sewer Manhole
OverheadPWR
Flow_Direction_EX
Analysis Points
Existing_Storm
Existing Sanitary Sewer
Existing Waterline
Property Boundary
Existing Arroyo Banks
On-Site Basins
Off-Site Basins
WHPacific
Job # : 229019-A000105.00
Author: AJS
Date: 10/23/2020
Vista De La Sierra Off-Site Drainage Basin Map
Columbus Capital Corporation, Beaty South Santa Fe, New Mexico
0 200 400 800
Feet
N
FIGURE 2


Legend
Sidewalk Drains
Curb Inlets
Existing Sanitary Sewer
PhaseLines
Developed Basins
Analysis Points
Existing Storm Drain
Flow Direction
Proposed Storm Drain Pipe
Developed Ponds
Proposed Lots
AP 1
AP 2
AP 3
AP 3+4
AP 4
AP 5
AP 6
AP 7
AP 8
AP 9
AP 10
AP 11
AP 13
PROPOSED 5- 60" CULVERTS
GOVERNOR MILE'S RD
BECKNER RD
NAVA ADE SUBDIVISION
MONTE DEL SOL CHARTER SCHOOL
LOS SOLEROS SUBDIVISION
RICHARDS AVENUE
EXISTING 1-72" CMP 2-66" CMP
Phase 1
Phase 2
Phase 3
Basin-1
Basin-2
Basin-3
Basin-4
Basin-5
Basin-6
Basin-7
Basin-8
Basin-9
Basin-10
Basin-11
Basin-12
Basin-13
Basin-14
Basin-15
Basin-16
Basin-17
Basin-18
Basin-19
Basin-20
Basin-21
Basin-22
Basin-23
Basin-24
Basin-25
Basin-26
Basin-27
Basin-28
Basin-29
Basin-30
Pond-1A
Pond-1B
Pond-2A
Pond-2B
Pond-3
Pond-5
Pond-6
Pond-7
Pond-7A
Pond-8
Pond-10
Pond-11
Pond-12
Pond-13
Pond-14
Q= 16 CFS
WHPacific
AN NV5 COMPANY
Job # : 229019-A000105.00
Author: AJS
Vista Del Sierra Proposed Site Drainage Basin Map
Columbus Capital Corporation, Beaty South Santa Fe, New Mexico
0 50 100 200 Feet
N
FIGURE 3


OFF-2
CN=77
OFF-9
CN=80
OFF-11
CN=80
OFF-7
CN=78
OFF-14
CN=88
OFF-12
CN=76
OFF-10
CN=82
OFF-8
CN=80
OFF-13
CN=87
OFF-3
CN=75
ON-1C
CN=70
Governor Miles
CN=87
ON-1B
CN=73
ON-4
CN=81
ON-1A
CN=76
OFF-1
CN=76
ON-2
CN=79
ON-3
CN=80
OFF-4
CN=79
Desert Sage
CN=77
OFF-6
CN=83
OFF-5
CN=74
Legend
On-Site Basins
Off-Site Basins
A - Developed, Low Intensity
A - Developed, Medium Intensity
A - Developed, High Intensity
A - Developed, Open Space
A- Herbaceous
A - Shrub/Scrub
B - Developed, Low Intensity
B - Developed, Medium Intensity
B - Developed, Open Space
B - Herbaceous
B - Shrub/Scrub
B - Urban Land
C - Developed, Low Intensity
C - Developed, Medium Intensity
C - Developed, High Intensity
C - Developed, Open Space
C - Herbaceous
C - Shrub/Scrub
Impervious
WHPacific
Job # : 229019-A000105.00
Author: AJS
Date: 10/22/2020
Vista Del Sierra Land Use and Soil Type Map
Columbus Capital Corporation, Beaty South
Santa Fe, New Mexico
0 200 400 800
Feet
N
FIGURE 4

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Santa Fe County Area, New Mexico

On-Site Basins



August 20, 2020

PCL XL error
    Error: IllegalOperatorSequence
    Operator: 0xc0
    Position: 403312

PRELIMINARY STORM WATER MASTER PLAN

VISTA DE LA SIERRA SUBDIVISION MASTER PLAN

Santa Fe, New Mexico



Prepared for

Columbus Capital Corporation

October 2020

Prepared by

WHPacific
AN NV5 COMPANY

6501 Americas Parkway NE, Suite 400
Albuquerque, NM 87110
T 505.247.0294 • F 505.242.4845
www.whpacific.com

1 Executive summary

The proposed Vista De La Sierra subdivision is located on 97 acres, southwest of the intersection of Richards Avenue and Governor Miles Road. A minor arroyo crosses the property, bisecting the property into north and south usable parcels. The arroyo is a major component of the Storm Water Master Plan.

Storm water enters the project at several location, 5 points from Governor Miles road to the north, 1 location form Richards Ave. to the east (arroyo crossing structure), and 2 locations from the south (Beckner Road and Los Solera residential subdivision. Storm water exists the project from 3 locations, West boundary (Arroyo), West Boundary at Nava Ade Subdivision, west boundary at City Open space, and west boundary at School site. A primary design criterion is to reduce developed flow to be equal to or less than existing conditions. The proposed plan does that. In addition, the area near the school site, the storm water release rate is significantly less than existing.

The Storm Water plan proposes to create open space and park areas along the arroyo to take advantage of the unique terrain that is the arroyo. Proposed drainage ponds will be located adjacent to the arroyo, between the arroyo and the sanitary sewer line. The ponds are designed to be shallow, to allow the pond areas to also function as usable open space. The ponds combined with the added improved park areas, along with the bike and pedestrian trail located in the sanitary sewer easement, and the arroyo all come together as a liner park. All these areas are integrated and landscaped such that one may not initially realize they have functions for storm water management.

An important aspect of the project is that the Homeowners Association (HOA) will be fully responsible for maintaining all ponds, crossing structures, arroyo improvements and landscaping. Having an HOA allows for more options in the management of the storm water facilities.

Many locations in the project are experiencing erosion and slope stability issues. The Annexation Agreement specifically calls out the requirement to address these issues. In particular, the construction of past subdivisions and construction of Governor Miles Road to the north have created several locations that currently need corrections. Most of the problems are due to culvert pipes extending beyond the roadway and releasing developed and concentrated flows onto the steep manmade slopes. This has resulted in scouring and erosion at all locations. All these locations are addressed by the Storm Master Water Plan.

The arroyo too has slope stability and erosion issues that are addressed by the Storm Water Master Plan. In one location, the arroyo is meandering north into Governor Miles Road, causing significant erosion, scour, and undermining, and is threatening Governor Miles Road. An existing sanitary sewer main line is located parallel to and south of the arroyo. The arroyo is meandering and curving near the 10-inch sanitary sewer line is several locations. The sewer line will be exposed if the erosion is not addressed. In those areas the arroyo is being slightly realigned and being reinforced to permanently protect the sanitary sewer line.

Richards Ave. is also experiencing potential damage due to erosion around the arroyo crossing structure. The Master Plan proposes extending the existing culverts and including a more permanent outlet structure.

Major storm events in the recent past have damaged the Nava Ade Subdivision. In some areas the arroyo exceeded the existing banks and flooded adjacent properties. In other areas, existing basins to the east, outside of the arroyo basins, carried storm water to the Nava Ade Subdivision, also causing flooding and damage. The Master Storm Water Plan address these areas and corrects these deficiencies.

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2 Introduction

This Storm Water Management Plan has been prepared for the Columbus Capital Corporation in support of the proposed Vista De La Sierra Subdivision project located in Santa Fe, New Mexico. The proposed Vista De La Sierra Subdivision consists of approximately 97 acres; 393 lots are planned to be built in 3 phases. An existing arroyo crosses the property, draining from east to west. The arroyo is to remain in a naturalistic condition, as required by the City of Santa Fe development regulations. Several areas of the arroyo or inflows to the arroyo are experiencing erosion. An Annexation Agreement between this subdivision and the City of Santa Fe requires erosion and slope stability concerns be addressed by the development. Erosion and flood control protection are planned within the arroyo and in the surrounding area following the naturalistic intent of the City's regulations, while providing safe drainage solutions. A Vicinity Map is shown on Figure 1. Figure 2 shows the site and the surrounding contributing watershed.

The purpose of this report is to analyze the existing drainage conditions and the conditions proposed for development. The adequacy of the existing structures is evaluated and site solutions for rainfall runoff are developed for the proposed subdivision that meets the Santa Fe drainage criteria for both MS4 ponding and runoff release criteria.

The site is situated between Governor Miles Road on the North, Desert Sage subdivision and Beckner Rd on the South, Richards Avenue on the east, and subdivisions to the west. An existing Site Map with a closer view of the property is shown on Figure 3. Two site visits were made by WHPacific to investigate existing site conditions.

3 Existing Conditions

3.1 General

Vista De La Sierra is located in the southern half of district 4 within Santa Fe City limits. The site is currently undeveloped, and slopes from the southeast to the northwest, ranging from 1.5 percent to 3 percent. The elevations on the eastern edge of the site range from 6574 to 6598 and from 6525 to 6550 on the western edge. Vegetation on site consists of native grasses, weeds, shrubs, and small trees. Many unofficial dirt roads and tire tracks crisscross the site. The surrounding area consist of undeveloped land, residential developments, some commercial development, and schools.

Figure 2 shows the site and contributing watersheds. Figure 3 provides a closer view of the only the project area.

Soils within the site are loam and loamy sands. Based on information obtained from USDA Natural Resources Conservation Service (NRCS), soil types throughout the site and off-site watershed consist of Alire loam, Buckhorse-Altazano complex, Predawn loam, and Alire-Urban land complex. These soil types are primarily within hydrologic soil group B and C, allowing for moderate infiltration and medium surface runoff potential, although some pockets of "hydrologic soil group A" soil exist in the watershed. A copy of the on-site and off-site reports are included in Appendix A. Figure 4 is a Land Use and Soil Type Map.

3.2 On-Site Conditions

3.2.1 Arroyo

An unimproved arroyo meanders through the northern portion of the site and is an unnamed tributary that ultimately drains to the Arroyo de Los Chamisos (beyond the project boundary). Minor tributaries located throughout the southern portions of the site drain northward into the main arroyo.

The arroyo enters the project from the east crossing under Richards Avenue at Analysis Point 10 (AP10) through three corrugated metal pipe (CMP) culverts (1-72-inch and 2-66-inch CMPs. On the upstream side of the crossing, the arroyo splits into several tributaries and is in good condition. There is roughly 1-foot of sediment in the culverts. On the downstream side, the culverts extend only a short distance from the edge of roadway and erosion is occurring that has potential to encroach into Richards Avenue.

As the arroyo meanders westward, the southern channel bank has eroded and in two locations is coming near a 10-inch sanitary sewer line that runs parallel to the arroyo. If the erosion continues, it will expose the line.

Farther westward at AP13, the existing arroyo has migrated to a location dangerously close to Governor Miles Road. The road is at risk of being undermined by erosion caused by the arroyo if corrections are not made soon. At this location, the arroyo bottom widens and the runoff splits. This is addressed in the proposed condition section below.

The arroyo meanders through the northern part of the project site and exits the site at AP4.

3.2.2 Existing utilities

Existing utilities that cross the site include overhead powerlines, a 16-inch waterline, and a 10-inch sanitary sewer line. The overhead powerlines traverse the site from the southwest corner to the north central border, then turn east, running along Governor Miles Road. The existing water line is parallel to the powerlines, sharing the same easement. The sanitary sewer line parallels the existing arroyo, generally at a distance of 40 to70 feet south of the arroyo, however in two locations, the arroyo is eroding and comes very near the sewer line. A connecting sewer line crosses the arroyo from the subdivision north of Vista De La Sierra to connect to the 10-inch line south of the arroyo.

The existing utility lines are shown on Figure 2.

3.3 Off-Site Runoff

Off-Site storm water drains onto the site from the north, east, and south at seven locations. The eastern inflow at Richards Avenue was described above.

Runoff from the north enters the site at five locations (Analysis Points – AP6, AP7, AP8, AP9, and AP11) via differing sizes of CMP culverts running under Governor Miles Road. Natural drainage-ways convey the storm water from the culverts into the project arroyo. All five culvert outlets are terminated just beyond Governor Miles Road and drain onto the steep embankment slope of the roadway. Each of these outlets as well as much of the embankment slope, are experiencing erosion, and scour has become a major concern at the culverts. If left unchecked, the erosion at these locations could threaten Governor Miles Road or may cause instability of the steep embankment on the southern side of Governor Miles Road. AP11 is an area of particular concerns. Drop inlets are located on each side of Governor Miles connecting to the culvert at AP11. On the south side of the road, storm water collects at this low point in the street and overwhelms the single grate drop inlet, overtops the curb, and flows south over the road embankment into the small drainage way. Erosion at this location is severe.

Runoff from the south flows into the project in two locations: from Los Soleras Subdivision and roughly in the center of the property at Beckner Road (AP5). Storm flows at AP5 are a combination of storm water generated south of I25, conveyed under the highway via a culvert, and storm water generated in areas south of the project labeled OFF-4, OFF-5, and partial runoff from Desert Sage subdivision. (See Figure 2). An existing storm drain culvert is located AP5 where the storm water crosses Beckner Road. Historically, a significant amount of offsite runoff entered the project. Recently the adjacent property owner constructed an earthen diversion that collects and conveys the offsite storm water to the west, along the south side of existing Beckner Road.

Los Soleras, a residential subdivision south of and adjacent to Vista De La Sierra, intercepts existing and developed flows, detains and retains those flows in a detention/retention pond and releases approximately 18cfs during the 100-year storm event.

The remaining Desert Sage subdivision drains directly into a pond in OFF1 and drains to the Richards Road culvert crossing at AP10. Drainage from Desert Sage and the runoff generated south of I25 is described and quantified in the original drainage report for the Desert Sage Subdivision and a Letter Amendment that revised the ponding conditions.

Runoff from OFF6, also south of the site drains from an on-site pond into ON-3.

3.4 Discharge points

Water is currently exiting the site in three locations (AP1 AP2, and AP4), all of which are along the western boundary. Runoff ponds along the adjacent subdivision at AP3, also on the western boundary.

AP1 - Most of the runoff draining from the site is contained in the arroyo, quantified at AP1. It is the largest and most significant discharge point of the project. At this location the arroyo is fairly straight and confined in a relatively uniform channel. Existing and proposed flow rates are shown in Table 1 below.

AP2 – Runoff draining to AP2 originates south of Beckner Road, crossing into this site via the culvert at AP5. the offsite flows combined with on-site basins ON-2 and ON-4 drain due west and terminate along the east wall of Nava Ade Subdivision. Existing topography indicated that the minor drainage way in ON-2 drains to the rear fences of homes along Autumn Leaf Lane (AP3) where runoff ponds adjacent to the property boundary. The situation was confirmed by local residents at a public hearing noting that flooding had occurred in the past as this location, and the situation was also confirmed at a site visit made by WHPacific.

AP4 - Runoff to AP4 originates from Los Soleras subdivision where is it ponded as described above, passes through Basin 27 and drains to Monte del Sol Charter School.

4 Design Criteria

Drainage Design criteria for the project complies with the *Santa Fe Code of Ordinances Chapter 14- Land Development article 14-8.2 Terrain and Stormwater*. The *Drainage Design Manual New Mexico Department of Transportation July 2018* (Drainage Manual was used as a supplementary guideline.

The Storm Frequency requirement criteria from the *Santa Fe Code of Ordinances Chapter 14- Land Development article 14-8.2 Terrain and Stormwater (4) Stormwater Management: (b) Discharge Standards* states: *(i)* "the stormwater runoff peak flow rate discharged from a site shall not exceed pre-development conditions for any frequency storm event up to the one percent chance, twenty-four-hour storm event at each discharge point."

Based on the project criteria the design storm for the hydrologic analysis is the 100yr-24hr rainfall event for both pre- and post-developed runoff, but as noted in Santa Fe drainage requirements, proposed condition runoff must be released at pre-development rates.

The existing and proposed hydrologic analyses were performed using the United States Army Corps of Engineers (USACE) Hydrologic Modeling System (HEC-HMS) (Reference 4), using the NRCS (previously Soil Conservation Service) unit hydrograph with a Type II rainfall distribution and curve number methodology. Data acquired from the approved Desert Sage Subdivision Drainage Report was incorporated into the HEC-HMS analyses for this project.

Hydraulic analysis is based on development criteria of the City. Existing and proposed arroyo hydraulic characteristics were analyzed using USCOE HEC-RAS. Bentley Culvert Master was used for culvert analysis.

5 Hydrology

Project topography was established using topography obtained from the City of Santa Fe. Analysis points were set based on locations where water enters the site and where storm water leaves the site. Other points of interest have been assigned an AP number as well. Off-site watershed basins were delineated with sub-basins created as required as shown on Figure 2. On-site existing and proposed condition drainage basins were delineated as shown on Figures 2 (existing) and Figure 3 for proposed.

Weighted curve numbers were estimated based on the NRCS soil types overlain with land cover conditions. Curve numbers were taken from the NMDOT Hydrology Manual, Tables 3-1 for natural areas and 3-4 for the developed areas. Soil type, vegetation, land use distribution and the corresponding weighted Curve Numbers for each basin are shown in the Appendix A and are illustrated in Figure 4.

Supporting calculations for the SCS Unit Hydrograph methodology including Time of Concentration and Lag Time were performed using the NMDOT procedures and are shown in Appendix A. The results from the HEC-HMS analysis are included in the Appendix, along with the model schematic. Basin IDs with corresponding areas, and 100-year flow rates and volumes are shown on this summary table extracted from the model.

Precipitation values were obtained from the Point Precipitation Frequency Estimates from NOAA Atlas 14 (Reference 3).

Hydrology for the Desert Sage subdivision southeast of the site and for the basins draining to the culvert under I-25 were not calculated in this report. This hydrology was developed in the Desert Sage Drainage Report. The City has reviewed and approved this report. A letter supplement to the report was submitted describing some modifications to the drainage scenario. This drainage supplement was also approved by the City. Desert Sage is planned for constructed prior to construction for this project, thus proposed condition calculations presented in the Desert Sage supplement were incorporated in the existing condition hydrology model for this project.

The modeling parameters are summarized below:

- Precipitation: the 100-year, 24-hour is 3.20 inches.
- Drainage area: Existing basins are annotated with OFF-# or ON-# for historic off-site and on-site basins respectively.
- Runoff Curve Numbers: existing runoff curve numbers between 73.5 and 85 were used based on soils with fair vegetation condition used. Proposed runoff curve number of 87 was used based on proposed development.

- Time of Concentration: For this Draft report, the time of concentration from the basins were calculated using methods shown in the NMDOT Drainage Design Manual with a minimum time of concentration of 10 minutes. A table of these values is shown in the appendix.
- Lag time is calculated using 0.6*(time of concentration)

Existing and proposed flowrates at analysis points are shown in Table 1 below and HEC-HMS results for the individual basins is included in the Appendix.

Table 1: Existing & Proposed Hydrology Summary (100YR-24HR)

Analysis Points	Existing 100-year Peak Discharge (cfs)	Proposed 100-year Peak Discharge (cfs)
Analysis Point 1	460	458
Analysis Point 2	19	0
Analysis Point 3	60	26
Analysis Point 4	49	41
Analysis Point 5	40	0
Analysis Point 6	5	5
Analysis Point 7	23	23
Analysis Point 8	67	67
Analysis Point 9	13	13
Analysis Point 10	425	425
Analysis Point 11	8	8
Analysis Point 12	331	331
Analysis Point 13	463	415

6 Proposed Conditions

6.1 General

The proposed storm water master plan scenario will maintain the existing drainage patterns and release runoff at the same or less than the existing 100-year peak flow. This will be done using a series of on-site detention ponds with pipes sized to release the flows at a controlled rate back into the arroyo and one retention pond (Pond 14). The ponding plan is described in detail below.

Santa Fe requires that each lot retain a certain volume for their MS4 requirements. Vista De La Sierra will use the on-site ponds to contain the MS4 requirement, and on-site lot ponding will not be required for most of the subdivision. The exception is at Pond 12 in which the lots will need to have an on-site pond.

The project will be constructed in phases, consisting of Units I, II, and III. Each phase will add portions of the overall design and include temporary ponds on the adjacent units to detain the storm water from the undeveloped parcels.

Arroyo stabilization is needed at several locations, and this is planned using Timber Crib-walls where stabilization is needed. This stabilization consists of short walls created using timbers (such as railroad timbers) placed in a stair step manner with flat areas for vegetation between the steps. Gabions are placed

below the surface to protect the arroyo during large, high-velocity storm events. See the Timber Crib-wall detail in Appendix B.

One channel crossing is proposed at AP13, thus minimizing the impact to the existing arroyo.

All maintenance of the drainage improvements, culverts, crossing structures, channel protection, etc. is the responsibility of the association, at no cost to the City.

The arroyo analysis and proposed stabilization measures, the ponding plan, and drainage solutions for individual areas are described in the sections below.

6.2 Arroyo analysis and Improvements

As discussed in the existing conditions section, this tributary arroyo has been undeveloped in the section of this project and has meandered and avulsed prior to entering the next downstream area, causing flooding from offsite.

The existing conditions and proposed conditions were modeled in HEC-RAS v. 5.0.7. The proposed conditions adjust the channel to minimize further erosion of the sanitary sewer line, contain the flows without the avulsion to protect downstream properties, and provide other erosion protection measures. Sediment transport was not modeled. Velocities are shown on the model output attached to this report.

The single crossing and roadway added to the model enables a secondary access to the subdivision. To maintain the existing 100-year water surface elevation, 6 culverts of 5.5ft diameter are recommended for the design.

Within the subdivision, adjacent and parallel to the arroyo, ponding is used to detain and retain the flows to reduce the runoff flow rate. These are discussed in detail in the following section. They are included in the topography used for the proposed conditions HEC-RAS model but are designated as ineffective flow areas. This allows the reviewer to see how the ponds coexist with the arroyo, but do not retain arroyo flows, until the discharge point. The discrete points of discharge are listed in the appendices and are included in the flow regime of both the existing and proposed hydraulic model.

6.3 Ponding Plan

The reduction of flow rates is accomplished by the use of drainage ponds to Detain or Retain runoff to the extent that the flow rates leaving the project are equal to or less than existing flow rates. Ponds were analyzed in HEC-HMS as noted below.

15 ponds are proposed to receive, detain, retain and release storm water to downstream locations at the required lessor flow rates. The retention pond volumes provided are generally meant to provide all the EPA MS4 retention ponding required, with no on-lot retention being required, unless the buildings constructed exceed the impervious area assumed for each lot. One exception is the outfall of Pond 12 at Analysis Point AP3. The contributing area to Pond 12 requires on-lot impervious volumes be accommodated by ponding on lot. However, all MS4 runoff volumes generated by the street row is accommodated by Pond-12.

The ponds are designed to be functioning open space tracts. All the ponds will be landscaped as shown in the Landscape Plan. The ponds along the south side of the arroyo are bordered by the existing 10-inch sanitary sewer line. A paved pedestrian trail is planned to be placed within the SAS easement. The trials and the ponds combined, are to make up a linear open space and park area. Ponds 5, 6,7, 7A, 8, and 11 all receive runoff via surface flow. As such the ponds are 2-feet to 3-feet in depth, including freeboard. The ponds are graded with 4:1 or flatter slopes to accommodate pedestrian activities. The area between the ponds and the

arroyo have a 10-foot top width. In areas where the arroyo could be subject to scour or erosion forces, arroyo channel lining is proposed consisting of Timber-crib Wall Slope Protection.

Where necessary culverts connect the various ponds. At appropriate locations culverts release flow from the ponds to the arroyo in a highly controlled manner. Between Ponds 5 and 6 is a storm drain, under the improved park site.

Ponds 1A and 1B receive storm water from conventional catch basins and storm drains and therefore are deeper ponds. These ponds are also much larger in area. The ponds will retain the required MS4 volume and function as detention ponds above this volume.

Pond 13 mostly accommodated MS4 volumes.

Pond 14 is all retention pond. At this location a storm drain connection would allow for the arroyo to fill the pond. In order to provide additional flood protection for Nava Ade subdivision, this pond will not be connected to the arroyo, and will function as a retention pond only.

Ponds 2A and 2B collect storm water from AP 7, 8 and 11. The storm drains are in areas where significant erosion has occurred. The culverts may be extended down the slope and runoff released at a location where scour on the slope is not factor. The culverts will include flared end sections and rip-rap erosion protection pads where needed. The ponds essentially are berms along the north side of the arroyo. Storm water is detained and released a controlled rate, to eliminate the scour problem. The flows are released up stream of the arroyo crossing structure.

Ponds 3 and 10 collect developed flows from Unit 3B, and provide the necessary detention and retention volume, and detains offsite flows form AP9, Governor Miles Road. Ponds 3 and 10 are landscaped and intended to be usable Open Space areas adjacent to Unit 3B.

All ponds and pond structures are to be maintained by the Vista De La Sierra Homeowners Association.

Table 2 includes the pond design data.

Table 2: Pond Summary

Pond	Full Pond Depth (feet)	Pond Bottom Elevation (feet)	Pond Top Elevation (feet)	100-year Elevation (feet)	Freeboard (feet)	Peak Inflow (cfs)	Peak Outflow (cfs)	MS 4 Volume Retained (acre-ft)	Inflow Volume (acre-ft)	Peak Storage (acre-ft)
1A	2.25	6534.75	6537	6535.7	1.3	20.5	5.2	0.4423	1.4	0.5
						To Pond 1B	4.9			
1B	2.25	6532.75	6535	6534.8	0.2	16	5.6	0.3449	2.0	0.6
2A	4	6549	6553	6552.4	0.6	86.8	48.9	0.1023	17.2	0.4
						To Pond 2B	33.9			
2B	4	6545	6549	6546.8	2.2	52.6	39.1	0.2814	12.5	1.4
3	2.25	6552.75	6555	6554.5	0.5	9.4	4.6	0.1518	0.6	0.2
5	3.25	6556	6559.25	6558.9	0.35	13.3	4.1	0.1635	2.2	0.5
6	3.25	6559	6562.25	6562	0.25	21.9	3.8	0.2263	1.5	0.7
7	2.25	6562.25	6564.5	6563.1	1.4	3.3	1.8	0.1781	0.4	0.1
7A	2.25	6564.75	6567	6566.6	0.4	4.9	3.3	0.0278	0.5	0.1
8	2.25	6567.25	6569.5	6569.2	0.3	8.7	4.9	0.0632	0.6	0.2
10	2.25	6565.75	6568	6567.9	0.1	11.1	9.3	0.0857	1.6	0.3
11	2.25	6572.75	6575	6574.5	0.5	6.2	3.3	0.0693	0.4	0.1
12	6	6524	6530	6528.4	1.6	37.3	26.1	0.6223	2.7	0.7
13	2.25	6532.75	6535	6534.8	0.2	6.6	2.7	0.0871	0.5	0.1
14	2	6526	6528	6527.5	0.5	0.5	0	0.0000	0.04	0.04
							Total Volume Retained =	2.8461		
							Volume Required to meet MS4 criteria =	2.08		

6.4 Individual drainage solutions

AP 10 – The existing culverts need to be extended and proper headwalls constructed for a permanent crossing structure. The annexation agreement calls for a 30 ft. wide open space tract be dedicated adjacent to Richards Ave. A minimum proposed improvement includes extending the culverts past the 30-foot Open Space tract, then sloping down to the arroyo bed at a slope no greater than 3.33ft/ to 1ft (30%). At the outlet of the culvert, an improved headwall is proposed.

Other than the headwall slope issue, no evidence of scour or erosion is evident at the culverts. In fact, it appears that some aggradation is occurring at this location, resulting in about 1 ft of accumulation of bed material in the culverts. Exist velocities at the culvert discharge point are reasonable. A timber crib-wall is proposed as a headwall, with a buried gabion structure under the flared end section to provide additional erosion and scour protection The timber crib-wall slope protection is intended to be landscaped with native plant material, consistent with the development ordinance and the landscape plan design. The Vista De La Sierra Neighborhood Association (VDLSNA) will be responsible for long-term maintenance of the crossing structure and the landscaping. Should any damage to the crossing structure occur, either from a large storm event, or long-term erosion, shall be repaired or improved by the VDLSNA.

Encroachment on sewer line – Timber Crib walls are planned at specific location where the channel is encroaching on the sewer line.

AP 6,7,8,9, and 11 along Governor Miles Road – Culverts will be extended to allow a flatter slope off Governor Miles Road and an end section and rip rap erosion control are planned.

AP13 – This crossing of the arroyo is planned at a location currently experiencing erosion and arroyo migration into Governor Miles Road. Five 60-inch culvert pipes are proposed to convey the stormwater. The invert of the pipes is being adjusted to allow the water surface to remain the same as under the existing

condition. The alignment of the culvert pipes will also direct the arroyo slightly away from Governor Miles Road and the erosion stabilized using the timber-crib walls.

AP3 / Pond 12 - A pond is proposed at this location. The pond includes retention to meet the MS4 requirement and detention ponding. The flow rate is reduced from 8.7cfs under existing conditions to 3.5cfs under proposed conditions. **AP4, Los Soleras subdivision, AP3** – The offsite drainage from Los Soleras has been greatly reduced (18cfs) and this combined with runoff from Basin 27 are less than existing condition flow rate to this location. The drainage from Las Soleras was described in a drainage study prepared by Isaacson & Arfman, P.A. for Sierra de Las Soleras Subdivision.

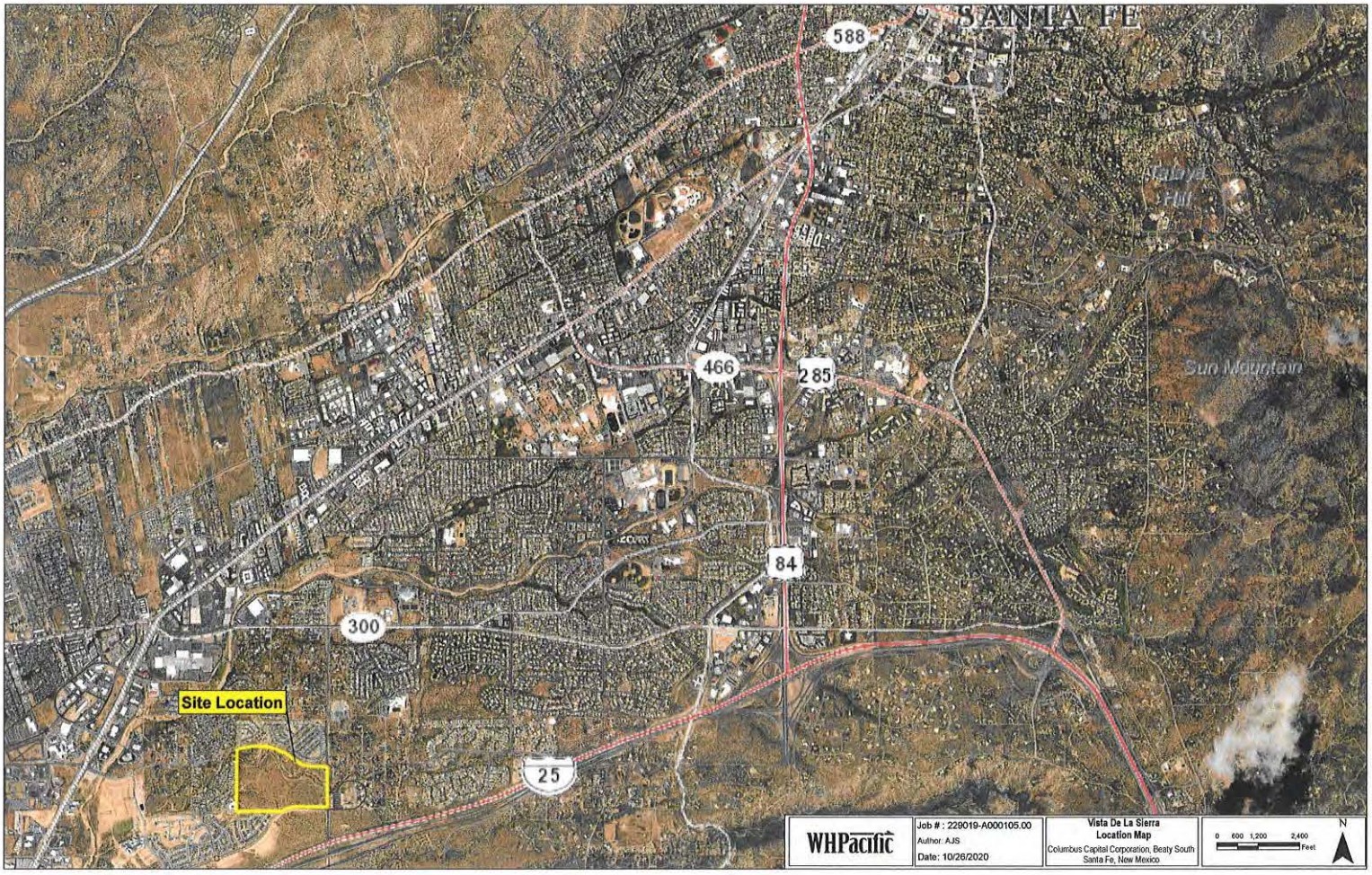
AP3+4 Downstream of existing Monte del Sol Charter School - Storm runoff draining at AP4 and AP3 combines approximately as shown on Figure 3. The planned Vista De La Sierra improvements greatly reduce the flow exiting Pond 12 and thus reduce the flow at the confluence of AP3 and AP4, improving the drainage function. By casual observation it looks as though this existing drainage way may be inadequate for the runoff reaching it under existing conditions.

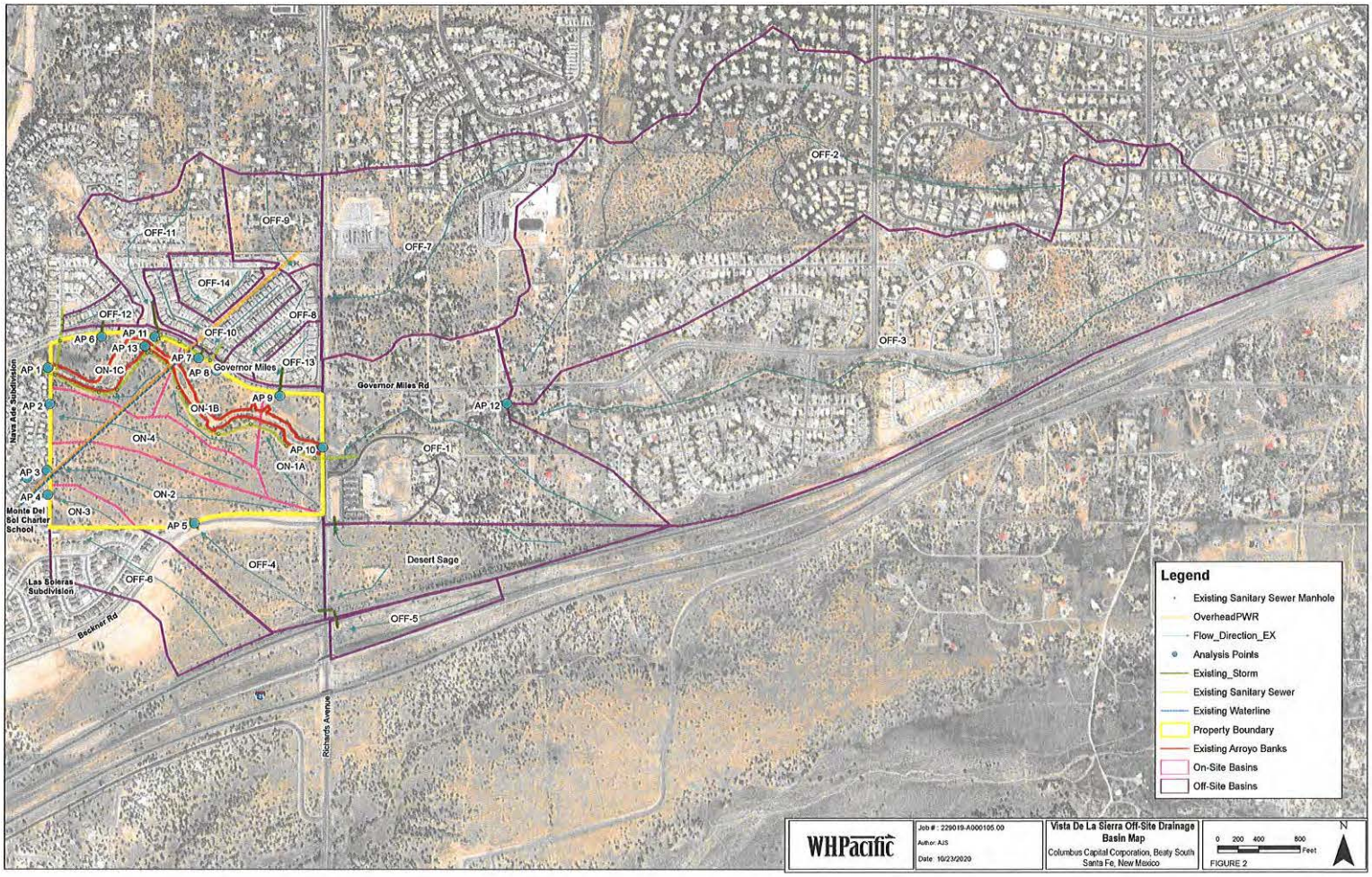
Beckner Road Storm Drain - Vista De La Sierra will be constructing portions of Beckner Road, including storm drain. The proposed storm drain is designed to accept offsite flows from the south and developed flows from adjacent Tracts 17 and 18, adjacent to and south of Beckner Road. The storm drain will be connected to an existing 60" storm drain, located approximately 1,500 ft. east of the south entrance to Vista De La Sierra (see Beckner Storm Drain Plan and Profile under exhibits). The proposed storm drain ranges from 18" diameter pipe to 60" diameter storm sewer pipe at the outfall. Hydrologic analysis from the contributing areas is based on the "Beckner Roadway Plans and Reports", by Isaacson and Arfman Engineering. The peak flow rate at the connection is approximately 139 cfs, based on the study by Isaacson and Arfman. A revised and final analysis will be provided by Isaacson and Arfman for use on the final design of the construction plans.

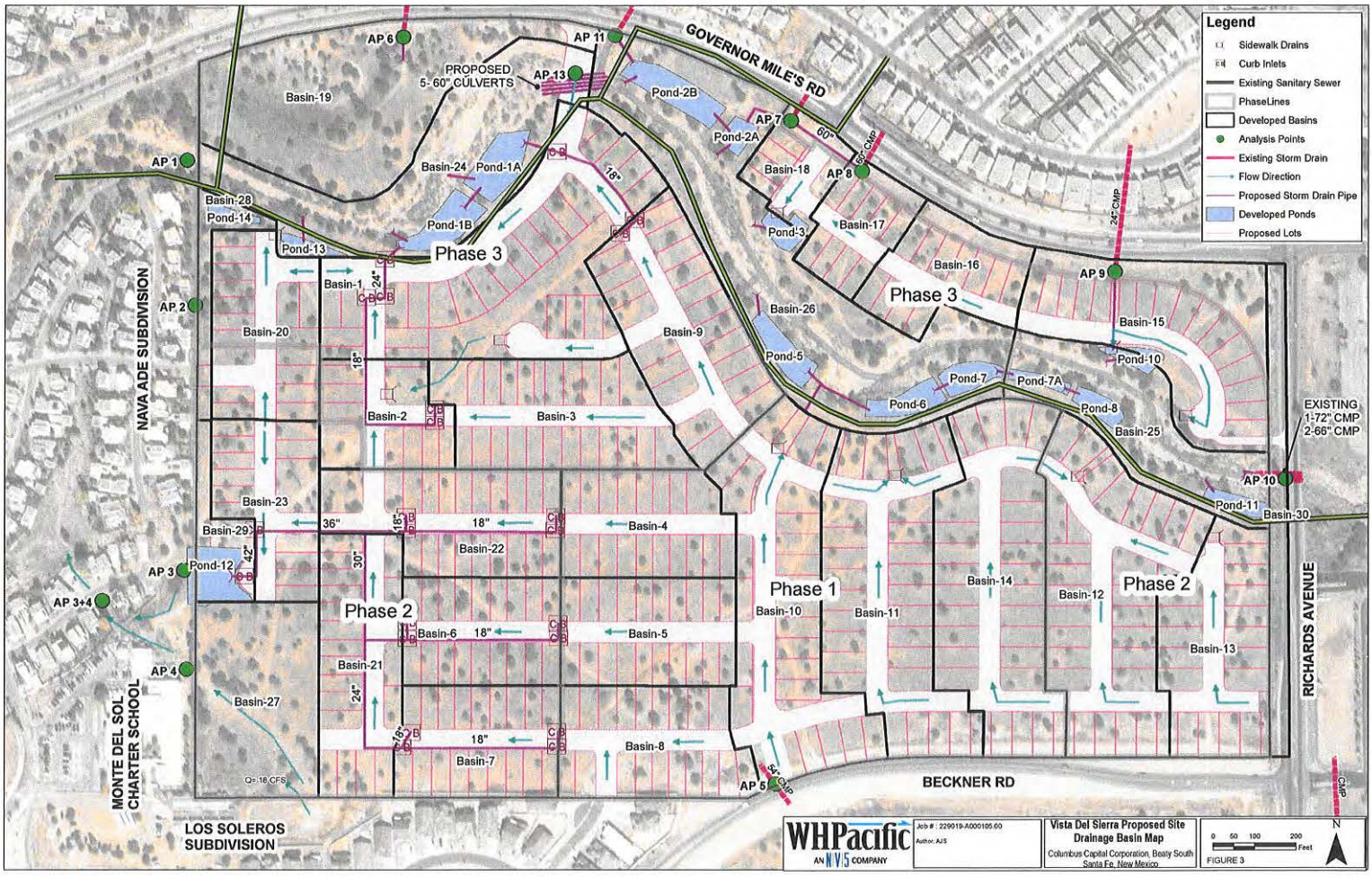
Conclusion - The analysis and recommendations herein provide a comprehensive storm water management plan for the proposed Vista De La Sierra Subdivision. The storm water management plan provided is consistent with the requirements stated in the City of Santa Fe Drainage Ordinance and discussions with staff and in the New Mexico State Highway and Transportation Department's Drainage Manual. Based on the proposed storm water management plan, the downstream properties of the Vista De La Sierra Subdivision will see no adverse impacts and will receive a reduction of the peak discharge rate for 100-year, 24-hour storm event from existing to developed conditions.

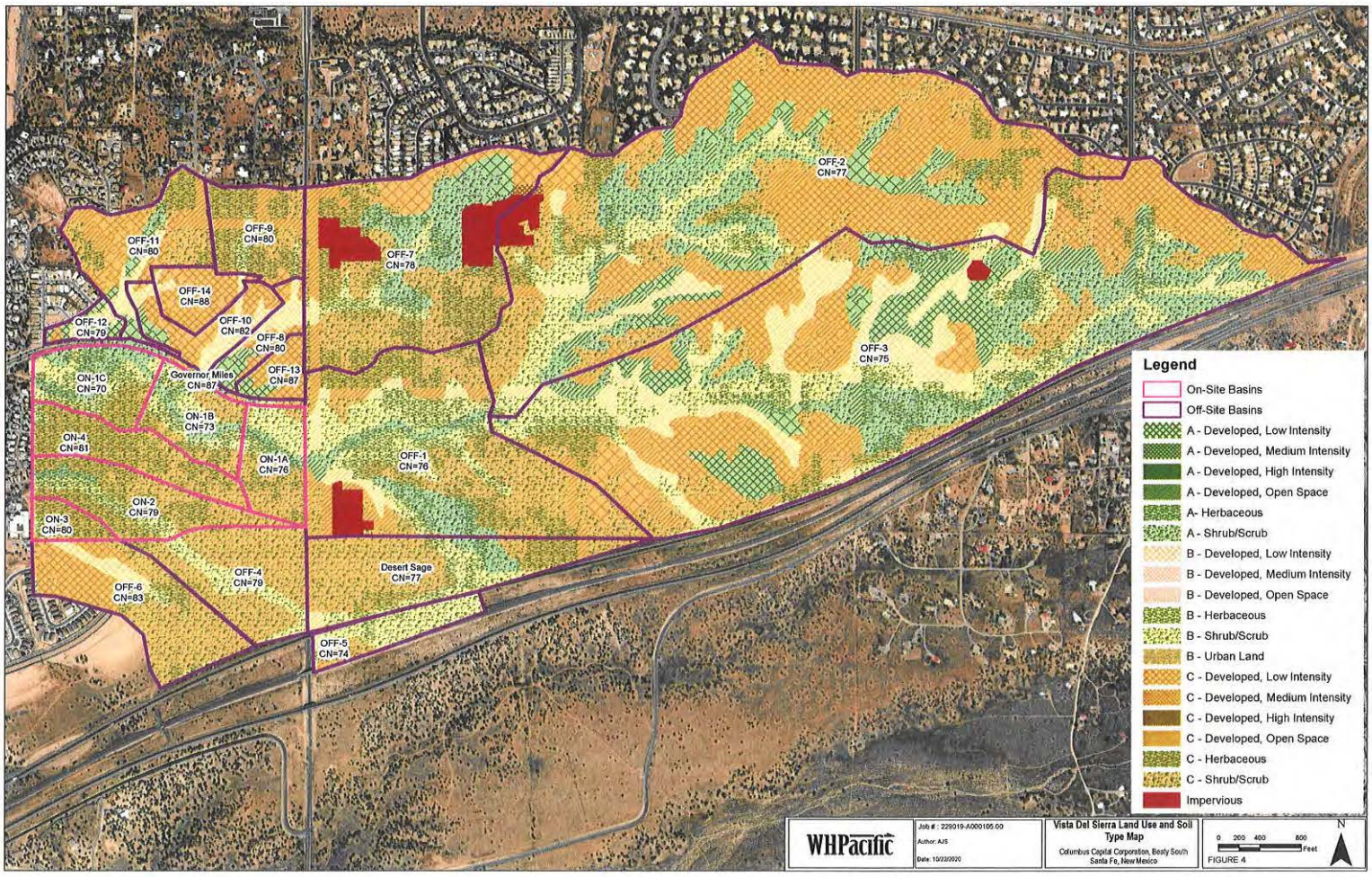
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SANTA FE
588
466
285
84
300
25
Site Location
Sun Mountain
WHPacific
Job # : 229019-A000105.00
Author: AJS
Date: 10/26/2020
Vista De La Sierra
Location Map
Columbus Capital Corporation, Beaty South
Santa Fe, New Mexico
0 600 1,200 2,400
Feet
N


OFF-2
OFF-11
OFF-9
OFF-7
OFF-14
OFF-12
OFF-8
OFF-10
OFF-3
OFF-13
AP 6
AP 11
AP 13
AP 7
AP 1
ON-1C
AP 8
Governor Miles
Governor Miles Rd
AP 2
AP 9
ON-1B
AP 12
Nava Ade Subdivision
ON-4
AP 10
OFF-1
ON-1A
AP 3
AP 4
ON-2
Monte Del Sol Charter School
ON-3
AP 5
OFF-4
Desert Sage
Las Soleras Subdivision
OFF-6
Beckner Rd
OFF-5
Richards Avenue
Legend
Existing Sanitary Sewer Manhole
OverheadPWR
Flow_Direction_EX
Analysis Points
Existing_Storm
Existing Sanitary Sewer
Existing Waterline
Property Boundary
Existing Arroyo Banks
On-Site Basins
Off-Site Basins
WHPacific
Job # : 229019-A000105.00
Author: AJS
Date: 10/23/2020
Vista De La Sierra Off-Site Drainage Basin Map
Columbus Capital Corporation, Beaty South Santa Fe, New Mexico
0 200 400 800
Feet
N
FIGURE 2


Legend
Sidewalk Drains
Curb Inlets
Existing Sanitary Sewer
PhaseLines
Developed Basins
Analysis Points
Existing Storm Drain
Flow Direction
Proposed Storm Drain Pipe
Developed Ponds
Proposed Lots
AP 1
AP 2
AP 3
AP 3+4
AP 4
AP 5
AP 6
AP 7
AP 8
AP 9
AP 10
AP 11
AP 13
PROPOSED 5- 60" CULVERTS
GOVERNOR MILE'S RD
BECKNER RD
RICHARDS AVENUE
NAVA ADE SUBDIVISION
MONTE DEL SOL CHARTER SCHOOL
LOS SOLEROS SUBDIVISION
EXISTING 1-72" CMP 2-66" CMP
Phase 1
Phase 2
Phase 3
Basin-1
Basin-2
Basin-3
Basin-4
Basin-5
Basin-6
Basin-7
Basin-8
Basin-9
Basin-10
Basin-11
Basin-12
Basin-13
Basin-14
Basin-15
Basin-16
Basin-17
Basin-18
Basin-19
Basin-20
Basin-21
Basin-22
Basin-23
Basin-24
Basin-25
Basin-26
Basin-27
Basin-28
Basin-29
Basin-30
Pond-1A
Pond-1B
Pond-2A
Pond-2B
Pond-3
Pond-5
Pond-6
Pond-7
Pond-7A
Pond-8
Pond-10
Pond-11
Pond-12
Pond-13
Pond-14
Q= 16 CFS
WHPacific
AN NV5 COMPANY
Job # : 229019-A000105.00
Author: AJS
Vista Del Sierra Proposed Site Drainage Basin Map
Columbus Capital Corporation, Beaty South Santa Fe, New Mexico
0 50 100 200 Feet
N
FIGURE 3


OFF-2
CN=77
OFF-9
CN=80
OFF-11
CN=80
OFF-7
CN=78
OFF-14
CN=88
OFF-12
CN=70
OFF-10
CN=82
OFF-8
CN=80
OFF-13
CN=87
OFF-3
CN=75
ON-1C
CN=70
Governor Miles
CN=87
ON-1B
CN=73
ON-4
CN=81
ON-1A
CN=76
OFF-1
CN=76
ON-2
CN=79
ON-3
CN=80
OFF-4
CN=79
Desert Sage
CN=77
OFF-6
CN=83
OFF-5
CN=74
Legend
On-Site Basins
Off-Site Basins
A - Developed, Low Intensity
A - Developed, Medium Intensity
A - Developed, High Intensity
A - Developed, Open Space
A- Herbaceous
A - Shrub/Scrub
B - Developed, Low Intensity
B - Developed, Medium Intensity
B - Developed, Open Space
B - Herbaceous
B - Shrub/Scrub
B - Urban Land
C - Developed, Low Intensity
C - Developed, Medium Intensity
C - Developed, High Intensity
C - Developed, Open Space
C - Herbaceous
C - Shrub/Scrub
Impervious
WHPacific
Job # : 229019-A000105.00
Author: AJS
Date: 10/23/2020
Vista Del Sierra Land Use and Soil Type Map
Columbus Capital Corporation, Beaty South Santa Fe, New Mexico
0 200 400 800 Feet
N
FIGURE 4

City of Santa Fe
SANTA FE HOMES PROGRAM
P R O P O S A L
"Vista de La Sierra"
Santa Fe, New Mexico

This Santa Fe Homes Program Proposal ("SFHP Proposal") is made this __ day of _____, 2020 by ***Branch Family Holdings, LLC*** ("SFHP Developer").

RECITALS

A. SFHP Developer is the developer of ***Vista de La Sierra Subdivision*** hereinafter referred to as the "Property".

B. SFHP Developer desires to **subdivide and develop** the Property.

C. It is understood that all representations made herein are material to the City and that the City will rely upon these representations in permitting or approving development of the Property.

PROPOSAL

SFHP Developer proposes to comply with the SFHP requirements as follows:

A. DEVELOPMENT REQUEST. SFHP Developer seeks ***Preliminary and Final Subdivision Plat*** approval.

B. SFHP PLAN. The project has an area of approximately **79.69** acres, zoned **R-5**, permitting **5** dwelling units per acre. SFHP Developer proposes to build **393 dwelling units**. Developer agrees to comply with the Santa Fe Homes Program ordinance. SFHP which requires that 20% of these homes are affordably-priced, resulting in **79** **affordable homes** and no fractional fee. The SFHP Plan shall include the number of bedrooms and bathrooms, the minimum square footage and the minimum household size, the

income range to be served and the current SFHP Home price for each SFHP Home as set forth in Section 8.2 of the SFHP Administrative Procedures. If the development is constructed in phases, a SFHP Plan for each phase shall be reviewed and approved by the City and recorded at the County Clerk's office prior to issuance of a building permit by the City for that phase.

C. SUCCESSORS IN TITLE. SFHP Developer proposes to develop the Property consistent with this SFHP Proposal. In the event that SFHP Developer sells, assigns, leases, conveys, mortgages, or encumbers the Property to any third party, the third party shall be required to execute a SFHP Agreement consistent with this Proposal prior to obtaining any City approvals.

D. MONITORING. SFHP Developer proposes to provide such information and documentation as the City may reasonably require in order to ensure that the actual sales were in compliance with the SFHP Agreement.

E. DEVELOPMENT INCENTIVES. SFHP Developer **does** request a density bonus (15%) and other fee waivers and reduced fees for the affordable units as per SFCC 14.8.11(G)(2), including: Impact Fees, Wastewater UECs and Building, Electrical, Plumbing & Mechanical Permit Fees. Water UECs (not including the construction costs associated with installation) are REDUCED.

E. REVISIONS, MODIFICATIONS AND SUPPLEMENTATION OF THIS PROPOSAL. In the event that the SFHP Developer or the City make material modifications, including modifications to the number of lots or units or the area covered by the Proposal, a revised SFHP Proposal shall be promptly submitted to the Office of Affordable Housing in order to provide a SFHP Proposal that is current and reflects the intended development.

IN WITNESS WHEREOF, this Proposal is made the day and year first written above.

SFHP DEVELOPER:

_____

{Signature}

_____

Jeff Branch, Managing Member

STATE OF California)
)ss.
COUNTY OF Santa Barbara

ACKNOWLEDGEMENT

The foregoing instrument was acknowledged before me this ___ day of _____, 2020, by _____.the {title} _____ of {entity} _____

X See attached Acknowledgment.

_____
NOTARY PUBLIC

My Commission Expires:

_____

REVIEWED BY:

_____ _____
OFFICE OF AFFORDABLE HOUSING DATE
Alexandra Ladd, Director

Attach: Exhibit 1 - Subdivision layout (proposed)
Exhibit 2 - Pricing Schedule

CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Santa Barbara }

On September 16, 2020 before me, Carlota Garcia Notary Public, (Here insert name and title of the officer)

personally appeared Jeffrey P. Branch,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public Signature (Notary Public Seal)

CARLOTA GARCIA
Notary Public - California
Santa Barbara County
Commission # 2177042
My Comm. Expires Jan 20, 2021

ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

Proposal
(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages 6 Document Date 09/16/2020

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
- ☐ Corporate Officer

(Title)

- ☐ Partner(s)
- ☐ Attorney-in-Fact
- ☐ Trustee(s)
- ☐ Other

INSTRUCTIONS FOR COMPLETING THIS FORM

This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he~~/she/~~they,~~ is /~~are~~) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - Indicate title or type of attached document, number of pages and date.
  - Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

EXHIBIT 1

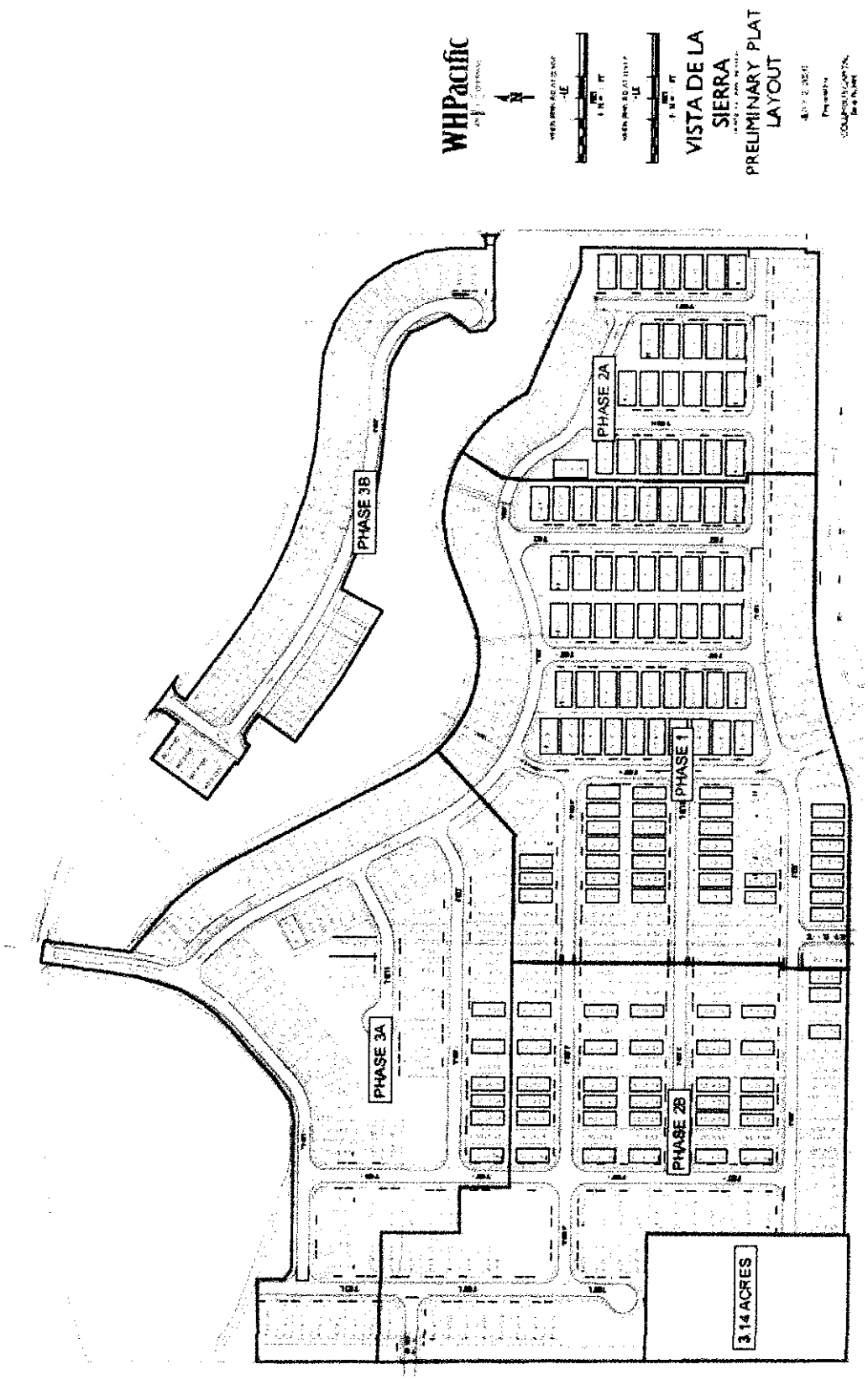

WHPacific
N
VISTA DE LA SIERRA
PRELIMINARY PLAT LAYOUT
PHASE 3B
PHASE 2A
PHASE 1
PHASE 3A
PHASE 2B
3.14 ACRES

EXHIBIT 2

SANTA FE HOMES PROGRAM
SFHP PLAN AND HOME SALES PRICING SCHEDULE
Effective January 2019*

Income Range	*Two Bedrooms* *1-2 person HH* *(900 sq min)*	*Three Bedrooms* *3-4 person HH* *(1,150 sq ft min)*	*Four Bedrooms* *4-5 person HH* *(1,250 sq ft min)*
2 (50-65%AMI)	Max. Price $123,500 4 Units	Max. Price $139,000 9 Units	Max. Price $154,500 4 Units
3 (65-80%AMI)	Max. Price $160,500 10 Units	Max. Price $180,750 20 Units	Max. Price $200,750 10 Units
4 (80-100%AMI)	Max. Price $197,500 4 Units	Max. Price $222,500 9 Units	Max. Price $247,000 4 Units

Prices reflect April 2019 HUD Area Median Incomes for Santa Fe. Refer to Section 26-1.16 (B) and the SFHP Administrative Procedures. For specific requirements contact The Office of Affordable Housing.

AFFORDABILITY CALCULATION
Single Family Building Lots

The project has an area of approximately 79.69 acres, zoned R-5, permitting 5 dwelling homes per acre. The required number of SFHP units is 20% of the total units, 5% each in Income Ranges 2 and 4 and 10% in Income Range 2. The project proposes **393 total lots** for development as single-family homes.

CALCULATION for the SFHP requirement:

= Total number of units multiplied by (0.2) = # of Units Required
= **393** total units x 0.2 = **78.6 SFHP unit**(s) are required
= **79 lots/units** will be delivered and a fractional fee paid for **0.0** units

---

NOTE: The home prices and fractional fee schedule are modified by the City according to Section 8.7.3 of the SFHP Administrative Procedures to reflect annual changes in the median income levels. The SFHP Home prices shown in this SFHP Agreement are the prices in effect at the time this Agreement is made. The current SFHP prices that are in effect at the time the SFHP Home is made available for sale or the fractional fees are paid, determines the actual SFHP Home Price and/or amount of fractional fee. The prices are updated annually.

City of Santa Fe

LAND USE DEPARTMENT | HISTORIC PRESERVATION DIVISION

ARCHAEOLOGICAL REVIEW COMMITTEE CLEARANCE PERMIT

Case Number: 2020-001775-ARC Date of Application: 2/12/2020

NMCRIS Number: 145094 Date of ARC Hearing: 3/5/2020

Archaeological Review District: ____Historic Downtown ____Rivers and Trails ✓ Suburban

Project Title: "An Archaeological Inventory of 4.08 acres for the Proposed Development of Lot 3 at Gov. Miles Road and Richards Ave in Santa Fe"

Site Address/Location: Governor Miles Road and Richards Avenue

Archaeologist: Ron Winters Email: rondigs@comcast.net Phone: 670-6952

Mailing Address: 109 Calle Paula Santa Fe NM 87505

Applicant: Greg Gonzales Email: ____ Phone: 670-2812
Columbus Capital

Mailing Address: 435 St. Michaels Drive A202

Submittal Type:

- ✓ Reconnaissance Report
- ____ Treatment Plan
- ____ Monitoring Plan
- ____ Preliminary Treatment Report
- ____ Monitoring Report
- ____ Final Treatment Report
- ____ Archaeologist Certification
- ____ Other: ____

ARC Action: ✓ **Approved** ____ **Approved with Conditions** *(see below)*

Conditions ____

Archaeological Review Committee Chairperson 3/5/2020 *Date*

Submitted to SHPO: Yes No Date Submitted ____

THIS IS NOT A CONSTRUCTION PERMIT.

DO NOT BEGIN DEMOLITION, GRADING, INFRASTRUCTURE, or CONSTRUCTION WITHOUT A PERMIT.
SUBMIT THIS FORM ALONG WITH YOUR BUILDING PERMIT APPLICATION, AND RETAIN A COPY AT THE JOB SITE.

City of Santa Fe, New Mexico
UTILITY SERVICE APPLICATION

***Fill in all highlighted fields on this application. Applicant must sign and date application.**

Check one only:
- X Sewer Service Technical Evaluation Request
- X Water Service Technical Evaluation Request
- ___ Agreement for Metered Service (AMS)
- ___ Agreement to Construct and Dedicate Public Improvements (ACD)
- ___ Annexation Application Water Budget
- ___ Water Offset Program/Water Rights Compliance Evaluation Request

WORK ORDER # _____

Applicant Name: Vista de la Sierra Subdivision

Project Address: 3800 Governor Miles Rd

***Required - Attach a Plat of the Property (legal lot of record and proposed development)**

Plat Filing Information: Year 2014 Book 804 Page 9-10 Township, Range, Section: 16N, 9E, 8

Location: (check one only) Inside Corporate City Limits ✓ Outside Corporate City Limits ___

Property Uniform Property Code: 1-050-095-387-083 Existing Well: Yes ___ No X

Legal Description including lot size: Vacant/ 79.49 acres

Short Description of Project: 393 lot subdivision single family to be developed in 3 phases

Construction Start Date: Spring 2021

*RESIDENTIAL PROJECT - Complete the following

1. Type of project: (i.e. Single Family Residence, Subdivision, Lot split, Apartments) Single family
2. Total number of lots approved on final plat/development plan: ___
3. Total number of homes existing or under construction: 0
4. Size of service requested: (5/8", 3/4", 1" or 2") 5/8"

***Please fill in all categories below that apply for which water service is requested:**

--- COMPLETED BY APPLICANT --- Number of Lots or Units		--- COMPLETED BY STAFF --- Water Use Factors	Annual Water Demand
267	Single Family Dwelling Unit, lot size less than 6,000 sq. ft.	.15 afy per d.u.	___
126	Single Family Dwelling Unit, lot size 6,000-10,890 sq. ft	.17 afy per d.u.	___
___	Single Family Dwelling Unit, lot size greater than 10,890 sq. ft.	.25 afy per d.u.	___
___	Mobile Home (in Mobile home park)	.17 afy per d.u.	___
___	Accessory Dwelling Unit	.09 afy per d.u.	___
___	Apartment/Condominium	.16 afy per d.u.	___
___	Senior Complex	.12 afy per d.u.	___
393	**Total**	**Total Residential Water Demand**	___ **AFY**

City of Santa Fe, New Mexico
UTILITY SERVICE APPLICATION

COMMERCIAL PROJECT - Complete the following

Type of Project: (i.e. Office, Retail, Mixed, etc.) _____
Total gross floor area of building: _____ square feet
Total area of lot, tract or parcel: _____ acres
Automatic Fire Sprinkler System: _____ Yes _____ No
Building Construction Type: _____
Building Square Footage: _____
Site Plan Attached: _____Yes _____ No

*Please check all use categories below that are planned for the building and the gross floor areas of each use within the proposed building.

---- COMPLETED BY APPLICANT ----		---- COMPLETED BY STAFF ----	
Check Type of Use	Gross Floor Area	Water Use Factors	Annual Water Demand
Commercial			
____ Office – Non-medical	_____	(0.70 afy per 10,000 s.f.)	_____
____ Medical Office	_____	(0.72 afy per 10,000 s.f.)	_____
____ Office – City/State	_____	(0.58 afy per 10,000 s.f.)	_____
____ Research and Development Lab	_____	(1.18 afy per 10,000 s.f.)	_____
_ Manufacturing – Goods	_____	(0.21 afy per site)	_____
____ Manufacturing – Consumables	_____	(2.33 afy per site)	_____
____ Laundromat, Commercial	_____	(0.78 afy per machine)	_____
____ Laundromat, Other	_____	(0.22 afy per machine)	_____
____ Drycleaner	_____	(0.41 afy per site)	_____
____ Plant Nursery	_____	(0.56 afy per 10,000 s.f.)	_____
____ Gyms with showers	_____	(8.94 afy per site)	_____
____ Gyms without showers	_____	(0.77 afy per site)	_____
____ Salons	_____	(0.21 afy per site)	_____
____ Pet Grooming	_____	(0.52 afy per site)	_____
____ Pet Daycare	_____	(0.11 afy per site)	_____
____ Retail, Large (Individual stores or shopping areas > 75,000 sq ft)	_____	(0.45 afy per 10,000 s.f.)	_____
____ Neighborhood Center/Medium Retail (Individual stores or shopping areas 75,000-25,000 sq ft)		(0.43 afy per 10,000 s.f.)	_____
____ Retail, Small (Individual stores or shopping areas < 25,000 sq ft)	_____	(0.06 afy per site)	_____
____ Gallery	_____	(0.60 afy per site)	_____
_ Grocery Store	_____	(1.27 afy per 10,000 s.f.)	_____
____ Restaurant (full service)	_____	(0.02 afy per seat)	_____
____ Restaurant (limited service)	_____	(1.63 afy per Site)	_____
____ Gasoline Station w/ Car Wash	_____	(6.56 afy per Site)	_____

____	Gasoline Station	_____	(0.88 afy per Site)	_____
____	Car Wash (full service)	_____	(5.66 afy per Site)	_____
____	Car Wash (limited service)	_____	(0.94 afy per Wash Bay)	_____
____	Auto Repair	_____	(0.12 afy per site)	_____
____	Car Rental	_____	(0.12 afy per site)	_____
____	Car Sales	_____	(0.07 afy per 10,000 s.f.)	_____
____	Self Storage	_____	(0.13 afy per site)	_____
____	Wholesale, Warehousing	_____	(0.4 afy per 10,000 s.f.)	_____
____	Industrial, Manufacturing	_____	(applicant estimate of water use)	_____
____	Church w/ day care or school)	_____	(1.3 afy per Site)	_____
____	Church w/o day care or school)	_____	(0.6 afy per Site)	_____
____	Hotel	No. of rooms _____	(.13 afy per room)	_____
____	Motel	No. of rooms _____	(.09 afy per room)	_____

Public Services

____	School, Elementary		(0.53 afy per 100 students)	_____
____	School, Middle or Junior High		(1.68 afy per 100 students)	_____
____	School, Senior High		(2.64 afy per 100 students)	_____
____	Schools, Daycare		(0.85 afy per 100 kids)	_____
____	Places of Worship		(0.15 afy per site)	_____
	With Daycare and school		(0.95 afy per site)	_____
____	Parks		(1.48 afy per acre)	_____
____	**Other** (not listed above) Please attach		(with attachment)	_____

water demand calculations and assumptions used

Total Floor Area _____

Total Commercial Water Demand _____ **AFY**

Total Residential Water Demand _____ **AFY**

TOTAL PROJECT WATER DEMAND _____ **AFY**

City of Santa Fe, New Mexico
UTILITY SERVICE APPLICATION

OWNER:	*Only If Applicable
Mailing Address:	AGENT: JenkinsGavin
	Title: Jennifer Jenkins
	Mailing Address: 130 Grant Ave Ste 101 Santa Fe, NM 87501
Phone Number:	Phone Number: 505.820.7444
Mobile Number:	Mobile Number:

Information Provided By: Check one: Owner _____ Agent X

Signature: _____ Date: 9/21/20

Technical Evaluation to be Sent to: Check one: Owner _____ Agent _____

COMMENTS: Water budget attached

APPLICANTS, PLEASE NOTE:

- Ordinance 2008-53, prohibits new connections outside the presumptive city limits including the Agua Fria traditional historic community (AFTHC) unless specific conditions are met. Applications for service outside the presumptive city limits and AFTHC must include documentation showing these conditions are met or the application will be rejected. The documents required are shown below.
- A map of the proposed project in relation to the existing city limits and the presumptive city limits
- A detailed description of the proposed develop0ment including the type and size of proposed land uses
- The health, safety and welfare or other legal reason for the connection
- A site water budget
- Documentation from the County of Santa Fe that county water service is not available
- Documentation from the wastewater division regarding sewer availability
- A certified Santa Fe Homes Proposal as set forth in Section 14-8.11 SFCC 1987 if applicable

CASE # 2020-012142 & 012170

CITY OF SANTA FE
VISTA DE LA SIERRA SUBDIVISION
PHASES 1, 2 & 3
SEPTEMBER 18, 2020



NOT TO SCALE

APPROVED FOR CONSTRUCTION:

SUBDIVISION ENGINEER DATE

CONSULTANTS

WHPacific
AN NV5 COMPANY

JENKINSGAVIN
LAND USE | PROJECT MANAGEMENT
130 Grant Avenue, Suite 101
Santa Fe, NM 87501
505.820.7444

Dawson Surveys, Inc.
Professional Land Surveyors
Santa Fe, NM, and Covington, LA
(505) 471-6650

DEVELOPER

COLUMBUS CAPITAL
CORPORATION
REAL ESTATE & DEVELOPMENT

SHEET INDEX	
SHEET #	TITLE
G-001	COVER SHEET / INDEX OF SHEETS
G-002	GENERAL NOTES
S-100A TO S-100B	EXISTING CONDITION TOPOGRAPHY
S-101 TO S-111	FINAL PLAT
S-115	SLOPE ANALYSIS MAP
S-120	PHASING PLAN
C-100	OVERALL GRADING PLAN
C1-101 TO C3-105	GRADING PLANS
C1-106 TO C3-106	STORM WATER POLLUTION PREVENTION PLANS
C1-200 TO C3-200	OVERALL PAVING PLAN
C1-201 TO C3-208	ROADWAY and STORM DRAIN PLAN & PROFILES
C-300	OVERALL WATER and SANITARY SEWER PLAN
C1-301 TO C3-309	WATER and SANITARY PLAN & PROFILES
C-500	TRAFFIC CONTROL PLAN
C1-600 TO C3-601	SIGNAGE, STRIPING AND DRY UTILITY PLAN
C-900	CIVIL DETAILS
GD-1	DETAILED GRADING PLAN
SWPPP-1	SWPPP DETAILS
SF-1 TO SF-4	SEWER DETAILS
WL-1	WATERLINE DETAILS
PAD-1 TO PAD-3	NMDOT CURB ACCESS PLAN
BDIC-003-04	NMDOT DROP INLET FOR TYPE "B" CURBS
BDIC 004-A to 004-B	NMDOT TYPE "B" MODIFIED DROP INLETS FOR CURBS
609-01-1/1	NMDOT SIDEWALK, CURB AND GUTTER DETAILS
COA-DWG. 2420	COA PAVING - CONCRETE VALLEY GUTTER MODIFIED
COA-DWG. 2510	COA TRAFFIC - PLAIN CUL-DE-SACS MODIFIED
L-100 TO L-105	IRRIGATION PLANS - PHASES 1,2,3
L-200 TO L-205	LANDSCAPING PLANS - PHASES 1,2,3

VISTA DE LA SIERRA SUBDIVISION

CASE / PERMIT NO. S-2020-__

SHEET NO.
G-001

P:\Columbus Capital Corporation\220919.A000105.00\Execution\Drawings\Civil\ALL PHASES\A000105.00-Overall Cover Sheet.dwg 9/15/2020 12:45 PM

APWA'S "NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," 1997 EDITION INCLUDING LATEST PUBLISHED AMENDMENTS.

3. INFRASTRUCTURE CONSTRUCTION SHALL CONFORM TO APPLICABLE SECTIONS OF THE NEW MEXICO DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION," 2000 EDITION (SSHBC).
4. THE ORDER OF PRECEDENCE SHALL BE LISTED IN ORDER OF HIGHEST PRECEDENCE, SHALL BE PROJECT SPECIFICATIONS, PLANS, CITY OF SANTA FE STANDARD DRAWINGS, APWASS, AND SSHBC.
5. IN THE CASE OF CONFLICTS BETWEEN PLANS AND SPECIFICATIONS RESOLUTION SHALL BE BY USING THE MORE RESTRICTIVE REQUIREMENT AS DETERMINED BY THE PROJECT ENGINEER AND APPROVED BY CITY PLANNING AND LAND LAND USE DEPARTMENT'S PERMIT AND DEVELOPMENT REVIEW DIVISION TECHNICAL REVIEW STAFF (P&DR).
6. THE PROJECT PLANS SHALL BE APPROVED FOR CONSTRUCTION BY THE P&DR'S ENGINEERING SUPERVISOR PRIOR TO ANY CONSTRUCTION ACTIVITY AND SCHEDULING A PRE-CONSTRUCTION MEETING. THE ENGINEERING SUPERVISOR MAY, BY WRITTEN AUTHORIZATION, DESIGNATE OTHERS TO ADMINISTER DUTIES DESCRIBED HEREIN.
7. THE CONSTRUCTION PROJECT ENGINEER SHALL BE A NEW MEXICO LICENSED PROFESSIONAL ENGINEER IN THE APPROPRIATE CATEGORY FOR THE TYPE OF WORK REPRESENTED BY THE PROJECT PLANS. THE PROJECT ENGINEER SHALL ARRANGE FOR A PRE-CONSTRUCTION MEETING PRIOR TO THE START OF CONSTRUCTION OR MOBILIZATION OF EQUIPMENT ON-SITE. AT THE PRE-CONSTRUCTION MEETING, THE PROJECT MANGER SHALL SUBMIT A LETTER PROVIDING THE NAME(S) OF SPECIFIC INDIVIDUALS WHO WILL BE PERFORMING WHAT TYPE OF INSPECTIONS AND RESPECTIVE TELEPHONE CONTACT NUMBER(S); 6595 TO SCHEDULE THE PRE-CONSTRUCTION MEETING A MINIMUM OF 10 CALENDAR DAYS IN ADVANCE OF THE MEETING DATE.
8. ATTENDANCE AT THE PRE-CONSTRUCTION MEETING IS MANDATORY FOR THE PROJECT ENGINEER (WHO SHALL CONDUCT THE MEETING), CONTRACTOR, P&DR TECHNICAL REVIEW STAFF, AND APPLICABLE STAFF FROM CITY STREET, WATER, AND WASTEWATER MANAGEMENT DIVISIONS. THE OWNER AND SUB-CONTRACTORS ARE ENCOURAGED TO ATTEND. AT THIS MEETING, A SPECIFIC P&DR STAFF MEMBER WILL BE ASSIGNED AS THE POINT OF CONTACT WITH THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROVIDE A LIST OF CONTACT PERSONNEL RESPONSIBLE FOR SITE CONSTRUCTION INCLUDING POSITION, TELEPHONE NUMBERS, AND AT LEAST ONE EMERGENCY TELEPHONE NUMBER ACTIVE ON A 24-HOUR BASIS.
10. AN EPA NOTICE OF INTENT (NOI) IS APPLICABLE. A COPY OF THE MAILED PERMIT APPLICATION SHALL BE PRESENTED AT THE TIME OF THE PRE-CONSTRUCTION MEETING ALONG WITH A WRITTEN STATEMENT GIVING THE MAILING DATE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL UNDERGROUND UTILITIES DURING THE COURSE OF THE WORK REGARDLESS OF ANY LOCATION SHOWN ON THE PLANS OR OTHER FIELD EVIDENCE, OR LACK THEREOF. NOTIFICATION TO NEW MEXICO ONE CALL AT 1-800-321-2537 FOR UTILITY LOCATES A MINIMUM OF 48 HOURS IN ADVANCE OF ANY EXCAVATION REQUIRED. MAINTENANCE OF UTILITY LOCATES SHALL BE CONTINUED THROUGHOUT THE PROJECT LIFE.
12. THE OWNER SHALL BE RESPONSIBLE FOR ALL CHANGES IN CONSTRUCTION DEEMED NECESSARY FOR ANY REASON SHALL HAVE APPROPRIATE PLANS AND/OR SPECIFICATIONS, INCLUDING APPLICABLE DESIGN CRITERIA, PREPARED BY A NEW MEXICO PROFESSIONAL ENGINEER AND SUBMITTED TO THE CITY ENGINEERING SUPERVISOR FOR APPROVAL. UPON APPROVAL, SAID CHANGES MAY BE INCORPORATED INTO THE PROJECT LIFE.
13. FINAL RECORD DRAWINGS, REFLECTING SUBSTANTIAL CHANGES TO THE ORIGINAL DESIGN DRAWINGS, SHALL BE SUBMITTED BY THE OWNER'S ENGINEER FOR APPROVAL TO THE ENGINEERING SUPERVISOR FOR PERMANENT FILING IN THE CITY PLANNING DEPARTMENT. SAID PLANS SHALL BE APPROVED BY APPLICABLE CITY DIVISIONS PRIOR TO FINAL ACCEPTANCE OF PROJECT WORK FOR MAINTENANCE RESPONSIBILITY AND THE BEGINNING OF THE WARRANTY PERIOD. UNDER NO CIRCUMSTANCES WILL PARTIAL ACCEPTANCE AND/OR WARRANTY COMMENCEMENT BEGIN FOR ANY COMPONENT OF PROJECT SCOPE BE PROVIDED.
14. CURB CUTS SHOWN IN THE ORIGINAL ORIGINAL, APPROVED CONSTRUCTION DRAWINGS WILL REQUIRE A "CURB CUT PERMIT" ISSUED BY THE CITY TRAFFIC ENGINEER PRIOR TO CONSTRUCTION. CURB CUTS FOUND TO BE NECESSARY THAT WERE NOT INCLUDED IN THE ORIGINAL, APPROVED CONSTRUCTION DRAWINGS WILL REQUIRED A CHANGE ORDER THAT INCLUDES A "CURB CUT PERMIT" FROM THE CITY TRAFFIC ENGINEER. CALL 505-955-6646 FOR INFORMATION.
15. PARALLEL WATER AND SANITARY SEWER (SAS) UTILITIES SHALL HAVE A MINIMUM HORIZONTAL SPACING OF 10 FEET AND VERTICAL SPACING OF 3 FEET WHEREIN THE WATER LINE IS ABOVE THE SAS LINE. INSTALLATION WILL BE IN SEPARATE TRENCHES. SHOULD ENCOUNTERED FIELD CONDITIONS EXIST THAT PREVENT MAINTAINING THESE SEPARATION DISTANCES AND RELATIONSHIP, A CHANGE ORDER SHALL BE INITIATED THAT PROVIDES FOR ALTERNATIVE PROTECTIVE MEASURES AND SUBMITTED FOR APPROVAL TO THE ENGINEERING SUPERVISOR VIA THE CITY WATER AND WASTEWATER MANAGEMENT DIMSIONS.
16. SANITARY SEWER LATERAL CONSTRUCTION MUST BE CONSTRUCTED UNDER SEPARATE PERMIT (SECONDARY) FOR SAS HOOKUP. THE CONTRACTOR SHALL OBTAIN THE PERMIT(S) PRIOR TO ANY CONSTRUCTION AND MUST BE OBTAINED AT THE PERMIT DESK AT CITY HALL; PROVIDING STREET ADDRESS FOR EACH HOOKUP. UPON PAYMENT OF FEE(S), THE PERMIT FORM WILL BE IMMEDIATELY GENERATED WHICH SHALL BE KEPT ON-SITE. CALL 505-955-6948 FOR PERMIT INFORMATION AND 505-955-6646 FOR INSPECTION OF EACH VISIBLE, CONNECTED LATERAL.
17. ALL CONTRACTOR WORK ACTIVITY SHALL BE CONFINED TO THE CONSTRUCTION LIMITS OF THE PROJECT. THERE SHALL BE NO ENCROACHMENT ONTO ADJACENT PROPERTIES, EITHER CONSTRUCTION OR MARSHALLING YARD(S) UNLESS LEGAL EASEMENT(S)/AGREEMENT(S) IS/ARE EXECUTED AND APPROVED BY THE ENGINEERING SUPERVISOR.
18. GRADING SHALL BE COMPLETED UNDER THE AUTHORITY OF A BUILDING PERMIT, THE APPLICATION OF WHICH SHALL SHOW THE TYPE OF WORK AS "OTHER" WITH THE NOTATION OF GRADING, LANDSCAPING, AND INFRASTRUCTURE SHOWN THEREON. CALL 505-955-6948 FOR PERMIT INFORMATION.
19. ALL CUT AND FILL SLOPES, INCLUDING SETBACK REQUIREMENTS, SHALL CONFORM TO THE REQUIREMENTS OF:
A. SANTA FE CITY CODE'S ARTICLE 14-8 (DEVELOPMENT AND DESIGN STANDARDS);
B. CHAPTER 33 OF THE UNIFORM BUILDING CODE, 1997 EDITION UNLESS OTHERWISE NOTED ON THE APPROVED CONSTRUCTION PLANS; AND
C. IN THE CASE OF CONFLICT BETWEEN THESE TWO SPECIFICATIONS, CITY CODE SHALL PREVAIL.
20. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO PUBLIC OR PRIVATE PROPERTY, INCLUDING UTILITIES.
21. MATERIAL QUALITY TESTING SHALL BE COMPLETED BY THE OWNER, THROUGH A RECOGNIZED TESTING LABORATORY. THE LABORATORY SHALL BE UNDER THE AUSPICES OF A NEW MEXICO PROFESSIONAL ENGINEER. COMPLETE. FIELD TEST REPORTS SHALL BE PROVIDED DIRECTLY TO THE P&DR STAFF ABSENCE. THE REPORTS SHALL BE FAXED TO 505-955-6829. IN EACH CASE, ALL TEST REPORTS AND OTHER COMMUNICATION SHALL CARRY THE APPLICABLE P&DR CASE AND BUILDING PERMIT PROJECT NUMBERS WHICH WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING.
23. PORTLAND CEMENT CONCRETE (PCC) PROPOSED TO BE USED FOR THE PROJECT SHALL CONFORM TO A MIX DESIGN PREPARED BY A NEW MEXICO PROFESSIONAL ENGINEER. THE DESIGN SHALL BE PROVIDED TO P&DR STAFF FOR APPROVAL A MINIMUM OF 14 CALENDAR DAYS PRIOR TO SCHEDULING THE INITIAL CASTING OPERATION OR, ALTERNATIVELY, THE PROJECT PLANS SHALL DEFINE A SPECIFIC MIX HAVING A PRIOR APPROVAL BY P&DR. EACH MIX SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
A. COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 CALENDAR DAYS
B. SEVEN (7.0) BAGS OF CEMENTITEOUS MATERIAL PER CUBIC YARD OF CONCRETE
C. TWENTY (20.0) PERCENT OR LESS OF FLYASH MATERIAL SUBSTITUTION FOR CEMENT
D. MAXIMUM AGGREGATE SIZE OF 3/4"
E. AIR ENTRAINMENT CONTENT RANGING BETWEEN 4.0 AND 7.0 PERCENT AT THE POINT OF CONCRETE OELIVERY INTO FORMS
24. CONCRETE SAMPLE SET SHALL CONSIST OF A MINIMUM THREE (3) CYLINDERS. ONE SAMPLE SET SHALL BE OBTAINED FOR EACH 500 LINEAR FEET CAST, 50 CAST CUBIC YARDS, OR ONE (1) SET PER CALENDAR DAY, WHICHEVER IS GREATEST. CYLINDERS SHALL BE TESTED AT 7, 28, AND 56 DAY INTERVALS; THE 56 DAY INTERVAL NEED NOT BE TESTED IF ANY PREVIOUS TEST RESULT EXCEEDS THE DESIGN VALUE.
25. TRAFFIC CONTROL DEVICES, AS PER APPROVED PLAN, SHALL BE INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. SAID DEVICES SHALL CONFORM TO THE LATEST PUBLISHED EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND TO WRITTEN DIRECTION FROM THE CITY TRAFFIC ENGINEER WHO MAY BE REACHED AT 505-955-6618.
26. SITE EROSION AND/OR SEDIMENT CONTROL, AS PER APPROVED PLAN, SHALL BE INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SSHBC'S SECTION 693 FOR OTHER REQUIREMENTS RELATING TO DUST ABATEMENT AND SIMILAR ISSUES.
27. UTILITY LINES MUST BE BORED UNDER ALL EXISTING STREET PCC STREET APPURTENANCES. A MINIMUM OF 12" SEPARATION MUST BE MAINTAINED BETWEEN UTILITY LINES. ANY CURB, GUTTER, OR OTHER DAMAGE MUST BE REPAIRED BEFORE FINAL INSPECTION WILL BE GIVEN.
28. EACH CITY UTILITY DIVISION SHALL PROVIDE A LETTER OF COMPLETED INSTALLATION, NOT NECESSARILY ACCEPTED FOR WARRANTY, AT THE CONTRACTOR'S REQUEST. SAID LETTERS SHALL BE PROVIDED TO THE P&DR STAFF AND RECEIVED WRITTEN STAFF ACCEPTANCE PRIOR TO SCHEDULING EITHER TV INSPECTION OF SAS AND STORM SEWER LINES OR PLACEMENT OF ROADWAY PAVEMENT MATERIAL.
29. ASTM, ASSHTO, OR INDEPENDENT LABORATORY CERTIFICATES OF MATERIAL COMPLIANCE ARE TO BE PROVIDED TO P&DR STAFF PRIOR TO BRINGING APPLICABLE MATERIAL ON SITE.
30. AGGREGATE BASE COURSE MATERIAL SHALL CONFORM TO THE SSHBC'S SECTION 304 USING GRADATION I.
31. PLANT MIX BITUMINOUS PAVEMENT (PMPB) PROPOSED TO BE USED FOR THE PROJECT SHALL CONFORM TO A MIX DESIGN PREPARED BY A NEW MEXICO PROFESSIONAL ENGINEER CONFORMING TO SSHBC'S SECTION 420 USING AGGREGATE CLASSIFICATION(S) CALLED FOR IN THE PROJECT PLANS. THE DESIGN SHALL BE PROVIDED TO P&DR STAFF FOR APPROVAL. A MINIMUM OF 14 CALENDAR DAYS PRIOR TO SCHEDULING THE INITIAL PAVINGS OPERATION PR, ALTERNATIVELY, THE PROJECT PLANS SHALL DEFINE A SPECIFIC MIX HAVING A PRIOR APPROVAL BY P&DR.
32. COMPACTION TESTING OF SUBGRADE, AGGREGATE BASE COURSE, AND EACH LIFT OF PMBP MATERIAL SHALL BE COMPLETED FOR EVERY 100 LINEAR FEET OF ROADWAY LENGTH EXCEPTING FOR PMBP MATERIAL IN WHICH CASE PROVIDE ONE (1) TEST FOR EVERY 100 LINEAR FEET OF LAYDOWN MACHINE PASS.
33. PMBP MATERIAL QUALITY TEST QUALITY TEST SAMPLES (WET) SHALL BE OBTAINED AND TESTED FOR EVERY 500 TONS OR FRACTION THEREOF OR ONE (1) SAMPLE PER DAY.
34. UTILITY APPURTENANCE SUCH AS TELEPHONE PEDESTALS, ELECTRICAL TRANSFORMERS, GAS, AND CABLE TV PEDESTALS SHALL BE PLACED OUTSIDE THE PUBLIC RIGHT-OF-WAY AND WITHIN UTILITY EASEMENTS. THE OWNER IS RESPONSIBLE FOR RELOCATING MIS-PLACED UTILITY STRUCTURES PRIOR TO REQUESTING A PRE-FINAL INSPECTION. WATER METER BOXES AND FIRE HYDRANTS MAY BE PLACED BETWEEN THE SIDEWALK AND CURB. WATER VALVE AND METER BOXES ARE NOT TO BE PLACED WITHIN MAINTENANCE AREAS OF SEMI-IMPROVED (GRAVEL OR EQUAL) ROADS.
35. CONSTRUCTION DEBRIS AND/OR EXCESS MATERIAL SHALL BE STORED IN AN ON-SITE AREA AND APPROPRIATELY CONTAINED. SAID DEBRIS SHALL NOT BE A NUISANCE TO THE SURROUND NEIGHBORHOOD. DISPOSAL OF DEBRIS SHALL BE EITHER WITHIN THE CITY LIMITS UNDER SEPARATE GRADING PERMIT OR AT A DESIGNATED NMED APPROVED DISPOSAL SITE. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE AS TO PROPOSED DEBRIS DISPOSAL SITE LOCATION(S). ALL DEBRIS AND/OR EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE PRIOR TO SCHEDULING A PRE-FINAL INSPECTION WI P&DR STAFF.
36. THE CONTRACTOR SHALL MAKE A WRITTEN REQUEST FOR A PRE-FINAL INSPECTION OF TERRAIN MANAGEMENT AND INFRASTRUCTURE WORKS A MINIMUM OF 14 CALENDAR DAYS IN ADVANCE WITH P&DR STAFF. AT THIS INSPECTION, APPLICABLE CITY DIVISION STAFF WILL REVIEW THE FINAL WORK PRODUCT. ANY DEFICIENCIES WILL BE NOTED IN A "PUNCHLIST" AND PROVIDED TO THE CONTRACTOR FOR CORRECTION. WHEN ALL PUNCHLIST ITEMS ARE COMPLETED THE CONTRACTOR SHALL FILE A WRITTEN STATEMENT TO THAT EFFECT AND A FINAL INSPECTION WILL BE HELD BY P&DR STAFF. UPON "ACCEPTANCE", AN ACCEPTANCE LETTER WILL BE PROVIDED WHEREIN ALL WORK WILL BE ACCEPTED FOR MAINTENANCE BY THE CITY AND THE COMMENCEMENT OF THE WARRANTY PERIOD INITIATED.
37. THE R-VALVE FOR THIS PROJECT SHALL NOT BE LESS THAN 50.

2. THE CONTRACTOR MUST OBTAIN ALL SEWER HOOKUP PERMITS FROM THE CITY'S BUILDING PERMITS SECTION (SEWER LINES) PRIOR TO COMMENCING ANY SEWER LINE CONSTRUCTION. A COPY OF THE PERMIT MUST BE KEPT AT THE CONSTRUCTION SITE.
3. ALL MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
4. A COPY OF THE APPROVED PLANS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES DURING WORK HOURS.
5. ALL MODIFICATIONS TO THE SANITARY SEWER PLANS MUST BE REVIEWED AND APPROVED BY THE CITY'S WASTEWATER MANAGEMENT DIVISION PRIOR TO CONSTRUCTION.
6. ADDITIONAL GENERAL NOTES ARE CONTAINED IN THE STANDARD CITY DETAIL SHEETS FOR SANITARY SEWER CONSTRUCTIONS.
7. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM CLASS C BEDDING (2006 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
8. ALL 4 INCH AND 6 INCH DIAMETER GRAVITY SEWER PIPE SHALL BE PRIVATE. NO PRIVATE SEWER SYSTEM SHALL USE LARGER THAN A 6 INCH DIAMETER PIPE. NO PUBLIC GRAVITY SEWER LINE TO BE ACCEPTED BY THE CITY OF SANTA FE FOR PERMANENT MAINTENANCE SHALL BE LESS THAN 8 INCHES DIAMETER.
9. NO CONCRETE ENCASEMENT OF NEW OR EXISTING PUBLIC SEWER PIPE WILL BE ALLOWED UNLESS APPROVED BY THE CITY OF SANTA FE WASTEWATER MANAGEMENT DIVISION.
10. CORE DRILLING IS REACQUIRED FOR ALL NEW CONNECTIONS TO AN EXISTING MANHOLE.
11. NO PUBLIC SEWER MAIN LINE OR MANHOLE WILL BE ALLOWED UNDER OR WITHIN A STORM WATER DETENTION/RETENTION POND.
12. PRIOR TO PAVING OVER ANY SANITARY SEWER LINES, SUBMIT T.V. TAPES AND LOGS, PRESSURE TESTS, AND THE ENGINEER'S CERTIFICATION TO THE CITY'S WASTEWATER MANAGEMENT DIVISION. AFTER THE WASTEWATER MANAGEMENT DIVISION REVIEWS THE ABOVE LISTED INFORMATION, A PRELIMINARY MANHOLE INSPECTION WILL BE CONDUCTED. WHEN ALL THE ITEMS LISTED BELOW ARE COMPLETED TO MEET THE STANDARDS OF THE WASTEWATER MANAGEMENT DIVISION, A LETTER APPROVING PAVING WILL BE ISSUED IN RELATION TO THE SANITARY SEWER. NOTE: A FINAL MANHOLE INSPECTION WILL BE CONDUCTED AFTER THE FINAL PAVING IS COMPLETED.
13. ALL SEWER MANHOLES WITH SEWER LINES 12 INCHES IN DIAMETER AND LARGER ARE REQUIRED TO HAVE APPROVED VENTED AND LOCKING MANHOLE COVERS.
14. LOCATE WIRES SHALL BE INSTALLED FOR ALL THE SANITARY SEWERS (GRAVITY/FORCE MAINS). THE LOCATE WIRE MUST BE VISIBLE IN THE MANHOLE OR ACCESS STRUCTURE. THIS WILL BE VERIFIED DURING THE PRELIMINARY MANHOLE INSPECTION PRIOR TO PAVING. THE LOCATE WIRE IS TO BE CONTINUOUS, 12 GAUGE, SOLID STRAND INSULATED COPPER WIRE.
15. OFF-ROAD PUBLIC SEWER ACCESS WILL BE PROVIDED FOR ALL PUBLIC SEWER LINES AND MANHOLES. ACCESS ROADS ARE TO BE A MINIMUM 12 FEET WIDE WITH A DRIVING SURFACE OF 6 INCHES OF COMPACTED BASE COURSE. NO ACCESS ROAD SHALL HAVE A GRADE GREATER THAN 15%. MANHOLES ARE TO BE ALIGNED WITH THE CENTER LINE OF THE ACCESS ROAD. SEWER EASEMENTS ARE TO BE A MINIMUM OF 20 FEET IN WIDTH.
16. OFF ROAD SANITARY SEWER - CALL THE WASTEWATER MANAGEMENT DIVISION AT 505-955-4650 FOR A FIELD REVIEW OF THE GRADING OF ALL OFF ROAD SANITARY SEWER TO ENSURE THAT THE CITY'S MAINTENANCE VEHICLES CAN ACCESS ALL MANHOLES. THE GRADES MAY BE REQUIRED TO BE ADJUSTED BASED UPON A FINAL INSPECTION BY THE WASTEWATER MANAGEMENT DIVISION AND THE PROJECT ENGINEER.
17. FOR RECORD DRAWINGS, TIE MANHOLE TO A CITY OF SANTA FE SURVEY MONUMENT AS PART OF THE FINAL RECORD DRAWINGS. SHOW CORRECTED AS-BUILT BEARING AND DISTANCES, SLOPES, RIM AND INVERT ELEVATIONS AND SEWER SERVICES ALONG THE HORIZONTAL ALIGNMENT OF THE SEWER SERVICES ALONG THE HORIZONTAL ALIGNMENT OF THE SANITARY SEWER. FOR RECORDS DRAWINGS, A SEPARATE SUMMARY TABLE ADDED TO THE EXISTING PLAN SHEETS OR AS AN ADDITIONAL SHEET SHALL BE REQUIRED. THE SUMMARY SHEET SHALL LIST DATA FOR THE SEWER LINE SEGMENTS BETWEEN MANHOLES SHOWING THE UPSTREAM AND DOWNSTREAM MANHOLE WITH THE DESIGN SEGMENT LENGTHS, SLOPES AND BEARINGS AND THE AS-BUILT SEGMENT LENGTHS, SLOPES AND BEARINGS. THE SUMMARY SHEET SHALL INDICATE THE TOTAL NUMBER OF NEW PUBLIC MANHOLES CONSTRUCTED, THE TOTAL NUMBER OF NEW PUBLIC MANHOLES CONSTRUCTED, THE TOTAL NUMBER OF CONNECTIONS TO EXISTING PUBLIC MANHOLES, THE TIE TO A CITY CONTROL MONUMENT AND THE TOTAL LENGTH OF AS-BUILT PUBLIC SEWER LINE CONSTRUCTED BY SIZE.
18. THE OWNER/DEVELOPER WILL BE RESPONSIBLE FOR MAINTAINING, REPAIRING AND LOCATING THE SEWER SYSTEM UNTIL CITY ACCEPTANCE FOR MAINTENANCE. DAMAGES RESULTING FROM A STOPPAGE IN ANY GRAVITY AND/OR PRESSURE SEWER SYSTEM WILL BE THE SOLE RESPONSIBILITY OF THE OWNER/DEVELOPER UNTIL A FINAL ACCEPTANCE LETTER FOR PERMANENT MAINTENANCE HAS BEEN ISSUED BY THE WASTEWATER MANAGEMENT DIVISION.
19. WATER METERS WILL NOT BE PLACED UNTIL A FINAL ACCEPTANCE LETTER HAS BEEN ISSUED BY THE WASTEWATER DIVISION FOR ALL ON-SIRE SANITARY SEWER NEEDED IN ORDER FOR THE PROJECT TO CONNECT TO THE SANITARY SEWER SYSTEM.
20. 20 FOOT WIDE ACCESS GATES SHALL BE PROVIDED AT ALL FENCES, WALLS OR OTHER OBSTRUCTIONS THAT CROSS A PUBLIC SEWER LINE. ACCESS GATES TO BE LOCATED WITHIN THE SANITARY SEWER EASEMENT.
21. THE OWNER/DEVELOPER WILL BE RESPONSIBLE FOR LOCATING EACH SEWER SERVICE AT THE TIME EACH LOT IS READY TO CONNECT TO THE SEWER. IT IS SUGGESTED THAT THE OWNER/DEVELOPER RETAIN A COPY OF THE TELEVISION INSPECTION VIDEO ALONG WITH THE VIDEO LOGS. EACH SERVICE SHALL BE CLEARLY MARKED FOR EACH LOT AR POINT OF CONNECTION. ALL CALLS RECEIVED BY THIS DIVISION REGARDING THE LOCATION OF SERVICE WILL BE FORWARDED TO THE OWNER/DEVELOPER.
22. THE CONTRACTOR SHALL CALL THE WASTEWATER MANAGEMENT DIVISION (MICHAEL DOZIER AT TELEPHONE # (505)-955-4642) FOR A FINAL MANHOLE INSPECTION. THIS INSPECTION WILL BE ISOLATED TO THE MANHOLES. THE CITY'S PLUMBING AND MECHANICAL INSPECTORS WILL CONDUCT ALL OTHER NECESSARY PLUMBING INSPECTIONS. NOTE: THE CITY'S PLUMBING AND MECHANICAL INSPECTORS WILL INSPECT THE INDIVIDUAL SEWER SERVICE TAPS AND LATERALS, WHICH CONNECT TO THE PUBLIC SANITARY SEWER.
23. THE EXISTING SANITARY SEWER LINE MUST BE T.V. TAPED PRIOR TO A NEW SERVICE CONNECTION BEING PLACED AS WELL AS TAPED AFTER THE SERVICES HAVE BEEN COMPLETED. THIS IS TO ENSURE THAT THE EXISTING SANITARY SEWER LINE IS NOT DAMAGED AND THE NEW SERVICE IS INSTALLED CORRECTLY.
24. ALL COSTS ASSOCIATED WITH THE OPERATION, MAINTENANCE AND REPLACEMENT OF GRINDER PUMPS FOR INDIVIDUAL LOTS SHALL BE THE MANAGEMENT DIVISION. FOR GRINDER PUMPS THAT CONNECT TO A GRAVITY MAIN, THE GRINDER PUMP SHALL BE A TYPE APPROVED BY THE CITY OF SANTA FE PLUMBING CODE.
25. A MINIMUM OF 12 INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN THE SEWER LINE ND ANY STORM DRAIN PIPING.
26. ALL PRESSURE SEWER SYSTEMS SHALL BE AIR OR HYDROSTATICALLY PRESSURE TESTED @ 120 PSI FOR 2 HOURS MINIMUM. THE TEST IS TO BE WITNESSED AND CERTIFIED BY THE PROJECT ENGINEER. PRIOR TO BEING PUT INTO SERVICE AND ACCEPTANCE BY THE CITY OF SANTA FE, ALL PRESSURE SEWER SYSTEM MAIN LINES WILL BE FILLED WITH WATER.
27. NO PUBLIC PRESSURE SEWER SYSTEM PIPING MAY BE INSTALLED IN A COMMON TRENCH WITH OTHER UTILITIES.
28. SEWER BACKFLOW CHECK VALVES WILL BE REQUIRED FOR ALL SEWER SERVICE LATERAL CONNECTIONS TO SEWER MAINS 12 INCHES OR GREATER IN DIAMETER. THE SEWER SERVICE CONNECTION MUST BE MADE AT AN EXISTING OR NEW MANHOLE. SEWER SERVICE CONNECTIONS TO SEWER MAINS WITH PIPE SIZE DIAMETER OF 12 INCHES AND GREATER WILL NOT BE MADE WITHOUT APPROVAL FROM THE WASTEWATER MANAGEMENT DIVISION.
29. SEWER BACKWATER CHECK VALVES SHALL BE REQUIRED ON PRIVATE SEWER SERVICE LATERALS PER THE CITY OF SANTA FE PLUMBING CODE.
30. ALL PVC SEWER PIPES THAT ARE INSTALLED AT A DEPTH OF TEN (10) FEET OR GREATER OR AT A SLOPE OF ONE PERCENT (1%) OR LESS SHALL BE SDR 26 PVC PIPE.
31. ALL AS-BUILT SEWER LINE AND MANHOLE DATA SHALL BE OBTAINED AND CERTIFIED BY A LICENSED SURVEYOR OR ENGINEER. AS-BUILT DATA SUPPLIED BY OTHER THAN A LICENSED SURVEYOR OR ENGINEER SHALL NOT BE VALID FOR FINAL AS-BUILTS.
32. ALL EXISTING AND NEW PUBLIC MANHOLES WITHIN A PROJECT SHALL HAVE ACCESS FOR CITY SEWER MAINTENANCE EQUIPMENT. ALL ACCESS IS SUBJECT TO FIELD VERIFICATION AND MODIFICATION AS REQUIRED BY THE WASTEWATER DIVISION PRIOR TO THE FINAL PROJECT CLOSE OUT WITH THE CITY OF SANTA FE.
33. ALL SEWER LINE CROSSINGS OF RIVERS, STREAMS, ARROYOS, DRAINAGE CHANNELS, ETC. SHALL REQUIRE A BASIS OF DESIGN ANALYSIS PREPARED BY A LICENSED ENGINEER.
34. AN APPROVED BACKFLOW VALVE AND ISOLATION VALVE ARE REQUIRED ON ALL LOW PRESSURE SEWER SERVICE LINES AS PER THE CITY OF SANTA FE STANDARD SEWER SPECIFICATIONS.
35. TERMINAL FLUSHING CONNECTIONS AND IN-LINE FLUSHING CONNECTIONS ARE REQUIRED ON ALL LOW PRESSURE SEWER SYSTEMS. THE MAXIMUM SPACING BETWEEN IN-LINE FLUSHING CONNECTIONS SHALL BE 500 FEET. DISTANCED GREATER THAN 500 FEET BETWEEN LOW PRESSURE SEWER IN-LINE FLUSHING CONNECTIONS SHALL BE APPROVED BY THE WASTEWATER DIVISION.
36. ALL SANITARY SEWER MANHOLES FIFTEEN (15) FEET IN DEPTH OF GREATER SHALL BE SIX (6) FOOT DIAMETER.
37. PVC SEWER PIPE SHALL BE RAN CONTINUOUS THROUGH MANHOLES WHEN PIPE OF APPROXIMATE EQUAL SLOPES ARE ENTERING AND LEAVING THE MANHOLES.
38. ALL NEW CONNECTIONS TO AN EXISTING SANITARY SEWER MANHOLE SHALL INCLUDE THE REHABILITATION REQUIRED TO MEET THE CITY OF SANTA FE WASTEWATER DIVISION STANDARD CONSTRUCTION DETAILS.

