City of Santa Fe

AGENDA

REGULAR MEETING OF THE PLANNING COMMISSION JULY 01, 2021 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, the ban on public gatherings in excess of those permitted in the current Public Health Order, and the need to incorporate technology and practices to re-institute in-person meetings consistent with the limitations established by the Order, the Planning Commission meeting will be conducted virtually.
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 at https://santafe.primegov.com/public/portal 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.

City of Santa Fe

AGENDA

REGULAR MEETING OF THE PLANNING COMMISSION JULY 01, 2021 AT 6:00 PM ATTEND VIRTUALLY

- 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:

1. June 3, 2021

E. APPROVAL OF FINDINGS/CONCLUSIONS

F. OLD BUSINESS

G. NEW BUSINESS

1. **Case #2021-3651. PODS Storage Facility Development Plan.** James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC, Owner, requests Development Plan approval for a PODS storage facility on approximately 4.47 acres. The proposal consists of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road. (Donna Wynant, Case Manager, djwynant@santafenm.gov, 955-6325)

2. **Case #2020-2639. 1160 Camino De Cruz Blanca Telecommunications Facility.** Gravity Pad Partners, LLC, Agent, for AT&T/FirstNet NML0255, Applicant, requests approval of a new telecommunication facility with a

waiver to height, pursuant to Subsection 14-6.2(E) "Telecommunication Facilities". The property is approximately 19.04 acres, zoned R-1PUD (Residential – one dwelling unit per acre, Planned Unit Development), and is within the Historic Design Review Overlay. (Dan Esquibel, Case Manager, daesquibel@santafenm.gov, 955-6587)

H. STAFF COMMUNICATIONS

I. MATTERS FROM THE COMMISSION

- Policy Subcommittee Update

J. 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.

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PLANNING COMMISSION MINUTES
JUNE 3, 2021

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C. Approval of Agenda	Approved as published	2
D. Approval of Minutes May 6, 2021	Approved	2
E. Findings & Conclusions	None	2
F. Old Business	None	2
G. New Business		
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MINUTES OF THE CITY OF SANTA FE PLANNING COMMISSION
Thursday, June 3, 2021 - 6:00 pm
VIRTUAL HEARING

CALL TO ORDER

A regular meeting of the City of Santa Fe Planning Commission was called to order by Chair Gutierrez on the above date at approximately 6:00 p.m. at a virtual meeting.

A. ROLL CALL

Roll Call indicated the presence of a quorum for the meeting.

Members Present
Commissioner Brian Patrick Gutierrez, Chair
Commissioner Mark Hogan, Vice Chair
Commissioner Janet Clow, Secretary
Commissioner Amanda Chavez
Commissioner Pilar Faulkner
Commissioner Lee Garcia – Arrived at 6:05 pm
Commissioner Carly Piccarello
Commissioner Dominic Sategna – Arrived at 6:10 pm

Members Absent
Commissioner Jessica Lawrence (Excused)

Others Present:
Mr. Elias Isaacson, Land Use Director
Mr. Noah Berke, Planning Manager
Ms. Sally Paez, Assistant City Attorney
Ms. Melissa D. Byers, Stenographer

NOTE: All items in the Committee packet for all agenda items are incorporated herewith by reference. The original Committee packet is on file in the Land Use Department.

B. PLEDGE OF ALLEGIANCE

Commissioner Hogan led the pledge of allegiance.

C. APPROVAL OF AGENDA

MOTION: Commissioner Faulkner moved, seconded by Commissioner Hogan to approve the agenda, as presented.

VOTE: The motion passed by unanimous roll call vote with Commissioners Chavez, Clow, Faulkner, Hogan, and Piccarello voting in favor and none voting against.

D. APPROVAL OF MINUTES

1. May 6, 2021

MOTION: Commissioner Faulkner moved, seconded by Commissioner Hogan to approve the minutes of May 6, 2021 as presented.

VOTE: The motion passed by unanimous roll call vote with Commissioners Chavez, Clow, Faulkner, Hogan, Piccarello and voting in favor and none voting against.

E. APPROVAL OF FINDINGS/CONCLUSIONS

None

F. OLD BUSINESS

None

G. NEW BUSINESS

None

H. STAFF COMMUNICATIONS

1. Informational Presentation: Metropolitan Planning Organization (Erick Aune MPO).

Eric Aune from MPO presented a PowerPoint presentation. He explained the MPO is representative of the City and County of Santa Fe, Pueblo of Tesuque and the New Mexico Department of Transportation (NMDOT). It is an independent government organization made by a Memorandum of Understanding and agreement and is hosted by the City. He introduced the other members on the MPO team.

He said a core tool of the MPO is the Metropolitan Transportation Plan. They are obligated at the federal level to update the plan every five years. The plan contains information about the operation of the entire system of transit, bicycles, pedestrians, and traffic. The plan produces a list of projects for the improvement of roadways and multi-use trails. Those include roadway, intersection and safety improvements.

The Bicycle Master Plan, the Trail Plan and the Pedestrian Master Plan are used to inform the city based on safety, and there is also a Public Transit Master Plan.

An overview of history starting with the railroad in the 1800s was reviewed. In 1912 a City Plan was put in place looking at the future planning for improvement of streets, and wastewater. Paved roads started in the 30's and in 1935 the MUTCD (Manual on Uniform Traffic Control Devices) was created. The Manual is the national guideline with a challenge that it is skewed for the automobile. In 1947 the City adopted zoning standards for roadways, resulting in things such as the traffic light at Old Santa Fe Trail and San Francisco in 1956.

Today they are rethinking what is appropriate, such as what St. Michael's should look like. The Pedestrian Safety Study that came out this week shows Santa Fe City and County second behind Albuquerque in pedestrian crashes, deaths and injuries. Mr. Aune felt there is a direct correlation in the amount of free parking and traffic congestion. He thought it a good idea to look at the code and what it delivers. He provided an example of a new sidewalk on Aqua Fria not compliant with Code. The sidewalk is built up against the wall on a curve, eliminating accessibility for someone in a wheelchair. It is also, the 5 foot bare minimum width making it difficult for two people to walk side by side. Many of the sidewalks in Santa Fe share space with bicycles, and he hears a lot of complaints about too many bicycles on sidewalks.

Code states that pedestrian crosswalks must be included as required by the land-use director. The MPO notes a lack of crosswalks throughout the City which was a conscious choice and believes they are essential to pedestrian safety. The City currently has a multimodal study that can be taken online to aid the city and looking at the challenge of systemic programmatic policies that are automobile dominated.

The MPO developed an interactive Bicycle Master Plan project for planners as well as individuals, to inform them of projects under consideration. It gives the existing multi-modal bicycle network.

Mr. Aune stood for questions.

Director Isaacson asked Mr. Aune about MPO's involvement in the Arroyo Chamiso crossing project and if he had any new information.

Mr. Aune replied MPO provides a travel demand model looking at existing and proposed land uses. MPO does an algorithm calculation on what those uses would deliver

in terms of traffic etc. and has provided that to the City for their analysis of the Arroyo Chamiso crossing (a.k.a. Richards Road extension) which was shut down in 2010 because the neighborhood was against it, it was revived four years ago and is moving forward with phase B design.

Commissioner Garcia said the challenge is taking a 500 year old City and making it modern. He said when he looks at the new development sidewalk, he would ask why it was built that way and how it passed inspection. They will see a lot of that until the City takes up the challenge to do sidewalks and infrastructure.

Vice Chair Hogan asked if there was a plan to connect Richards Avenue to 599 at some point.

Mr. Aune replied that has been discussed in the long term plan. However, it would be very expensive and is not a priority project, but it is being considered.

Vice Chair Hogan said the development of the Bike and Trail Masterplan citywide is very impressive and has alternative ways of getting around Santa Fe instead of using a car. He asked about the critical connections that need to be made.

Mr. Aune said he was happy that the City and County take this seriously. The underpass at St. Michael's comes up a lot. He is aware there are concerns about the homeless and safety. There was a safety audit and federal safety plans, and the City has hired a consultant who should wrap up a design within a year. The City is trying to determine the final connection for another connector, the Santa Fe River Trail, through the Agua Fria/South Meadows to the River Trail at San Felipe. Also, the Acequia Trail has been funded. So, in the next couple of years the south side should see tremendous improvements for connectivity. The MPO supports that for recreation and a safe, alternative way to get to work. There are many needs and gaps in the connections with the Bicycle Master Plan that the MPO will strive to achieve in collaboration with the City and County.

Vice Chair Hogan asked if there is opportunity for input on the infrastructure funding from the federal government.

Mr. Aune said the State of New Mexico passed an infrastructure project fund in the amount of $121 million dollars. It is expected that the MPO area including the Pueblo of Tesuque, will get about $5 million of that. MPO has been working with Public Works and City and County on eligible projects for those funds. In addition to the federal funds, the City/County has committed to using road and gas tax to commit $40 million a year to the fund. The latest version in the Senate includes an additional billion dollars for bicycles and pedestrians, so he is watching to see if that survives.

Commissioner Sategna and Commissioner Garcia indicated their arrival times for the record.

Chair Garcia asked which is first, the MPO or the future land use map.

Mr. Aune explained when MPO updates their travel demand model every six years or so, they coordinate long term plans with City and County Land Use staff. That information includes upcoming projects to inform the design. There was a public meeting on St. Francis and St. Michael's about two weeks ago on the design. DOT also has a team redesigning Cerrillos Road from St. Michael's to St. Francis. He thought that compelling because they are thinking critically about what the design will deliver because the City will take over Cerrillos and St. Michael's.

Commissioner Garcia asked if the West Alameda area is being considered.

Mr. Aune said three county commissioners are on the policy board and three City councilors are working together. As a result of the annexation there is collaboration with West Alameda on drainage improvements and a roundabout.

Commissioner Garcia asked if any trail connections are considered for pedestrians or bicycles.

Mr. Aune said yes, Commissioner Anna Hansen is a big advocate for that area.

Commissioner Sategna asked for more information on the lack of pedestrian lanes.

Mr. Aune said there are two substantive issues: the width of the sidewalks and crosswalks. He wanted to include MUTCD (Manual on Uniform Traffic Control Devices) in the presentation because he learned there were no crosswalks or sidewalks at Capital High School. The City uses MUTCD, but their standards are rational from an engineering perspective only. They are illogical from a planning perspective and should be looked at critically and only as guidelines. The communities that were effective in changing the pedestrian and bicycle safety have top down leadership. They empower engineers to change their behavior. He felt there were many reasons to question just following the guidelines and continuing the same practice.

Commissioner Sategna asked if he had seen any approach as very successful in increasing pedestrian safety and crosswalks, bike paths etc.

Mr. Aune said yes, when the leadership across the nation from people such as the Planning Commission, City Council, etc. say, we can do better, and look at the best management practices across the nation. He appreciates the roundabouts, and the good work Santa Fe has done in that area and hopes that continues.

Chair Gutierrez asked with all of the building in South Meadows if the traffic issues, etc. will be left to the City to resolve or will the MPO get involved.

Mr. Aune said the MPO supports the City and is putting a lot of energy in their partners such as the schools and national parks system. MPO wants to raise awareness that 1) it is the fastest growing parts of the City, 2) you can see it and 3) it is willfully deficient. This morning the MPO started a public engagement campaign with the help of City Councilors. They placed 35 large details on sidewalks and bus stops throughout the South Meadows area asking for input. A queue code can be scanned on your phone that takes you to the survey on the website. They plan a walking audit with the community on August 24th to look at the sidewalks and raise awareness of improvements happening and what could be done better.

Commissioner Piccarello said we are seeing significant changes from other cities regarding climate change. She asked if he could choose one thing, what would the MPO want the City to become more aggressive in with their planning.

Mr. Aune replied the number one thing from a planning perspective is that the City has overbuilt the roadways. The City should not only stop overbuilding, but stop the road diets on St. Michael's. Siler Road is an example and used to be four lanes and has been reduced and there is road reduction on Guadalupe north. The City needs to reverse the incentive to drive and provide alternative transit. Secondly is a quasi-public/private partnership for electric charging stations for automobiles and there has to be an increase in renewable energy.

Commissioner Sategna asked if there was a way to build on the existing bike paths to promote biking and walkable spaces. They appear to be underused and undervalued as a way to create walk ability or less reliance on a car.

Mr. Aune responded that leveraging that goes back to specific things the City could do to incentivize people. Free parking is one example that incentivizes people to drive. He recently received a call from a new museum with concerns about little or no additional parking. He looks at that as an incentive for people to walk. It is a market mentality and a matter of getting people out to walk, bike and not to drive. He would like to see incentives for people to bike to work. The MPO is working with the City on their five year transit plan now and that is what he recommends.

Commissioner Faulkner said her concern is that the Santa Fe bus system is not that great. She thought the City would not be successful in removing parking spaces until there is a more effective transit system.

Mr. Aune said the people at Transit recognize that. Most of their funds are federally provided, and the City matches with GRT funds. Increasing frequency and effectiveness of transit will cost extra. The question is if the City is interested in spending extra money, otherwise it can’t be done. He agreed it should be looked at as a system and not just parking or transit.

He said his challenge is the Traffic Impact Assessments (TIA) used by the Planning Commission when making decisions. A TIA has an inherent bias for suburban development and assumptions built from suburban development. They are biased to deliver bigger wider roads in the suburban sprawl. He would like TIAs to be *transportation* impact assessments with pedestrians on equal footing in the analysis. Raising awareness could possibly change that.

Commissioner Faulkner said she appreciated his insight from an engineering versus planning approach. She felt engineering doesn't always consider community and how they work, or do not work and those two things could be in conflict at times.

Commissioner Piccarello said she is a one car family and lives in an area where there is a bike path. Not every area of the city has that. She asked what areas most lack bike accessibility.

Mr. Aune said MPO is looking at development patterns from the County where there is no accommodation for anything other than a road and car. The southside sector and peripheral areas of Santa Fe are areas of greatest example, such as Rodeo Road The bridge is frightening and doesn't have much room to walk. Zoning and land use around the bridge includes many multifamily and senior developments and residential and the roadway is lacking in sidewalks, bike facilities and almost everything.

Commissioner Piccarello recalled a town in the northeast that made the bus system free and were looking at how that would impact their employment rate. They were only going to do that for a year. The point is to look at the bus system and unemployment rate together. She wondered if there is room for the City to do that.

Mr. Aune said yes, but there are two sides of the coin. Leadership often thinks if they have more transit then more people would ride it. The component cohort that services want to attract is people working and commuting as a means of getting out of the car. Not because they don't have a car or because of financial reasons. The flip side of the coin is if a city isn't willing to add frequency and investments to a service. Calling it "free" devalues the system and it doesn't work.

Chair Gutierrez thanked Mr. Aune for the presentation.

2. Planning for Growth. (Elias Isaacson)

Director Isaacson gave a presentation on Planning for Growth. He said the issues Mr. Aune presented tonight dovetail with the growth planning issues. He said historically Santa Fe had been dealing with growth management issues since inception.

Growth management planning is a type of comprehensive plan used to measure the impact of new growth impact on a community and helps to define the policies and

regulations by which that impact will be managed. It recognizes that managing growth will enhance quality of life, identify locations for various land uses for future growth, and determine proper scale and density for future land uses. Establishing appropriate pace of future growth is required to sustain that growth and developing around existing new urban centers with access to trails and transit services to reduce automobile dependence and promote pedestrians. The promotion of development also provides a range of housing options that address the needs of the community affordably.

The current general plan establishes a framework for responding to the challenges and opportunities presented by our city's growth. A growth management plan should be organized to respond to the community's specific vision and goals and objectives.

Looking at the growth management in Chapter 4 of the General plan, there are things like quality of life, urban form, transportation alternatives, water, sustainable growth, and regional perspective for planning. There is the creation of themes for livability, housing affordability, and equity in the safety and wellness and economic health of a community. Design issues like density, connectivity, architecture, urban design, infrastructure, transportation and environmental quality, all involve regional planning.

It addresses questions on climate change and carbon emissions, the amount of open space, landscape and opportunities for local food production. Growth management planning is important because Santa Fe is unique and a remarkable place to live and it continues to attract people. The challenge, as people relocate to Santa Fe, is to create a smart and inclusive growth plan that ensures growth, provides equitable access to future employment, housing choice affordability and the City's cultural and natural resources.

Most of the City's population growth can be attributed to the several phases of annexation. They are now beginning to see accelerated migration facilitated by what is referred to as the "zoom boom". The average household size is dropping, and the City is getting older, and families are no longer moving in. The census tracts in 2010 versus 2020 show populations over the age of 65. The question becomes what that means for local housing. Median house values are steadily rising but households are not. As that gap continues, finding acceptable housing options are more challenging. Owner-occupied housing went up in 2020 but the vacancy rate has remained flat.

With the growth management planning, the public engagement process will be open and designed to challenge the thinking about the future. It will be inclusive and should be guided by goals to educate, engage and empower the community. Effort should be made to include new voices in the process and outreach. An entire generation of people in Santa Fe have not had an opportunity to engage in shaping the vision and future of the City. A number of things have been done to address growth such as the annexation of land in the southern part of the City, zoning overlays like the Midtown Link, the redevelopment of the Midtown Campus and the planning efforts in the southwest area

and the 25 Year Sustainable Santa Fe plan. Also, recently, the Santa Fe River Corridor Plan.

The City has limited development in some areas and added a green building ordinance; adopted HERS, an energy and water efficiency rating system. Santa Fe has an active water planning and conservation team working on 40-80 year plans, and has looked at storm water management to protect arroyos and how to plan infrastructure expansion. The Land Use Department identified appropriate rates and impact fees and will look at growth infill and the benefits of density. A big goal will be creating policies that support walkable neighborhoods and a sense of community that provides for active lifestyles, with easy access to parks, trails and open space.

Density ranges from 21 to 29 units per acre. It is important to incentivize multimodal travel and reduce reliance on automobiles which plays a big part in housing affordability. That also helps the City reach its goals on carbon neutrality. The Mayor and City Council are looking at opportunities to make fees permanent for funding the Affordable Housing Trust Fund. Street networks should be balanced by reliable, efficient public transportation systems. The City cannot build out of their traffic problems, so focus is also on resource conservation. The City is collaborating with the Santa Fe County Utilities Department and initiated a community informed planning study to develop a long-range Water Resource Management study. The current study will be completed by 2024 and continue to be reevaluated and repeated, as necessary. The plans extend as far out as 2100.

From a regional growth management perspective, the 1999 General Plan identified the importance of regional planning to manage growth. The next steps are working on an RFP which will take them through the summer of this year which includes a scope of work. After the RFP they will evaluate and probably start the planning process in the winter of 2022.

Director Isaacson stood for questions.

Chair Gutierrez's explained the presentation was not on the agenda, however, it was a last minute decision that it would be heard.

He noted his batteries were running low and asked Vice Chair Hogan to take over for a moment.

Commissioner Chavez said everyone likes to be part of community engagement, but doing that equitably and getting good representation of the community is more difficult. She asked what steps are planned to engage the community.

Director Isaacson said they haven't actually discussed that much. They will ask those who respond to the RFP to provide ideas on how to engage the community. He said we want their strategy and tools for getting that information. He was on the selection committee for the multimodal transit study. They discussed the importance of the

selection process, and the strategies the different teams recommend. Then they will evaluate and discuss what would be the most successful.

Commissioner Chavez explained she is a big community advocate and knows how difficult community engagement can be. Proposals to engage are great but the question is whether the community is really engaged, and their voice is represented. It is one thing to propose a plan for engagement but another to actually hold individuals, or a consulting group, accountable.

Director Isaacson agreed. The community engagement process will last for months so is not comparable to an ENN. This process will focus on asking the community their vision and values and what are the trade-offs. That will be built into the proposal process.

Commissioner Faulkner said she was concerned that when reaching out to consultants, many are from out of state. They often don't have a clear perspective of the community or the values. She wanted to be sure to capture the culture and the big picture of Santa Fe. She noted a number of nonprofits serve Santa Feans that could be consulted. She wondered if they have been considered, or if that was required of consultants in the RFP.

Director Isaacson said it is not in the RFP. He thought consultants would have the same thought about contacting partners. There are also other departments, such as Arts and Culture or a division that is a part of the community development group that he would like to be involved in outreach.

Commissioner Sategna said for the record, he wanted to know why they are not pursuing a general plan and focus is only on the growth management plan. He asked what the differences are in those and why the Land Use Department is promoting a growth development plan versus a general plan update.

Director Isaacson said the 1999 General Plan is an important starting point for additional long-range planning and they will build off that. The current challenges are the issues related to the City's growth. Those can be addressed through growth management and long-range planning more quickly. That also provides the foundation for future long-range planning, whether a full general plan update or a pivot to a small area or other type of climate effort plan. That by no means forecloses on future updates to the general plan, but is the most effective to the challenges of housing affordability, sustainability, transit, infrastructure planning, etc.

Commissioner Sategna said to follow up on that he wanted to know what Director Isaacson felt was being excluded. He wasn't clear about the differences and understands that growth management is part of the general plan. Focusing only on growth management, he asked what will be excluded.

Director Isaacson's response was that he wouldn't say that something was being excluded, he would say things were being prioritized. This looks more at the relationships between the topics instead of each topic individually. This is an opportunity to find synergies through that lens rather than just updating sections of the general plan. He found those to be a more siloed approach that is indicative of long-range planning in the 1990s and early 2000's.

Commissioner Chavez asked to follow up on Commissioner Sategna's comments. She said she understood what Director Isaacson was saying. She thought, however, he would be running into roadblocks. She asked if he didn't feel he was going to run into barriers with a focus on just one part of the general plan. She thought what made an effective general plan is that there are systems that work together in a common direction. She asked if they chuck that, how would that not interfere with the systems working properly.

Director Isaacson thought the growth management plan was more systems-focused than a traditional general plan. It looks at the relationships of transportation, infrastructure, open space, water conservation, etc. A growth management plan is as much of a comprehensive plan as a general plan, but is about what is working and not working. Outcomes are about recommendations for land use policy. The focus is what are the impacts of growth and what is most appropriate so growth can happen in a sustainable, fiscally responsible way. He thought this approach no less comprehensive or less system focused than the general planning effort in 1999. In fact, it is more so because of advancements around moderate planning.

Commissioner Chavez asked if the growth management plan and general plan will work together rather than the focus being on growth management because it has been evolved.

Director Isaacson said the two plans wouldn't necessarily be worked on side-by-side, but more in an integrated fashion. The growth management plan will provide more concise, prescriptive recommendations on managing growth. It is designed to work in concert. If in the future a more robust update of the general plan is required, that could be done at that time.

He said the importance of the commitment to update any long-range plan came up in the Quality of Life meeting. The design can almost be for an update at 5-10 year intervals to ensure the recommendations and policies still work.

Commissioner Faulkner asked if safe to say that the general plan approach is antiquated, and growth management is a new form of a general plan.

Director Isaacson said obviously some communities still do general plans and there are reasons why. Some communities consistently update their plan, and the plan continues to make sense. He said we find we have deferred maintenance in our long-

range plan. We have taken a more thematic based approach to innovation to allow Santa Fe to respond and develop ideas and strategies for some of the challenges.

Director Isaacson said he wasn't saying that the general plan doesn't have a purpose or lacks importance. By examining land-use policies through a growth management plan they can revisit the general plan. That does the heavy lifting.

Commissioner Faulkner thought the approach of looking at the lens of growth management would accomplish a lot of things. A lot of would be updating the general plan which would be related to the growth of Santa Fe from a town to a city.

Director Isaacson agreed. He said updating the general plan, most likely would be talking about growth anyway. They should just go ahead and focus on growth management as the first pass through the general plan, or a longer planning document. Then they could move on to address other aspects.

Commissioner Sategna said this is all new information and he appreciated the presentation. He knew the Mayor and City Council supported this. His concern was the level of public engagement in a process where they are honing in, and focusing on one aspect. He thought historically a general plan update requires all members of the community be engaged in the process. He was looking forward to seeing how that would happen. He asked if there is a requirement to update the general plan, and if so, when that would be done since the focus is only on one aspect of the general plan.

Director Isaacson indicated that both the general plan and growth management process of engaging the public are similar. They should not be concerned that the public would be engaged differently. The growth management process covers many of the same questions and topics on the vision and values, the direction the City wants to go, and what are the trade-offs. He asked if Attorney Paez wanted to comment on the legal obligation for a general plan update.

Attorney Paez explained the City is required to have a comprehensive plan but there is no timeframe required for updates. In terms of state law, the City's authority for land-use regulation and the Commission's authority is important that a plan be in place. The statutes call it a master plan and a comprehensive plan, and a general plan serves as the legal function. She thought possibly these things could be incorporated as an amendment, or they could update portions. Ultimately it needs to be a guiding document.

There were no further questions from Commissioners.

Chair Gutierrez asked if there were other staff communications.

Mr. Berke reported there would be no second meeting in June, and they will continue to meet virtually. He anticipated the Attorney General will make a decision once the public health emergency is lifted, on how public meetings should be conducted. He

indicated a hybrid model will be tested in the chambers with the Governing Body and he will have more information.

Director Isaacson said to add to that, City Councilors will meet June 9th in a hybrid meeting in Council Chambers, but everyone else including staff, will be virtual. The City will evaluate the effectiveness of that and decide for commissions and other committees in July. He thought possibly the Commission would meet in person the first or second meeting in July in chambers, but staff and the public would still log in.

Director Isaacson said the important thing to note is that once they switch to an in person format, all of the Commissioners will have to be present.

I. MATTERS FROM THE COMMISSION

- Policy Subcommittee Update.

Commissioner Faulkner reported on the Subcommittee work. They spent the first several meetings on administrative matters and the process for review and assessment and recommendations. Two soft policies have been identified, one serving as advisors to the Land Use staff on the RFP for the growth management plan and the hygiene scrub of Chapter 14 if staff wants the help. Also, two major priorities will be the cannabis policy and an affordable housing policy specifically addressing Chapter 14 that could be used to encourage or enhance affordable housing build out. Their first policy meeting is on June 10th with the purpose of being educated on their priorities. Staff has consented to doing presentations and she also invited City Councilors to participate.

Commissioner Faulkner offered to email the full process document to those interested.

L. ADJOURNMENT

Chair Gutierrez adjourned the meeting at 7:55 pm.

Submitted by:

Melissa D. Byers, Stenographer for
Byers Organizational Support Services

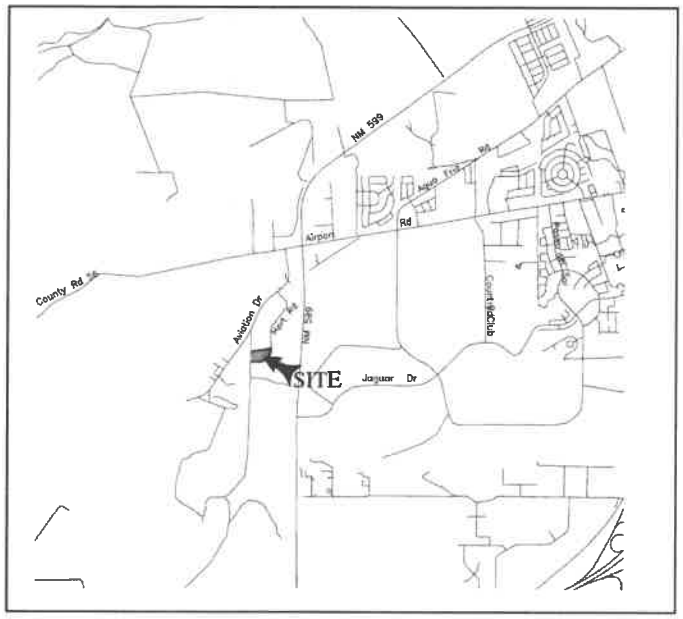
Approved by:

_____

Brian Gutierrez, Chair

Land Use Department
Planning Commission Staff Report

Case No:	2021-3651
PC Hearing:	July 1, 2021
Applicant:	James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC
Request:	Development Plan
Location:	4900 Beckner
Case Mgr.:	Donna Wynant, AICP
Zoning:	I-1 (Light Industrial)
Pre-app.:	January 4, 2021
ENN:	February 8, 2021
Proposal:	Development Plan for a storage facility



Case #2021-3651. PODS Storage Facility Development Plan. James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC, Owner, requests Development Plan approval for a PODS storage facility on approximately 4.47 acres. The proposal consists of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road. (Donna Wynant, AICP, Case Manager)

The Applicant is also requesting a Lot Line Adjustment, which is reviewed administratively (Case #2021-3652) between Lot 4 (4800 Hart Road) and Lot 5 (4900 Hart Road) in the Hart Business Park. Lot 4 will be increasing in size by 0.23 acres (10,019 sq. ft.) and Lot 5 will be decreasing in size by 0.23 acres (10,019 sq. ft.). The lot line adjustment will reconfigure the lots for the future design of the PODS facility.

I. RECOMMENDATION

The Land Use Department recommends **APPROVAL** with the conditions of approval as outlined in this report.

Two motions will be required in this case:

- *Approve or deny the development plan for Case No. 2021-3651 subject to the required general findings, and subject to the conditions of approval and technical corrections recommended by staff in Section II and Exhibit A of this staff report.*
- *Approve or deny the Findings of Fact and Conclusions of Law for Case No. 2021-3651 as shown in Exhibit C of this report.*

II. CONDITIONS OF APPROVAL

The following are conditions of approval for this project from the City's Development Review Team. The conditions and technical corrections are also listed in Exhibit A.

#	CONDITIONS OF APPROVAL	Dept/ Division	To Be Completed
1	Shall comply with IFC 2015, Appendix D, Section D104	Geronimo Griego/Fire Prevention	Prior to Recordation
2	Shall comply with IFC 2015, Appendix D, Section D105 Aerial Fire Apparatus Access Roads.	Geronimo Griego/Fire Prevention	Prior to Recordation
3	An approved water plan and Agreement to Construct and Dedicate (ACD) from the Water Division will be required.	Public Utilities/Water	Prior to Recordation
4	Per Subsection 14-8.5(C)(3) "In outdoor storage yards or salvage yards , a solid wall or fence at least six (6) feet in height, with access only through solid gates that are kept closed when not in use, shall be erected around the entire yard. No object shall be stacked or stored higher than the minimum height of the enclosing wall or fence."	Current Planning	Prior to Recordation
5	Approval of the Development Plan is contingent upon the Lot Line Adjustment of Lot 5 to be reviewed/approved administratively.	Current Planning	Prior to Signature Sheet.

III. EXECUTIVE SUMMARY

The subject property is 4.7 acres of vacant land zoned I-1 and located in the Hart Business Park at 4900 Hart Road on an adjusted Lot 5. The Hart Business Park subdivision plat was approved by the Planning Commission in 2008 for 11 lots on 82.9 acres (Case #S-2008-03). The Business Park is adjacent to the Airport and includes Hart Road, which is a 50-foot wide public right-of-way that ends in a cul-de-sac with an emergency drive onto adjacent airport property to the west, connecting it to Aviation Drive. This proposal includes a lot line adjustment to the north lot line of Lot 5 which is under a separate application to be reviewed and approved administratively. (See Figure 1 on page 4 of this report.)

The proposal includes a *"40,000 square foot warehouse building to store PODS which are delivered to the client's property to store personal or business goods. The PODS are then picked up and sent back to the warehouse for safe keeping until needed by the client. Empty PODS are stored outside the building as reserve inventory for future clients. An additional 12,800 square foot appendage to the building is proposed for construction in the future."*

The proposed development plan requires Planning Commission approval as it will be new construction

exceeding 30,000 square feet per Subsection 14-3.8(B)(3)(b). The Commission's review of this project will focus on compatibility with surrounding uses, consistency with applicable site design standards and compliance with applicable standards of Chapter 14. Staff analysis concludes that the Project complies with all applicable sections of Chapter 14 for approval of a development plan.

Should the Commission approve this application, the development plan will be recorded and the project will proceed to construction permit review. No other public review procedures apply to this project.

IV. EXISTING CONDITIONS

Direction	Property	Zoning
North	Vacant land (remainder of Lot 4-A) and FedEx	I-1 (Light Industrial)
East	Vacant land	I-1 (Light Industrial)
South	Vacant land	I-1 (Light Industrial)
West	Vacant land (Santa Fe Airport property)	I-1 (Light Industrial))

The terrain is best described as gentle with average slopes on the order of less than six percent. There are limited slopes of 20-30 percent within the lot boundary and those are generally man made. There are no well defined drainage channels on the Lot. Drainage collection areas were provided in conjunction with the construction of Hart Road. In this case a drainage pipe from the drop inlets on Hart Road directs storm water from Lot 5 to an easement on the south side of Hart Road which discharges into a developed storm water detention pond.

V. PROJECT DESCRIPTION

The Applicant requests approval of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road. Part of the application includes a lot line adjustment to reconfigure the north lot line of Lot 5-A to better accommodate the proposed layout. Therefore, the approval of this Project is contingent on the administrative approval of the lot line adjustment.

As a storage facility with possible outdoor storage, the POD business is a permitted use in the I-1 district. Any outdoor storage however must be screened per Subsection 14-8.5(C)(3) with a solid wall or fence at least six (6) feet in height, around the entire yard with no object stacked or stored higher than the minimum height of the enclosing wall or fence.

Lot 5, including the adjustment that will occur to Lot 5, is vacant of any structures. Drop inlets have been constructed on Hart Drive and a culvert carries storm water to the south into a drainage swale and storm water pond. There are fire hydrants at the south end of the lot located between the curb and sidewalk at the west side of Hart Road and on the east side of Hart Road, south of the cul-de-sac. There is a 5-foot sidewalk along the length of lot 5 on the west side of Hart Road.

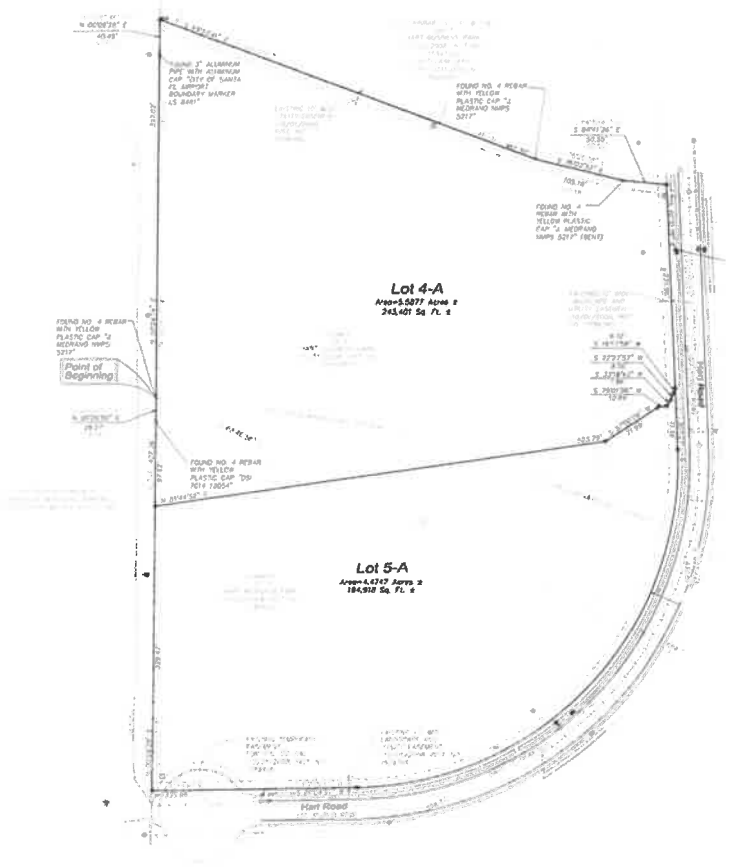
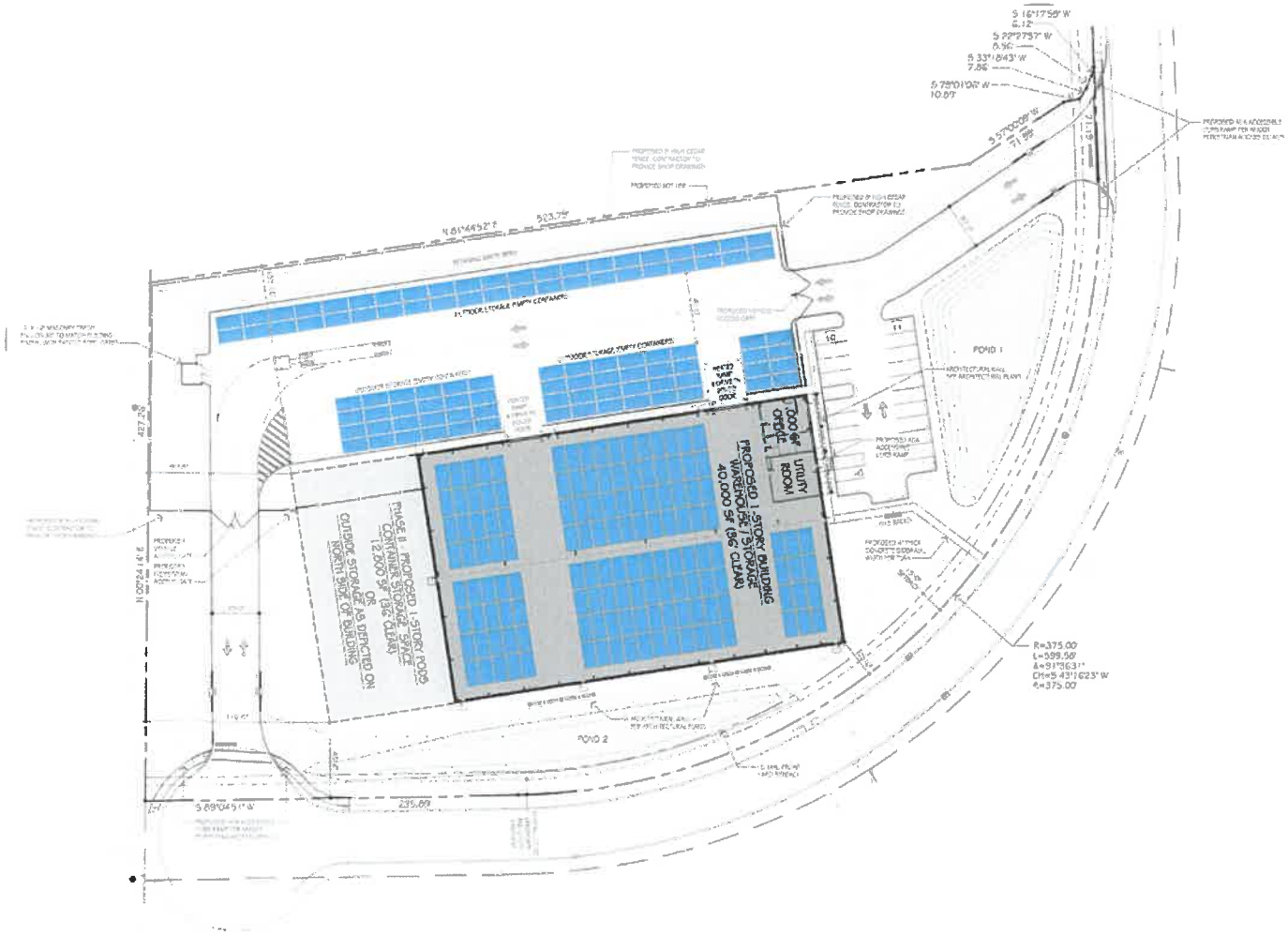


Figure 1: The adjustment in the lot lines, to be reviewed/approved administratively, will better accommodate the proposed building. The Lot Line Adjustment and Development Plan will be recorded at the same time.

The development, as proposed, is in compliance with Table 14-7.3-1 Dimensional Standards for height, setback, and lot coverage. The design exceeds the required 155 Architectural Points for the I-1 district with their 160 points as shown on the building elevations in their plan sheets.

Dimensional Standards for the I-1 Light Industrial District			
	Required	**Provided**	**Compliance Status**
Maximum Height of Structures	65' (provided that any part of the building exceeding 36 feet in height shall be set back from each yard line at least one foot for each two feet of additional building height above 36 feet) ; (9 / 2 = additional 4.5' setback)	45' (1 story)	Complies

Minimum Setback Requirements	Street: 15' + 4.5' = 19.5' Side: 0' + 4.5' = 4.5' Rear: 10' + 4.5' = 14.5'	Street: 21.5' Side: 125' Rear: 104'	Complies
Maximum Lot Coverage (%)	50%	26.8%	Complies
Open Space	25%	34.8%	Complies
Parking	Warehouse Use: 1 space per 500 sq. ft. (51,800 sq. ft./ 500 = 103.6 spaces) Office: 1 space per 350 sq. ft. (1,000 sq. ft. / 350 = 2.8 spaces) 106is spaces required* * Under the category of 'Industrial Service & Storage' for "other industrial and industrial parks - **Parking may be determined by the City.**	Phase I: 16 spaces Phase II: 5 spaces 21 spaces provided	Complies* *Based on City's determination that has been substantiated by the Applicant's professional engineering company.



Access, Traffic and Parking

The intersection of Hart Drive and Aviation Drive was constructed in conjunction with the development of the Hart Business Park. A left turn lane on Aviation Drive was constructed at the same time as the Park to create a separate left turn lane into the Park. The left turn lane was constructed at the time with the assumption that the Park would generate higher volumes of traffic and such a left turn lane was warranted. At this point the only user of Hart Drive is FedEx Ground.

An emergency access was also created with this phase of the Park. The emergency access begins at the end of the cul-de-sac and extends northward on City land intersecting with Aviation Drive with gated access control. The emergency road was designed to satisfy the International Fire Code standards at the time it was constructed. The loop water line for the subdivision and the city sewer line to the sewer plant is also located in this same area.

City Code requires one space per 500 square feet of gross building area. For a 52,800 square foot building with a 1,000 square foot office, the number of required parking spaces would be 106.

The Applicant has stated that experience at other POD buildings in other communities and the national parking standards indicate that 20 parking spaces is required to satisfy the parking requirement for employees and the very few clients that come to the site. The additional parking creates a paved surface, disturbing a significant amount of terrain, discharging substantial volumes of storm water and creating an unnecessary heat sink. A parking study prepared by the consulting engineer indicates that only 20 parking spaces are required to serve this use. There are 21 parking spaces shown on the development plan. Staff concurs with this analysis.

Fire Protection and Emergency Access

There is access to all sides of the building either from the internal driveway or from Hart Drive. An eight-inch water line is located in Hart Drive. This line connects at two points to a 12-inch line on Aviation Drive. One point at the intersection of Hart Drive and Aviation Drive and the second at the emergency road and Aviation Drive. A loop line has been provided to serve the Park. A fire suppression, sprinkler system, will be constructed within the warehouse. The pump system is operated by a diesel generator.

Terrain Management, Landscaping and Archeological

The terrain is best described as gentle with average slopes on the order of less than six percent. There are limited slopes of 20-30 percent within the lot boundary and those are generally man made. There are no well-defined drainage channels on the Lot. Drainage collection areas were provided in conjunction with the construction of Hart Road. In this case a drainage pipe from the drop inlets on Hart Road directs storm water from Lot 5 to an easement on the south side of Hart Road which discharges into a developed storm water detention pond.

Santa Fe Engineering has placed ponds on the property that are designed to accommodate the non-historic 100-year storm volumes. There is a standpipe on this lot that was designed as part of the subdivision to accept run-off and direct it under Hart road to a pond on the southeast side of Hart Road. The ponds have been landscaped to take advantage of the rainwater from the developed areas of the property.

Archaeology

An archaeological report was prepared per city standards at the time of review for the Hart Business Park subdivision application. Archaeological clearance from the city Archaeological Committee was issued with the review of the subdivision. No significant sites were located within the boundaries of the existing Lot 5 or within the future adjusted Lot 5. The certificate of archaeological clearance is found in Applicants materials (See Appendix F)

Water & Sewer

There is an 8-inch city water line in Hart Drive that connects to the 12 inch line in Aviation Drive at two locations providing for a redundancy in the system. The Applicant will have to offset the water use equal to the estimated water consumption. The amount of the water offset is discussed under water budget in this report. Two fire hydrants are available to this lot for fire protection and fire flow purposes.

An eight-inch sewer line and manholes have been located in the Park per city code. A sewer line is available to this lot that was previously installed prior to FedEx occupying the property. The discharge from the building is limited since very few people work inside the building. The majority of employees are either picking up or dropping off PODS.

Water Budget

The city code requires that water used by the development must have an equal offset for water use, plus the line loss factor estimated by the city of 0.098 percent. The City has calculated the annual water use for "Wholesale, Warehousing" at 0.4 acre feet per 10,000 square feet of gross building area. The water budget for the first phase of the project is:

Domestic consumption:	1.6 ac. ft/yr (.4 x 4)
Landscape:	0.43 ac. ft./yr
Subtotal	2.03 ac. ft./yr
	2.23 ac. ft./yr with line loss of .098 ac. ft./yr.

Since this is less than 5-acre feet it is possible to use the City's water conservation program to offset the water that will be used in the building, landscape, and line loss requirement.

Lighting & Signage

The Site Lighting and Photometric Plans shows site lighting in compliance with Section 14-8.9. A proposed wall sign is shown on the building's front (east) elevation facing Hart Road that states "PODS – Portable on Demand Storage." The sign and any other proposed signage will come under a separate sign permit application.

VI. DEVELOPMENT PLAN APPROVAL CRITERIA: 14-3.8(D)(1)

Planning Commission review of a development plan is required since the new development exceeds 30,000 square feet. Approval of the following criterion are required by Subsection 14-3.8(D)(1):

Criterion 1: **Planning Commission is empowered to approve the plan under the section of Chapter 14 described in the application;**	**Criterion Met:** (Yes/No) **YES**
Applicant's Response: Per Section 14-2.3(C)(1) of the Santa Fe City Code the Planning Commission has authority to review, act on and provide Findings of Fact and Conclusions of Law for the Preliminary and Final Development plans. **Staff Response:** Staff concurs with the Applicant's response. The Planning Commission is empowered to approve this proposal for a development plan as per Subsection 14-2.3(C)(1).	
Criterion 2: **that approving the development plan will not adversely affect the public interest; and**	**Criterion Met:** (Yes/No) **YES**
Applicant's Response: The Hart Business Park is zoned I-1 Light Industrial which permits a range of light industrial uses including storage facilities. The only other business in the Hart Business Park is FedEx Ground, which is in the business of receiving, holding temporarily and delivering packages to its customers. **Staff Response:** The public interest is not defined, however ordinances, Chapter 14, and the General Plan were adopted by elected officials who serve as the public interest. This proposal satisfies the regulations in Chapter 14 and is in compliance with the General Plan which identifies this overall area for light and heavy industrial use.	
Criterion 3: **that the use and any associated buildings are compatible with and adaptable to buildings, structures and uses of the abutting property and other properties in the vicinity of the premises under consideration.**	**Criterion Met:** (Yes/No) **YES**

Applicant's Response:
As mentioned above the closest similar use to the development plan request is FedEx Ground. The lots surrounding the subject lot within the Hart Business Park are zoned Light Industrial and are subject to the same restrictive covenants for the Park. The City owns land immediately to the west of the subject lot. The City property is vacant and there has been discussion in the past about preparing a master plan for the property that would relate to the uses at the Santa Fe Airport and Airport Master Plan. NM 599 borders the eastern boundary of the Hart Business Park.

Staff Response:
Staff concurs with the Applicant's response. The Project is in an I-1 (Light Industrial) District and is surrounded by vacant land and the FedEx Ground business within the Hart Business Park. The airport, a scrap yard, and several other industrial and warehouse businesses.

VII. EARLY NEIGHBORHOOD NOTIFICATION

An Early Neighborhood Notification Meeting was held on February 8, 2021. The meeting was held virtually on the Zoom platform with no one from the public in attendance. (See Exhibit E: ENN Materials)

VIII. EXPIRATION

The final development plan proposal will expire three years from the date of final action (approval of the findings of fact and conclusions of law) by the Planning Commission. Should the Commission approve the development plan and adopt the findings as scheduled, the expiration of the final development plan will be July 1, 2024.

IX. ATTACHMENTS

EXHIBIT A: Technical Corrections

EXHIBIT B: Development Review Team Memoranda and Emails

1. Traffic Engineering, Wilson Engineering (traffic engineer on contract)
2. Technical Review/ Engineering, Dee Beingessner
3. Landscape Review,-William Rivera
4. Water Division, Alan Hook
5. Public Utilities, Robert Jorgensen
6. Wastewater Division, Stan Holland
7. Fire Marshal, Geronimo Griego
8. Solid Waste Division, Eric Lucero

EXHIBIT C: Findings of Fact and Conclusions of Law

EXHIBIT D: Maps and Photos

1. Future Land Use

2. Current Zoning
3. Aerial Photo
4. Bird's Eye View of Overall Area
5. Google Street Views

EXHIBIT E: ENN Materials
1. City ENN Notes
2. ENN Guidelines

EXHIBIT F: Applicant Submittals
1. Development Plan and Lot Line Adjustment Applications
2. Development Plan
3. Development Plan Application Report

APPROVED BY:

Title	Name	Initials
Interim Land Use Department Director	Jason Kluck	JMK
Land Use Planner Manager	Noah Berke, AICP	NLB
Land Use Department Senior Planner	Donna Wynant, AICP	DJW

City of Santa Fe, New Mexico

Planning Commission

Exhibit A

Technical Corrections

Technical Corrections

Case #2021 3651 & 3652 PODS Storage Facility

#	TECHNICAL CORRECTIONS	Dept/ Division	To be completed by:
	Address Water Plan Sheet 2021-19 markup review notes dated 6/14/21 (See attached memo)	Public Works/Utilities Robert Jorgensen	Prior to final plan approval
	The water offset requirement for the proposed facility is: Domestic consumption: 1.6 ac. ft/yr (.4 x 4) Landscape: 0.43 ac. ft./yr Subtotal 2.03 ac. ft./yr Contingency line loss 0.98ac.ft/yr Total 2.23 ac. Ft/yr Commercial development less than 5-acre feet. Applicant must cover the water offsets demand by paying for the water rights for development at $16,600 per acre-foot through City to offset the water that will be used in the building, landscape, and line loss requirement. **TOTAL 0.63 AFY** **2.23 AFY x $16,600 per acre-foot** **Grand total of $37,018** *Refer to SFCC 14-8.13 for more detailed information	Water Division, Patricio Pacheco	
	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 2015 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 2015 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	Fire Marshal Robert Griego	At the time of any new construction or remodel.

	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) 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 2015 Section D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade. 10. Shall comply with IFC 2015 Section D103.5 Fire apparatus access road gates. 11. Shall comply with Section D106 Multiple-Family Residential Developments. 12. Shall meet the IFC code requirements 2015 edition or the most current edition the governing body has adopted at the time of permitting.		

City of Santa Fe, New Mexico

Planning Commission

Exhibit B

DRT Memos

1. Traffic Engineering, Wilson Engineering (traffic engineer on contract)
2. Technical Review/ Engineering, Dee Beingessner
3. Landscape Review,-William Rivera
4. Water Division, Alan Hook
5. Public Utilities, Robert Jorgensen
6. Wastewater Division, Stan Holland
7. Fire Marshal, Geronimo Griego
8. Solid Waste Division, Eric Lucero

Fwd: DRT Reminder when Final Comments Due

You replied on Mon 6/14/2021 9:27 AM

BERKE, NOAH L.
Mon 6/14/2021 7:44 AM
To: WYNANT, DONNA J.

Noah Berke, AICP, CFM
Planner Manager
Land Use Department
(505) 955-6647
(505) 490-5930

From: Gallegos, Audra V. <Audra.Gallegos@wilsonco.com>
Sent: Monday, June 14, 2021 7:30:26 AM
To: BERKE, NOAH L. <nlberke@santafenm.gov>
Subject: RE: DRT Reminder when Final Comments Due

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Noah!
I have no comments.

Audra V. Gallegos, PE
Civil Engineer | Wilson & Company, Inc., Engineers & Architects | 505 348 4110 (direct) | 505 250 4653 (cell)

From: BERKE, NOAH L. <nlberke@santafenm.gov>
Sent: Friday, June 11, 2021 3:16 PM
To: Gallegos, Audra V. <Audra.Gallegos@wilsonco.com>
Subject: FW: DRT Reminder when Final Comments Due

Noah Berke, AICP, CFM
Planner Manager
City of Santa Fe Land Use Department
Office: (505) 955-6647
Cell or Text: (505) 490-5930
Email: nlberke@santafenm.gov

Click here for Zoning Code Information

Click here for Property Information

https://www.alltogethersantafe.org/

Donna,

I reviewed it and didn't have any other comments. Thanks!
Dee

From: WYNANT, DONNA J. <djwynant@santafenm.gov>
Sent: Thursday, June 3, 2021 2:07 PM
To: BEINGESSNER, DEE <dabeingessner@santafenm.gov>
Subject: PODS Development - update

Hey Dee,

Victoria Dalton of Siebert and Associates sent me a link to a revised set of plan sheets for PODS development on Hart Road (case #2021-3651 Dev Plan & #2021-3652 Lot Line Adjustment). I included it in the shared drive folder. She said the changes were made with the grading plans and with some font on various sheets that were illegible.

\\file-svr-1\Public$\Land Use Department\2021-3651 & 3652 PODS Storage Facility 4900 Hart Rd

This is how it appears in the line up of materials on the shared drive. Go to the word doc where I pasted her link to the revised plan sheets. (I removed the previous pdf of plan sheets on the public shared drive to avoid any confusion). I also included the traffic engineering comments from Audra from Wilson and Company traffic engineering (last attachment) that better addresses accessibility issues, etc.

Name	Date modified	Type	Size
2021-05-17 Hart Pod Storage TMR (1).pdf	5/19/2021 9:38 AM	Adobe Acrobat D...	13,515 KB
Applicant Letter 5-17-21.pdf	5/17/2021 9:48 AM	Adobe Acrobat D...	316 KB
Applications_ DP & LLA.pdf	5/17/2021 9:48 AM	Adobe Acrobat D...	233 KB
LINK TO REVISED DRAWING SET- USE THESE- 6-1-21.d...	6/3/2021 10:55 AM	Microsoft Word D...	14 KB
PODsdevrpt.pdf	5/17/2021 2:29 PM	Adobe Acrobat D...	85,751 KB
Revised Sheets for Traffic 6-3-21.pdf	6/3/2021 10:28 AM	Adobe Acrobat D...	682 KB

Let me know if you have any questions. Thanks!

Donna J. Wynant, AICP
Land Use Senior Planner
City of Santa Fe Land Use Department
200 Lincoln Ave., Box 909
Santa Fe, NM 87504-0909
(505) 955-6325
djwynant@santafenm.gov
Click here for Zoning Code Information
Click here for Property Information

Case #2021-3651. PODS Storage Facility Development Plan

RL

RIVERA, WILLIAM L.
Mon 6/7/2021 4:53 PM
To: WYNANT, DONNA J.

Hi Donna,

Landscape and irrigation drawings look good, I have no requests or comments at this time.

Regards,

Lawrence Rivera
Land Use Compliance Officer
Technical Review Division
Planning & Land Use Department

Reply Forward

City of Santa Fe, New Mexico

memo

DATE: June 15, 2021

TO: Donna Wynant, Land Use Senior Planner
Current Planning Division, Land Use Department

FROM: Patricio Pacheco, Water Resources & Conservation
Water Division, Water Resources & Conservation Department

RE: PODS Storage Facility

After reviewing the water budget for Case # 2021-3651 & 3652 PODS Storage Facility at 4900 Hart Rd, has been determined that the water offset requirement for the proposed facility is:

Domestic consumption: 1.6 ac. ft/yr (.4 x 4)
Landscape: 0.43 ac. ft./yr
Subtotal 2.03 ac. ft./yr
Contigencey line loss 0.98ac.ft/yr
Total 2.23 ac. Ft/yr

Commercial development less than 5-acre feet. Applicant must cover the water offsets demand by paying for the water rights for development at $16,600 per acre-foot through City to offset the water that will be used in the building, landscape, and line loss requirement.

TOTAL 0.63 AFY
2.23 AFY x $16,600 per acre-foot
Grand total of $37,018

*Refer to SFCC 14-8.13 for more detailed information

Development Review Team

Comment Form

Date: June 14, 2021

Staff person: Robert Jorgensen

Dept/Div: Public Works Dept./Public Utilities

Case: **Case #2021-3651 & 3652: PODS Storage Facility on Development Plan**

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 and Agreement to Construct and Dedicate (ACD) from Water Division will be required	Prior to final plan approval
2	
3	
4	

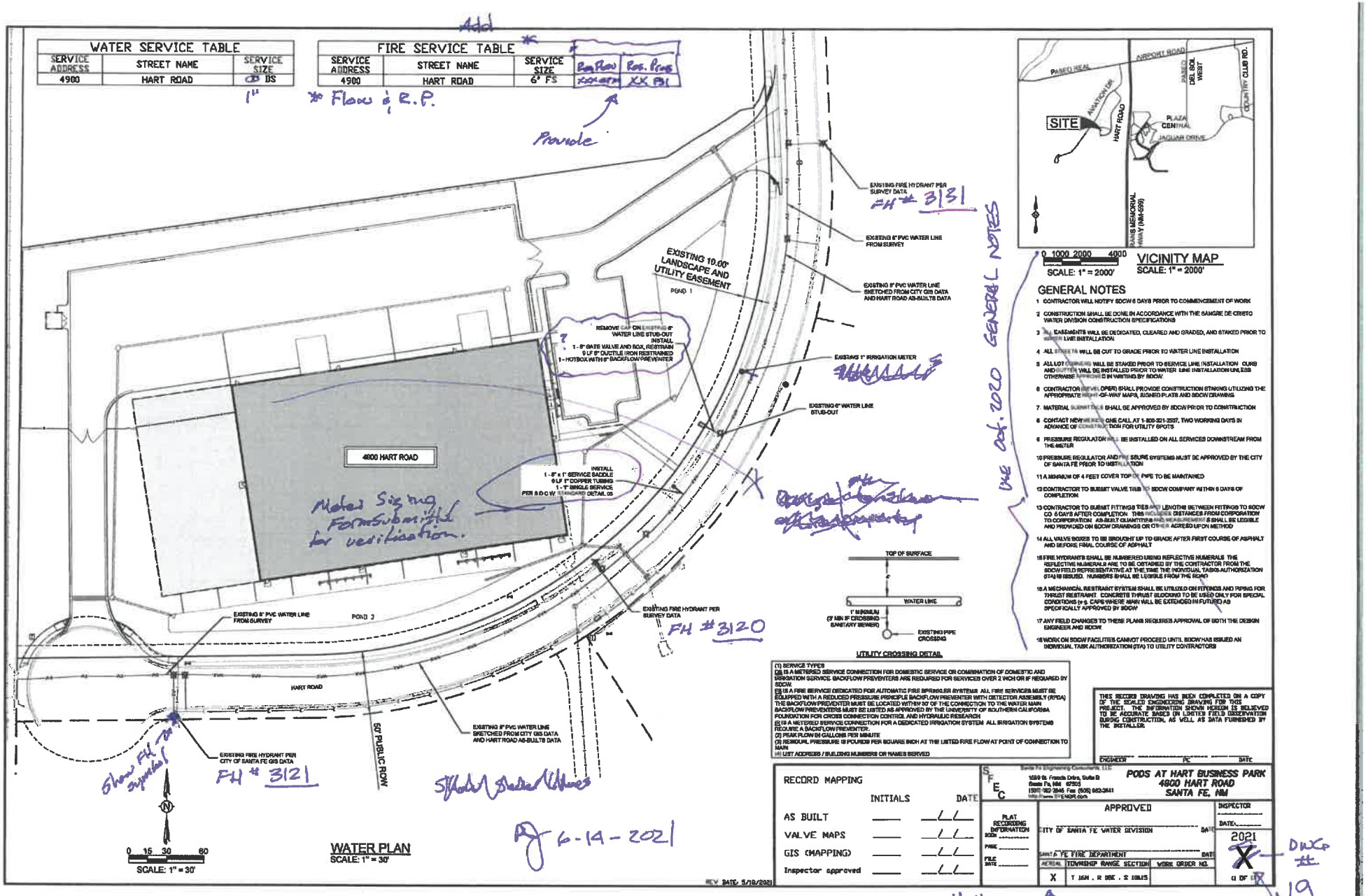
Technical Corrections*:	Must be completed by:
1 Address Water Plan Sht. 2021-19 markup review notes dated 6/14/2021	Prior to final plan approval
2	
3	
4	

*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):


WATER SERVICE TABLE
SERVICE ADDRESS | STREET NAME | SERVICE SIZE
4900 | HART ROAD | DS
1"
FIRE SERVICE TABLE
SERVICE ADDRESS | STREET NAME | SERVICE SIZE | Req. Flow | Res. Press
4900 | HART ROAD | 6" FS | XXX GPM | XX PSI
* Flow & R.P.
Provide
Add
4900 HART ROAD
Model Sizing Form Submitted for verification.
EXISTING 10.00' LANDSCAPE AND UTILITY EASEMENT
POND 1
POND 2
REMOVE CAP ON EXISTING 6" WATER LINE STUB-OUT INSTALL
1 - 6" GATE VALVE AND BOX, RESTRAIN
9 LF 6" DUCTILE IRON RESTRAINED
1 - HOTBOX WITH 6" BACKFLOW PREVENTER
INSTALL
1 - 6" x 1" SERVICE SADDLE
6 LF 1" COPPER TUBING
1 - 1" SINGLE SERVICE
PER SDCW STANDARD DETAIL 05
EXISTING 1" IRRIGATION METER
EXISTING 6" WATER LINE STUB-OUT
EXISTING FIRE HYDRANT PER SURVEY DATA
FH # 3131
EXISTING 8" PVC WATER LINE FROM SURVEY
EXISTING 8" PVC WATER LINE SKETCHED FROM CITY GIS DATA AND HART ROAD AS-BUILTS DATA
EXISTING FIRE HYDRANT PER SURVEY DATA
FH #3120
EXISTING 8" PVC WATER LINE FROM SURVEY
EXISTING FIRE HYDRANT PER CITY OF SANTA FE GIS DATA
FH # 3121
Show FH, Tie Supplied
HART ROAD
50' PUBLIC ROW
EXISTING 8" PVC WATER LINE SKETCHED FROM CITY GIS DATA AND HART ROAD AS-BUILTS DATA
N
0 15 30 60
SCALE: 1" = 30'
WATER PLAN
SCALE: 1" = 30'
REV DATE: 5/10/2021
SITE
PASEO REAL
AIRPORT ROAD
HART ROAD
AVANTGARDE DR
PLAZA CENTRAL
JAGUAR DRIVE
PASEO DEL SOL WEST
COUNTRY CLUB RD.
PANKS MEMORIAL HIGHWAY (NM-599)
0 1000 2000 4000
SCALE: 1" = 2000'
VICINITY MAP
SCALE: 1" = 2000'
GENERAL NOTES
1 CONTRACTOR WILL NOTIFY SDCW 6 DAYS PRIOR TO COMMENCEMENT OF WORK
2 CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE SANGRE DE CRISTO WATER DIVISION 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 WATER LINE INSTALLATION
5 ALL LOT CORNERS WILL BE STAKED PRIOR TO SERVICE LINE INSTALLATION CURB AND GUTTER WILL BE INSTALLED PRIOR TO WATER LINE INSTALLATION UNLESS OTHERWISE APPROVED IN WRITING BY SDCW
6 CONTRACTOR (DEVELOPER) SHALL PROVIDE CONSTRUCTION STAKING UTILIZING THE APPROPRIATE RIGHT-OF-WAY MAPS, SIGNED PLATS AND SDCW DRAWING
7 MATERIAL SUBMITTALS SHALL BE APPROVED BY SDCW 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 REGULATOR 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 COMPANY WITHIN 5 DAYS OF COMPLETION
13 CONTRACTOR TO SUBMIT FITTINGS TIES AND LENGTHS BETWEEN FITTINGS TO SDCW CO 5 DAYS AFTER COMPLETION THIS INCLUDES DISTANCES FROM CORPORATION TO CORPORATION AS-BUILT QUANTITIES AND MEASUREMENT S SHALL BE LEGIBLE AND PROVIDED ON SDCW DRAWINGS OR OTHER AGREED UPON METHOD
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 FROM THE SDCW FIELD REPRESENTATIVE AT THE TIME THE INDIVIDUAL TASKS AUTHORIZATION (TA) IS ISSUED. NUMBERS SHALL BE LEGIBLE FROM THE ROAD
16 A MECHANICAL RESTRAINT SYSTEM SHALL BE UTILIZED ON FITTINGS AND PIPING FOR THRUST RESTRAINT CONCRETE THRUST BLOCKING TO BE USED ONLY FOR SPECIAL CONDITIONS (e.g. CAPS WHERE MAIN WILL BE EXTENDED IN FUTURE) AS SPECIFICALLY APPROVED BY SDCW
17 ANY FIELD CHANGES TO THESE PLANS REQUIRES APPROVAL OF BOTH THE DESIGN ENGINEER AND SDCW
18 WORK ON SDCW FACILITIES CANNOT PROCEED UNTIL SDCW HAS ISSUED AN INDIVIDUAL TASK AUTHORIZATION (TA) TO UTILITY CONTRACTORS
Use Oct. 2020 General Notes
TOP OF SURFACE
WATER LINE
1' MINIMUM (5' MIN IF CROSSING SANITARY SEWER)
EXISTING PIPE CROSSING
UTILITY CROSSING DETAIL
(1) SERVICE TYPES
DS IS A METERED SERVICE CONNECTION FOR DOMESTIC SERVICE OR COMBINATION OF DOMESTIC AND IRRIGATION SERVICE. BACKFLOW PREVENTERS ARE REQUIRED FOR SERVICES OVER 2 INCH DIA OR IF REQUIRED BY SDCW.
FS IS A FIRE SERVICE DEDICATED FOR AUTOMATIC FIRE SPRINKLER SYSTEMS. ALL FIRE SERVICES MUST BE EQUIPPED WITH A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER WITH DETECTOR ASSEMBLY (RPDA) THE BACKFLOW PREVENTER MUST BE LOCATED WITHIN 50' OF THE CONNECTION TO THE WATER MAIN BACKFLOW PREVENTERS MUST BE LISTED AS APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH
IS A METERED SERVICE CONNECTION FOR A DEDICATED IRRIGATION SYSTEM. ALL IRRIGATION SYSTEMS REQUIRE A BACKFLOW PREVENTER.
(2) PEAK FLOW IN GALLONS PER MINUTE
(3) RESIDUAL PRESSURE IS POUNDS PER SQUARE INCH AT THE LISTED FIRE FLOW AT POINT OF CONNECTION TO MAIN
(4) LIST ADDRESS / BUILDING NUMBERS OR NAMES SERVED
THIS RECORD DRAWING HAS BEEN COMPLETED ON A COPY OF THE SEALED ENGINEERING DRAWING FOR THIS PROJECT. THE INFORMATION SHOWN HEREON IS BELIEVED TO BE ACCURATE BASED ON LIMITED FIELD OBSERVATION DURING CONSTRUCTION, AS WELL AS DATA FURNISHED BY THE INSTALLER.
ENGINEER PE DATE
RECORD MAPPING
INITIALS DATE
AS BUILT ____ __/__/__
VALVE MAPS ____ __/__/__
GIS (MAPPING) ____ __/__/__
Inspector approved ____ __/__/__
SFEC
1599 St. Francis Drive, Suite B
Santa Fe, NM 87505
(505) 982-3946 Fax (505) 982-3641
PODS AT HART BUSINESS PARK
4900 HART ROAD
SANTA FE, NM
PLAT RECORDING INFORMATION
BOOK
PAGE
FILE
DATE
APPROVED
CITY OF SANTA FE WATER DIVISION DATE
SANTA FE FIRE DEPARTMENT DATE
AERIAL | TOWNSHIP RANGE SECTION | WORK ORDER NO.
X | T 16N . R 08E . S 10&15
INSPECTOR
DATE
2021
X
SHEET 9 OF 19
DWG # 19
N-11
N-12
AERIAL #
6-14-2021

HOLLAND, TOWNSEND S.
Fri 6/11/2021 3:27 PM

To: WYNANT, DONNA J.

Donna
For Case #2021-3651 and Case #2021-3652, the Wastewater Division has no objection to the Lot line adjustment and the property for this project has a City public sewer line with a sewer service line extended to the property for City sewer service.

T. Stanley Holland, P.E.
Wastewater Management Division
73 Paseo Real
Santa Fe, NM 87507
505-955-4637
tsholland@santafenm.gov

From: WYNANT, DONNA J. <djwynant@santafenm.gov>
Sent: Friday, June 11, 2021 3:17 PM
To: HOLLAND, TOWNSEND S. <tsholland@santafenm.gov>
Subject: PODS development- DRT Comments

Stan

Here's the case captions with the link to the shared drive. Please send me your comments. Thanks!

Planning Commission – July 1, 2021

1. Case #2021-3651. **PODS Storage Facility Development Plan.** James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC, Owner, requests Development Plan approval for a PODS storage facility on approximately 4.47 acres. The proposal consists of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road. (Donna Wynant, Case Manager, djwynant@santafenm.gov, 955-6325) \\file-svr-1\Public$\Land Use Department\2021-3651 & 3652_PODS Storage Facility 4900 Hart Rd
2. Case #2021-3652. **PODs Storage Facility Lot Line Adjustment. (Admin.)** James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC, Owner, requests a Lot Line Adjustment between Lot 4 (4800 Hart Road) and Lot 5 (4900 Hart Road) in the Hart Business Park. Lot 4 will be increasing in size by 0.23 acres (10,019 sq. ft.) and Lot 5 will be decreasing in size by 0.23 acres (10,019 sq. ft.). The lot line adjustment will reconfigure the lots for the future design of the PODS facility. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road. (Donna Wynant, Case Manager, djwynant@santafenm.gov, 955-6325) \\file-svr-1\Public$\Land Use Department\2021-3651 & 3652_PODS Storage Facility 4900 Hart Rd

DRT Schedule:

- May 17, 2021: Application Submitted
- May 20, 2021: DRT Staff Meeting:
- May 26, 2021: DRT Certifies Application Complete/Requires Additional Info
- Additional Submittals Due: June 1, 2021
- DRT Final Comments: June 7, 2021

Donna J. Wynant, AICP
Land Use Senior Planner
City of Santa Fe Land Use Department
200 Lincoln Ave., Box 909
Santa Fe, NM 87504-0909
(505) 955-6325
djwynant@santafenm.gov
Click here for Zoning Code Information
Click here for Property Information

Development Review Team

Comment Form

Date: 06/12/2021

Staff person: Geronimo Griego

Dept/Div: Fire Prevention

Case: 2021-3651 & 3652 PODS Storage Facility 4900 Hart Rd

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. Shall comply with IFC 2015, Appendix D, Section D104 2. Shall comply with IFC 2015, Appendix D, Section D105 Aerial Fire Apparatus Access Roads.	Prior to planning commission.

Technical Corrections*:	Must be completed by:
3. 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 2015 Section 503.2.1) 4. 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) 5. Shall comply with table D103.4 Requirements for Dead-End Fire Apparatus Access Roads. 6. Fire Department shall have 150 feet distance to any portion of the building on any new construction. (IFC 2015 section 503.1.1) 7. 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.	At the time of any new construction or remodel.

8. Shall have water supply that meets fire flow requirements as per IFC (Appendix B) 9. Shall comply with Section D102.1 Access and Loading (75,000 lbs). 10. 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) 11. Shall comply with IFC 2015 Section D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade. 12. Shall comply with IFC 2015 Section D103.5 Fire apparatus access road gates. 13. Shall comply with Section D106 Multiple-Family Residential Developments. 14. Shall meet the IFC code requirements 2015 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

LUCERO, ERIC J.
Mon 6/7/2021 11:50 AM
To: WYNANT, DONNA J.

In regards to cases:

Case #2021-3651. PODS Storage Facility Development Plan. James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC, Owner, requests Development Plan approval for a PODS storage facility on approximately 4.47 acres. The proposal consists of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road.

Case #2021-3652. PODs Storage Facility Lot Line Adjustment. (Admin.) James W. Siebert & Associates, Inc., Agent, for CCSF/599, LLC, Owner, requests a Lot Line Adjustment between Lot 4 (4800 Hart Road) and Lot 5 (4900 Hart Road) in the Hart Business Park Lot 4 will be increasing in size by 0.23 acres (10,019 sq. ft.) and Lot 5 will be decreasing in size by 0.23 acres (10,019 sq. ft.). The lot line adjustment will reconfigure the lots for the future design of the PODS facility. The property is zoned I-1 (Light Industrial) and is located at 4900 Hart Road.

I have no comments at this time.

Thanks,

Eric J Lucero
Operations Manager
City of Santa Fe
Environmental Services Division

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

Case #2021-3651 – PODS Storage Facility Development Plan
Owner's/Applicant's Name – CCSF/599, LLC
Agent's Name – James W. Siebert & Associates, Inc.

THIS MATTER came before the Planning Commission (Commission) for hearing on July 1, 2021 upon the application (Application) of Jim W. Siebert, as agent for CCSF/599, LLC (Applicant). The Applicant requests approval of a development plan for a PODS storage facility on a vacant parcel of approximately 4.47 acres located at 4900 Hart Road (Property). The Property is zoned I-1 (Light Industrial).

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. The I-1 zoning district allows for a storage facility with outdoor storage.
2. The Project consists of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building, and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building.
3. Under the Santa Fe City Code (SFCC) Section 14-3.8(B)(3)(a), a development plan is required for proposed development with a "gross floor area of thirty thousand square feet or more and is located within any zoning district of the city."
4. SFCC Section14-3.1 sets out certain procedures to be followed on the Application, including, without limitation, (a) a pre-application conference [SFCC § 14-3.l(E)]; (b) an Early Neighborhood Notification (ENN) meeting [SFCC §1 4-3.1(F)(2)(a)(iv)]; and (c) compliance with notice and public hearing requirements [SFCC § 14-3.1(H)-(I)].
5. A pre-application conference was held on January 4, 2021.
6. The Applicant conducted a virtual ENN meeting on February 8, 2021, using Zoom.
7. Pursuant to SFCC Section 14-3.1(H), notice of the ENN meeting was properly given.
8. The ENN meeting was attended by representatives of the Applicant and City staff. No members of the public attended.
9. Code Section 14-3.8(C)(1) requires applicants for development plan approval to submit certain plans and other documentation that show compliance with applicable provisions of the Code (Submittal Requirements).
10. City Land Use Department staff reviewed the Application and related materials and information submitted by the Applicant for conformity with applicable Code requirements and provided the Commission with a written report of its findings (Staff Report).
11. Staff recommended that the Commission approve the Development Plan, subject to certain conditions of approval and technical corrections set forth in the Staff Report and attached exhibits.

12. The information contained in the Staff Report and exhibits is sufficient to establish that the Submittal Requirements have been met.
13. SFCC Section 14-3.8 establishes certain procedures for development plan approval including, without limitation, a public hearing by the Commission and a decision based on the criteria set out in SFCC Section 14-3.8(D).
14. 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 prior to making a decision.
15. SFCC Section 14-3.8(D)(1) sets out approval criteria and requires the Commission to make complete findings of fact sufficient to show that these criteria have been met before a development plan may be approved.
16. Pursuant to SFCC Section 14-3.8(D)(1)(a), the Commission finds that it is empowered to approve the development plan under SFCC Sections 14-2.3(C)(1) and 14-3.8(B)(4).
17. Pursuant to SFCC Section 14-3.8(D)(1)(b), the Commission finds that approving the development plan for the Project would not adversely affect the public interest.
18. Pursuant to SFCC Section 14-3.8(D)(1)(c), the Commission finds that the use and any associated buildings are compatible with and adaptable to buildings, structures and uses of the abutting property and other properties in the vicinity of the Project. The subject property is located in a mixed-use area comprising significant commercial, institutional, and multi-family development. The proposed use and scale of the Project is compatible with land uses in the vicinity.
19. Under SFCC Section 14-3.8(D)(2), the Commission is authorized to specify conditions of approval for a development plan that are necessary to accomplish the proper development of the area and to implement the policies of the general plan.
20. The Commission finds that the conditions and technical corrections set out in the Staff Report and exhibits are necessary to accomplish the proper development of the area and to implement the policies of the general plan.
21. The Applicant is willing and able to comply with the conditions and technical corrections set forth in the staff report and exhibits.

CONCLUSIONS OF LAW

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

1. The Commission has the authority under Chapter 14 of the SFCC to review and approve the Applicant's proposed Development Plan subject to conditions.
2. The Applicant has complied with the Submittal Requirements.
3. The development plan should be approved because all procedural requirements and criteria for development plan approval have been met.

WHEREFORE, IT IS ORDERED ON THE 1st DAY OF JULY 2021 BY THE PLANNING COMMISSION OF THE CITY OF SANTA FE:

The Development Plan for the Project is approved subject to the conditions and technical corrections set forth in the staff report and exhibits. The Development Plan shall expire three years after issuance of this final action unless actual development of the site or off-site improvements has begun and is continued pursuant to SFCC Section 14-3.19(B)(4), (6) or a time extension is granted pursuant to SFCC Section 14-3.19(C).

_____ _____

Brian Gutierrez Date:
Chairperson

FILED:

_____ _____

Kristine Bustos-Mihelcic Date:
City Clerk

APPROVED AS TO FORM:

_____ _____

Sally A. Paez Date:
Assistant City Attorney

City of Santa Fe, New Mexico

Planning Commission

Exhibit C

Findings of Fact and Conclusions of Law

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

Case #2021-3651 – PODS Storage Facility Development Plan
Owner's/Applicant's Name – CCSF/599, LLC
Agent's Name – James W. Siebert & Associates, Inc.

THIS MATTER came before the Planning Commission (Commission) for hearing on July 1, 2021 upon the application (Application) of Jim W. Siebert, as agent for CCSF/599, LLC (Applicant). The Applicant requests approval of a development plan for a PODS storage facility on a vacant parcel of approximately 4.47 acres located at 4900 Hart Road (Property). The Property is zoned I-1 (Light Industrial).

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. The I-1 zoning district allows for a storage facility with outdoor storage.
2. The Project consists of 52,800 square feet of building area to be constructed in two phases: Phase I will consist of a 40,000 square foot building, and Phase 2 will consist of 12,800 square feet of building area or outdoor storage space on the north side of the building.
3. Under the Santa Fe City Code (SFCC) Section 14-3.8(B)(3)(a), a development plan is required for proposed development with a "gross floor area of thirty thousand square feet or more and is located within any zoning district of the city."
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15. SFCC Section 14-3.8(D)(1) sets out approval criteria and requires the Commission to make complete findings of fact sufficient to show that these criteria have been met before a development plan may be approved.
16. Pursuant to SFCC Section 14-3.8(D)(1)(a), the Commission finds that it is empowered to approve the development plan under SFCC Sections 14-2.3(C)(1) and 14-3.8(B)(4).
17. Pursuant to SFCC Section 14-3.8(D)(1)(b), the Commission finds that approving the development plan for the Project would not adversely affect the public interest.
18. Pursuant to SFCC Section 14-3.8(D)(1)(c), the Commission finds that the use and any associated buildings are compatible with and adaptable to buildings, structures and uses of the abutting property and other properties in the vicinity of the Project. The subject property is located in a mixed-use area comprising significant commercial, institutional, and multi-family development. The proposed use and scale of the Project is compatible with land uses in the vicinity.
19. Under SFCC Section 14-3.8(D)(2), the Commission is authorized to specify conditions of approval for a development plan that are necessary to accomplish the proper development of the area and to implement the policies of the general plan.
20. The Commission finds that the conditions and technical corrections set out in the Staff Report and exhibits are necessary to accomplish the proper development of the area and to implement the policies of the general plan.
21. The Applicant is willing and able to comply with the conditions and technical corrections set forth in the staff report and exhibits.

CONCLUSIONS OF LAW

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

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_____ _____
Brian Gutierrez Date:
Chairperson

FILED:

_____ _____
Kristine Bustos-Mihelcic Date:
City Clerk

APPROVED AS TO FORM:

_____ _____
Sally A. Paez Date:
Assistant City Attorney

City of Santa Fe, New Mexico

Planning Commission

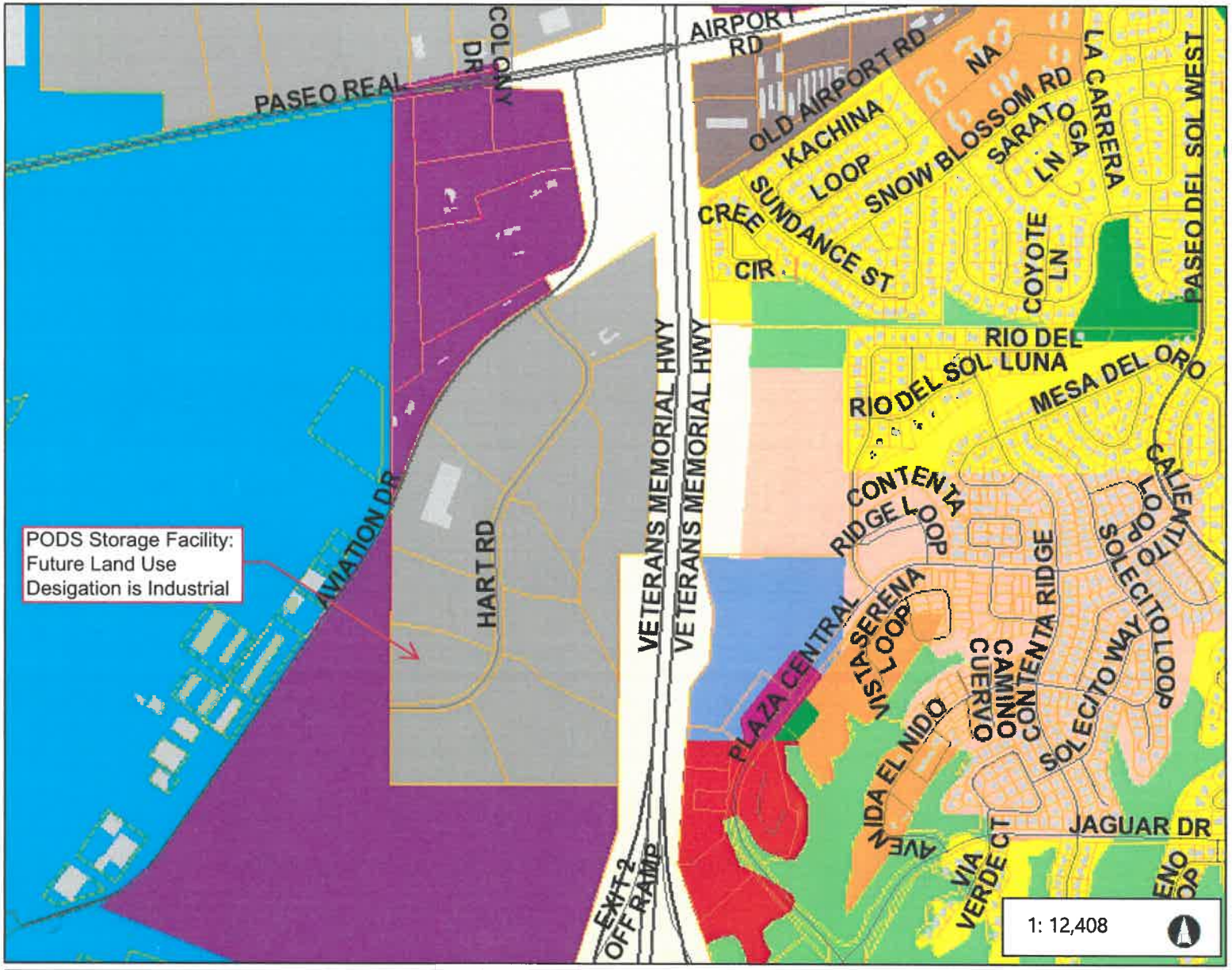
Exhibit D

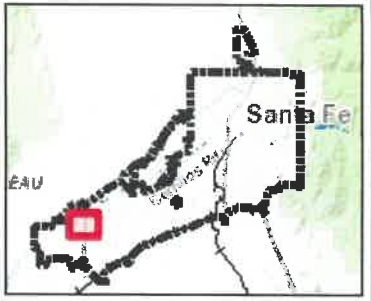
Maps and Photos

1. Future Land Use
2. Current Zoning
3. Aerial Photo
4. Bird's Eye View of Overall Area
5. Google Street Views

City of Santa Fe
Mapping the City Different

PODS Storage Facility - ~~Aerial~~ Future Land Use Map





Legend

- City Limits
- Address Points
- Building Footprint
- 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

© Latitude Geographics Group Ltd.

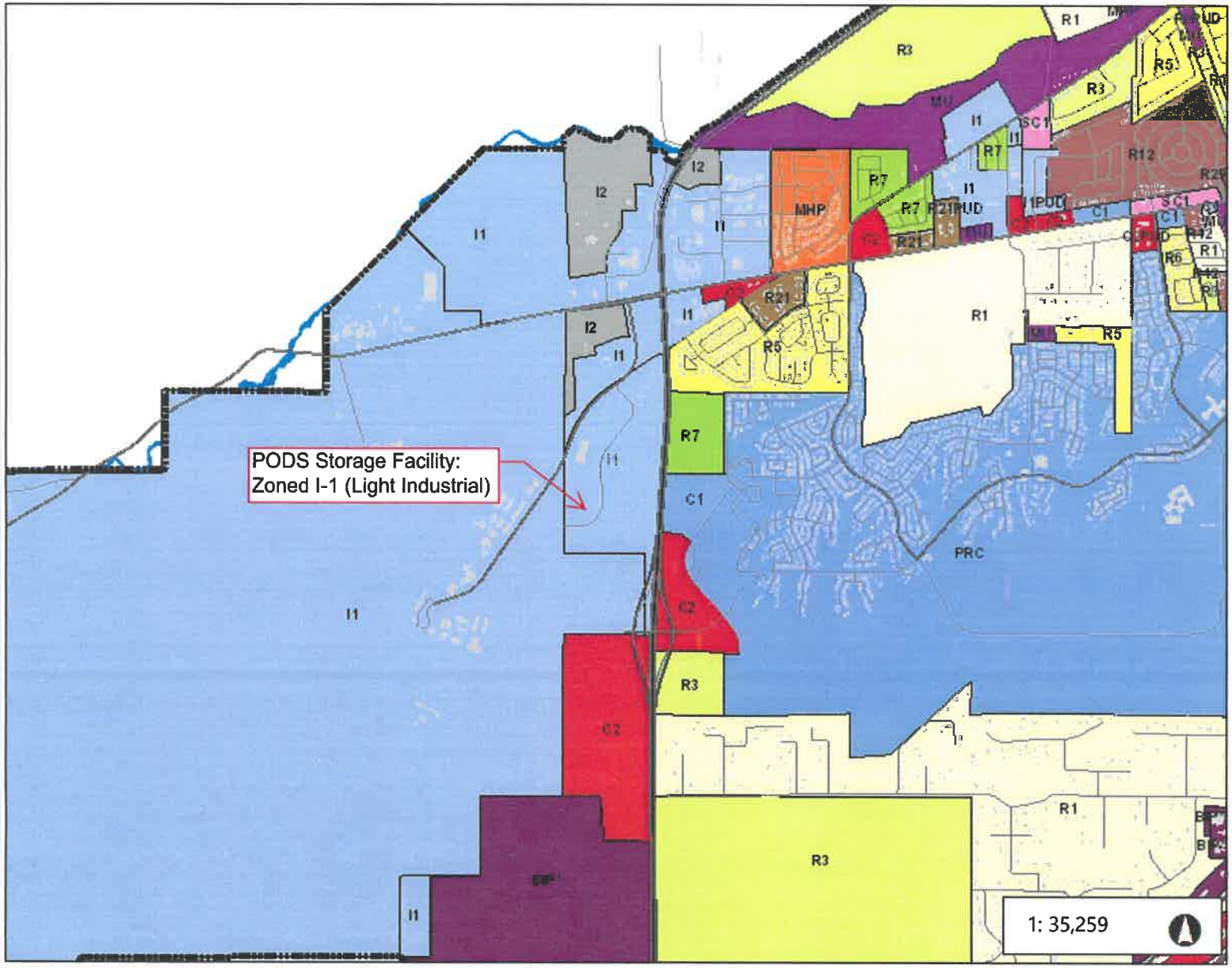
2,068.0 0 1,033.99 2,068.0 Feet

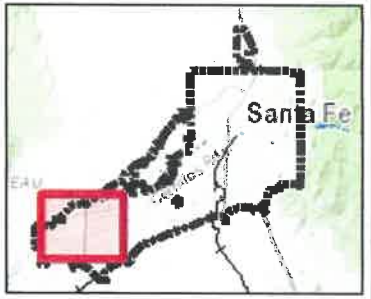
WGS_1984_Web_Mercator_Auxiliary_Sphere

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

Santa Fe
Mapping the City Different

PODS Storage Facility - Zoning Map





Legend

- City Limits
- Address Points
- Building Footprint
- Roads
- Major Roads

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
- BCD Business Capital District

Notes

© Latitude Geographics Group Ltd.

5,876.4 0 2,938.21 5,876.4 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

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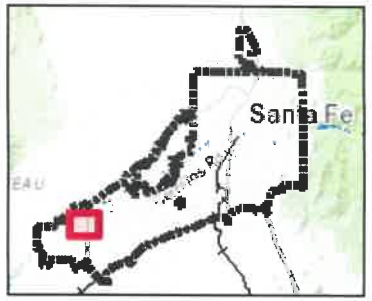
THIS MAP IS NOT TO BE USED FOR NAVIGATION

City of Santa Fe
Mapping the City Different

PODS Storage Facility - Aerial Map



Legend

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

Notes

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2,068.0 0 1,033.99 2,068.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

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PODS Storage Facility
Bird's Eye View Looking north

Views of the Site
(Google Street Views)

Figure 1: Looking southwest along Hart Road, towards the site.

Figure 2: Looking from Aviation drive, across Santa Fe Airport property, towards the site.

City of Santa Fe, New Mexico

Planning Commission

Exhibit E

Early Neighborhood Notification Materials

1. Meeting Notes
2. ENN Guidelines

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

Project Name	PODS Storage Facility
Project Location	4900 Hart Road
Project Description	Development Plan for 52,8000 square feet of building area to be constructed in two phases. Phase I: 40,000 sq. ft. of building and Phase II: 12,800 sq. ft. of building area or outdoor storage space on the north side of building.
Applicant / Owner	CCSF/599, LLC, Owner
Agent	James W. Siebert & Associates, Inc., Agent
Pre-App Meeting Date	January 4, 2021
ENN Meeting Date	February 8, 2021
ENN Meeting Location	Virtual meeting through Zoom
Application Type	Development Plan and (Administrative) Lot Line Adjustment
Land Use Staff	Donna Wynant
Other Staff	N/A
Attendance	Applicant's agent and team. No attendance from the public

Notes/Comments:

The meeting opened at 5:30 pm with City staff and the Applicant's development team in attendance with no one in attendance from the public. The applicant gave a quick presentation for everyone's benefit in attendance. Meeting adjourned around 6:00 pm.

EARLY NEIGHBORHOOD NOTIFICATION MEETING

Request for Staff Attendance

Project Information

Project Name: PODS Storage Facility, Dev. Plan & lot line Adj

Address: 4900 Hart Road & 4800 Hart Rd **Parcel Size:** 4.7085 Acres

Zoning: I-1 **Future Land Use:** Light Industrial

Preapplication Conference Date: Jan. 14, 2021

Detailed Project Description: Development Plan for 40,000 sqft Bldg for Indoor & Outdoor Storage of PODS storage containers

Property Owner Information

Name: CCSF-NIAM LLC

Address: 1000 W. San Mateo

Phone: N/A **E-mail Address:** N/A

Applicant/Agent Information (if different from owner):

Name: James W. Siebert & Assoc. Inc

Address: 915 Mercer Street, Santa Fe, NM

Phone: 983-5588 **E-mail Address:** Jim@Jwsiebert.com

Agent Authorization (if applicable):

I am/We are the owner(s) and record title holder(s) of the property located at: 4800 & 4900 Hart Road.

I/We authorize James W. Siebert & Assoc. Inc 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:	Feb 8th	
TIME:	5:30 - 6:30	
LOCATION:		

https://us02web.zoom.us/j/87211099835?pwd=MVF3bkdGL1h5MkwzVTEvR0NYMDEvdz09

JAMES W. SIEBERT
AND ASSOCIATES, INC.

915 MERCER STREET * SANTA FE, NEW MEXICO 87505
(505) 983-5588 * FAX (505) 989-7313
jim@jwsiebert.com

EARLY NEIGHBORHOOD NOTIFICATION MEETING
ONLINE MEETING

July 20, 2020,

Dear Neighbor:

Due to "Social Distancing" Statewide requirements and health concerns associated with the Corona Virus (COVID-19), an ENN meeting will be conducted online via Zoom Video Conferencing for a Development Plan Review described below:

The purpose of the meeting is to present a Development Plan request for a 40,000 sq.ft. building and 10,000 sq.ft. of building area. Interior and exterior storage of POD'S is request as part of the Development Plan review. The request also incudes a lot line adjustment between Lots 4 and the subject lot 5 of the Hart Business Park.

In accordance with the requirements of the City of Santa Fe's Early Neighborhood Notification regulations, this is to inform you that a meeting is scheduled for:

Time: **5:30 PM**
When: **Monday, February 8, 2021**
Zoom Login:
Join Zoom Meeting
https://us02web.zoom.us/j/87211099835?pwd=MVF3bkdGL1h5MkwzVTEvR0NYMDEvdz09
Meeting ID: 872 1109 9835
Passcode: 371559
One tap mobile
+13462487799,,87211099835#,,,,*371559# US (Houston)
+16699009128,,87211099835#,,,,*371559# US (San Jose)

Meeting ID: 872 1109 9835
Passcode: 371559
Find your local number: https://us02web.zoom.us/u/kbNOzUQy35

Early Neighborhood Notification 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.

Persons with disabilities in need of special accommodations or the hearing impaired needing an interpreter please contact the Land Use Office (955-6820) 5 days prior to the hearing or meeting date.

Sincerely,

James W. Siebert

Vicinity map on reverse side of this letter

ENN GUIDELINES

Applicant Information

Project Name: **PODS Development Plan and Lot Line Adjustment**

Name: **Siebert** (*Last*) **James** (*First*) **W** (*M.I.*)

Address: **915 Mercer Street** (*Street Address*) (*Suite/Unit #*)

Santa Fe, NM 87505 (*City*) **NM** (*State*) **87505** (*ZIP Code*)

Phone: **(505) 983-5588** E-mail Address: **jim@jwsiebert.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

(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 property is zoned I-1 light industrial and will be located within the Hart Business Park. The only other building within the Park is FedEx Ground. Both buildings are similar in a sense that each is designed to store items and receive shipments via trucks. The POD building will be one story, 42 feet in height which allows for stacking of PODS inside the warehouse. The development will have to meet the city landscape standards in addition to the trees that have been installed along Hart Road. The building will have to comply with the architectural point requirement for an industrial use. The lighting, be it pole or building mounted will have to comply with the City Code for illumination standards, include light levels at the perimeter of the property. City land is adjacent to this lot, which currently serves as open space. There are no existing or proposed trails in this area.

(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.***

This property has very few environmental constraints, partly because it is located within a fully developed industrial park. There is no substantial tree cover and such geologic features as floodplains, rock outcroppings and escarpments are not found on this property. The owner of the property will have to arrange for city pick up of trash.

All storage takes place within each POD unit units which is fully enclosed and designed to federal fire standards. The fire risk is minimized by the interior sprinkler system that is capable of putting out an interior fire in a matter of minutes.

(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.***

An archaeological report was prepared for the Business Park at the time the application for rezoning and subdivision was submitted to the city. No archaeological sites or areas of historic significance were found on the property and the City Archaeological Committee recommended clearance for the Business Park. There are no acequias on the property and the lot is not located with the Historic Downtown District.

(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 entire park is zoned I-1, light industrial. The city has an industrial park planned for the adjacent property to the west. The properties to the north are more heavy industrial in nature, consisting of a wrecking yard and concrete batch plan. The General Plan recommends light industrial for this area and densities are not applicable to commercial uses as part of the General Plan land use recommendations.

(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.***

Hart Road is a city road which satisfies the city standards for industrial parks. The only other transportation mode available in the area is via airline service. City buses do not provide bus service to the Airport nor to this area of the city. When the city approved the Hart Business Park a traffic impact study was required. The study recommended a left turn holding lane that was installed as part of the park improvements. There are no new or improved pedestrian trails in this area of Santa Fe.

(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.***

Jobs will be created during the construction of the building, including the infrastructure to support the requirements of the building. Approximately 15-18 permanent jobs will be created to man the operation once the building is constructed and PODs are moved to the site. As many people as possible will be hired locally to staff the building. PODs are a support service for residents and businesses that need a temporary place to storage furniture or other goods. The stored materials are kept inside a warehouse that is climate controlled.

(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.***

This is a commercial operation and as such has little to do with affordable housing. It would serve a variety of households since the demands created by moving, home repairs and storage are different for different households.

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(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 designed to be for the most part self-sufficient. The building is fully sprinkled to fire standards greater than similar industrial buildings of this size. All of the required city infrastructure including roads, water and sewer was installed with the construction of the Hart Business Park. Other than FedEx this is the first building to occur in the Park in 12 years. This is the opportunity to better utilize the park infrastructure and hopefully serve as an anchor for further development.

(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.***

This project is a limited user of water. Given the limited number of people inside the building, many of which are in trucks off-site either picking up or dropping of PODs the domestic water consumption is limited. Landscape will most likely require more water for irrigation than domestic use for the interior of the building. Any water use, be it interior or exterior, will have to be offset by the purchase of water credits or water rights.

(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.***

This building will be located in an isolated part of town where there is limited recreational activity and opportunity for pedestrian access. Not much has changed in this part of the urban area in the last 20 years.

The Hart Business Park was designed to allow for the construction of light industrial uses which is of economic importance to the City. There are few locations within the developed areas of the city where such light industrial uses can exist. Many of those uses, for example on Siler Road, are now relocating and redevelopment to less intensive uses is taking their place.

(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.*

This property was approved for annexation in 2008 since it was close to the airport and city water and sewer was available in the immediate area. It is a natural adjunct to the Santa Fe Airport and is one reason the POD company decided to locate in this area. There is significant residential development to the east on NM 599. Tierra Contenta still has area to develop including the area that is currently serviced by the recently opened interchange on NM 599.

4900 Hart Road
Lot 5 Hart Development Plan

UPC #	Physical Address	Assessed Property Owner	Property Owner Mailing Address	Property Occupancy Status
1-046-095-419-104	43 Aviation Dr. Santa Fe, NM 87507	William Hans Voss ET AL	PO Box 5774 Santa Fe, NM 87502	Tenant occupied
1-046-094-424-417	4901 Aviation Dr. Santa Fe, NM 87507	CCSF-NIAM LLC	600 W. San Mateo Rd. Santa Fe, NM 87507	Vacant
1-046-094-419-465	4900 Aviation Dr. Santa Fe, NM 875017	CCSF-NIAM LLC	600 W. San Mateo Rd. Sant Fe, NM 87505	Vacant
1-046-094-484-428	4851 Hart Rd. Santa Fe, NM 87507	CCSF-NIAM LLC	600 W. San Mateo Rd. Sant Fe, NM 87505	Vacant
1-046-094-423-502	4800 Hart Rd. Santa Fe, NM 87507	CCSF-NIAM LLC	600 W. San Mateo Rd. Sant Fe, NM 87505	Vacant
1-046-094-476-527	4701 Hart Rd. Santa Fe, NM 87507	CCSF-NIAM LLC	600 W. San Mateo Rd. Sant Fe, NM 87505	Vacant
1-046-095-428-026	4700 Hart Road Santa Fe, NM 87507	Fainbarg II, LP. & ET AL	129 W. Wilson Sr. Ste 100 Costa Mesa, CA	Tenant Occupied
1-046-094-492-475	4801 Hart Road Santa Fe, NM 87507	CCSF-NIAM LLC	600 W. San Mateo Rd. Sant Fe, NM 87505	Vacant
1-045-094-429-218	121 Aviation Dr. Santa Fe, NM 87507	Municipal Airport	PO Box 909 Santa Fe, NM 87504	Owner Occupied
1-046-094-352-509	4801 Aviation Dr. Santa Fe, NM 87507	Municipal Airport	PO Box 909 Santa Fe, NM 87504	Owner Occupied

1) SI & E 04082, JZ

Warranty Deed Being re recorded to show Grantees correct name

WARRANTY DEED

STATE OF NEW MEXICO)
)
COUNTY OF SANTA FE)

KNOW ALL MEN BY THESE PRESENTS:

That Howell Family Partnership, whose address is 612 Woodland Avenue, El Paso, Texas 79927 (the "Grantor"), for consideration paid, grants to CCSF~~NMXMDX~~, whose address is P.O. Drawer K, Santa Fe, New Mexico 87504 (the "Grantee"), the real estate and any improvements thereon described as Exhibit "A," attached hereto and incorporated herein, ** CCSF-599 LLC.,

subject to:

(a) Reservations, conditions and exceptions contained in the Patent from The United States of America to Lillian Roak, dated August 29, 2036 and recorded in Book B at page 369, records of Santa Fe County, New Mexico, and the acts of Congress under which said patent was issued;

(b) Easement from J.C. Roak and Lalo Roak to County of Santa Fe, dated and recorded in Book 28 at page 160, records of Santa Fe County, New Mexico;

(c) Easement from Lillian Roak to County of Santa Fe, dated and recorded in Book 179 at page 59, records of Santa Fe County, New Mexico;

(d) Easement from Lalo Roak to Public Service Company of New Mexico and The Mountain States Telephone and Telegraph Company recorded in Book 242, page 361, records of Santa Fe County, New Mexico;

(e) Deviation of fence from property line, dirt road crossing easterly portion of property, pet cemetary, notes and conditions and all matters as shown on Plat of Survey entitled "Boundary Survey Plat Prepared For Howell Family Partnership", filed for record as Document No. 949309, appearing in Plat Book 337 at page 19, records of Santa Fe County, New Mexico;

(f) Power poles and overhead utility lines, deviation of fence from property lines, trail road, notes and conditions and all matters as shown on Plat of Survey entitled Plat of Survey for CCSF599 LLC a New Mexico Limited Liability Company within Sections 10, 11, 14 and 15, T, 16N., R. 8E., N.M.P.M." filed for record as Document Number 1345591, appearing in Plat Book 507 at page 039, records of Santa Fe County, New Mexico;

(g) all other reservations, easements, covenants, or restrictions of record or apparent; and

12656-101/CPIN/735886.1

SFC CLERK RECORDED 09/30/2004

SFC CLERK RECORDING 01/13/2005

SFC CLERK RECORDING 01/12/2005

(h) all taxes for the year of recording of this Deed and subsequent years,

with warranty covenants.

EXECUTED as of the 30th day of September, 2004.

HOWELL FAMILY PARTNERSHIP

By: Thomas R Howell
Thomas Howell
General Partner

STATE OF TEXAS)
)
COUNTY OF EL PASO)

This instrument was acknowledged before me on this 28th day of September, 2004 by Thomas Howell, the general partner of Howell Family Partnership.

CLYDE A. PINE JR.
NOTARY PUBLIC
In and for the State of Texas
My commission expires
November 4, 2007

Clyde A. Pine
Notary Public in and for the State of Texas

SFC CLERK RECORDED 09/30/2004

COUNTY CLERK
REBECCA BUSTAMANTE
SANTA FE COUNTY NEW MEXICO

COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

WARRANTY DEED
PAGES: 3

I Hereby Certify That This Instrument Was Filed for Record On The 24TH Day Of November, A.D., 2004 at 12:33 And Was Duly Recorded as Instrument # 1558075
Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Rebecca Bustamante
County Clerk, Santa Fe, NM

Deputy

12656-101/CPIN/735886.1

SFC CLERK RECORDED 01/12/2005

EXHIBIT "A"

All of Tracts 1, 2 and 3 as shown on Plat of Survey entitled "Plat of Survey for CCSF599 LLC a New Mexico Limited Liability Company within Sections 10, 11, 14, and 15, T. 16n., R. E., N.M.P.M.", filed for record as Document Number 134591, appearing in Plat Book 567 at page 039, records of Santa Fe County, New Mexico.

SFC CLERK RECORDED 09/30/2004

COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

WARRANTY DEED
PAGES: 3

I Hereby Certify That This Instrument Was Filed for Record On The 12TH Day Of January, A.D., 2005 at 14:58 And Was Duly Recorded as Instrument # [redacted]
Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Valerie Espinoza
Deputy _____ County Clerk, Santa Fe, NM

COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

WARRANTY DEED
PAGES: 3

I Hereby Certify That This Instrument Was Filed for Record On The 30TH Day Of September, A.D., 2004 at 15:32 And Was Duly Recorded as Instrument # [redacted]
Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Rebecca Bustamante
Deputy _____ County Clerk, Santa Fe, NM

12656-101/CPDN/735886.1

VICINITY MAP

SCALE 1" = 2000'

N

ADDRESSES

LOT NO.	ADDRESS
1	4408 HART ROAD
2	4420 HART ROAD
3	4700 HART ROAD
4	4800 HART ROAD
5	4808 HART ROAD
6	4901 HART ROAD
7	4901 HART ROAD
8	4901 HART ROAD
9	4701 HART ROAD
10	4801 HART ROAD
11	4801 HART ROAD

STORMWATER AGREEMENT:

STORMWATER EASEMENTS AND OTHER DRAINAGE APPURTENANCES ON PRIVATE PROPERTY SHALL BE MAINTAINED AND KEPT FULLY FUNCTIONAL AT ORIGINALLY DESIGNED AND CONSTRUCTED WHEN PRIVATE PROPERTY IS DEVELOPED. THE CITY HAS THE RIGHT, BUT NOT THE OBLIGATION, TO ENTER PRIVATE PROPERTY WHERE IT HAS BEEN GIVEN AN EASEMENT OR OTHERWISE DETERMINED THAT MAINTENANCE DEFICIENCY AND/OR FAILURE EXISTS, AND TO PERFORM ALL MAINTENANCE AND REPAIR WORK AS MAY BE NECESSARY TO RESTORE THE FUNCTIONAL CAPACITY OF THE DRAINAGE IMPROVEMENTS AS DESIGNED. ALL COSTS INCURRED BY THE CITY IN PERFORMING SUCH MAINTENANCE AND REPAIR WORK SHALL BE PAID BY THE OWNER(S) OF THE PROPERTY ON WHICH SUCH WORK IS PERFORMED. BY SIGNING BELOW TO THIS AGREEMENT, THE PROPERTY OWNER(S) APPROVE AND AGREE THAT THIS AGREEMENT IS BINDING AND ENFORCEABLE AGAINST THEM AND ANY AND ALL FUTURE OWNERS, HEIRS, AND ASSIGNS REGARDING THE LAND, ON PRESENT AND FUTURE OWNERS, HEIRS, AND ASSIGNS.

Keith J. Hart
KEITH J. HART
IT'S MANAGING MEMBER

STATE OF NEW MEXICO }ss
COUNTY OF SANTA FE }

ON THIS 14th DAY OF August, 2008, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY THE PERSON(S) WHOSE NAME(S) APPEAR ABOVE.

Victoria G. Reynolds 5-23-2011
NOTARY PUBLIC MY COMMISSION EXPIRES

OFFICIAL SEAL
VICTORIA L. REYNOLDS
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 5-23-2011

DEDICATION / AFFIDAVIT:

KNOW ALL MEN BY THESE PRESENTS: THAT THE UNDERSIGNED OWNER HAS CAUSED TO BE SURVEYED, THE LANDS SHOWN HEREON. THAT DIVISION OF LAND IS MADE WITH OUR FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES AND CONTROL OF SAID OWNER. SAID PARCEL IS HEREBY DEDICATED TO THE CITY OF SANTA FE. EASEMENTS ARE HEREBY GRANTED FOR ALL CERTAIN COUTIES. ALL PUBLIC UTILITY EASEMENTS FOR SANITARY SEWER EXPENDITURES AND ROW ARE GRANTED TO THE CITY OF SANTA FE FOR THE PURPOSE OF INSTALLING, OPERATING AND MAINTAINING SUCH PUBLIC UTILITIES AND FOR ALL OTHER PURPOSES HEREIN SHOWN WITH THE RIGHT OF INGRESS AND EGRESS THERETO. UTILITY SERVICES ARE DESIGNATED FOR CABLE AND SATELLITE TELEVISION SERVICE AND TELECOMMUNICATIONS SERVICE AND EASEMENTS FOR CABLE AND SATELLITE TELEVISION SERVICE AND TELECOMMUNICATIONS SERVICE ARE HEREBY GRANTED AND THE RIGHT TO TRIM OR REMOVE TREES, VEGETATION OR CONSTRUCTIONS AT ADDRESS REASONABLY FOR SAID UTILITIES. THOSE LANDS LIE WITHIN THE PLANNING AND PLATTING JURISDICTION OF THE CITY OF SANTA FE, NEW MEXICO.

Keith J. Hart
KEITH J. HART
IT'S MANAGING MEMBER

STATE OF NEW MEXICO }ss
COUNTY OF SANTA FE }

ON THIS 14th DAY OF August, 2008, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY THE PERSON(S) WHOSE NAME(S) APPEAR ABOVE.

Victoria G. Reynolds 5-23-2011
NOTARY PUBLIC MY COMMISSION EXPIRES

OFFICIAL SEAL
VICTORIA L. REYNOLDS
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 5-23-2011

UTILITIES:

CURRENT AND FUTURE SERVICES

B. Angel 8-13-08
PNM GAS AND ELECTRIC SERVICES — DATE

[signature] 8/15/08
QWEST COMMUNICATIONS, INC. — DATE

[signature] 8/2/08
COMCAST CABLE — DATE

N/A
COMCAST CABLE — DATE

IN APPROVING THIS PLAT, PNM ELECTRIC SERVICES AND GAS SERVICES (PNM) DO NOT CONSENT TO ANY CHANGES OR MODIFICATIONS HEREIN WHICH, CONSEQUENTLY, MAY NEED NEW EASEMENTS GRANTED TO PNM. ALL EASEMENTS PREVIOUSLY GRANTED TO PNM SHALL REMAIN IN FORCE UNLESS RELEASED BY PNM. NO BUILDINGS, TREES, STRUCTURES OR LANDSCAPING SHALL BE PLACED ON ANY EASEMENT UNLESS SUCH USE IS APPROVED BY PNM. ALL EASEMENTS SHOWN ON THIS PLAT ARE RECORDED OR EXISTING EASEMENTS UNLESS OTHERWISE NOTED.

QWEST COMMUNICATIONS, INC. 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.

REFERENCE AND BASIS OF BEARINGS:

BOUNDARY SURVEY PLAT PREPARED FOR HOWELL FAMILY PARTNERSHIP, FILED IN THE OFFICE OF THE COUNTY CLERK, SANTA FE COUNTY, NEW MEXICO, AT PLAT BOOK 384, PAGE 006, AS DOCUMENT NO. 1,241,385. LANDMARK SURVEYS PROJECT NO. 04-16, PLAT NO. L-744.

H.M. SUPPLEMENTAL PLAT SHOWING WALL HOLDING CLAIMS IN SECTIONS 13,14,23,24, AND 18, T.16N., R.8E., N.M.P.M. APPROVED BY THE U.S. SURVEYOR'S OFFICE ON NOVEMBER 18, 1887.

NOTE:
DUE LOT LESS ENTIRES, THE 10.000 PLATTED AREA AS SHOWN ON OPEN SPACE TRACT 1, SHOWN C 9.289 S AND 3.8048 C SHALL BE EXPLORING DATE JUNE 19, 2008.

CITY REVIEW:

[signature] 8/19/08
CITY ENGINEER — DATE

[signature] 9/16/2008
CITY ATTORNEY — DATE

CITY CONDITIONS:

EACH LOT SHALL BE SERVED BY DOMESTIC WATER AND WATER SERVICE AT THE TIME OF DEVELOPMENT.

PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, 2003 AND SUBSEQUENT AMENDMENTS.

PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF SANTA FE ORDINANCE ADOPTED AFTER OCTOBER 15, 2003 THAT ADDRESSES ANY PROPOSED OR EXISTING DEVELOPMENTS SUBJECT TO CHAPTER 14, LAND DEVELOPMENT CODE, 2003 AND SUBSEQUENT AMENDMENTS.

FENCES, WALLS OR OTHER OBSTRUCTIONS SHALL NOT BE PLACED OR CONSTRUCTED ACROSS PUBLIC SANITARY SEWER EASEMENTS.

UTILITY EXPANSION CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION FOR EACH LOT. CONTACT THE CITY OF SANTA FE PERMIT AND DEVELOPMENT REVIEW DIVISION TO PAY THESE CHARGES.

HOST COUNTY SITE (WHERE RELOCATED BY GOVERNOR'S PROPOSE 2008 ORDINANCE 2008-32

AN ADA INSPECTION SHALL BE CONDUCTED PRIOR TO PROJECT ACCEPTANCE. THE CONTRACTOR SHALL CONTACT CITY STAFF TO SCHEDULE AN INSPECTION.

ADOPTED BY THE CITY PLANNING COMMISSION AT ITS MEETING OF
July 17, 2008 ITS CASE NO.: S2008-3
[signature] 8/19/08 [signature] 9/16/08
SECRETARY DATE — CHAIR DATE

ISSUANCE OF PERMITS FOR BUILDINGS CREATED IN THIS SUBDIVISION IS SUBJECT TO TRANSFER OF WATER RIGHTS TO THE CITY OF SANTA FE PURSUANT TO SECTION 14-8.10(F)(2) 2001

CASE NO. S2008-3
U.P.C. # 1-010-005-010-007
RECORD INFORMATION FOR COUNTY CLERK

FINAL PLAT OF SURVEY
HART BUSINESS PARK
CCSF599 LLC A NEW MEXICO
LIMITED LIABILITY COMPANY
WITHIN SECTIONS 10, 11, 14 AND 15,
T. 16 N., R. 8 E., N.M.P.M.
SANTA FE COUNTY, NEW MEXICO

SHEET 1 OF 3

SURVEYOR'S CERTIFICATE:

ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, I HEREBY CERTIFY THAT THIS PLAT IS AN ACCURATE DELINEATION OF A SURVEY COMPLETED UNDER MY DIRECTION ON FEBRUARY 20, 2008. I FURTHER CERTIFY THAT THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO, ADOPTED BY THE NEW MEXICO STATE BOARD OF PROFESSIONAL ENGINEERS AND SURVEYORS

[signature]
JAMES J. MORIARTY
N.M.P.S. No.12177

LANDMARK SURVEYS
P.O. BOX 4797
SANTA FE, NEW MEXICO 87502
TEL: (505)471-1201
FAX: (505)473-0484
EMAIL: landmarksurveys@qwest.net

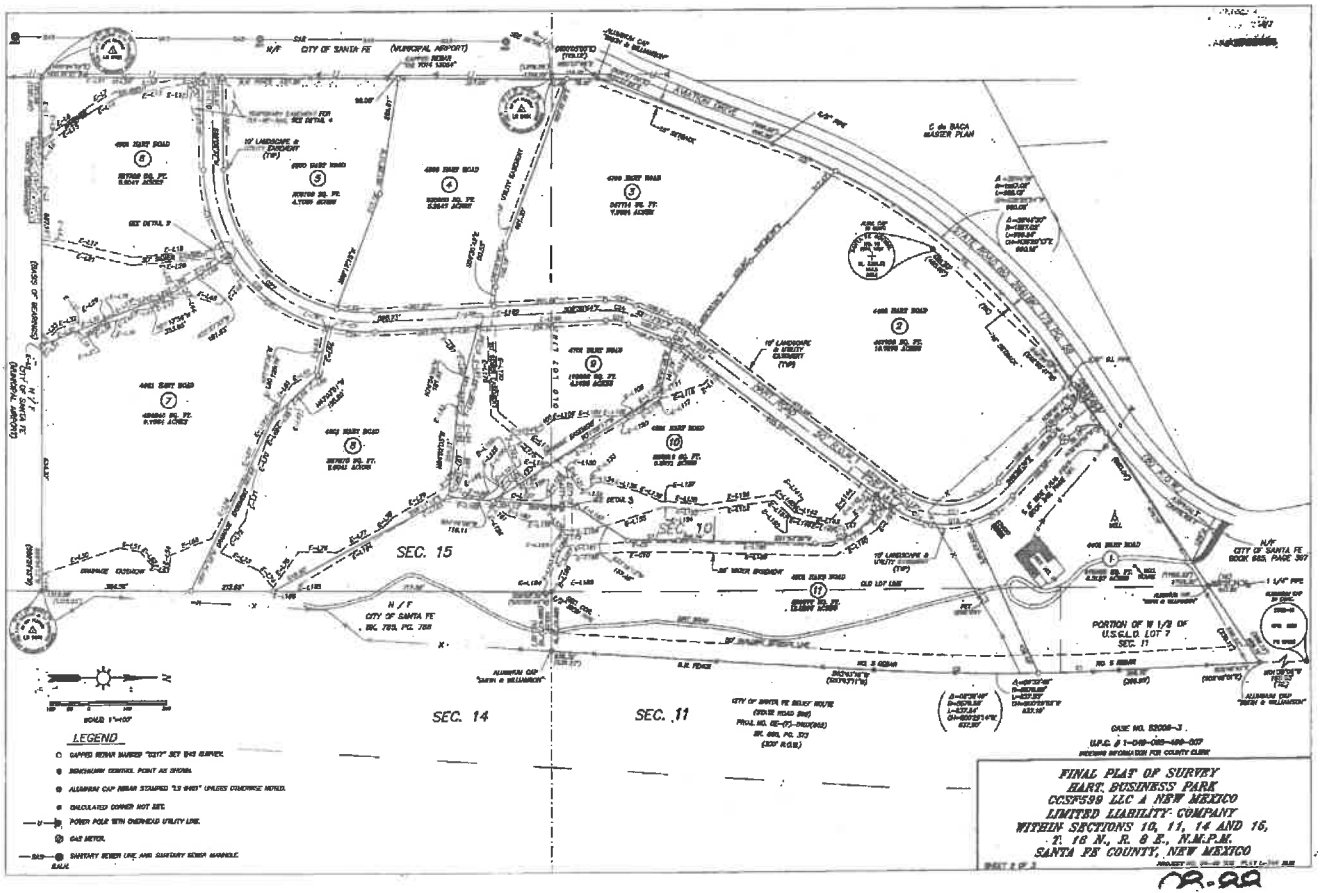
STATE OF NEW MEXICO
JAMES J. MORIARTY
12177
REGISTERED PROFESSIONAL SURVEYOR

Ref 1339776
COUNTY OF SANTA FE
STATE OF NEW MEXICO

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD ON THE 26 DAY OF August A.D. 2008, AT 01:06:01 P.M. AND WAS DULY RECORDED IN VOL. 599, PAGE 006 OF THE RECORDS OF SANTA FE COUNTY, NEW MEXICO

WITNESS MY HAND AND SEAL OF OFFICE
VALERIE ESPINOZA
COUNTY CLERK, SANTA FE COUNTY, NM
[signature]
DEPUTY

OR-RR


SEC. 15
SEC. 14
SEC. 11
SEC. 10
N/F CITY OF SANTA FE (MUNICIPAL AIRPORT)
BASIS OF BEARINGS
N/F CITY OF SANTA FE (MUNICIPAL AIRPORT)
4000 HART ROAD
4001 HART ROAD
4002 HART ROAD
4003 HART ROAD
4004 HART ROAD
4005 HART ROAD
4006 HART ROAD
4007 HART ROAD
4008 HART ROAD
4009 HART ROAD
4010 HART ROAD
4011 HART ROAD
10' LANDSCAPE & UTILITY EASEMENT (TYP)
C de BACA MASTER PLAN
STATE ROAD 599 (NEW MEXICO 599)
N/F CITY OF SANTA FE BOOK 663, PAGE 397
PORTION OF W 1/2 OF U.S.G.L.O. LOT 7 SEC. 11
N/F CITY OF SANTA FE BK. 783, PG. 788
CITY OF SANTA FE BASIN ROAD (STATE ROAD 599) FINAL NO. 6E-(7)-2800(26G) BK. 699, PG. 373 (207 R.O.S.)
OLD LOT LINE
ALUMINUM CAP "SMITH & WILLIAMSON"
SCALE 1"=400'
LEGEND
CAPPED REBAR MARKED "CITY" SET THIS SURVEY.
MONUMENT CONTROL POINT AS SHOWN.
ALUMINUM CAP REBAR STAMPED "LS 9465" UNLESS OTHERWISE NOTED.
CALCULATED CORNER NOT SET.
POWER POLE WITH OVERHEAD UTILITY LINE.
GAS METER.
SANITARY SEWER LINE AND SANITARY SEWER MANHOLE.
CASE NO. S2006-3.
U.P.C. # 1-049-069-499-007
RECORD INFORMATION FOR COUNTY CLERK
FINAL PLAT OF SURVEY
HART BUSINESS PARK
CCSF599 LLC A NEW MEXICO
LIMITED LIABILITY COMPANY
WITHIN SECTIONS 10, 11, 14 AND 16,
T. 16 N., R. 8 E., N.M.P.M.
SANTA FE COUNTY, NEW MEXICO

08-99

EASEMENT LINE CURVE CHART

CURVE	ARC LENGTH	DELTA ANGLE	RADIUS	CHORD BEARING	CHORD LENGTH
C-C1	15.69'	89°41'19"	40.00'	S 17°50'34" E	15.77'
C-C2	26.39'	03°46'10"	400.00'	S 89°28'54" E	26.39'
C-C3	7.91'	00°41'08"	400.00'	S 87°42'39" E	7.91'
C-C4	8.42'	01°12'01"	400.00'	S 87°22'45" E	8.42'
C-C5	51.23'	06°34'39"	446.00'	S 87°22'45" E	51.20'
C-C6	51.69'	06°38'13"	446.00'	S 87°25'32" E	51.66'
C-C7	8.42'	01°04'13"	450.00'	S 84°20'09" E	8.42'
C-C8	8.42'	01°04'13"	450.00'	S 83°15'56" E	8.42'
C-C9	190.01'	09°41'59"	1123.00'	N 00°39'51" E	189.78'
C-C10	190.01'	09°41'59"	1123.00'	S 00°39'51" E	189.78'
C-C11	9.00'	81°13'11"	6.35'	S 89°24'20" W	8.00'

EASEMENT LINE LINE CHART

LINE	BEARING	DISTANCE
L-1	N 00°00'00" E	40.00'
L-2	S 89°59'59" E	40.00'
L-3	S 00°00'00" E	40.00'
L-4	N 89°59'59" W	40.00'
L-5	N 00°00'00" E	40.00'
L-6	S 89°59'59" E	40.00'
L-7	S 00°00'00" E	40.00'
L-8	N 89°59'59" W	40.00'
L-9	N 00°00'00" E	40.00'
L-10	S 89°59'59" E	40.00'
L-11	S 00°00'00" E	40.00'
L-12	N 89°59'59" W	40.00'
L-13	N 00°00'00" E	40.00'
L-14	S 89°59'59" E	40.00'
L-15	S 00°00'00" E	40.00'
L-16	N 89°59'59" W	40.00'
L-17	N 00°00'00" E	40.00'
L-18	S 89°59'59" E	40.00'
L-19	S 00°00'00" E	40.00'
L-20	N 89°59'59" W	40.00'
L-21	N 00°00'00" E	40.00'
L-22	S 89°59'59" E	40.00'
L-23	S 00°00'00" E	40.00'
L-24	N 89°59'59" W	40.00'
L-25	N 00°00'00" E	40.00'
L-26	S 89°59'59" E	40.00'
L-27	S 00°00'00" E	40.00'
L-28	N 89°59'59" W	40.00'
L-29	N 00°00'00" E	40.00'
L-30	S 89°59'59" E	40.00'
L-31	S 00°00'00" E	40.00'
L-32	N 89°59'59" W	40.00'
L-33	N 00°00'00" E	40.00'
L-34	S 89°59'59" E	40.00'
L-35	S 00°00'00" E	40.00'
L-36	N 89°59'59" W	40.00'
L-37	N 00°00'00" E	40.00'
L-38	S 89°59'59" E	40.00'
L-39	S 00°00'00" E	40.00'
L-40	N 89°59'59" W	40.00'
L-41	N 00°00'00" E	40.00'
L-42	S 89°59'59" E	40.00'
L-43	S 00°00'00" E	40.00'
L-44	N 89°59'59" W	40.00'
L-45	N 00°00'00" E	40.00'
L-46	S 89°59'59" E	40.00'
L-47	S 00°00'00" E	40.00'
L-48	N 89°59'59" W	40.00'
L-49	N 00°00'00" E	40.00'
L-50	S 89°59'59" E	40.00'
L-51	S 00°00'00" E	40.00'
L-52	N 89°59'59" W	40.00'
L-53	N 00°00'00" E	40.00'
L-54	S 89°59'59" E	40.00'
L-55	S 00°00'00" E	40.00'
L-56	N 89°59'59" W	40.00'
L-57	N 00°00'00" E	40.00'
L-58	S 89°59'59" E	40.00'
L-59	S 00°00'00" E	40.00'
L-60	N 89°59'59" W	40.00'
L-61	N 00°00'00" E	40.00'
L-62	S 89°59'59" E	40.00'
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L-64	N 89°59'59" W	40.00'
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L-90	S 89°59'59" E	40.00'
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L-312	N 89°59'59" W	40.00'
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L-316	N 89°59'59" W	40.00'
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L-368	N 89°59'59" W	40.00'
L-369	N 00°00'00" E	40.00'
L-370	S 89°59'59" E	40.00'
L-371	S 00°00'00" E	40.00'
L-372	N 89°59'59" W	40.00'
L-373	N 00°00'00" E	40.00'
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L-378	S 89°59'59" E	40.00'
L-379	S 00°00'00" E	40.00'
L-380	N 89°59'59" W	40.00'
L-381	N 00°00'00" E	40.00'
L-382	S 89°59'59" E	40.00'
L-383	S 00°00'00" E	40.00'
L-384	N 89°59'59" W	40.00'
L-385	N 00°00'00" E	40.00'
L-386	S 89°59'59" E	40.00'
L-387	S 00°00'00" E	40.00'
L-388	N 89°59'59" W	40.00'
L-389	N 00°00'00" E	40.00'
L-390	S 89°59'59" E	40.00'
L-391	S 00°00'00" E	40.00'
L-392	N 89°59'59" W	40.00'
L-393	N 00°00'00" E	40.00'
L-394	S 89°59'59" E	40.00'
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L-396	N 89°59'59" W	40.00'
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L-399	S 00°00'00" E	40.00'
L-400	N 89°59'59" W	40.00'
L-401	N 00°00'00" E	40.00'
L-402	S 89°59'59" E	40.00'
L-403	S 00°00'00" E	40.00'
L-404	N 89°59'59" W	40.00'
L-405	N 00°00'00" E	40.00'
L-406	S 89°59'59" E	40.00'
L-407	S 00°00'00" E	40.00'
L-408	N 89°59'59" W	40.00'
L-409	N 00°00'00" E	40.00'
L-410	S 89°59'59" E	40.00'
L-411	S 00°00'00" E	40.00'
L-412	N 89°59'59" W	40.00'
L-413	N 00°00'00" E	40.00'
L-414	S 89°59'59" E	40.00'
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L-417	N 00°00'00" E	40.00'
L-418	S 89°59'59" E	40.00'
L-419	S 00°00'00" E	40.00'
L-420	N 89°59'59" W	40.00'
L-421	N 00°00'00" E	40.00'
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L-423	S 00°00'00" E	40.00'
L-424	N 89°59'59" W	40.00'
L-425	N 00°00'00" E	40.00'
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L-427	S 00°00'00" E	40.00'
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L-429	N 00°00'00" E	40.00'
L-430	S 89°59'59" E	40.00'
L-431	S 00°00'00" E	40.00'
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L-452	N 89°59'59" W	40.00'
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L-470	S 89°59'59" E	40.00'
L-471	S 00°00'00" E	40.00'
L-472	N 89°59'59" W	40.00'
L-473	N 00°00'00" E	40.00'
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L-620	N 89°59'59" W	40.00'
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L-622	S 89°59'59" E	40.00'
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L-624	N 89°59'59" W	40.00'
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L-626	S 89°59'59" E	40.00'
L-627	S 00°00'00" E	40.00'
L-628	N 89°59'59" W	40.00'
L-629	N 00°00'00" E	40.00'
L-630	S 89°59'59" E	40.00'
L-631	S 00°00'00" E	40.00'
L-632	N 89°59'59" W	40.00'
L-633	N 00°00'00" E	40.00'
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L-635	S 00°00'00" E	40.00'
L-636	N 89°59'59" W	40.00'
L-637	N 00°00'00" E	40.00'
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L-648	N 89°59'59" W	40.00'
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L-650	S 89°59'59" E	40.00'
L-651	S 00°00'00" E	40.00'
L-652	N 89°59'59" W	40.00'
L-653	N 00°00'00" E	40.00'
L-654	S 89°59'59" E	40.00'
L-655	S 00°00'00" E	40.00'
L-656	N 89°59'59" W	40.00'
L-657	N 00°00'00" E	40.00'
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L-659	S 00°00'00" E	40.00'
L-660	N 89°59'59" W	40.00'
L-661	N 00°00'00" E	40.00'
L-662	S 89°59'59" E	40.00'
L-663	S 00°00'00" E	40.00'
L-664	N 89°59'59" W	40.00'
L-665	N 00°00'00" E	40.00'
L-666	S 89°59'59" E	40.00'
L-667	S 00°00'00" E	40.00'
L-668	N 89°59'59" W	40.00'
L-669	N 00°00'00"

City of Santa Fe, New Mexico

Planning Commission

Exhibit F

Applicant Submittals

1. Development Plan and Lot Line Adjustment Applications
2. Development Plan
3. Development Plan Application Report

JAMES W. SIEBERT

AND ASSOCIATES, INC.

915 MERCER STREET * SANTA FE, NEW MEXICO 87505

(505) 983-5588

jim@jwsiebert.com

May 17, 2021

Noah Berke
Current Planner Manager
200 Lincoln Ave. PO Box 909S
Santa Fe, NM 87504

Re: PODS Project Application for Preliminary and Final Development Plan

As representative for SAF HART DISTR LLC, the developer of the PODS project I am submitting an application for Preliminary and Final Development plan review. Also accompanying the application is a lot line adjustment between lots 4 and 5 of the Hart Business Park required to accommodate the site plan for the PODS development. The project will be constructed in two phases with phase 1 consisting of a 40,000 square foot building and phase 2 consisting of 12,800 square feet of building area. In order to avoid disturbance of the land in the future, the grading and drainage shown on the engineering plans reflects the full extent of the building which is 52.800 square feet of building area. The application will initially take place digitally.

The following material is submitted in a digital format:

- Application Letter from James W. Siebert
- Development Plan- Plan consisting of 58 pages
- Development Plan Report in 8 ½ x 11 format prepared by Siebert & Associates

Upon receipt of the application by the city and notification of the application fee, payment for the application will be made by credit card.

Please schedule this request for the July 1, 2021 Planning Commission public hearing

Sincerely,

James W. Siebert

Xc: Gary Krupnick
Mike Gomez
Larry Medrano
Richard Kent

(date stamp)

DEVELOPMENT PLAN APPLICATION

Parcel Information

Project Name: POD's Storage Facility Development Plan

Address: 4900 Hart Rd. **Property Size:** 4.7085

Current Use of Land: Light Industrial **Proposed Use of Land:** Light Industrial

Does a Rezoning application accompany this application? YES ☐ NO ☐ **Are any variances required?** YES ☐ NO ☑

Preapplication Conference Date: Jan. 14, 2021

Early Neighborhood Notice (ENN) meeting date: Feb. 8, 2021 **Zoning:** I1

Property Owner Information

Name: CCSF/599 LLC

Address: First: 600 W. San Mateo Last: Santa Fe Street Address: NM State: 87505 Suite/Unit #: ZIP Code: City:

Phone: ( ) N/A **E-mail Address:** N/A

Applicant/Agent Information (if different from owner)

Company Name: James W. Siebert & Assoc., Inc

Name: James Siebert

Address: First: 915 Mercer St. Last: Santa Fe Street Address: NM State: 87505 Suite/Unit #: ZIP Code: City:

Phone: ( ) 983-5588 **E-mail Address:** jim@jwsiebert.com

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: 4900 Hart Rd

I/We authorize James W. Siebert & Assoc. Inc to act as my/our agent to execute this application.

Signed: _____ **Date:** _____

Signed: _____ **Date:** _____

Barry Reiss Authorized Manager
CCSF/599 LLC

Submittal Checklist (Requirements found in Section 14-3.8 SFCC 1987)

☐ *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 1987)	☐	Landscape, Parking and Lighting Plan, Signage Specifications
☐	Terrain Management Plans (as required by Section 14-8.2 SFCC 1987)	☐	Traffic Impact Analysis (if required)	☐	Proof of Compliance with Conditions of Annexation Approval (if applicable)	☐	Sewer and Water Plan (including profiles and details)	☐	Phasing Plan (if applicable)
☐	Archaeological Clearance (if applicable)								

Development Plan Submittal Requirements, as defined by Section 14-3.8(C) SFCC 1987:

Applicants for developments that require development plans under this section shall submit plans and other documentation as required by the land use director that show compliance with the applicable provisions of the Santa Fe City Code as provided in Section 14-3.1(C) (Form of Application), including plans that show:

(a) existing conditions on the site and within two hundred (200) feet of the site;
(b) proposed modifications to the site, including the locations of existing and new structures, grading, landscaping, lighting, pedestrian and vehicular circulation, parking and loading facilities;
(c) the types, extent and intensity of land uses that are proposed;
(d) proposed modifications to the infrastructure serving the site, including public and private streets, driveways and traffic control measures and utilities;
(e) documentation of compliance with development standards such as required yards, lot coverage, height of structures and open space;
(f) the phases of development, if applicable;
(g) for residential development, a proposal for provision of affordable housing as required by Section 14-8.11 (Santa Fe Homes Program);
(h) a development water budget as required by Section 14-8.13;
(i) for a development plan or final development plan, sufficient detail to clearly show how each applicable development standard is to be met and identify any variance or waiver required;
(j) for a preliminary development plan, sufficient detail to demonstrate the feasibility of meeting all applicable development standards, including an analysis of the type and extent of variances or waivers required, specific requests for which may be included.

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: 5/17/2021

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. Thank you, and feel free to contact the Land Use Department staff at (505) 955-6585 with any questions.

LOT CONSOLIDATION OR LOT LINE ADJUSTMENT

Parcel Information

Project Name: 4800 & 4900 Hart Rd Lot Line Adj

Address: 4800 & 4900 Hart Rd

Property Size: 4.7085 & 5.3547 AC

Current Use of Land: Light Industrial

Proposed Use of Land: Light Industrial

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

Uniform Parcel Code Number: 1-046-094-423-502 & 1-046-

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

Property Owner Information

Name: CCSF 599 LLC
First Last

Address: 1000 W. San Mateo
Street Address

Santa Fe
City

Suite/Unit #

NM
State

ZIP Code

Phone: ( ) N/A

E-mail Address: N/A

Applicant/Agent Information (if different from owner)

Company Name: James W. Siebert & Assoc., Inc.

Name: James Siebert
First Last

Address: 915 Mercer St
Street Address

Santa Fe
City

Suite/Unit #

NM
State

87505
ZIP Code

Phone: ( ) 9935588

E-mail Address: jim@jwsiebert.com

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: 4800 & 4900 Hart Rd

I/We authorize James W. Siebert & Assoc., Inc. to act as my/our agent to execute this application.

Signed: _____ Date: _____

Signed: _____ Date: _____

Barry Kuess, Authorized Manager
CCSF 599 LLC

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)	☐	Define slopes greater than 30% (if applicable)
☐	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 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: Joshua M. Dalton JDS Date: 5/17/2021

TERRAIN MANAGEMENT REPORT
SOILS, DRAINAGE, AND GRADING
FOR PODS AT HART BUSINESS PARK
PRELIMINARY AND FINAL DEVELOPMENT PLAN
SANTA FE, NEW MEXICO

Prepared For:

SAF Hart Distr. LLC
687 Old Willets Path
Hauppauge, NY 11788

Prepared By:

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

May 2021

TERRAIN MANAGEMENT REPORT
SOILS, DRAINAGE, AND GRADING
FOR PODS AT HART BUSINESS PARK
PRELIMINARY AND FINAL DEVELOPMENT PLAN
SANTA FE, NEW MEXICO

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APPENDIX C DEVELOPED DRAINAGE CALCULATIONS

APPENDIX D EXISTING CONDITIONS ROUTING CALCULATIONS

APPENDIX E DEVELOPED CONDITIONS ROUTING CALCULATIONS

TERRAIN MANAGEMENT REPORT
SOILS, DRAINAGE, AND GRADING
FOR PODS AT HART BUSINESS PARK
PRELIMINARY AND FINAL DEVELOPMENT PLAN
SANTA FE, NEW MEXICO

I. INTRODUCTION

The Pods Storage Facility is proposed to be located at the Hart Business Park It is located on a 4.47 ± acre site in the City of Santa Fe within Section 15, Township 16 North, Range 8 East, N.M.P.M. The latitude is 35° 37' 18.2" and the longitude is 106° 4' 38.5." The site is located at 4900 Hart Road, Santa Fe, NM. The Hart Business Park is a phased development. Phase 1 was constructed in 2008-2009 (Case Number S2008-03). Phase 1 consisted of Hart Road, intersection improvements, and all the infrastructure for Hart Road (water, sewer, and dry utilities). A Fed-Ex facility has been developed north of the site. The Vicinity Map is presented in Figure 1, Appendix A.

The subject property is currently vacant and mainly in its natural condition. The Legal Lot of Record is presented in Figure 2, Appendix A. The lot lines are being adjusted to accommodate the development. The Lot Line Adjustment Plat is presented in Figure 3, Appendix A. The development is proposed to be constructed in 2021. The Development Plan is presented in Figure 4, Appendix A.

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 and Stormwater Management Regulations (SFCC 14-8.2).

II. EXISTING CONDITIONS

The existing land uses in the area consist of commercial, airport, and vacant land. The land on the north consists of FedEx Ground, commercial and vacant land; on the south by vacant land; on the east by NM 599 (Veterans Memorial Highway), Tierra Contenta subdivision, and vacant; and on the west by the Santa Fe Regional Airport and Army National Guard. The Existing Conditions Map is presented in Figure 5, Appendix A.

Topographic mapping at a scale of 1 inch = 40 feet with 1-foot contour intervals was prepared for this project by Precision Surveys, dated April 2021. The Certified Topographic Map is presented in Figure 6, Appendix A.

Areas of 0% - 20%, 20% - 30%, and over 30% were delineated. The slope analysis map indicates that there are no areas of natural slope under 30% on the property. Any 30% and greater slopes within the project limits are manmade. The Slope Analysis Calculations are presented in Figure 7, Appendix A.

III. SOILS

Soil classifications were obtained from the "Web Soil Survey" by the Natural Resources Conservation Service (NRCS), version 12, updated June 8, 2020. The survey in this area is the result of a high intensity soil survey. The Soils Map is presented in Figure 8, Appendix A. The following soils were found to be in the drainage area:

103	Zepol silt loam, 0 to 2 percent slopes
115	Panky-Urban Land Complex, 1 to 4 percent slopes
117	Agua Fria- Paraje Complex, 1 to 8 percent slopes
118	Golondrina-Paraje Complex, 8 to 45 percent slopes

Zepol silt loam, 0 to 2 percent slopes is located throughout 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 (0.06 to 2.00 in / hr)
Hydrologic Soil Group	B

Panky-Urban Land Complex, 1 to 4 percent slopes is located throughout 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

Agua Fria- Paraje Complex, 1 to 8 percent slopes soil is located on 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 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

The NRCS 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.

IV. DRAINAGE

Onsite drainage flows generally from north to south. Storm drainage computations for existing conditions were calculated using on site topographic mapping prepared for the project and City of Santa Fe GIS mapping where needed for offsite coverage.

A. Existing Conditions

Drainage areas were delineated on the topographic maps prepared for the project. Drainage area and channel lengths were measured several times and average numbers used for this report. There are several existing offsite basins which drain through the site. The Existing Conditions Drainage Map is presented in Figure 9, Appendix A. Storm drainage computations for existing conditions were calculated using the on-site topographic mapping prepared for this project. The drainages which impact the site are presented in Table 1.

TABLE 1
EXISTING DRAINAGE BASIN CHARACTERISTICS

Basin	Description	Area (ac)
Q1-EX	Offsite basin flowing west	2.13
Q2-EX	Offsite basin flowing into onsite basin Q5-EX	0.39
Q3-EX	Offsite site basin flowing east	0.29
Q4-EX	Onsite basin exiting the site to the east	0.83
Q5-EX	Onsite basin exiting the site to the south	1.95
Q6-EX	Onsite basin exiting the site to the south	1.65

According to maps prepared by the United States Department of Commerce, presented in the NOAA Precipitation Frequency Data Server, Atlas 14 Volume 1, Version 5, revised 2011, the following precipitation data in Table 2 should be used for the project:

TABLE 2 PRECIPITATION DATA		
FREQUENCY	DURATION	PRECIPITATION
100 Year	24 Hour	3.24”
50 Year	24 Hour	2.93”
25 Year	24 Hour	2.61”
2 Year	24 Hour	1.53”

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 by basin are presented in Table 3.

TABLE 3 PEAK FLOW QUANTITIES EXISTING CONDITIONS					
Basin	Description	CN	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Q1-EX	Offsite basin flowing west	87	3.31	3.96	4.58
Q2-EX	Offsite basin flowing into onsite basin Q5-EX	87	0.65	0.78	0.90
Q3-EX	Offsite site basin flowing east	87	0.43	0.51	0.60
Q4-EX	Onsite basin exiting the site to the east	87	1.45	1.72	2.00
Q5-EX	Onsite basin exiting the site to the south	86	3.25	3.89	4.54
Q6-EX	Onsite basin exiting the site to the south	87	2.87	3.42	3.96

B. Developed Conditions

The development of the project will have an impact on stormwater runoff due to the grading of the site and the additional impervious areas. The Development Plan is presented in Figure 10, Appendix A. In order to control this excess runoff, the storm water management plan provides for absorption and retention of runoff at key locations within the site. The Developed Conditions Drainage Map is presented in Figure 10, Appendix A. The developed conditions drainage characteristics are shown in Table 4.

TABLE 4 DEVELOPED DRAINAGE BASIN CHARACTERISTICS		
Basin	Description	Acres
Q1-EX	Offsite basin flowing west	2.13
Q2-EX	Offsite basin flowing into the site from the north	0.39
Q3-EX	Offsite basin flowing east	0.29
Q4-DEV	Onsite basin flowing through DI to Pond 1	0.26
Q5-DEV	Onsite basin flowing into Pond 1	0.46
Q6-DEV	Onsite basin exiting the site to the south	0.08
Q7-DEV	Onsite basin flowing into Pond 2	0.33
Q8-DEV	Onsite basin flowing south into Pond 2	0.6
Q9-DEV	Onsite basin flowing north through storm pipe to Pond 2	0.62
Q10-DEV	Onsite basin flowing into Pond 2	1.71
Q11-DEV	Onsite basin exiting the site to the south	0.04
Q12-DEV	Onsite basin flowing south through storm pipe	0.23

The Calculated Peak Flows for the developed conditions without runoff mitigation measures is presented in Table 5. The Developed Drainage Calculations are presented in Appendix C.

TABLE 5 PEAK FLOW QUANTITIES DEVELOPED CONDITIONS					
Basin	Description	CN	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Q1-EX	Offsite basin flowing west	87	3.31	3.96	4.58
Q2-EX	Offsite basin flowing into the site from the north	87	0.65	0.78	0.90
Q3-EX	Offsite basin flowing east	87	0.43	0.51	0.60
Q4-DEV	Onsite basin flowing through DI to Pond 1	88	0.56	0.67	0.77
Q5-DEV	Onsite basin flowing into Pond 1	88	1.05	1.24	1.44
Q6-DEV	Onsite basin exiting the site to the south	79	0.11	0.13	0.16
Q7-DEV	Onsite basin flowing into Pond 2	76	0.37	0.48	0.59
Q8-DEV	Onsite basin flowing south into Pond 2	98	1.98	2.23	2.47
Q9-DEV	Onsite basin flowing north through storm pipe to Pond 2	98	2.04	2.30	2.55
Q10-DEV	Onsite basin flowing into Pond 2	94	4.70	5.39	6.05
Q11-DEV	Onsite basin exiting the site to the south	89	0.09	0.11	0.12
Q12-DEV	Onsite basin flowing south through storm pipe	80	0.28	0.35	0.42

The City of Santa Fe Terrain and Stormwater Management Regulations require that peak discharge after development must not exceed peak discharge before development. Excess runoff from new impervious areas (roofs, sidewalks, parking lots) will be mitigated by ponding areas with controlled release.

Pond information is provided in Table 6. Two ponds are proposed.

TABLE 6
POND INFORMATION

Name	Bottom Elev.	Top Elev.	Area (SF)	Volume (CF)
Pond 1	6334.5	6336.5	6,508	10,076
Pond 2	6334	6336	8,666	14,577

C. Hydrographs

The individual basins were routed using Hydraflow Hydrographs 2019 to obtain the peak flow exiting the site.

The existing conditions drainage basins were routed to obtain the overall peak flow exiting the site for the 25, 50, and 100-year recurrence storm. The routings are presented in Appendix D.

The developed conditions basins were routed to obtain the overall peak overall peak flow exiting the site for the 25, 50, and 100-year recurrence storm. The routings are presented in Appendix E. Table 7 presents a comparison of the peak flow for the existing and developed conditions.

TABLE 7
COMPARISON OF PEAK FLOW QUANTITIES

Description	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Existing Condition – Flows exiting the property	8.20	9.84	11.43
Developed Condition – Flows exiting the property	7.56	8.97	10.38
Reduction in Flow (CFS)	0.64	0.87	1.05

Table 7 indicates that the City of Santa Fe Terrain and Stormwater Management Regulations have been met.

D. 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 Maps Number 35049C0389D, dated June 17, 2008 and 35049C0502E, dated December 4, 2012 for this area is presented in Figure 11, Appendix A. A review of the map indicates that there is no proposed construction 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 and Drainage 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.

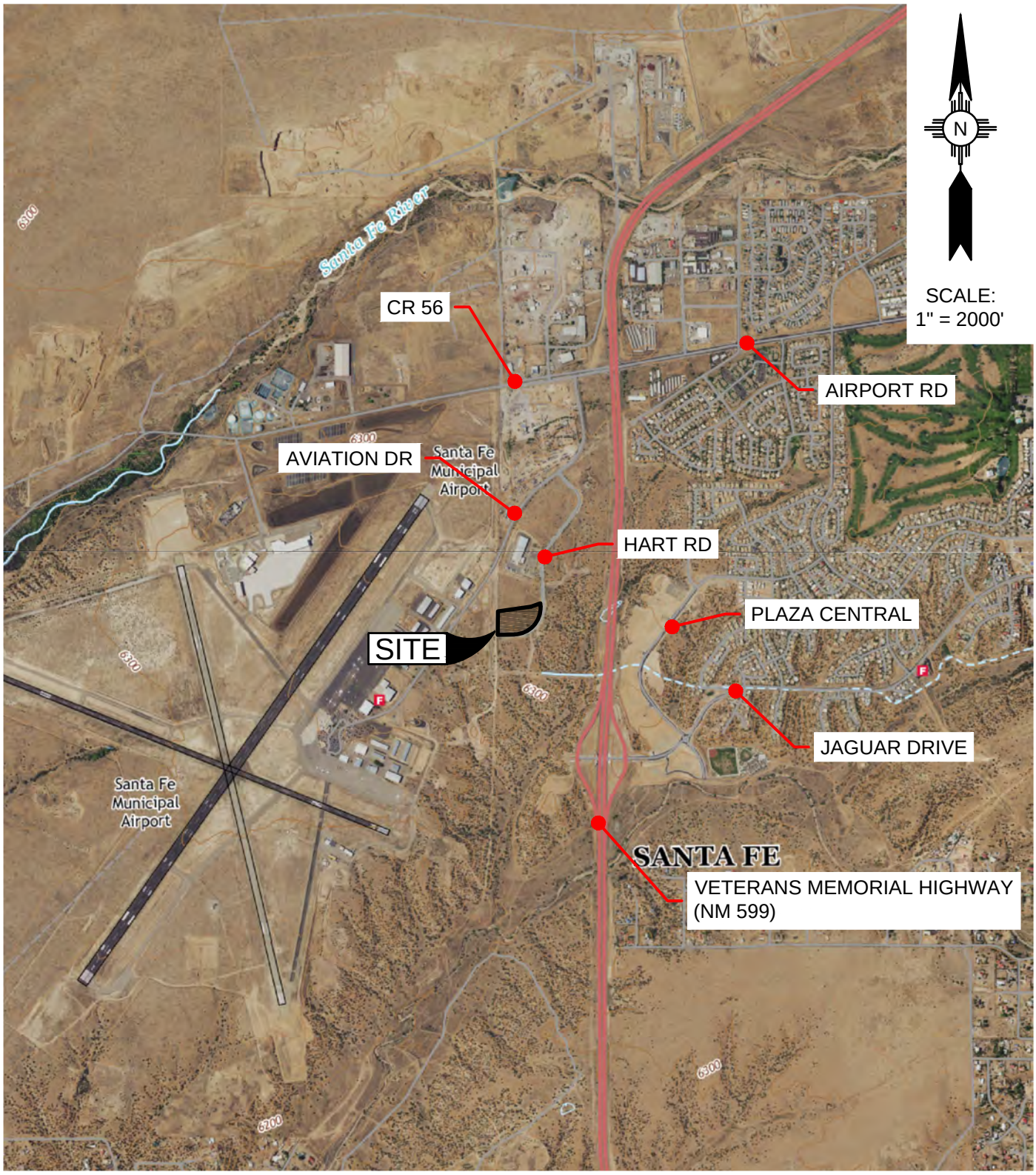
B. Cut and fill slopes will be as follows:
Fills - 1 vertical on 3 horizontal.
Cuts - 1 vertical on 2 horizontal.

C. Roadway drainage structures (culverts, brow ditches, and channels) will be constructed in conjunction with grading. No changes in the drainage ways or floodplain will be permitted except as shown on the Grading and Drainage Plans.

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

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

APPENDIX A
FIGURES



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

VICINITY MAP
FIGURE 1

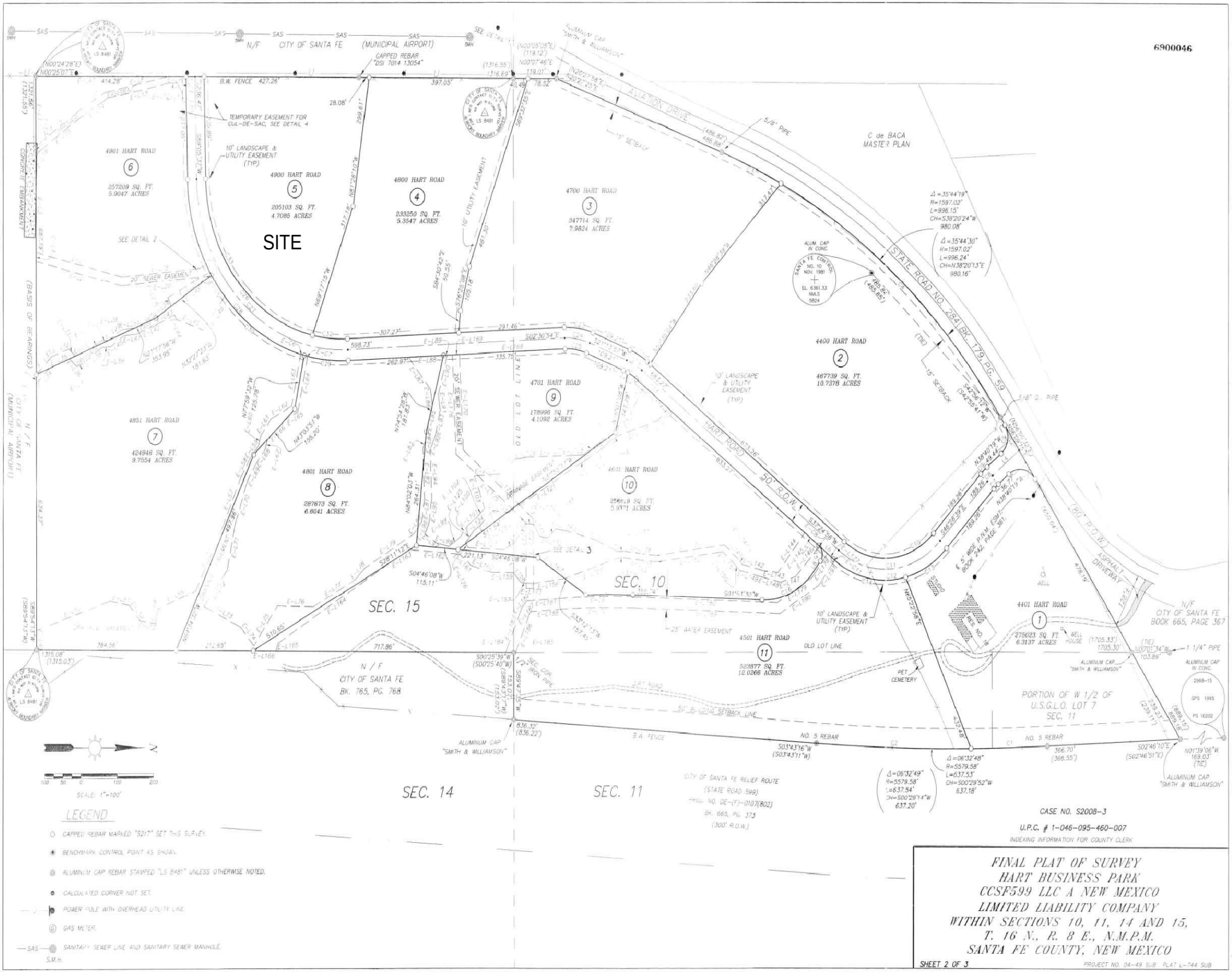

6900046
SITE
4901 HART ROAD
6
257208 SQ. FT.
5.9047 ACRES
4900 HART ROAD
5
205103 SQ. FT.
4.7085 ACRES
4800 HART ROAD
4
233250 SQ. FT.
5.3547 ACRES
4700 HART ROAD
3
347714 SQ. FT.
7.9824 ACRES
4400 HART ROAD
2
467739 SQ. FT.
10.7378 ACRES
4701 HART ROAD
9
178998 SQ. FT.
4.1092 ACRES
4851 HART ROAD
7
424946 SQ. FT.
9.7554 ACRES
4801 HART ROAD
8
287673 SQ. FT.
6.6041 ACRES
4631 HART ROAD
10
256619 SQ. FT.
5.8971 ACRES
4501 HART ROAD
11
583977 SQ. FT.
13.0266 ACRES
4401 HART ROAD
1
279023 SQ. FT.
6.3137 ACRES
HART ROAD 50' R.O.W.
AVIATION DRIVE
STATE ROAD NO. 2841 (NM 599)
C de BACA MASTER PLAN
N/F CITY OF SANTA FE (MUNICIPAL AIRPORT)
N/F CITY OF SANTA FE BOOK 665, PAGE 367
N/F CITY OF SANTA FE Bk. 765, PG. 768
PORTION OF W 1/2 OF U.S.G.L.O. LOT 7 SEC. 11
SEC. 10
SEC. 15
SEC. 14
SEC. 11
CITY OF SANTA FE RELIEF ROUTE (STATE ROAD 599) PROJ. NO. DE-(F)-0107(802) BK. 665, PG. 373 (300' R.O.W.)
OLD LOT LINE
10' LANDSCAPE & UTILITY EASEMENT (TYP)
20' SEWER EASEMENT
TEMPORARY EASEMENT FOR CUL-DE-SAC, SEE DETAIL 4
B.W. FENCE
ASPHALT DRIVEWAY
WELL HOUSE
PET CEMETERY
ALUMINUM CAP "SMITH & WILLIAMSON"
ALUMINUM CAP IN CONC. 2968-15 GPS 1995 PS 10202
NO. 5 REBAR
CAPPED REBAR MARKED "5217" SET THIS SURVEY
BENCHMARK CONTROL POINT AS SHOWN
ALUMINUM CAP REBAR STAMPED "LS 8481" UNLESS OTHERWISE NOTED.
CALCULATED CORNER NOT SET.
POWER POLE WITH OVERHEAD UTILITY LINE.
GAS METER.
SANITARY SEWER LINE AND SANITARY SEWER MANHOLE.
SCALE: 1"=100'
CASE NO. S2008-3
U.P.C. # 1-046-095-460-007
INDEXING INFORMATION FOR COUNTY CLERK
FINAL PLAT OF SURVEY
HART BUSINESS PARK
CCSF599 LLC A NEW MEXICO
LIMITED LIABILITY COMPANY
WITHIN SECTIONS 10, 11, 14 AND 15,
T. 16 N., R. 8 E., N.M.P.M.
SANTA FE COUNTY, NEW MEXICO
SHEET 2 OF 3
PROJECT NO. 04-49 SUB PLAT L-744 SUB

FIGURE 2

Plat of

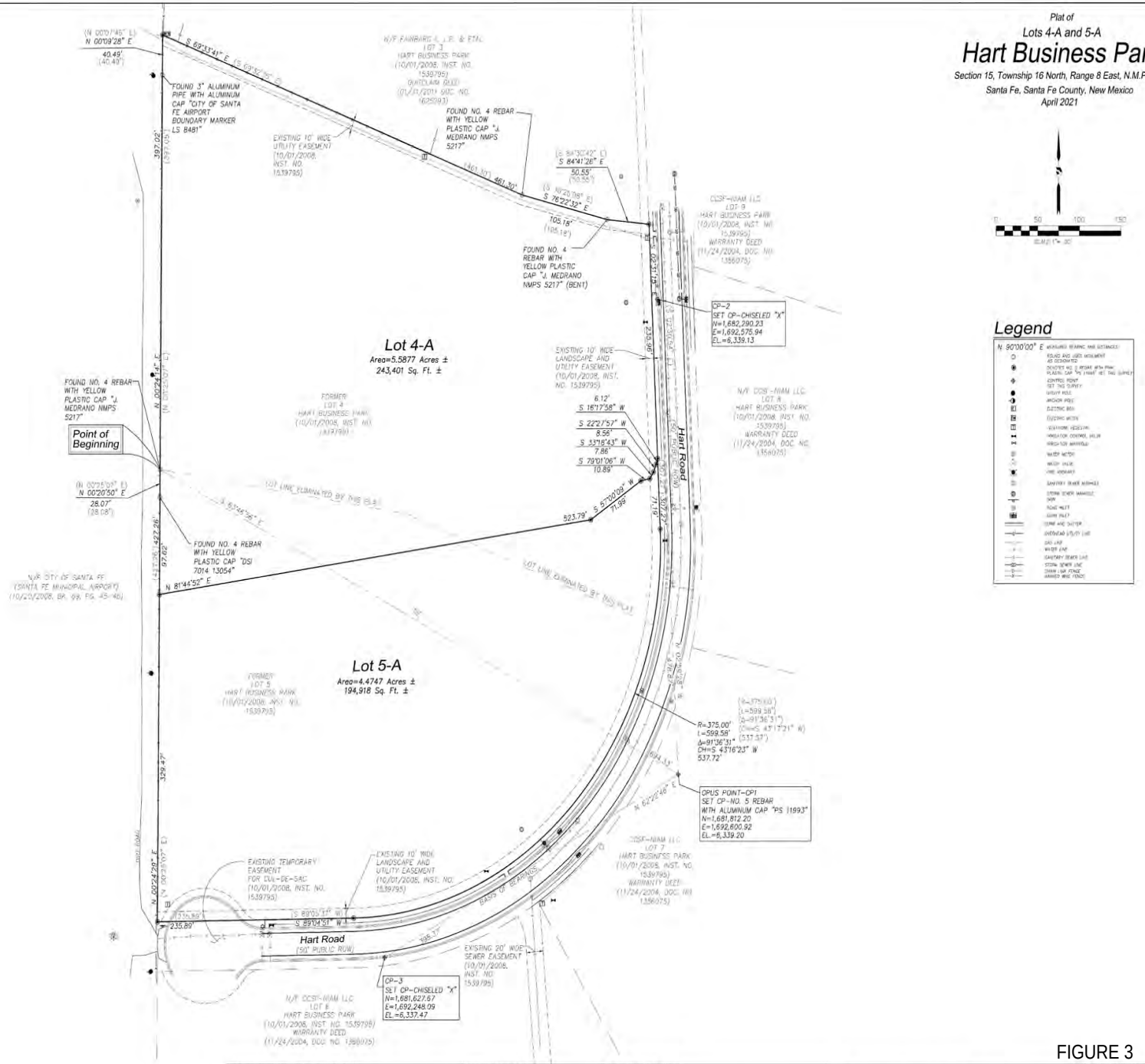
Lots 4-A and 5-A

Hart Business Park

Section 15, Township 16 North, Range 8 East, N.M.P.M.

Santa Fe, Santa Fe County, New Mexico

April 2021



Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
◉	DENOTES NO. 5 REBAR WITH PINK PLASTIC CAP "PS 11993" SET THIS SURVEY
✦	CONTROL POINT SET THIS SURVEY
●	UTILITY POLE
⊕	ANCHOR POLE
▣	ELECTRIC BOX
▣	ELECTRIC METER
▣	TELEPHONE PEDESTAL
▣	IRRIGATION CONTROL VALVE
▣	IRRIGATION MANIFOLD
▣	WATER METER
▣	WATER VALVE
▣	FIRE HYDRANT
▣	SANITARY SEWER MANHOLE
▣	STORM SEWER MANHOLE
▣	SIGN
▣	ROAD INLET
▣	CURB INLET
	CURB AND GUTTER
	OVERHEAD UTILITY LINE
	GAS LINE
	WATER LINE
	SANITARY SEWER LINE
	STORM SEWER LINE
	CHAIN LINK FENCE
	BARBED WIRE FENCE

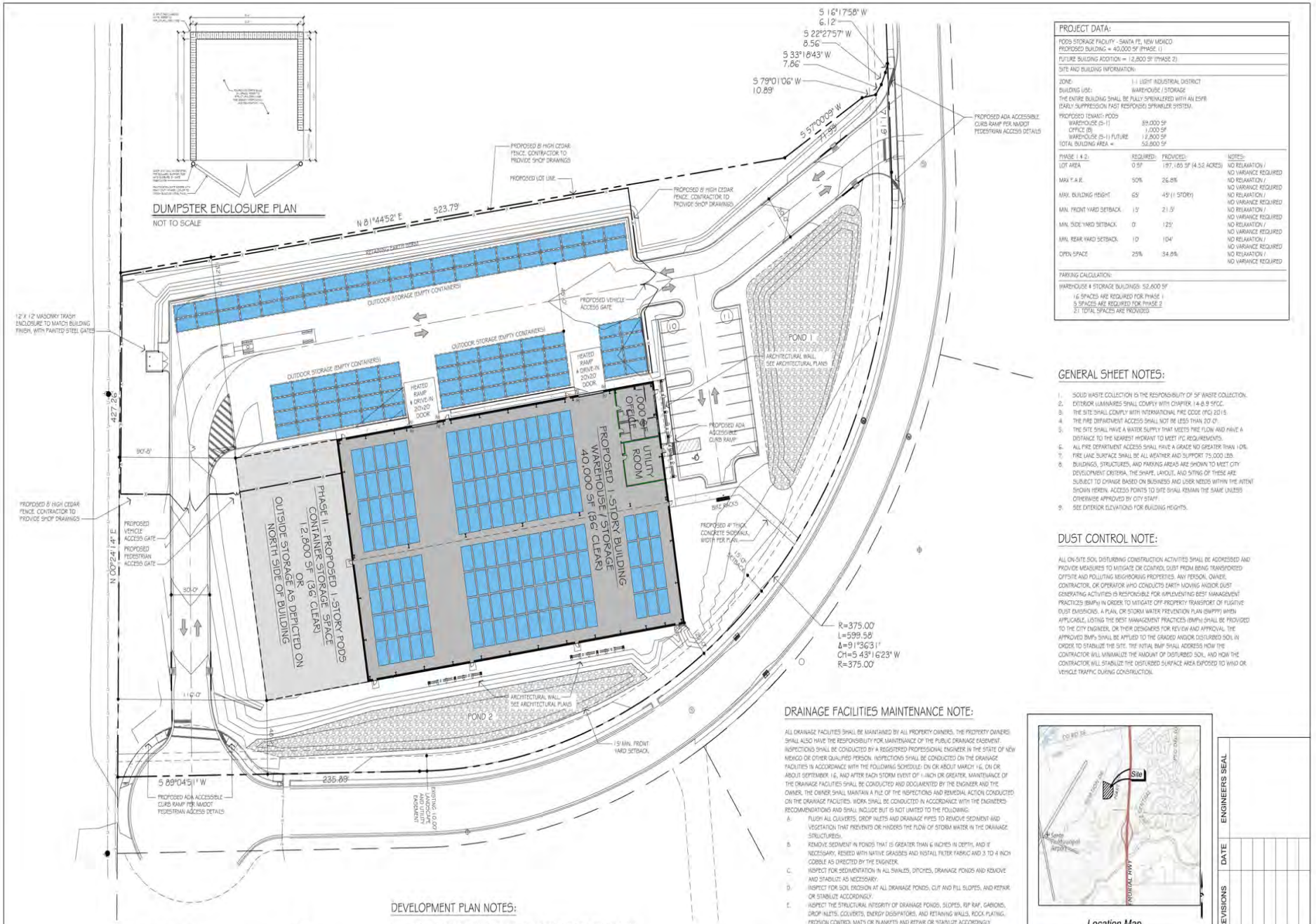
FIGURE 3

COORDINATE AND DIMENSION INFORMATION						PLSS INFORMATION				PROPERTY INFORMATION		PROJECT INFORMATION	
STATE PLANE ZONE: NM-C	GRID GROUND COORDINATES: GRID	TYPE: STANDARD				LAND GRANT: N/A				PROPERTY OWNER: CCSF-NIAM LLC		CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88		ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES		SECTION: 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD	DRAWN BY: JK	CHECKED BY: LM
CONTROL USED: OPUS SOLUTION: 210405MT001 TR575669B532651			BASE POINT FOR SCALING ADJUSTMENT: N = 0 E = 0			CITY: SANTA FE		COUNTY: SANTA FE	STATE: NM	LPC: 1046094423502000000 1046094419465000000		PSI JOB NO.: 216036P	SHEET NUMBER: 2 OF 2
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00038715 GROUND TO GRID: 0.99960301			DISTANCE ANNOTATION: GROUND										
			BEARING ANNOTATION: GRID	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: YES								

PRECISION SURVEYS, INC.

OFFICE LOCATION: 9209 San Mateo Boulevard, NE Albuquerque, NM 87113

505.856.5700 PHONE 505.856.7900 FAX



PROJECT DATA:

PODS STORAGE FACILITY - SANTA FE, NEW MEXICO
PROPOSED BUILDING = 40,000 SF (PHASE 1)
FUTURE BUILDING ADDITION = 12,800 SF (PHASE 2)

SITE AND BUILDING INFORMATION:

ZONE:	I-1 LIGHT INDUSTRIAL DISTRICT
BUILDING USE:	WAREHOUSE / STORAGE

THE ENTIRE BUILDING SHALL BE FULLY SPRINKLERED WITH AN ESFR (EARLY SUPPRESSION FAST RESPONSE) SPRINKLER SYSTEM.

PROPOSED TENANT/ PODS

WAREHOUSE (S-1)	39,000 SF
OFFICE (B)	1,000 SF
WAREHOUSE (S-1) FUTURE	12,800 SF
TOTAL BUILDING AREA =	52,800 SF

PHASE 1 & 2:	REQUIRED:	PROVIDED:	NOTES:
LOT AREA	0 SF	197,165 SF (4.52 ACRES)	NO RELAXATION / NO VARIANCE REQUIRED
MAX F.A.R.	50%	26.8%	NO RELAXATION / NO VARIANCE REQUIRED
MAX. BUILDING HEIGHT	65'	45' (1 STORY)	NO RELAXATION / NO VARIANCE REQUIRED
MIN. FRONT YARD SETBACK	15'	21.5'	NO RELAXATION / NO VARIANCE REQUIRED
MIN. SIDE YARD SETBACK	0'	125'	NO RELAXATION / NO VARIANCE REQUIRED
MIN. REAR YARD SETBACK	10'	104'	NO RELAXATION / NO VARIANCE REQUIRED
OPEN SPACE	25%	34.8%	NO RELAXATION / NO VARIANCE REQUIRED

PARKING CALCULATION:

WAREHOUSE & STORAGE BUILDINGS: 52,600 SF
16 SPACES ARE REQUIRED FOR PHASE 1
5 SPACES ARE REQUIRED FOR PHASE 2
21 TOTAL SPACES ARE PROVIDED

GENERAL SHEET NOTES:

1. SOLID WASTE COLLECTION IS THE RESPONSIBILITY OF SF WASTE COLLECTION.
2. EXTERIOR LUMINAIRES SHALL COMPLY WITH CHAPTER 14-8.9 SFCC.
3. THE SITE SHALL COMPLY WITH INTERNATIONAL FIRE CODE (IFC) 2015.
4. THE FIRE DEPARTMENT ACCESS SHALL NOT BE LESS THAN 20'-0".
5. THE SITE SHALL HAVE A WATER SUPPLY THAT MEETS FIRE FLOW AND HAVE A DISTANCE TO THE NEAREST HYDRANT TO MEET IFC REQUIREMENTS.
6. ALL FIRE DEPARTMENT ACCESS SHALL HAVE A GRADE NO GREATER THAN 10%.
7. FIRE LANE SURFACE SHALL BE ALL WEATHER AND SUPPORT 75,000 LBS.
8. BUILDINGS, STRUCTURES, AND PARKING AREAS ARE SHOWN TO MEET CITY DEVELOPMENT CRITERIA. THE SHAPE, LAYOUT, AND SITING OF THESE ARE SUBJECT TO CHANGE BASED ON BUSINESS AND USER NEEDS WITHIN THE INTENT SHOWN HEREIN. ACCESS POINTS TO SITE SHALL REMAIN THE SAME UNLESS OTHERWISE APPROVED BY CITY STAFF.
9. SEE EXTERIOR ELEVATIONS FOR BUILDING HEIGHTS.

DUST CONTROL NOTE:

ALL ON-SITE 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 EARTH MOVING 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 THEIR DESIGNERS 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 MINIMALIZE THE AMOUNT OF DISTURBED SOIL, AND HOW THE CONTRACTOR WILL STABILIZE THE DISTURBED SURFACE AREA EXPOSED TO WIND OR VEHICLE TRAFFIC DURING CONSTRUCTION.

DRAINAGE FACILITIES MAINTENANCE NOTE:

ALL DRAINAGE FACILITIES SHALL BE MAINTAINED BY ALL PROPERTY OWNERS. THE PROPERTY OWNERS SHALL ALSO HAVE THE RESPONSIBILITY FOR MAINTENANCE OF THE PUBLIC DRAINAGE EASEMENT. 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 16, ON OR ABOUT SEPTEMBER 16, 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 ENGINEERS 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, DRAINAGE 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.

Location Map

DEVELOPMENT PLAN

SCALE: 1" = 30'-0"

REFER TO CIVIL SITE PLAN FOR ADDITIONAL INFORMATION

GUNNISON'S PRAIRIE DOG NOTE:

THE PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE GUANISON'S PRAIRIE DOG ORDINANCE (ARTICLE 14-8.12)

DEVELOPMENT PLAN NOTES:

A. PROPERTY DEVELOPMENT SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 2001 AND SUBSEQUENT AMENDMENTS.
B. PROPERTY DEVELOPMENT SHALL 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 OF BUILDING PERMIT.
C. EACH LOT SHALL BE SERVED BY SEPARATE WATER AND SEWER LINES.
D. SHALL COMPLY WITH INTERNATIONAL FIRE CODE (IFC) 2009 EDITION.
E. PRIOR TO ANY NEW CONSTRUCTION, PLAT SHALL BE SUBMITTED TO FIRE DEPARTMENT FOR COMPLIANCE WITH INTERNATIONAL FIRE CODE (IFC).
F. NO FENCES, WALLS, OR OTHER OBSTRUCTIONS SHALL BE PLACED OR CONSTRUCTED ACROSS OR WITHIN PUBLIC SANITARY SEWER EASEMENTS.
G. WASTEWATER UTILITY EXPANSION CHARGES (LEC) SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.
H. FIRE SERVICE REQUIREMENTS WILL BE DETERMINED BY THE FIRE DEPARTMENT PRIOR TO DEVELOPMENT OR ISSUANCE OF A BUILDING PERMIT.

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

ARCHITECT:
the KENT
ARCHITECTURAL COLLABORATIVE, PLLC
687 OLD WILLETS PATH
HAUPPAUGE • NEW YORK 11788
631.793.9684
rkent.tkac@gmail.com

ENGINEERS SEAL | DATE | REVISIONS

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DEVELOPMENT PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1/16" = 1'-0"	A200

FIGURE 4

REFERENCE
CITY OF SANTA FE GIS MAPPING, 2011 IMAGE

EXISTING CONDITIONS
MAP
FIGURE 5

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

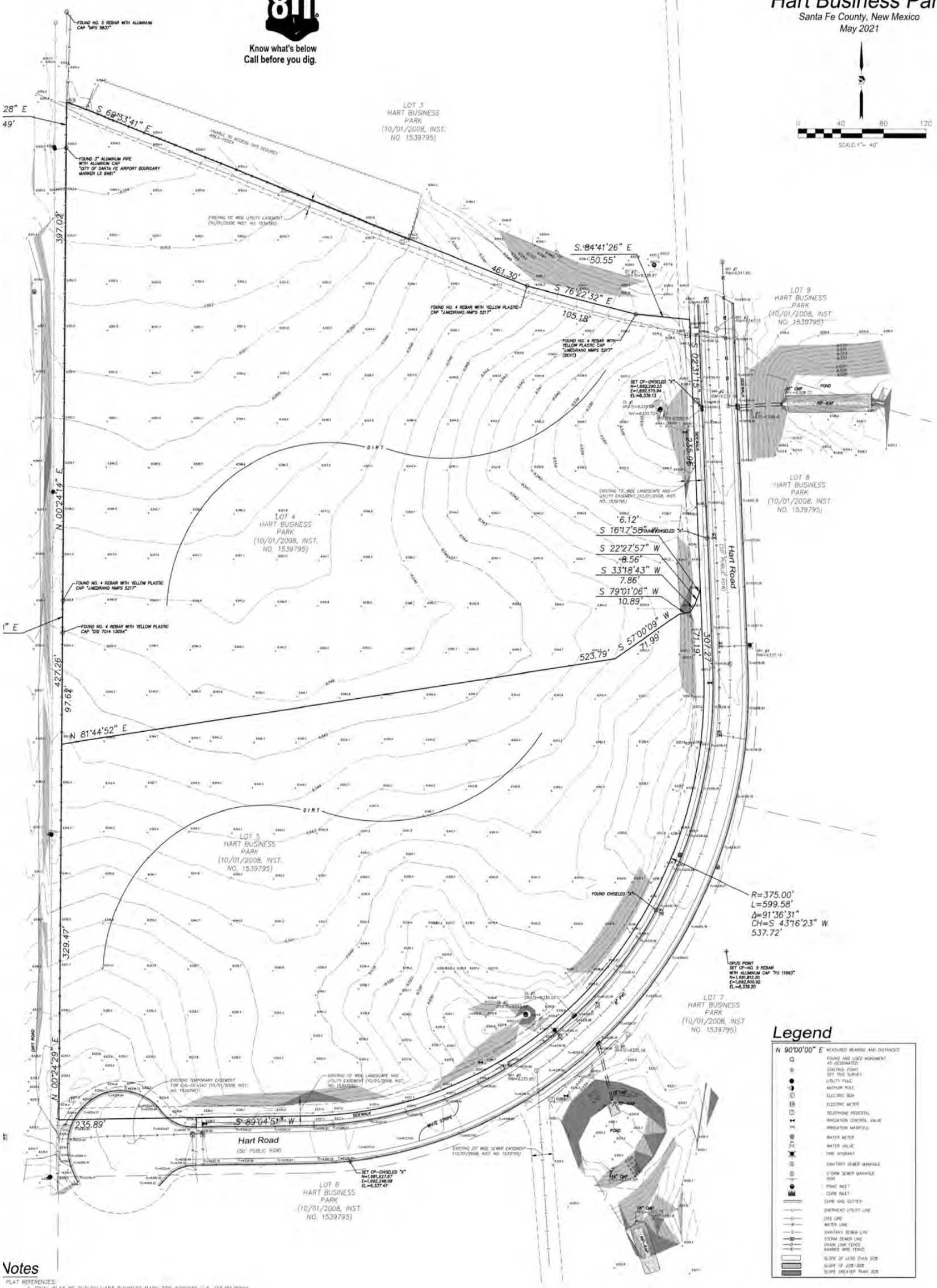
See Sheet 2 of 2 for Invert Details

811 Know what's below Call before you dig.

Topographic Survey and Slope Analysis Map of

Lots 4 and 5 Hart Business Park

Santa Fe County, New Mexico
May 2021



Legend

N 90°00'00" E — MEASURED BEARING AND DISTANCES
FOUND AND USED MONUMENT AS DESIGNATED
CONTROL POINT SET THIS SURVEY
UTILITY POLE
ANCHOR POLE
ELECTRIC BOX
ELECTRIC METER
TELEPHONE PEDESTAL
IRRIGATION CONTROL VALVE
IRRIGATION MARKER
WATER METER
WATER VALVE
FIRE HYDRANT
SANITARY SEWER MANHOLE
STORM SEWER MANHOLE
SIGN
POND INLET
CURB INLET
CURB AND GUTTER
OVERHEAD UTILITY LINE
GAS LINE
WATER LINE
SANITARY SEWER LINE
STORM SEWER LINE
CHAIN LINK FENCE
BARBED WIRE FENCE
SLOPE OF LESS THAN 20%
SLOPE OF 20%-30%
SLOPE GREATER THAN 30%

Notes

PLAT REFERENCES:
A. FINAL PLAT OF SURVEY HART BUSINESS PARK FOR CCSF509 LLC. (10/01/2008 INSTRUMENT NO. 1539795)

ELEVATION DATUM IS BASED ON NAVD 1988 FROM OPUS SOLUTION: 210405MT001 TR5756698532851

LOCATION OF UNDERGROUND UTILITIES AND EASEMENTS NOT VERIFIED BY THIS PLAN. UNDERGROUND UTILITIES MAY EXIST WHERE NONE ARE SHOWN. UNDERGROUND UTILITY LOCATION IS BASED UPON INFORMATION PROVIDED BY OTHERS AND MAY BE INCOMPLETE OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE OWNER SHOULD INFORM HIMSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE OWNER IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND UTILITY LINES. THE OWNER IS URGED TO COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE OWNER SHOULD MAKE THEMSELVES AWARE OF REGULATIONS STATED IN CHAPTER 62, ARTICLE 14, NMSA 1978 RELATING TO EXCAVATION DAMAGE TO PIPELINES AND UNDERGROUND UTILITY LINES.

THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1"=40' WITH A CONTOUR INTERVAL OF ONE FOOT.

NM ONE CALL TICKET NUMBER: 21AP050447

Surveyor's Certificate

I, LARRY W. MEDRANO, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEW MEXICO, LICENSE NUMBER 11993, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS PREPARED BY ME BY FIELD SURVEYS USING GPS RTK MEASUREMENTS. ELEVATIONS BASED ON OPUS SOLUTION: 210405MT001 TR5756698532851 (NAVD 1988). THIS SURVEY MEETS THE MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYING IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND SURVEYORS. THIS IS NOT A BOUNDARY SURVEY.

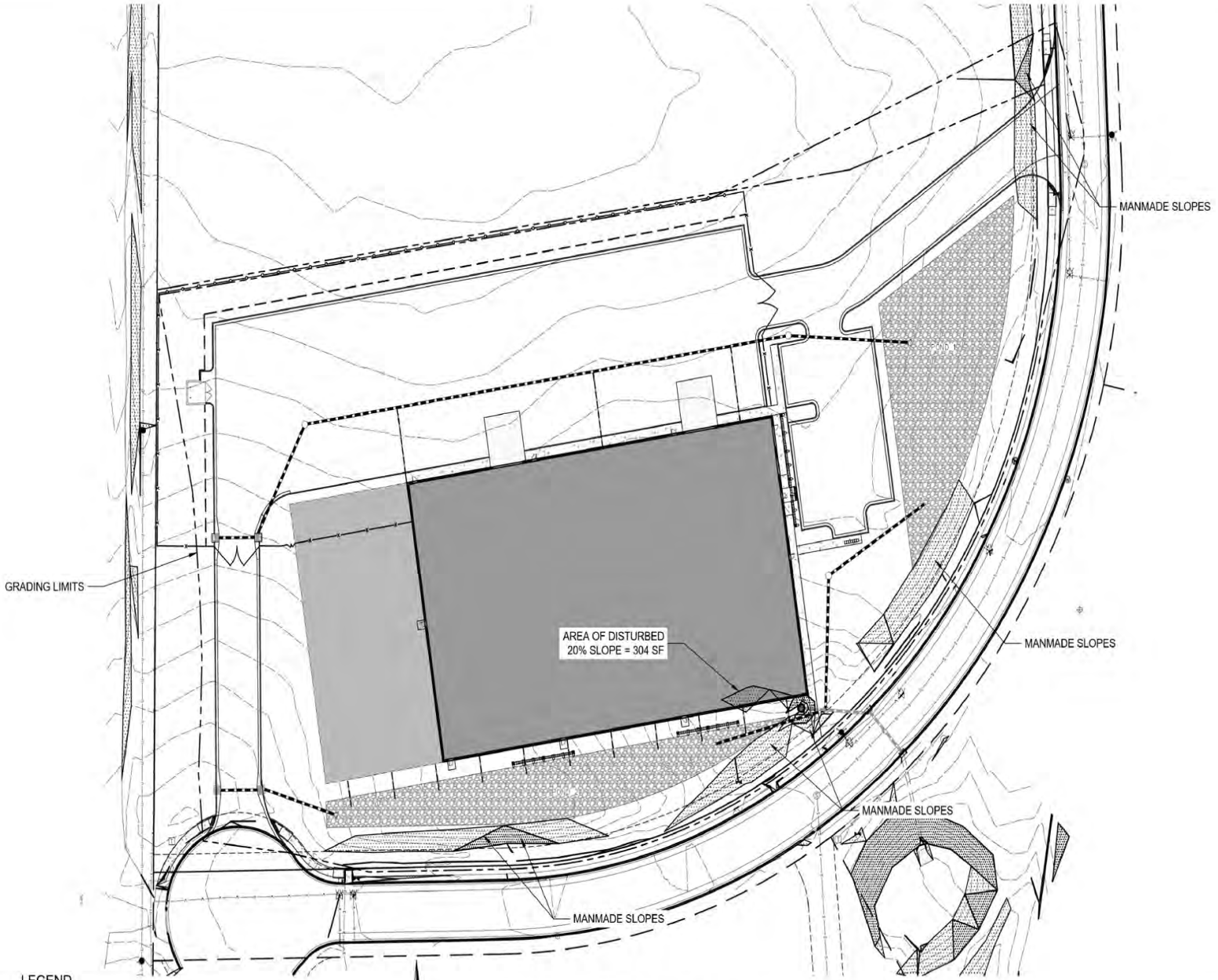
LARRY W. MEDRANO — DATE
N.M.P.S. No. 11993
DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION

LARRY W. MEDRANO — NEW MEXICO — 11993 — REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION						PLSS INFORMATION				PROPERTY INFORMATION		PROJECT INFORMATION	
PLANE ZONE: M-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD				LAND GRANT: SANTA FE GRANT				PROPERTY OWNER: CCSF-NIAM LLC		CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
HORIZONTAL DATUM: 83	VERTICAL DATUM: NAVD88		ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES		SECTION: 10 & 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD	DRAWN BY: JK	CHECKED BY: LM
EX. USED: S SOLUTION: 210405MT001 TR5756698532851			BASE POINT FOR SCALING AND/OR ROTATION: N = 0 E = 0			CITY: N/A		COUNTY: SANTA FE	STATE: NM	UPC: 1046094423502000000 1046094419465000000		PSI JOB NO: 216036T	SHEET NUMBER: 1 OF 2
COMBINED SCALE FACTOR: D TO GROUND: 1.00039715 OUND TO GRID: 0.99960301		DISTANCE ANNOTATION: GROUND											
		BEARING ANNOTATION: GRID	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: YES									

PRECISION SURVEYS, INC.
OFFICE LOCATION: 9200 San Mateo Boulevard, NE Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

FIGURE 6



LEGEND

AREA OF 20% TO 30% SLOPE

AREA OF 30% AND GREATER SLOPE

THERE ARE NO 30% AND GREATER NATURAL SLOPES BEING DISTURBED WITHIN THE PROJECT LIMITS.

N

SLOPE ANALYSIS CALCULATIONS

SCALE: 1" = 30'

FIGURE 7

0 15 30 60

SCALE: 1" = 30'

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		

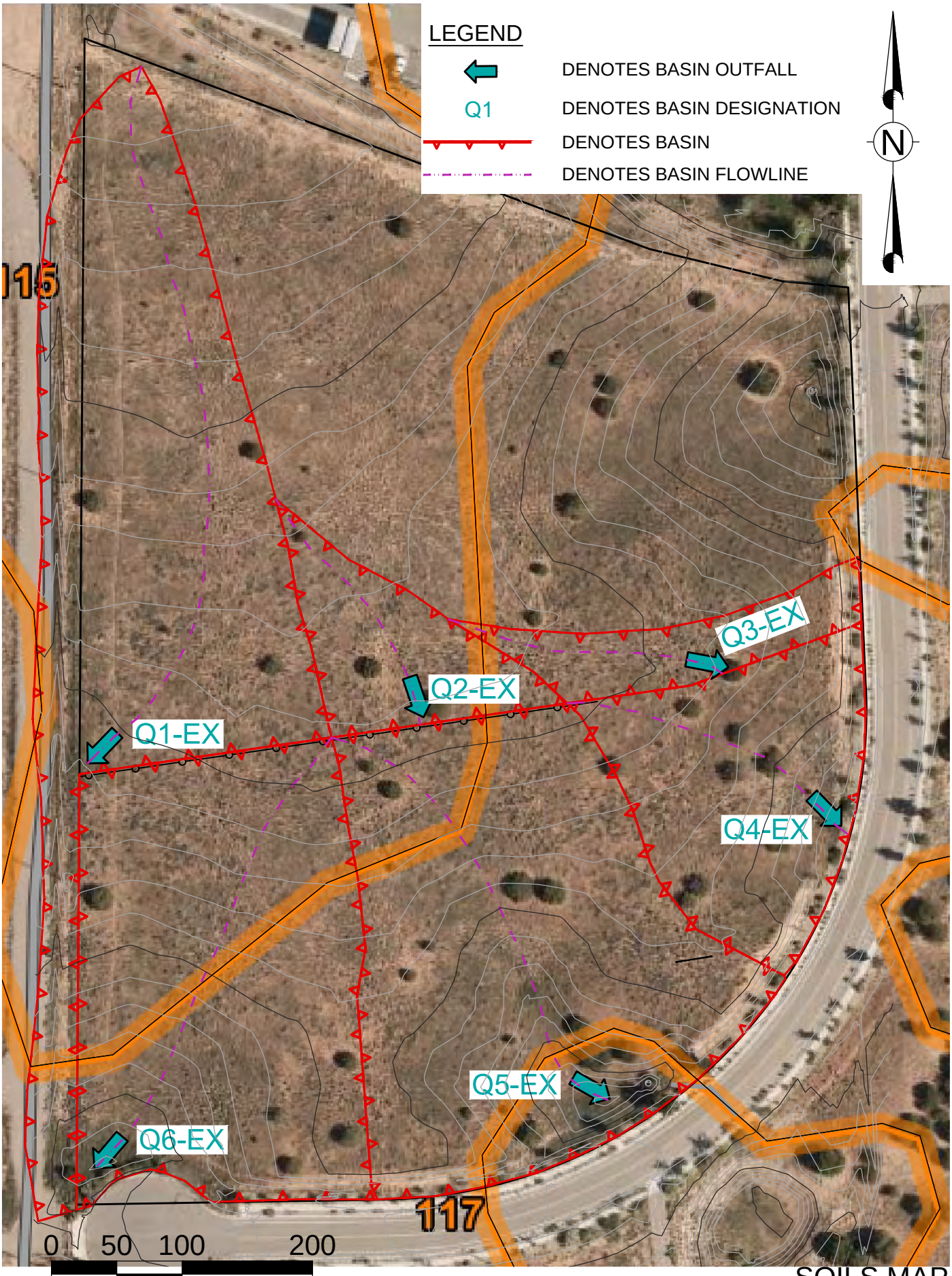
CASE # _____

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

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

SLOPE ANALYSIS CALCULATIONS

DATE:	SCALE:	SHEET:
MAY 2021	1" = 30'	C-102



SCALE: 1" = 100'

SOILS MAP
FIGURE 8

EXISTING CONDITIONS DRAINAGE MAP
FIGURE 9

LEGEND

DENOTES BASIN OUTFALL

Q1-PRO DENOTES BASIN DESIGNATION

DENOTES BASIN

DENOTES BASIN FLOWLINE

N

0 50 100 200

SCALE: 1" = 100'

PROPOSED CONDITION DRAINAGE MAP
FIGURE 10

LEGEND

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

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that 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

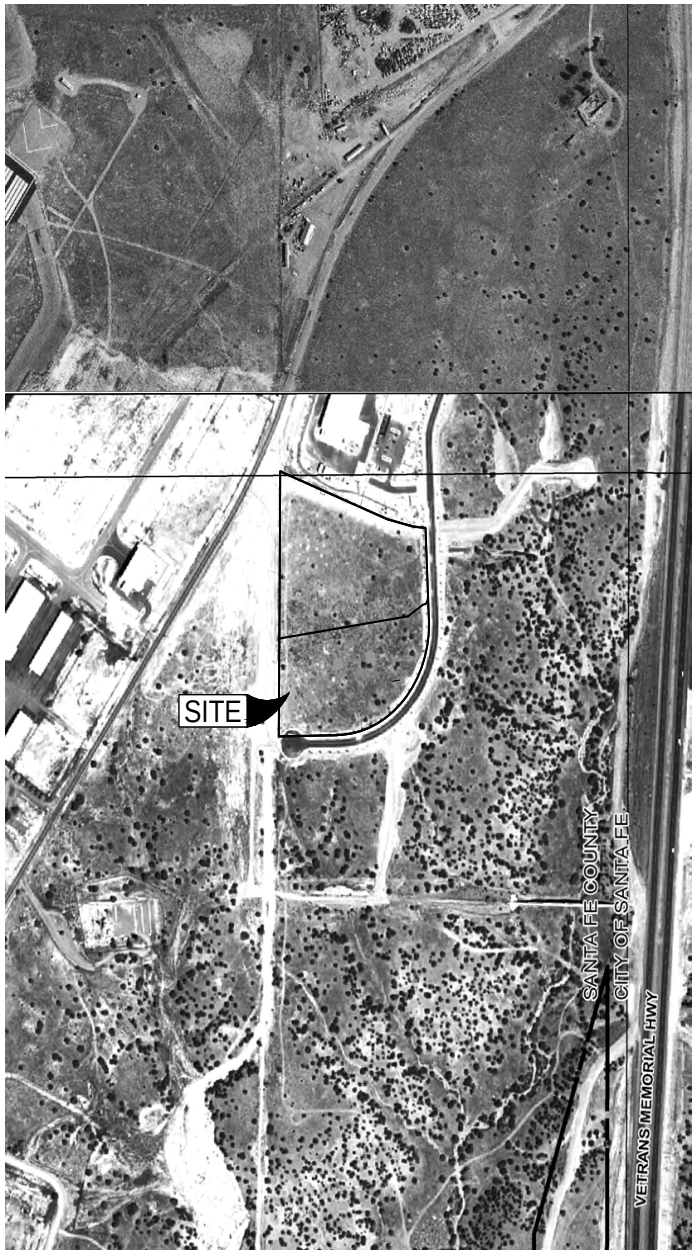
OTHERWISE PROTECTED AREAS (OPAs)

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.
- 513 (EL 987) — 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

- A — A: Cross section line
- 23 — 23: Transect line
- 97° 07' 30", 32° 22' 30": Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4 276 000mE: 1000-meter Universal Transverse Mercator grid values, zone 13
- 600000 FT: 5000-foot grid ticks: New Mexico State Plane coordinate system, Central zone (FIPSZONE 3002), Transverse Mercator
- DX5510 X: Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5: River Mile



* MAP 35049C0389D WAS NOT UPDATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE 2012 MAP REVISIONS (REVISION "E").