AS-BUILT NOTE

THE MANHOLE TO THE CITY OF SANTA FE SURVEY MONUMENT AS A PART OF THE FINAL AS-BUILT PLANS. SHOW AS-BUILT BEARINGS AND DISTANCES ALONG THE HORIZONTAL ALIGNMENT OF THE SANITARY SEWER.

SDCW WATER NOTES

1. THE CONTRACTOR WILL NOTIFY SDCW 5 DAYS PRIOR TO COMMENCEMENT OF WORK.
2. CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE SANGRE DE CRISTO WATER COMPANY CONSTRUCTION SPECIFICATIONS.
3. ALL EASEMENTS WILL BE DEDICATED, CLEARED AND GRADED, AND STAKED PRIOR TO WATER LINE INSTALLATION.
4. ALL STREETS WILL BE CUT TO GRADE PRIOR TO WATERLINE INSTALLATION.
5. ALL LOT CORNERS WILL BE STAKED PRIOR TO SERVICE LINE INSTALLATION. CURB AND GUTTER WILL BE INSTALLED PRIOR TO WATERLINE INSTALLATION UNLESS OTHERWISE APPROVED IN WRITING BY SDCW CO.
6. CONTRACTOR (DEVELOPER) SHALL PROVIDE CONSTRUCTION STAKING UTILIZING THE APPROPRIATE RIGHT OF WAY MAPS, SIGNED PLATS AND SDCW COMPANY DRAWINGS.
7. MATERIAL SUBMITTAL SHALL BE APPROVED BY SDCW CO. PRIOR TO CONSTRUCTION.
8. CONTACT NEW MEXICO ONE CALL AT 1-800-321-2537, TWO WORKING DAYS IN ADVANCE OF CONSTRUCTION FOR UTILITY SPOTS.
9. PRESSURE REGULATORS WILL BE INSTALLED ON ALL SERVICES DOWNSTREAM FROM THE METER.
10. PRESSURE REGULATOR AND PRESSURE SYSTEMS MUST BE APPROVED BY THE CITY OF SANTA FE PRIOR TO INSTALLATION.
11. A MINIMUM OF 4 FEET COVER TOP OF PIPE TO BE MAINTAINED.
12. CONTRACTOR TO SUBMIT VALVE TIES TO SDCW CO. WITHIN 5 DAYS OF COMPLETION.
13. CONTRACTOR TO SUBMIT FITTING TIES AND LENGTHS BETWEEN FITTINGS TO SDCW CO. 5 DAYS AFTER COMPLETION. THIS INCLUDES DISTANCES FROM CORPORATION TO CORPORATION AS-BUILT QUANTITIES AND MEASUREMENTS.
14. ALL VALVE BOXES TO BE BROUGHT UP TO GRADE AFTER FIRST COURSE OF ASPHALT AND BEFORE FINAL COURSE OF ASPHALT.
15. FIRE HYDRANTS SHALL BE NUMBERED USING REFLECTIVE NUMERALS. THE REFLECTIVE NUMERALS ARE TO BE OBTAINED BY THE CONTRACTOR FOR THE SDCW CO. FIELD REPRESENTATIVE AT THE TIME THE ITA IS ISSUED. NUMBERS SHALL BE LEGIBLE FROM THE ROAD.
16. A MECHANICAL RESTRAINT SYSTEM SHALL BE UTILIZED ON FITTINGS AND PIPING FOR ALL CONDITIONS (e.g. CAPS WHERE MAIN WILL BE EXTENDED IN THE FUTURE) AS SPECIFICALLY APPROVED BY SDCW.
17. ANY CHANGES TO THESE PLANS MUST BE APPROVED BY BOTH SDCW AND THE DESIGN ENGINEER.
18. WORK ON THE WATER SYSTEM CANNOT PROCEED UNTIL SDCW HAS ISSUED AN INDIVIDUAL TASK AUTHORIZATION (ITA) TO THE UTILITY CONTRACTOR.

CASE/PERMIT NO. S-2020-XX

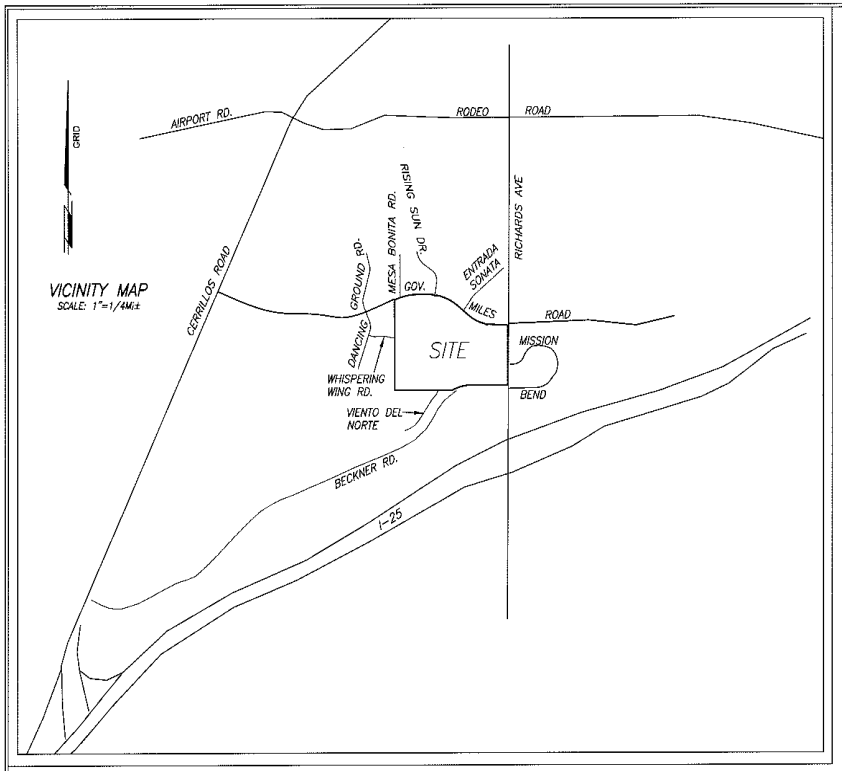
NO.	REVISIONS	BY	APP.	DATE

CITY REVIEW

PROJECT:

SDCW

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VICINITY MAP
SCALE: 1"=1/4Mi±

AEROTECH MAPPING LEGEND

SYMBOLS DESCRIPTIONS
NOT ALL SYMBOLS SHOWN ARE USED

- CACTUS
- FLAG
- GRID TICK
- AERIAL PANELS
- PALM TREE
- SINGLE TREE
- PEDESTRIAN SIGNAL
- CULVERT
- POST- MISC
- SPOT ELEVATION
- BILLBOARD
- TRANSMISSION
- BRIDGE SIGNS
- CATCH BASIN
- FIRE HYDRANT
- METER / UTILITY
- MAN HOLE
- STREET LIGHT
- LIGHT POLE
- UTILITY POLE
- SIGNS
- SIGNS
- TV DISH
- STREET SIGN
- GATE
- TRAFFIC SIGNAL
- VALVE
- ARROW / STRAIGHT
- ARROW / TURNS
- ARROWS / TURNS
- BIKE LANE
- HANDICAP
- TRAFFIC PAINT
- TRAFFIC PAINT
- MINE
- BUILDING
- BRIDGE
- CANOPY
- CENTER LINE PAINT
- CONCRETE
- CURB / GUTTER
- DIRT ROAD / TRAIL
- GOLF FAIRWAY
- FENCE
- GRID TEXT
- INDEX CONTOUR
- INTER CONTOUR
- ASPHALT PAVEMENT
- SWIMMING POOL
- RETAINING WALL
- PAVED ROAD
- RAILROAD
- VEGETATION/TREE LINE
- GUARD RAIL
- PARKING STRIPES
- WASH

REFERENCE DOCUMENTS:

"BECKNER ROAD EXTENSION DEDICATION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD. CO. AND THE CITY OF SANTA FE SHOWING PUBLIC R/W DEDICATION OF A PORTION OF LOT 3 AS SHOWN ON PLAT RECORDED IN BOOK 710 PAGES 21–22", AS RECORDED AS INST.# 1796166 IN BK. 804 PAGES 09–10.

LOT LINE ADJUSTMENT PLAT PREPARED FOR BECKNER ROAD EQUITIES, INC. BY GARY E. DAWSON, NMLS 7014. PLAT RECORDED AS INSTRUMENT NUMBER 1592455 ON THE 4TH DAY OF MARCH, 2010 AND PLAT BOOK 714 PAGES 14–26, IN THE SANTA FE COUNTY CLERKS OFFICE.

ROADWAY & UTILITY RIGHT OF WAY GOVERNOR MILES ROAD NAVA ADE SUBD. TO RICHARDS AVE. SE1/4 SB, T16N, R9E, NMPM SANTA FE COUNTY, N.M. PREPARED BY RICHARD A. MORRIS, L.S.#10277, RECORDED IN PLAT BK. 362 PG.07.

WARRANTY DEED, JOHN ARDISSONE AND MAY T. ARDISSONE TO BUILDING SERVICES OF SANTA, BK 462 PAGE 621.

ALL OTHER REFERENCE DOCUMENTS AS NOTED HEREON.

NOTES:

ALL EASEMENTS AND DATA ARE TAKEN FROM REFERENCE DOCUMENTS #1&#2. NO ADDITIONAL RESEARCH HAS BEEN PROVIDED NOR PERFORMED FOR THIS SURVEY.

TOPOGRAPHIC MAPPING PROVIDED BY "AEROTECH MAPPING, INC."("AEROTECH") WAS THE BASIS OF CONTOURS PROVIDED HEREIN. ALL DATA FROM THIS MAPPING HAS NOT BEEN VERIFIED AND THE PURPOSE OF THIS MAP IS TO CERTIFY THAT MAPPING MEETS OR EXCEEDS MAPPING STANDARDS.

SEE RECORDED PLATS FOR NOTES, RESTRICTIONS AND EASEMENTS. THIS PROPERTY IS SUBJECT TO VALID RESTRICTIONS, EASEMENTS AND COVENANTS OF RECORD.

THIS IS NOT A BOUNDARY SURVEY OR A RIGHT-OF-WAY SURVEY. APPARENT PROPERTY CORNERS, RIGHT-OF-WAY LINE, OR PROPERTY LINES AS SHOWN ARE DERIVED FROM RECORD SURVEY PLATS, RIGHT-OF-WAY MAPS, OR DEEDS REFERENCED HEREON AND ARE NOT GUARANTEED OR TO BE RELIED ON FOR THE ESTABLISHMENT OF PROPERTY LINES.

ALL UNDERGROUND UTILITIES ON THIS DRAWING ARE APPROXIMATE, LOCATED FROM A COMBINATION OF FIELD TIES OF SURFACE FEATURES, MARKINGS BY LOCATORS AND G.I.S. MAPS PROVIDED BY UTILITY COMPANIES. REFER TO NM811 TICKET 20FE1303224. THIS INFORMATION SHOULD NOT BE USED IN LIEU OF FIELD INSPECTIONS. CONTRACTOR OR OWNER IS RESPONSIBLE TO HAVE UTILITIES LOCATED AND POT-HOLED PRIOR TO DIGGING. CONTACT THE COVERNING UTILITY PROVIDER FOR ADDITIONAL INFORMATION. LOCATES WERE EXISTING AND NO LOCATES WERE ORDERED FOR THIS SURVEY.

CONTROL SUMMARY:

BEARINGS ARE GRID. DISTANCES ARE REFERRED TO 6800' AMSL. TO CONVERT TO NMSP CENTRAL ZONE GRID DISTANCES, MULTIPLY BY THE COMBINED SCALE FACTOR OF 0.999583853. VERTICAL DATUM IS NAVD88. ALL DATA IS DERIVED FROM CONTROL ESTABLISHED USING THE NMSP NAD83 PROJECTION FROM RTK BASE STATION "DAWSON2", ESTABLISHED FROM '92 NGS AND SANTA FE COUNTY G.I.S. CONTROL STATIONS: GRID N1687626.87027, GRID E 1708833.475 AND AN ELEVATION OF 6572.376 VIA STATIC OBSERVATION.

FLOOD ZONE

THIS PROPERTY LIES WITHIN OTHER AREAS ZONE "X", AREAS OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAPS (F.I.R.M.) #35049C0394D, EFFECTIVE DATE JUNE 17, 2008.

SURVEYORS CERTIFICATE:

I HEREBY CERTIFY THAT I ESTABLISHED THE HORIZONTAL AND VERTICAL CONTROL POINTS USED FOR THE BASIS OF THIS AERIAL MAPPING ON JANUARY 27, 2020. THE SPOT ELEVATIONS WERE OBTAINED UNDER MY PERSONAL SUPERVISION ON FEB. 26, 2020 AND MORE THAN 95% OF THOSE POINTS COMPARED TO THE CONTOURS AS REFERENCED, MEET OR EXCEED MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYS. THIS IS A TRUE REPRESENTATION OF A TOPOGRAPHIC SURVEY COMPILED BY ME. TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND MAP ARE CORRECT, TRUE AND AND MEET MINIMUM MAPPING STANDARDS.

DIEGO J. SISNEROS, N.M.P.L.S. #13986 3/19/2020

DIEGO J. SISNEROS NEW MEXICO 13986 REGISTERED PROFESSIONAL SURVEYOR

DAWSON SURVEYS FIELD TIE LEGEND AND ABBREVIATIONS

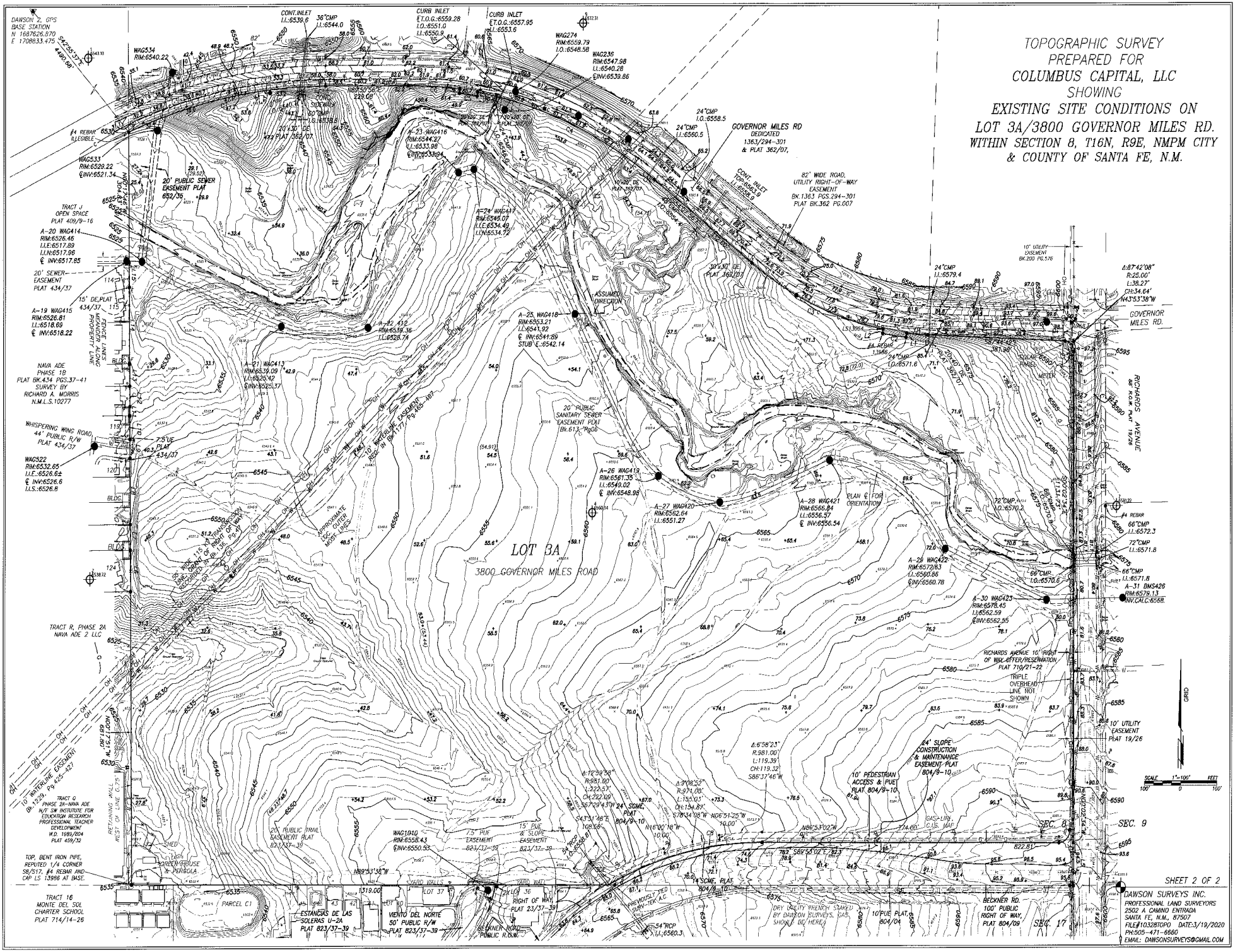
- ●F DENOTES #4 REBAR 10277
- ● DENOTES #4 REBAR, LS 13986 OR AS INDICATED
- • DENOTES CALCULATED POINT, NOT SET
- ⊠ DENOTES PEDESTAL, TRANSFORMER, SWITCHGEAR OR UTILITY CABINET
- DENOTES COMMUNICATION PEDESTAL/RISER
- SB DENOTES STAKE, MARKING BORE HOLE LOCATION
- DENOTES ELEC. METER
- DENOTES METER/METERS
- DENOTES UTILITY POLE
- —> DENOTES ANCHOR/GUY
- DENOTES SEWER MANHOLE
- VV DENOTES WATER VALVE
- DENOTES WATER METER
- + 0.0 DENOTES SPOT ELEVATIONS/SPOT VERIFICATIONS
- (0.0) DENOTES INTERPOLATED MAPPING SPOT VERIFICATION WHERE APPROACHING OR EXCEEDING MINIMUM TOLERANCES
- DENOTES FENCE
- OH DENOTES OVERHEAD UTILITY LINE
- W DENOTES WATER LINE, LOCATOR LOCATION
- > DENOTES SEWER LINE, ASSUMED LOCATION
- C DENOTES COMMUNICATION LINE, LOCATOR LOCATION
- G DENOTES GAS, LOCATOR LOCATION
- W DENOTES WATERLINE, G.I.S. MAPPING
- JT DENOTES JOINT UTILITY TRENCH, G.I.S. MAPPING
- G DENOTES GAS, G.I.S. MAPPING
- SDE DENOTES SLOPE & DRAINAGE EASEMENT
- PUE DENOTES PUBLIC UTILITY EASEMENT
- SCME DENOTES SLOPE CONSTRUCTION & MAINTENANCE EASEMENT
- PUE DENOTES PUBLIC UTILITY EASEMENT
- OE DENOTES DRAINAGE EASEMENT
- DENOTES BOUNDARY OF LANDS DEALT WITH BY THIS PLAT. INFORMATION OUTSIDE THIS BOUNDARY IS BACKGROUND INFORMATION ONLY, NOT VERIFIED FOR ACCURACY AND IS NOT PART OF THIS PLAT.

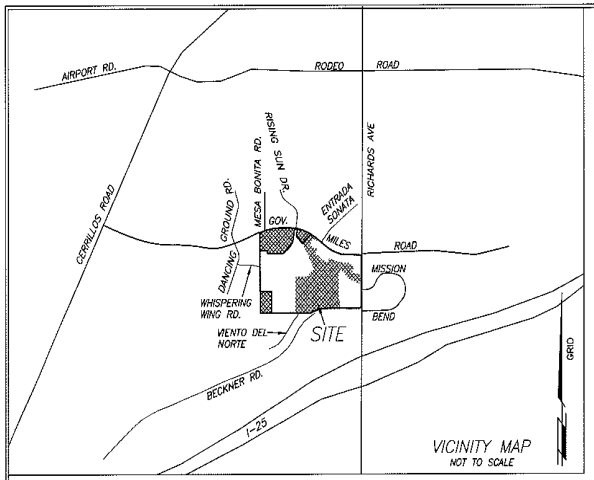
LINE TABLE		
LINE	BEARING	DIST
L1	N08°07'45"E	10.01'
L2	S08°07'45"W	10.01'
L3	N09°24'15"E	10.00'
L4	S06°55'56"W	10.00'
L5	S00°02'34"E	130.08'
L6	N00°21'48"W	96.34'
L7	N00°21'48"W	59.78'
L8	N00°17'43"W	154.51'
L9	N00°17'43"W	44.01'
L10	N00°17'20"W	54.85'
L11	N00°02'03"W	21.23'
L12	N00°25'47"W	47.81'
L13	N00°20'58"W	51.96'
L14	N00°17'00"W	176.76'
L15	N00°30'02"W	56.84'

CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CHD BRG
C1	3°45'06"	891.00'	58.34'	58.33'	S85°52'09"E
C2	4°11'53"	901.00'	66.01'	66.00'	S81°52'15"E
C3	25°36'57"	891.00'	398.35'	395.04'	S86°36'25"E
C4	26°27'49"	1159.00'	535.32'	530.57'	S87°21'51"E
C5	2°28'19"	1149.00'	49.57'	49.57'	S81°49'55"E
C6	7°03'58"	1159.00'	142.83'	142.84'	S86°36'03"E
C7	21°50'45"	1459.00'	556.29'	552.92'	N76°55'34"E
C8		957.00'	440.34'	436.47'	S76°36'04"W
C9	90°09'32"	30.00'	47.21'	42.49'	N45°02'12"E

TOPOGRAPHIC SURVEY PREPARED FOR COLUMBUS CAPITAL, LLC SHOWING EXISTING SITE CONDITIONS ON LOT 3A/3800 GOVERNOR MILES RD. WITHIN SECTION 8, T16N, R9E, NMPM CITY & COUNTY OF SANTA FE, N.M.

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 A CAMINO ENTRADA
SANTA FE, N.M., 87507
FILE#103287OPO DATE:3/19/2020
PH:505-471-6660
EMAIL: DAWSONSURVEYS@GMAIL.COM


TOPOGRAPHIC SURVEY
PREPARED FOR
COLUMBUS CAPITAL, LLC
SHOWING
EXISTING SITE CONDITIONS ON
LOT 3A/3800 GOVERNOR MILES RD.
WITHIN SECTION 8, T16N, R9E, NMPM CITY
& COUNTY OF SANTA FE, N.M.
LOT 3A
3800 GOVERNOR MILES ROAD
GOVERNOR MILES RD.
RICHARDS AVENUE
WHISPERING WING ROAD
BECKNER RD.
SEC. 8
SEC. 9
SEC. 17
SHEET 2 OF 2
DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 A CAMINO ENTRADA
SANTA FE, N.M., 87507
FILE#10328TOPO DATE:3/19/2020
PH:505-471-6660
EMAIL: DAWSONSURVEYS@GMAIL.COM



UTILITY COMPANIES

COMCAST DATE

IN APPROVING THIS PLAT, PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM), NEW MEXICO GAS COMPANY (NMGC) AND QWEST CORPORATION D/B/A CENTURYLINK (QWEST) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM, NMGC AND QWEST DO NOT WAIVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT, OR OTHER DOCUMENT AND WHICH ARE NOT SHOWN ON THIS PLAT.

PNM ELECTRIC SERVICE DATE

NM GAS COMPANY DATE

QWEST CORP. d/b/a/ CENTURYLINK QC

THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICES TO THE SUBDIVISION.

CENTURY LINK DATE

CONTROL REFERENCE

-BEARINGS ARE GRID, REFERRED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM NAD83(1992), CENTRAL ZONE FROM GPS STATE PLANE PROJECTION.
-DISTANCES ARE REFERRED TO GROD AMSL.
-DATUM DERIVED FROM DAWSON2 GPS BASE STATION N=1,687,626.870 E=1,708,833.475 ELE=6572.376', ESTABLISHED FROM SANTA FE COUNTY CONTROL STATIONS USING DATA FROM THE 1992 BLUEBOOK REPORT FOR NGS AND S.F. CO..

SANTA FE COUNTY SIGNATURES

SANTA FE COUNTY TREASURER DATE

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the____day of _____, 202____A.D. at _____ o'clock_____, and was duly recorded in book_____, page(s)_____of the records of Santa Fe County.

Witness my Hand and Seal of office
GERALDINE SALAZAR
County Clerk, Santa Fe county, N.M.

Deputy

CITY OF SANTA FE APPROVAL & REVIEW

APPROVED BY THE SANTA FE PLANNING COMMISSION AT THEIR MEETING OF 2020, AS CASE NO. 2020-

PLANNING COMMISSION CHAIRPERSON DATE

PLANNING COMMISSION SECRETARY DATE

CITY ENGINEER FOR LAND USE DATE

CITY PLANNER DATE

NOTES

1. PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.
2. PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK OR SUBMITTAL FOR A BUILDING PERMIT APPLICATION THAT MODIFIES ANY PROVISION OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.
3. BUILDABLE AREAS FOR PLATTED PARCELS WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION AS DETAILED IN THE LAND DEVELOPMENT CODE.
4. EACH LOT SHALL BE SERVED WITH SEPARATE SEWER AND WATER SERVICES.
5. THE PROPERTY AND STRUCTURES SHALL BE CONNECTED TO THE CITY'S PUBLIC SEWER COLLECTION SYSTEM.
6. PRIOR TO ANY NEW CONSTRUCTION, PLAT WILL BE SUBMITTED TO FIRE DEPARTMENT FOR COMPLIANCE WITH INTERNATIONAL FIRE CODE.
7. WASTEWATER U.E.C. CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.
8. NO FENCES, WALLS OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS.
9. NO WALLS, FENCES OR OTHER STRUCTURES THAT WOULD IMPEDE DRAINAGE FLOW SHALL BE PLACED WITHIN DRAINAGE EASEMENTS SHOWN HEREON.
10. ANY AND ALL DEVELOPMENT SHALL MEET THE IFC CODE REQUIREMENTS 2009 EDITION OR THE MOST CURRENT EDITION THE GOVERNING BODY HAS ADOPTED AT THE TIME OF PERMITTING.

FLOOD ZONE

THIS PROPERTY LIES WITHIN OTHER AREAS ZONE "X", AREAS OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAPS (F.I.R.M.) #35049C0394D, EFFECTIVE DATE JUNE 17, 2008.

LOT OF RECORD AND OTHER REFERENCE DOCUMENTS:

1. LOT 3 : "BECKNER ROAD EXTENSION DEDICATION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD. CO. AND THE CITY OF SANTA FE SHOWING PUBLIC R/W DEDICATION OF A PORTION OF LOT 3 AS SHOWN ON PLAT RECORDED IN BOOK 710 PAGES 21-22", AS RECORDED AS INST.# 1796166 IN BK. 804 PAGES 09-10.
2. LOT LINE ADJUSTMENT PLAT PREPARED FOR BECKNER ROAD EQUITIES, INC. BY GARY E. DAWSON, NMLS 7014. PLAT RECORDED AS INSTRUMENT NUMBER 1592455 ON THE 4TH DAY OF MARCH, 2010 AND PLAT BOOK 714 PAGES 14-26, IN THE SANTA FE COUNTY CLERKS OFFICE.
3. ROADWAY & UTILITY RIGHT OF WAY GOVERNOR MILES ROAD NAVA ADE SUBD. TO RICHARDS AVE. SE1/4 S8, T16N, R9E, NMPM SANTA FE COUNTY, N.M. PREPARED BY RICHARD A. MORRIS, L.S.#10277, RECORDED IN PLAT BK. 352 PG.07.
4. WARRANTY DEED, JOHN ARDISSONE AND MAY T. AROISSONE TO BUILDING SERVICES OF SANTA FE, BK 462 PAGE 821.

ALL OTHER REFERENCE DOCUMENTS AS NOTED HEREON.

DEDICATION AND AFFIDAVIT

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED OWNER(S) HAVE CAUSED TO SUBDIVIDE THOSE LANDS SHOWN HEREON.

OPEN SPACE TRACTS A-F & S ARE HEREBY GRANTED TO THE VISTA DE LA SIERRA HOMEOWNERS ASSOCIATION.

DRAINAGE EASEMENTS ARE HEREBY CREATED FOR THE MITIGATION OF STORM WATERS OF THE SUBDIVISION LOTS AND ROADS. THE MAINTENANCE OF THESE EASEMENTS SHALL BE THE RESPONSIBILITY OF THE H.O.A..

ROADS SHOWN HEREON AS PUBLIC RIGHT OF WAY, CREATED BY THIS PLAT, ARE HEREBY DEDICATED TO THE CITY OF SANTA FE FOR PUBLIC USE & MAINTENANCE.

TRAIL EASEMENTS SHOWN HEREON, CREATED BY THIS PLAT, ARE HEREBY DEDICATED TO THE CITY OF SANTA FE FOR A PUBLIC NON-MOTORIZED PEDESTRIAN TRAIL AND THE CONSTRUCTION, REPAIR, AND MAINTENANCE OF SAID TRAIL. MAINTENANCE IS THE RESPONSIBILITY OF THE CITY OF SANTA FE.

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF: PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM"), A NEW MEXICO CORPORATION, (PNM ELECTRIC) FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.

EASEMENTS FOR ELECTRIC TRANSFORMERS/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMERS/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

NEW MEXICO GAS COMPANY FOR INSTALLATION, MAINTENANCE, AND SERVICE FOR NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.

"QWEST CORPORATION, D/B/A CENTURY/LINK QC" FOR INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURIED AND AERIAL COMMUNICATION LINES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDED COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND CLOSURES. THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICES TO THE SUBDIVISION.

COMCAST FOR THE INSTALLATION, MAINTENANCE, AND SERVICE SUCH LINES, CABLE AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE SERVICES.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE WITHIN THE EASEMENT, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENT, WITH THE RIGHT AND PRIVILEGE OF CDING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT OF WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRICAL TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS SHALL BE BINDING UPON THE UNDERSIGNED AND THEIR SUCCESSORS AND ASSIGNS

THIS PLAT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNER(S). THIS PLAT CONTAINS 94.058 ACRES, MORE OR LESS. THIS DEDICATION LIES WITHIN THE PLATTING JURISDICTION OF THE CITY OF SANTA FE, N.M.

STORM WATER AGREEMENT:

PROPERTY OWNER(S) HEREBY AGREE THAT ALL STORM WATER EASEMENTS AND ANY OTHER DRAINAGE IMPROVEMENTS ON PRIVATE PROPERTY WILL BE MAINTAINED AND KEPT FULLY FUNCTIONAL AS ORIGINALLY DESIGNED AND CONSTRUCTED WITHIN PRIVATE PROPERTY BOUNDARIES BY ESTANCIAS DEL NORTE HOME OWNERS ASSOCIATION(OWNER) AND SUBSEQUENT HEIRS, ASSIGNS, AND FUTURE OWNERS. THE CITY IS HEREBY GRANTED THE FOLLOWING: (1) ACCESS FOR INSPECTION OF SAID IMPROVEMENTS; (2) IN THE EVENT OF DRAINAGE FACILITY MAINTENANCE DEFICIENCY AND AFTER TEN (10) DAYS WRITTEN NOTICE TO THE RESPECTIVE PROPERTY OWNER, TO ENTER AND RESTORE FULL FUNCTIONAL CAPACITY OF THE DRAINAGE IMPROVEMENTS; AND (3) TO LIEN THE PROPERTY FOR BOTH DIRECT AND INDIRECT COSTS ASSOCIATED WITH SUCH WORK. BY SIGNATURE AFFIXED TO THIS INSTRUMENT, THE PROPERTY OWNER(S) APPROVE AND AGREE THAT THIS AGREEMENT IS BINDING PERPETUALLY, RUNNING WITH THE LAND, ON PRESENT AND FUTURE OWNERS, HEIRS, AND ASSIGNS.

DRAINAGE FACILITIES MAINTENANCE

THE DRAINAGE FACILITIES ARE PRIVATE AND SHALL BE MAINTAINED BY THE PROPERTY OWNERS.

INSPECTIONS OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER, THE HOMEOWNERS ASSOCIATION SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.

THE REMEDIAL ACTION SHALL CONSIST OF (1) REMOVAL AND DISPOSAL OF SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH; (2) FLUSHING ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND POLLUTANTS THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURES; AND, (3) INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS AND INSPECT FOR THE STRUCTURAL INTEGRITY OF ALL APPURTENANT DRAINAGE STRUCTURES AND REPAIR OR STABILIZE ACCORDINGLY.

OWNER LOT 3:
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY

JEFFERY BRANCH, MANAGING MEMBER.

STATE OF NEW MEXICO)
)SS
COUNTY OF _____)
ON THIS ____ DAY OF _____, 202_, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY JEFFERY BRANCH, MANAGING MEMBER, OF BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY.

NOTARY PUBLIC COMMISSION EXPIRES

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE REPRESENTATION OF A SURVEY COMPLETED UNDER MY PERSONAL SUPERVISION ON THE 19TH DAY OF MARCH, 2019. TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAT ARE CORRECT, TRUE AND MEET THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO.

DIEGO J. SISNEROS, NMPS#13986 9/0/2020

PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 1

PREPARED FOR

BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY

SHOWING

A SUBDIVISION OF LOT 3A AS SHOWN ON PLAT RECORDED AS INSTRUMENT #1796166 IN BOOK 804 PAGES 09-10 INTO 128 RESIDENTIAL LOTS

PURPOSE: TO CREATE 128 RESIDENTIAL LOTS 5 OPEN SPACE TRACTS, RESERVED SCHOOL TRACT W, RESERVED FUTURE DEVELOPMENT TRACTS U & V AND FUTURE SUBDIVISION PHASE PARCELS 2A & 2B AND PHASES 3A & 3B

"TITLE AND INDEXING INFORMATION FOR COUNTY CLERK"

OWNERS: BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
PARENT PARCEL: LOT 3 BECKNER ROAD EXTENSION DEDICAION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD CO. AND THE CITY OF SANTA FE, RECORDED AS INST.#1796166 IN BOOK 804 PAGES 9-10.

UPC: 1-050-095-387-083

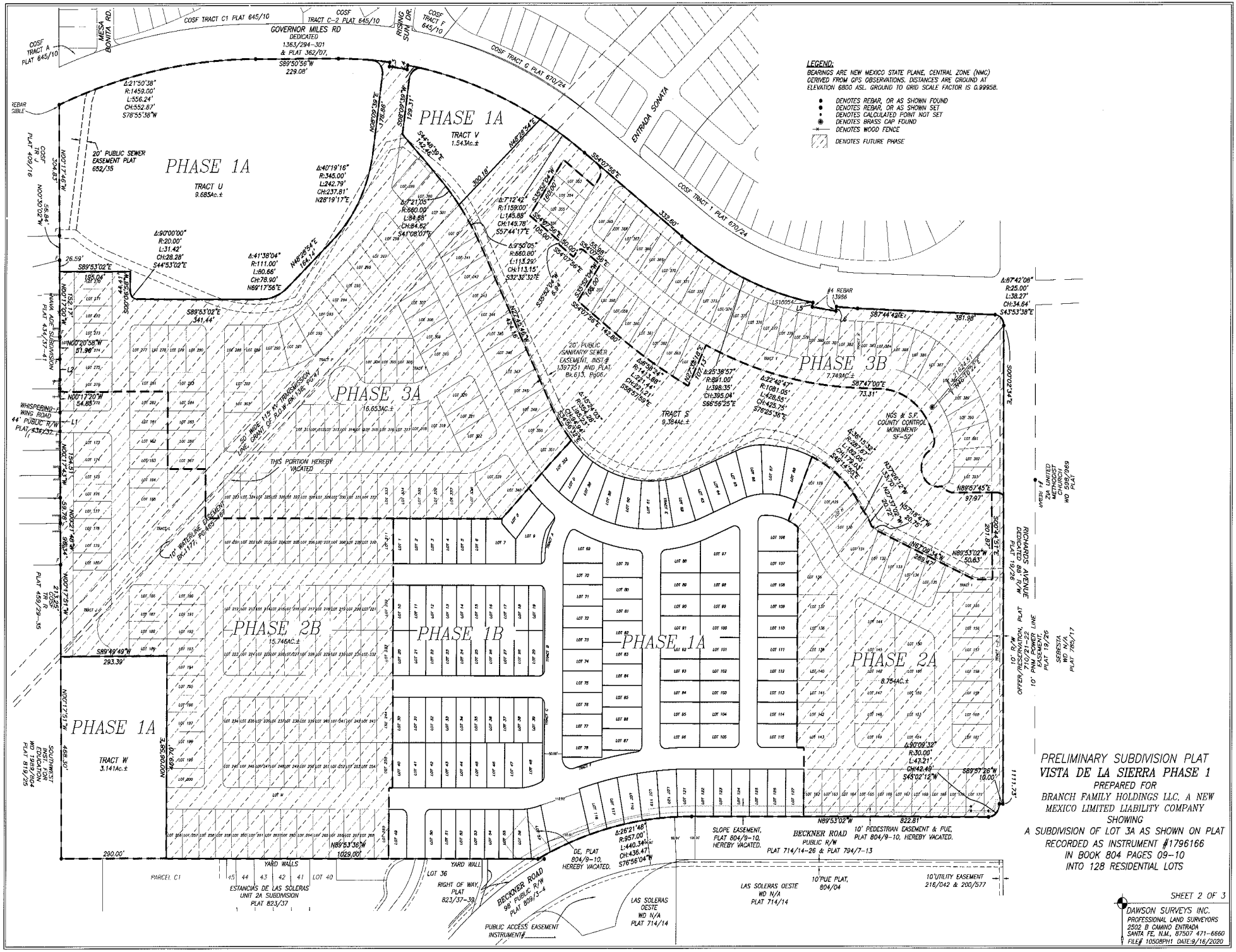
PLSS LOCATION: SECTION 8, T16N, R9E, NMPM

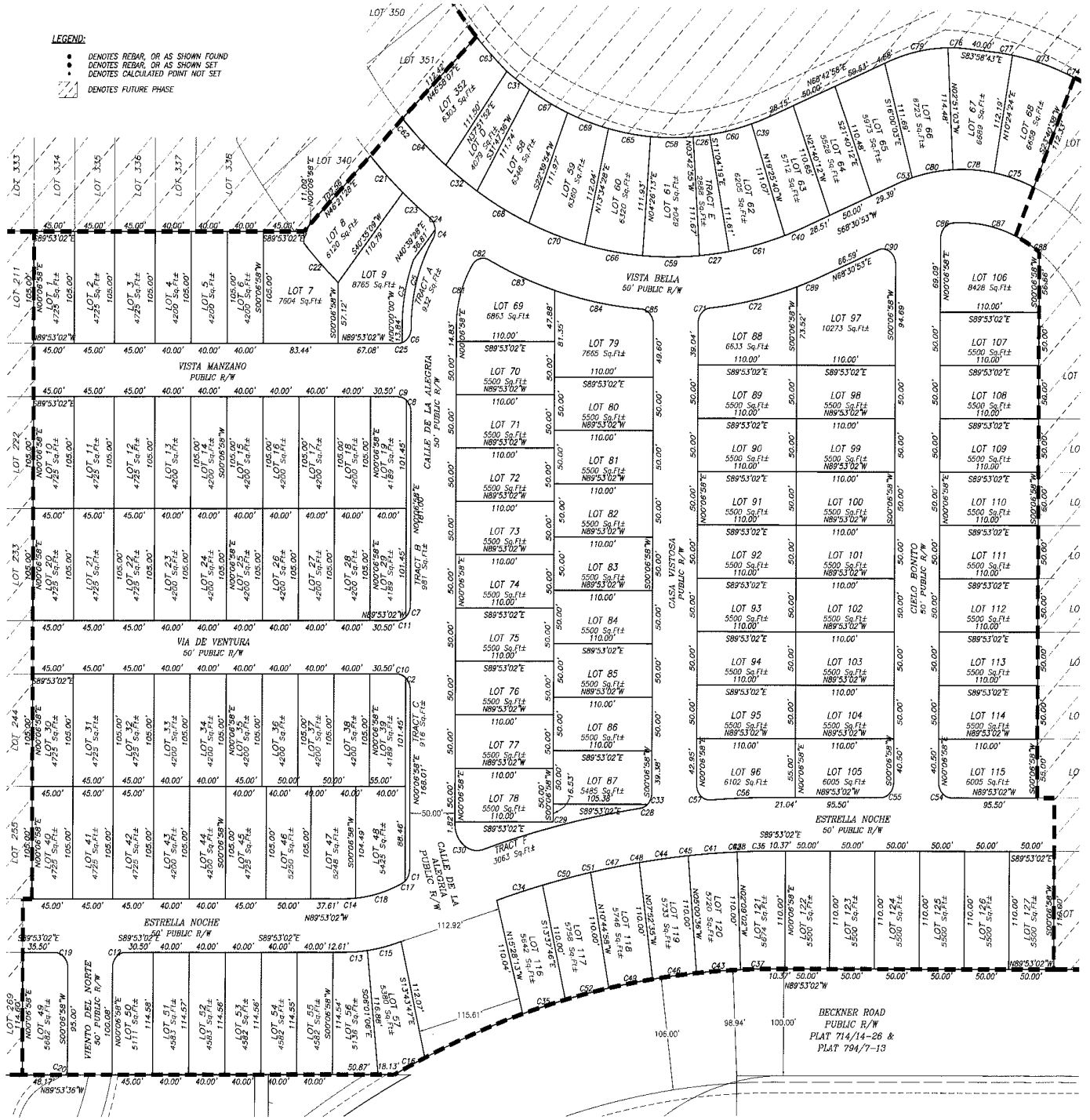
CITY: SANTA FE

COUNTY: SANTA FE

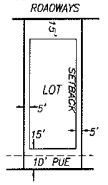
STATE: NEW MEXICO

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH1 DATE:9/16/2020


LEGEND:
BEARINGS ARE NEW MEXICO STATE PLANE, CENTRAL ZONE (NMC) DERIVED FROM GPS OBSERVATIONS. DISTANCES ARE GROUND AT ELEVATION 6800 ASL. GROUND TO GRID SCALE FACTOR IS 0.99958.
DENOTES REBAR, OR AS SHOWN FOUND
DENOTES REBAR, OR AS SHOWN SET
DENOTES CALCULATED POINT NOT SET
DENOTES BRASS CAP FOUND
DENOTES WOOD FENCE
DENOTES FUTURE PHASE
PHASE 1A
TRACT V
1.543Ac.±
PHASE 1A
TRACT U
9.685Ac.±
PHASE 3A
16.653AC.±
PHASE 3B
7.749AC.±
TRACT S
9.384Ac.±
PHASE 2B
15.746AC.±
PHASE 1B
PHASE 1A
PHASE 2A
8.754AC.±
PHASE 1A
TRACT W
3.141Ac.±
GOVERNOR MILES RD
DEDICATED
1.363/294-301
& PLAT 362/07,
ENTRADA SONATA
COSF TRACT C1 PLAT 645/10
COSF TRACT C-2 PLAT 645/10
COSF TRACT G PLAT 670/24
COSF TRACT 1 PLAT 670/24
COSF TRACT A PLAT 645/10
COSF TRACT F 645/10
MESA BONITA RD.
RISING SUN DR.
20' PUBLIC SEWER EASEMENT PLAT 652/35
20' PUBLIC SANITARY SEWER EASEMENT, INST.# 1397751 AND PLAT Bk.613, Pg.06
50' WIDE 115 KV TRANSMISSION LINE GRANT OF R.O.W. BK. 135, PG. 47
THIS PORTION HEREBY VACATED
10' WATERLINE EASEMENT BK.1177, PG.485
WHISPERING WING ROAD 44' PUBLIC R/W PLAT 434/37
NGS & S.F. COUNTY CONTROL MONUMENT SF-52
#4 REBAR 13956
LS16054
RICHARDS AVENUE 66' R/W DEDICATED PLAT 19/26
OFFER/RESERVATION, PLAT 710/21-22
10' PUE AND WALL EASEMENT, PLAT 19/26
SERESTA WD N/A PLAT 786/17
2W UNITED METHODIST CHURCH WD 598/969 PLAT
BECKNER ROAD PUBLIC R/W PLAT 714/14-26 & PLAT 794/7-13
98' PUBLIC R/W PLAT 809/3-4
SLOPE EASEMENT, PLAT 804/9-10, HEREBY VACATED.
10' PEDESTRIAN EASEMENT & PUE, PLAT 804/9-10, HEREBY VACATED.
DE, PLAT 804/9-10, HEREBY VACATED.
10'PUE PLAT, 804/04
10'UTILITY EASEMENT 216/042 & 200/577
LAS SOLERAS OESTE WD N/A PLAT 714/14
ESTANCIAS DE LAS SOLERAS UNIT 2A SUBDIVISION PLAT 823/37
RIGHT OF WAY, PLAT 823/37-39
PUBLIC ACCESS EASEMENT INSTRUMENT#
SOUTHWEST INST. FOR EDUCATION WD 1989/804 PLAT 819/25
PARCEL C1
YARD WALLS
YARD WALL
LOT 36
LOT 40
S89°50'56"W 229.08'
S89°53'02"E 195.04'
S89°53'02"E 341.44'
N00°20'58"W 54.85'
N00°20'58"W 51.96'
S89°49'49"W 293.39'
N89°53'36"W 1029.00'
S87°44'42"E 381.98'
S89°57'45"E 97.97'
N89°53'02"W 50.63'
N89°57'26"W 10.00'
N89°53'02"W 822.81'
S00°04'34"E 2201.87'
N00°17'20"W 2134.53'
N00°17'45"W 1304.63'
N00°17'45"W 1304.51'
N00°17'45"W 1304.51'
N00°17'45"W 1304.51'
N00°17'45"W 1304.51'
N00°17'45"W 488.50'
N00°30'02"W 56.94'
N00°06'58"E 469.70'
S00°06'58"E 44.41'
S00°06'58"E 44.41'
N89°09'39"W 129.31'
N89°09'39"E 178.86'
S44°46'39"E 142.42'
N48°28'54"E 300.18'
S82°07'56"E 332.60'
S82°07'56"E 142.80'
S82°07'56"E 180.00'
S82°07'56"E 55.98'
S82°07'56"E 180.00'
S82°07'56"E 105.00



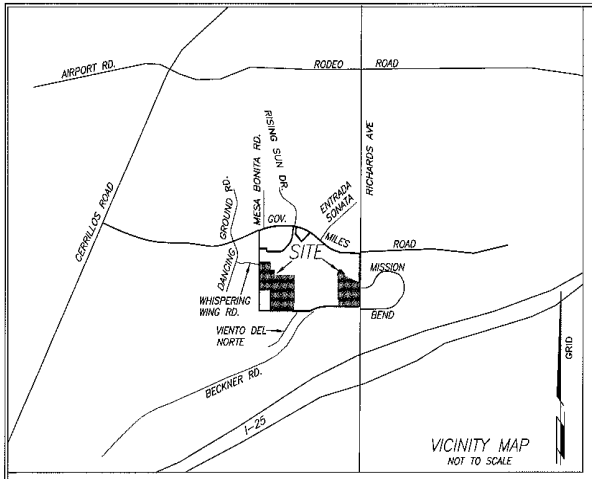
TYPICAL LOT BUILDING SETBACKS & PUBLIC UTILITY EASEMENT DETAIL FRONTING ROADWAYS



CURVE	RADIUS	ARC	CHORD	BEARING	DELTA
C1	14.50'	12.42'	12.04'	S24°38'59"W	49°04'02"
C2	14.50'	12.42'	12.04'	S24°25'03"E	49°04'02"
C3	160.00'	65.73'	65.27'	N11°06'33"E	23°32'19"
C4	14.50'	8.83'	8.70'	S15°34'18"W	34°54'20"
C5	150.00'	88.19'	86.92'	S16°10'55"W	33°41'04"
C6	14.50'	18.37'	17.16'	S35°37'50"W	72°34'53"
C7	14.50'	12.42'	12.04'	S24°38'59"W	49°04'02"
C8	14.50'	12.42'	12.04'	S24°25'03"E	49°04'02"
C9	14.50'	10.36'	10.14'	S69°25'03"E	40°55'58"
C10	14.50'	10.36'	10.14'	S69°25'03"E	40°55'58"
C11	14.50'	10.36'	10.14'	S69°38'59"W	40°55'58"
C12	14.50'	22.78'	20.51'	N45°06'58"E	90°00'00"
C13	203.45'	25.84'	25.83'	N86°24'04"E	7°16'41"
C14	150.00'	12.41'	12.40'	S87°44'47"W	4°44'21"
C15	203.45'	38.50'	38.44'	N77°20'29"E	10°50'29"
C16	957.00'	37.25'	37.25'	S64°52'04"W	2°13'48"
C17	14.50'	3.96'	3.95'	S57°00'11"W	15°38'21"
C18	150.00'	53.81'	53.52'	S75°05'59"W	20°33'15"
C19	14.50'	22.78'	20.51'	S44°53'02"E	90°00'00"
C20	8.00'	5.52'	5.41'	S19°53'17"W	39°32'39"
C21	460.00'	50.10'	50.07'	S46°17'39"E	6°14'24"
C22	502.23'	53.29'	53.26'	N46°04'27"W	6°04'45"
C23	460.00'	38.15'	38.14'	S51°42'25"E	4°45'08"
C24	14.50'	13.23'	12.78'	S28°01'25"E	52°17'08"
C25	14.50'	4.60'	4.59'	S81°01'07"W	18°11'42"
C26	304.80'	18.72'	18.71'	N83°59'13"E	3°31'06"
C27	410.00'	33.04'	33.03'	S83°16'26"W	4°37'04"
C28	14.50'	8.89'	8.75'	S64°45'22"W	35°07'48"
C29	1117.00'	179.53'	179.34'	S77°43'00"W	9°12'32"
C30	25.00'	46.69'	40.19'	N53°23'09"W	107°00'14"
C31	304.80'	30.63'	30.61'	S55°31'13"E	5°45'26"
C32	410.00'	42.45'	42.43'	N55°06'07"W	5°55'56"
C33	14.50'	11.91'	11.58'	S23°39'13"W	47°04'30"
C34	1067.00'	53.06'	53.06'	N74°33'47"E	2°50'57"
C35	957.00'	49.52'	49.52'	S74°27'40"W	2°57'54"
C36	1067.00'	38.40'	38.39'	N89°08'07"E	2°03'42"
C37	957.00'	39.04'	39.04'	S86°56'50"W	2°20'15"
C38	1067.00'	5.00'	5.00'	N87°55'12"E	0°16'07"
C39	304.80'	21.25'	21.24'	N71°16'12"E	3°59'38"
C40	410.00'	25.22'	25.22'	S70°16'37"W	3°31'28"
C41	1067.00'	49.75'	49.74'	N86°10'54"E	2°40'16"
C42	1067.00'	5.00'	5.00'	N87°39'06"E	0°16'07"
C43	957.00'	49.26'	49.25'	S86°18'15"W	2°56'56"
C44	1067.00'	49.87'	49.87'	N83°14'19"E	2°40'40"
C45	1067.00'	5.00'	5.00'	N84°42'43"E	0°16'07"
C46	957.00'	49.37'	49.36'	S83°21'06"W	2°57'20"
C47	1067.00'	49.99'	49.98'	N80°17'20"E	2°41'04"
C48	1067.00'	5.00'	5.00'	N81°45'56"E	0°16'07"
C49	957.00'	49.47'	49.47'	S80°23'35"W	2°57'43"
C50	1067.00'	50.11'	50.10'	N77°19'59"E	2°41'26"
C51	1067.00'	5.00'	5.00'	N78°48'45"E	0°16'07"
C52	957.00'	49.58'	49.57'	S77°25'40"W	2°58'06"
C53	200.00'	19.14'	19.14'	S71°15'25"W	5°29'03"
C54	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"
C55	14.50'	22.78'	20.51'	S45°06'58"W	90°00'00"
C56	1117.00'	73.56'	73.55'	S88°13'46"W	3°46'24"
C57	14.50'	23.73'	21.17'	N46°46'14"W	93°46'24"
C58	304.80'	47.53'	47.48'	S89°47'13"E	8°56'03"
C59	410.00'	63.44'	63.37'	N89°56'05"W	8°51'55"
C60	304.80'	47.57'	47.62'	N77°44'50"E	8°57'38"
C61	410.00'	63.87'	63.81'	S76°30'08"W	8°55'33"
C62	410.00'	1.02'	1.02'	N43°38'10"W	0°08'33"
C63	354.28'	47.15'	47.12'	S46°28'18"E	7°39'29"
C64	410.00'	64.13'	64.06'	N47°39'17"W	8°57'41"
C65	304.80'	47.50'	47.45'	S80°51'20"E	8°55'42"
C66	410.00'	65.36'	65.29'	N80°59'07"W	9°08'01"
C67	304.80'	47.83'	47.78'	S62°53'40"E	8°59'28"
C68	410.00'	65.65'	65.58'	N62°39'20"W	9°10'29"
C69	304.80'	47.88'	47.84'	S71°53'26"E	9°00'05"
C70	410.00'	65.66'	65.59'	N71°49'51"W	9°10'32"
C71	14.50'	21.38'	19.50'	N42°21'32"E	84°29'09"
C72	460.00'	99.14'	98.95'	N76°25'40"E	12°20'53"
C73	310.24'	66.21'	66.07'	S73°23'30"E	12°35'49"
C74	284.70'	4.11'	4.11'	S67°47'31"E	0°49'38"
C75	200.00'	46.32'	46.22'	N72°57'29"W	13°16'13"
C76	186.15'	18.60'	18.59'	S87°58'45"E	5°39'02"
C77	310.24'	13.85'	13.85'	S80°58'07"E	2°33'27"
C78	200.00'	46.28'	46.17'	N86°13'19"W	13°15'27"
C79	189.15'	67.60'	67.24'	N79°00'54"E	20°28'39"
C80	200.00'	45.90'	45.80'	S80°34'27"W	13°09'01"
C81	100.00'	60.62'	59.69'	N17°28'55"E	34°43'53"
C82	14.50'	20.61'	18.92'	N75°33'36"E	81°25'30"
C83	460.00'	79.34'	79.25'	S68°40'08"E	9°52'58"
C84	460.00'	98.24'	98.06'	S79°43'43"E	12°14'13"
C85	14.50'	21.75'	19.77'	S42°51'56"E	85°57'47"
C86	14.50'	21.78'	19.79'	N43°09'01"E	86°04'06"
C87	150.00'	101.94'	99.99'	S74°20'49"E	38°56'14"
C88	150.00'	0.20'	0.20'	S54°50'27"E	0°04'30"
C89	460.00'	30.02'	30.01'	N70°23'03"E	3°44'20"
C90	14.50'	28.24'	23.99'	S55°41'04"E	111°36'05"

PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 1
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF LOT 3A AS SHOWN ON PLAT RECORDED AS INSTRUMENT #1796166 IN BOOK 804 PAGES 09-10 INTO 128 RESIDENTIAL LOTS

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH1 DATE:9/16/2020



UTILITY COMPANIES

COMCAST DATE

IN APPROVING THIS PLAT, PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM), NEW MEXICO GAS COMPANY (NMGC) AND QWEST CORPORATION D/B/A CENTURYLINK (QWEST) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM, NMGC AND QWEST DO NOT WAIVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT, OR OTHER DOCUMENT AND WHICH ARE NOT SHOWN ON THIS PLAT.

PNM ELECTRIC SERVICE DATE

NM GAS COMPANY DATE

QWEST CORP. d/b/a/ CENTURYLINK QC

THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICES TO THE SUBDIVISION.

CENTURY LINK DATE

CONTROL REFERENCE

-BEARINGS ARE GRID, REFERRED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM NAD83(1992), CENTRAL ZONE FROM GPS STATE PLANE PROJECTION.
-DISTANCES ARE REFERRED TO GROD NMSI.
-DATUM DERIVED FROM DAWSON2 GPS BASE STATION N=1,687,626.870 E=1,708,833.475 ELE=6572.376', ESTABLISHED FROM SANTA FE COUNTY CONTROL STATIONS USING DATA FROM THE 1992 BLUEBOOK REPORT FOR NGS AND S.F. CO..

SANTA FE COUNTY SIGNATURES

SANTA FE COUNTY TREASURER DATE

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the_____day of _____, 202_____A.D. at _____ o'clock_____, and was duly recorded in book_____, page(s)_____of the records of Santa Fe County.

Witness my Hand and Seal of office
GERALDINE SALAZAR
County Clerk, Santa Fe county, N.M.

Deputy

CITY OF SANTA FE APPROVAL & REVIEW

APPROVED BY THE SANTA FE PLANNING COMMISSION AT THEIR MEETING OF 2020, AS CASE NO. 2020-

PLANNING COMMISSION CHAIRPERSON DATE

PLANNING COMMISSION SECRETARY DATE

CITY ENGINEER FOR LAND USE DATE

CITY PLANNER DATE

NOTES

1. *PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.*
2. *PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK OR SUBMITTAL FOR A BUILDING PERMIT APPLICATION THAT MODIFIES ANY PROVISION OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.*
3. *BUILDABLE AREAS FOR PLATTED PARCELS WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION AS DETAILED IN THE LAND DEVELOPMENT CODE.*
4. *EACH LOT SHALL BE SERVED WITH SEPARATE SEWER AND WATER SERVICES.*
5. *THE PROPERTY AND STRUCTURES SHALL BE CONNECTED TO THE CITY'S PUBLIC SEWER COLLECTION SYSTEM.*
6. *PRIOR TO ANY NEW CONSTRUCTION, PLAT WILL BE SUBMITTED TO FIRE DEPARTMENT FOR COMPLIANCE WITH INTERNATIONAL FIRE CODE.*
7. *WASTEWATER U.E.C. CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.*
8. *NO FENCES, WALLS OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS.*
9. *NO WALLS, FENCES OR OTHER STRUCTURES THAT WOULD IMPEDE DRAINAGE FLOW SHALL BE PLACED WITHIN DRAINAGE EASEMENTS SHOWN HEREON.*
10. *ANY AND ALL DEVELOPMENT SHALL MEET THE IFC CODE REQUIREMENTS 2009 EDITION OR THE MOST CURRENT EDITION THE GOVERNING BODY HAS ADOPTED AT THE TIME OF PERMITTING.*

FLOOD ZONE

THIS PROPERTY LIES WITHIN OTHER AREAS ZONE "X", AREAS OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAPS (F.I.R.M.) #35049C0394D, EFFECTIVE DATE JUNE 17, 2008.

LOT OF RECORD AND OTHER REFERENCE DOCUMENTS:

1. *LOT 3 : "BECKNER ROAD EXTENSION DEDICATION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD. CO. AND THE CITY OF SANTA FE SHOWING PUBLIC R/W DEDICATION OF A PORTION OF LOT 3 AS SHOWN ON PLAT RECORDED IN BOOK 710 PAGES 21-22", AS RECORDED AS INST.# 1796166 IN BK. 804 PAGES 09-10.*
2. *LOT LINE ADJUSTMENT PLAT PREPARED FOR BECKNER ROAD EQUITIES, INC. BY CARY E. DAWSON, NMLS 7014. PLAT RECORDED AS INSTRUMENT NUMBER 1592455 ON THE 4TH DAY OF MARCH, 2010 AND PLAT BOOK 714 PAGES 14-26, IN THE SANTA FE COUNTY CLERKS OFFICE.*
3. *ROADWAY & UTILITY RIGHT OF WAY GOVERNOR MILES ROAD NAVA ADE SUBD. TO RICHARDS AVE. SE1/4 S8, T16N, R9E, NMPM SANTA FE COUNTY, N.M. PREPARED BY RICHARD A. MORRIS, L.S.#10277, RECORDED IN PLAT BK. 362 PG.07.*
4. *WARRANTY DEED, JOHN ARDISSONE AND MAY T. ARDISSONE TO BUILDING SERVICES OF SANTA FE, BK 462 PAGE 621.*

ALL OTHER REFERENCE DOCUMENTS AS NOTED HEREON.

DEDICATION AND AFFIDAVIT

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED OWNER(S) HAVE CAUSED TO SUBDIVIDE THOSE LANDS SHOWN HEREON.

OPEN SPACE TRACTS H, I, I-2, J, & L ARE HEREBY GRANTED TO THE VISTA DE LA SIERRA HOMEOWNERS ASSOCIATION.

DRAINAGE EASEMENTS ARE HEREBY CREATED FOR THE MITIGATION OF STORM WATERS OF THE SUBDIVISION LOTS AND ROADS. THE MAINTENANCE OF THESE EASEMENTS SHALL BE THE RESPONSIBILITY OF THE H.O.A..

ROADS SHOWN HEREON AS PUBLIC RIGHT OF WAY, CREATED BY THIS PLAT, ARE HEREBY DEDICATED TO THE CITY OF SANTA FE FOR PUBLIC USE & MAINTENANCE.

TRAIL EASEMENTS SHOWN HEREON, CREATED BY THIS PLAT, ARE HEREBY DEDICATED TO THE CITY OF SANTA FE FOR A PUBLIC NON-MOTORIZED PEDESTRIAN TRAIL AND THE CONSTRUCTION, REPAIR, AND MAINTENANCE OF SAID TRAIL. MAINTENANCE IS THE RESPONSIBILITY OF THE CITY OF SANTA FE.

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF: PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM"), A NEW MEXICO CORPORATION, (PNM ELECTRIC) FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.

EASEMENTS FOR ELECTRIC TRANSFORMERS/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMERS/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

NEW MEXICO GAS COMPANY FOR INSTALLATION, MAINTENANCE, AND SERVICE FOR NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.

"QWEST CORPORATION, D/B/A CENTURY/LINK QC" FOR INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURIED AND AERIAL COMMUNICATION LINES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDED COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND CLOSURES. THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICES TO THE SUBDIVISION.

COMCAST FOR THE INSTALLATION, MAINTENANCE, AND SERVICE SUCH LINES, CABLE AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE SERVICES.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE WITHIN THE EASEMENT, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENT, WITH THE RIGHT AND PRIVILEGE OF GOING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT OF WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRICAL TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS SHALL BE BINDING UPON THE UNDERSIGNED AND THEIR SUCCESSORS AND ASSIGNS

THIS PLAT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNER(S). THIS PLAT CONTAINS 24.50 ACRES, MORE OR LESS. THIS DEDICATION LIES WITHIN THE PLATTING JURISDICTION OF THE CITY OF SANTA FE, N.M.

STORM WATER AGREEMENT:
PROPERTY OWNER(S) HEREBY AGREE THAT ALL STORM WATER EASEMENTS AND ANY OTHER DRAINAGE IMPROVEMENTS ON PRIVATE PROPERTY WILL BE MAINTAINED AND KEPT FULLY FUNCTIONAL AS ORIGINALLY DESIGNED AND CONSTRUCTED WITHIN PRIVATE PROPERTY BOUNDARIES BY ESTANCIAS DEL NORTE HOME OWNERS ASSOCIATION(OWNER) AND SUBSEQUENT HEIRS, ASSIGNS, AND FUTURE OWNERS. THE CITY IS HEREBY GRANTED THE FOLLOWING: (1) ACCESS FOR INSPECTION OF SAID IMPROVEMENTS; (2) IN THE EVENT OF DRAINAGE FACILITY MAINTENANCE DEFICIENCY AND AFTER TEN (10) DAYS WRITTEN NOTICE TO THE RESPECTIVE PROPERTY OWNER, TO ENTER AND RESTORE FULL FUNCTIONAL CAPACITY OF THE DRAINAGE IMPROVEMENTS; AND (3) TO LIEN THE PROPERTY FOR BOTH DIRECT AND INDIRECT COSTS ASSOCIATED WITH SUCH WORK. BY SIGNATURE AFFIXED TO THIS INSTRUMENT, THE PROPERTY OWNER(S) APPROVE AND AGREE THAT THIS AGREEMENT IS BINDING PERPETUALLY, RUNNING WITH THE LAND, ON PRESENT AND FUTURE OWNERS, HEIRS, AND ASSIGNS.

DRAINAGE FACILITIES MAINTENANCE

THE DRAINAGE FACILITIES ARE PRIVATE AND SHALL BE MAINTAINED BY THE PROPERTY OWNERS.

INSPECTIONS OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. THE HOMEOWNERS ASSOCIATION SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.

THE REMEDIAL ACTION SHALL CONSIST OF (1) REMOVAL AND DISPOSAL OF SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH; (2) FLUSHING ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND POLLUTANTS THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURES; AND, (3) INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS AND INSPECT FOR THE STRUCTURAL INTEGRITY OF ALL APPURTENANT DRAINAGE STRUCTURES AND REPAIR OR STABILIZE ACCORDINGLY.

OWNER LOT 3:
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY

JEFFERY BRANCH, MANAGING MEMBER.

STATE OF NEW MEXICO)
)SS
COUNTY OF _____)
ON THIS _____ DAY OF _____, 202_. THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY JEFFERY BRANCH, MANAGING MEMBER. OF BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY.

NOTARY PUBLIC COMMISSION EXPIRES

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE REPRESENTATION OF A SURVEY COMPLETED UNDER MY PERSONAL SUPERVISION ON THE 19TH DAY OF MARCH, 2019. TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAT ARE CORRECT, TRUE AND MEET THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO.

DIEGO J. SISNEROS, NMPS#13986 9/0/2020

PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 2
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON PLAT RECORDED AS INSTRUMENT # IN BOOK PAGES INTO 143 RESIDENTIAL LOTS

PURPOSE: TO CREATE 143 RESIDENTIAL PARCELS

"TITLE AND INDEXING INFORMATION FOR COUNTY CLERK"

OWNERS: BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
PARENT PARCEL: LOT 3 BECKNER ROAD EXTENSION DEDICAION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD CO. AND THE CITY OF SANTA FE, RECORDED AS INST.#1796166 IN BOOK 804 PAGES 9-10.

UPC: 1-050-095-387-083

PLSS LOCATION: SECTION 8, T16N, R9E, NMPM

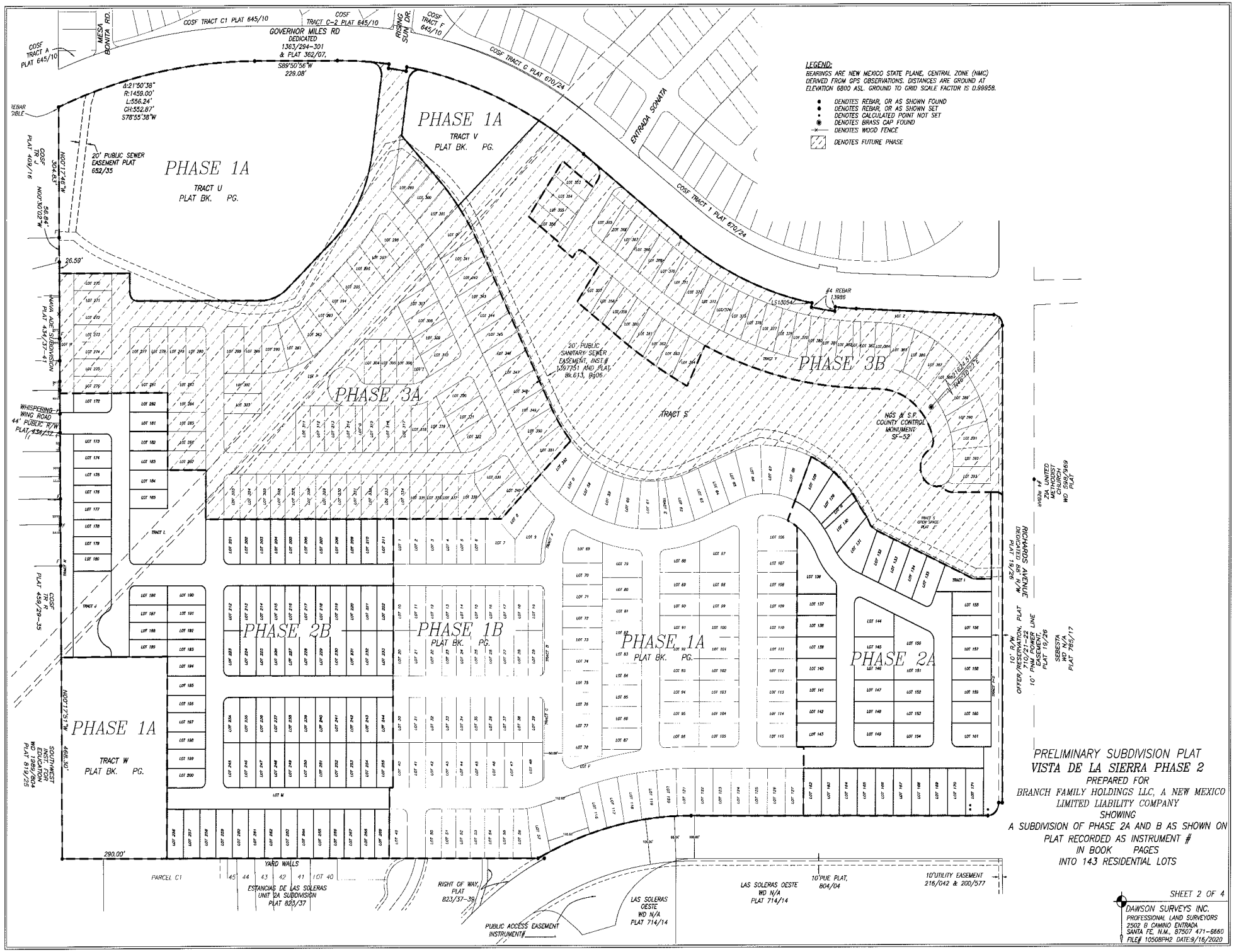
CITY: SANTA FE

COUNTY: SANTA FE

STATE: NEW MEXICO

SHEET 1 OF 4

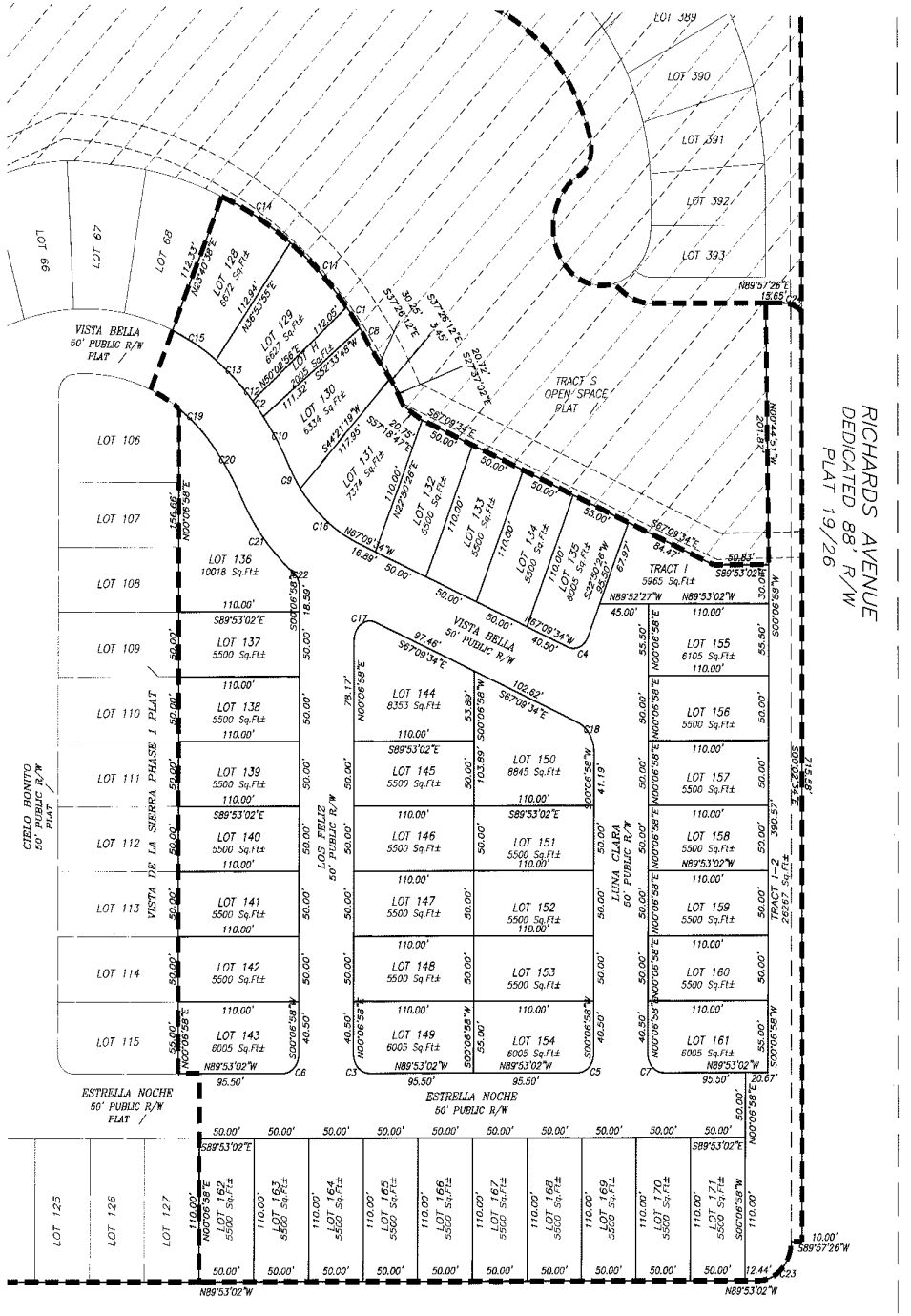
DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH2 DATE:9/16/2020



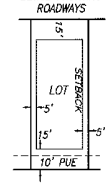
PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 2
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON PLAT RECORDED AS INSTRUMENT #
IN BOOK PAGES
INTO 143 RESIDENTIAL LOTS

SHEET 2 OF 4

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH2 DATE:9/15/2020



TYPICAL LOT BUILDING SETBACKS & PUBLIC UTILITY EASEMENT DETAIL FRONTING ROADWAYS



50' PUBLIC R/W

CURVE	RADIUS	ARC	CHORD	BEARING	DELTA
C1	284.89'	20.41'	20.41'	S36°40'30"E	4°06'17"
C2	246.35'	15.49'	15.49'	N38°43'50"W	3°36'13"
C3	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"
C4	14.50'	22.78'	20.51'	S67°50'26"W	90°00'00"
C5	14.50'	22.78'	20.51'	S45°06'58"W	90°00'00"
C6	14.50'	22.78'	20.51'	S45°06'58"W	90°00'00"
C7	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"
C8	284.98'	17.70'	17.70'	S32°52'44"E	3°33'33"
C9	125.00'	19.55'	19.53'	N30°55'00"W	8°57'40"
C10	246.35'	45.63'	45.56'	N31°37'22"W	10°36'43"
C11	284.77'	71.76'	71.58'	S45°51'22"E	14°26'29"
C12	246.35'	8.58'	8.58'	N41°31'48"W	1°59'42"
C13	200.00'	37.33'	37.27'	N47°45'17"W	10°41'35"
C14	284.69'	72.18'	71.69'	S60°11'36"E	14°31'37"
C15	200.09'	46.15'	46.05'	N59°42'44"W	13°13'18"
C16	125.00'	69.29'	68.41'	N51°16'42"W	31°45'43"
C17	14.50'	28.53'	24.14'	N56°28'42"E	112°43'29"
C18	25.00'	29.35'	27.70'	S33°31'18"E	67°16'31"
C19	150.00'	32.45'	32.39'	S48°36'21"E	12°23'42"
C20	200.00'	55.75'	55.57'	S34°25'20"E	15°58'20"
C21	175.00'	77.47'	76.84'	S39°07'03"E	25°21'46"
C22	14.50'	13.14'	12.69'	S25°50'29"E	51°54'54"

LEGEND:

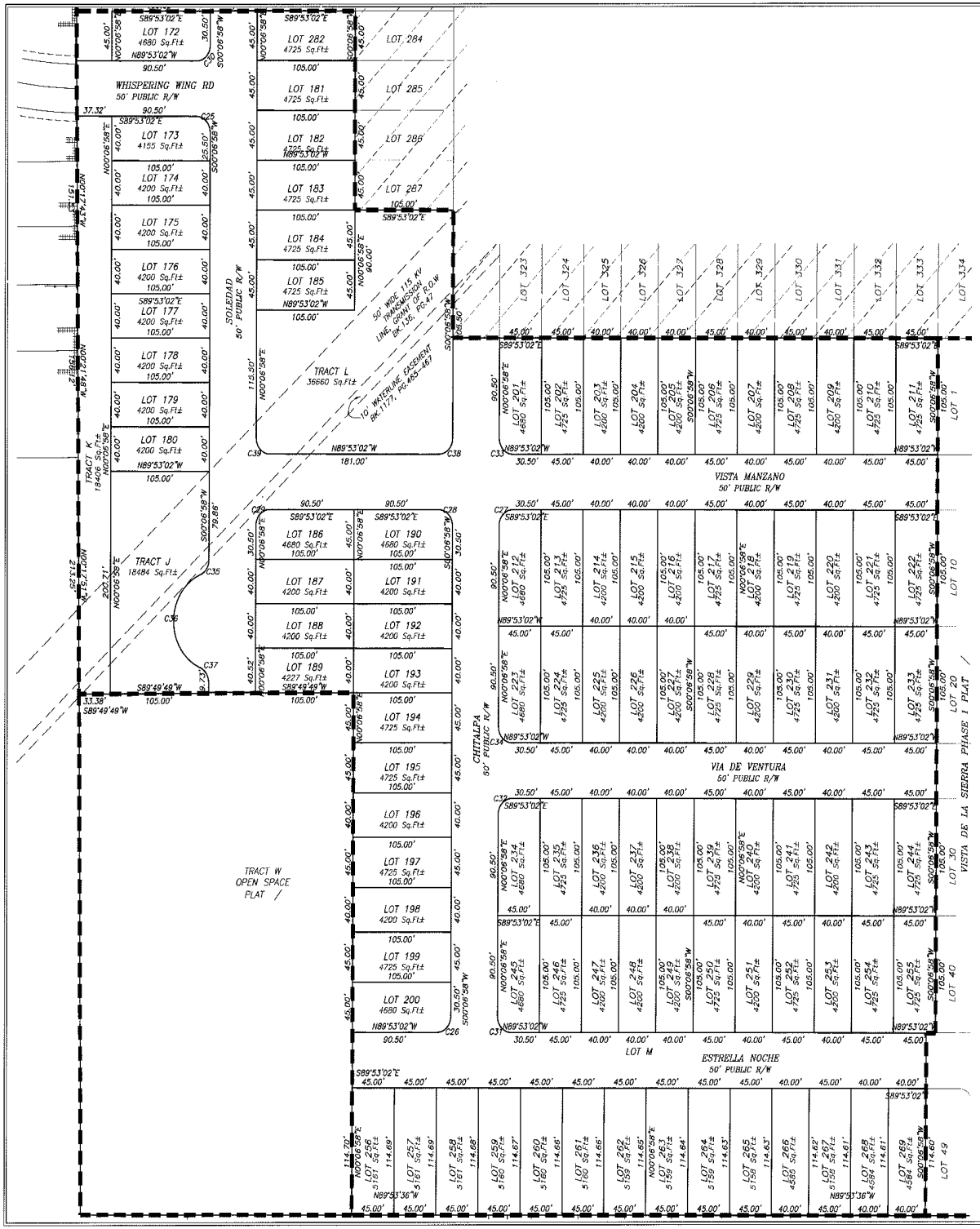
- DENOTES REBAR, OR AS SHOWN FOUND
- DENOTES REBAR, OR AS SHOWN SET
- DENOTES CALCULATED POINT NOT SET

DENOTES FUTURE PHASE

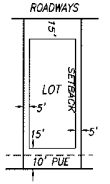
PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 2
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO
LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON
PLAT RECORDED AS INSTRUMENT #
IN BOOK PAGES
INTO 143 RESIDENTIAL LOTS

SHEET 3 OF 4

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 1050BPH2 DATE:9/16/2020



TYPICAL LOT BUILDING SETBACKS & PUBLIC UTILITY EASEMENT DETAIL FRONTING ROADWAYS



50' PUBLIC R/W

CURVE	RADIUS	ARC	CHORD	BEARING	DELTA
C23	30.00'	47.21'	42.49'	S45°02'12"W	90°09'32"
C24	25.00'	18.91'	18.46'	S68°22'18"E	43°20'32"
C25	14.50'	22.78'	20.51'	S44°53'02"E	90°00'00"
C26	14.50'	22.78'	20.51'	S45°06'58"W	90°00'00"
C27	14.50'	22.78'	20.51'	N45°06'58"E	90°00'00"
C28	14.50'	22.78'	20.51'	S44°53'02"E	90°00'00"
C29	14.50'	22.78'	20.51'	N45°06'58"E	90°00'00"
C30	14.50'	22.78'	20.51'	S45°06'58"W	90°00'00"
C31	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"
C32	14.50'	22.78'	20.51'	N45°06'58"E	90°00'00"
C33	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"
C34	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"
C35	14.50'	17.34'	16.33'	S34°22'34"W	68°31'12"
C36	44.93'	107.46'	83.61'	S00°06'58"W	137°02'24"
C37	14.50'	17.34'	16.33'	S34°08'38"E	68°31'12"
C38	14.50'	22.78'	20.51'	S45°06'58"W	90°00'00"
C39	14.50'	22.78'	20.51'	N44°53'02"W	90°00'00"

LEGEND:

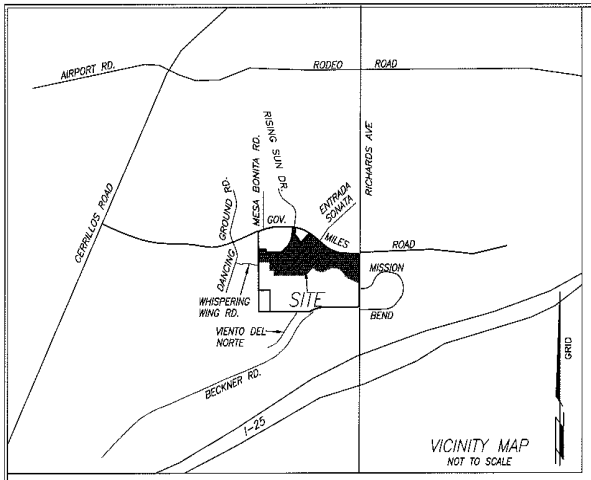
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DENOTES FUTURE PHASE

PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 2

PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON PLAT RECORDED AS INSTRUMENT # IN BOOK PAGES INTO 143 RESIDENTIAL LOTS

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH2 DATE:9/16/2020



UTILITY COMPANIES

COMCAST DATE

IN APPROVING THIS PLAT, PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM), NEW MEXICO GAS COMPANY (NMGC) AND QWEST CORPORATION D/B/A CENTURYLINK (QWEST) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM, NMGC AND QWEST DO NOT WAIVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT, OR OTHER DOCUMENT AND WHICH ARE NOT SHOWN ON THIS PLAT.

PNM ELECTRIC SERVICE DATE

NM GAS COMPANY DATE

QWEST CORP. d/b/a/ CENTURYLINK QC

THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICES TO THE SUBDIVISION.

CENTURY LINK DATE

CONTROL REFERENCE

-BEARINGS ARE GRID, REFERRED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM NAD83(1992), CENTRAL ZONE FROM GPS STATE PLANE PROJECTION.
-DISTANCES ARE REFERRED TO GROUND AMSL.
-DATUM DERIVED FROM DAWSON2 GPS BASE STATION N=1,687,626.870 E=1,708,833.475 ELE=6572.376', ESTABLISHED FROM SANTA FE COUNTY CONTROL STATIONS USING DATA FROM THE 1992 BLUEBOOK REPORT FOR NGS AND S.F. CO..

SANTA FE COUNTY SIGNATURES

SANTA FE COUNTY TREASURER DATE

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the____day of _____, 202____A.D. at _____ o'clock_____, and was duly recorded in book_____ page(s)_____of the records of Santa Fe County.

Witness my Hand and Seal of office
GERALDINE SALAZAR
County Clerk, Santa Fe county, N.M.

Deputy

CITY OF SANTA FE APPROVAL & REVIEW

APPROVED BY THE SANTA FE PLANNING COMMISSION AT THEIR MEETING OF 2020, AS CASE NO. 2020-

PLANNING COMMISSION CHAIRPERSON DATE

PLANNING COMMISSION SECRETARY DATE

CITY ENGINEER FOR LAND USE DATE

CITY PLANNER DATE

NOTES

1. PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14. LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.
2. PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK OR SUBMITTAL FOR A BUILDING PERMIT APPLICATION THAT MODIFIES ANY PROVISION OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 1987 AND SUBSEQUENT AMENDMENTS.
3. BUILDABLE AREAS FOR PLATTED PARCELS WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION AS DETAILED IN THE LAND DEVELOPMENT CODE.
4. EACH LOT SHALL BE SERVED WITH SEPARATE SEWER AND WATER SERVICES.
5. THE PROPERTY AND STRUCTURES SHALL BE CONNECTED TO THE CITY'S PUBLIC SEWER COLLECTION SYSTEM.
6. PRIOR TO ANY NEW CONSTRUCTION, PLAT WILL BE SUBMITTED TO FIRE DEPARTMENT FOR COMPLIANCE WITH INTERNATIONAL FIRE CODE.
7. WASTEWATER U.E.C. CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.
8. NO FENCES, WALLS OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS.
9. NO WALLS, FENCES OR OTHER STRUCTURES THAT WOULD IMPEDE DRAINAGE FLOW SHALL BE PLACED WITHIN DRAINAGE EASEMENTS SHOWN HEREON.
10. ANY AND ALL DEVELOPMENT SHALL MEET THE IFC CODE REQUIREMENTS 2009 EDITION OR THE MOST CURRENT EDITION THE GOVERNING BODY HAS ADOPTED AT THE TIME OF PERMITTING.

FLOOD ZONE

THIS PROPERTY LIES WITHIN OTHER AREAS ZONE "X", AREAS OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAPS (F.I.R.M.) #35049C0394D, EFFECTIVE DATE JUNE 17, 2008.

LOT OF RECORD AND OTHER REFERENCE DOCUMENTS:

1. LOT 3 : "BECKNER ROAD EXTENSION DEDICATION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD. CO. AND THE CITY OF SANTA FE SHOWING PUBLIC R/W DEDICATION OF A PORTION OF LOT 3 AS SHOWN ON PLAT RECORDED IN BOOK 710 PAGES 21-22", AS RECORDED AS INST.# 1796166 IN BK. 804 PAGES 09-10.
2. LOT LINE ADJUSTMENT PLAT PREPARED FOR BECKNER ROAD EQUITIES, INC. BY GARY E. DAWSON, NMLS 7014. PLAT RECORDED AS INSTRUMENT NUMBER 1592455 ON THE 4TH DAY OF MARCH, 2010 AND PLAT BOOK 714 PAGES 14-26, IN THE SANTA FE COUNTY CLERKS OFFICE.
3. ROADWAY & UTILITY RIGHT OF WAY GOVERNOR MILES ROAD NAVA ADE SUBD. TO RICHARDS AVE. SE1/4 S8, T16N, R9E, NMPM SANTA FE COUNTY, N.M. PREPARED BY RICHARD A. MORRIS, L.S.#10277, RECORDED IN PLAT BK. 362 PG.07.
4. WARRANTY DEED, JOHN ARDISSONE AND MAY T. ARDISSONE TO BUILDING SERVICES OF SANTA FE, BK 462 PAGE 621.

ALL OTHER REFERENCE DOCUMENTS AS NOTED HEREON.

DEDICATION AND AFFIDAVIT

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED OWNER(S) HAVE CAUSED TO SUBDIVIDE THOSE LANDS SHOWN HEREON.

OPEN SPACE TRACTS N, O, P, Q, T, X & Z ARE HEREBY GRANTED TO THE VISTA DE LA SIERRA HOMEOWNERS ASSOCIATION.

DRAINAGE EASEMENTS ARE HEREBY CREATED FOR THE MITIGATION OF STORM WATERS OF THE SUBDIVISION LOTS AND ROADS. THE MAINTENANCE OF THESE EASEMENTS SHALL BE THE RESPONSIBILITY OF THE H.O.A..

ROADS SHOWN HEREON AS PUBLIC RIGHT OF WAY, CREATED BY THIS PLAT, ARE HEREBY DEDICATED TO THE CITY OF SANTA FE FOR PUBLIC USE & MAINTENANCE.

TRAIL EASEMENTS SHOWN HEREON, CREATED BY THIS PLAT, ARE HEREBY DEDICATED TO THE CITY OF SANTA FE FOR A PUBLIC NON-MOTORIZED PEDESTRIAN TRAIL AND THE CONSTRUCTION, REPAIR, AND MAINTENANCE OF SAID TRAIL. MAINTENANCE IS THE RESPONSIBILITY OF THE CITY OF SANTA FE.

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF: PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM"), A NEW MEXICO CORPORATION, (PNM ELECTRIC) FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.

EASEMENTS FOR ELECTRIC TRANSFORMERS/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMERS/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

NEW MEXICO GAS COMPANY FOR INSTALLATION, MAINTENANCE, AND SERVICE FOR NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.

"QWEST CORPORATION, D/B/A CENTURY/LINK QC" FOR INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURIED AND AERIAL COMMUNICATION LINES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDED COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND CLOSURES. THIS PLAT HAS BEEN APPROVED FOR EASEMENT PURPOSES ONLY. THE SIGNING OF THIS PLAT DOES NOT IN ANY WAY GUARANTEE TELEPHONE SERVICES TO THE SUBDIVISION.

COMCAST FOR THE INSTALLATION, MAINTENANCE, AND SERVICE SUCH LINES, CABLE AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE SERVICES.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE WITHIN THE EASEMENT, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENT, WITH THE RIGHT AND PRIVILEGE OF GOING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT OF WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRICAL TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS SHALL BE BINDING UPON THE UNDERSIGNED AND THEIR SUCCESSORS AND ASSIGNS

THIS PLAT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNER(S). THIS PLAT CONTAINS 24.402 ACRES, MORE OR LESS. THIS DEDICATION LIES WITHIN THE PLATTING JURISDICTION OF THE CITY OF SANTA FE, N.M.

STORM WATER AGREEMENT:
PROPERTY OWNER(S) HEREBY AGREE THAT ALL STORM WATER EASEMENTS AND ANY OTHER DRAINAGE IMPROVEMENTS ON PRIVATE PROPERTY WILL BE MAINTAINED AND KEPT FULLY FUNCTIONAL AS ORIGINALLY DESIGNED AND CONSTRUCTED WITHIN PRIVATE PROPERTY BOUNDARIES BY ESTANCIAS DEL NORTE HOME OWNERS ASSOCIATION(OWNER) AND SUBSEQUENT HEIRS, ASSIGNS, AND FUTURE OWNERS. THE CITY IS HEREBY GRANTED THE FOLLOWING: (1) ACCESS FOR INSPECTION OF SAID IMPROVEMENTS; (2) IN THE EVENT OF DRAINAGE FACILITY MAINTENANCE DEFICIENCY AND AFTER TEN (10) DAYS WRITTEN NOTICE TO THE RESPECTIVE PROPERTY OWNER, TO ENTER AND RESTORE FULL FUNCTIONAL CAPACITY OF THE DRAINAGE IMPROVEMENTS; AND (3) TO LIEN THE PROPERTY FOR BOTH DIRECT AND INDIRECT COSTS ASSOCIATED WITH SUCH WORK. BY SIGNATURE AFFIXED TO THIS INSTRUMENT, THE PROPERTY OWNER(S) APPROVE AND AGREE THAT THIS AGREEMENT IS BINDING PERPETUALLY, RUNNING WITH THE LAND, ON PRESENT AND FUTURE OWNERS, HEIRS, AND ASSIGNS.

DRAINAGE FACILITIES MAINTENANCE

THE DRAINAGE FACILITIES ARE PRIVATE AND SHALL BE MAINTAINED BY THE PROPERTY OWNERS.

INSPECTIONS OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. THE HOMEOWNERS ASSOCIATION SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.

THE REMEDIAL ACTION SHALL CONSIST OF (1) REMOVAL AND DISPOSAL OF SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH; (2) FLUSHING ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND POLLUTANTS THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURES; AND, (3) INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS AND INSPECT FOR THE STRUCTURAL INTEGRITY OF ALL APPURTENANT DRAINAGE STRUCTURES AND REPAIR OR STABILIZE ACCORDINGLY.

OWNER LOT 3:
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY

JEFFERY BRANCH, MANAGING MEMBER.

STATE OF NEW MEXICO)
)SS
COUNTY OF _____)
ON THIS ____ DAY OF _____, 202_ THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY JEFFERY BRANCH, MANAGING MEMBER. OF BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY.

NOTARY PUBLIC COMMISSION EXPIRES

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE REPRESENTATION OF A SURVEY COMPLETED UNDER MY PERSONAL SUPERVISION ON THE 19TH DAY OF MARCH, 2019. TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAT ARE CORRECT, TRUE AND MEET THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO.

DIEGO J. SISNEROS, NMPS#13986 9/0/2020

PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 3
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON PLAT RECORDED AS INSTRUMENT #
IN BOOK PAGES
INTO 121 RESIDENTIAL LOTS

PURPOSE: TO CREATE 121 RESIDENTIAL PARCELS

"TITLE AND INDEXING INFORMATION FOR COUNTY CLERK"

OWNERS: BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
PARENT PARCEL: LOT 3 BECKNER ROAD EXTENSION DEDICAION PLAT PREPARED FOR BUILDING SERVICES OF SANTA FE, BEATY FAMILY LTD CO. AND THE CITY OF SANTA FE, RECORDED AS INST.#1796166 IN BOOK 804 PAGES 9-10.