NFIP — NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0389D

FIRM

FLOOD INSURANCE RATE MAP

SANTA FE COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 389 OF 1100

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SANTA FE, CITY OF	350070	0389	D
SANTA FE COUNTY (UNINCORPORATED AREAS)	350069	0389	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 35049C0389D*

EFFECTIVE DATE JUNE 17, 2008

Federal Emergency Management Agency

NFIP — NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0502E

FIRM

FLOOD INSURANCE RATE MAP

SANTA FE COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 502 OF 1100

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

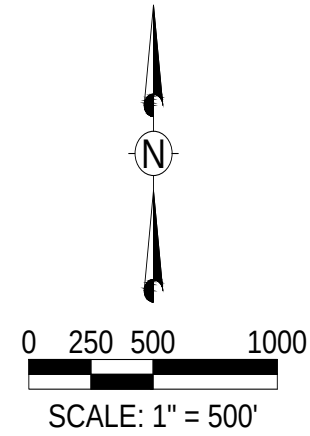
COMMUNITY	NUMBER	PANEL	SUFFIX
SANTA FE, CITY OF	350070	0502	E
SANTA FE COUNTY (UNINCORPORATED AREAS)	350069	0502	E

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 35049C0502E

MAP REVISED DECEMBER 4, 2012

Federal Emergency Management Agency



FLOOD INSURANCE RATE MAP
FIGURE 11

APPENDIX B

EXISTING DRAINAGE CALCULATIONS

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q1-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q1-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q1-EX		Outlet	2.13	87	.33

Total area: 2.13 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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			
Q1-EX	3.31	3.96	4.58
REACHES			
OUTLET	3.31	3.96	4.58

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			
Q1-EX	3.31 12.08	3.96 12.09	4.58 12.10
REACHES			
OUTLET	3.31	3.96	4.58

CPC

PODS AT HART BUSINESS PARK
Q1-EX
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-EX	2.13	0.330	87	Outlet	

Total Area: 2.13 (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)
Q1-EX							
SHEET	100	0.0140	0.150				0.272
SHALLOW	473	0.0199	0.050				0.058
						Time of Concentration	.33

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q1-EX	Dirt (w/ right-of-way)		C	.2	87
	Herbaceous	(poor)	C	1.93	87
	Total Area / Weighted Curve Number			2.13	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q2-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q2-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q2-EX		Outlet	0.39	87	.279

Total area: .39 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	0.65	0.78	0.90
REACHES			
OUTLET	0.65	0.78	0.90

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-EX	0.65 12.06	0.78 12.06	0.90 12.07
REACHES			
OUTLET	0.65	0.78	0.90

CPC

PODS AT HART BUSINESS PARK
Q2-EX
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-EX	.39	0.279	87	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)
Q2-EX							
SHEET	100	0.0155	0.150				0.262
SHALLOW	109	0.0128	0.050				0.017
						Time of Concentration	.279

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q2-EX	Herbaceous	(poor)	C	.39	87
	Total Area / Weighted Curve Number			.39	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q3-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q3-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q3-EX		Outlet	0.29	87	.357

Total area: .29 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	0.43	0.51	0.60
REACHES			
OUTLET	0.43	0.51	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			
Q3-EX	0.43 12.10	0.51 12.11	0.60 12.11
REACHES			
OUTLET	0.43	0.51	0.60

CPC

PODS AT HART BUSINESS PARK
Q3-EX
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-EX	.29	0.357	87	Outlet	

Total Area: .29 (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-EX							
SHEET	100	0.0080	0.150				0.341
SHALLOW	116	0.0166	0.050				0.016
						Time of Concentration	.357

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q3-EX	Herbaceous	(poor)	C	.29	87
	Total Area / Weighted Curve Number			.29	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q4-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q4-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q4-EX		Outlet	0.83	87	.253

Total area: .83 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	1.45	1.72	2.00
REACHES			
OUTLET	1.45	1.72	2.00

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-EX	1.45 12.05	1.72 12.04	2.00 12.04
REACHES			
OUTLET	1.45	1.72	2.00

CPC

PODS AT HART BUSINESS PARK
Q4-EX
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-EX	.83	0.253	87	Outlet	

Total Area: .83 (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-EX							
SHEET	100	0.0190	0.150				0.241
SHALLOW	144	0.0453	0.050				0.012
						Time of Concentration	.253

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q4-EX	Herbaceous	(poor)	C	.83	87
	Total Area / Weighted Curve Number			.83	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q5-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q5-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q5-EX		Outlet	1.95	86	.248

Total area: 1.95 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	3.25	3.89	4.54
REACHES			
OUTLET	3.25	3.89	4.54

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			
Q5-EX	3.25 12.04	3.89 12.04	4.54 12.04
REACHES			
OUTLET	3.25	3.89	4.54

CPC

PODS AT HART BUSINESS PARK
Q5-EX
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-EX	1.95	0.248	86	Outlet	

Total Area: 1.95 (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-EX							
SHEET	100	0.0223	0.150				0.226
SHALLOW	266	0.0442	0.050				0.022
						Time of Concentration	.248

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q5-EX	Herbaceous	(poor)	B	.23	80
	Herbaceous	(poor)	C	1.72	87
	Total Area / Weighted Curve Number			1.95	86

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q6-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q6-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q6-EX		Outlet	1.65	87	.254

Total area: 1.65 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	2.87	3.42	3.96
REACHES			
OUTLET	2.87	3.42	3.96

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-EX	2.87 12.05	3.42 12.04	3.96 12.05
REACHES			
OUTLET	2.87	3.42	3.96

CPC

PODS AT HART BUSINESS PARK
Q6-EX
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-EX	1.65	0.254	87	Outlet	

Total Area: 1.65 (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)
Q6-EX							
SHEET	100	0.0217	0.150				0.229
SHALLOW	277	0.0355	0.050				0.025
						Time of Concentration	.254

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q6-EX	Herbaceous	(poor)	C	1.65	87
	Total Area / Weighted Curve Number			1.65	87

APPENDIX C
DEVELOPED DRAINAGE CALCULATIONS

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q4-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q4-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q4-PRO		Outlet	0.26	88	.132

Total area: .26 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.56	0.67	0.77
REACHES			
OUTLET	0.56	0.67	0.77

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			
Q4-PRO	0.56 11.96	0.67 11.95	0.77 11.96
REACHES			
OUTLET	0.56	0.67	0.77

CPC

PODS AT HART BUSINESS PARK
Q4-PRO
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-PRO	.26	0.132	88	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)
Q4-PRO							
SHEET	81	0.0810	0.150				0.114
SHALLOW	117	0.0078	0.025				0.018
						Time of Concentration	.132

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q4-PRO	Open space; grass cover 50% to 75% (fair)	C	.13	79
	Paved parking lots, roofs, driveways	C	.13	98
	Total Area / Weighted Curve Number		.26	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q5-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q5-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q5-PRO		Outlet	0.46	88	0.1

Total area: .46 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	1.05	1.24	1.44
REACHES			
OUTLET	1.05	1.24	1.44

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-PRO	1.05 11.93	1.24 11.93	1.44 11.93
REACHES			
OUTLET	1.05	1.24	1.44

CPC

PODS AT HART BUSINESS PARK
Q5-PRO
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-PRO	.46	0.100	88	Outlet	

Total Area: .46 (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-PRO							
SHEET	100	0.0391	0.011				0.022
SHALLOW	43	0.0070	0.025				0.007
SHALLOW	22	0.1268	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
Q5-PRO	Open space; grass cover 50% to 75% (fair)	C	.24	79
	Paved parking lots, roofs, driveways	C	.22	98
	Total Area / Weighted Curve Number		.46	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q6-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q6-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q6-PRO		Outlet	0.08	79	.153

Total area: .08 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.11	0.13	0.16
REACHES			
OUTLET	0.11	0.13	0.16

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			
Q6-PRO	0.11	0.13	0.16
	12.00	11.99	11.99
REACHES			
OUTLET	0.11	0.13	0.16

CPC

PODS AT HART BUSINESS PARK
Q6-PRO
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-PRO	.08	0.153	79	Outlet	

Total Area: .08 (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-PRO							
SHEET	92	0.0503	0.150				0.153
						Time of Concentration	.153

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q6-PRO	Open space; grass cover 50% to 75% (fair)	C	.08	79
	Total Area / Weighted Curve Number		.08	79

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q7-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q7-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q7-PRO		Outlet	0.33	76	0.1

Total area: .33 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.37	0.48	0.59
REACHES			
OUTLET	0.37	0.48	0.59

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-PRO	0.37 11.94	0.48 11.94	0.59 11.94
REACHES			
OUTLET	0.37	0.48	0.59

CPC

PODS AT HART BUSINESS PARK
Q7-PRO
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-PRO	.33	0.100	76	Outlet	

Total Area: .33 (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-PRO							
SHEET	47	0.0836	0.150				0.073
SHALLOW	107	0.0262	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
Q7-PRO	Open space; grass cover 50% to 75% (fair)	B	.11	69
	Open space; grass cover 50% to 75% (fair)	C	.21	79
	Paved parking lots, roofs, driveways	C	.01	98
	Total Area / Weighted Curve Number		.33	76

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q8-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q8-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q8-PRO		Outlet	0.6	98	0.1

Total area: .60 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	1.98	2.23	2.47
REACHES			
OUTLET	1.98	2.23	2.47

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-PRO	1.98	11.93	2.23	11.92	2.47	11.93
REACHES						
OUTLET	1.98		2.23		2.47	

CPC

PODS AT HART BUSINESS PARK
Q8-PRO
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-PRO	.60	0.100	98	Outlet	

Total Area: .60 (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-PRO							
SHEET	79	0.0100	0.011				0.032
						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
Q8-PRO	Paved parking lots, roofs, driveways	C	.6	98
	Total Area / Weighted Curve Number		.6	98

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q9-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q9-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q9-PRO		Outlet	0.62	98	0.1

Total area: .62 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	2.04	2.30	2.55
REACHES			
OUTLET	2.04	2.30	2.55

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						
Q9-PRO	2.04	11.93	2.30	11.92	2.55	11.93
REACHES						
OUTLET	2.04		2.30		2.55	

CPC

PODS AT HART BUSINESS PARK
Q9-PRO
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-PRO	.62	0.100	98	Outlet	

Total Area: .62 (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-PRO							
SHEET	100	0.0100	0.011				0.039
SHALLOW	14	0.0100	0.025				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
Q9-PRO	Paved parking lots, roofs, driveways	C	.62	98
	Total Area / Weighted Curve Number		.62	98

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q10-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q10-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q10-PRO		Outlet	1.71	94	.14

Total area: 1.71 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	4.70	5.39	6.05
REACHES			
OUTLET	4.70	5.39	6.05

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-PRO	4.70 11.95	5.39 11.96	6.05 11.95
REACHES			
OUTLET	4.70	5.39	6.05

CPC

PODS AT HART BUSINESS PARK
Q10-PRO
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-PRO	1.71	0.140	94	Outlet	

Total Area: 1.71 (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-PRO							
SHEET	21	0.1019	0.150				0.035
SHALLOW	482	0.0050	0.025				0.093
SHALLOW	123	0.0198	0.025				0.012
						Time of Concentration	.14

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q10-PRO	Open space; grass cover 50% to 75% (fair)	C	.4	79
	Paved parking lots, roofs, driveways	C	1.31	98
	Total Area / Weighted Curve Number		1.71	94

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q11-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q11-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q11-PRO		Outlet	0.04	89	0.1

Total area: .04 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.09	0.11	0.12
REACHES			
OUTLET	0.09	0.11	0.12

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-PRO	0.09 11.93	0.11 11.93	0.12 11.93
REACHES			
OUTLET	0.09	0.11	0.12

CPC

PODS AT HART BUSINESS PARK
Q11-PRO
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-PRO	.04	0.100	89	Outlet	

Total Area: .04 (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-PRO							
SHEET	45	0.1293	0.150				0.059
						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-PRO	Open space; grass cover 50% to 75% (fair)	C	.02	79
	Paved parking lots, roofs, driveways	C	.02	98
	Total Area / Weighted Curve Number		.04	89

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q12-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q12-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q12-PRO		Outlet	0.23	80	.237

Total area: .23 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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			
Q12-PRO	0.28	0.35	0.42
REACHES			
OUTLET	0.28	0.35	0.42

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						
Q12-PRO	0.28	12.04	0.35	12.05	0.42	12.04
REACHES						
OUTLET	0.28		0.35		0.42	

CPC

PODS AT HART BUSINESS PARK
Q12-PRO
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
Q12-PRO	.23	0.237	80	Outlet	

Total Area: .23 (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)
Q12-PRO							
SHEET	100	0.0235	0.150				0.221
SHALLOW	200	0.0444	0.050				0.016
						Time of Concentration	.237

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q12-PRO	Open space; grass cover 50% to 75% (fair)	C	.22	79
	Paved parking lots, roofs, driveways	C	.01	98
	Total Area / Weighted Curve Number		.23	80

APPENDIX D

EXISTING CONDITIONS ROUTING CALCULATIONS

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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	------	-------	1.334	-------	-------	0.000	3.475	4.154	4.821	Q1-EX
2	Reach	1	-------	1.227	-------	-------	0.000	3.235	3.874	4.502	FLOW TO Q6-EX
4	SCS Runoff	------	-------	0.273	-------	-------	0.000	0.706	0.843	0.978	Q2-EX
5	Reach	4	-------	0.244	-------	-------	0.000	0.646	0.774	0.900	FLOW TO Q5-EX
7	SCS Runoff	------	-------	0.174	-------	-------	0.000	0.454	0.543	0.630	Q3-EX
8	Reach	7	-------	0.173	-------	-------	0.000	0.452	0.541	0.628	FLOW TO Q4-EX
10	SCS Runoff	------	-------	0.580	-------	-------	0.000	1.502	1.794	2.081	Q4-EX
11	Combine	8, 10	-------	0.737	-------	-------	0.000	1.916	2.289	2.655	FLOW TO EAST
13	SCS Runoff	------	-------	1.306	-------	-------	0.000	3.512	4.218	4.913	Q5-EX
14	Combine	5, 13	-------	1.515	-------	-------	0.000	4.072	4.888	5.694	FLOW TO EX POND
15	Reservoir	14	-------	0.112	-------	-------	0.000	0.614	0.693	0.759	OUTFLOW POND
17	SCS Runoff	------	-------	1.153	-------	-------	0.000	2.986	3.567	4.136	Q6-EX
18	Combine	2, 17	-------	2.231	-------	-------	0.000	5.874	7.034	8.179	FLOW TO SOUTHWEST
20	Combine	11, 15, 18,	-------	2.952	-------	-------	0.000	8.202	9.839	11.43	TOTAL OUTFLOW FROM SITE

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	3.475	1	725	10,853	------	------	------	Q1-EX
2	Reach	3.235	1	729	10,850	1	------	------	FLOW TO Q6-EX
4	SCS Runoff	0.706	1	723	2,012	------	------	------	Q2-EX
5	Reach	0.646	1	727	1,983	4	------	------	FLOW TO Q5-EX
7	SCS Runoff	0.454	1	726	1,492	------	------	------	Q3-EX
8	Reach	0.452	1	727	1,346	7	------	------	FLOW TO Q4-EX
10	SCS Runoff	1.502	1	723	4,282	------	------	------	Q4-EX
11	Combine	1.916	1	724	5,627	8, 10	------	------	FLOW TO EAST
13	SCS Runoff	3.512	1	722	9,442	------	------	------	Q5-EX
14	Combine	4.072	1	723	11,425	5, 13	------	------	FLOW TO EX POND
15	Reservoir	0.614	1	750	9,380	14	6334.93	5,421	OUTFLOW POND
17	SCS Runoff	2.986	1	723	8,512	------	------	------	Q6-EX
18	Combine	5.874	1	726	19,362	2, 17	------	------	FLOW TO SOUTHWEST
20	Combine	8.202	1	725	34,370	11, 15, 18,	------	------	TOTAL OUTFLOW FROM SITE

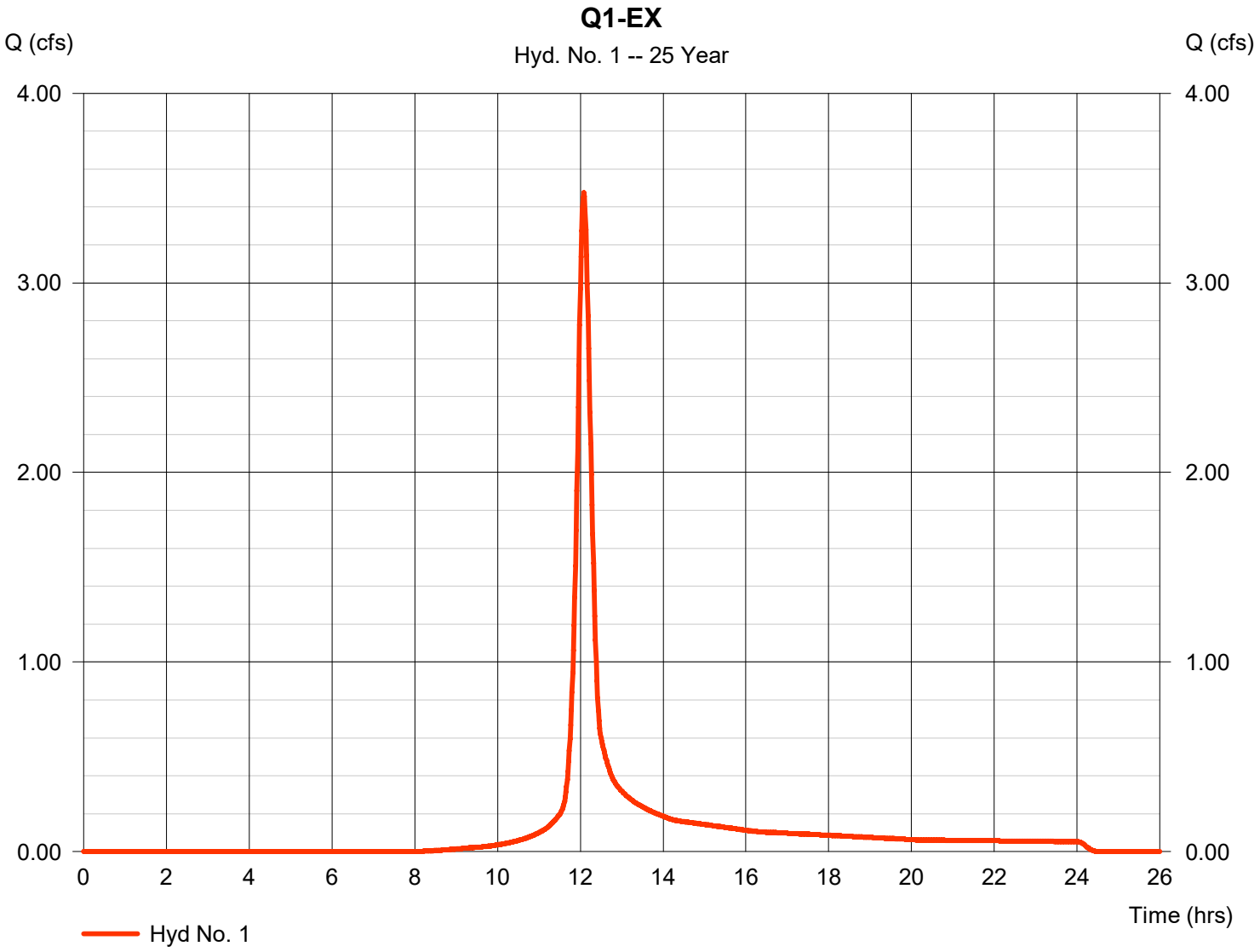
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020 Thursday, 05 / 13 / 2021

Hyd. No. 1

Q1-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.475 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.08 hrs
Time interval	=	1 min	Hyd. volume	=	10,853 cuft
Drainage area	=	2.130 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.80 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



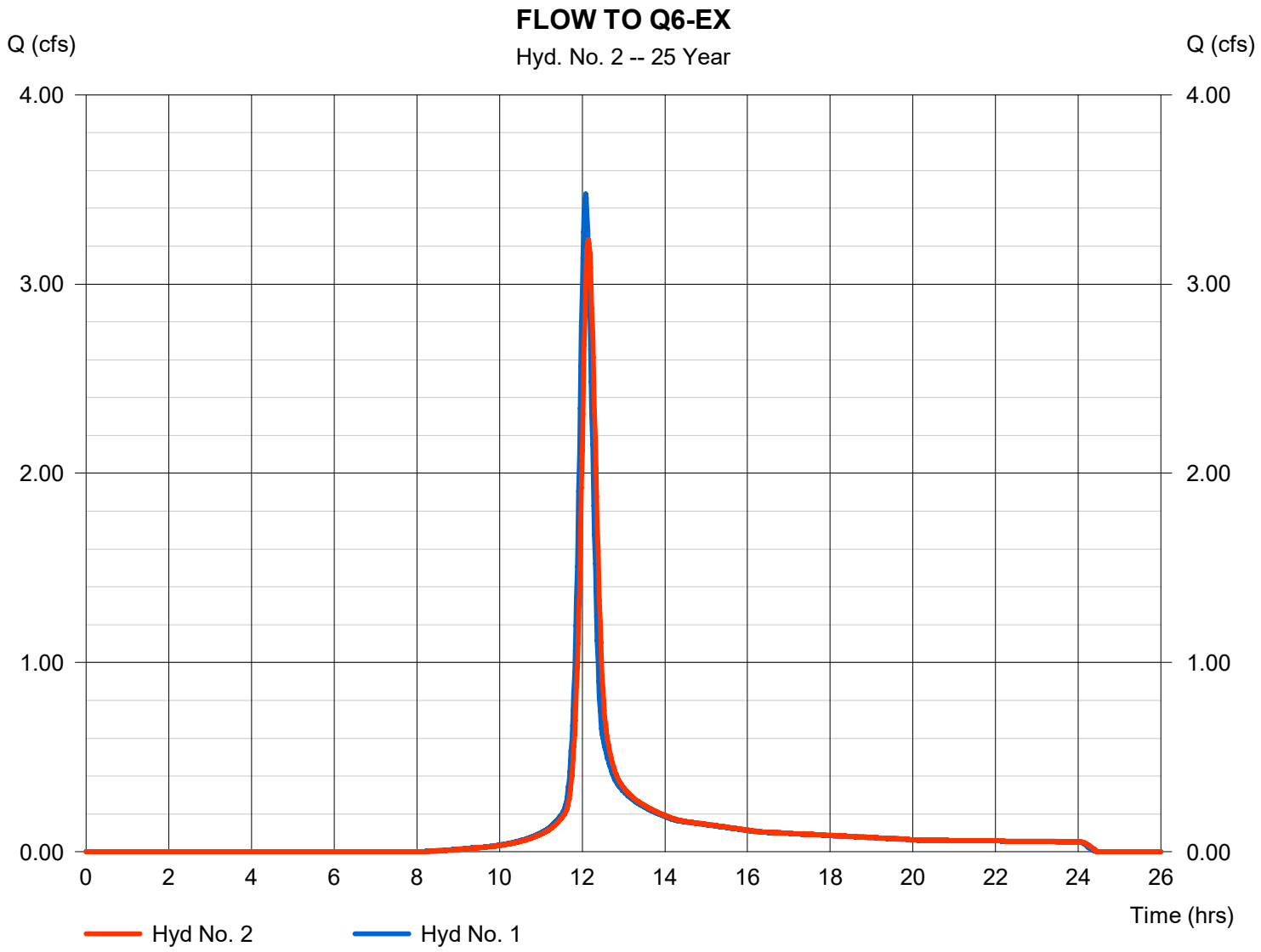
Hydrograph Report

Hyd. No. 2

FLOW TO Q6-EX

Hydrograph type	= Reach	Peak discharge	= 3.235 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 10,850 cuft
Inflow hyd. No.	= 1 - Q1-EX	Section type	= Trapezoidal
Reach length	= 300.0 ft	Channel slope	= 3.7 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 30.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.116	Rating curve m	= 1.071
Ave. velocity	= 1.20 ft/s	Routing coeff.	= 0.2283

Modified Att-Kin routing method used.

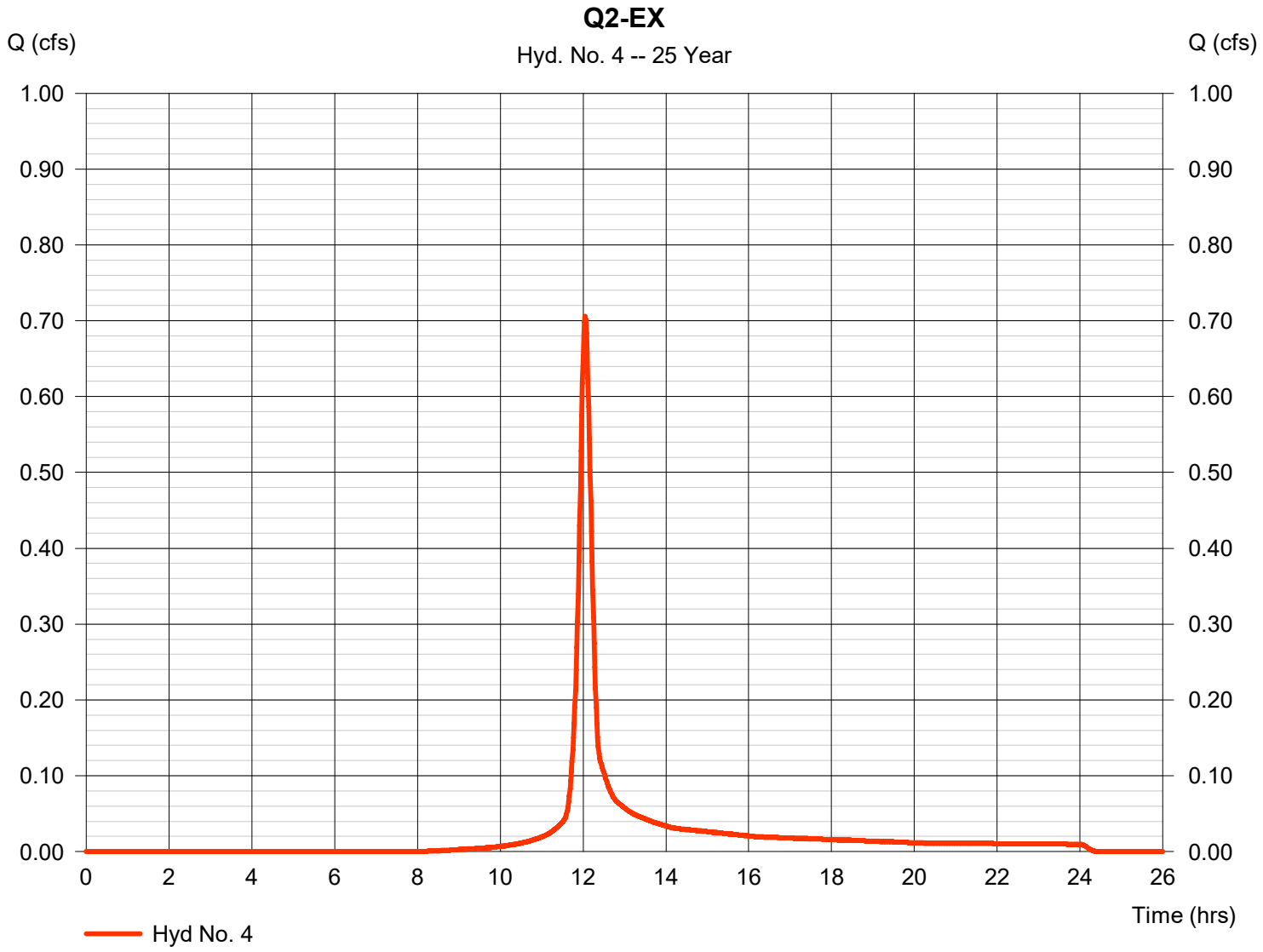


Hydrograph Report

Hyd. No. 4

Q2-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 0.706 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 2,012 cuft
Drainage area	= 0.390 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.74 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



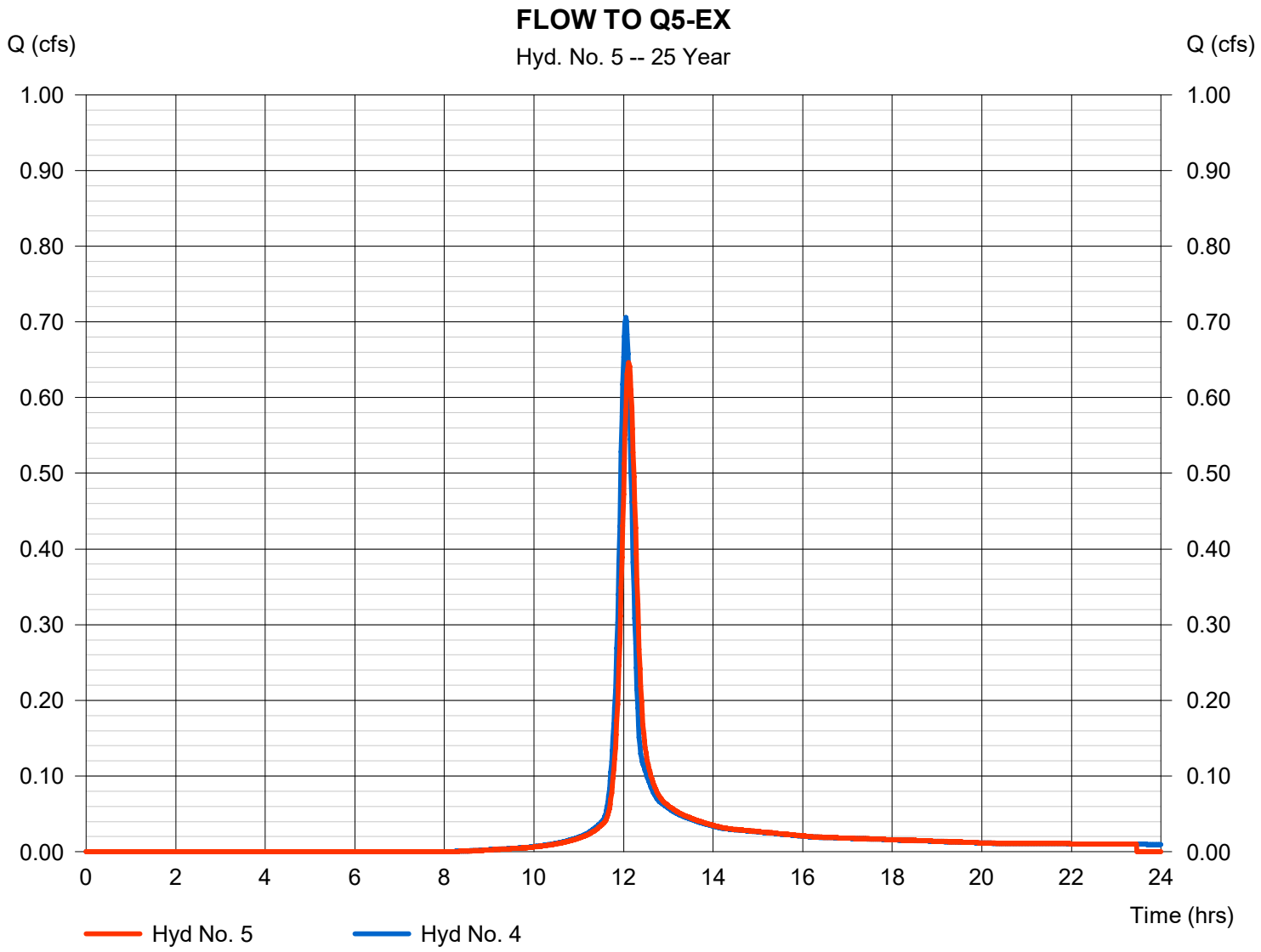
Hydrograph Report

Hyd. No. 5

FLOW TO Q5-EX

Hydrograph type	=	Reach	Peak discharge	=	0.646 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	1,983 cuft
Inflow hyd. No.	=	4 - Q2-EX	Section type	=	Trapezoidal
Reach length	=	328.0 ft	Channel slope	=	4.2 %
Manning's n	=	0.035	Bottom width	=	17.0 ft
Side slope	=	16.0:1	Max. depth	=	1.0 ft
Rating curve x	=	1.317	Rating curve m	=	1.117
Ave. velocity	=	1.23 ft/s	Routing coeff.	=	0.2238

Modified Att-Kin routing method used.

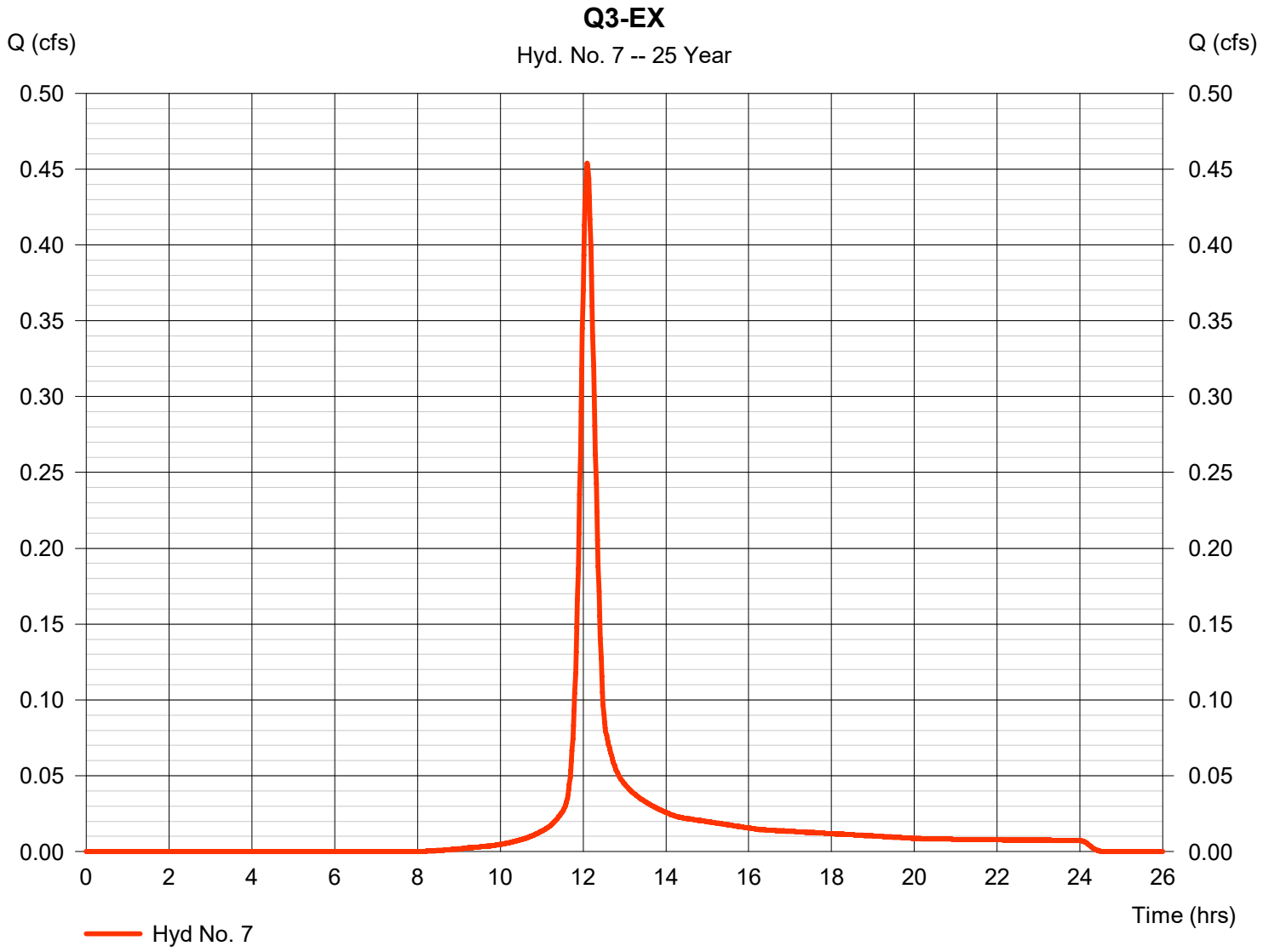


Hydrograph Report

Hyd. No. 7

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.454 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,492 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.42 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



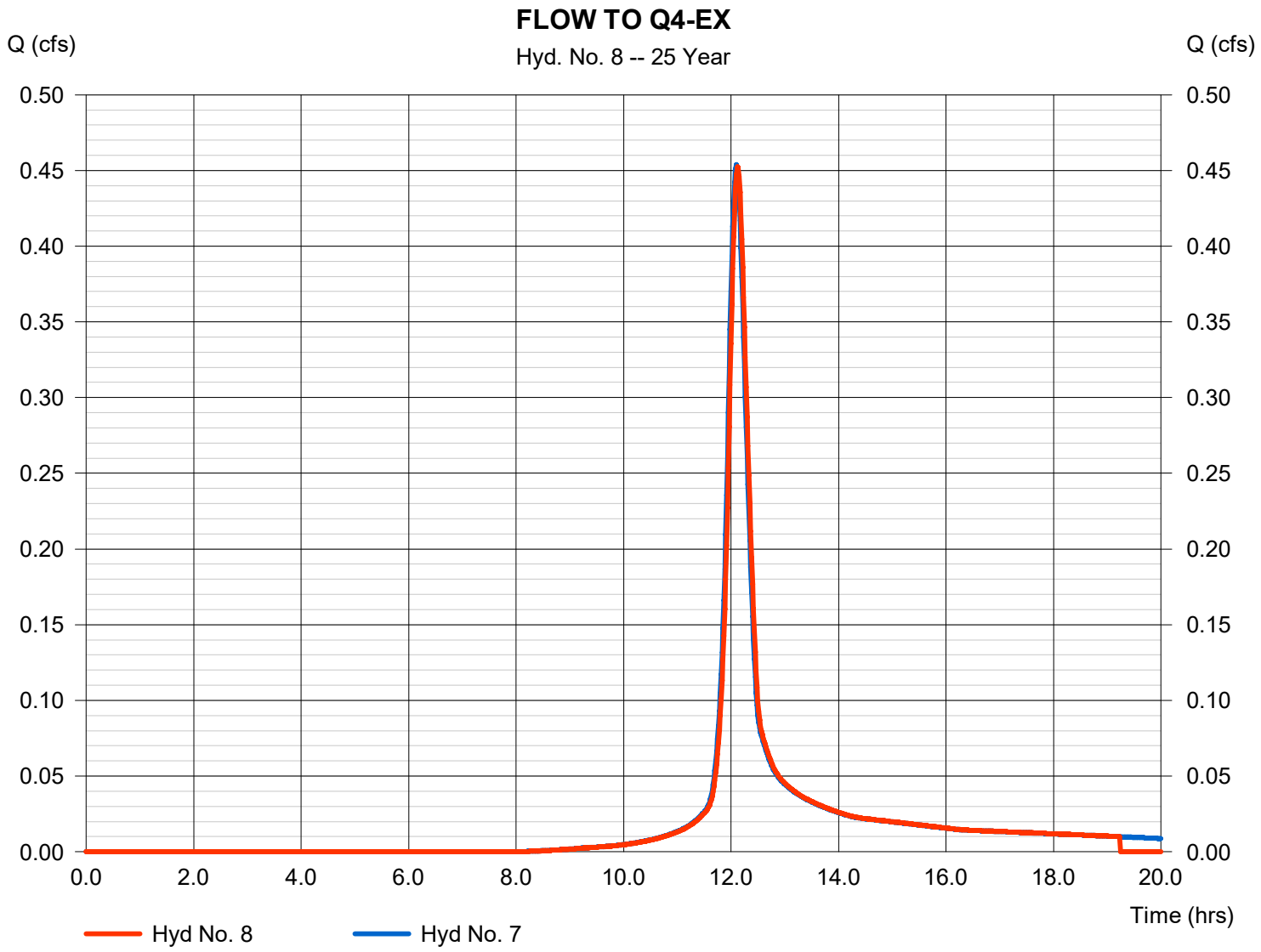
Hydrograph Report

Hyd. No. 8

FLOW TO Q4-EX

Hydrograph type	=	Reach	Peak discharge	=	0.452 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	1,346 cuft
Inflow hyd. No.	=	7 - Q3-EX	Section type	=	Trapezoidal
Reach length	=	152.0 ft	Channel slope	=	4.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	2.954	Rating curve m	=	0.966
Ave. velocity	=	3.16 ft/s	Routing coeff.	=	0.7513

Modified Att-Kin routing method used.

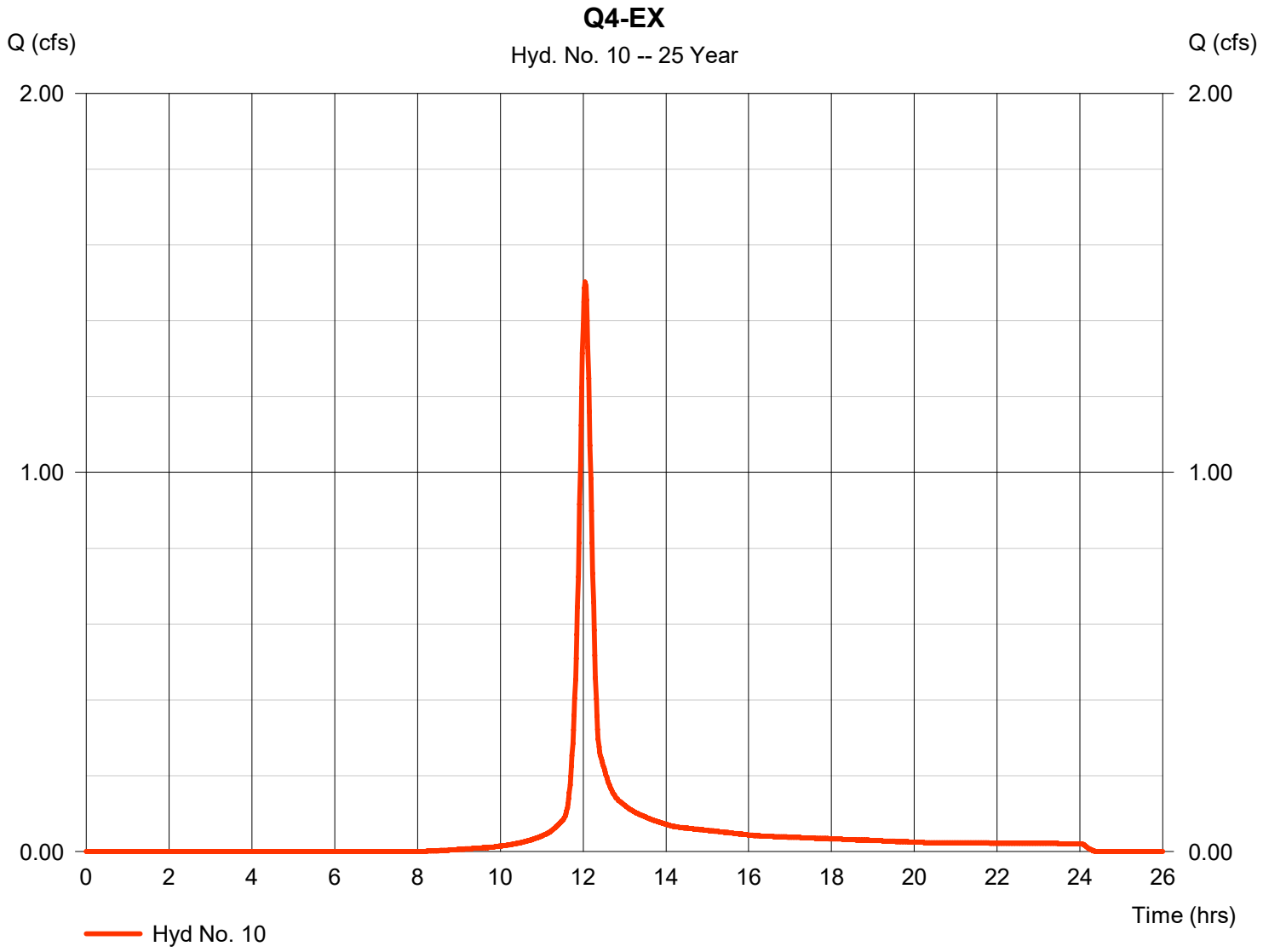


Hydrograph Report

Hyd. No. 10

Q4-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 1.502 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 4,282 cuft
Drainage area	= 0.830 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.18 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

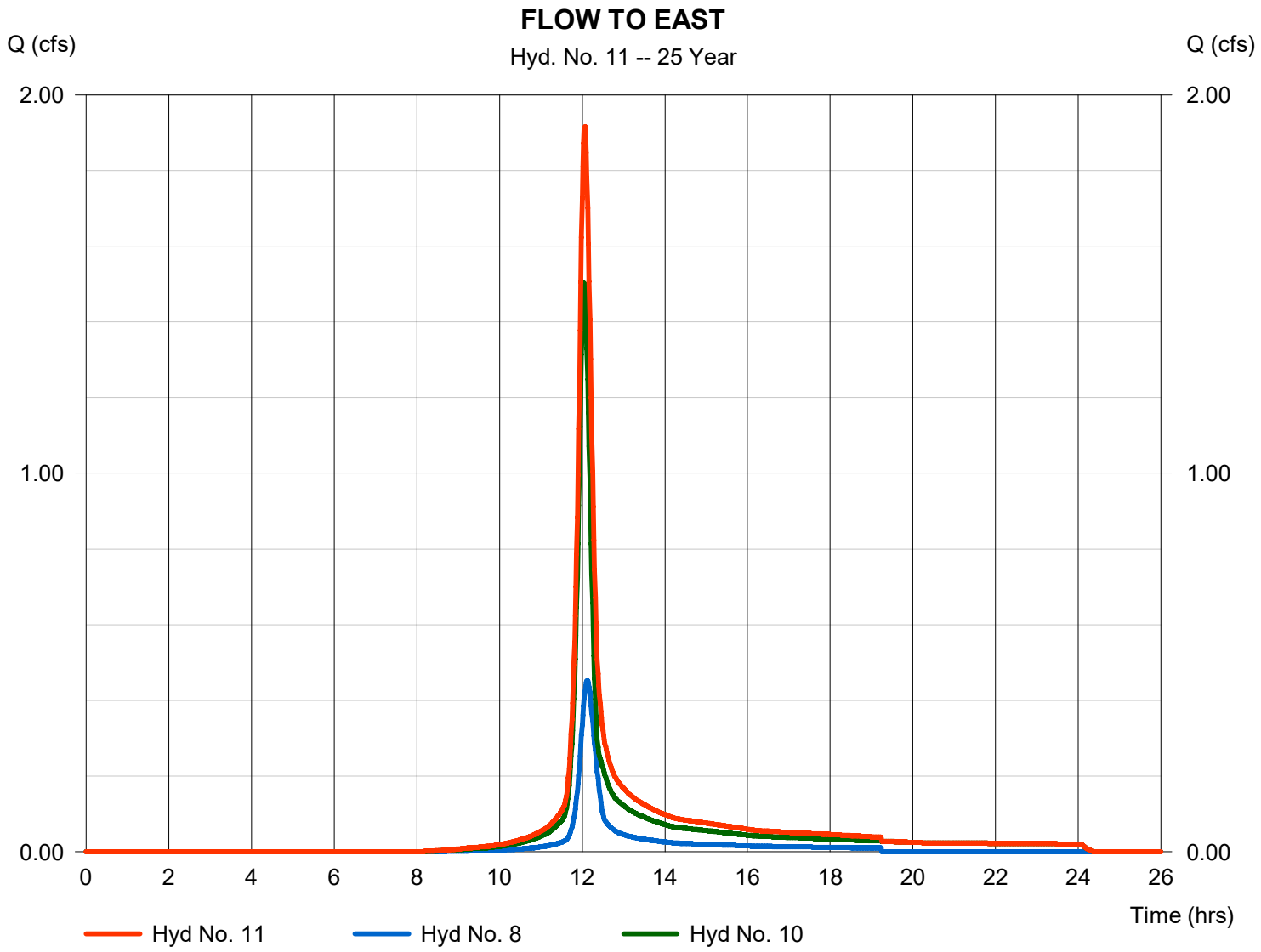


Hydrograph Report

Hyd. No. 11

FLOW TO EAST

Hydrograph type	= Combine	Peak discharge	= 1.916 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 5,627 cuft
Inflow hyds.	= 8, 10	Contrib. drain. area	= 0.830 ac

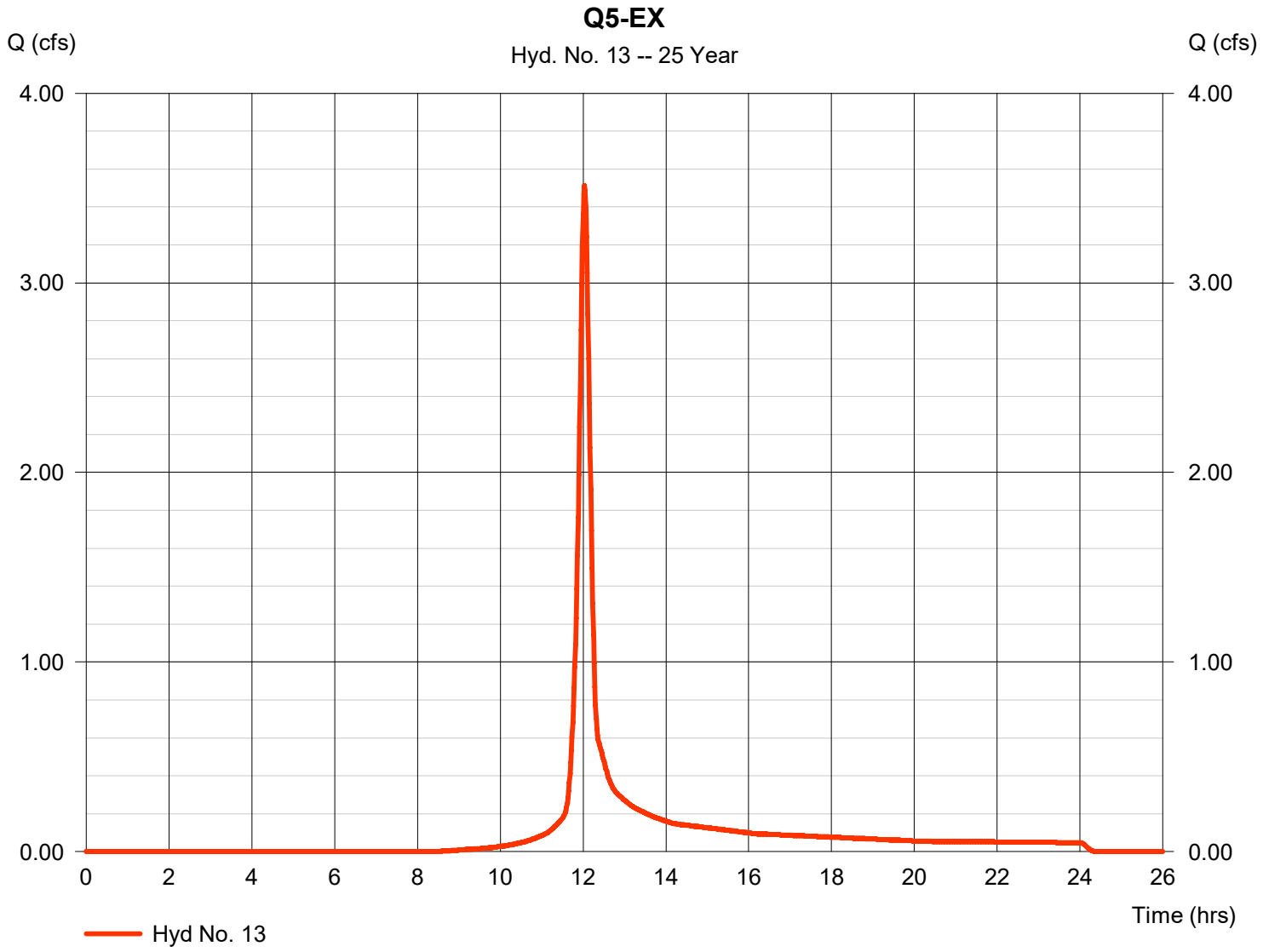


Hydrograph Report

Hyd. No. 13

Q5-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 3.512 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.03 hrs
Time interval	= 1 min	Hyd. volume	= 9,442 cuft
Drainage area	= 1.950 ac	Curve number	= 86
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 14.88 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

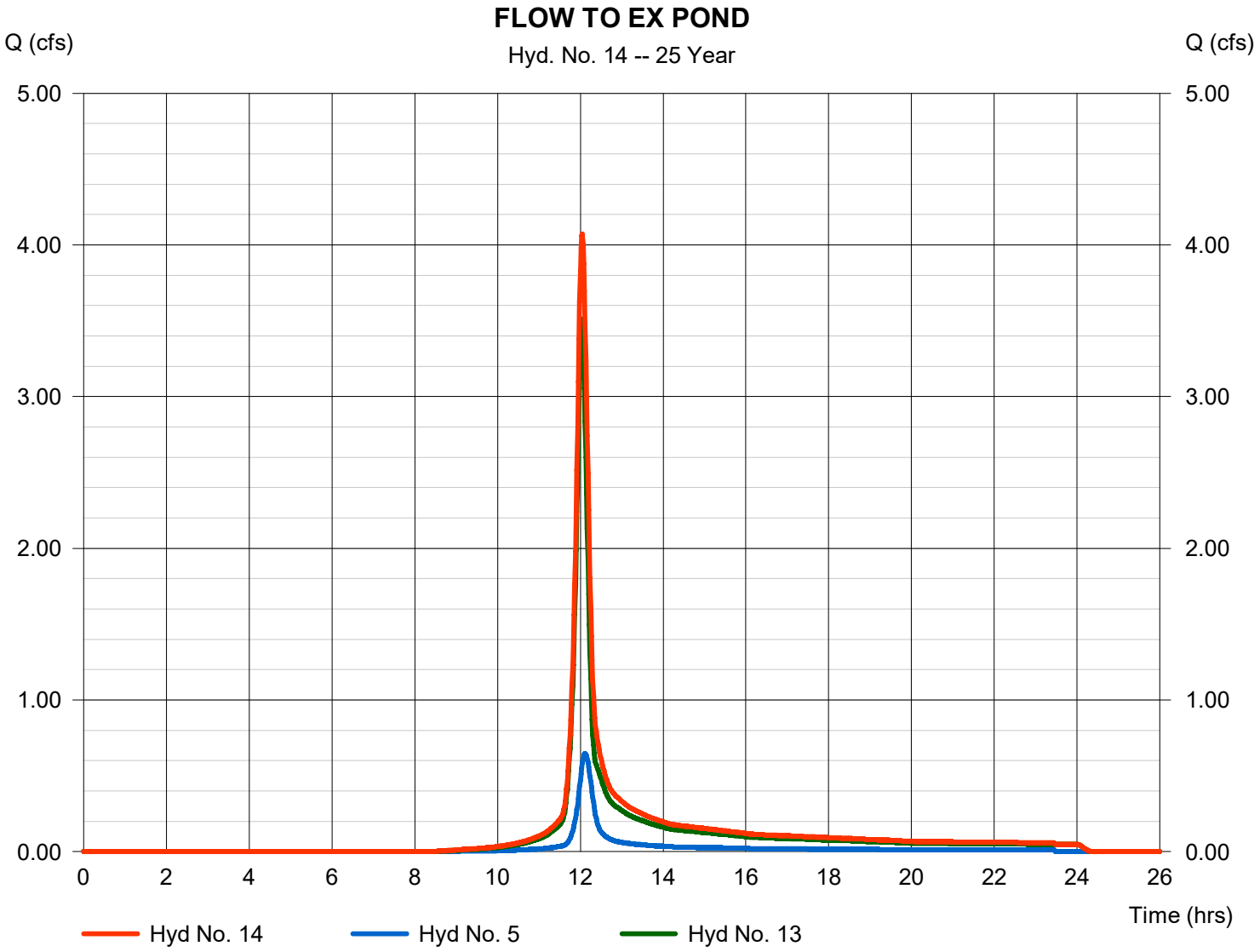


Hydrograph Report

Hyd. No. 14

FLOW TO EX POND

Hydrograph type	= Combine	Peak discharge	= 4.072 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 11,425 cuft
Inflow hyds.	= 5, 13	Contrib. drain. area	= 1.950 ac



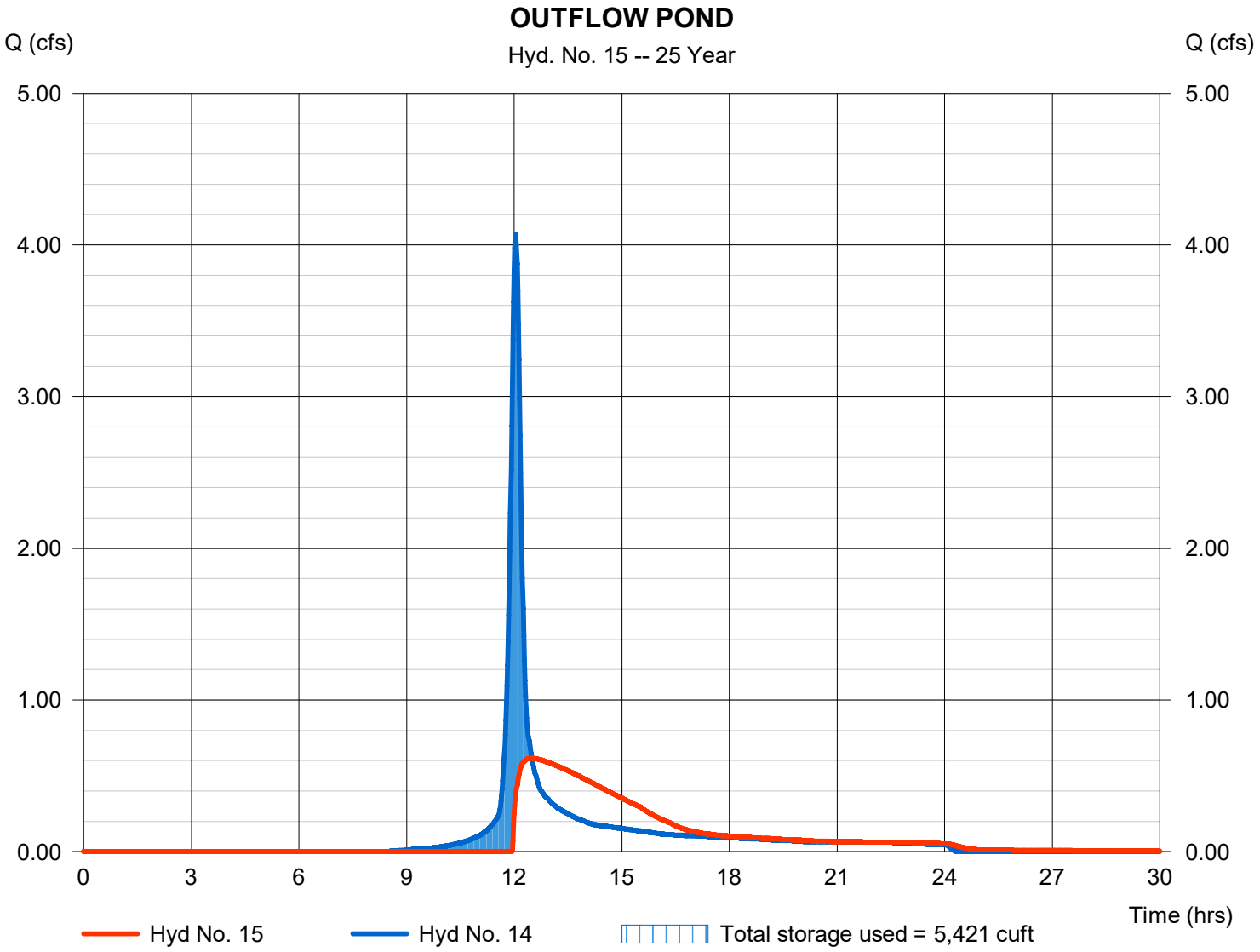
Hydrograph Report

Hyd. No. 15

OUTFLOW POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.614 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.50 hrs
Time interval	=	1 min	Hyd. volume	=	9,380 cuft
Inflow hyd. No.	=	14 - FLOW TO EX POND	Max. Elevation	=	6334.93 ft
Reservoir name	=	EX POND	Max. Storage	=	5,421 cuft

Storage Indication method used.



Pond No. 1 - EX POND

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 6331.90 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6331.90	00	0	0
0.10	6332.00	84	3	3
1.10	6333.00	1,080	488	491
2.10	6334.00	2,434	1,712	2,203
3.10	6335.00	4,612	3,465	5,668
3.60	6335.50	6,042	2,655	8,323

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 16.00	0.00	0.00	0.00
Span (in)	= 16.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 6331.90	0.00	0.00	0.00
Length (ft)	= 40.00	0.00	0.00	0.00
Slope (%)	= 0.50	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)	= 1.37	0.00	0.00	0.00
Crest El. (ft)	= 6333.98	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	---	---	---
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	6331.90	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.01	0	6331.91	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.02	1	6331.92	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.03	1	6331.93	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.04	1	6331.94	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.05	1	6331.95	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.06	2	6331.96	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.07	2	6331.97	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.08	2	6331.98	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.09	3	6331.99	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.10	3	6332.00	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.20	52	6332.10	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.30	100	6332.20	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.40	149	6332.30	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.50	198	6332.40	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.60	247	6332.50	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.70	296	6332.60	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.80	345	6332.70	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.90	393	6332.80	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.00	442	6332.90	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.10	491	6333.00	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.20	662	6333.10	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.30	833	6333.20	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.40	1,005	6333.30	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.50	1,176	6333.40	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.60	1,347	6333.50	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.70	1,518	6333.60	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.80	1,689	6333.70	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.90	1,860	6333.80	0.00	---	---	---	0.00	---	---	---	---	---	0.000
2.00	2,031	6333.90	0.00	---	---	---	0.00	---	---	---	---	---	0.000
2.10	2,203	6334.00	0.01 ic	---	---	---	0.01	---	---	---	---	---	0.013
2.20	2,549	6334.10	0.19 ic	---	---	---	0.19	---	---	---	---	---	0.190
2.30	2,896	6334.20	0.30 ic	---	---	---	0.30 ic	---	---	---	---	---	0.296
2.40	3,242	6334.30	0.36 ic	---	---	---	0.36 ic	---	---	---	---	---	0.357
2.50	3,589	6334.40	0.41 ic	---	---	---	0.41 ic	---	---	---	---	---	0.409
2.60	3,935	6334.50	0.46 ic	---	---	---	0.46 ic	---	---	---	---	---	0.455
2.70	4,282	6334.60	0.51 ic	---	---	---	0.50 ic	---	---	---	---	---	0.497

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EX POND

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
2.80	4,628	6334.70	0.54 ic	---	---	---	0.54 ic	---	---	---	---	---	0.535
2.90	4,975	6334.80	0.57 ic	---	---	---	0.57 ic	---	---	---	---	---	0.571
3.00	5,321	6334.90	0.63 ic	---	---	---	0.61 ic	---	---	---	---	---	0.605
3.10	5,668	6335.00	0.66 ic	---	---	---	0.64 ic	---	---	---	---	---	0.637
3.15	5,933	6335.05	0.66 ic	---	---	---	0.65 ic	---	---	---	---	---	0.652
3.20	6,199	6335.10	0.69 ic	---	---	---	0.67 ic	---	---	---	---	---	0.667
3.25	6,464	6335.15	0.69 ic	---	---	---	0.68 ic	---	---	---	---	---	0.682
3.30	6,730	6335.20	0.72 oc	---	---	---	0.70 ic	---	---	---	---	---	0.696
3.35	6,995	6335.25	0.72 oc	---	---	---	0.71 ic	---	---	---	---	---	0.711
3.40	7,261	6335.30	0.75 oc	---	---	---	0.72 ic	---	---	---	---	---	0.724
3.45	7,526	6335.35	0.75 oc	---	---	---	0.74 ic	---	---	---	---	---	0.738
3.50	7,792	6335.40	0.78 oc	---	---	---	0.75 ic	---	---	---	---	---	0.751
3.55	8,057	6335.45	0.78 oc	---	---	---	0.76 ic	---	---	---	---	---	0.764
3.60	8,323	6335.50	0.78 oc	---	---	---	0.78 ic	---	---	---	---	---	0.778

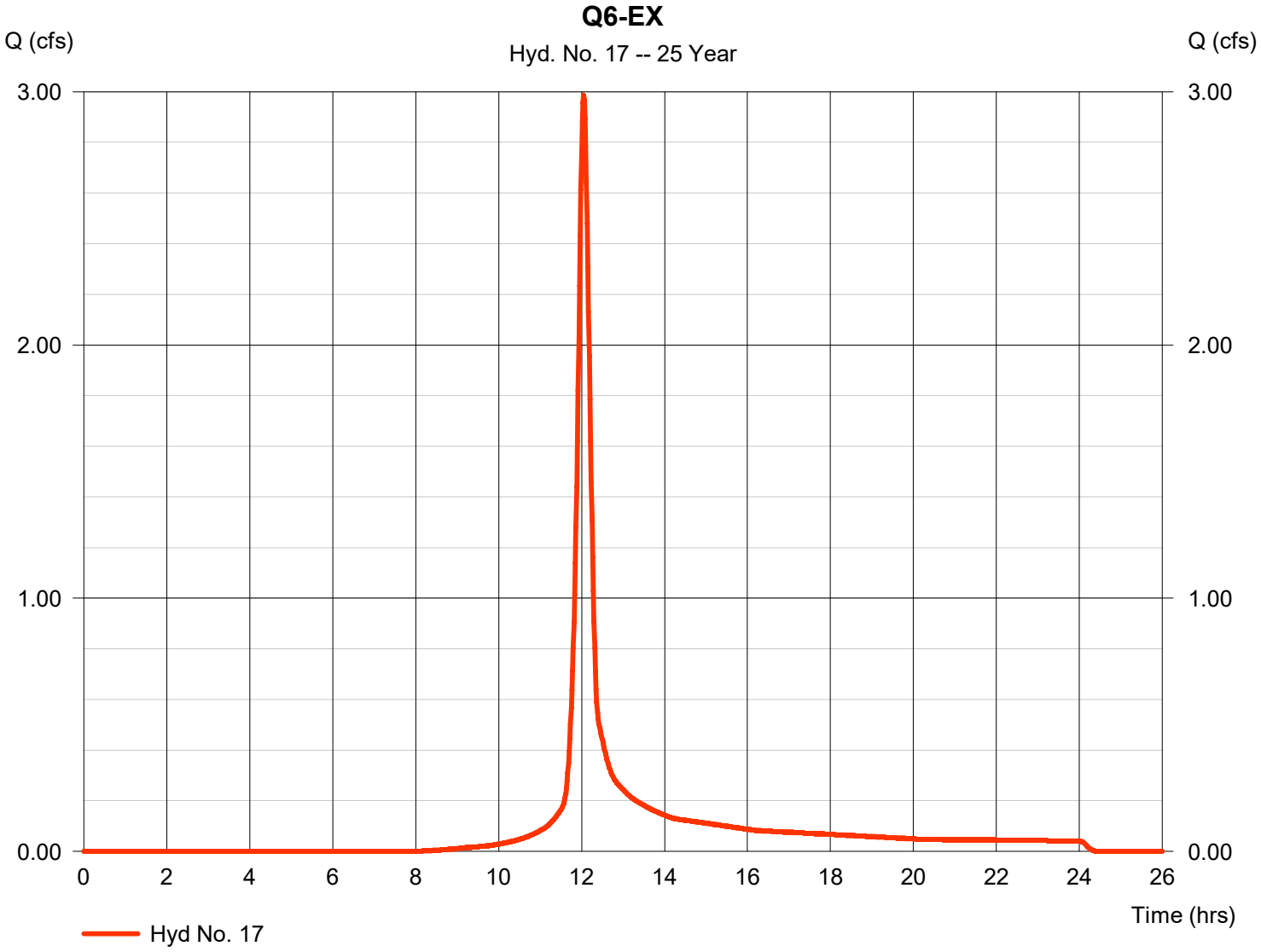
...End

Hydrograph Report

Hyd. No. 17

Q6-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.986 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	8,512 cuft
Drainage area	=	1.650 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.24 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

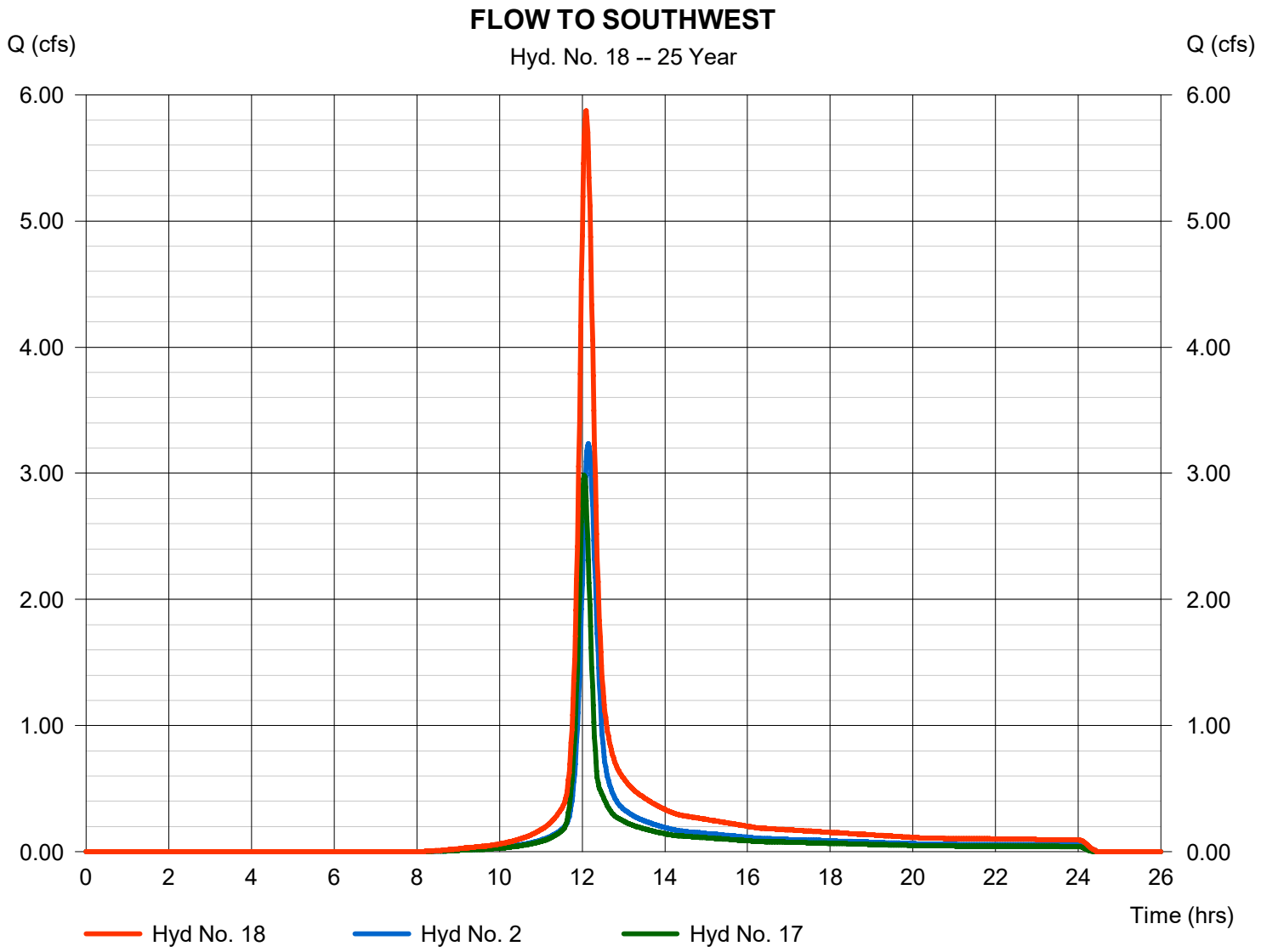


Hydrograph Report

Hyd. No. 18

FLOW TO SOUTHWEST

Hydrograph type	= Combine	Peak discharge	= 5.874 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 19,362 cuft
Inflow hyds.	= 2, 17	Contrib. drain. area	= 1.650 ac

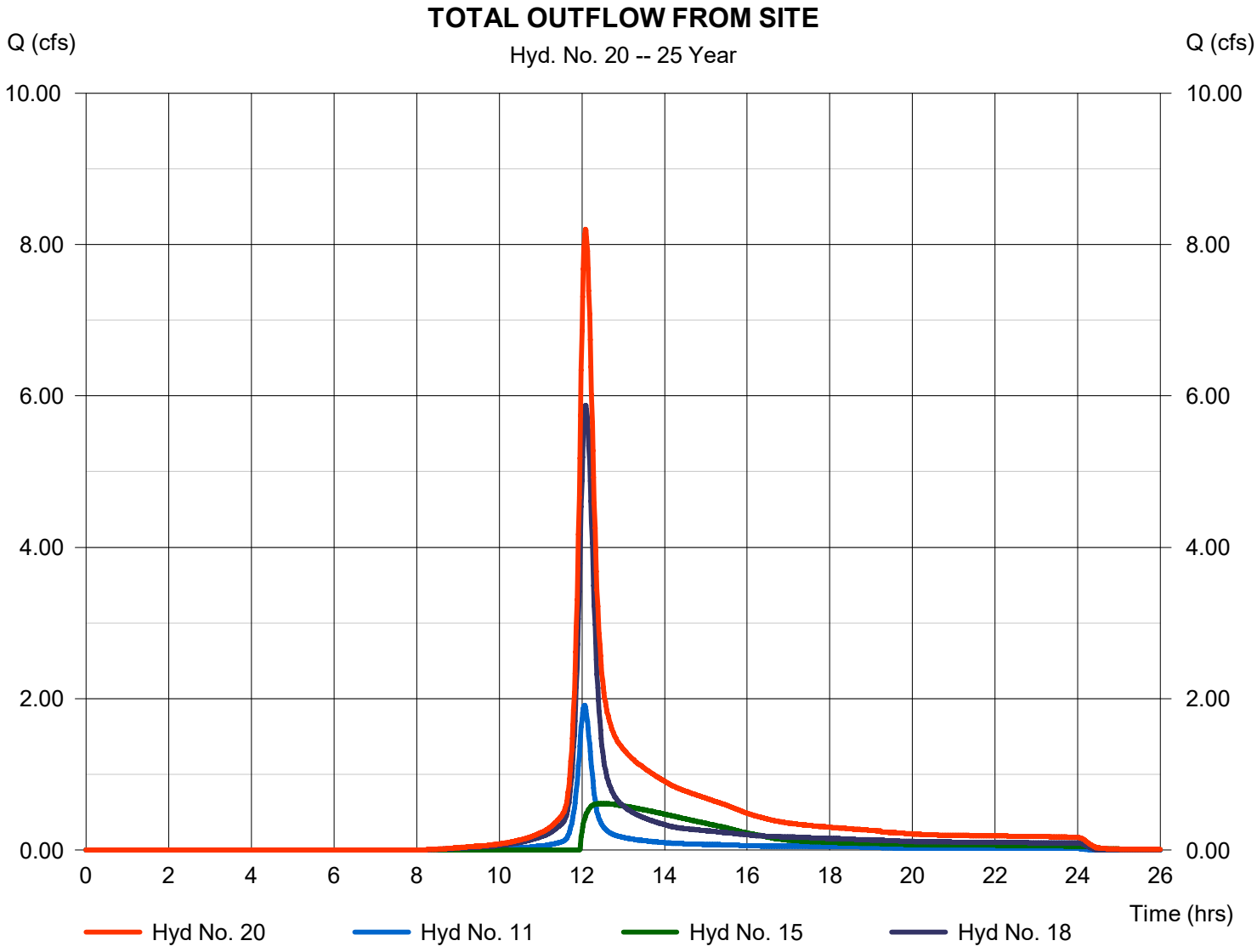


Hydrograph Report

Hyd. No. 20

TOTAL OUTFLOW FROM SITE

Hydrograph type	= Combine	Peak discharge	= 8.202 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 34,370 cuft
Inflow hyds.	= 11, 15, 18	Contrib. drain. area	= 0.000 ac



Hydrograph Summary Report

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

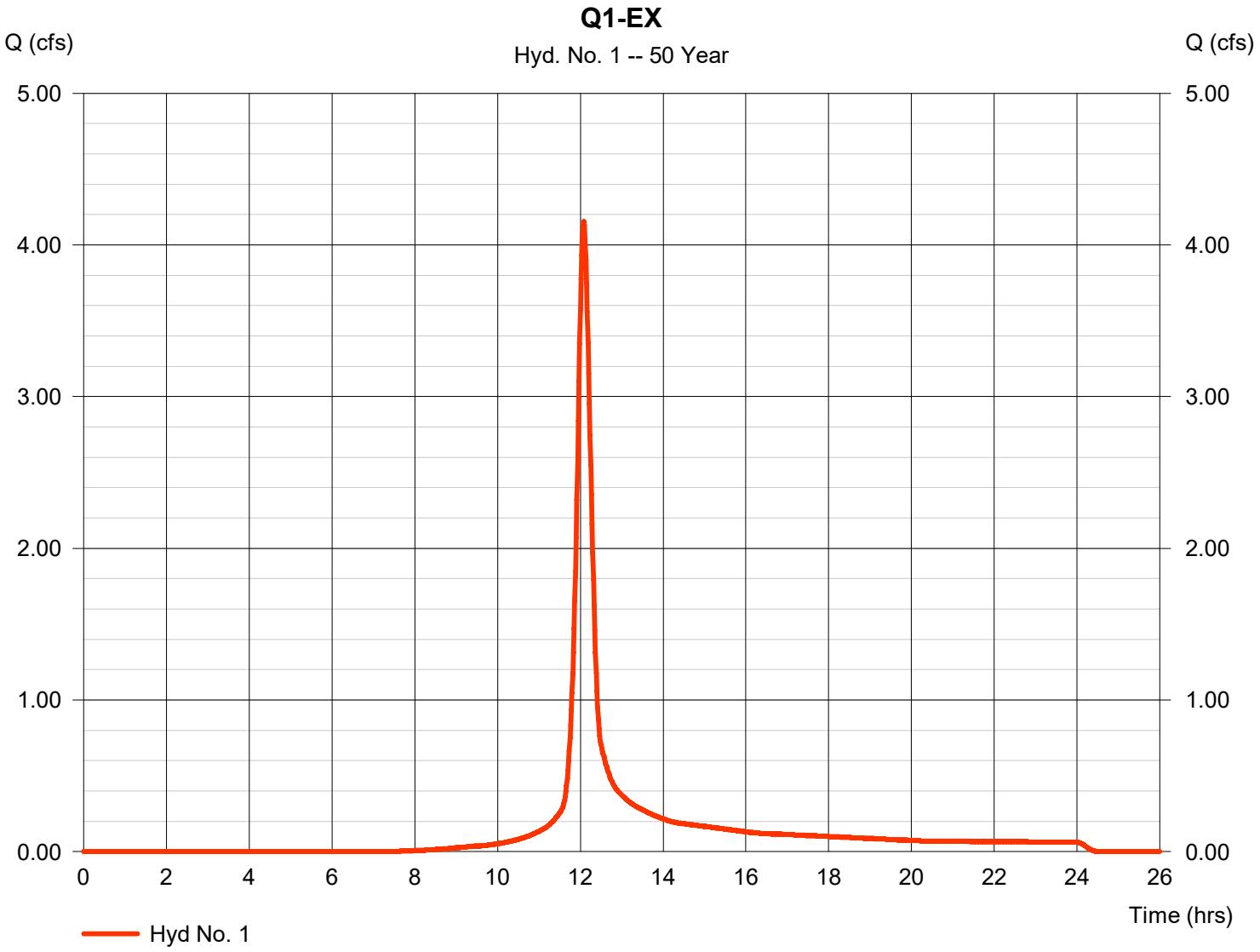
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.154	1	725	12,975	------	------	------	Q1-EX
2	Reach	3.874	1	729	12,973	1	------	------	FLOW TO Q6-EX
4	SCS Runoff	0.843	1	723	2,405	------	------	------	Q2-EX
5	Reach	0.774	1	727	2,400	4	------	------	FLOW TO Q5-EX
7	SCS Runoff	0.543	1	726	1,784	------	------	------	Q3-EX
8	Reach	0.541	1	727	1,648	7	------	------	FLOW TO Q4-EX
10	SCS Runoff	1.794	1	723	5,119	------	------	------	Q4-EX
11	Combine	2.289	1	724	6,767	8, 10	------	------	FLOW TO EAST
13	SCS Runoff	4.218	1	722	11,344	------	------	------	Q5-EX
14	Combine	4.888	1	723	13,745	5, 13	------	------	FLOW TO EX POND
15	Reservoir	0.693	1	751	11,700	14	6335.19	6,667	OUTFLOW POND
17	SCS Runoff	3.567	1	723	10,177	------	------	------	Q6-EX
18	Combine	7.034	1	725	23,149	2, 17	------	------	FLOW TO SOUTHWEST
20	Combine	9.839	1	725	41,616	11, 15, 18,	------	------	TOTAL OUTFLOW FROM SITE

Hydrograph Report

Hyd. No. 1

Q1-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.154 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.08 hrs
Time interval	=	1 min	Hyd. volume	=	12,975 cuft
Drainage area	=	2.130 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.80 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



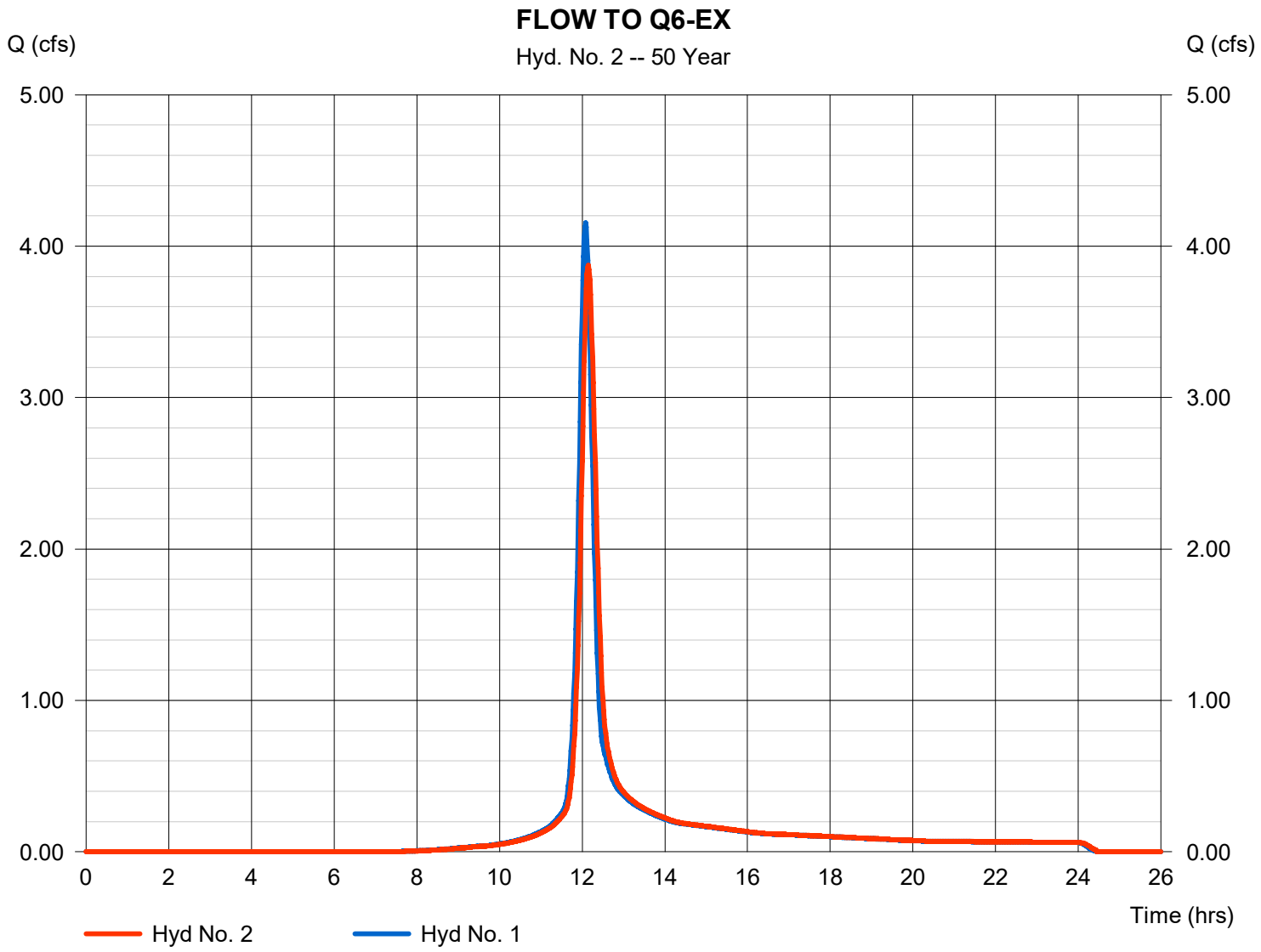
Hydrograph Report

Hyd. No. 2

FLOW TO Q6-EX

Hydrograph type	= Reach	Peak discharge	= 3.874 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 12,973 cuft
Inflow hyd. No.	= 1 - Q1-EX	Section type	= Trapezoidal
Reach length	= 300.0 ft	Channel slope	= 3.7 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 30.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.116	Rating curve m	= 1.071
Ave. velocity	= 1.22 ft/s	Routing coeff.	= 0.2307

Modified Att-Kin routing method used.

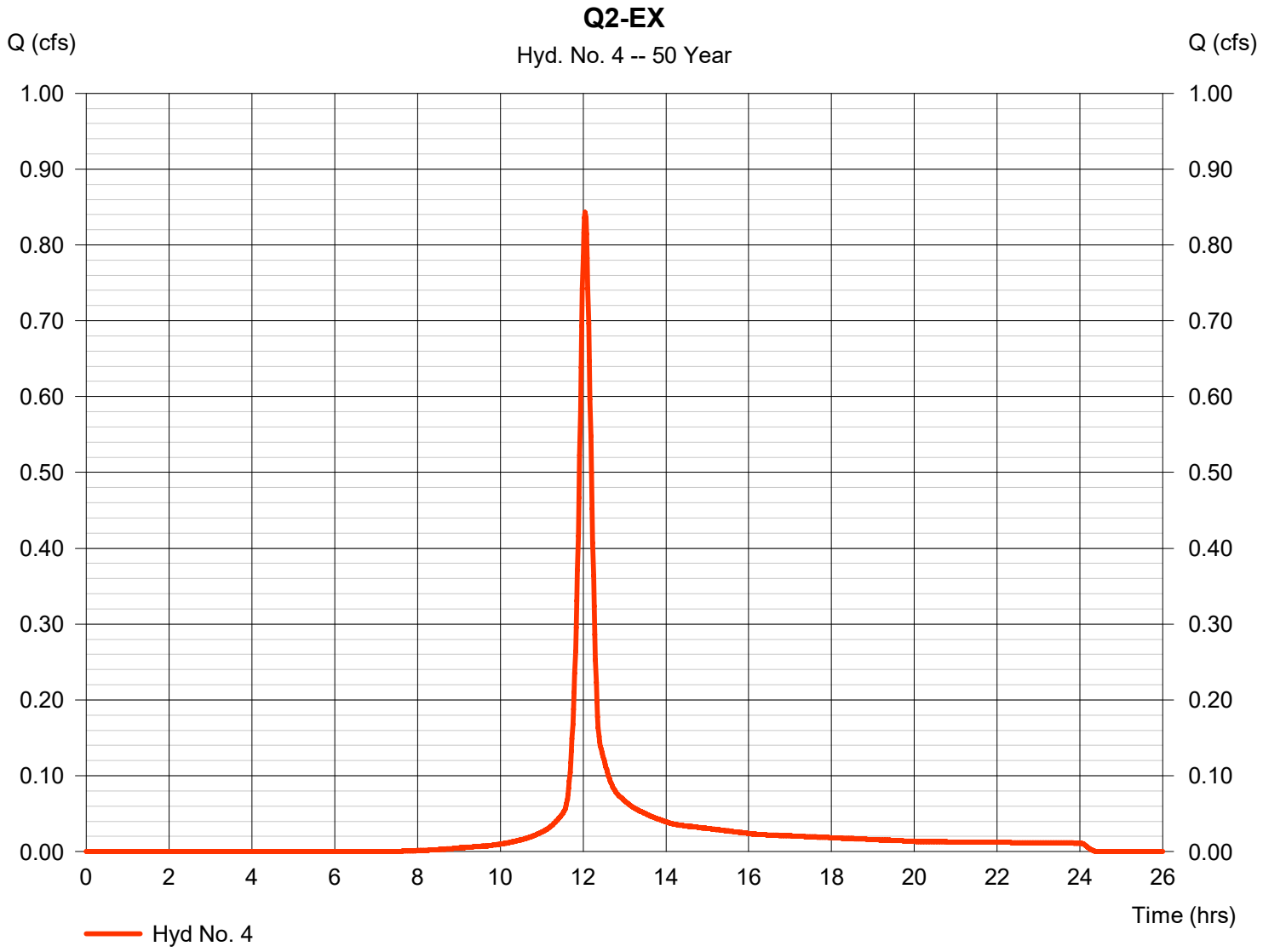


Hydrograph Report

Hyd. No. 4

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.843 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,405 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



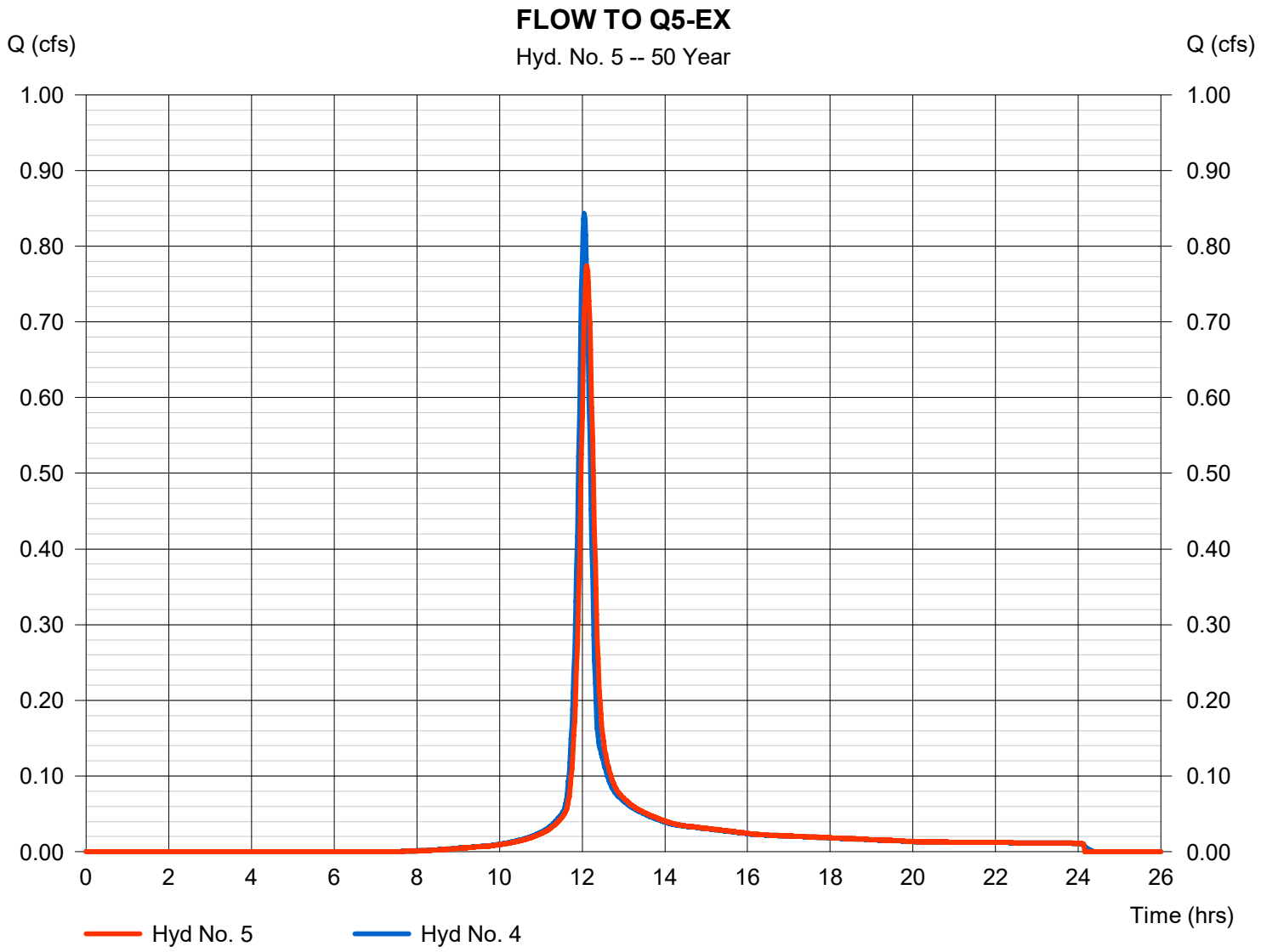
Hydrograph Report

Hyd. No. 5

FLOW TO Q5-EX

Hydrograph type	= Reach	Peak discharge	= 0.774 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 2,400 cuft
Inflow hyd. No.	= 4 - Q2-EX	Section type	= Trapezoidal
Reach length	= 328.0 ft	Channel slope	= 4.2 %
Manning's n	= 0.035	Bottom width	= 17.0 ft
Side slope	= 16.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.317	Rating curve m	= 1.117
Ave. velocity	= 1.26 ft/s	Routing coeff.	= 0.2275

Modified Att-Kin routing method used.

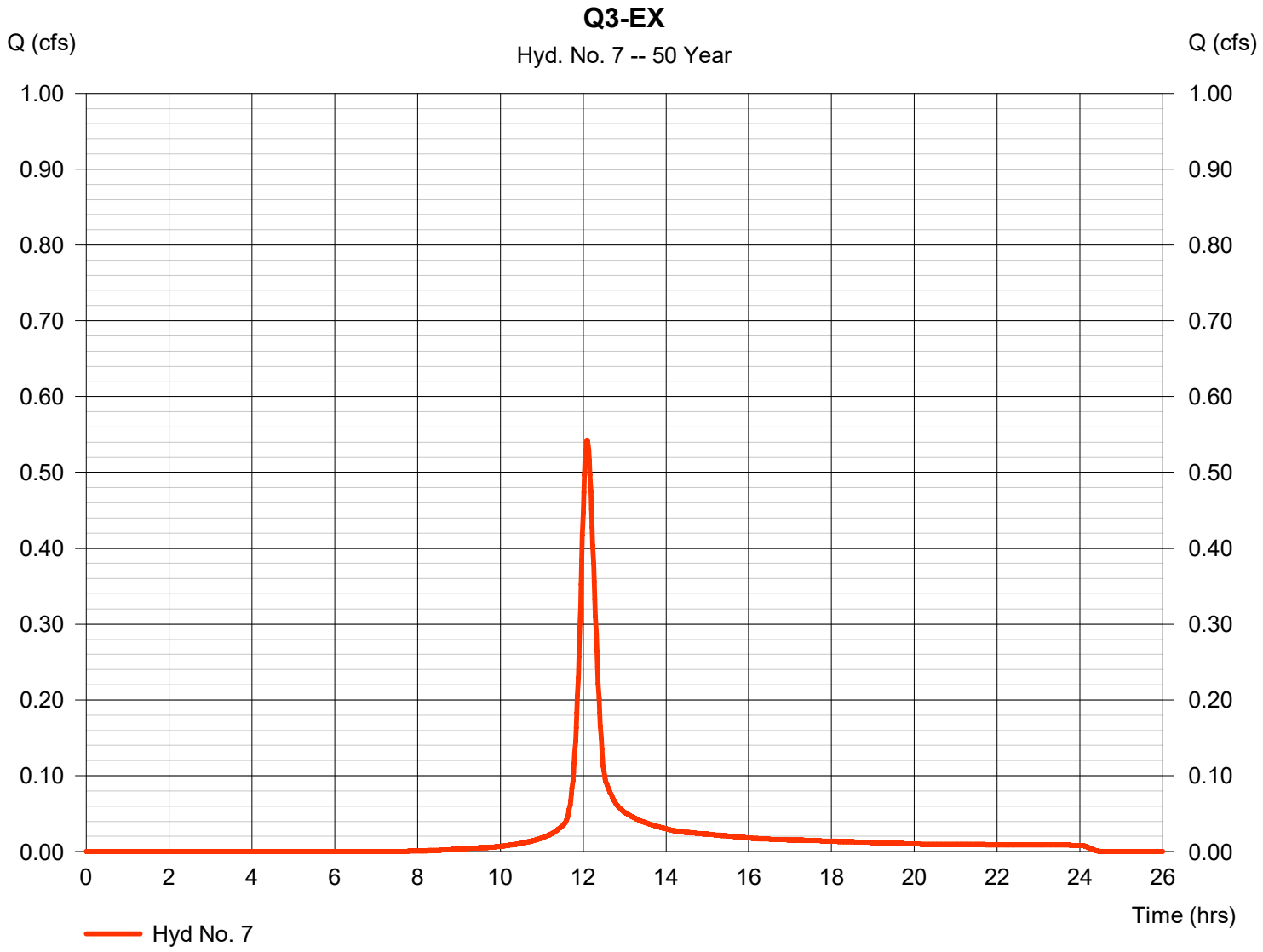


Hydrograph Report

Hyd. No. 7

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.543 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,784 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.42 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



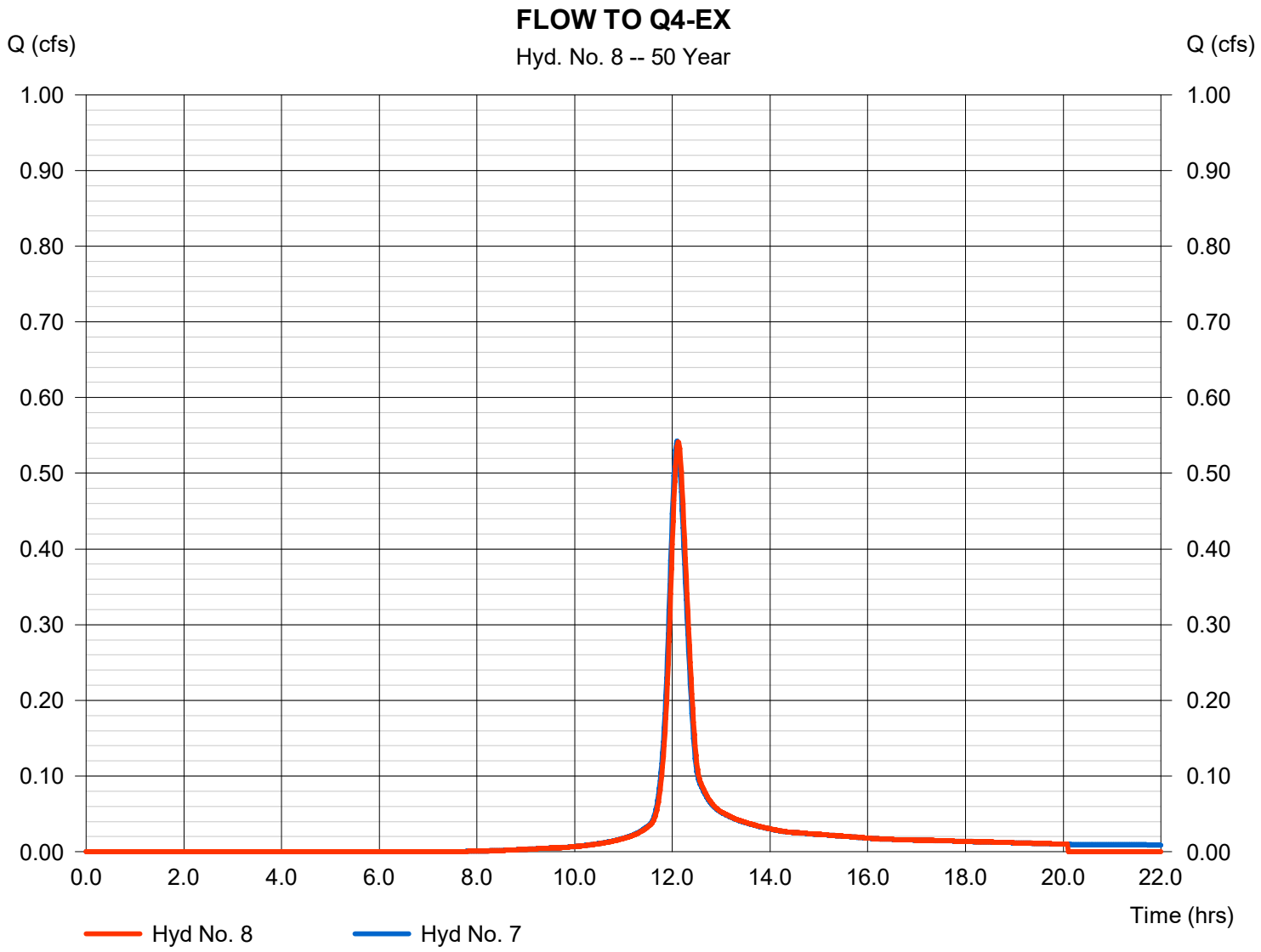
Hydrograph Report

Hyd. No. 8

FLOW TO Q4-EX

Hydrograph type	=	Reach	Peak discharge	=	0.541 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	1,648 cuft
Inflow hyd. No.	=	7 - Q3-EX	Section type	=	Trapezoidal
Reach length	=	152.0 ft	Channel slope	=	4.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	2.954	Rating curve m	=	0.966
Ave. velocity	=	3.14 ft/s	Routing coeff.	=	0.7483

Modified Att-Kin routing method used.

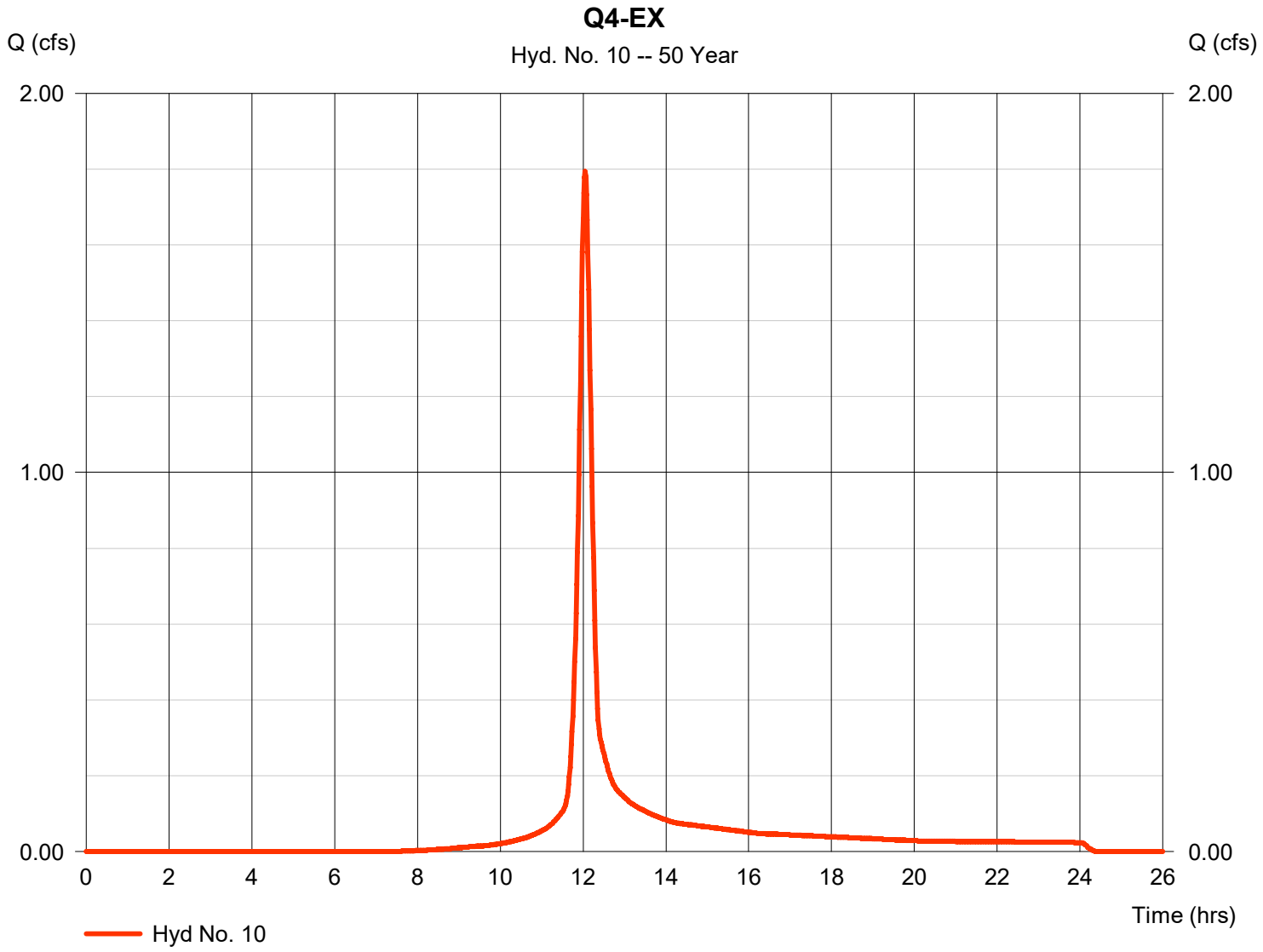


Hydrograph Report

Hyd. No. 10

Q4-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.794 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	5,119 cuft
Drainage area	=	0.830 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.18 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

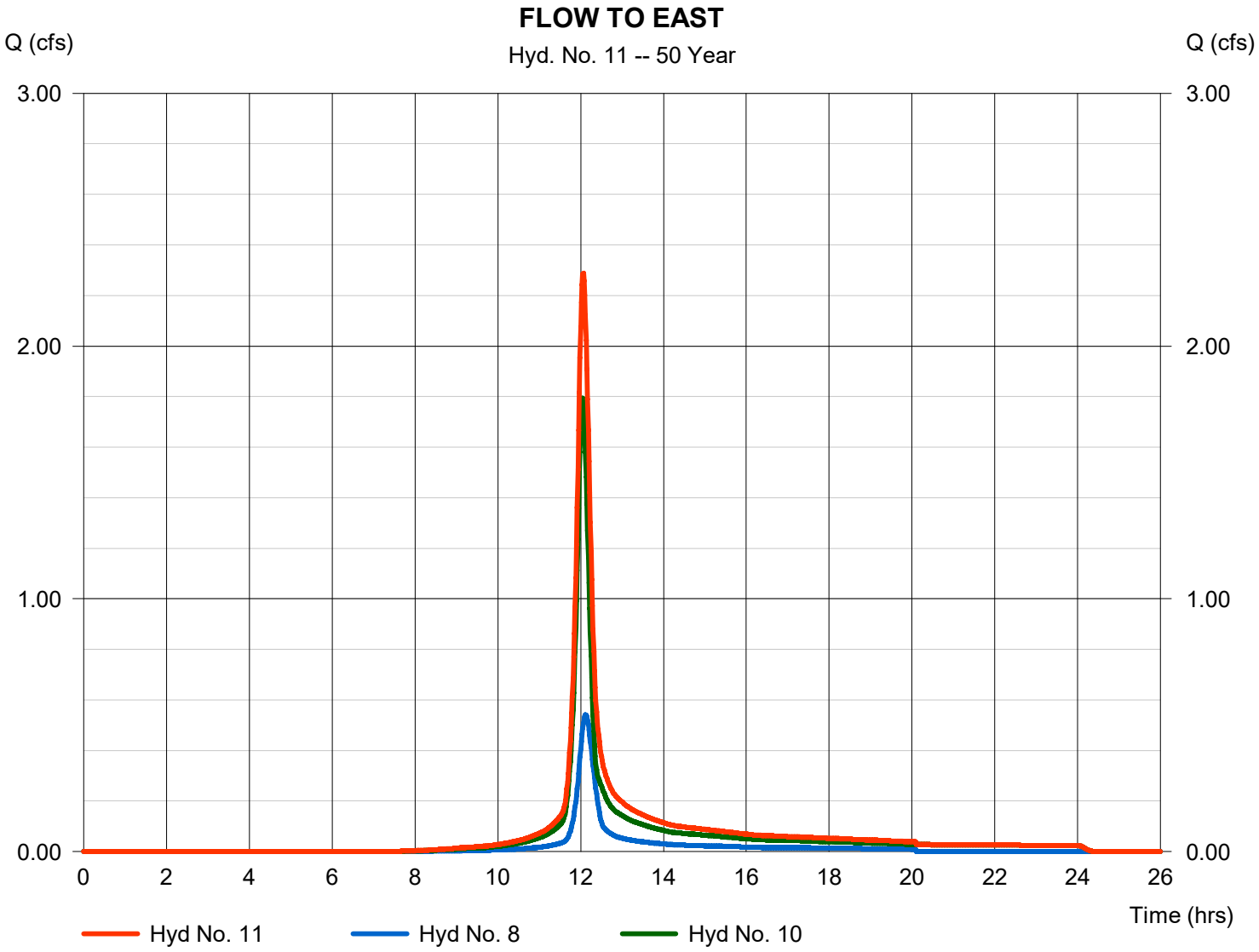


Hydrograph Report

Hyd. No. 11

FLOW TO EAST

Hydrograph type	= Combine	Peak discharge	= 2.289 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 6,767 cuft
Inflow hyds.	= 8, 10	Contrib. drain. area	= 0.830 ac

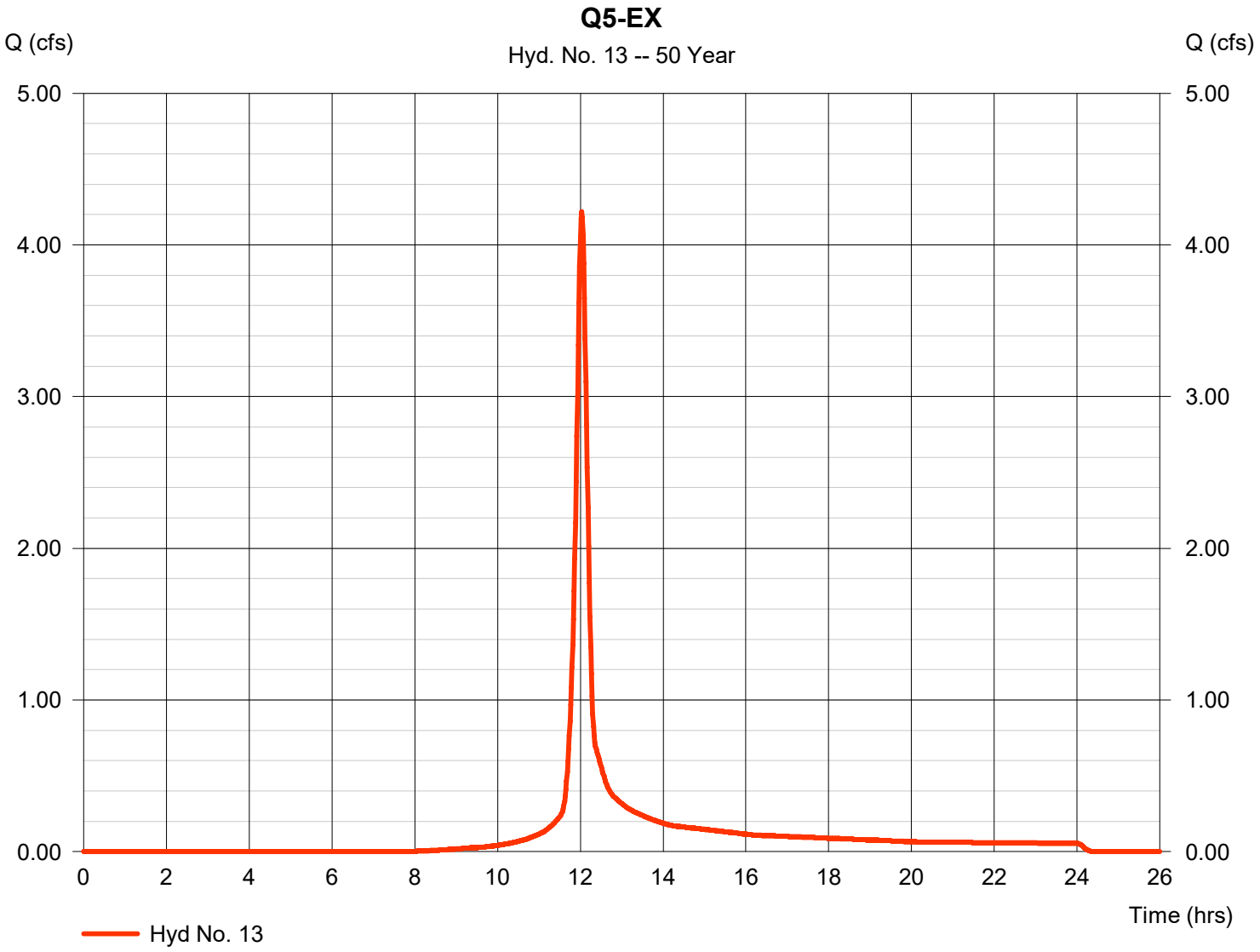


Hydrograph Report

Hyd. No. 13

Q5-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.218 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	11,344 cuft
Drainage area	=	1.950 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.88 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

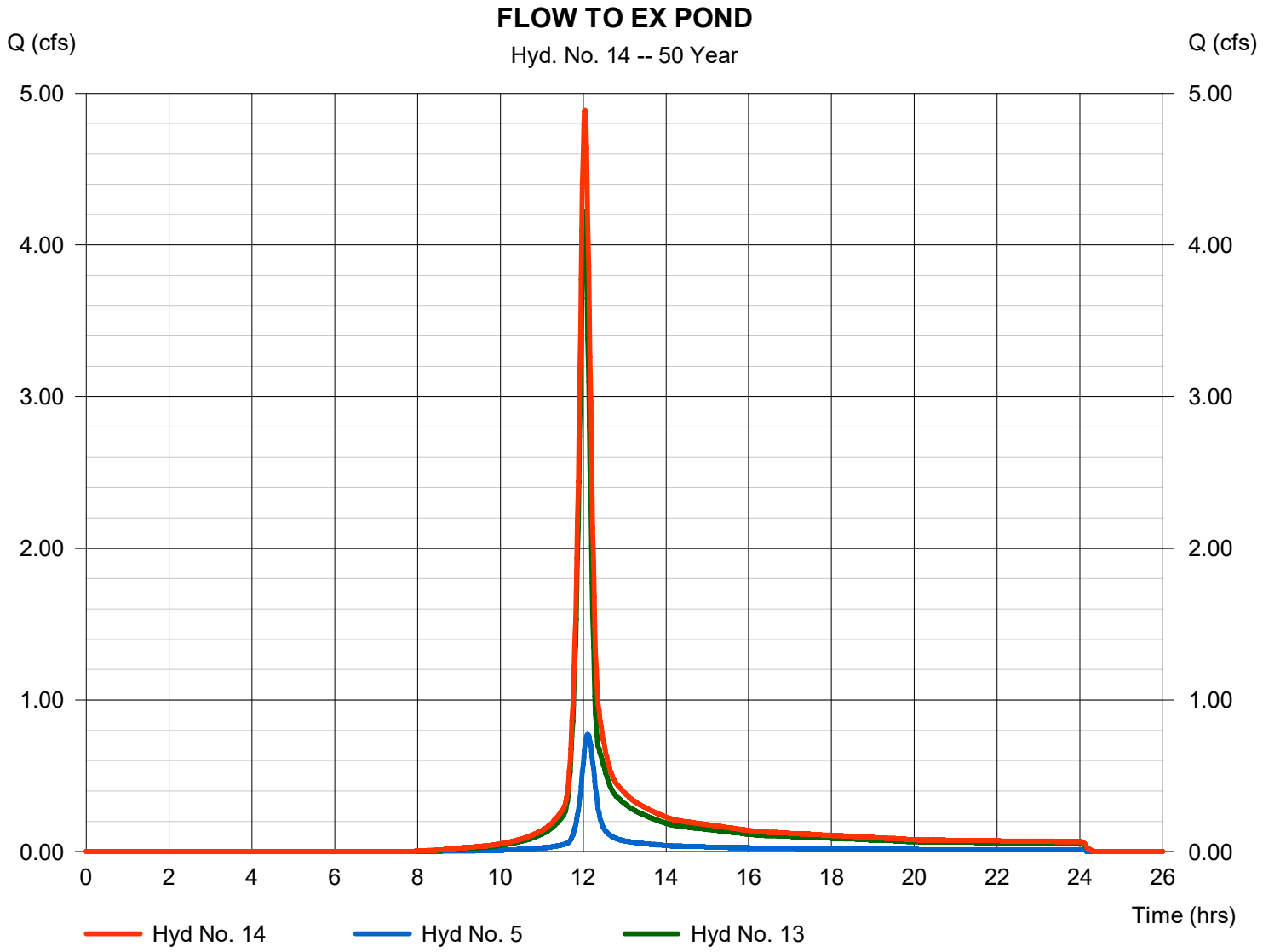


Hydrograph Report

Hyd. No. 14

FLOW TO EX POND

Hydrograph type	= Combine	Peak discharge	= 4.888 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 13,745 cuft
Inflow hyds.	= 5, 13	Contrib. drain. area	= 1.950 ac



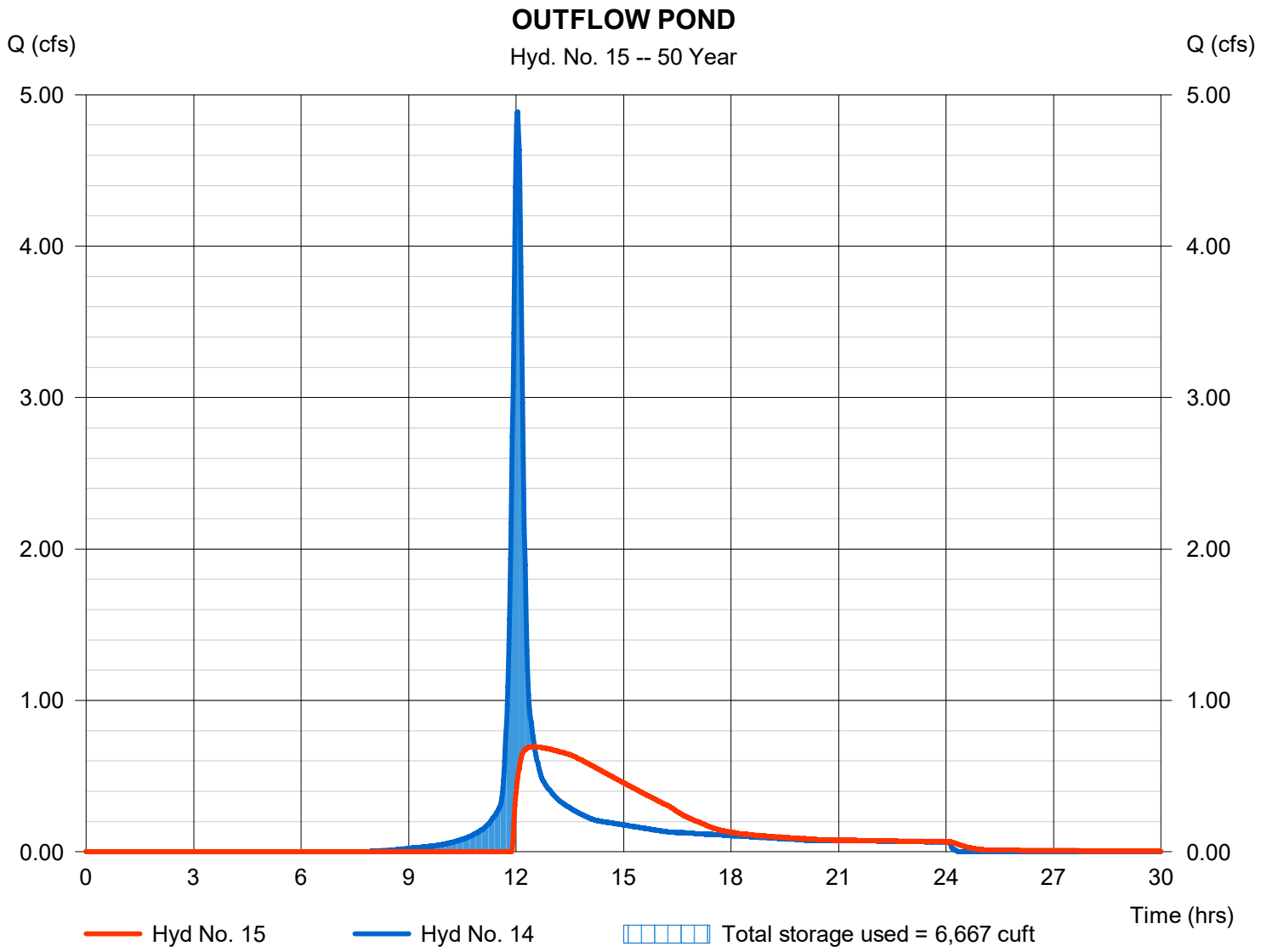
Hydrograph Report

Hyd. No. 15

OUTFLOW POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.693 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.52 hrs
Time interval	=	1 min	Hyd. volume	=	11,700 cuft
Inflow hyd. No.	=	14 - FLOW TO EX POND	Max. Elevation	=	6335.19 ft
Reservoir name	=	EX POND	Max. Storage	=	6,667 cuft

Storage Indication method used.

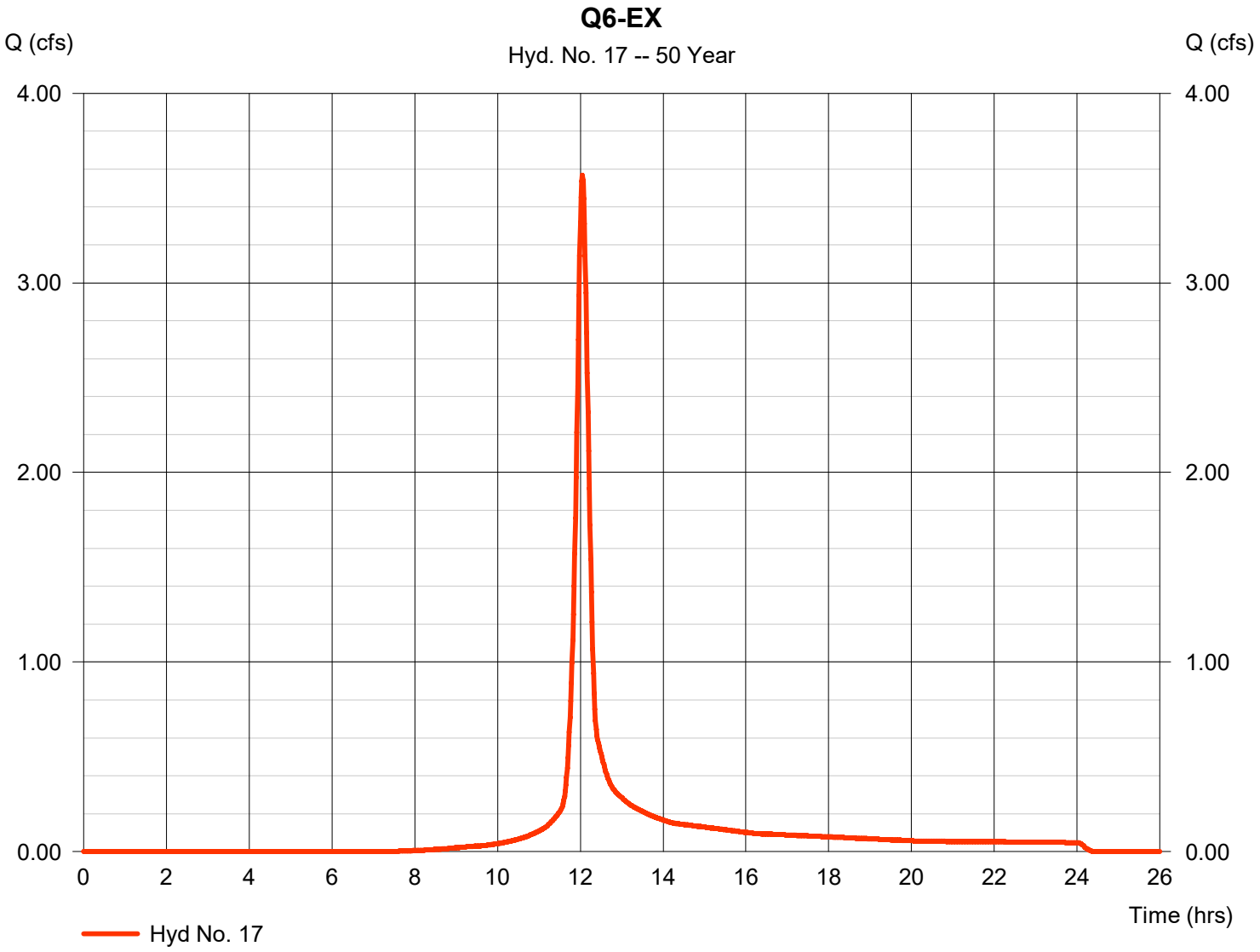


Hydrograph Report

Hyd. No. 17

Q6-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.567 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	10,177 cuft
Drainage area	=	1.650 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.24 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

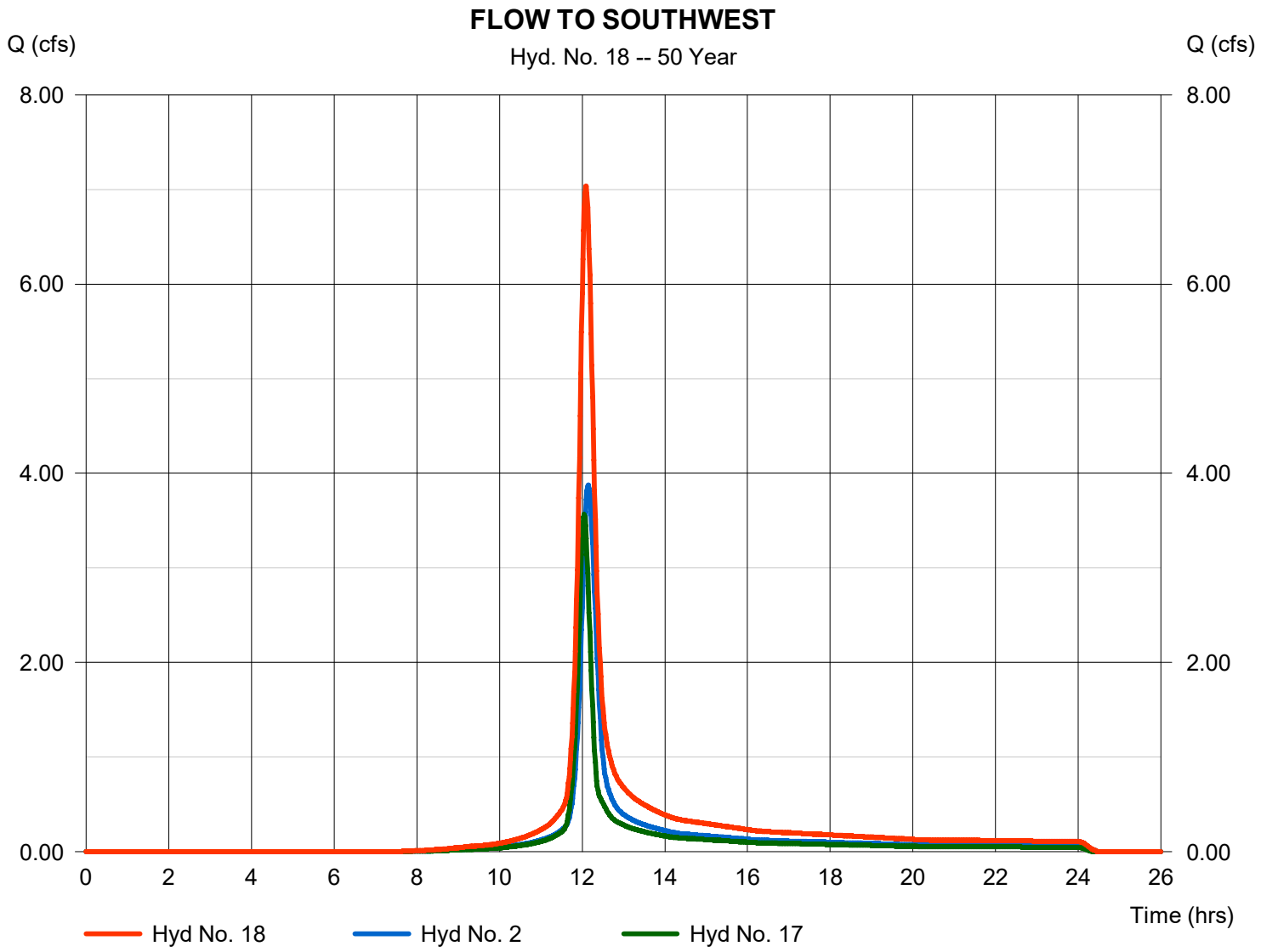


Hydrograph Report

Hyd. No. 18

FLOW TO SOUTHWEST

Hydrograph type	= Combine	Peak discharge	= 7.034 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 23,149 cuft
Inflow hyds.	= 2, 17	Contrib. drain. area	= 1.650 ac

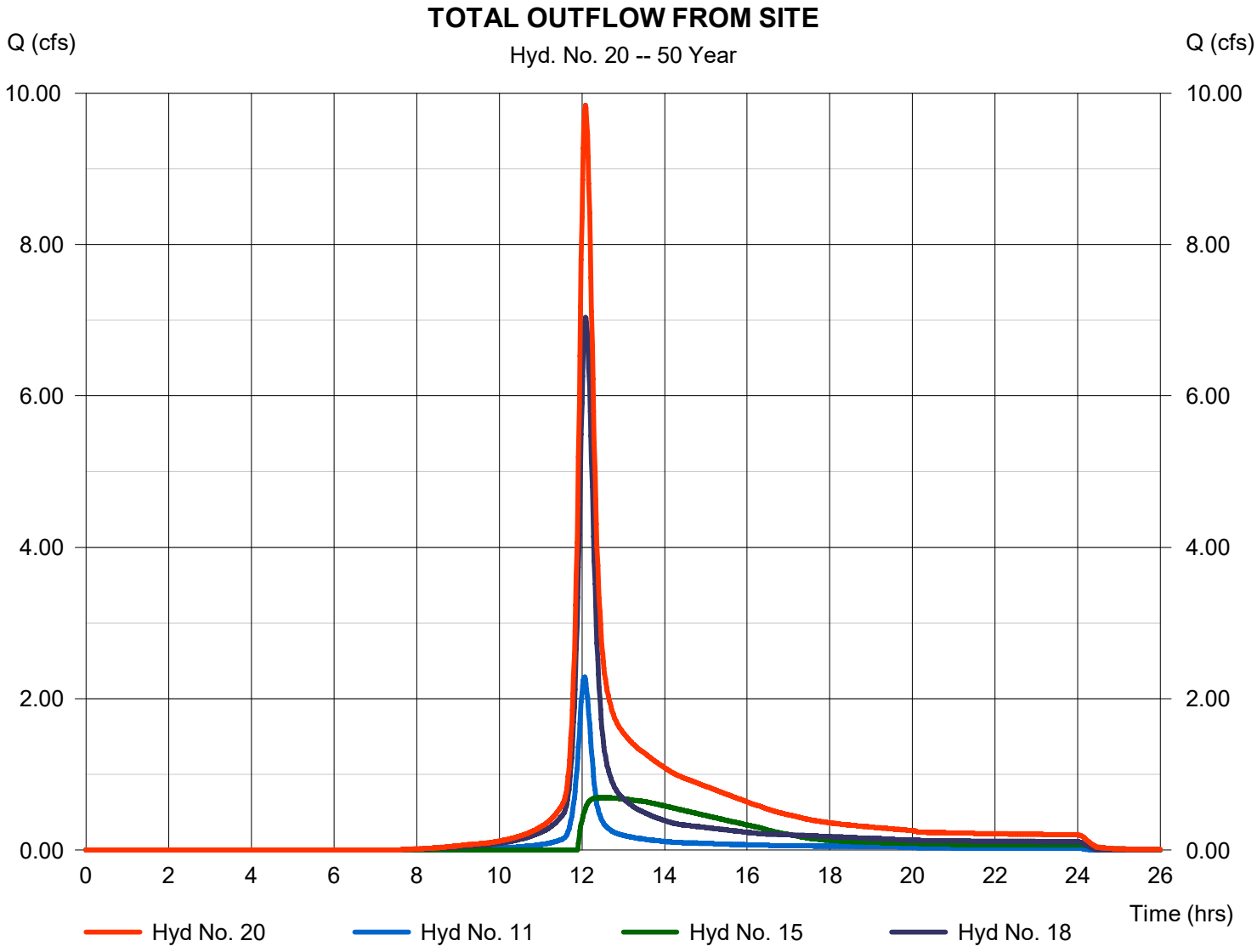


Hydrograph Report

Hyd. No. 20

TOTAL OUTFLOW FROM SITE

Hydrograph type	= Combine	Peak discharge	= 9.839 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 41,616 cuft
Inflow hyds.	= 11, 15, 18	Contrib. drain. area	= 0.000 ac



Hydrograph Summary Report

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

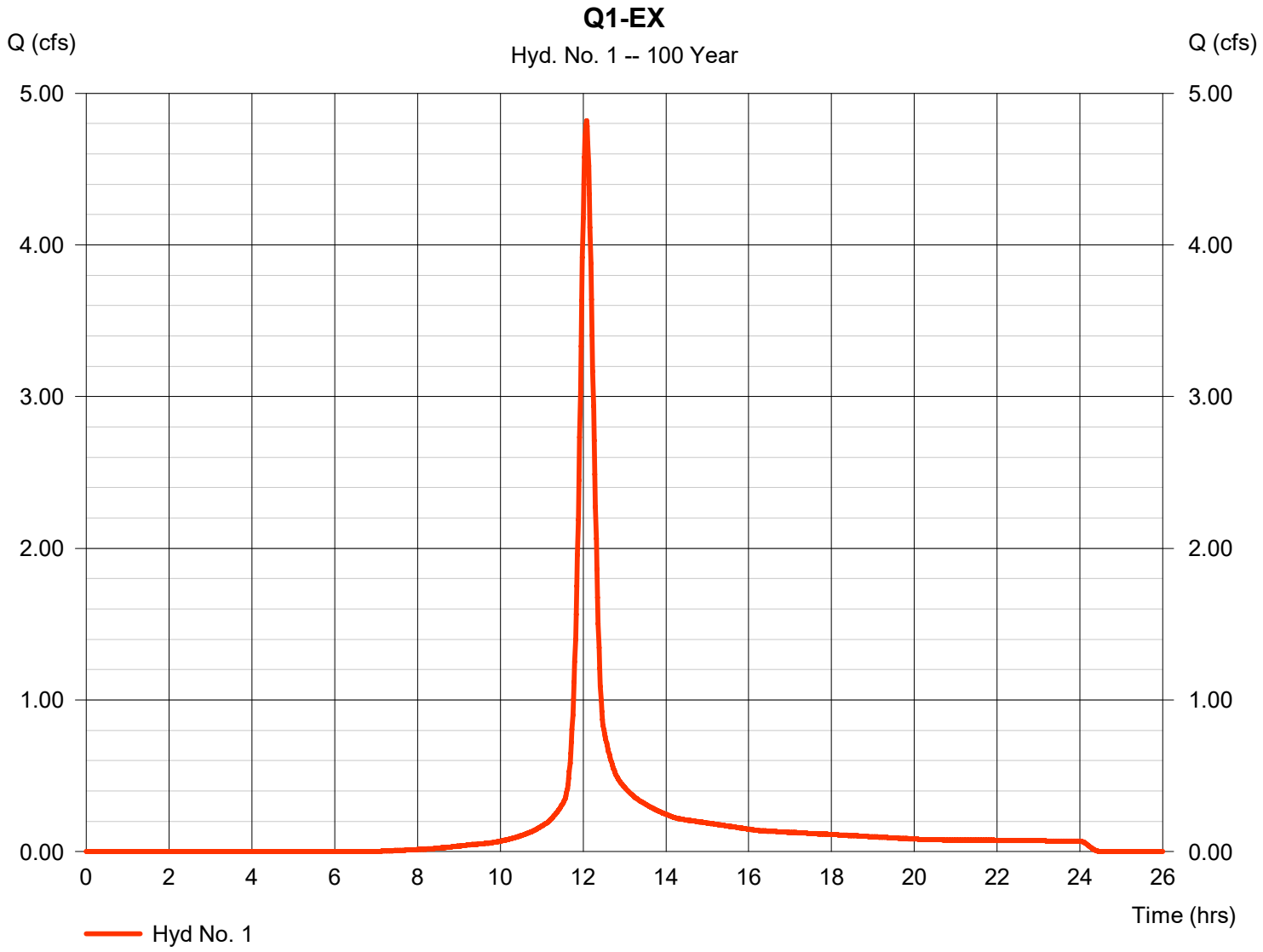
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.821	1	725	15,080	------	------	------	Q1-EX
2	Reach	4.502	1	729	15,077	1	------	------	FLOW TO Q6-EX
4	SCS Runoff	0.978	1	723	2,796	------	------	------	Q2-EX
5	Reach	0.900	1	727	2,791	4	------	------	FLOW TO Q5-EX
7	SCS Runoff	0.630	1	726	2,073	------	------	------	Q3-EX
8	Reach	0.628	1	727	2,015	7	------	------	FLOW TO Q4-EX
10	SCS Runoff	2.081	1	723	5,950	------	------	------	Q4-EX
11	Combine	2.655	1	724	7,964	8, 10	------	------	FLOW TO EAST
13	SCS Runoff	4.913	1	722	13,236	------	------	------	Q5-EX
14	Combine	5.694	1	722	16,027	5, 13	------	------	FLOW TO EX POND
15	Reservoir	0.759	1	752	13,982	14	6335.43	7,948	OUTFLOW POND
17	SCS Runoff	4.136	1	723	11,827	------	------	------	Q6-EX
18	Combine	8.179	1	725	26,904	2, 17	------	------	FLOW TO SOUTHWEST
20	Combine	11.43	1	725	48,851	11, 15, 18,	------	------	TOTAL OUTFLOW FROM SITE

Hydrograph Report

Hyd. No. 1

Q1-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 4.821 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,080 cuft
Drainage area	= 2.130 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.80 min
Total precip.	= 3.24 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



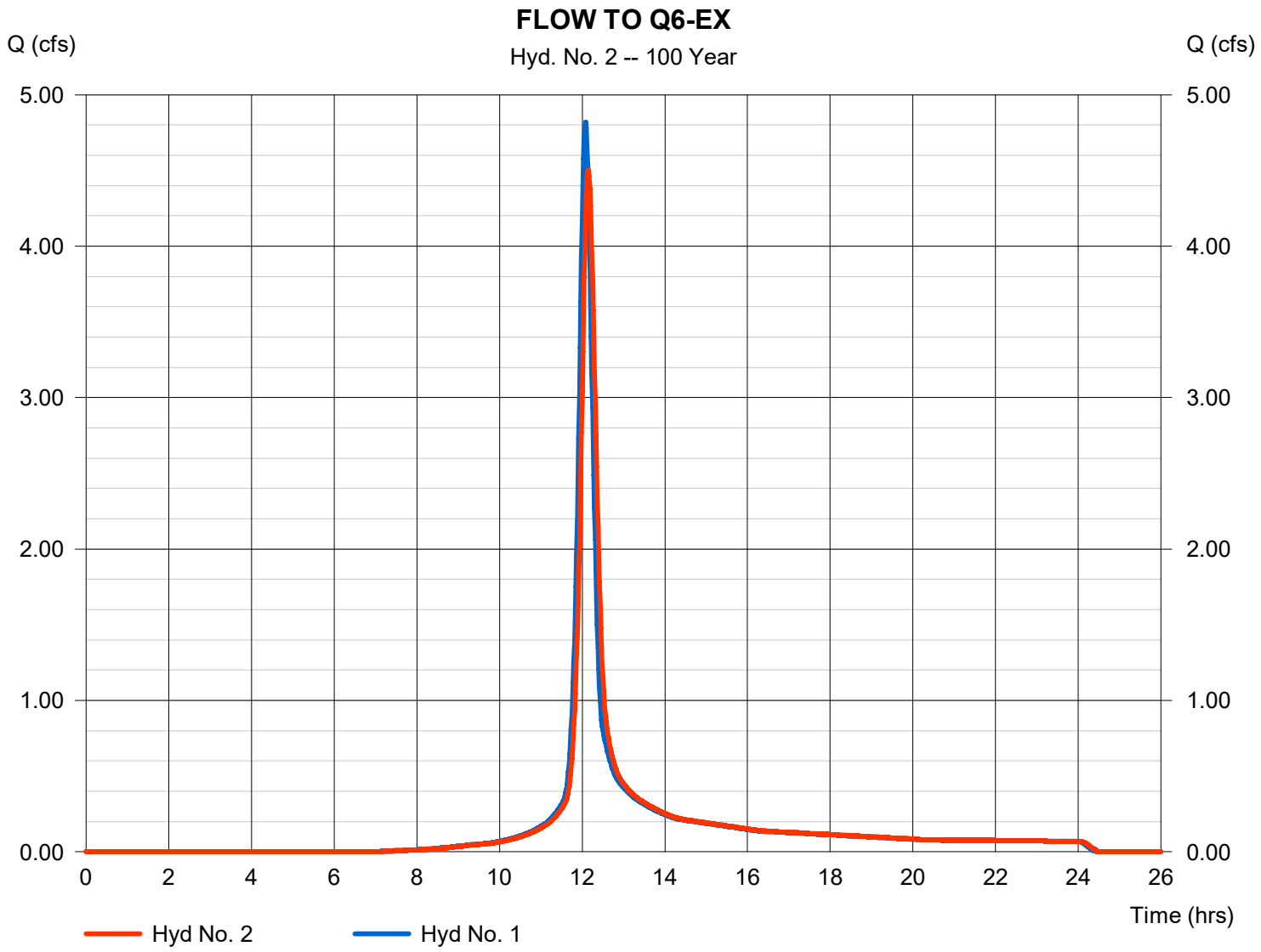
Hydrograph Report

Hyd. No. 2

FLOW TO Q6-EX

Hydrograph type	=	Reach	Peak discharge	=	4.502 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.15 hrs
Time interval	=	1 min	Hyd. volume	=	15,077 cuft
Inflow hyd. No.	=	1 - Q1-EX	Section type	=	Trapezoidal
Reach length	=	300.0 ft	Channel slope	=	3.7 %
Manning's n	=	0.035	Bottom width	=	20.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	1.116	Rating curve m	=	1.071
Ave. velocity	=	1.23 ft/s	Routing coeff.	=	0.2327

Modified Att-Kin routing method used.

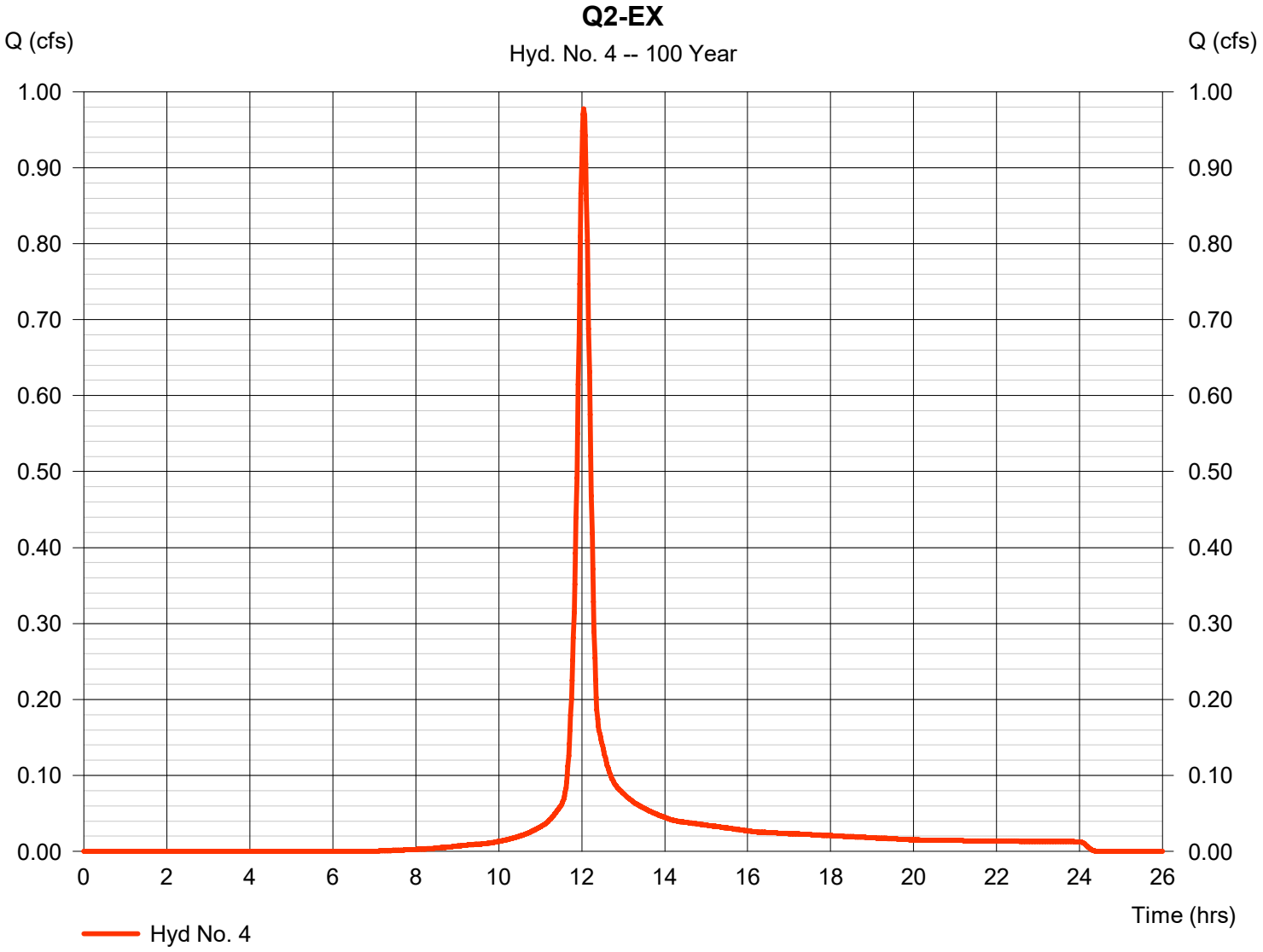


Hydrograph Report

Hyd. No. 4

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.978 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,796 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



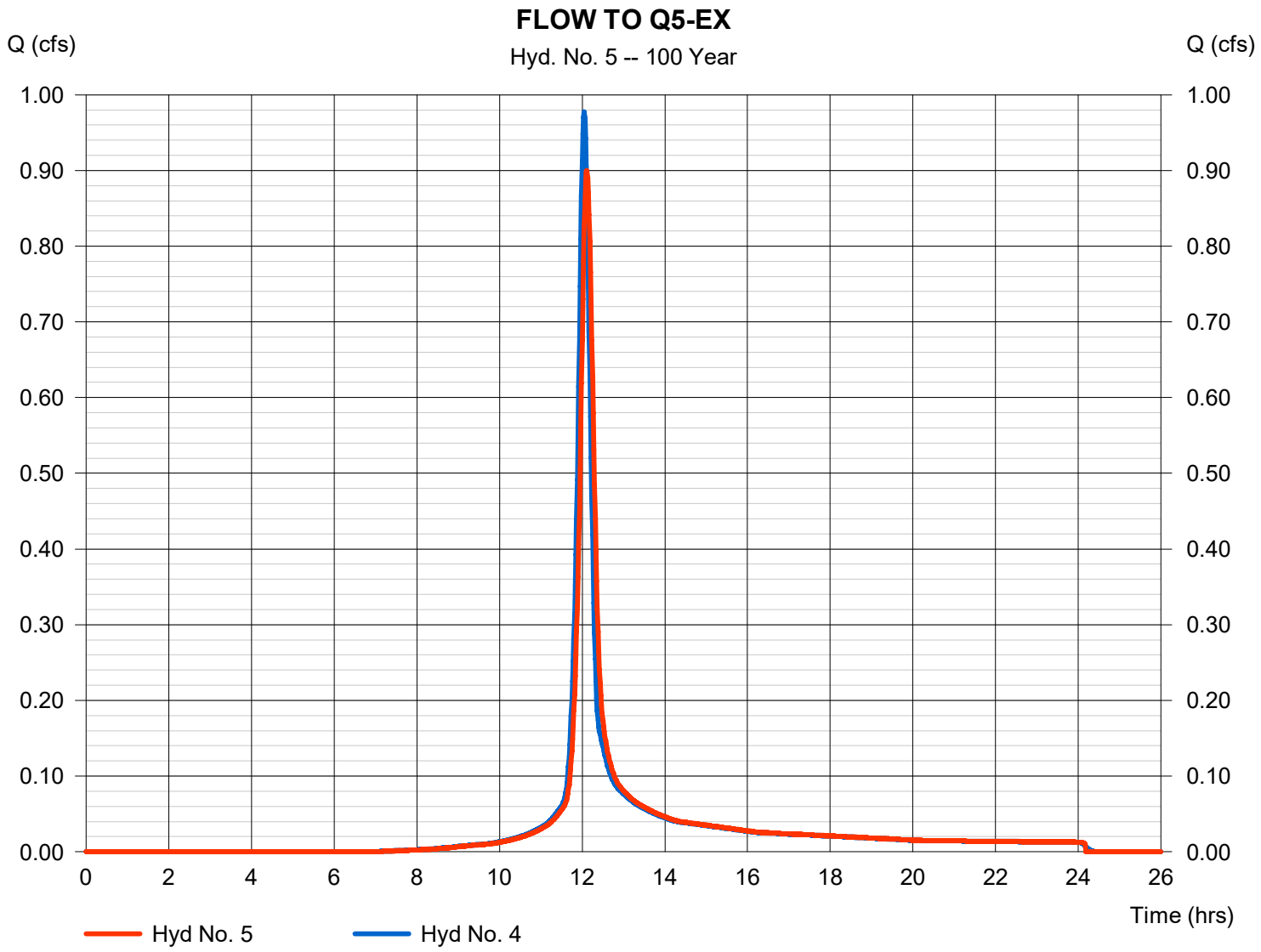
Hydrograph Report

Hyd. No. 5

FLOW TO Q5-EX

Hydrograph type	= Reach	Peak discharge	= 0.900 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 2,791 cuft
Inflow hyd. No.	= 4 - Q2-EX	Section type	= Trapezoidal
Reach length	= 328.0 ft	Channel slope	= 4.2 %
Manning's n	= 0.035	Bottom width	= 17.0 ft
Side slope	= 16.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.317	Rating curve m	= 1.117
Ave. velocity	= 1.28 ft/s	Routing coeff.	= 0.2306

Modified Att-Kin routing method used.

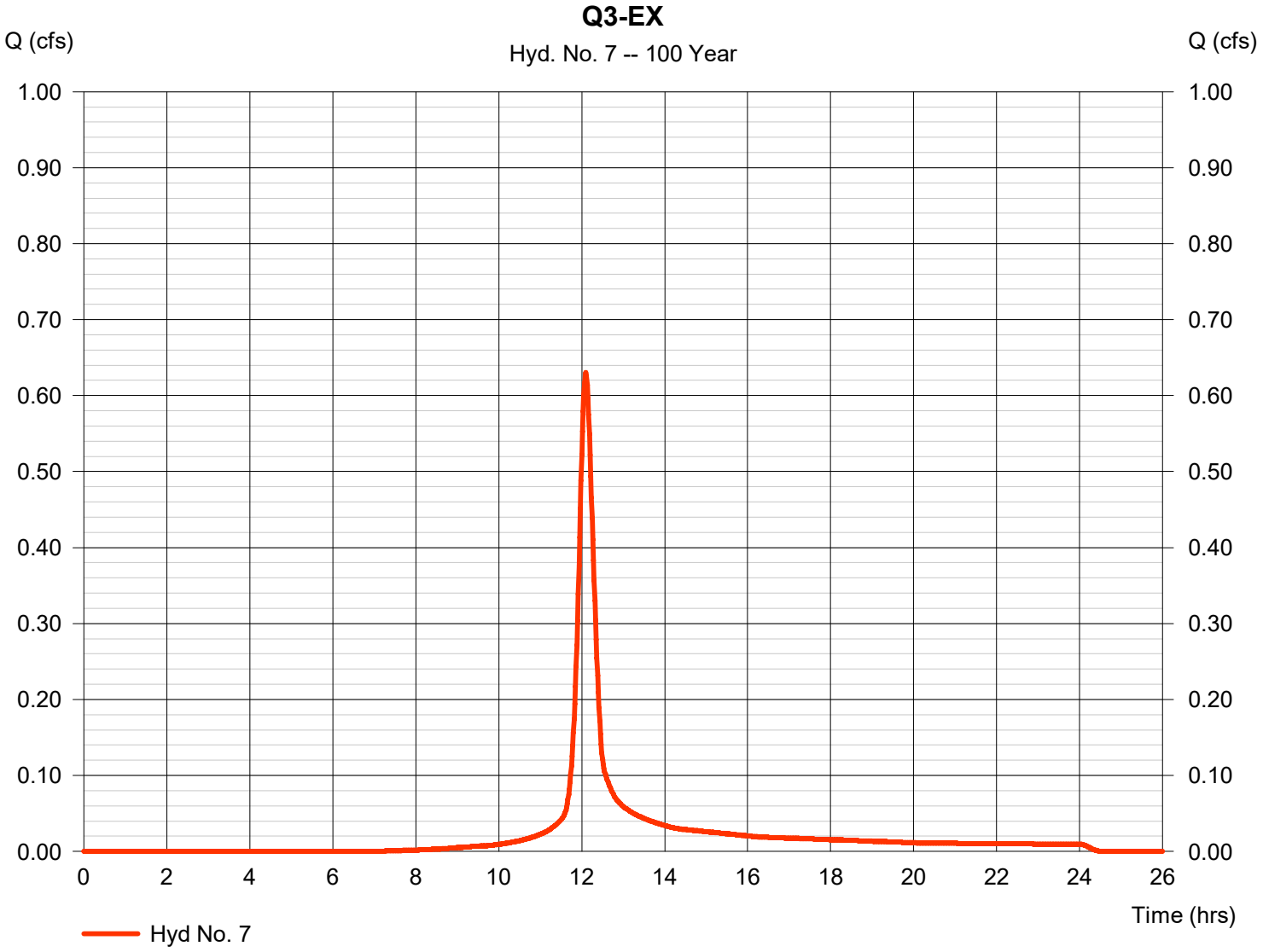


Hydrograph Report

Hyd. No. 7

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.630 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	2,073 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.42 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



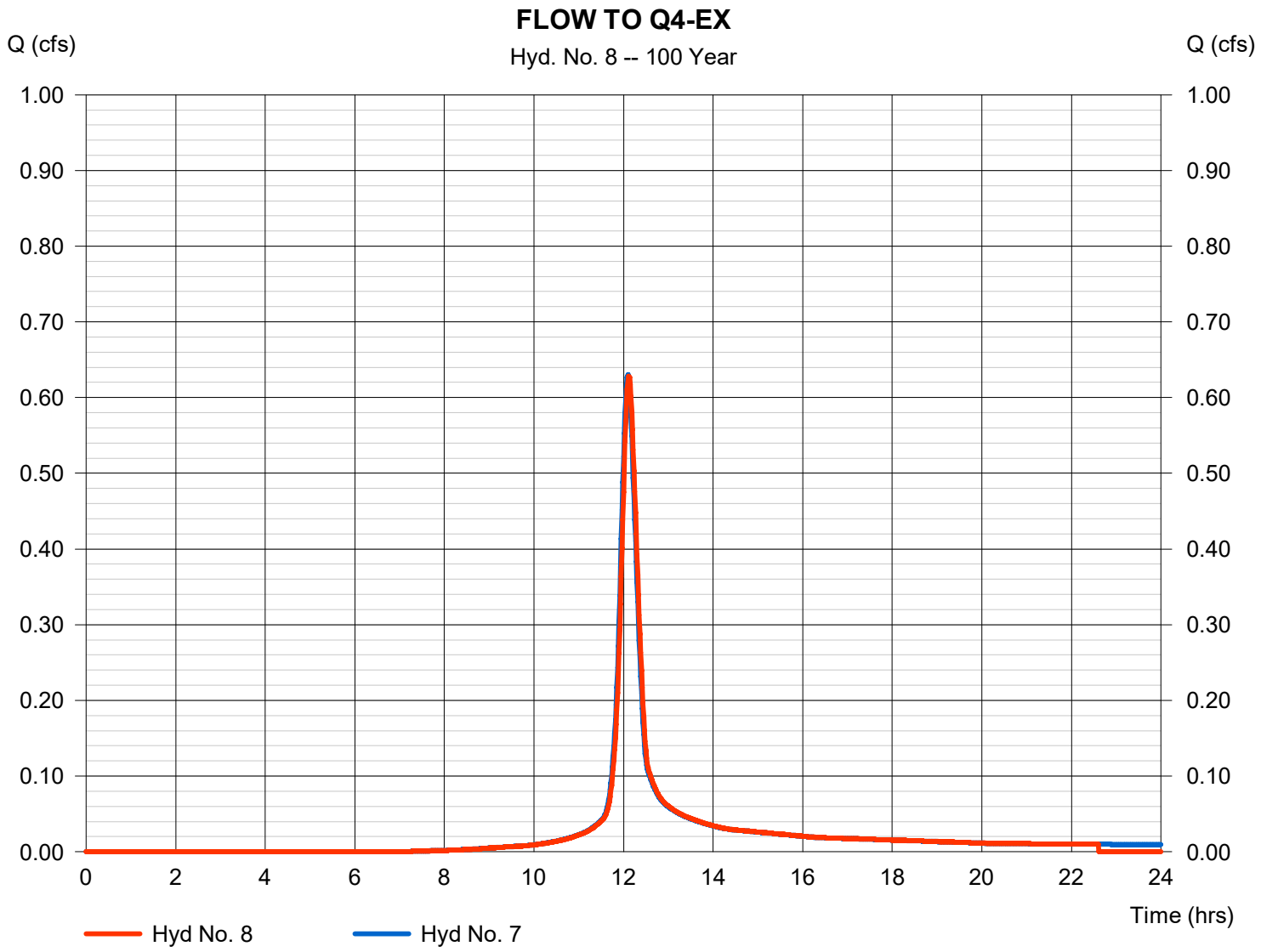
Hydrograph Report

Hyd. No. 8

FLOW TO Q4-EX

Hydrograph type	=	Reach	Peak discharge	=	0.628 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	2,015 cuft
Inflow hyd. No.	=	7 - Q3-EX	Section type	=	Trapezoidal
Reach length	=	152.0 ft	Channel slope	=	4.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	2.954	Rating curve m	=	0.966
Ave. velocity	=	3.12 ft/s	Routing coeff.	=	0.7458

Modified Att-Kin routing method used.

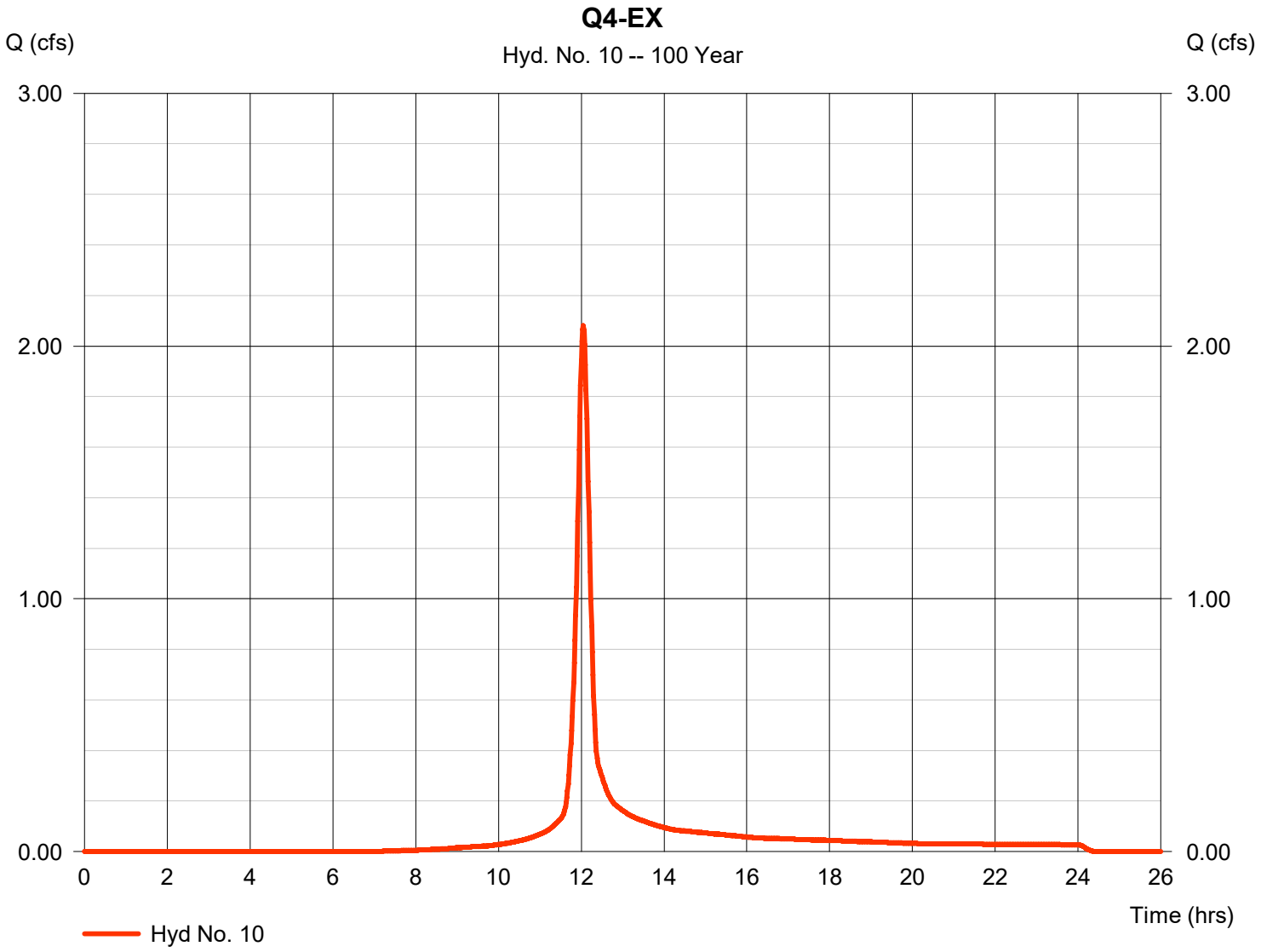


Hydrograph Report

Hyd. No. 10

Q4-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.081 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	5,950 cuft
Drainage area	=	0.830 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.18 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

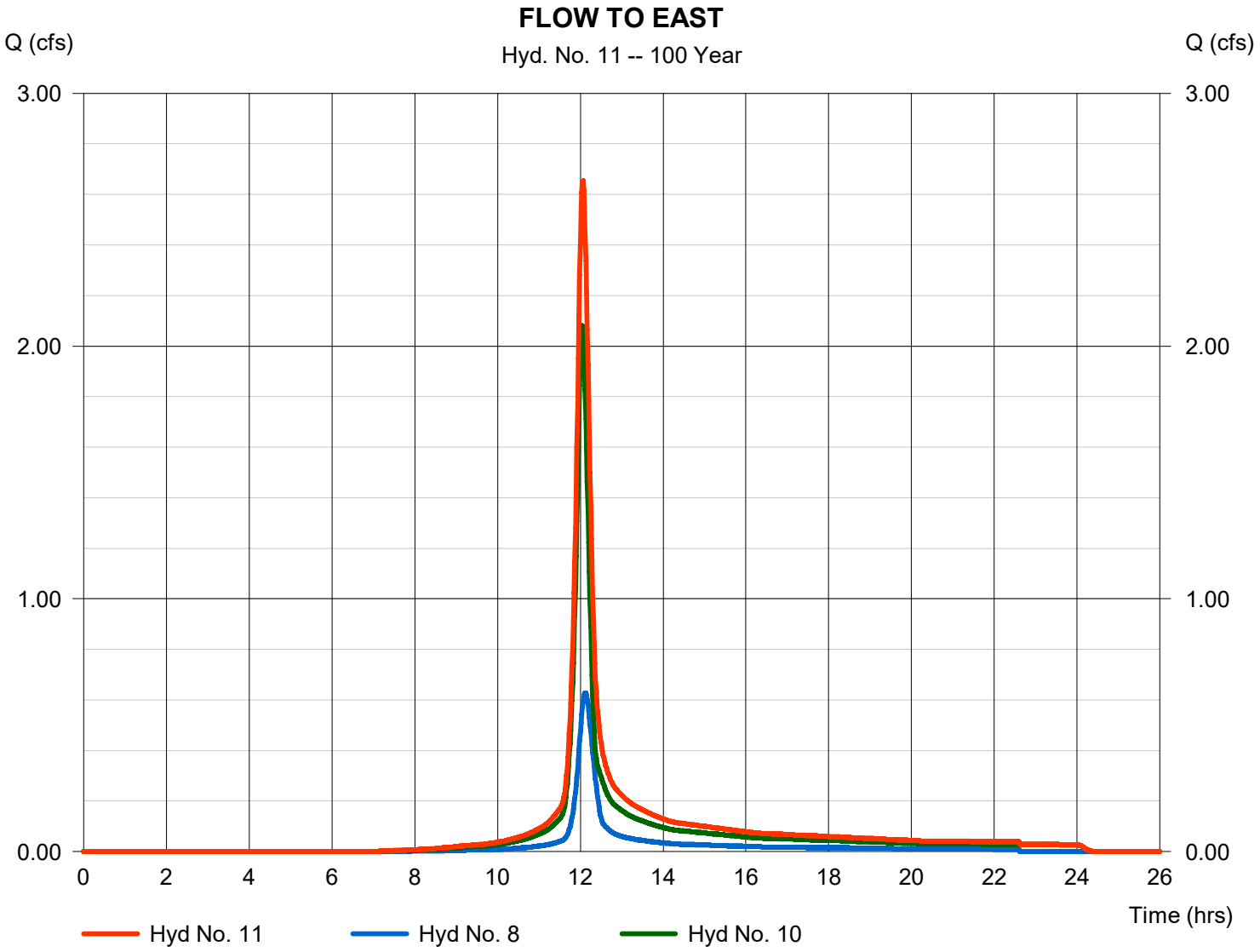


Hydrograph Report

Hyd. No. 11

FLOW TO EAST

Hydrograph type	= Combine	Peak discharge	= 2.655 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 7,964 cuft
Inflow hyds.	= 8, 10	Contrib. drain. area	= 0.830 ac

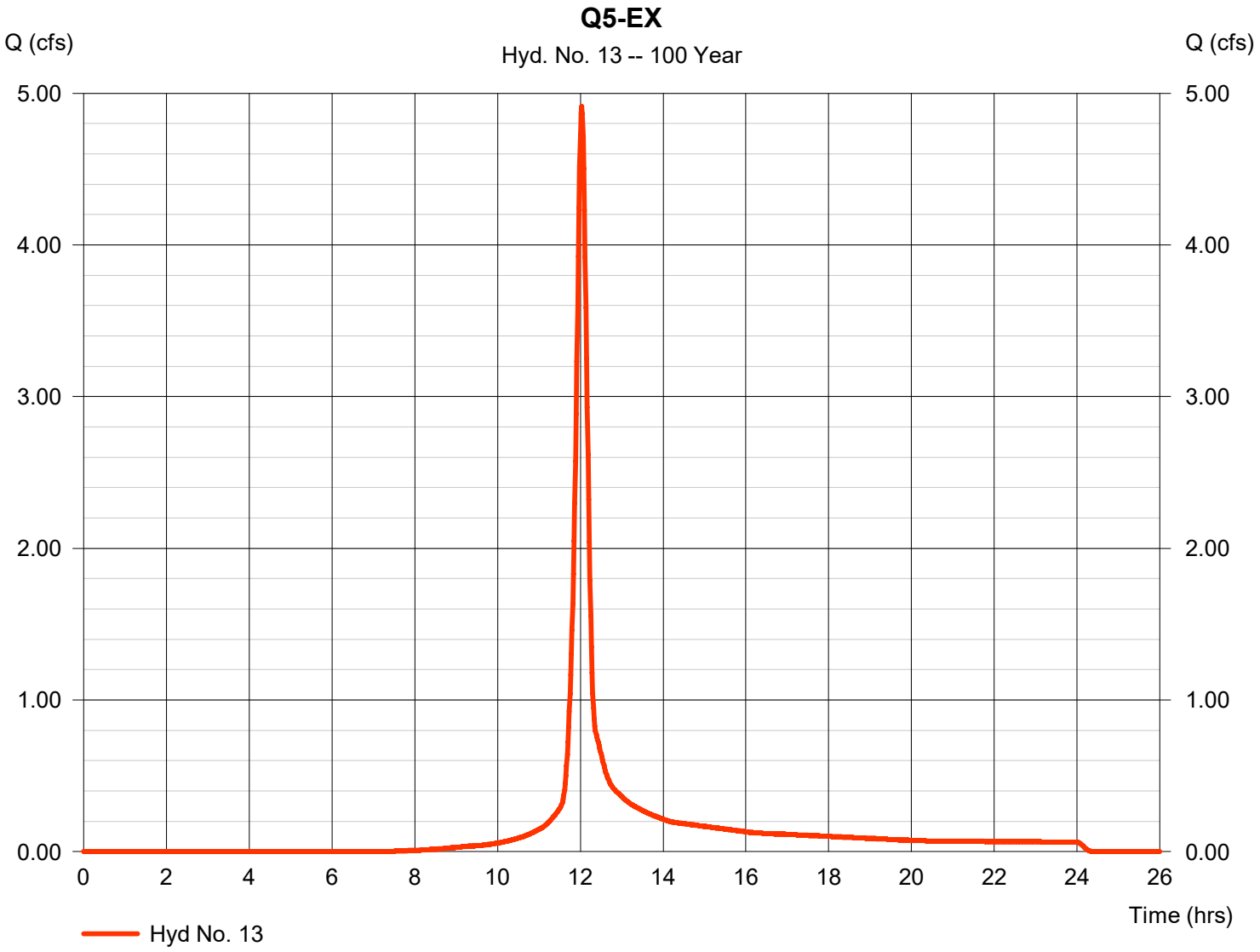


Hydrograph Report

Hyd. No. 13

Q5-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.913 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	13,236 cuft
Drainage area	=	1.950 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.88 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

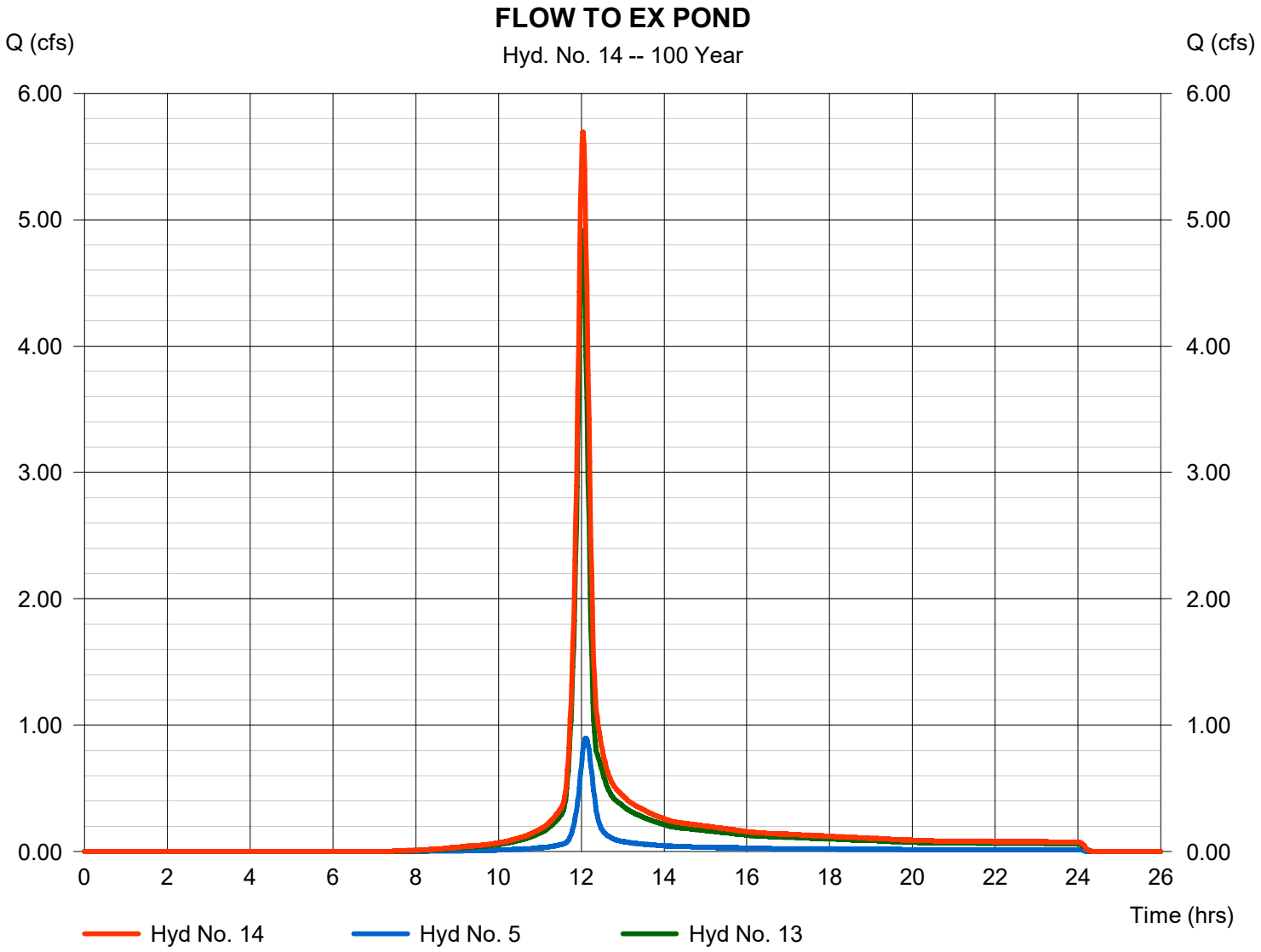


Hydrograph Report

Hyd. No. 14

FLOW TO EX POND

Hydrograph type	=	Combine	Peak discharge	=	5.694 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	16,027 cuft
Inflow hyds.	=	5, 13	Contrib. drain. area	=	1.950 ac



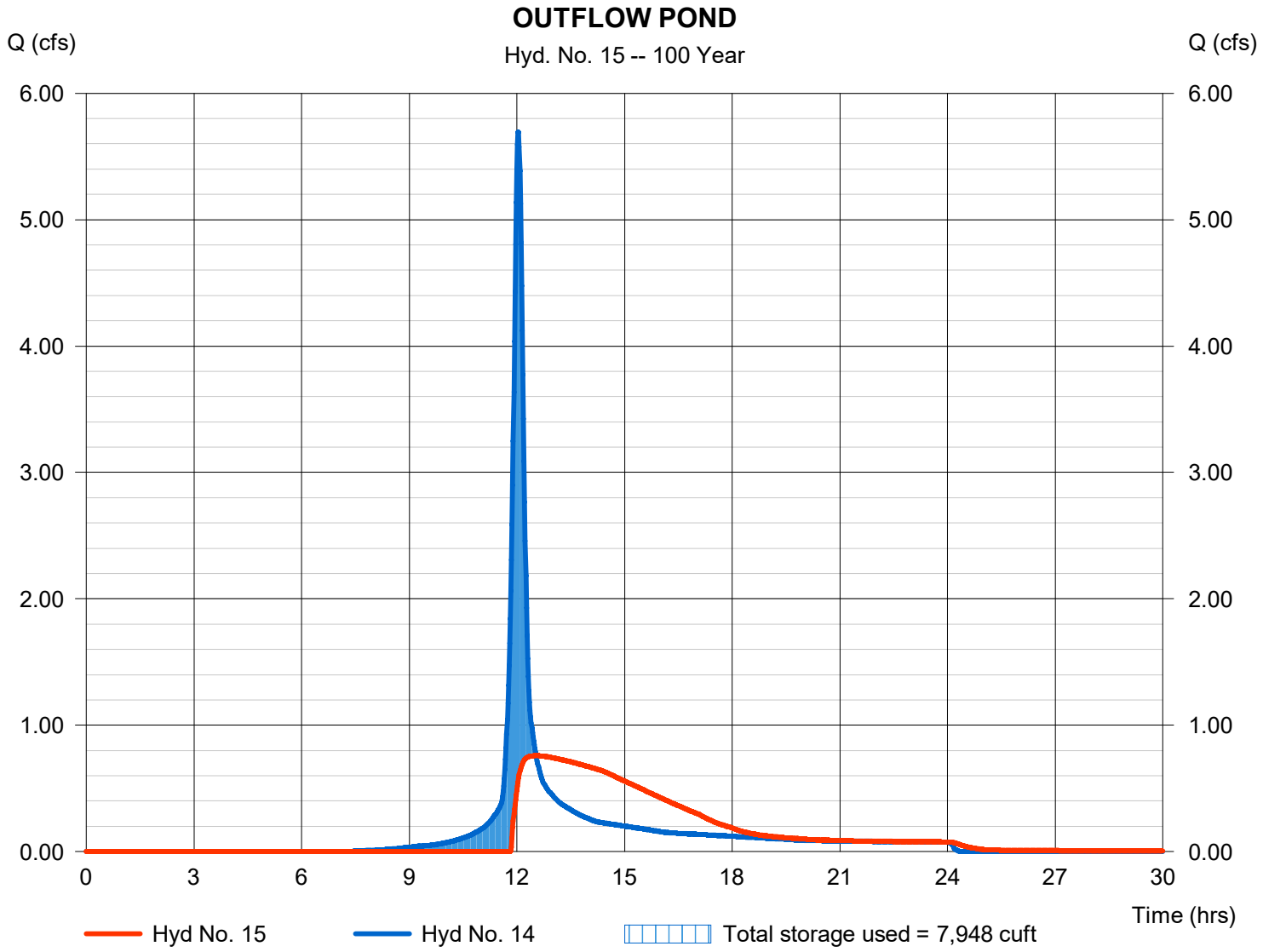
Hydrograph Report

Hyd. No. 15

OUTFLOW POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.759 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.53 hrs
Time interval	=	1 min	Hyd. volume	=	13,982 cuft
Inflow hyd. No.	=	14 - FLOW TO EX POND	Max. Elevation	=	6335.43 ft
Reservoir name	=	EX POND	Max. Storage	=	7,948 cuft

Storage Indication method used.