UPC: 1-050-095-387-083

PLSS LOCATION: SECTION 8, T16N, R9E, NMPM

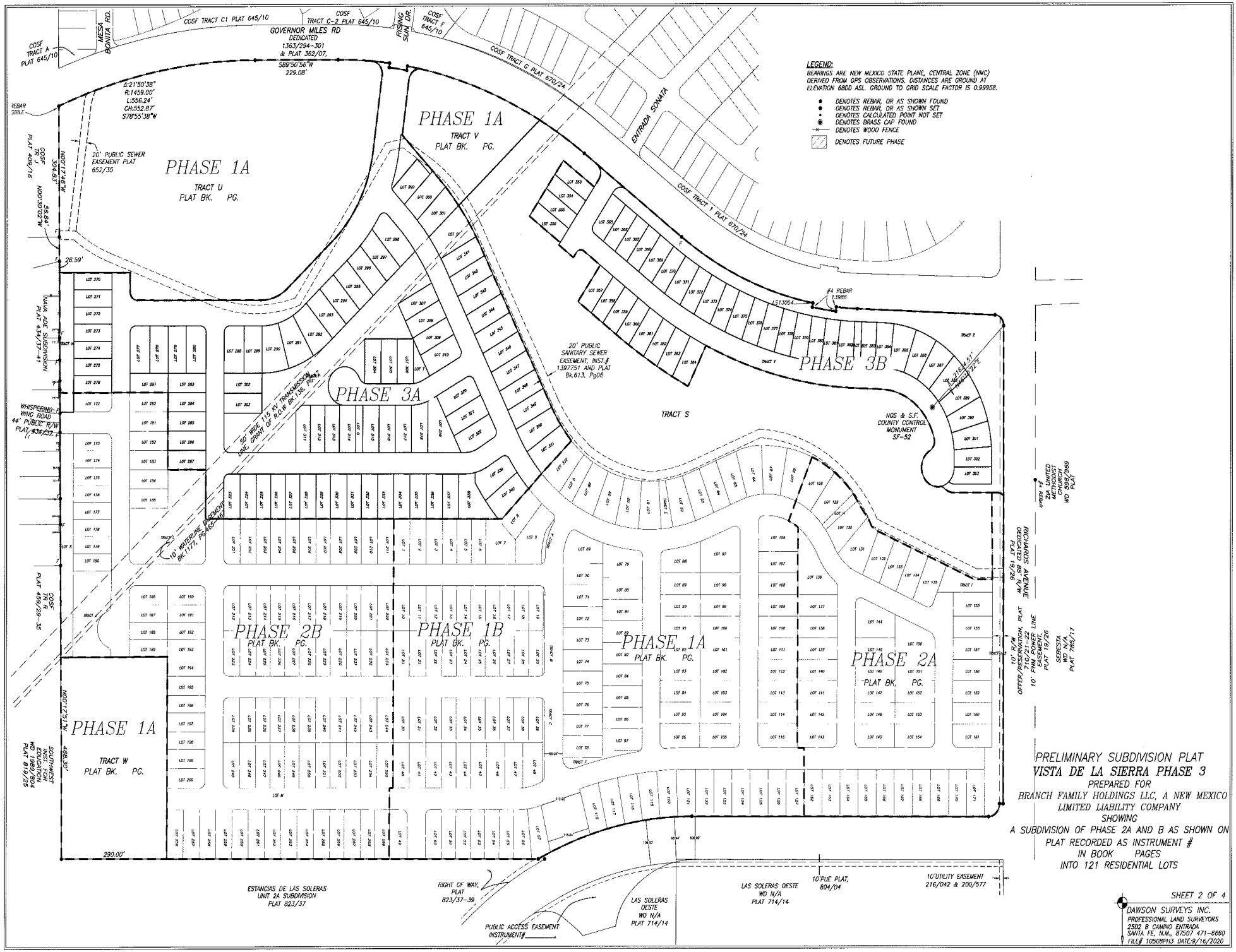
CITY: SANTA FE

COUNTY: SANTA FE

STATE: NEW MEXICO

SHEET 1 OF 4

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 1050BPH3 DATE:9/16/2020



PRELIMINARY SUBDIVISION PLAT

VISTA DE LA SIERRA PHASE 3

PREPARED FOR

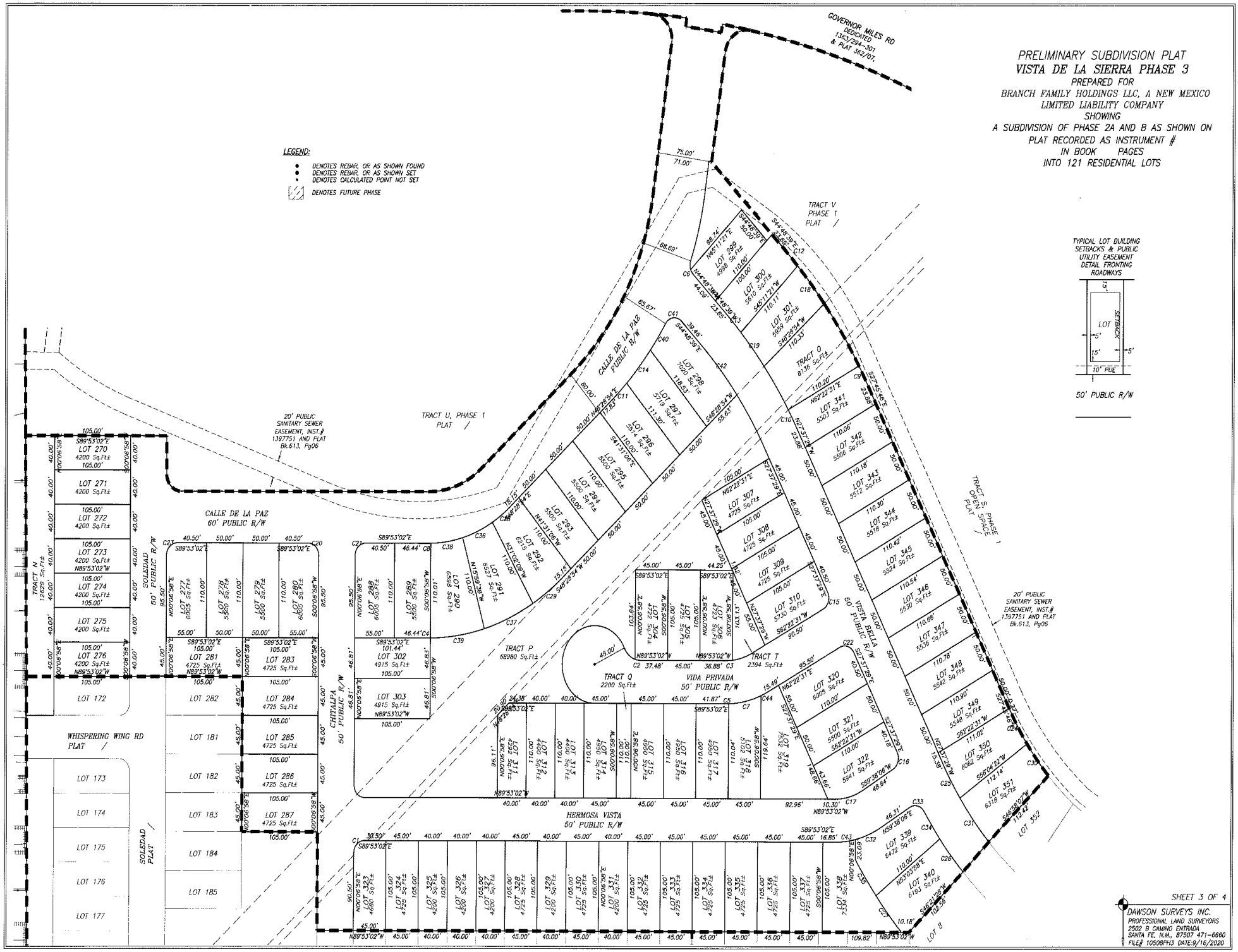
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY

SHOWING

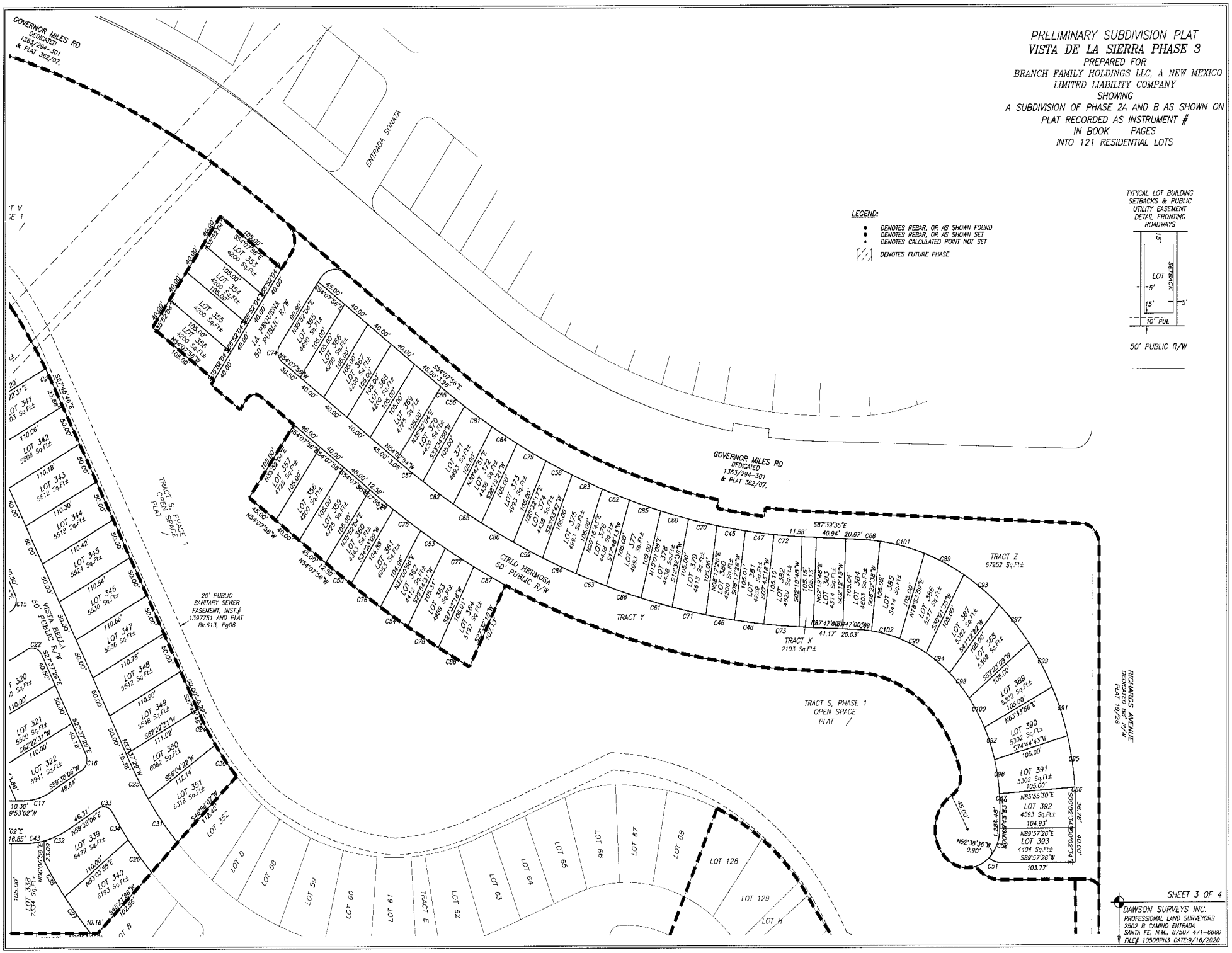
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON PLAT RECORDED AS INSTRUMENT # IN BOOK PAGES INTO 121 RESIDENTIAL LOTS

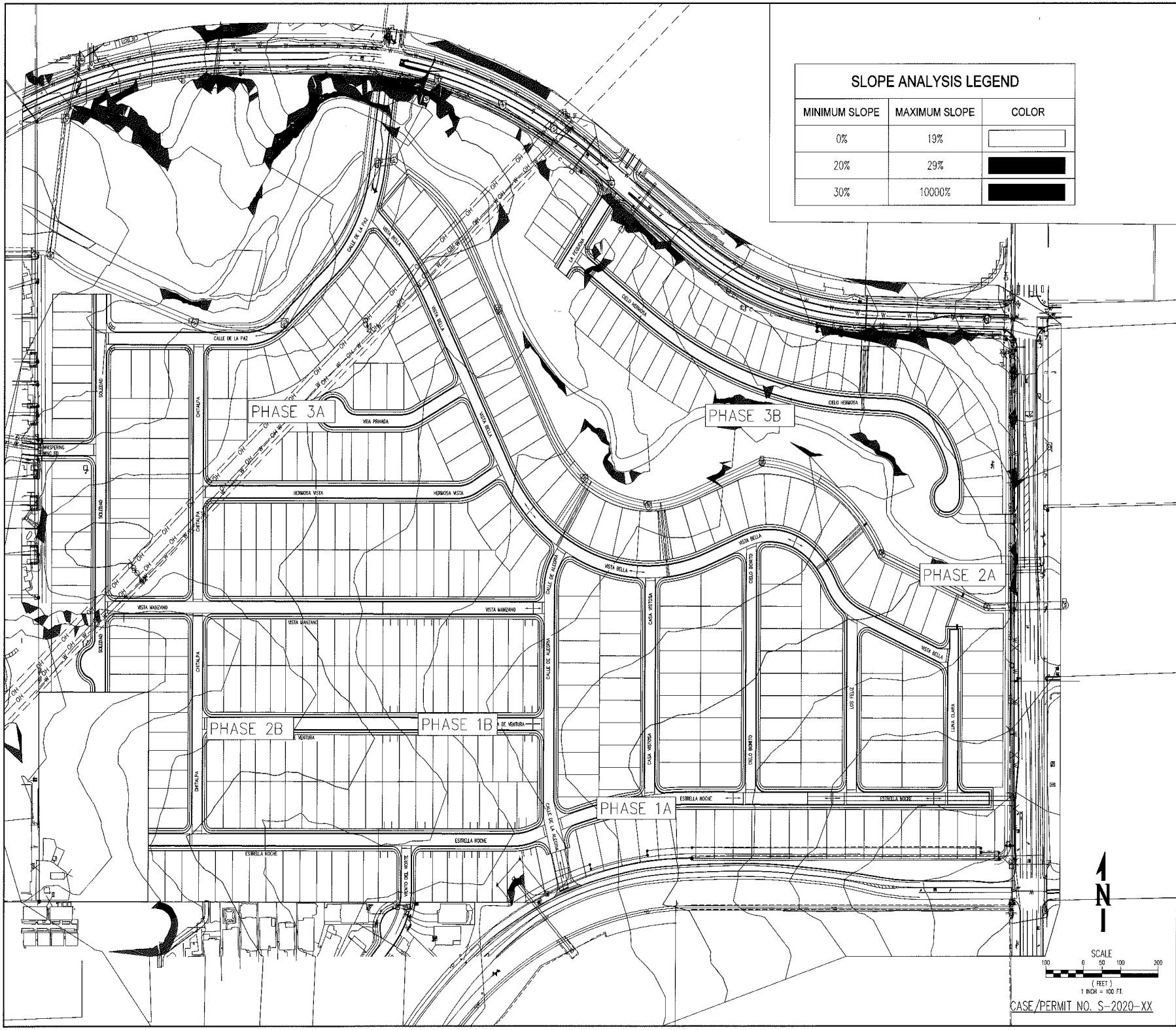
SHEET 2 OF 4

DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6650
FILE# 10508PH3 DATE:9/16/2020


PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 3
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO
LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON
PLAT RECORDED AS INSTRUMENT #
IN BOOK PAGES
INTO 121 RESIDENTIAL LOTS
LEGEND:
DENOTES REBAR, OR AS SHOWN FOUND
DENOTES REBAR, OR AS SHOWN SET
DENOTES CALCULATED POINT NOT SET
DENOTES FUTURE PHASE
GOVERNOR MILES RD
DEDICATED
1363/294-301
& PLAT 362/07
TRACT V
PHASE 1
PLAT
TRACT U, PHASE 1
PLAT
20' PUBLIC
SANITARY SEWER
EASEMENT, INST.#
1397751 AND PLAT
Bk.613, Pg06
CALLE DE LA PAZ
60' PUBLIC R/W
CALLE DE LA PAZ
PUBLIC R/W
SOLEDAD
50' PUBLIC R/W
TRACT N
12629 Sq.Ft±
TRACT P
6B980 Sq.Ft±
TRACT Q
2200 Sq.Ft±
TRACT T
2394 Sq.Ft±
VIDA PRIVADA
50' PUBLIC R/W
VISTA BELLA
50' PUBLIC R/W
CHITALFA
50' PUBLIC R/W
HERMOSA VISTA
50' PUBLIC R/W
WHISPERING WING RD
PLAT
SOLEDAD
PLAT
TRACT S PHASE 1
OPEN SPACE
PLAT
20' PUBLIC
SANITARY SEWER
EASEMENT, INST.#
1397751 AND PLAT
Bk.613, Pg06
TYPICAL LOT BUILDING
SETBACKS & PUBLIC
UTILITY EASEMENT
DETAIL FRONTING
ROADWAYS
15'
SETBACK
LOT
0'
5'
15'
5'
10' PUE
50' PUBLIC R/W
SHEET 3 OF 4
DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 B CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH3 DATE:9/16/2020

S-110


PRELIMINARY SUBDIVISION PLAT
VISTA DE LA SIERRA PHASE 3
PREPARED FOR
BRANCH FAMILY HOLDINGS LLC, A NEW MEXICO LIMITED LIABILITY COMPANY
SHOWING
A SUBDIVISION OF PHASE 2A AND B AS SHOWN ON PLAT RECORDED AS INSTRUMENT #
IN BOOK PAGES
INTO 121 RESIDENTIAL LOTS
GOVERNOR MILES RD DEDICATED 1363/294-301 & PLAT 362/07.
ENTRADA SONATA
LA PRIMAVERA 50' PUBLIC R/W
GOVERNOR MILES RD DEDICATED 1363/294-301 & PLAT 362/07.
CIELO HERMOSA 50' PUBLIC R/W
VISTA BELLA 50' PUBLIC R/W
TRACT S, PHASE 1 OPEN SPACE PLAT
TRACT Y
TRACT X 2103 Sq.Ft±
TRACT Z 67952 Sq.Ft±
20' PUBLIC SANITARY SEWER EASEMENT, INST.# 1397751 AND PLAT Bk.613, Pg08
RICHARDS AVENUE DEDICATED 88' R/W PLAT 19/26
LEGEND:
DENOTES REBAR, OR AS SHOWN FOUND
DENOTES REBAR, OR AS SHOWN SET
DENOTES CALCULATED POINT NOT SET
DENOTES FUTURE PHASE
TYPICAL LOT BUILDING SETBACKS & PUBLIC UTILITY EASEMENT DETAIL FRONTING ROADWAYS
50' PUBLIC R/W
SHEET 3 OF 4
DAWSON SURVEYS INC.
PROFESSIONAL LAND SURVEYORS
2502 D CAMINO ENTRADA
SANTA FE, N.M., 87507 471-6660
FILE# 10508PH3 DATE:9/16/2020
S-111



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/14/20
SCALE:
DESIGNED BY: RB, NZ
DRAWN BY: JS, BZ, A., NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: SLOPE ANALYSIS MAP
5FT CONTOURS

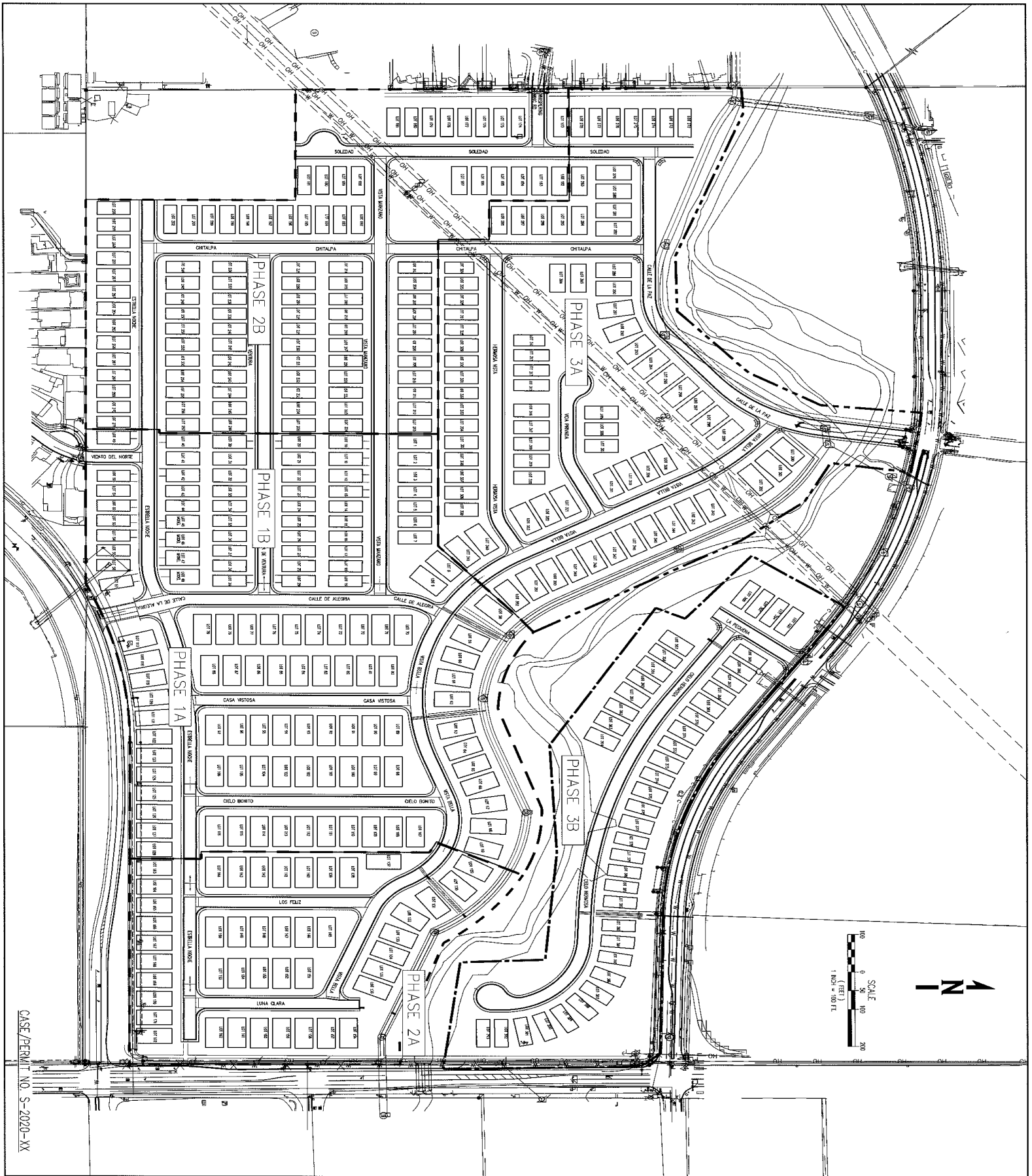
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK & REC		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
S-115

2020

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CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. S-120

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

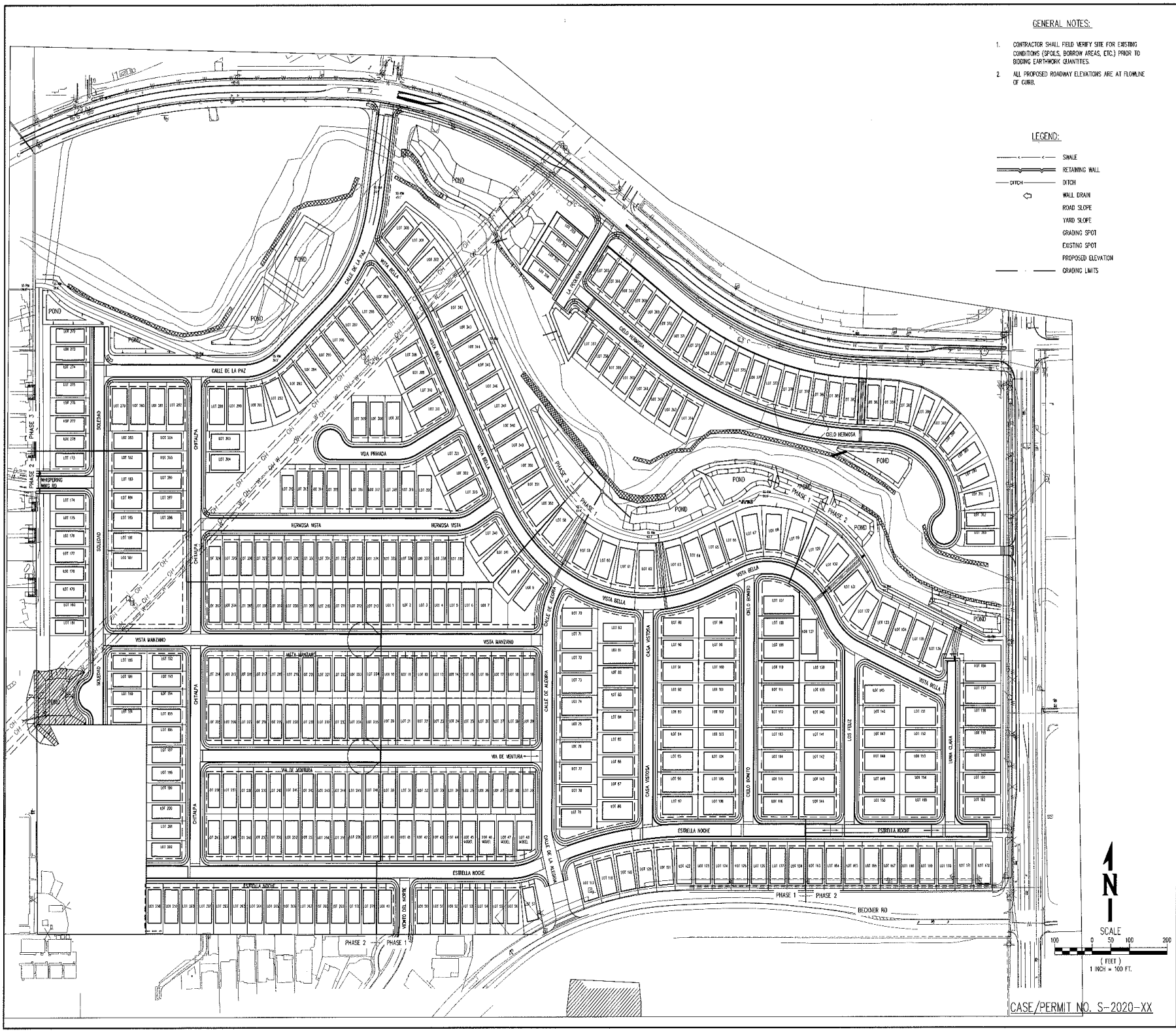
SHEET TITLE: PHASING PLAN

PRELIMINARY

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

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Albuquerque, NM 87113
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

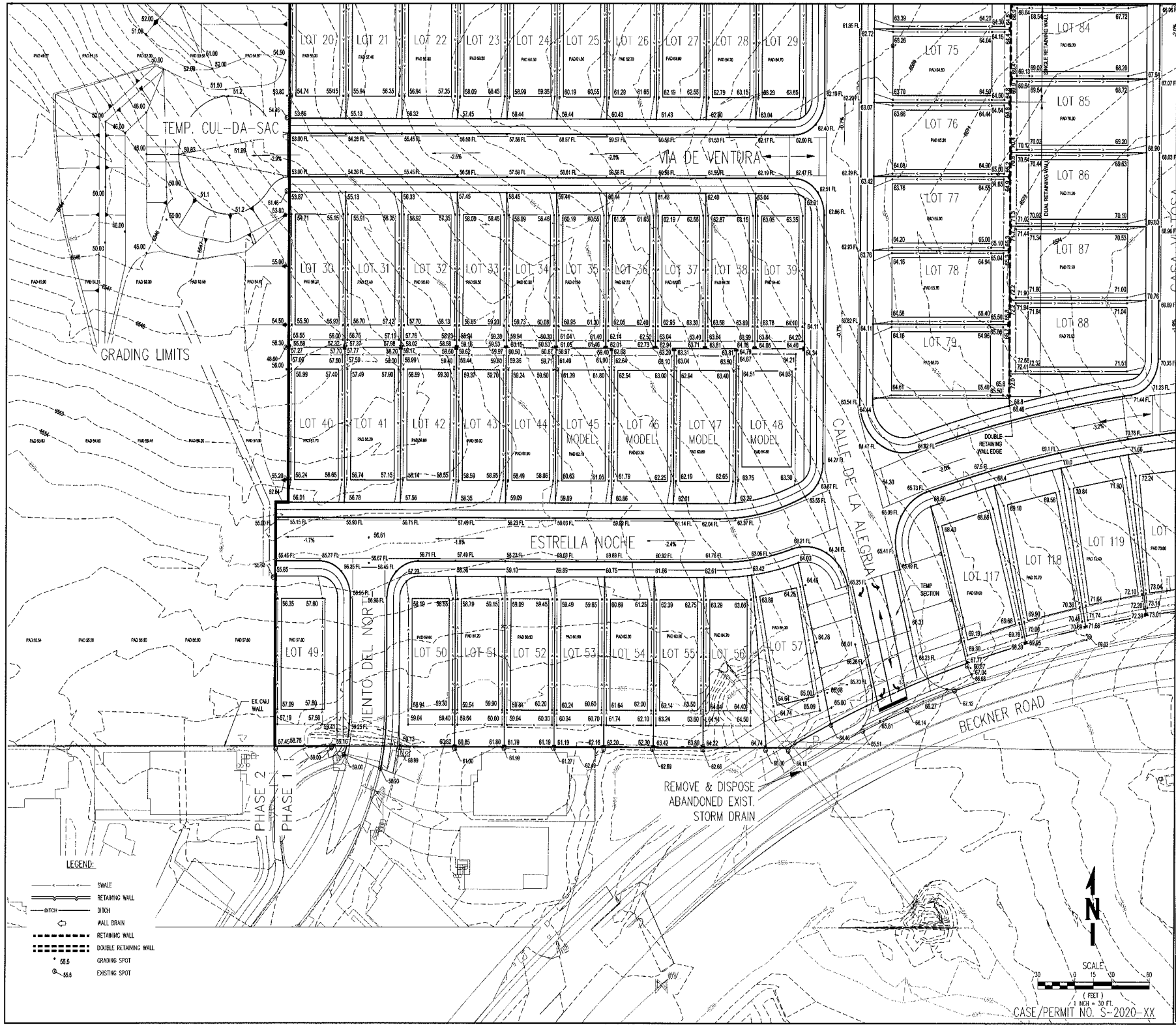
PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: OVERALL GRADING PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
UTILITY		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK & OPEN SPACE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C-100

P:\Columbus Capital Corporation\2200115-A000105.00\Execution\Drawings\Civil\Phase 1\A000105.00-C-Grading Plan_Phase 1.dwg 9/18/2020 1:11 PM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/03/20
SCALE:

DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY

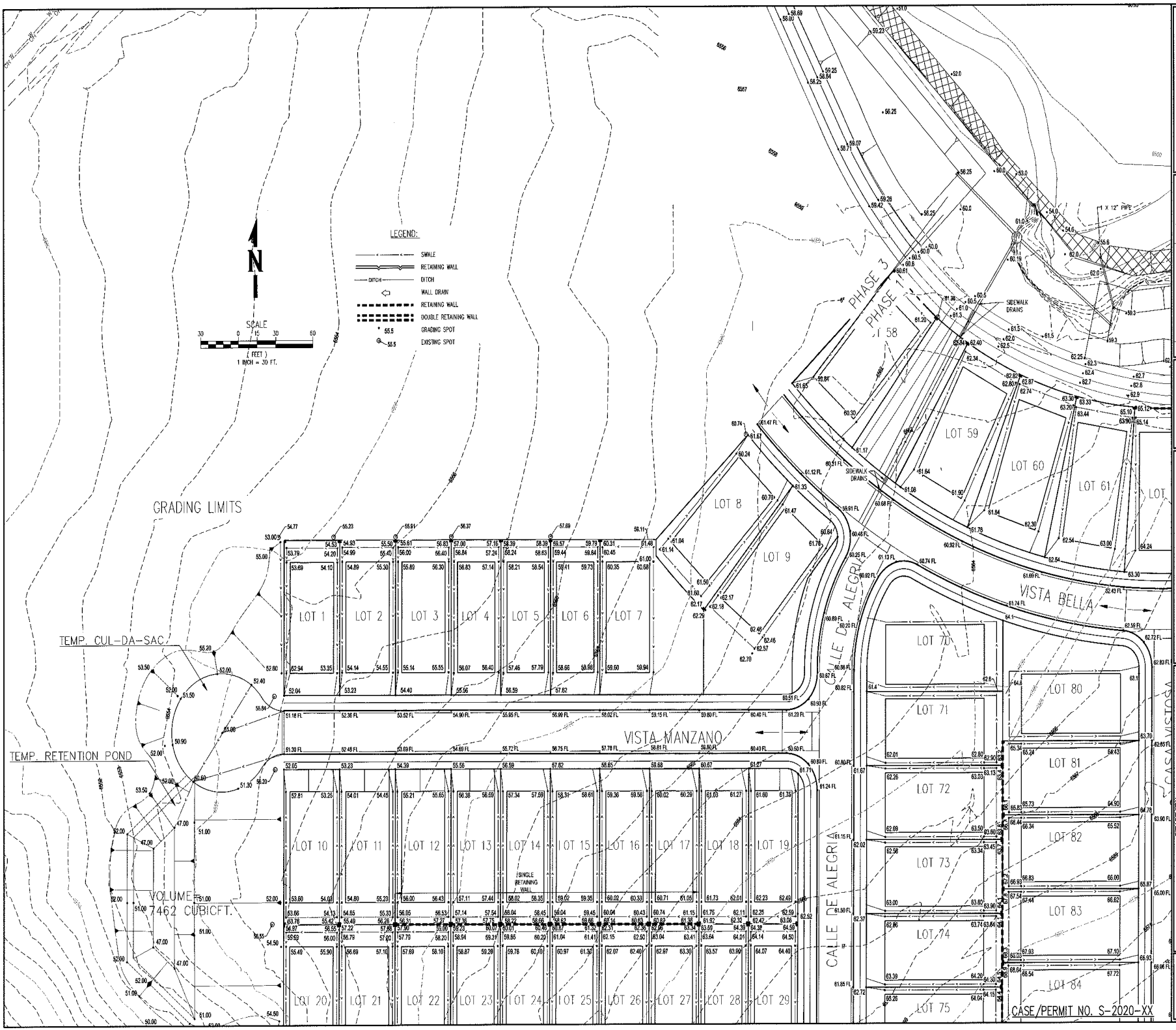
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: GRADING PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION SECTION		

SHEET NO.
C1-101

P:\Columbus Capital Corporate\n\220619-A000105.00\Execution\Drawings\Civil\Phase 1\A000105.00-C-Grading Plan_Phase 1.dwg 8/18/2020 10:39 AM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JK, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 1

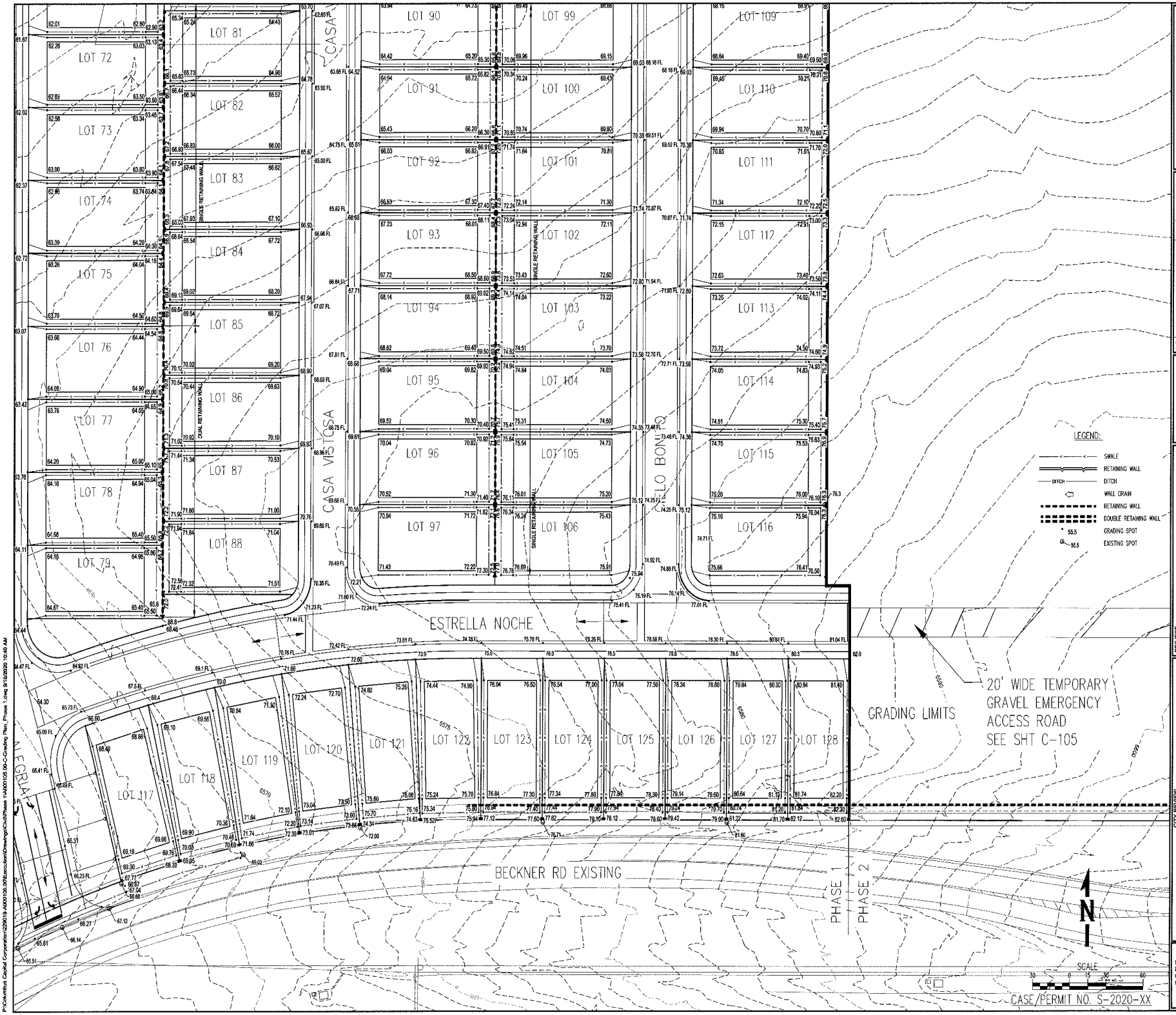
SHEET TITLE:
GRADING PLAN

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PUBLIC WORKS/ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
SOLID WASTE			
PARKS & RECREATION			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
C1-102

SCALE: 1" = 30'
2020

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

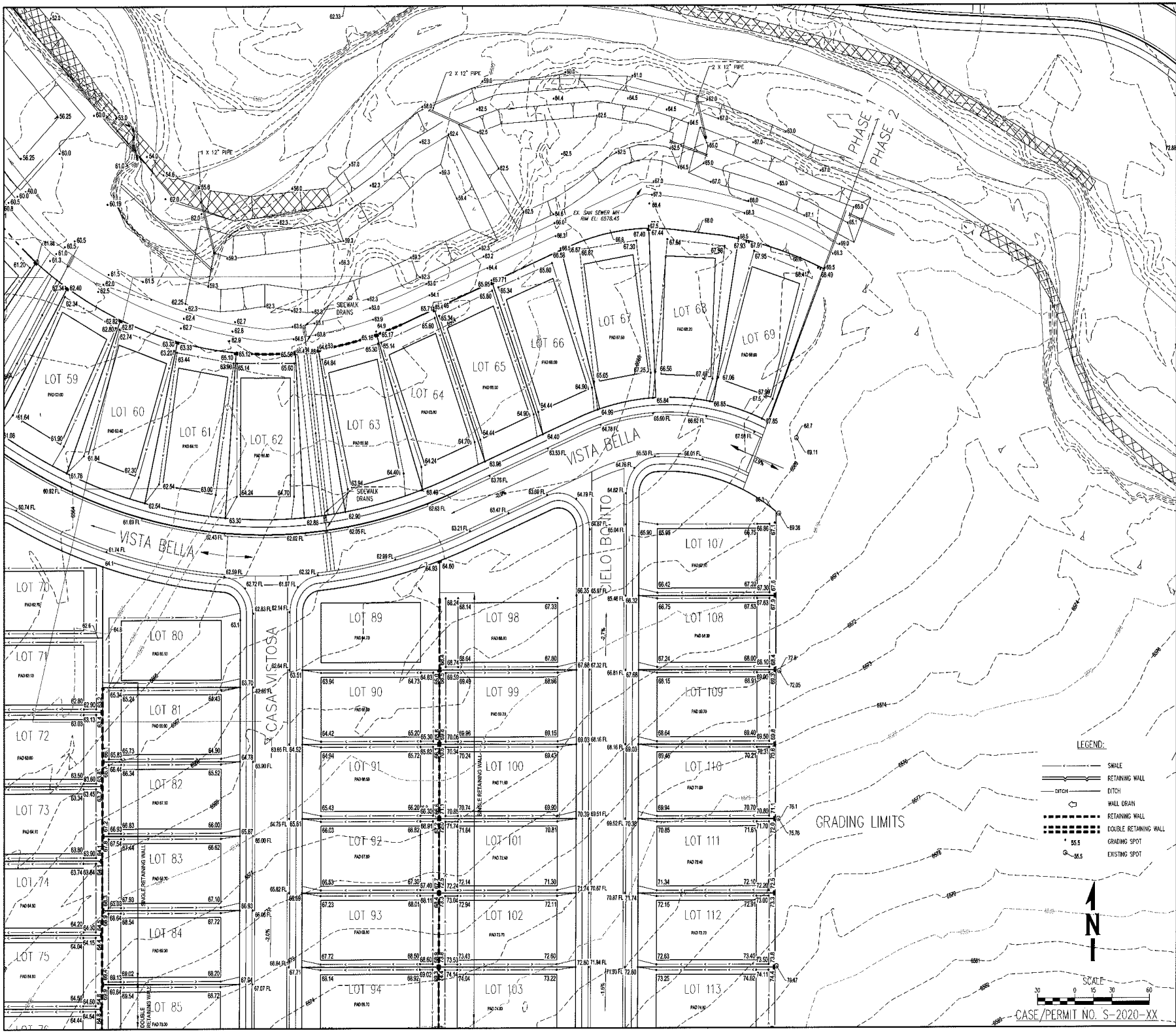
PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 1

SHEET TITLE:
GRADING PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARKS & CIP		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C1-103

2020



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NO.	REVISIONS	BY	APP	DATE

PROJECT:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
FILE
CHECKED BY: RB
DATE: 09/03/20
SCALE: AS NOTED

PRELIMINARY

PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 1

SHEET TITLE:
GRADING PLAN

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
PW/ ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK & OPEN SPACE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C1-104

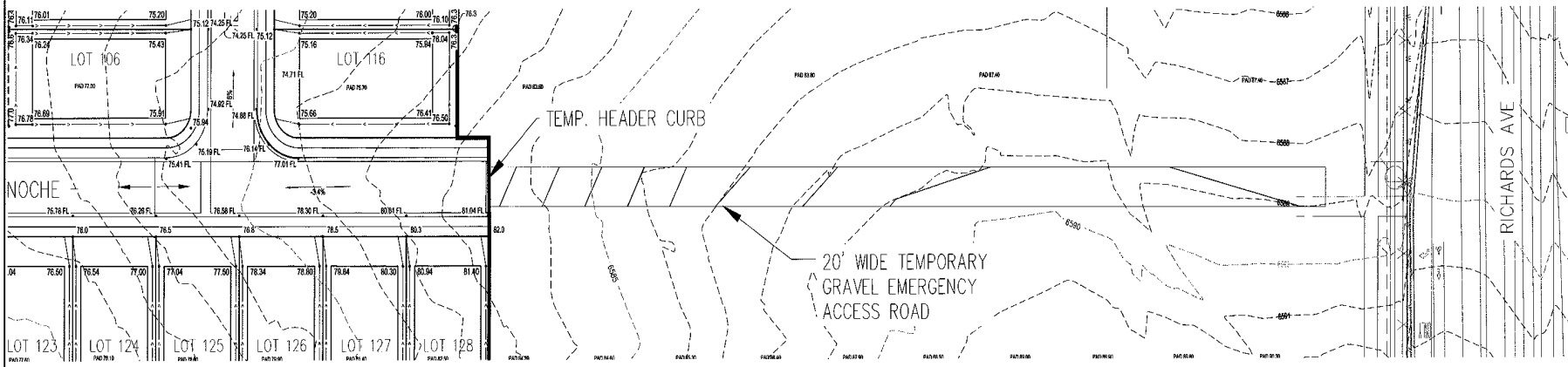
CASE/PERMIT NO. S-2019-XX

N

SCALE
40 0 20 40 80
(FEET)
1 INCH = 40 FT.

LEGEND:

- SWALE
- RETAINING WALL
- DITCH
- WALL DRAIN
- RETAINING WALL
- DOUBLE RETAINING WALL
- 55.5 GRADING SPOT
- 55.5 EXISTING SPOT



CASE/PERMIT NO. S-2020-XX

P:\Columbia Capital Corporation\1223619-A000105.00\Execution\Drawings\Civil\Phase 1\A000105.00-C-Grading Plan_Phase 1.dwg 9/18/2020 10:41 AM

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

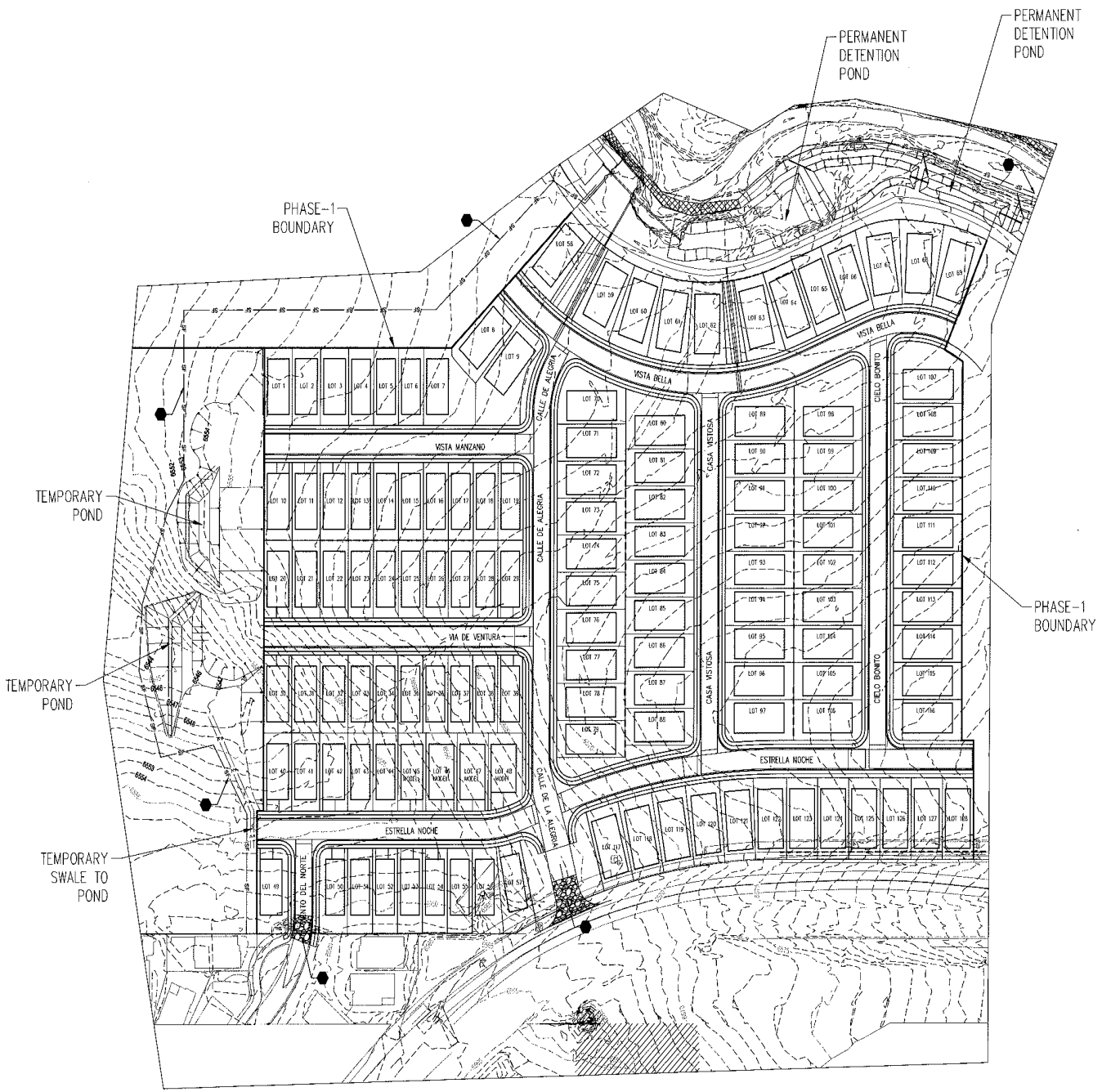
PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1
SHEET TITLE: GRADING PLAN

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C1-105



SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND SEDIMENT PONDS.
1A. CONTACT CITY OF SANTA FE FOR INSPECTION.
2. ALL CONSTRUCTION TRAFFIC TO UTILIZE CONSTRUCTION ENTRANCE ONLY.
3. CONTINUE ROUGH GRADING AND EARTHWORK.
4. INSTALL SEWER.
5. INSTALL STORM DRAIN.
6. INSTALL WATER.
7. INSTALL CURB & GUTTER.
8. INSTALL DRY UTILITIES.
9. INSTALL FILLETS & VALLEY GUTTERS.
10. INSTALL BASE COURSE & FIRST LIFTED POINT.
11. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED REMOVE SEDIMENT CONTROL DEVICES INCLUDING SILT FENCE UPON APPROVAL OF CITY PLANNING AND DEVELOPMENT REVIEW STAFF.
12. COMPLY WITH REVEGETATION MIX FOR NMSHSD CLASS "A" SEEDING.

LEGEND:

—SF—SF— SILT FENCE

GRADING LIMITS

KEYED NOTES: ⬡

1. INSTALL TEMPORARY STONE CONSTRUCTION ENTRANCE AT THE BEGINNING OF ACCESS ROAD CONSTRUCTION PER DETAIL ON SHEET SWPPP-1.
2. INSTALL SILT FENCE OR COMPOST SOCKS PER DETAILS ON SHEET SWPPP-1 ON PROJECT DISTURBANCE BOUNDARY.

N

SCALE
75 0 37.5 75 150
(FEET)
1 INCH = 75 FT.

CASE/PERMIT NO. S-2020-XX

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
TREE PROTECTION/MGMT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: RB, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

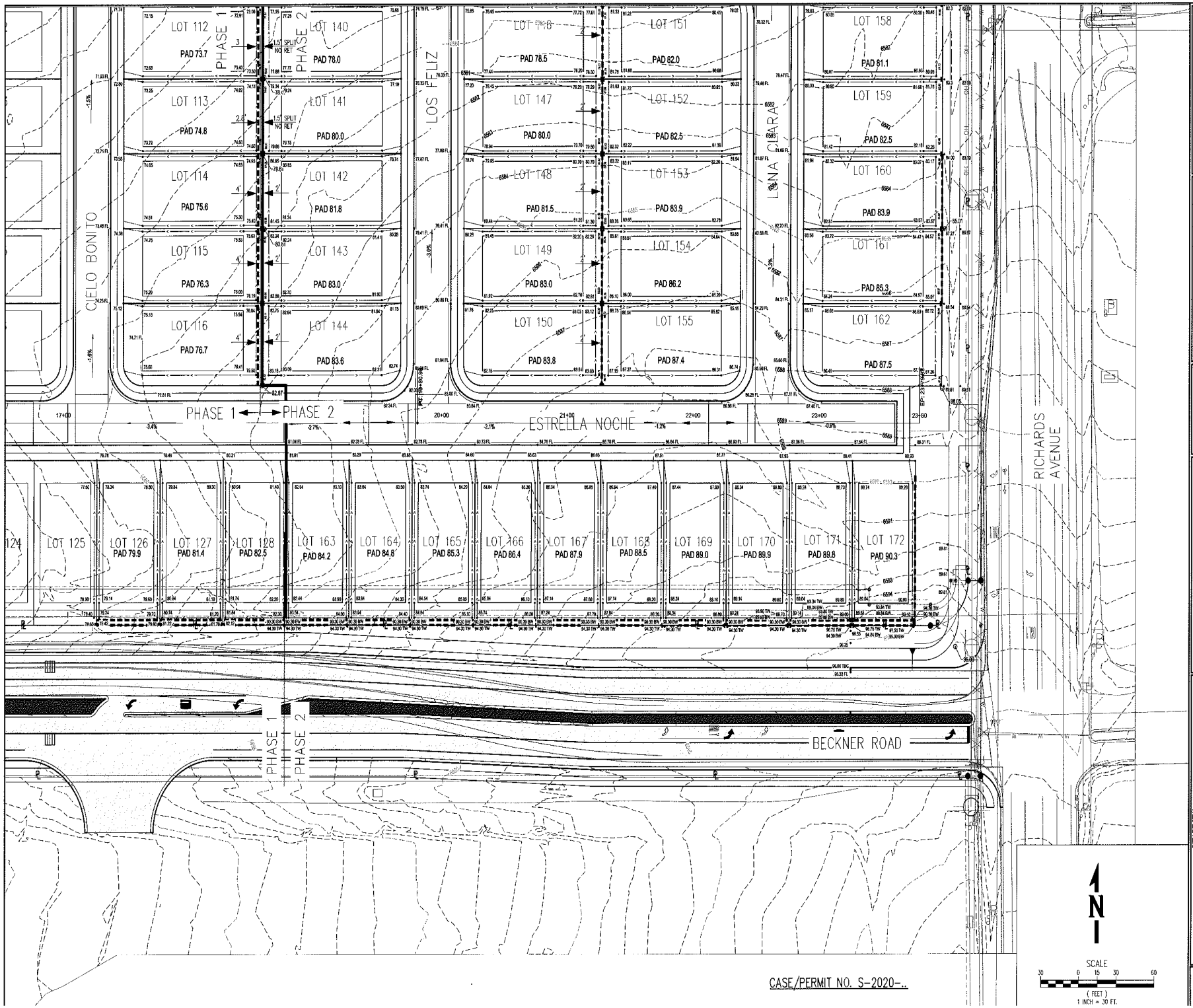
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: STORM WATER POLLUTION & PREVENTION PLAN

SHEET NO. C1-106

2020

P:\Columbus Capital Corporation\20219-A\00105.00\Solution\Drawings\Civil\Phase 1\A00105.00-C-SWPPP Plan_Phase 1.dwg 9/18/2020 11:04 AM



CASE/PERMIT NO. S-2020-..

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY
9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

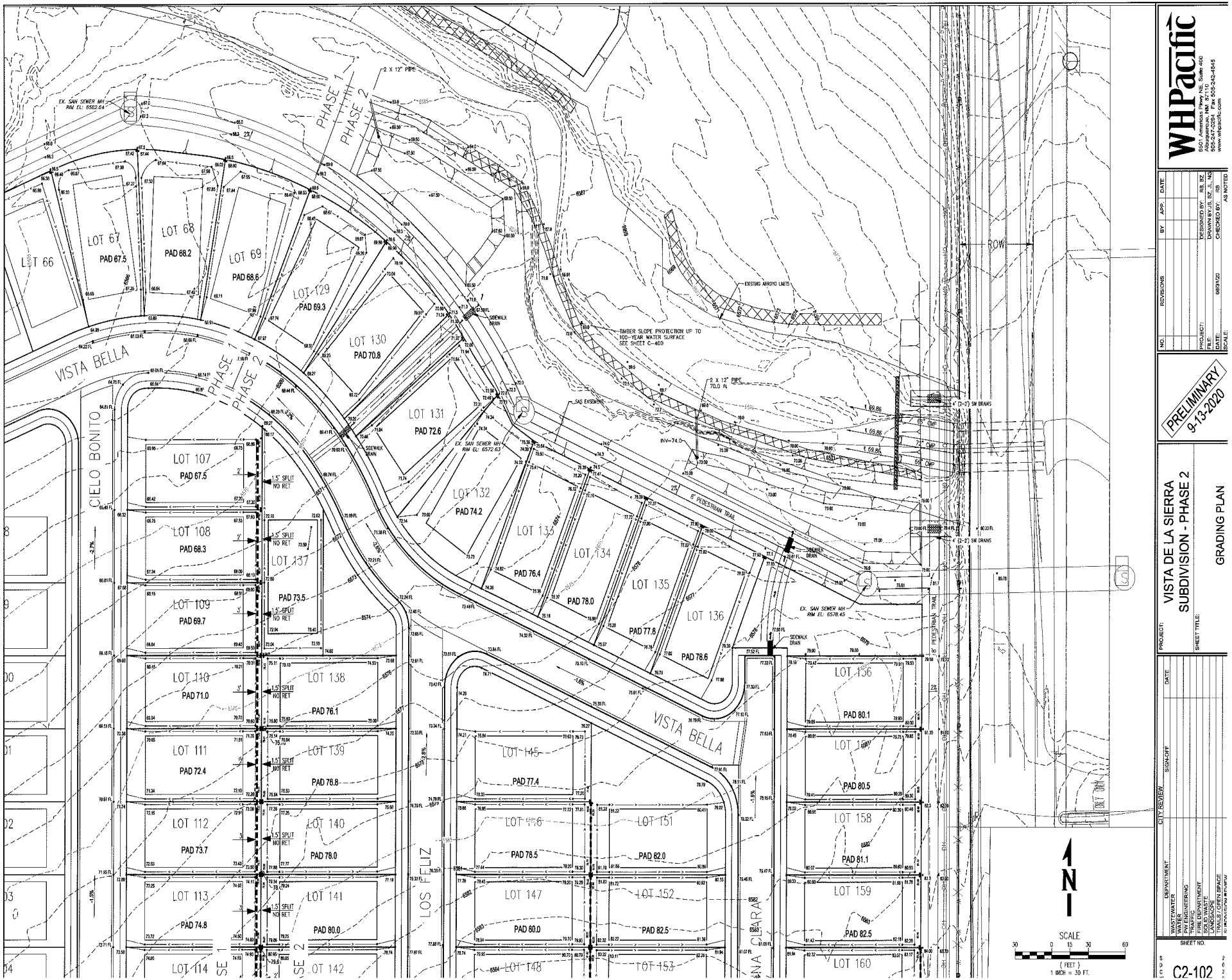
SHEET TITLE: GRADING PLAN

DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PARKS / ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LAND USE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C2-101

Sheet 2 of 2

Capital Corporation\Z2619-A000105.00\Execution\Drawings\Civil\Phase 2\A000105.00-C-Grading Plan_Phase 2A.dwg 9/18/2020 10:47 AM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NC
CHECKED BY: RB

PRELIMINARY
9-13-2020

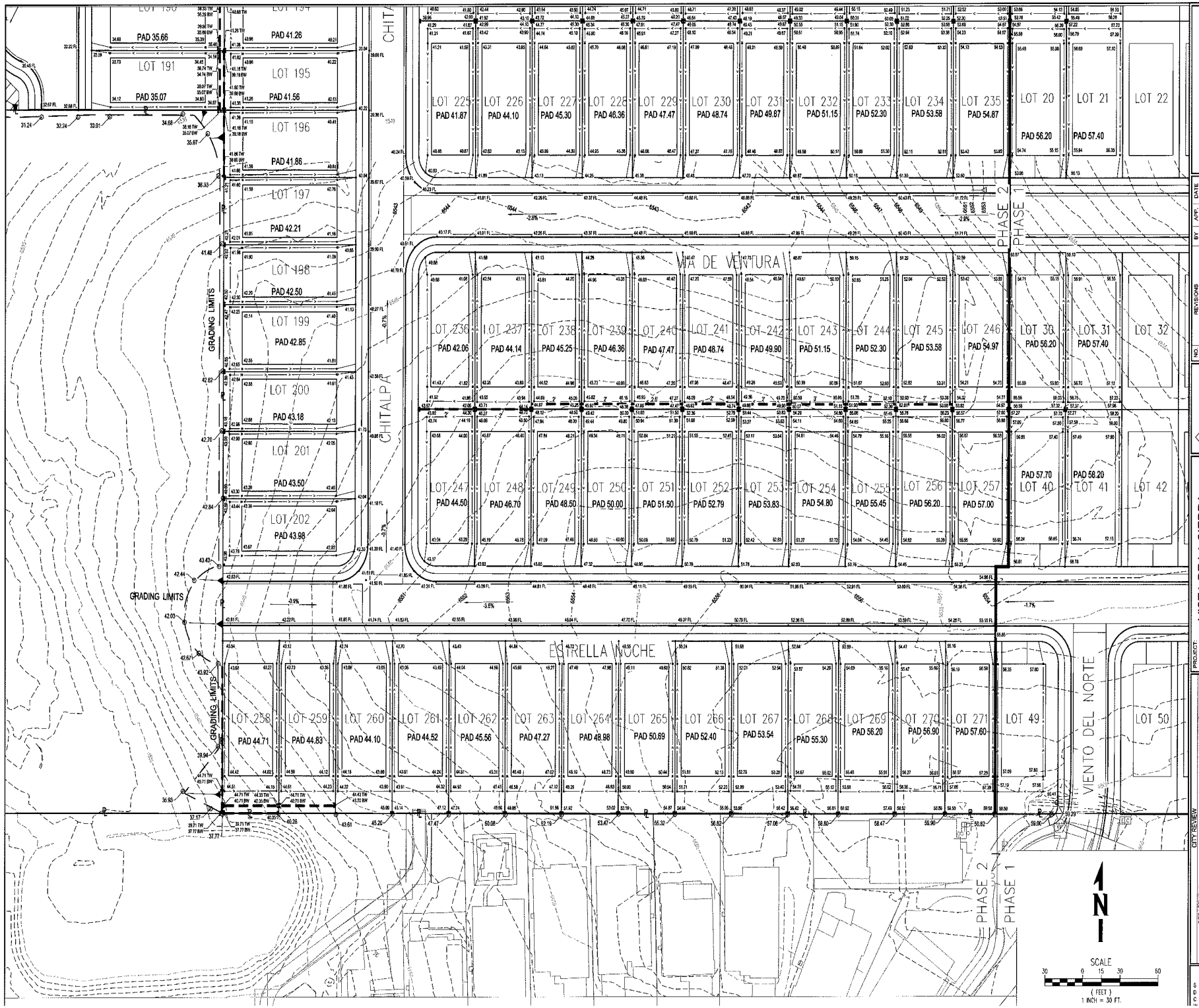
PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

SHEET TITLE:
GRADING PLAN

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
PW ENGINEERING		
PARKS		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAFFIC/OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C2-102

Capilla Corporation\235015-AD\05105.00\Execution\Drawings\Civil\Phase 2A\005105.00-C-Grading Plan_Phase 2A.dwg 9/18/2020 10:49 AM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 06/01/20
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DESIGNED BY: RB, BZ
DRAWN BY: JB, BZ, JL, NC
CHECKED BY: RB

PRELIMINARY
9-13-2020

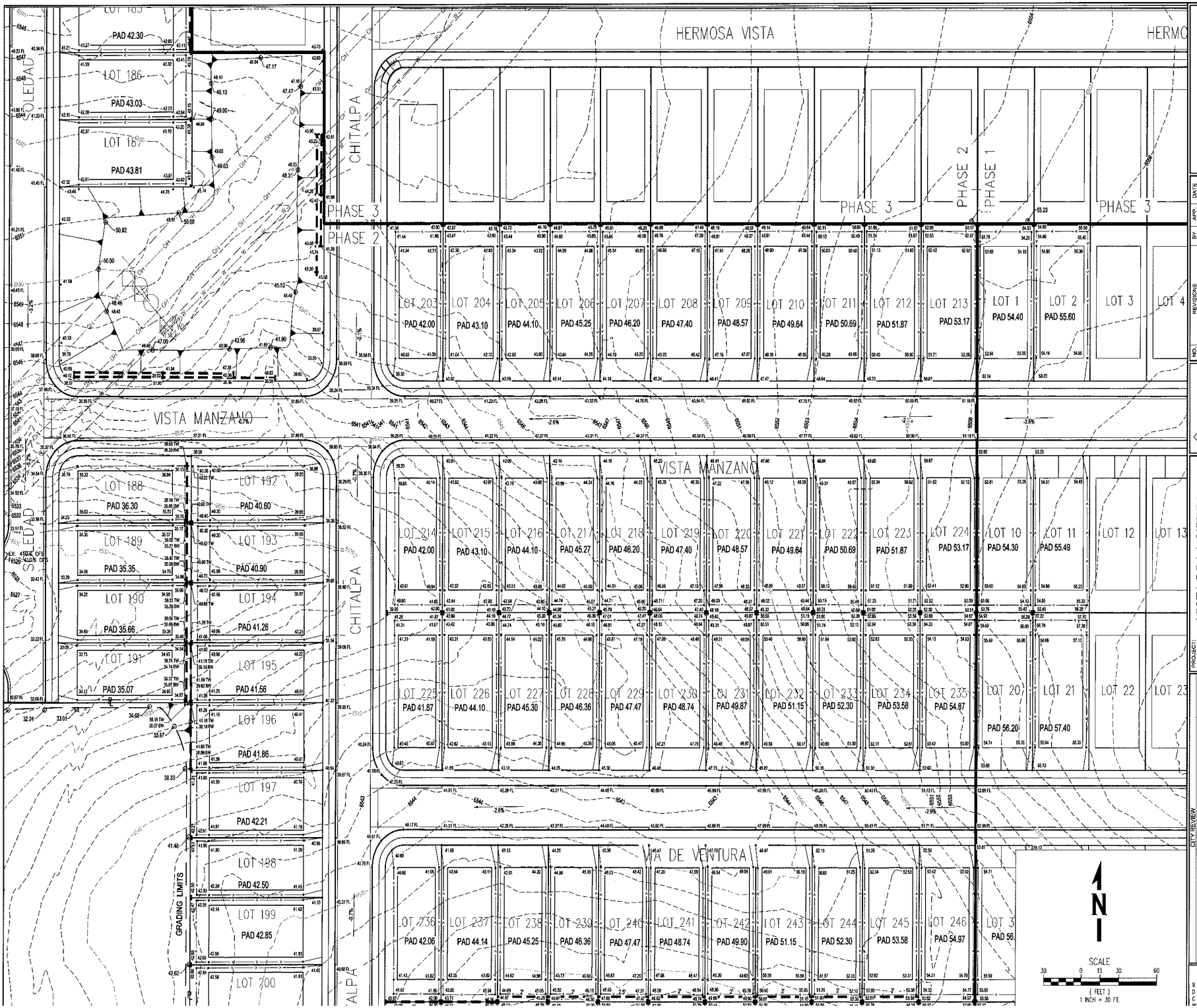
PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

SHEET TITLE:
GRADING PLAN

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
TRAFFIC ENGINEERING			
PARKS			
FIRE DEPARTMENT			
SOLID WASTE			
LAND DEVELOPMENT			
TRAILS / OPEN SPACE			

SHEET NO.
C2-103

Capital Corporation\229019.A090105.00\Execution\Drawings\Civil\Phase 2\A090105.00-C-Grading Plan_Phase 2B.dwg 9/16/2020 10:49 AM



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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-243-4845
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NO.	REVISIONS	BY	APP.	DATE

PROJECT: DESIGNED BY: RB, BZ
FILE: DRAWN BY: BZ, JL, NS
DATE: 08/31/20 CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY
9-13-2020

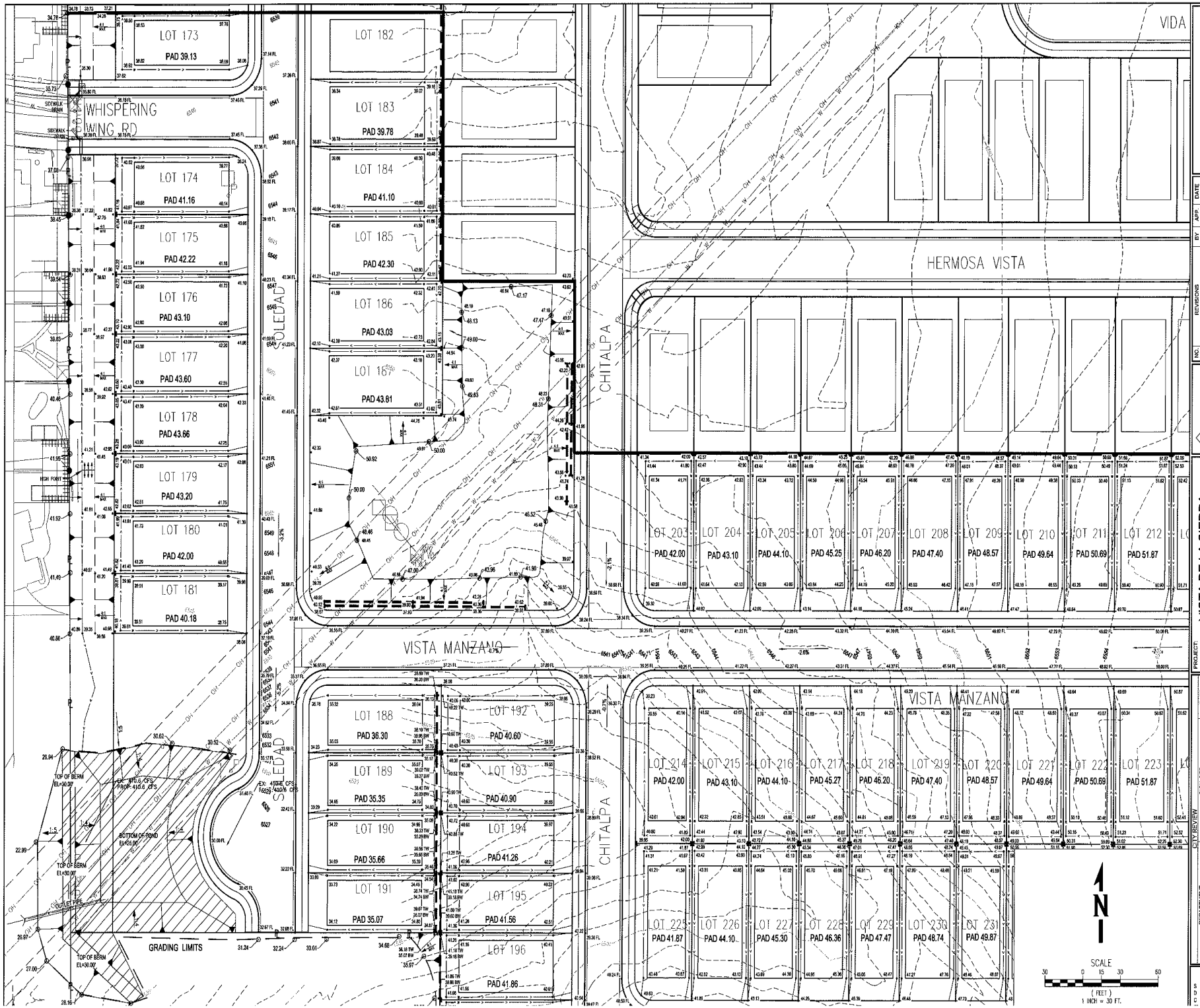
PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

SHEET TITLE: GRADING PLAN

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
PW ENGINEERING		
PARKS		
FIRE DEPARTMENT		
SOLID WASTE		
TRANSP.		
OPEN SPACE		

SHEET NO.
C2-104

...Capital Corporation\220219-A000105.00\Execution\Drawings\Civil\Phase 2\A000105.00-C-Grading Plan_Phase 2B.dwg 9/15/2020 10:50 AM



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6501 Americas Pkwy NE, Suite 400
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www.whpsf.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY
9-13-2020

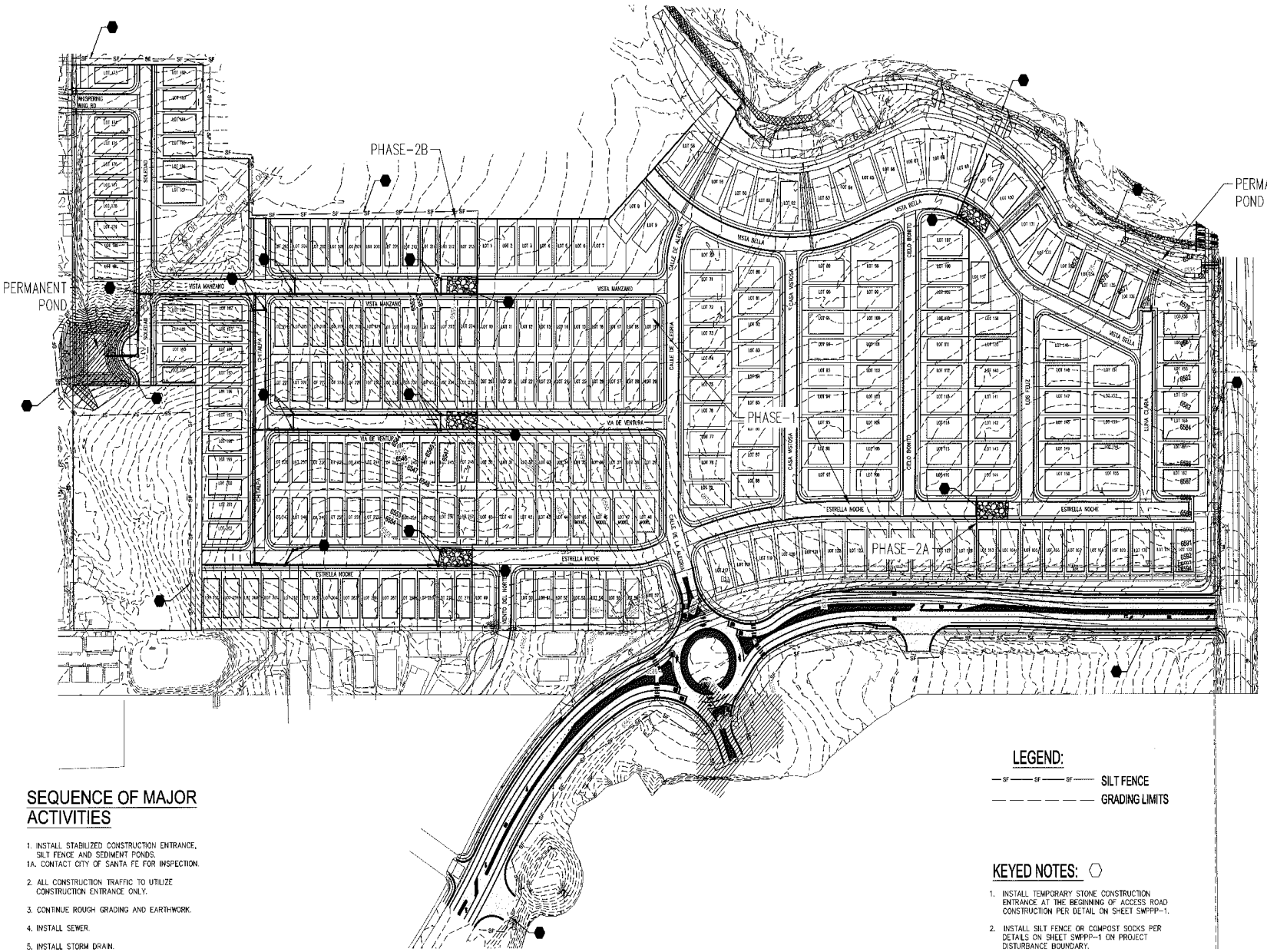
PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

SHEET TITLE: GRADING PLAN

DEPARTMENT	DATE	CITY REVIEW	SIGN-OFF
WASTEWATER			
WATER			
ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
SOLID WASTE			
PARKS			
TRAILS / OPEN SPACE			

SHEET NO.
C2-105

i Capital Corporation\229019-A\00105.00\Exhibit\Drawings\Civil\Phase 2A\00105.00-C-Grading Plan_Phase 2B.dwg 9/18/2020 10:50 AM



SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND SEDIMENT PONDS.

1A. CONTACT CITY OF SANTA FE FOR INSPECTION.

2. ALL CONSTRUCTION TRAFFIC TO UTILIZE CONSTRUCTION ENTRANCE ONLY.

3. CONTINUE ROUGH GRADING AND EARTHWORK.

4. INSTALL SEWER.

5. INSTALL STORM DRAIN.

6. INSTALL WATER.

7. INSTALL CURB & GUTTER.

8. INSTALL DRY UTILITIES.

9. INSTALL FILLETS & VALLEY GUTTERS.

10. INSTALL BASE COURSE & FIRST LIFTED POINT.

11. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED REMOVE SEDIMENT CONTROL DEVICES INCLUDING SILT FENCE UPON APPROVAL OF CITY PLANNING AND DEVELOPMENT REVIEW STAFF.

12. COMPLY WITH REVEGETATION MIX FOR NMSHSD CLASS "A" SEEDING.

LEGEND:

— SF — SF — SF — SILT FENCE

— — — — — — GRADING LIMITS

KEYED NOTES: ⬡

1. INSTALL TEMPORARY STONE CONSTRUCTION ENTRANCE AT THE BEGINNING OF ACCESS ROAD CONSTRUCTION PER DETAIL ON SHEET SWPPP-1.
2. INSTALL SILT FENCE OR COMPOST SOCKS PER DETAILS ON SHEET SWPPP-1 ON PROJECT DISTURBANCE BOUNDARY.
3. INSTALL INLET PROTECTION FOR NEW STORM INLETS DURING CONSTRUCTION PER DETAILS ON SHEET SWPPP-1.

N

SCALE
100 0 50 100 200
(FEET)
1 INCH = 100 FT.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY
9-13-2020

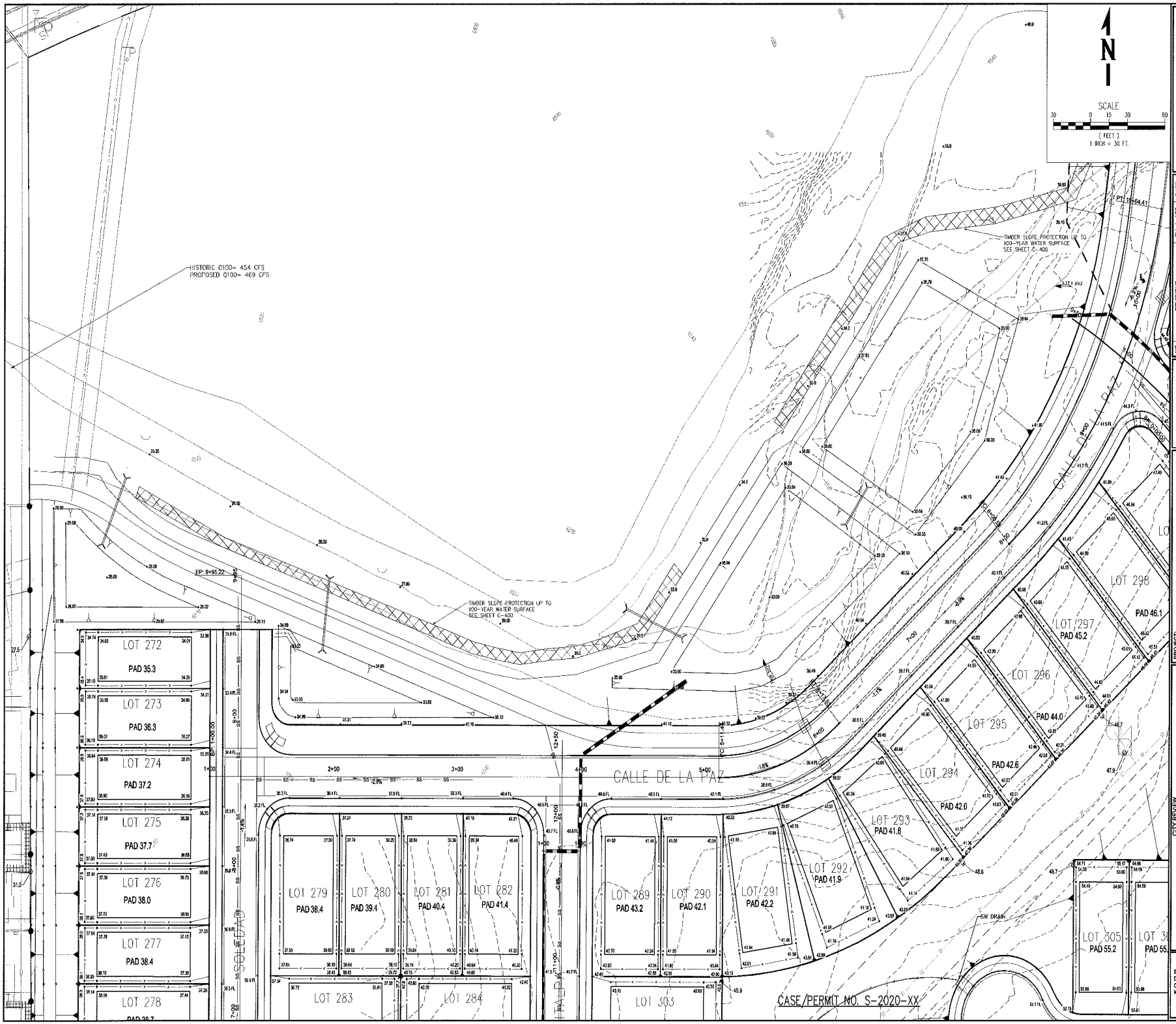
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STORM WATER POLLUTION & PREVENTION PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C2-106

P:\Columbus Capital Corporation\2020\19-A0001\05.00\Execution\Drawings\Civil\Phase 2\A0001105.00-C-SWPPP Plan_Phase 2.dwg (9/18/2020 11:02 AM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RBI, SZ
DRAWN BY: SZ, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: GRADING PLAN

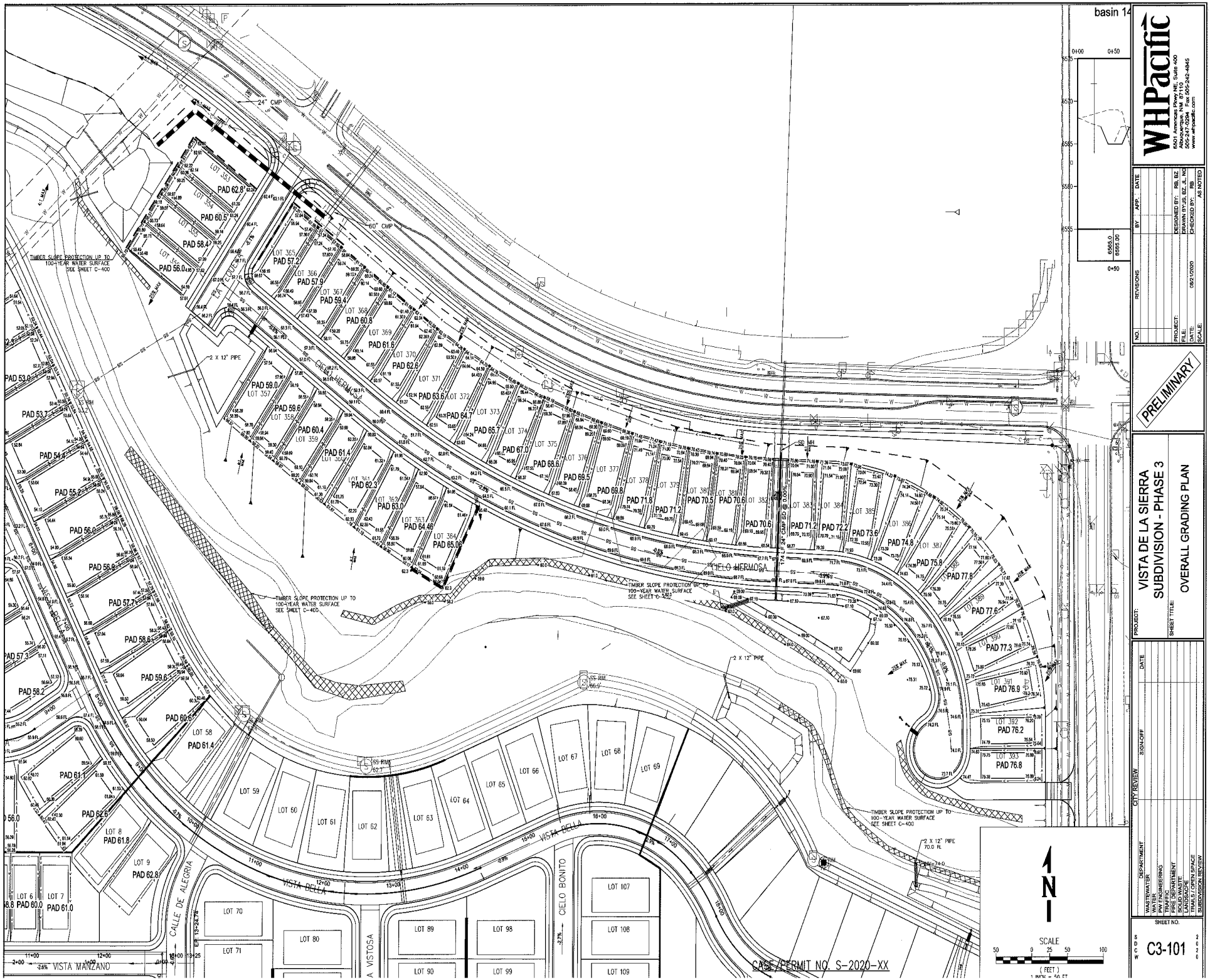
CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
HYDROLOGY DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
DRB/SUBDIVISION REVIEW		

SHEET NO.
C3-100

2020

P:\Columbia Capital Corporation\226019 A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C-Grading Plan_Phase 3.dwg 8/19/2020 11:53 AM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: BS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

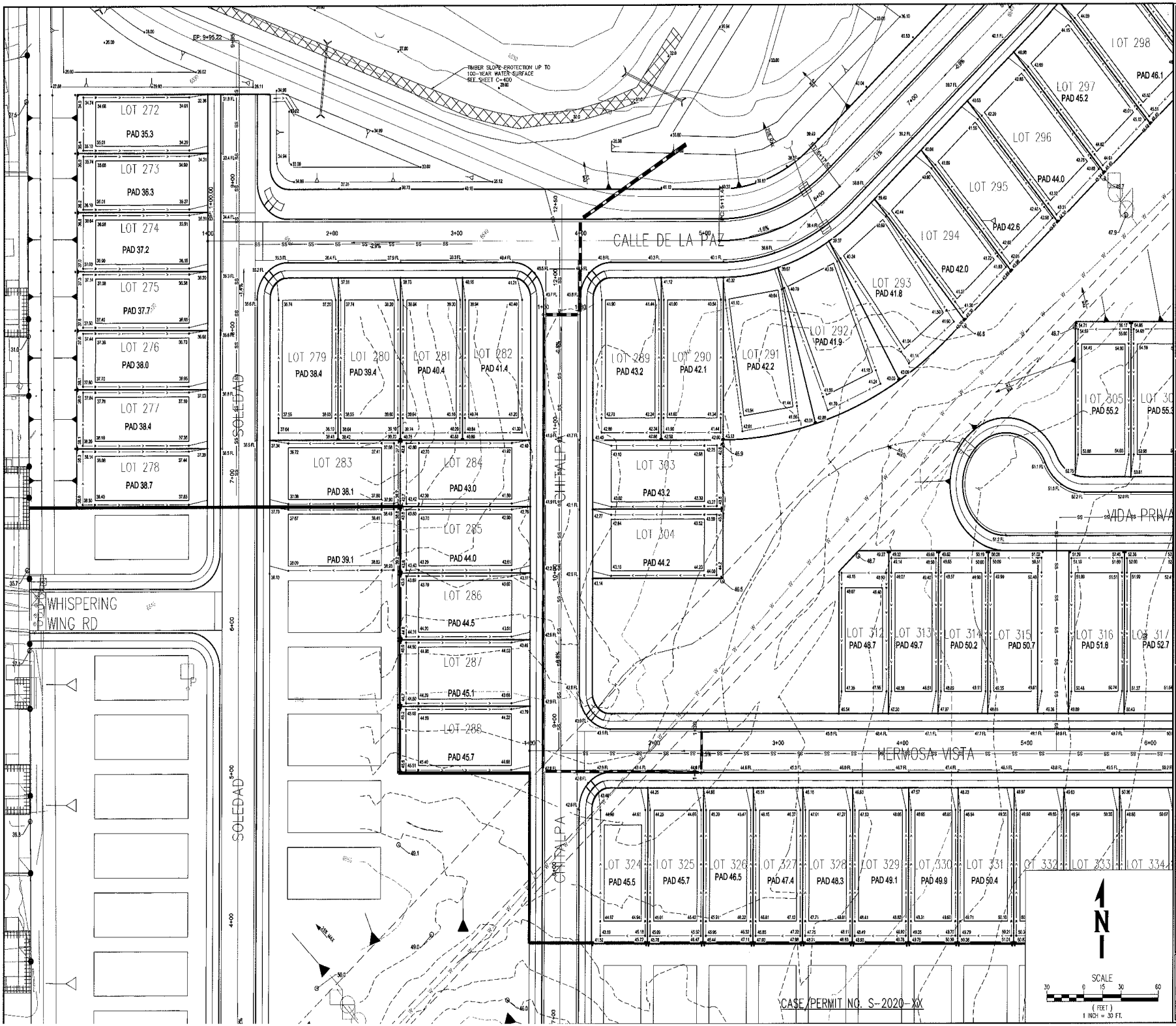
PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 3

SHEET TITLE:
OVERALL GRADING PLAN

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PW ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
PARKS & REC			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
C3-101

Document Capital Corporation\2020\19-A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C-Grading Plan_Phase 3.dwg 8/19/2020 11:53 AM



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NO	REVISIONS	BY	APP.	DATE

DESIGNED BY: RB, RZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED

PRELIMINARY

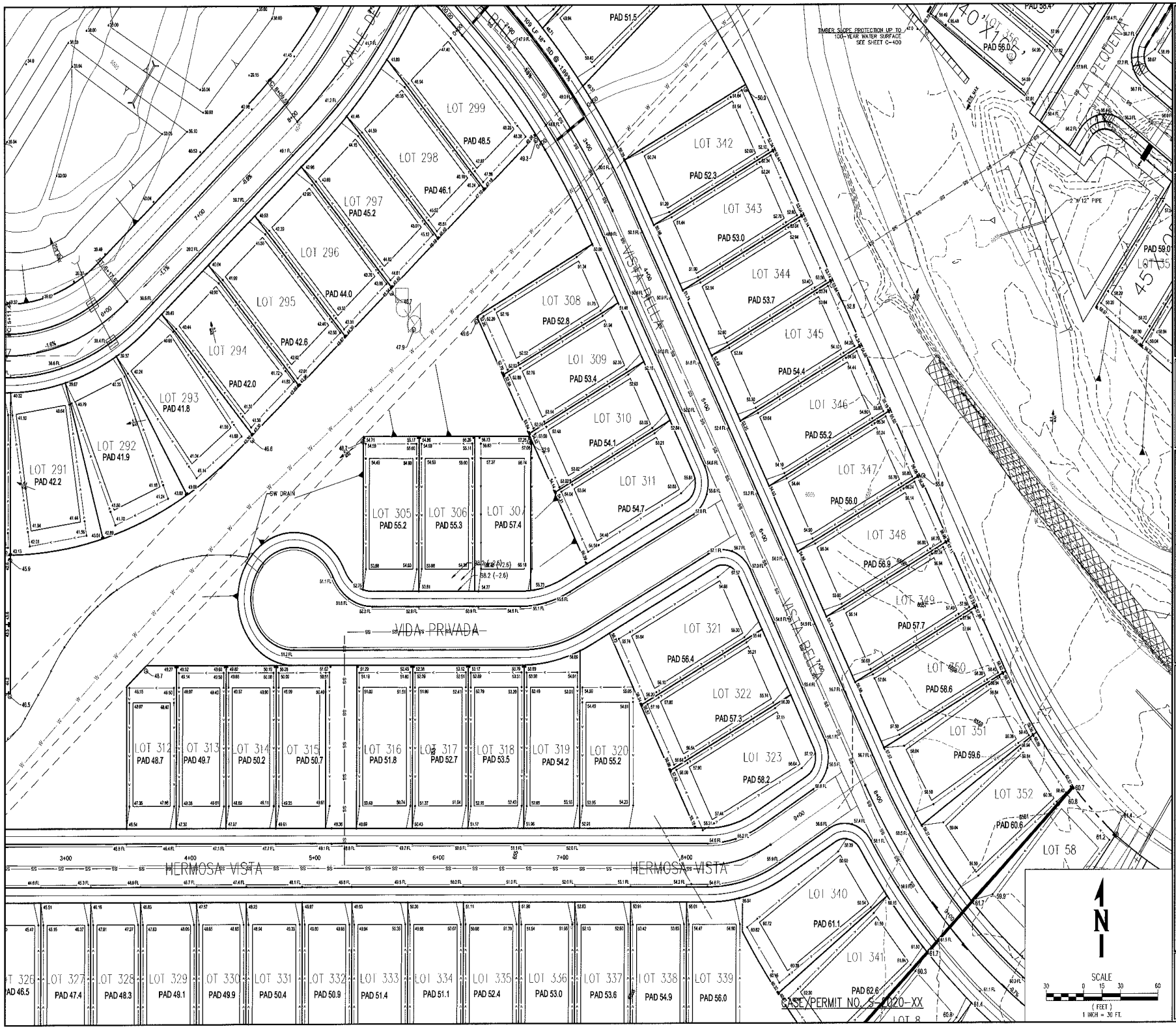
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: GRADING PLAN

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-102

"C:\Columbus Capital Corporation\2250519-A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C-Grading Plan_Phase 3.dwg 9/18/2020 11:54 AM



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6501 Americas Pkwy NE Suite 400
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www.whpacific.com

NO.	REVISIONS	BY	APP'D	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, KS
CHECKED BY: RB

PRELIMINARY

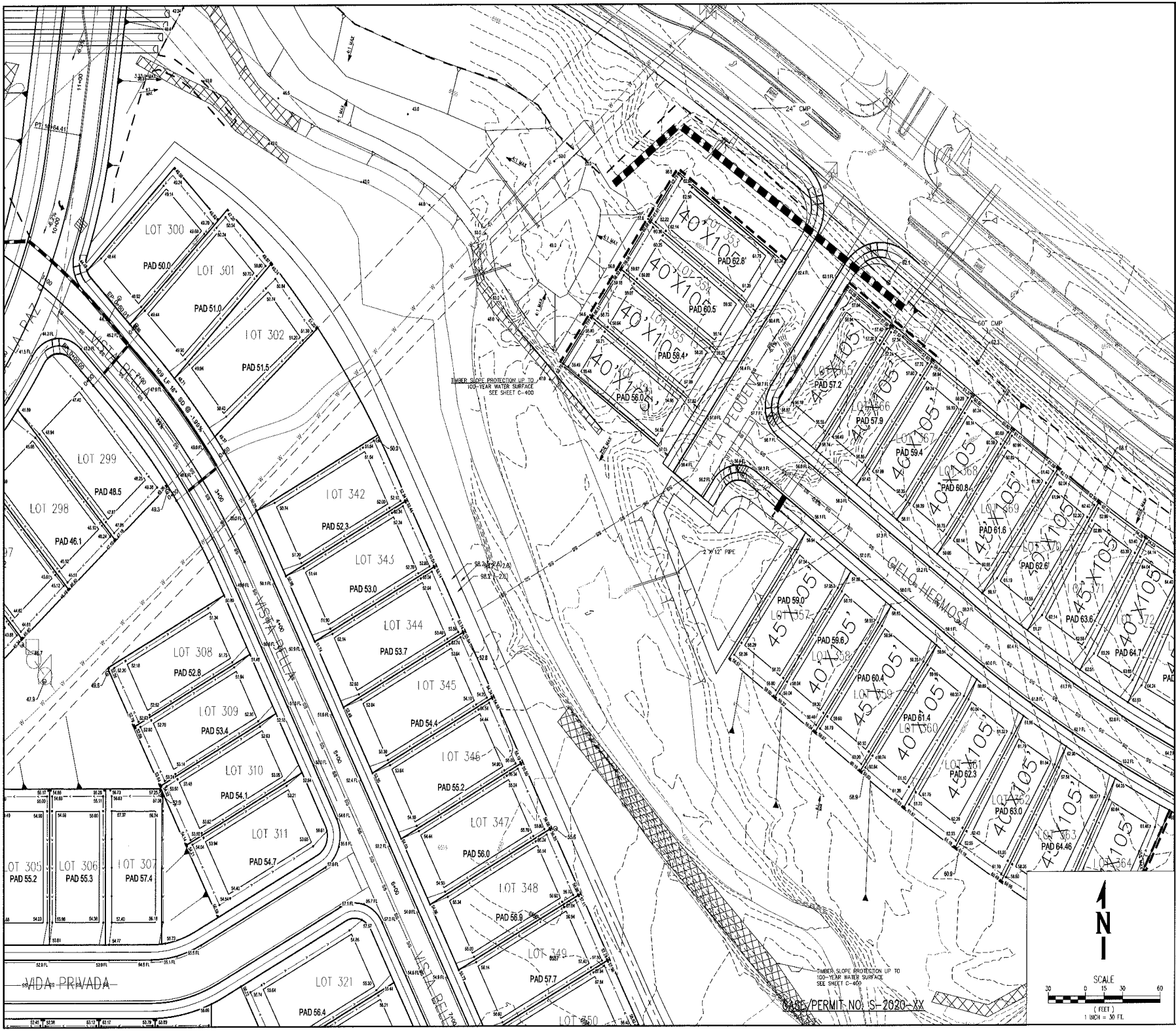
PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 3

SHEET TITLE:
GRADING PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-103

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CASE/PERMIT NO: S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
SCALE: AS NOTED
DESIGNED BY: RB, DZ
DRAWN BY: AS, BZ, JL, NG
CHECKED BY: RB
DATE: 08/21/2020

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: GRADING PLAN

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
PARKS & RECREATION		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-104

SCALE: 1" = 30'
DATE: 2020

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 06/21/2020
SCALE:
DESIGNED BY: RB BZ
DRAWN BY: RB BZ, AL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: GRADING PLAN

CITY REVIEW	DEPARTMENT	SIGN-OFF	DATE
	WASTEWATER		
	WATER		
	PW ENGINEERING		
	TRAFFIC		
	FIRE DEPARTMENT		
	SOLID WASTE		
	LANDSCAPE		
	TRAILS / OPEN SPACE		
	SUBDIVISION REVIEW		

SHEET NO.
C3-105

SCALE: 1" = 30'
2020

P:\Columbus Capital Corporation\025919-A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C-Grading Plan_Phase 3.dwg 9/18/2020 11:54 AM

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND SEDIMENT PONDS.
1A. CONTACT CITY OF SANTA FE FOR INSPECTION.
2. ALL CONSTRUCTION TRAFFIC TO UTILIZE CONSTRUCTION ENTRANCE ONLY.
3. CONTINUE ROUGH GRADING AND EARTHWORK.
4. INSTALL SEWER.
5. INSTALL STORM DRAIN.
6. INSTALL WATER.
7. INSTALL CURB & GUTTER.
8. INSTALL DRY UTILITIES.
9. INSTALL FILLETS & VALLEY GUTTERS.
10. INSTALL BASE COURSE & FIRST LIFTED POINT.
11. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED REMOVE SEDIMENT CONTROL DEVICES INCLUDING SILT FENCE UPON APPROVAL OF CITY PLANNING AND DEVELOPMENT REVIEW STAFF.
12. COMPLY WITH REVEGETATION MIX FOR NMSHSD CLASS "A" SEEDING.

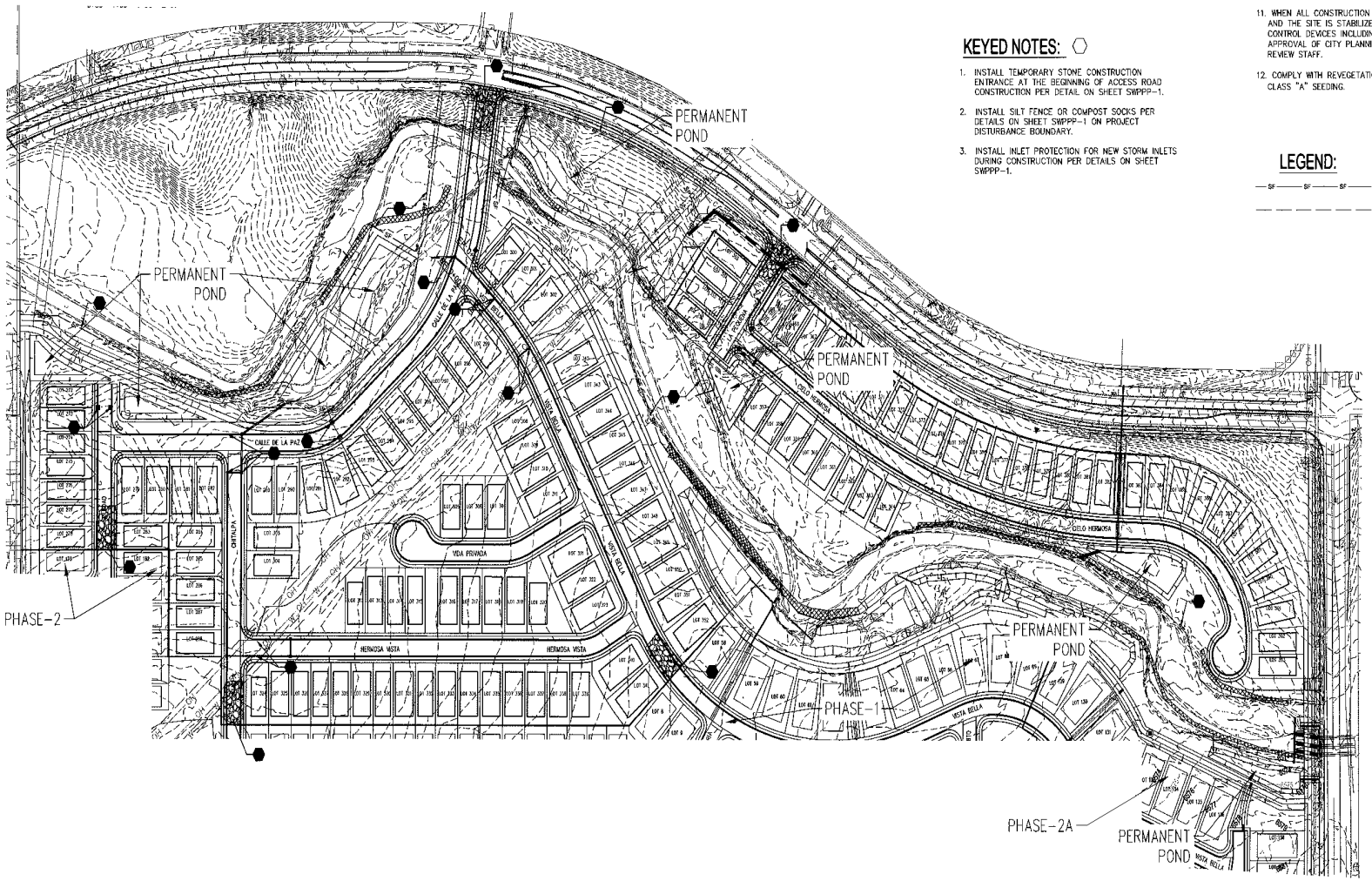
KEYED NOTES: ⬡

1. INSTALL TEMPORARY STONE CONSTRUCTION ENTRANCE AT THE BEGINNING OF ACCESS ROAD CONSTRUCTION PER DETAIL ON SHEET SWPPP-1.
2. INSTALL SILT FENCE OR COMPOST SOCKS PER DETAILS ON SHEET SWPPP-1 ON PROJECT DISTURBANCE BOUNDARY.
3. INSTALL INLET PROTECTION FOR NEW STORM INLETS DURING CONSTRUCTION PER DETAILS ON SHEET SWPPP-1.

LEGEND:

—SF—SF—SF— SILT FENCE

— — — — — — GRADING LIMITS



CASE/PERMIT NO. S-2020-XX

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
ENG & WATER		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: STORM WATER POLLUTION & PREVENTION PLAN

PRELIMINARY

NO.	REVISIONS	BY	APP.	DATE

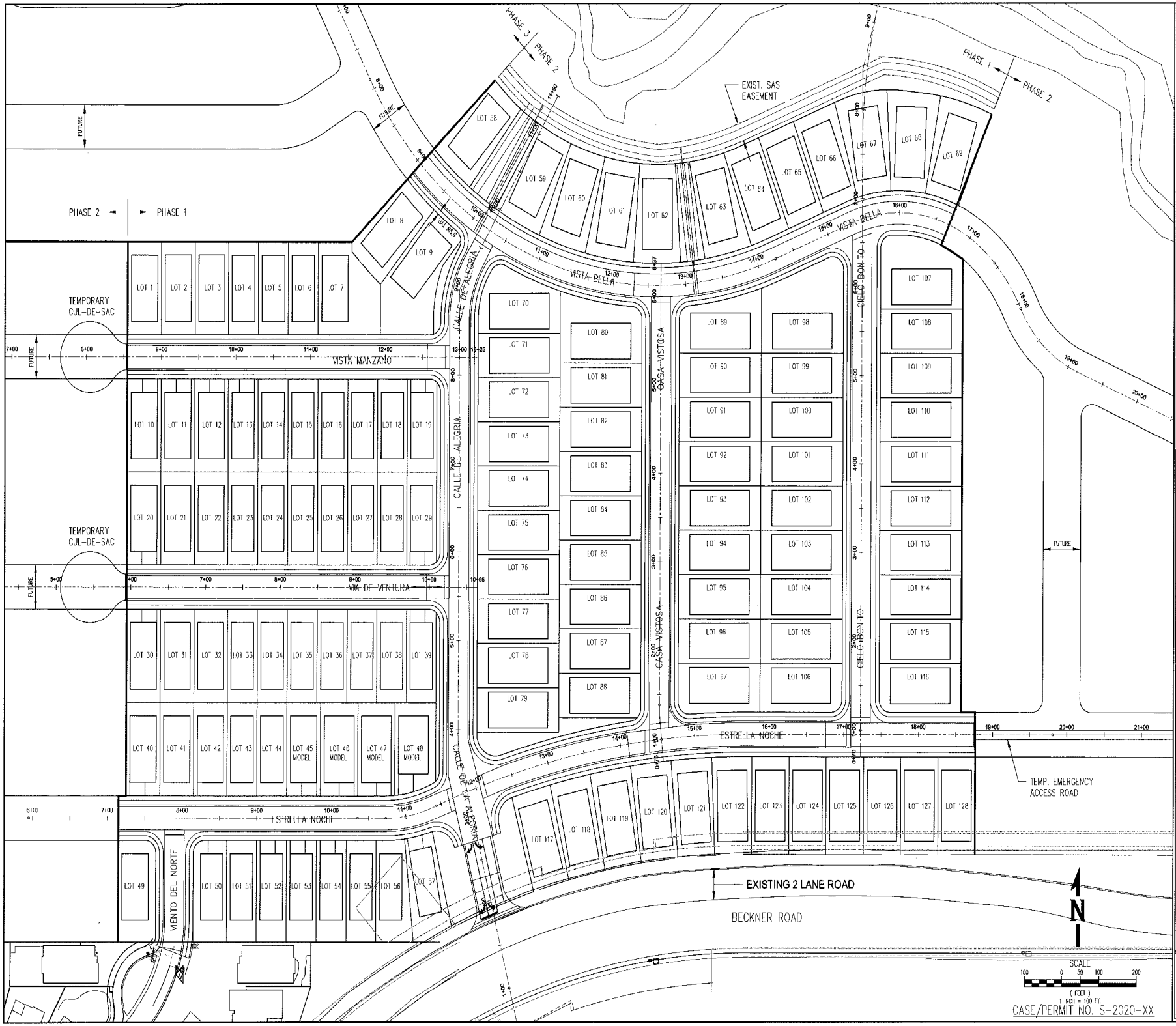
PROJECT:
FILE:
DATE: 06/27/2020
SCALE: AS NOTED

DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87113
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SHEET NO.
C-106

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, KG
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: OVERALL PAVING PLAN

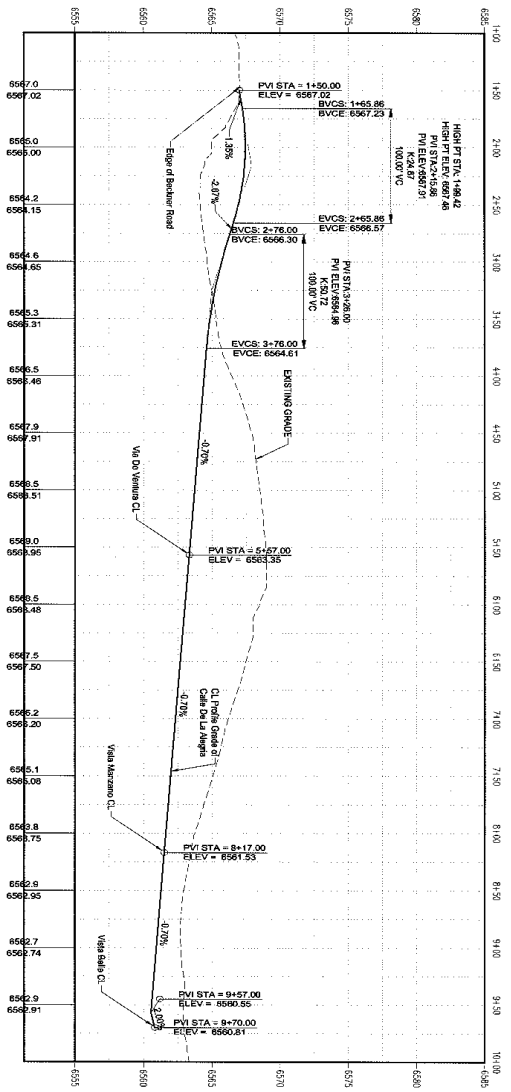
DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARKS		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C1-200

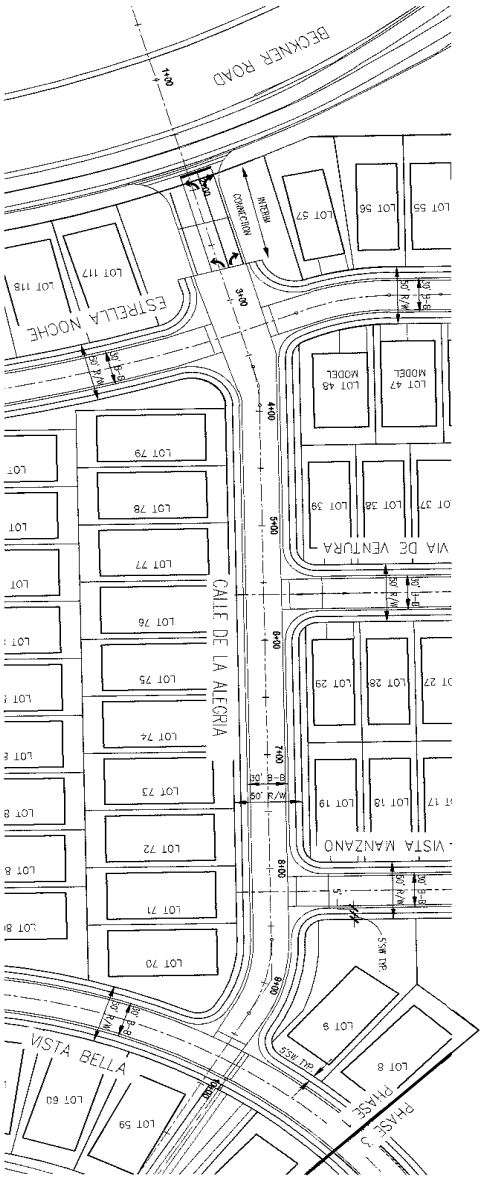
2020

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CALLE DE LA ALEGRIA



N

SCALE
0 25 50 100
(FEET)
1 INCH = 50 Ft.