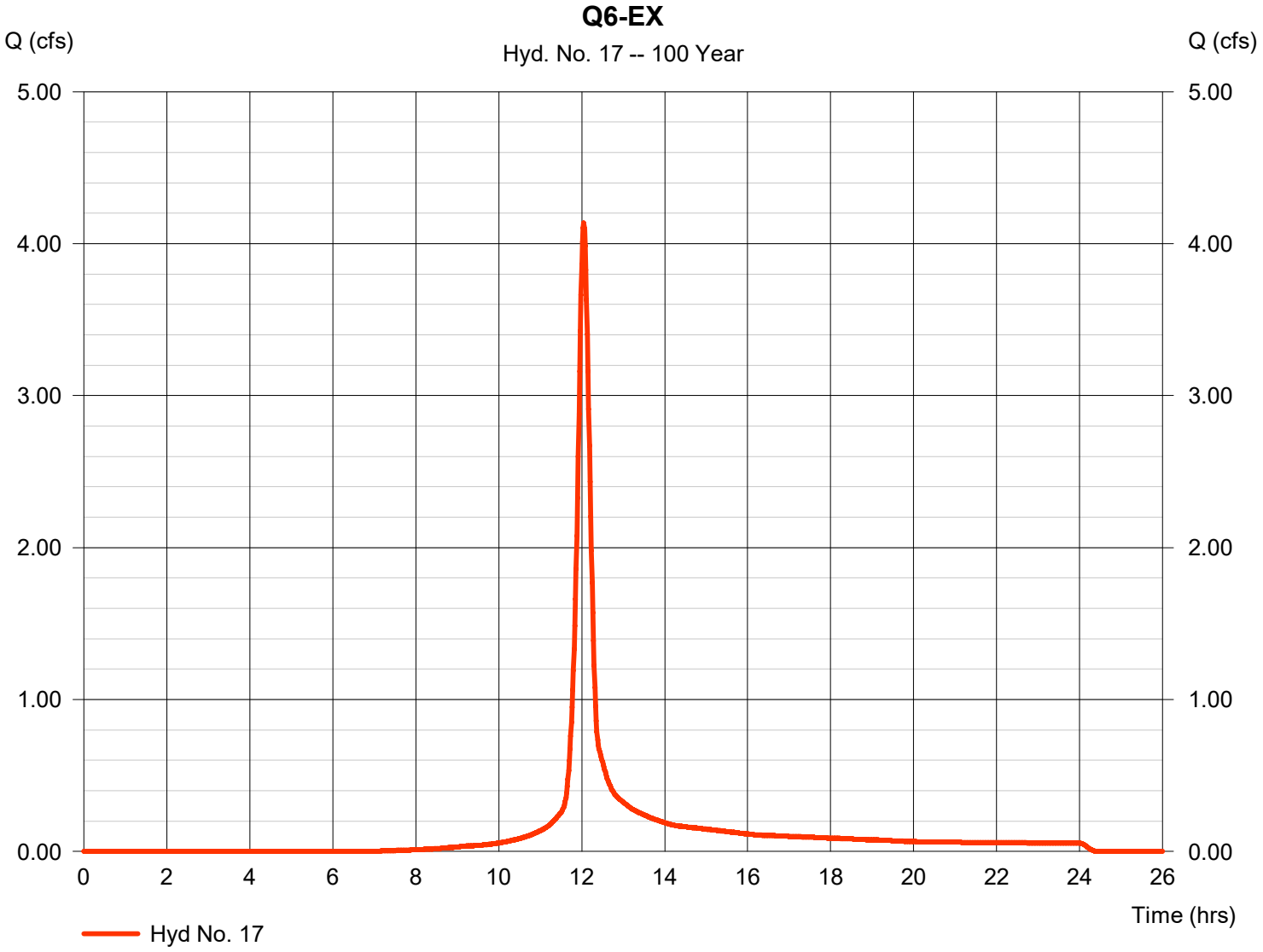


Hydrograph Report

Hyd. No. 17

Q6-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.136 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	11,827 cuft
Drainage area	=	1.650 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.24 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

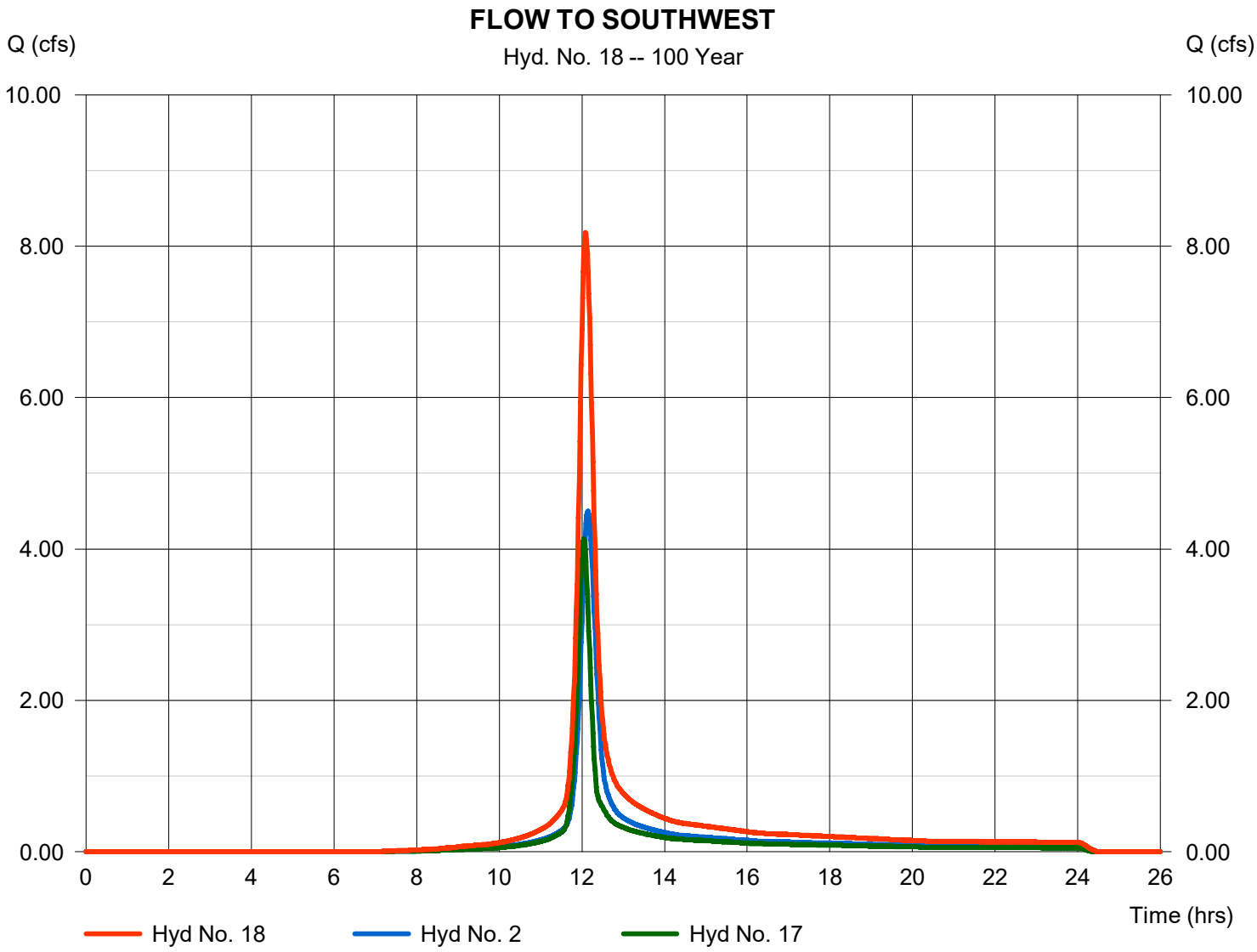


Hydrograph Report

Hyd. No. 18

FLOW TO SOUTHWEST

Hydrograph type	= Combine	Peak discharge	= 8.179 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 26,904 cuft
Inflow hyds.	= 2, 17	Contrib. drain. area	= 1.650 ac

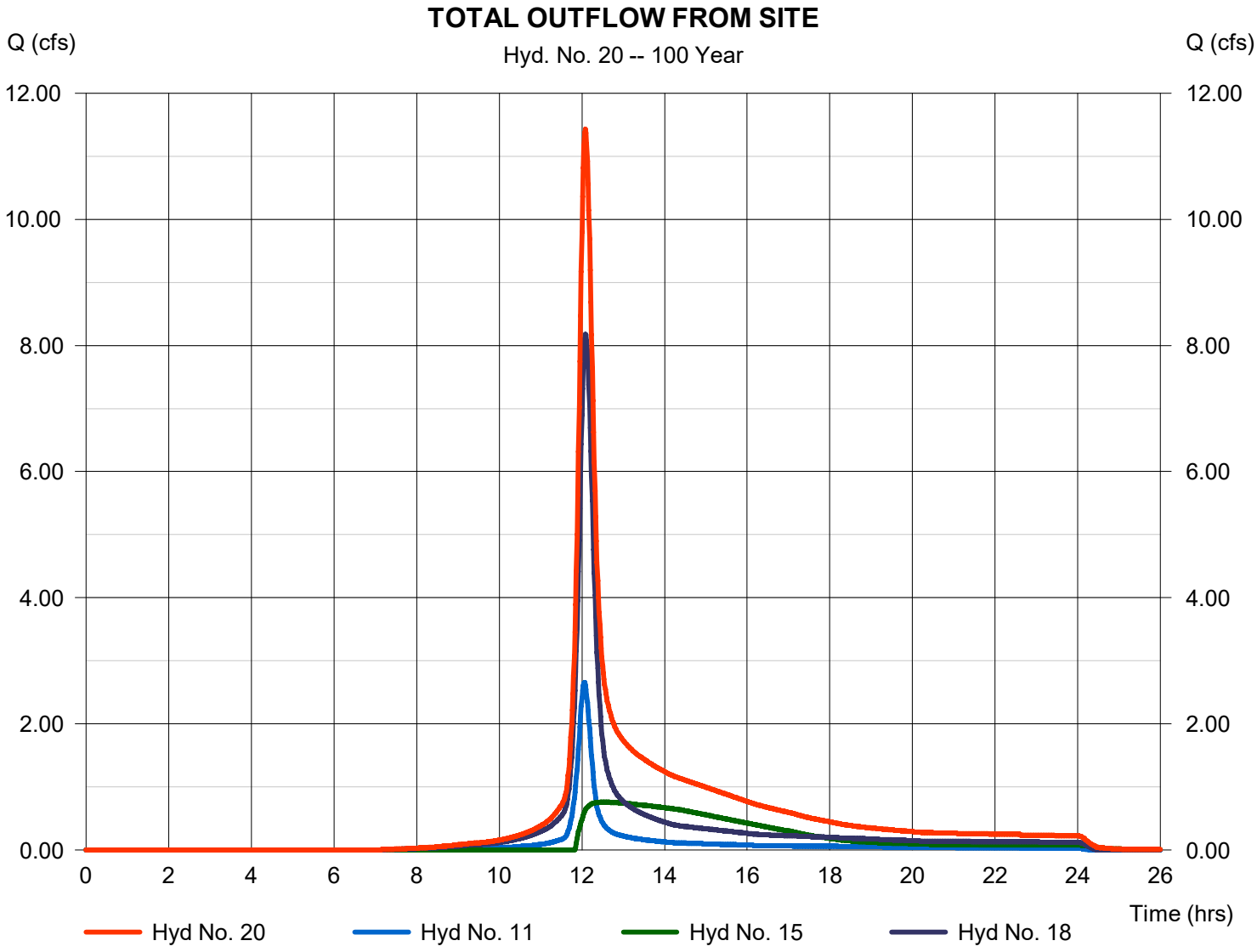


Hydrograph Report

Hyd. No. 20

TOTAL OUTFLOW FROM SITE

Hydrograph type	= Combine	Peak discharge	= 11.43 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 48,851 cuft
Inflow hyds.	= 11, 15, 18	Contrib. drain. area	= 0.000 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.

ecip. file name: K:\LAS SOLERAS TRACT 1 APT AND RETAIL FOR ABACUS\Drainage\LAS SOLERAS TRACT 1.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	1.53	0.00	0.00	0.00	2.61	2.93	3.24
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 E

DEVELOPED CONDITIONS ROUTING CALCULATIONS

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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	------	-------	0.174	-------	-------	0.000	0.454	0.543	0.630	Q3-EX
2	SCS Runoff	------	-------	0.263	-------	-------	0.000	0.638	0.755	0.869	Q4-PRO
4	SCS Runoff	------	-------	0.517	-------	-------	0.000	1.245	1.470	1.692	Q5-PRO
5	Combine	1, 2, 4	-------	0.889	-------	-------	0.000	2.200	2.609	3.010	FLOW TO POND 1
6	Reservoir	5	-------	0.023	-------	-------	0.000	0.096	0.125	0.155	FLOW FROM POND
8	SCS Runoff	------	-------	0.030	-------	-------	0.000	0.116	0.146	0.175	Q6-PRO
10	SCS Runoff	------	-------	0.093	-------	-------	0.000	0.460	0.591	0.724	Q7-PRO
12	SCS Runoff	------	-------	1.304	-------	-------	0.000	2.286	2.575	2.855	Q8-PRO
14	SCS Runoff	------	-------	1.347	-------	-------	0.000	2.363	2.661	2.950	Q9-PRO
15	Reach	14	-------	0.941	-------	-------	0.000	1.946	2.253	2.551	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	------	-------	2.606	-------	-------	0.000	5.154	5.906	6.631	Q10-PRO
18	Combine	10, 12, 15, 17	-------	4.781	-------	-------	0.000	9.600	11.05	12.46	FLOW TO POND 2
19	Reservoir	18	-------	1.021	-------	-------	0.000	2.602	3.075	3.800	FLOW FROM POND 2
21	SCS Runoff	------	-------	0.049	-------	-------	0.000	0.113	0.133	0.152	Q11-PRO
23	SCS Runoff	------	-------	0.273	-------	-------	0.000	0.706	0.843	0.978	Q2-EX
24	Reach	23	-------	0.204	-------	-------	0.000	0.561	0.676	0.790	FLOW TO TIE TO Q1-EX
26	SCS Runoff	------	-------	1.334	-------	-------	0.000	3.475	4.154	4.821	Q1-EX
27	Combine	24, 26	-------	1.519	-------	-------	0.000	3.989	4.779	5.556	FLOW TO Q12-PRO
28	Reach	27	-------	1.470	-------	-------	0.000	3.931	4.721	5.498	FLOW TO Q12-PRO
30	SCS Runoff	------	-------	0.078	-------	-------	0.000	0.294	0.368	0.443	Q12-PRO
31	Combine	28, 30	-------	1.531	-------	-------	0.000	4.175	5.025	5.860	FLOW TO PIPE
33	Combine	6, 8, 19, 21, 31,	-------	3.023	-------	-------	0.000	7.567	8.974	10.38	TOTAL FLOW EXITING THE SITE

Hydrograph Summary Report

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

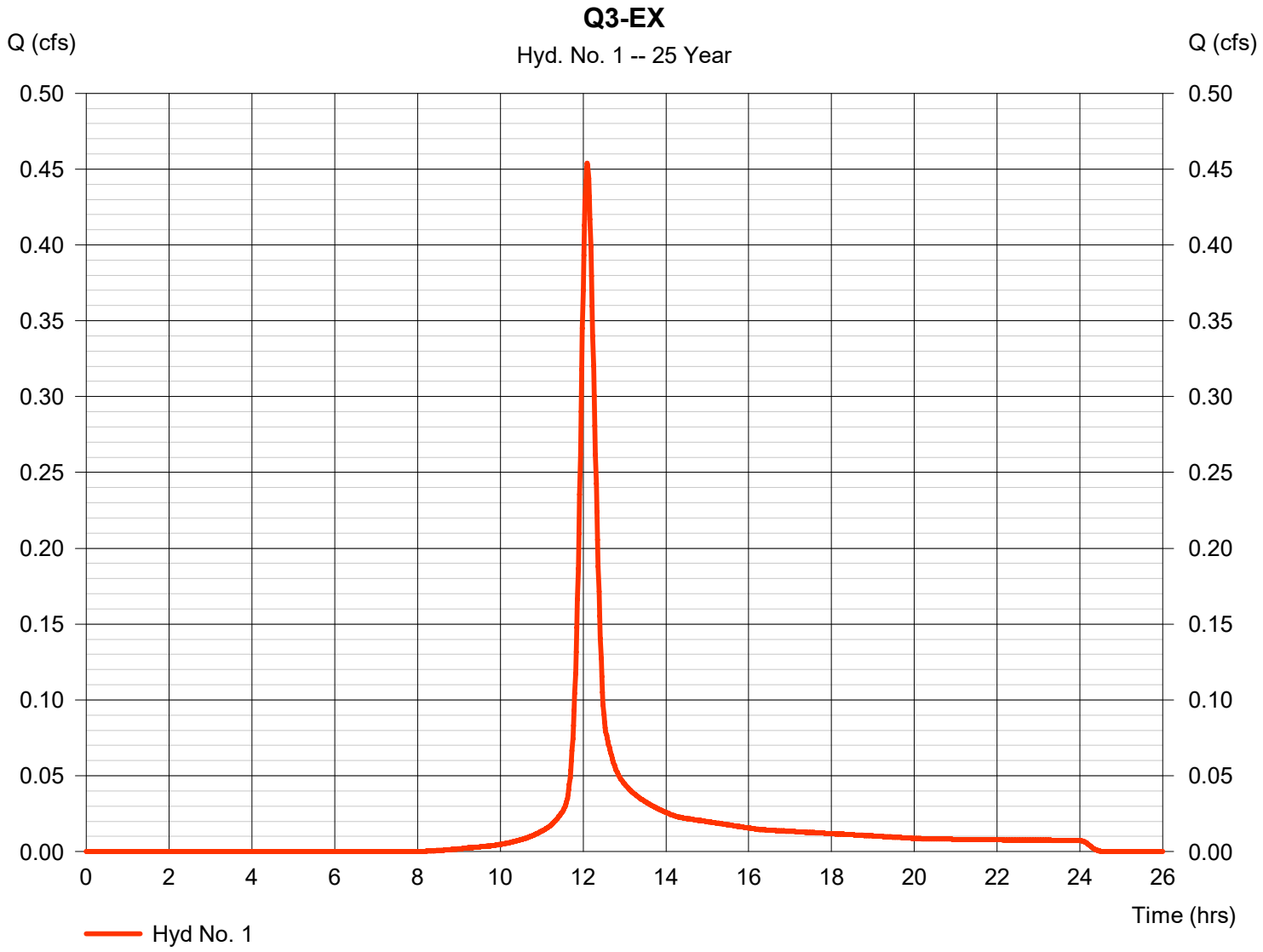
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.454	1	726	1,492	------	------	------	Q3-EX
2	SCS Runoff	0.638	1	718	1,358	------	------	------	Q4-PRO
4	SCS Runoff	1.245	1	718	2,542	------	------	------	Q5-PRO
5	Combine	2.200	1	718	5,392	1, 2, 4	------	------	FLOW TO POND 1
6	Reservoir	0.096	1	827	4,647	5	6335.27	3,252	FLOW FROM POND
8	SCS Runoff	0.116	1	720	265	------	------	------	Q6-PRO
10	SCS Runoff	0.460	1	718	941	------	------	------	Q7-PRO
12	SCS Runoff	2.286	1	717	5,346	------	------	------	Q8-PRO
14	SCS Runoff	2.363	1	717	5,524	------	------	------	Q9-PRO
15	Reach	1.946	1	721	5,521	14	------	------	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	5.154	1	719	12,257	------	------	------	Q10-PRO
18	Combine	9.600	1	719	24,065	10, 12, 15, 17	------	------	FLOW TO POND 2
19	Reservoir	2.602	1	729	23,409	18	6335.50	10,456	FLOW FROM POND 2
21	SCS Runoff	0.113	1	718	232	------	------	------	Q11-PRO
23	SCS Runoff	0.706	1	723	2,012	------	------	------	Q2-EX
24	Reach	0.561	1	729	1,984	23	------	------	FLOW TO TIE TO Q1-EX
26	SCS Runoff	3.475	1	725	10,853	------	------	------	Q1-EX
27	Combine	3.989	1	725	12,836	24, 26	------	------	FLOW TO Q12-PRO
28	Reach	3.931	1	728	12,834	27	------	------	FLOW TO Q12-PRO
30	SCS Runoff	0.294	1	723	806	------	------	------	Q12-PRO
31	Combine	4.175	1	727	13,640	28, 30	------	------	FLOW TO PIPE
33	Combine	7.567	1	727	42,034	6, 8, 19, 21, 31,	------	------	TOTAL FLOW EXITING THE SITE

Hydrograph Report

Hyd. No. 1

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.454 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,492 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.40 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

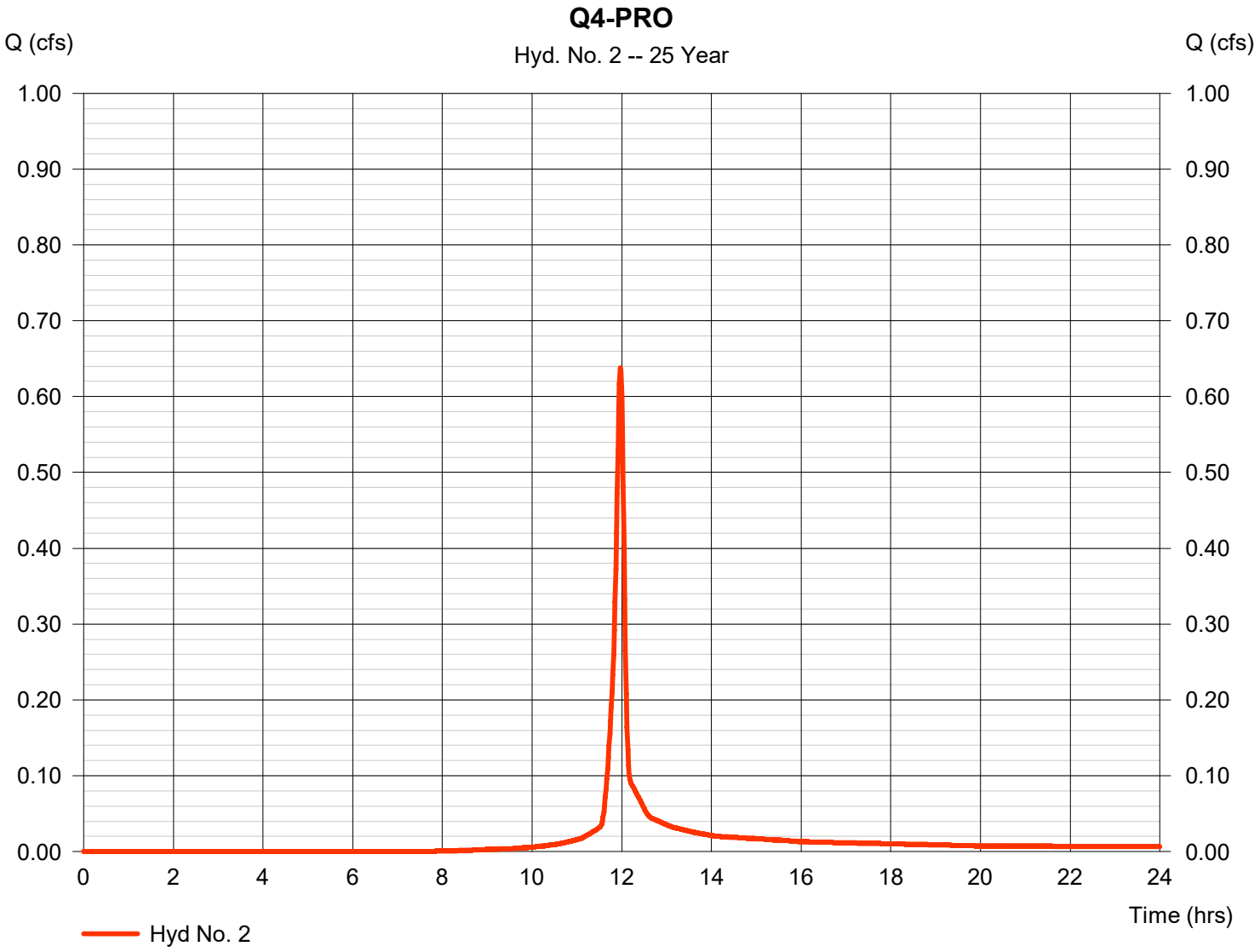


Hydrograph Report

Hyd. No. 2

Q4-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.638 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,358 cuft
Drainage area	=	0.260 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.90 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

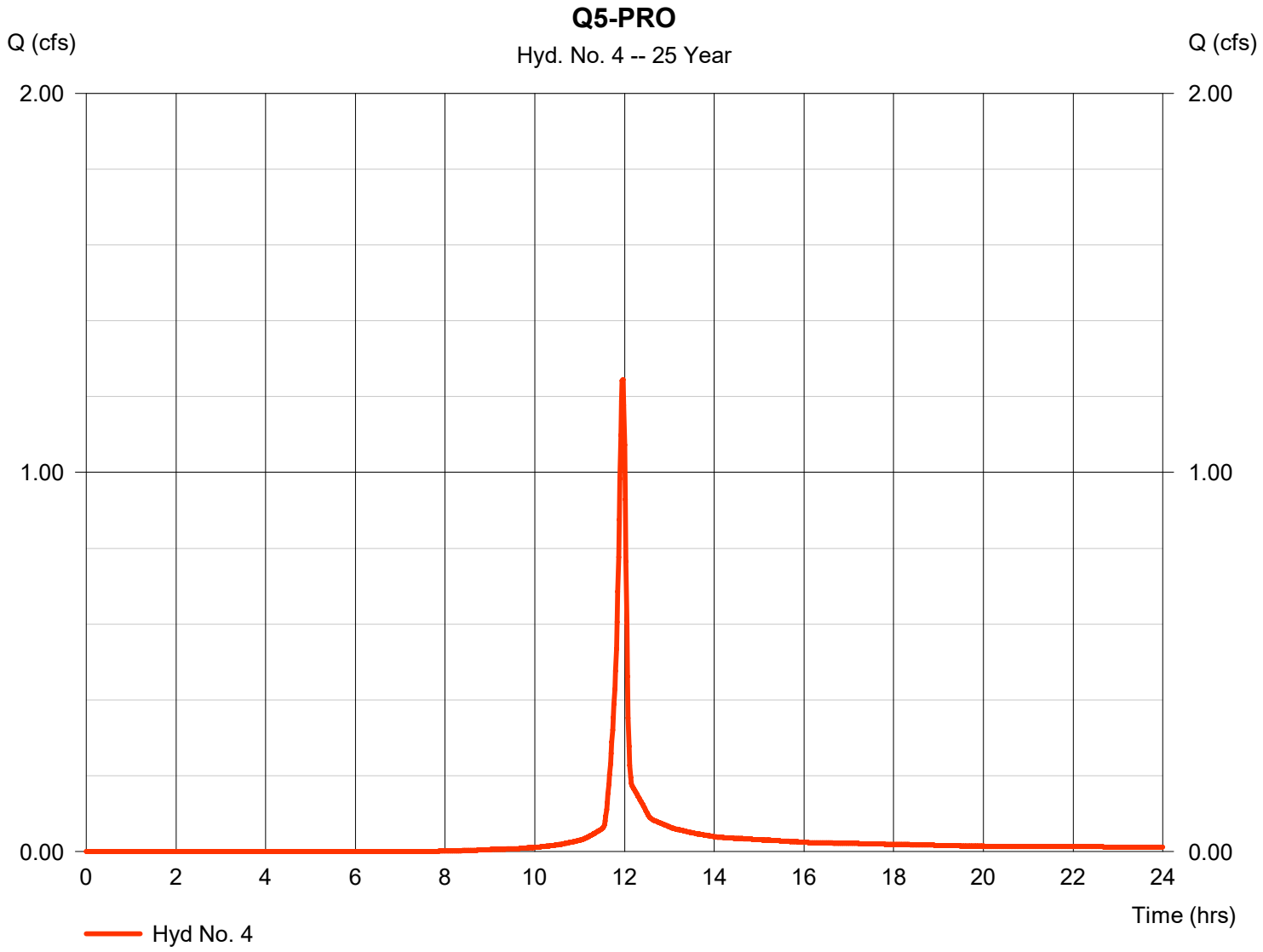


Hydrograph Report

Hyd. No. 4

Q5-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.245 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	2,542 cuft
Drainage area	=	0.460 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

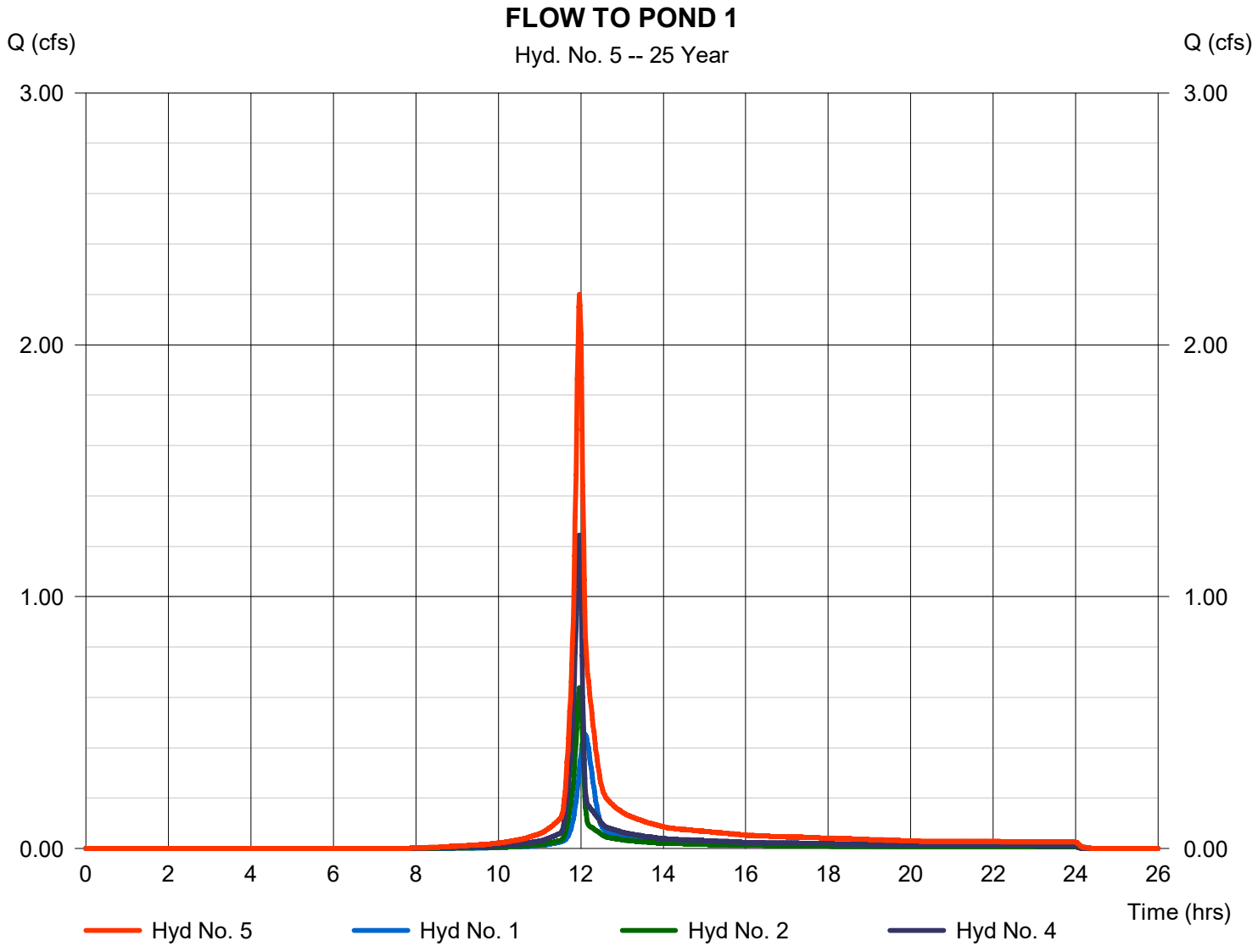


Hydrograph Report

Hyd. No. 5

FLOW TO POND 1

Hydrograph type	=	Combine	Peak discharge	=	2.200 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	5,392 cuft
Inflow hyds.	=	1, 2, 4	Contrib. drain. area	=	1.010 ac



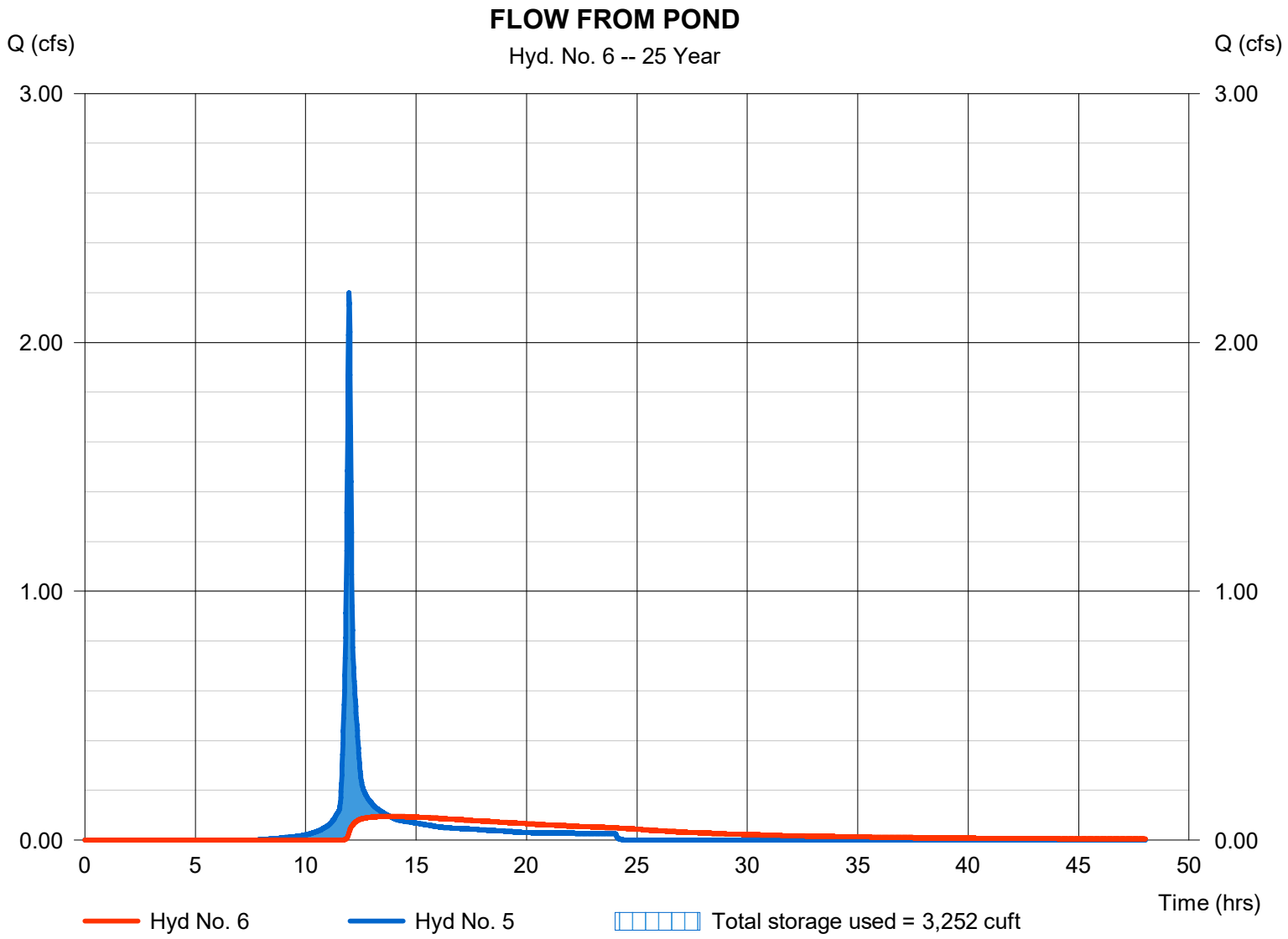
Hydrograph Report

Hyd. No. 6

FLOW FROM POND

Hydrograph type	= Reservoir	Peak discharge	= 0.096 cfs
Storm frequency	= 25 yrs	Time to peak	= 13.78 hrs
Time interval	= 1 min	Hyd. volume	= 4,647 cuft
Inflow hyd. No.	= 5 - FLOW TO POND 1	Max. Elevation	= 6335.27 ft
Reservoir name	= POND 1	Max. Storage	= 3,252 cuft

Storage Indication method used.



Pond No. 3 - POND 1

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 6334.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6334.50	3,665	0	0
0.50	6335.00	4,317	1,995	1,995
1.00	6335.50	5,009	2,332	4,327
1.50	6336.00	5,739	2,687	7,014
2.00	6336.50	6,508	3,062	10,076

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	1
Invert El. (ft)	= 6334.50	0.00	0.00	6334.60
Length (ft)	= 50.00	0.00	0.00	0.10
Slope (%)	= 0.50	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	0.00	0.00	0.00
Crest El. (ft)	= 6336.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	---	---	---
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	6334.50	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.05	200	6334.55	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.10	399	6334.60	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.15	599	6334.65	0.00	---	---	0.00	0.00	---	---	---	---	---	0.002
0.20	798	6334.70	0.00	---	---	0.01	0.00	---	---	---	---	---	0.005
0.25	998	6334.75	0.00	---	---	0.01	0.00	---	---	---	---	---	0.010
0.30	1,197	6334.80	0.00	---	---	0.02	0.00	---	---	---	---	---	0.016
0.35	1,397	6334.85	0.00	---	---	0.02	0.00	---	---	---	---	---	0.022
0.40	1,596	6334.90	0.00	---	---	0.03	0.00	---	---	---	---	---	0.029
0.45	1,796	6334.95	0.00	---	---	0.04	0.00	---	---	---	---	---	0.036
0.50	1,995	6335.00	0.00	---	---	0.04	0.00	---	---	---	---	---	0.044
0.55	2,229	6335.05	0.00	---	---	0.05	0.00	---	---	---	---	---	0.053
0.60	2,462	6335.10	0.00	---	---	0.06	0.00	---	---	---	---	---	0.062
0.65	2,695	6335.15	0.00	---	---	0.07	0.00	---	---	---	---	---	0.071
0.70	2,928	6335.20	0.00	---	---	0.08	0.00	---	---	---	---	---	0.081
0.75	3,161	6335.25	0.00	---	---	0.09	0.00	---	---	---	---	---	0.092
0.80	3,394	6335.30	0.00	---	---	0.10	0.00	---	---	---	---	---	0.102
0.85	3,628	6335.35	0.00	---	---	0.11	0.00	---	---	---	---	---	0.113
0.90	3,861	6335.40	0.00	---	---	0.12	0.00	---	---	---	---	---	0.125
0.95	4,094	6335.45	0.00	---	---	0.14	0.00	---	---	---	---	---	0.137
1.00	4,327	6335.50	0.00	---	---	0.15	0.00	---	---	---	---	---	0.149
1.05	4,596	6335.55	0.00	---	---	0.16	0.00	---	---	---	---	---	0.162
1.10	4,864	6335.60	0.00	---	---	0.17	0.00	---	---	---	---	---	0.175
1.15	5,133	6335.65	0.00	---	---	0.19	0.00	---	---	---	---	---	0.188
1.20	5,402	6335.70	0.00	---	---	0.20	0.00	---	---	---	---	---	0.202
1.25	5,671	6335.75	0.00	---	---	0.22	0.00	---	---	---	---	---	0.216
1.30	5,939	6335.80	0.00	---	---	0.23	0.00	---	---	---	---	---	0.230
1.35	6,208	6335.85	0.00	---	---	0.24	0.00	---	---	---	---	---	0.244
1.40	6,477	6335.90	0.00	---	---	0.26	0.00	---	---	---	---	---	0.259
1.45	6,745	6335.95	0.00	---	---	0.27	0.00	---	---	---	---	---	0.274
1.50	7,014	6336.00	0.00	---	---	0.29	0.00	---	---	---	---	---	0.290
1.55	7,320	6336.05	0.18 ic	---	---	0.31	0.17	---	---	---	---	---	0.480
1.60	7,626	6336.10	0.49 ic	---	---	0.32	0.49	---	---	---	---	---	0.815
1.65	7,933	6336.15	0.93 ic	---	---	0.34	0.91	---	---	---	---	---	1.243
1.70	8,239	6336.20	1.44 oc	---	---	0.35	1.39	---	---	---	---	---	1.749
1.75	8,545	6336.25	1.98 oc	---	---	0.37	1.95	---	---	---	---	---	2.320
1.80	8,851	6336.30	2.60 oc	---	---	0.39	2.56	---	---	---	---	---	2.950
1.85	9,157	6336.35	3.24 oc	---	---	0.40	3.23	---	---	---	---	---	3.633

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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
1.90	9,464	6336.40	3.97 oc	---	---	0.42	3.94	---	---	---	---	---	4.367
1.95	9,770	6336.45	4.70 oc	---	---	0.44	4.70 s	---	---	---	---	---	5.137
2.00	10,076	6336.50	5.37 oc	---	---	0.46	5.37 s	---	---	---	---	---	5.824

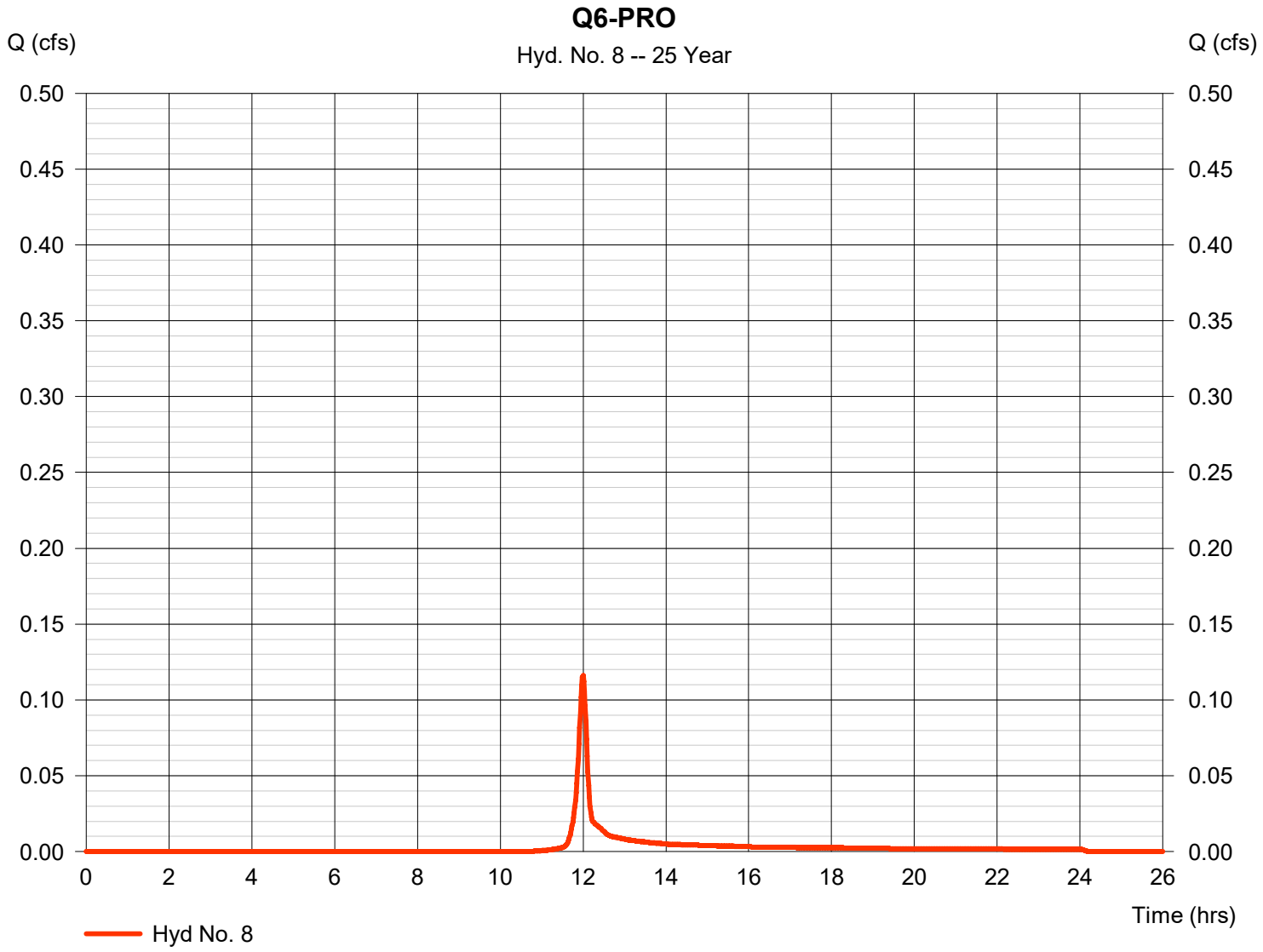
...End

Hydrograph Report

Hyd. No. 8

Q6-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.116 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	265 cuft
Drainage area	=	0.080 ac	Curve number	=	79
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	9.18 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

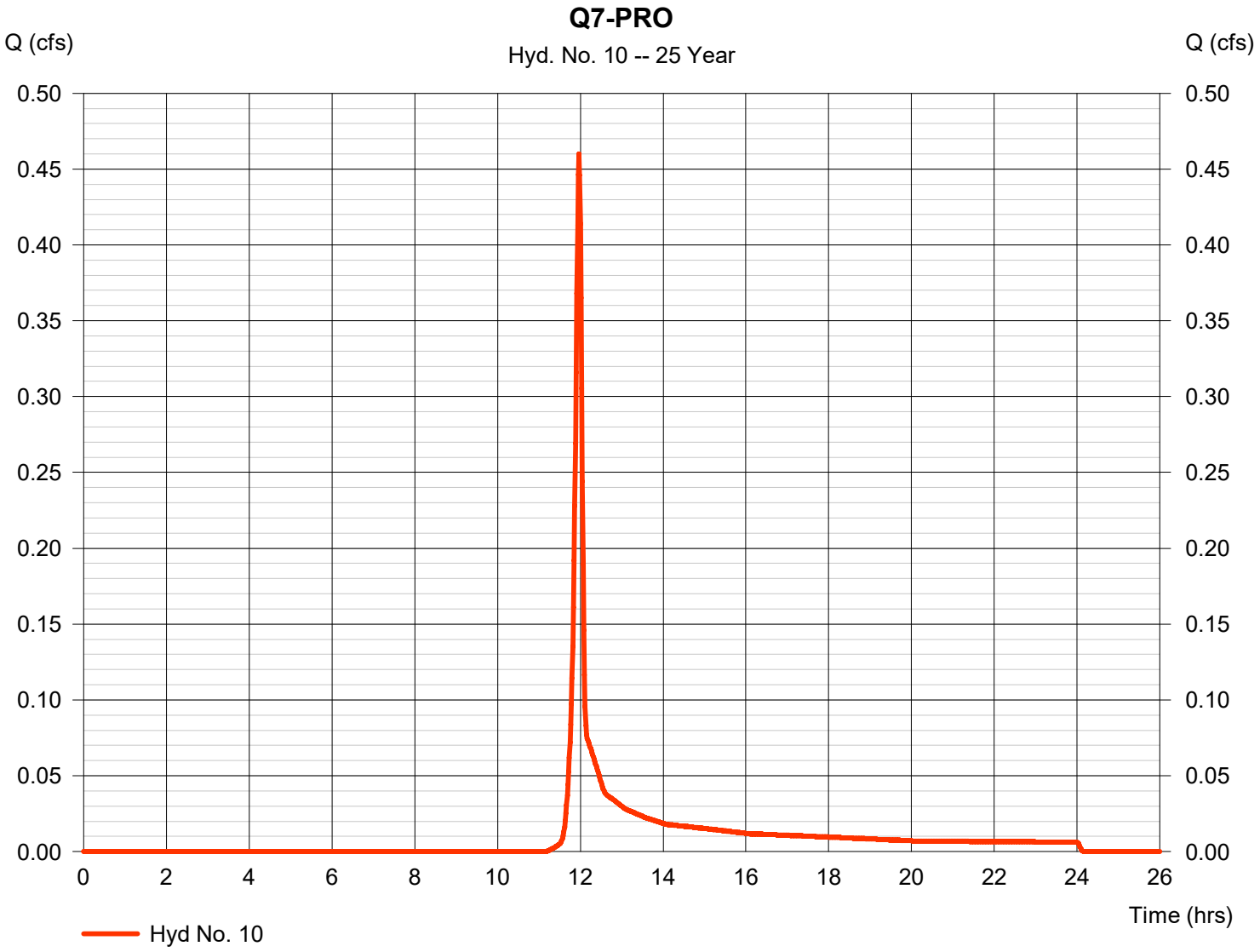


Hydrograph Report

Hyd. No. 10

Q7-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.460 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	941 cuft
Drainage area	=	0.330 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

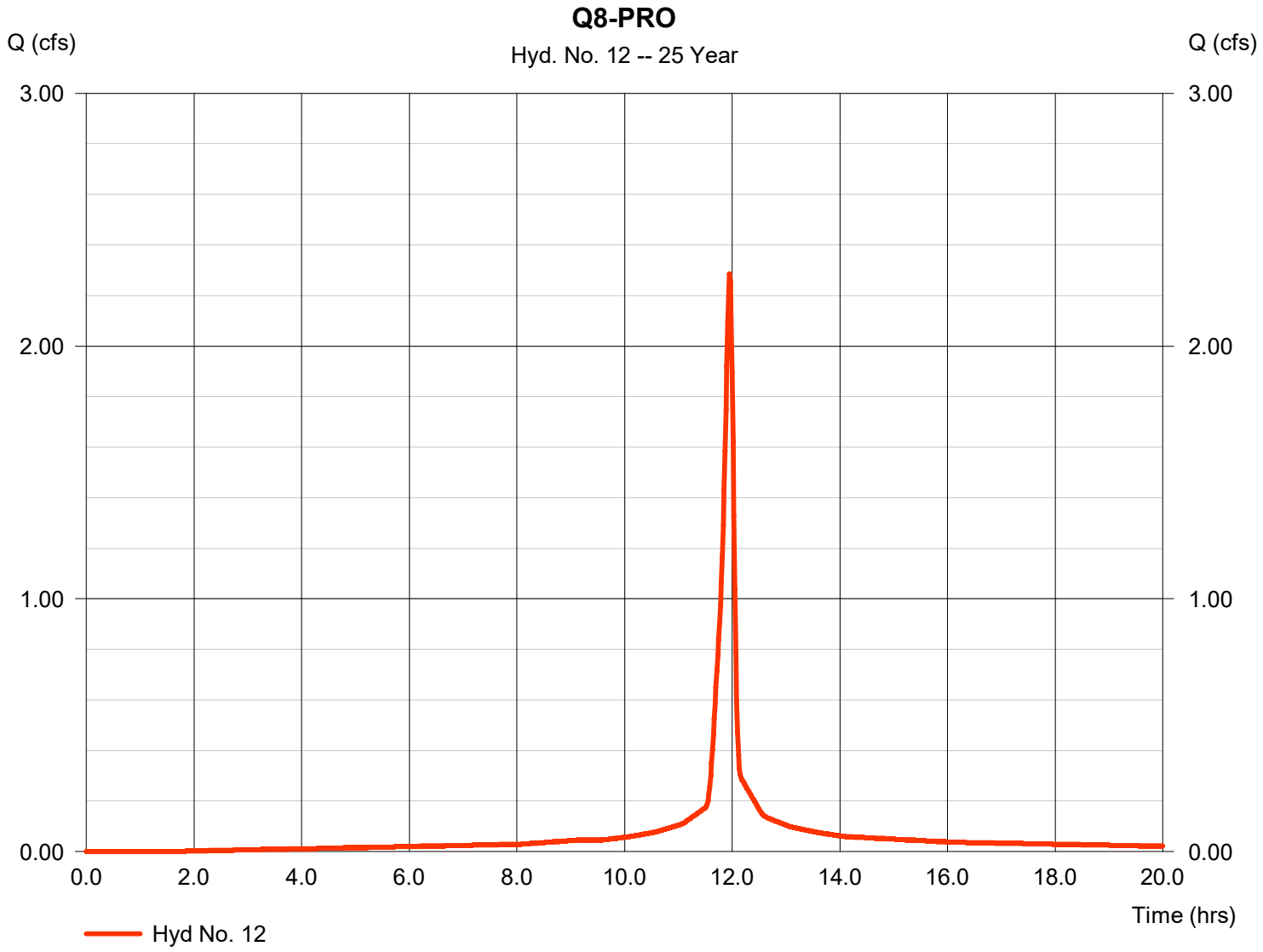


Hydrograph Report

Hyd. No. 12

Q8-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.286 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	5,346 cuft
Drainage area	=	0.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

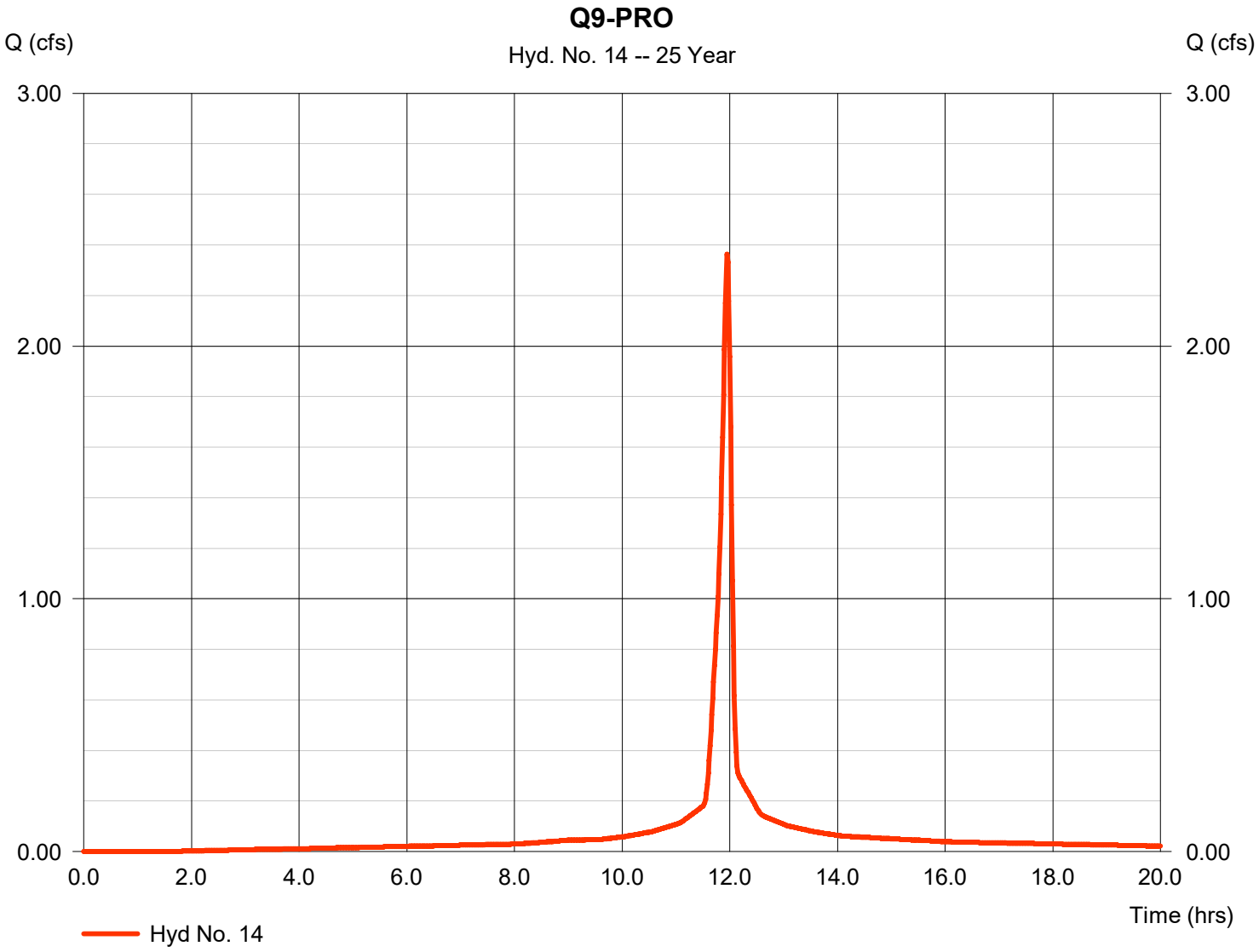


Hydrograph Report

Hyd. No. 14

Q9-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.363 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	5,524 cuft
Drainage area	=	0.620 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



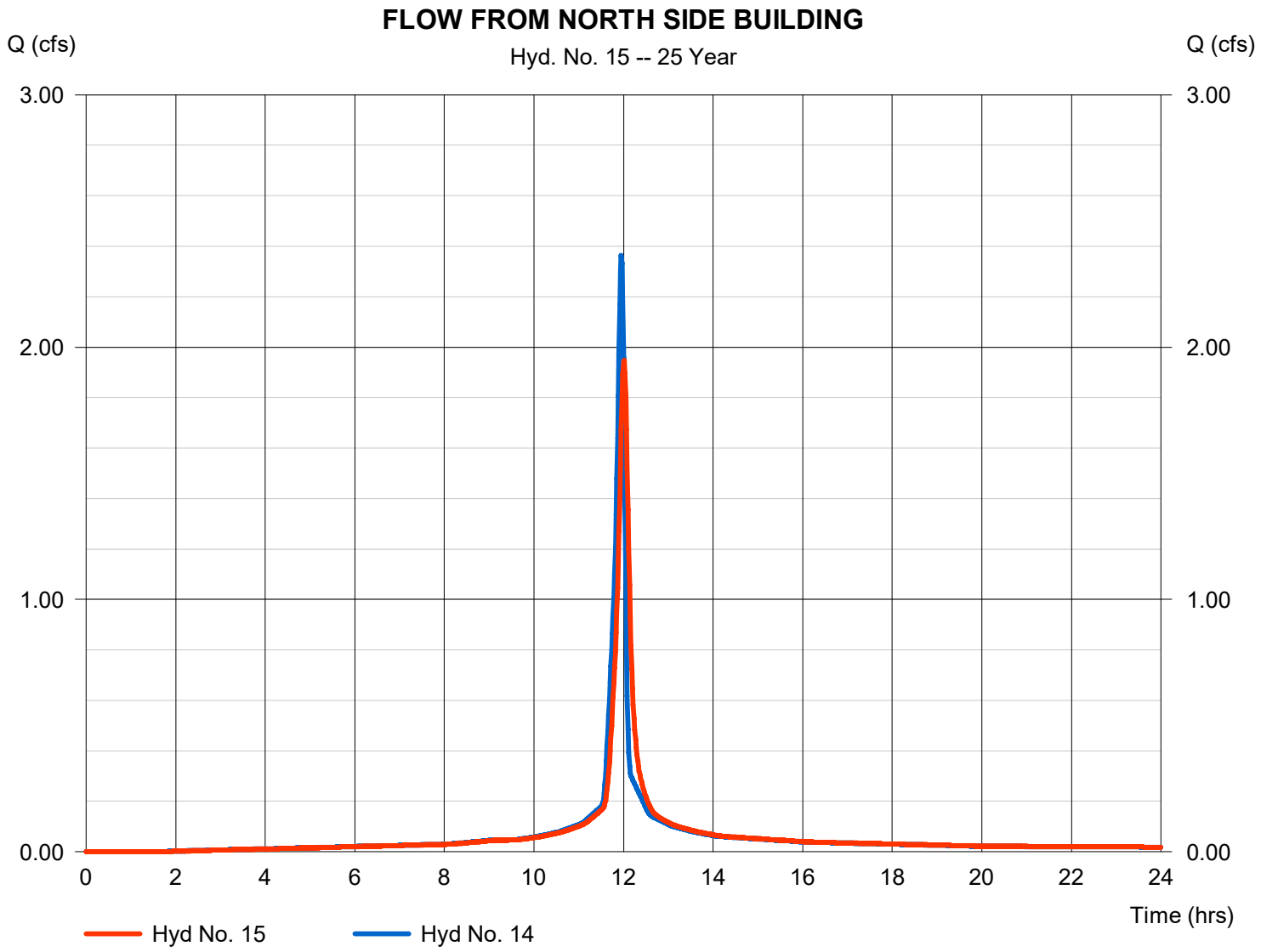
Hydrograph Report

Hyd. No. 15

FLOW FROM NORTH SIDE BUILDING

Hydrograph type	= Reach	Peak discharge	= 1.946 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 5,521 cuft
Inflow hyd. No.	= 14 - Q9-PRO	Section type	= Circular
Reach length	= 509.0 ft	Channel slope	= 0.5 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 2.433	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.1793

Modified Att-Kin routing method used.

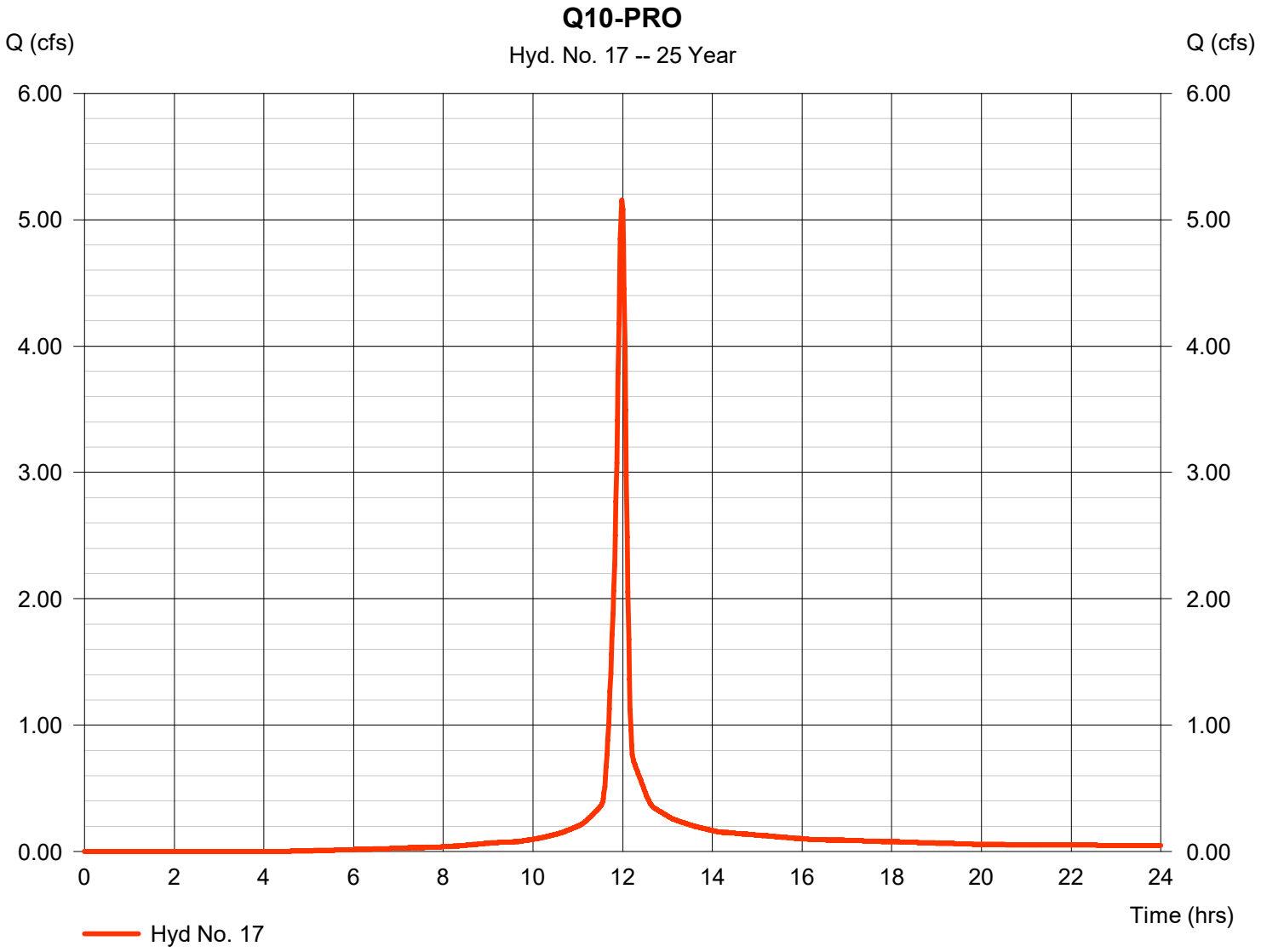


Hydrograph Report

Hyd. No. 17

Q10-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.154 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	12,257 cuft
Drainage area	=	1.710 ac	Curve number	=	94
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.40 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

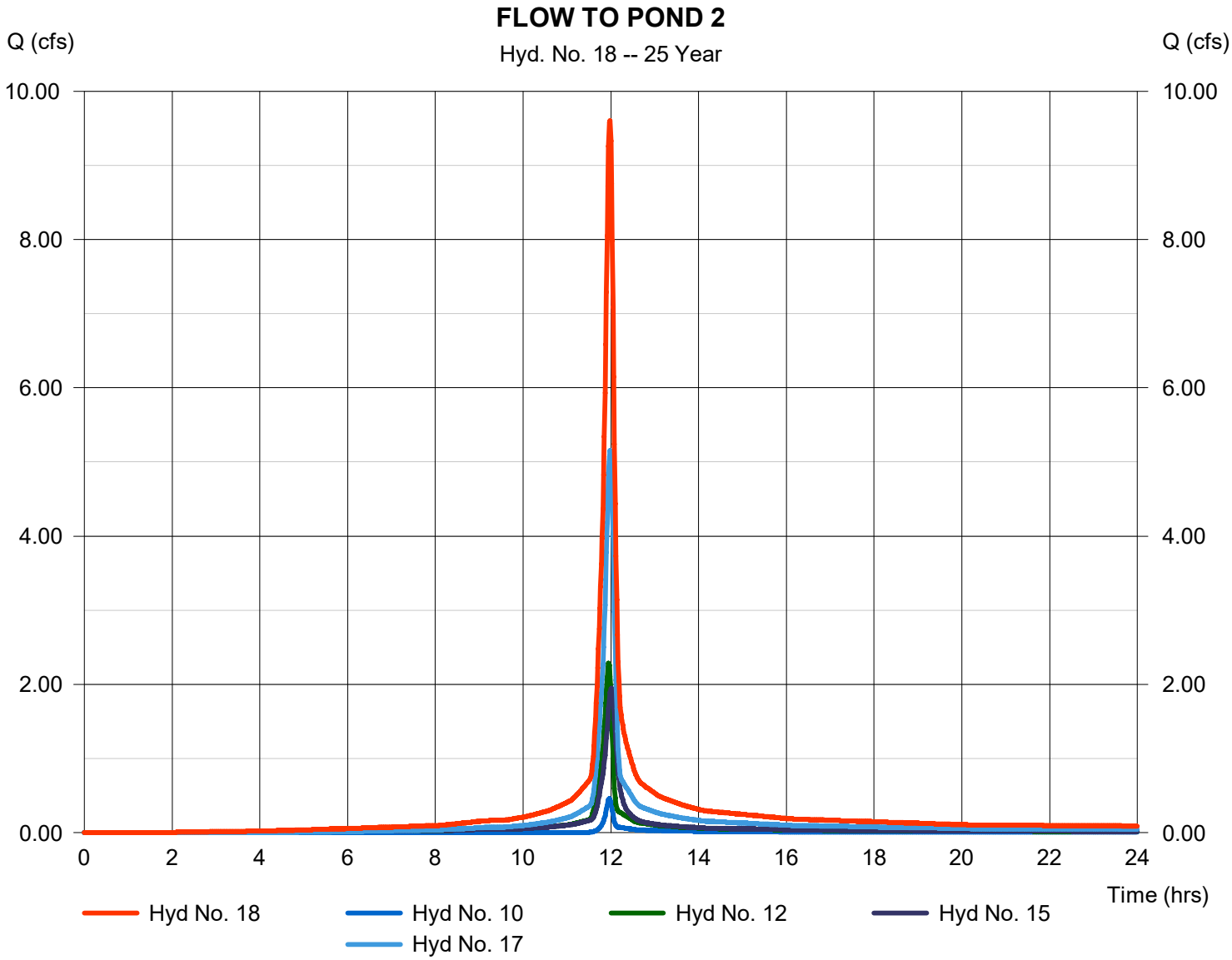


Hydrograph Report

Hyd. No. 18

FLOW TO POND 2

Hydrograph type	=	Combine	Peak discharge	=	9.600 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	24,065 cuft
Inflow hyds.	=	10, 12, 15, 17	Contrib. drain. area	=	2.640 ac



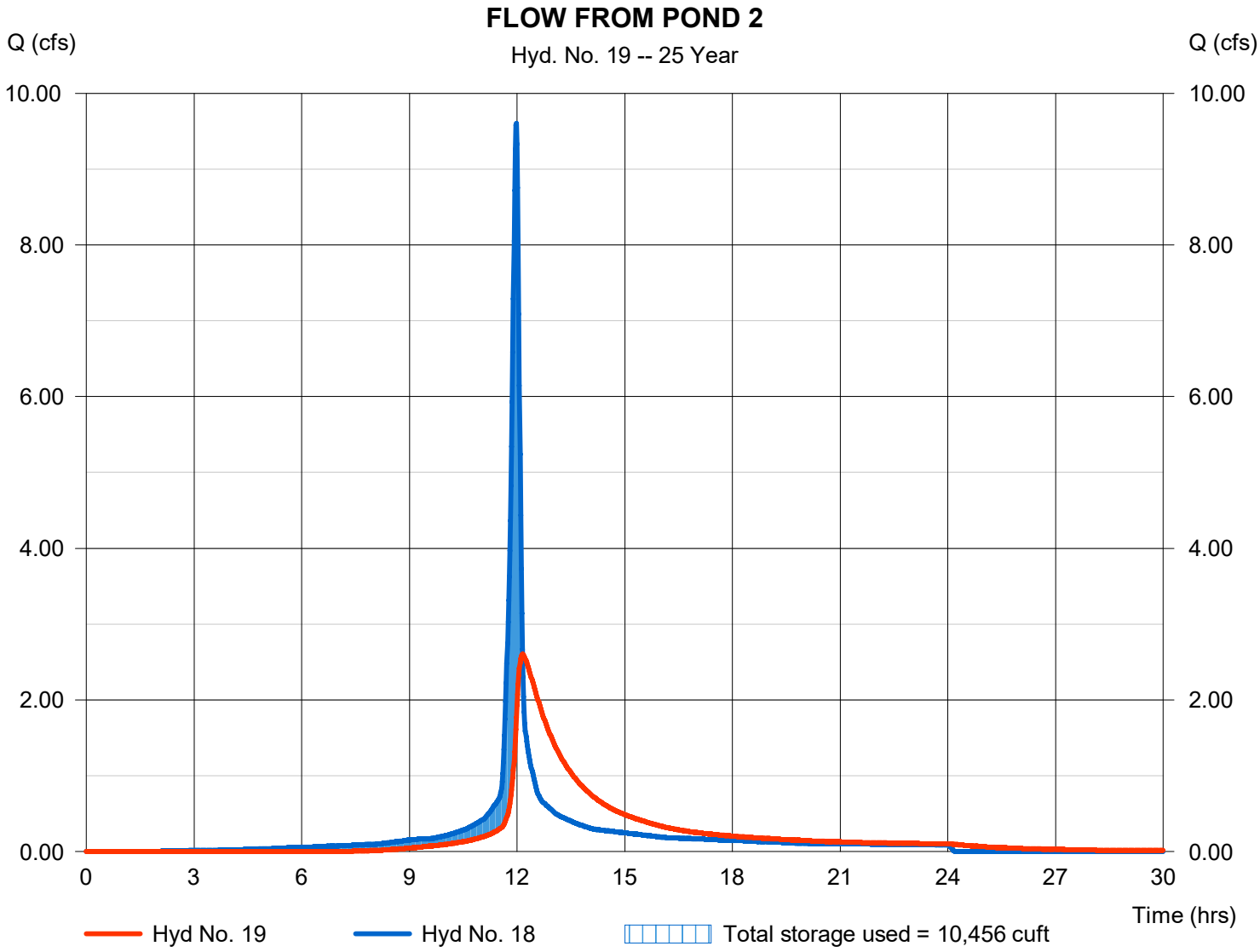
Hydrograph Report

Hyd. No. 19

FLOW FROM POND 2

Hydrograph type	= Reservoir	Peak discharge	= 2.602 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 23,409 cuft
Inflow hyd. No.	= 18 - FLOW TO POND 2	Max. Elevation	= 6335.50 ft
Reservoir name	= POND 2	Max. Storage	= 10,456 cuft

Storage Indication method used.



Pond No. 5 - POND 2

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 6334.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6334.00	5,932	0	0
0.50	6334.50	6,829	3,190	3,190
1.50	6335.50	7,741	7,285	10,475
2.00	6336.00	8,666	4,102	14,577

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	0.00	0.00	3.00
Span (in)	= 18.00	0.00	0.00	3.00
No. Barrels	= 1	0	0	1
Invert El. (ft)	= 6334.00	0.00	0.00	6334.10
Length (ft)	= 25.00	0.00	0.00	0.10
Slope (%)	= 0.50	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	0.00	0.00	0.00
Crest El. (ft)	= 6335.75	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	---	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

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

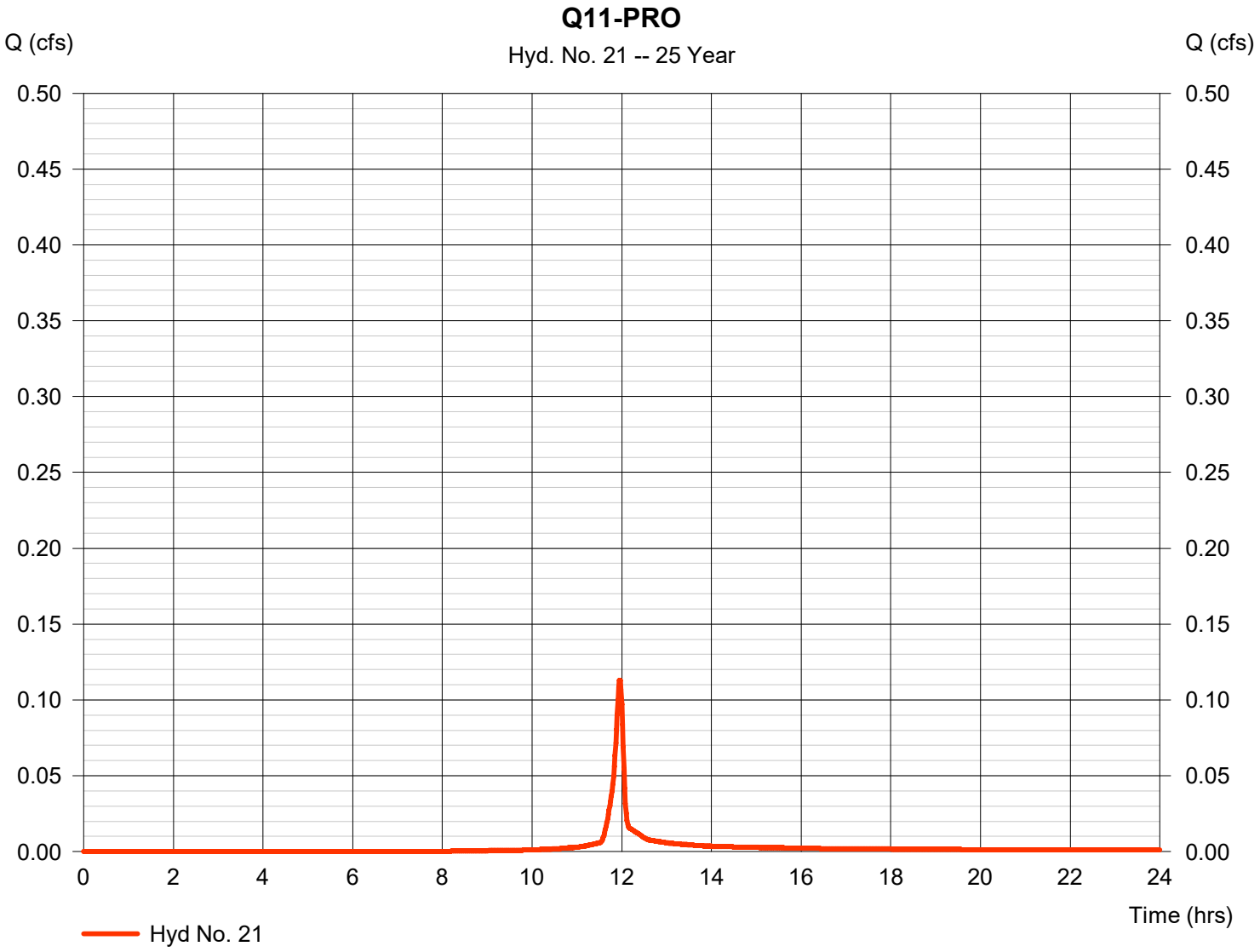
Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	6334.00	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.05	319	6334.05	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.10	638	6334.10	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.15	957	6334.15	0.00	---	---	0.02	0.00	---	---	---	---	---	0.017
0.20	1,276	6334.20	0.00	---	---	0.05	0.00	---	---	---	---	---	0.049
0.25	1,595	6334.25	0.00	---	---	0.09	0.00	---	---	---	---	---	0.091
0.30	1,914	6334.30	0.00	---	---	0.14	0.00	---	---	---	---	---	0.140
0.35	2,233	6334.35	0.00	---	---	0.20	0.00	---	---	---	---	---	0.195
0.40	2,552	6334.40	0.00	---	---	0.26	0.00	---	---	---	---	---	0.257
0.45	2,871	6334.45	0.00	---	---	0.32	0.00	---	---	---	---	---	0.324
0.50	3,190	6334.50	0.00	---	---	0.40	0.00	---	---	---	---	---	0.398
0.60	3,919	6334.60	0.00	---	---	0.56	0.00	---	---	---	---	---	0.557
0.70	4,647	6334.70	0.00	---	---	0.73	0.00	---	---	---	---	---	0.732
0.80	5,376	6334.80	0.00	---	---	0.92	0.00	---	---	---	---	---	0.923
0.90	6,104	6334.90	0.00	---	---	1.13	0.00	---	---	---	---	---	1.128
1.00	6,833	6335.00	0.00	---	---	1.35	0.00	---	---	---	---	---	1.346
1.10	7,561	6335.10	0.00	---	---	1.58	0.00	---	---	---	---	---	1.577
1.20	8,290	6335.20	0.00	---	---	1.82	0.00	---	---	---	---	---	1.819
1.30	9,018	6335.30	0.00	---	---	2.07	0.00	---	---	---	---	---	2.073
1.40	9,747	6335.40	0.00	---	---	2.34	0.00	---	---	---	---	---	2.337
1.50	10,475	6335.50	0.00	---	---	2.61	0.00	---	---	---	---	---	2.610
1.55	10,885	6335.55	0.00	---	---	2.75	0.00	---	---	---	---	---	2.750
1.60	11,295	6335.60	0.00	---	---	2.89	0.00	---	---	---	---	---	2.893
1.65	11,706	6335.65	0.00	---	---	3.04	0.00	---	---	---	---	---	3.038
1.70	12,116	6335.70	0.00	---	---	3.19	0.00	---	---	---	---	---	3.186
1.75	12,526	6335.75	0.00	---	---	3.34	0.00	---	---	---	---	---	3.336
1.80	12,936	6335.80	0.17 ic	---	---	3.49	0.17	---	---	---	---	---	3.657
1.85	13,346	6335.85	0.51 oc	---	---	3.64	0.49	---	---	---	---	---	4.129
1.90	13,756	6335.90	0.91 oc	---	---	3.80	0.90	---	---	---	---	---	4.696
1.95	14,167	6335.95	1.41 oc	---	---	3.96	1.38	---	---	---	---	---	5.343
2.00	14,577	6336.00	1.99 oc	---	---	4.13	1.96	---	---	---	---	---	6.086

Hydrograph Report

Hyd. No. 21

Q11-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.113 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	232 cuft
Drainage area	=	0.040 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

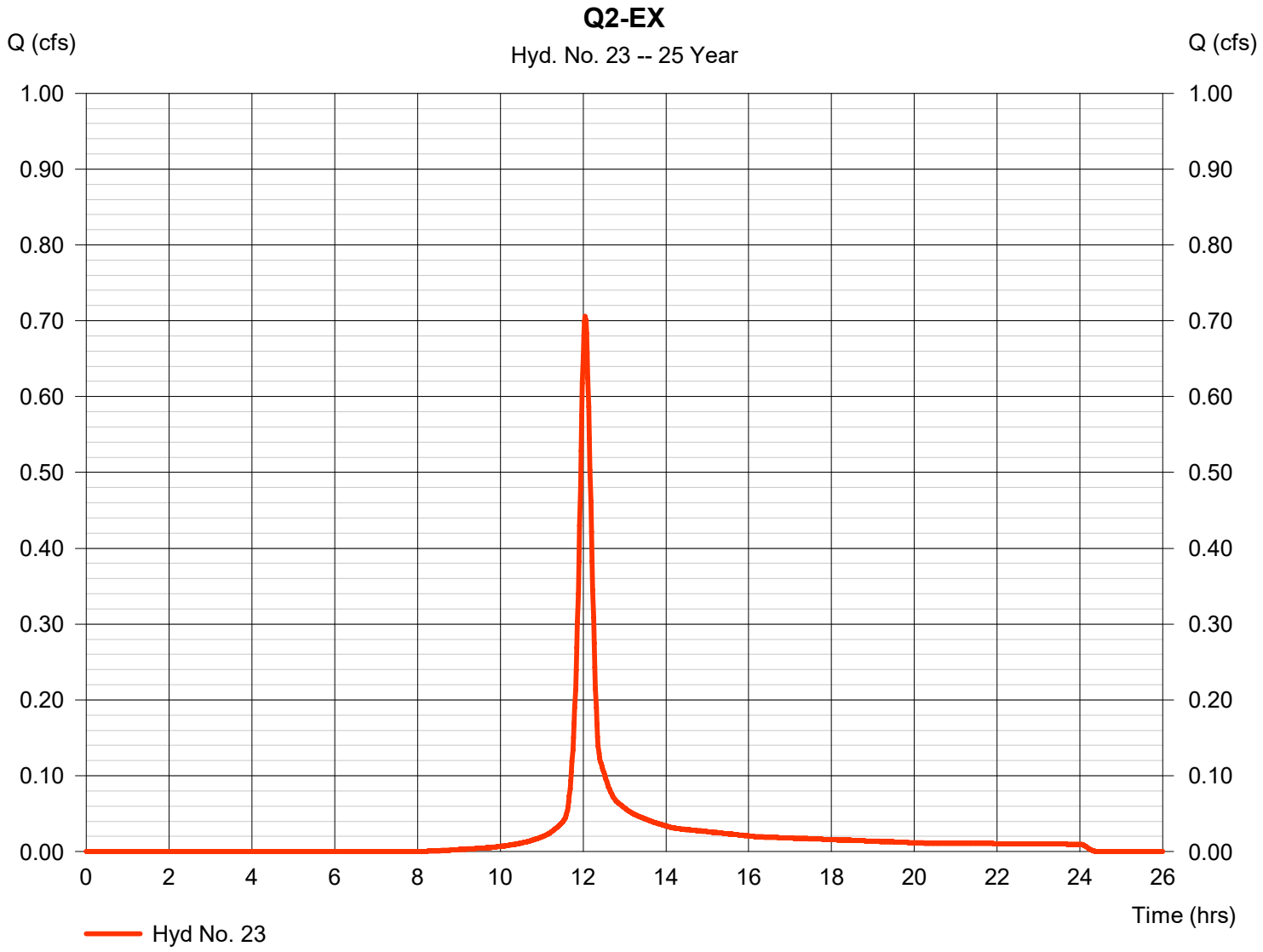


Hydrograph Report

Hyd. No. 23

Q2-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 0.706 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 2,012 cuft
Drainage area	= 0.390 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.74 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



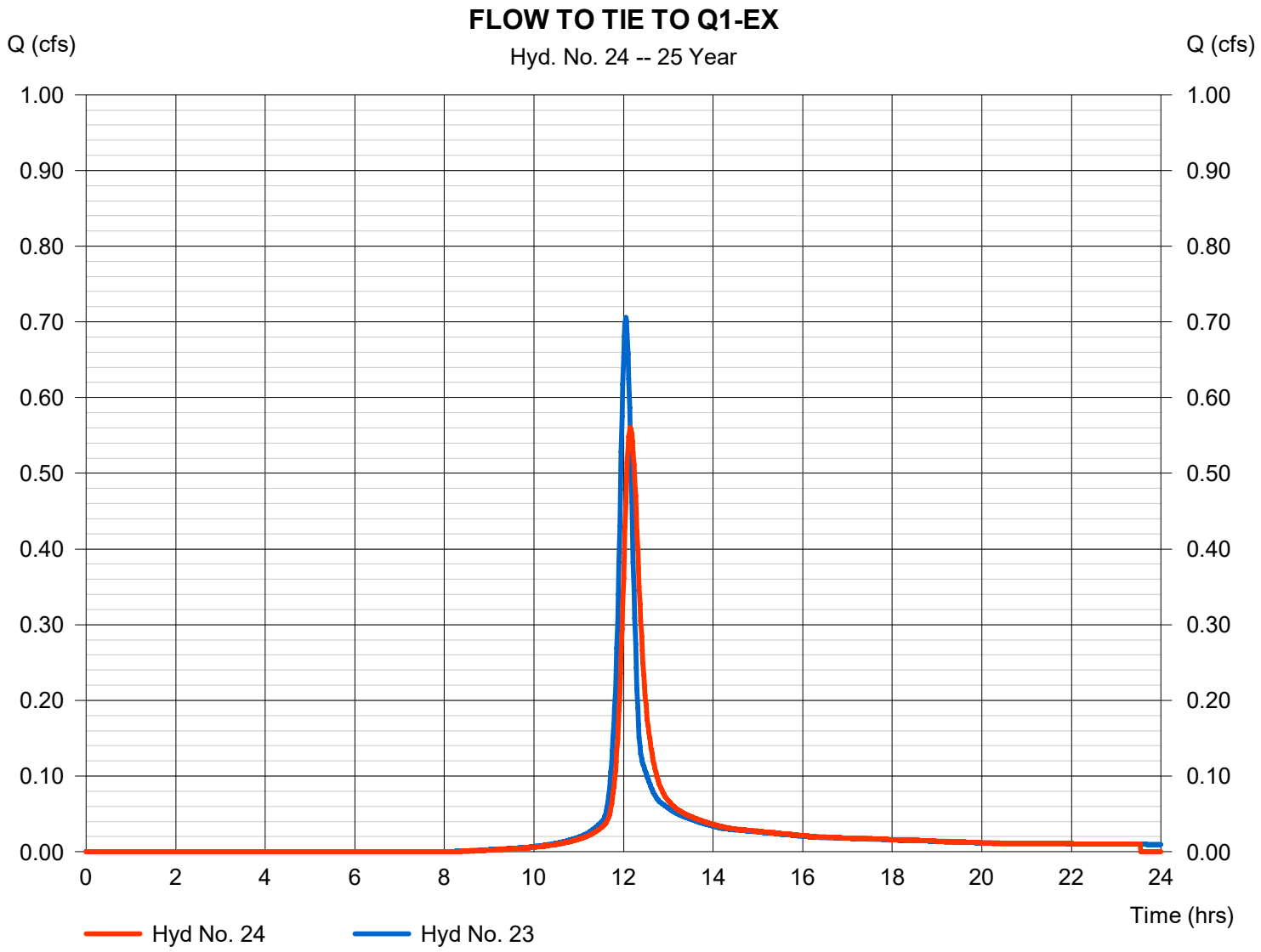
Hydrograph Report

Hyd. No. 24

FLOW TO TIE TO Q1-EX

Hydrograph type	= Reach	Peak discharge	= 0.561 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 1,984 cuft
Inflow hyd. No.	= 23 - Q2-EX	Section type	= Trapezoidal
Reach length	= 258.0 ft	Channel slope	= 0.1 %
Manning's n	= 0.035	Bottom width	= 5.0 ft
Side slope	= 3.0:1	Max. depth	= 1.0 ft
Rating curve x	= 0.412	Rating curve m	= 1.190
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.1169

Modified Att-Kin routing method used.

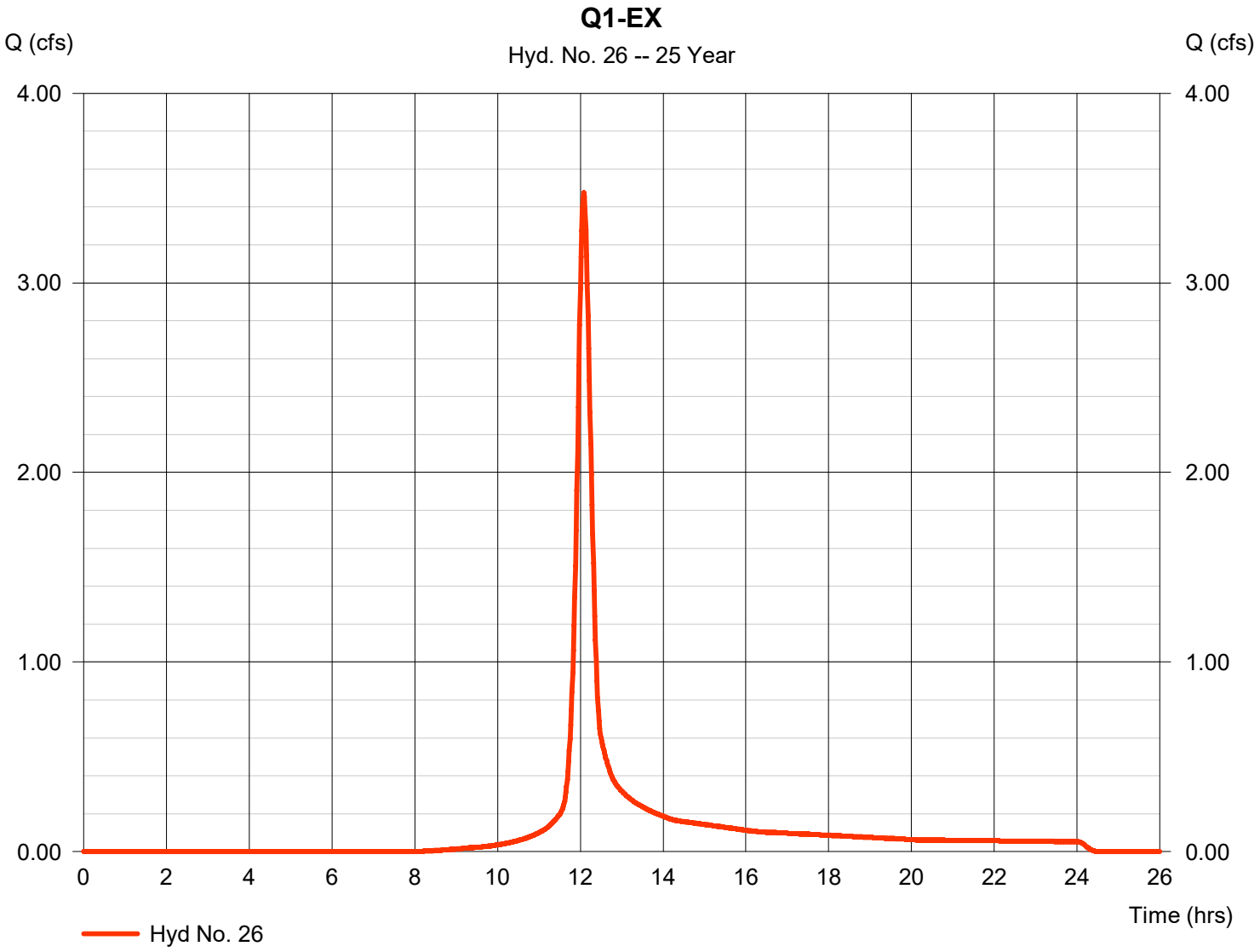


Hydrograph Report

Hyd. No. 26

Q1-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.475 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.08 hrs
Time interval	=	1 min	Hyd. volume	=	10,853 cuft
Drainage area	=	2.130 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.80 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

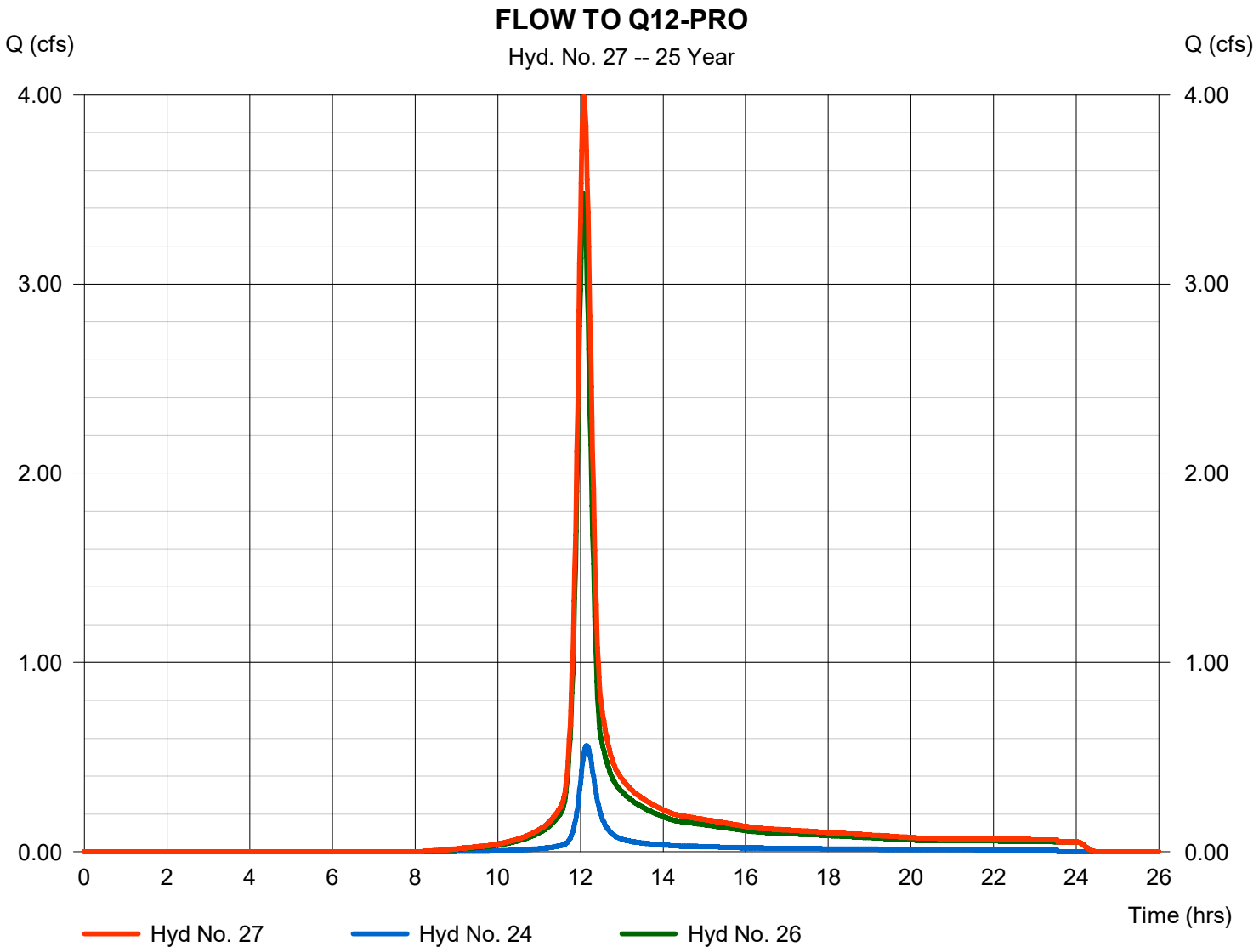


Hydrograph Report

Hyd. No. 27

FLOW TO Q12-PRO

Hydrograph type	= Combine	Peak discharge	= 3.989 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 12,836 cuft
Inflow hyds.	= 24, 26	Contrib. drain. area	= 2.130 ac



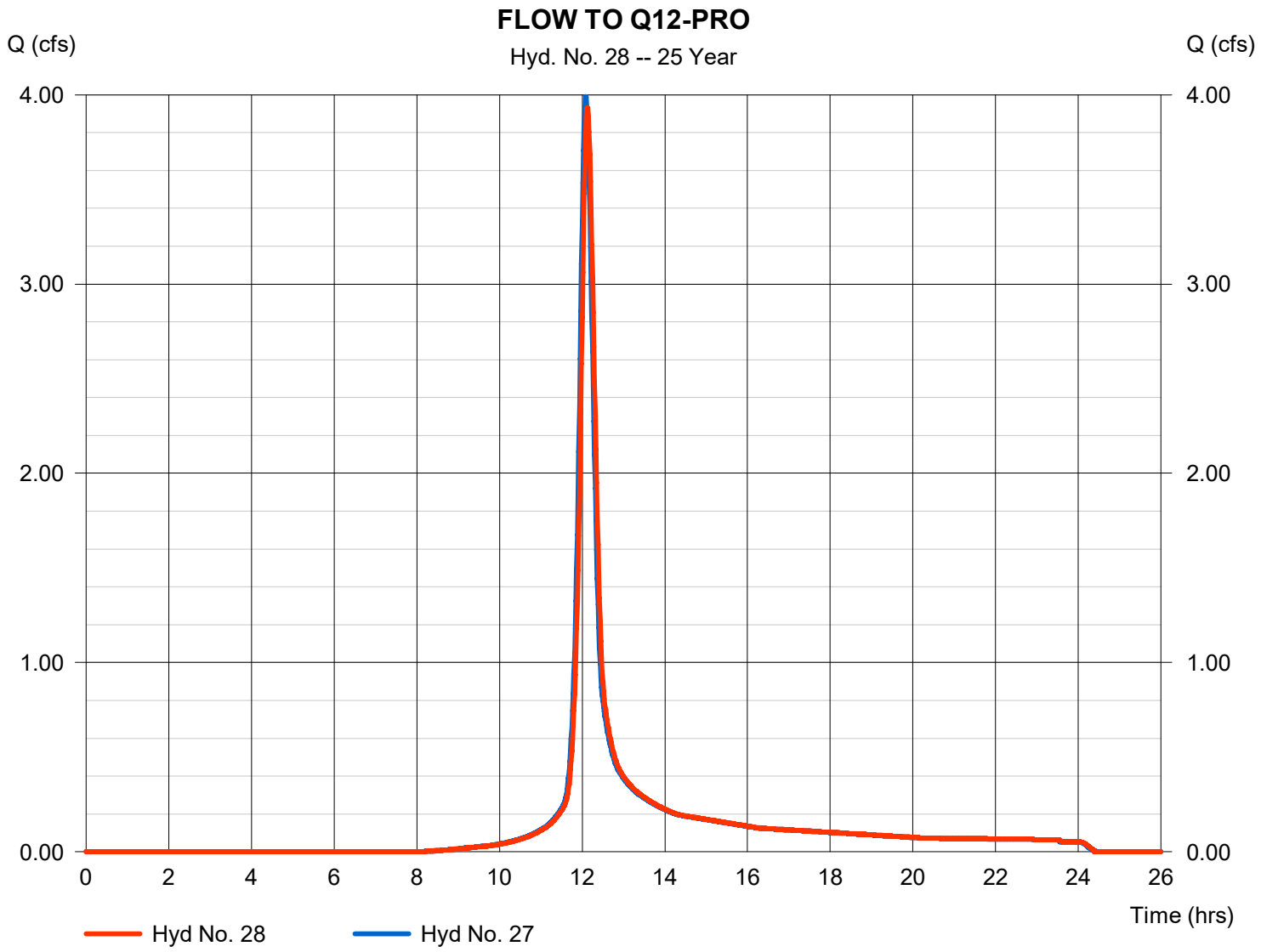
Hydrograph Report

Hyd. No. 28

FLOW TO Q12-PRO

Hydrograph type	= Reach	Peak discharge	= 3.931 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 12,834 cuft
Inflow hyd. No.	= 27 - FLOW TO Q12-PRO	Section type	= Rectangular
Reach length	= 294.0 ft	Channel slope	= 3.5 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 0.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.088	Rating curve m	= 1.646
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.4664

Modified Att-Kin routing method used.

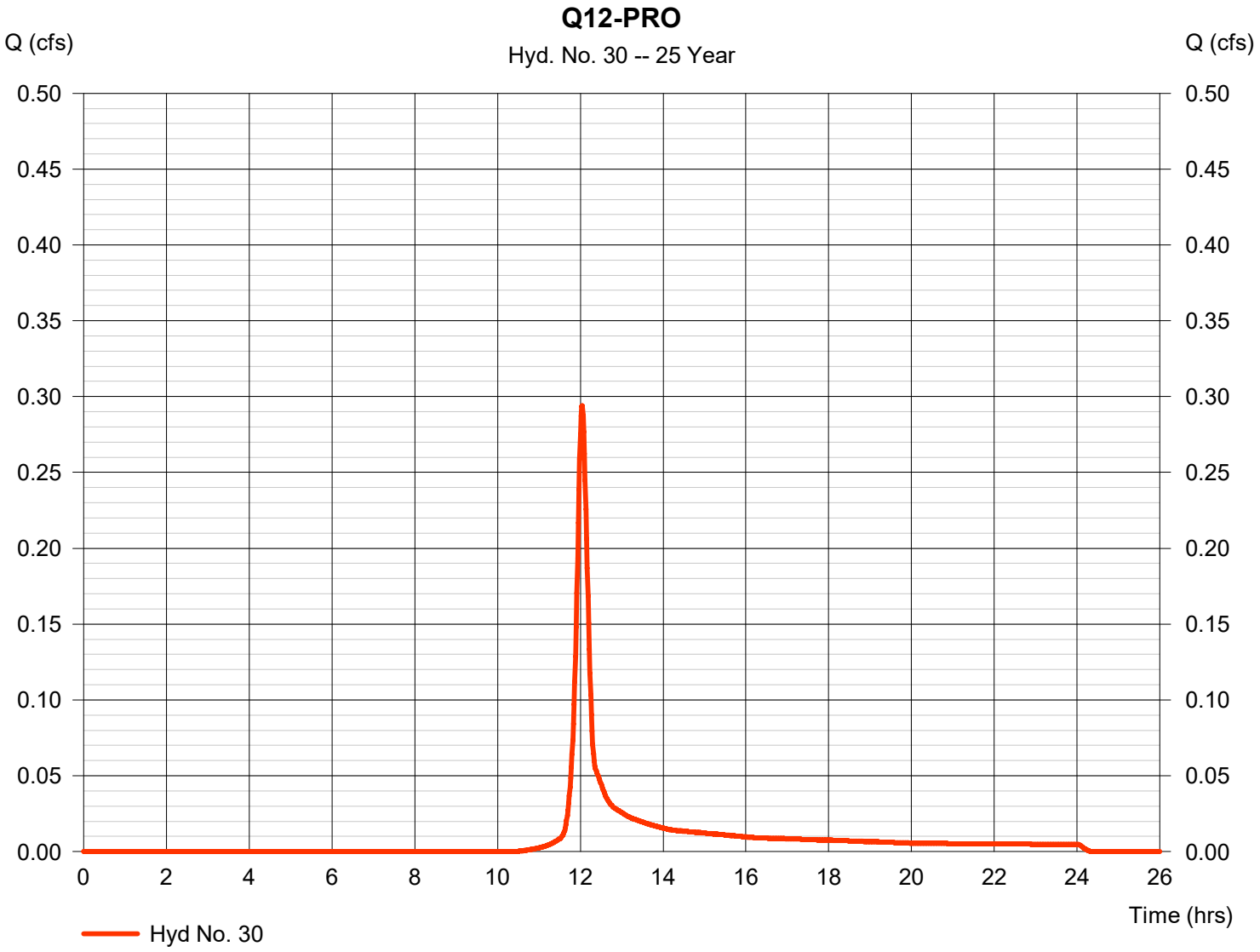


Hydrograph Report

Hyd. No. 30

Q12-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.294 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	806 cuft
Drainage area	=	0.230 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.22 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

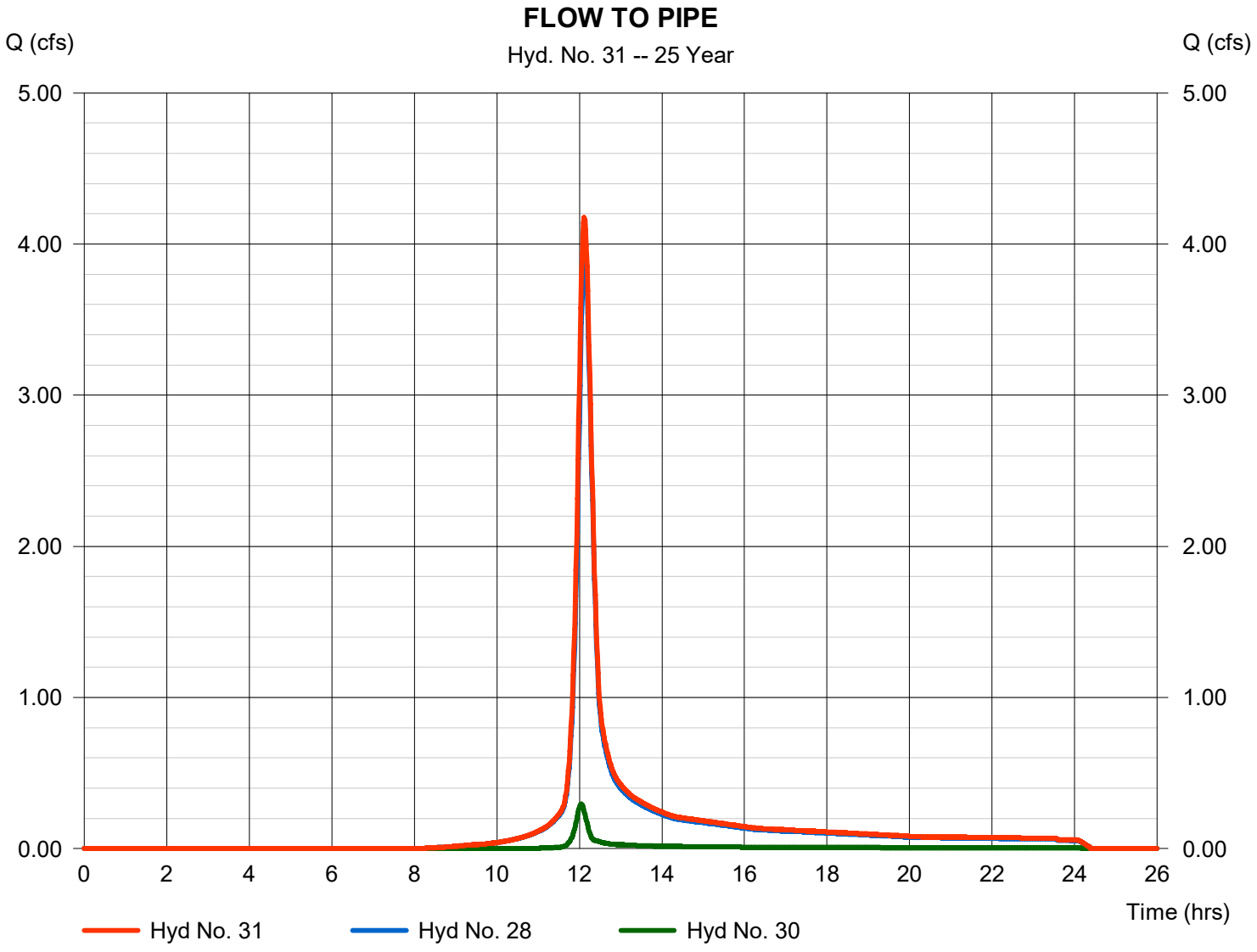


Hydrograph Report

Hyd. No. 31

FLOW TO PIPE

Hydrograph type	= Combine	Peak discharge	= 4.175 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 13,640 cuft
Inflow hyds.	= 28, 30	Contrib. drain. area	= 0.230 ac

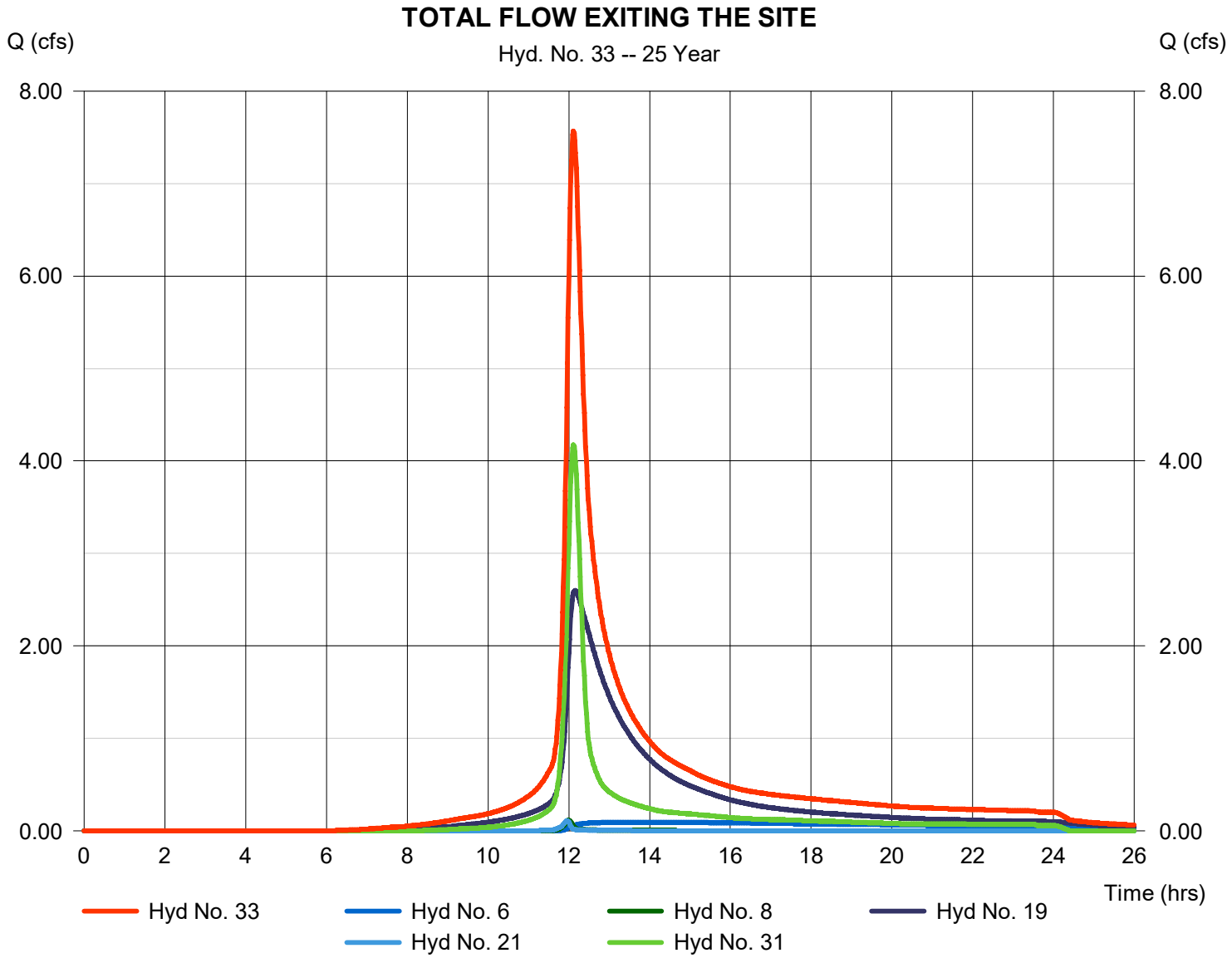


Hydrograph Report

Hyd. No. 33

TOTAL FLOW EXITING THE SITE

Hydrograph type	= Combine	Peak discharge	= 7.567 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 42,034 cuft
Inflow hyds.	= 6, 8, 19, 21, 31	Contrib. drain. area	= 0.120 ac



Hydrograph Summary Report

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

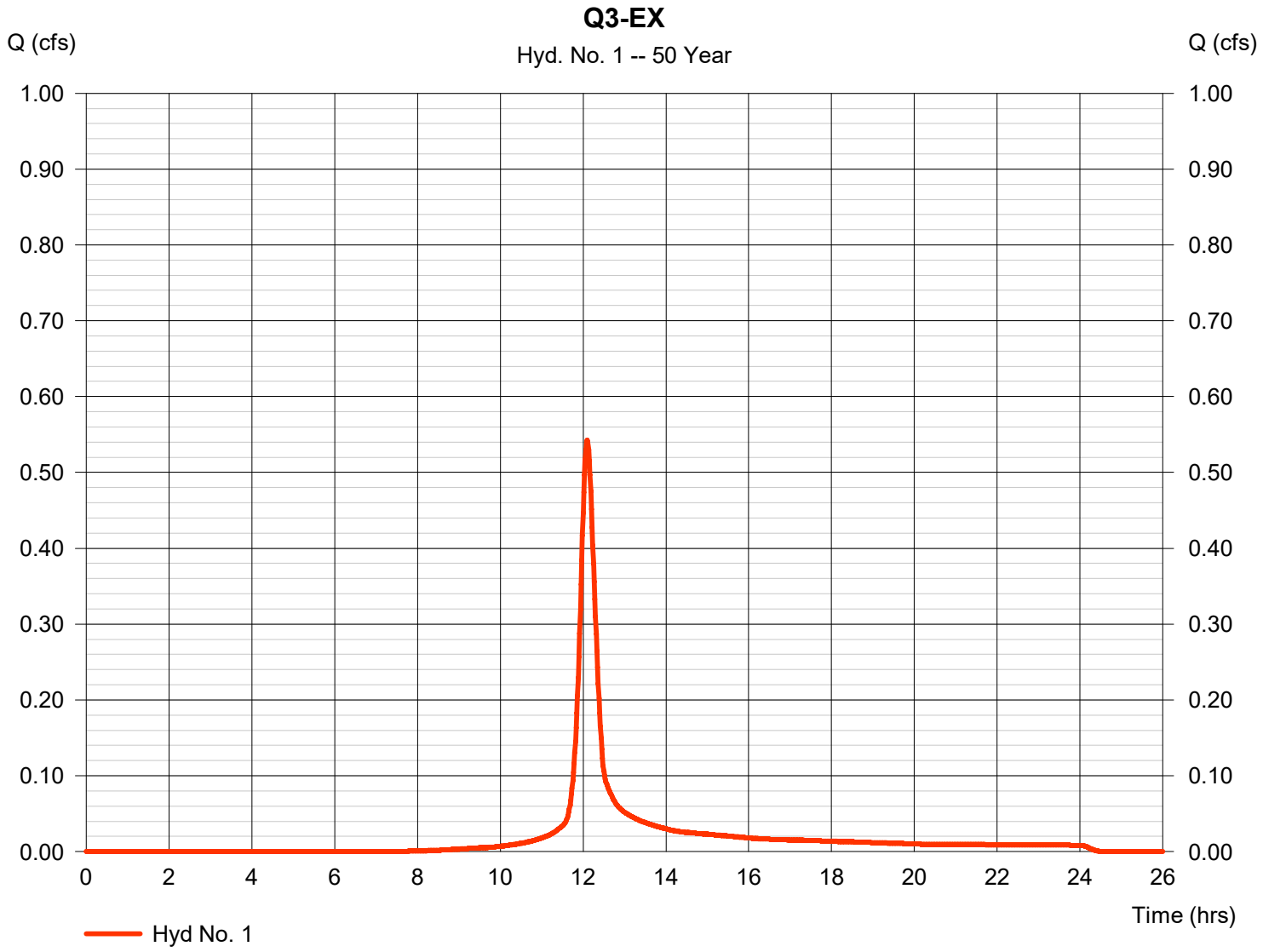
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.543	1	726	1,784	------	------	------	Q3-EX
2	SCS Runoff	0.755	1	718	1,616	------	------	------	Q4-PRO
4	SCS Runoff	1.470	1	717	3,024	------	------	------	Q5-PRO
5	Combine	2.609	1	718	6,423	1, 2, 4	------	------	FLOW TO POND 1
6	Reservoir	0.125	1	813	5,658	5	6335.40	3,854	FLOW FROM POND
8	SCS Runoff	0.146	1	720	330	------	------	------	Q6-PRO
10	SCS Runoff	0.591	1	718	1,196	------	------	------	Q7-PRO
12	SCS Runoff	2.575	1	717	6,061	------	------	------	Q8-PRO
14	SCS Runoff	2.661	1	717	6,263	------	------	------	Q9-PRO
15	Reach	2.253	1	720	6,260	14	------	------	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	5.906	1	719	14,168	------	------	------	Q10-PRO
18	Combine	11.05	1	719	27,685	10, 12, 15, 17	------	------	FLOW TO POND 2
19	Reservoir	3.075	1	729	27,029	18	6335.66	11,808	FLOW FROM POND 2
21	SCS Runoff	0.133	1	717	275	------	------	------	Q11-PRO
23	SCS Runoff	0.843	1	723	2,405	------	------	------	Q2-EX
24	Reach	0.676	1	729	2,398	23	------	------	FLOW TO TIE TO Q1-EX
26	SCS Runoff	4.154	1	725	12,975	------	------	------	Q1-EX
27	Combine	4.779	1	725	15,373	24, 26	------	------	FLOW TO Q12-PRO
28	Reach	4.721	1	727	15,371	27	------	------	FLOW TO Q12-PRO
30	SCS Runoff	0.368	1	722	1,000	------	------	------	Q12-PRO
31	Combine	5.025	1	727	16,371	28, 30	------	------	FLOW TO PIPE
33	Combine	8.974	1	727	49,475	6, 8, 19, 21, 31,	------	------	TOTAL FLOW EXITING THE SITE

Hydrograph Report

Hyd. No. 1

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.543 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,784 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.40 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

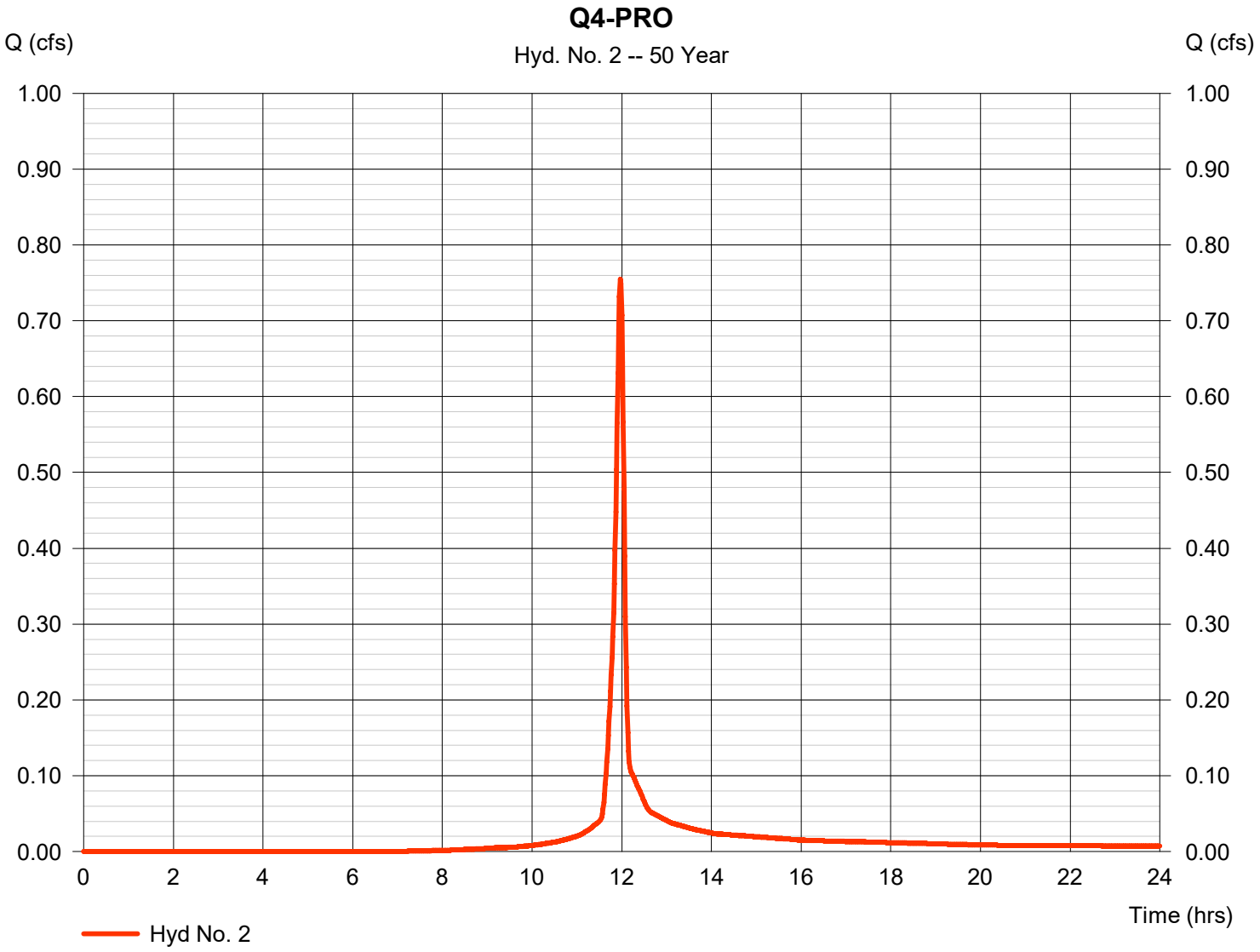


Hydrograph Report

Hyd. No. 2

Q4-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.755 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,616 cuft
Drainage area	=	0.260 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.90 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

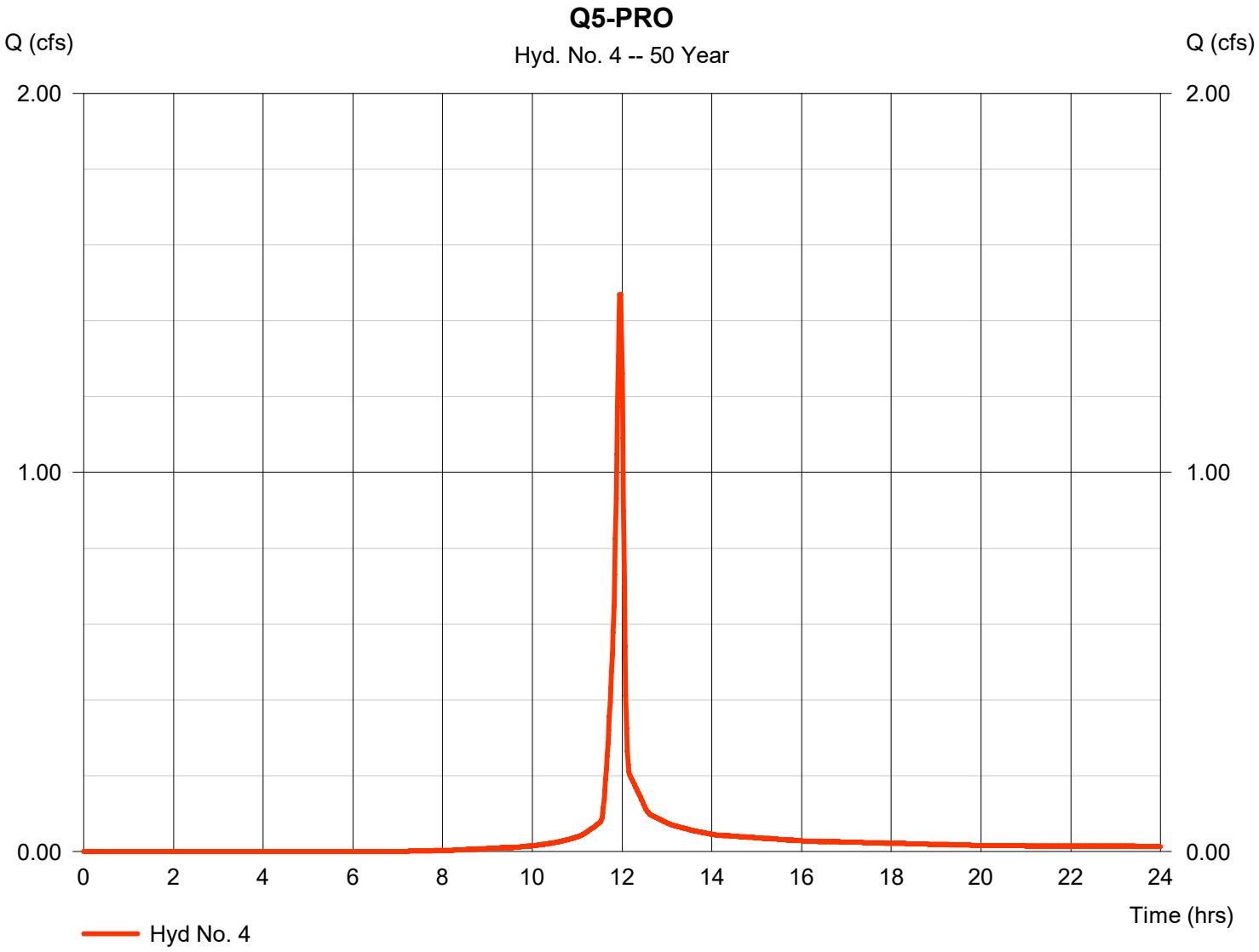


Hydrograph Report

Hyd. No. 4

Q5-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.470 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	3,024 cuft
Drainage area	=	0.460 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

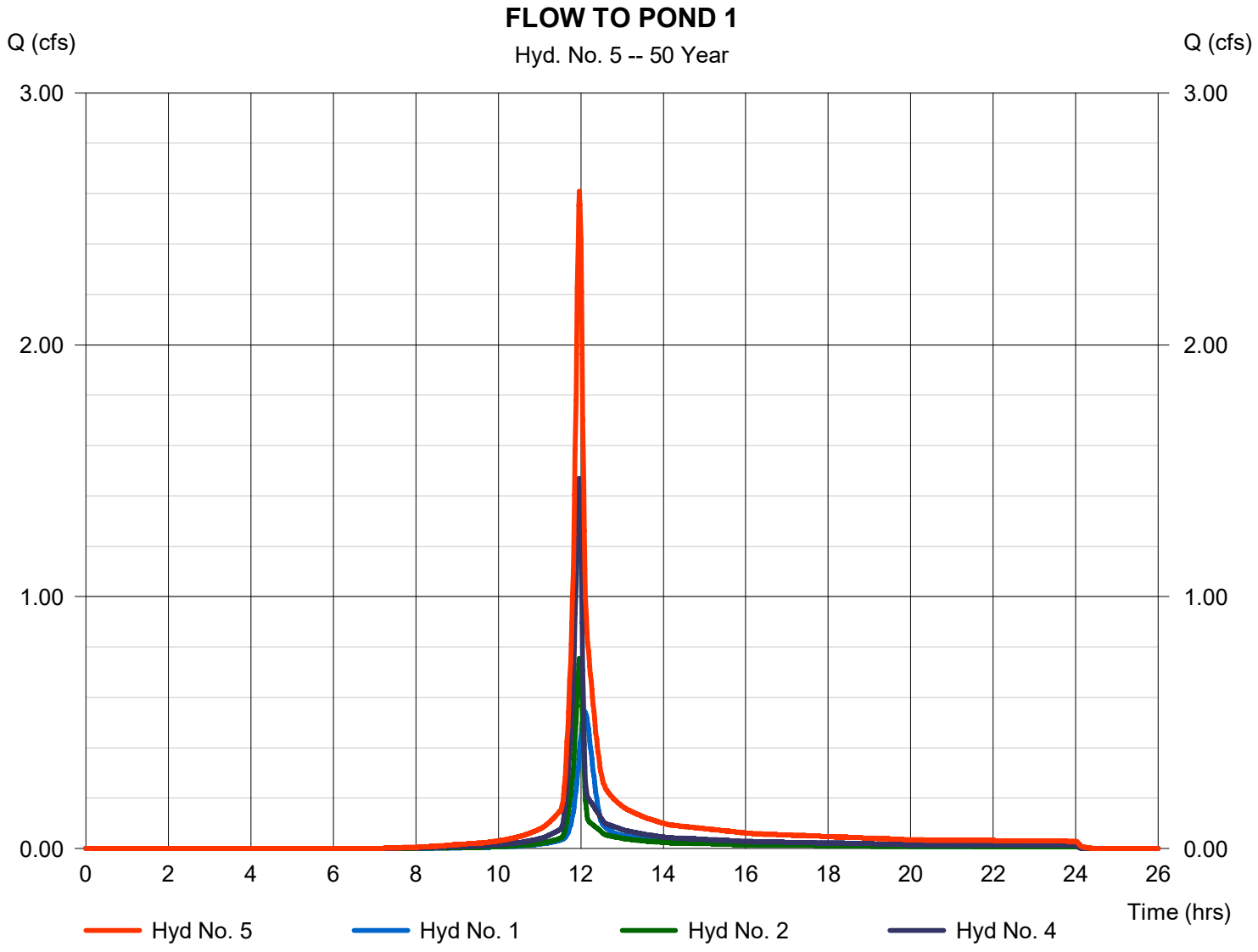


Hydrograph Report

Hyd. No. 5

FLOW TO POND 1

Hydrograph type	=	Combine	Peak discharge	=	2.609 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	6,423 cuft
Inflow hyds.	=	1, 2, 4	Contrib. drain. area	=	1.010 ac



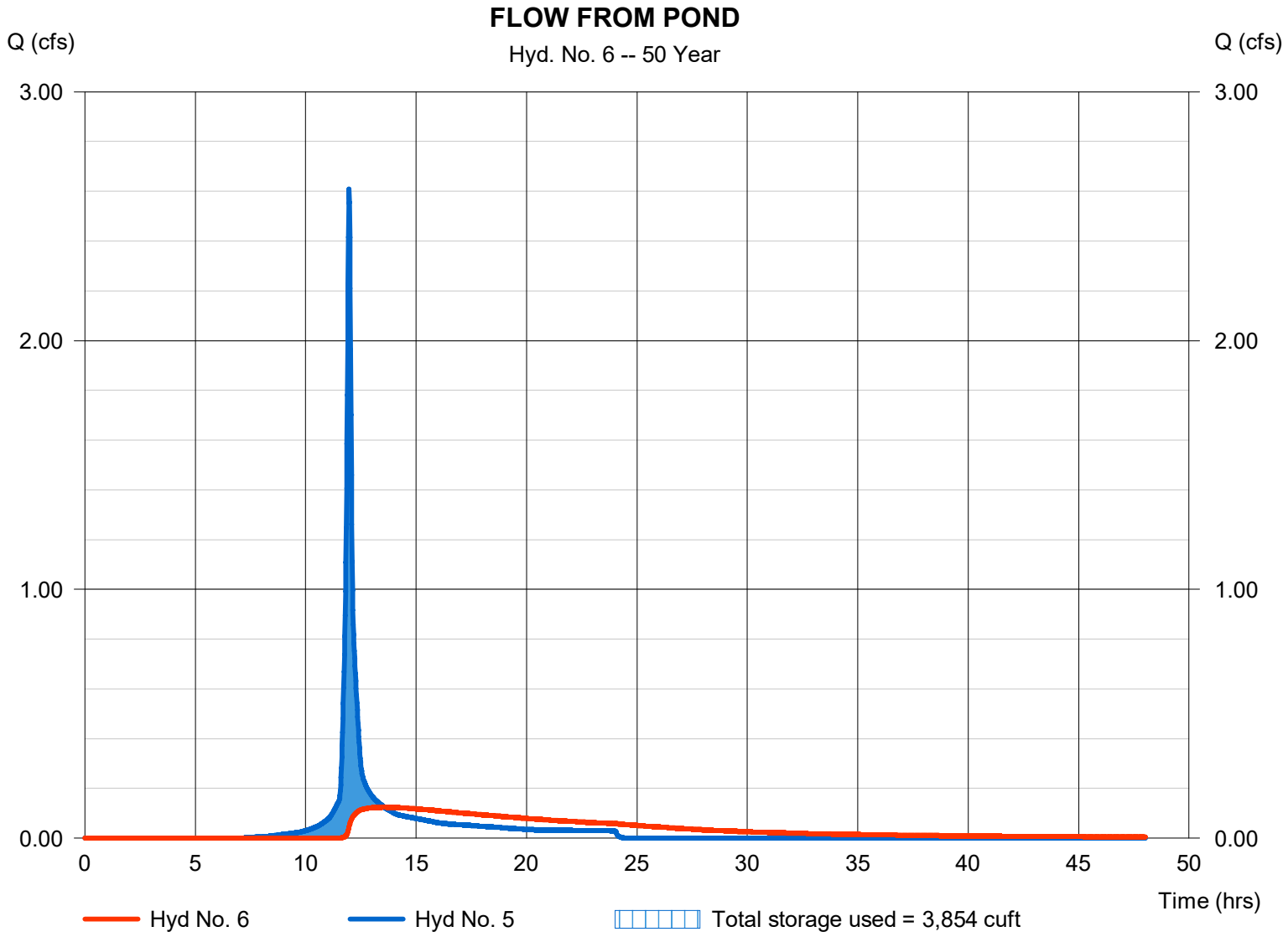
Hydrograph Report

Hyd. No. 6

FLOW FROM POND

Hydrograph type	= Reservoir	Peak discharge	= 0.125 cfs
Storm frequency	= 50 yrs	Time to peak	= 13.55 hrs
Time interval	= 1 min	Hyd. volume	= 5,658 cuft
Inflow hyd. No.	= 5 - FLOW TO POND 1	Max. Elevation	= 6335.40 ft
Reservoir name	= POND 1	Max. Storage	= 3,854 cuft

Storage Indication method used.

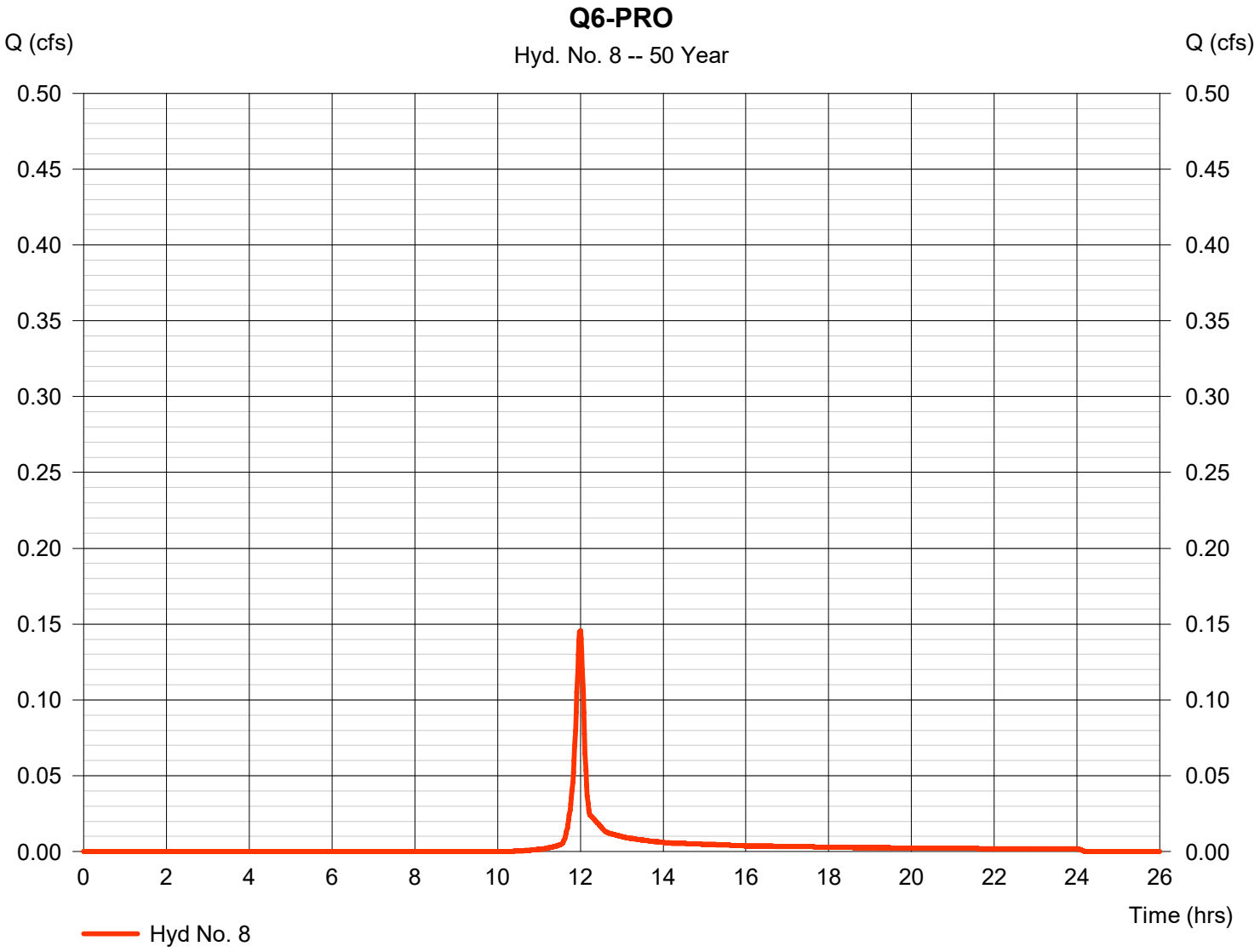


Hydrograph Report

Hyd. No. 8

Q6-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.146 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	330 cuft
Drainage area	=	0.080 ac	Curve number	=	79
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	9.18 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

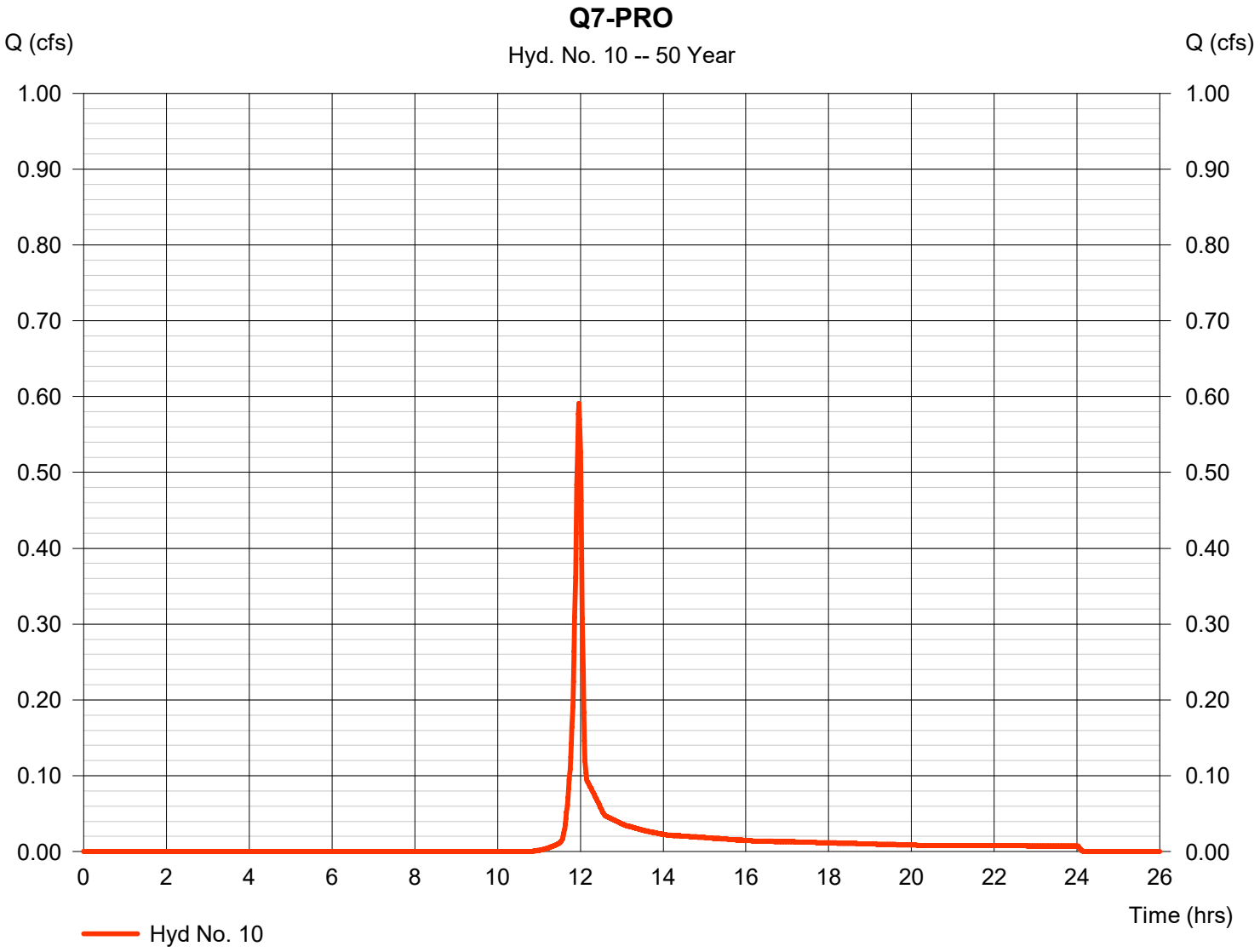


Hydrograph Report

Hyd. No. 10

Q7-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.591 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,196 cuft
Drainage area	=	0.330 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

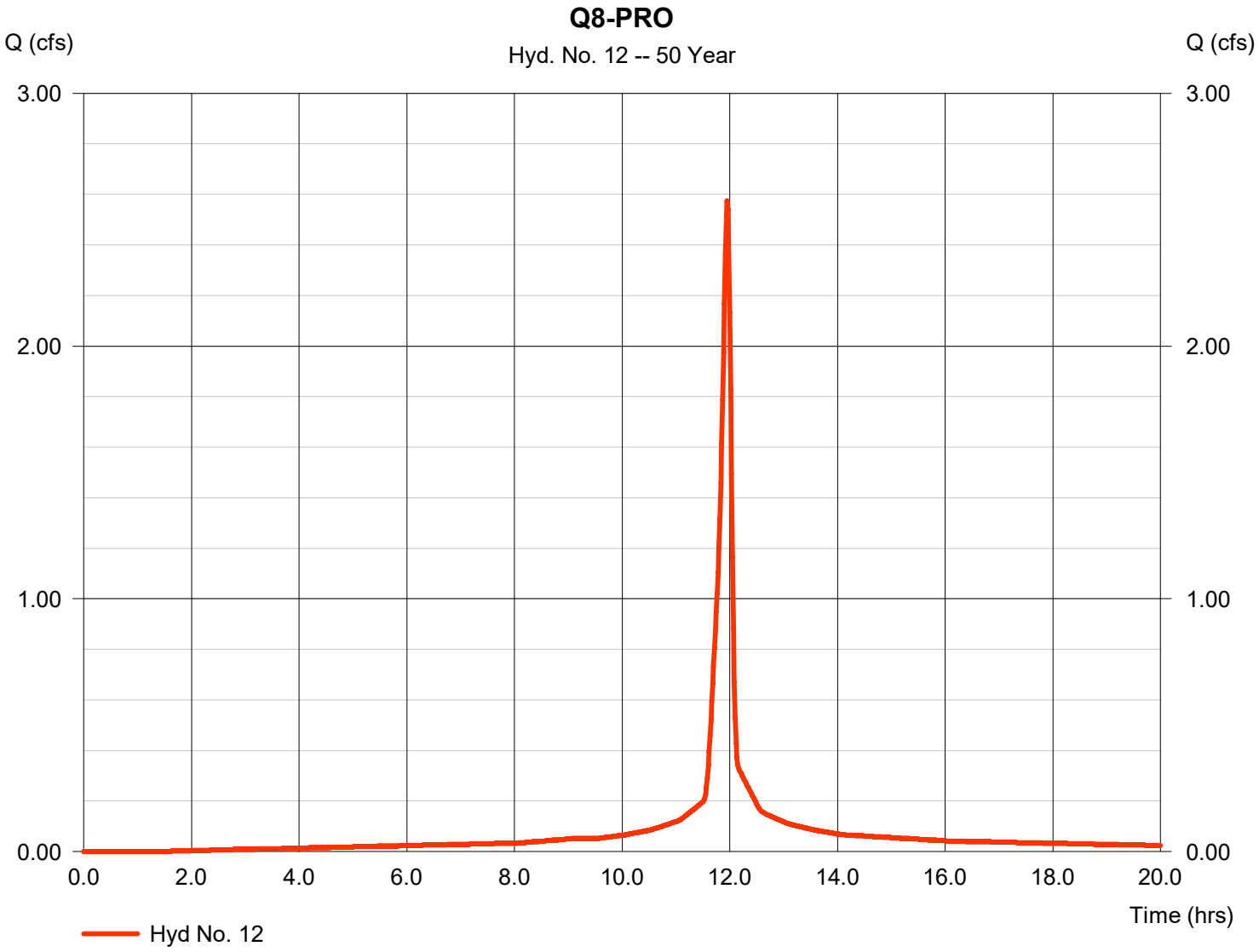


Hydrograph Report

Hyd. No. 12

Q8-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.575 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,061 cuft
Drainage area	=	0.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

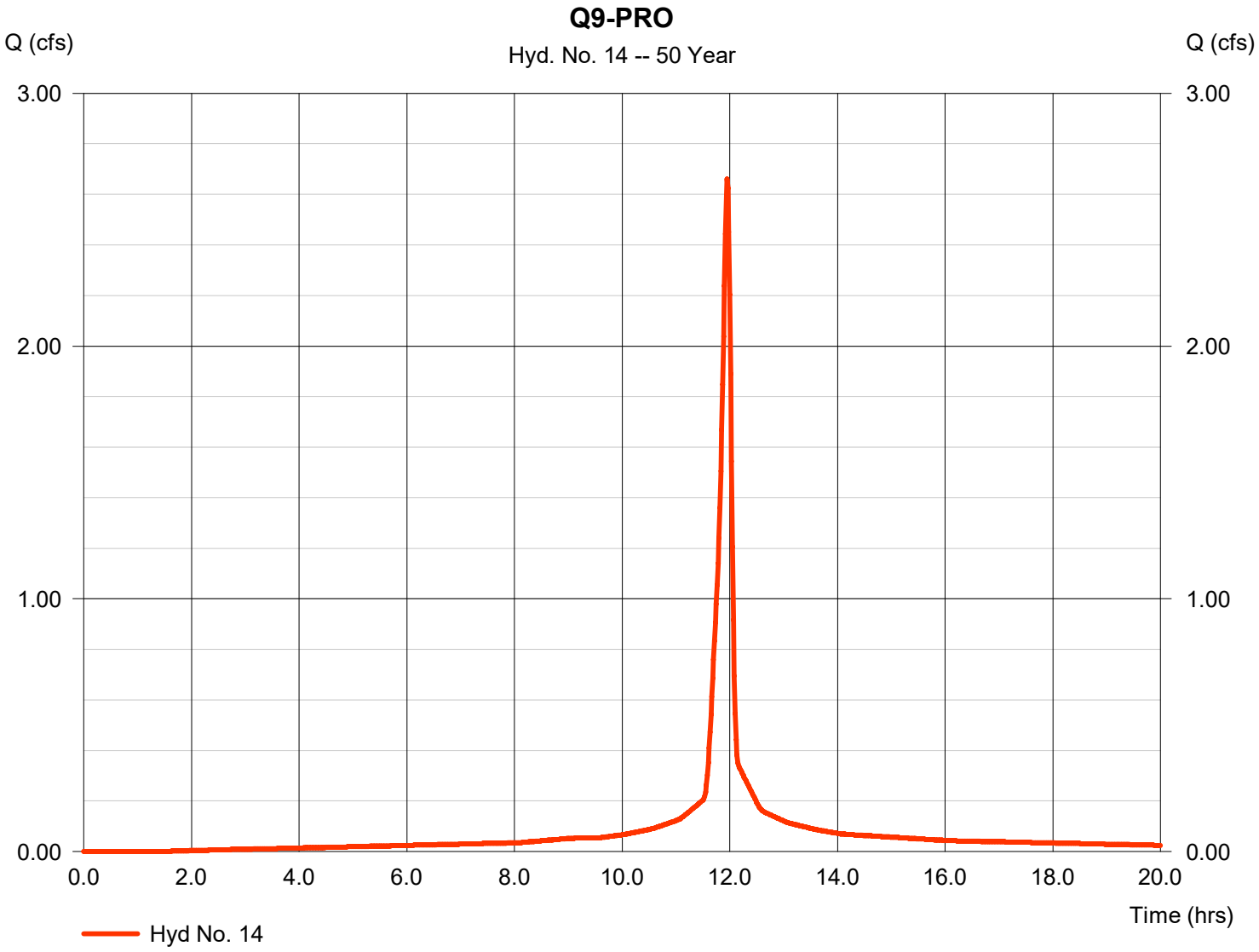


Hydrograph Report

Hyd. No. 14

Q9-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.661 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,263 cuft
Drainage area	=	0.620 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



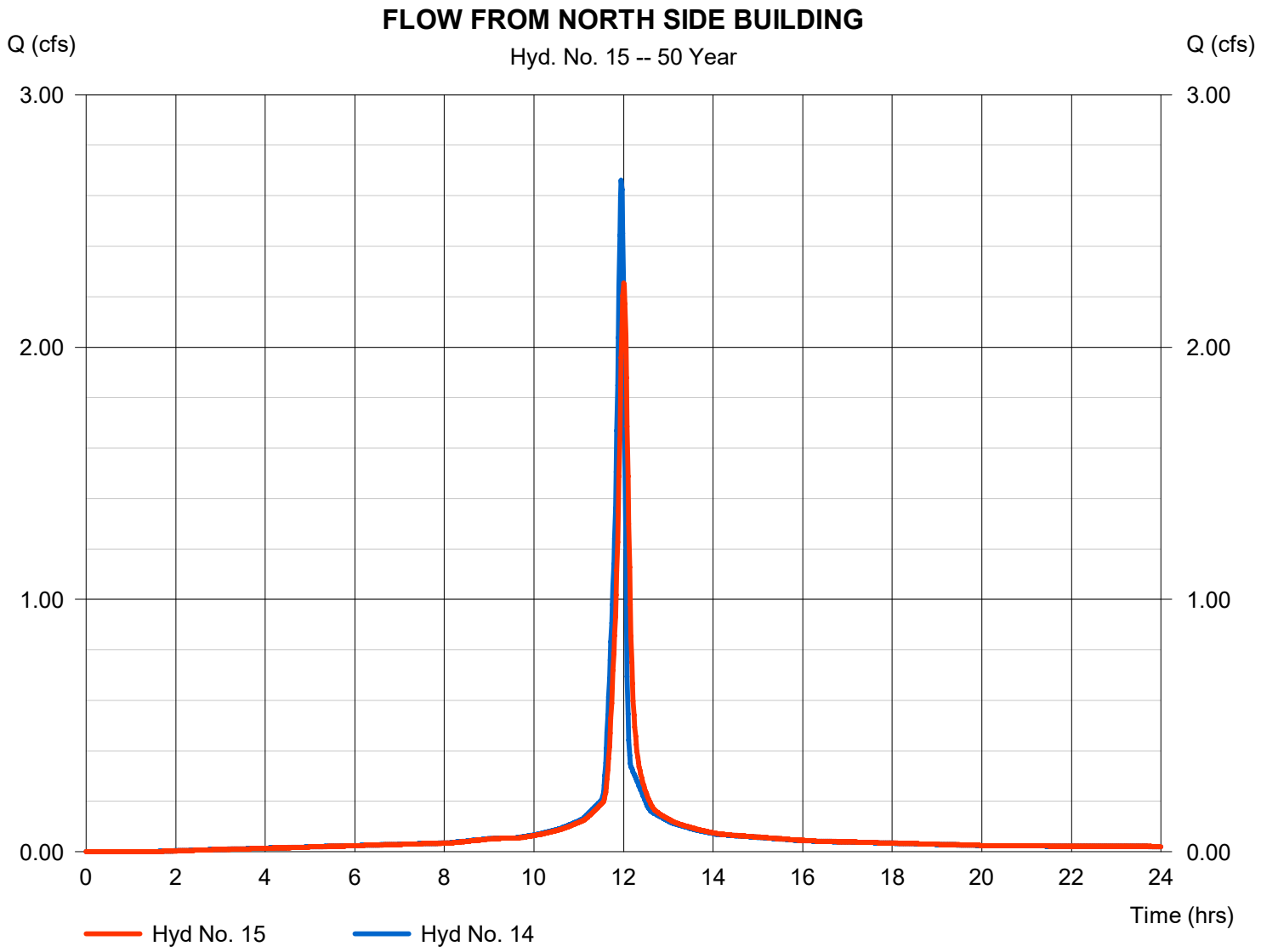
Hydrograph Report

Hyd. No. 15

FLOW FROM NORTH SIDE BUILDING

Hydrograph type	=	Reach	Peak discharge	=	2.253 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	6,260 cuft
Inflow hyd. No.	=	14 - Q9-PRO	Section type	=	Circular
Reach length	=	509.0 ft	Channel slope	=	0.5 %
Manning's n	=	0.025	Bottom width	=	1.5 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	2.433	Rating curve m	=	1.250
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.1997

Modified Att-Kin routing method used.

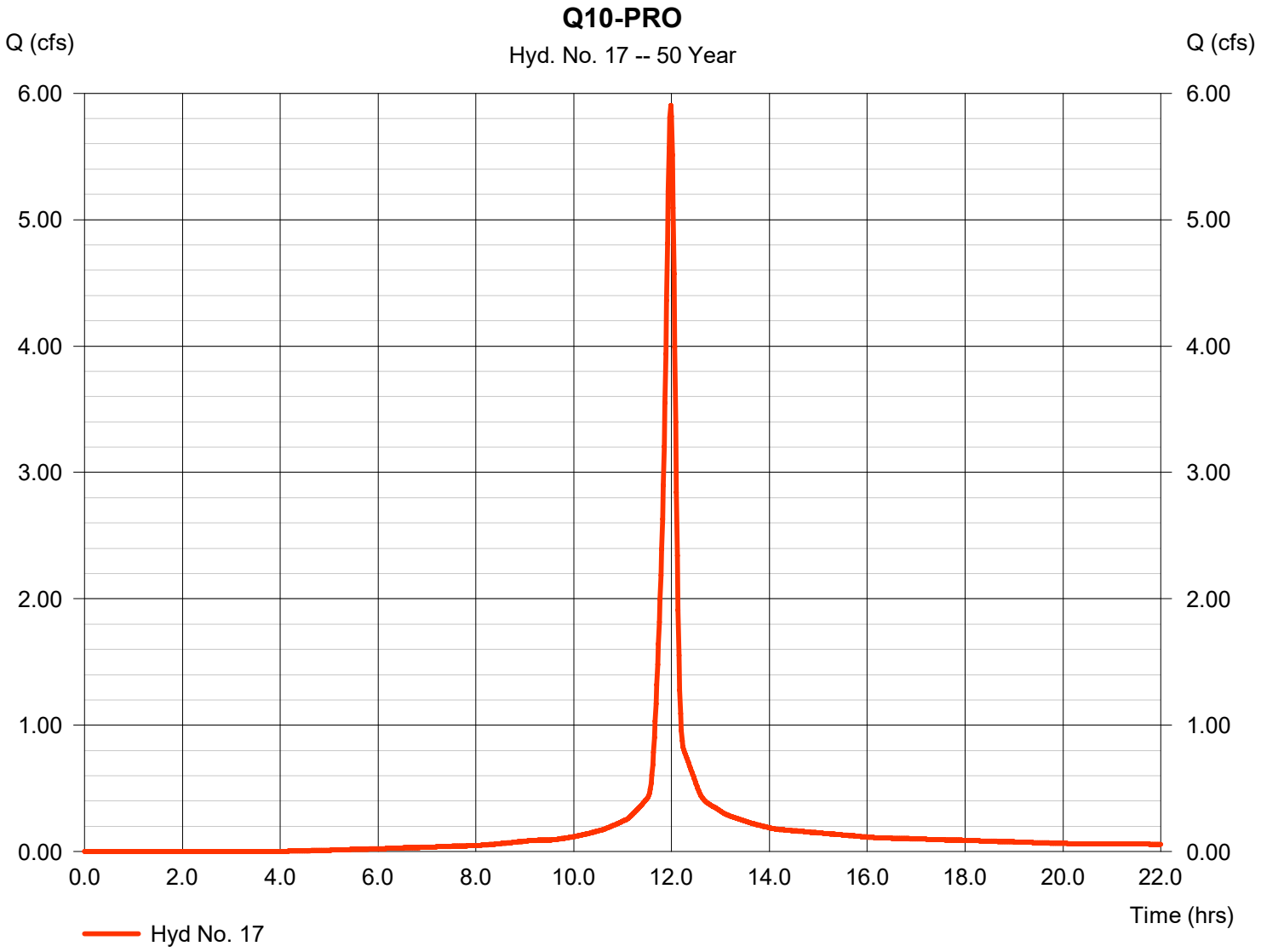


Hydrograph Report

Hyd. No. 17

Q10-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.906 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	14,168 cuft
Drainage area	=	1.710 ac	Curve number	=	94
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.40 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

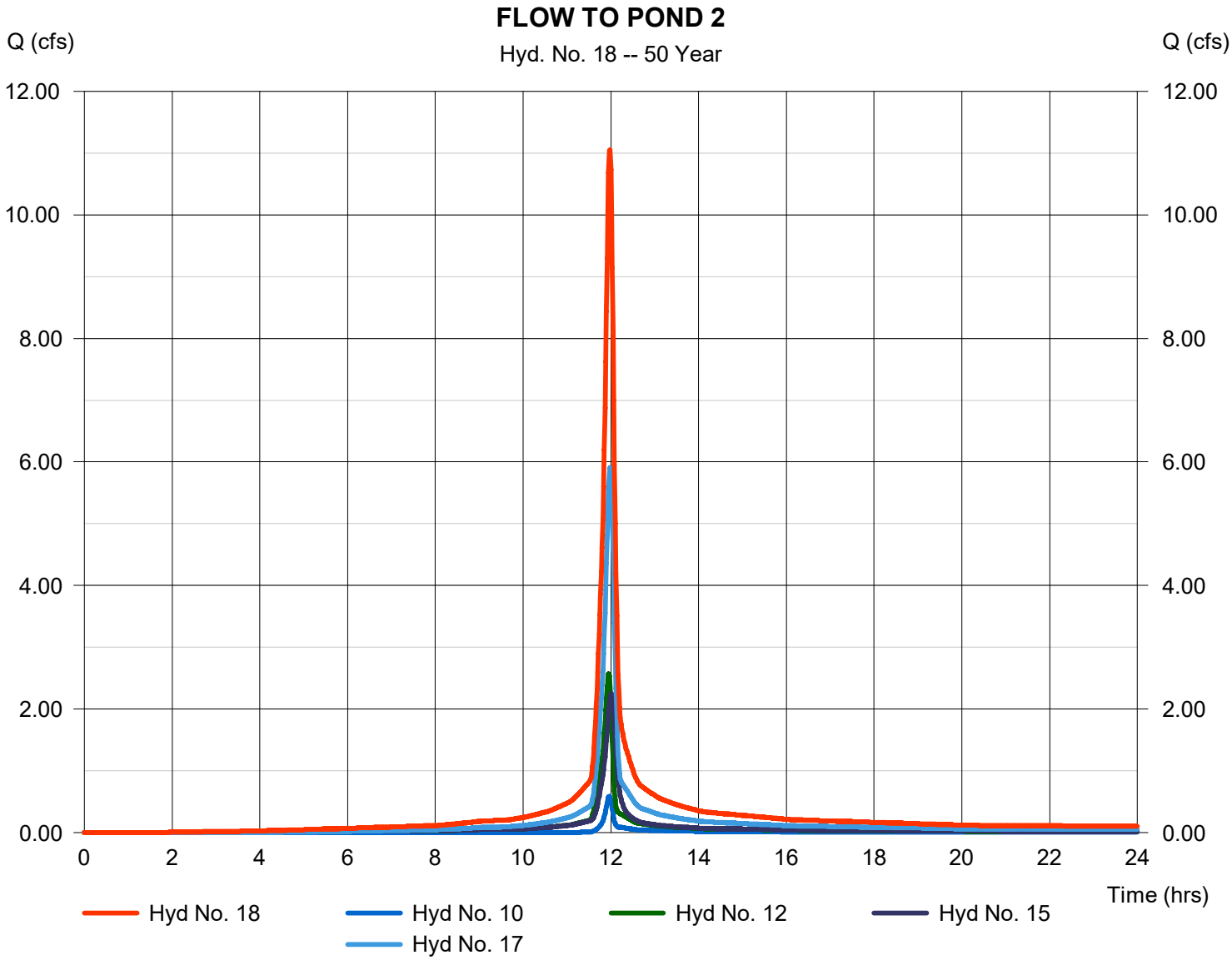


Hydrograph Report

Hyd. No. 18

FLOW TO POND 2

Hydrograph type	=	Combine	Peak discharge	=	11.05 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	27,685 cuft
Inflow hyds.	=	10, 12, 15, 17	Contrib. drain. area	=	2.640 ac



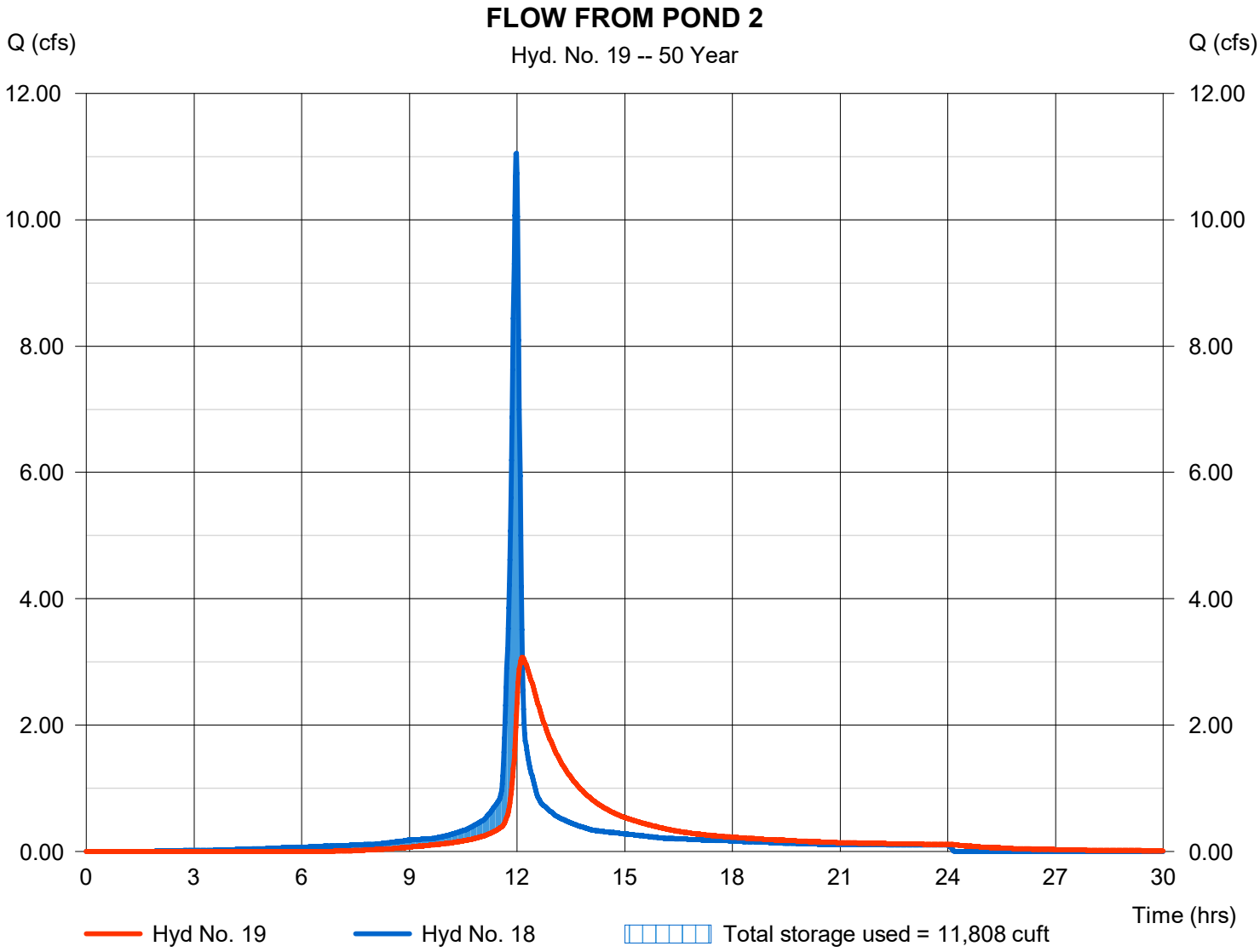
Hydrograph Report

Hyd. No. 19

FLOW FROM POND 2

Hydrograph type	= Reservoir	Peak discharge	= 3.075 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 27,029 cuft
Inflow hyd. No.	= 18 - FLOW TO POND 2	Max. Elevation	= 6335.66 ft
Reservoir name	= POND 2	Max. Storage	= 11,808 cuft

Storage Indication method used.

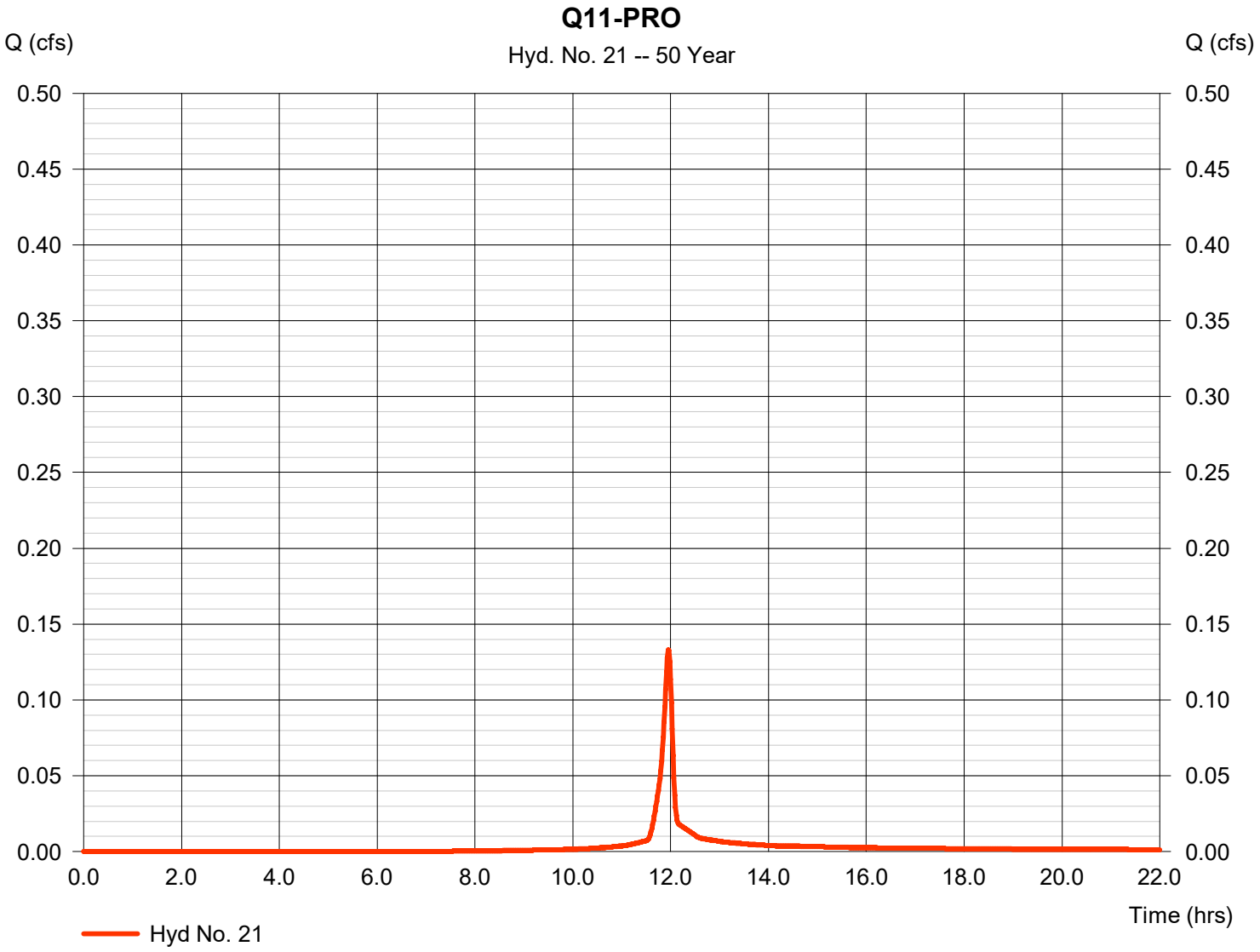


Hydrograph Report

Hyd. No. 21

Q11-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.133 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	275 cuft
Drainage area	=	0.040 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

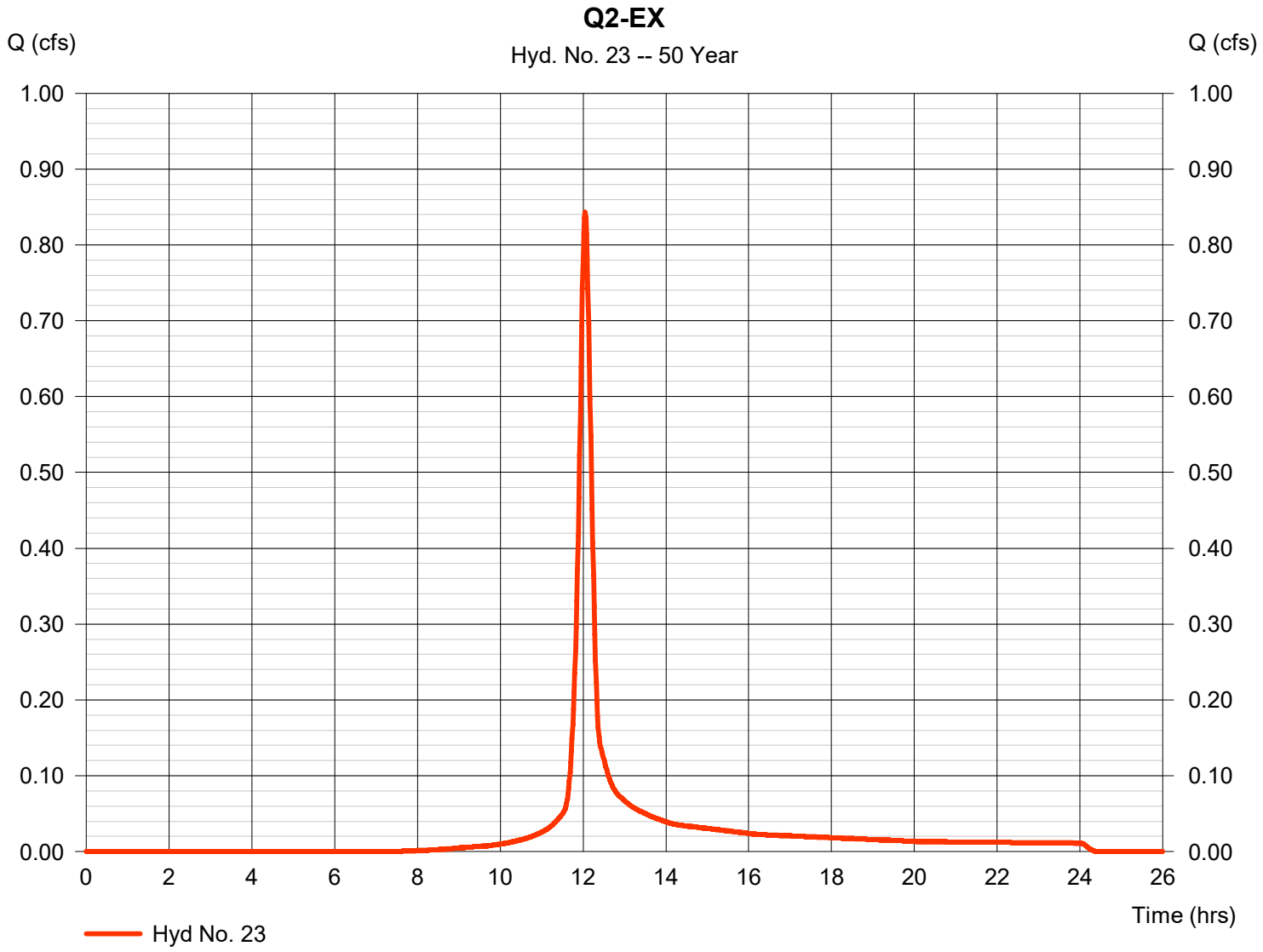


Hydrograph Report

Hyd. No. 23

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.843 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,405 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



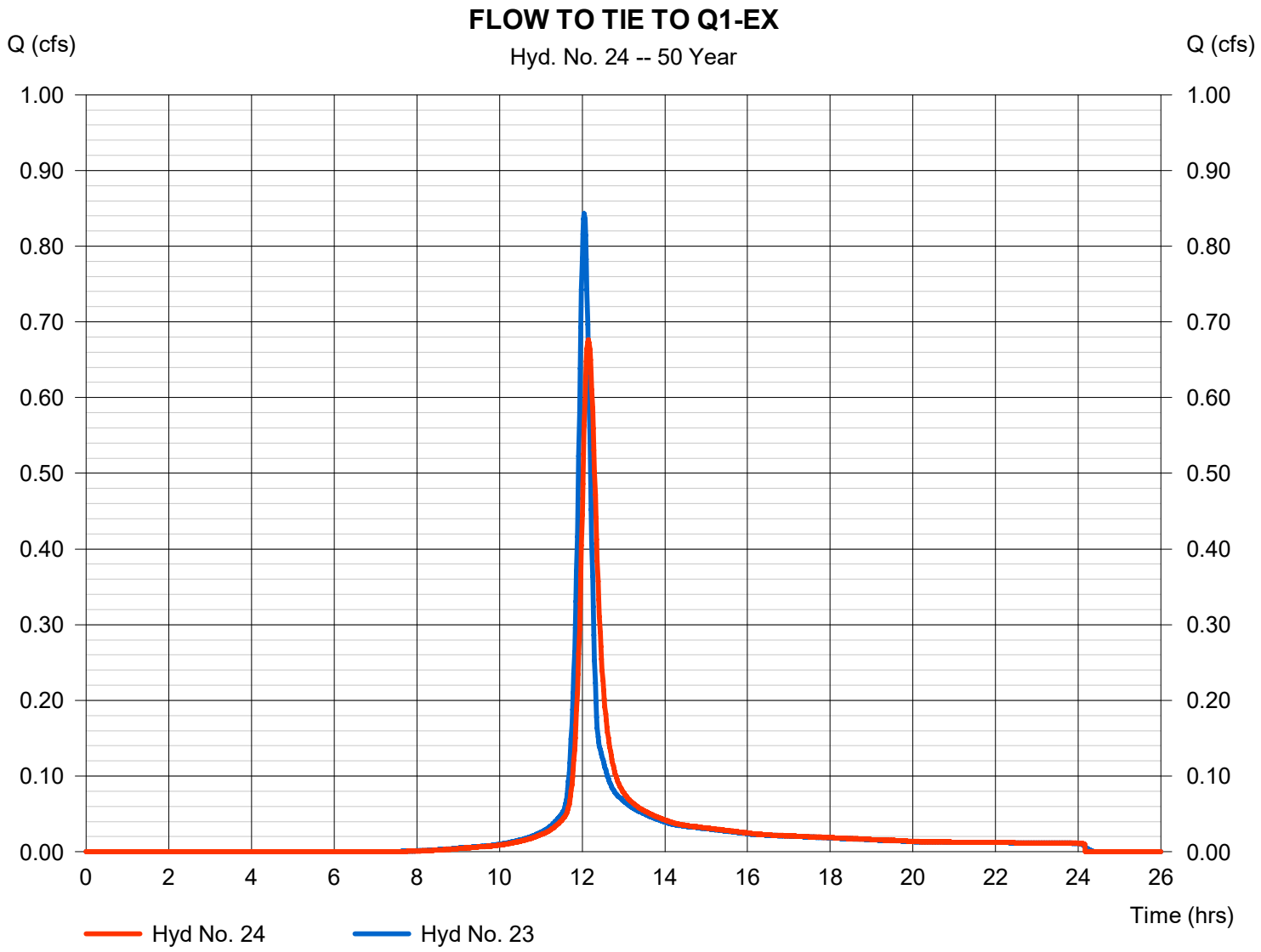
Hydrograph Report

Hyd. No. 24

FLOW TO TIE TO Q1-EX

Hydrograph type	=	Reach	Peak discharge	=	0.676 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.15 hrs
Time interval	=	1 min	Hyd. volume	=	2,398 cuft
Inflow hyd. No.	=	23 - Q2-EX	Section type	=	Trapezoidal
Reach length	=	258.0 ft	Channel slope	=	0.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	3.0:1	Max. depth	=	1.0 ft
Rating curve x	=	0.412	Rating curve m	=	1.190
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.1200

Modified Att-Kin routing method used.

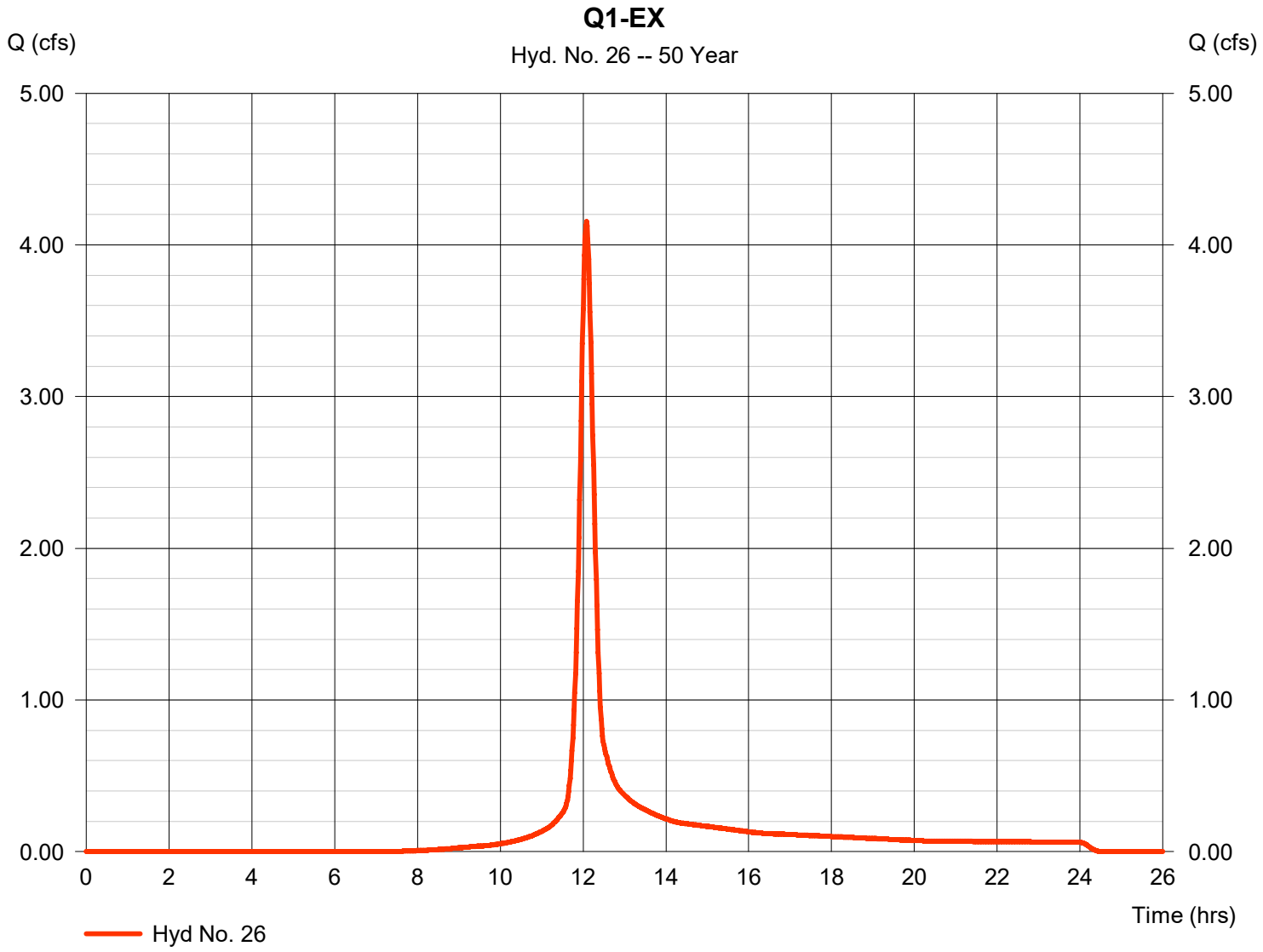


Hydrograph Report

Hyd. No. 26

Q1-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 4.154 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 12,975 cuft
Drainage area	= 2.130 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.80 min
Total precip.	= 2.93 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

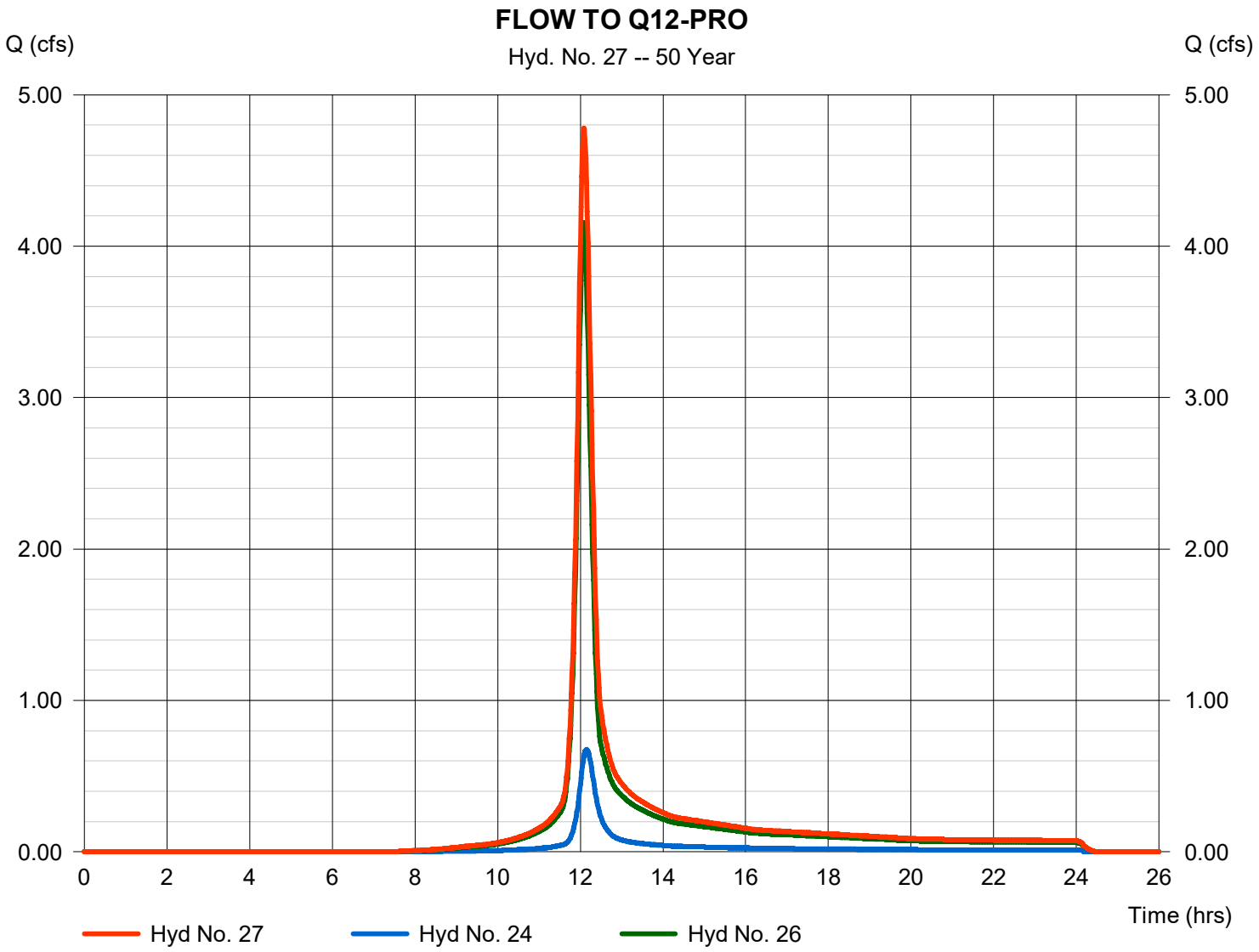


Hydrograph Report

Hyd. No. 27

FLOW TO Q12-PRO

Hydrograph type	= Combine	Peak discharge	= 4.779 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,373 cuft
Inflow hyds.	= 24, 26	Contrib. drain. area	= 2.130 ac



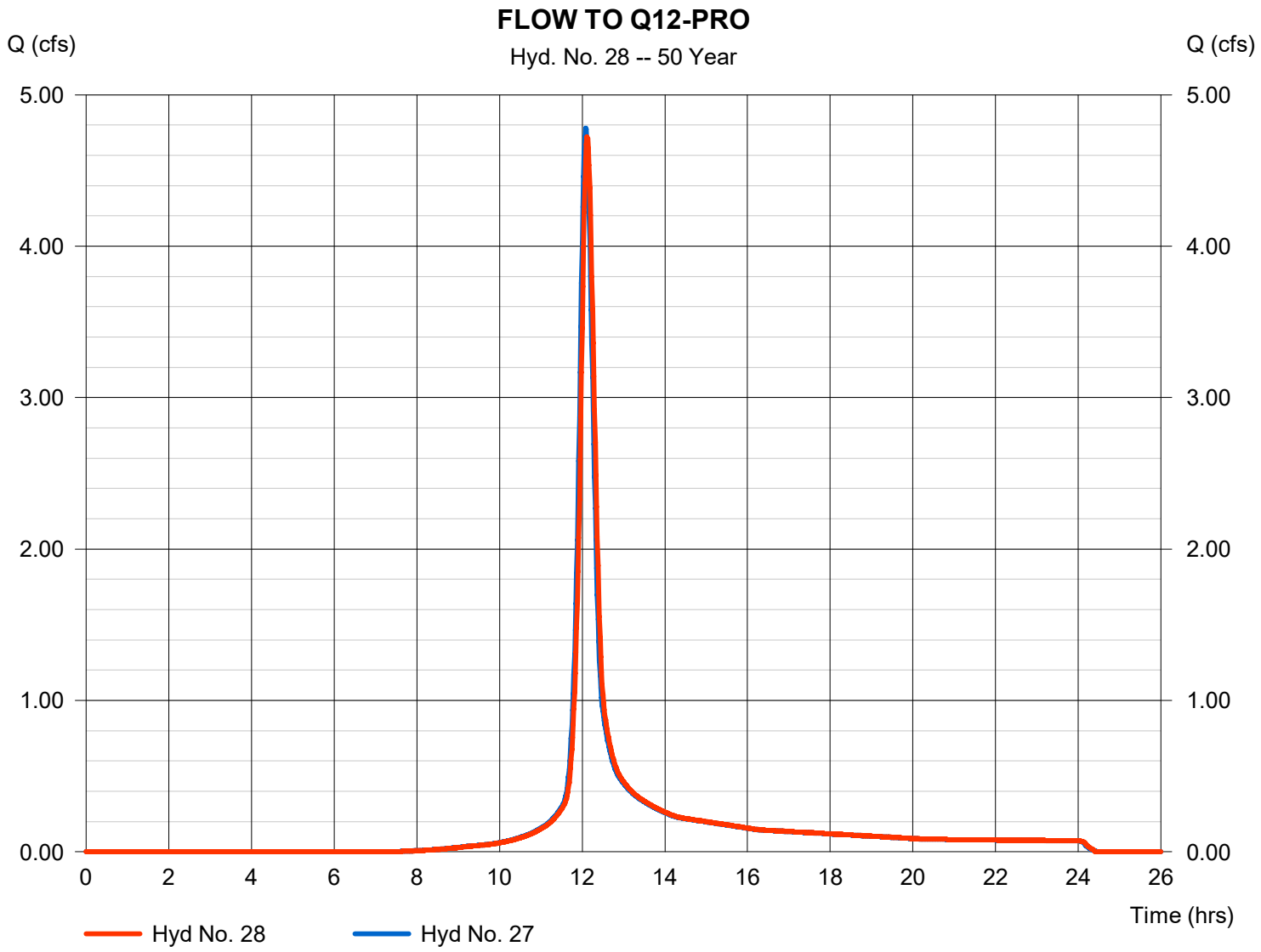
Hydrograph Report

Hyd. No. 28

FLOW TO Q12-PRO

Hydrograph type	= Reach	Peak discharge	= 4.721 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 15,371 cuft
Inflow hyd. No.	= 27 - FLOW TO Q12-PRO	Section type	= Rectangular
Reach length	= 294.0 ft	Channel slope	= 3.5 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 0.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.088	Rating curve m	= 1.646
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.4922

Modified Att-Kin routing method used.

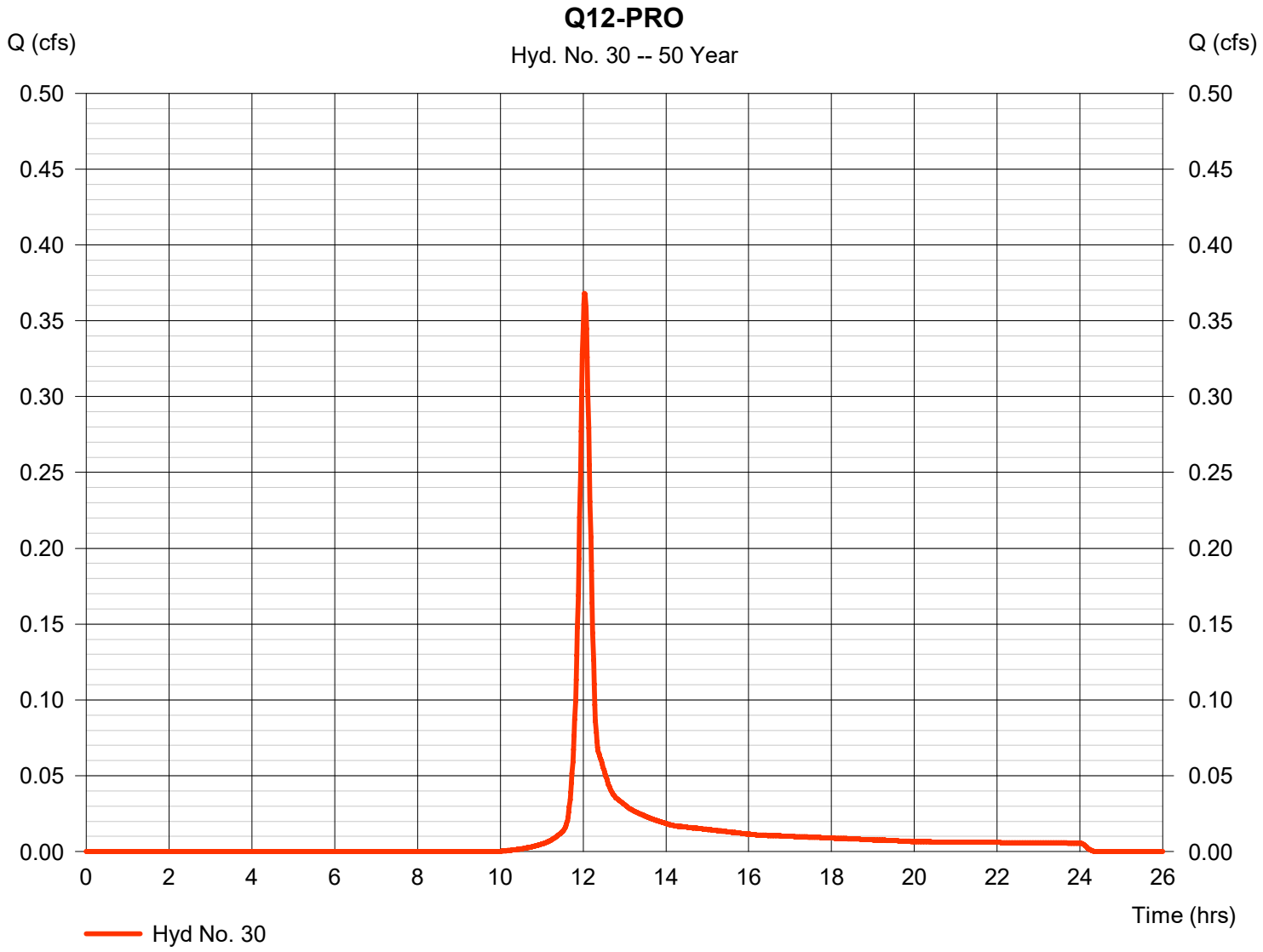


Hydrograph Report

Hyd. No. 30

Q12-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.368 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	1,000 cuft
Drainage area	=	0.230 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.22 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

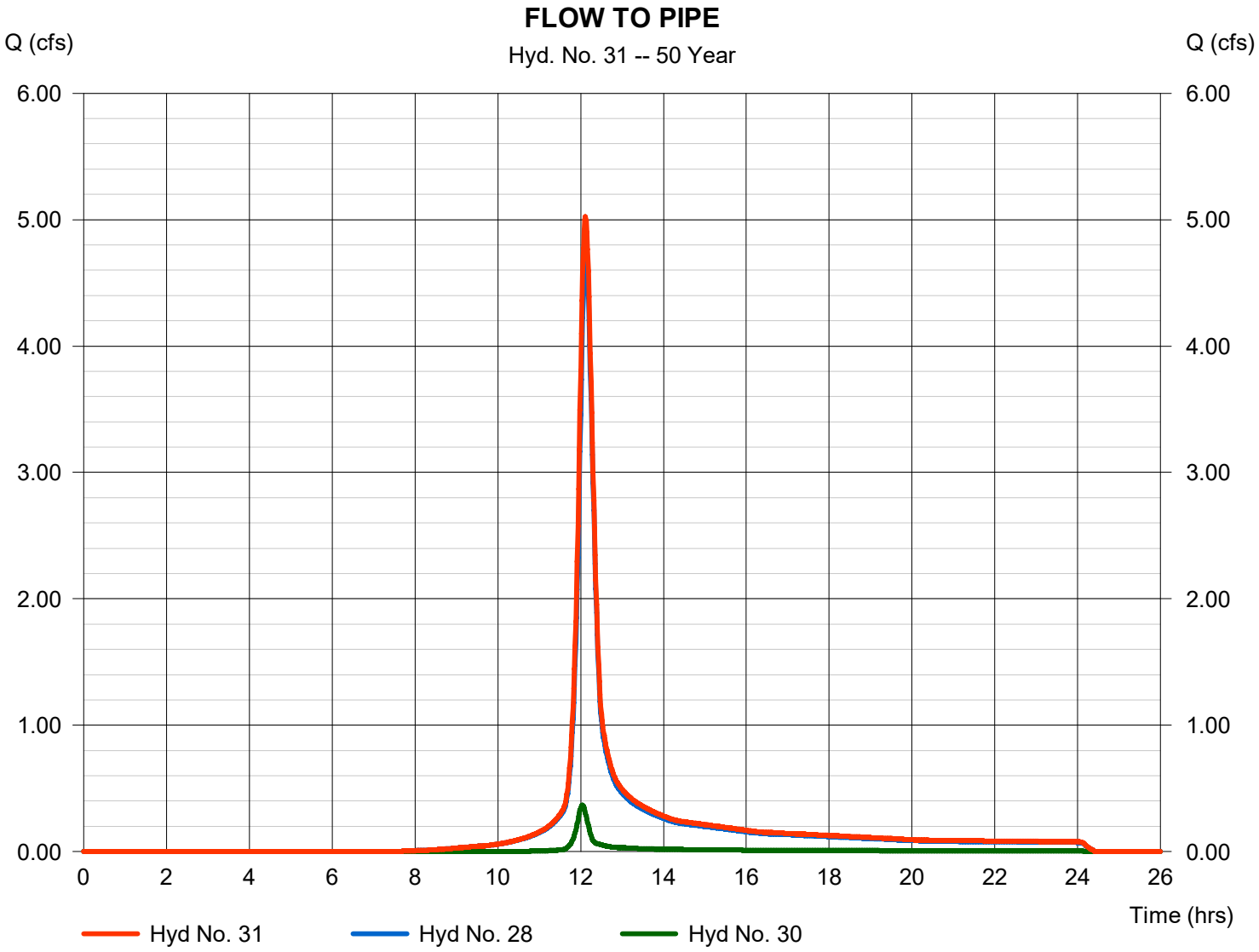


Hydrograph Report

Hyd. No. 31

FLOW TO PIPE

Hydrograph type	= Combine	Peak discharge	= 5.025 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 16,371 cuft
Inflow hyds.	= 28, 30	Contrib. drain. area	= 0.230 ac

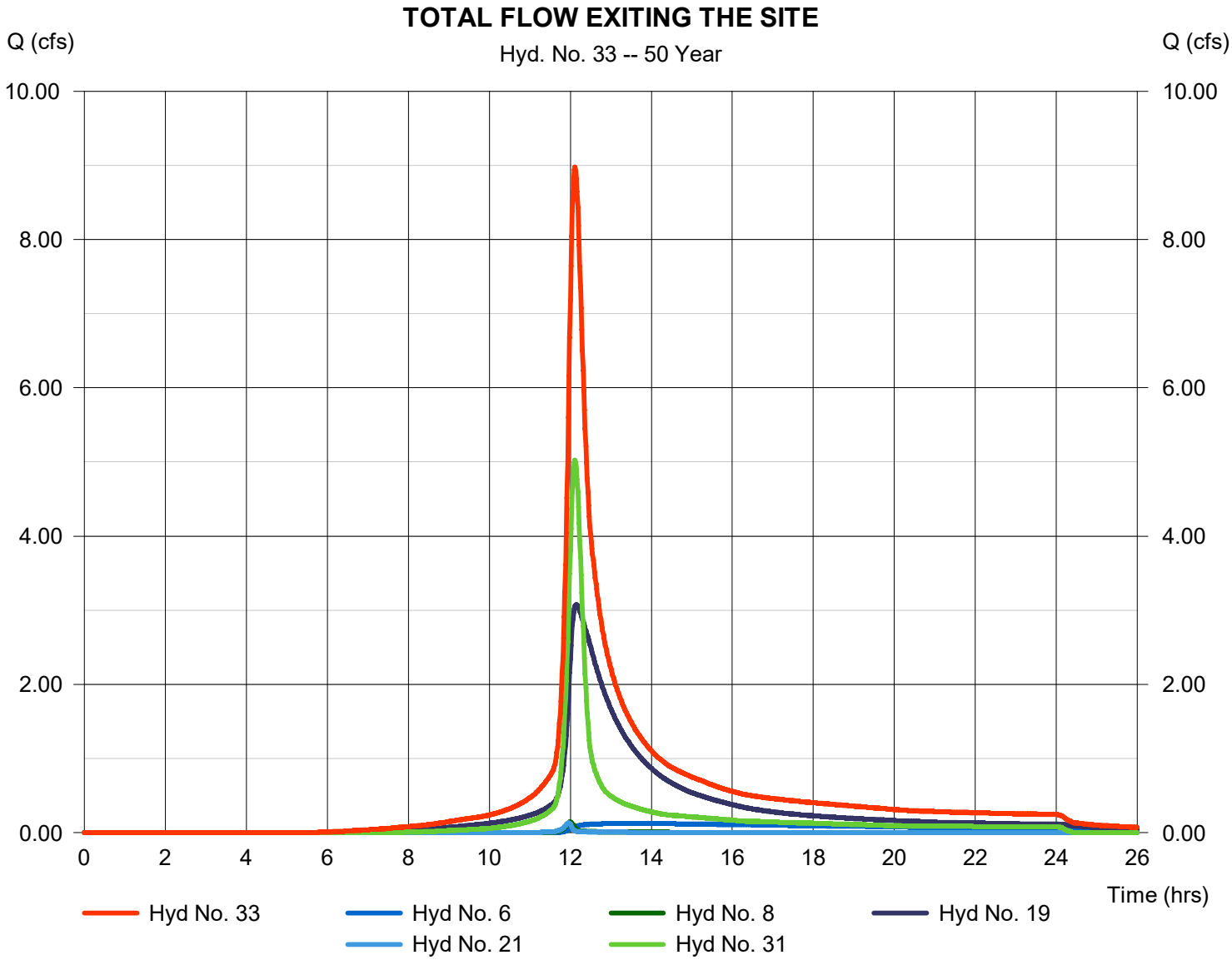


Hydrograph Report

Hyd. No. 33

TOTAL FLOW EXITING THE SITE

Hydrograph type	= Combine	Peak discharge	= 8.974 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 49,475 cuft
Inflow hyds.	= 6, 8, 19, 21, 31	Contrib. drain. area	= 0.120 ac



Hydrograph Summary Report

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

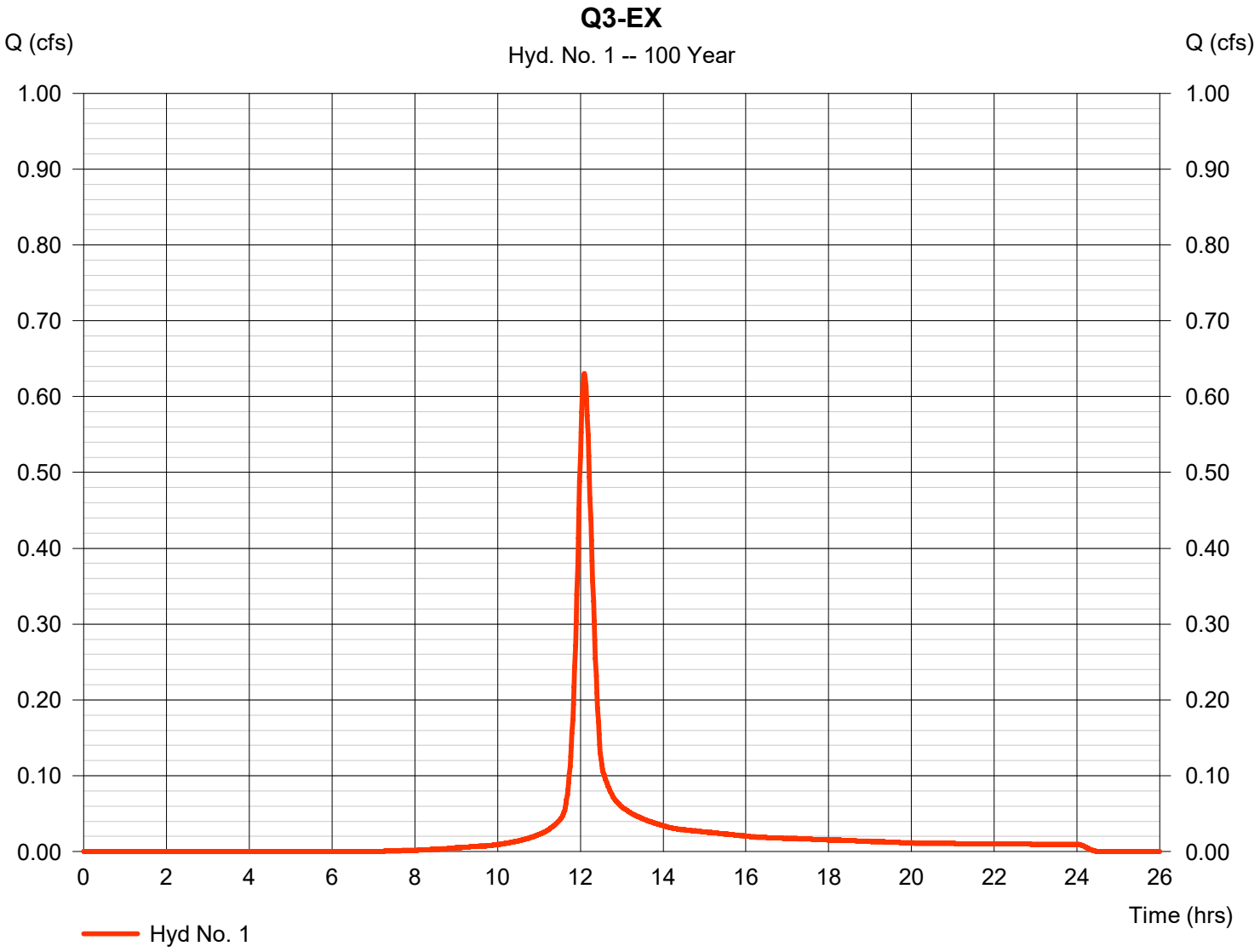
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.630	1	726	2,073	------	------	------	Q3-EX
2	SCS Runoff	0.869	1	718	1,871	------	------	------	Q4-PRO
4	SCS Runoff	1.692	1	717	3,501	------	------	------	Q5-PRO
5	Combine	3.010	1	718	7,444	1, 2, 4	------	------	FLOW TO POND 1
6	Reservoir	0.155	1	802	6,663	5	6335.52	4,449	FLOW FROM POND
8	SCS Runoff	0.175	1	720	397	------	------	------	Q6-PRO
10	SCS Runoff	0.724	1	718	1,458	------	------	------	Q7-PRO
12	SCS Runoff	2.855	1	717	6,755	------	------	------	Q8-PRO
14	SCS Runoff	2.950	1	717	6,980	------	------	------	Q9-PRO
15	Reach	2.551	1	720	6,977	14	------	------	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	6.631	1	719	16,031	------	------	------	Q10-PRO
18	Combine	12.46	1	719	31,221	10, 12, 15, 17	------	------	FLOW TO POND 2
19	Reservoir	3.800	1	728	30,564	18	6335.81	13,060	FLOW FROM POND 2
21	SCS Runoff	0.152	1	717	317	------	------	------	Q11-PRO
23	SCS Runoff	0.978	1	723	2,796	------	------	------	Q2-EX
24	Reach	0.790	1	729	2,789	23	------	------	FLOW TO TIE TO Q1-EX
26	SCS Runoff	4.821	1	725	15,080	------	------	------	Q1-EX
27	Combine	5.556	1	725	17,869	24, 26	------	------	FLOW TO Q12-PRO
28	Reach	5.498	1	727	17,867	27	------	------	FLOW TO Q12-PRO
30	SCS Runoff	0.443	1	722	1,196	------	------	------	Q12-PRO
31	Combine	5.860	1	727	19,063	28, 30	------	------	FLOW TO PIPE
33	Combine	10.38	1	727	56,790	6, 8, 19, 21, 31,	------	------	TOTAL FLOW EXITING THE SITE