① ROADWAY KEYED NOTES:

1. NEW ROADWAY SECTION.
2. BUILD ROADWAY FOR 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-301.
3. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET P&D-X
4. BUILD ADA COMPLIANT 28' CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET P&D-X.

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C1-201

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

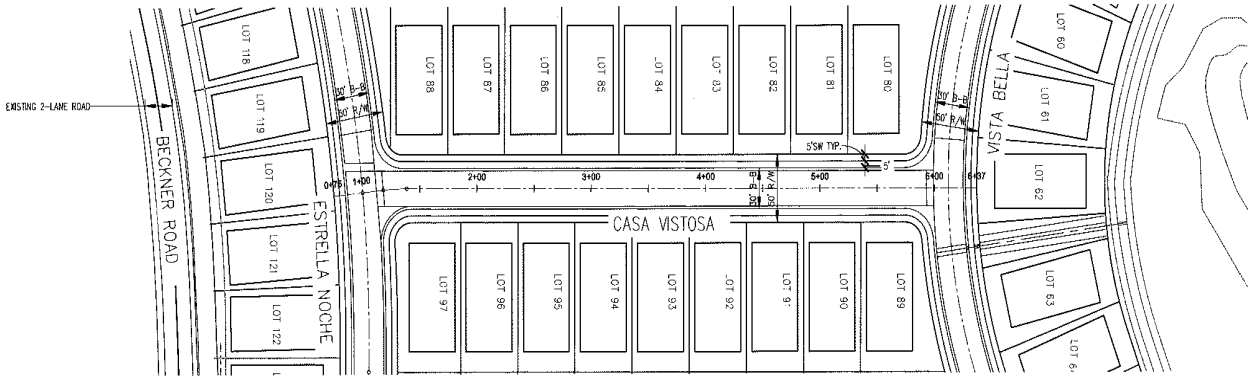
SHEET TITLE: ROADWAY PLAN & PROFILE - CALLE DE LA ALEGRIA

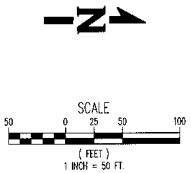
PRELIMINARY

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY:JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
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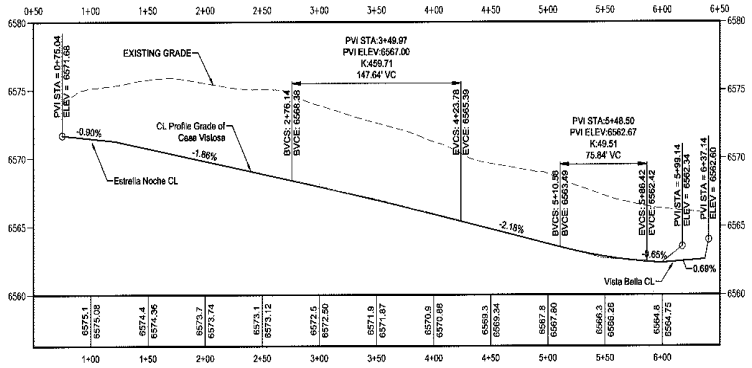




① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASA VISTOSA



CASE/PERMIT NO. S-2020-XX

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM | 87110
505-247-0000 Fax 505-842-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

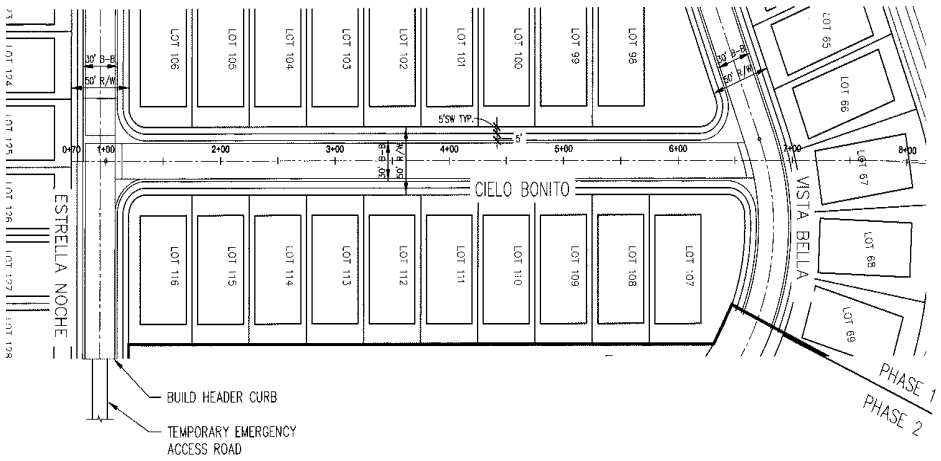
SHEET TITLE: ROADWAY PLAN & PROFILE - CASA VISTOSA

DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PUBLIC WORKS/ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

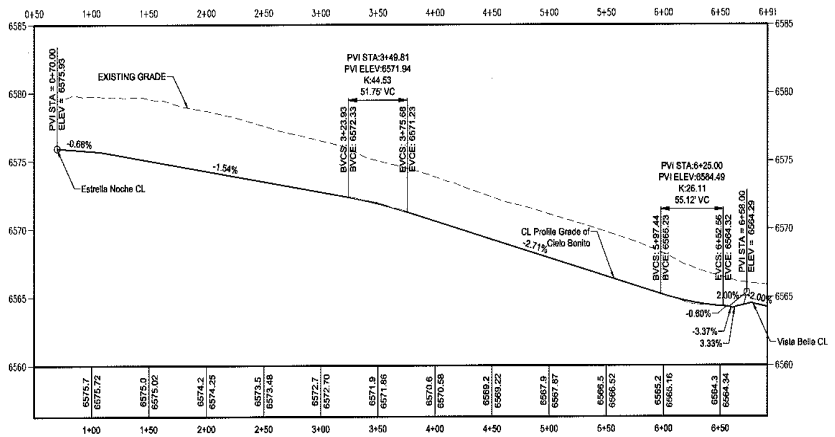
SHEET NO. C1-202

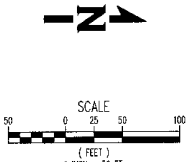
SEPTEMBER 2020

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CIELO BONITO





① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PUBLIC ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LAND USE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

CITY REVIEW

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: ROADWAY PLAN & PROFILE - CIELO BONITO

PRELIMINARY

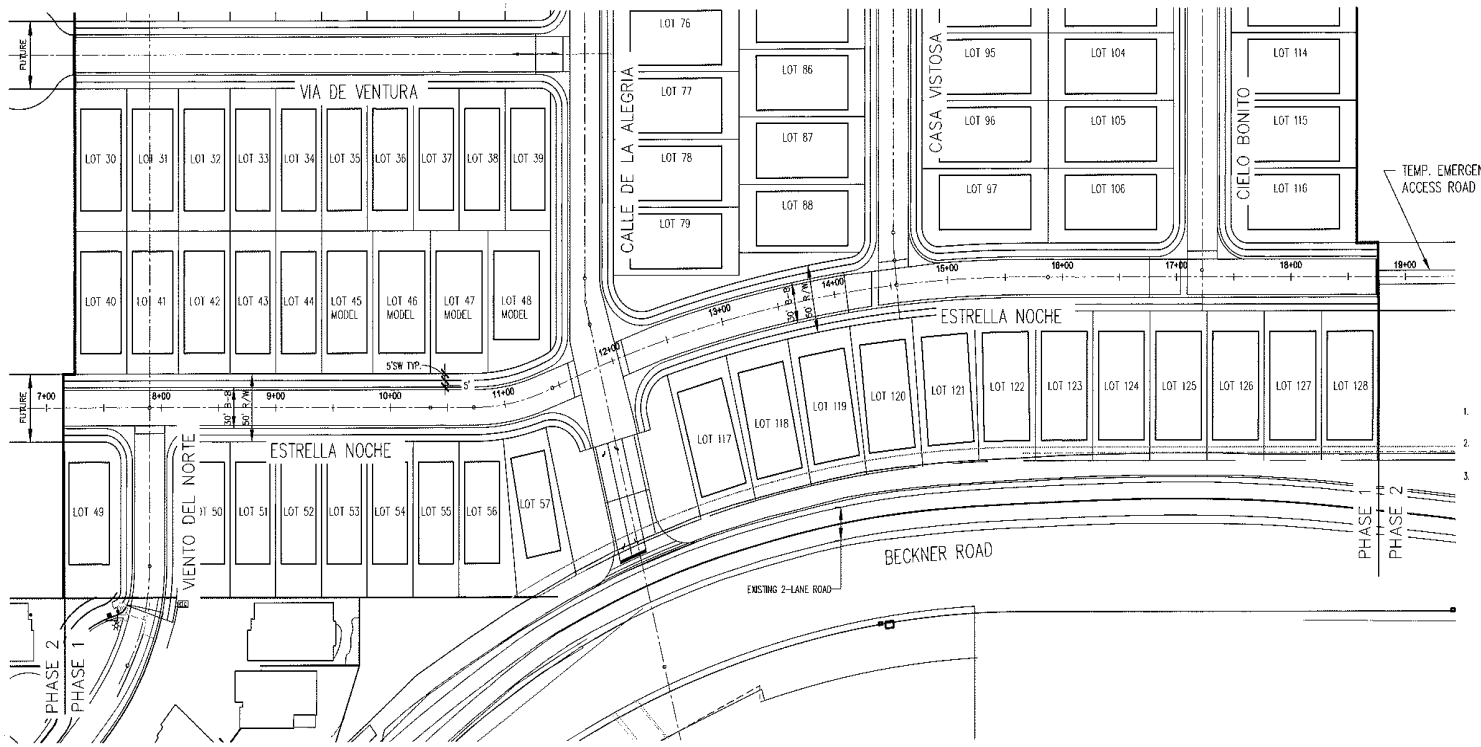
NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/09/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY:JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

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6501 Americas Pkwy NE Suite 400
Albuquerque, NM 87110
505-247-0000, Fax 505-242-4946
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SHEET NO.
C1-203

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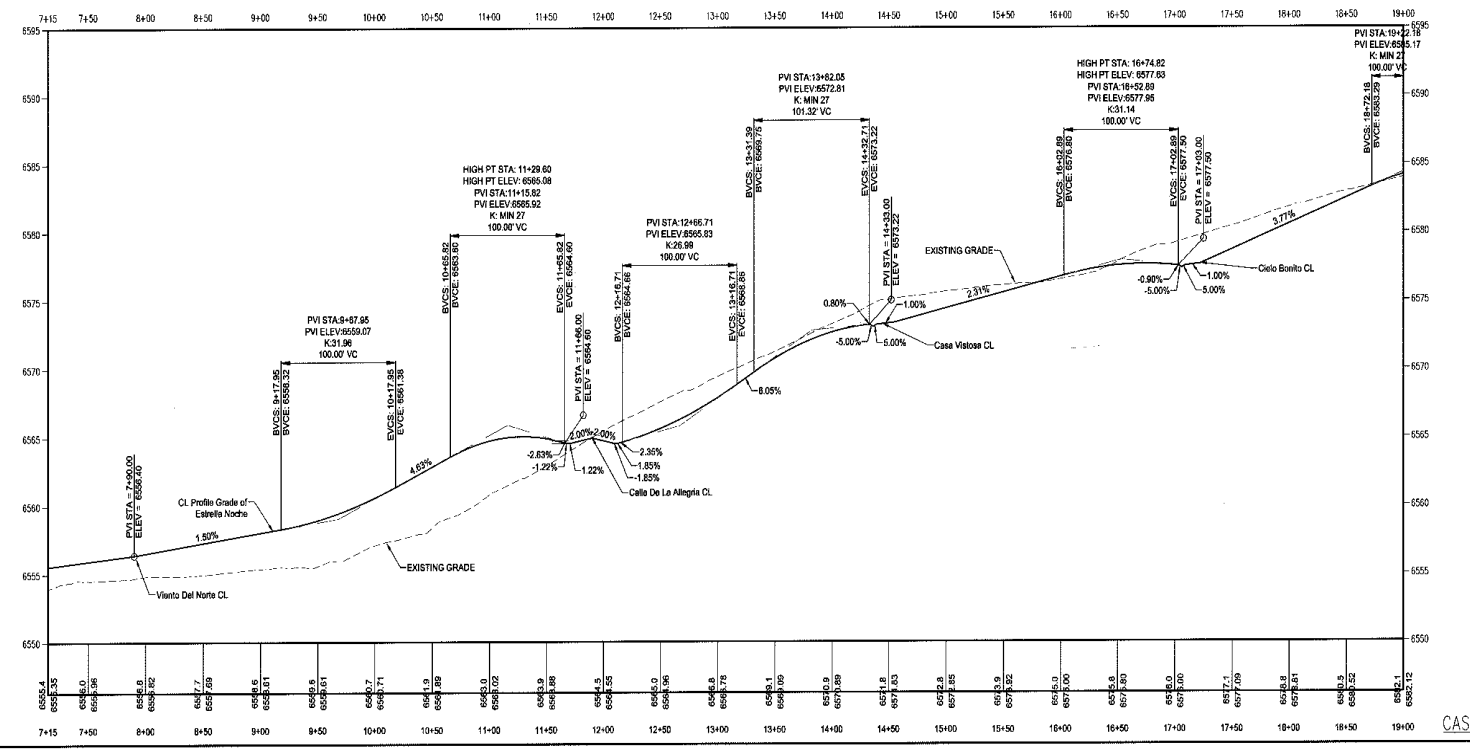
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SCALE
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(FEET)
1 INCH = 50 FT.

① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

ESTRELLA NOCHE



CASE/PERMIT NO. S-2020-XX

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/09/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
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PRELIMINARY

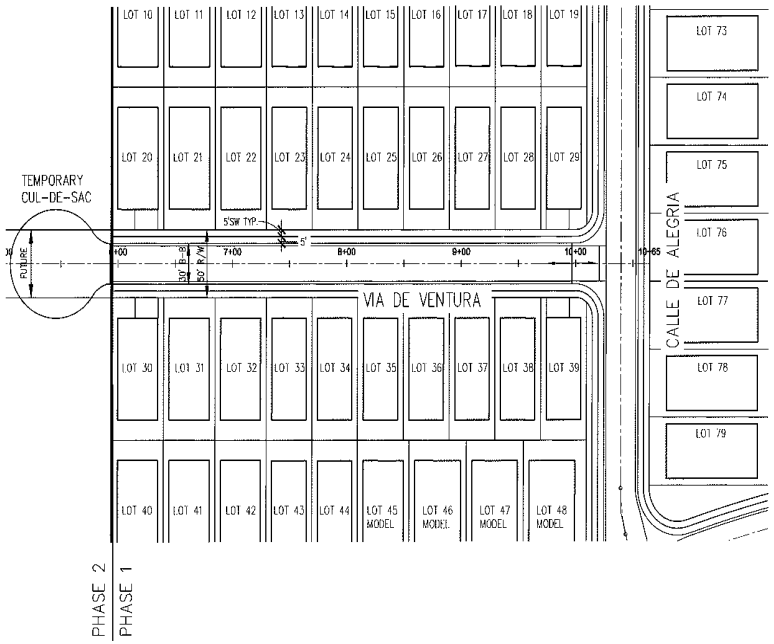
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

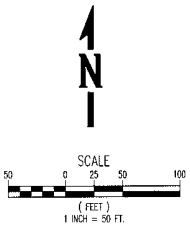
SHEET TITLE: ROADWAY PLAN & PROFILE-ESTRELLA NOCHE

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PUBLIC WORKS/ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
PARKS			
LAND USE/ZONE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
C1-204

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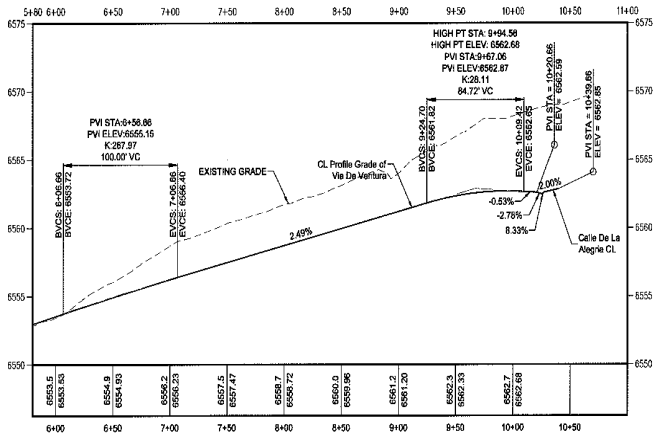




① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

VIA DE VENTURA



CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
DATE: 09/03/20
SCALE: AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

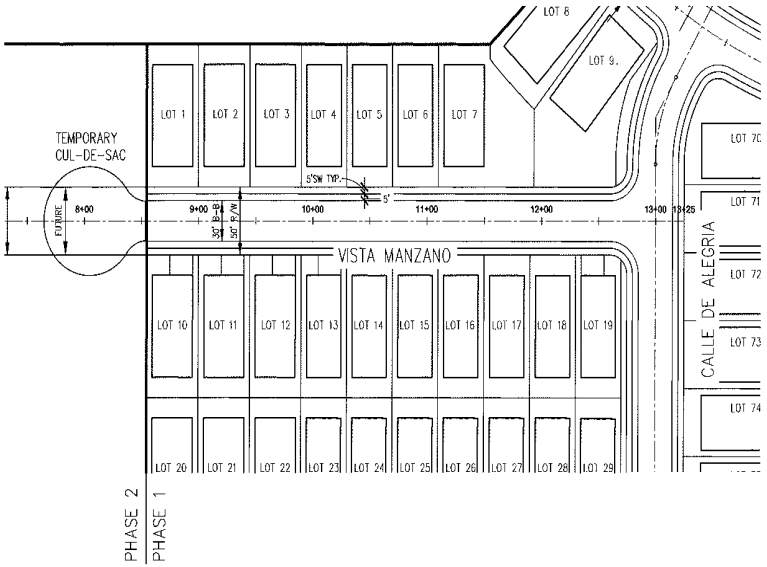
SHEET TITLE: ROADWAY PLAN & PROFILE - VIA DE VENTURA

CITY REVIEW

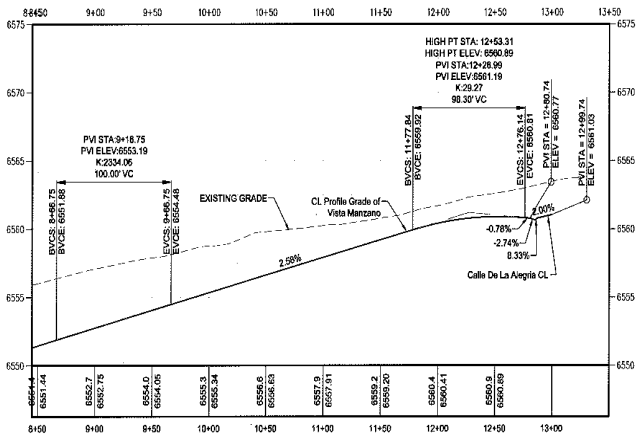
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER/ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

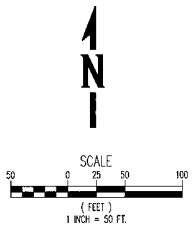
SHEET NO.
C1-205

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VISTA MANZANO





ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-800.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, MG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

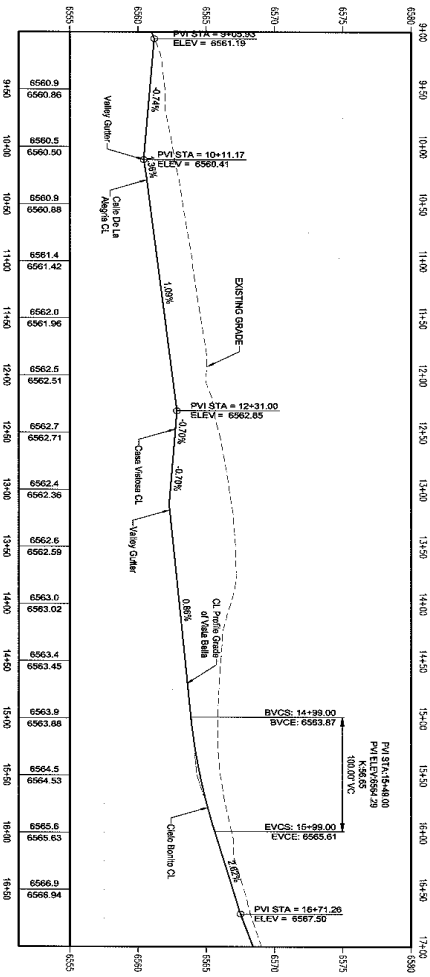
SHEET TITLE: ROADWAY PLAN & PROFILE - VISTA MANZANO

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK & OPEN SPACE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

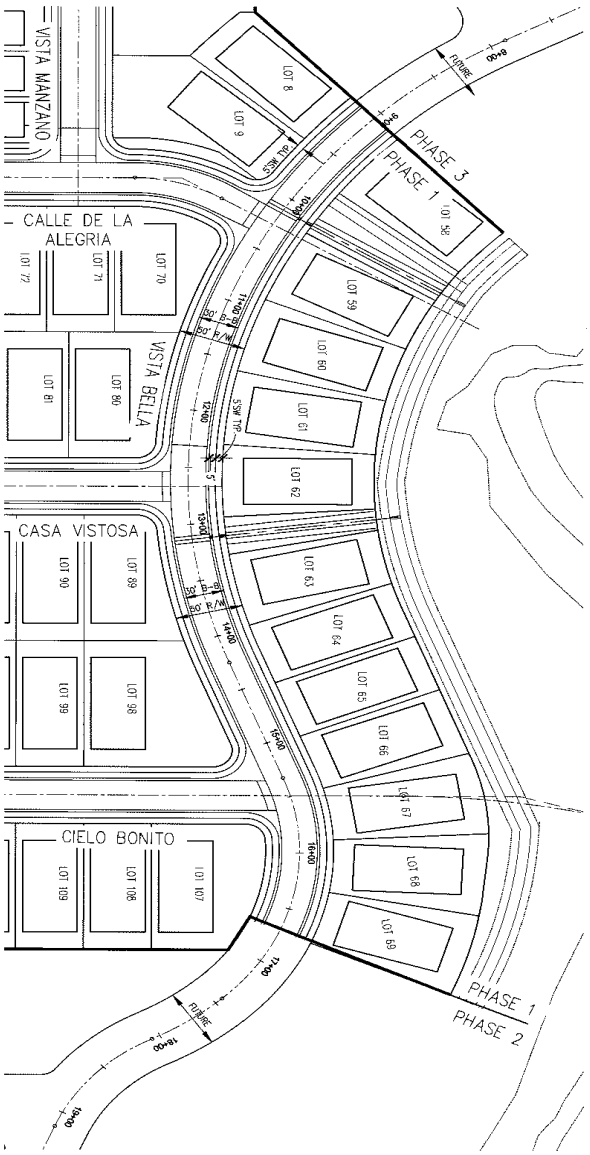
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VISTA BELLA



ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-500.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER INDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

SCALE
1 INCH = 50 FT.
50 0 25 50 100

N

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSACPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO: C1-207

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

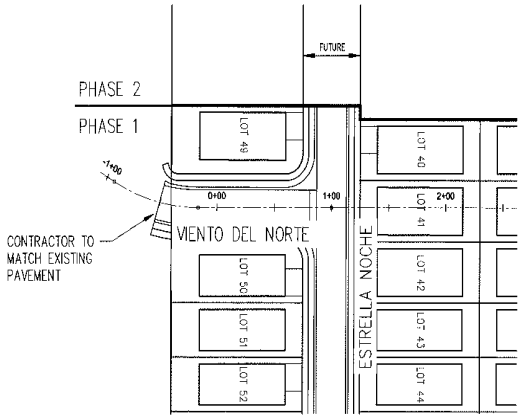
SHEET TITLE: ROADWAY PLAN & PROFILE - VISTA BELLA

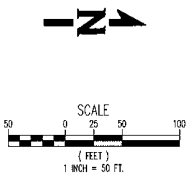
PRELIMINARY

NO.	REVISIONS	BY	APP.	DATE

PROJECT: DESIGNED BY: RS, BZ
FILE: DRAWN BY:JS, BZ, JL, NG
DATE: 09/03/20 CHECKED BY: RS
SCALE: AS NOTED

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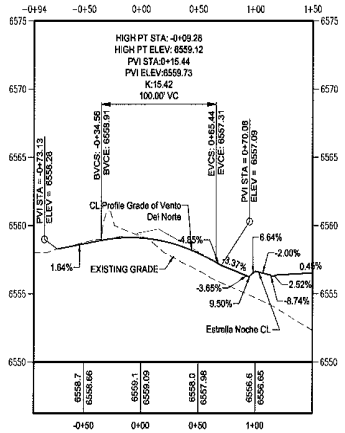




ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

VIENTO DEL NORTE



CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, MG
CHECKED BY: RB
AS NOTED

PRELIMINARY

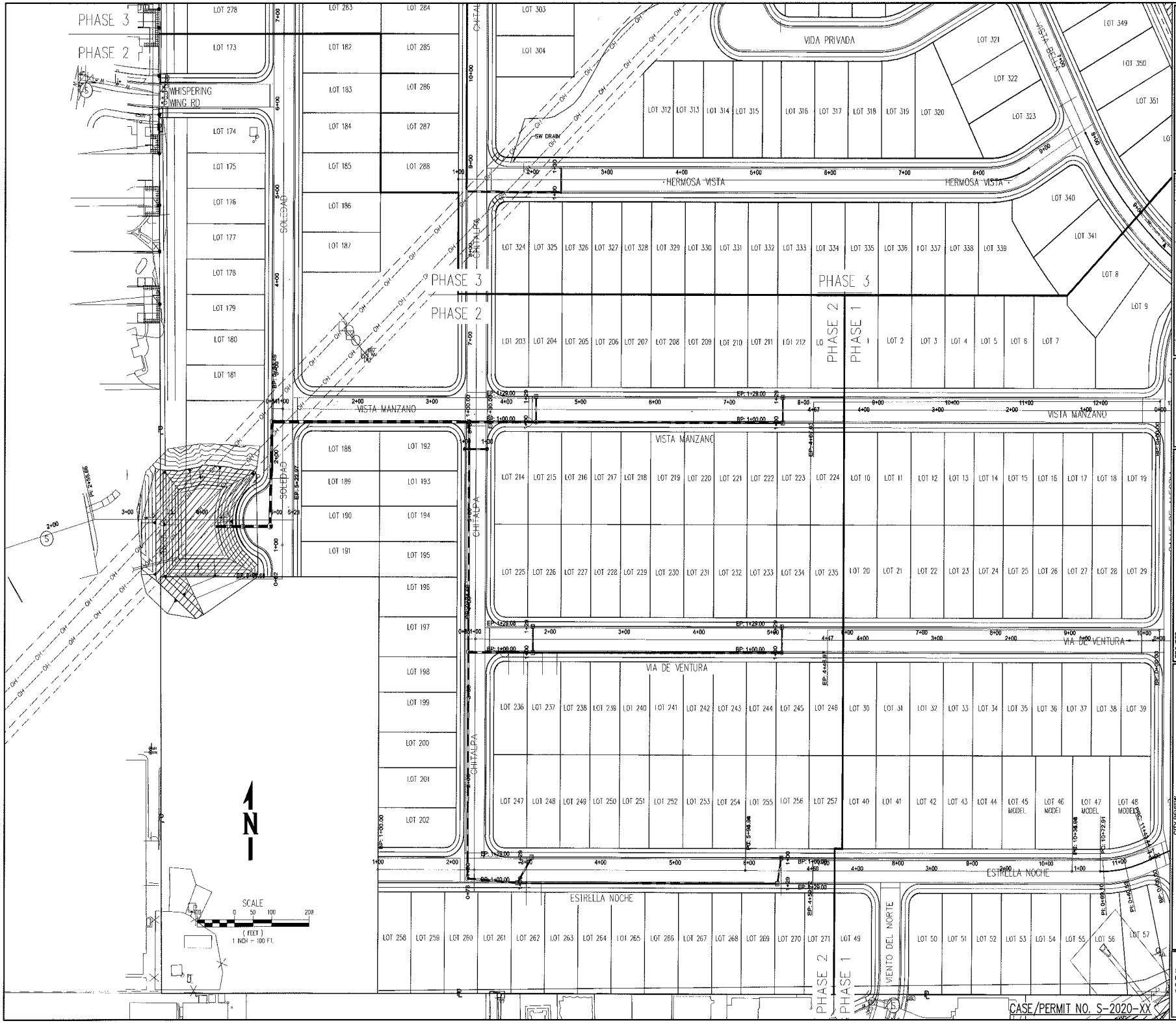
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: ROADWAY PLAN & PROFILE - VIENTO DEL NORTE

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
PW / ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C-208

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/21/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY
9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2
SHEET TITLE: STORM DRAIN AND ROADWAY - OVERALL

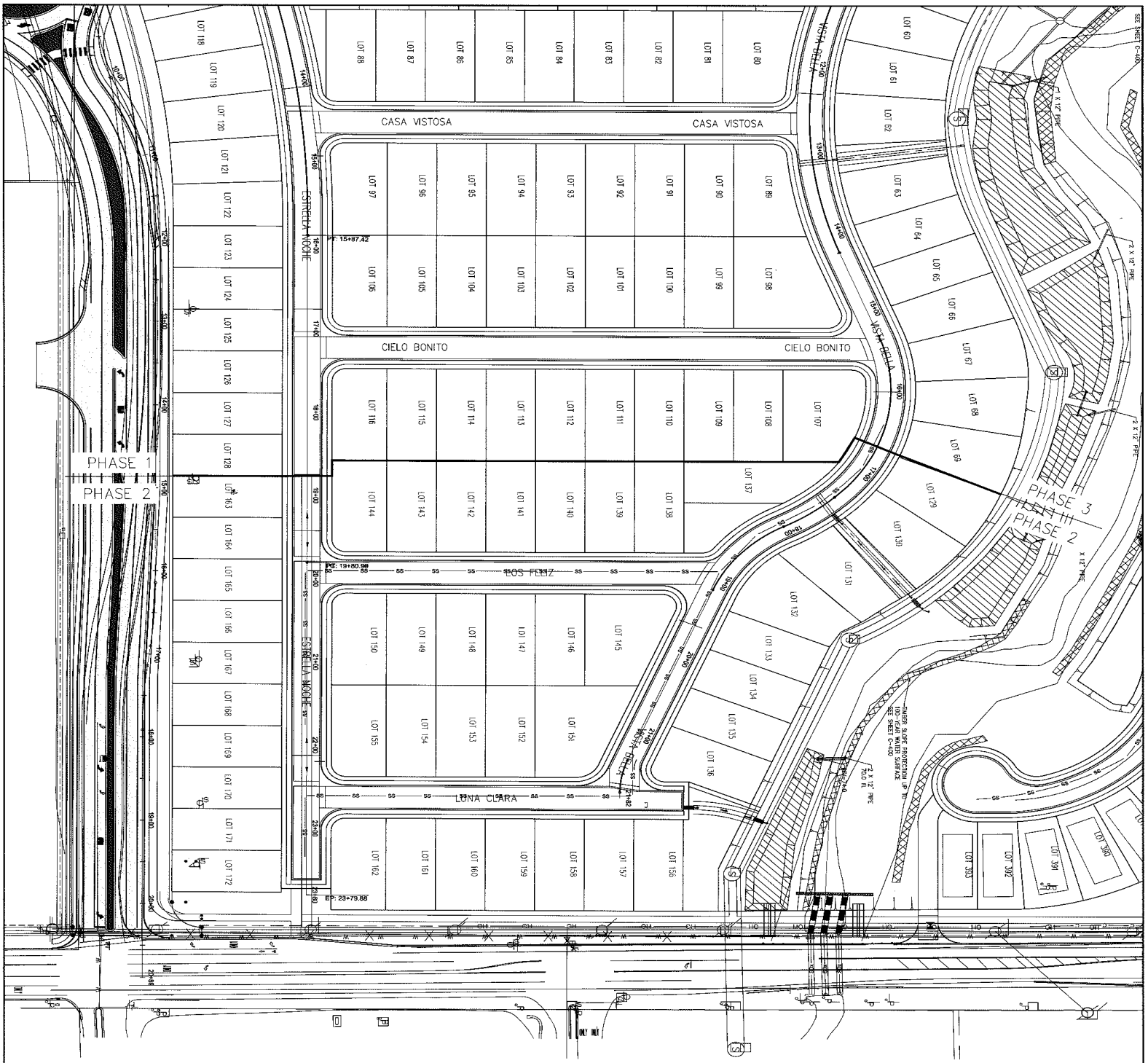
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK & REC		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

CITY REVIEW

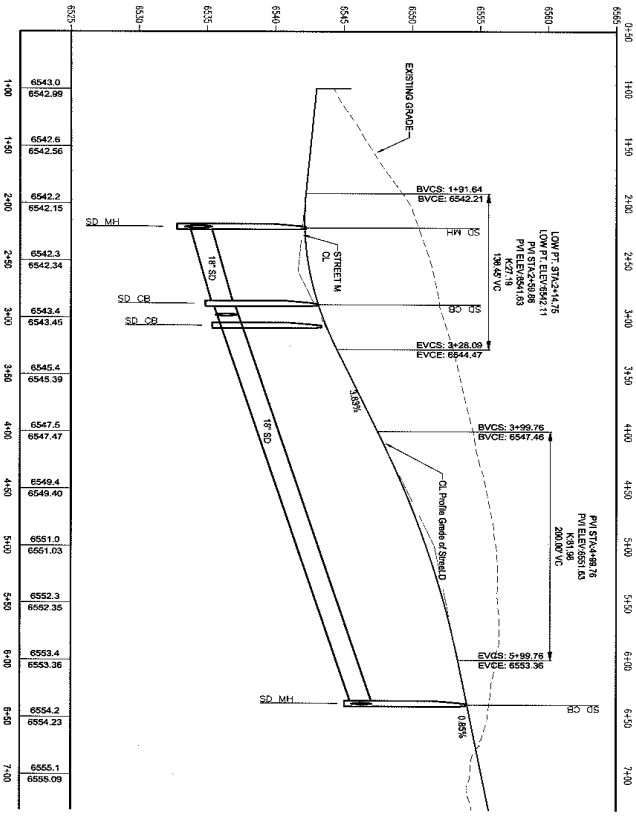
SHEET NO.
C2-200

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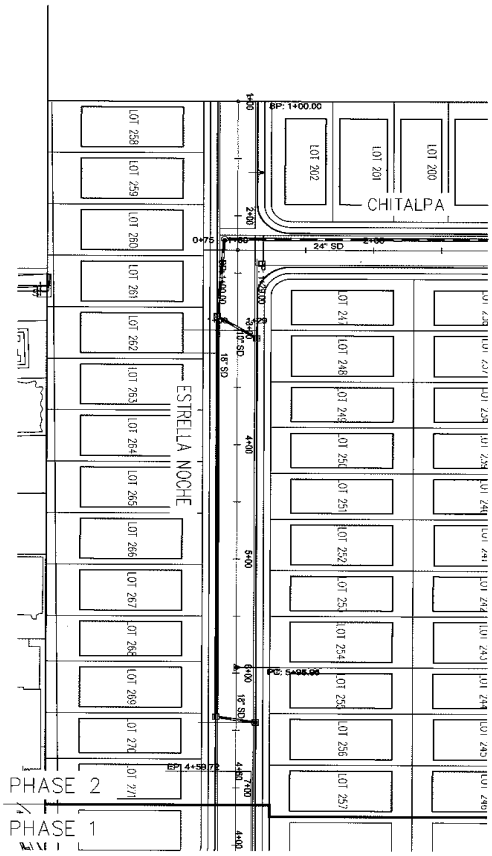
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CASA VISTOSA
CASA VISTOSA
CIELO BONITO
CIELO BONITO
LOS FELIZ
LUNA CLARA
ESTRELLA NOCHE
VISTA BELLA
PHASE 1
PHASE 2
PHASE 3
PHASE 2
LOT 80
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SEE SHEET C-400
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STREET D PROFILE



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SCALE
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(FEET)
1 INCH = 50 FT.

① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-300.
2. BUILD CONCRETE DRIVEWAY PER DETAILS SHEET PAD-X.
3. BUILD ADA COMPLIANT CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12.00 SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C2-202

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE - ESTRELLA NOCHE

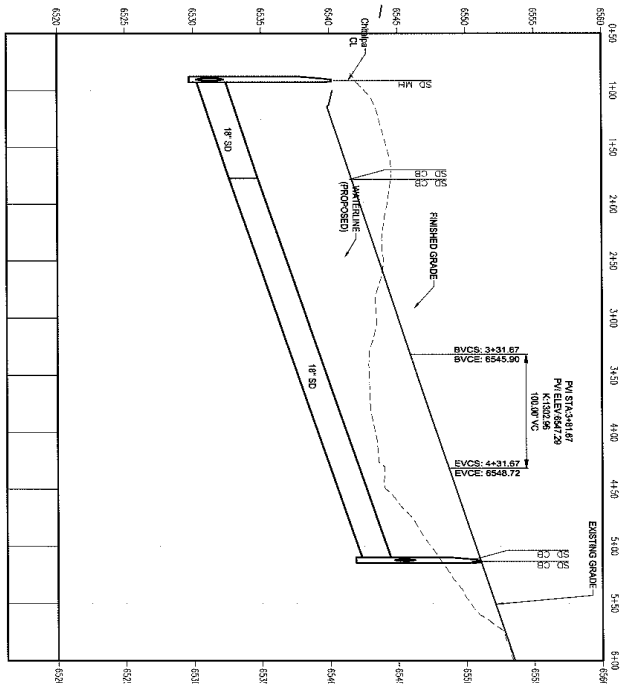
PRELIMINARY 9-13-2020

NO.	REVISIONS	BY	APP.	DATE

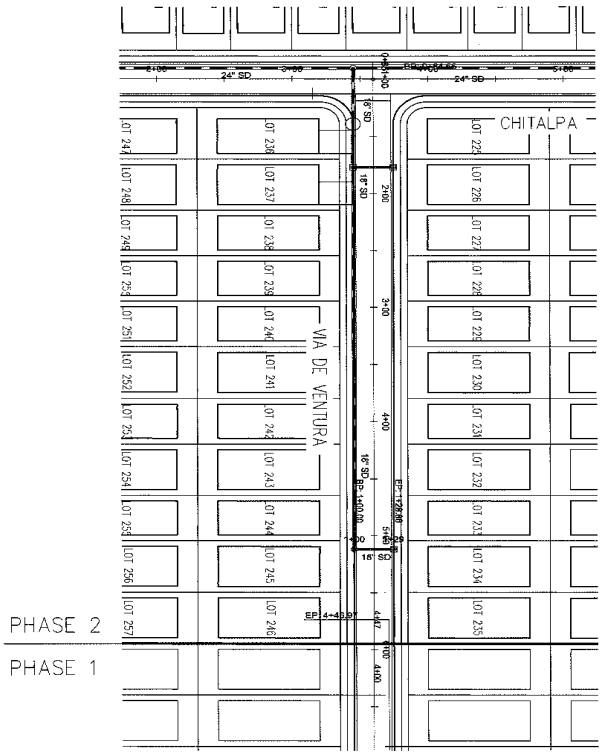
PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

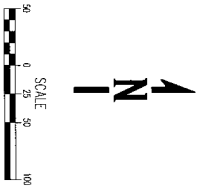
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Albuquerque, NM 87110
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STREET E PROFILE





KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-901.
2. BUILD CONCRETE DRIVEWAY PER DETAIL'S SHEET P40-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER MMDOT DETAIL 608-5 OF 12 ON SHEET P40-X.

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C2-203

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

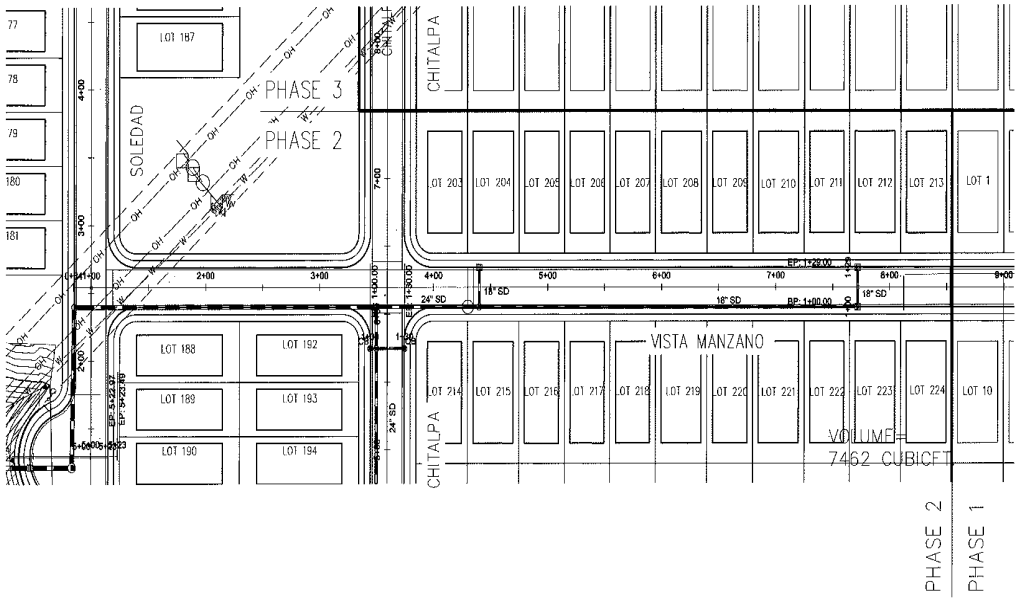
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE - VIA DE VENTURA

PRELIMINARY 9-13-2020

NO.	REVISIONS	BY	APP.	DATE

PROJECT:		DESIGNED BY:	RB, BZ
FILE:		DRAWN BY:	JS, BZ, JL, NG
DATE:	08/31/20	CHECKED BY:	RB
SCALE:			AS NOTED

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
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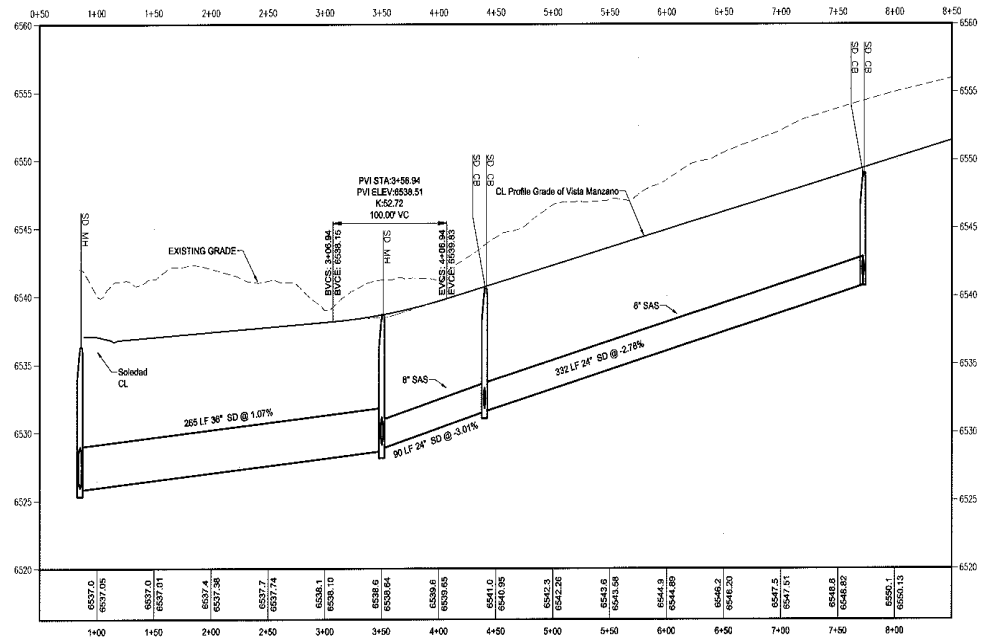
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SCALE
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(FEET)
1 INCH = 50 FT.

① KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

STREET F PROFILE



CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT: DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, MG
DATE: 08/31/20
CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

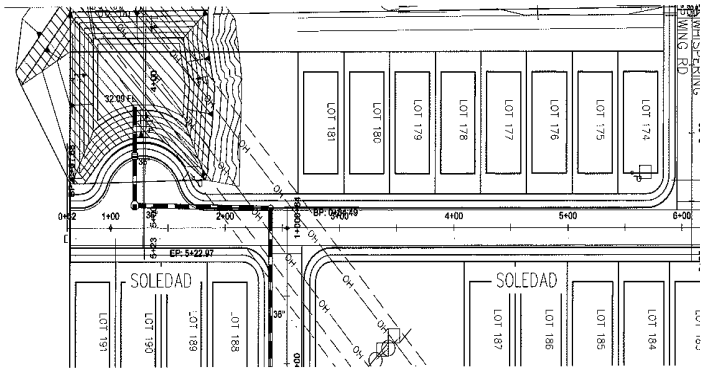
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE - VISTA MANZANO

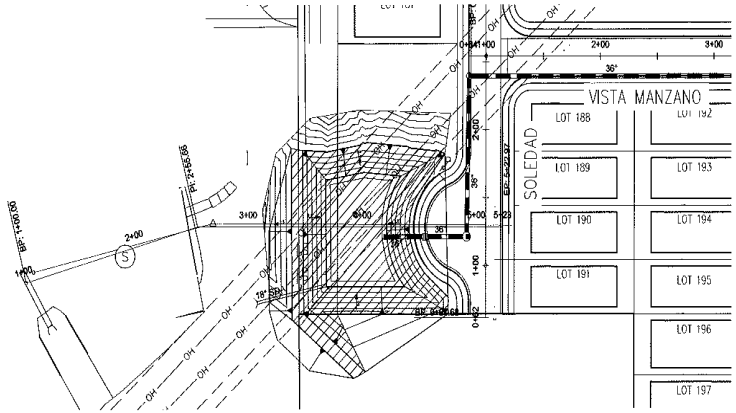
CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C2-204

SCALE: 2 0 2 0 2 0





SCALE

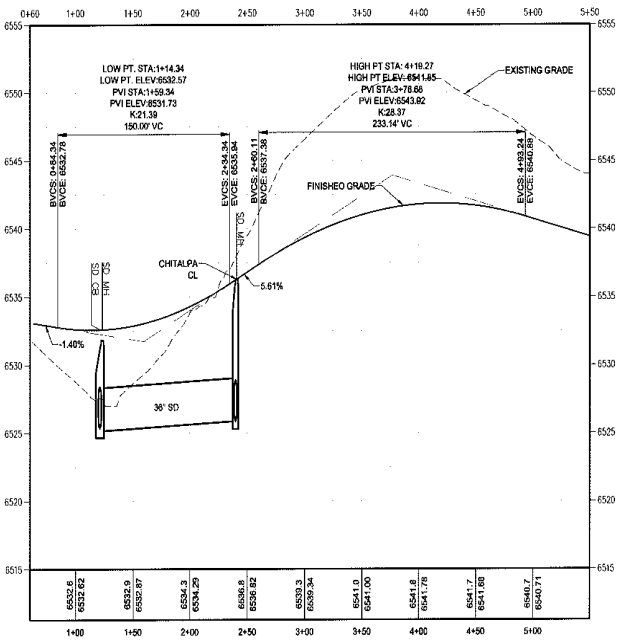
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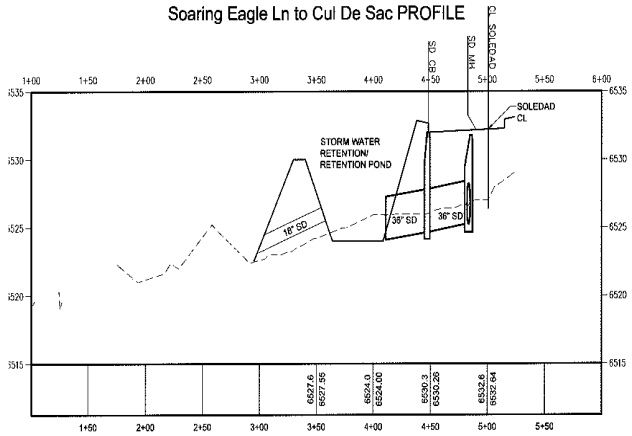
① KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

STREET L PROFILE



Soaring Eagle Ln to Cul De Sac PROFILE



CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, MB
DATE: 06/01/20
CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY
9-13-2020

PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

SHEET TITLE:
STORM DRAIN AND ROADWAY PLAN & PROFILE - SOLEDAD & SOARING LN TO CUL DE SAC

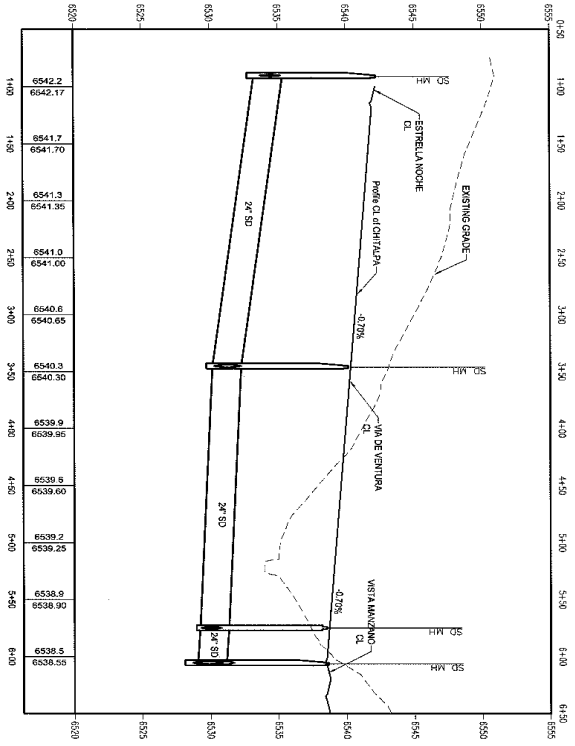
CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
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PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

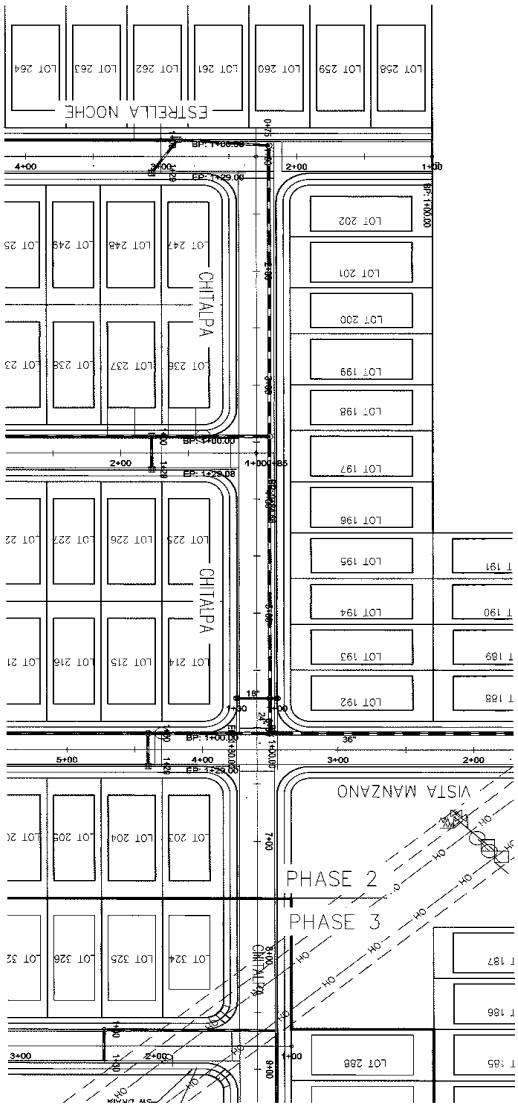
SHEET NO.
C2-205

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STREET M PROFILE



KEYED NOTES:

1. BUILD ROADWAY PER 56' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

SCALE
(FEET)
1 INCH = 50 FT.
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N

CASE/PERMIT NO. S-2020-XX

SHEET NO.	C2-206	2020	

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

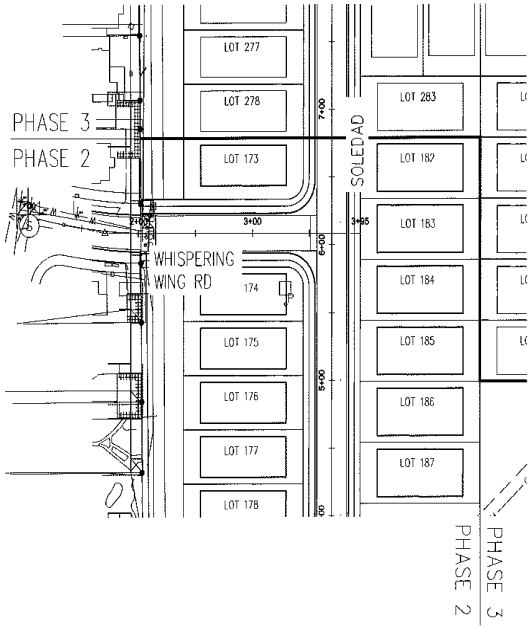
SHEET TITLE: STORM DRAIN AND ROADWAY PLAN & PROFILE - CHITALPA

PRELIMINARY 9-13-2020

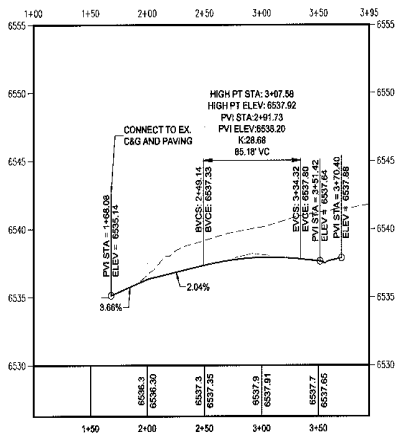
NO.	REVISIONS	BY	APP.	DATE

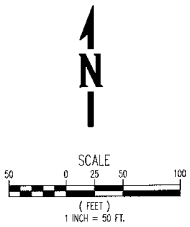
PROJECT:		DESIGNED BY:	RB, BZ
FILE:		DRAWN BY:	JS, BZ, JL, NG
DATE:	08/31/20	CHECKED BY:	RB
SCALE:			AS NOTED

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WHISPERING WING RD PROFILE





(1) KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, MG
CHECKED BY: RB
DATE: 09/21/20
SCALE: AS NOTED

PRELIMINARY
9-13-2020

PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

SHEET TITLE:
ROADWAY PLAN & PROFILE - WHISPERING WING ROAD

CITY REVIEW	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
PARKS DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION MGR/DIR		

SHEET NO.
C2-207

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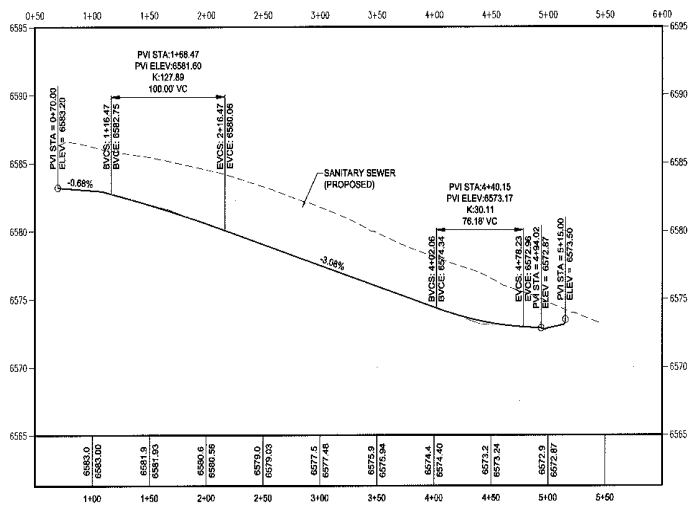
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SCALE
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(FEET)
1 INCH = 50 FT.

KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

STREET H PROFILE



CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT: 09212.00
DESIGNED BY: RB, BZ
FILE: DRAWN BY: BZ, JL, NG
DATE: 08/21/20 CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY
9-13-2020

PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 2

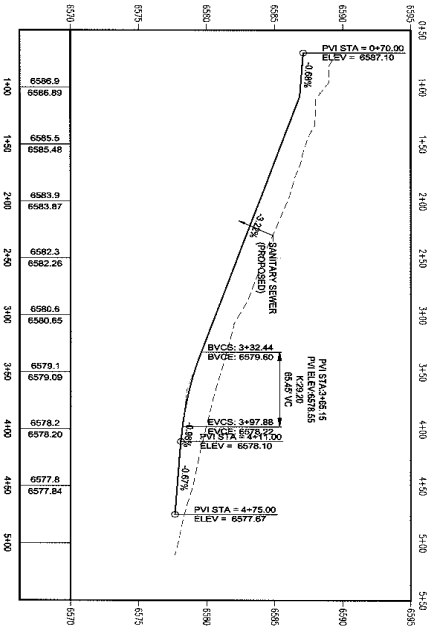
SHEET TITLE:
STORM DRAIN AND ROADWAY
PLAN & PROFILE - LOS FELIZ

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

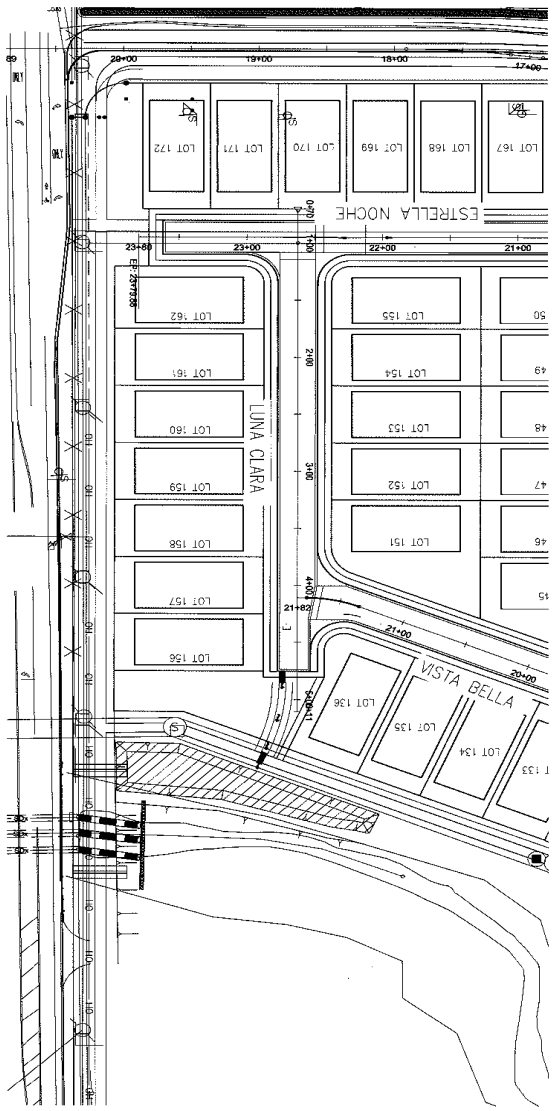
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C2-208

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STREET I PROFILE



KEYED NOTES:

1. BUILD ROADWAY PER 56' ROW ROADWAY TYPICAL SECTION ON SHEET C-902.
2. BUILD CONCRETE DRIVEWAY PER DETAIL SHEET P4D-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER AMAFCA DETAIL 628-5.01 & ON SHEET P4D-X.

SCALE
(FEET)
1 INCH = 50 FT.

N

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C2-209

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

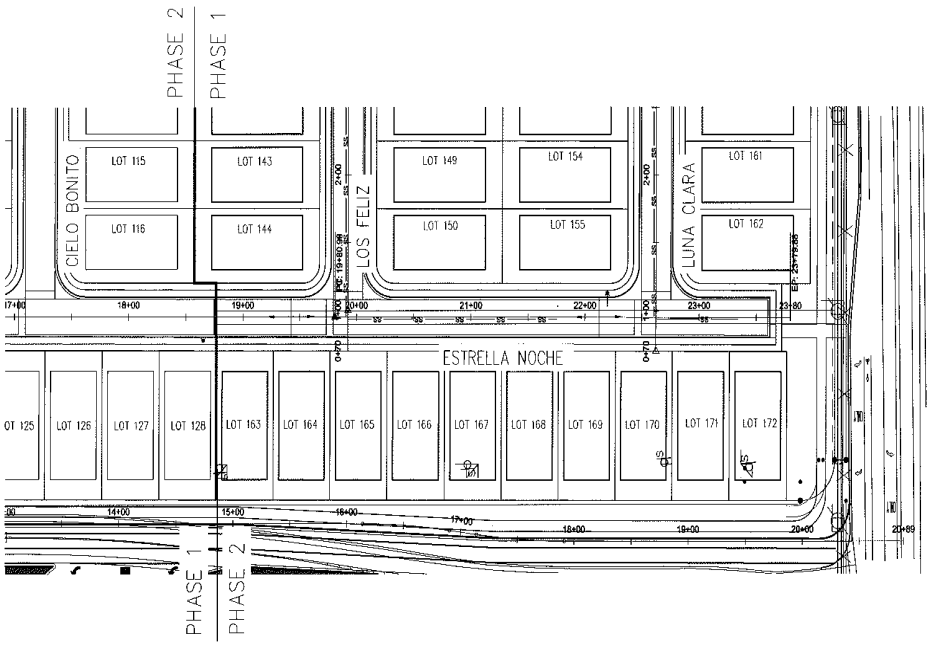
SHEET TITLE: STORM DRAIN AND ROADWAY PLAN & PROFILE - LUNA CLARA

PRELIMINARY 9-13-2020

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY:JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

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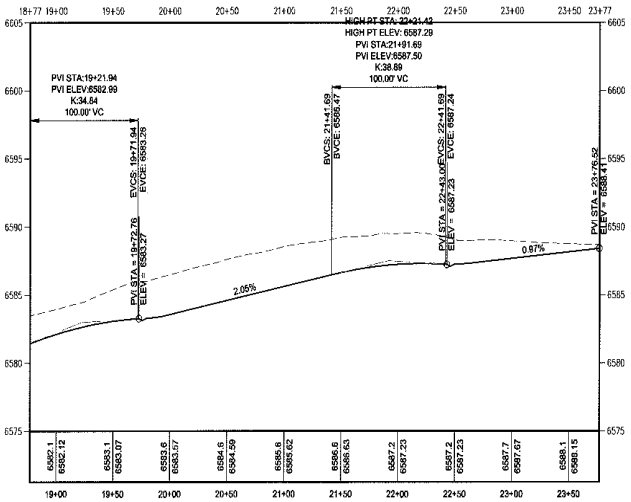
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SCALE
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(FEET)
1 INCH = 50 FT.

① KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

STREET D PROFILE



CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY
9-13-2020

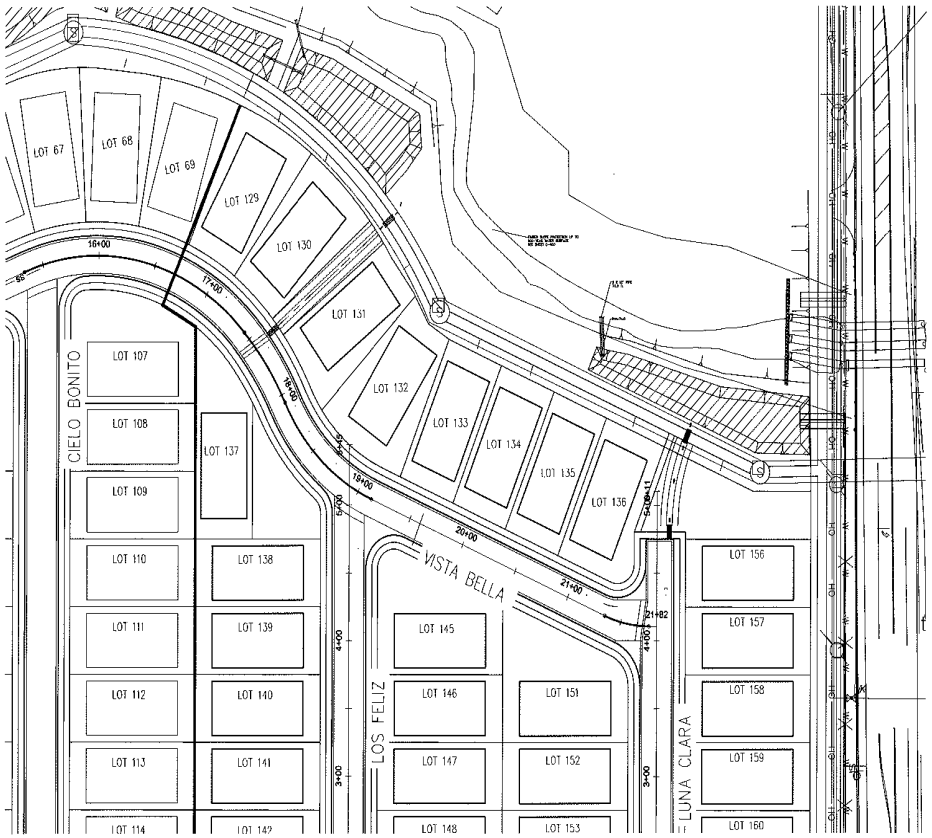
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE - ESTRELLA NOCHE

CITY REVIEW	DEPARTMENT	SIGN-OFF	DATE
	WASTEWATER		
	WATER		
	PW ENGINEERING		
	TRAFFIC		
	FIRE DEPARTMENT		
	SOLID WASTE		
	LANDSCAPE		
	TRAILS / OPEN SPACE		
	SUBDIVISION REVIEW		

SHEET NO.
C2-210

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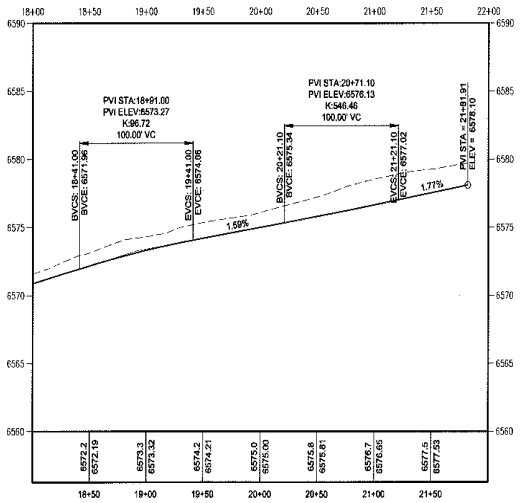
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SCALE
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(FEET)
1 INCH = 50 FT.

① KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

STREET G PROFILE



CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, MS
CHECKED BY: RB

PRELIMINARY
9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

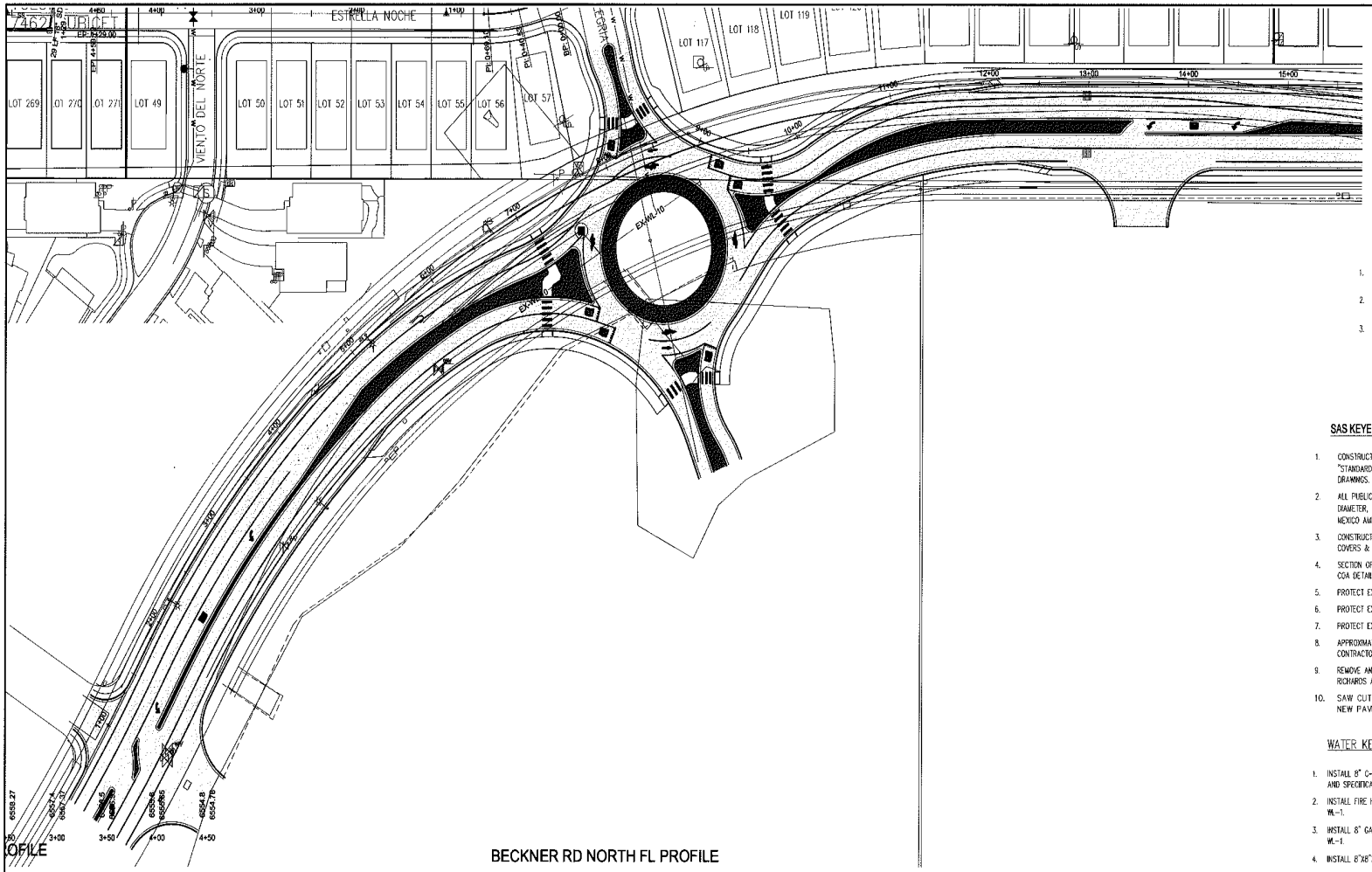
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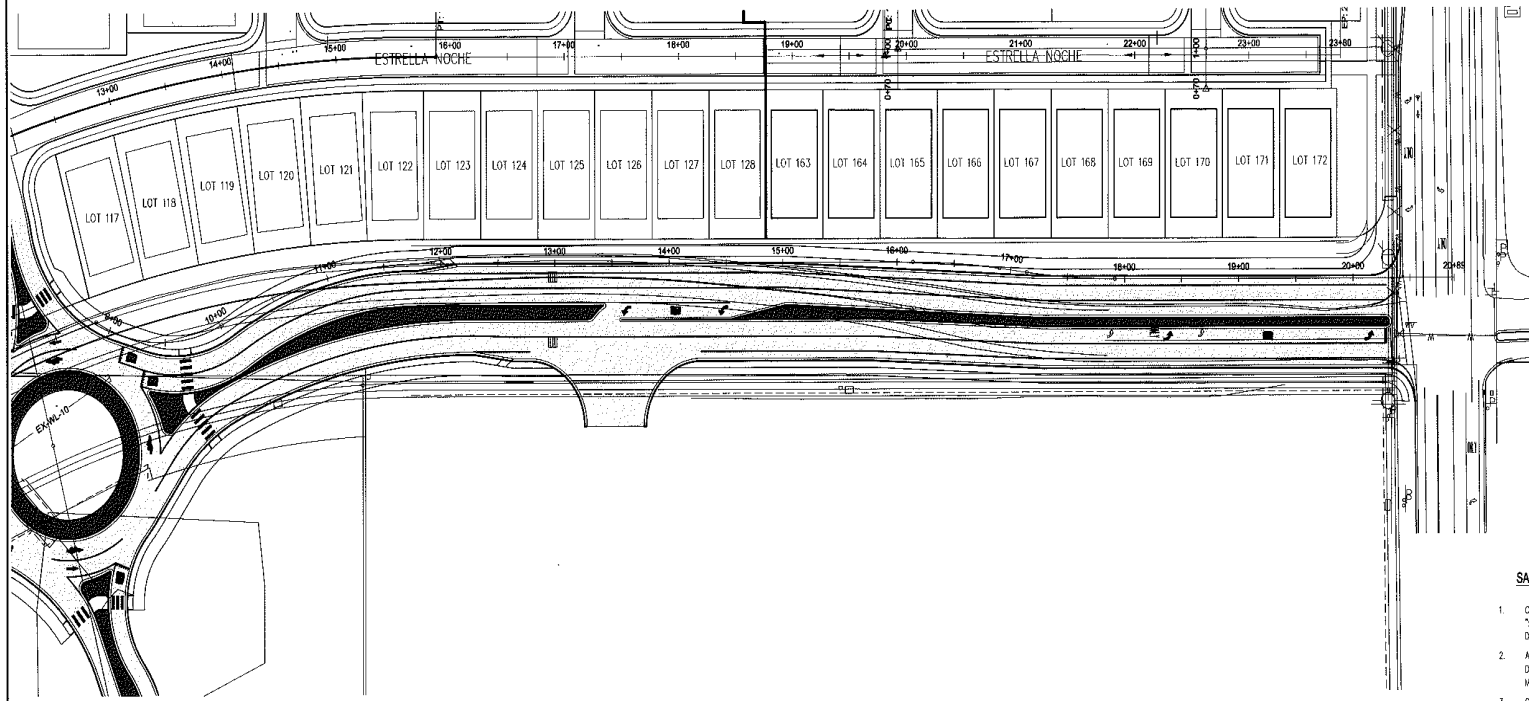
CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C2-211

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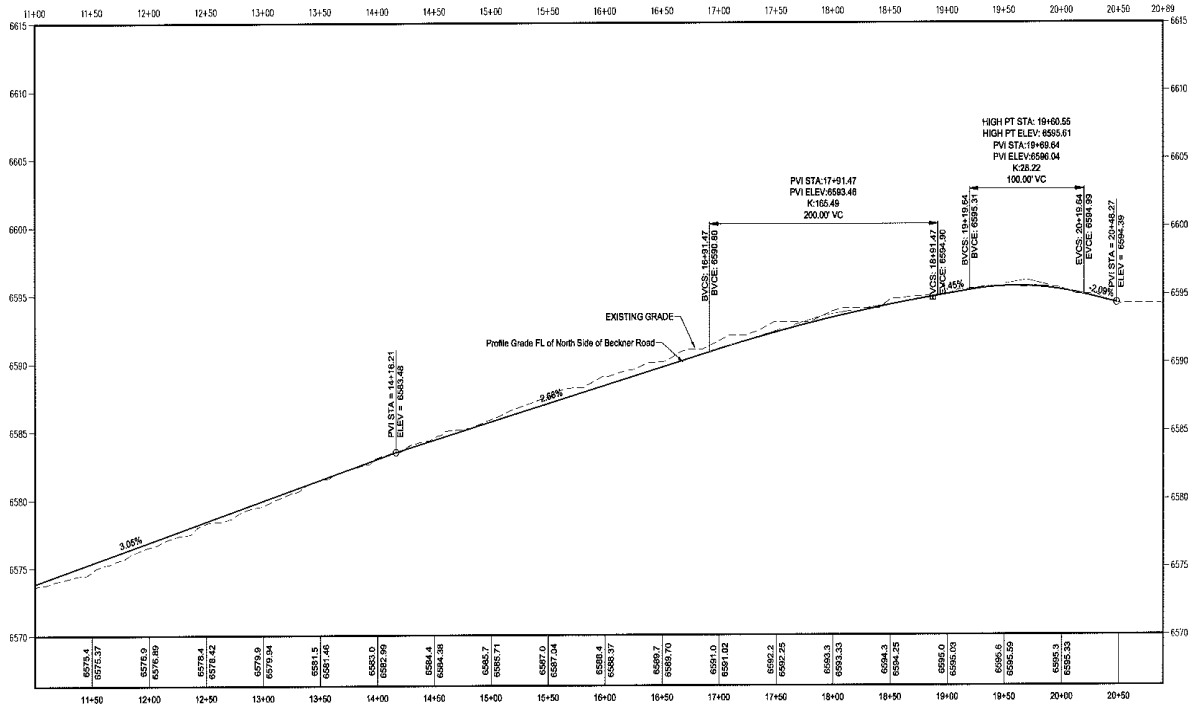

ESTRELLA NOCHE
VIENTO DEL NORTE
LOT 269
LOT 270
LOT 271
LOT 49
LOT 50
LOT 51
LOT 52
LOT 53
LOT 54
LOT 55
LOT 56
LOT 57
LOT 117
LOT 118
LOT 119
EXIST. 10" W
EXIST. 8" W
EXIST. 8" SS
EXIST. 10" SS
EXIST. 12" SS
EXIST. 24" SD
EXIST. 18" SD
EXIST. 30" SD
EXIST. 36" SD
EXIST. 42" SD
EXIST. 48" SD
EXIST. 54" SD
EXIST. 60" SD
EXIST. 66" SD
EXIST. 72" SD
EXIST. 78" SD
EXIST. 84" SD
EXIST. 90" SD
EXIST. 96" SD
EXIST. 102" SD
EXIST.



KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

BECKNER RD NORTH FL PROFILE



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X6" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP'.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY 9-13-2020

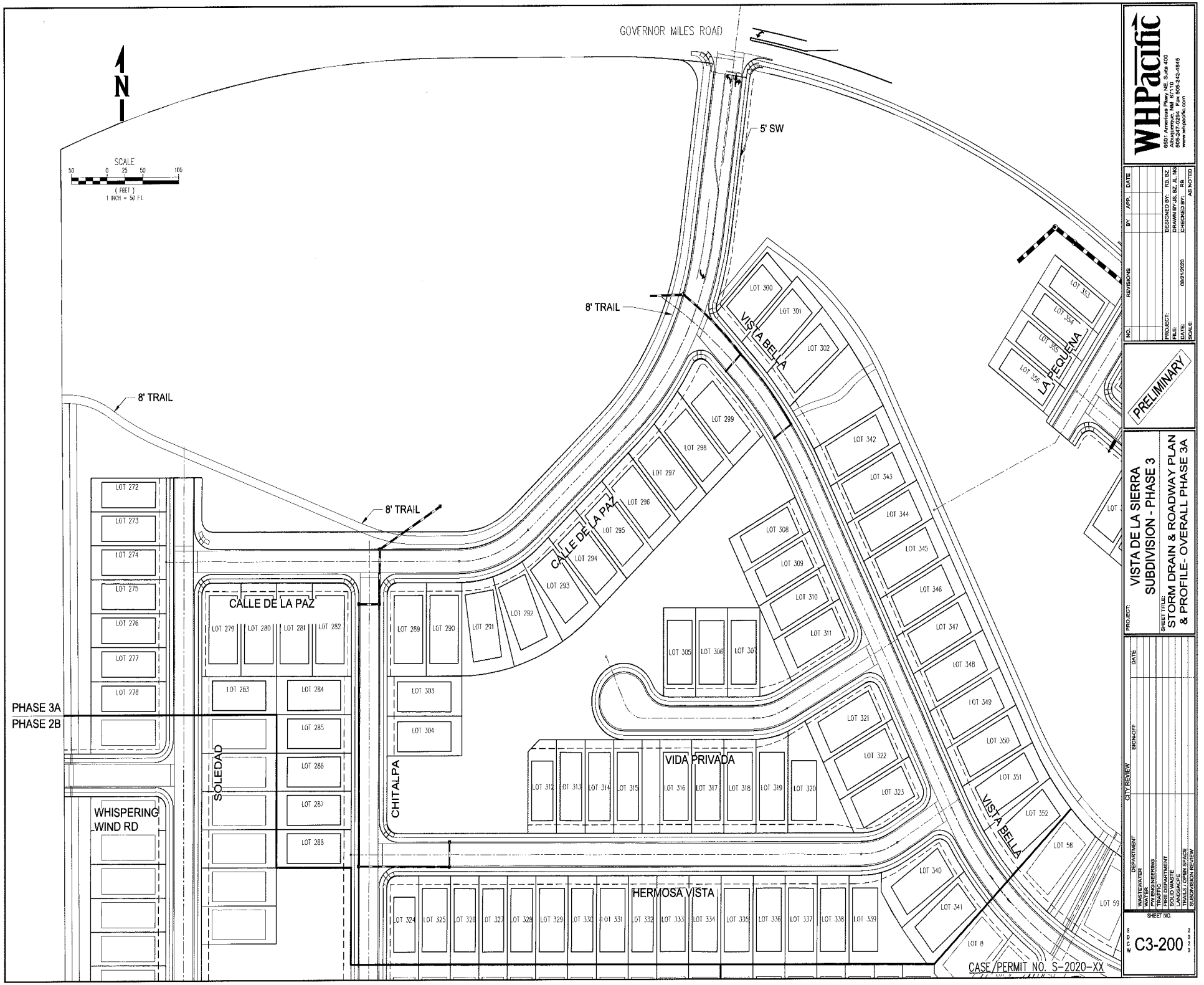
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STORM DRAIN AND ROADWAY PLAN & PROFILE - BECKNER RD

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PUBLIC ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C2-213

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
DESIGNED BY: RD, BZ
DRAWN BY: JS, BZ, JL, NG
FILE:
DATE: 08/21/2020
CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 3

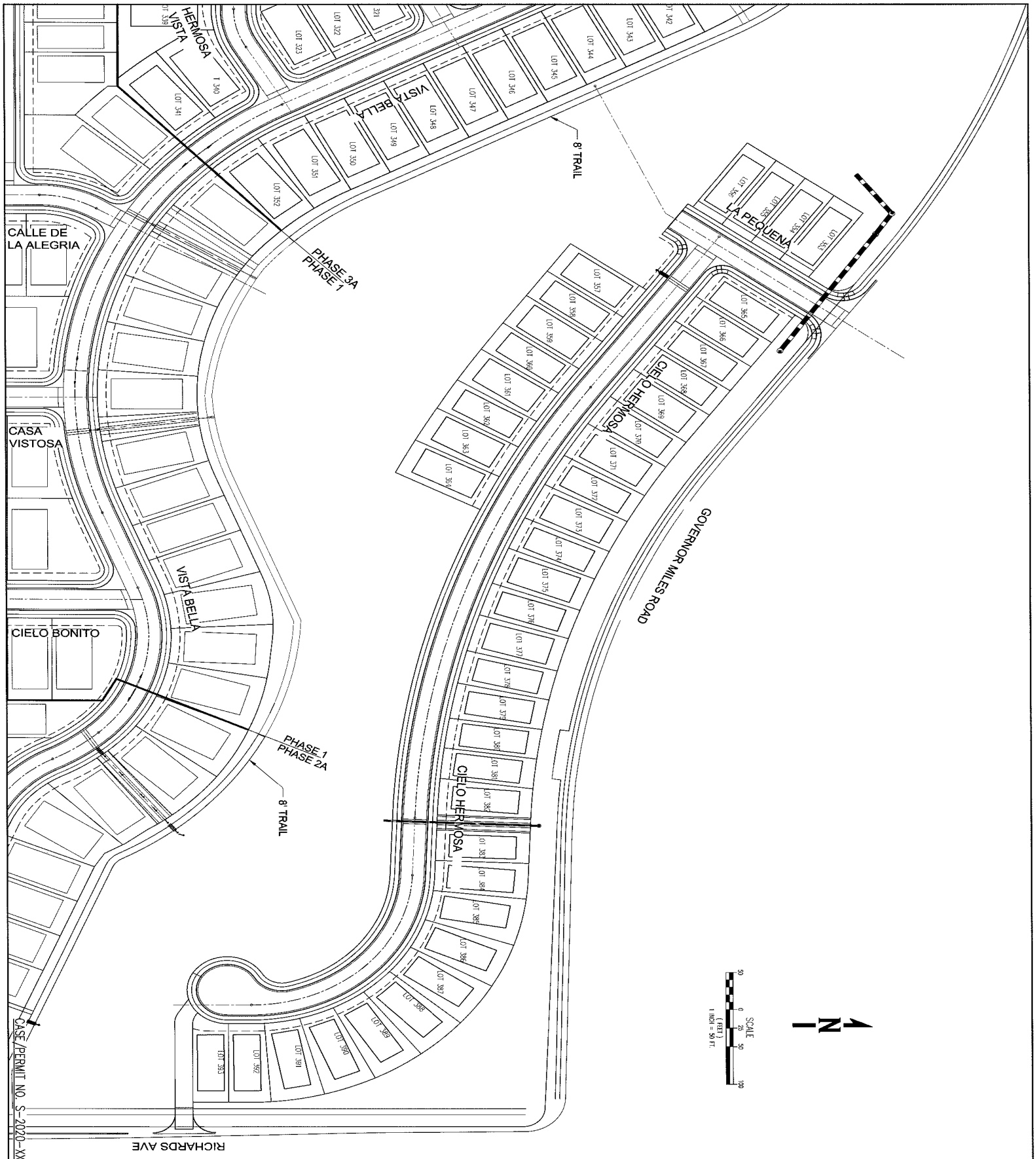
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- OVERALL PHASE 3A

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-200

P:\Columbus Capital Corporation\220519-A000105.000\Execution\Drawings\Civil\Phase 3A\000105.00-C-PAP01_Phase 3.dwg 8/18/2020 11:30 AM

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CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C3-201

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- OVERALL PHASE 3A

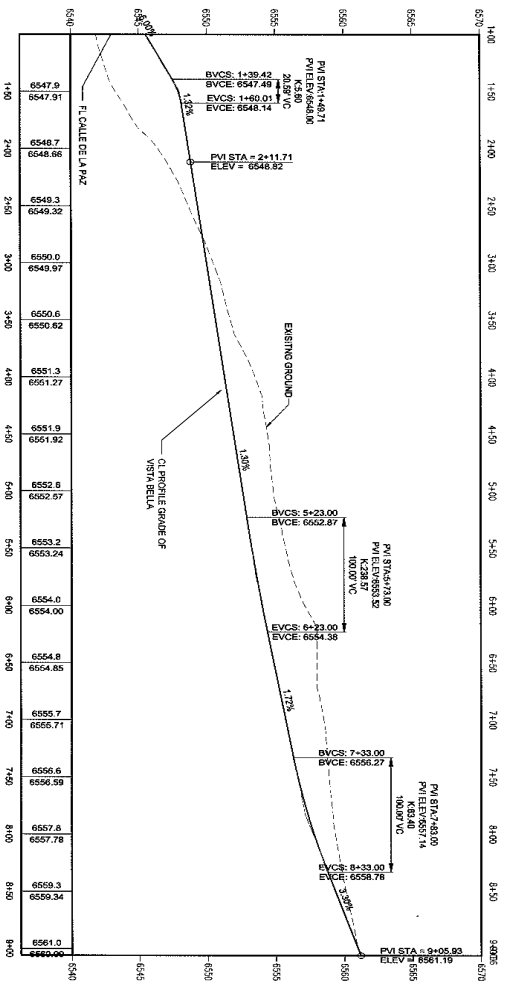
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NO.	REVISIONS	BY	APP.	DATE

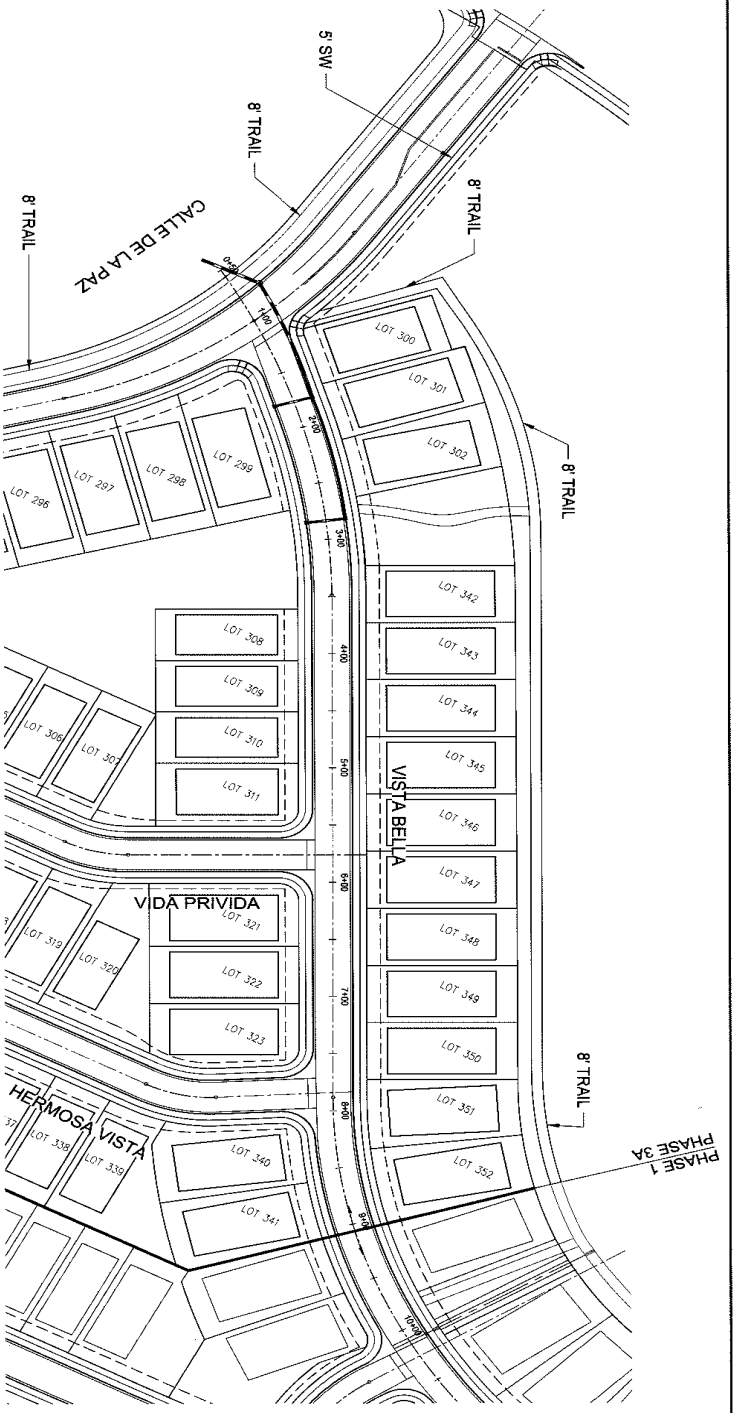
PROJECT:
FILE:
DATE: 08/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY:JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

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VISTA BELLA



① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-500.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET P&D-X.
3. BUILD ADA COMPLIANT CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12.08 SHEET P&D-X.

SCALE
(FEET)
1 INCH = 50 FT.
0
25
50
100

N

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO. C3-202

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

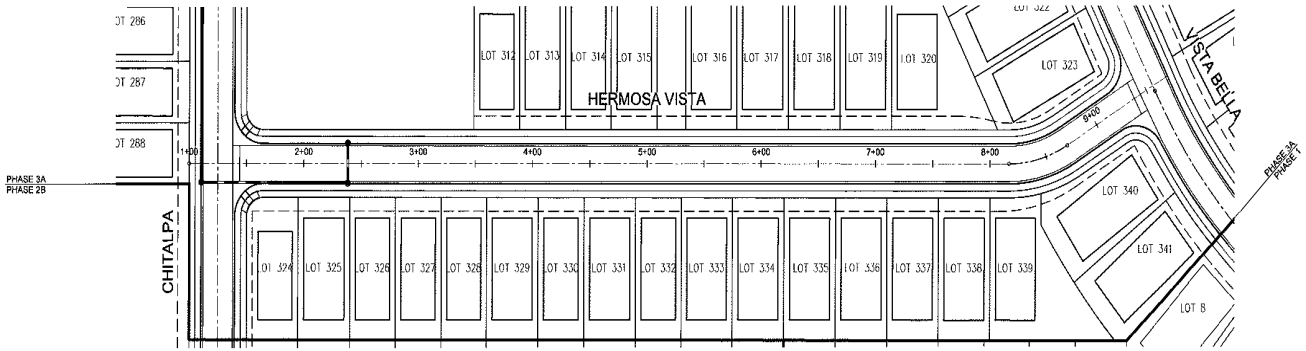
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- VISTA BELLA

PRELIMINARY

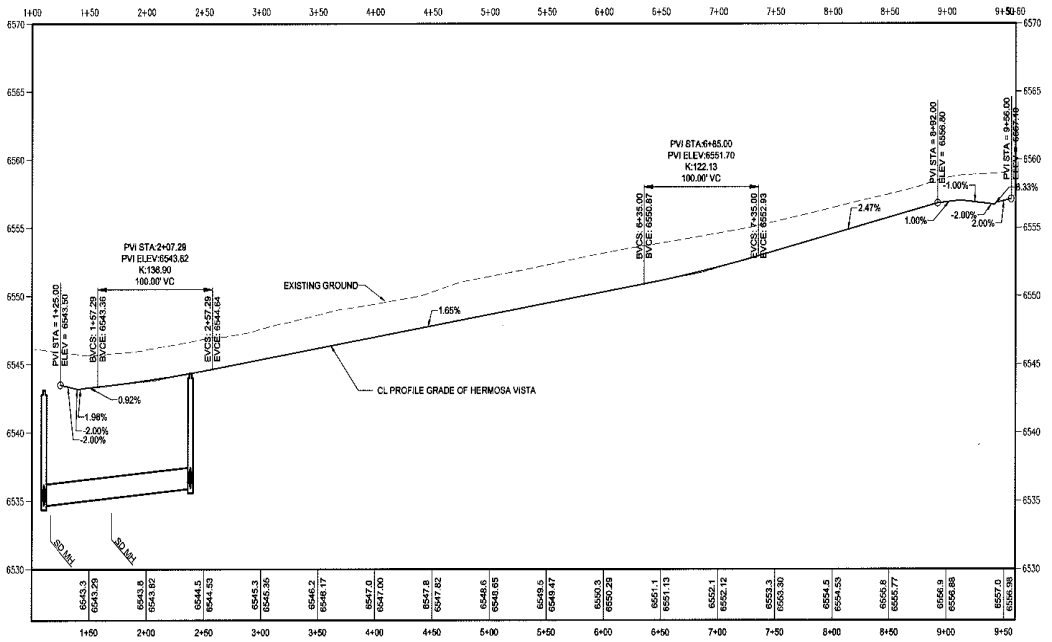
NO.	REVISIONS	BY	APP.	DATE

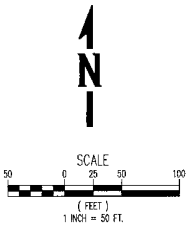
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FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY:JS, BZ, JL, NG
CHECKED BY: RB

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HERMOSA VISTA





① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, RB, JML, MES
CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY

PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 3

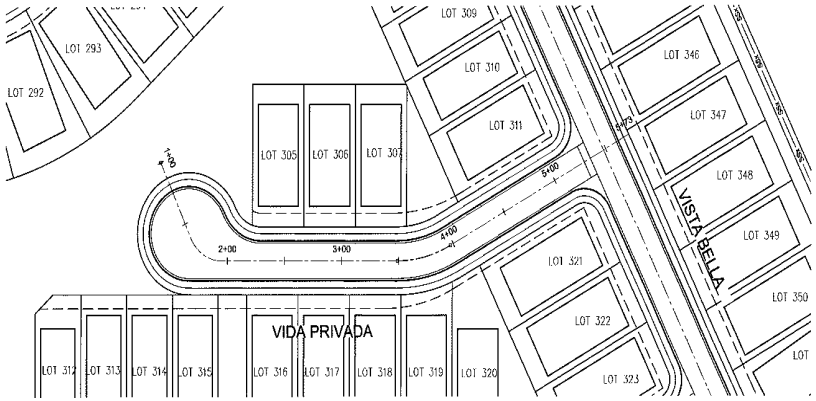
SHEET TITLE:
STORM DRAIN & ROADWAY PLAN & PROFILE- HERMOSA VISTA

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
PARKS DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION ATTORNEY		

SHEET NO.
C3-203

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SCALE

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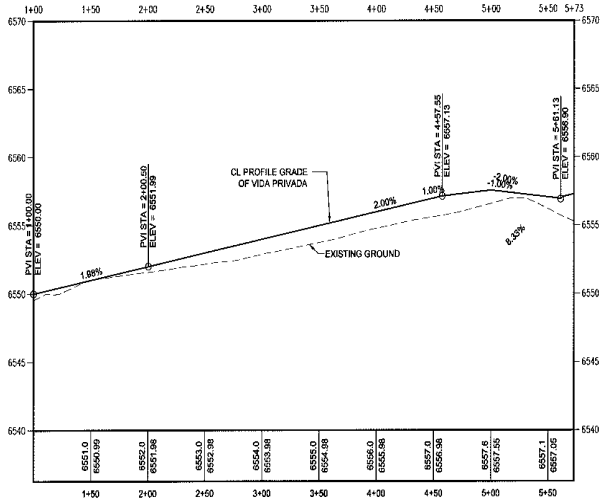
(FEET)

1 INCH = 50 FT.

① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

VIDA PRIVADA



CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY

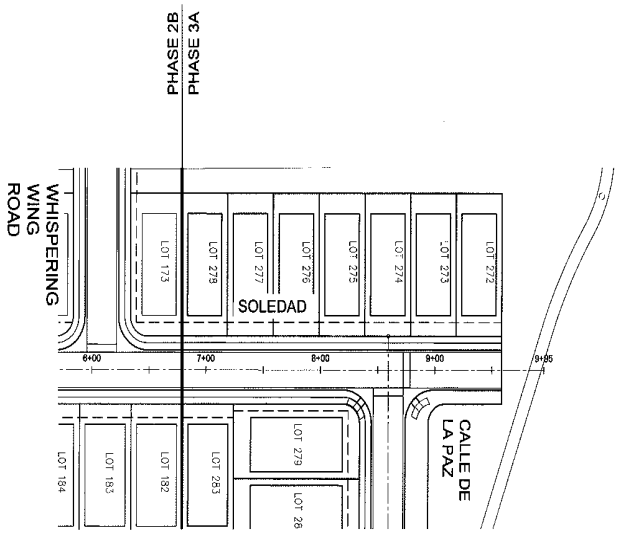
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- VIDA PRIVADA

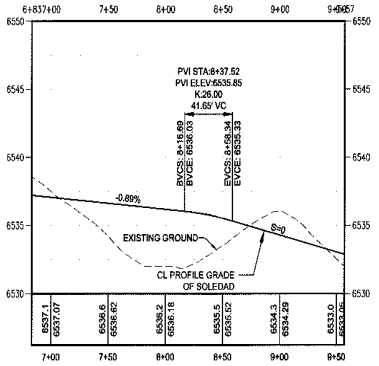
CITY REVIEW	DEPARTMENT	SIGN-OFF	DATE
	WASTEWATER		
	WATER		
	PUBLIC ENGINEERING		
	TRAFFIC		
	FIRE DEPARTMENT		
	SOLID WASTE		
	LANDSCAPE		
	TRAILS / OPEN SPACE		
	SUBDIVISION REVIEW		

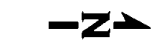
SHEET NO.
C3-204

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SOLEDAD





① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 06/21/2020
SCALE:
DESIGNED BY: RB, RZ
DRAWN BY: RB, RZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

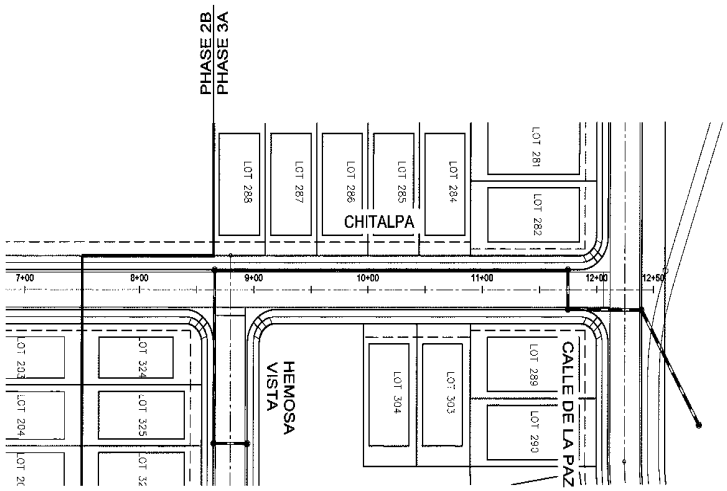
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

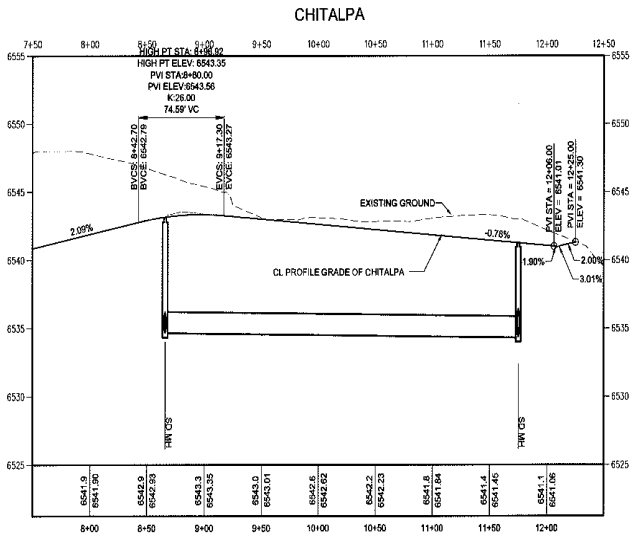
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- SOLEDAD

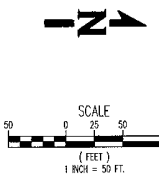
DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
SCALE: C3-205

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(1) ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 608-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

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5001 American Pkwy NE, Suite 400
Albuquerque, NM 87113
505.247.0294 Fax 505.242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: RB, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

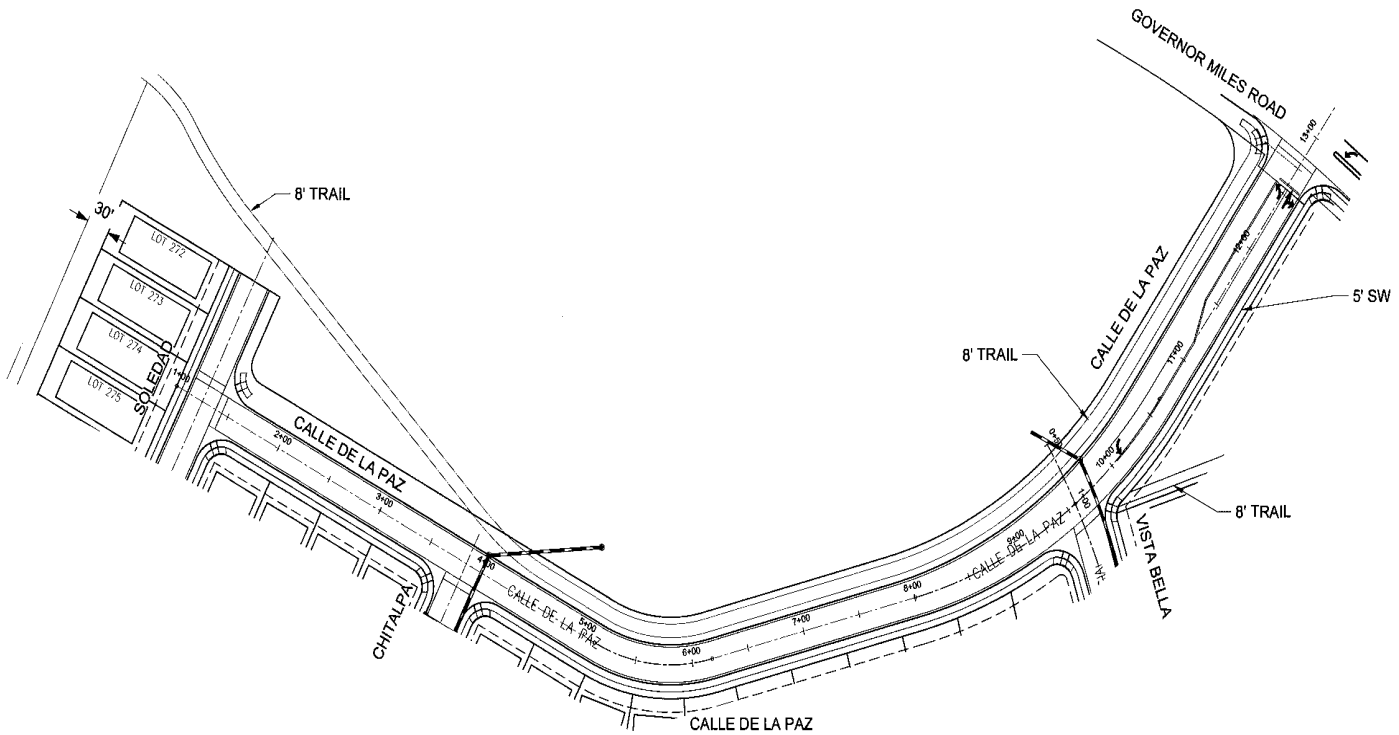
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

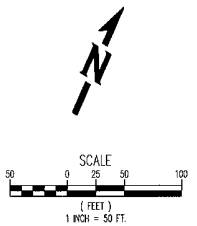
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- CHITALPA

CITY REVIEW	DEPARTMENT	SIGN-OFF	DATE
	WASTEWATER		
	WATER		
	PW ENGINEERING		
	TRAFFIC		
	FIRE DEPARTMENT		
	SOLID WASTE		
	LANDSCAPE		
	TRAILS / OPEN SPACE		
	SUBDIVISION REVIEW		

SHEET NO.
C3-206

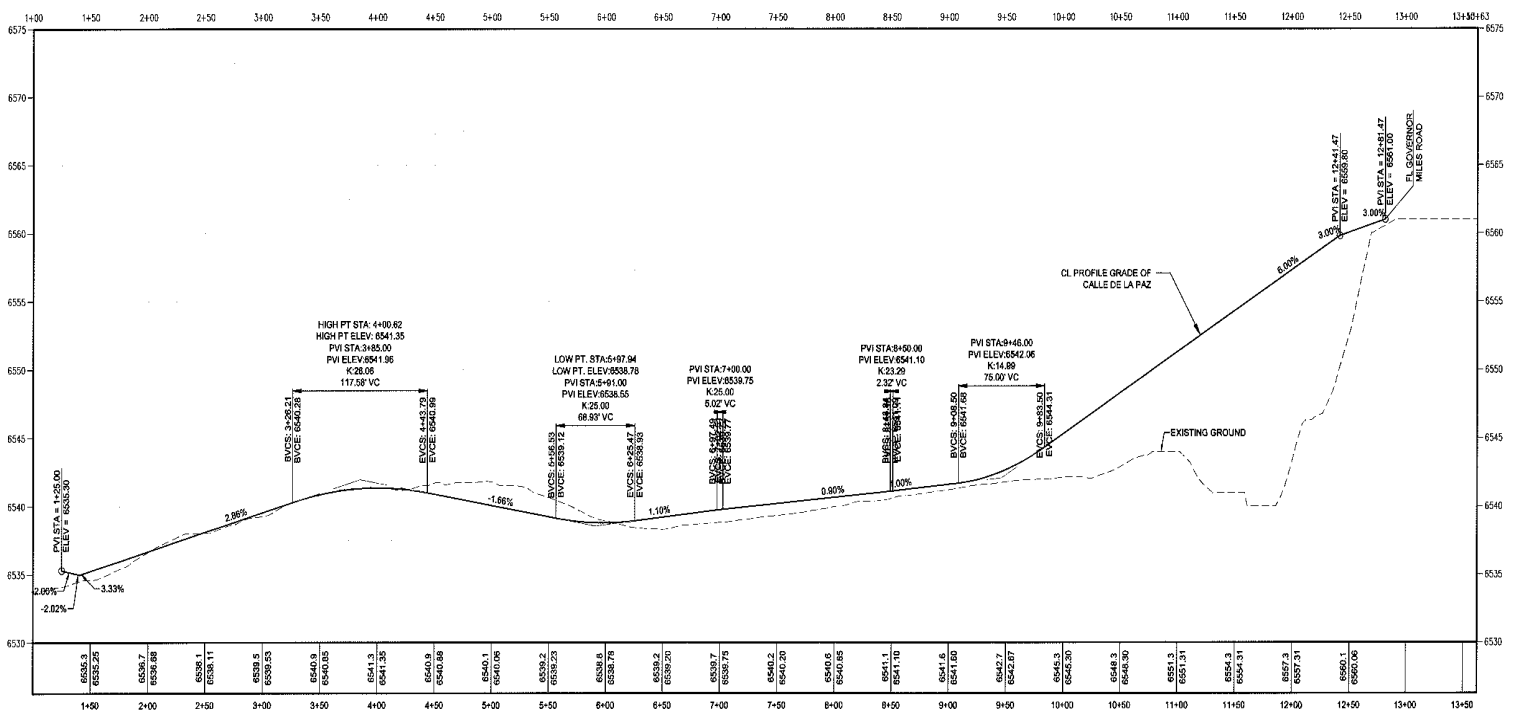
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ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 606-5 OF 12 ON SHEET PAD-X.



CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 06/21/2020
SCALE: AS NOTED
DESIGNED BY: RS, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RS

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- CALLE DE LA PAZ

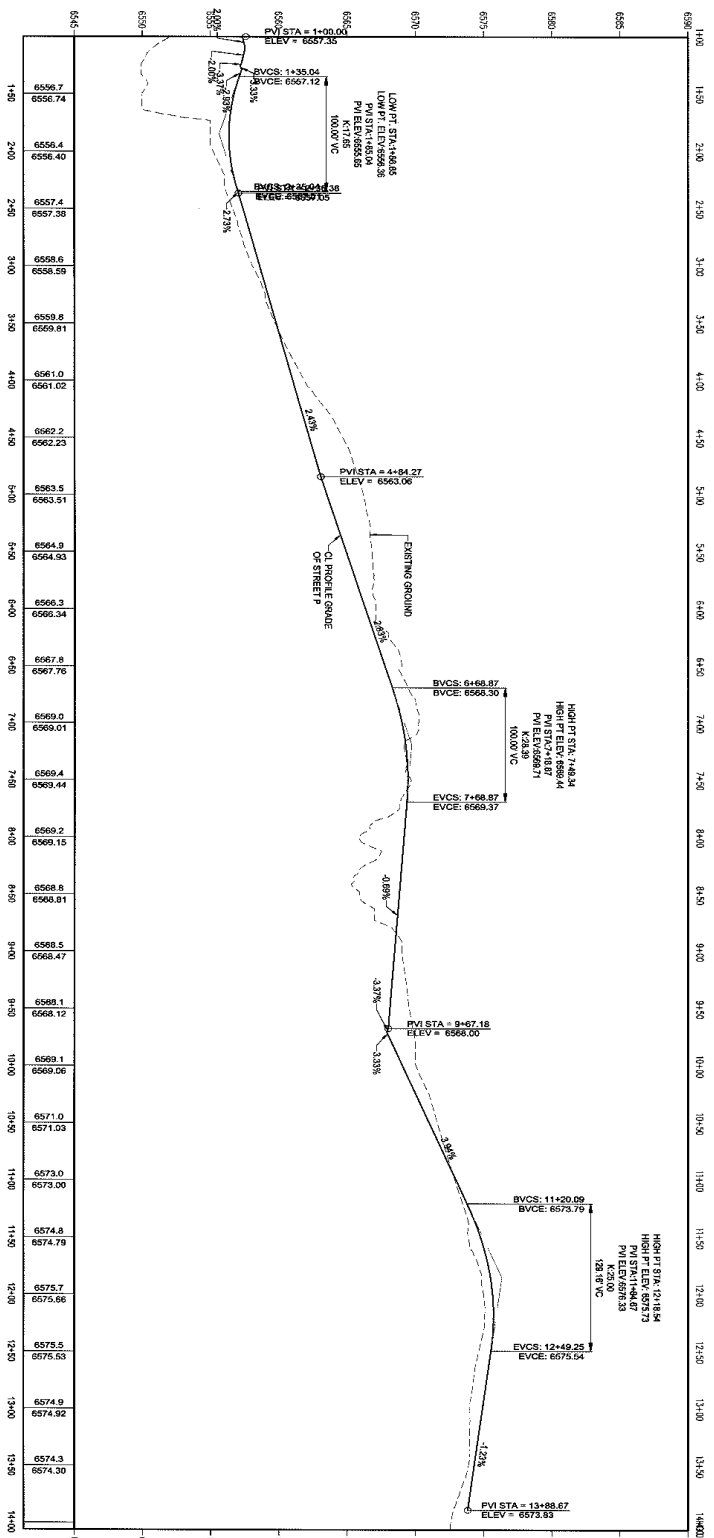
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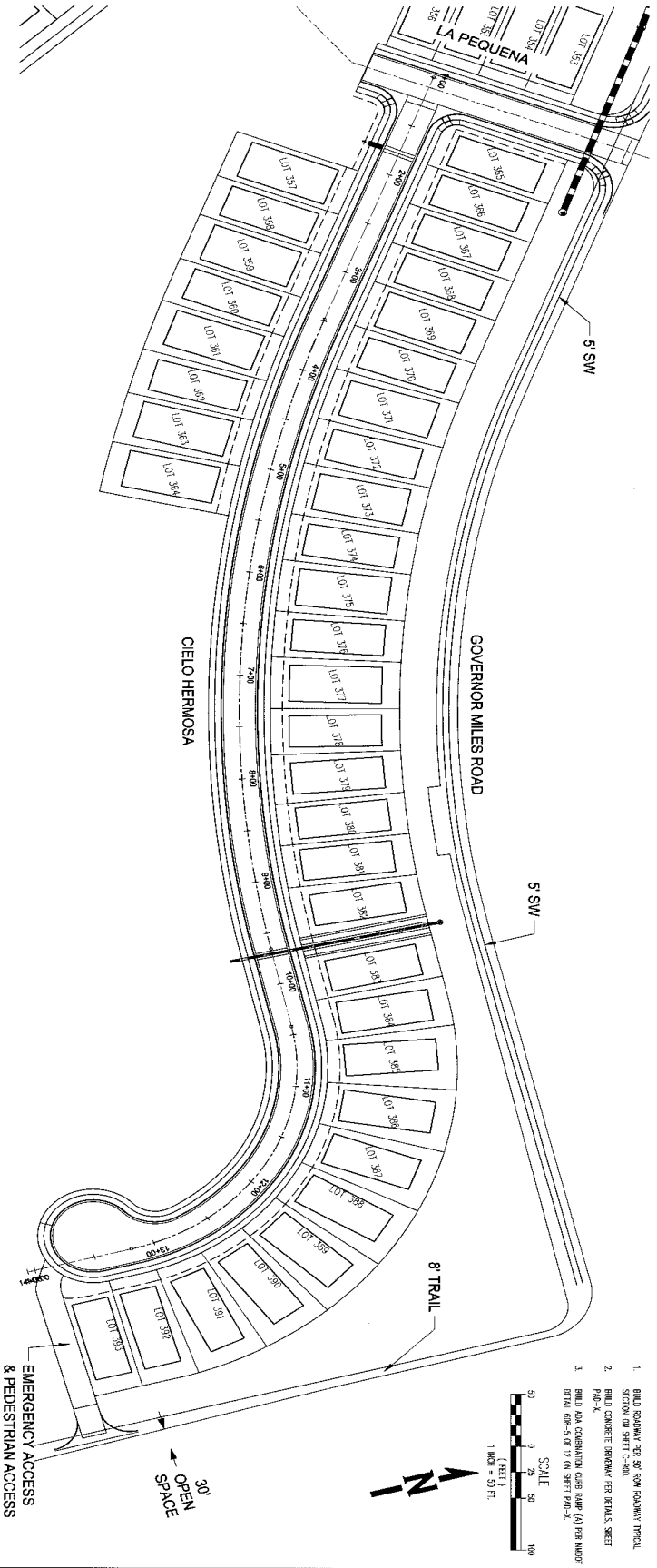
DEPARTMENT	DATE
WASTEWATER	
WATER	
PW ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
CITY ARCHITECT	
LANDSCAPE	
TRAILS / OPEN SPACE	
SUBDIVISION REVIEW	

SHEET NO.
SHEET C3-207
2020

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ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 56' ROW ROADWAY TYPICAL SECTION ON SHEET C-302.
2. BUILD CONCRETE DRIVEWAY PER DETAILS SHEET P40-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 606-5 OF '12 ON SHEET P40-X.

CASE/PERMIT NO. S-2020-XX

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO: C3-208

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

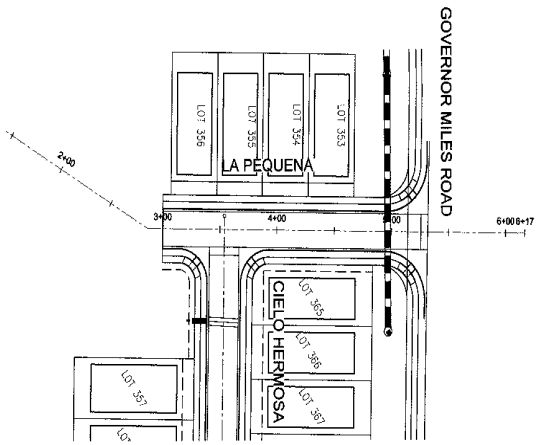
SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- CIELO HERMOSA

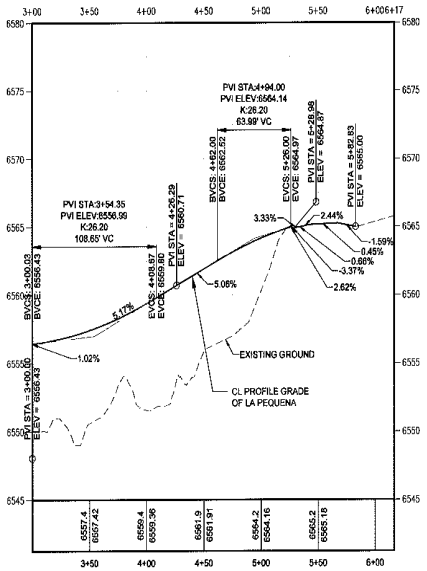
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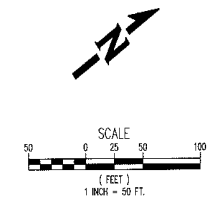
NO.	REVISIONS	BY	APP.	DATE

PROJECT: DESIGNED BY: RB, BZ
FILE: DRAWN BY:JS, BZ, JL, NG
DATE: 09/21/2020 CHECKED BY: RB
SCALE: AS NOTED

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4945
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① ROADWAY KEYED NOTES:

1. BUILD ROADWAY PER 50' ROW ROADWAY TYPICAL SECTION ON SHEET C-900.
2. BUILD CONCRETE DRIVEWAY PER DETAILS, SHEET PAD-X.
3. BUILD ADA COMBINATION CURB RAMP (A) PER NMDOT DETAIL 606-5 OF 12 ON SHEET PAD-X.

CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: STORM DRAIN & ROADWAY PLAN & PROFILE- LA PEQUENA

DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C-209

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CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

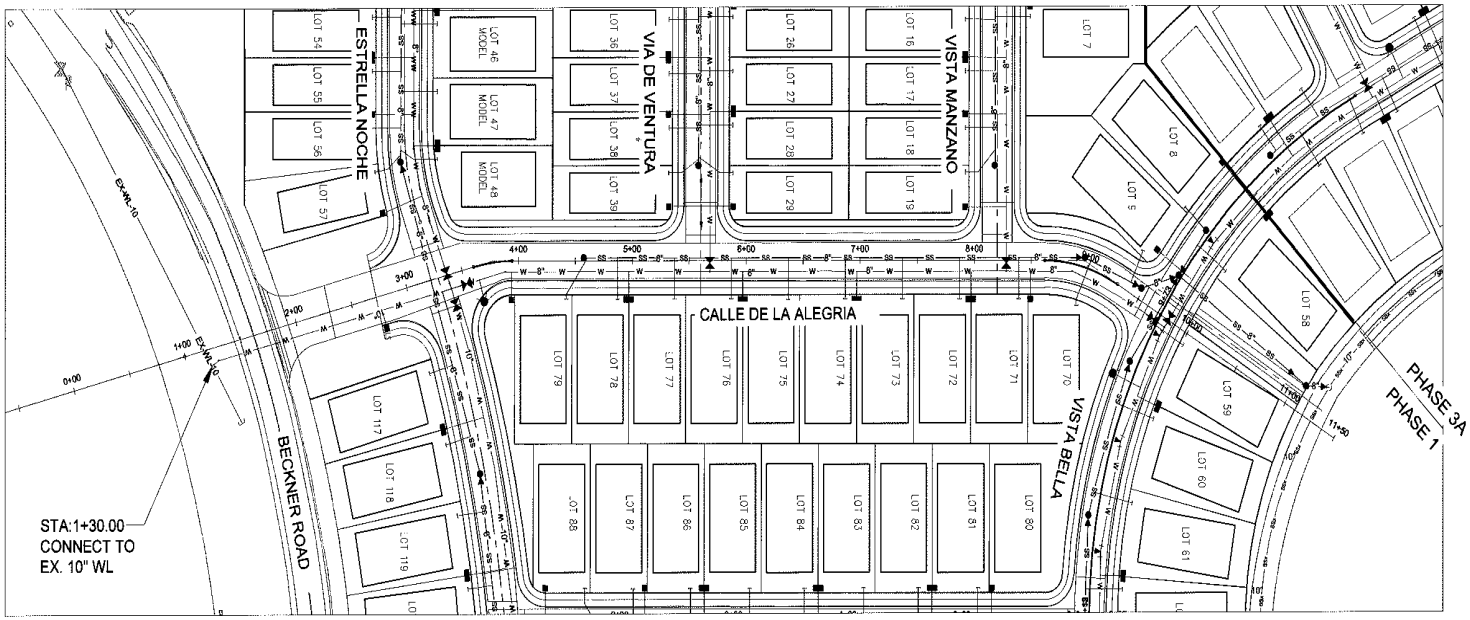
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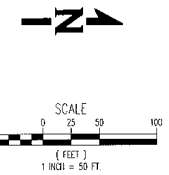
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PH 1, 2, & 3

SHEET TITLE: OVERALL WATER & SEWER PLAN

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PWD / ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
LAND MGMT			
PARKS			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
C-300





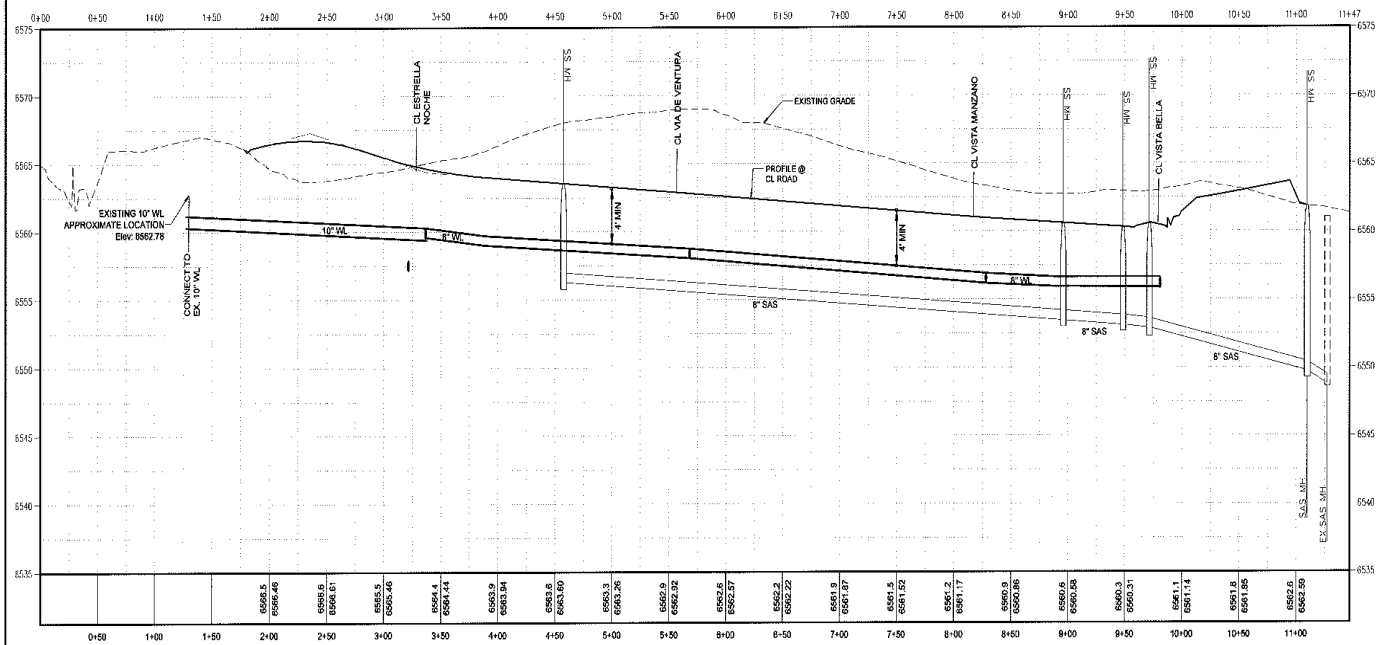
SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2190.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET W1-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURE CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CALLE DE LA ALEGRIA



CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax: 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP'D	DATE

PROJECT: DESIGNED BY: RB, BZ
FILE: DRAWN BY: RB, BZ, JL, MG
DATE: 09/30/2020 CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY

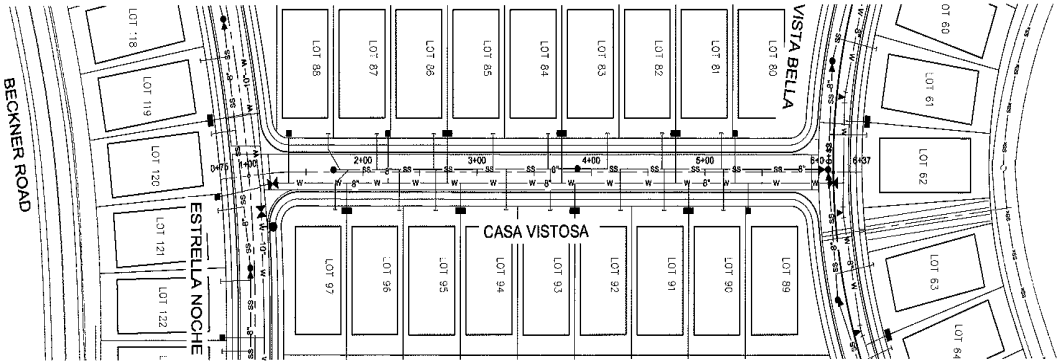
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

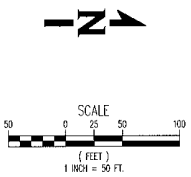
SHEET TITLE: WATER AND SEWER PLAN & PROFILE - CALLE DE LA ALEGRIA

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
ENVIRONMENTAL REVIEW		

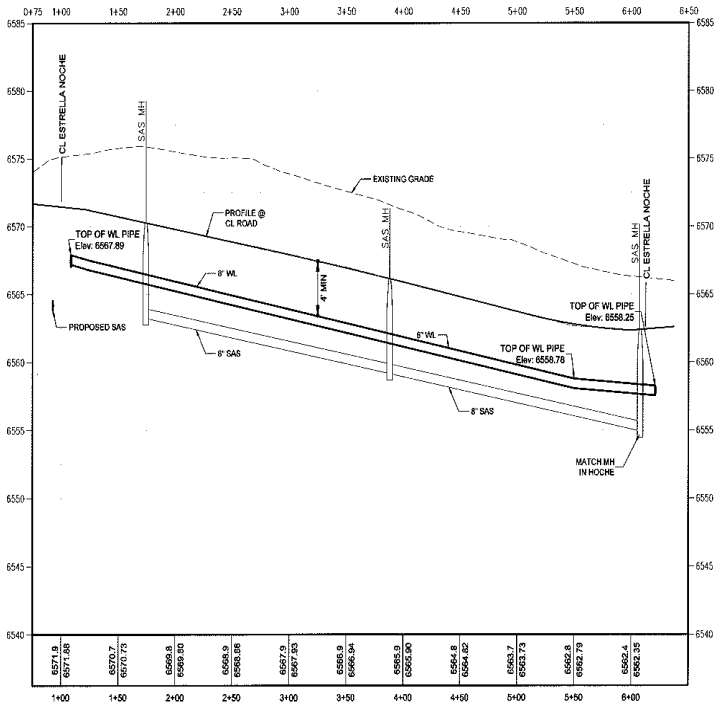
SHEET NO. C1-301

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CASA VISTOSA



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: RB, BZ, JL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY

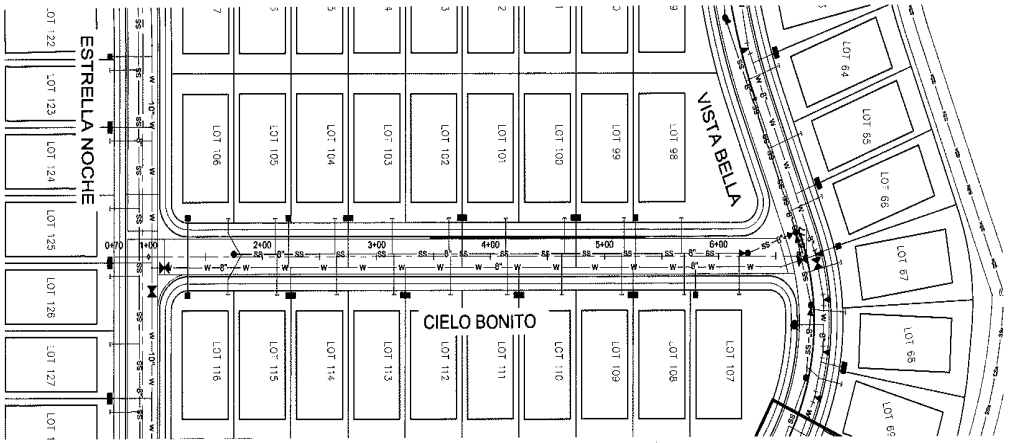
PROJECT:
VISTA DE LA SIERRA
SUBDIVISION - PHASE 1

SHEET TITLE:
WATER AND SEWER PLAN & PROFILE - CASA VISTOSA

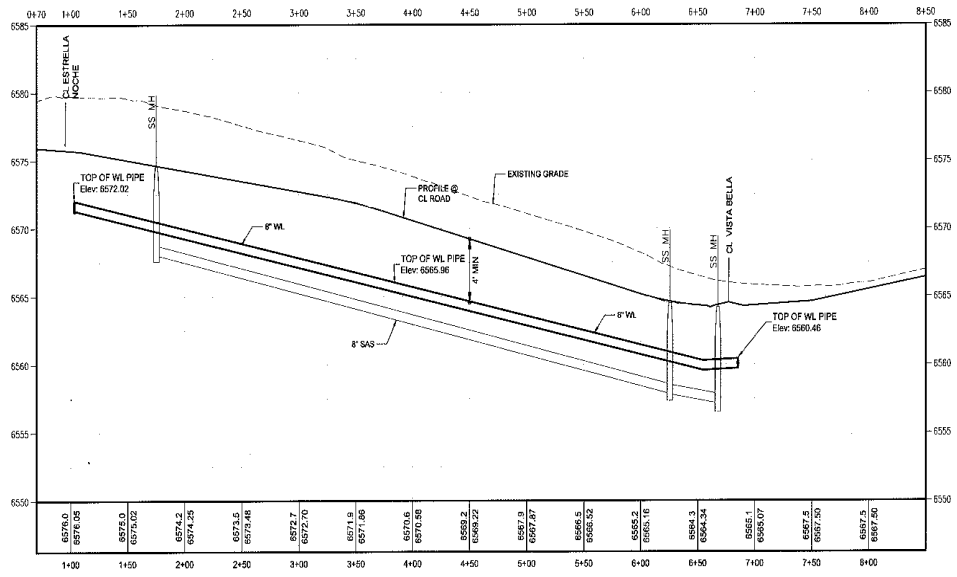
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

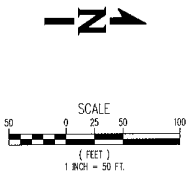
SHEET NO.
C1-302

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CIELO BONITO





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06. SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY, SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE
Albuquerque, NM 87110 Suite 400
505-247-0294 Fax 505-242-4645
www.whpacific.com

NO. | REVISIONS | BY | APP. | DATE

PROJECT:
FILE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, KG
CHECKED BY: RB
DATE: 09/03/20
SCALE: AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

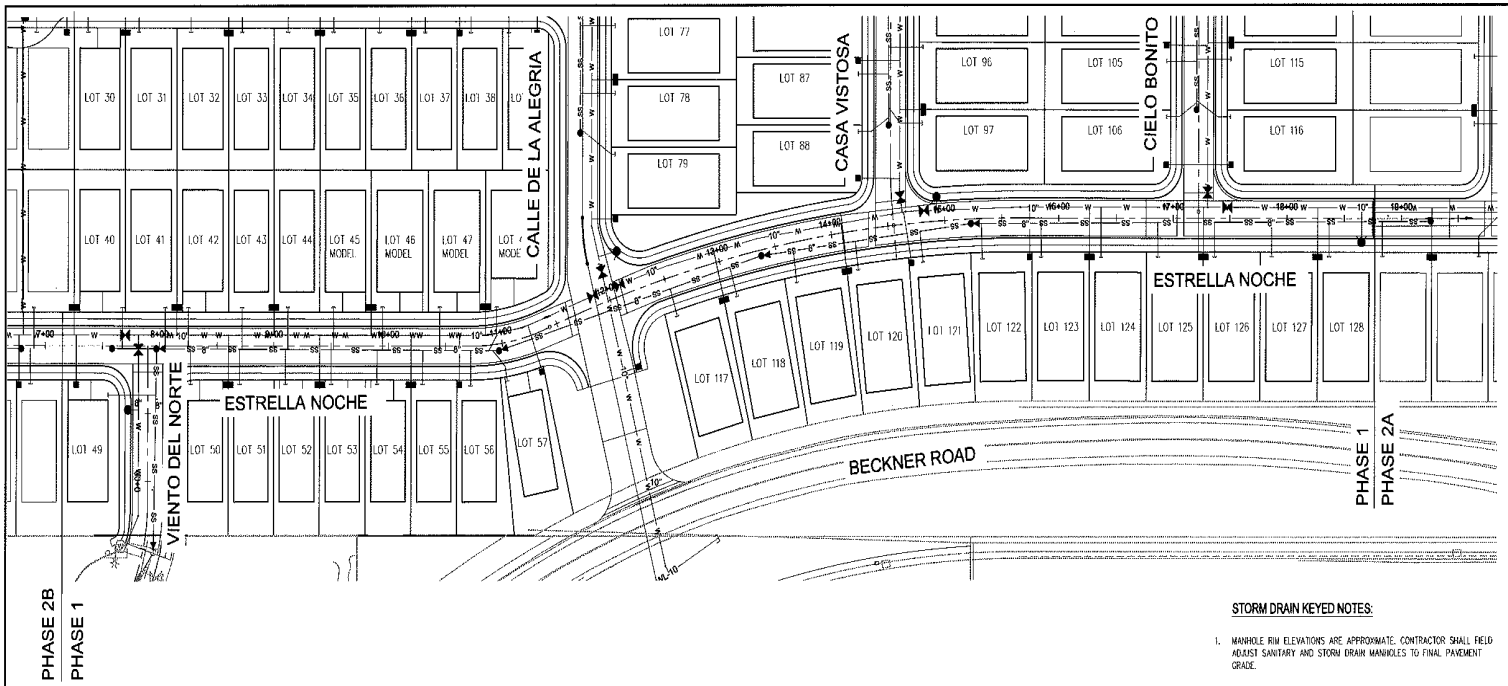
SHEET TITLE: WATER AND SEWER PLAN & PROFILE - CIELO BONITO

CITY REVIEW — SIGN-OFF — DATE

DEPARTMENT
WASTEWATER
WATER
PW ENGINEERING
TRAFFIC
FIRE DEPARTMENT
SOLID WASTE
LANDSCAPE
TRAILS / OPEN SPACE
SUBDIVISION REVIEW

SHEET NO.
C1-303

P:\Columbus Capital Corporation\225619-A000105.03\Execution\Drawings\Civil\Phase 1\A000105.00-C-Utility PkPD1_Phase 1 Jacky Lin.dwg 9/15/2020 11:40 AM



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
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5. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
6. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
7. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
8. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
9. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

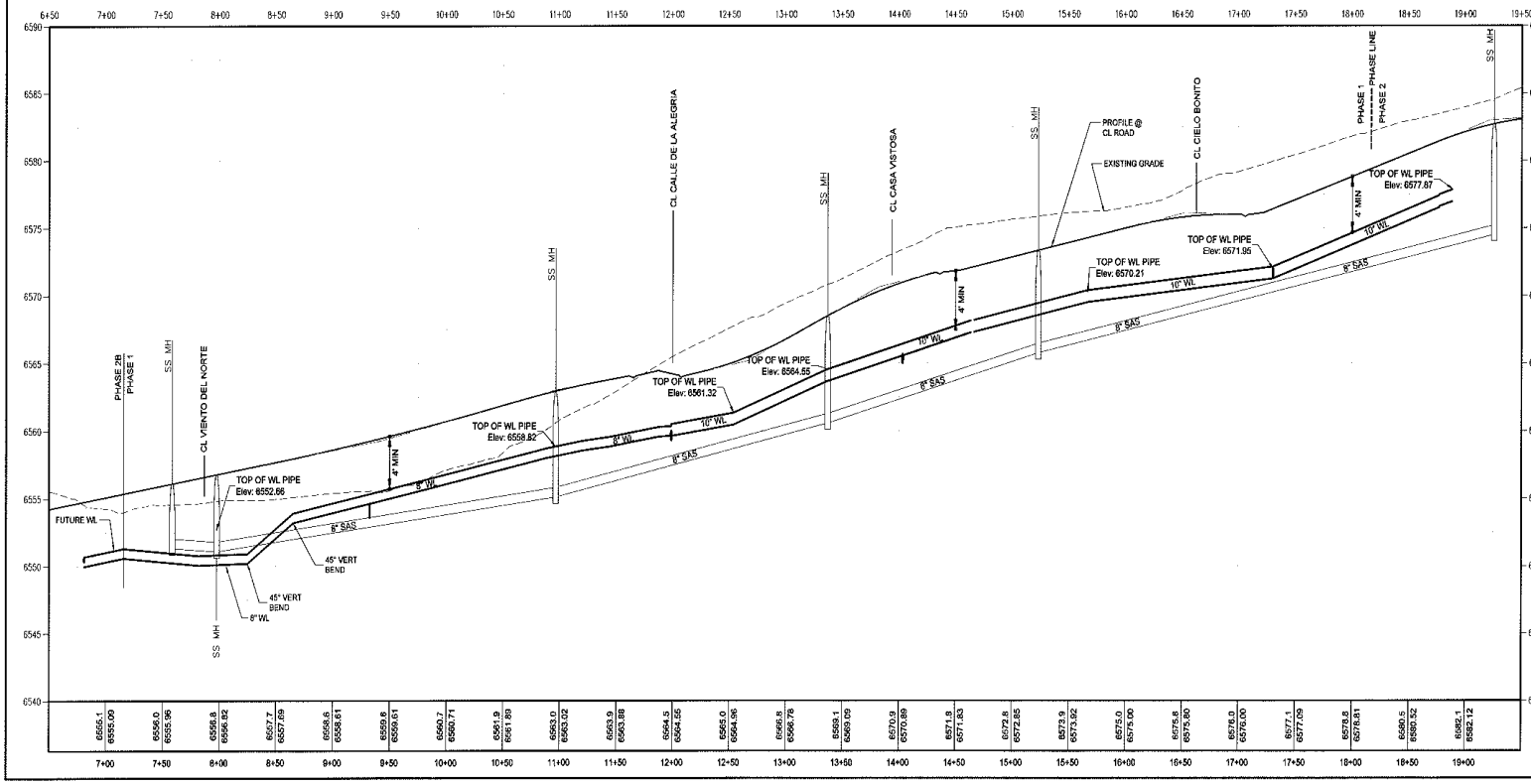
WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS, UNLESS OTHERWISE NOTED.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06. SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

STORM DRAIN KEYED NOTES:

1. MANHOLE RIM ELEVATIONS ARE APPROXIMATE. CONTRACTOR SHALL FIELD ADJUST SANITARY AND STORM DRAIN MANHOLES TO FINAL PAVEMENT GRADE.

ESTRELLA NOCHE



N

SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

CASE/PERMIT NO. S-2020-XX

WHPacific
8501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87113
505-247-0294 Fax 505-242-4945
www.whpacific.com

NO	REVISIONS	BY	APP	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE: AS NOTED

DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

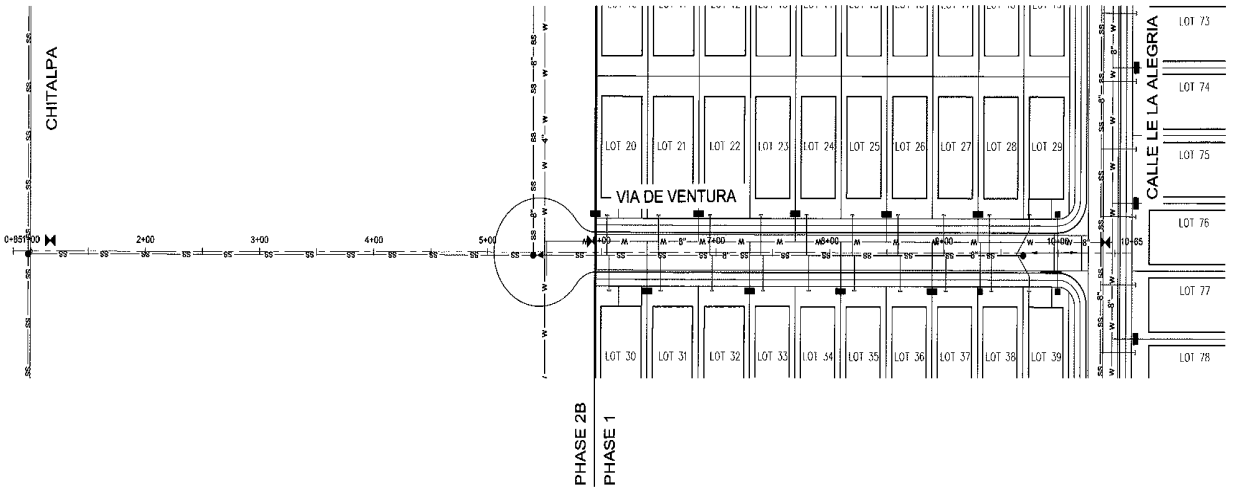
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

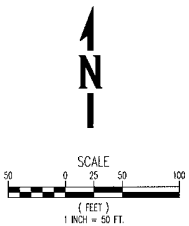
SHEET TITLE: WATER AND SEWER PLAN & PROFILE - STREET D

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

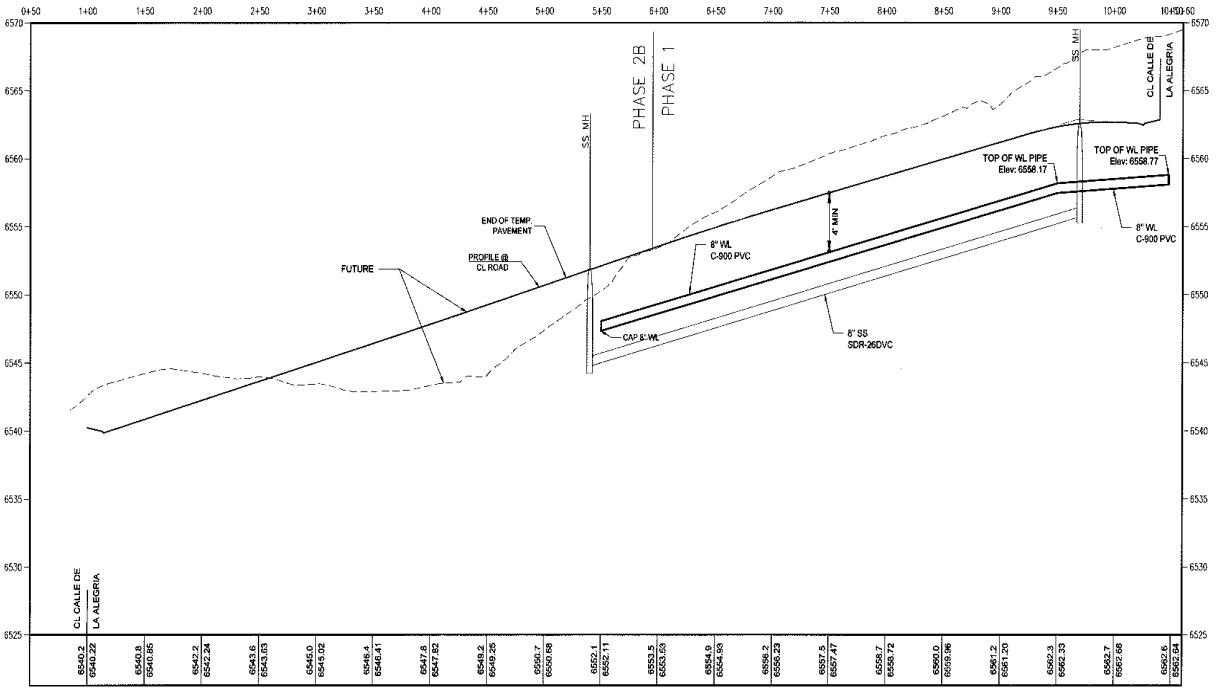
SHEET NO.
C1-304

P:\Dambus Capital Corporate\Vista\226619-A000105.01\Execution\Drawings\Civil\Phase 1\A000105.00-C-Utility Plt-Pl01_Phase 1 Jacky Lin.dwg 9/15/2020 11:40 AM





VIA DE VENTURA



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
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5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-243-4845
www.whpacific.com

NO. | REVISIONS | BY | APP'D | DATE

PROJECT:
FILE:
DATE:
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NG
CHECKED BY: RB
AS NOTED
06/03/2020

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

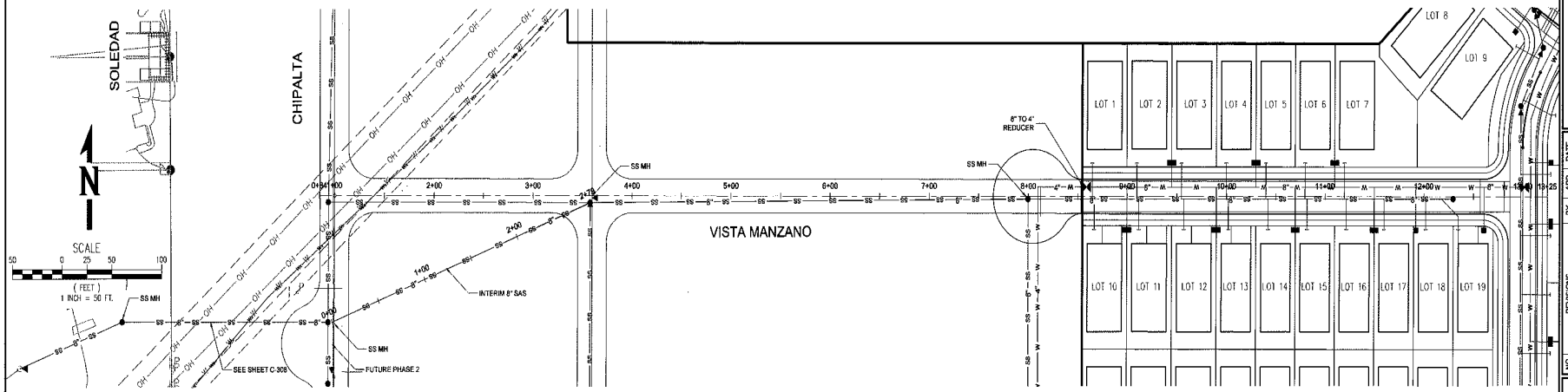
SHEET TITLE: WATER AND SEWER PLAN & PROFILE - VIA DE VENTURA

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C1-305

P:\Columbus Capital Corporation\229915.A0\105.01\Execution\Drawings\Civil\Phase 1\A0\0105.00-C-Utility P&P(1)_Phase 1 Jacky Ln.dwg 9/18/2020 11:40 AM



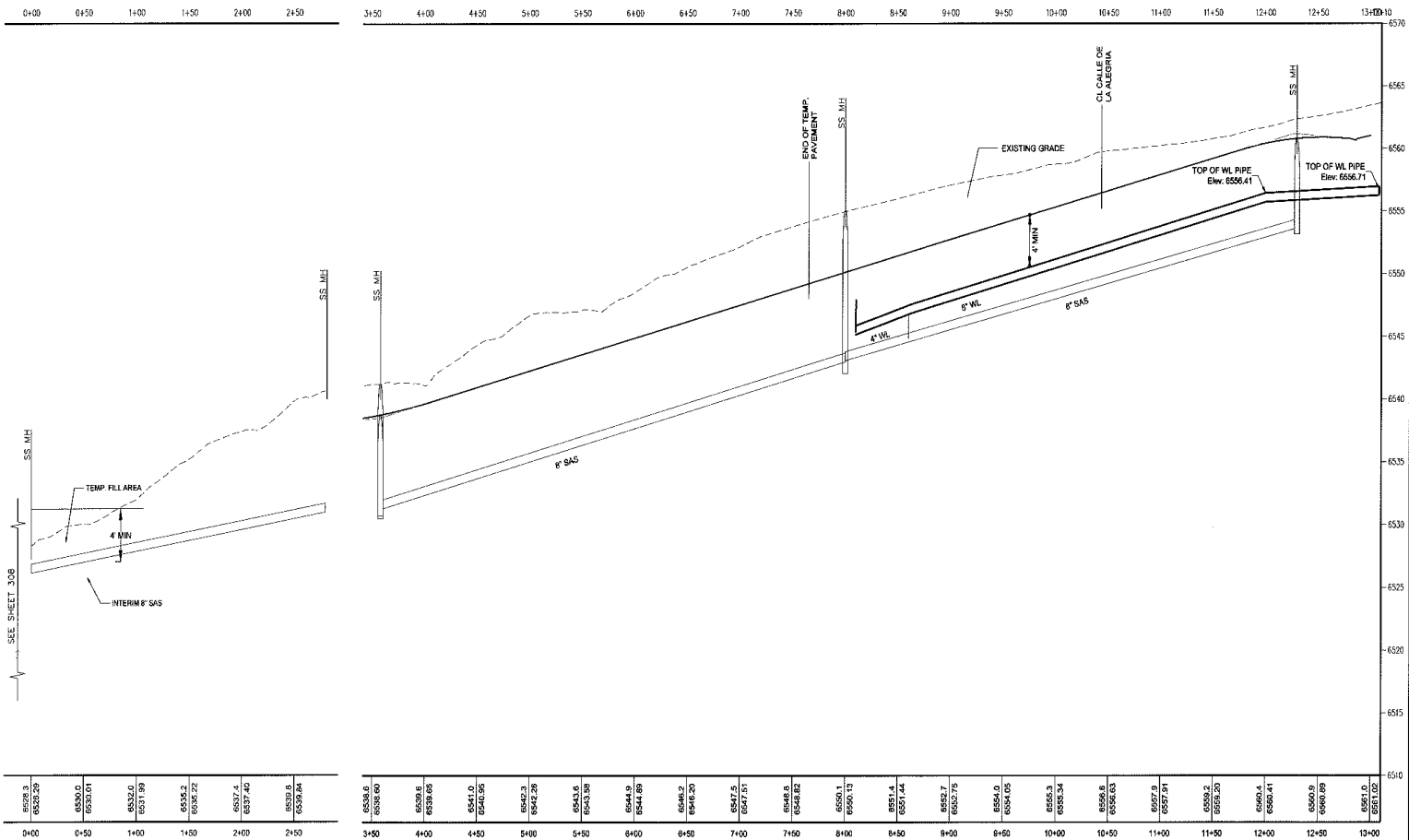
VISTA MANZANO

SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
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WATER KEYED NOTES:

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9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.



CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-6845
www.whpacific.com

DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NG
CHECKED BY: RB
AS NOTED

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/09/20
SCALE:

PRELIMINARY

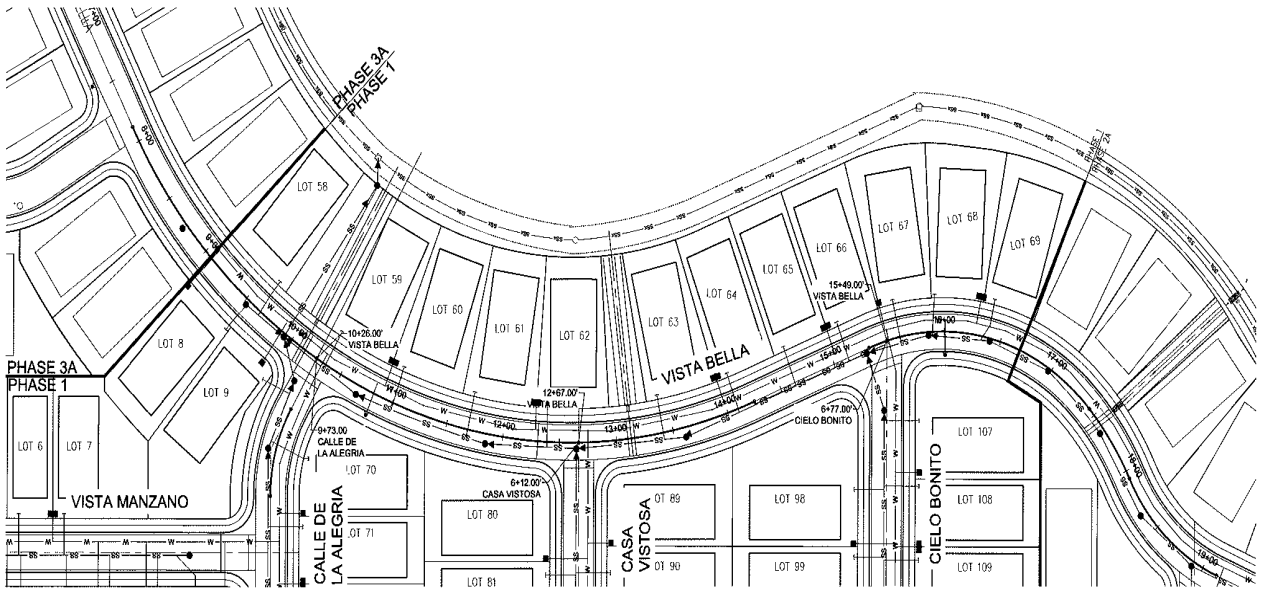
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: WATER AND SEWER PLAN & PROFILE - VISTA MANZANO

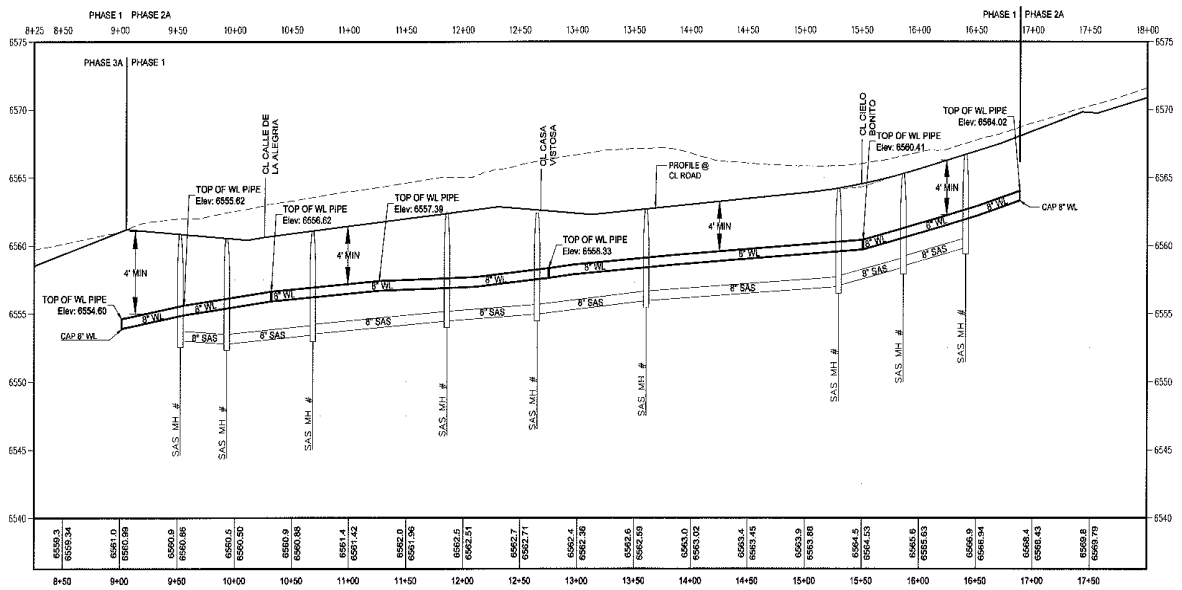
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DEPARTMENT		
WASTEWATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

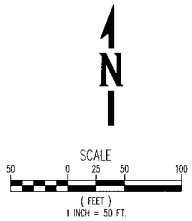
SHEET NO.
C1-306

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VISTA BELLA





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. . ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITRINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
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505-247-0294 Fax 505-262-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

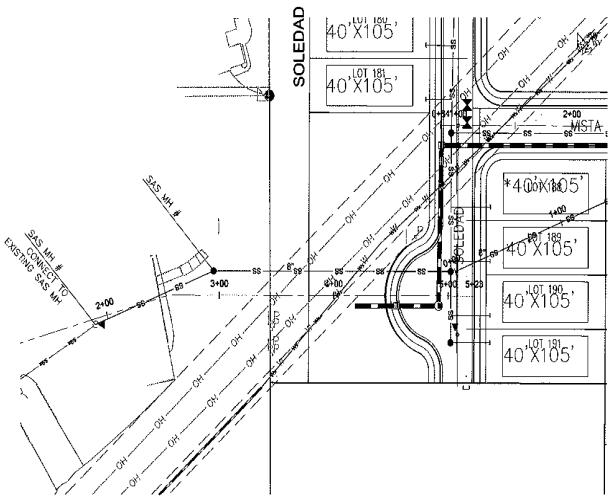
SHEET TITLE: WATER AND SEWER PLAN & PROFILE - VISTA BELLA

CITY REVIEW

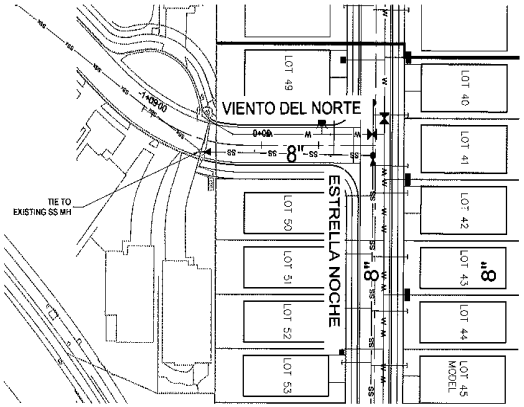
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WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
SCALE: C1-307
2020

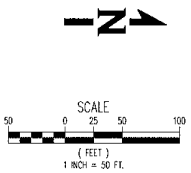
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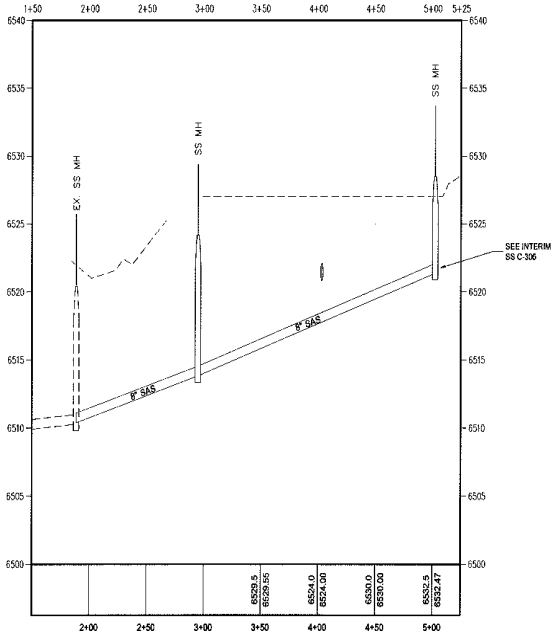


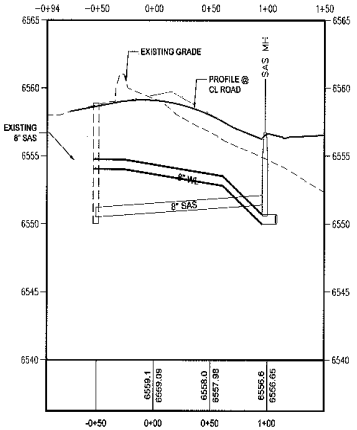
SOARING EAGLE TIE-IN



VIENTO DEL NORTE







SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2186.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 08, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
8500 Menaul Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0994 Fax 505-262-4845
www.whpacific.com

NO. | REVISIONS | BY | APP'D | DATE

PROJECT:
FILE:
DATE: 09/09/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: BJL, MG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

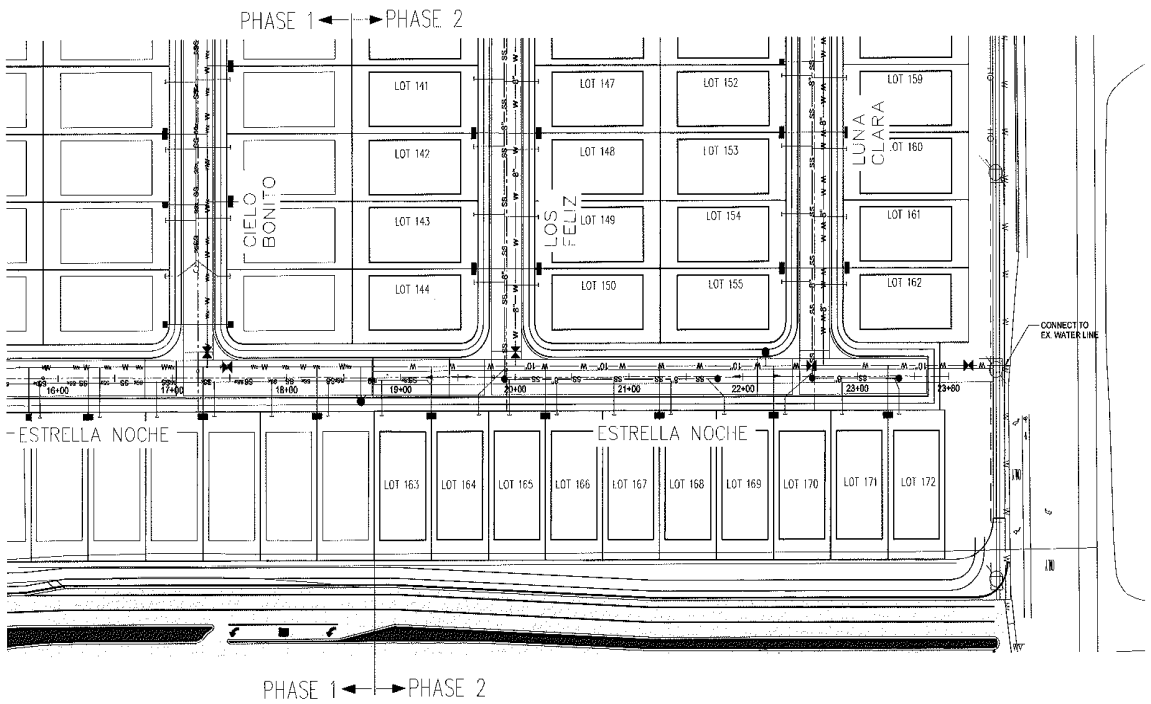
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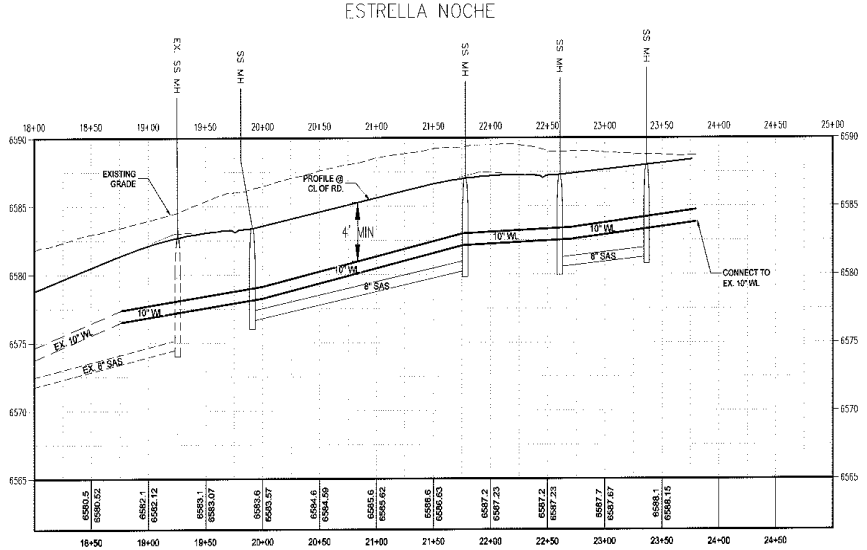
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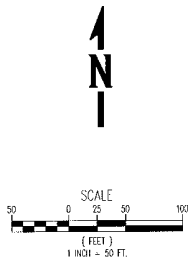
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WASTEWATER	
WATER	
PW ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
SOLID WASTE	
LAND/OPEN SPACE	
PARKS	
SUBDIVISION REVIEW	

SHEET NO.
SHEET C1-308
2020

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SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MILL/RAM SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 02, SHEET WL 1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY OR THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-2294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NS
CHECKED BY: RB
AS NOTED

PRELIMINARY 9-13-2020

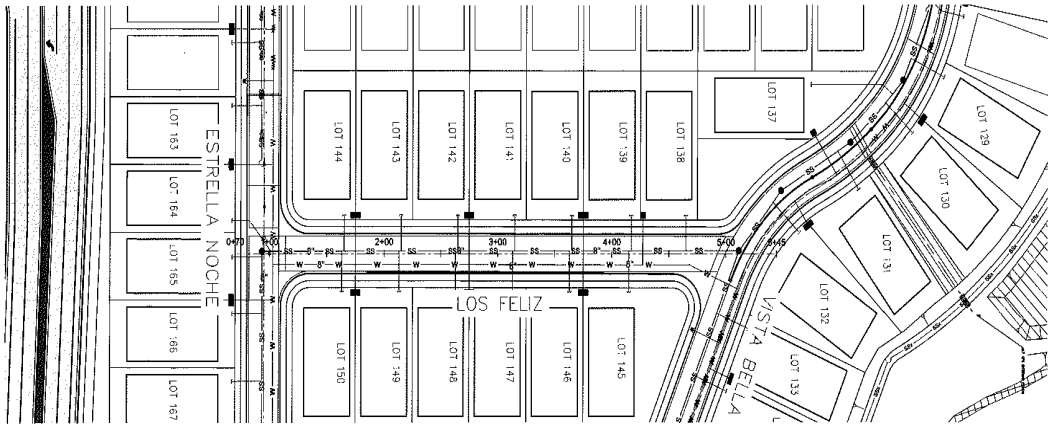
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

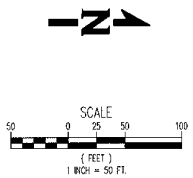
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WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

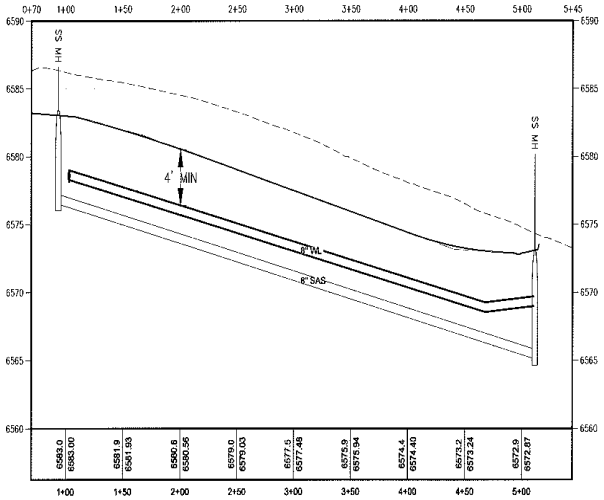
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LOS FELIZ



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
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11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-262-4845
www.whpacific.com

NO. | REVISIONS | BY | APP'D | DATE

PROJECT:
FILE:
DATE: 08/17/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, MG
CHECKED BY: RB
AS NOTED

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: WATER AND SEWER PLAN & PROFILE- LOS FELIZ

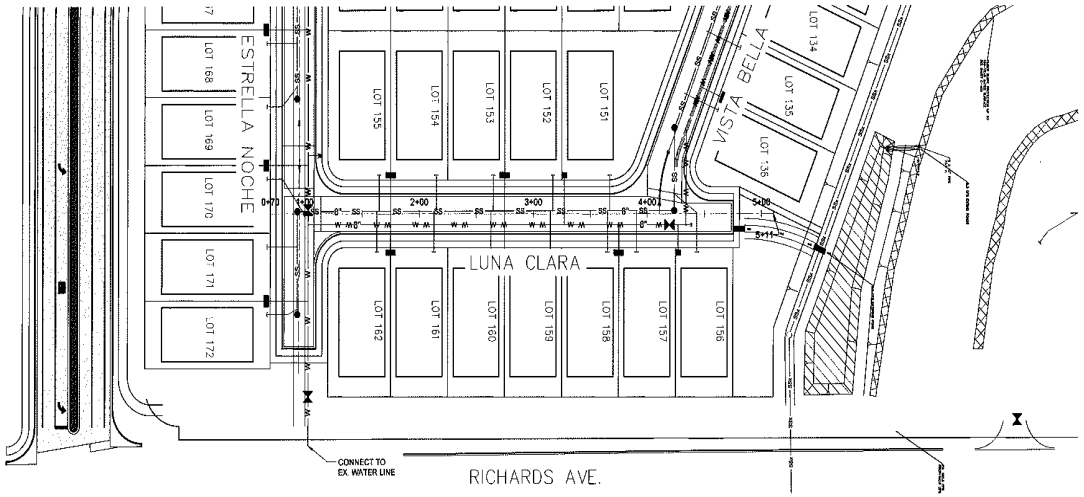
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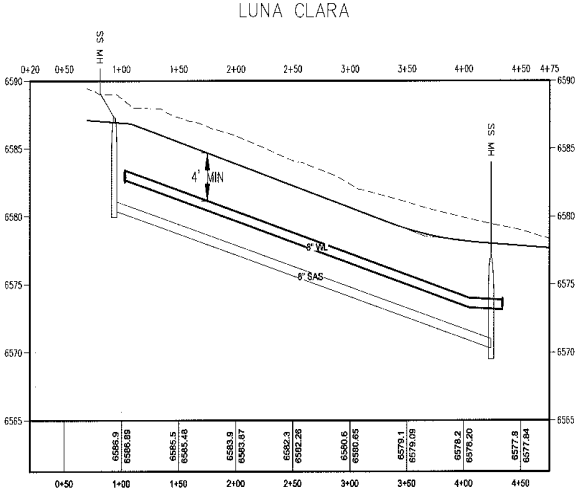
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WASTEWATER		
WATER		
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LANDSCAPE		
TRAILS / OPEN SPACE		
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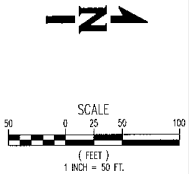
SHEET NO. C2-302

PROJECT NO. 2019

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SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
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5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
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11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE: 0801080
SCALE: AS NOTED
DESIGNED BY: RBI, BZ
DRAWN BY: BS, BZ, RBI, MG
CHECKED BY: RBI

PRELIMINARY 9-13-2020

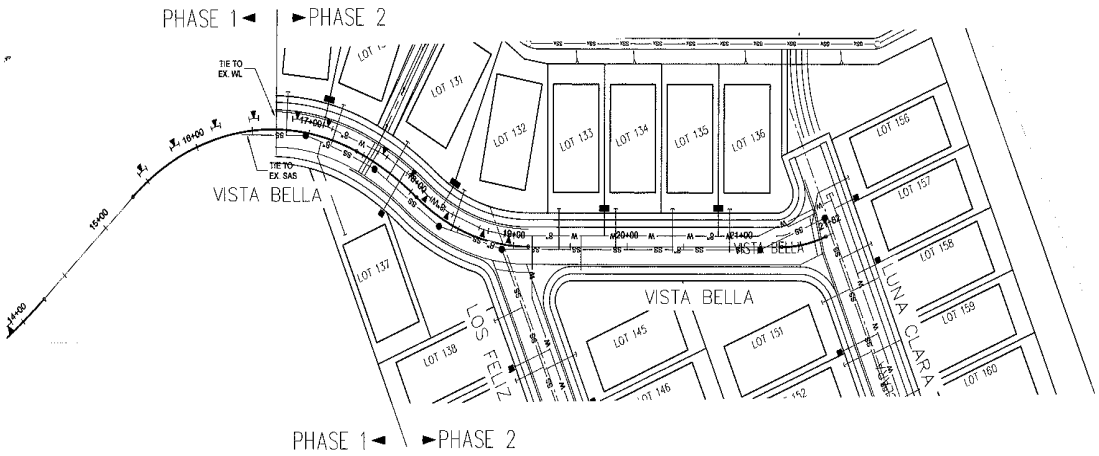
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

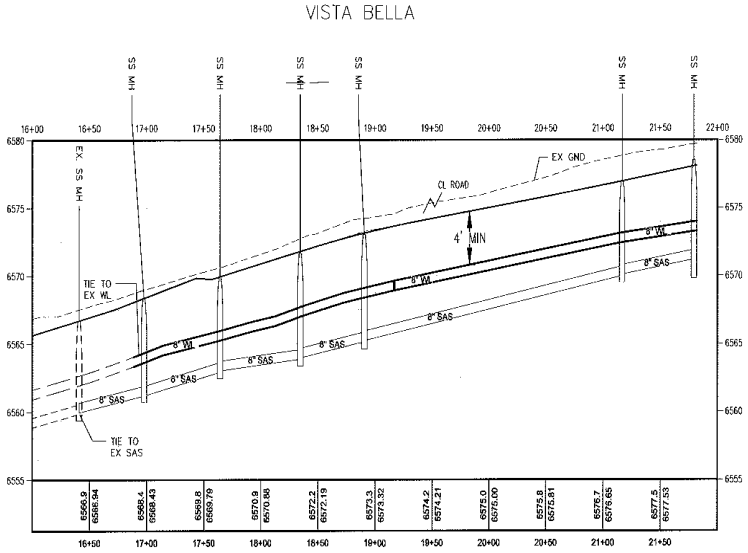
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- LUNA CLARA

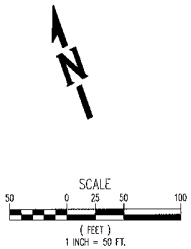
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C2-303

P:\Columbus Capital Corporation\22501\19-A0001105.00\Execution\Drawings\Civil\Phase 2\A0001105.00-C-Utility PLEP01_Phase 2.dwg 9/18/2020 11:48 AM







SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1997 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/31/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: RB, BZ, JJL, NCS
CHECKED BY:
AS NOTED

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

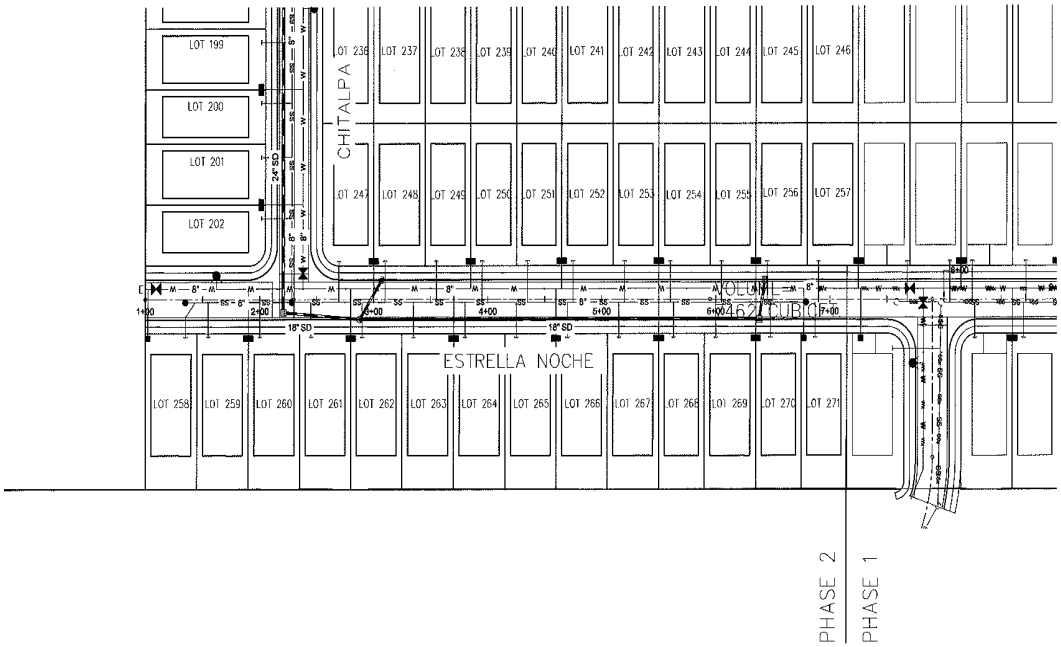
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- VISTA BELLA

CITY REVIEW

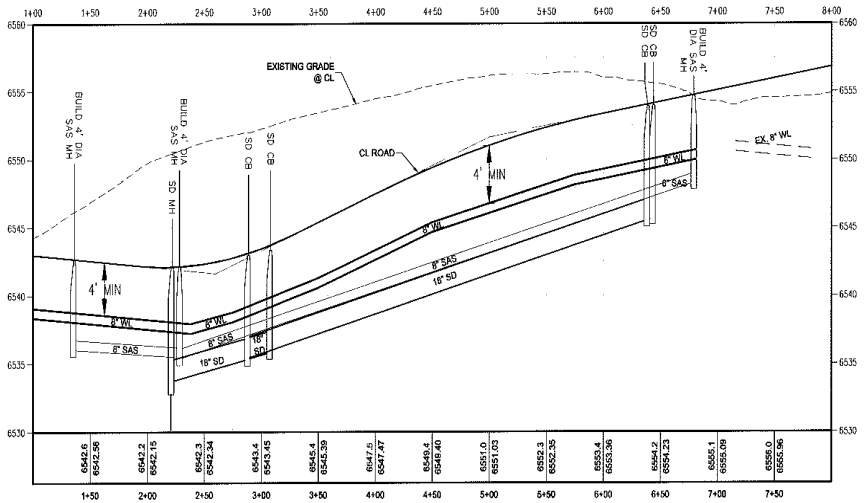
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

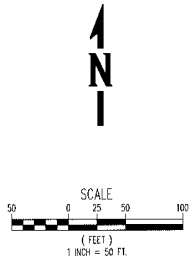
SHEET NO.
C2-304

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ESTRELLA NOCHE





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
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4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 67, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

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8501 Menaul Blvd. NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT: RR-102
FILE: DESIGNED BY: RR
DATE: 08/31/20 DRAWN BY: BZ, MG
SCALE: AS NOTED CHECKED BY: RB

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

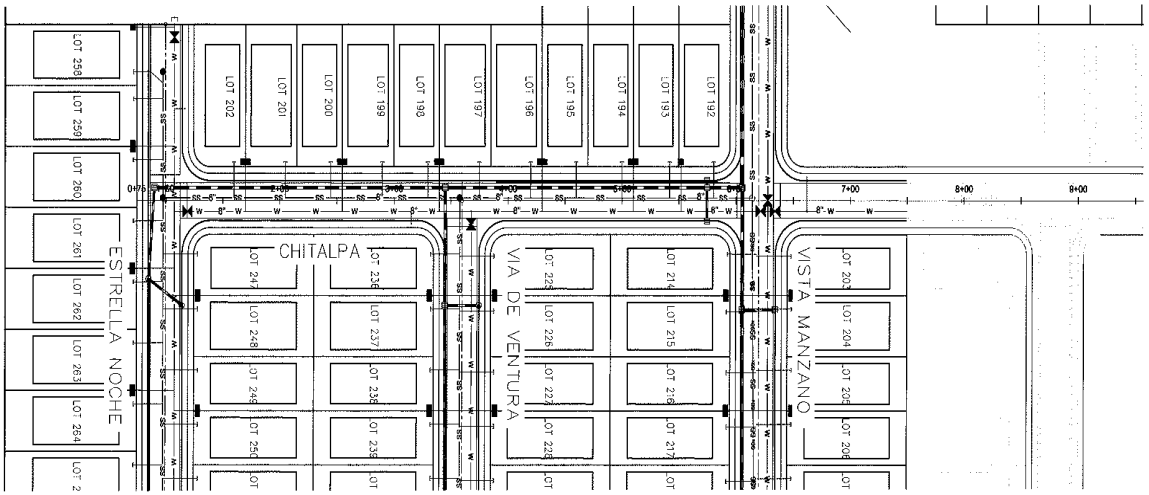
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- ESTRELLA NOCHE WEST

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW/ ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TREE PROTECTION SPACE		
SUBDIVISION REVIEW		

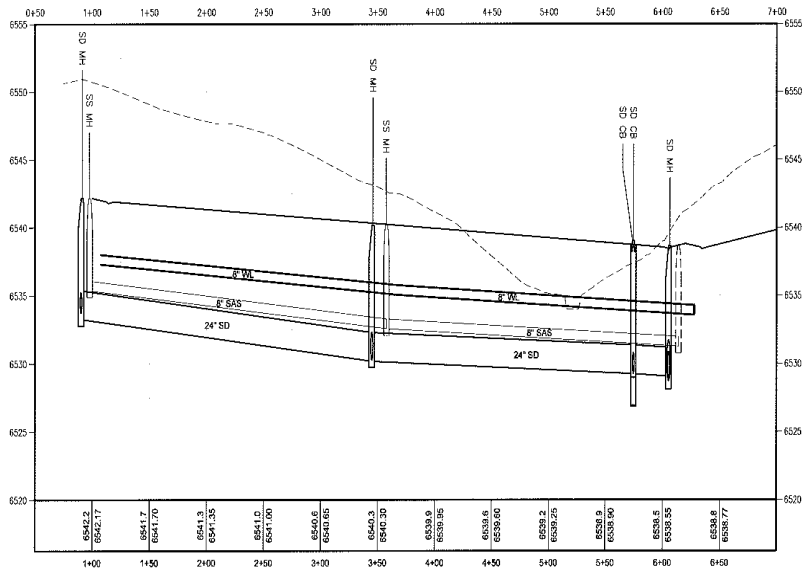
SHEET NO.
C2-305

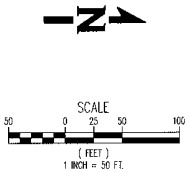
2020

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CHITALPA





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
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8. INSTALL 8" 11.25° BEND.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
8501 Americas Pkwy NE Suite 400
Albuquerque, NM 87113
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO. | REVISIONS | BY | APP'D | DATE

PROJECT:
FILE:
DESIGNED BY: RBS, BZ
DRAWN BY: BZ, JL, NG
CHECKED BY: RBS
DATE: 08/31/20
SCALE: AS NOTED

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

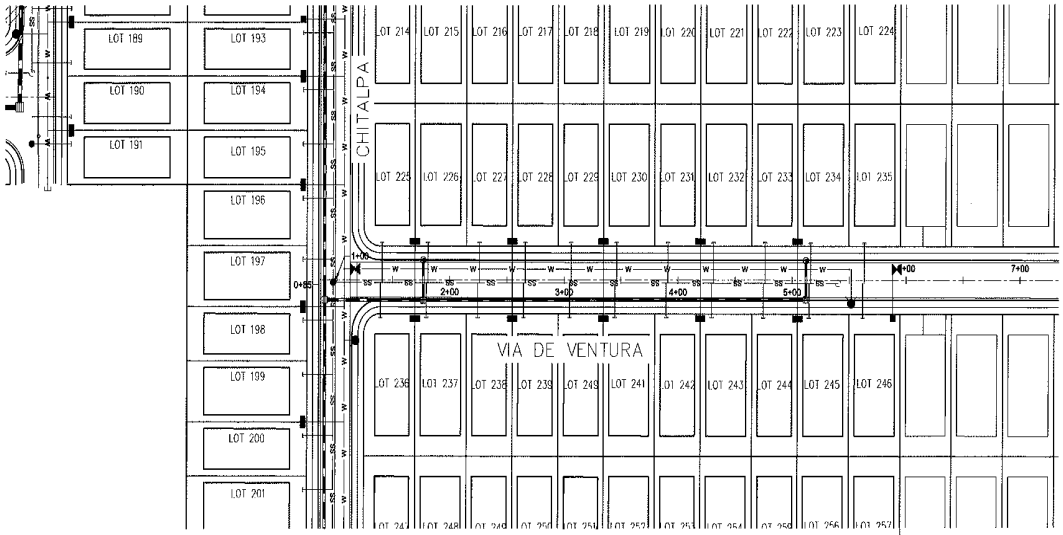
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- CHITALPA

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

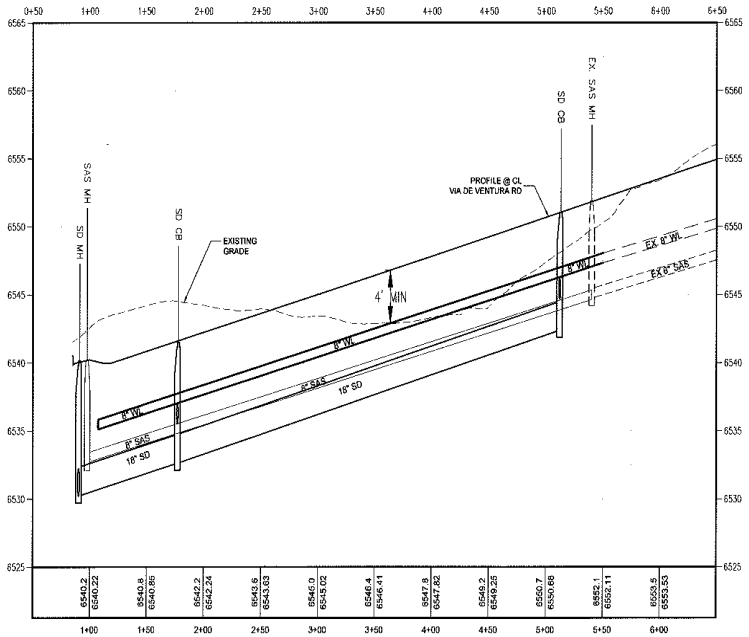
SHEET NO.
SCALE: C2-306
2020

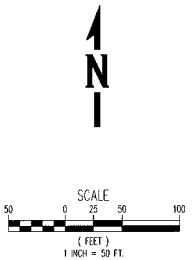
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PHASE 2 | PHASE 1

VIA DE VENTURA





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
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11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-262-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE: 0631020 DESIGNED BY: RB, BZ
DATE: DRAWN BY: JS, BZ, JL, MS
SCALE: CHECKED BY: RB AS NOTED

PRELIMINARY 9-13-2020

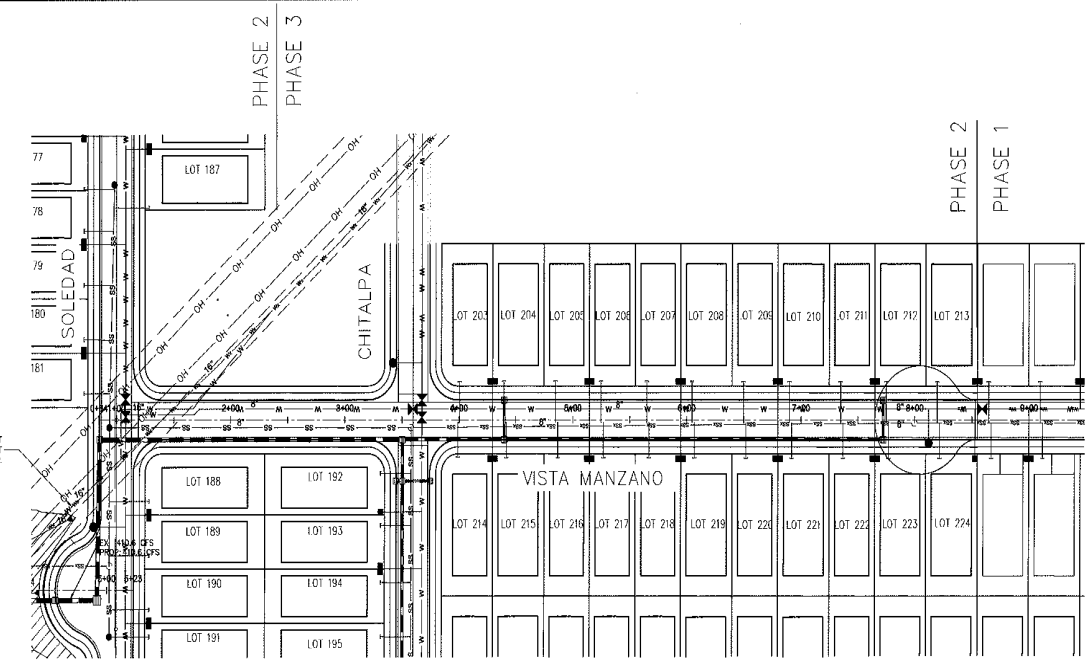
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

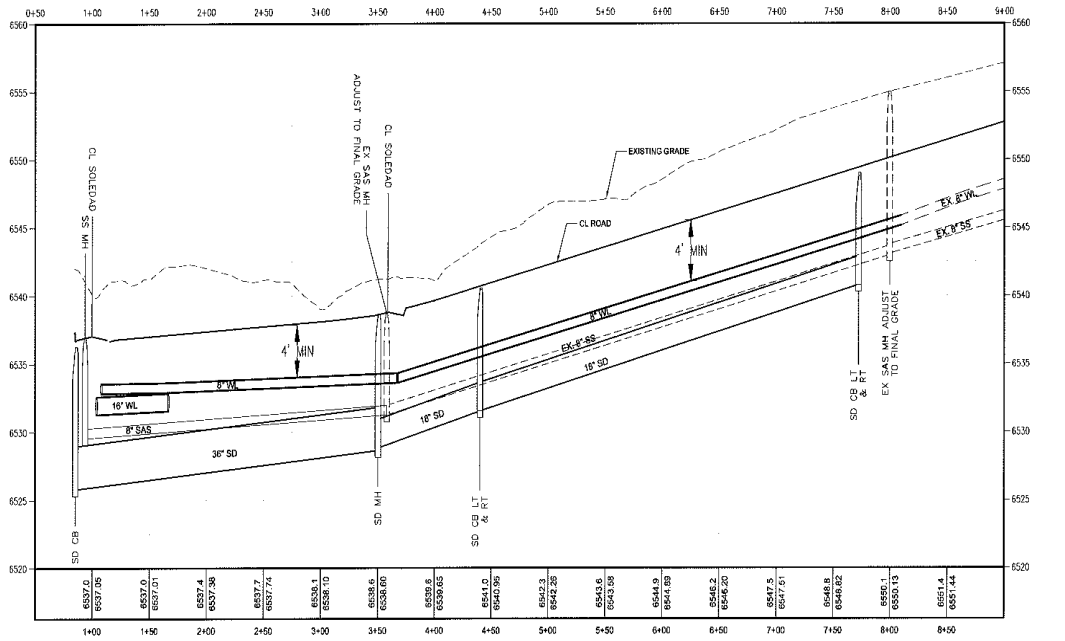
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- VIA DE VENTURA

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW/ ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION ASSTEM		

SHEET NO.
C2-307

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N

SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
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7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
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WATER KEYED NOTES:

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3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
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6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy. NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
DESIGNED BY: REL, BZ
DRAWN BY: BZ, BA, MG
CHECKED BY: REL
DATE: 09/01/20
SCALE: AS NOTED

PRELIMINARY
9-13-2020

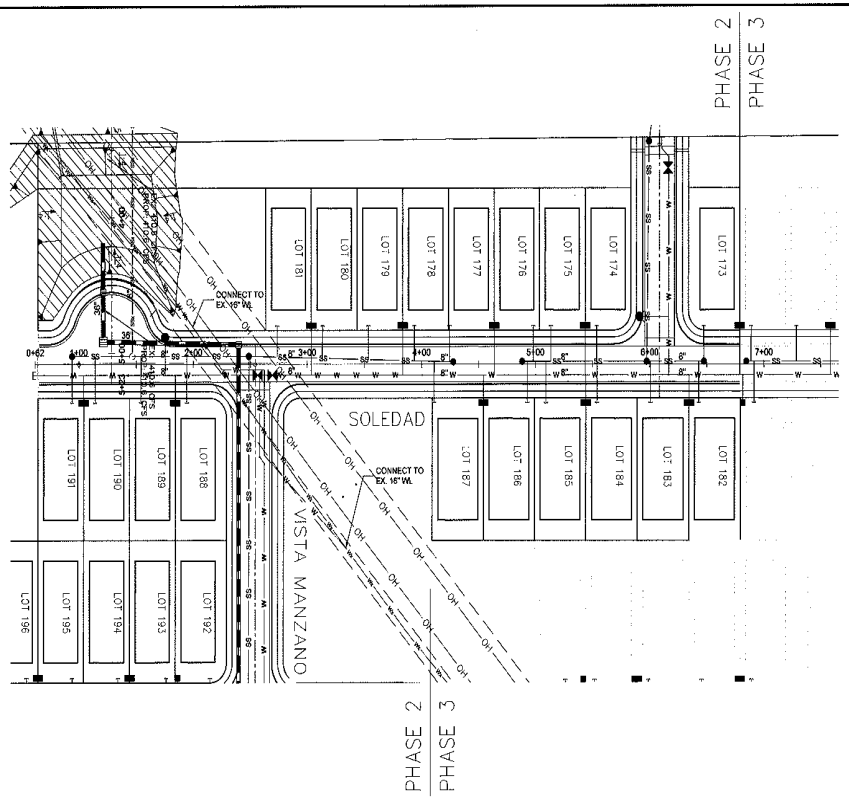
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: WATER AND SEWER PLAN & PROFILE- VISTA MANZANO

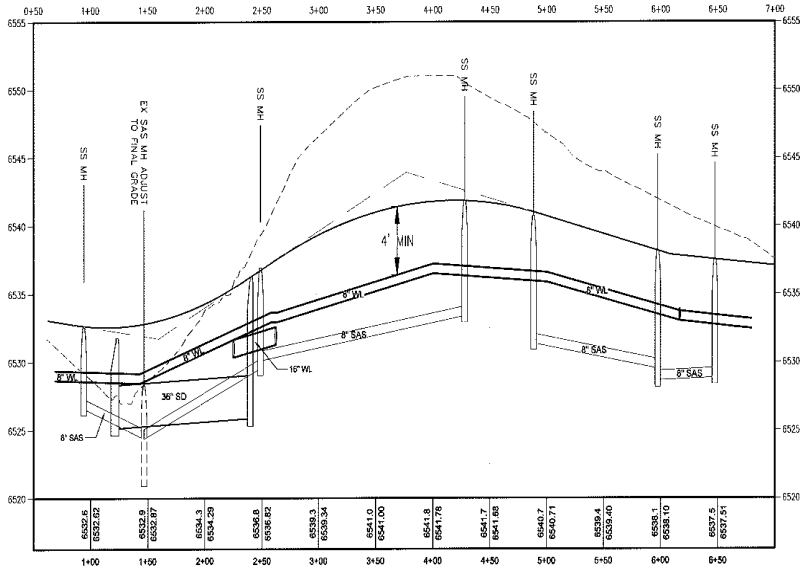
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

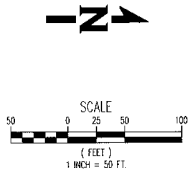
SHEET NO. C2-308

P:\Colombus Capital Corporation\225019-A000105.00\Execution\Drawings\Civil\Phase 2\A000105.00-C-LXRy PREPL_Phase 2.dwg 9/18/2020 11:49 AM



SOLEDAD





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2160.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
8501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87113
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
DESIGNED BY: RB, BZ
FILE:
DRAWN BY: BZ, JL, MG
DATE: 09/21/20
CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY 9-13-2020

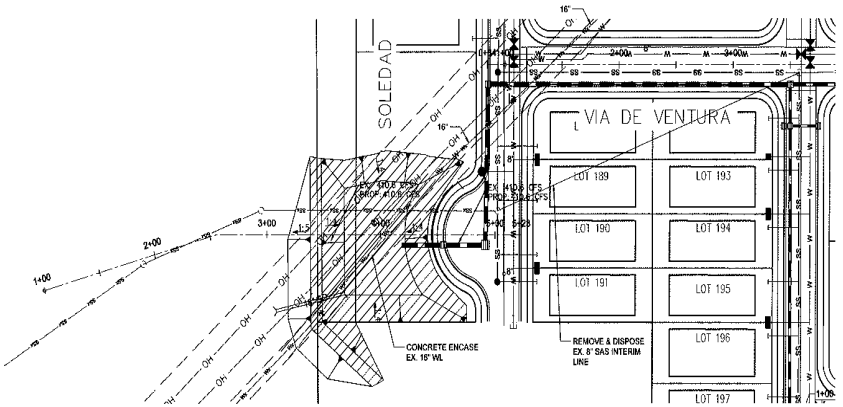
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: WATER AND SEWER PLAN & PROFILE- SOLEDAD

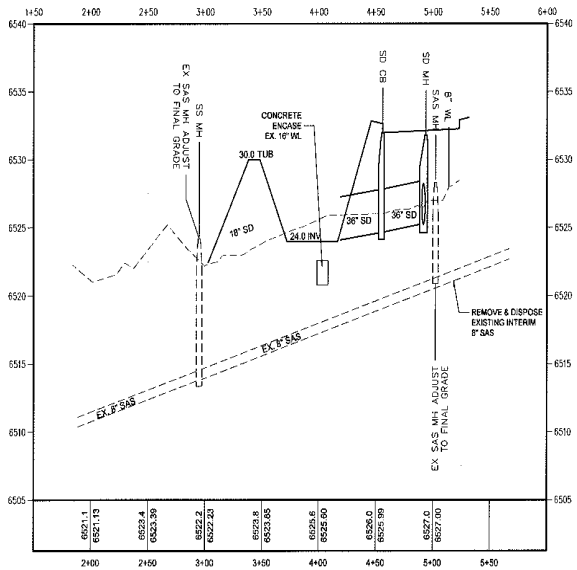
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SDCW WATER		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

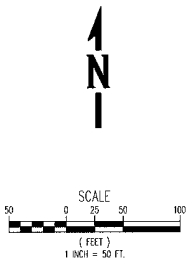
SHEET NO.
C2-309

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SOARING EAGLE





SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
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4. INSTALL 8"X8"X8" TEE.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6121 Indian School Rd. NE, Suite 400
Albuquerque, NM 87110
505-247-0264 Fax 505-243-4845
www.whpacific.com

NO.	REVISIONS	BY	APP'D	DATE

PROJECT:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, BC, NG
CHECKED BY: RB
DATE: 08/31/20
SCALE: AS NOTED

PRELIMINARY 9-13-2020

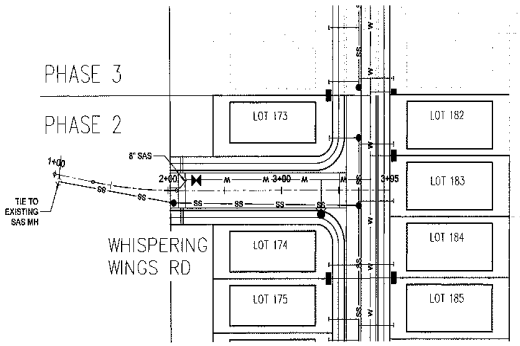
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: WATER AND SEWER PLAN & PROFILE- SOARING EAGLE

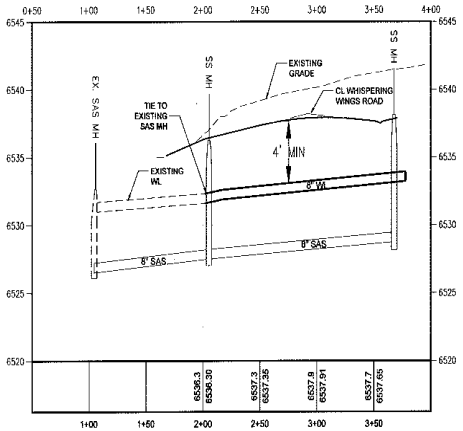
CITY REVIEW	DEPARTMENT	SIGN-OFF	DATE
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	WATER		
	PW ENGINEERING		
	TRAFFIC		
	FIRE DEPARTMENT		
	SOLID WASTE		
	LANDSCAPE		
	TRAILS / OPEN SPACE		
	SUBDIVISION REVIEW		

SHEET NO.
SCOUT C2-310 2020

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WHISPERING WINGS RD



N

SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

SAS KEYED NOTES:

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3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
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WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO. | REVISIONS | BY | APP. | DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: RS, BZ, JL, NGE
CHECKED BY: RB