Hydrograph Report

Hyd. No. 1

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.630 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	2,073 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.40 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

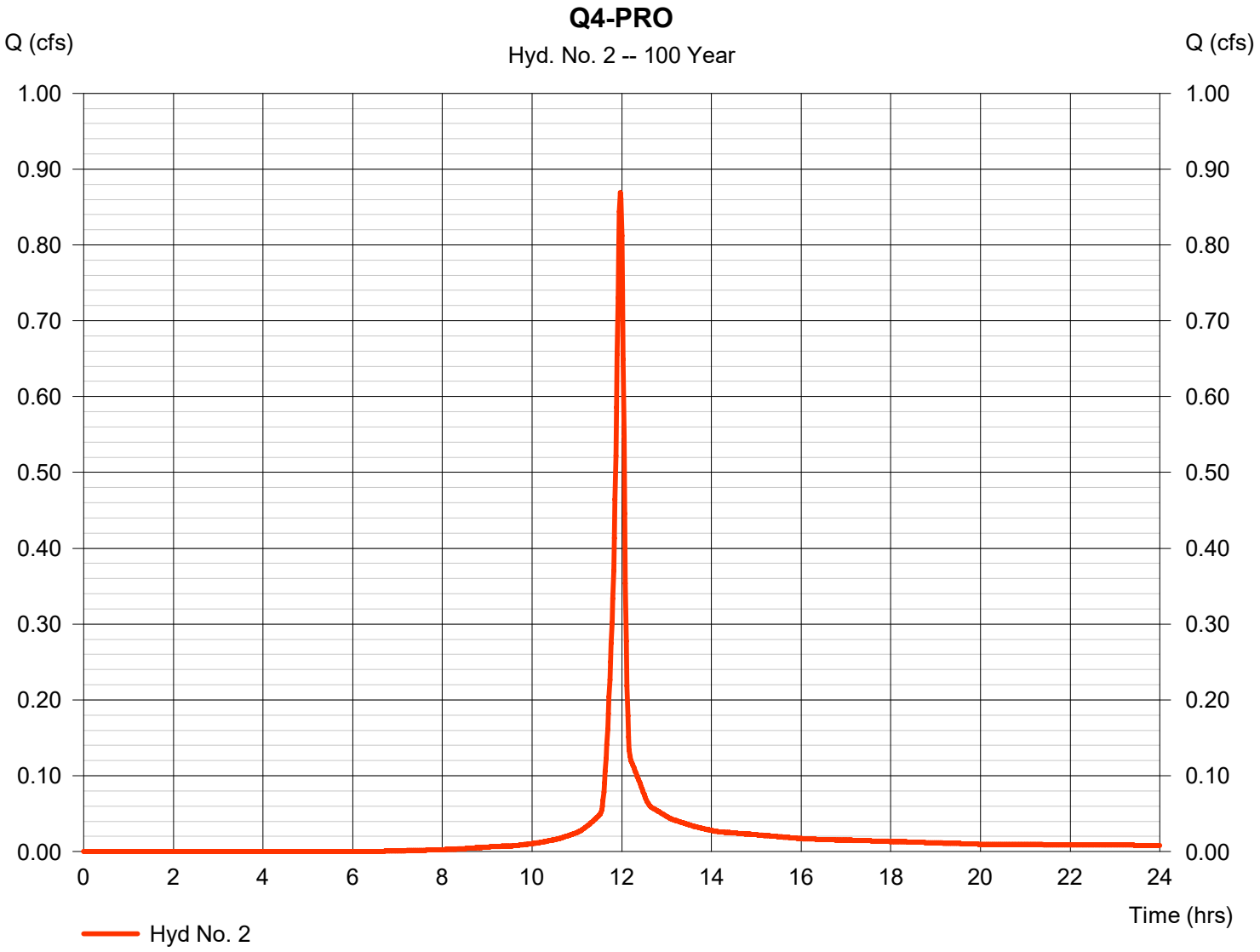


Hydrograph Report

Hyd. No. 2

Q4-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.869 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,871 cuft
Drainage area	=	0.260 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.90 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

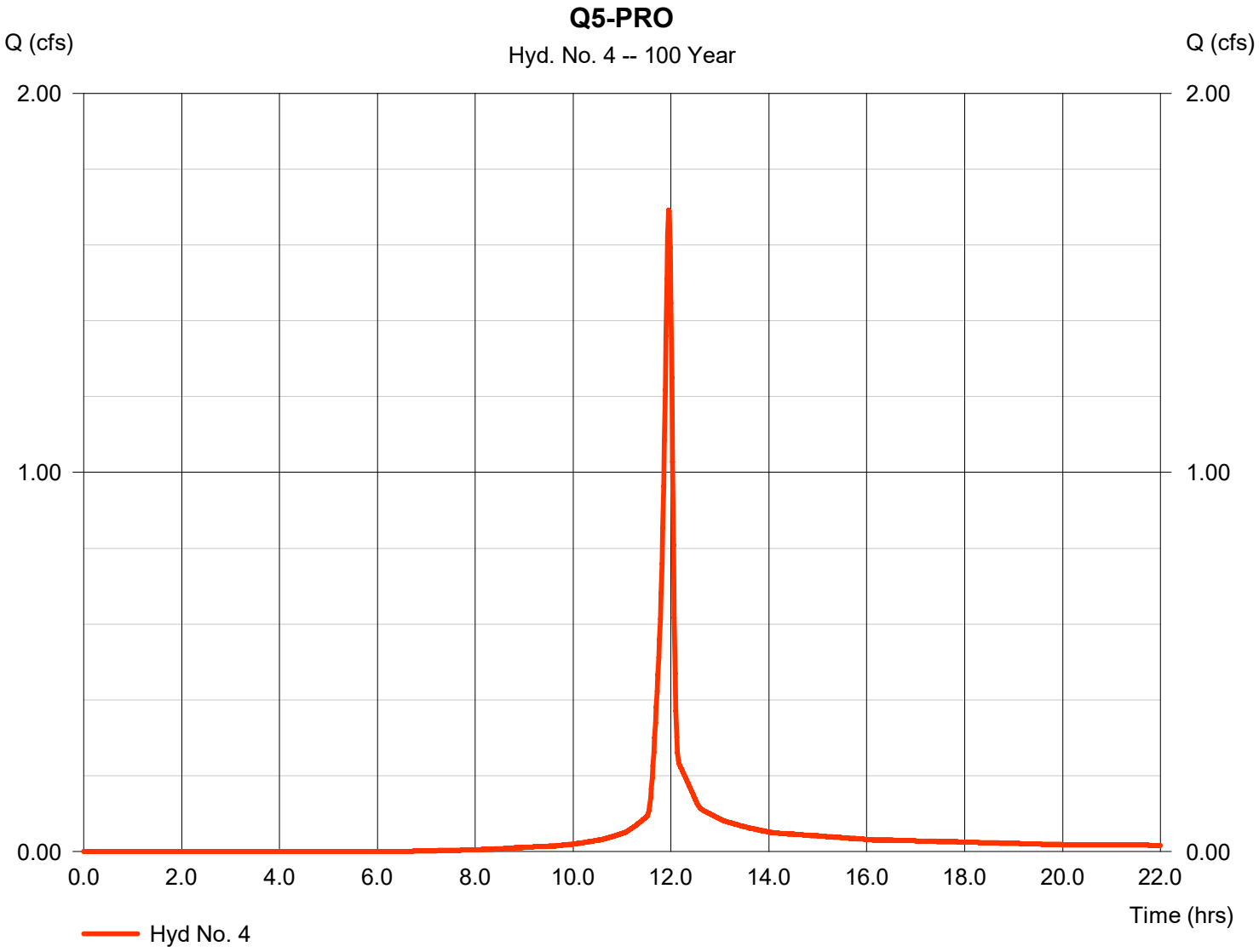


Hydrograph Report

Hyd. No. 4

Q5-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.692 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	3,501 cuft
Drainage area	=	0.460 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

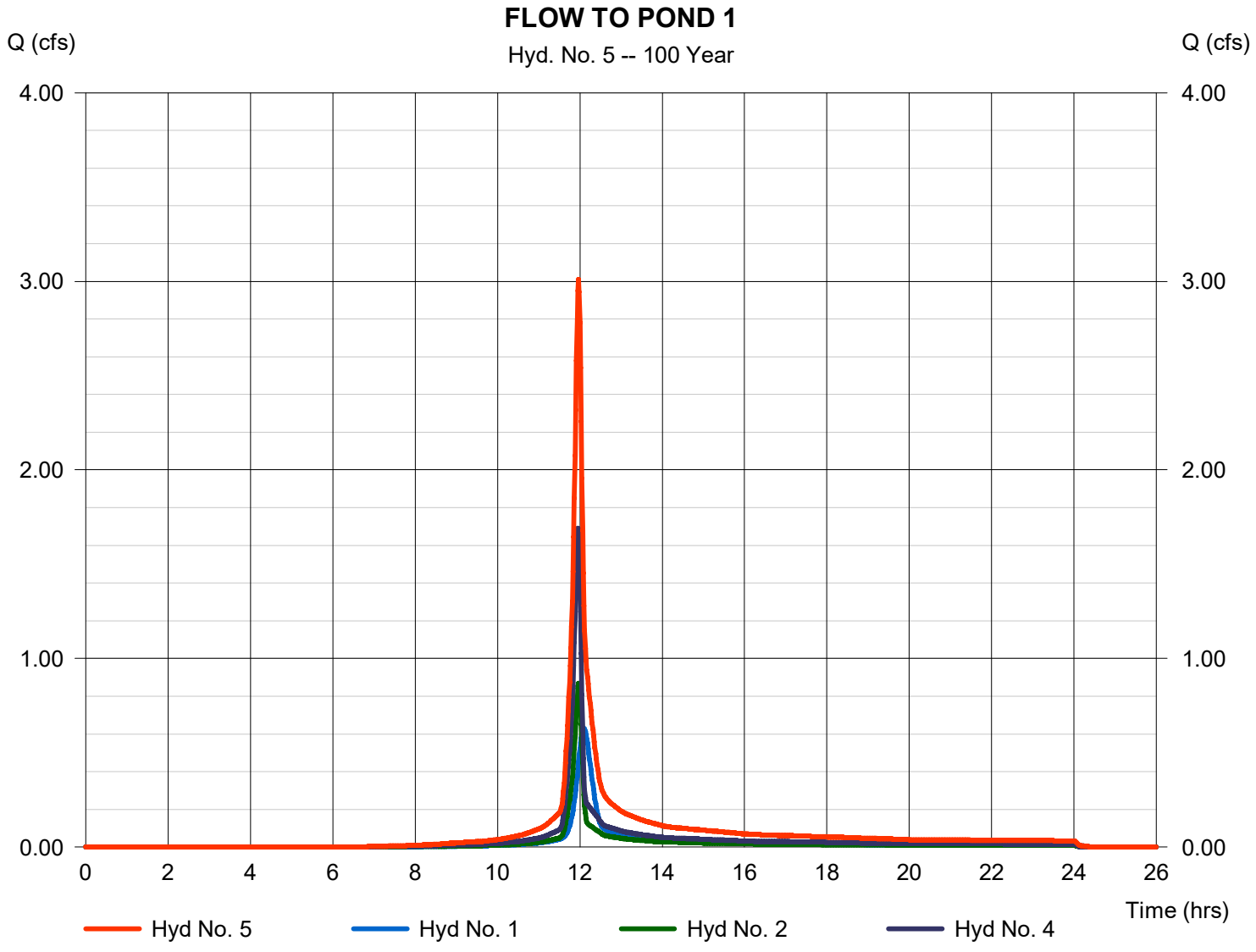


Hydrograph Report

Hyd. No. 5

FLOW TO POND 1

Hydrograph type	=	Combine	Peak discharge	=	3.010 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	7,444 cuft
Inflow hyds.	=	1, 2, 4	Contrib. drain. area	=	1.010 ac



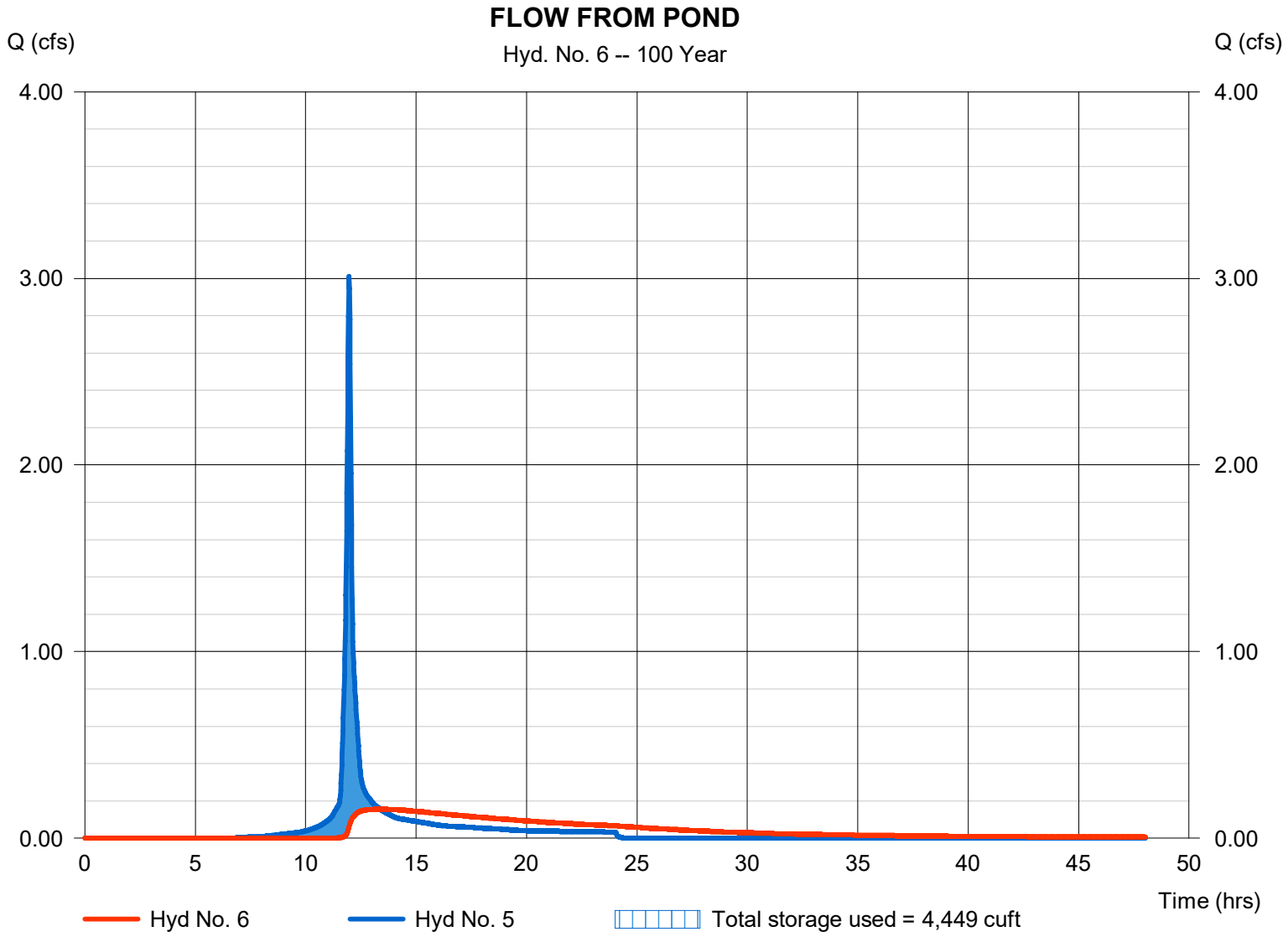
Hydrograph Report

Hyd. No. 6

FLOW FROM POND

Hydrograph type	= Reservoir	Peak discharge	= 0.155 cfs
Storm frequency	= 100 yrs	Time to peak	= 13.37 hrs
Time interval	= 1 min	Hyd. volume	= 6,663 cuft
Inflow hyd. No.	= 5 - FLOW TO POND 1	Max. Elevation	= 6335.52 ft
Reservoir name	= POND 1	Max. Storage	= 4,449 cuft

Storage Indication method used.

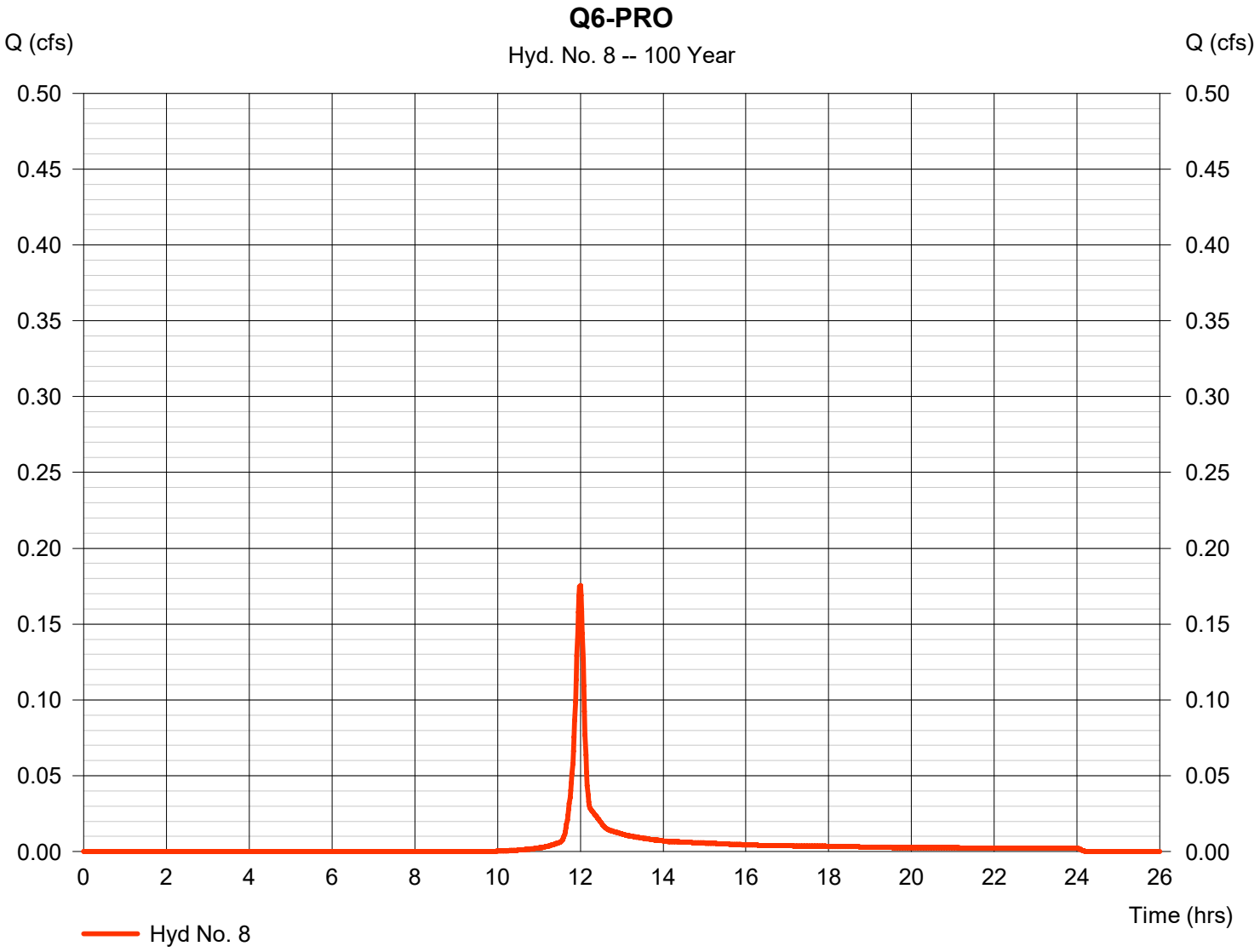


Hydrograph Report

Hyd. No. 8

Q6-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.175 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	397 cuft
Drainage area	=	0.080 ac	Curve number	=	79
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	9.18 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

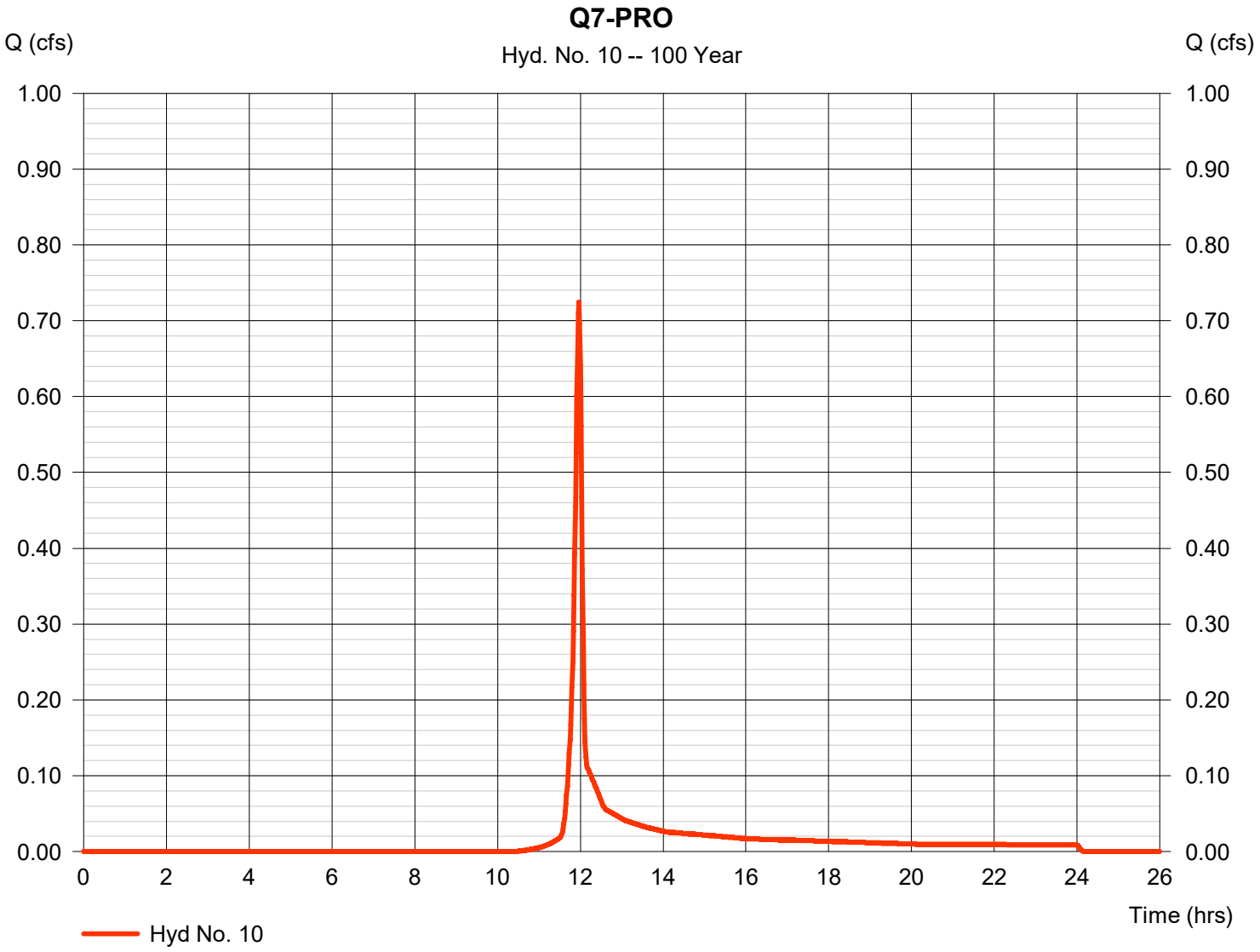


Hydrograph Report

Hyd. No. 10

Q7-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.724 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,458 cuft
Drainage area	=	0.330 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

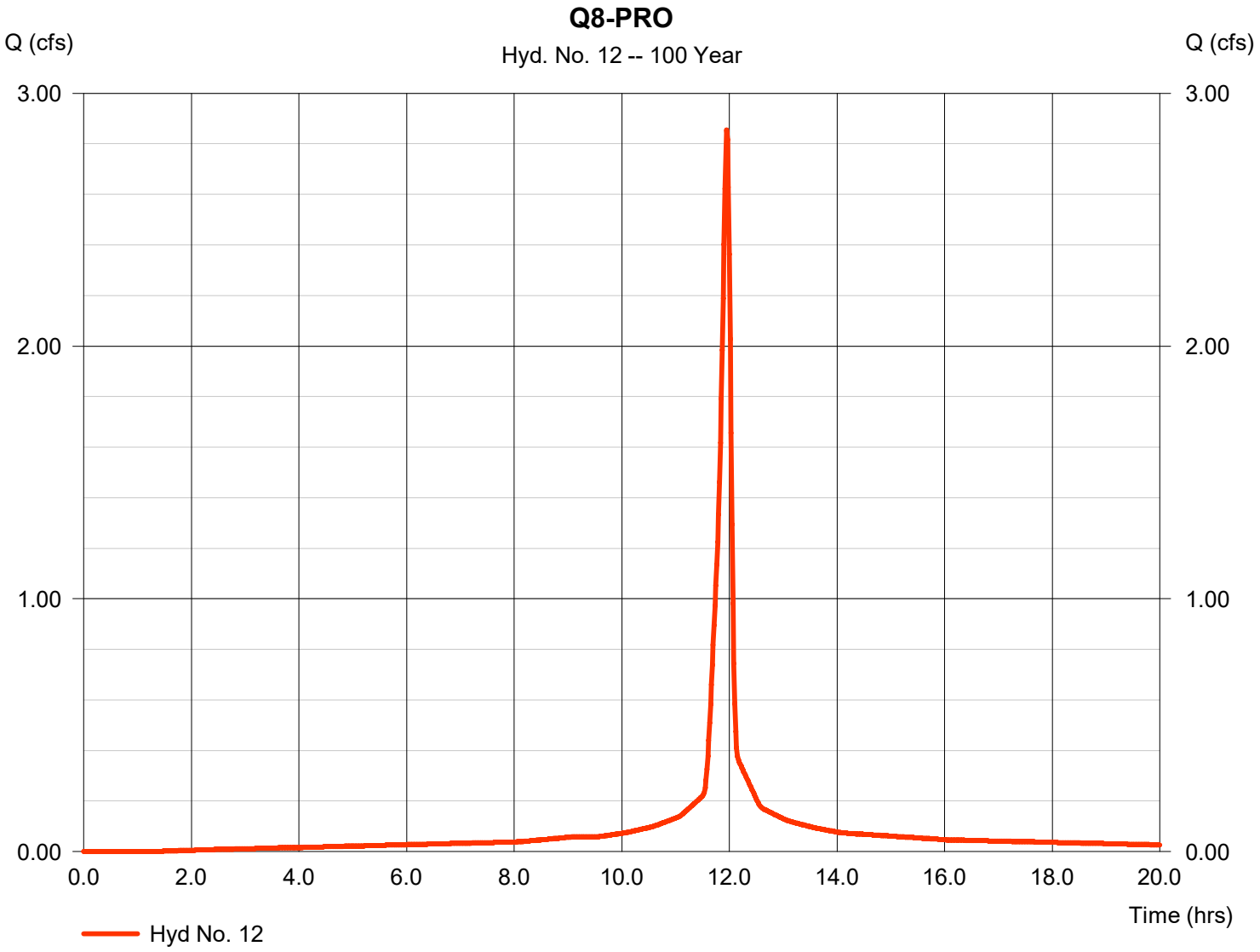


Hydrograph Report

Hyd. No. 12

Q8-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.855 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,755 cuft
Drainage area	=	0.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

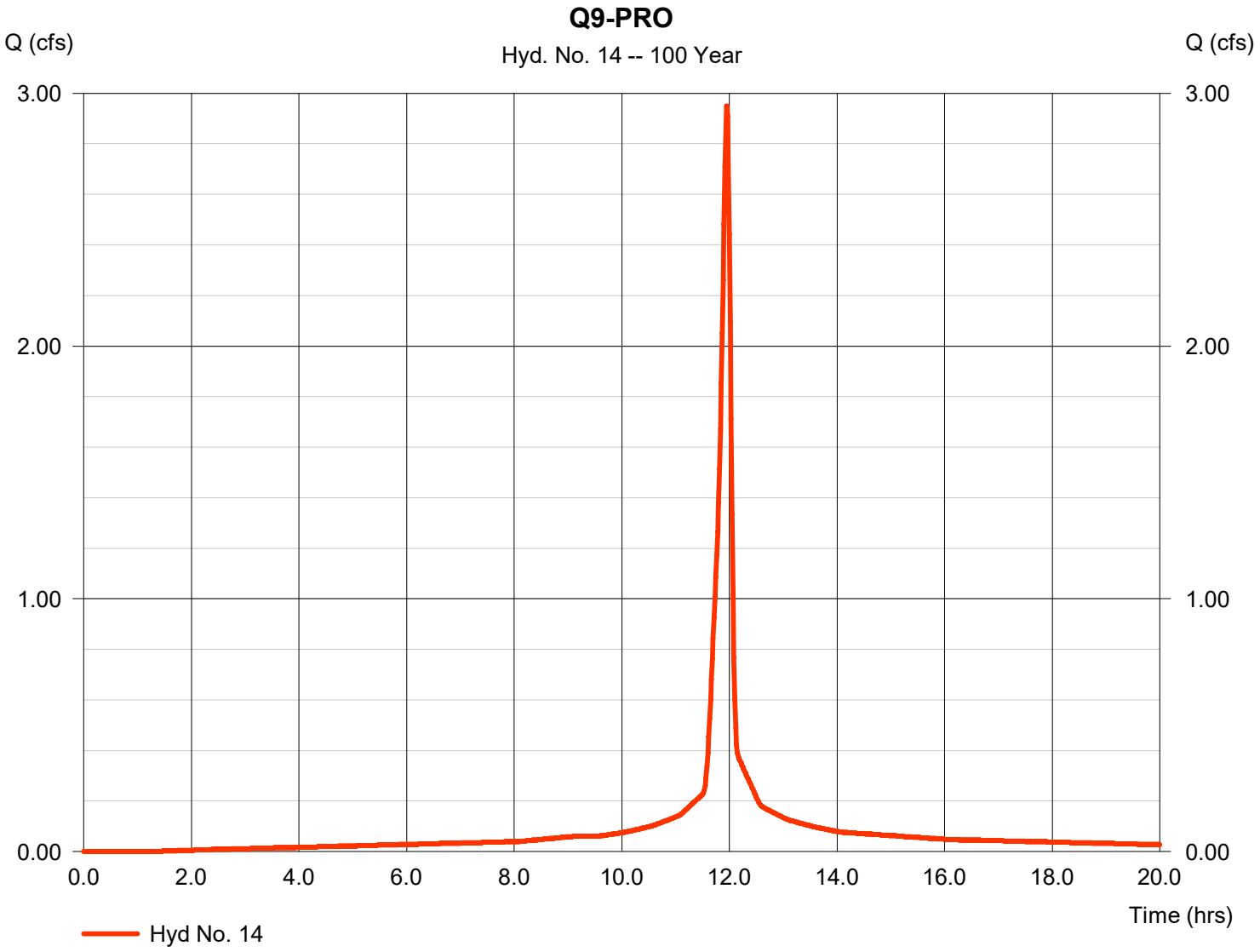


Hydrograph Report

Hyd. No. 14

Q9-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.950 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,980 cuft
Drainage area	=	0.620 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



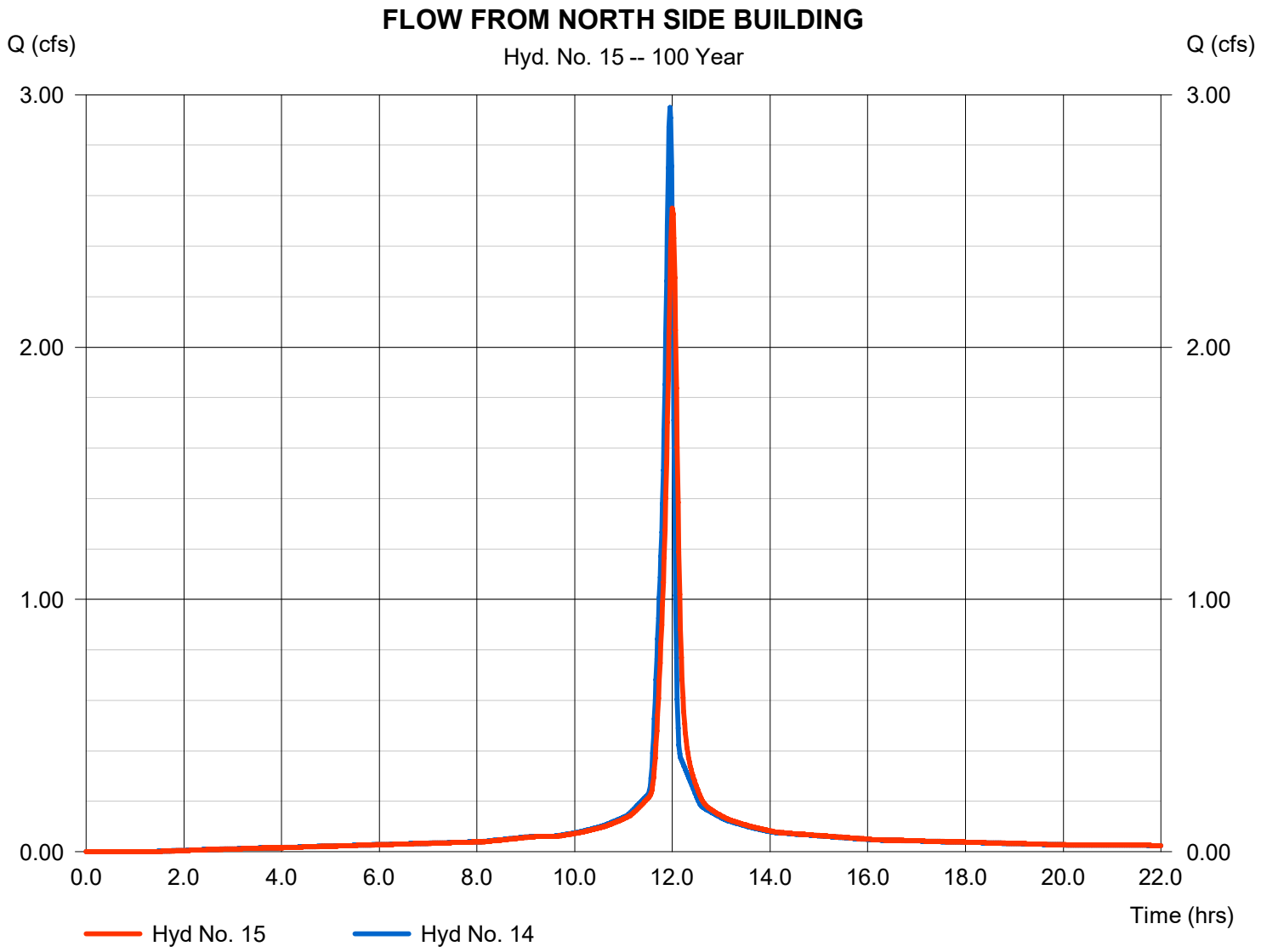
Hydrograph Report

Hyd. No. 15

FLOW FROM NORTH SIDE BUILDING

Hydrograph type	= Reach	Peak discharge	= 2.551 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 6,977 cuft
Inflow hyd. No.	= 14 - Q9-PRO	Section type	= Circular
Reach length	= 509.0 ft	Channel slope	= 0.5 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 2.433	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.2190

Modified Att-Kin routing method used.

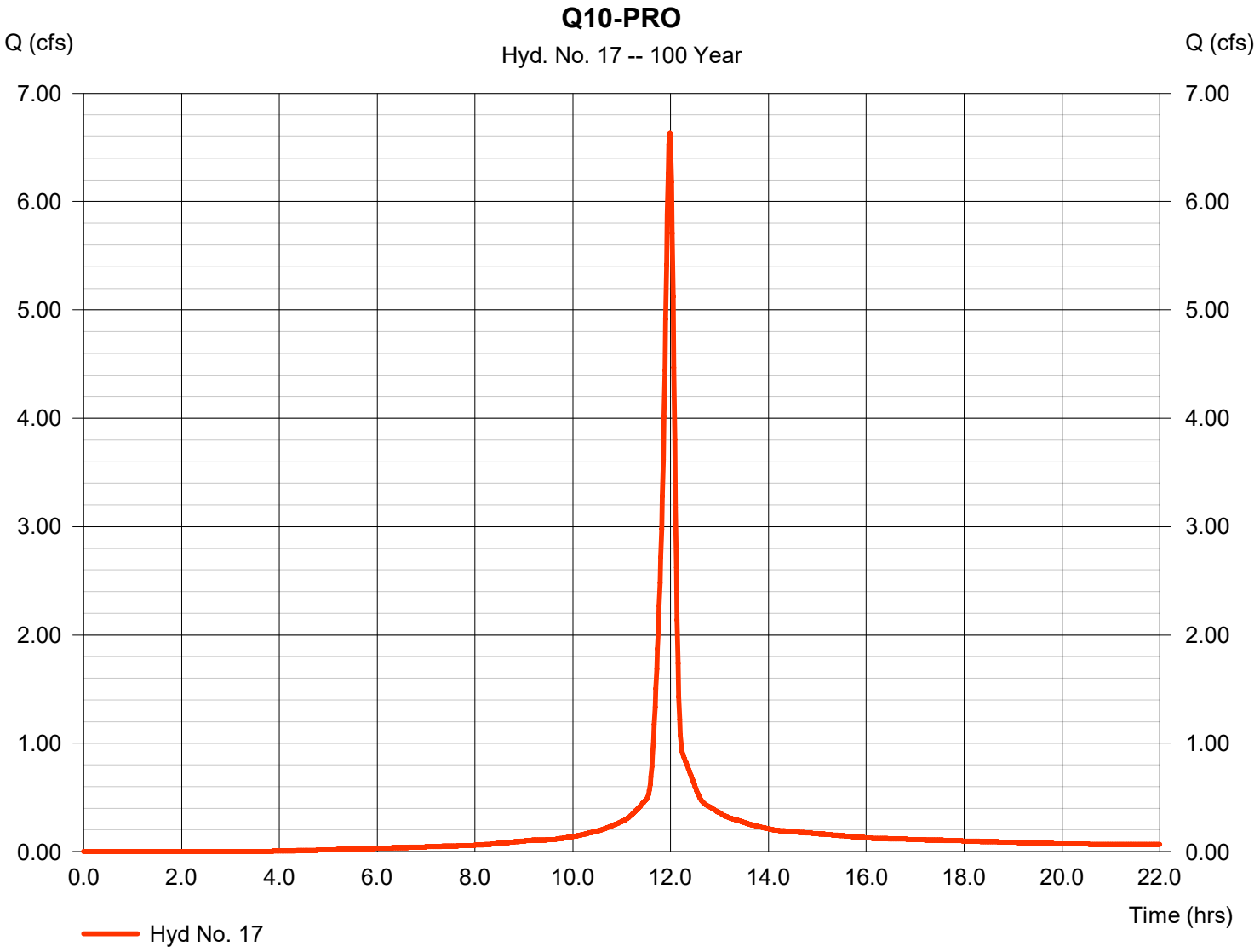


Hydrograph Report

Hyd. No. 17

Q10-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.631 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	16,031 cuft
Drainage area	=	1.710 ac	Curve number	=	94
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.40 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

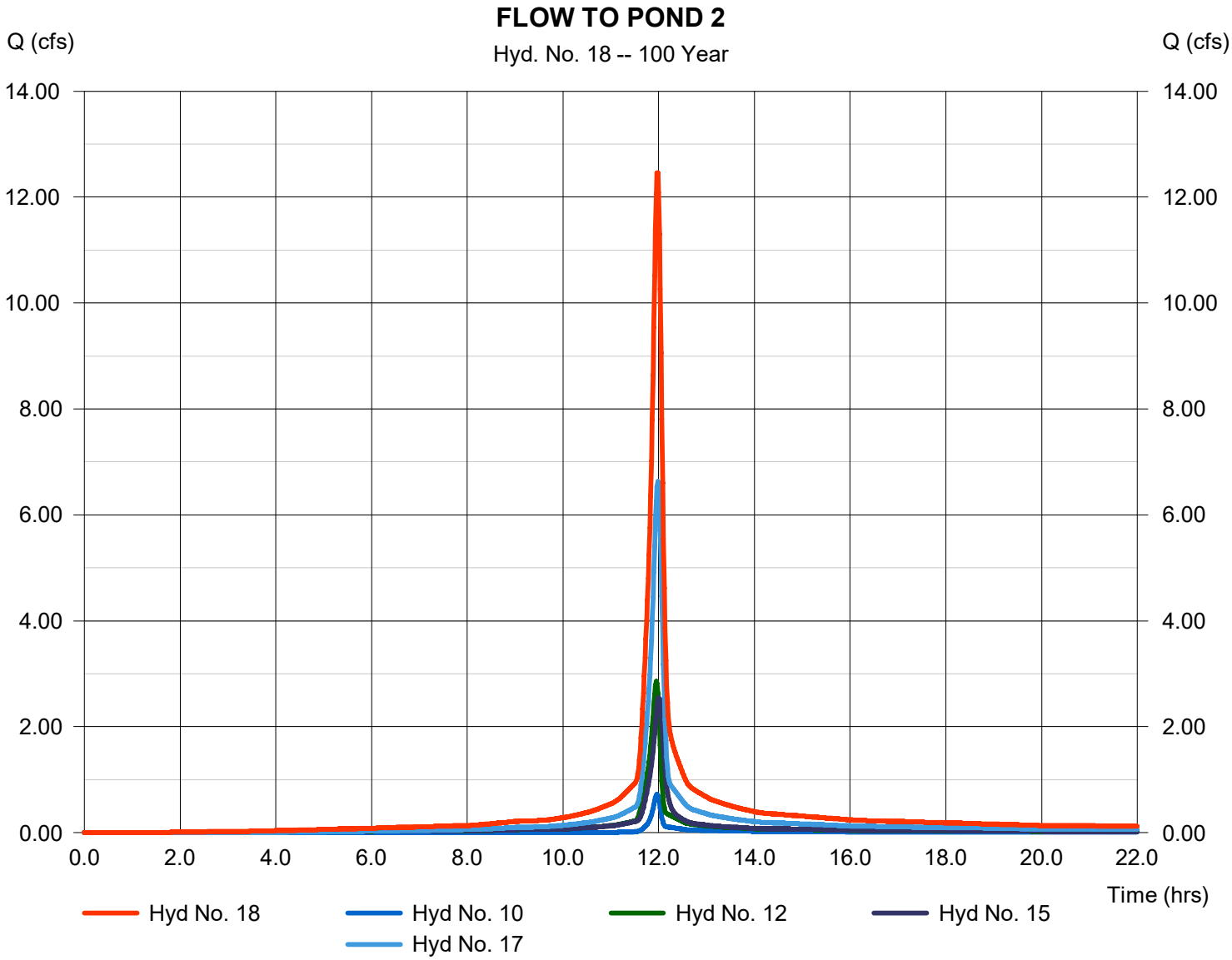


Hydrograph Report

Hyd. No. 18

FLOW TO POND 2

Hydrograph type	= Combine	Peak discharge	= 12.46 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 31,221 cuft
Inflow hyds.	= 10, 12, 15, 17	Contrib. drain. area	= 2.640 ac



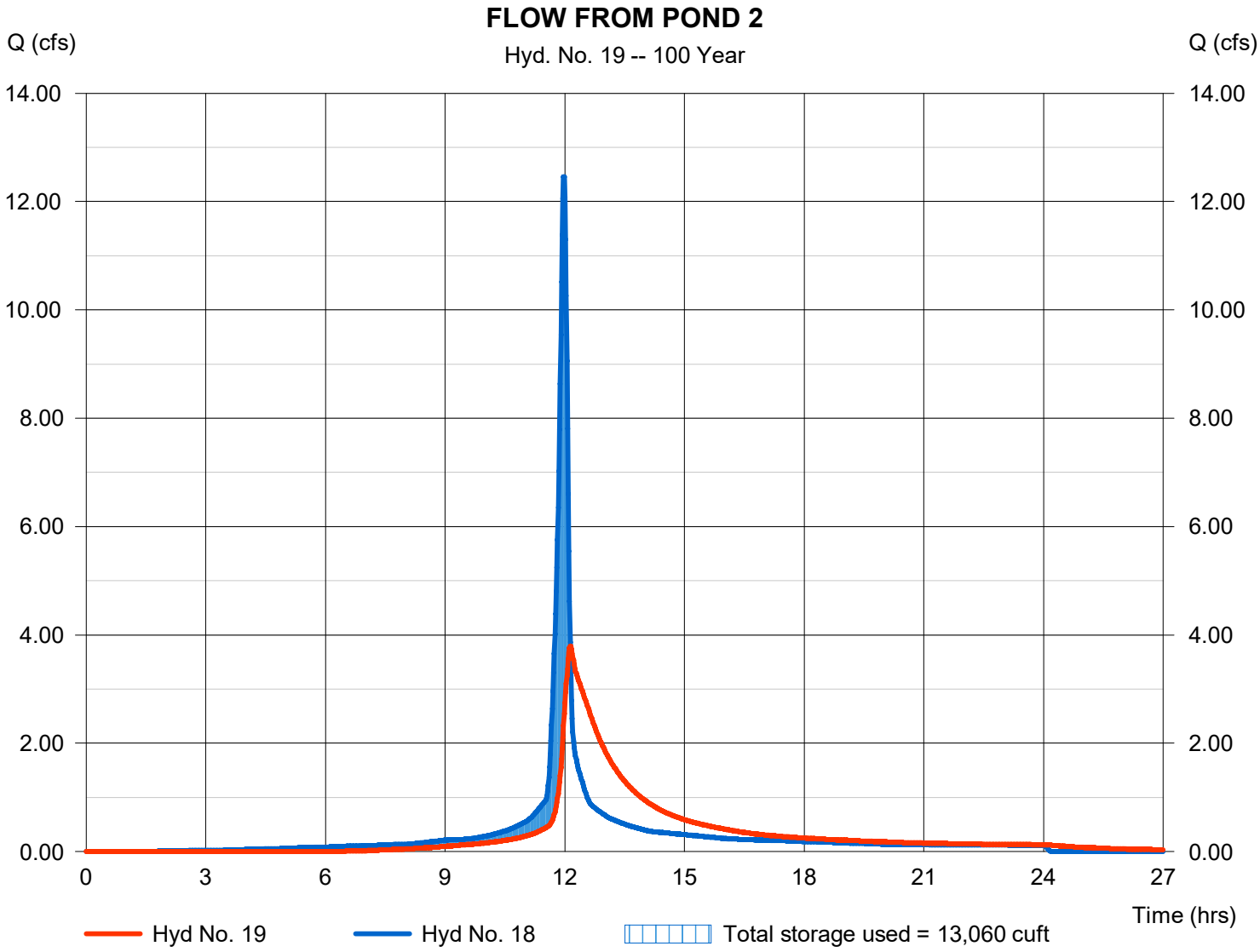
Hydrograph Report

Hyd. No. 19

FLOW FROM POND 2

Hydrograph type	= Reservoir	Peak discharge	= 3.800 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 30,564 cuft
Inflow hyd. No.	= 18 - FLOW TO POND 2	Max. Elevation	= 6335.81 ft
Reservoir name	= POND 2	Max. Storage	= 13,060 cuft

Storage Indication method used.

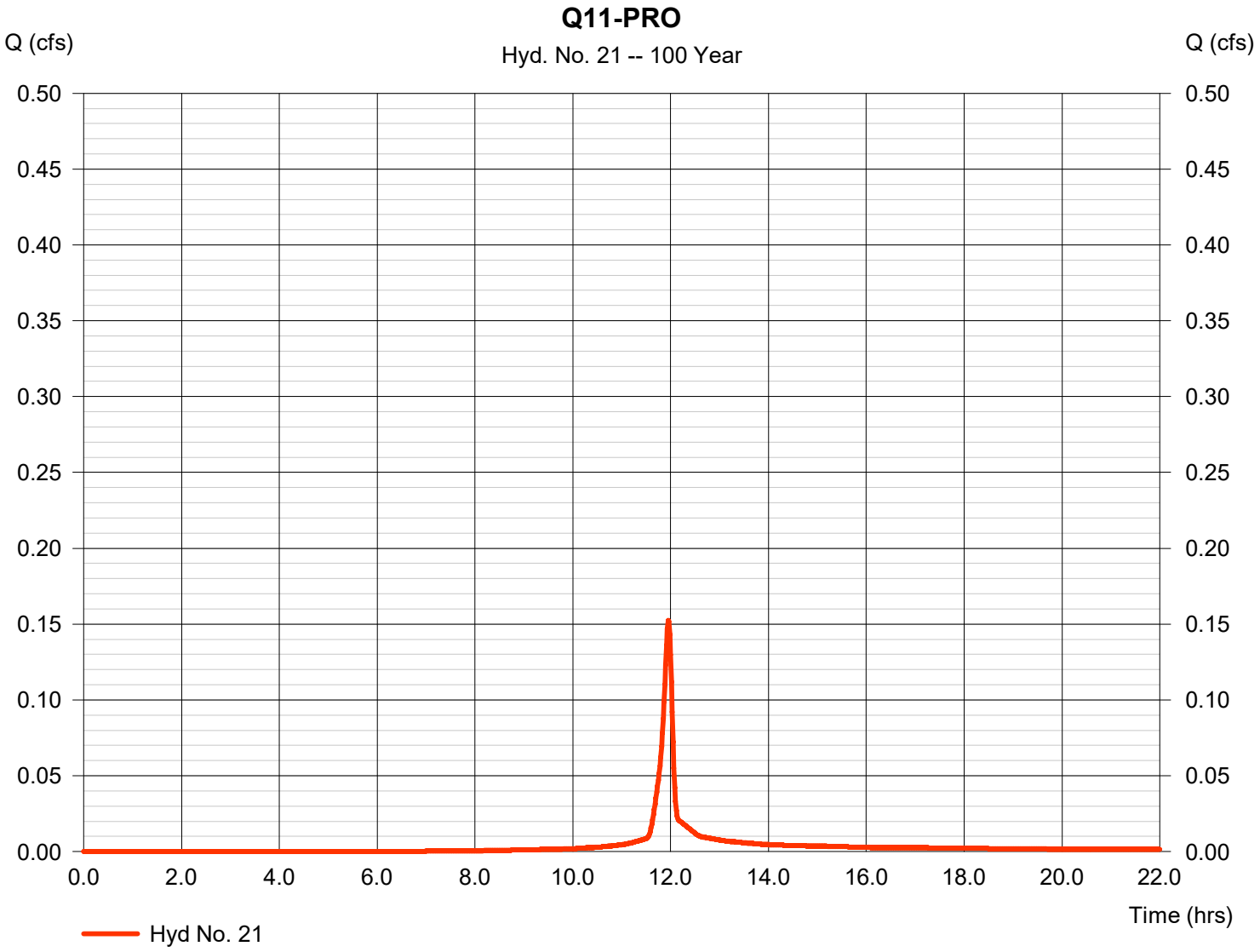


Hydrograph Report

Hyd. No. 21

Q11-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.152 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	317 cuft
Drainage area	=	0.040 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

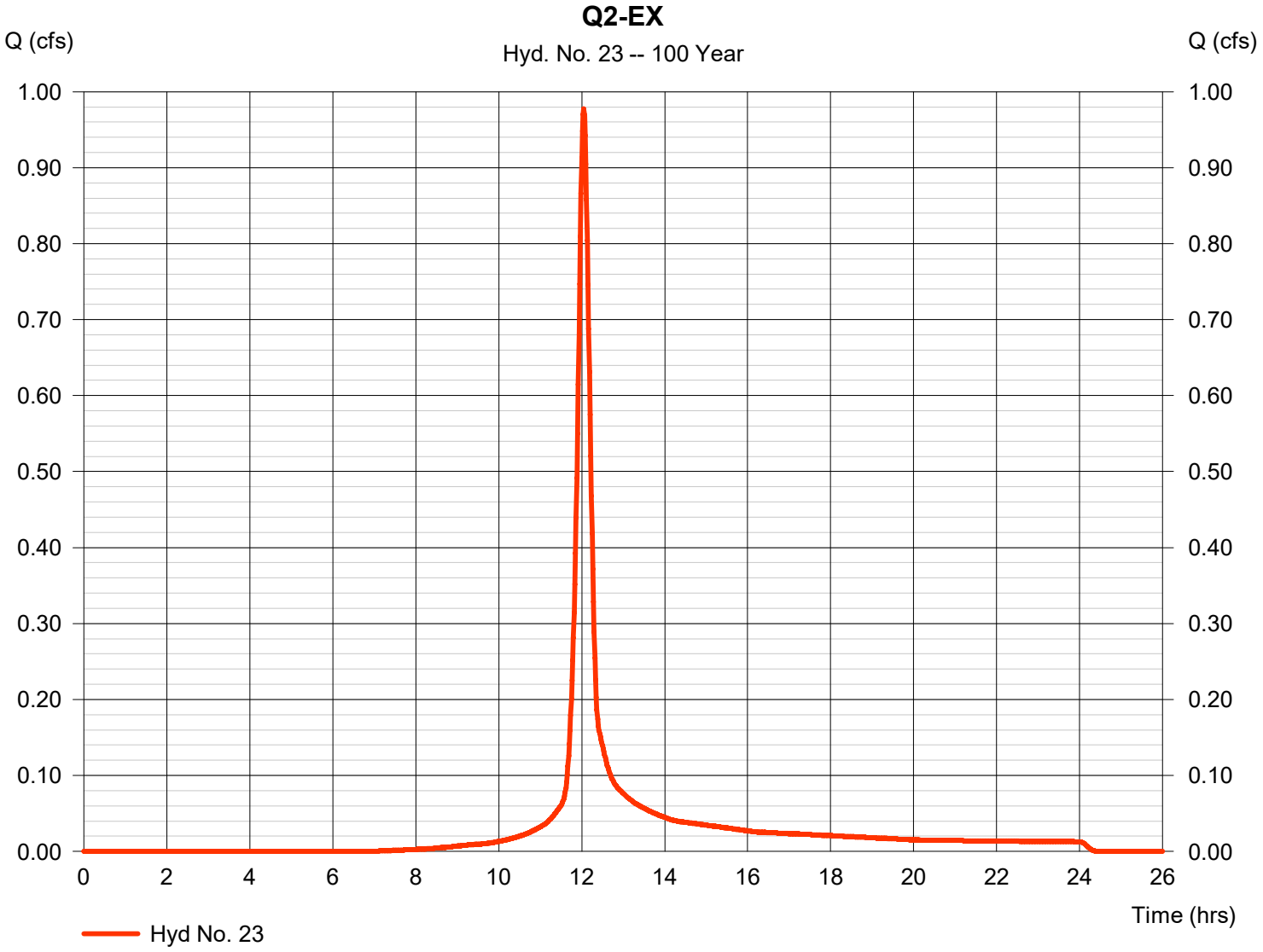


Hydrograph Report

Hyd. No. 23

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.978 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,796 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



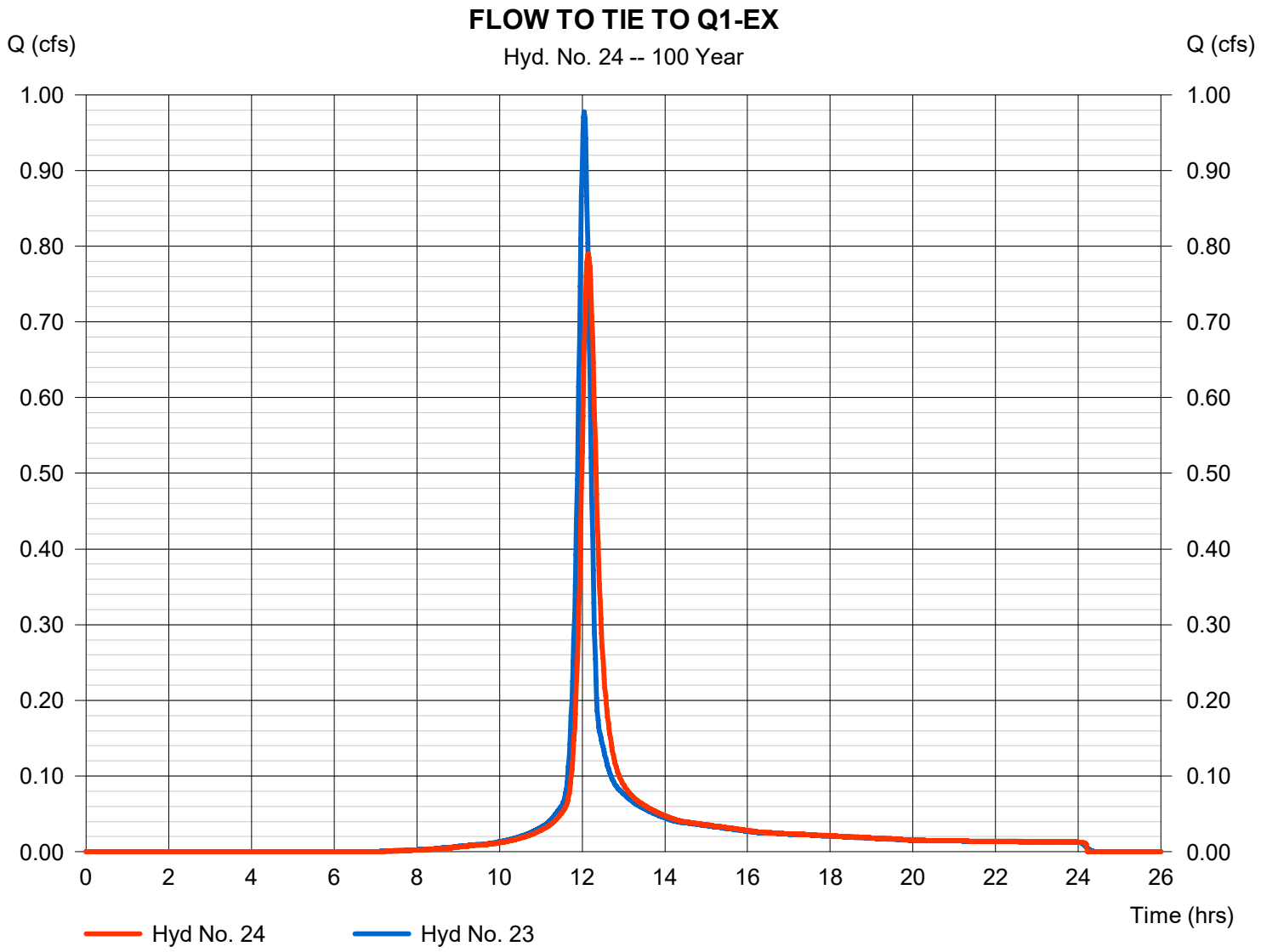
Hydrograph Report

Hyd. No. 24

FLOW TO TIE TO Q1-EX

Hydrograph type	=	Reach	Peak discharge	=	0.790 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.15 hrs
Time interval	=	1 min	Hyd. volume	=	2,789 cuft
Inflow hyd. No.	=	23 - Q2-EX	Section type	=	Trapezoidal
Reach length	=	258.0 ft	Channel slope	=	0.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	3.0:1	Max. depth	=	1.0 ft
Rating curve x	=	0.412	Rating curve m	=	1.190
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.1227

Modified Att-Kin routing method used.

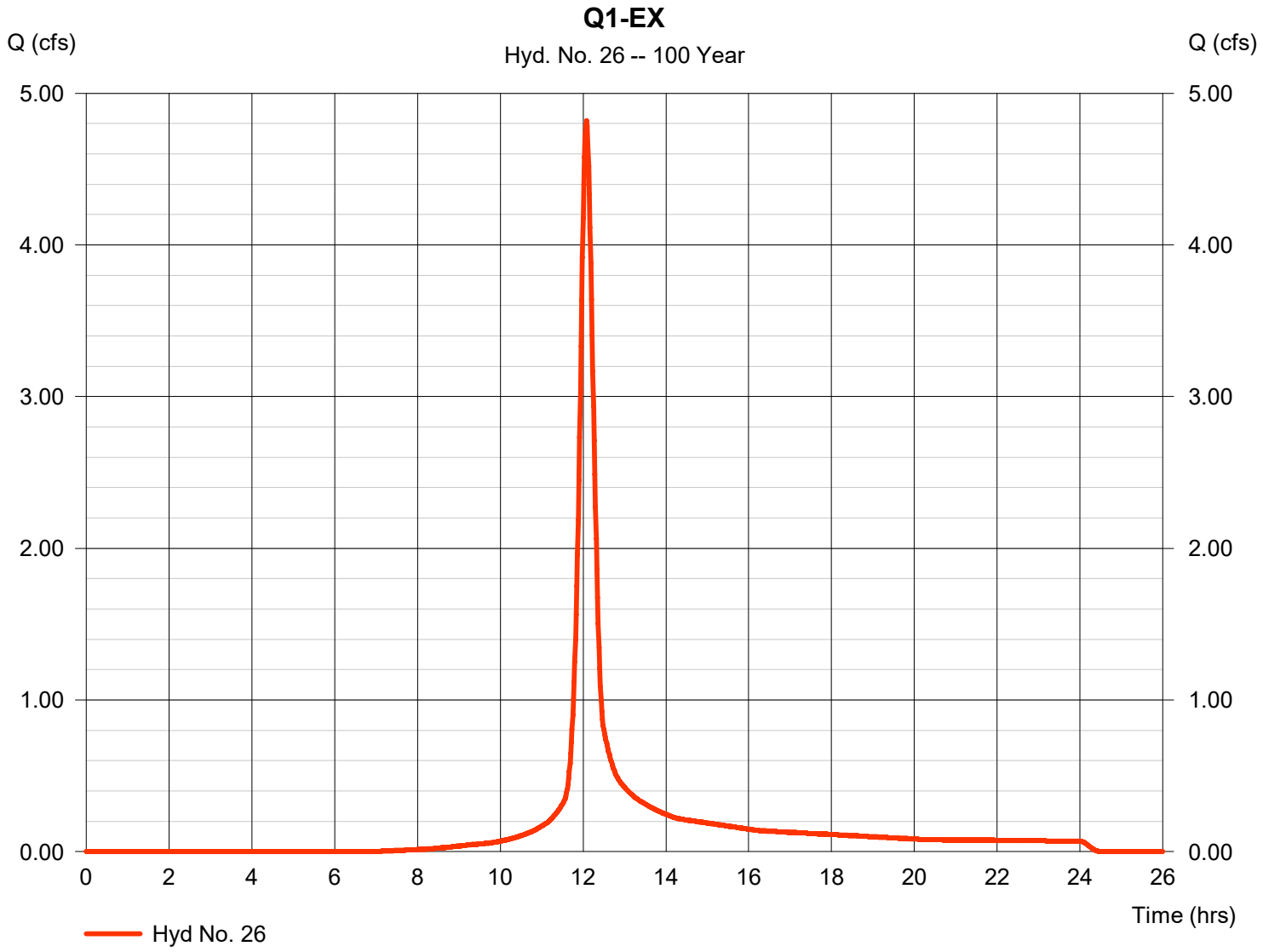


Hydrograph Report

Hyd. No. 26

Q1-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 4.821 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,080 cuft
Drainage area	= 2.130 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.80 min
Total precip.	= 3.24 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

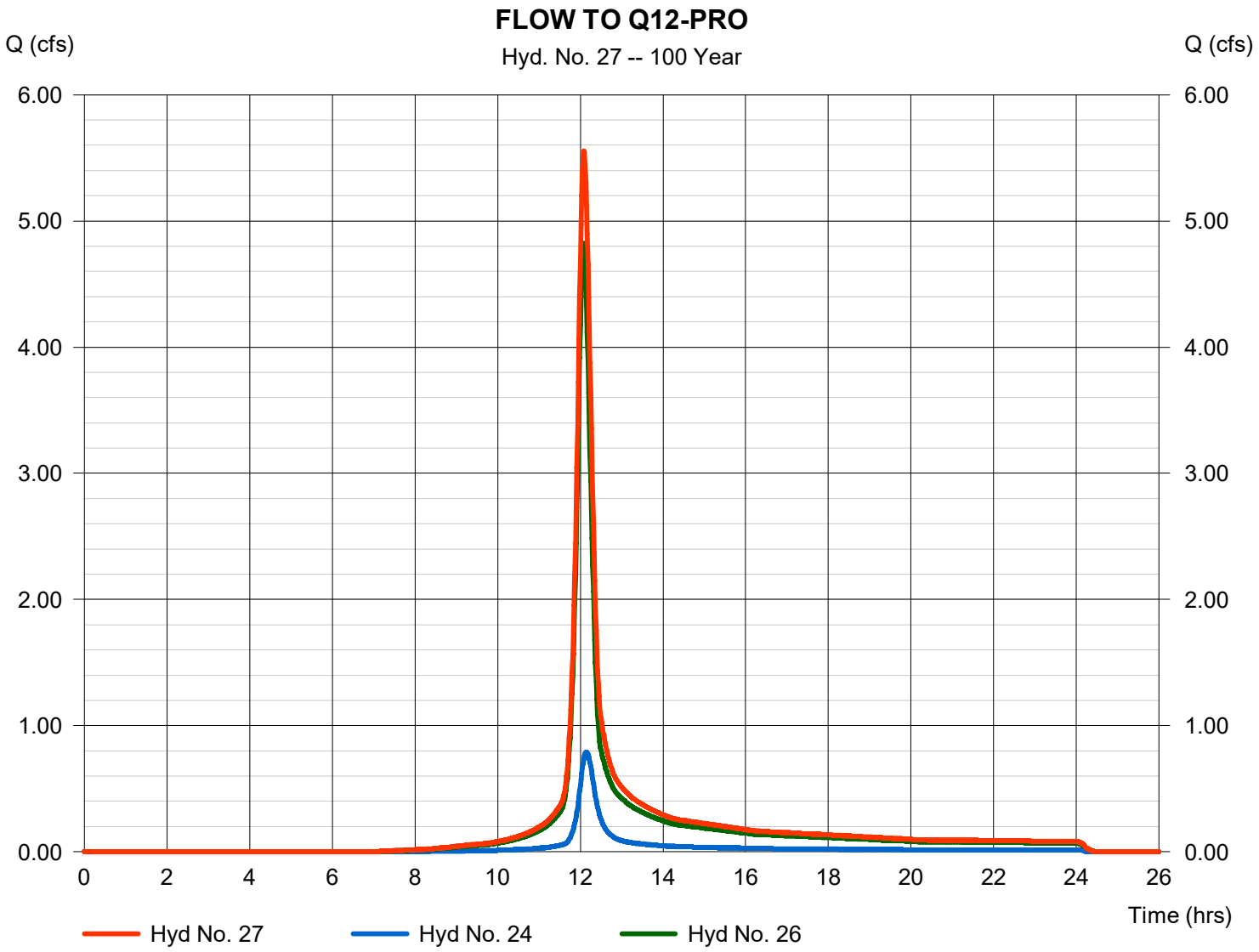


Hydrograph Report

Hyd. No. 27

FLOW TO Q12-PRO

Hydrograph type	= Combine	Peak discharge	= 5.556 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 17,869 cuft
Inflow hyds.	= 24, 26	Contrib. drain. area	= 2.130 ac



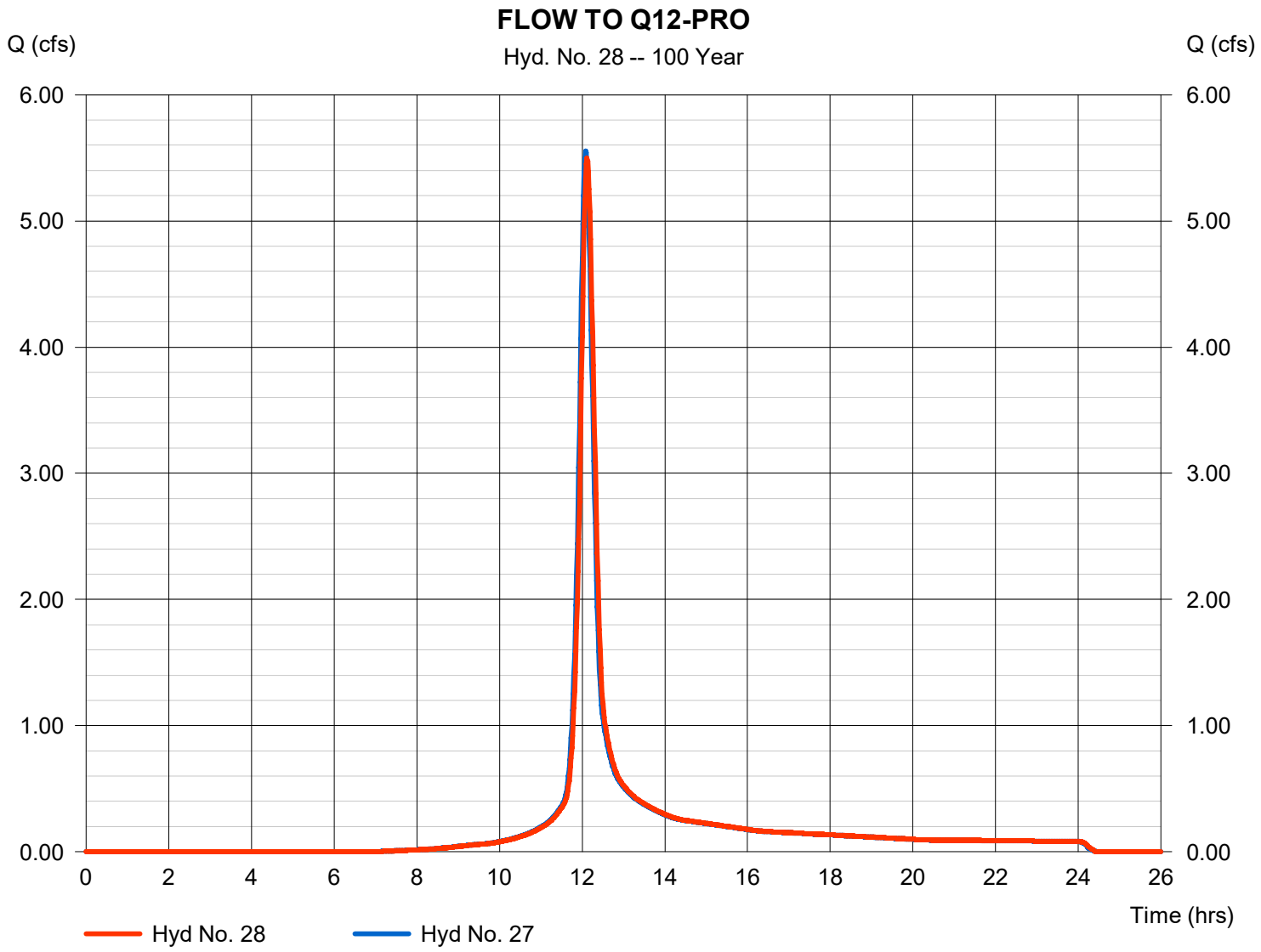
Hydrograph Report

Hyd. No. 28

FLOW TO Q12-PRO

Hydrograph type	=	Reach	Peak discharge	=	5.498 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	17,867 cuft
Inflow hyd. No.	=	27 - FLOW TO Q12-PRO	Section type	=	Rectangular
Reach length	=	294.0 ft	Channel slope	=	3.5 %
Manning's n	=	0.035	Bottom width	=	20.0 ft
Side slope	=	0.0:1	Max. depth	=	1.0 ft
Rating curve x	=	1.088	Rating curve m	=	1.646
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.5145

Modified Att-Kin routing method used.

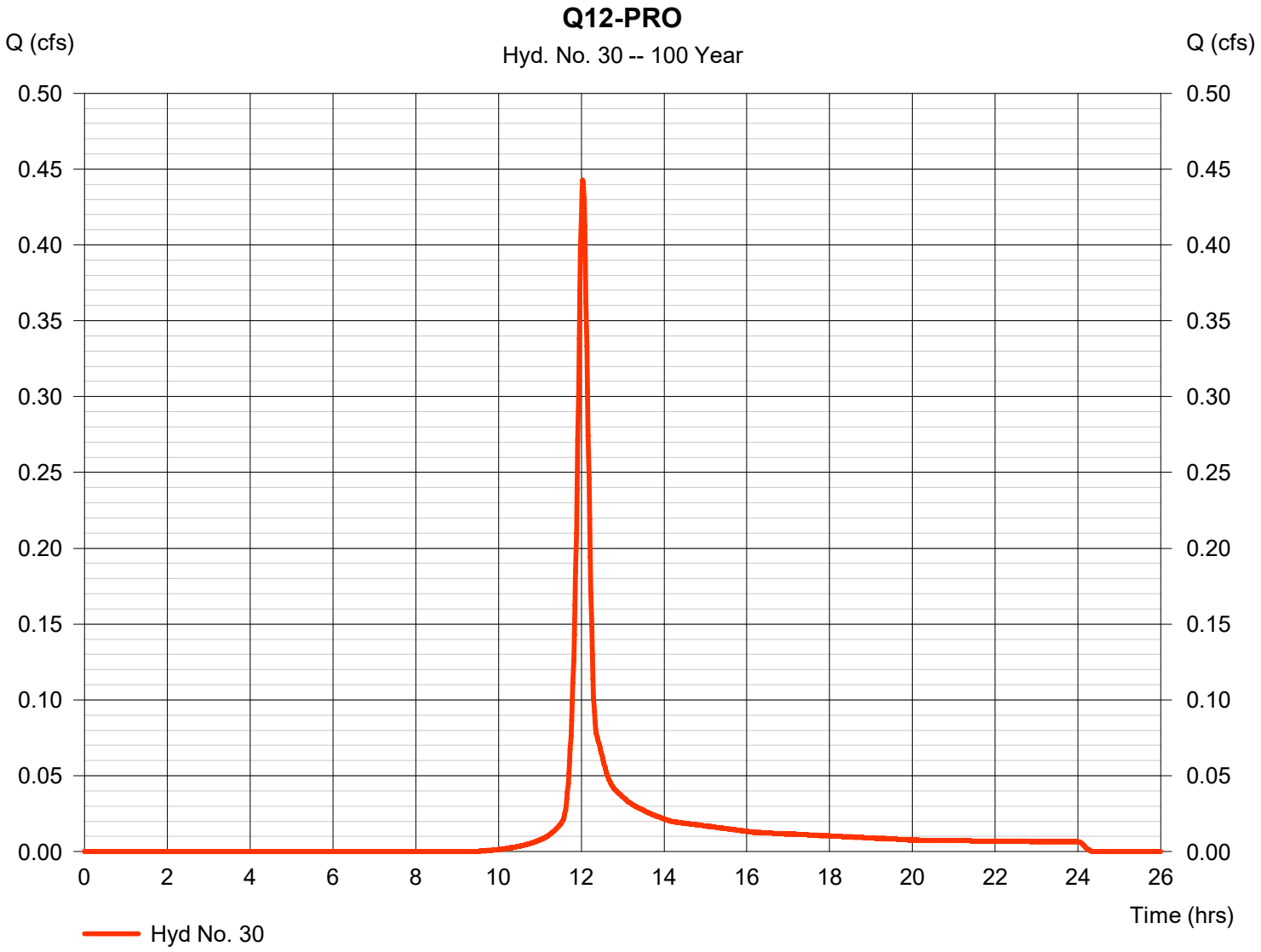


Hydrograph Report

Hyd. No. 30

Q12-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.443 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	1,196 cuft
Drainage area	=	0.230 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.22 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

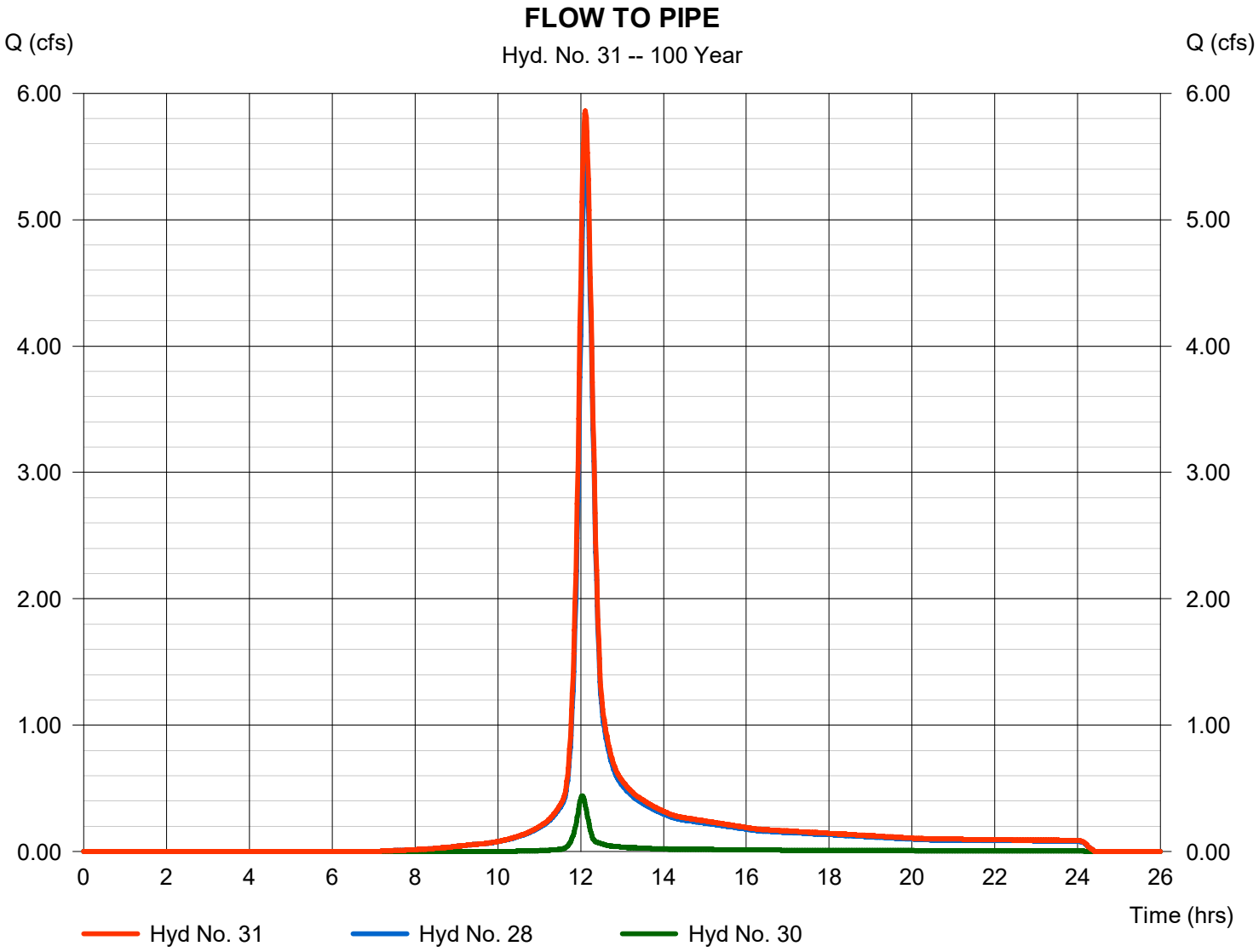


Hydrograph Report

Hyd. No. 31

FLOW TO PIPE

Hydrograph type	= Combine	Peak discharge	= 5.860 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 19,063 cuft
Inflow hyds.	= 28, 30	Contrib. drain. area	= 0.230 ac

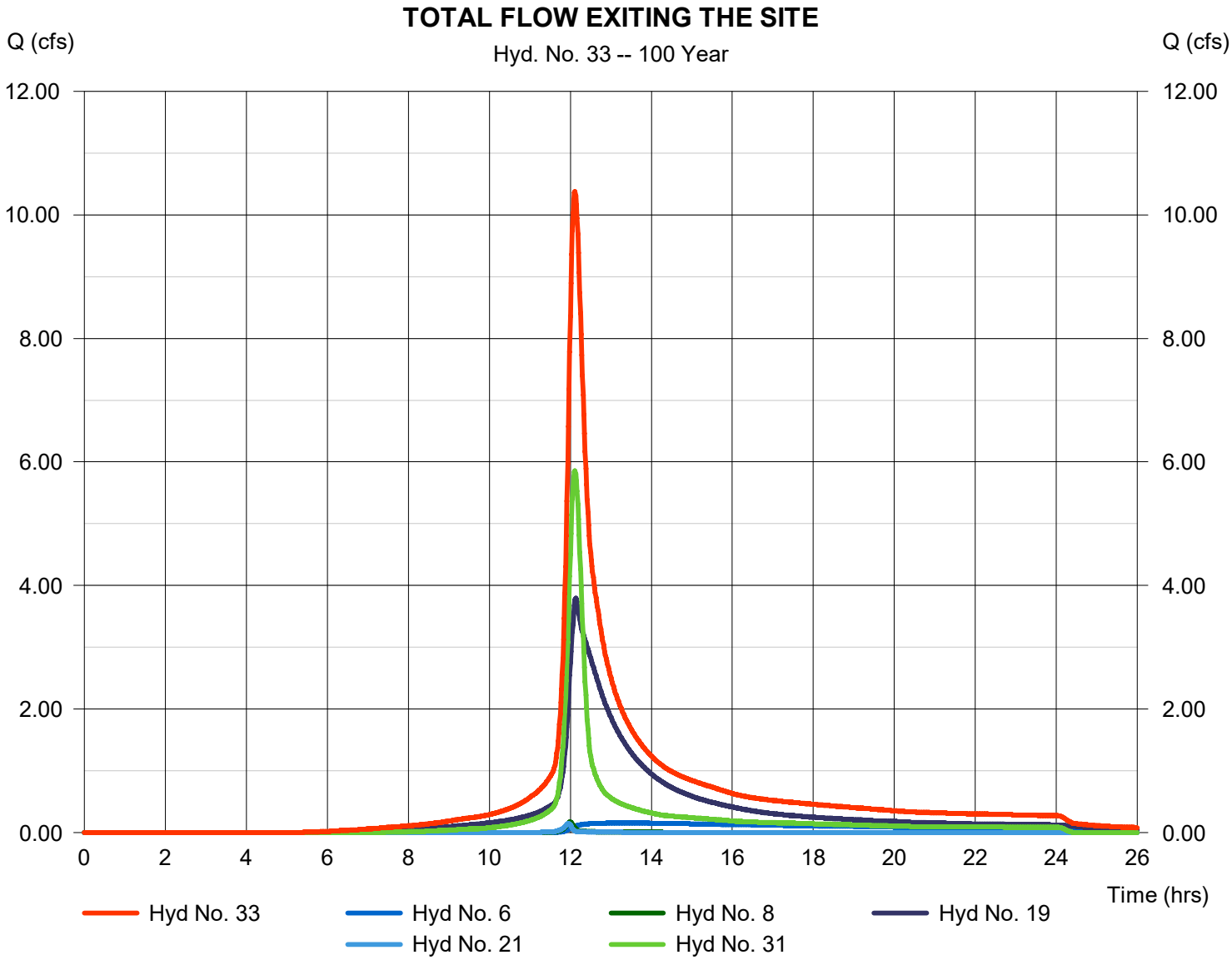


Hydrograph Report

Hyd. No. 33

TOTAL FLOW EXITING THE SITE

Hydrograph type	= Combine	Peak discharge	= 10.38 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 56,790 cuft
Inflow hyds.	= 6, 8, 19, 21, 31	Contrib. drain. area	= 0.120 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.

ecip. file name: K:\LAS SOLERAS TRACT 1 APT AND RETAIL FOR ABACUS\Drainage\LAS SOLERAS TRACT 1.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	1.53	0.00	0.00	0.00	2.61	2.93	3.24
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

TERRAIN MANAGEMENT REPORT
SOILS, DRAINAGE, AND GRADING
FOR PODS AT HART BUSINESS PARK
PRELIMINARY AND FINAL DEVELOPMENT PLAN
SANTA FE, NEW MEXICO

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May 2021

TERRAIN MANAGEMENT REPORT
SOILS, DRAINAGE, AND GRADING
FOR PODS AT HART BUSINESS PARK
PRELIMINARY AND FINAL DEVELOPMENT PLAN
SANTA FE, NEW MEXICO

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APPENDIX C DEVELOPED DRAINAGE CALCULATIONS

APPENDIX D EXISTING CONDITIONS ROUTING CALCULATIONS

APPENDIX E DEVELOPED CONDITIONS ROUTING CALCULATIONS

TERRAIN MANAGEMENT REPORT
SOILS, DRAINAGE, AND GRADING
FOR PODS AT HART BUSINESS PARK
PRELIMINARY AND FINAL DEVELOPMENT PLAN
SANTA FE, NEW MEXICO

I. INTRODUCTION

The Pods Storage Facility is proposed to be located at the Hart Business Park It is located on a 4.47 ± acre site in the City of Santa Fe within Section 15, Township 16 North, Range 8 East, N.M.P.M. The latitude is 35° 37' 18.2" and the longitude is 106° 4' 38.5." The site is located at 4900 Hart Road, Santa Fe, NM. The Hart Business Park is a phased development. Phase 1 was constructed in 2008-2009 (Case Number S2008-03). Phase 1 consisted of Hart Road, intersection improvements, and all the infrastructure for Hart Road (water, sewer, and dry utilities). A Fed-Ex facility has been developed north of the site. The Vicinity Map is presented in Figure 1, Appendix A.

The subject property is currently vacant and mainly in its natural condition. The Legal Lot of Record is presented in Figure 2, Appendix A. The lot lines are being adjusted to accommodate the development. The Lot Line Adjustment Plat is presented in Figure 3, Appendix A. The development is proposed to be constructed in 2021. The Development Plan is presented in Figure 4, Appendix A.

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 and Stormwater Management Regulations (SFCC 14-8.2).

II. EXISTING CONDITIONS

The existing land uses in the area consist of commercial, airport, and vacant land. The land on the north consists of FedEx Ground, commercial and vacant land; on the south by vacant land; on the east by NM 599 (Veterans Memorial Highway), Tierra Contenta subdivision, and vacant; and on the west by the Santa Fe Regional Airport and Army National Guard. The Existing Conditions Map is presented in Figure 5, Appendix A.

Topographic mapping at a scale of 1 inch = 40 feet with 1-foot contour intervals was prepared for this project by Precision Surveys, dated April 2021. The Certified Topographic Map is presented in Figure 6, Appendix A.

Areas of 0% - 20%, 20% - 30%, and over 30% were delineated. The slope analysis map indicates that there are no areas of natural slope under 30% on the property. Any 30% and greater slopes within the project limits are manmade. The Slope Analysis Calculations are presented in Figure 7, Appendix A.

III. SOILS

Soil classifications were obtained from the "Web Soil Survey" by the Natural Resources Conservation Service (NRCS), version 12, updated June 8, 2020. The survey in this area is the result of a high intensity soil survey. The Soils Map is presented in Figure 8, Appendix A. The following soils were found to be in the drainage area:

103	Zepol silt loam, 0 to 2 percent slopes
115	Panky-Urban Land Complex, 1 to 4 percent slopes
117	Agua Fria- Paraje Complex, 1 to 8 percent slopes
118	Golondrina-Paraje Complex, 8 to 45 percent slopes

Zepol silt loam, 0 to 2 percent slopes is located throughout 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 (0.06 to 2.00 in / hr)
Hydrologic Soil Group	B

Panky-Urban Land Complex, 1 to 4 percent slopes is located throughout 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

Agua Fria- Paraje Complex, 1 to 8 percent slopes soil is located on 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 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

The NRCS 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.

IV. DRAINAGE

Onsite drainage flows generally from north to south. Storm drainage computations for existing conditions were calculated using on site topographic mapping prepared for the project and City of Santa Fe GIS mapping where needed for offsite coverage.

A. Existing Conditions

Drainage areas were delineated on the topographic maps prepared for the project. Drainage area and channel lengths were measured several times and average numbers used for this report. There are several existing offsite basins which drain through the site. The Existing Conditions Drainage Map is presented in Figure 9, Appendix A. Storm drainage computations for existing conditions were calculated using the on-site topographic mapping prepared for this project. The drainages which impact the site are presented in Table 1.

TABLE 1
EXISTING DRAINAGE BASIN CHARACTERISTICS

Basin	Description	Area (ac)
Q1-EX	Offsite basin flowing west	2.13
Q2-EX	Offsite basin flowing into onsite basin Q5-EX	0.39
Q3-EX	Offsite site basin flowing east	0.29
Q4-EX	Onsite basin exiting the site to the east	0.83
Q5-EX	Onsite basin exiting the site to the south	1.95
Q6-EX	Onsite basin exiting the site to the south	1.65

According to maps prepared by the United States Department of Commerce, presented in the NOAA Precipitation Frequency Data Server, Atlas 14 Volume 1, Version 5, revised 2011, the following precipitation data in Table 2 should be used for the project:

TABLE 2 PRECIPITATION DATA		
FREQUENCY	DURATION	PRECIPITATION
100 Year	24 Hour	3.24”
50 Year	24 Hour	2.93”
25 Year	24 Hour	2.61”
2 Year	24 Hour	1.53”

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 by basin are presented in Table 3.

TABLE 3 PEAK FLOW QUANTITIES EXISTING CONDITIONS					
Basin	Description	CN	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Q1-EX	Offsite basin flowing west	87	3.31	3.96	4.58
Q2-EX	Offsite basin flowing into onsite basin Q5-EX	87	0.65	0.78	0.90
Q3-EX	Offsite site basin flowing east	87	0.43	0.51	0.60
Q4-EX	Onsite basin exiting the site to the east	87	1.45	1.72	2.00
Q5-EX	Onsite basin exiting the site to the south	86	3.25	3.89	4.54
Q6-EX	Onsite basin exiting the site to the south	87	2.87	3.42	3.96

B. Developed Conditions

The development of the project will have an impact on stormwater runoff due to the grading of the site and the additional impervious areas. The Development Plan is presented in Figure 10, Appendix A. In order to control this excess runoff, the storm water management plan provides for absorption and retention of runoff at key locations within the site. The Developed Conditions Drainage Map is presented in Figure 10, Appendix A. The developed conditions drainage characteristics are shown in Table 4.

TABLE 4 DEVELOPED DRAINAGE BASIN CHARACTERISTICS		
Basin	Description	Acres
Q1-EX	Offsite basin flowing west	2.13
Q2-EX	Offsite basin flowing into the site from the north	0.39
Q3-EX	Offsite basin flowing east	0.29
Q4-DEV	Onsite basin flowing through DI to Pond 1	0.26
Q5-DEV	Onsite basin flowing into Pond 1	0.46
Q6-DEV	Onsite basin exiting the site to the south	0.08
Q7-DEV	Onsite basin flowing into Pond 2	0.33
Q8-DEV	Onsite basin flowing south into Pond 2	0.6
Q9-DEV	Onsite basin flowing north through storm pipe to Pond 2	0.62
Q10-DEV	Onsite basin flowing into Pond 2	1.71
Q11-DEV	Onsite basin exiting the site to the south	0.04
Q12-DEV	Onsite basin flowing south through storm pipe	0.23

The Calculated Peak Flows for the developed conditions without runoff mitigation measures is presented in Table 5. The Developed Drainage Calculations are presented in Appendix C.

TABLE 5 PEAK FLOW QUANTITIES DEVELOPED CONDITIONS					
Basin	Description	CN	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Q1-EX	Offsite basin flowing west	87	3.31	3.96	4.58
Q2-EX	Offsite basin flowing into the site from the north	87	0.65	0.78	0.90
Q3-EX	Offsite basin flowing east	87	0.43	0.51	0.60
Q4-DEV	Onsite basin flowing through DI to Pond 1	88	0.56	0.67	0.77
Q5-DEV	Onsite basin flowing into Pond 1	88	1.05	1.24	1.44
Q6-DEV	Onsite basin exiting the site to the south	79	0.11	0.13	0.16
Q7-DEV	Onsite basin flowing into Pond 2	76	0.37	0.48	0.59
Q8-DEV	Onsite basin flowing south into Pond 2	98	1.98	2.23	2.47
Q9-DEV	Onsite basin flowing north through storm pipe to Pond 2	98	2.04	2.30	2.55
Q10-DEV	Onsite basin flowing into Pond 2	94	4.70	5.39	6.05
Q11-DEV	Onsite basin exiting the site to the south	89	0.09	0.11	0.12
Q12-DEV	Onsite basin flowing south through storm pipe	80	0.28	0.35	0.42

The City of Santa Fe Terrain and Stormwater Management Regulations require that peak discharge after development must not exceed peak discharge before development. Excess runoff from new impervious areas (roofs, sidewalks, parking lots) will be mitigated by ponding areas with controlled release.

Pond information is provided in Table 6. Two ponds are proposed.

TABLE 6
POND INFORMATION

Name	Bottom Elev.	Top Elev.	Area (SF)	Volume (CF)
Pond 1	6334.5	6336.5	6,508	10,076
Pond 2	6334	6336	8,666	14,577

C. Hydrographs

The individual basins were routed using Hydraflow Hydrographs 2019 to obtain the peak flow exiting the site.

The existing conditions drainage basins were routed to obtain the overall peak flow exiting the site for the 25, 50, and 100-year recurrence storm. The routings are presented in Appendix D.

The developed conditions basins were routed to obtain the overall peak overall peak flow exiting the site for the 25, 50, and 100-year recurrence storm. The routings are presented in Appendix E. Table 7 presents a comparison of the peak flow for the existing and developed conditions.