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

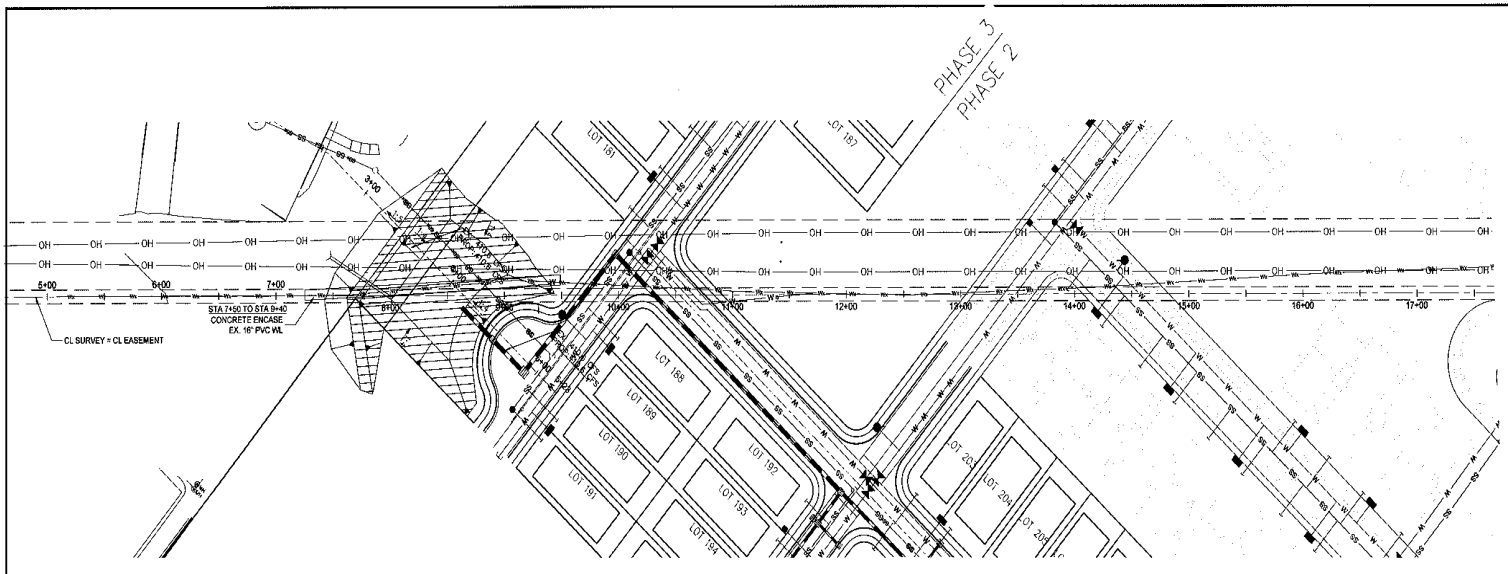
SHEET TITLE: WATER AND SEWER PLAN & PROFILE-WHISPERING WINGS RD

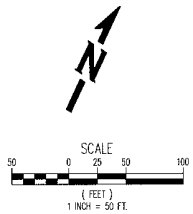
CITY REVIEW SIGN-OFF

DEPARTMENT	DATE
WASTEWATER	
WATER	
PW ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
SOLID WASTE	
LANDSCAPE	
TRAILS / OPEN SPACE	
SUBDIVISION REVIEW	

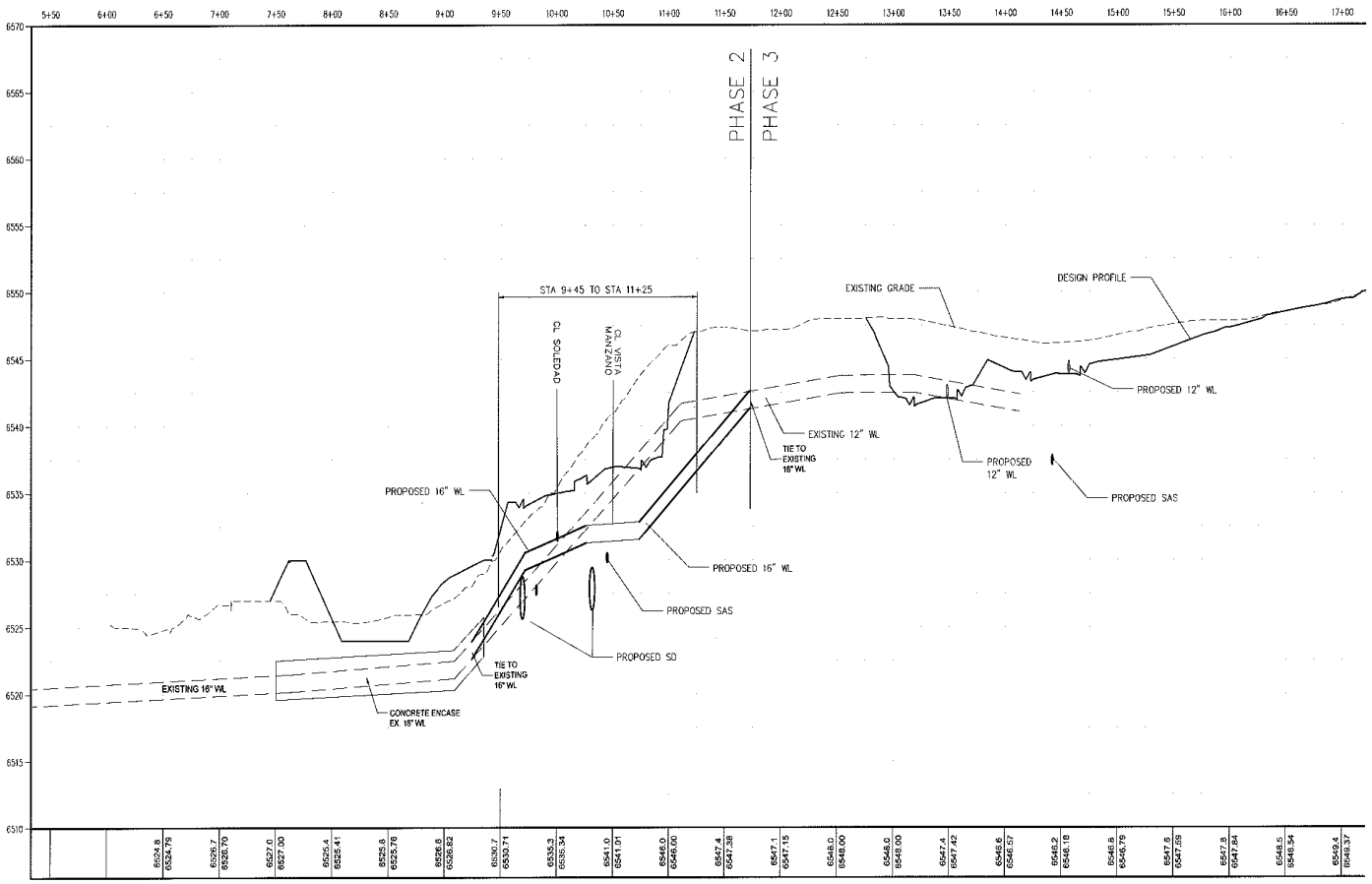
SHEET NO.
SHEETS 6
C2-311
2 OF 2

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EXISTING WL CL EASEMENT - (1) PROFILE



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1997 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
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WATER KEYED NOTES:

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3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
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6. INSTALL 8" 45° BEND.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 06/01/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

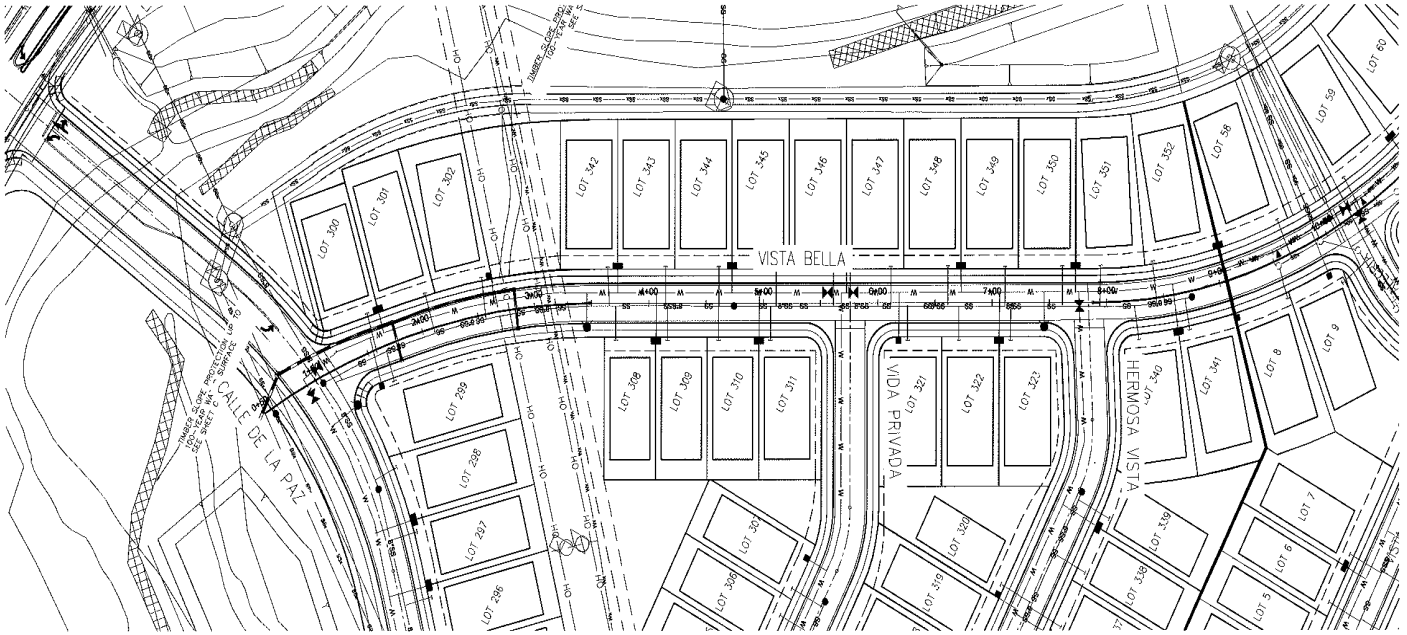
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- EXISTING WL

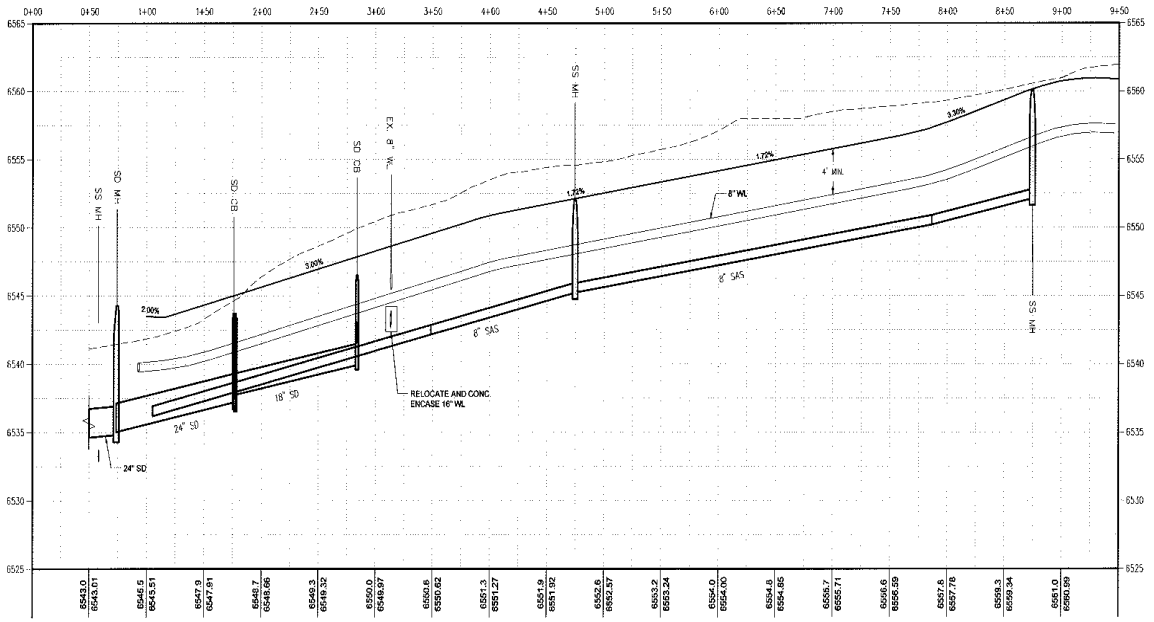
CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C2-312

P:\Columbus Capital Corporation\029019-A000105.00\Execution\Drawings\Civil\Phase 2\A000105.00-C-Utility P&P01_Phase 2.dwg 9/10/2020 11:49 AM





SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
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WATER KEYED NOTES:

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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-2294 Fax 505-262-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 05/21/2020
SCALE:
DESIGNED BY: RBI, BIZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RBI
AS NOTED

PRELIMINARY

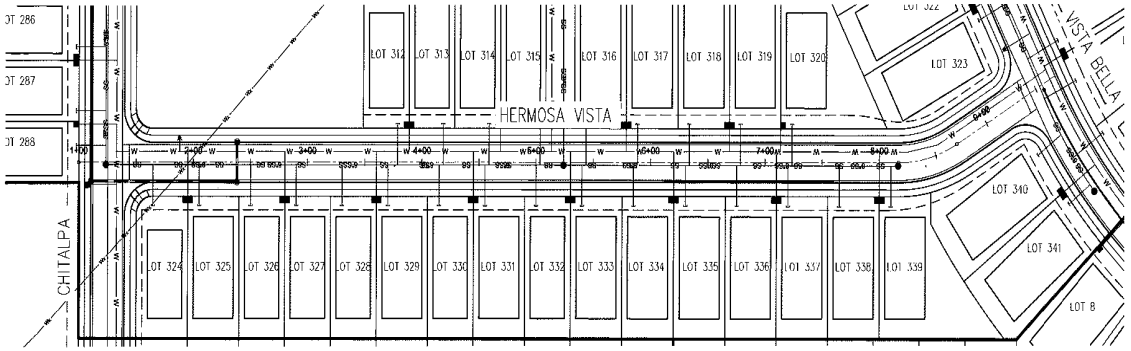
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

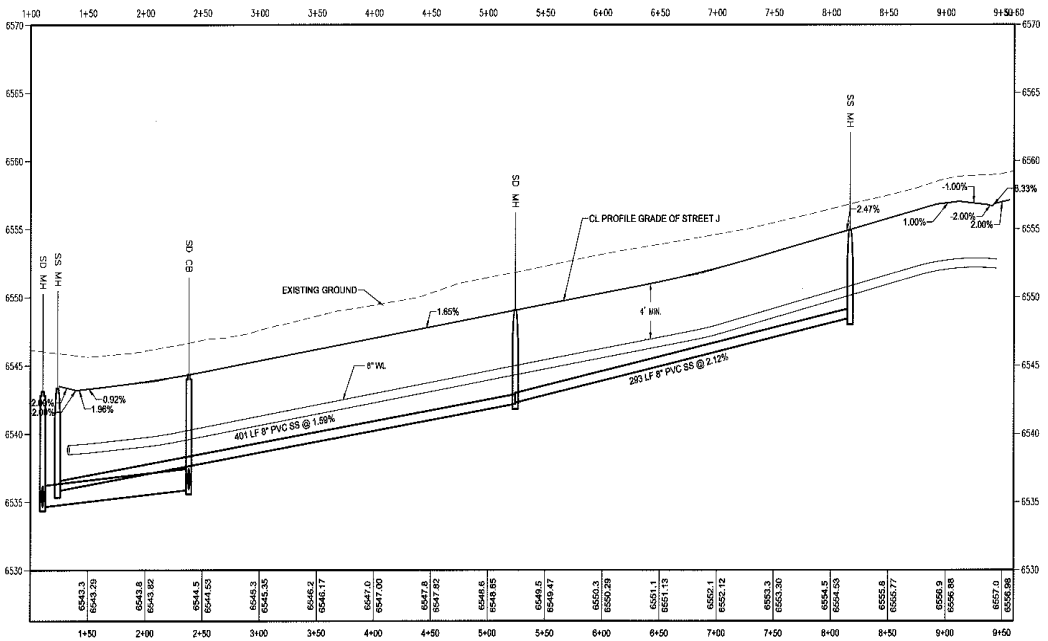
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET G

DEPARTMENT	SIGN-OFF	DATE
CITY REVIEW		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK & RECREATION		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-302

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N

SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
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8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 05, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"x8"x8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-342-4850 FAX 505-342-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, AL, NG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

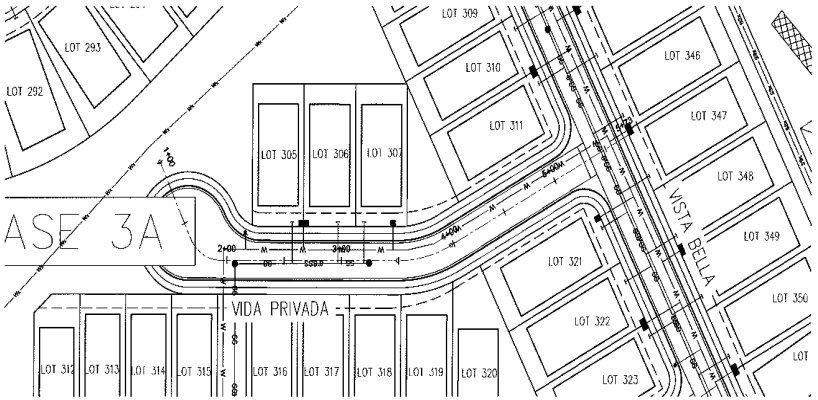
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET J

CITY REVIEW SIGN-OFF

DEPARTMENT	DATE
WASTEWATER	
WATER	
PW ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
PARKS	
LANDSCAPE	
TRAILS / OPEN SPACE	
SUBDIVISION REVIEW	

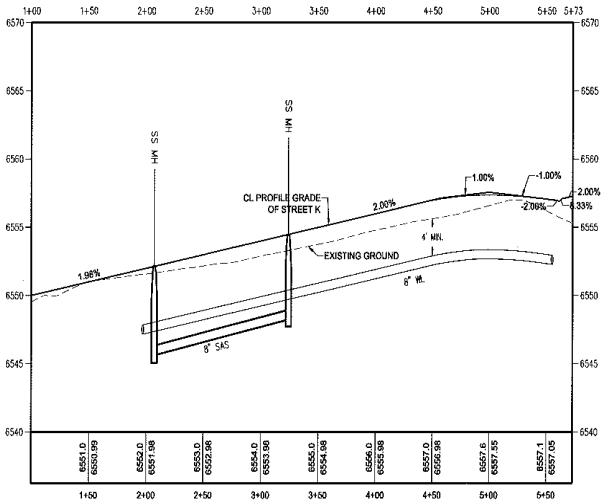
SHEET NO.
W C D S
C3-303
2 2 0 2 0

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N

SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.



SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 08, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-2294 Fax 505-242-4845
www.whpacific.com

NO. | REVISIONS | BY | APP. | DATE

PROJECT:
FILE:
DATE: 06/27/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET K

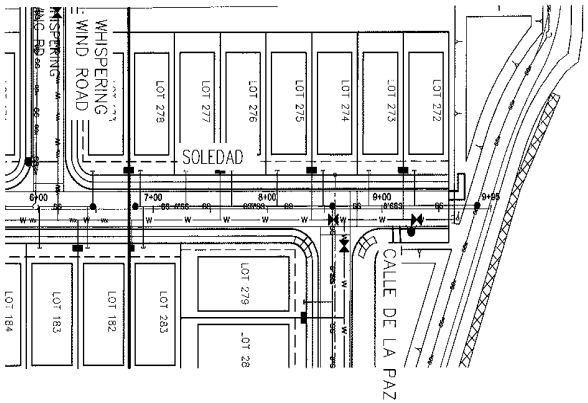
CITY REVIEW | SIGN-OFF | DATE

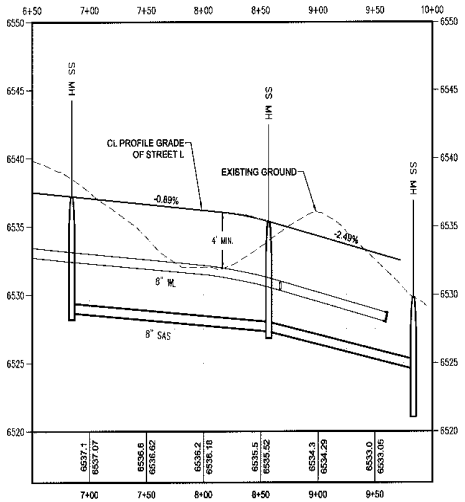
DEPARTMENT
WASTEWATER
WATER
PW ENGINEERING
TRAFFIC
FIRE DEPARTMENT
SOLID WASTE
LANDSCAPE
TRAILS / OPEN SPACE
SUBDIVISION REVIEW

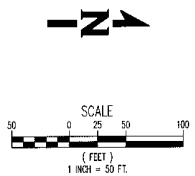
SHEET NO.
C3-304

2020

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SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0004 Fax 505-842-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY:JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

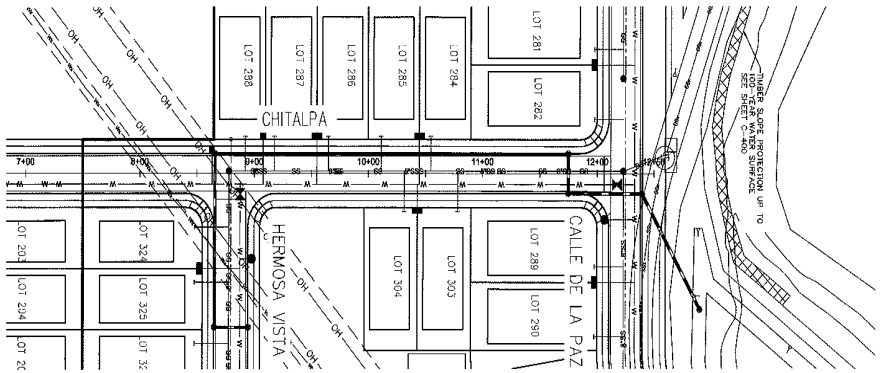
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET L

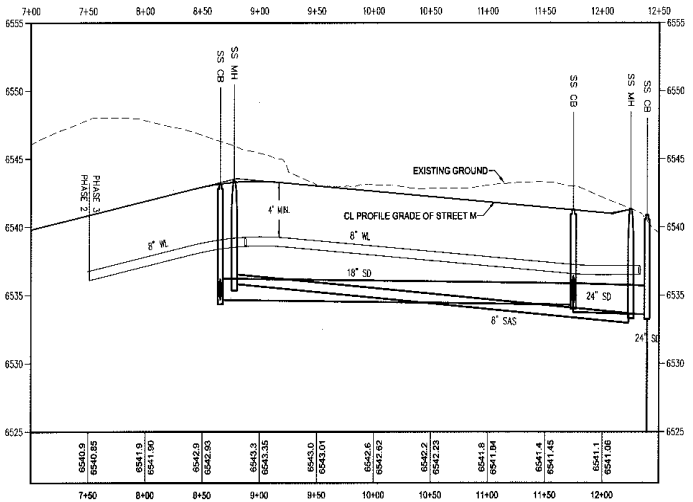
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PWD / ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LAND USE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

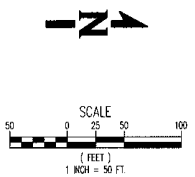
SHEET NO.
C3-305

2020

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SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2160.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET W.-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET W.-1.
4. INSTALL 8"X8"X6" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET W.-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"X8"X6" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-858-3100, Fax: 505-242-4545
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 05/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

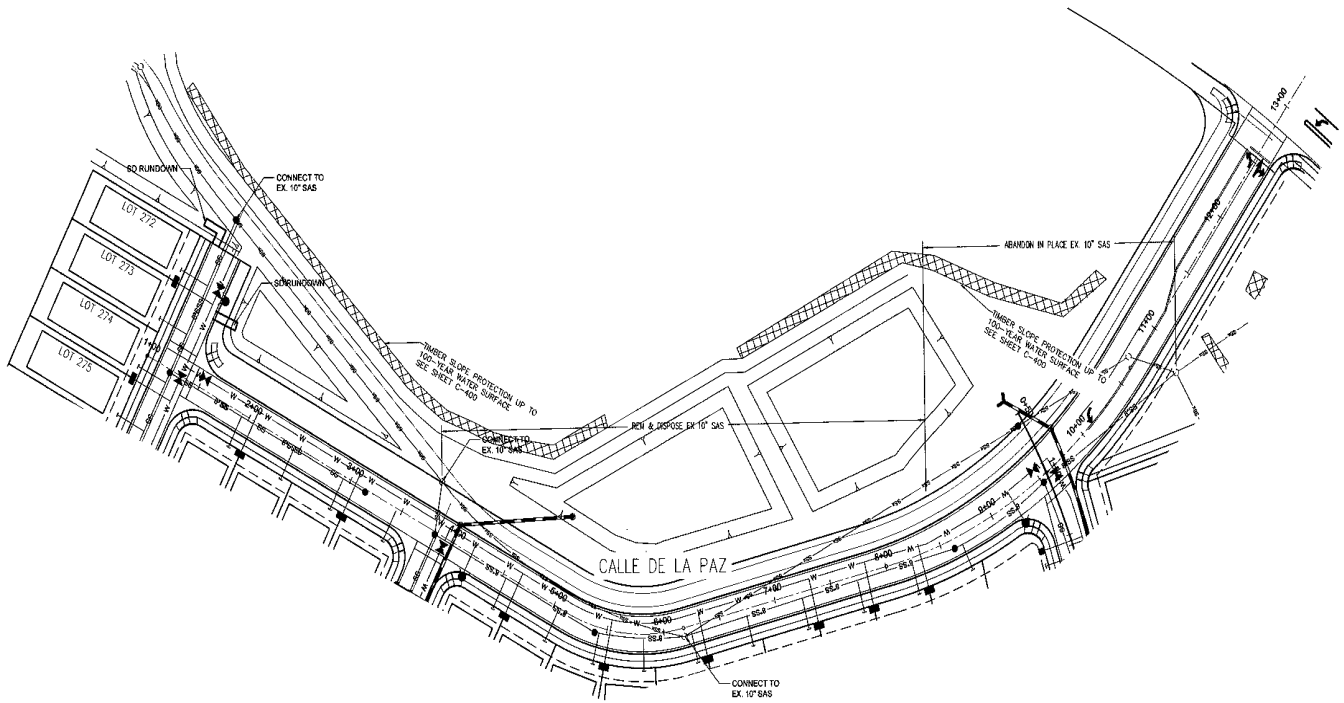
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

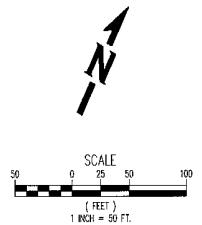
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET M

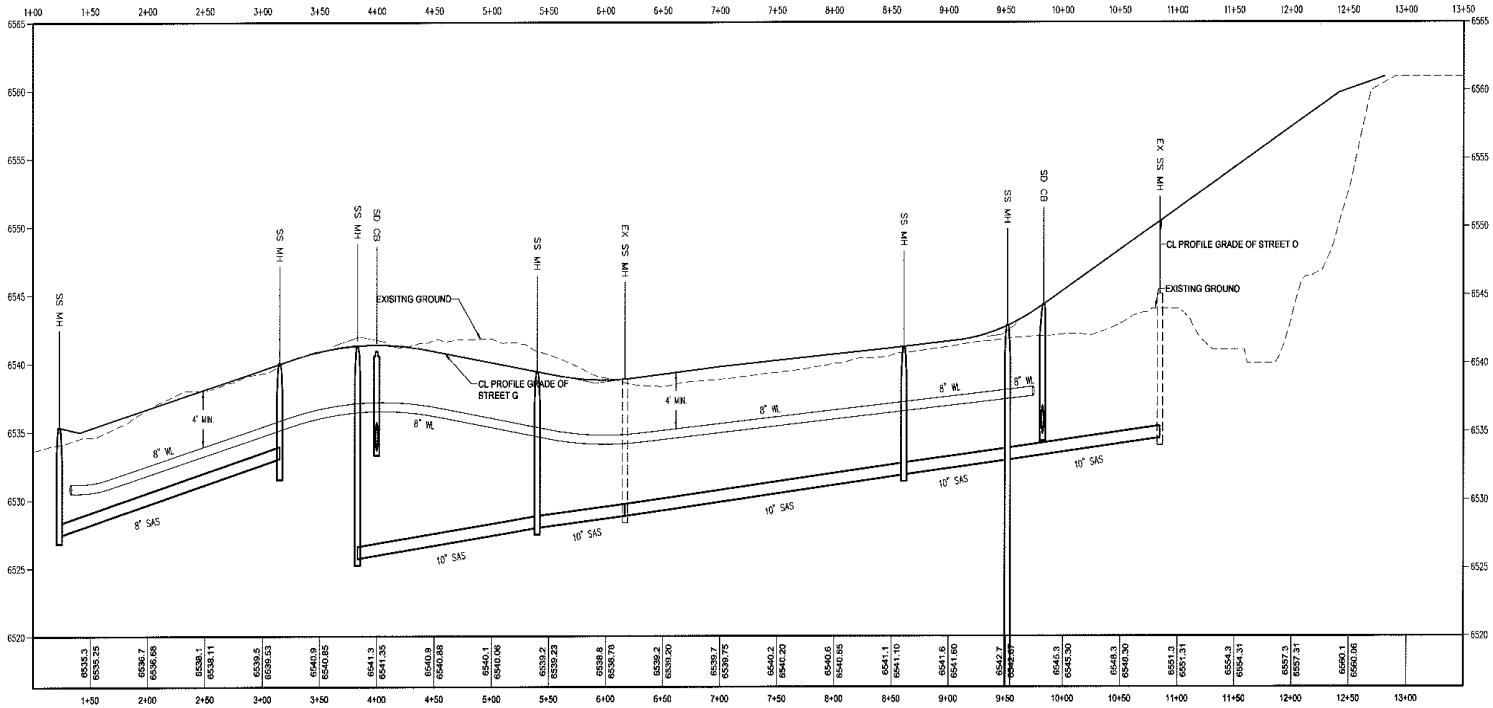
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-306

P:\Columbus Capital Corporation\2290519-A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C-Utility Plt\P01_Phase 3.dwg 9/18/2020 12:08 PM







SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"X8"X8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 08, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY, SAW CUT NEAT. INSTALL NEW 8"X8"X8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

WHPacific
6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-348-4000 Fax 505-242-4846
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

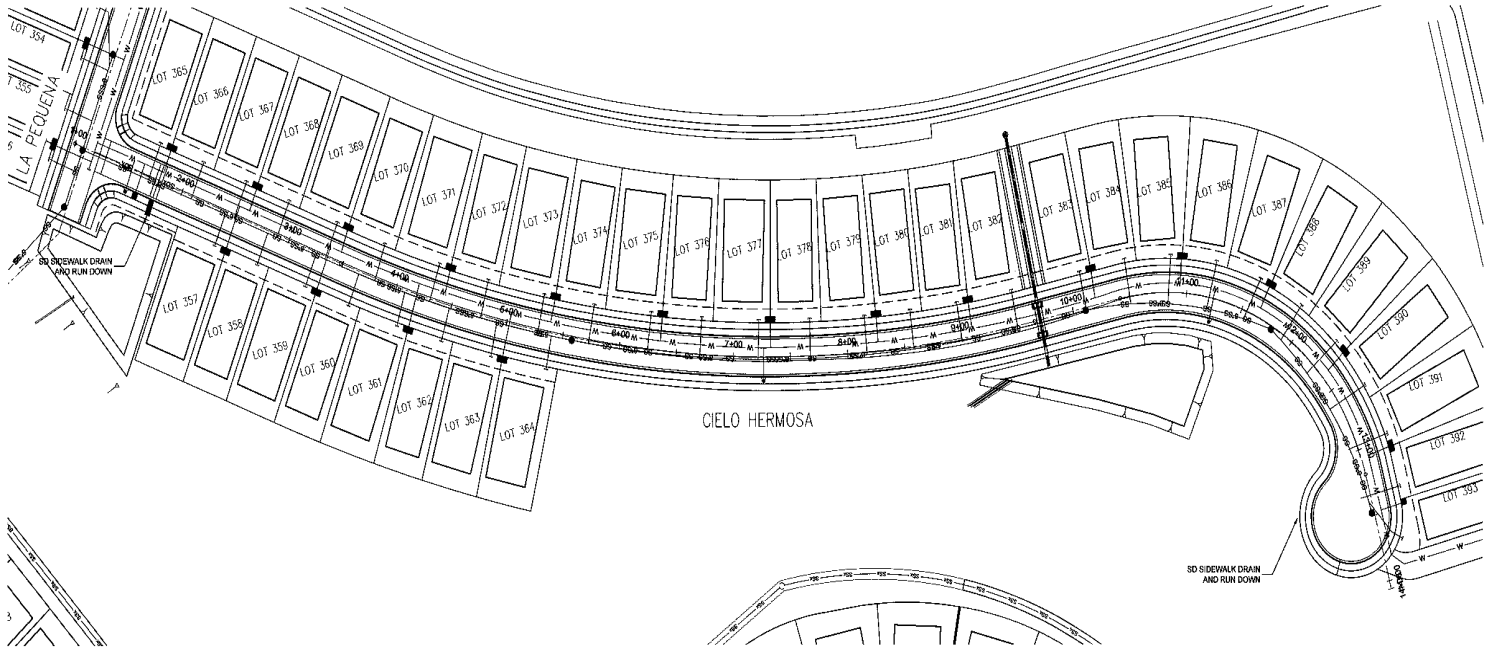
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

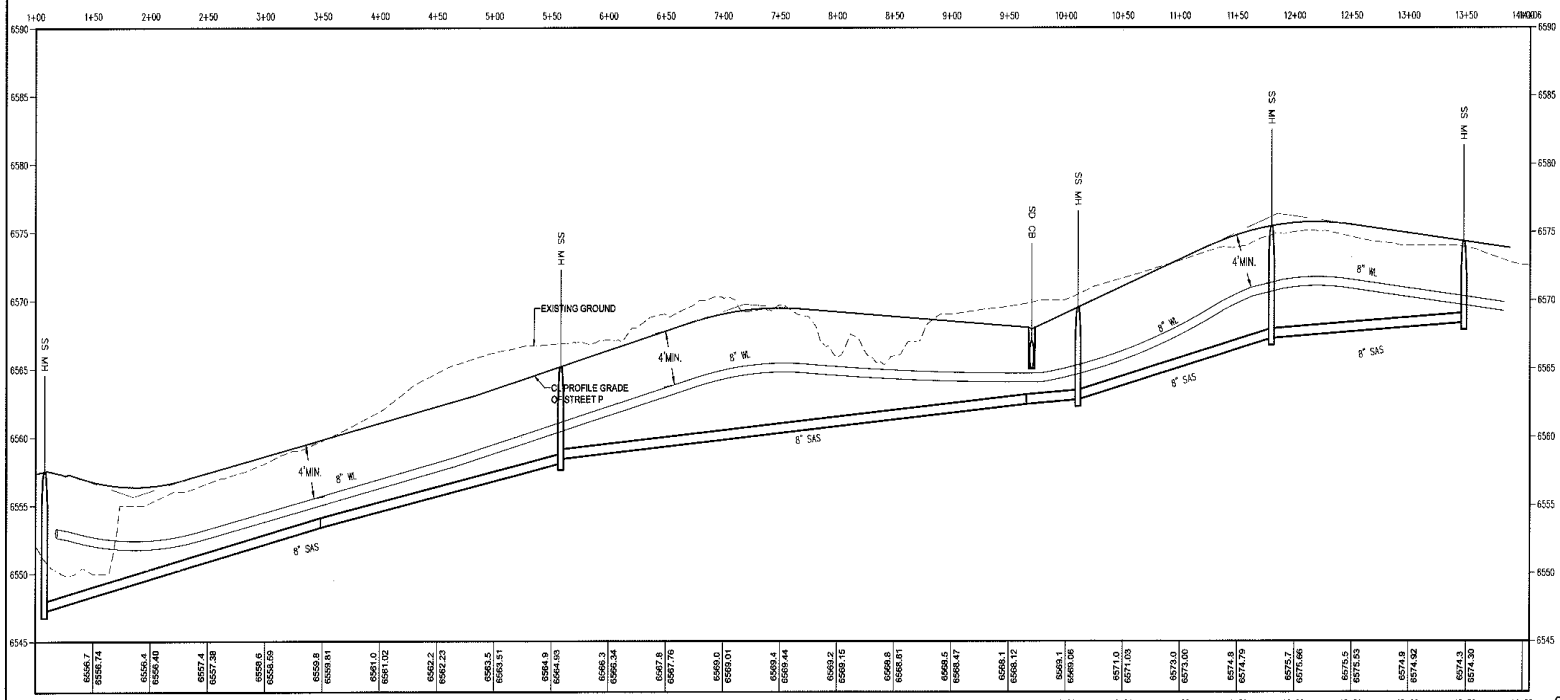
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET O

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PW / ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
SOLID WASTE			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
C3-307

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SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1997 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-1.3.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
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12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX

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6501 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-2294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

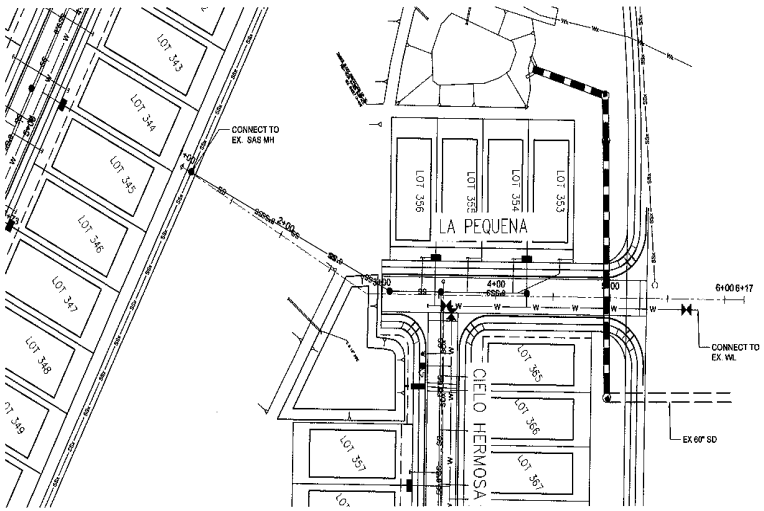
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

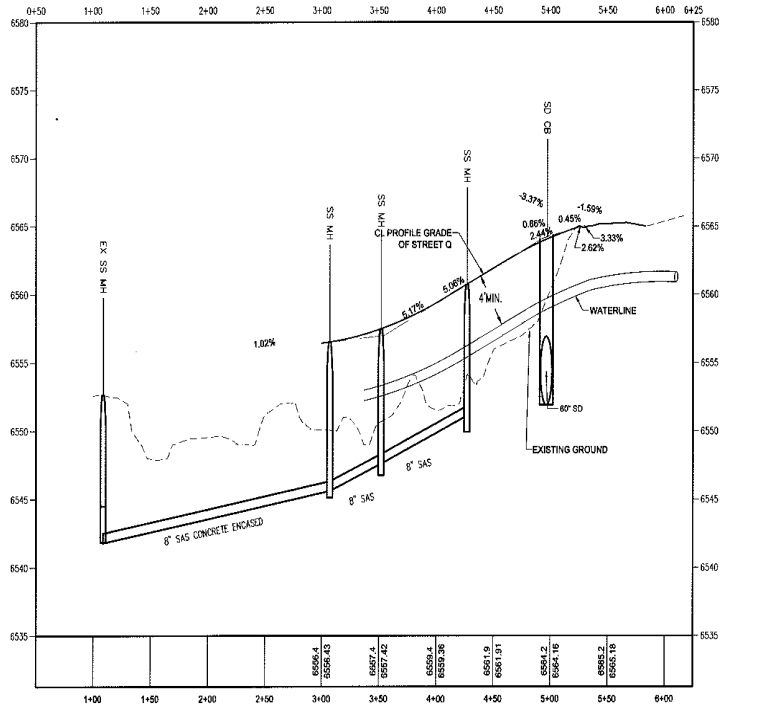
SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET P

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARKS & SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
SHEET C3-308 OF 2

P:\Columbus Capital Corporation\325019-A\00105.00\Execution\Drawings\Civil\Phase 3\A00105.00-C-Utility P&P01_Phase 3.dwg 9/18/2020 12:09 PM





4' MIN.

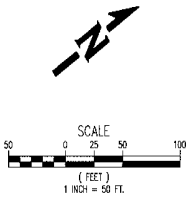
SAS KEYED NOTES:

1. CONSTRUCT SANITARY SEWER MANHOLE IN ACCORDANCE WITH THE "STANDARD MANHOLE DETAIL SHEET" SHOWN ON THE CITY STANDARD DRAWINGS.
2. ALL PUBLIC GRAVITY SEWER LINES SHALL BE A MINIMUM OF 8 INCH DIAMETER, SDR 26 PIPE AND A MINIMUM CLASS C BEDDING (1987 NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION).
3. CONSTRUCT MANHOLE WITH LOCKING AND WATER TIGHT MANHOLE COVERS & DETAIL ON THIS SHEET.
4. SECTION OF NEW SEWERLINE UNDER RICHARDS AVE TO BE BORED PER COA DETAIL DWG 2180.
5. PROTECT EXISTING WATERLINE IN PLACE.
6. PROTECT EXISTING OVERHEAD POWER LINE IN PLACE.
7. PROTECT EXISTING SANITARY SEWER LINE IN PLACE.
8. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER LINE. CONTRACTOR TO VERIFY DEPTH PRIOR TO CROSSING.
9. REMOVE AND REPLACE ASPHALT FOR SEWER LINE EXCAVATION PER RICHARDS AVENUE WITH MEDIAN SECTION ON SHEET C-13.
10. SAW CUT CLEAN LINE ON EXISTING ASPHALT TO TIE ON NEW PAVEMENT.

WATER KEYED NOTES:

1. INSTALL 8" C-900 PVC WATER LINE PER SDCW CO. STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL FIRE HYDRANT PER PER SDCW CO. STANDARD DETAIL 07, SHEET WL-1.
3. INSTALL 8" GATE VALVE PER SDCW CO. STANDARD DETAIL 08, SHEET WL-1.
4. INSTALL 8"x8"x8" TEE.
5. INSTALL 8" 90° BEND.
6. INSTALL 8" 45° BEND.
7. INSTALL 8" 22.5° BEND.
8. INSTALL 8" 11.25° BEND.
9. INSTALL 1" WATERLINE SERVICE PER DETAILS 02A AND 06, SHEET WL-1 AND INSTALL 1" CURB STOP AND BOX AT TERMINATION OF LINE. FUTURE CONNECTION SHALL BE MADE BY THE SANGRE DE CRISTO WATER COMPANY IN THE CITY OF SANTA FE.
10. PROTECT UTILITY LINES WHEN CROSSING FOR NEW WATERLINE INSTALLATION USING FOLLOWING SDCW CO. STANDARDS AND SPECIFICATIONS.
11. TIE TO EXISTING 8" STUB OUT. LOCATION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY. SAW CUT NEAT. INSTALL NEW 8"x8"x8" TEE WITH GATE VALVE IN NON-PRESSURED CONNECTION. RESTRAIN AND INSTALL FITTINGS PER MANUFACTURERS SPECIFICATIONS.
12. PROPOSED STORM DRAIN CROSSING.

CASE/PERMIT NO. S-2020-XX



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, SZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

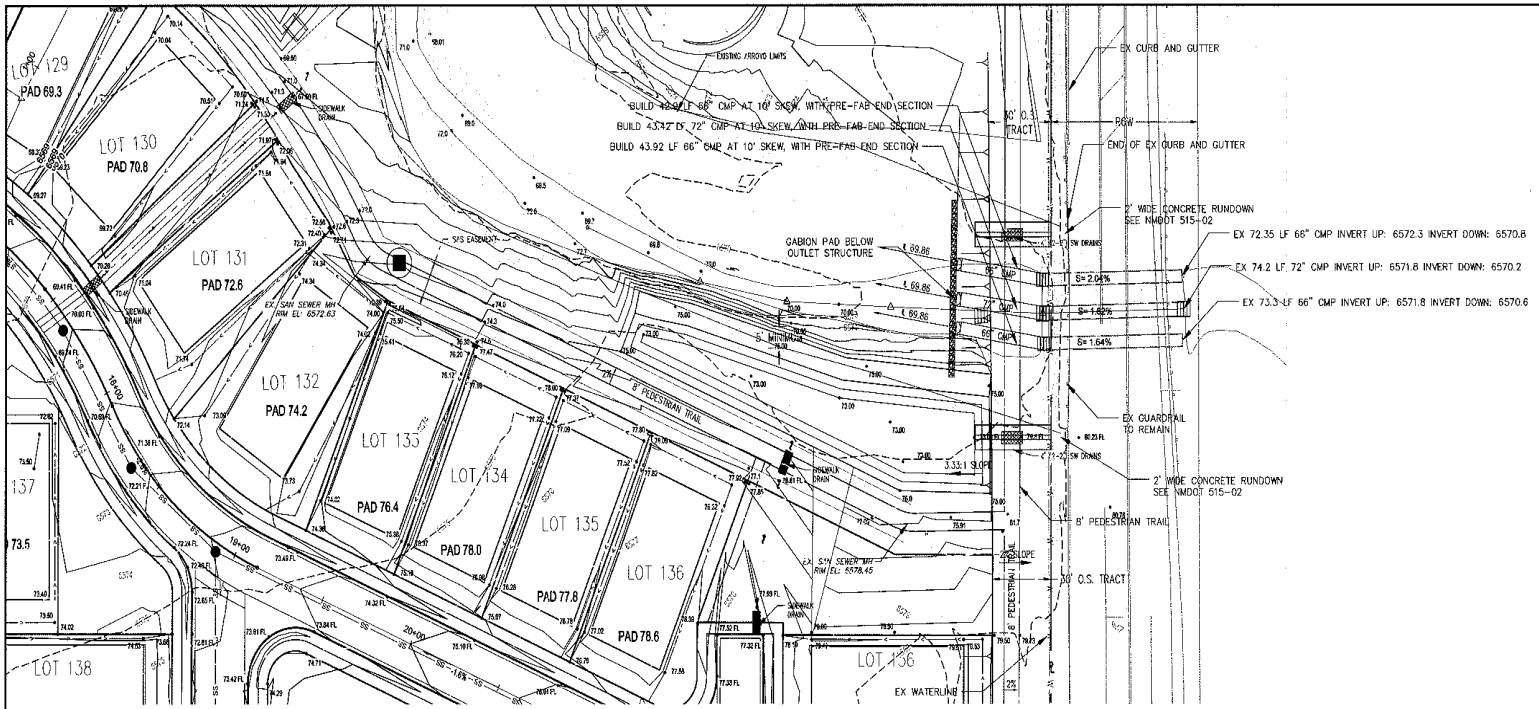
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: WATER AND SEWER PLAN & PROFILE- STREET Q

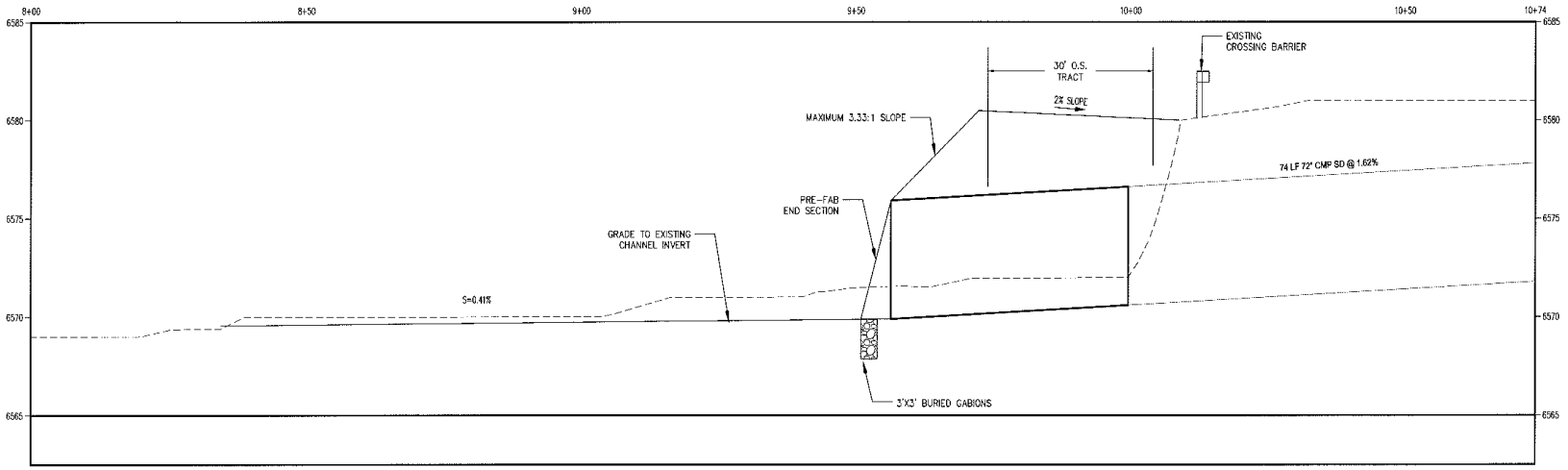
DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARKS & RECREATION		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
W C D S C3-309 2020

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Richards Crossing PROFILE



SCALE: 1":10' H
1":5' V

CASE/PERMIT NO. S-2020-XX

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NO: REVISIONS BY APP. DATE
PROJECT:
FILE:
DATE: 05/01/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

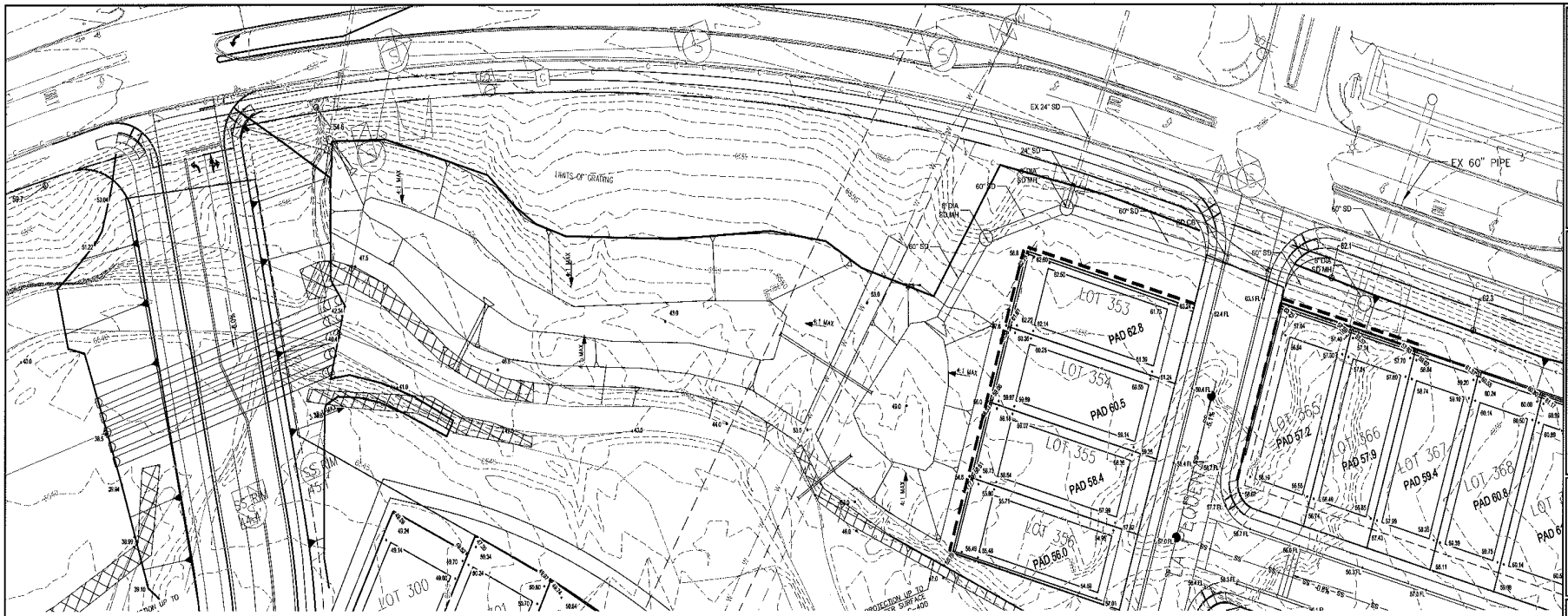
PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2
SHEET TITLE: ARROYO CROSSING - PHASE 2

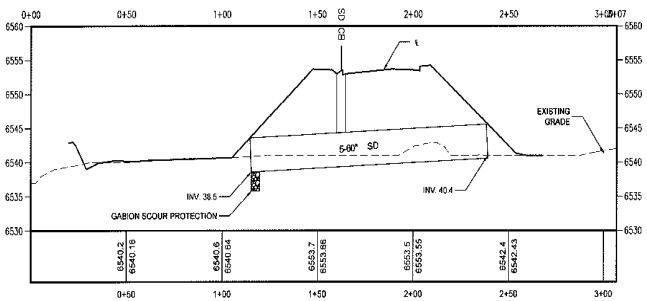
DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARK PLANNING		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C-400

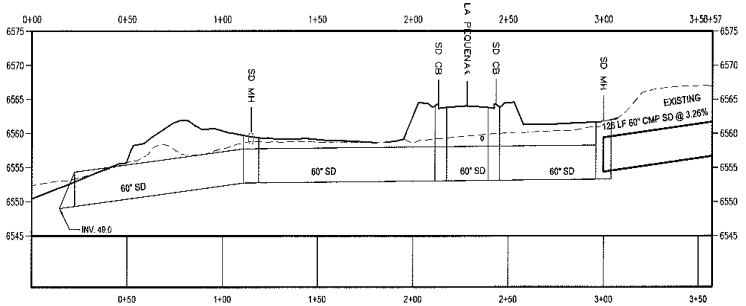
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Calle De La Paz Crossing PROFILE



Pipe From Northern Subdivision PROFILE



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RS, RZ
DRAWN BY: RS, RZ, JL, MG
CHECKED BY: RS

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2
SHEET TITLE: STORM AND ARROYO - PHASE 3

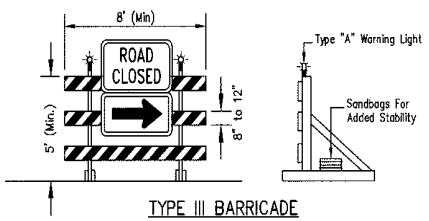
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
CAD/GIS/ADDRESS		
LAND DEVELOPMENT		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C-401

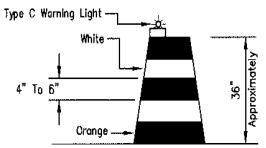
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TEMPORARY TRAFFIC CONTROL DEVICES

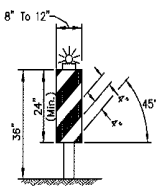
DESIGNATION	DETAIL	MINIMUM SIZE (inches)	DESIGNATION	DETAIL	MINIMUM SIZE (inches)	DESIGNATION	DETAIL	MINIMUM SIZE (inches)
W20-1	ROAD WORK 1500 FT	48 x 48	W1-4R W1-4L		30 x 30 30 x 30	W1-6R W1-6L		48 x 24 48 x 24
W20-1a	ROAD WORK AHEAD	48 x 48	W16-2a	500 FEET	24 x 18	G20-1	ROAD WORK NEXT 4.5 MILES	60 x 24
W20-1b	ROAD WORK 1/2 MILE	48 x 48	G20-2a	END ROAD WORK	48 x 24	W3-4	BE PREPARED TO STOP	36 x 36
W20-4	ONE LANE ROAD 1000 FT	48 x 48	Type III Barricade		As Shown			
W20-7a		48 x 48	R11-2	ROAD CLOSED	48 x 30			
W13-1	15 MPH	24 x 24	W8-12	NO CENTER STRIPE	48 x 48			
Drums or Vertical Panels		As Shown						
Type A Warning Lights		N/A						
Type C Warning Lights		N/A						



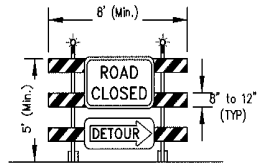
TYPE III BARRICADE



DRUM

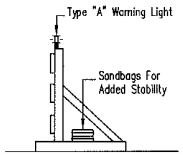


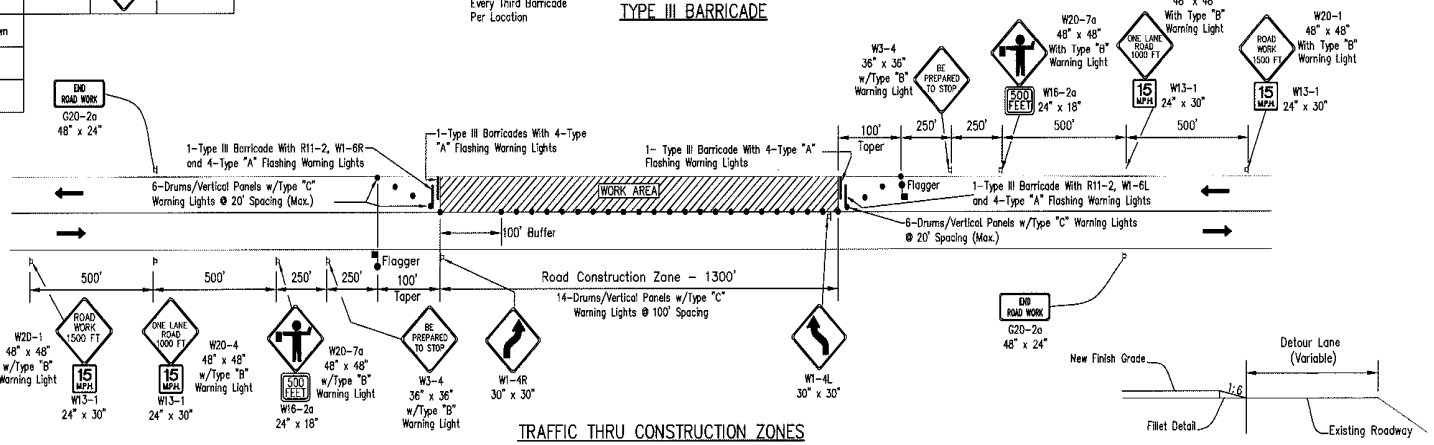
VERTICAL PANEL
(Alternate)



Signs Required On Every Third Barricade Per Location

TYPE III BARRICADE





TRAFFIC THRU CONSTRUCTION ZONES

FILLET DETAIL

GENERAL NOTES

1. All Traffic Control Devices Shall Be in Accordance With the MUTCD (Latest Edition and Amendments) and the Supplemental Specifications for This Project.
2. The Traffic Control Details Shown Are Only a Guide. The Contractor Is Solely Responsible For Implementing a Traffic Control Plan (TCP) in Accordance With These Details, Section 700 of NMDOT Standard Specifications, and the MUTCD Under Item 63501-0000. Any Additional Traffic Control Devices Called For on the Contractor's TCP Will Not Be Measured For Payment But Shall Be Considered Incidental to the Bid Items For Traffic Control Shown in the Bid Schedule. See the Supplemental Specifications For Additional Requirements.
3. Signs G20-1 and G20-2a Shall Be Placed at the Project Limits and Remain in Place Through the Duration of the Project.
4. Flaggers Shall Be Stationed Left & Right As Shown When Equipment Is Crossing or Working Within the Existing Roadway Prism.
5. In Areas Open And/Or Crossed By The General Public, the Contractor Shall Ensure That No Pavement Drop-Offs Are Left Exposed During Non-Working Hours. The Contractor Shall Initiate Corrective Means to Achieve a 1:6 Or Flatter Slope As Shown in the Fillet Detail.
6. At the End of Each Working Day, It Will Be the Contractor's Responsibility to Provide a Driving Surface Free of Obstructions. Access to All Adjoining Properties and BIA/County System Routes Shall Be Maintained at All Times (Day and Night).
7. All Traffic Control Devices (Except at Detour Road Locations and as Noted in Above Note #3) Such as Construction Signs, Drums, Barricades, etc., Shall Be Removed to a Location at Least Thirty (30) Feet From the Edge of the Shoulder When Construction Is Not in Progress.
8. During Construction Operations, Traffic Shall Be Moved Through the Work Zone Using Pilot Cars (As Required). Applicable Signs and Other Items (Two-Way Radio Contact) Related to the Traffic Control Shall Be Considered Incidental Obligations of the Contractor.
9. The Contractor Has the Option to Either Use Drums or Vertical Panels, But Shall Not Use a Combination of Both. No Traffic Cones Are Allowed.
10. The Contractor Has the Option to Utilize Detour Roads in Accordance With the MUTCD in Conjunction With or in Lieu of Using the "Traffic Thru Construction Zones" Details Shown on this Plan and in Accordance With Section 107 and 204. The Cost of Any Detour Roads (Including All Detour Related Earthwork and Maintenance) Shall Be Considered Incidental to the Temporary Traffic Control Bid Items. The Contractor Is Responsible For All Necessary Permits and Clearances For Any Detour Roads.
11. It is the Responsibility of the Contractor to Maintain the Existing Roadway And/Or Detour in a Drivable Condition During Construction. This Work is Considered Incidental to Temporary Traffic Control.
12. At Locations Where New Road Construction Intersects Existing Roadway And At Tie-Ins With Existing Roads at The End of of The New Construction, Special Traffic Control Procedures Shall be Included as Needed in The Contractor's TCP. These Include But Are Not Necessarily Limited to The following: Type III Barricades With "Road Closed"/Detour Signs; Flaggers; Drums, Etc.
13. The Traffic Control on This Project Shall Be Coordinated With The Project Construction Schedule. The Contractor's TCP Shall Reflect This Coordination.
14. All Traffic Control Actions and Changes Shall Be in Compliance with General Note 3, Pg 3 - NT01.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

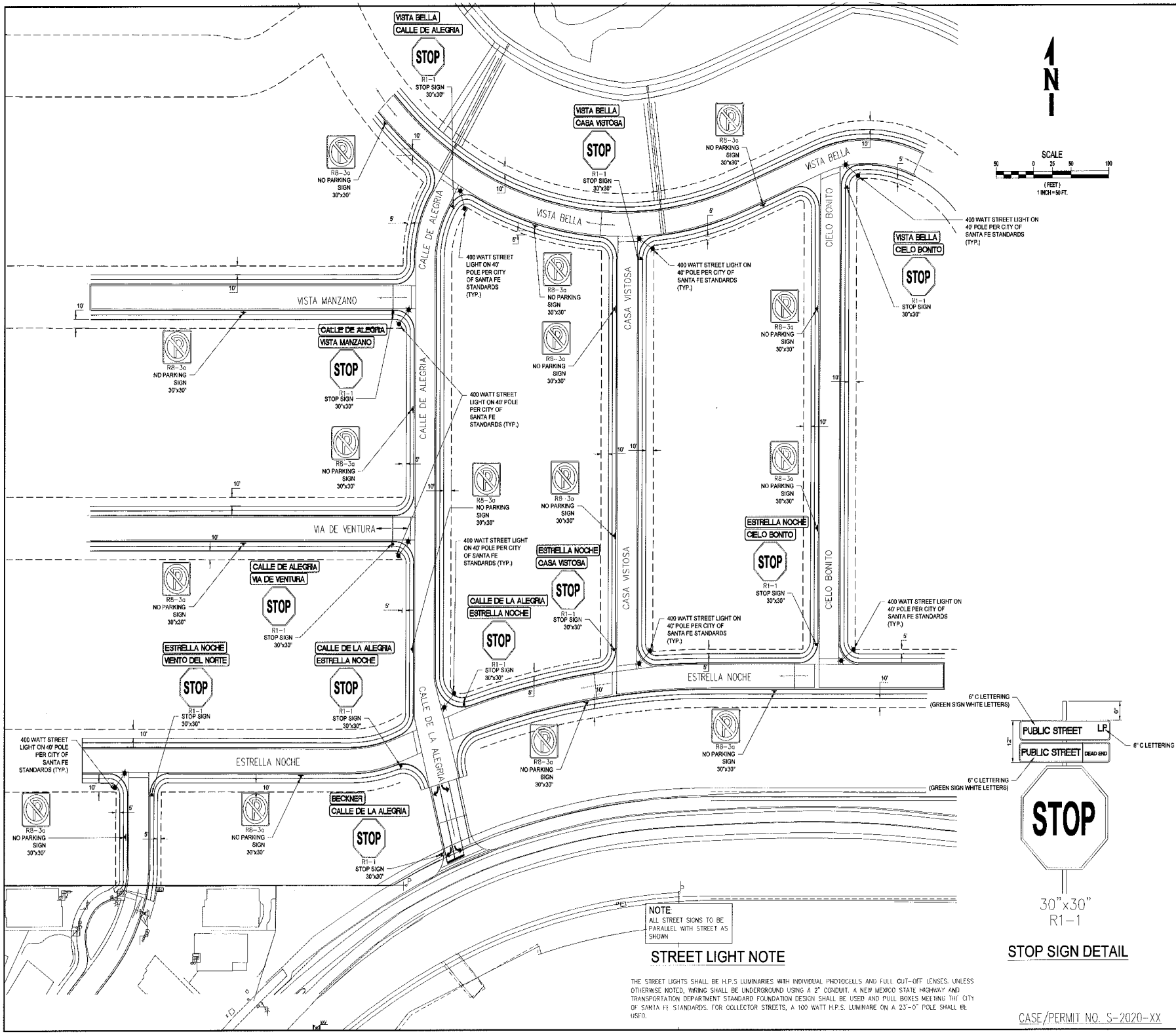
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: TRAFFIC CONTROL PLAN

DEPARTMENT	CITY REVIEW SIGN-OFF	DATE
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C-500

P:\Columbus Capital Corporation\W2206113-A\100\105.00\Execution\Drawings\Civil\Phase 1\V000105.00-C-Traffic Control.dwg 9/18/2020 12:11 PM



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, MG
CHECKED BY: RB

PRELIMINARY

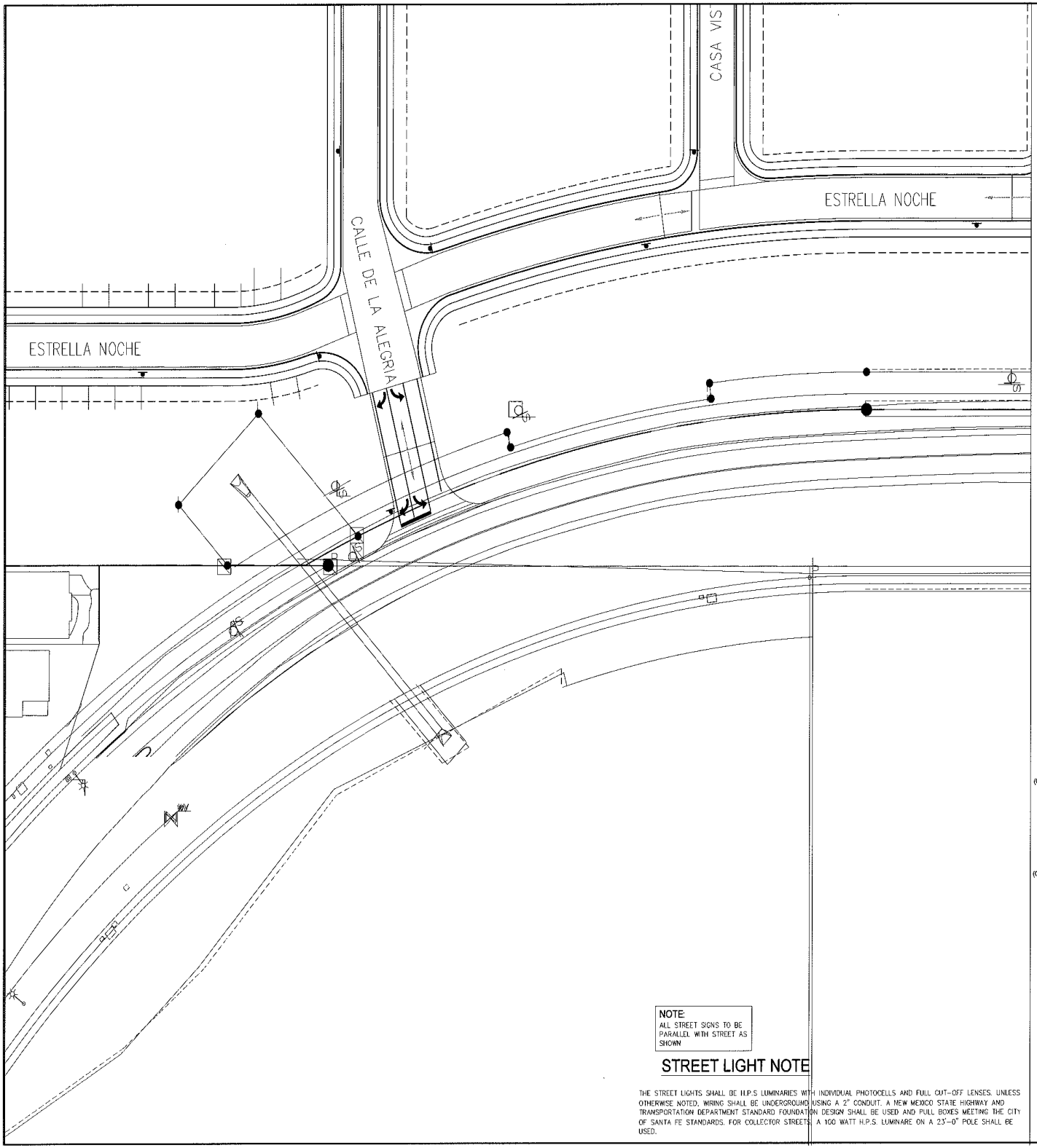
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: STRIPING, SIGNAGE & DRY UTILITY PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PARKS		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C1-600

P:\Columbus Capital Corporation\2019\19-A000105.00\Execution\Drawings\Civil\Phase 1\A000105.00-C-Striping, Signage & Dry Utility Plan_Phase 1.dwg 9/18/2020 12:14 PM



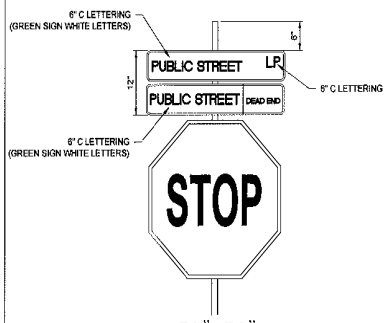
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SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.

NOTE:
ALL STREET SIGNS TO BE PARALLEL WITH STREET AS SHOWN

STREET LIGHT NOTE

THE STREET LIGHTS SHALL BE H.P.S LUMINARIES WITH INDIVIDUAL PHOTOCELLS AND FULL CUT-OFF LENSES. UNLESS OTHERWISE NOTED, WIRING SHALL BE UNDERGROUND USING A 2" CONDUIT. A NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD FOUNDATION DESIGN SHALL BE USED AND PULL BOXES MEETING THE CITY OF SANTA FE STANDARDS. FOR COLLECTOR STREETS, A 100 WATT H.P.S. LUMINARE ON A 23'-0" POLE SHALL BE USED.



STOP SIGN DETAIL

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/03/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, MS
CHECKED BY: RB

PRELIMINARY

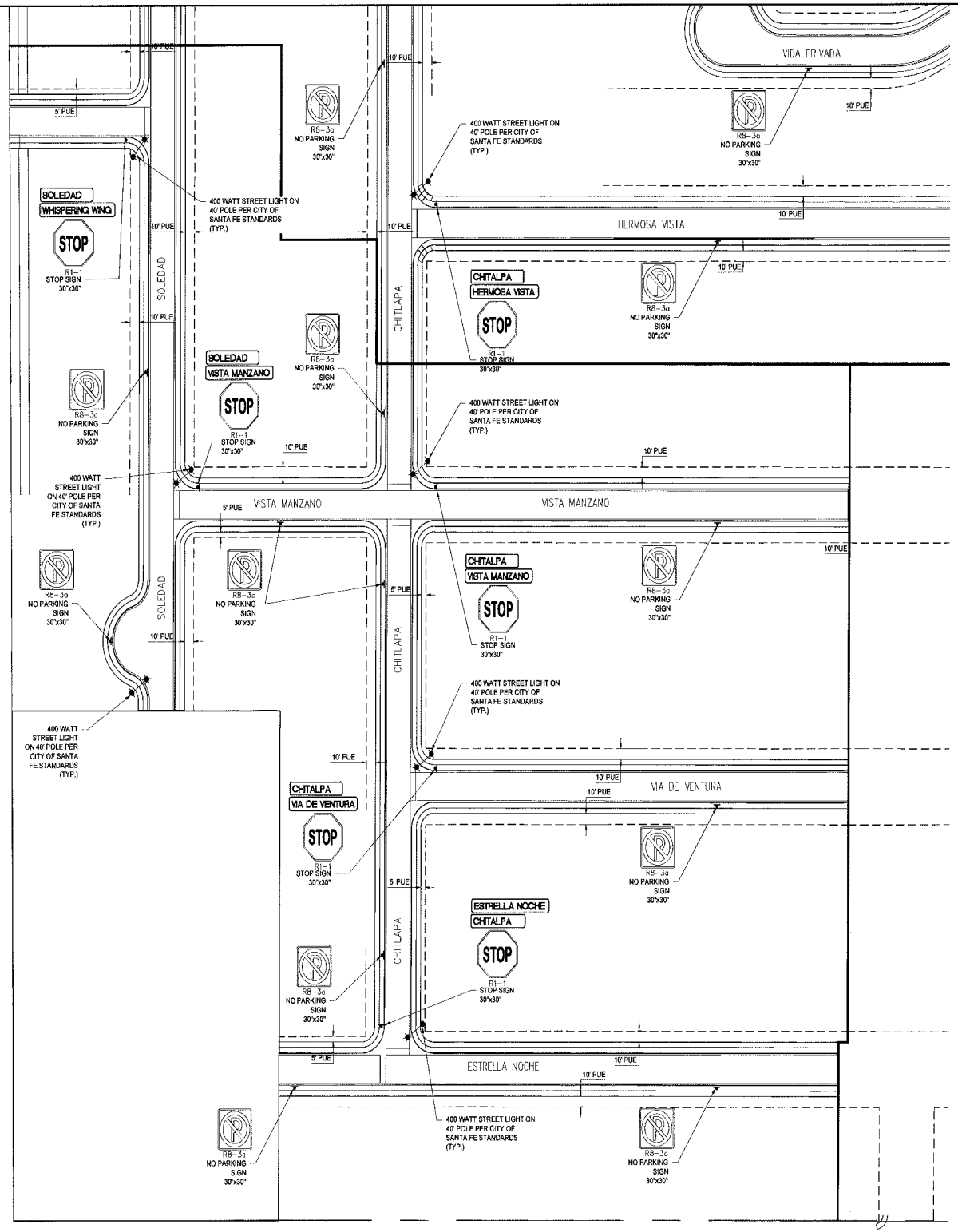
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: STRIPING, SIGNAGE & DRY UTILITY PLAN

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PW ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
PARKS MAINT.			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

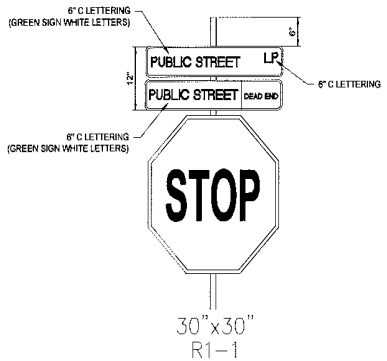
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C1-600

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SCALE
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(FEET)
1 INCH = 50 FT.



STOP SIGN DETAIL

NOTE:
ALL STREET SIGNS TO BE PARALLEL WITH STREET AS SHOWN

STREET LIGHT NOTE

THE STREET LIGHTS SHALL BE H.P.S LUMINARIES WITH INDIVIDUAL PHOTOCELLS AND FULL CUT-OFF LENSES. UNLESS OTHERWISE NOTED, WIRING SHALL BE UNDERGROUND USING A 2" CONDUIT. A NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD FOUNDATION DESIGN SHALL BE USED AND PULL BOXES MEETING TRF CITY OF SANTA FE STANDARDS. FOR COLLECTOR STREETS, A 100 WATT H.P.S. LUMINARE ON A 23'-0" POLE SHALL BE USED.

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RBL, BZ
DRAWN BY: BZ, JL, NG
CHECKED BY: RBL

PRELIMINARY
9-13-2020

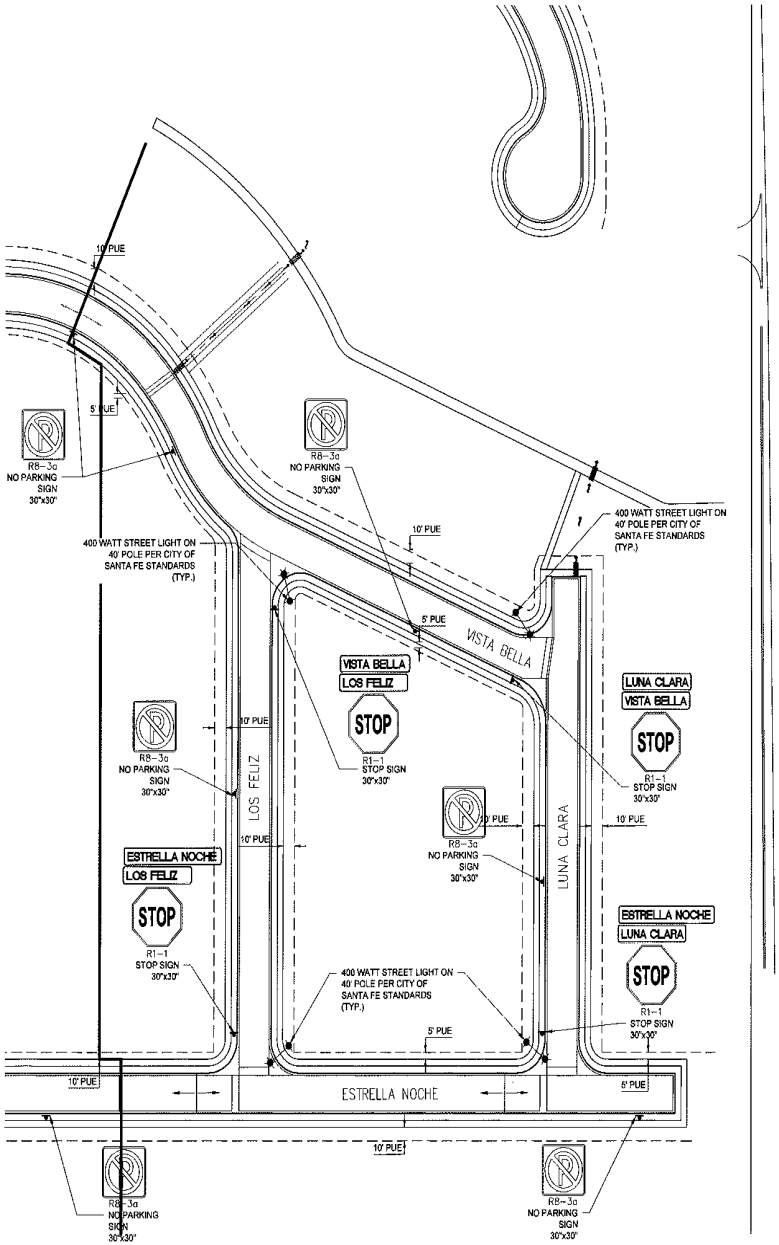
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STRIPING, SIGNAGE & LIGHTING, DRY UTILITY PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
SCALE: 1" = 50' 2020
C2-600

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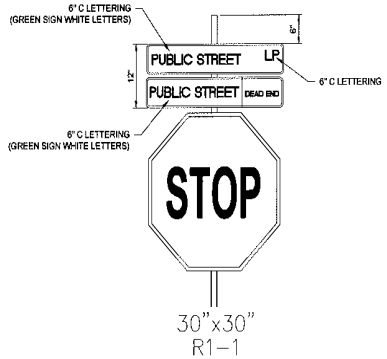


N

SCALE

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(FEET)
1 INCH = 50 FT.



STOP SIGN DETAIL

NOTE:
ALL STREET SIGNS TO BE PARALLEL WITH STREET AS SHOWN

STREET LIGHT NOTE

THE STREET LIGHTS SHALL BE H.P.S. LUMINARIES WITH INDIVIDUAL PHOTOCELLS AND FULL CUT-OFF LENSES. UNLESS OTHERWISE NOTED, WIRING SHALL BE UNDERGROUND USING A 2" CONDUIT. A NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD FOUNDATION DESIGN SHALL BE USED AND PULL BOXES MEETING THE CITY OF SANTA FE STANDARDS. FOR COLLECTOR STREETS, A 100 WATT H.P.S. LUMINARE ON A 23'-0" POLE SHALL BE USED.

CASE/PERMIT NO. S-2020-XX

WHPacific
6301 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE:
DESIGNED BY: RBL, BIZ
DRAWN BY: JS, BIZ, JL, NG
CHECKED BY: RBL
AS NOTED

PRELIMINARY
9-13-2020

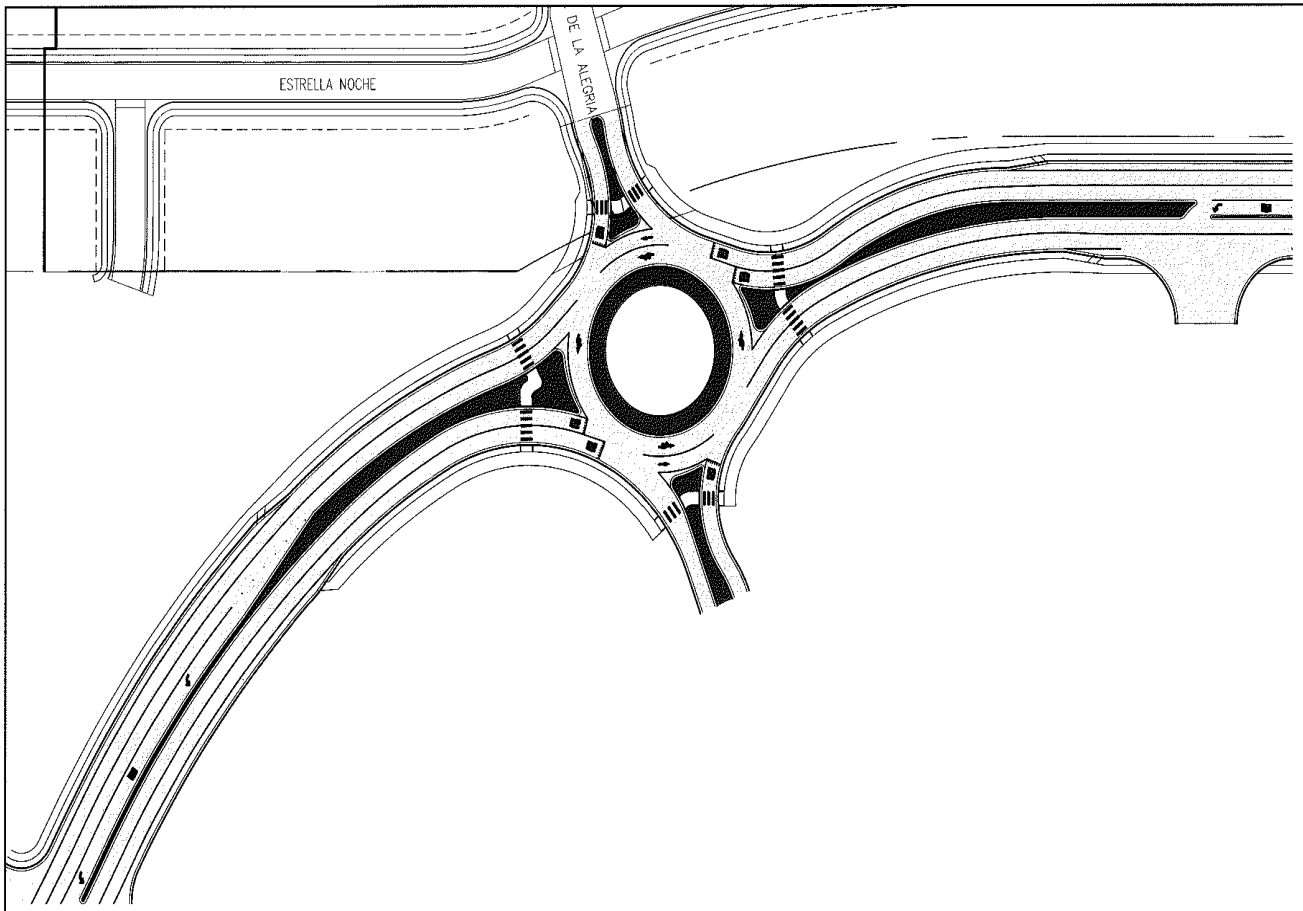
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STRIPING, SIGNAGE & LIGHTING, DRY UTILITY PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

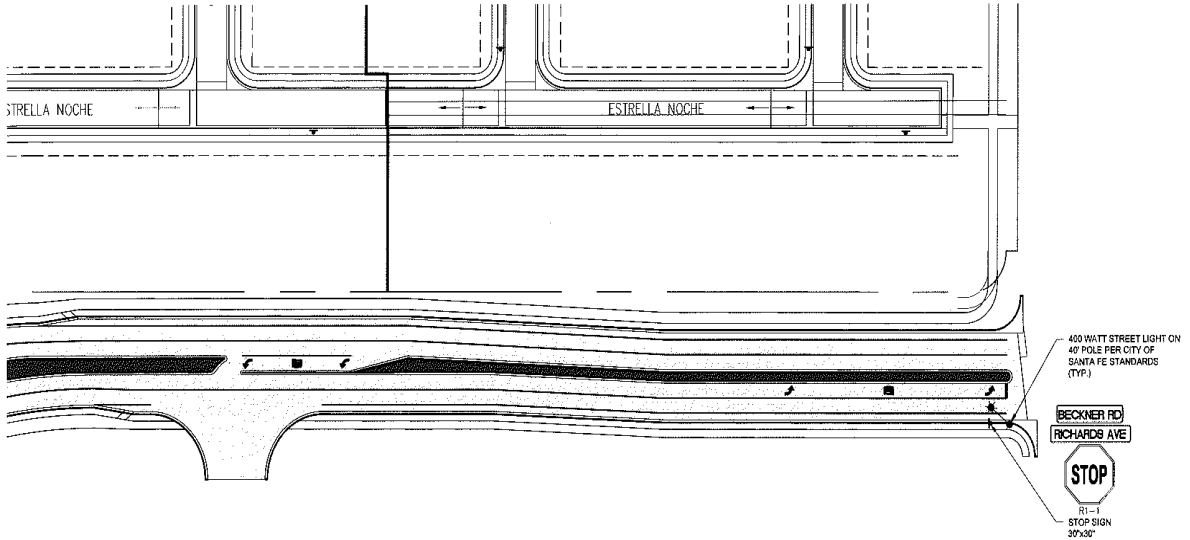
SHEET NO.
C2-601

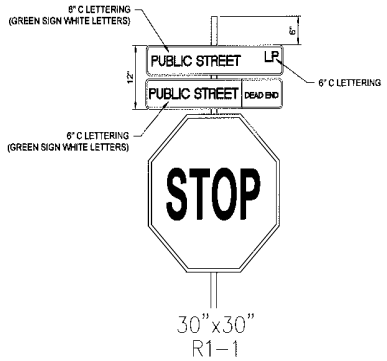
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N

SCALE
50 0 25 50 100
(FEET)
1 INCH = 50 FT.





STOP SIGN DETAIL

NOTE:
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STREET LIGHT NOTE

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505-247-0294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/31/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: BZ, RB, AL, MS
CHECKED BY: RB

PRELIMINARY 9-13-2020

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 2

SHEET TITLE: STRIPING, SIGNAGE & LIGHTING, DRY UTILITY PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
SCOTT C2-602 2020

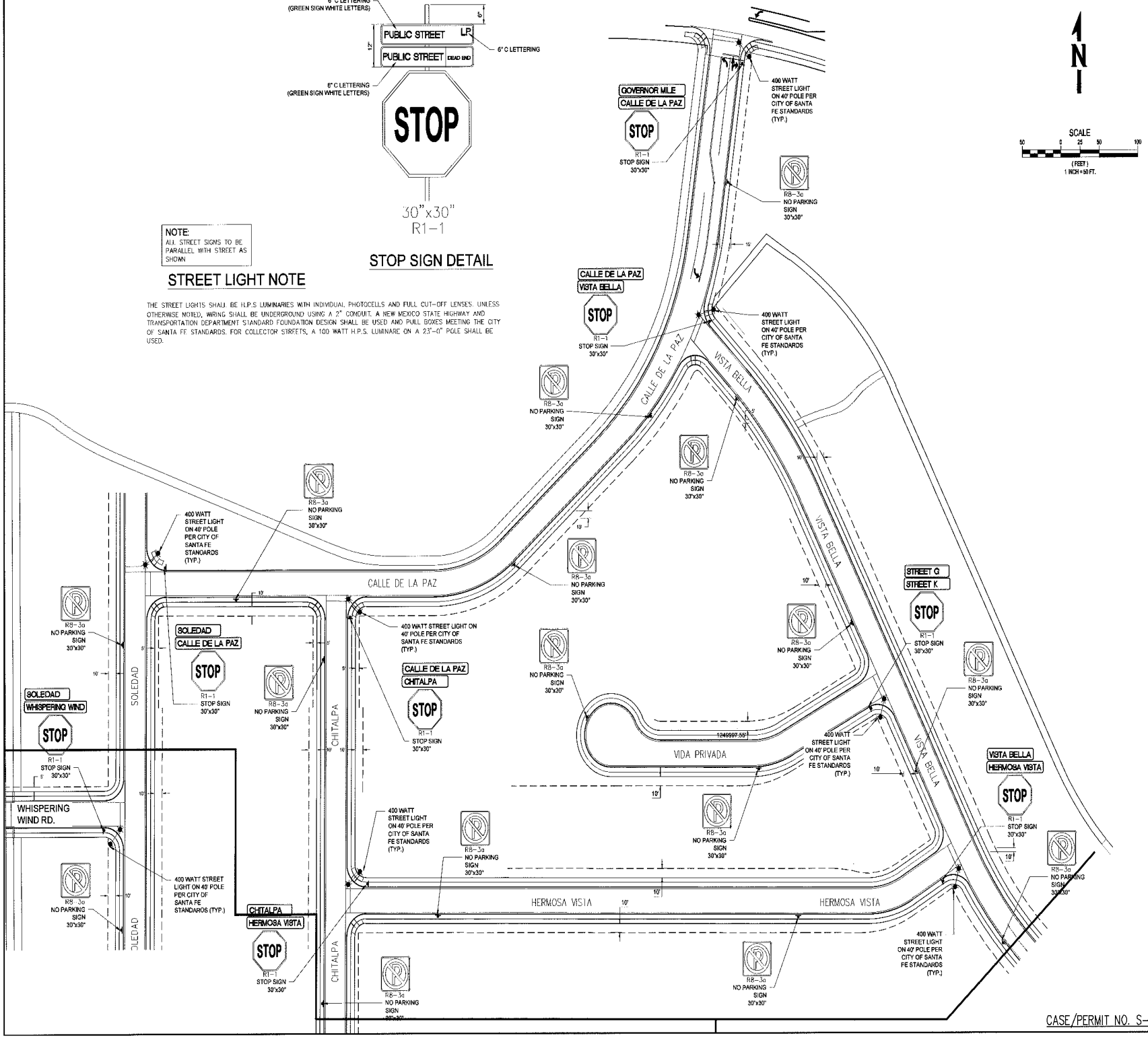
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STOP SIGN DETAIL

NOTE:
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: RB, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

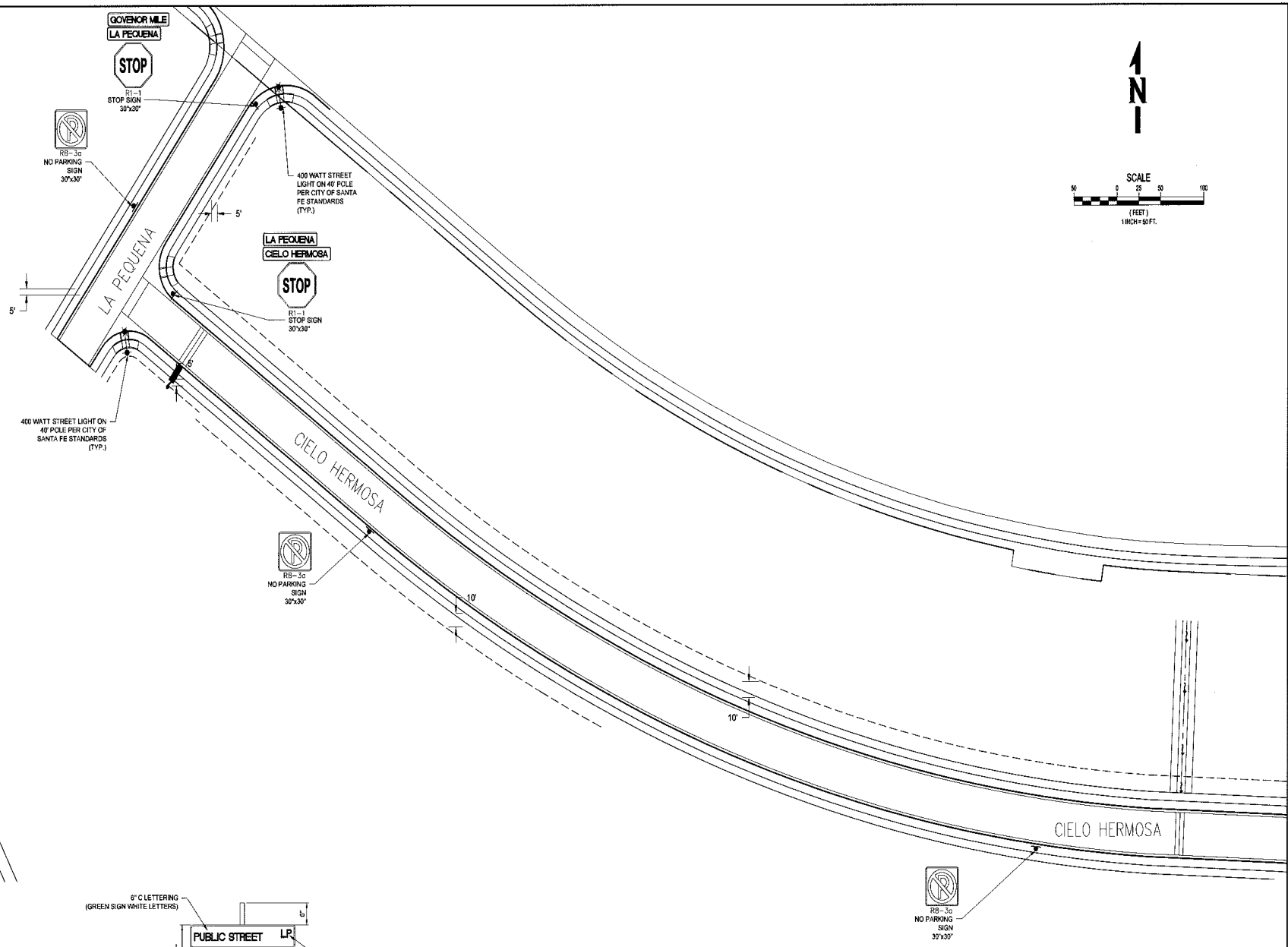
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

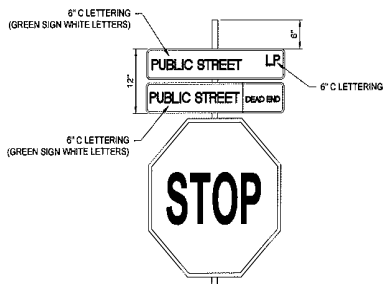
SHEET TITLE: STRIPING, SIGNAGE & DRY UTILITY PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
C3-600

P:\Columbus Capital Corporation\220019.A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C-Striping, Signage & Dry Utility Plan_Phase 3.dwg 9/16/2020 12:17 PM





STOP SIGN DETAIL

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 05/21/2020
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

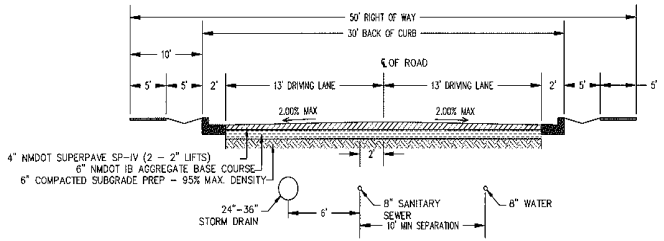
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 3

SHEET TITLE: STRIPING, SIGNAGE & DRY UTILITY PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

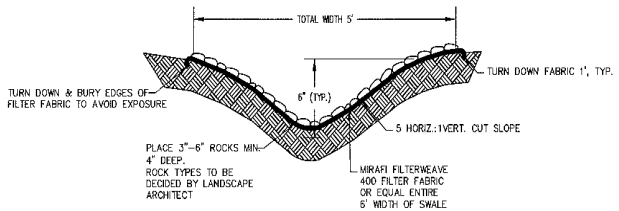
SHEET NO.
C3-601

P:\Columbus Capital Corporation\2019\19-A000105.00\Execution\Drawings\Civil\Phase 3\A000105.00-C Striping, Signage & Dry Utility Plan_Phase 3.dwg 6/19/2020 12:17 PM



50' R.O.W. - ON STREET PARKING (1 / C-900)

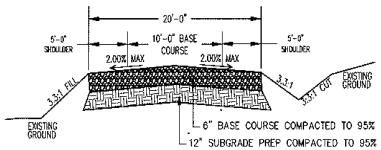
SCALE: N.T.S.



DRAINAGE SWALE (2 / C-900)

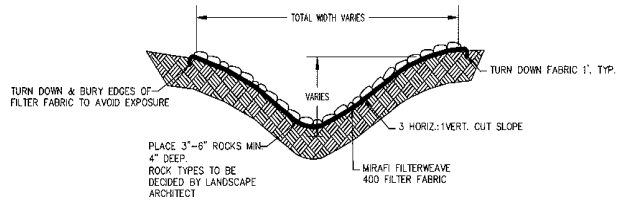
SCALE: N.T.S.

ALL SWALES TO BE LINED WITH
FABRIC EXCEPT AND THEN LAYERED
WITH ROCK ON TOP.
NOTE: LAP FABRIC PANELS A MIN. OF
12" WITH DOWNSTREAM PANEL
BENEATH UPSTREAM PANEL



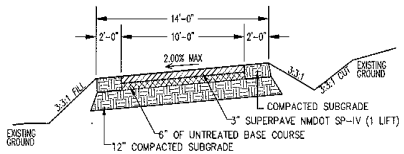
EMERGENCY ACCESS ROAD SECTION (3 / C-900)

SCALE: N.T.S.



POND SECTION (4 / C-900)

SCALE: N.T.S.



10' BIKE TRAIL SECTION (5 / C-900)

SCALE: N.T.S.

CASE/PERMIT NO. S-2020-XX

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6501 Americas Pkwy NE, Suite 400
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 08/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: BS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

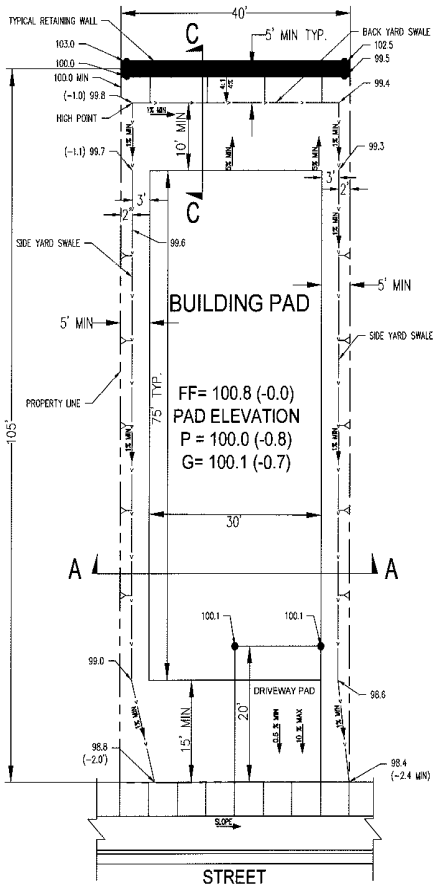
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: CIVIL DETAILS

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
PLAT / ADMIN		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

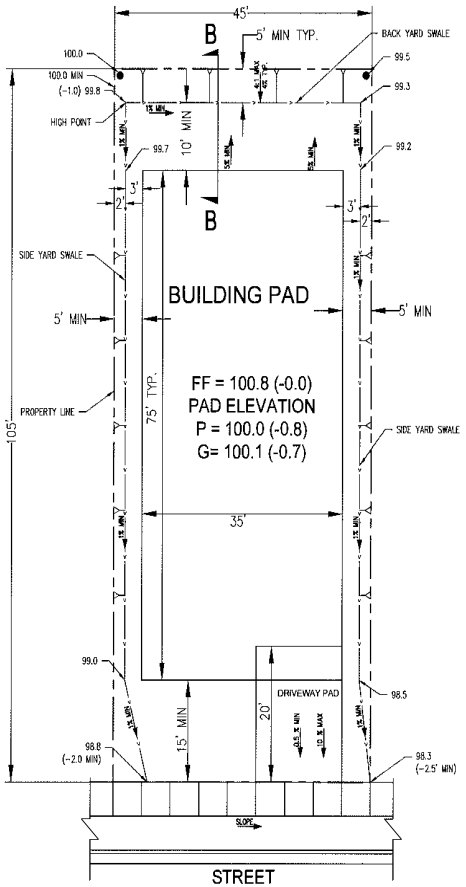
SHEET NO.
C-900

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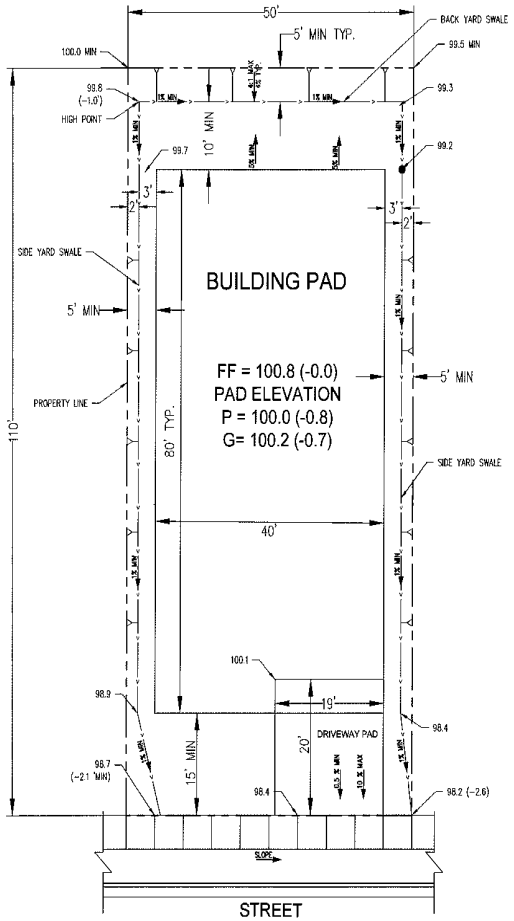
TYPICAL 40'X105' ATTACHED GARAGE LOT GRADING PLAN

SCALE: 1"=10'



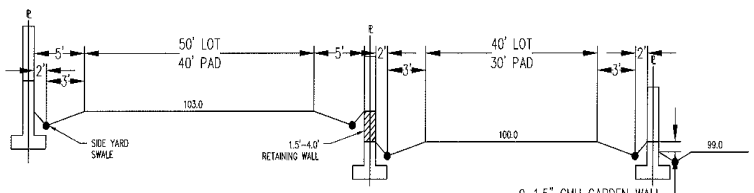
TYPICAL 45'X105' ATTACHED GARAGE LOT GRADING PLAN

SCALE: 1"=10'



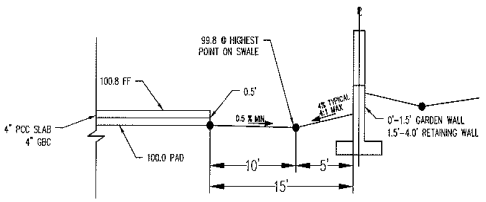
TYPICAL 50'X110' ATTACHED GARAGE LOT GRADING PLAN

SCALE: 1"=10'



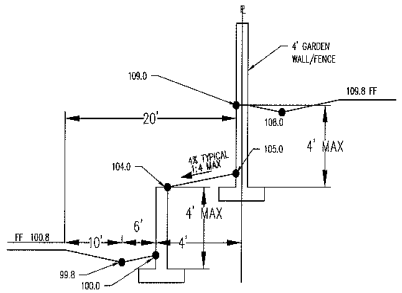
TYPICAL LOT SECTION AA

SCALE: NTS



TYPICAL LOT SECTION BB

SCALE: NTS



TYPICAL RETAINING WALL SECTION CC

SCALE: NTS

CASE/PERMIT NO. S-2020-XX

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505-342-2000 fax 505-842-1845
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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: DETAILED GRADING PLAN

CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER/ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
POLICE/TRAFFIC		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
GD-1

P:\Columbus Capital Corporation\22592\19-A000105.00\Execution\Drawings\Civil\Phase 1\A000105.00-G-Detailed Grading Details_Phase 1.dwg 9/18/2020 12:29 PM

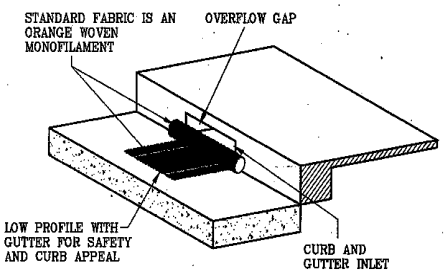
BEAVER DAM

Installation and Maintenance Guidelines

Installation: The empty Beaver Dam should be placed over the grate as the grate stands on end. If using optional oil absorbents; place absorbent pillow on pouch, on the bottom (below-grade side) of the unit. Attach absorbent pillow to tether loop. Tuck the enclosure flap inside to completely enclose the grate. Holding the lifting devices (do not rely on lifting devices to support the entire weight of the grate), place the grate into its frame (street side first), then lower back edge with dam into place. The Beaver Dam should be partially blocking the curb hood when installed properly.

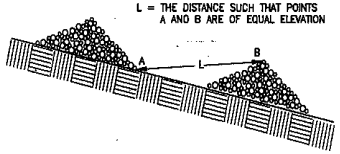
Maintenance: Remove all accumulated sediment and debris from surface and vicinity of unit after each storm event. Remove sediment that has accumulated within the containment area of the Beaver Dam as needed. If using optional oil absorbents; remove and replace absorbent pillow when near saturation.

BEAVER DAM

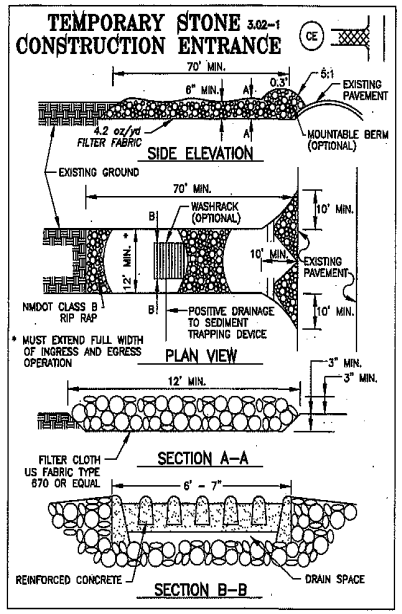


DESIGN CONFORMS TO ALL SHAPES OF CONCRETE CURBS

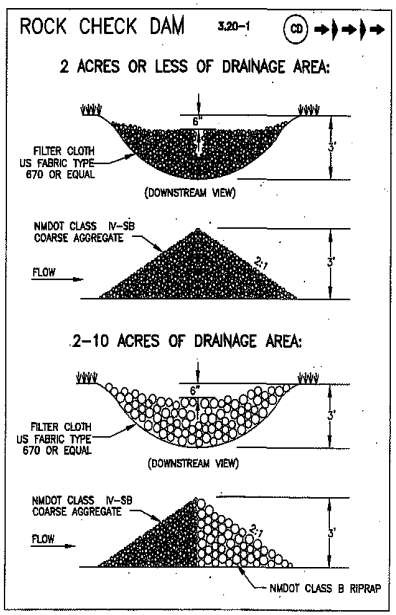
SPACING BETWEEN CHECK DAMS 3.20-2



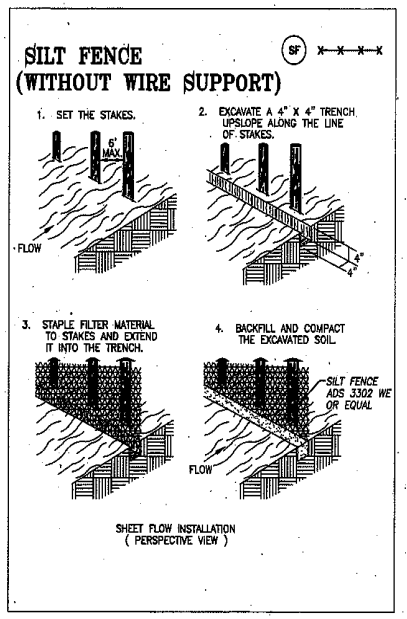
TEMPORARY STONE CONSTRUCTION ENTRANCE 3.02-1



ROCK CHECK DAM 3.20-1

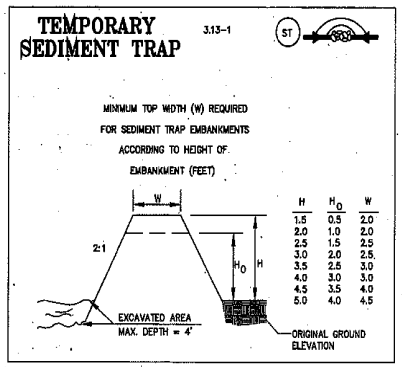


SILT FENCE (WITHOUT WIRE SUPPORT)



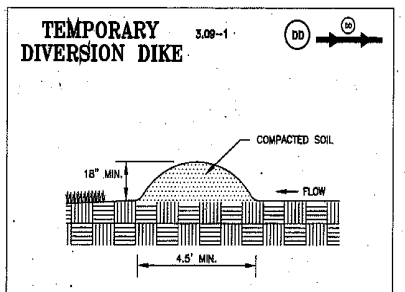
SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)

TEMPORARY SEDIMENT TRAP 3.13-1



H	H_O	W
1.5	0.5	2.0
2.0	1.0	2.0
2.5	1.5	2.5
3.0	2.0	2.5
3.5	2.5	3.0
4.0	3.0	3.0
4.5	3.5	4.0
5.0	4.0	4.5

TEMPORARY DIVERSION DIKE 3.09-1



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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE: 09144ZD
DATE:
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, MS
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3
SHEET TITLE: SWPP DETAILS

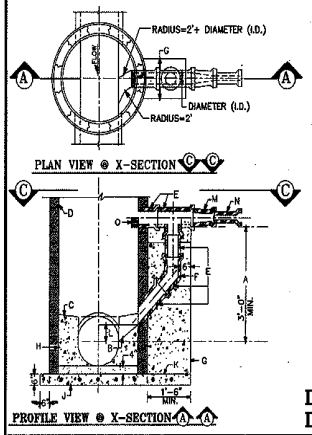
DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PW ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
PARKS & REC			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
WORK ORDER NO. SWPPP 2020
-1

P:\Columbus Capital Corporation\12290\19-A0001\05.00\Execution\Drawings\Civil\Plans 1\A0001105.00-C-SWPPP Details_Phase 1.dwg 9/18/2020 12:30 PM

LEGEND

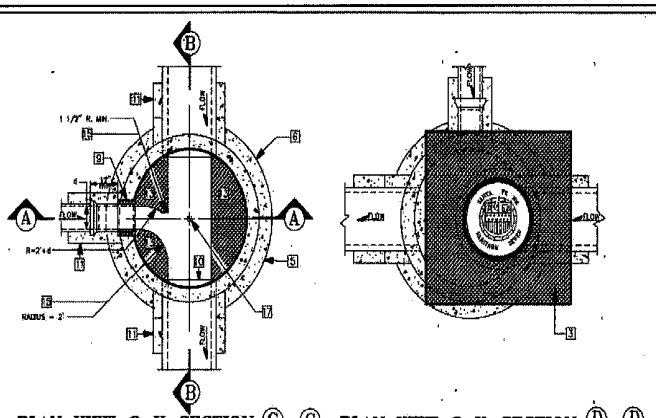
ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with suitable sized openings, refer to general note CM-2A
6	CONCRETE BASE, refer to concrete base detail Dwg. No. SAS-7
7	SEWER PIPE, refer to general note CM-1
8	6"(in) GROUT FILLET, on upper half of pipe and around base
9	ADAPTER, MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
10	PIPE PENETRATION INTO MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
11	PIPE SUPPORT, CONCRETE, shall extend out-side of manhole a maximum of 18"(in) to bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CR-6
13	SHELF, to be 9"(in) minimum width with 1"(in) per 1'-0" slope, from crown of pipe
14	CUT UPPER HALF OF PIPE, after manhole has been completed and inspected by engineer
15	HAND FORMED CHANNELS, shall be on a uniform radius and shall not hold water
16	INVERT ELEVATIONS OF LATERAL LINES, shall be the same as the springline elevation of the sewer main, where possible
17	CHANGE SLOPE OF PIPE, at center of manhole
18	APPROVED WATER STOP, to be with type of pipe

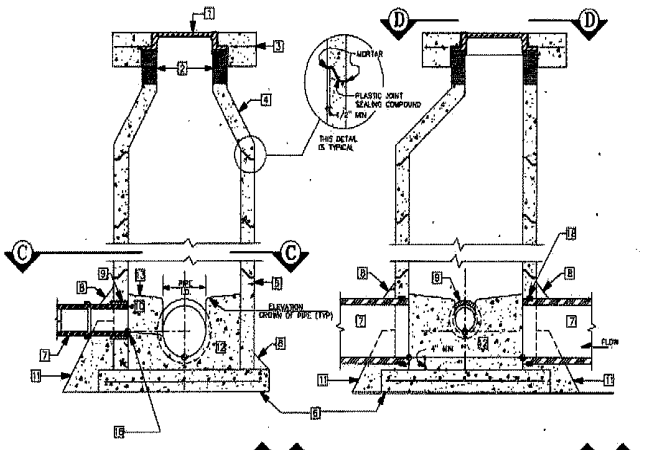


CONSTRUCTION NOTES

A. 3' (YT) MINIMUM DISTANCE OF VERTICAL DROP. LESS THAN 3'(YT) DEGALLONS DROP MANHOLE.
B. TURN PIPE INVERT IN SHELF. INVERT TO SPRINGLINE.
C. SHELF SLOPE, 1"(IN) PER FT.
D. MANHOLE TYPE FOR UPPER PORTION IS SPECIFIED IN MANHOLE TYPE "E" DETAIL DWG NO. SAS-2.
E. USE ELL OR PIPE(LESS 30) PIPE THROUGHOUT DROP. ALL PIPING IN DROP STRUCTURE FROM THE TEE IS DECREASED ONE PIPE SIZE FROM THE SERVICE LINE. (SERVICE=8" DROP=10")
F. USE BELL AND SPIGOT 45° LONG RADIUS BEND.
G. CONCRETE SUPPORT WITH EQUALS PIPE O.D. PLUS 8"(IN) MINIMUM EACH SIDE.
H. CONCRETE FILL.
J.
K.
L. MINIMUM 2'(IN) ABOVE SPRINGLINE OR AS SHOWN ON PLAN.
M. REDUCER
N. SERVICE LINE
O. EXTEND PIPE 3"(IN) MINIMUM 8"(IN) MAXIMUM INTO MANHOLE TOP. 1/2 PIPE REMOVED.

DROP MANHOLE DETAIL
DWG. #: SAS-1 NOT TO SCALE





◆ DENOTES ELEVATION PER ENGINEER'S DESIGN

NOT TO SCALE

MANHOLE TYPE "E" DETAIL/DWG # SAS-2 (See Dwg. # SAS-14 for Type "C" Flat Top)

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
- A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
- B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
  1. UP THRU 10" (IN.) DIAMETER: ASTM D 3034, SDR 35.
  2. 12 INCH THRU 15" (IN.) DIAMETER: ASTM D 3034 SDR 35 PIPE.
  3. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
- C. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1300 PVC COUPLINGS PROVIDED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "YELLOWMATE" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
- D. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
- E. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
- F. SERVICE CONNECTIONS:
  1. YCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
  2. PVC PIPE: CAST IRON SADDLE TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "MINIMAX" ADVANCO, HERSEY "ROMICK", OR APPROVED EQUAL.
- G. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
- A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
- B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
- C. MANHOLE STEPS: REFER TO SECTION 930.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. IND. OR APPROVED EQUAL; 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
- D. FRAMES AND COVERS:
  1. CASTING: SHALL CONFORM TO SECTION 180, 181 & 182, NM, APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
  2. MINIMUM COVER WIDTH: 185 POUNDS
  3. MINIMUM COMBINED WEIGHT: 525 POUNDS +/- 5%
  4. BEARING SURFACES: SHALL BE MACHINED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER, MINIMUM SEATING WIDTH: 7/8"(IN.)
  5. COATING: NONE
  6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
  7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
  8. CASTINGS TOLERANCES: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
- A. REQUIREMENTS:
  1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
  2. WHEN VITRIFIED CLAY CROSSES AN AQUIFYO.
  3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
  4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
  5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 8"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

FIELD QUALITY CONTROL

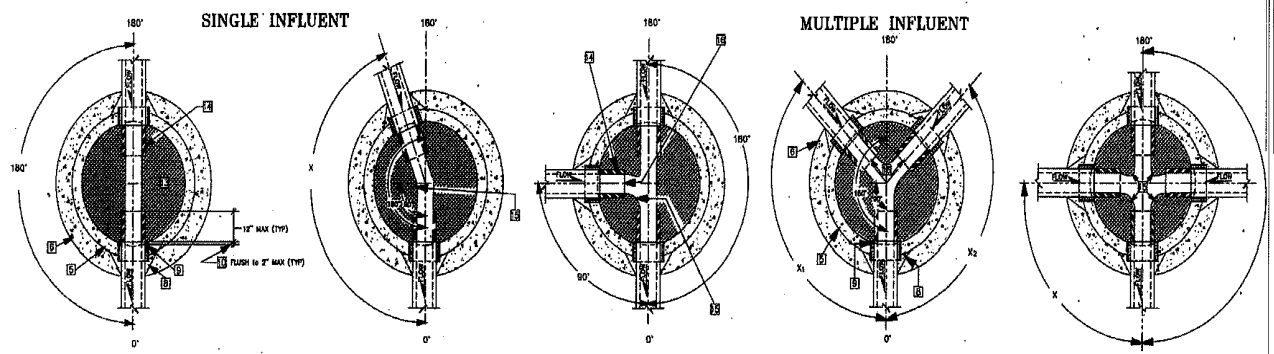
FQC-1 TESTING AND INSPECTION:
- A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
- B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
- C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
- A. LINE: 0.50 FOOT
- B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.



PLAN VIEW OF MANHOLE BASE CONNECTION/DWG. # SAS-3 NOT TO SCALE

CASE/PERMIT NO. S-2020-XX

WHPacific
5001 American Pkwy NE, Suite 400
Albuquerque, NM 87113
505-247-2034 Fax: 505-212-5845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

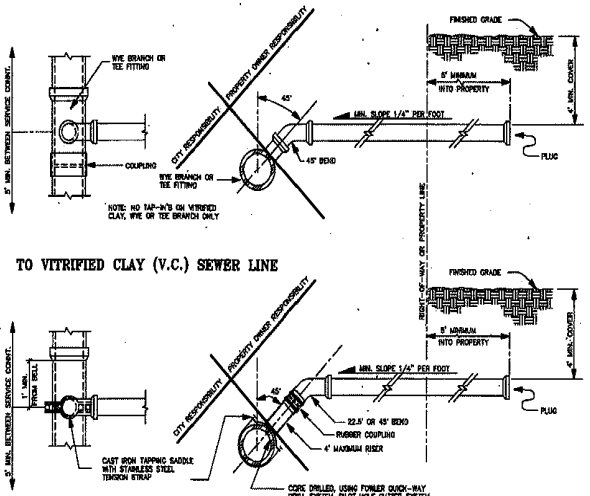
CITY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
WASTEWATER		
WATER		
PW/ENGINEERING		
TRAFFIC		
FIRE DEPARTMENT		
SOLID WASTE		
LANDSCAPE		
TRAILS / OPEN SPACE		
SUBDIVISION REVIEW		

SHEET NO.
SF-1

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LEGEND

ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CW-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with suitable sized openings, refer to general note CM-2A
6	CONCRETE BASE, refer to concrete base detail Dwg. No. SAS-7
7	SEWER PIPE, refer to general note CM-1
8	6"(in) GROUT FILLET, on upper half of pipe and around base
9	ADAPTER, MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
10	PIPE PENETRATION INTO MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
11	PIPE SUPPORT, CONCRETE, shall extend out-side of manhole a maximum of 18"(in) to bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CR-6
13	SHELF, to be 9"(in) minimum width with 1"(in) per 1'-0" slope, from crown of pipe
14	CUT UPPER HALF OF PIPE, after manhole has been completed and inspected by engineer
15	HAND FORMED CHANNELS, shall be on a uniform radius and shall not hold water
16	INVERT ELEVATIONS of LATERAL LINES, shall be the same as the springline elevation of the sewer main, where possible
17	CHANGE SLOPE OF PIPE, at center of manhole
18	APPROVED WATER STOP, to be with type of pipe



TO VITRIFIED CLAY (V.C.) SEWER LINE

TO PVC SEWER LINE

NOT TO SCALE

SERVICE CONNECTION DETAILS/DWG. # SAS-10

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK:
CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS:
USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT:
OBTAIN PERMITS FOR THE PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OUTSTANDING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 SUBSTITUTIONS OR CHANGES:
ALL SUBSTITUTIONS OR CHANGES MUST BE APPROVED BY THE CITY WATER QUALITY DIVISION OR CITY APPROVED REPRESENTATIVE PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS OR CHANGES MUST BE SUBMITTED BY THE DESIGN ENGINEER TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. WHERE APPROPRIATE, SUBMITTAL MUST INCLUDE FABRICATION DRAWINGS, WORKING DRAWINGS AND MATERIAL SPECIFICATIONS OF TEST DATA TO JUSTIFY SUBSTITUTIONS OR CHANGES. DESIGN ENGINEER SHALL AUTHORIZE ANY DRAWINGS FOR SUBSTITUTIONS AND CHANGES AND SUBMIT THEM TO THE CITY WATER QUALITY DIVISION FOR APPROVAL. UNAUTHORIZED SUBMITTALS WILL BE REJECTED.

CR-5 MANUFACTURER'S CERTIFICATES:
WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 725, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. UP THRU 15" (IN.) DIAMETER: ASTM D 3034 SDR 35 PIPE.
2. 12 INCH THRU 15" (IN.) DIAMETER: ASTM D 3034 SDR 26 PIPE.
3. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 WALL SR-64.
C. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1360 FOR COUPLINGS PRODUCED BY JM-EAGLE CORPORATION, LOCKING COUPLINGS WITH WELDS SPLINE, MARKETED AS "YELLOWPUNCH" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
D. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AS/PVC ADAPTED COUPLINGS.
E. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
F. SERVICE CONNECTIONS:
1. WYE PIPE: FACTORY TEE FITTINGS; SECTION 1.05 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS FOWLER "QUICKWAY" GERICO, MERREY "ROMAC", OR APPROVED EQUAL.
G. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.3 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 820.4.7 NM APWA POLYPROPYLENE, ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL; 14"(IN.) WIDE, 10"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTINGS SHALL CONFORM TO SECTION 180, 181 & 182, NM APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
2. MINIMUM COVER WEIGHT: 125 POUNDS
3. MINIMUM COMBINED WEIGHT: 365 POUNDS
4. +/- 0IN
5. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
6. COATING: NONE
7. COVER LETTERING: SANTA FE, N.M. SANITARY SEWER
8. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER
9. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIAMETER. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
A. REQUIREMENTS:
1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
2. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA; PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE PROPERLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 705, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 6'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 6'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASE:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL.
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA; SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

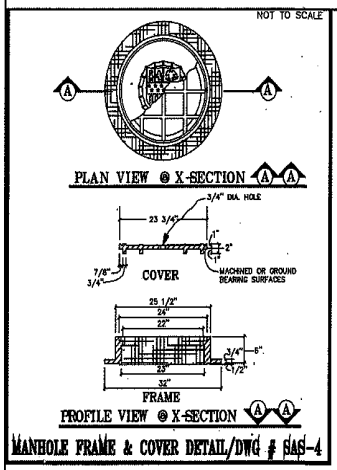
FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
A. LINE: 0.10 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD SLOPE ANY WATER.

FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 801.7 NM APWA.

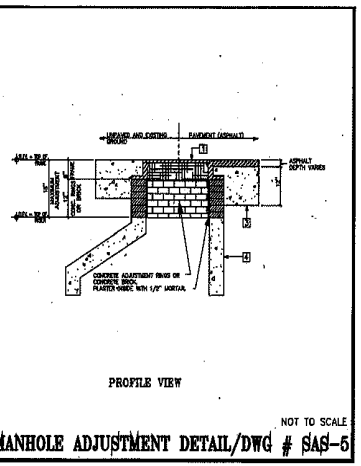
FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV TELEVISING INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

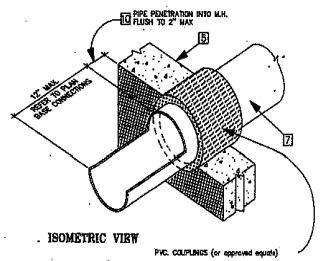
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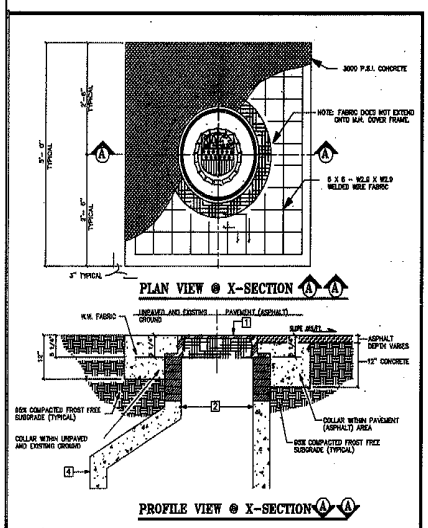
MANHOLE FRAME & COVER DETAIL/DWG # SAS-4



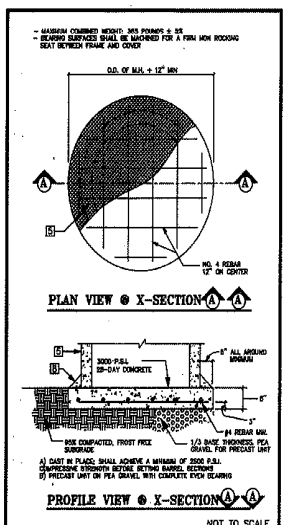
MANHOLE ADJUSTMENT DETAIL/DWG # SAS-5



MANHOLE ADAPTER DETAIL/DWG. # SAS-8 NOT TO SCALE



CONCRETE COLLAR DETAIL/DWG. # SAS-6 NOT TO SCALE



CONCRETE BASE DETAIL/DWG. # SAS-7

CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
505-247-2294 Fax 505-242-4845
www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RBL BZ
DRAWN BY: JS, BZ, A, NG
CHECKED BY: RBL

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

CITY REVIEW SIGN-OFF

DEPARTMENT	DATE
WASTEWATER	
WATER	
PW ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
SOLID WASTE	
LANDSCAPE	
TRAILS / OPEN SPACE	
SUBDIVISION REVIEW	

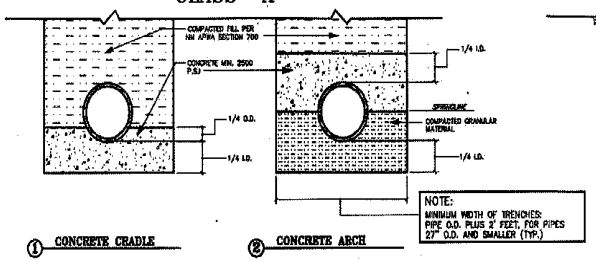
SHEET NO. SF-2

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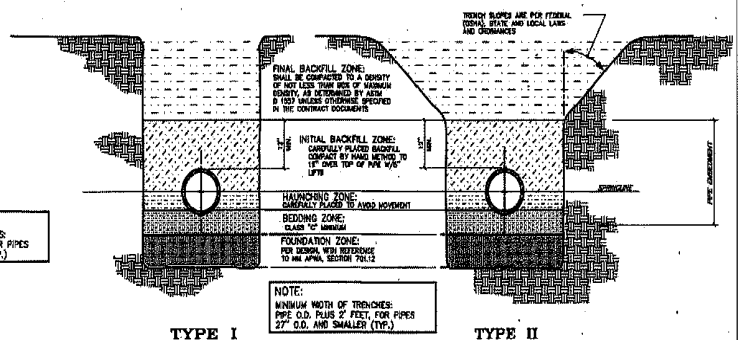
TRENCH BEDDING AND INSTALLATION DETAILS/DWG. # SAS-11

NOT TO SCALE

CLASS "A"

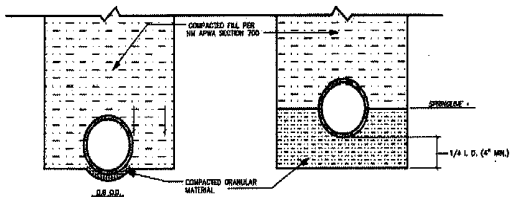


① CONCRETE CRADLE ② CONCRETE ARCH

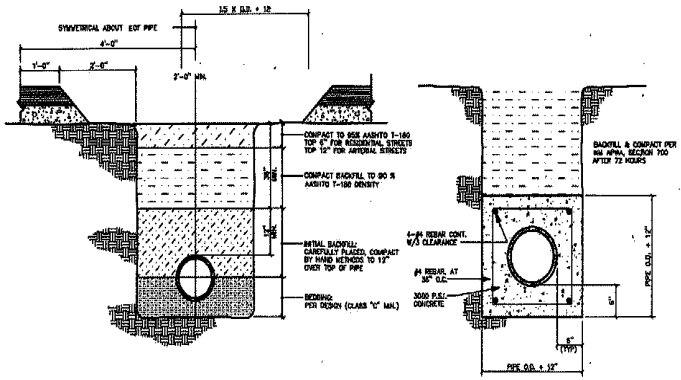


TYPE I TYPE II

CLASS "B"

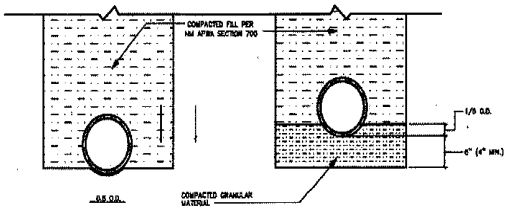


① SHAPED SUBGRADE WITH GRANULAR FOUNDATION ② GRANULAR FOUNDATION



PAVED AREAS CONCRETE ENCASEMENT

CLASS "C"



① SHAPED SUBGRADE ② GRANULAR FOUNDATION

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK: CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS: USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT: OBTAIN PERMITS FOR THE PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OBTAINING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 [redacted]

CR-5 MANUFACTURER'S CERTIFICATES: WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS: CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. UP THRU 10" (IN.) DIAMETER: ASTM D 3034 PSPS.
2. 12 INCH THRU 15" (IN.) DIAMETER: ASTM D 3034 SDR 35 PVC.
3. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
C. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1550 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "YELLOWMINE" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
D. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
E. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
F. SERVICE CONNECTIONS:
1. WYE PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "QUICKWAY", GENECO, HERSEY "ROMAC", OR APPROVED EQUAL.
G. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 930.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL: 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTING: SHALL CONFORM TO SECTION 160, 161 & 162, NM APWA CLASS 30D. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
2. MINIMUM COVER WEIGHT: 165 POUNDS
3. MINIMUM COMBINED WEIGHT: 385 POUNDS +/- 5%
4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
5. CAUTION: NONE
6. COVER LETTERING: SANTA FE, N.M. SANITARY SEWER
7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIAMETER. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
A. REQUIREMENTS:
1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
2. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 4"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 600, NM APWA: PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASES:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE.
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL.
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA: SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
A. LINE: 0.10 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

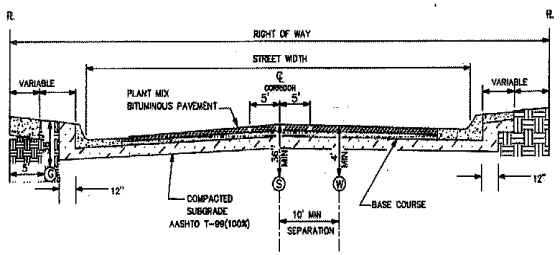
FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE 'BE' M MANHOLE TO MEET THEIRE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

TYPICAL UTILITIES SEPARATION DETAIL/DWG. # SAS-12

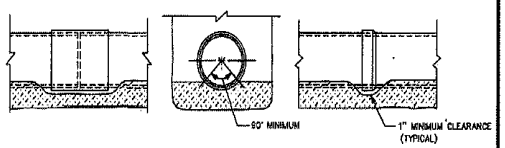


LEGEND

Ⓢ SEWER ℄ PROPERTY LINE
Ⓖ GAS ℄ CENTER LINE
Ⓦ WATER

NOT TO SCALE

BELL OR COUPLING INSTALLATION DETAIL/DWG. # SAS-13



NOT TO SCALE

CASE/PERMIT NO. S-2020-XX

WHPacific
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www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

PRELIMINARY

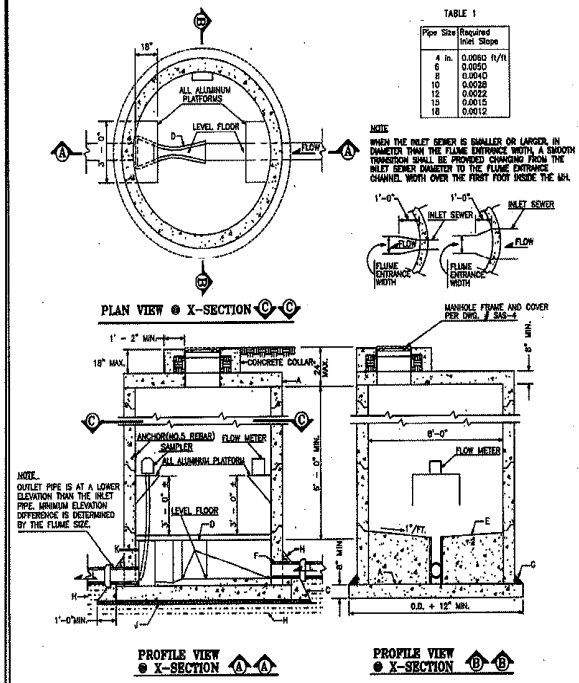
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

CITY REVIEW	SIGN-OFF	DEPARTMENT	DATE
		WASTEWATER	
		WATER	
		ENGINEERING	
		TRAFFIC	
		FIRE DEPARTMENT	
		REAL ESTATE	
		LANDSCAPE	
		TRAILS / OPEN SPACE	
		SUBDIVISION REVIEW	

SHEET NO.
SF-3

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GENERAL NOTES

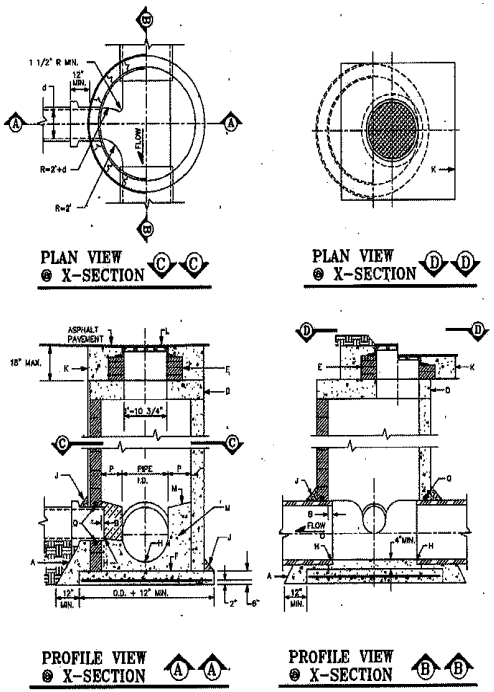
1. THIS DESIGN IS APPLICABLE FOR MANHOLES 6.0 FT. & GREATER IN DEPTH MEASURED FROM FLOOR TO CONCRETE COVER. DEPTHS LESS THAN 6.0 FT. WILL REQUIRE THE 6x8 RECTANGULAR MANHOLE PER DWG. # IP-2.
2. INDUSTRIAL MANHOLE SHALL BE LOCATED ON PRIVATE PROPERTY OUTSIDE OF CITY RIGHT-OF-WAY. CITY PERSONNEL SHALL HAVE ACCESS TO THE MANHOLE AT ALL TIMES OF THE DAY OR NIGHT.
3. NOT ALL INSTALLATIONS WILL REQUIRE THE ALUMINUM PLATFORMS. SAMPLER AND FLOW METERING APPARATUS TO BE PROVIDED BY THE INDUSTRIAL USER. FINAL DECISIONS RELATIVE TO THE REQUIREMENT FOR MONITORING EQUIPMENT AND THE SPECIFIC TYPE OF FLUME WILL BE MADE BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION FOR EACH INDIVIDUAL CASE.
4. A PARSHALL FLUME OR PALMER BOWLUS FLUME SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THIS DETAIL. THE FLUME MUST BE SIZED TO ACCURATELY MEASURE ALL ANTICIPATED FLOW LEVELS. PRIOR TO INSTALLATION THE FLUME SIZE, AND TYPE MUST BE APPROVED BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION.
5. IN ORDER TO CONTROL VELOCITIES AT A LEVEL THAT ALLOWS FOR ACCURATE FLOW MEASUREMENT, SLOPES ON THE INLET SEWER LINES FOR 20 FT. OUTSIDE THE MANHOLE MUST BE AS SPECIFIED IN TABLE 1 FOR THE VARIOUS SIZE LINES. OUTLET SEWER LINES MUST BE DESIGNED TO CONVEY THE MAXIMUM DESIGN FLOWS WITHOUT CREATING A SURCHARGE CONDITION IN THE FLUME.

CONSTRUCTION NOTES

A. ALL MANHOLE BASES, RISER SECTIONS AND FLAT SLAB TOP SECTIONS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH CITY SPECIFICATIONS.
B. FRAME & COVER FOR NON-TRAFFIC AREAS SHALL BE NEENAH R-6681-VIH OR EQ. FOR TRAFFIC OR PARKING AREAS, IT SHALL BE NEENAH R-6663-DH OR EQUAL.
C. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE THE MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO THE SPRING LINE.
D. PREFABRICATED MONITORING FLUME TO BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SHALL BE MANUFACTURED BY MANNING. PLASTI-FAB OR APPROVED EQUAL. A PARSHALL FLUME OR A PALMER BOWLUS FLUME SHALL BE INSTALLED AS DIRECTED BY THE PRETREATMENT SECTION, WATER QUALITY CONTROL DIVISION.
E. CONCRETE FILLETS, USE 3000 PSI CONC. WITH TYPE II CEMENT. FILLETS TO MATCH TOP OF FLUME AND SLOPE ONE INCH PER FOOT.
F MANHOLE PIPE CONNECTIONS TO BE PER ASTM C-923; STANDARD SPEC. FOR RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE MANHOLE STRUCTURES AND PIPES. RESILIENT CONNECTORS TO BE A-LOK OR APPROVED EQUAL.
G. 6 IN. GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
H 6" SUBGRADE AND BACKFILL COMPACTED TO 95% MODIFIED PROCTOR.
J. 2 IN. GRAVEL CRUSHED STONE LEVELING COURSE.
L. FLUME OUTLET END ADAPTER, PLASTI-FAB OR APPROVED EQUAL.
L. SLOPE PER TABLE 1.

SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (8 FT. DIA.)/DWG. #IP-1

NOT TO SCALE



GENERAL NOTES

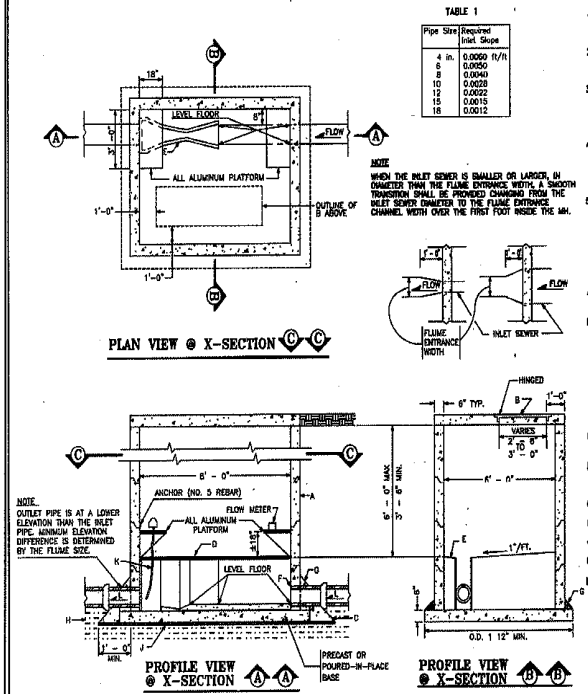
1. USE APPROVED MASTIC JOINT MATERIAL FOR ALL JOINTS.
2. CONTRACTOR HAS OPTION TO CONSTRUCT TYPE "C" M.H. IN LIEU OF TYPE "E" M.H. FOR DEPTHS OF 8' OR MORE.
3. DESIGN APPLIES TO 4', 5' & 8' MANHOLES.
4. M.H. GREATER THAN 18' IN DEPTH SHALL ONLY BE CONSTRUCTED OF PRECAST CONCRETE SECTION.
5. USE NON-SHRINK GROUT FOR FILLETS AND PENETRATIONS.
6. POSITION M.H. OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.

CONSTRUCTION NOTES

A. CONCRETE PIPE SUPPORT SHALL EXTEND OUTSIDE OF M.H. TO BELL OF FIRST JOINT & SHALL CRADLE PIPE TO SPRING LINE. NOT APPLICABLE FLEXIBLE PIPE.
B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAX., MEASURED AT SPRING LINE OF PIPE.
D. PRECAST CONCRETE COVER
E. USE MAX. 4 COURSES OR. MS BRICK ON UNPAVED STREET FOR FUTURE ADJ. OF M.H. FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2" MORTAR.
F. CONCRETE BASE TO BE POURED IN PLACE USING NO. 4 BARS AT 8" O.C. EA. WAY FOR M.H. DEPTH OF 16' OR GREATER. NO 4 BARS AT 12" O.C. EA. WAY FOR M.H. LESS THAN 16' IN DEPTH.
H. INV. ELEV. OF STUB OR LATERAL AS SHOWN ON PLANS.
J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
K. USE A 5'x 5' CONCRETE PAD IN ALL AREAS SLOPE FOR GRADER USE UNPAVED AREAS.
L. FRAME AND COVER, SEE DWG. # SAS-4
M. CONCRETE FILL, 3000 PSI
N. SLOPE 1" PER FT. FROM PIPE CROWN
P. SHELF TO BE 9" WIDE MIN.
Q. APPROVED WATERSTOP TO BE COMPATIBLE WITH TYPE OF PIPE.

MANHOLE TYPE "C" DETAIL/DWG. # SAS-14

NOT TO SCALE



GENERAL NOTES

1. THIS DESIGN IS APPLICABLE FOR MANHOLES 6.0 FT. & LESS IN DEPTH MEASURED FROM FLOOR TO CONCRETE COVER. DEPTHS GREATER THAN 6.0 FT. WILL REQUIRE THE 8' DIAMETER, ROUND MANHOLE PER DWG NO. IP-1.
2. INDUSTRIAL MANHOLE SHALL BE LOCATED ON PRIVATE PROPERTY OUTSIDE OF CITY RIGHT-OF-WAY. CITY PERSONNEL SHALL HAVE ACCESS TO THE MANHOLE AT ALL TIMES OF THE DAY OR NIGHT.
3. NOT ALL INSTALLATIONS WILL REQUIRE THE ALUMINUM PLATFORMS. SAMPLER AND FLOW METERING APPARATUS TO BE PROVIDED BY THE INDUSTRIAL USER. FINAL DECISIONS RELATIVE TO THE REQUIREMENT FOR MONITORING EQUIPMENT AND THE SPECIFIC TYPE OF FLUME WILL BE MADE BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION FOR EACH INDIVIDUAL CASE.
4. A PARSHALL FLUME OR PALMER BOWLUS FLUME SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THIS DETAIL. THE FLUME MUST BE SIZED TO ACCURATELY MEASURE ALL ANTICIPATED FLOW LEVELS. PRIOR TO INSTALLATION THE FLUME SIZE, AND TYPE MUST BE APPROVED BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION.
5. IN ORDER TO CONTROL VELOCITIES AT A LEVEL THAT ALLOWS FOR ACCURATE FLOW MEASUREMENT, SLOPES ON THE INLET SEWER LINES FOR 20 FT. OUTSIDE THE MANHOLE MUST BE AS SPECIFIED IN TABLE 1 FOR THE VARIOUS SIZE LINES. OUTLET SEWER LINES MUST BE DESIGNED TO CONVEY THE MAXIMUM DESIGN FLOWS WITHOUT CREATING A SURCHARGE CONDITION IN THE FLUME.

CONSTRUCTION NOTES

A. ALL MANHOLE BASES, RISER SECTIONS AND FLAT SLAB TOP SECTIONS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH CITY SPECIFICATIONS.
B. FRAME & COVER FOR NON-TRAFFIC AREAS SHALL BE NEENAH R-6681-VIH OR EQ. FOR TRAFFIC OR PARKING AREAS, IT SHALL BE NEENAH R-6663-DH OR EQUAL.
C. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE THE MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO THE SPRING LINE.
D. PREFABRICATED MONITORING FLUME TO BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SHALL BE MANUFACTURED BY MANNING. PLASTI-FAB OR APPROVED EQUAL. A PARSHALL FLUME OR A PALMER BOWLUS FLUME SHALL BE INSTALLED AS DIRECTED BY THE PRETREATMENT SECTION, WATER QUALITY CONTROL DIVISION.
E. CONCRETE FILLETS, USE 3000 PSI CONC. WITH TYPE II CEMENT. FILLETS TO MATCH TOP OF FLUME AND SLOPE ONE INCH PER FOOT.
F. MANHOLE PIPE CONNECTIONS TO BE PER ASTM C-923; STANDARD SPEC. FOR RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE MANHOLE STRUCTURES AND PIPES. RESILIENT CONNECTORS TO BE A-LOK OR APPROVED EQUAL.
G. 6 IN. GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
H. 6" SUBGRADE AND BACKFILL COMPACTED TO 95% MODIFIED PROCTOR.
J 2 IN. GRAVEL CRUSHED STONE LEVELING COURSE.
K FLUME OUTLET END ADAPTER, PLASTI-FAB OR APPROVED EQUAL
L. SLOPE PER TABLE 1.

SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (6x8 RECTANGLAR)/DWG. #IP-2

NOT TO SCALE

CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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www.whpacific.com

NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, A. NG
CHECKED BY: RB

PRELIMINARY

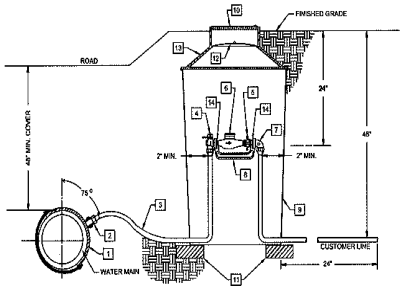
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
PARKS & OPEN SPACE			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

SHEET NO.
SF-4

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NOTE: SEE SERVICE LOCATION DETAIL FOR PLACEMENT DIMENSIONS AND DIRECTIONS.

ITEM

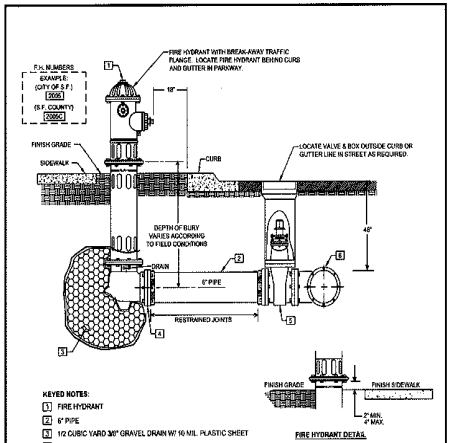
1. 1" SERVICE SADDLE
2. 1" CORORATION STOP (A.W.W.A. TAPERED THREAD)
3. 1" COPPER TUBING (TYPE " K ")
4. 1" ANGLE VALVE
5. 3/4" EXPANSION CONNECTION
6. 3/4" SEALED REGISTER WATER METER (FURNISHED & INSTALLED BY SDCW)
7. 1" ANGLE ELL WITH TEST VALVE
8. 1" CAST IRON METER YOKE
9. 24" DIA. X 36" METER BOX
10. POLYMER LID (12-5/16" DIA.)
11. BLOCKS - USE AS DIRECTED BY SDCW
12. INNER ALUMINUM FROST LID
13. DOUBLE LID COVER (20" D/A. X 11-1/2" DIA. INNER OPENING) WITH EXTENSION RING (20" DIA. X 24" DIA.)
14. 1" X 3/4" METER ADAPTER

SANGRE DE CRISTO WATER DIVISION
CITY OF SANTA FE, NEW MEXICO
STANDARD DETAILS

3/4" SINGLE SERVICE

DRAWN BY: | DATE: 09/2006
CHECKED: | SCALE: N/A
APPROVED:

02A



KEYED NOTES:

1. FIRE HYDRANT
2. 6" PIPE
3. 1/2 CUBIC YARD 3/8" GRAVEL DRAIN W/ 16 MIL PLASTIC SHEET
4. 6" MJ RETAINER AND 6" HARNESS (IF REQUIRED)
5. 6" MJ x FL GATE VALVE & BOX
6. TEE: MJ RUN W/ 6" FLANGE OUTLET

CONSTRUCTION NOTES:

A - FIRE HYDRANT SHALL NOT BE INSTALLED NEAR ANY STRUCTURES AND SHALL HAVE A MINIMUM 36" CLEAR SPACE IN ALL DIRECTIONS.

B - LOCATE HYDRANT 18" BEHIND BACK OF CURB UNLESS OTHERWISE SHOWN ON PLANS OR SPECIFICALLY DIRECTED BY S.D.C.W. HYDRANT TO BE SET PLUMB AND AT PROPER ELEVATION (ELEVATION PROVIDED BY DEVELOPER) HYDRANTS INSTALLED AS PART OF A NEW DEVELOPMENT/EXTENSION SHALL BE A STANDARD 5' BURY HYDRANT AND SHALL BE SET TO FINISHED GRADE WITHOUT THE USE OF HYDRANT EXTENSIONS (IF AN ADJUSTMENT IS REQUIRED, RE-LAY THE WATER MAIN AND FIRE HYDRANT LEG OR INSTALL RESTRAINED OFFSET AS DIRECTED BY SDCW)

C - WEEP HOLE MUST HAVE 1/4" PLUG REMOVED AND BE FREE DRAINING INTO GRAVEL DRAIN. USE FULLY RESTRAINED JOINTS FROM THE FIRE HYDRANT TO THE FLANGED CONNECTION ON VALVE.

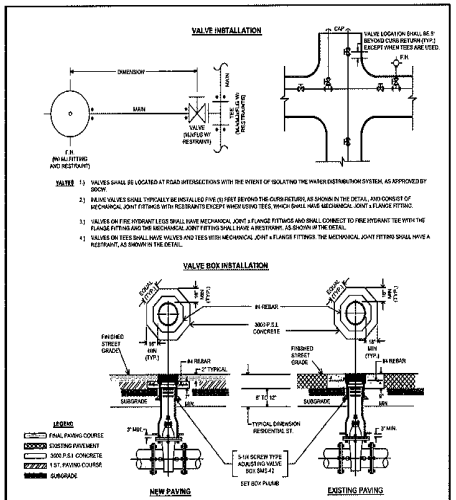
D - FIRE HYDRANT SHALL BE PAINTED AND REFLECTIVE NUMERALS INSTALLED AFTER INSTALLATION.

SANGRE DE CRISTO WATER DIVISION
CITY OF SANTA FE, NEW MEXICO
STANDARD DETAILS

FIRE HYDRANT

DRAWN BY: | DATE: 09/2006
CHECKED: | SCALE:
APPROVED:

07



VALVES 1) VALVES SHALL BE LOCATED AT ROAD INTERSECTIONS WITH THE INTENT OF ISOLATING THE WATER DISTRIBUTION SYSTEM, AS APPROVED BY SDCW.

2) WHERE VALVES SHALL TYPICALLY BE INSTALLED FIVE (5) FEET BEYOND THE CURB RETURN, AS SHOWN IN THE DETAIL, AND CONSIST OF MECHANICAL JOINT FITTINGS WITH RESTRAINTS EXCEPT WHEN USING TEES, WHICH SHALL HAVE MECHANICAL JOINT x FLANGE FITTING.

3) VALVES ON FIRE HYDRANT LEGS SHALL HAVE MECHANICAL JOINT x FLANGE FITTINGS AND SHALL CONNECT TO FIRE HYDRANT TEE WITH THE FLANGE FITTING AND THE MECHANICAL JOINT FITTING SHALL HAVE A RESTRAINT, AS SHOWN IN THE DETAIL.

4) VALVES ON TEES SHALL HAVE VALVES AND TEES WITH MECHANICAL JOINT x FLANGE FITTINGS. THE MECHANICAL JOINT FITTING SHALL HAVE A RESTRAINT, AS SHOWN IN THE DETAIL.

NEW PAVING VALVE BOXES SHALL BE INSTALLED AND RAISED TO GRADE IN THE FOLLOWING MANNER FOR NEW PAVING:

1) VALVE BOX SHALL BE INSTALLED OVER VALVE DURING MAIN INSTALLATION. TOP OF VALVE BOX SHALL BE LEFT BELOW THE TOP OF SUBGRADE UNTIL VALVE IS READY TO BE RAISED TO FINAL GRADE.

2) WHEN THE VALVE BOX IS READY TO BE RAISED, AN OCTAGON SHAPE SHALL BE CUT-OUT AROUND THE VALVE BOX FROM THE FIRST PAVING LIFT (AS SHOWN IN THE DETAIL). THE VALVE BOX SHALL BE RAISED TO THE FINISHED STREET GRADE. THE SOIL AROUND THE VALVE BOX SHALL BE THOROUGHLY COMPACTED IN ACCORDANCE WITH CITY STANDARDS. THE CONCRETE COLLAR (CONSISTING OF 3,000 PSI CONCRETE AND #4 REBAR) SHALL BE POURED FLUSH WITH THE TOP OF THE FIRST PAVING COURSE (MOLDING HAND FORMING CONCRETE TO REMOVE VOIDS) AND THE VALVE BOX SHALL BE PROTECTED FROM VEHICULAR TRAFFIC FOR 24 HOURS.

EXISTING PAVING INSTALL VALVE BOXES PER "NEW PAVING" (SEE ABOVE) WITH THE CONCRETE COLLAR POURED FLUSH WITH THE FINISHED GRADE OF THE EXISTING PAVING WITH A SMOOTH TROWELED FINISH. NOTE: IF EXCAVATION OVER 42" SQUARE IS REQUIRED TO ADJUST VALVE BOX TO GRADE, "NEW PAVING" CONCRETE COLLAR PROCEDURE SHALL BE FOLLOWED AS WELL AS ANY NECESSARY PAVING SHALL BE COMPLETED.

UNPAVED AREAS IN DIRT OR GRAVEL STREETS, TOP OF VALVE BOX AND CONCRETE COLLAR SHALL BE LEFT 6" BELOW THE STREET GRADE. IN OTHER UNPAVED AREAS, VALVE BOX AND CONCRETE COLLAR SHALL BE LEFT 2" ABOVE FINISHED GRADE OR AS DIRECTED BY SDCW.

PROTECTION OF VALVE BOXES VALVE BOXES SHALL BE PROTECTED FROM DAMAGE, LOSS AND SHALL NOT BE FILLED WITH DIRT AND DEBRIS. VALVES MUST BE ACCESSIBLE DURING CONSTRUCTION WITH MINIMUM EXCAVATION. VALVES IDENTIFIED BY SDCW AS KEY SHUT-OFF VALVES SHALL REMAIN AT GRADE DURING ALL PHASES OF CONSTRUCTION.

SANGRE DE CRISTO WATER DIVISION
CITY OF SANTA FE, NEW MEXICO
STANDARD DETAILS

VALVE & VALVE BOX INSTALLATION

DRAWN BY: | DATE: 09/2006
CHECKED: | SCALE: N/A
APPROVED:

08

CASE/PERMIT NO. S-2020-XX

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NO.	REVISIONS	BY	APP'D	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB
AS NOTED

PRELIMINARY

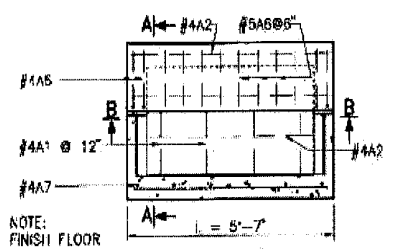
PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: WATERLINE STANDARD CONSTRUCTION DETAILS

DEPARTMENT	CITY REVIEW	SIGN-OFF	DATE
WASTEWATER			
WATER			
PW ENGINEERING			
TRAFFIC			
FIRE DEPARTMENT			
ELECTRIC			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

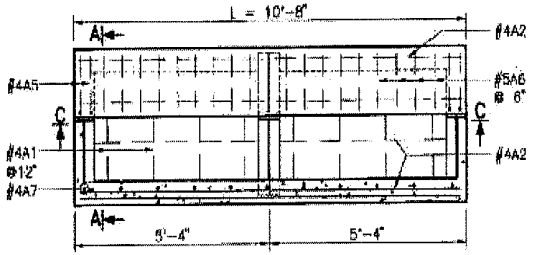
SHEET NO.
WL-1

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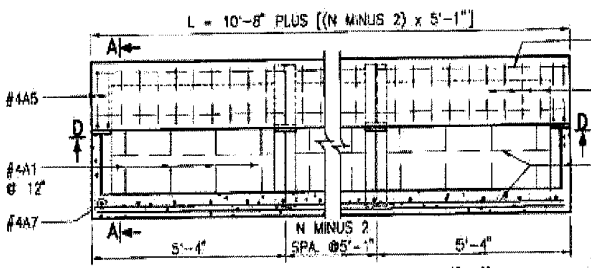


NOTE:
FINISH FLOOR TO DRAIN TO OUTLET PIPE SEE SKETCH.

PLAN TYPE I

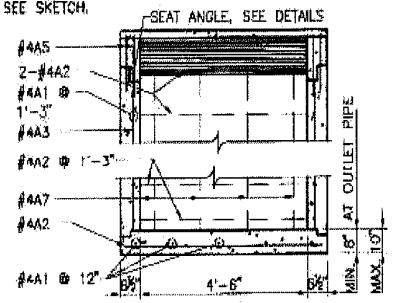


PLAN TYPE II

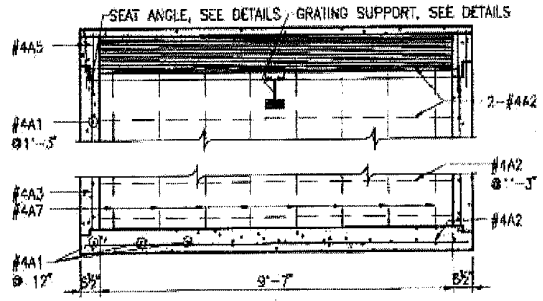


PLAN TYPE III TO TYPE "N"

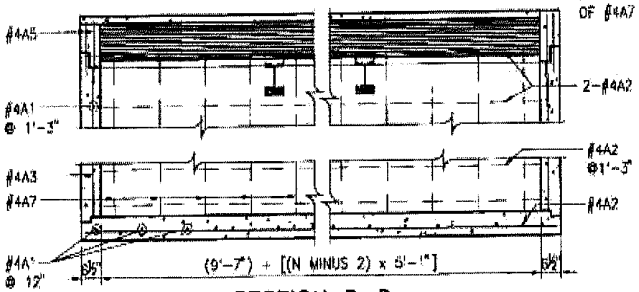
NOTE:
SEE REINFORCING BAR SCHEDULE FOR SPACING OF #4A7 BARS.



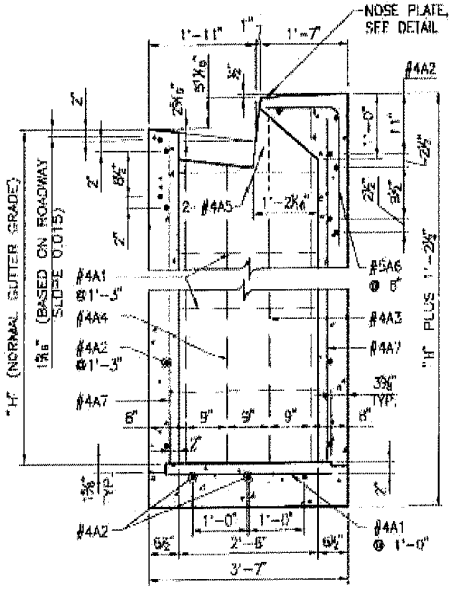
SECTION B-B



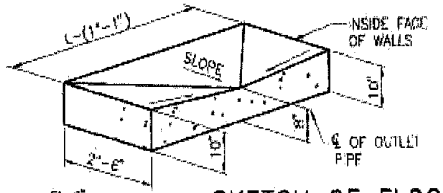
SECTION C-C



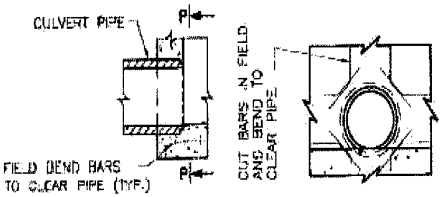
SECTION D-D



SECTION A-A
TYPICAL FOR ALL TYPES

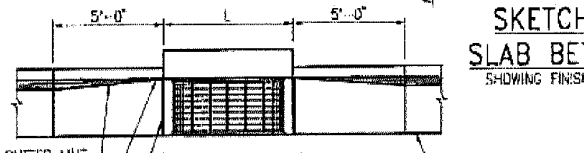


SKETCH OF FLOOR
SLAB BETWEEN WALLS
SHOWING FINISH TO DRAIN OUTLET PIPE

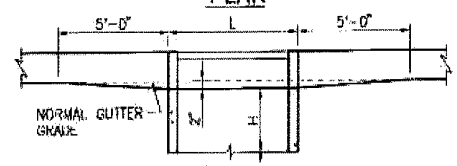


TYPICAL SECTION
@ ℄ PIPE

PART
SECTION P-P

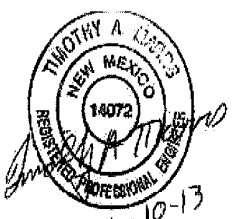


PLAN



SECTION ALONG GUTTER LINE
DETAIL FOR PLACING DROP INLET

SERIAL 623-14-2/3 AND 623-14-3/3 MUST ACCOMPANY THIS SHEET.



NO.	DATE	BY	DESCRIPTION
1	1/25/13	YML	REVISED TO CURB

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

DROP INLET FOR TYPE "B" CURB

DESIGNED BY: YML DRAWN BY: SNL CHECKED BY: YML/TM

623-14-1/3 1 of 3

CITY REVIEW SIGN-OFF

DEPARTMENT	DATE
WASTEWATER	
PW ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
PARK & RECREATION	
LANDSCAPE	
TRAILS / OPEN SPACE	
SUBDIVISION REVIEW	

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NO.	REVISIONS	BY	APP.	DATE

PROJECT:
FILE:
DATE: 09/14/20
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, KG
CHECKED BY: RB
AS NOTED

PRELIMINARY

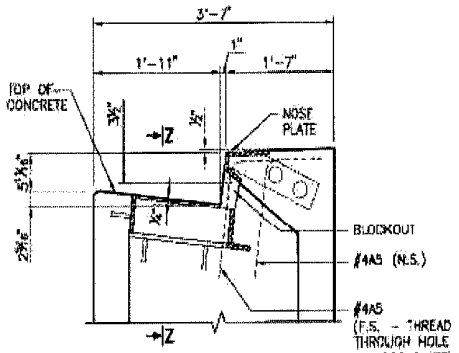
PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: NMDOT - DROP INLET FOR TYPE B CURBS

SHEET NO.
BDIC
-003-04

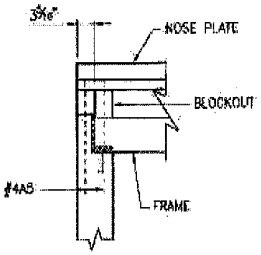
CASE/PERMIT NO. S-2020-XX

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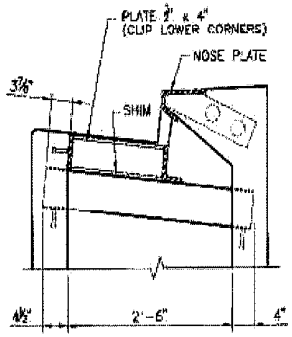
SECTION X-X

(SEE SHEET 3 OF 3)
(GRATE NOT SHOWN)



SECTION Z-Z

(GRATE NOT SHOWN)



SECTION Y-Y

(SEE SHEET 3 OF 3)
(GRATE NOT SHOWN)

GENERAL NOTES

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (CURRENT EDITION), APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
2. STRUCTURAL STEEL MATERIALS, WELDING, AND FABRICATION SHALL CONFORM TO SECTION 541 - STEEL STRUCTURES OF THE STANDARD SPECIFICATIONS.
3. ALL STRUCTURAL STEEL SHALL RECEIVE A PROTECTIVE COATING IN CONFORMANCE WITH SECTION 545 OF THE STANDARD SPECIFICATIONS.
4. ALL CONCRETE TO BE CLASS "A". CHAMFER ALL EXPOSED EDGES 3/4", UNLESS OTHERWISE NOTED.
5. ALL REINFORCING BARS SHALL CONFORM TO AASHTO M31, GRADE 60. DIMENSIONS REFER TO CENTERLINE OF BARS.
6. SEE ROADWAY PLANS FOR LOCATION OF DROP INLET, NUMBER, SIZE, AND FLOW LINE ELEVATIONS OF PIPE DRAINS, AND "H" DIMENSION.
7. OUTLET PIPES SHALL NOT BE SET AT END OF DROP INLET.

DESIGN DATA:

DESIGN IS IN ACCORDANCE WITH AASHTO LRFD SPECIFICATIONS 2010 FIFTH EDITION AND CURRENT INTERIMS.

DESIGN STRESSES:	STRUCTURAL STEEL: ASTM A-36 FY = 36 KSI REINFORCED CONCRETE: F'c = 3,000 PSI @ 28 DAYS Fy = 60 ksi, GRADE 60
LIVE LOAD:	HL-93
HORIZONTAL EARTH PRESSURE:	36 LBS./CU.FT. EQUIVILENT FLUID PRESSURE WITH 2' LIVE LOAD SURCHARGE
MAXIMUM:	H = 11'-6"

ESTIMATED QUANTITIES

TYPE	N	L	CLASS "A" CONC. † CU. YDS	REINFORCING BARS - LBS. H = 8'-0" OR LESS	REINFORCING BARS - LBS. H = 8'-1" TO 10'-0"	REINFORCING BARS - LBS. H = 10'-0" TO 11'-6"	STRUCTURAL STEEL - LBS.
I	1	5'-7"	0.324H+0.098	23.870 H + 94.779	25.209 H + 95.440	36.094 H + 100.790	570
II	2	10'-8"	0.528H+1.367	37.319 H + 180.150	41.327 H + 182.185	58.185 H + 190.838	1186
III	3	15'-8"	0.732H+2.017	50.768 H + 265.518	57.448 H + 268.858	81.496 H + 280.882	1796
IV	4	20'-10"	0.936H+2.676	64.217 H + 350.887	73.569 H + 354.563	104.297 H + 370.927	2412
V	5	25'-11"	1.140H+3.335	77.662 H + 436.258	89.690 H + 442.270	127.098 H + 460.974	3022
VI	6	31'-0"	1.344H+3.995	91.115 H + 521.716	105.811 H + 528.974	149.899 H + 551.018	3631

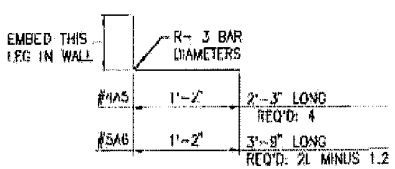
† SEE TABLE FOR PIPE DEDUCTION
N = NUMBER OF GRATINGS PLACED IN DROP INLET
H = NORMAL GUTTER ELEVATION TO FLOW LINE ELEVATION OF OUTLET PIPE. USE H IN FEET.

CLASS "A" CONCRETE DEDUCTIONS FOR ONE PIPE

SIZE	CONCRETE PIPE	METAL PIPE
18"	0.06 Cu. YDS.	0.04 CU. YDS.
24"	0.10 CU. YDS.	0.06 CU. YDS.
30"	0.15 Cu. YDS.	0.10 CU. YDS.
36"	0.21 C... YDS.	0.14 CU. YDS.
42"	0.28 CU. YDS.	0.18 CU. YDS.

NOTE:
DEDUCTIONS NOTED ARE FOR PIPES NORMAL TO WALLS. FOR SKEWED PIPES, MULTIPLY DEDUCTIONS BY SECANT OF SKEW ANGLE. FOR SMALLER PIPES OTHER THAN THOSE SHOWN IN TABLE, ADJUST DEDUCTIONS ACCORDINGLY.

REINFORCING BAR SCHEDULE



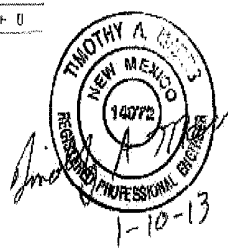
#4A5	1'-2"	2'-3" LONG REQ'D: 4
#5A6	1'-2"	3'-9" LONG REQ'D: 2L MINUS 1.2

#4A1	3'-3"	REQ'D: L MINUS 0.60 PLUS 1.60H
#4A2	L MINUS 3"	REQ'D: 9 PLUS 1.60H
#4A3	H PLUS 10"	REQ'D: 4
#4A4	H	REQ'D: 4

#4A7

"H"	SPACES		REQUIRED
8'-0" OR LESS	10"	H PLUS 6"	12 N + 2
8'-1" TO 10'-0"	8"	H PLUS 6"	16 N
10'-1" TO 11'-6"	4½"	H PLUS 6"	26 N + 0

NOTE:
"H" AND "L" ARE IN FEET, FINISH BARS TO THE NEAREST WHOLE NUMBER OF BARS.



1-10-13

SERIALS 623-14-1/3 AND 623-14-3/3 MUST ACCOMPANY THIS SHEET.

DATE	BY	DESCRIPTION
1/27/12	YML	REVISED TO UPPER REVISING (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

DROP INLET FOR TYPE "B" CURBS GRATES, FRAMES, NOSE PLATES AND CENTER SUPPORT BEAMS

DESIGNED BY: YML DRAWN BY: SG CHECKED BY: YML/TM

623-14-2/3 2 of 3

CASE/PERMIT NO. S-2020-XX

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PROJECT:
FILE:
DATE:
SCALE:
DESIGNED BY: RB, BZ
DRAWN BY: BZ, AL, MS
CHECKED BY: RB
AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: NMDOT - TYPE B MODIFIED DROP INLETS FOR CURBS

CITY REVIEW / SIGN-OFF — DATE

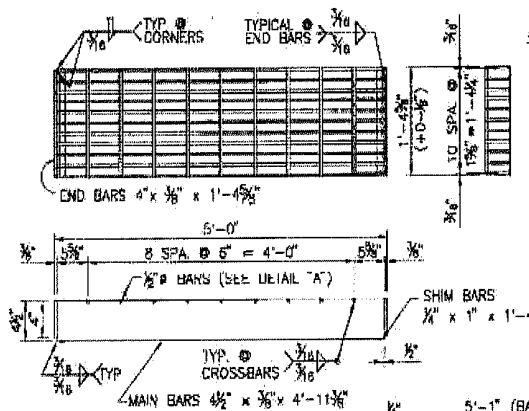
DEPARTMENT: WASTEWATER, PW ENGINEERING, TRAFFIC, FIRE DEPARTMENT, SOLID WASTE, LANDSCAPE, TRAILS / OPEN SPACE, SUBDIVISION REVIEW

SHEET NO.

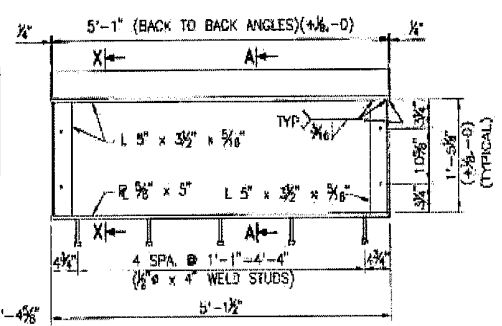
BDIC -004-A

2020

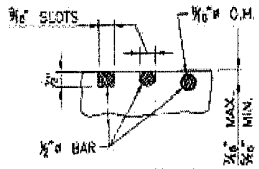
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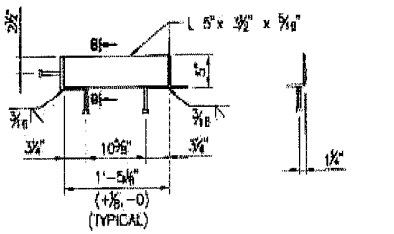
GRATING DETAILS



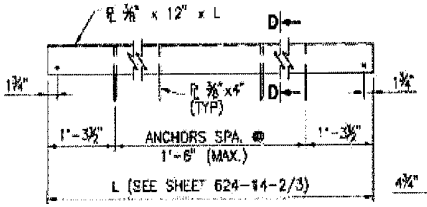
ANGLE FRAME DETAIL (TYPE 1)



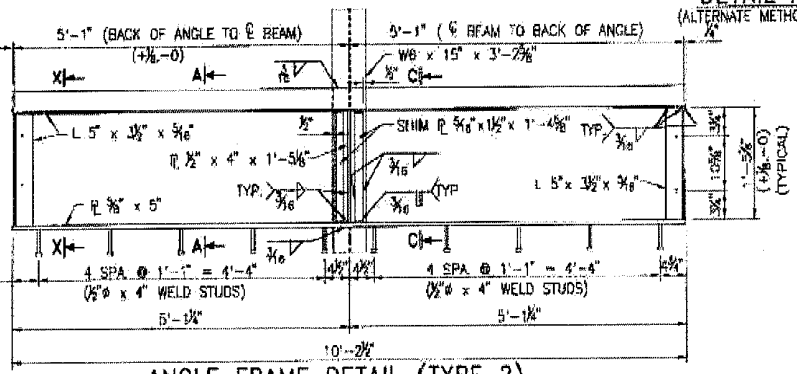
DETAIL A
(ALTERNATE METHODS)



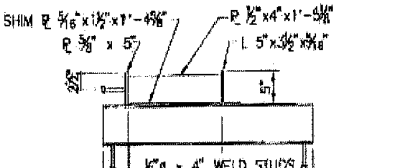
SECTION A-A SECTION B-B



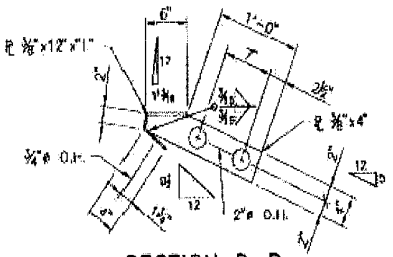
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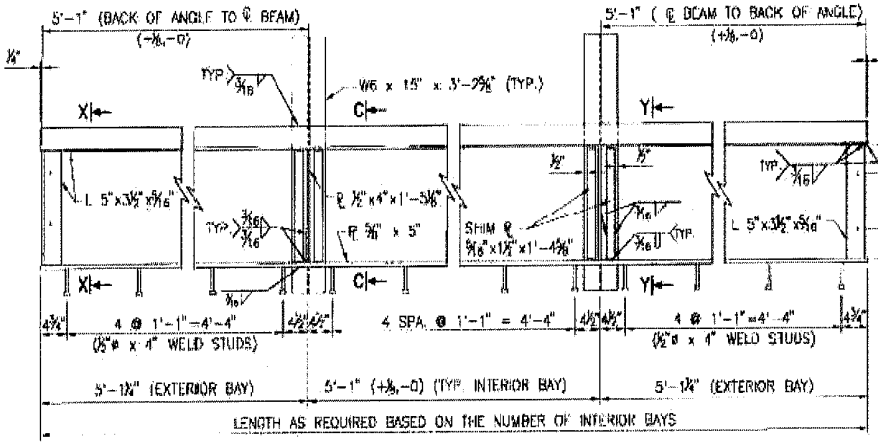
ANGLE FRAME DETAIL (TYPE 2)



SECTION C-C



SECTION D-D
(GRATE NOT SHOWN)



ANGLE FRAME DETAIL (TYPE N)

SERIALS 623-14-1/3 AND 623-14-2/3 MUST ACCOMPANY THIS SHEET.

TIMOTHY A. MARTIN NEW MEXICO 14072 REGISTERED PROFESSIONAL ENGINEER
1-10-13

DATE	BY	DESCRIPTION
1/23/13	YML	REVISED TO DATE

REVISIONS FOR CHANGE NOTICES

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

DROP INLET FOR TYPE "D" CURBS GRATES, FRAMES, NOSE PLATES AND CENTER SUPPORT BEAMS

DESIGNED BY: YML DRAWN BY: SKL CHECKED BY: YML/TM

623-14-3/3 3 of 3

CASE/PERMIT NO. S-2020-XX

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PROJECT: | DESIGNED BY: RB, BZ
FILE: | DRAWN BY: US, BZ, JL, NG
DATE: 09/14/20 | CHECKED BY: RB
SCALE: AS NOTED

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1, 2 & 3

SHEET TITLE: NMDOT - TYPE B MODIFIED DROP INLETS FOR CURBS

CITY REVIEW SIGN-OFF

DEPARTMENT	DATE
WASTEWATER	
WATER	
ENGINEERING	
TRAFFIC	
FIRE DEPARTMENT	
PARKS	
LANDSCAPE	
TRAILS / OPEN SPACE	
SUBDIVISION REVIEW	

SHEET NO.
BDIC -004-B

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GENERAL NOTES

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]

SIDEWALKS

12. SIDEWALK AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SCDRA 608-01-17.
13. SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1.5% TYPICAL, BUT SHALL NOT EXCEED 2.0% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).
14. SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT, EXCLUSIVE OF THE WIDTH OF THE CURB RETURN.
EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.0 FT, PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT MAXIMUM. PASSING SPACES SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM
15. ANY SIGNS POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.
16. THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5.0 FT MINIMUM.

CURB RAMPS

17. FOR NEW CONSTRUCTION AND ALTERATIONS: CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMP STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMP STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REMOVED AND RECONSTRUCTED.
18. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES WHEN APPLYING THE 15 FOOT MAX LENGTH. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
19. CONSTRUCT THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES, BLENDED TRANSITIONS, AND TURNING SPACES AS TYPICAL 5.0 FT X 5.0 FT AND MINIMUM 4.0 FT X 4.0 FT. CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
20. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
21. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.3%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP RUNS, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.0%.
22. CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.
23. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
24. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMP IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.0 FT FOR AN 8.3% SLOPE)

CROSSWALKS

25. PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED CROSSWALK. CURB RAMP LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.

DETECTABLE WARNING

26. DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE UTILIZED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACE PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CROSSES A STREET ALLEY, TRAFFIC ISLAND, MEDIAN, OR ROADWAY. DETECTABLE WARNING SURFACES (DWS) SHALL NOT BE INSTALLED AT PEDESTRIAN, DRIVEWAYS. DETECTABLE WARNING SURFACE MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP OR YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.
27. DETAILS OF DETECTABLE WARNING SURFACE ARE SHOWN IN CONTRACT PLANS AND SHEET 608-001-4/12 OF THE STANDARD DRAWINGS.

ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS

28. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT PRACTICABLE. INSTALL PEDESTRIAN STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS. REFER TO THE MUTCD FOR FURTHER GUIDANCE.
29. PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCATED WITHIN A HORIZONTAL REACH OF 9" TO 24" AND SHALL BE WITHIN 36" TO 44" ABOVE THE SIDEWALK SURFACE.
30. PEDESTRIAN SIGNAL SHALL HAVE 48"x48" MIN TURNING SPACE TO PROVIDE ACCESS TO PUSH BUTTONS

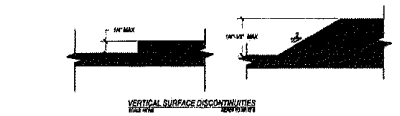
ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES:

ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE NMDOT PEDESTRIAN ACCESS STANDARDS AND PROWAG 2011 OR LATEST EDITION. ANY DESIGN / CONSTRUCTION DETAIL THAT THAT IS DEEMED AN VARIANCE OR TECHNICALLY INFEASIBLE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITTAL AND APPROVAL OF ADA DESIGN VARIANCE PROCEDURES.

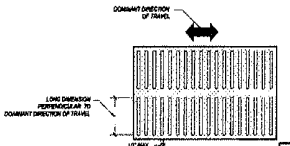
32. EXCEPTION: IN ALTERATION WORK, IF COMPLIANCE IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT PRACTICABLE. ANY ELEMENTS OR FEATURES OF THE BUILDING OR FACILITY THAT IS BEING ALTERED AND CAN BE MADE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SCOPE OF THE ALTERATION

33. TECHNICAL INFEASIBILITY: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE LIKELIHOOD OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WOULD REQUIRE REMOVING OR ALTERING A LOAD-BEARING MEMBER WHICH IS AN EXISTING PART OF THE STRUCTURAL FRAME, OR BECAUSE OTHER EXISTING PHYSICAL OR SITE CONSTRAINTS PROHIBIT

34. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.



VERTICAL SURFACE DISCONTINUITIES



HORIZONTAL OPENINGS



NO	DATE	BY	APP	DESCRIPTION
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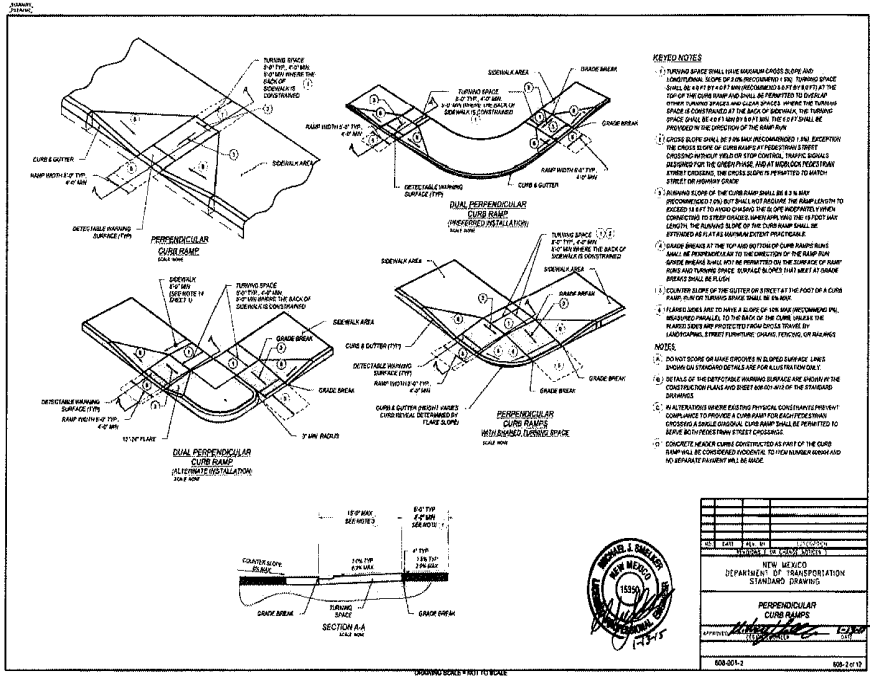
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

PEDESTRIAN ACCESS ROUTE GENERAL NOTES

APPROVED: [illegible] CHIEF ENGINEER

608-001-1 606-1 of 12

DRAWING SCALE = NOT TO SCALE



KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMENDED 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN
2. CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE
3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE
4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH
5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX
6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 8%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS

NOTES

A. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-4/12 OF THE STANDARD DRAWINGS
C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS
D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.

NO	DATE	BY	APP	DESCRIPTION
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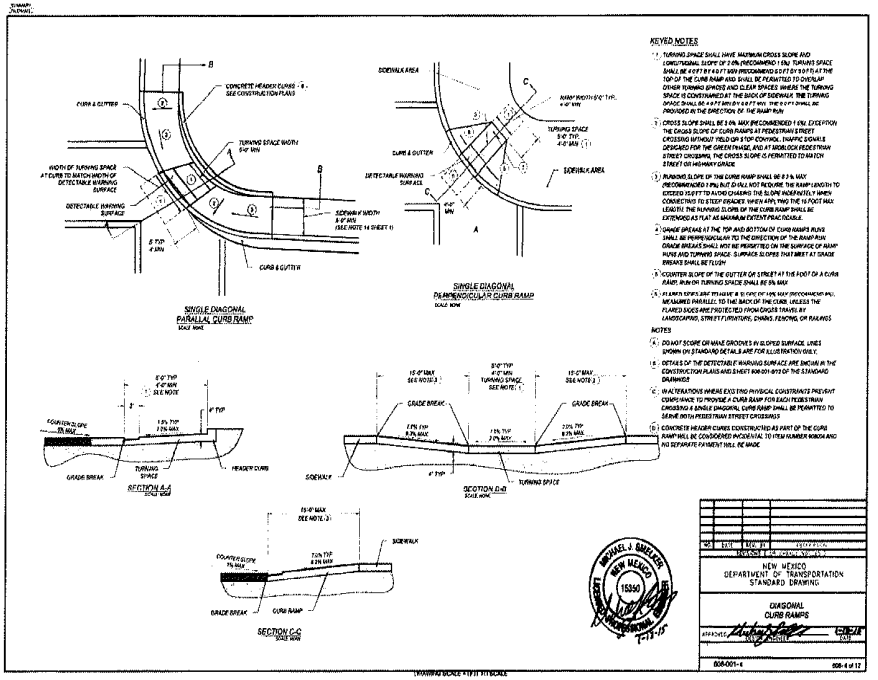
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

PERPENDICULAR CURB RAMPS

APPROVED: [illegible] CHIEF ENGINEER

608-001-2 608-2 of 12

DRAWING SCALE = NOT TO SCALE

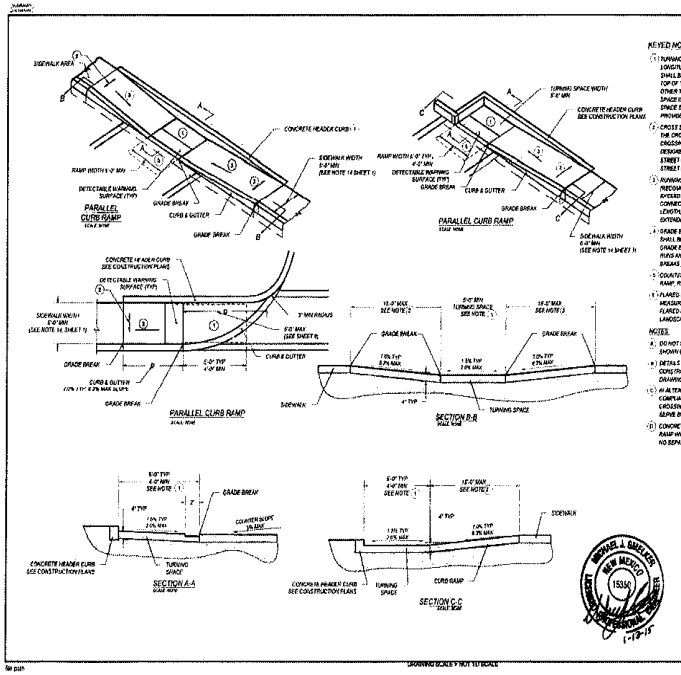


KEYED NOTES

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NOTES

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NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

DIAGONAL CURB RAMPS

APPROVED: [illegible] CHIEF ENGINEER

608-001-4 608-4 of 12

DRAWING SCALE = NOT TO SCALE

NO	DATE	BY	APP	DESCRIPTION
				REVISED TO CHANGE SHEET 1

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

PARALLEL CURB RAMPS

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608-001-3 608-3 of 12

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CASE/PERMIT NO. S-2020-XX

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Albuquerque, NM 87110
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DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, NG
CHECKED BY: RB

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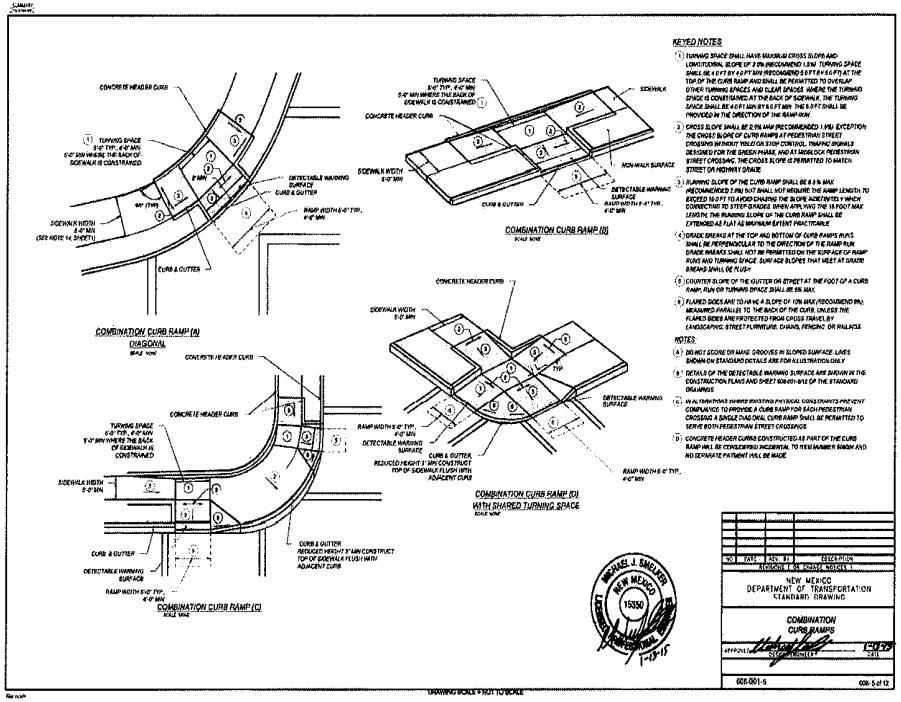
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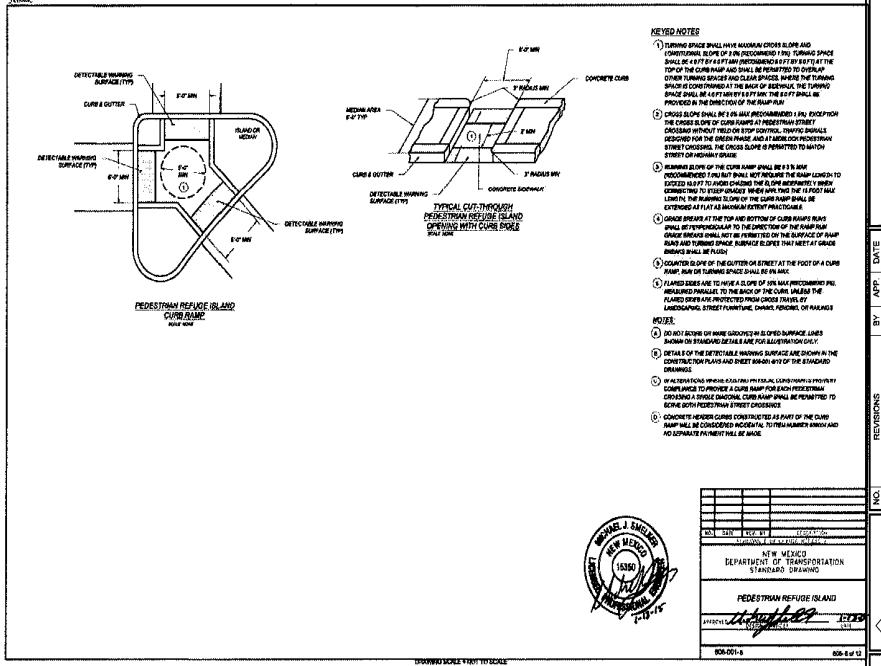
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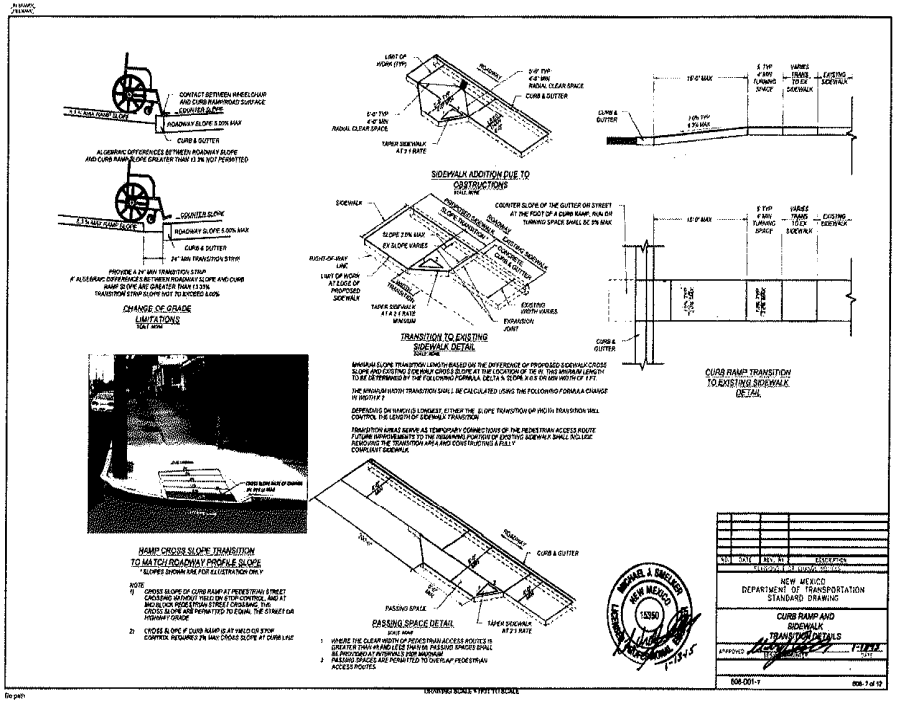
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PARKS & OPEN SPACE			
LANDSCAPE			
TRAILS / OPEN SPACE			
SUBDIVISION REVIEW			

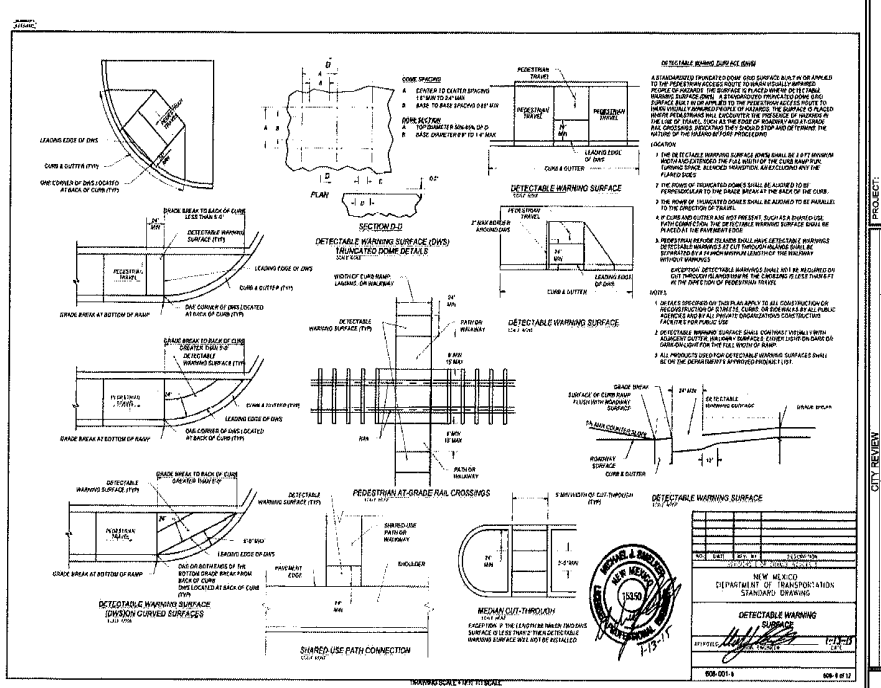
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PROJECT:
FILE:
DATE: 09/14/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: JS, BZ, JL, KG
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA
SUBDIVISION - PHASE 1, 2 & 3

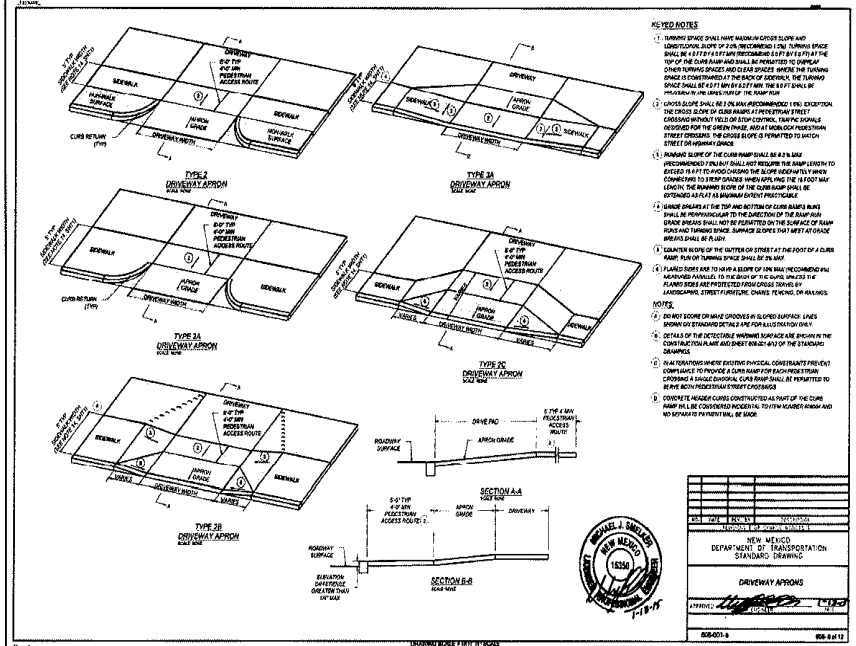
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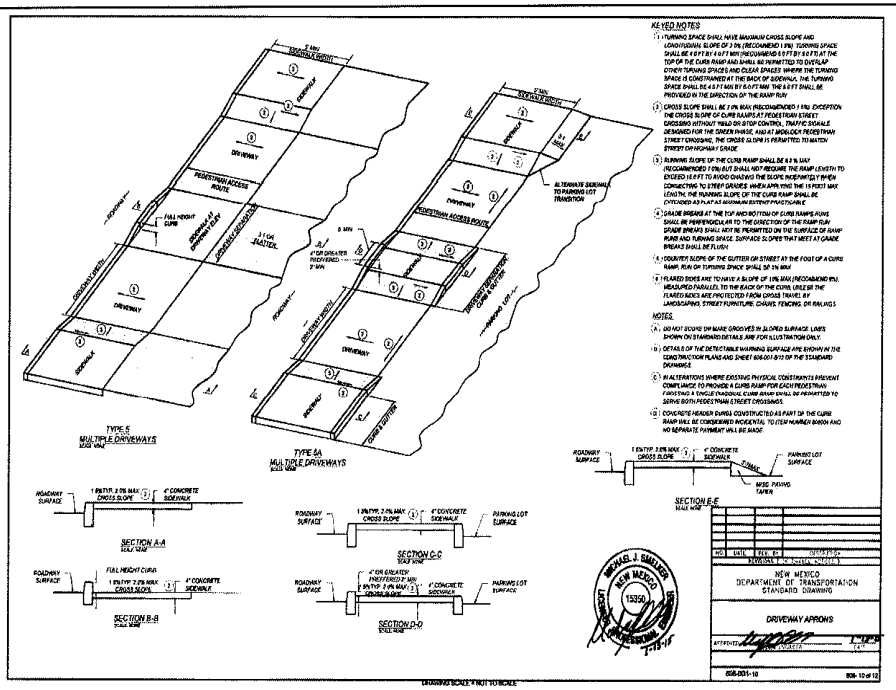
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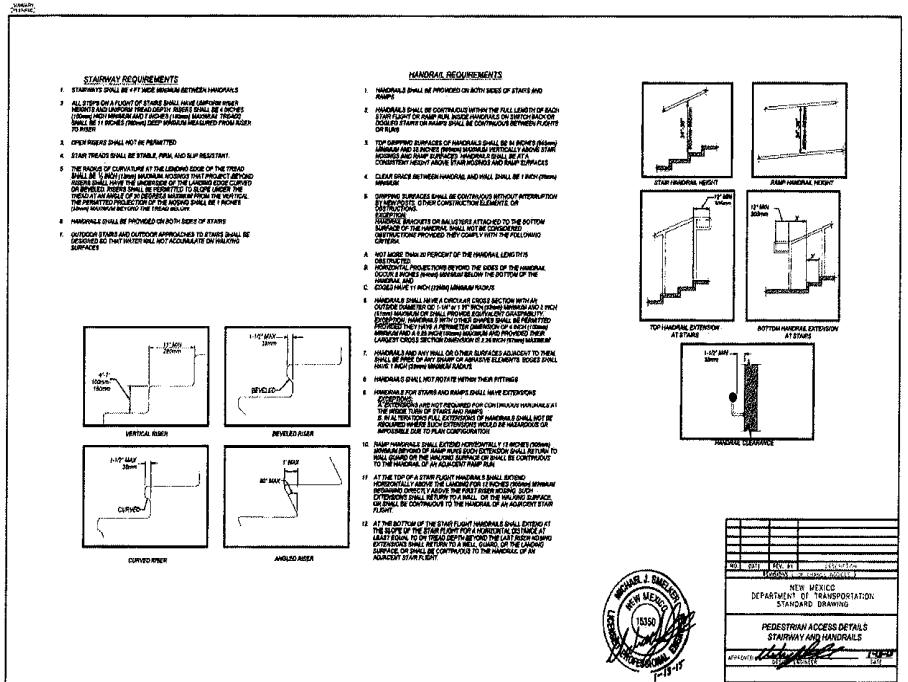
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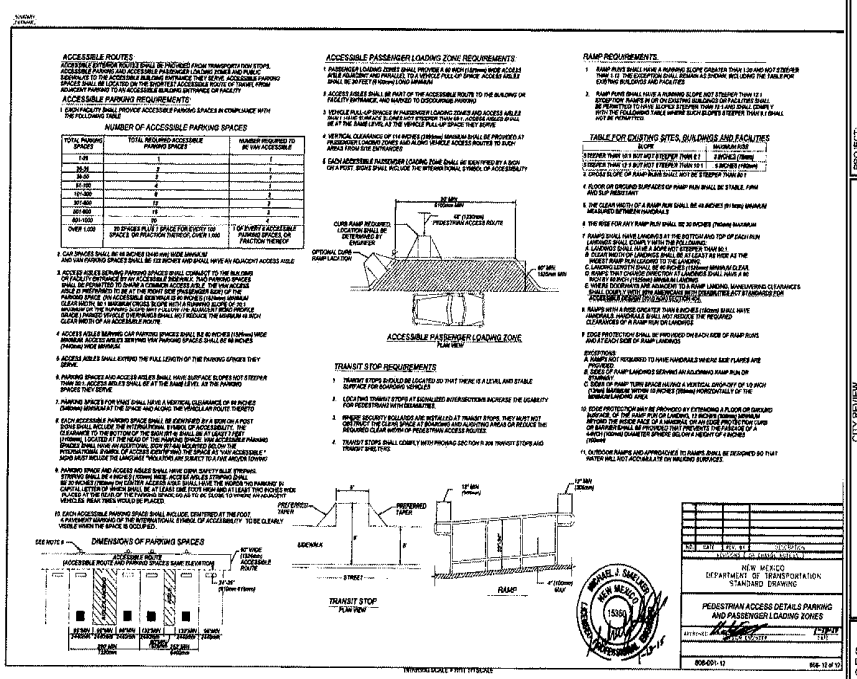
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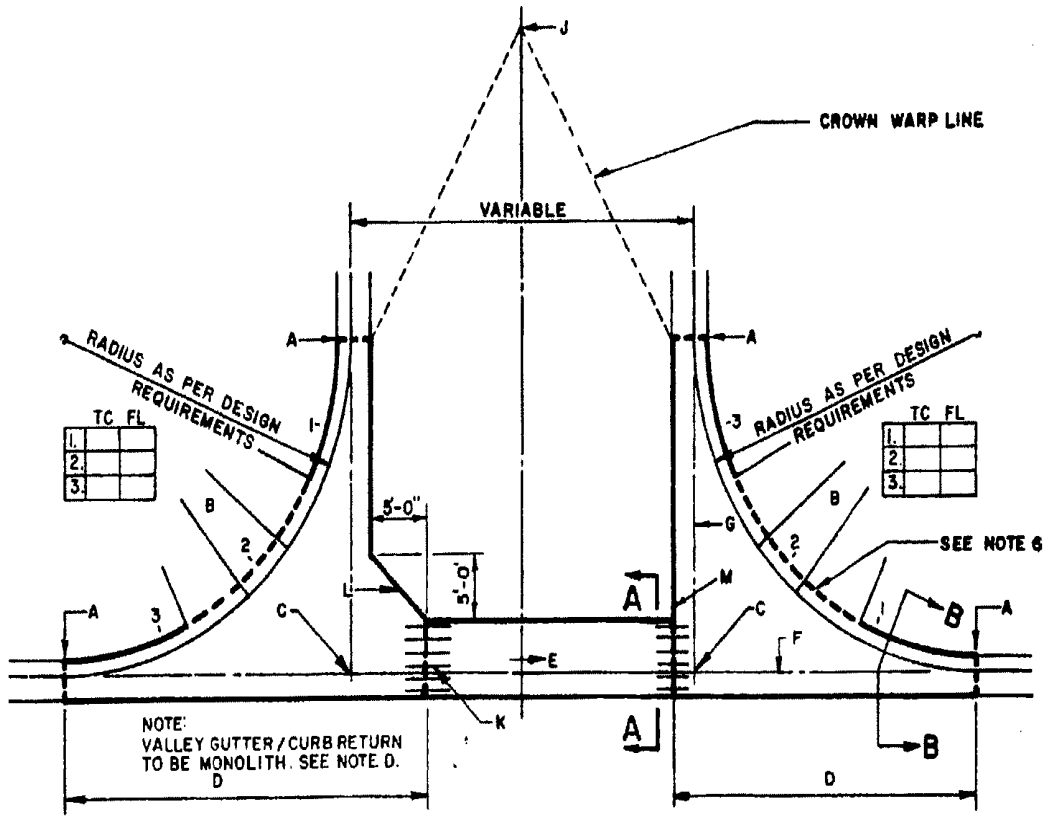
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SUBDIVISION - PHASE 1, 2 & 3
SHEET TITLE: NMDOT - PEDESTRIAN ACCESS DETAILS

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WASTEWATER			
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TRAFFIC			
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SUBDIVISION REVIEW			

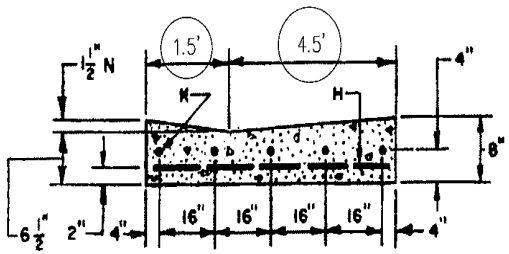
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CASE/PERMIT NO. S-2020-XX

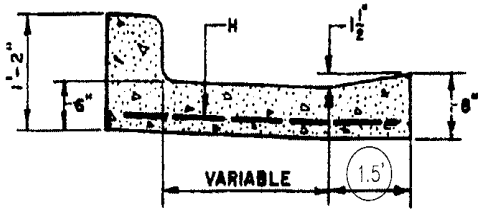
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PLAN



SECTION A-A



SECTION B-B

CASE/PERMIT NO. S-XXXX-XX

GENERAL NOTES

1. DESIGN ELEVATIONS TO BE GIVEN AT EACH END OF THE CURB RETURN (TOP OF CURB ELEV.) AND AT INTERSECTIONS OF PROJECTED FLOWLINES (FLOWLINE ELEV.).
2. ON UPSTREAM AND DOWNSTREAM ENDS OF THE INTERSECTION, VALLEY GUTTER CONSTRUCTION SHALL EXTEND TO THE END OF RETURNS.
3. THE VALLEY GUTTER TO BE REINFORCED WITH 6" X 6" X NO. 6 GA. WIRE MESH.
4. INVERT OF VALLEY GUTTER TO EXTEND FROM FLOWLINE OF UPSTREAM CURB RETURN TO FLOWLINE OF DOWNSTREAM CURB RETURN.
5. CURB FLOWLINE AND TOP OF CURB ELEV. SHOWN IN THE BOX CORRESPOND TO QUARTERPOINTS INDICATED ON THE CURB RETURN IN THE CLOCKWISE DIRECTION.
6. ---- DENOTES 1/2" EXPANSION JOINT.
7. FOR NEW CONSTRUCTION, VALLEY GUTTER SHALL BE CONSTRUCTED PRIOR TO ADJACENT PAVEMENT. ASPHALT CONCRETE SHALL BE INSTALLED MONOLITHICALLY TO MEET NEW VALLEY GUTTER.
8. PRIOR TO CONSTRUCTION OF NEW VALLEY GUTTER ON EXISTING ACCEPTED STREETS, PAVEMENT SHALL BE REMOVED AS SHOWN ON PLANS.

CONSTRUCTION NOTES

A. END OF CURB RETURN, SEE NOTE 1.
B. FOR RAMP DETAILS, SEE DWGS. 2418, 2440, 2441.
C. INTERSECTION OF FLOWLINES, SEE NOTE 1.
D. VALLEY GUTTER (CURB RETURN FILLET)
E. DIRECTION OF FLOW.
F. FLOWLINE.
G. PROJECTED FLOWLINE OF 1-1/2" INVERT, SEE NOTE 2.
H. 6" X 6" X NO. 6 GA. WIRE MESH.
J. BEGIN CROWN WARP TO NO CROWN SECTION AS PER DWGS. 2401 OR AS SPECIFIED ON PLANS, OR INDICATED BY THE ENGINEER.
K. NO. 4 BARS 3'-0" LONG AT 16" O.C.
L. ALTERNATE A, WITH FILLET AS PER PLANS.
M. ALTERNATE B, NO FILLET AS PER PLANS.
N. THE 1-1/2" INVERT DEPTH MAY BE REDUCED TO IMPROVE RIDEABILITY WITH APPROVAL OF ENGINEER.

CITY OF ALBUQUERQUE

REVISIONS
1/91
11/14/91
3/30/94

PAVING
CONCRETE VALLEY GUTTER
DWG. 2420

AUG. 198

WHPacific
6501 American Pkwy NE, Suite 400
Albuquerque, NM 87110
(505) 342-4200 Fax: 505-342-4545
www.whpacific.com

NO. | REVISIONS | BY | APP. | DATE

PROJECT:
FILE:
DATE: 06/2020
SCALE: AS NOTED
DESIGNED BY: RR, RZ
DRAWN BY: RS, BZ, JL, NC
CHECKED BY: RR

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: COA PAVING - CONCRETE VALLEY GUTTER MODIFIED

CITY REVIEW | SIGN-OFF | DATE

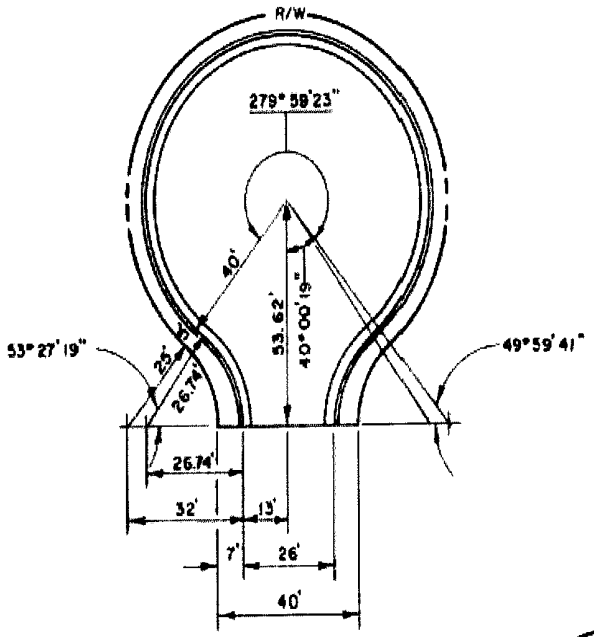
DEPARTMENT
WASTEWATER
WATER
PW ENGINEERING
TRAFFIC
PARKS DEPARTMENT
SOLID WASTE
LANDSCAPE
TRAILS / OPEN SPACE
SUBDIVISION SECTION

SHEET NO.
COA-DWG
2420

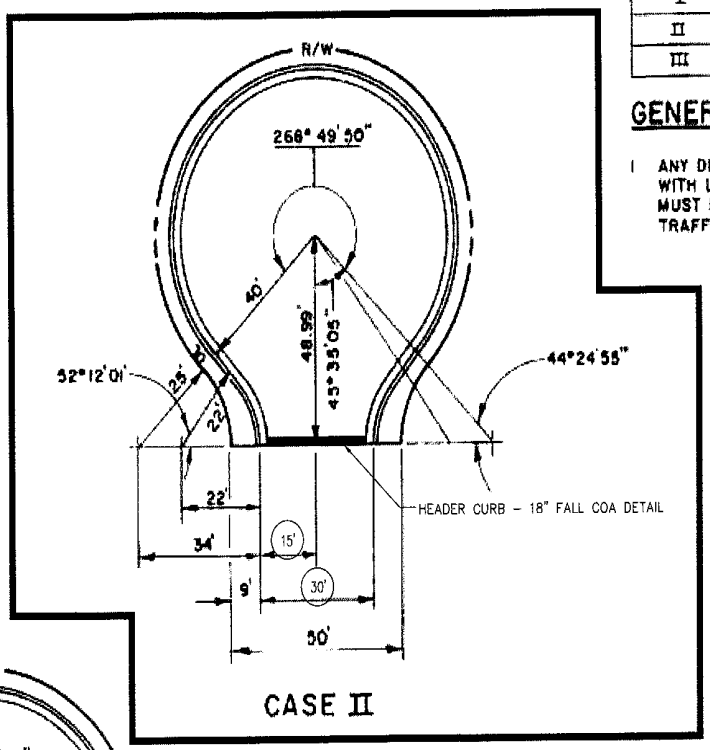
CASE	PAVED AREA SQ. YARDS	C. & G. LINEAL FEET
I	564	250
II	556	239
III	573	245

GENERAL NOTES:

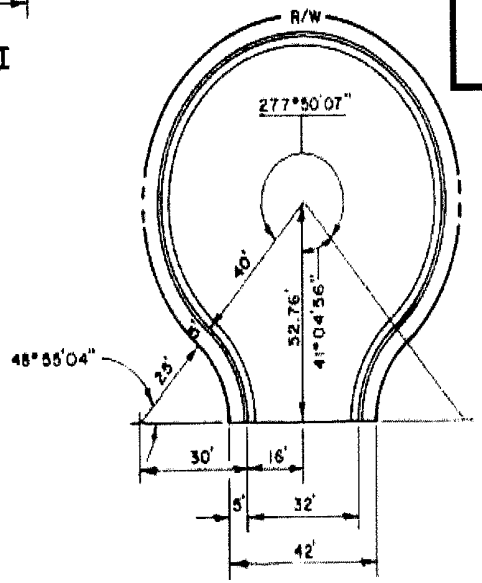
1. ANY DESIGN CALLING FOR A CUL-DE-SAC WITH LESS THAN A 40 FT. PAVING RADIUS MUST BE INDIVIDUALLY APPROVED BY TRAFFIC ENG. DIVISION.



CASE I



CASE II



CASE III

REVISIONS	CITY OF ALBUQUERQUE
	TRAFFIC
	PLAIN CUL-DE-SACS
	DWG. 2510 AUG. 1986

CASE/PERMIT NO. S-XXXX-XX

WHPacific
6001 Americas Pkwy NE, Suite 400
Albuquerque, NM 87110
505-247-0294 Fax 505-243-4845
www.whpacific.com

NO. | REVISIONS | BY | APP'D | DATE

PROJECT:
FILE:
DATE: 08/20/20
SCALE: AS NOTED
DESIGNED BY: RB, BZ
DRAWN BY: BZ, JL, NS
CHECKED BY: RB

PRELIMINARY

PROJECT: VISTA DE LA SIERRA SUBDIVISION - PHASE 1

SHEET TITLE: COA PAVING - CONCRETE VALLEY GUTTER MODIFIED

CITY REVIEW / SIGN-OFF / DATE

DEPARTMENT
WASTEWATER
WATER
PUBLIC WORKS/ENGINEERING
TRAFFIC
FIRE DEPARTMENT
SOLID WASTE
LAND USE
TRAILS / OPEN SPACE

SHEET NO.
COA-DWG 2510

IRRIGATION WATER SCHEDULE

PHASE 1

MONTH	TREES (TOTAL: 233, 12 GPH/TREE)			SHRUBS (TOTAL: 312, 2 GPH/SHRUB)		
	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH
JANUARY	0.5	30	1,398	0.5	30	312
FEBRUARY	0.5	30	1,398	0.5	30	312
MARCH	2	120	5,592	2	120	1,248
APRIL	4	240	11,184	4	240	2,496
MAY	16	960	44,736	16	960	9,984
JUNE	16	960	44,736	16	960	9,984
JULY	16	960	44,736	16	960	9,984
AUGUST	4	240	11,184	4	240	2,496
SEPTEMBER	2	120	5,592	2	120	1,248
OCTOBER	2	120	5,592	2	120	1,248
NOVEMBER	0.5	30	1,398	0.5	30	312
DECEMBER	0.5	30	1,398	0.5	30	312
SUBTOTAL - GALLONS PER YEAR			178,944			39,936
PH 1 TOTAL GALLONS PER YEAR - TREES AND SHRUBS						218,880

PHASE 2A

MONTH	TREES (TOTAL: 136, 12 GPH/TREE)			SHRUBS (TOTAL: 131, 2 GPH/SHRUB)		
	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH
JANUARY	0.5	30	816	0.5	30	131
FEBRUARY	0.5	30	816	0.5	30	131
MARCH	2	120	3,264	2	120	524
APRIL	4	240	6,528	4	240	1,048
MAY	16	960	26,112	16	960	4,192
JUNE	16	960	26,112	16	960	4,192
JULY	16	960	26,112	16	960	4,192
AUGUST	4	240	6,528	4	240	1,048
SEPTEMBER	2	120	3,264	2	120	524
OCTOBER	2	120	3,264	2	120	524
NOVEMBER	0.5	30	816	0.5	30	131
DECEMBER	0.5	30	816	0.5	30	131
SUBTOTAL - GALLONS PER YEAR			104,448			16,768
PH 2A TOTAL GALLONS PER YEAR - TREES AND SHRUBS						121,216

PHASE 2B

MONTH	TREES (TOTAL: 230, 12 GPH/TREE)			SHRUBS (TOTAL: 128, 2 GPH/SHRUB)		
	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH
JANUARY	0.5	30	1,428	0.5	30	280
FEBRUARY	0.5	30	1,428	0.5	30	280
MARCH	2	120	5,712	2	120	1,120
APRIL	4	240	11,424	4	240	2,240
MAY	16	960	45,696	16	960	8,960
JUNE	16	960	45,696	16	960	8,960
JULY	16	960	45,696	16	960	8,960
AUGUST	4	240	11,424	4	240	2,240
SEPTEMBER	2	120	5,712	2	120	1,120
OCTOBER	2	120	5,712	2	120	1,120
NOVEMBER	0.5	30	1,428	0.5	30	280
DECEMBER	0.5	30	1,428	0.5	30	280
SUBTOTAL - GALLONS PER YEAR			182,784			35,840
PH 2B TOTAL GALLONS PER YEAR - TREES AND SHRUBS						218,624

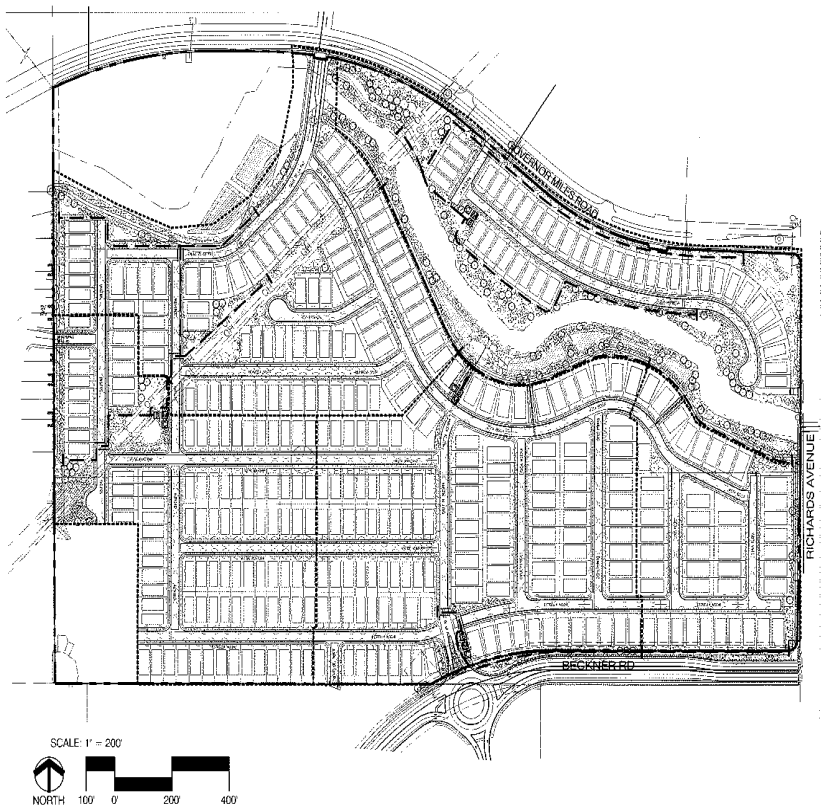
PHASE 3A

MONTH	TREES (TOTAL: 367, 12 GPH/TREE)			SHRUBS (TOTAL: 280, 2 GPH/SHRUB)		
	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH
JANUARY	0.5	30	2,202	0.5	30	320
FEBRUARY	0.5	30	2,202	0.5	30	320
MARCH	2	120	8,808	2	120	1,280
APRIL	4	240	17,616	4	240	2,560
MAY	16	960	70,464	16	960	10,240
JUNE	16	960	70,464	16	960	10,240
JULY	16	960	70,464	16	960	10,240
AUGUST	4	240	17,616	4	240	2,560
SEPTEMBER	2	120	8,808	2	120	1,280
OCTOBER	2	120	8,808	2	120	1,280
NOVEMBER	0.5	30	2,202	0.5	30	320
DECEMBER	0.5	30	2,202	0.5	30	320
SUBTOTAL - GALLONS PER YEAR			281,856			40,960
PH 3A TOTAL GALLONS PER YEAR - TREES AND SHRUBS						322,816

PHASE 3B

MONTH	TREES (TOTAL: 778, 12 GPH/TREE)			SHRUBS (TOTAL: 1300, 2 GPH/SHRUB)		
	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH	CYCLES/ MONTH	RUNTIME/ MONTH	GALLONS/ MONTH
JANUARY	0.5	30	4,668	0.5	30	1,300
FEBRUARY	0.5	30	4,668	0.5	30	1,300
MARCH	2	120	18,672	2	120	5,200
APRIL	4	240	37,344	4	240	10,400
MAY	16	960	149,376	16	960	41,600
JUNE	16	960	149,376	16	960	41,600
JULY	16	960	149,376	16	960	41,600
AUGUST	4	240	37,344	4	240	10,400
SEPTEMBER	2	120	18,672	2	120	5,200
OCTOBER	2	120	18,672	2	120	5,200
NOVEMBER	0.5	30	4,668	0.5	30	1,300
DECEMBER	0.5	30	4,668	0.5	30	1,300
SUBTOTAL - GALLONS PER YEAR			597,504			166,400
PH 3B TOTAL GALLONS PER YEAR - TREES AND SHRUBS						763,904

GRAND TOTAL GALLONS PER YEAR - TREES AND SHRUBS 1,645,440



IRRIGATION EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
M	METER (SEE UTILITY PLAN)
B	BACKFLOW PREVENTER: FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER IN HOT BOX. INSULATED BACKFLOW ENCLOSURE (CONTRACTOR TO PROVIDE POSITIVE HEAT SOURCE TO BACKFLOW PREVENTER).
= : =	SLEEVING: CLASS 200 PVC SOLVENT WELD, 2 SIZES LARGER THAN PIPE TO BE SLEEVED, 1 PIPE PER SLEEVE.
— —	IRRIGATION MAINLINE: SCHEDULE 40 PVC, SOLVENT WELD (1"), 36" DEPTH FOR CONSTANT PRESSURE MAIN AND 24" DEPTH FOR NON-CONSTANT PRESSURE MAIN.
	LATERAL PIPING: SCHEDULE 40 PVC, 18" DEPTH, 3/4" UNLESS NOTED OTHERWISE.
	AUTOMATIC DRIP VALVE ASSEMBLY: HUNTER PCZ-101-25 DRIP ZONE CONTROL KIT.
	DRIP IRRIGATION TUBING: 3/4" POLYETHYLENE PIPE, 6" DEPTH MIN, W/COMPRESSION FITTINGS AND FLUSH CAP; CONNECTION TO PVC LATERAL AND FLUSH CAPS SHALL BE PLACED IN 6" VALVE BOX. TUBING SHALL BE PINNED EVERY 10'.
	EMITTER DEVICE: RAIN BIRD XERI-BUG EMITTERS AS DEFINED BELOW. 1/4" DISTRIBUTION TUBING PINNED AT EACH SHRUB/TREE. SHRUBS - (2) XB-10, 1 GPH EMITTERS EACH TREES - (6) XB-20, 2 GPH EMITTERS EACH
C	CONTROLLER: RAIN BIRD ESP8-LXME (8 STATION) W/LXMMSS STAINLESS STEEL CABINET ON LXMMSSPED STAINLESS STEEL PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL POWER TO CONTROLLER.

CONSENSUS PLANNING

Landscape Architecture
Urban Design
Planning Services

302 EIGHTH ST. NW
Albuquerque, NM 87102
Phone (505) 764-9801
Fax (505) 842-5495

#	Date	Description
		REVISIONS

Vista de la Sierra

Santa Fe, New Mexico

Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

OVERALL IRRIGATION PLAN

L-100



SCALE: 1" = 60'

NORTH 30' 0' 60' 120'

IRRIGATION EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
M	METER (SEE UTILITY PLAN)
B	BACKFLOW PREVENTER: FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER IN HOT BOX. INSULATED BACKFLOW ENCLOSURE (CONTRACTOR TO PROVIDE POSITIVE HEAT SOURCE TO BACKFLOW PREVENTER).
====	SLEEVING: CLASS 200 PVC SOLVENT WELD, 2 SIZES LARGER THAN PIPE TO BE SLEEVED, 1 PIPE PER SLEEVE.
— —	IRRIGATION MAINLINE: SCHEDULE 40 PVC, SOLVENT WELD (1"), 30" DEPTH FOR CONSTANT PRESSURE MAIN AND 24" DEPTH FOR NON-CONSTANT PRESSURE MAIN.
	LATERAL PIPING: SCHEDULE 40 PVC, 18" DEPTH, 3/4" UNLESS NOTED OTHERWISE.
	AUTOMATIC DRIP VALVE ASSEMBLY: HUNTER PCZ-101-25 DRIP ZONE CONTROL KIT.
	DRIP IRRIGATION TUBING: 3/4" POLYETHYLENE PIPE, 6" DEPTH MIN, W/COMPRESSION FITTINGS AND FLUSH CAP. CONNECTION TO PVC LATERAL AND FLUSH CAPS SHALL BE PLACED IN 6" VALVE BOX. TUBING SHALL BE PINNED EVERY 10'.
	EMITTER DEVICE: RAIN BIRD XER-BUG EMITTERS AS DEFINED BELOW. 1/4" DISTRIBUTION TUBING PINNED AT EACH SHRUB/TREE. SHRUBS - (2) XB-10, 1 GPH EMITTERS EACH TREES - (6) XB-20, 2 GPH EMITTERS EACH
C	CONTROLLER: RAIN BIRD ESP8-LXME (8 STATION) W/LXMMSS STAINLESS STEEL CABINET ON LXMMSSPED STAINLESS STEEL PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL POWER TO CONTROLLER.

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Vista de la Sierra

Santa Fe, New Mexico

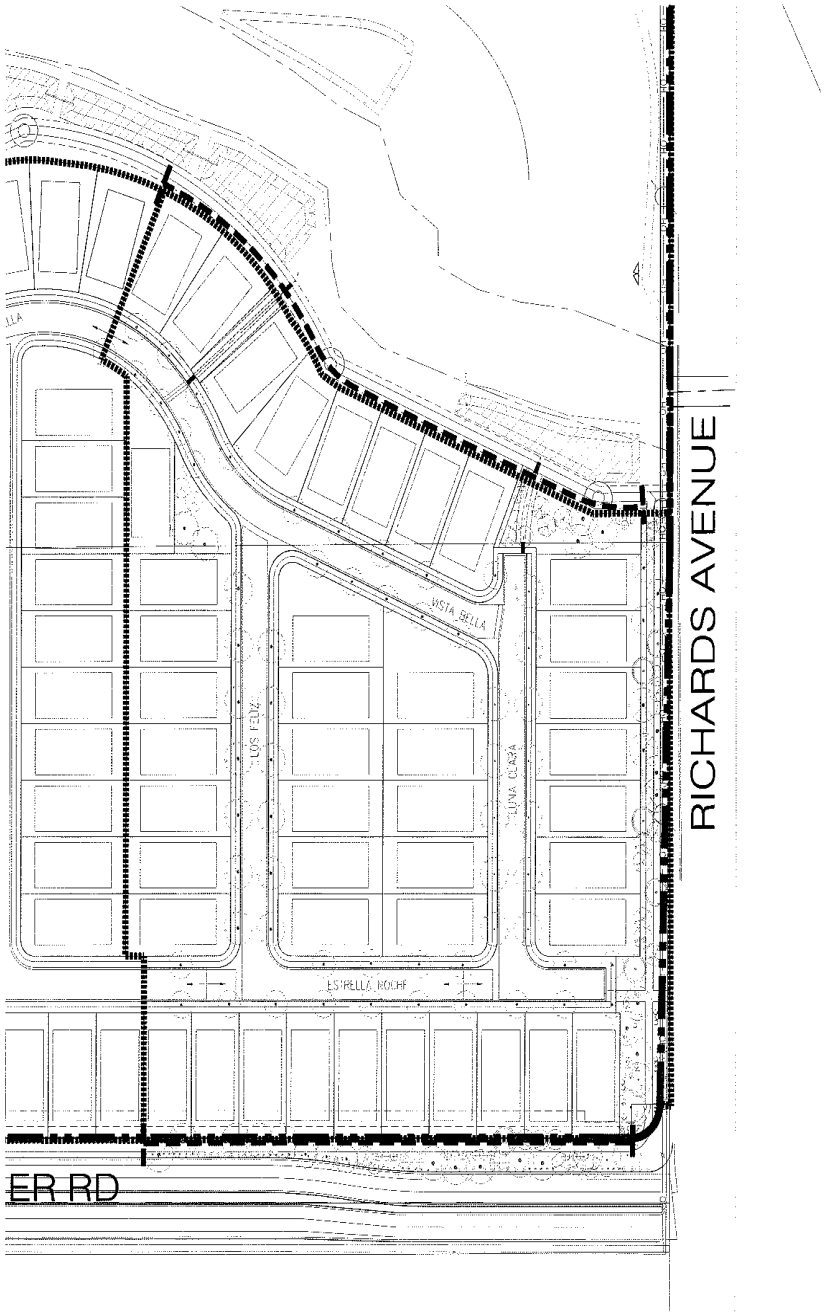
Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24

Sheet Title:

PHASE 1A
IRRIGATION PLAN

L-101



SCALE: 1" = 60'

NORTH 30' 0' 60' 120'

IRRIGATION EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
M	METER (SEE UTILITY PLAN)
BF	BACKFLOW PREVENTER: FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER IN HOT BOX. INSULATED BACKFLOW ENCLOSURE (CONTRACTOR TO PROVIDE POSITIVE HEAT SOURCE TO BACKFLOW PREVENTER).
==:==	SLEEVING: CLASS 200 PVC SOLVENT WELD, 2 SIZES LARGER THAN PIPE TO BE SLEEVED, 1 PIPE PER SLEEVE.
— —	IRRIGATION MAINLINE: SCHEDULE 40 PVC, SOLVENT WELD (1"), 35" DEPTH FOR CONSTANT PRESSURE MAIN AND 24" DEPTH FOR NON-CONSTANT PRESSURE MAIN.
	LATERAL PIPING: SCHEDULE 40 PVC, 18" DEPTH, 3/4" UNLESS NOTED OTHERWISE.
	AUTOMATIC DRIP VALVE ASSEMBLY: HUNTER PCZ-101-25 DRIP ZONE CONTROL KIT.
	DRIP IRRIGATION TUBING: 3/4" POLYETHYLENE PIPE, 6" DEPTH MIN. W/COMPRESSION FITTINGS AND FLUSH CAP; CONNECTION TO PVC LATERAL AND FLUSH CAPS SHALL BE PLACED IN 6" VALVE BOX. TUBING SHALL BE PINNED EVERY 10'.
	EMITTER DEVICE: RAIN BIRD XER-BUG EMITTERS AS DEFINED BELOW. 1/4" DISTRIBUTION TUBING PINNED AT EACH SHRUB/TREE. SHRUBS - (2) XB-10, 1 GPH EMITTERS EACH TREES - (6) XB-20, 2 GPH EMITTERS EACH
C	CONTROLLER: RAIN BIRD ESP8-LXME (8 STATION) W/LXMMSS STAINLESS STEEL CABINET ON LXMMSSPED STAINLESS STEEL PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL POWER TO CONTROLLER.

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REVISIONS

Vista de la Sierra

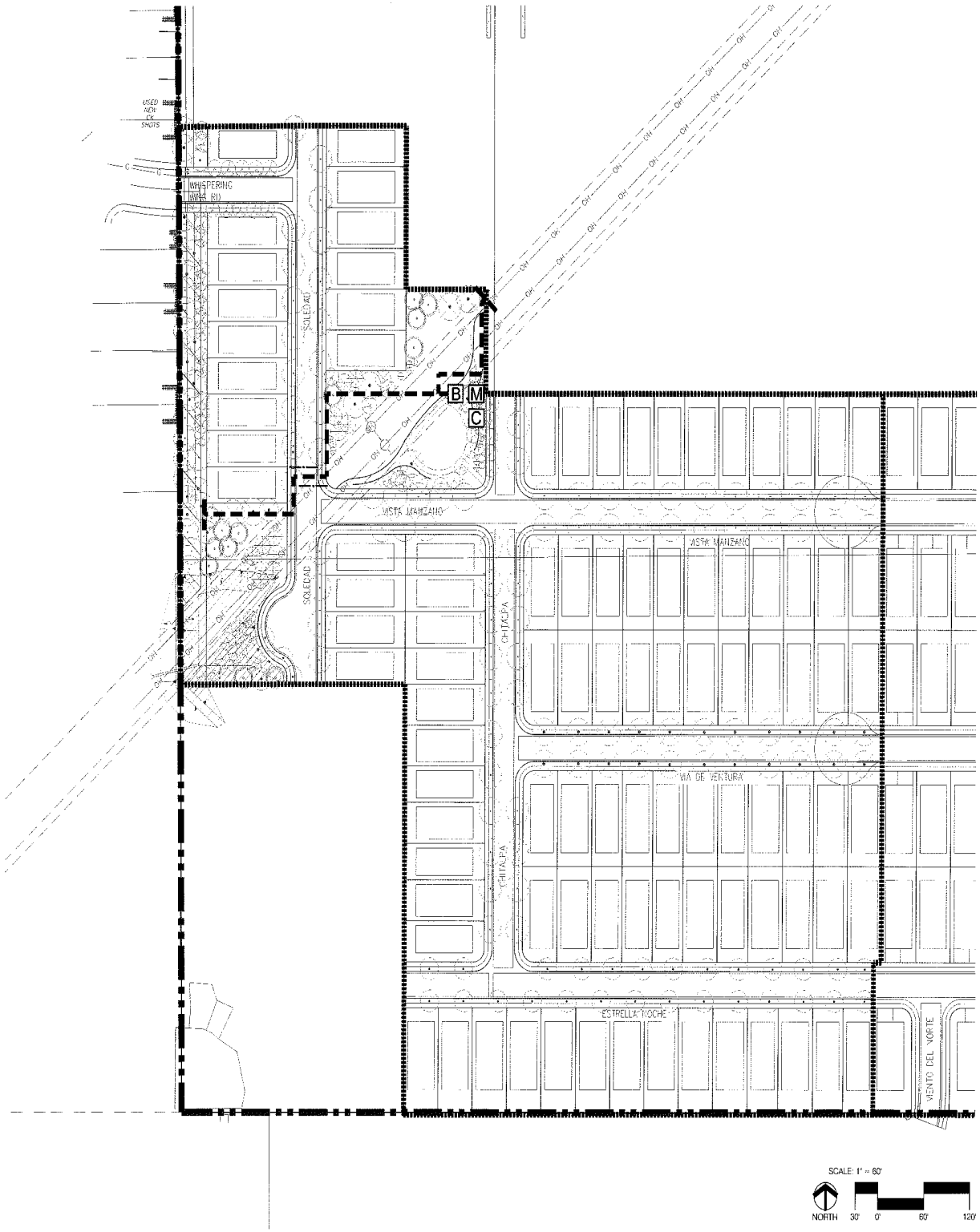
Santa Fe, New Mexico

Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

PHASE 2A
IRRIGATION PLAN

L-102



IRRIGATION EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
M	METER (SEE UTILITY PLAN)
B	BACKFLOW PREVENTER: FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER IN HOT BOX. INSULATED BACKFLOW ENCLOSURE (CONTRACTOR TO PROVIDE POSITIVE HEAT SOURCE TO BACKFLOW PREVENTER).
= = =	SLEEVING: CLASS 200 PVC SOLVENT WELD, 2 SIZES LARGER THAN PIPE TO BE SLEEVED, 1 PIPE PER SLEEVE.
— —	IRRIGATION MAINLINE: SCHEDULE 40 PVC, SOLVENT WELD (1"), 36" DEPTH FOR CONSTANT PRESSURE MAIN AND 24" DEPTH FOR NON-CONSTANT PRESSURE MAIN.
	LATERAL PIPING: SCHEDULE 40 PVC, 18" DEPTH, 3/4" UNLESS NOTED OTHERWISE.
	AUTOMATIC DRIP VALVE ASSEMBLY: HUNTER PCZ-101-25 DRIP ZONE CONTROL KIT.
	DRIP IRRIGATION TUBING: 3/4" POLYETHYLENE PIPE, 6" DEPTH MIN, W/COMPRESSION FITTINGS AND FLUSH CAP, CONNECTION TO PVC LATERAL AND FLUSH CAPS SHALL BE PLACED IN 6" VALVE BOX. TUBING SHALL BE PINNED EVERY 10'.
	EMITTER DEVICE: RAIN BIRD XER-BUG EMITTERS AS DEFINED BELOW. 1/4" DISTRIBUTION TUBING PINNED AT EACH SHRUB/TREE. SHRUBS - (2) XB-10, 1 GPH EMITTERS EACH TREES - (6) XB-20, 2 GPH EMITTERS EACH
C	CONTROLLER: RAIN BIRD ESP8-LXME (8 STATION) W/LXMMSS STAINLESS STEEL CABINET ON LXMMSSPED STAINLESS STEEL PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL POWER TO CONTROLLER.

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REVISIONS		
#	Date	Description

Vista de la Sierra

Santa Fe, New Mexico

Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24

Sheet Title:

PHASE 2B
IRRIGATION PLAN

L-103

IRRIGATION EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
M	METER (SEE UTILITY PLAN)
B	BACKFLOW PREVENTER: FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER IN HOT BOX. INSULATED BACKFLOW ENCLOSURE (CONTRACTOR TO PROVIDE POSITIVE HEAT SOURCE TO BACKFLOW PREVENTER).
= = =	SLEEVING: CLASS 200 PVC SOLVENT WELD, 2 SIZES LARGER THAN PIPE TO BE SLEEVED, 1 PIPE PER SLEEVE.
— —	IRRIGATION MAINLINE: SCHEDULE 40 PVC, SOLVENT WELD (1"), 36" DEPTH FOR CONSTANT PRESSURE MAIN AND 24" DEPTH FOR NON-CONSTANT PRESSURE MAIN.
	LATERAL PIPING: SCHEDULE 40 PVC, 18" DEPTH, 3/4" UNLESS NOTED OTHERWISE.
	AUTOMATIC DRIP VALVE ASSEMBLY: HUNTER PCZ-101-25 DRIP ZONE CONTROL KIT.
	DRIP IRRIGATION TUBING: 3/4" POLYETHYLENE PIPE, 6" DEPTH MIN, W/COMPRESSION FITTINGS AND FLUSH CAP. CONNECTION TO PVC LATERAL AND FLUSH CAPS SHALL BE PLACED IN 6" VALVE BOX. TUBING SHALL BE PINNED EVERY 10'.
	EMITTER DEVICE: RAIN BIRD XERI-BUG EMITTERS AS DEFINED BELOW. 1/4" DISTRIBUTION TUBING PINNED AT EACH SHRUB/TREE. SHRUBS - (2) XB-10, 1 GPH EMITTERS EACH TREES - (6) XB-20, 2 GPH EMITTERS EACH
C	CONTROLLER: RAIN BIRD ESP8-LXME (8 STATION) W/LXMMSS STAINLESS STEEL CABINET ON LXMMSSPED STAINLESS STEEL PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL POWER TO CONTROLLER.



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Planning Services

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Albuquerque, NM 87102
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#	Date	REVISIONS Description

Vista de la Sierra

Santa Fe, New Mexico

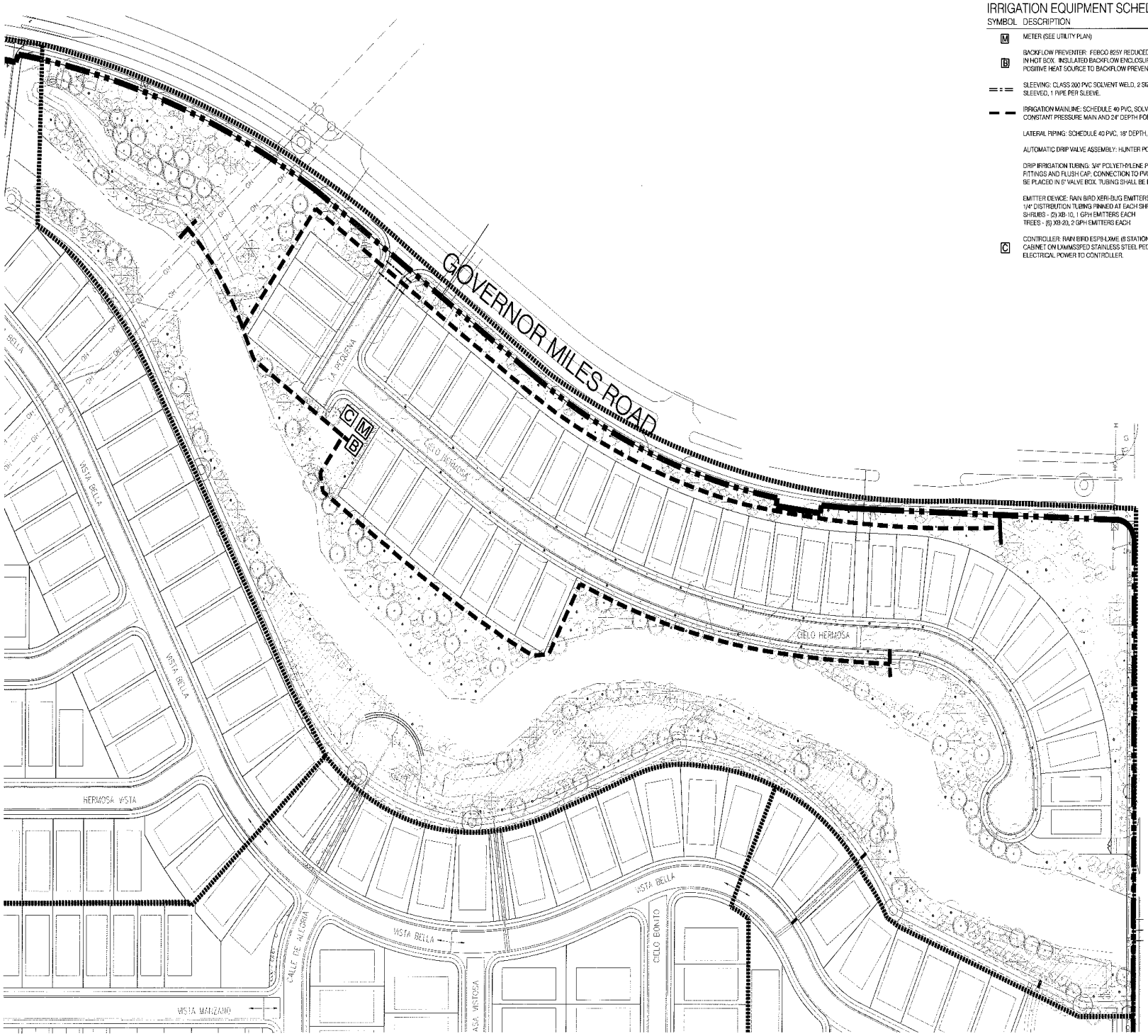
Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24

Sheet Title:

PHASE 3A
IRRIGATION PLAN

L-104



IRRIGATION EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION
M	METER (SEE UTILITY PLAN)
B	BACKFLOW PREVENTER: FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER IN HOT BOX. INSULATED BACKFLOW ENCLOSURE (CONTRACTOR TO PROVIDE POSITIVE HEAT SOURCE TO BACKFLOW PREVENTER).
==:==	SLEEVING: CLASS 200 PVC SOLVENT WELD, 2 SIZES LARGER THAN PIPE TO BE SLEEVED, 1 PIPE PER SLEEVE.
— —	IRRIGATION MAINLINE: SCHEDULE 40 PVC, SOLVENT WELD (1"), 36" DEPTH FOR CONSTANT PRESSURE MAIN AND 24" DEPTH FOR NON-CONSTANT PRESSURE MAIN.
	LATERAL PIPING: SCHEDULE 40 PVC, 18" DEPTH, 3/4" UNLESS NOTED OTHERWISE.
	AUTOMATIC DRIP VALVE ASSEMBLY: HUNTER PCZ-101-25 DRIP ZONE CONTROL KIT.
	DRIP IRRIGATION TUBING: 3/4" POLYETHYLENE PIPE, 6" DEPTH MIN. W/COMPRESSION FITTINGS AND FLUSH CAP. CONNECTION TO PVC LATERAL AND FLUSH CAPS SHALL BE PLACED IN 6" VALVE BOX. TUBING SHALL BE PINNED EVERY 10'.
	EMITTER DEVICE: RAIN BIRD XERI-BUG EMITTERS AS DEFINED BELOW. 1/4" DISTRIBUTION TUBING PINNED AT EACH SHRUB/TREE. SHRUBS - (2) XB-10, 1 GPH EMITTERS EACH TREES - (6) XB-20, 2 GPH EMITTERS EACH
C	CONTROLLER: RAIN BIRD ESP8-LXME (8 STATION) W/LXMMSS STAINLESS STEEL CABINET ON LXMMSSPED STAINLESS STEEL PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL POWER TO CONTROLLER.

SCALE: 1" = 60'

NORTH 30' 0' 60' 120'

CONSENSUS PLANNING

Landscape Architecture
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Albuquerque, NM 87102
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#	Date	Description
		REVISIONS

Vista de la Sierra

Santa Fe, New Mexico

Landscape Architect's Seal

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

PHASE 3B
IRRIGATION PLAN

L-105

LOT COUNT BY PHASE

PHASE 1	128
PHASE 2	144
PHASE 3	122
TOTAL	394

OPEN SPACE AREA REQUIREMENTS

REQUIREMENTS: .024 AC PER DWELLING UNIT
394 x .024 = 9.46 AC.

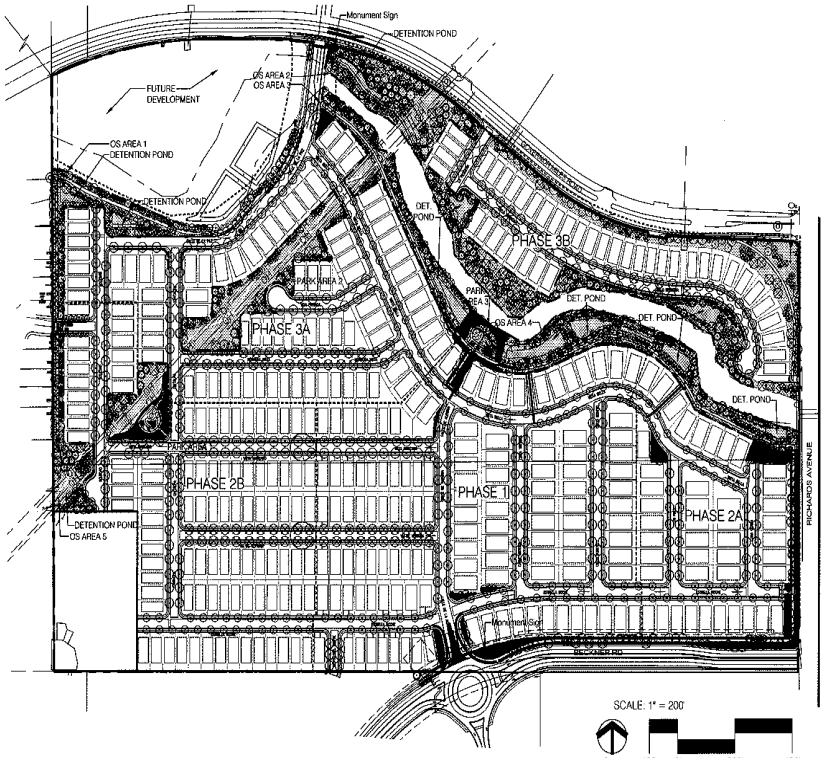
AREA 1	AREA:	54,314 SF
AREA 2	AREA:	159,294 SF
AREA 3	AREA:	57,556 SF
AREA 4	AREA:	105,654 SF
AREA 5	AREA:	37,860 SF
TOTAL PROVIDED:		414,678 SF (9.52 AC.)

IN ADDITION TO THE PROVIDED OPEN SPACE, THE ARROYO FLOOD PLAIN IS 4.35 ACRES, ABOVE AND BEYOND THE REQUIRED OPEN SPACE AMOUNT. THIS PROVIDES A TOTAL OF 13.88 ACRES OF OPEN SPACE.

PARK AREA REQUIREMENTS

REQUIREMENTS: .005 AC. PER DWELLING UNIT
394 x .006 = 2.36 AC.

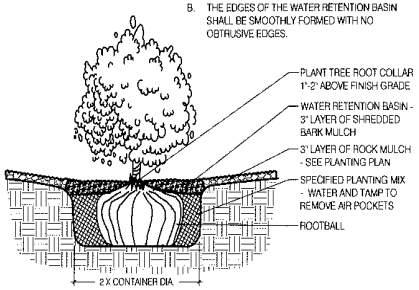
AREA 1	AREA:	50,117 SF
AREA 2	AREA:	157,631 SF
AREA 3	AREA:	51,262 SF
TOTAL PROVIDED:		129,282 SF (2.97 AC.)





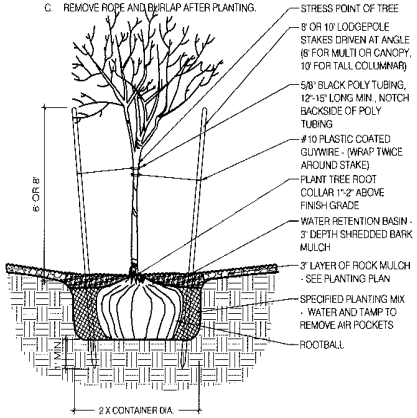
MONUMENT SIGN CONCEPT Not to Scale

NOTES:
A. THE WATER RETENTION BASIN SHALL BE TWICE THE PLANTING PIT DIAMETER.
B. THE EDGES OF THE WATER RETENTION BASIN SHALL BE SMOOTHLY FORMED WITH NO OBTRUSIVE EDGES.



SHRUB PLANTING Not to Scale

NOTES:
A. THE WATER RETENTION BASIN SHALL BE TWICE THE PLANTING PIT DIAMETER.
B. THE EDGES OF THE WATER RETENTION BASIN SHALL BE SMOOTHLY FORMED WITH NO OBTRUSIVE EDGES.
C. REMOVE ROPE AND BURLAP AFTER PLANTING.



TREE PLANTING Not to Scale

GENERAL LANDSCAPE NOTES

IRRIGATION

IRRIGATION SYSTEM STANDARDS OUTLINED IN SECTION 14-8.4(E) WATER HARVESTING AND IRRIGATION STANDARDS SHALL BE STRICTLY ADHERED TO. PASSIVE WATER HARVESTING SHALL BE ACCOMMODATED WITHIN STREET MEDIANS AND DETENTION PONDS. ACTIVE WATER HARVESTING SYSTEMS ARE NOT INCLUDED IN THIS PLAN. A FULLY AUTOMATED IRRIGATION SYSTEM WILL BE USED TO IRRIGATE TREE, SHRUB AND GROUNDCOVER PLANTING AREAS. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO ISOLATE PLANT MATERIAL ACCORDING TO SOLAR EXPOSURE AND WILL BE SET UP BY PLANT ZONES ACCORDING TO WATER REQUIREMENTS. THE TREES WILL BE PROVIDED WITH (6) 5 GPH EMITTERS, WITH THE ABILITY TO BE EXPANDED TO ACCOMMODATE THE GROWTH OF THE TREE. SHRUBS AND GROUNDCOVERS WILL BE PROVIDED WITH (2) 1 GPH EMITTERS. TREES, SHRUBS AND GROUNDCOVERS WILL BE GROUPED ON THE SAME VALVE. REFERENCE IRRIGATION PLAN L-100.

THE PLANT PALETTE IS PREDOMINANTLY COMPRISED OF PLANTS WITH LOW TO MEDIUM WATER USE REQUIREMENTS, THEREBY MINIMIZING IRRIGATION NEEDS WHILE ENSURING THE VIABILITY OF THE PLANTS. IN ADDITION TO A MULTI-PROGRAMMABLE CONTROLLER, AN EVAPOTRANSPIRATION MANAGEMENT CONTROLLER WILL BE INCLUDED IN THE DESIGN OF THE IRRIGATION SYSTEM TO MONITOR WEATHER CONDITIONS SO THAT THE OPTIMUM MOISTURE BALANCE IS ACHIEVED AND THE POSSIBILITY OF OVER-WATERING IS REDUCED.

PASSIVE WATER HARVESTING

SEE GRADING AND DRAINAGE PLANS FOR SPECIFIC DIRECTION ON PASSIVE WATER HARVESTING FEATURES AND DETENTION AREAS.

PNM COORDINATION

COORDINATION WITH PNM'S NEW SERVICE DELIVERY DEPARTMENT IS NECESSARY REGARDING PROPOSED TREE LOCATION AND HEIGHT, SIGN LOCATION AND HEIGHT, AND LIGHTING HEIGHT IN ORDER TO ENSURE SUFFICIENT SAFETY CLEARANCES. SCREENING WILL BE DESIGNED TO ALLOW FOR ACCESS TO ELECTRIC UTILITIES. IT IS NECESSARY TO PROVIDE ADEQUATE CLEARANCE OF TEN FEET IN FRONT AND AT LEAST 5 FEET ON THE REMAINING THREE SIDES SURROUNDING ALL GROUND-MOUNTED EQUIPMENT FOR SAFE OPERATION, MAINTENANCE AND REPAIR PURPOSES.

RESPONSIBILITY OF MAINTENANCE

MAINTENANCE OF ALL PLANTING AND IRRIGATION, INCLUDING THOSE WITHIN THE PUBLIC R.O.W., OPEN SPACE AND MEDIANS, SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER/HOA, TO BACK OF CURB.

CLEAR SIGHT DISTANCE

LANDSCAPING AND SIGNAGE WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE AREA.

STREET TREES

THE AVERAGE SPACING OF STREET TREES SHALL BE AS FOLLOWS: 40' O.C. ON MAJOR AND SECONDARY ARTERIALS

BECKNER ROAD
REQUIRED: 32 PROVIDED: 48

RICHARDS AVENUE
REQUIRED: 30 PROVIDED: 43

GOVERNOR MILES ROAD
REQUIRED: 44 PROVIDED: 44

DETENTION POND PLANTING REQUIREMENTS

APPROX. 105,187 SQ. FT PROVIDED (1 TREE/3 SHRUBS PER 500 SQ. FT.)
REQUIRED: 210 TREES / 631 SHRUBS
PROVIDED: 308 TREES / 631 SHRUBS
(DUE TO MAINTENANCE REQUIREMENTS/CONCERNS, WE HAVE LIMITED THE QUANTITY OF TREES WITHIN THE DETENTION PONDS. ALL TREES AND SHRUBS WILL BE LOCATED ON THE UPPER HALF OF THE POND SLOPES)

SIGN AREA PLANTING REQUIREMENTS

TWO SIGNS OF 100 SQ. FT. SIGN FACE = 200 SQ. FT.
REQUIRED: 20 SHRUBS (1 PER 10 SQ. FT.)
PROVIDED: 20 SHRUBS (MIN.)

PARK DESIGN

EQUIPMENT AND DESIGN BY EXERPLAY
CONTACT: GREGORY NEAL
DIRECT: 505-577-7004
TOLL FREE: 800-457-5444

OPEN SPACE PLANTING REQUIREMENTS BY AREA

REQUIREMENTS: 1 TREE/2 SHRUBS PER 500 SQ. FT.
25% EVERGREEN

AREA 1	AREA:	54,314 SF
	REQUIRED:	108 TREES / 216 SHRUBS
	PROVIDED:	108 TREES / 216 SHRUBS
AREA 2	AREA:	159,294 SF
	REQUIRED:	318 TREES / 636 SHRUBS
	PROVIDED:	318 TREES / 636 SHRUBS
AREA 3	AREA:	57,556 SF
	REQUIRED:	115 TREES / 230 SHRUBS
	PROVIDED:	115 TREES / 230 SHRUBS
AREA 4	AREA:	105,654 SF
	REQUIRED:	211 TREES / 422 SHRUBS
	PROVIDED:	211 TREES / 422 SHRUBS
AREA 5	AREA:	37,860 SF
	REQUIRED:	76 TREES / 152 SHRUBS
	PROVIDED:	76 TREES / 152 SHRUBS

REQUIRED EVERGREEN TREES AND SHRUBS: 25% (MIN.)
207 TREES AND 414 SHRUBS
PROVIDED EVERGREEN TREES AND SHRUBS:
310 TREES AND 386 SHRUBS (MIN.)

PLANT LEGEND

SYMBOL	SCIENTIFIC NAME / COMMON NAME
DECIDUOUS TREES	
	CELTIS RETICULATA NETLEAF HACKBERRY
	CHILOPSIS LINEARIS DESERT WILLOW
	FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH
	GLEDITSIA TRIACANTHOS 'IMPERIAL' IMPERIAL HONEY LOCUST
	PRUNUS CERACIFERA 'K. VESUVIUS' K. VESUVIUS FLOWERING PLUM
	PYRUS CALLERYANA 'CLEVELAND' FLOWERING PEAR
	QUERCUS RUCKLEYI TEXAS RED OAK
EVERGREEN TREES	
	JUNIPERUS SCOPULORUM 'SKYROCKET' SKYROCKET ROCKY MTN. JUNIPER
	PINUS EDULIS PINON PINE
	PINUS NIGRA AUSTRIAN PINE
LARGE SHRUBS	
	CARYOPTERIS CLANDONENSIS BLUE MIST
	CHRYSOTHAMNUS NAUSEOSUS CHAMISA
	FALLUGIA PARADOXA APACHE PLUME
	PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' LITTLE SPIRE RUSSIAN SAGE
	RHUS TRILOBATA THREE-LEAF SUMAC
EVERGREEN SHRUBS AND ACCENTS	
	LAVANDULA X INTERMEDIA 'GROSSO' GROSSO LAVENDER
	DASYLIRION WHEELERI SOTOL
	BUXUS SPP. BOXWOOD
	ACHILLEA 'MOONSHINE' MOONSHINE YARROW
	RHAPHIOLEPIS INDICA INDIA HAWTHORN
	YUCCA BACCATA BANANA YUCCA
	HESPERALOE PARVIFLORA RED YUCCA
SMALL SHRUBS & GROUNDCOVERS	
	POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL
	CENTRANTHUS RUBER JUPITERS BEARD
	NEPETA X FAASSENII 'SIX HILLS GIANT' SIX HILLS GIANT CATMINT
	PENSTEMON PINIFOLIUS PINELEAF PENSTEMON
	RHUS TRILOBATA 'AUTUMN AMBER' CREEPING THREE-LEAF SUMAC
	MIRABILIS MULTIFLORA WESTERN FOUR O'CLOCK
	RHUS AROMATICA 'GRO LOW' GRO LOW SUMAC
ORNAMENTAL GRASSES	
	CALAMAGROSTIS A. 'KARL FOERSTER' KARL FOERSTER REED GRASS
	MUHLENBERGIA CAPILLARIS REGAL MIST
	NASELLA TENNUISSIMA THREAD GRASS
	SPOROBOLUS WRIGHTII GIANT SACATON
	MOSS ROCK BOULDERS (3'X3' MIN)
	7/8" SIERRA GOLD ROCK MULCH (3" DEPTH)/ 2"-4" AMARETTO BROWN COBBLE MULCH (6" DEPTH)
	PARKBLEND SOD (KENTUCKY BLUEGRASS/FESCUE MIX)
	NATIVE REVEGETATION SEED MIX SPOTTED GAYFEATHER LANCELEAF COREOPSIS PLAINS COREOPSIS CALIFORNIA POPPY FIREWHEEL SKYROCKET BLUE FLAX DESERT FOUR O'CLOCK MEXICAN HAT YELLOW PRAIRIE CONEFLOWER CHOCOLATE FLOWER BLUE GRAMA INDIAN RICEGRASS WESTERN WHEATGRASS SIDEOATS GRAMA GALLETA

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Fax (505) 842-5495

#	Date	Description
		REVISIONS

Vista de la Sierra

Santa Fe, New Mexico

Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

OVERALL LANDSCAPE PLAN

L-200



PLANT LEGEND PHASE 1A

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		DECIDUOUS TREES		
26		CELTIS RETICULATA NETLEAF HACKBERRY	2" B&B	10' HT. X 4' SPR. 20' HT. X 24' SPR.
16		CHILOPSIS LINEARIS DESERT WILLOW	2" B&B	6' HT. X 4' SPR. 20' HT. X 20' SPR.
22		FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH	2.5" B&B	16, HT. X 6' SPR. 35' HT. X 35' SPR.
55		GLEDITSIA TRIACANTHOS 'IMPERIAL' IMPERIAL HONEY LOCUST	2" B&B	10' HT. X 4' SPR. 60' HT. X 50' SPR.
14		PRUNUS CERACIFERA 'K. VESUVIUS' K. VESUVIUS FLOWERING PLUM	2.5" B&B	16' HT. X 5' SPR. 20' HT. X 15' SPR.
70		PYRUS CALLERYANA 'CLEVELAND' FLOWERING PEAR	2.5" B&B	12' HT. X 5' SPR. 25' HT. X 20' SPR.
2		QUERCUS BUCKLEYI TEXAS RED OAK	2.5" B&B	12' HT. X 6' SPR. 60' HT. X 50' SPR.
		EVERGREEN TREES		
21		JUNIPERUS SCOPULORUM 'SKYROCKET' SKYROCKET ROCKY MTN. JUNIPER	B&B	10' MIN HT. 20' HT. X 5' SPR.
3		PINUS EDULIS PINON PINE	B&B	6' MIN. HT. 30' HT. X 20' SPR.
4		PINUS NIGRA AUSTRIAN PINE	B&B	6' MIN HT. 35' HT. X 25' SPR.
		LARGE SHRUBS		
74 MIN.		CARYOPTERIS CLANDONENSIS BLUE MIST	5-GAL.	6' O.C. 6' HT. X 6' SPR.
		CHRYSOTHAMNUS NAUSEOSUS CHAMISA	5-GAL.	8' O.C. 6' HT. X 10' SPR.
		FALLUGIA PARADOXA APACHE PLUME	5-GAL.	5' O.C. 5' HT. X 5' SPR.
		PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' LITTLE SPIRE RUSSIAN SAGE	5-GAL.	6' O.C. 4' HT. X 5' SPR.
		RHUS TRILOBATA THREE-LEAF SUMAC	5-GAL.	6' O.C. 6' HT. X 9' SPR.
		EVERGREEN SHRUBS AND ACCENTS		
72 MIN.		LAVANDULA X INTERMEDIA 'GROSSO' GROSSO LAVENDER	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		DASYLIRION WHEELERI SOTOL	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		BUXUS SPP. BOXWOOD	5-GAL.	5' O.C. 4' HT. X 4' SPR.
		ACHILLEA 'MOONSHINE' MOONSHINE YARROW	5-GAL.	4' O.C. 2' HT. X 4' SPR.
		RHAPHIOLEPIS INDICA INDIA HAWTHORN	5-GAL.	5' O.C. 3' HT. X 3' SPR.
		YUCCA BACCATA BANANA YUCCA	5-GAL.	5' O.C. 4' HT. X 3' SPR.
		HESPERALOE PARVIFLORA RED YUCCA	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		SMALL SHRUBS & GROUNDCOVERS		
119 MIN.		POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		CENTRANTHUS RUBER JUPITER'S BEARD	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		NEPETA X FAASSENII 'SIX HILLS GIANT' SIX HILLS GIANT CATMINT	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		PENSTEMON PINIFOLIUS PINELEAF PENSTEMON	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS TRILOBATA 'AUTUMN AMBER' CREEPING THREE-LEAF SUMAC	1-GAL.	4' O.C. 2' HT. X 4' SPR.
		MIRABILIS MULTIFLORA WESTERN FOUR O'CLOCK	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS AROMATICA 'GRO LOW' GRO LOW SUMAC	5-GAL.	3' O.C. 2' HT. X 3' SPR.
		ORNAMENTAL GRASSES		
47 MIN.		CALAMAGROSTIS A. 'KARL FOERSTER' KARL FOERSTER REED GRASS	1-GAL.	2' O.C. 4' HT. X 2' SPR.
		MUHLENBERGIA CAPILLARIS REGAL MIST	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		NASELLA TENNUISSIMA THREAD GRASS	1-GAL.	3' O.C. 4' HT. X 3' SPR.
		SPOROBOLUS WRIGHTII GIANT SACATON	5-GAL.	6' O.C. 8' HT. X 6' SPR.

NOT ALL ILLUSTRATED DUE TO SCALE OF DRAWING

MOSS ROCK BOULDERS (2X3' MIN)

7/8" SIERRA GOLD ROCK MULCH (3" DEPTH)/ 2"-4" AMARETTO BROWN COBBLE MULCH (8" DEPTH)

PARKBLEND SOD (KENTUCKY BLUEGRASS/FESCUE MIX)

NATIVE REVEGETATION SEED MIX	PLS/AC
SPOTTED GAYFEATHER	1.0
LANCELEAF COREOPSIS	.5
PLAINS COREOPSIS	.5
CALIFORNIA POPPY	.5
FIREWHEEL	.5
SKYROCKET	.5
BLUE FLAX	.5
DESERT FOUR O'CLOCK	.5
MEXICAN HAT	.5
YELLOW PRAIRIE CONEFLOWER	.5
CHOCOLATE FLOWER	.5
BLUE GRAMA	2.0
INDIAN RICEGRASS	5.0
WESTERN WHEATGRASS	1.0
SIDECATS GRAMA	1.0
GAILLETA	7.0

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#	Date	Description
		REVISIONS

Vista de la Sierra

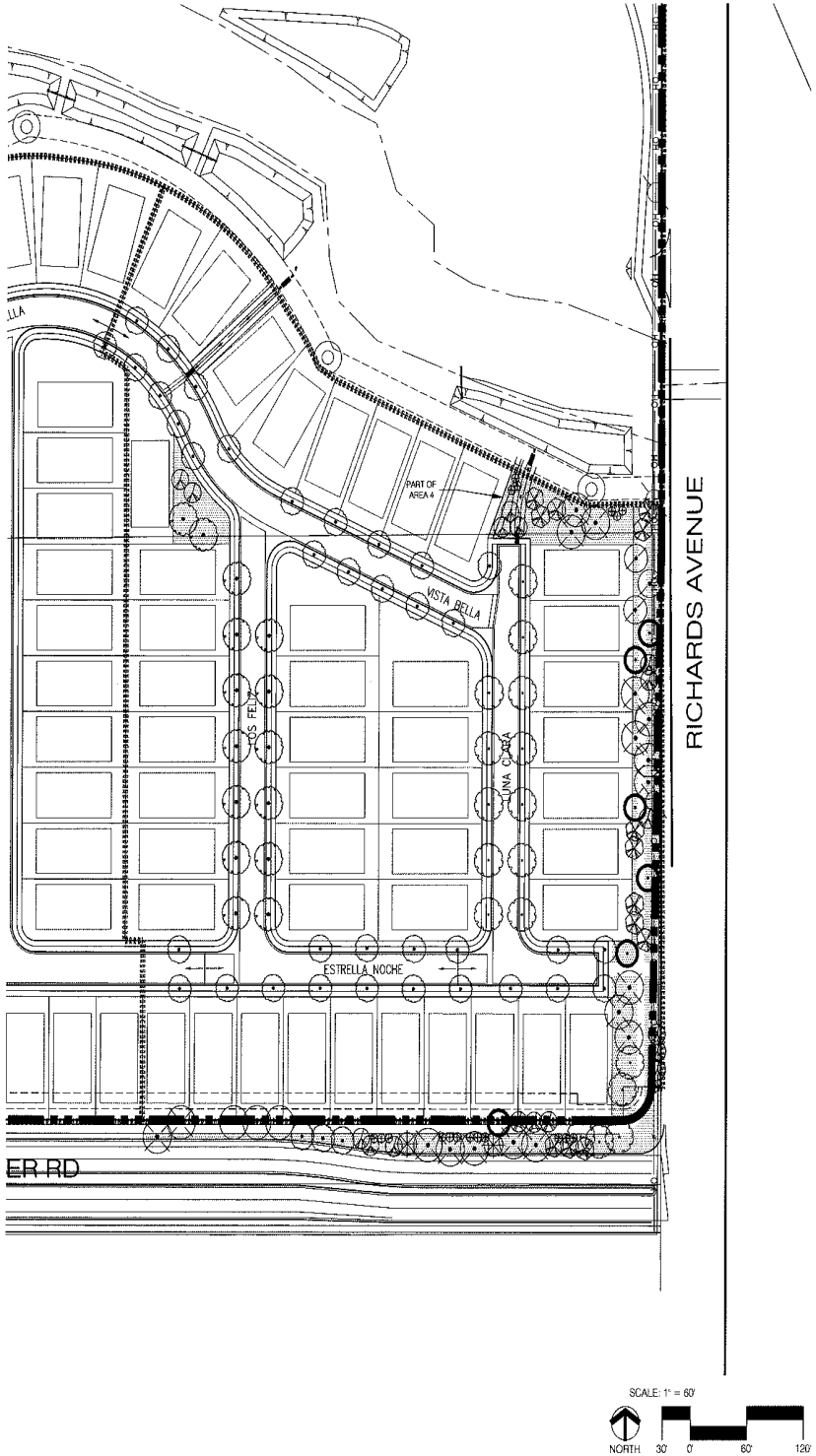
Santa Fe, New Mexico

Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

PHASE 1A
LANDSCAPE PLAN

L-201



PLANT LEGEND PHASE 2A

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		DECIDUOUS TREES		
18		CELTIS RETICULATA NETLEAF HACKBERRY	2" B&B	10' HT. X 4' SPR. 20 HT. X 24' SPR.
13		CHILOPSIS LINEARIS DESERT WILLOW	2" B&B	8 HT. X 4' SPR. 20 HT. X 20' SPR.
3		FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH	2.5" B&B	16, H.T. X 6' SPR. 35' HT. X 35' SPR.
17		GLEDITSIA TRIANCANTHOS 'IMPERIAL' IMPERIAL HONEY LOCUST	2" B&B	10' HT. X 4' SPR. 60 HT. X 50' SPR.
17		PRUNUS CERACIFERA 'K. VESUVIUS' K. VESUVIUS FLOWERING PLUM	2.5" B&B	10' H.T. X 5' SPR. 20' HT. X 15' SPR.
39		PYRUS CALLERYANA 'CLEVELAND' FLOWERING PEAR	2.5" B&B	12' HT. X 5' SPR. 25' HT. X 20' SPR.
3		QUERCUS BUCKLEYI TEXAS RED OAK	2.5" B&B	12' H.T. X 6' SPR. 60 HT. X 50' SPR.
		EVERGREEN TREES		
18		JUNIPERUS SCOPULORUM 'SKYROCKET' SKYROCKET ROCKY MTN. JUNIPER	B&B	10' MIN I.HT. 20' HT. X 5' SPR.
2		PINUS EDULIS PINON PINE	B&B	6' MIN. HT. 30 HT. X 20' SPR.
6		PINUS NIGRA AUSTRIAN PINE	B&B	6' MIN HT. 35' HT. X 25' SPR.
		LARGE SHRUBS		
23 MIN.		CARYOPTERIS CLANDONIENSIS BLUE MIST	5-GAL.	6' O.C. 6 HT. X 6' SPR.
		CHRYSOTHAMNUS NAUSEOSUS CHAMISA	5-GAL.	8' O.C. 6' HT. X 10' SPR.
		FALLUGIA PARADOXA APACHE PLUME	5-GAL.	5' O.C. 5' HT. X 5' SPR.
		PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' LITTLE SPIRE RUSSIAN SAGE	5-GAL.	6' O.C. 4' HT. X 5' SPR.
		RHUS TRILOBATA THREE-LEAF SUMAC	5-GAL.	6' O.C. 6' HT. X 5' SPR.
		EVERGREEN SHRUBS AND ACCENTS		
28 MIN.		LAVANDULA X INTERMEDIA 'GROSSO' GROSSO LAVENDER	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		DASYLIRION WHEELERI SOTOL	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		BUXUS SPP. BOXWOOD	5-GAL.	5' O.C. 4' HT. X 4' SPR.
		ACHILLEA 'MOONSHINE' MOONSHINE YARROW	5-GAL.	4' O.C. 2' HT. X 4' SPR.
		RHAPHIOLEPIS INDICA INDIA HAWTHORN	5-GAL.	5' O.C. 3' HT. X 3' SPR.
		YUCCA BACCATA BANANA YUCCA	5-GAL.	3' O.C. 4' HT. X 3' SPR.
		HESPERALOE PARVIFLORA RED YUCCA	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		SMALL SHRUBS & GROUNDCOVERS		
39 MIN		POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL	5-GAL.	3' O.C. 3' H.T. X 3' SPR.
		CENTRANTHUS RUBER JUPITER'S BEARD	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		NEPETA X FAASSENII 'SIX HILLS GIANT' SIX HILLS GIANT CATMINT	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		PENSTEMON PINIFOLIUS PINELEAF PENSTEMON	1-GAL	2' O.C. 2' HT. X 2' SPR.
		RHUS TRILOBATA 'AUTUMN AMBER' CREEPING THREE-LEAF SUMAC	1-GAL.	4' O.C. 2' HT. X 4' SPR.
		MIRABILIS MULTIFLORA WESTERN FOUR O'CLOCK	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS AROMATICA 'GRO LOW' GRO LOW SUMAC	5-GAL.	3' O.C. 2' HT. X 3' SPR.
		ORNAMENTAL GRASSES		
41 MIN.		CALAMAGROSTIS A. 'KARL FOERSTER' KARL FOERSTER REED GRASS	1-GAL.	2' O.C. 4' HT. X 2' SPR.
		MUHLENBERGIA CAPILLARIS REGAL MIST	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		NASELLA TENUISSIMA THREAD GRASS	1-GAL.	3' O.C. 4' HT. X 3' SPR.
		SPOROBOLUS WRIGHTII GIANT SACATON	5-GAL.	6' O.C. 8' HT. X 6' SPR.

NOT ALL ILLUSTRATED DUE TO SCALE OF DRAWING

MOSS ROCK BOULDERS (3'X3' MIN)

7/8" SIERRA GOLD ROCK MULCH (3" DEPTH)/ 2"-4" AMARETTO BROWN COBBLE MULCH (6" DEPTH)

PARKBLEND SOD (KENTUCKY BLUEGRASS/FESCUE MIX)

NATIVE REVEGETATION SEED MIX	PLS/AC
SPOTTED GAYFEATHER	1.0
LANCELEAF COREOPSIS	.5
PLAINS COREOPSIS	.5
CALIFORNIA POPPY	.5
FIREWHEEL	.5
SKYROCKET	.5
BLUE FLAX	.5
DESERT FOUR O'CLOCK	.5
MEXICAN HAT	.5
YELLOW PRAIRIE CONEFLOWER	.5
CHOCOLATE FLOWER	.5
BLUE GRAMA	2.0
INDIAN RICEGRASS	5.0
WESTERN WHEATGRASS	1.0
SIDEOATS GRAMA	1.0
GALLETA	7.0

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#	Date	Description

Vista de la Sierra

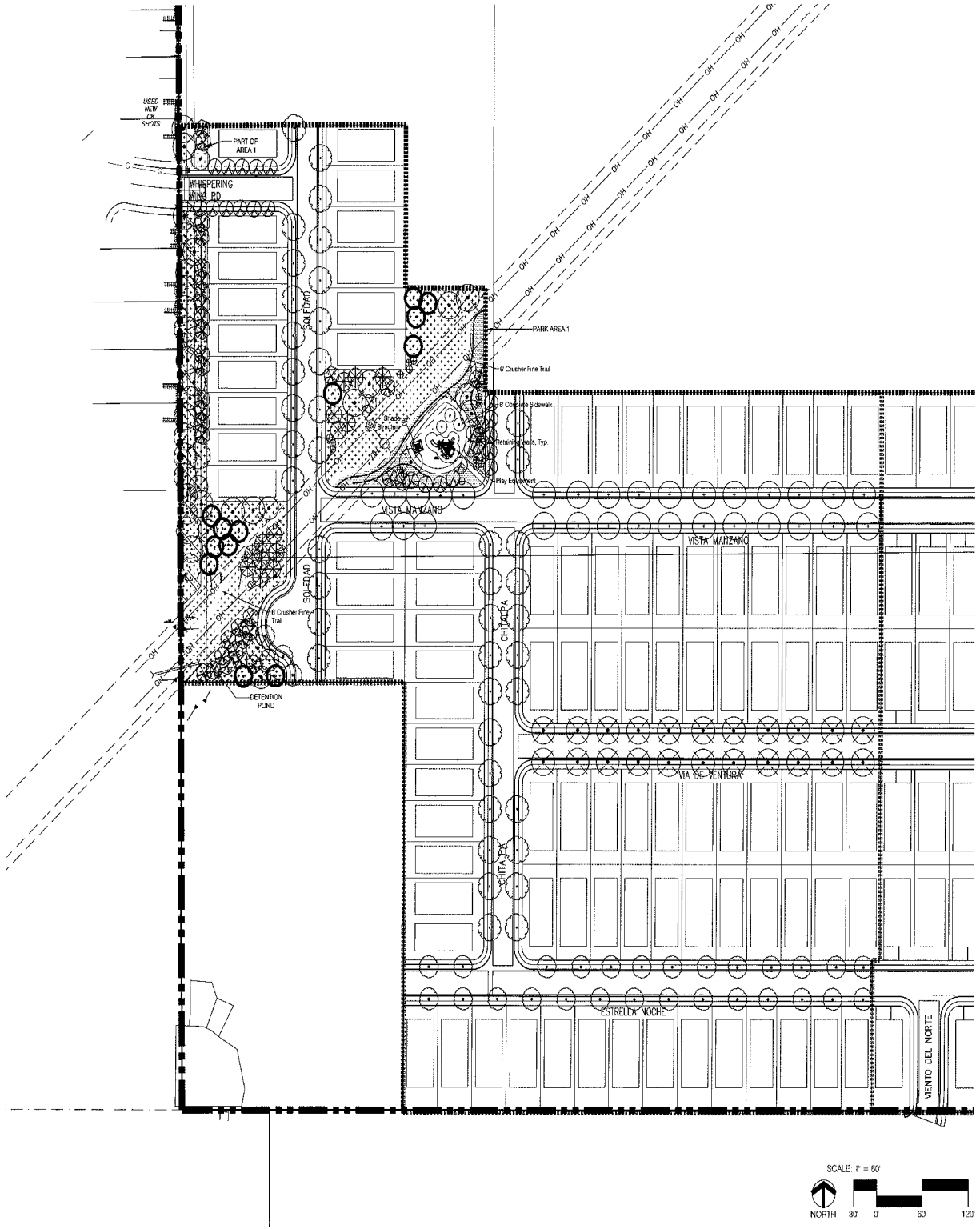
Santa Fe, New Mexico

Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

PHASE 2A
LANDSCAPE PLAN

L-202



SCALE: 1" = 60'

NORTH 30' 0' 60' 120'

PLANT LEGEND PHASE 2B

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		DECIDUOUS TREES		
41		CELTIS RETICULATA NETLEAF HACKBERRY	2" B&B	10' HT. X 4' SPR. 20' HT. X 20' SPR.
36		CHILOPSIS LINEARIS DESERT WILLOW	2" B&B	8' HT. X 4' SPR. 20' HT. X 20' SPR.
30		FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH	2.5" B&B	16' HT. X 6' SPR. 35' HT. X 35' SPR.
55		GLEDITSIA TRIACANTHOS 'IMPERIAL' IMPERIAL HONEY LOCUST	2" B&B	10' HT. X 4' SPR. 60' HT. X 50' SPR.
23		PRUNUS CERACIFERA 'K. VESUVIUS' K. VESUVIUS FLOWERING PLUM	2.5" B&B	10' HT. X 5' SPR. 20' HT. X 15' SPR.
32		PYRUS CALLERYANA 'CLEVELAND' FLOWERING PEAR	2.5" B&B	12' HT. X 5' SPR. 25' HT. X 20' SPR.
7		QUERCUS BUCKLEYI TEXAS RED OAK	2.5" B&B	12' HT. X 6' SPR. 60' HT. X 50' SPR.
		EVERGREEN TREES		
19		JUNIPERUS SCOPULORUM 'SKYROCKET' SKYROCKET ROCKY MTN. JUNIPER	B&B	10' MIN HT. 20' HT. X 6' SPR.
14		PINUS EDULIS PINON PINE	B&B	6' MIN. HT. 30' HT. X 20' SPR.
13		PINUS NIGRA AUSTRIAN PINE	B&B	6' MIN HT. 35' HT. X 25' SPR.
		LARGE SHRUBS		
70 MIN.		CARYOPTERIS CLANDONENSIS BLUE MIST	5-GAL.	6' O.C. 6' HT. X 6' SPR.
		CHRYSOTHAMNUS NAUSEOSUS CHAMISA	5-GAL.	8' O.C. 6' HT. X 10' SPR.
		FALLUGIA PARADOXA APACHE PLUME	5-GAL.	5' O.C. 5' HT. X 5' SPR.
		PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' LITTLE SPIRE RUSSIAN SAGE	5-GAL.	6' O.C. 4' HT. X 5' SPR.
		RHUS TRILOBATA THREE-LEAF SUMAC	5-GAL.	6' O.C. 6' HT. X 5' SPR.
		EVERGREEN SHRUBS AND ACCENTS		
70 MIN.		LAVANDULA X INTERMEDIA 'GROSSO' GROSSO LAVENDER	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		DASYLIRION WHEELERI SOTOL	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		BUXUS SPP. BOXWOOD	5-GAL.	5' O.C. 4' HT. X 4' SPR.
		ACHILLEA 'MOONSHINE' MOONSHINE YARROW	5-GAL.	4' O.C. 2' HT. X 4' SPR.
		RHAPHIOLEPIS INDICA INDIA HAWTHORN	5-GAL.	5' O.C. 3' HT. X 3' SPR.
		YUCCA BACCATA BANANA YUCCA	5-GAL.	3' O.C. 4' HT. X 3' SPR.
		HESPERALOE PARVIFLORA RED YUCCA	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		SMALL SHRUBS & GROUNDCOVERS		
70 MIN.		POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		CENTRANTHUS RUBER JUPITERS BEARD	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		NEPETA X FAASSENII 'SIX HILLS GIANT' SIX HILLS GIANT CATMINT	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		PENSTEMON PINIFOLIUS PINELEAF PENSTEMON	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS TRILOBATA 'AUTUMN AMBER' CREEPING THREE-LEAF SUMAC	1-GAL.	4' O.C. 2' HT. X 4' SPR.
		MIRABILIS MULTIFLORA WESTERN FOUR O'CLOCK	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS AROMATICA 'GRO LOW' GRO LOW SUMAC	5-GAL.	3' O.C. 2' HT. X 3' SPR.
		ORNAMENTAL GRASSES		
70 MIN.		CALAMAGROSTIS A. 'KARL FOERSTER' KARL FOERSTER REED GRASS	1-GAL.	2' O.C. 4' HT. X 2' SPR.
		MUHLENBERGIA CAPILLARIS REGAL MIST	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		NASELLA TENUISSIMA THREAD GRASS	1-GAL.	3' O.C. 4' HT. X 3' SPR.
		SPOROBOLUS WRIGHTII GIANT SACATON	5-GAL.	6' O.C. 8' HT. X 6' SPR.

NOT ALL ILLUSTRATED DUE TO SCALE OF DRAWING

MOSS ROCK BOULDERS (3'X3' MIN)

7/8" SIERRA GOLD ROCK MULCH (3" DEPTH)/ 2"-4" AMARETTO BROWN COBBLE MULCH (6" DEPTH)

PARKSLEND SOD (KENTUCKY BLUEGRASS/FESCUE MIX)

NATIVE REVEGETATION SEED MIX	PLS/AC
SPOTTED GAYFEATHER	1.0
LANCELEAF COREOPSIS	.5
PLAINS COREOPSIS	.5
CALIFORNIA POPPY	.5
FIREWHEEL	.5
SKYROCKET	.5
BLUE FLAX	.5
DESERT FOUR O'CLOCK	.5
MEXICAN HAT	.5
YELLOW PRAIRIE CONEFLOWER	.5
CHOCOLATE FLOWER	.5
BLUE GRAMA	2.0
INDIAN RICEGRASS	5.0
WESTERN WHEATGRASS	1.0
SIDEOATS GRAMA	1.0
GALLETA	7.0

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#	Date	Description

Vista de la Sierra

Santa Fe, New Mexico

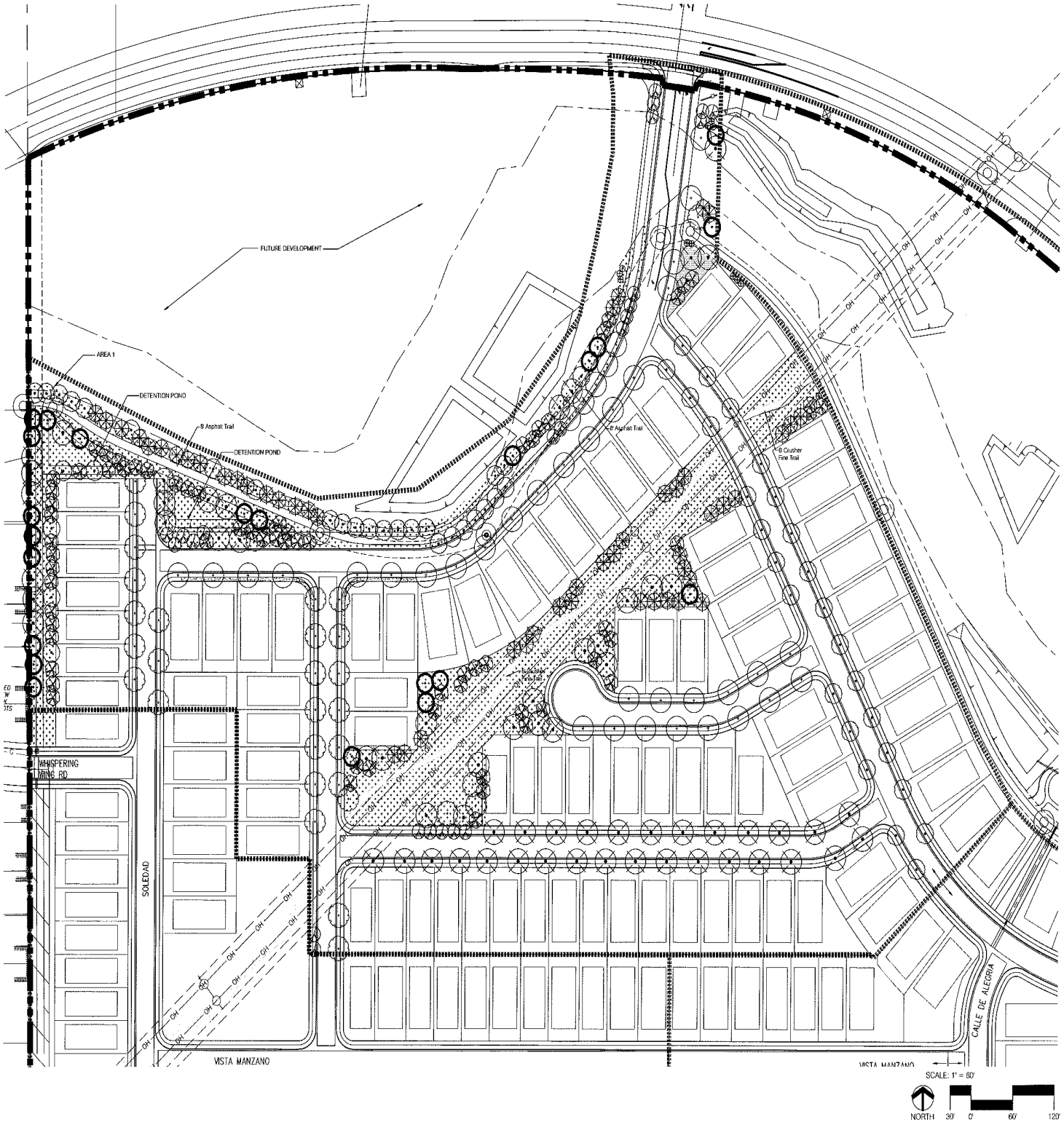
Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24

Sheet Title:

PHASE 2B
LANDSCAPE PLAN

L-203



PLANT LEGEND PHASE 3A

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		DECIDUOUS TREES		
64		CELTIS RETICULATA NETLEAF HACKBERRY	2" B&B	10' HT. X 4' SPR. 20' HT. X 24' SPR.
67		CHILOPSIS LINEARIS DESERT WILLOW	2" B&B	8' HT. X 4' SPR. 20' HT. X 20' SPR.
38		FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH	2.5" B&B	16' HT. X 8' SPR. 35' HT. X 35' SPR.
39		GLEDITSIA TRIACANTHOS 'IMPERIAL' IMPERIAL HONEY LOCUST	2" B&B	10' HT. X 4' SPR. 60' HT. X 50' SPR.
24		PRUNUS CERACIFERA 'K. VESUVIUS' K. VESUVIUS FLOWERING PLUM	2.5" B&B	10' HT. X 5' SPR. 20' HT. X 15' SPR.
58		PYRUS CALLERYANA 'CLEVELAND' FLOWERING PEAR	2.5" B&B	12' HT. X 5' SPR. 25' HT. X 20' SPR.
0		QUERCUS BUCKLEYI TEXAS RED OAK	2.5" B&B	12' HT. X 8' SPR. 60' HT. X 50' SPR.
		EVERGREEN TREES		
14		JUNIPERUS SCOPULORUM 'SKYROCKET' SKYROCKET ROCKY MTN. JUNIPER	B&B	10' MIN HT. 20' HT. X 5' SPR.
50		PINUS EDULIS PINON PINE	B&B	6' MIN. HT. 30' HT. X 20' SPR.
22		PINUS NIGRA AUSTRIAN PINE	B&B	6' MIN HT. 35' HT. X 25' SPR.
		LARGE SHRUBS		
80 MIN.		CARYOPTERIS CLANDONIENSIS BLUE MIST	5-GAL.	6' O.C. 6' HT. X 6' SPR.
		CHRYSOTHAMNUS NAUSEOSUS CHAMISA	5-GAL.	8' O.C. 6' HT. X 10' SPR.
		FALLUGIA PARADOXA APACHE PLUME	5-GAL.	5' O.C. 5' HT. X 5' SPR.
		PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' LITTLE SPIRE RUSSIAN SAGE	5-GAL.	6' O.C. 4' HT. X 5' SPR.
		RHUS TRILOBATA THREE-LEAF SUMAC	5-GAL.	6' O.C. 6' HT. X 5' SPR.
		EVERGREEN SHRUBS AND ACCENTS		
80 MIN.		LAVANDULA X INTERMEDIA 'GROSSO' GROSSO LAVENDER	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		DASYLIRION WHEELERI SOTOL	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		BUXUS SPP. BOXWOOD	5-GAL.	5' O.C. 4' HT. X 4' SPR.
		ACHILLEA 'MOONSHINE' MOONSHINE YARROW	5-GAL.	4' O.C. 2' HT. X 4' SPR.
		RHAPHIOLEPIS INDICA INDIA HAWTHORN	5-GAL.	5' O.C. 3' HT. X 3 SPR.
		YUCCA BACCATA BANANA YUCCA	5-GAL.	3' O.C. 4' HT. X 3' SPR.
		HESPERALOE PARVIFLORA RED YUCCA	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		SMALL SHRUBS & GROUNDCOVERS		
82 MIN.		POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		CENTRANTHUS RUBER JUPITERS BEARD	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		NEPETA X FAASSENII 'SIX HILLS GIANT' SIX HILLS GIANT CATMINT	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		PENSTEMON PINIFOLIUS PINELEAF PENSTEMON	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS TRILOBATA 'AUTUMN AMBER' CREEPING THREE-LEAF SUMAC	1-GAL.	4' O.C. 2' HT. X 4' SPR.
		MIRABILIS MULTIFLORA WESTERN FOUR O'CLOCK	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS AROMATICA 'GRO LOW' GRO LOW SUMAC	5-GAL.	3' O.C. 2' HT. X 3' SPR.
		ORNAMENTAL GRASSES		
78 MIN.		CALAMAGROSTIS A. 'KARL FOERSTER' KARL FOERSTER REED GRASS	1-GAL.	2' O.C. 4' HT. X 2' SPR.
		MUHLENBERGIA CAPILLARIS REGAL MIST	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		NASELLA TENNUISSIMA THREAD GRASS	1-GAL.	3' O.C. 4' HT. X 3' SPR.
		SPOROBOLUS WRIGHTII GIANT SACATON	5-GAL.	6' O.C. 8' HT. X 6' SPR.

NOT ALL ILLUSTRATED DUE TO SCALE OF DRAWING

MOSS ROCK BOULDERS (3X3' MIN)

7/8" SIERRA GOLD ROCK MULCH (3" DEPTH)/ 2"-4" AMARETTO BROWN COBBLE MULCH (6" DEPTH)

PARKBLEND SOD (KENTUCKY BLUEGRASS/FESCUE MIX)

NATIVE REVEGETATION SEED MIX	PLS/AC
SPOTTED GAYFEATHER	1.0
LANCELEAF COREOPSIS	.5
PLAINS COREOPSIS	.5
CALIFORNIA POPPY	.5
FIREWHEEL	.5
SKYROCKET	.5
BLUE FLAX	.5
DESERT FOUR O'CLOCK	.5
MEXICAN HAT	.5
YELLOW PRAIRIE CONEFLOWER	.5
CHOCOLATE FLOWER	.5
BLUE GRAMA	2.0
INDIAN RICEGRASS	5.0
WESTERN WHEATGRASS	1.0
SIDEOATS GRAMA	1.0
GALLETA	7.0

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REVISIONS

#	Date	Description

Vista de la Sierra

Santa Fe, New Mexico

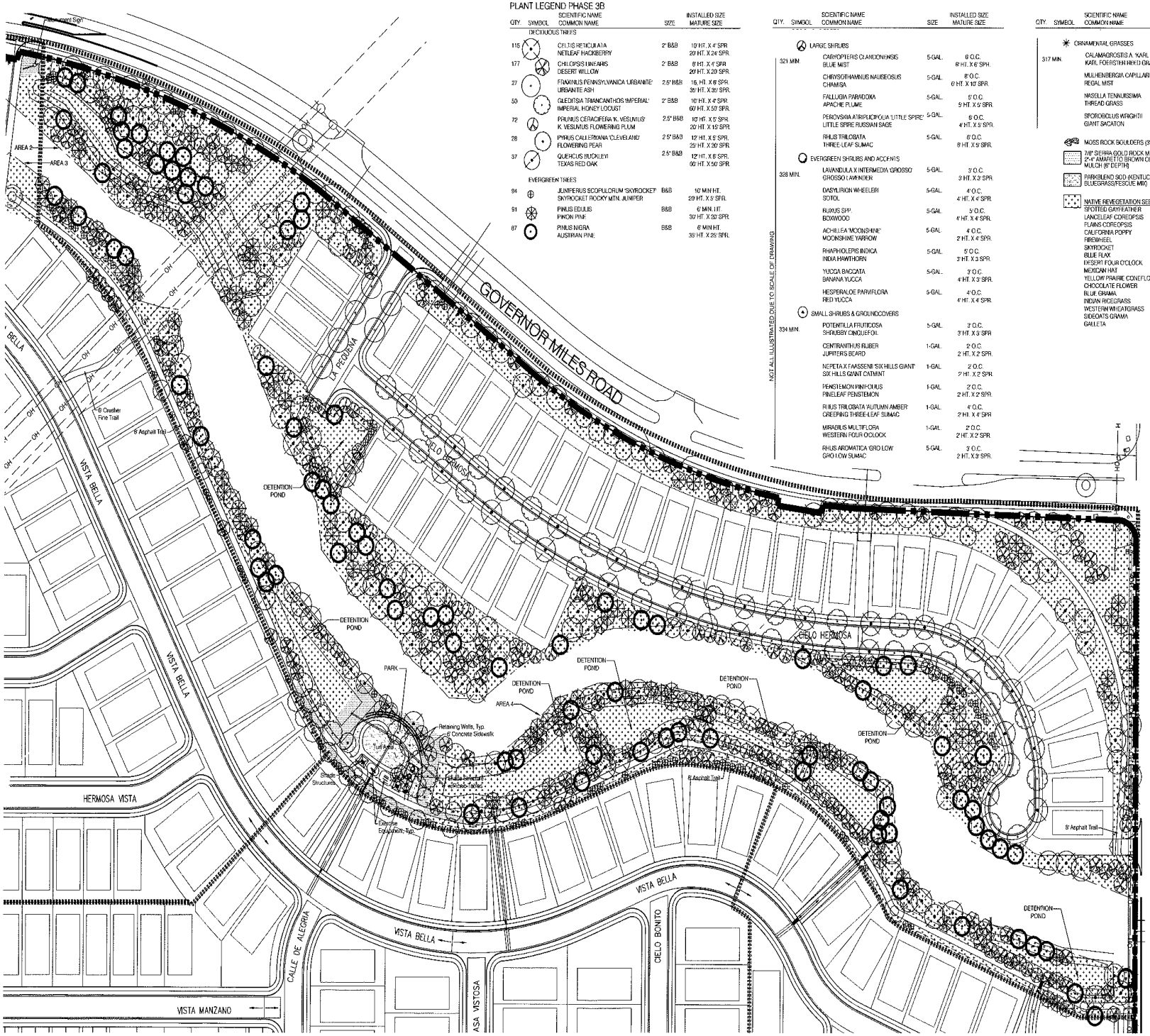
Landscape Architect's Seal:

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24

Sheet Title:

PHASE 3A
LANDSCAPE PLAN

L-204



PLANT LEGEND PHASE 3B

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		DECIDUOUS TREES		
115		CELTIS RETICULATA NETLEAF HACKBERRY	2" B&B	10' HT. X 4' SPR. 20' HT. X 24' SPR.
177		CHILOPSIS LINEARIS DESERT WILLOW	2" B&B	8' HT. X 4' SPR 20' HT. X 20' SPR.
27		FRAXINUS PENNSYLVANICA 'URBANITE' URBANITE ASH	2.5" B&B	15' HT. X 6' SPR. 35' HT. X 35' SPR.
50		GLEDITSIA TRIACANTHOS 'IMPERIAL' IMPERIAL HONEY LOCUST	2" B&B	10' HT. X 4' SPR. 60' HT. X 50' SPR.
72		PRUNUS CERACIFERA 'K. VESUVIUS' K. VESUVIUS FLOWERING PLUM	2.5" B&B	10' HT. X 5' SPR. 20' HT. X 15' SPR.
28		PYRUS CALLERYANA 'CLEVELAND' FLOWERING PEAR	2.5" B&B	12' HT. X 5' SPR. 25' HT. X 20' SPR.
37		QUERCUS BUCKLEYI TEXAS RED OAK	2.5" B&B	12' HT. X 6' SPR. 60' HT. X 50' SPR.
		EVERGREEN TREES		
94		JUNIPERUS SCOPULORUM 'SKYROCKET' SKYROCKET ROCKY MTN. JUNIPER	B&B	10' MIN HT. 20' HT. X 5' SPR.
91		PINUS EDULIS PINON PINE	B&B	6' MIN. HT. 30' HT. X 20' SPR.
87		PINUS NIGRA AUSTRIAN PINE	B&B	6' MIN HT. 35' HT. X 25' SPR.

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		LARGE SHRUBS		
321 MIN.		CARYOPTERIS CLANDONENSIS BLUE MIST	5-GAL.	6' O.C. 6' HT. X 6' SPR.
		CHRYSOTHAMNUS NAUSEOSUS CHAMISA	5-GAL.	8' O.C. 6' HT. X 10' SPR.
		FALLUGIA PARADOXA APACHE PLUME	5-GAL.	5' O.C. 5' HT. X 5' SPR.
		PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' LITTLE SPIRE RUSSIAN SAGE	5-GAL.	6' O.C. 4' HT. X 5' SPR.
		RHUS TRILOBATA THREE-LEAF SUMAC	5-GAL.	6' O.C. 6' HT. X 9' SPR.
		EVERGREEN SHRUBS AND ACCENTS		
328 MIN.		LAVANDULA X INTERMEDIA 'GROSSO' GROSSO LAVENDER	5-GAL.	3' O.C. 3' HT. X 3' SPR.
		DASYLIRION WHEELERI SOTOL	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		BUXUS SP. BOXWOOD	5-GAL.	5' O.C. 4' HT. X 4' SPR.
		ACHILLEA 'MOONSHINE' MOONSHINE YARROW	5-GAL.	4' O.C. 2' HT. X 4' SPR.
		RHAPHIOLEPIS INDICA INDIA HAWTHORN	5-GAL.	5' O.C. 3' HT. X 3' SPR.
		YUCCA BACCATA BANANA YUCCA	5-GAL.	3' O.C. 4' HT. X 3' SPR.
		HESPERALOE PARVIFLORA RED YUCCA	5-GAL.	4' O.C. 4' HT. X 4' SPR.
		SMALL SHRUBS & GROUNDCOVERS		
334 MIN.		POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL	5-GAL.	3' O.C. 3' HT. X 3' SPR
		CENTRANTHUS RUBER JUPITER'S BEARD	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		NEPETA X FAASSENII 'SIX HILLS GIANT' SIX HILLS GIANT CATMINT	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		PENSTEMON PINIFOLIUS PINELEAF PENSTEMON	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS TRILOBATA 'AUTUMN AMBER' CREEPING THREE-LEAF SUMAC	1-GAL.	4' O.C. 2' HT. X 4' SPR
		MIRABILIS MULTIFLORA WESTERN FOUR-O'CLOCK	1-GAL.	2' O.C. 2' HT. X 2' SPR.
		RHUS AROMATICA 'GRO LOW' GRO LOW SUMAC	5-GAL.	3' O.C. 2' HT. X 9' SPR.

NOT ALL ILLUSTRATED DUE TO SCALE OF DRAWING

QTY.	SYMBOL	SCIENTIFIC NAME / COMMON NAME	SIZE	INSTALLED SIZE / MATURE SIZE
		ORNAMENTAL GRASSES		
317 MIN.		CALAMAGROSTIS A. 'KARL FOERSTER' KARL FOERSTER REED GRASS	1-GAL.	2' O.C. 4' HT. X 2' SPR.
		MUHLENBERGIA CAPILLARIS REGAL MIST	5-GAL.	3' O.C. 3' HT. X 3' SPR
		NASSELLA TENUISSIMA THREAD GRASS	1-GAL.	3' O.C. 4' HT. X 3' SPR.
		SPOROBOLUS WRIGHTII GIANT SACATON	5-GAL.	6' O.C. 8' HT. X 6' SPR.

MOSS ROCK BOULDERS (3'X3' MIN)

7/8" SIERRA GOLD ROCK MULCH (3" DEPTH)/ 2"-4" AMARETTO BROWN COBBLE MULCH (6" DEPTH)

PARKBLEND SOD (KENTUCKY BLUEGRASS/FESCUE MIX)

NATIVE REVEGETATION SEED MIX	PLS/AC
SPOTTED GAYFEATHER	1.0
LANCELEAF COREOPSIS	.5
PLAINS COREOPSIS	.5
CALIFORNIA POPPY	.5
PRAIRIEWHEEL	.5
SKYROCKET	.5
BLUE FLAX	.5
DESERT FOUR O'CLOCK	.5
MEXICAN HAT	.5
YELLOW PRAIRIE CONEFLOWER	.5
CHOCOLATE FLOWER	.5
BLUE GRAMA	2.0
INDIAN RICEGRASS	5.0
WESTERN WHEATGRASS	1.0
SIDEOATS GRAMA	1.0
GALLETA	7.0

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#	Date	Description
		REVISIONS

Vista de la Sierra

Santa Fe, New Mexico

Landscape Architects Seal

Designed By:	KP/CG
Drawn By:	KP/CG
Checked By:	CG
Date:	9/18/20
Project No:	1402-24
Sheet Title:	

PHASE 3B
LANDSCAPE PLAN

L-205