TABLE 7
COMPARISON OF PEAK FLOW QUANTITIES

Description	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
Existing Condition – Flows exiting the property	8.20	9.84	11.43
Developed Condition – Flows exiting the property	7.56	8.97	10.38
Reduction in Flow (CFS)	0.64	0.87	1.05

Table 7 indicates that the City of Santa Fe Terrain and Stormwater Management Regulations have been met.

D. 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 Maps Number 35049C0389D, dated June 17, 2008 and 35049C0502E, dated December 4, 2012 for this area is presented in Figure 11, Appendix A. A review of the map indicates that there is no proposed construction 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 and Drainage 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.

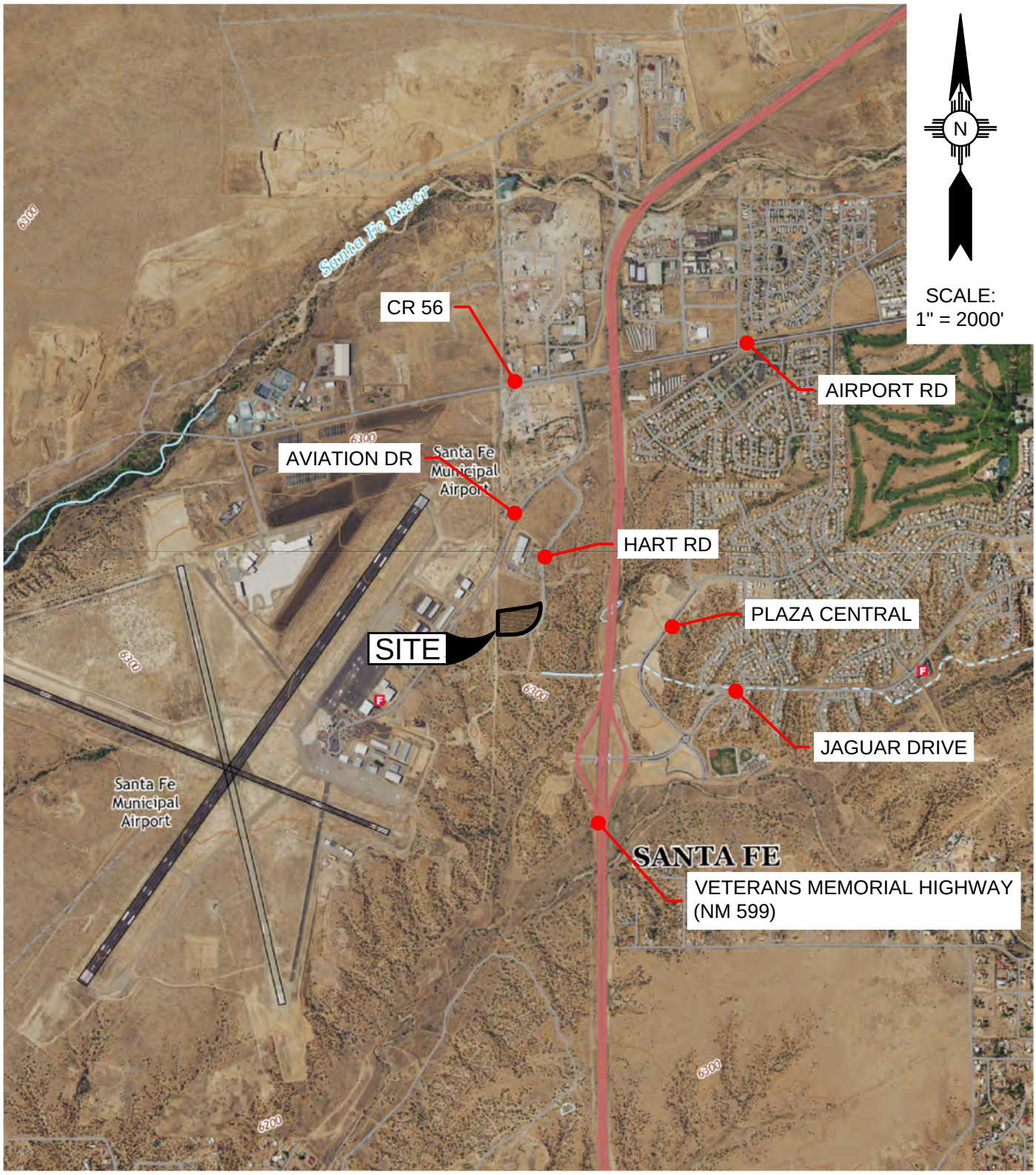
B. Cut and fill slopes will be as follows:
Fills - 1 vertical on 3 horizontal.
Cuts - 1 vertical on 2 horizontal.

C. Roadway drainage structures (culverts, brow ditches, and channels) will be constructed in conjunction with grading. No changes in the drainage ways or floodplain will be permitted except as shown on the Grading and Drainage Plans.

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

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

APPENDIX A
FIGURES



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

VICINITY MAP
FIGURE 1

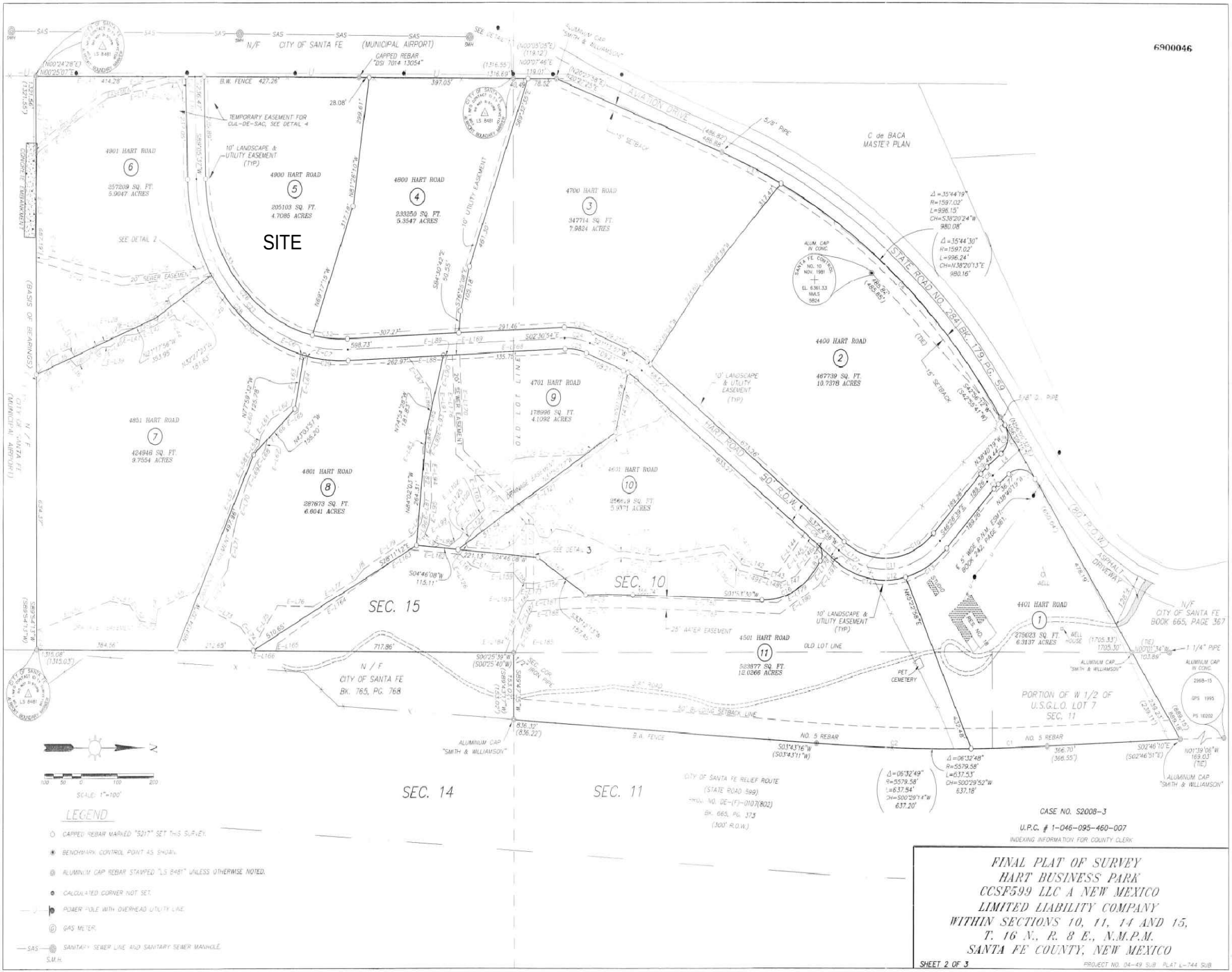

6900046
SITE
4901 HART ROAD
6
257208 SQ. FT.
5.9047 ACRES
4900 HART ROAD
5
205103 SQ. FT.
4.7085 ACRES
4800 HART ROAD
4
233250 SQ. FT.
5.3547 ACRES
4700 HART ROAD
3
347714 SQ. FT.
7.9824 ACRES
4400 HART ROAD
2
467739 SQ. FT.
10.7378 ACRES
4701 HART ROAD
9
178998 SQ. FT.
4.1092 ACRES
4851 HART ROAD
7
424946 SQ. FT.
9.7554 ACRES
4801 HART ROAD
8
287673 SQ. FT.
6.6041 ACRES
4631 HART ROAD
10
256619 SQ. FT.
5.8971 ACRES
4501 HART ROAD
11
583977 SQ. FT.
13.0266 ACRES
4401 HART ROAD
1
279023 SQ. FT.
6.3137 ACRES
HART ROAD 50' R.O.W.
AVIATION DRIVE
STATE ROAD NO. 2841 (NM 599)
C de BACA MASTER PLAN
N/F CITY OF SANTA FE (MUNICIPAL AIRPORT)
N/F CITY OF SANTA FE BOOK 665, PAGE 367
N/F CITY OF SANTA FE Bk. 765, PG. 768
PORTION OF W 1/2 OF U.S.G.L.O. LOT 7 SEC. 11
SEC. 10
SEC. 15
SEC. 14
SEC. 11
CITY OF SANTA FE RELIEF ROUTE (STATE ROAD 599) PROJ. NO. DE-(F)-0107(802) BK. 665, PG. 373 (300' R.O.W.)
OLD LOT LINE
10' LANDSCAPE & UTILITY EASEMENT (TYP)
20' SEWER EASEMENT
TEMPORARY EASEMENT FOR CUL-DE-SAC, SEE DETAIL 4
B.W. FENCE
ASPHALT DRIVEWAY
WELL HOUSE
PET CEMETERY
ALUMINUM CAP "SMITH & WILLIAMSON"
ALUMINUM CAP IN CONC. 2968-15 GPS 1995 PS 10202
NO. 5 REBAR
CAPPED REBAR MARKED "5217" SET THIS SURVEY
BENCHMARK CONTROL POINT AS SHOWN
ALUMINUM CAP REBAR STAMPED "LS 8481" UNLESS OTHERWISE NOTED.
CALCULATED CORNER NOT SET.
POWER POLE WITH OVERHEAD UTILITY LINE.
GAS METER.
SANITARY SEWER LINE AND SANITARY SEWER MANHOLE.
SCALE: 1"=100'
CASE NO. S2008-3
U.P.C. # 1-046-095-460-007
INDEXING INFORMATION FOR COUNTY CLERK
FINAL PLAT OF SURVEY
HART BUSINESS PARK
CCSF599 LLC A NEW MEXICO
LIMITED LIABILITY COMPANY
WITHIN SECTIONS 10, 11, 14 AND 15,
T. 16 N., R. 8 E., N.M.P.M.
SANTA FE COUNTY, NEW MEXICO
SHEET 2 OF 3
PROJECT NO. 04-49 SUB PLAT L-744 SUB

FIGURE 2

Plat of

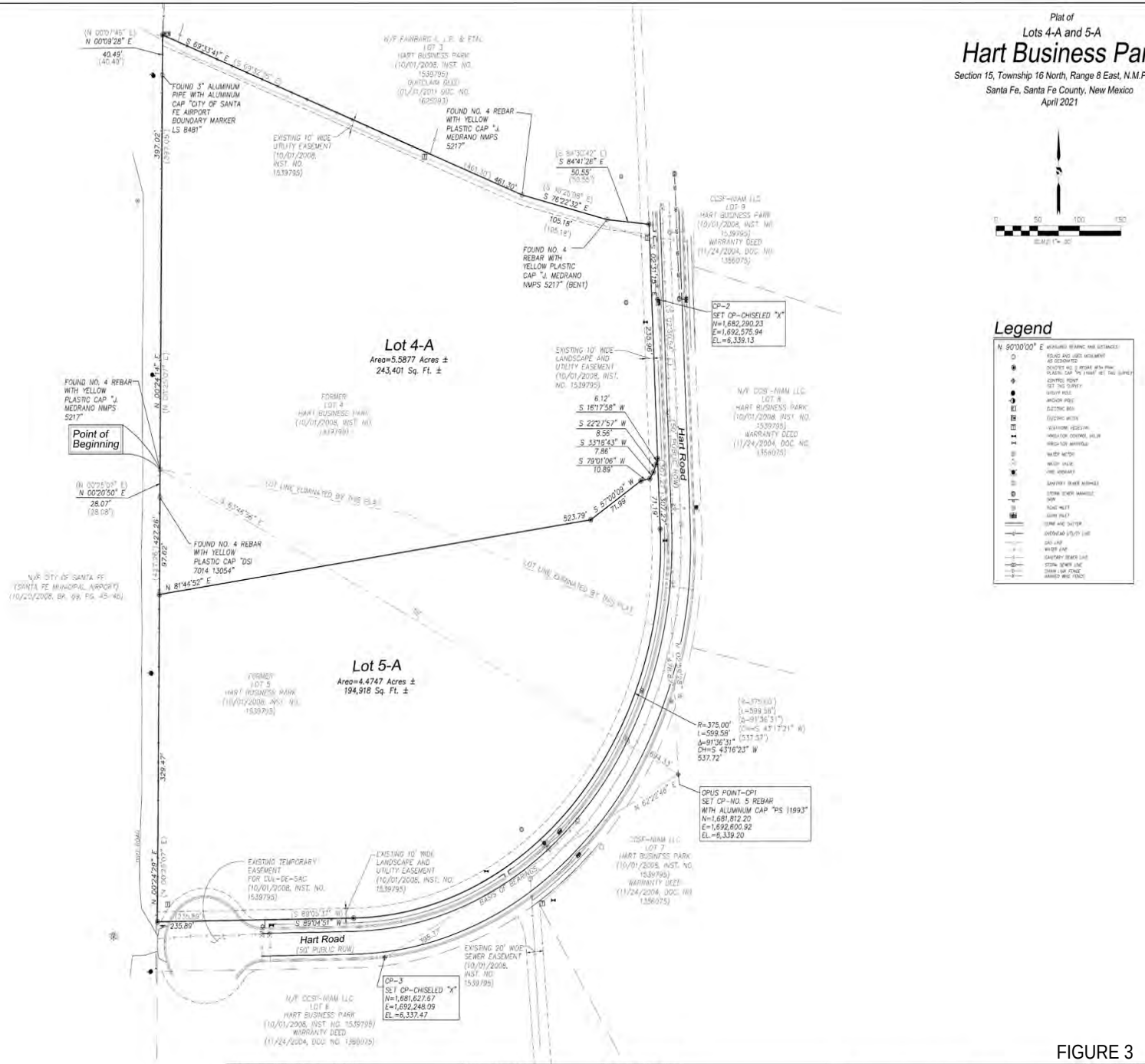
Lots 4-A and 5-A

Hart Business Park

Section 15, Township 16 North, Range 8 East, N.M.P.M.

Santa Fe, Santa Fe County, New Mexico

April 2021



Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
◉	DENOTES NO. 5 REBAR WITH PINK PLASTIC CAP "PS 11993" SET THIS SURVEY
✦	CONTROL POINT SET THIS SURVEY
●	UTILITY POLE
⊕	ANCHOR POLE
▣	ELECTRIC BOX
▣	ELECTRIC METER
▣	TELEPHONE PEDESTAL
▣	IRRIGATION CONTROL VALVE
▣	IRRIGATION MANIFOLD
▣	WATER METER
▣	WATER VALVE
▣	FIRE HYDRANT
▣	SANITARY SEWER MANHOLE
▣	STORM SEWER MANHOLE
▣	SIGN
▣	ROAD INLET
▣	CURB INLET
	CURB AND GUTTER
	OVERHEAD UTILITY LINE
	GAS LINE
	WATER LINE
	SANITARY SEWER LINE
	STORM SEWER LINE
	CHAIN LINK FENCE
	BARBED WIRE FENCE

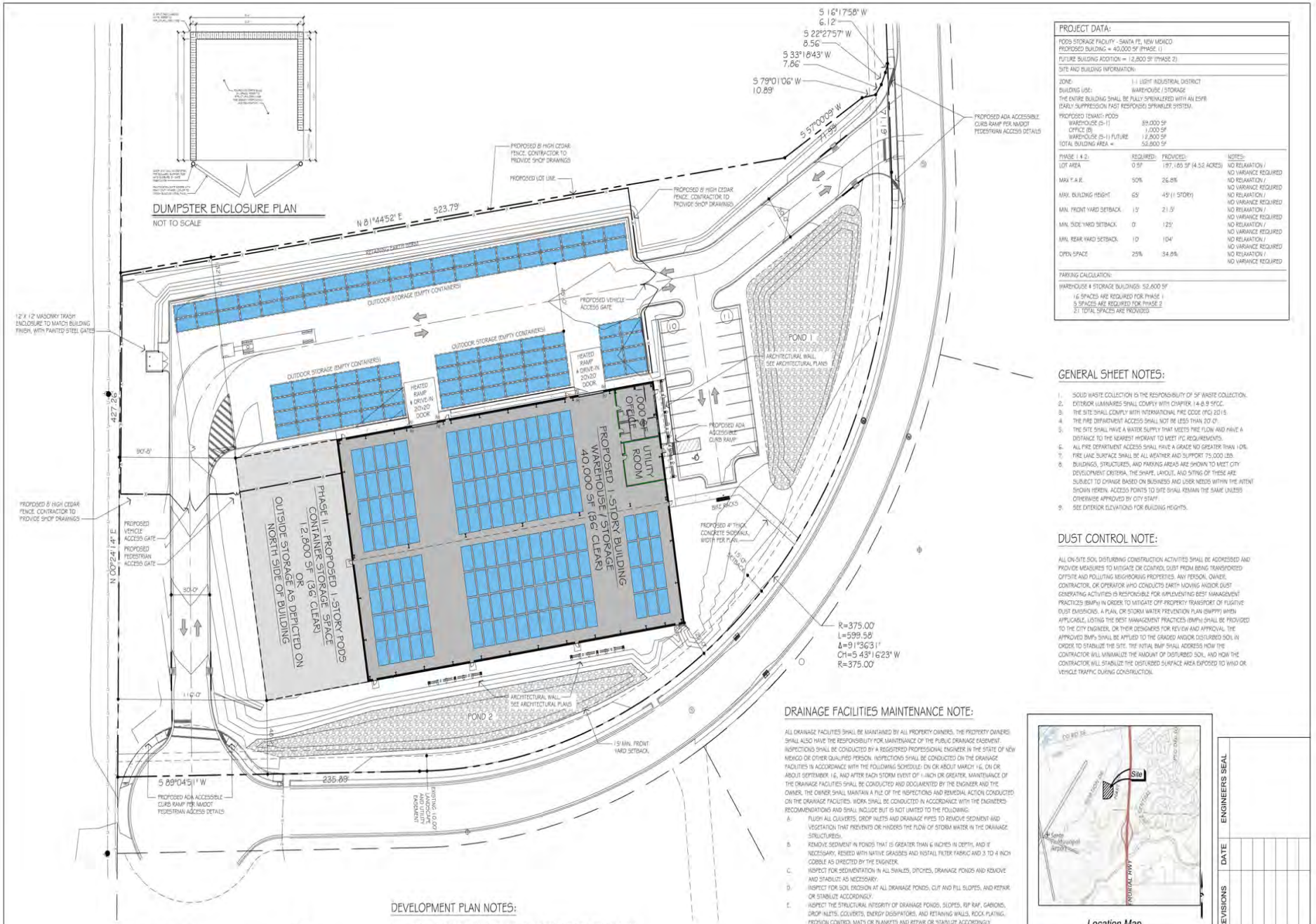
FIGURE 3

COORDINATE AND DIMENSION INFORMATION						PLSS INFORMATION				PROPERTY INFORMATION		PROJECT INFORMATION	
STATE PLANE ZONE: NM-C	GRID GROUND COORDINATES: GRID	TYPE: STANDARD				LAND GRANT: N/A				PROPERTY OWNER: CCSF-NIAM LLC		CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88		ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES		SECTION: 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD	DRAWN BY: JK	CHECKED BY: LM
CONTROL USED: OPUS SOLUTION: 210405MT001 TR575669B532651			BASE POINT FOR SCALING ADJUSTMENT: N = 0 E = 0			CITY: SANTA FE		COUNTY: SANTA FE	STATE: NM	LPC: 1046094423502000000 1046094419465000000		PSI JOB NO.: 216036P	SHEET NUMBER: 2 OF 2
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00038715 GROUND TO GRID: 0.99960301			DISTANCE ANNOTATION: GROUND										
			BEARING ANNOTATION: GRID	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: YES								

PRECISION SURVEYS, INC.

OFFICE LOCATION: 9209 San Mateo Boulevard, NE Albuquerque, NM 87113

505.856.5700 PHONE 505.856.7900 FAX



PROJECT DATA:

PODS STORAGE FACILITY - SANTA FE, NEW MEXICO
PROPOSED BUILDING = 40,000 SF (PHASE 1)
FUTURE BUILDING ADDITION = 12,800 SF (PHASE 2)

SITE AND BUILDING INFORMATION:

ZONE:	I-1 LIGHT INDUSTRIAL DISTRICT
BUILDING USE:	WAREHOUSE / STORAGE

THE ENTIRE BUILDING SHALL BE FULLY SPRINKLERED WITH AN ESFR (EARLY SUPPRESSION FAST RESPONSE) SPRINKLER SYSTEM.

PROPOSED TENANT/ PODS

WAREHOUSE (S-1)	39,000 SF
OFFICE (B)	1,000 SF
WAREHOUSE (S-1) FUTURE	12,800 SF
TOTAL BUILDING AREA =	52,800 SF

PHASE 1 & 2:	REQUIRED:	PROVIDED:	NOTES:
LOT AREA	0 SF	197,165 SF (4.52 ACRES)	NO RELAXATION / NO VARIANCE REQUIRED
MAX F.A.R.	50%	26.8%	NO RELAXATION / NO VARIANCE REQUIRED
MAX. BUILDING HEIGHT	65'	45' (1 STORY)	NO RELAXATION / NO VARIANCE REQUIRED
MIN. FRONT YARD SETBACK	15'	21.5'	NO RELAXATION / NO VARIANCE REQUIRED
MIN. SIDE YARD SETBACK	0'	125'	NO RELAXATION / NO VARIANCE REQUIRED
MIN. REAR YARD SETBACK	10'	104'	NO RELAXATION / NO VARIANCE REQUIRED
OPEN SPACE	25%	34.8%	NO RELAXATION / NO VARIANCE REQUIRED

PARKING CALCULATION:

WAREHOUSE & STORAGE BUILDINGS: 52,600 SF
16 SPACES ARE REQUIRED FOR PHASE 1
5 SPACES ARE REQUIRED FOR PHASE 2
21 TOTAL SPACES ARE PROVIDED

GENERAL SHEET NOTES:

1. SOLID WASTE COLLECTION IS THE RESPONSIBILITY OF SF WASTE COLLECTION.
2. EXTERIOR LUMINAIRES SHALL COMPLY WITH CHAPTER 14-8.9 SFCC.
3. THE SITE SHALL COMPLY WITH INTERNATIONAL FIRE CODE (IFC) 2015.
4. THE FIRE DEPARTMENT ACCESS SHALL NOT BE LESS THAN 20'-0".
5. THE SITE SHALL HAVE A WATER SUPPLY THAT MEETS FIRE FLOW AND HAVE A DISTANCE TO THE NEAREST HYDRANT TO MEET IFC REQUIREMENTS.
6. ALL FIRE DEPARTMENT ACCESS SHALL HAVE A GRADE NO GREATER THAN 10%.
7. FIRE LANE SURFACE SHALL BE ALL WEATHER AND SUPPORT 75,000 LBS.
8. BUILDINGS, STRUCTURES, AND PARKING AREAS ARE SHOWN TO MEET CITY DEVELOPMENT CRITERIA. THE SHAPE, LAYOUT, AND SITING OF THESE ARE SUBJECT TO CHANGE BASED ON BUSINESS AND USER NEEDS WITHIN THE INTENT SHOWN HEREIN. ACCESS POINTS TO SITE SHALL REMAIN THE SAME UNLESS OTHERWISE APPROVED BY CITY STAFF.
9. SEE EXTERIOR ELEVATIONS FOR BUILDING HEIGHTS.

DUST CONTROL NOTE:

ALL ON-SITE 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 EARTH MOVING 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 THEIR DESIGNERS 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 MINIMALIZE THE AMOUNT OF DISTURBED SOIL, AND HOW THE CONTRACTOR WILL STABILIZE THE DISTURBED SURFACE AREA EXPOSED TO WIND OR VEHICLE TRAFFIC DURING CONSTRUCTION.

DRAINAGE FACILITIES MAINTENANCE NOTE:

ALL DRAINAGE FACILITIES SHALL BE MAINTAINED BY ALL PROPERTY OWNERS. THE PROPERTY OWNERS SHALL ALSO HAVE THE RESPONSIBILITY FOR MAINTENANCE OF THE PUBLIC DRAINAGE EASEMENT. 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 16, ON OR ABOUT SEPTEMBER 16, 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 ENGINEERS 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, DRAINAGE 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.

Location Map

DEVELOPMENT PLAN

SCALE: 1" = 30'-0"

REFER TO CIVIL SITE PLAN FOR ADDITIONAL INFORMATION

GUNNISON'S PRAIRIE DOG NOTE:

THE PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE GUANISON'S PRAIRIE DOG ORDINANCE (ARTICLE 14-8.12)

DEVELOPMENT PLAN NOTES:

A. PROPERTY DEVELOPMENT SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF CHAPTER 14, LAND DEVELOPMENT CODE, SFCC 2001 AND SUBSEQUENT AMENDMENTS.
B. PROPERTY DEVELOPMENT SHALL 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 OF BUILDING PERMIT.
C. EACH LOT SHALL BE SERVED BY SEPARATE WATER AND SEWER LINES.
D. SHALL COMPLY WITH INTERNATIONAL FIRE CODE (IFC) 2009 EDITION.
E. PRIOR TO ANY NEW CONSTRUCTION, PLAT SHALL BE SUBMITTED TO FIRE DEPARTMENT FOR COMPLIANCE WITH INTERNATIONAL FIRE CODE (IFC).
F. NO FENCES, WALLS, OR OTHER OBSTRUCTIONS SHALL BE PLACED OR CONSTRUCTED ACROSS OR WITHIN PUBLIC SANITARY SEWER EASEMENTS.
G. WASTEWATER UTILITY EXPANSION CHARGES (LEC) SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.
H. FIRE SERVICE REQUIREMENTS WILL BE DETERMINED BY THE FIRE DEPARTMENT PRIOR TO DEVELOPMENT OR ISSUANCE OF A BUILDING PERMIT.

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

ARCHITECT:
the KENT
ARCHITECTURAL COLLABORATIVE, PLLC
687 OLD WILLETS PATH
HAUPPAUGE • NEW YORK 11788
631.793.9684
rkent.tkac@gmail.com

ENGINEERS SEAL | DATE | REVISIONS

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DEVELOPMENT PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1/16" = 1'-0"	A200

FIGURE 4

REFERENCE
CITY OF SANTA FE GIS MAPPING, 2011 IMAGE

EXISTING CONDITIONS
MAP
FIGURE 5

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

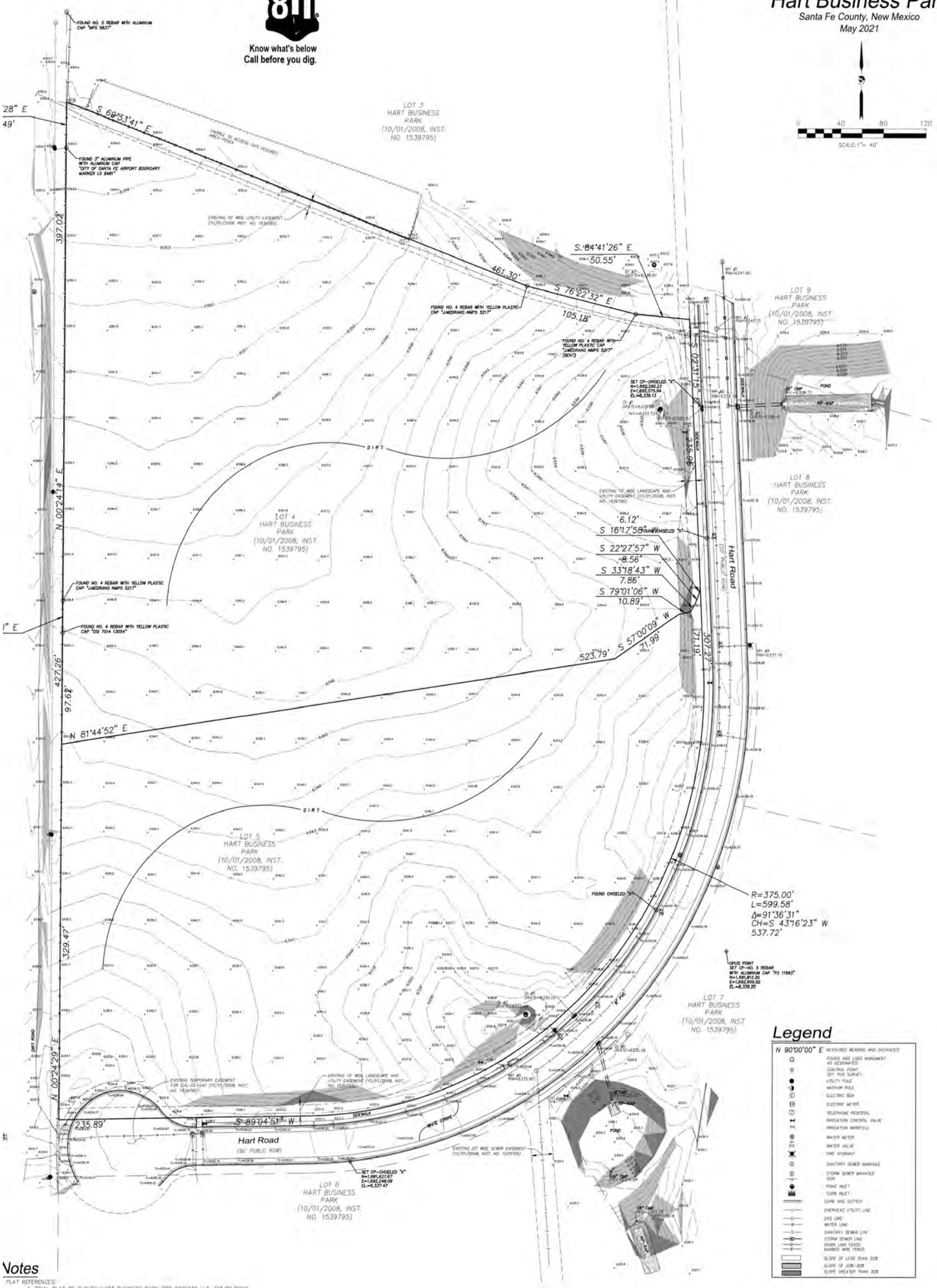
See Sheet 2 of 2 for Invert Details

811 Know what's below Call before you dig.

Topographic Survey and Slope Analysis Map of

Lots 4 and 5 Hart Business Park

Santa Fe County, New Mexico
May 2021



Legend

N 90°00'00" E — MEASURED BEARING AND DISTANCES
FOUND AND USED MONUMENT AS DESIGNATED
CONTROL POINT SET THIS SURVEY
UTILITY POLE
ANCHOR POLE
ELECTRIC BOX
ELECTRIC METER
TELEPHONE PEDESTAL
IRRIGATION CONTROL VALVE
IRRIGATION MARKER
WATER METER
WATER VALVE
FIRE HYDRANT
SANITARY SEWER MANHOLE
STORM SEWER MANHOLE
SIGN
POND INLET
CURB INLET
CURB AND GUTTER
OVERHEAD UTILITY LINE
GAS LINE
WATER LINE
SANITARY SEWER LINE
STORM SEWER LINE
CHAIN LINK FENCE
BARBED WIRE FENCE
SLOPE OF LESS THAN 20%
SLOPE OF 20%-30%
SLOPE GREATER THAN 30%

Notes

PLAT REFERENCES:
A. FINAL PLAT OF SURVEY HART BUSINESS PARK FOR CCSF509 LLC. (10/01/2008 INSTRUMENT NO. 1539795)

ELEVATION DATUM IS BASED ON NAVD 1988 FROM OPUS SOLUTION: 210405MT001 TR5756698532851

LOCATION OF UNDERGROUND UTILITIES AND EASEMENTS NOT VERIFIED BY THIS PLAN. UNDERGROUND UTILITIES MAY EXIST WHERE NONE ARE SHOWN. UNDERGROUND UTILITY LOCATION IS BASED UPON INFORMATION PROVIDED BY OTHERS AND MAY BE INCOMPLETE OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE OWNER SHOULD INFORM HIMSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE OWNER IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND UTILITY LINES. THE OWNER IS URGED TO COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE OWNER SHOULD MAKE THEMSELVES AWARE OF REGULATIONS STATED IN CHAPTER 62, ARTICLE 14, NMSA 1978 RELATING TO EXCAVATION DAMAGE TO PIPELINES AND UNDERGROUND UTILITY LINES.

THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1"=40' WITH A CONTOUR INTERVAL OF ONE FOOT.

NM ONE CALL TICKET NUMBER: 21AP050447

Surveyor's Certificate

I, LARRY W. MEDRANO, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEW MEXICO, LICENSE NUMBER 11993, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS PREPARED BY ME BY FIELD SURVEYS USING GPS RTK MEASUREMENTS. ELEVATIONS BASED ON OPUS SOLUTION: 210405MT001 TR5756698532851 (NAVD 1988). THIS SURVEY MEETS THE MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYING IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND SURVEYORS. THIS IS NOT A BOUNDARY SURVEY.

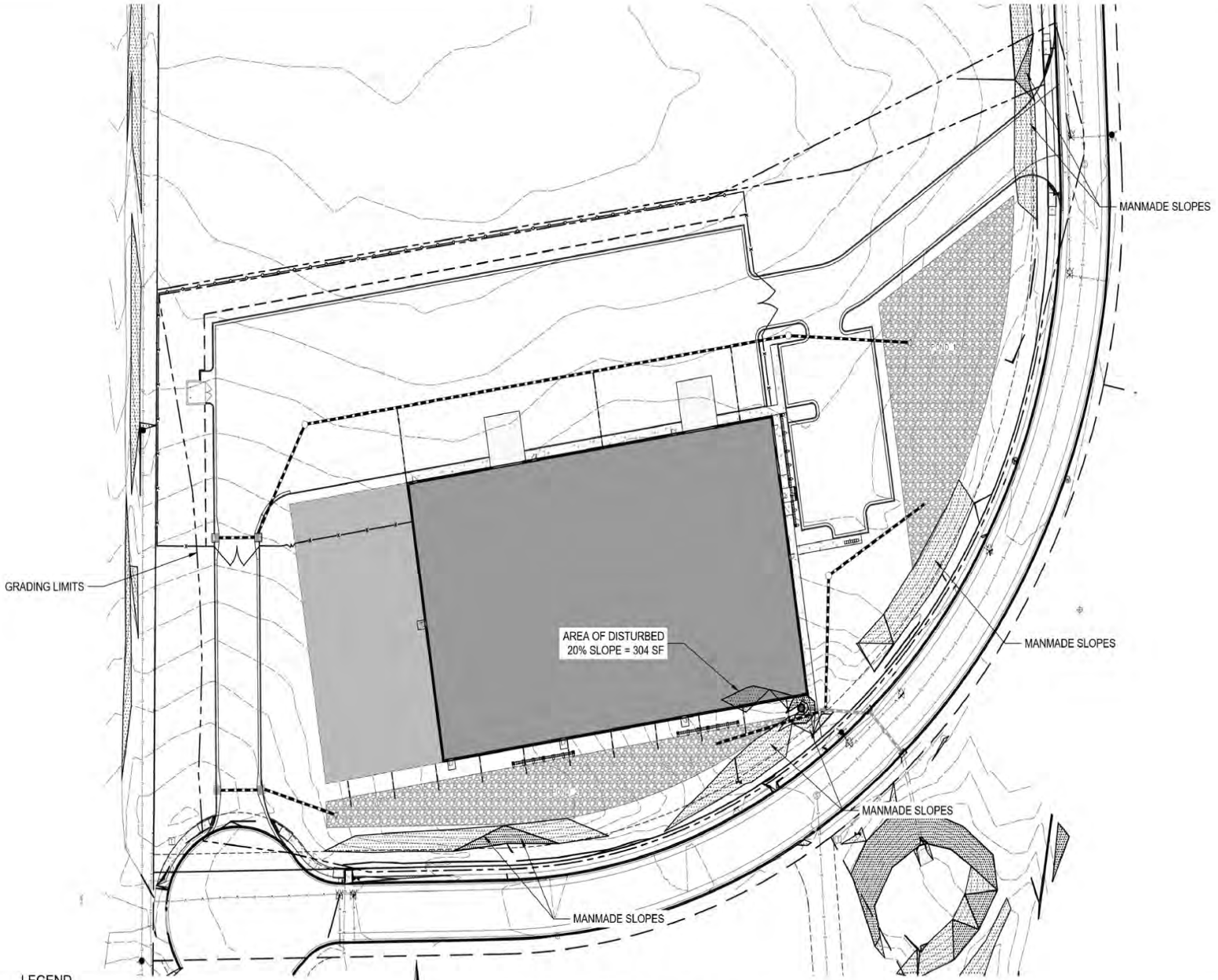
LARRY W. MEDRANO — DATE
N.M.P.S. No. 11993
DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION

LARRY W. MEDRANO — NEW MEXICO — 11993 — REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION						PLSS INFORMATION				PROPERTY INFORMATION		PROJECT INFORMATION	
PLANE ZONE: M-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD				LAND GRANT: SANTA FE GRANT				PROPERTY OWNER: CCSF-NIAM LLC		CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
HORIZONTAL DATUM: 83	VERTICAL DATUM: NAVD88		ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES		SECTION: 10 & 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD	DRAWN BY: JK	CHECKED BY: LM
EX. USED: S SOLUTION: 210405MT001 TR5756698532851			BASE POINT FOR SCALING AND/OR ROTATION: N = 0 E = 0			CITY: N/A		COUNTY: SANTA FE	STATE: NM	UPC: 1046094423502000000 1046094419465000000		PSI JOB NO: 216036T	SHEET NUMBER: 1 OF 2
COMBINED SCALE FACTOR: D TO GROUND: 1.00039715 OUND TO GRID: 0.99960301		DISTANCE ANNOTATION: GROUND											
		BEARING ANNOTATION: GRID	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: YES									

PRECISION SURVEYS, INC.
OFFICE LOCATION: 9200 San Mateo Boulevard, NE Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

FIGURE 6



LEGEND

AREA OF 20% TO 30% SLOPE

AREA OF 30% AND GREATER SLOPE

THERE ARE NO 30% AND GREATER NATURAL SLOPES BEING DISTURBED WITHIN THE PROJECT LIMITS.

N

SLOPE ANALYSIS CALCULATIONS

SCALE: 1" = 30'

FIGURE 7

0 15 30 60

SCALE: 1" = 30'

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		

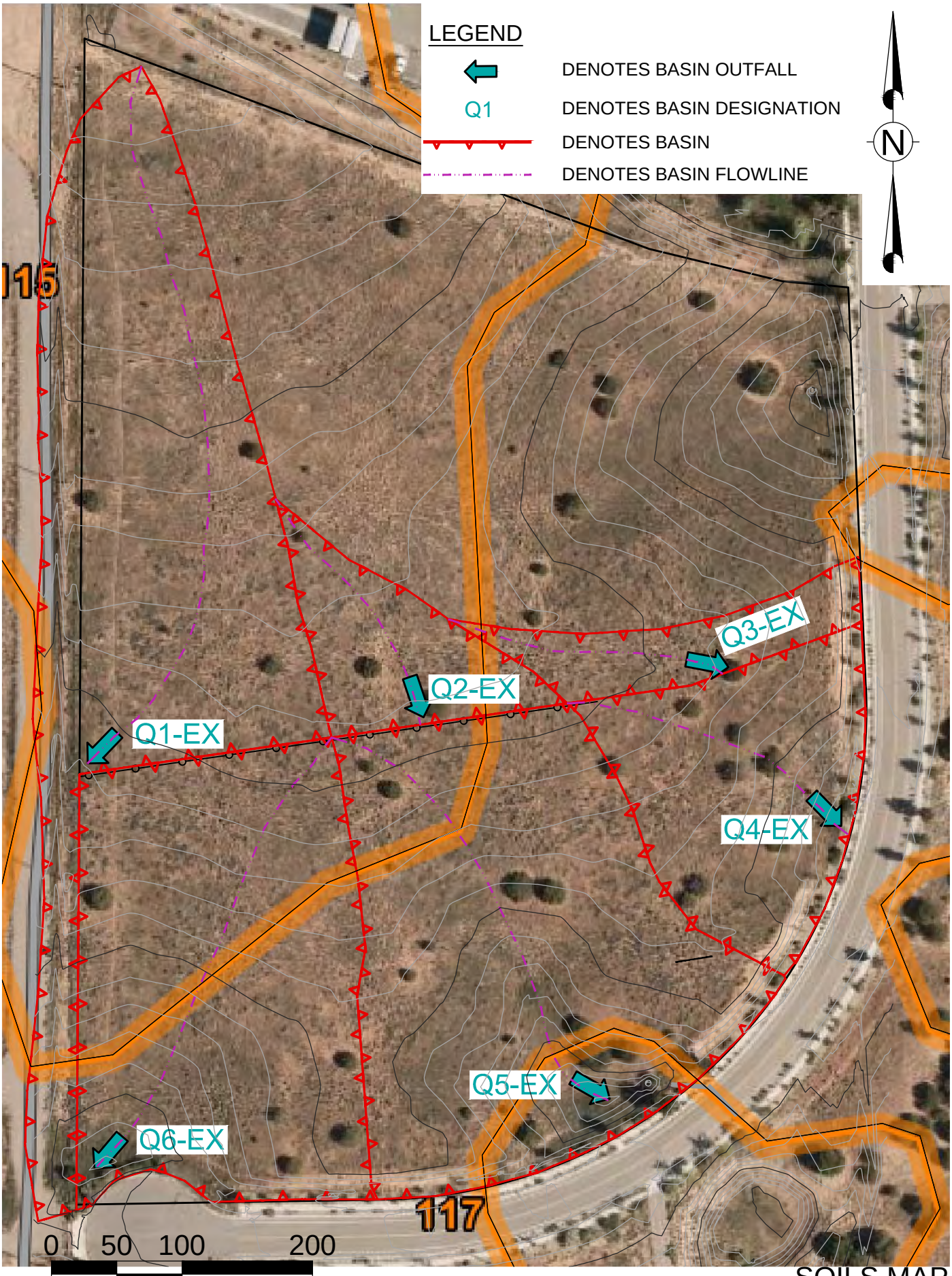
CASE # _____

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

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

SLOPE ANALYSIS CALCULATIONS

DATE:	SCALE:	SHEET:
MAY 2021	1" = 30'	C-102



SCALE: 1" = 100'

SOILS MAP
FIGURE 8

EXISTING CONDITIONS DRAINAGE MAP
FIGURE 9

LEGEND

DENOTES BASIN OUTFALL

Q1-PRO DENOTES BASIN DESIGNATION

DENOTES BASIN

DENOTES BASIN FLOWLINE

N

0 50 100 200

SCALE: 1" = 100'

PROPOSED CONDITION DRAINAGE MAP
FIGURE 10

LEGEND

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

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that 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

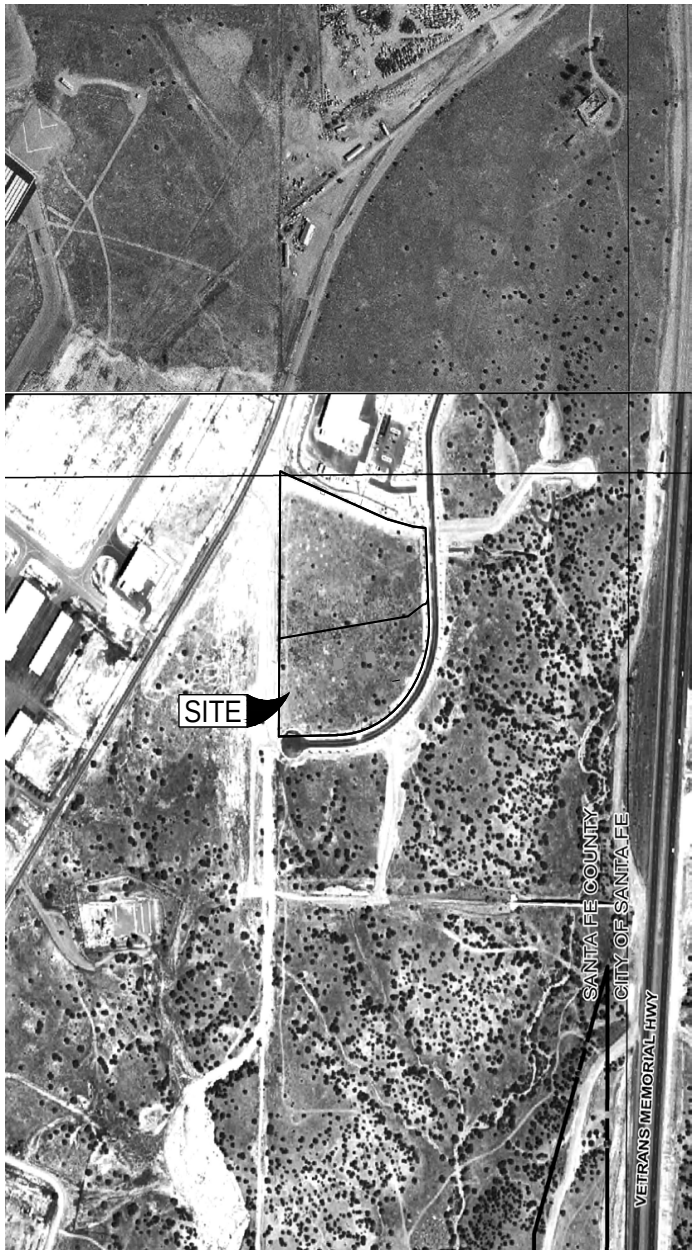
OTHERWISE PROTECTED AREAS (OPAs)

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.
- 513 (EL 987) — 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

- A — A: Cross section line
- 23 — 23: Transect line
- 97° 07' 30", 32° 22' 30": Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4 276 000mE: 1000-meter Universal Transverse Mercator grid values, zone 13
- 600000 FT: 5000-foot grid ticks: New Mexico State Plane coordinate system, Central zone (FIPSZONE 3002), Transverse Mercator
- DX5510 X: Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5: River Mile



* MAP 35049C0389D WAS NOT UPDATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE 2012 MAP REVISIONS (REVISION "E").

NFIP — NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0389D

FIRM

FLOOD INSURANCE RATE MAP

SANTA FE COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 389 OF 1100

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SANTA FE, CITY OF	350070	0389	D
SANTA FE COUNTY (UNINCORPORATED AREAS)	350069	0389	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 35049C0389D*

EFFECTIVE DATE JUNE 17, 2008

Federal Emergency Management Agency

NFIP — NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0502E

FIRM

FLOOD INSURANCE RATE MAP

SANTA FE COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 502 OF 1100

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

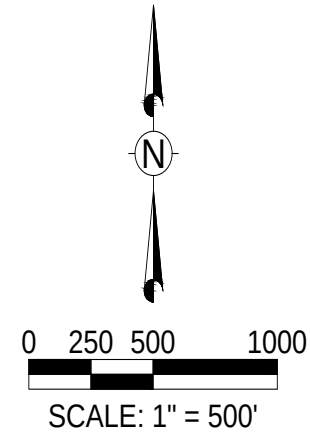
COMMUNITY	NUMBER	PANEL	SUFFIX
SANTA FE, CITY OF	350070	0502	E
SANTA FE COUNTY (UNINCORPORATED AREAS)	350069	0502	E

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 35049C0502E

MAP REVISED DECEMBER 4, 2012

Federal Emergency Management Agency



FLOOD INSURANCE RATE MAP
FIGURE 11

APPENDIX B

EXISTING DRAINAGE CALCULATIONS

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q1-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q1-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q1-EX		Outlet	2.13	87	.33

Total area: 2.13 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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			
Q1-EX	3.31	3.96	4.58
REACHES			
OUTLET	3.31	3.96	4.58

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			
Q1-EX	3.31 12.08	3.96 12.09	4.58 12.10
REACHES			
OUTLET	3.31	3.96	4.58

CPC

PODS AT HART BUSINESS PARK
Q1-EX
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-EX	2.13	0.330	87	Outlet	

Total Area: 2.13 (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)
Q1-EX							
SHEET	100	0.0140	0.150				0.272
SHALLOW	473	0.0199	0.050				0.058
						Time of Concentration	.33

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q1-EX	Dirt (w/ right-of-way)		C	.2	87
	Herbaceous	(poor)	C	1.93	87
	Total Area / Weighted Curve Number			2.13	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q2-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q2-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q2-EX		Outlet	0.39	87	.279

Total area: .39 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	0.65	0.78	0.90
REACHES			
OUTLET	0.65	0.78	0.90

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-EX	0.65 12.06	0.78 12.06	0.90 12.07
REACHES			
OUTLET	0.65	0.78	0.90

CPC

PODS AT HART BUSINESS PARK
Q2-EX
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-EX	.39	0.279	87	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)
Q2-EX							
SHEET	100	0.0155	0.150				0.262
SHALLOW	109	0.0128	0.050				0.017
						Time of Concentration	.279

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q2-EX	Herbaceous	(poor)	C	.39	87
	Total Area / Weighted Curve Number			.39	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q3-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q3-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q3-EX		Outlet	0.29	87	.357

Total area: .29 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	0.43	0.51	0.60
REACHES			
OUTLET	0.43	0.51	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			
Q3-EX	0.43 12.10	0.51 12.11	0.60 12.11
REACHES			
OUTLET	0.43	0.51	0.60

CPC

PODS AT HART BUSINESS PARK
Q3-EX
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-EX	.29	0.357	87	Outlet	

Total Area: .29 (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-EX							
SHEET	100	0.0080	0.150				0.341
SHALLOW	116	0.0166	0.050				0.016
						Time of Concentration	.357

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q3-EX	Herbaceous	(poor)	C	.29	87
	Total Area / Weighted Curve Number			.29	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q4-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q4-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q4-EX		Outlet	0.83	87	.253

Total area: .83 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	1.45	1.72	2.00
REACHES			
OUTLET	1.45	1.72	2.00

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-EX	1.45 12.05	1.72 12.04	2.00 12.04
REACHES			
OUTLET	1.45	1.72	2.00

CPC

PODS AT HART BUSINESS PARK
Q4-EX
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-EX	.83	0.253	87	Outlet	

Total Area: .83 (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-EX							
SHEET	100	0.0190	0.150				0.241
SHALLOW	144	0.0453	0.050				0.012
						Time of Concentration	.253

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q4-EX	Herbaceous	(poor)	C	.83	87
	Total Area / Weighted Curve Number			.83	87

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q5-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q5-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q5-EX		Outlet	1.95	86	.248

Total area: 1.95 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	3.25	3.89	4.54
REACHES			
OUTLET	3.25	3.89	4.54

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			
Q5-EX	3.25 12.04	3.89 12.04	4.54 12.04
REACHES			
OUTLET	3.25	3.89	4.54

CPC

PODS AT HART BUSINESS PARK
Q5-EX
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-EX	1.95	0.248	86	Outlet	

Total Area: 1.95 (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-EX							
SHEET	100	0.0223	0.150				0.226
SHALLOW	266	0.0442	0.050				0.022
						Time of Concentration	.248

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q5-EX	Herbaceous	(poor)	B	.23	80
	Herbaceous	(poor)	C	1.72	87
	Total Area / Weighted Curve Number			1.95	86

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q6-EX
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q6-EX.w55

Date: 5/10/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q6-EX		Outlet	1.65	87	.254

Total area: 1.65 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-EX	2.87	3.42	3.96
REACHES			
OUTLET	2.87	3.42	3.96

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-EX	2.87 12.05	3.42 12.04	3.96 12.05
REACHES			
OUTLET	2.87	3.42	3.96

CPC

PODS AT HART BUSINESS PARK
Q6-EX
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-EX	1.65	0.254	87	Outlet	

Total Area: 1.65 (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)
Q6-EX							
SHEET	100	0.0217	0.150				0.229
SHALLOW	277	0.0355	0.050				0.025
						Time of Concentration	.254

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q6-EX	Herbaceous	(poor)	C	1.65	87
	Total Area / Weighted Curve Number			1.65	87

APPENDIX C
DEVELOPED DRAINAGE CALCULATIONS

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q4-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q4-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q4-PRO		Outlet	0.26	88	.132

Total area: .26 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.56	0.67	0.77
REACHES			
OUTLET	0.56	0.67	0.77

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			
Q4-PRO	0.56 11.96	0.67 11.95	0.77 11.96
REACHES			
OUTLET	0.56	0.67	0.77

CPC

PODS AT HART BUSINESS PARK
Q4-PRO
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-PRO	.26	0.132	88	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)
Q4-PRO							
SHEET	81	0.0810	0.150				0.114
SHALLOW	117	0.0078	0.025				0.018
						Time of Concentration	.132

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q4-PRO	Open space; grass cover 50% to 75% (fair)	C	.13	79
	Paved parking lots, roofs, driveways	C	.13	98
	Total Area / Weighted Curve Number		.26	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q5-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q5-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q5-PRO		Outlet	0.46	88	0.1

Total area: .46 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	1.05	1.24	1.44
REACHES			
OUTLET	1.05	1.24	1.44

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-PRO	1.05 11.93	1.24 11.93	1.44 11.93
REACHES			
OUTLET	1.05	1.24	1.44

CPC

PODS AT HART BUSINESS PARK
Q5-PRO
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-PRO	.46	0.100	88	Outlet	

Total Area: .46 (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-PRO							
SHEET	100	0.0391	0.011				0.022
SHALLOW	43	0.0070	0.025				0.007
SHALLOW	22	0.1268	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
Q5-PRO	Open space; grass cover 50% to 75% (fair)	C	.24	79
	Paved parking lots, roofs, driveways	C	.22	98
	Total Area / Weighted Curve Number		.46	88

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q6-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q6-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q6-PRO		Outlet	0.08	79	.153

Total area: .08 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.11	0.13	0.16
REACHES			
OUTLET	0.11	0.13	0.16

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			
Q6-PRO	0.11	0.13	0.16
	12.00	11.99	11.99
REACHES			
OUTLET	0.11	0.13	0.16

CPC

PODS AT HART BUSINESS PARK
Q6-PRO
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-PRO	.08	0.153	79	Outlet	

Total Area: .08 (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-PRO							
SHEET	92	0.0503	0.150				0.153
						Time of Concentration	.153

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q6-PRO	Open space; grass cover 50% to 75% (fair)	C	.08	79
	Total Area / Weighted Curve Number		.08	79

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q7-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q7-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q7-PRO		Outlet	0.33	76	0.1

Total area: .33 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.37	0.48	0.59
REACHES			
OUTLET	0.37	0.48	0.59

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-PRO	0.37 11.94	0.48 11.94	0.59 11.94
REACHES			
OUTLET	0.37	0.48	0.59

CPC

PODS AT HART BUSINESS PARK
Q7-PRO
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-PRO	.33	0.100	76	Outlet	

Total Area: .33 (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-PRO							
SHEET	47	0.0836	0.150				0.073
SHALLOW	107	0.0262	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
Q7-PRO	Open space; grass cover 50% to 75% (fair)	B	.11	69
	Open space; grass cover 50% to 75% (fair)	C	.21	79
	Paved parking lots, roofs, driveways	C	.01	98
	Total Area / Weighted Curve Number		.33	76

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q8-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q8-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q8-PRO		Outlet	0.6	98	0.1

Total area: .60 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	1.98	2.23	2.47
REACHES			
OUTLET	1.98	2.23	2.47

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-PRO	1.98	11.93	2.23	11.92	2.47	11.93
REACHES						
OUTLET	1.98		2.23		2.47	

CPC

PODS AT HART BUSINESS PARK
Q8-PRO
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-PRO	.60	0.100	98	Outlet	

Total Area: .60 (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-PRO							
SHEET	79	0.0100	0.011				0.032
						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
Q8-PRO	Paved parking lots, roofs, driveways	C	.6	98
	Total Area / Weighted Curve Number		.6	98

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q9-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q9-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q9-PRO		Outlet	0.62	98	0.1

Total area: .62 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	2.04	2.30	2.55
REACHES			
OUTLET	2.04	2.30	2.55

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						
Q9-PRO	2.04	11.93	2.30	11.92	2.55	11.93
REACHES						
OUTLET	2.04		2.30		2.55	

CPC

PODS AT HART BUSINESS PARK
Q9-PRO
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-PRO	.62	0.100	98	Outlet	

Total Area: .62 (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-PRO							
SHEET	100	0.0100	0.011				0.039
SHALLOW	14	0.0100	0.025				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
Q9-PRO	Paved parking lots, roofs, driveways	C	.62	98
	Total Area / Weighted Curve Number		.62	98

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q10-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q10-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q10-PRO		Outlet	1.71	94	.14

Total area: 1.71 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	4.70	5.39	6.05
REACHES			
OUTLET	4.70	5.39	6.05

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-PRO	4.70 11.95	5.39 11.96	6.05 11.95
REACHES			
OUTLET	4.70	5.39	6.05

CPC

PODS AT HART BUSINESS PARK
Q10-PRO
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-PRO	1.71	0.140	94	Outlet	

Total Area: 1.71 (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-PRO							
SHEET	21	0.1019	0.150				0.035
SHALLOW	482	0.0050	0.025				0.093
SHALLOW	123	0.0198	0.025				0.012
						Time of Concentration	.14

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q10-PRO	Open space; grass cover 50% to 75% (fair)	C	.4	79
	Paved parking lots, roofs, driveways	C	1.31	98
	Total Area / Weighted Curve Number		1.71	94

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q11-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q11-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q11-PRO		Outlet	0.04	89	0.1

Total area: .04 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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-PRO	0.09	0.11	0.12
REACHES			
OUTLET	0.09	0.11	0.12

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-PRO	0.09 11.93	0.11 11.93	0.12 11.93
REACHES			
OUTLET	0.09	0.11	0.12

CPC

PODS AT HART BUSINESS PARK
Q11-PRO
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-PRO	.04	0.100	89	Outlet	

Total Area: .04 (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-PRO							
SHEET	45	0.1293	0.150				0.059
						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-PRO	Open space; grass cover 50% to 75% (fair)	C	.02	79
	Paved parking lots, roofs, driveways	C	.02	98
	Total Area / Weighted Curve Number		.04	89

WinTR-55 Current Data Description

--- Identification Data ---

User: CPC
Project: PODS AT HART BUSINESS PARK
SubTitle: Q12-PRO
State: New Mexico
County: SANTA FE
Filename: K:\HART POD STORAGE FACILITY\Drainage\TR55\Q12-PRO.w55

Date: 5/13/2021
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Q12-PRO		Outlet	0.23	80	.237

Total area: .23 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	-Yr (in)	-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)
1.53	.0	.0	2.61	2.93	3.24	.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			
Q12-PRO	0.28	0.35	0.42
REACHES			
OUTLET	0.28	0.35	0.42

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						
Q12-PRO	0.28	12.04	0.35	12.05	0.42	12.04
REACHES						
OUTLET	0.28		0.35		0.42	

CPC

PODS AT HART BUSINESS PARK
Q12-PRO
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
Q12-PRO	.23	0.237	80	Outlet	

Total Area: .23 (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)
Q12-PRO							
SHEET	100	0.0235	0.150				0.221
SHALLOW	200	0.0444	0.050				0.016
						Time of Concentration	.237

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
Q12-PRO	Open space; grass cover 50% to 75% (fair)	C	.22	79
	Paved parking lots, roofs, driveways	C	.01	98
	Total Area / Weighted Curve Number		.23	80

APPENDIX D

EXISTING CONDITIONS ROUTING CALCULATIONS

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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	------	-------	1.334	-------	-------	0.000	3.475	4.154	4.821	Q1-EX
2	Reach	1	-------	1.227	-------	-------	0.000	3.235	3.874	4.502	FLOW TO Q6-EX
4	SCS Runoff	------	-------	0.273	-------	-------	0.000	0.706	0.843	0.978	Q2-EX
5	Reach	4	-------	0.244	-------	-------	0.000	0.646	0.774	0.900	FLOW TO Q5-EX
7	SCS Runoff	------	-------	0.174	-------	-------	0.000	0.454	0.543	0.630	Q3-EX
8	Reach	7	-------	0.173	-------	-------	0.000	0.452	0.541	0.628	FLOW TO Q4-EX
10	SCS Runoff	------	-------	0.580	-------	-------	0.000	1.502	1.794	2.081	Q4-EX
11	Combine	8, 10	-------	0.737	-------	-------	0.000	1.916	2.289	2.655	FLOW TO EAST
13	SCS Runoff	------	-------	1.306	-------	-------	0.000	3.512	4.218	4.913	Q5-EX
14	Combine	5, 13	-------	1.515	-------	-------	0.000	4.072	4.888	5.694	FLOW TO EX POND
15	Reservoir	14	-------	0.112	-------	-------	0.000	0.614	0.693	0.759	OUTFLOW POND
17	SCS Runoff	------	-------	1.153	-------	-------	0.000	2.986	3.567	4.136	Q6-EX
18	Combine	2, 17	-------	2.231	-------	-------	0.000	5.874	7.034	8.179	FLOW TO SOUTHWEST
20	Combine	11, 15, 18,	-------	2.952	-------	-------	0.000	8.202	9.839	11.43	TOTAL OUTFLOW FROM SITE

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	3.475	1	725	10,853	------	------	------	Q1-EX
2	Reach	3.235	1	729	10,850	1	------	------	FLOW TO Q6-EX
4	SCS Runoff	0.706	1	723	2,012	------	------	------	Q2-EX
5	Reach	0.646	1	727	1,983	4	------	------	FLOW TO Q5-EX
7	SCS Runoff	0.454	1	726	1,492	------	------	------	Q3-EX
8	Reach	0.452	1	727	1,346	7	------	------	FLOW TO Q4-EX
10	SCS Runoff	1.502	1	723	4,282	------	------	------	Q4-EX
11	Combine	1.916	1	724	5,627	8, 10	------	------	FLOW TO EAST
13	SCS Runoff	3.512	1	722	9,442	------	------	------	Q5-EX
14	Combine	4.072	1	723	11,425	5, 13	------	------	FLOW TO EX POND
15	Reservoir	0.614	1	750	9,380	14	6334.93	5,421	OUTFLOW POND
17	SCS Runoff	2.986	1	723	8,512	------	------	------	Q6-EX
18	Combine	5.874	1	726	19,362	2, 17	------	------	FLOW TO SOUTHWEST
20	Combine	8.202	1	725	34,370	11, 15, 18,	------	------	TOTAL OUTFLOW FROM SITE

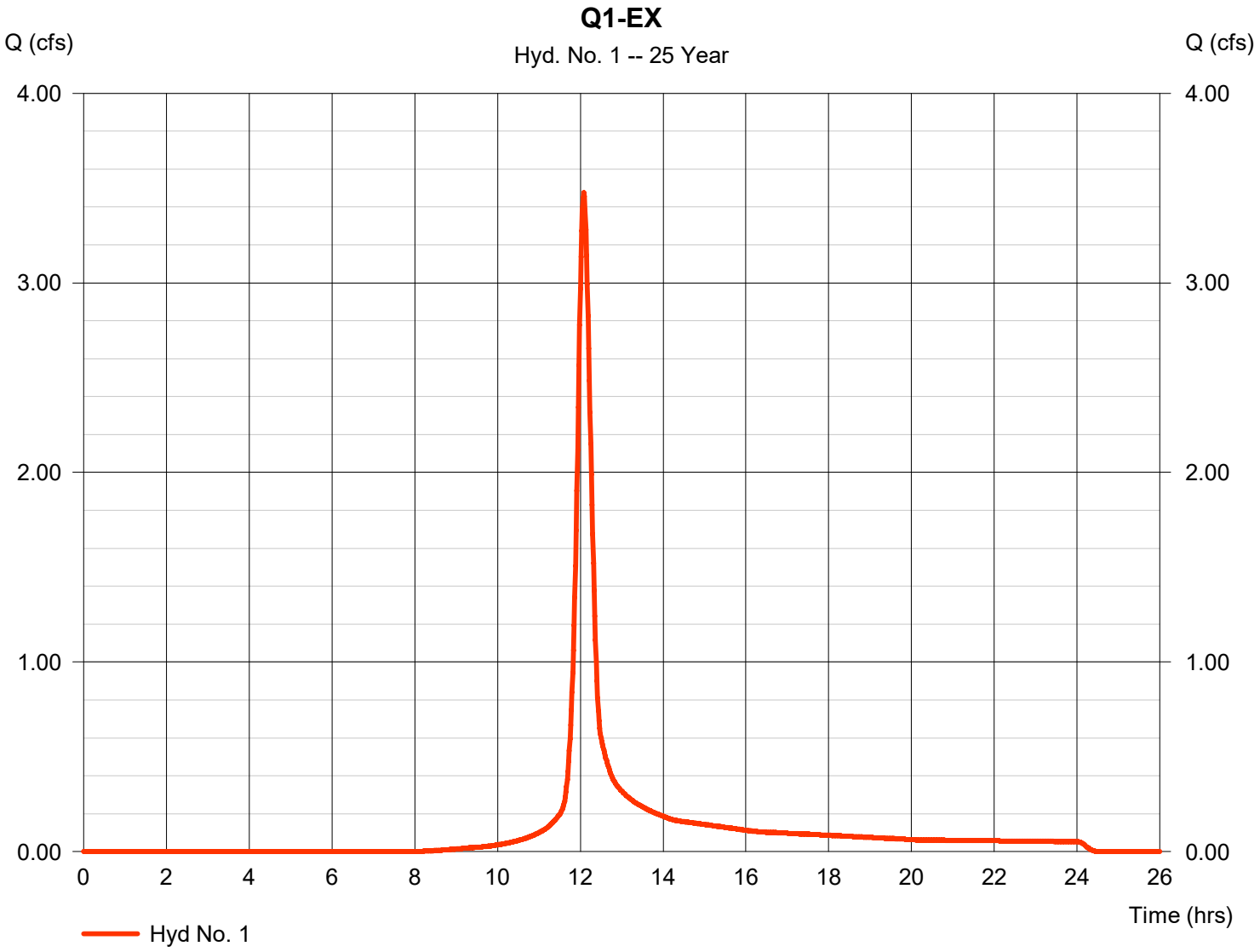
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020 Thursday, 05 / 13 / 2021

Hyd. No. 1

Q1-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.475 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.08 hrs
Time interval	=	1 min	Hyd. volume	=	10,853 cuft
Drainage area	=	2.130 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.80 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



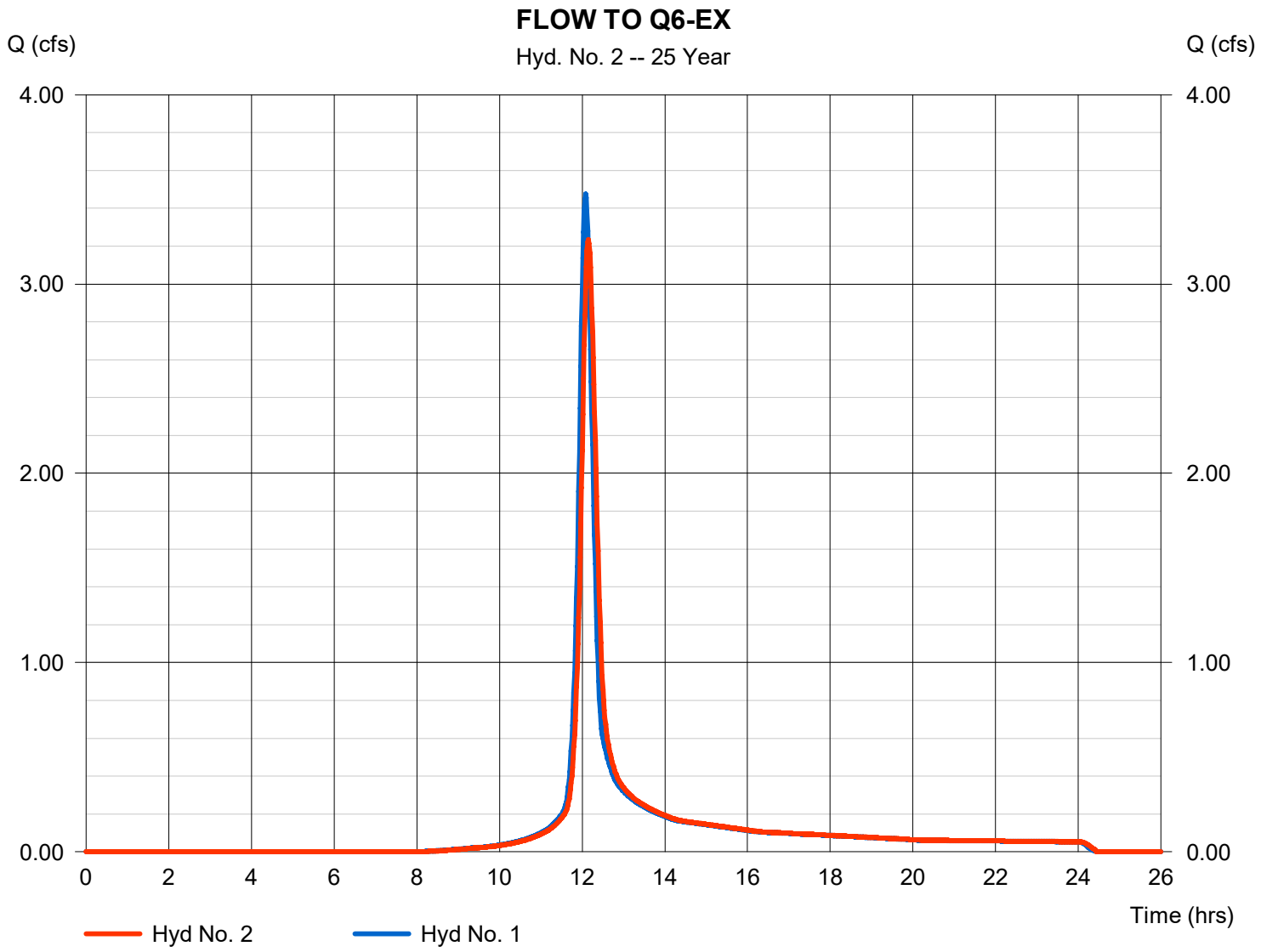
Hydrograph Report

Hyd. No. 2

FLOW TO Q6-EX

Hydrograph type	= Reach	Peak discharge	= 3.235 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 10,850 cuft
Inflow hyd. No.	= 1 - Q1-EX	Section type	= Trapezoidal
Reach length	= 300.0 ft	Channel slope	= 3.7 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 30.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.116	Rating curve m	= 1.071
Ave. velocity	= 1.20 ft/s	Routing coeff.	= 0.2283

Modified Att-Kin routing method used.

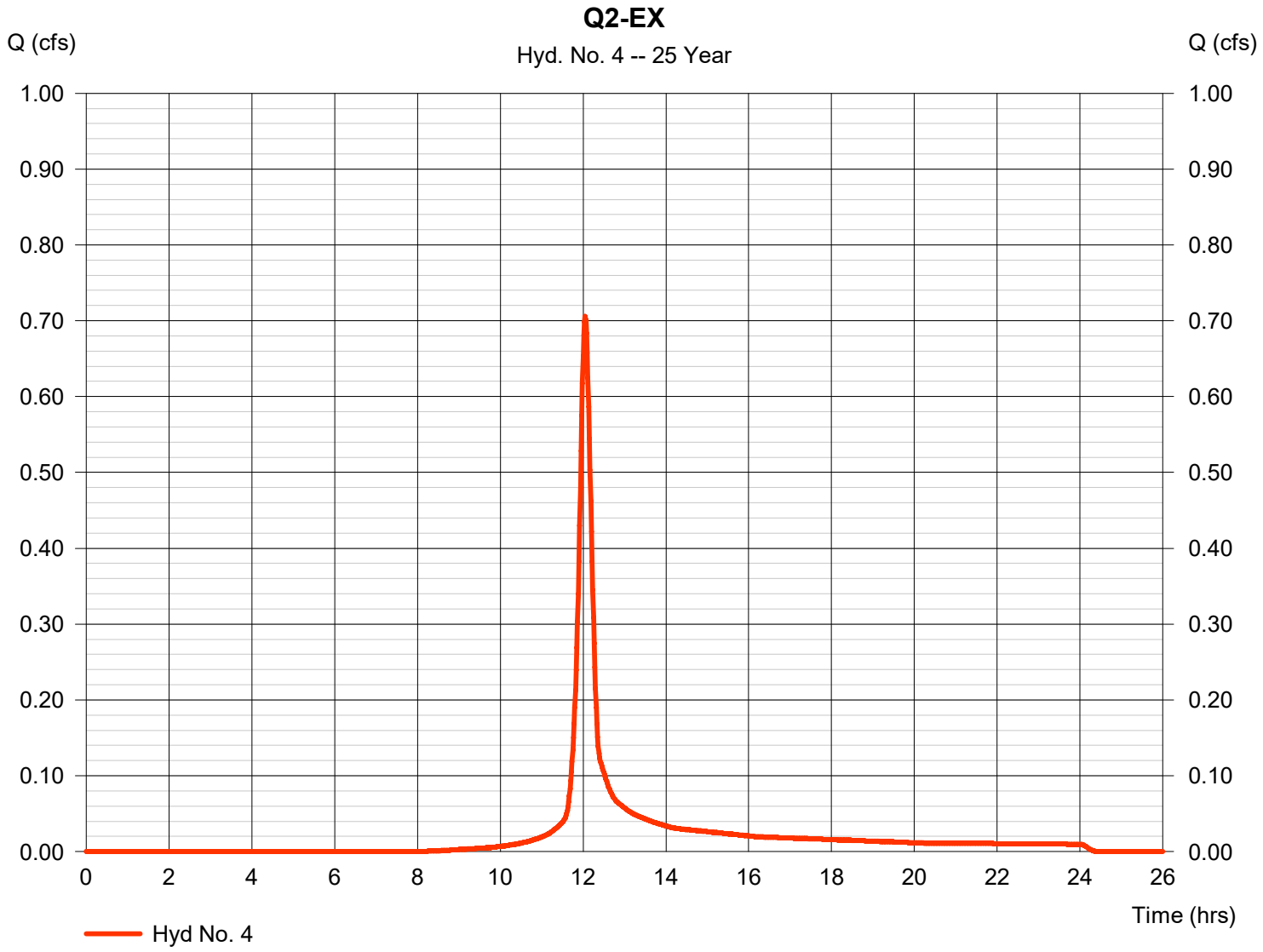


Hydrograph Report

Hyd. No. 4

Q2-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 0.706 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 2,012 cuft
Drainage area	= 0.390 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.74 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



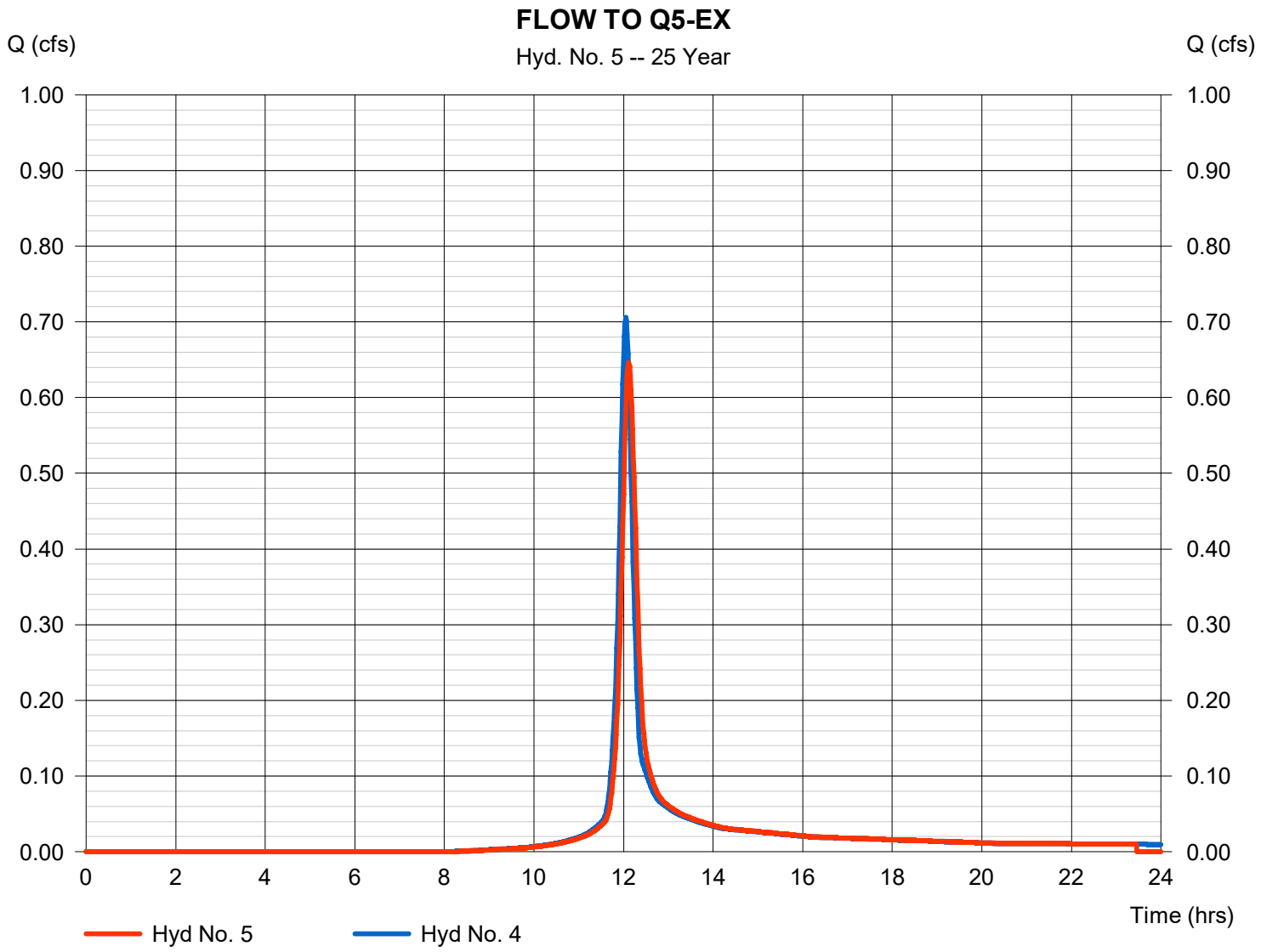
Hydrograph Report

Hyd. No. 5

FLOW TO Q5-EX

Hydrograph type	=	Reach	Peak discharge	=	0.646 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	1,983 cuft
Inflow hyd. No.	=	4 - Q2-EX	Section type	=	Trapezoidal
Reach length	=	328.0 ft	Channel slope	=	4.2 %
Manning's n	=	0.035	Bottom width	=	17.0 ft
Side slope	=	16.0:1	Max. depth	=	1.0 ft
Rating curve x	=	1.317	Rating curve m	=	1.117
Ave. velocity	=	1.23 ft/s	Routing coeff.	=	0.2238

Modified Att-Kin routing method used.

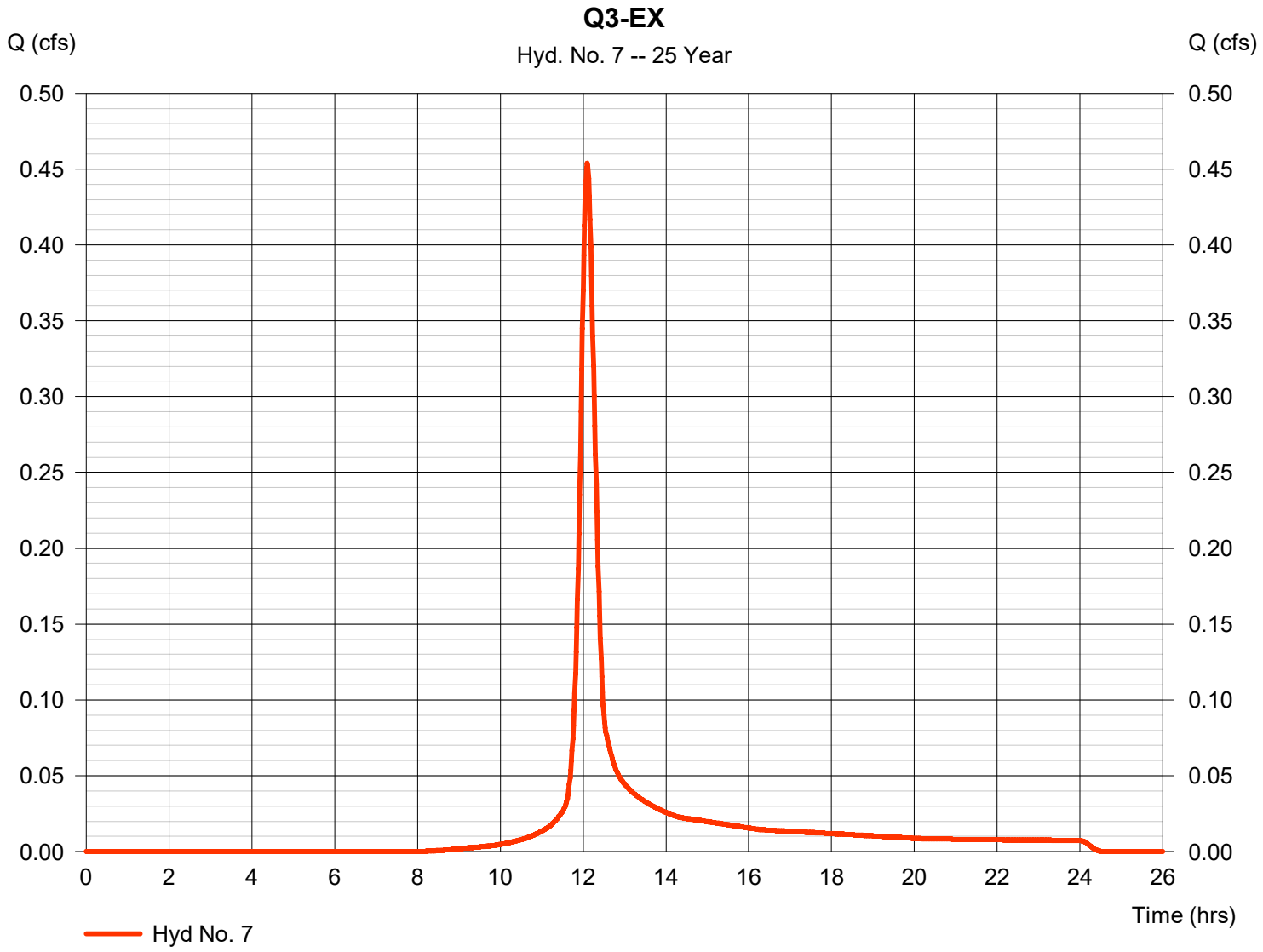


Hydrograph Report

Hyd. No. 7

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.454 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,492 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.42 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



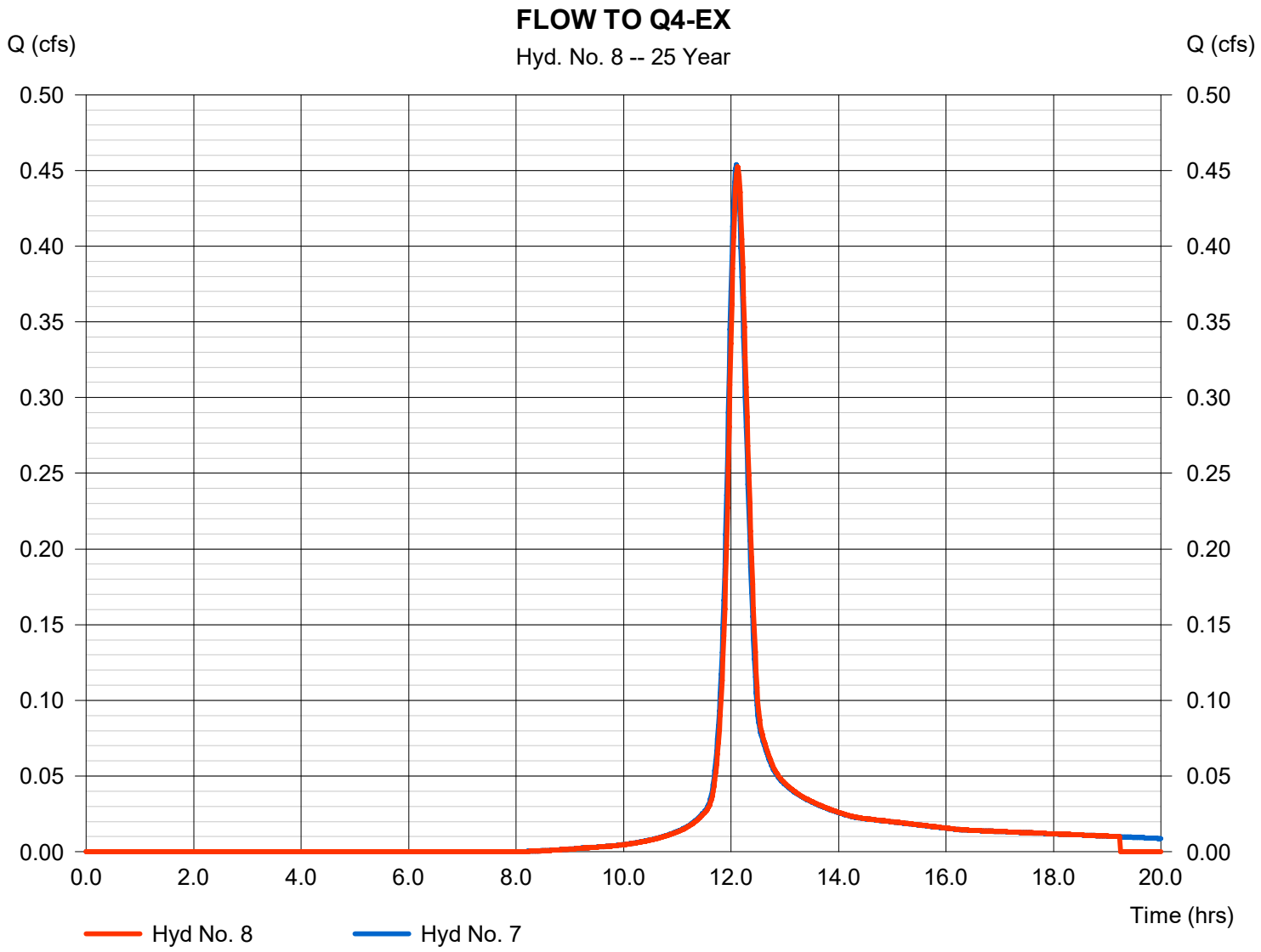
Hydrograph Report

Hyd. No. 8

FLOW TO Q4-EX

Hydrograph type	=	Reach	Peak discharge	=	0.452 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	1,346 cuft
Inflow hyd. No.	=	7 - Q3-EX	Section type	=	Trapezoidal
Reach length	=	152.0 ft	Channel slope	=	4.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	2.954	Rating curve m	=	0.966
Ave. velocity	=	3.16 ft/s	Routing coeff.	=	0.7513

Modified Att-Kin routing method used.

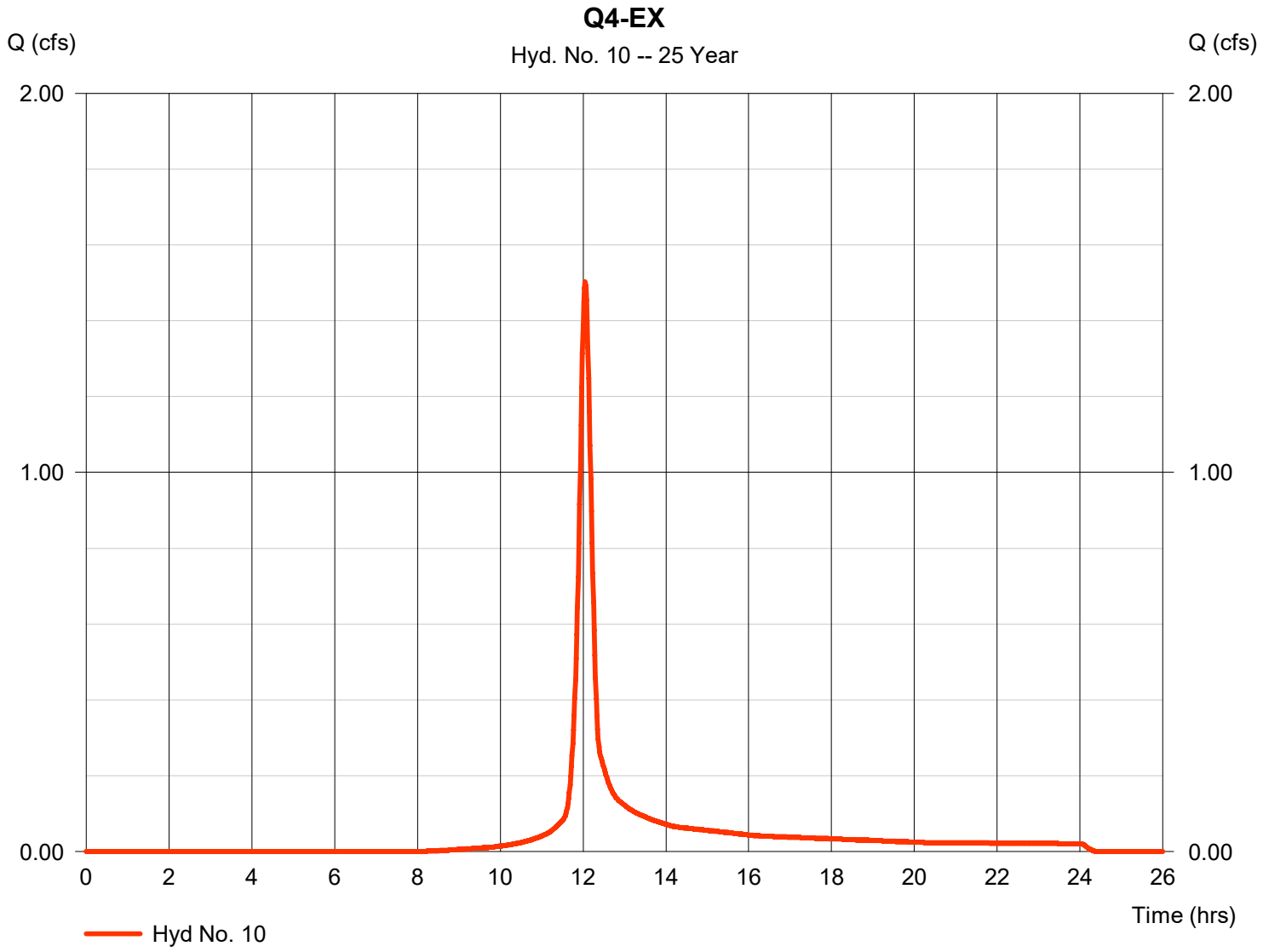


Hydrograph Report

Hyd. No. 10

Q4-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 1.502 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 4,282 cuft
Drainage area	= 0.830 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.18 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

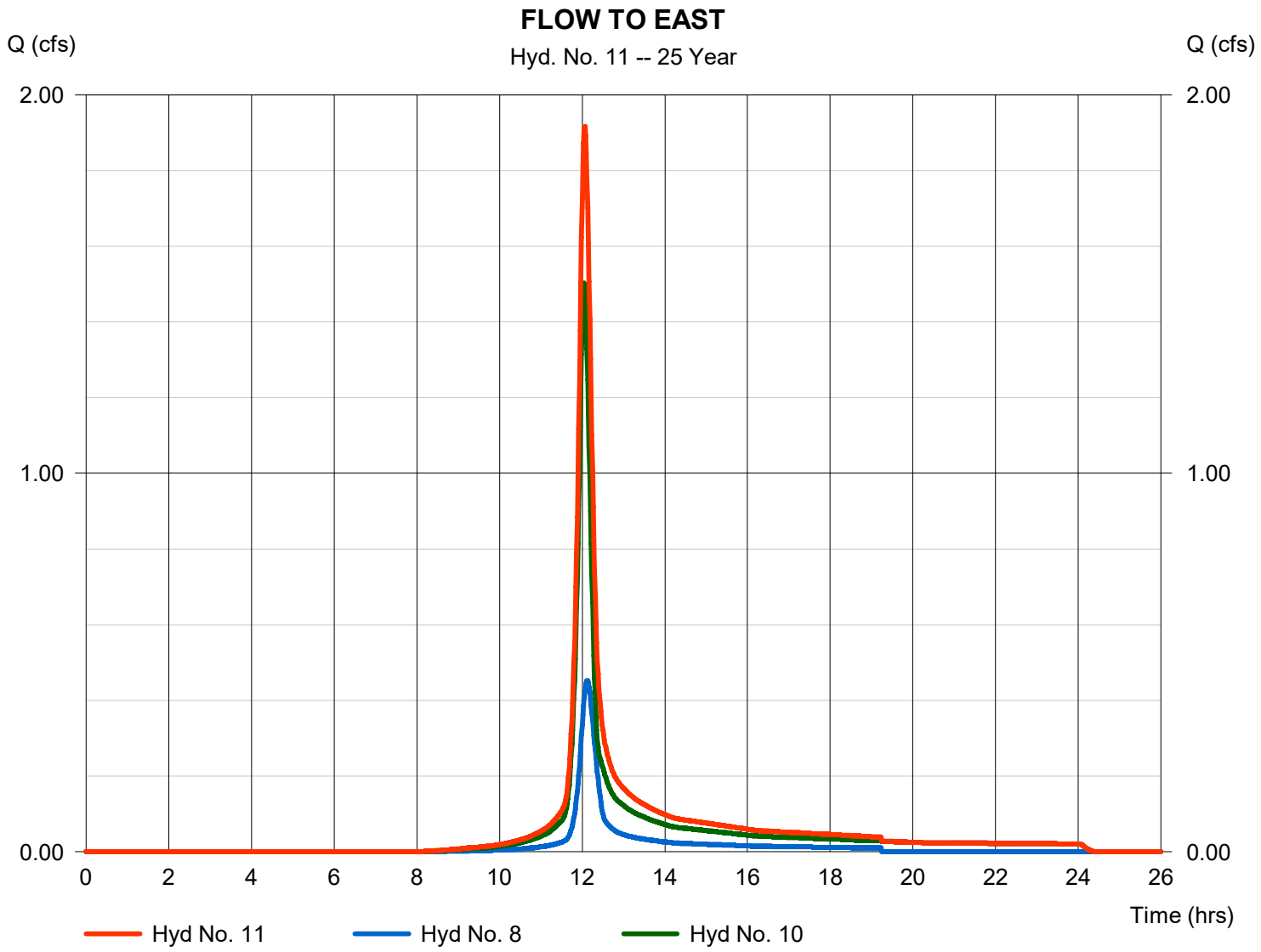


Hydrograph Report

Hyd. No. 11

FLOW TO EAST

Hydrograph type	= Combine	Peak discharge	= 1.916 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 5,627 cuft
Inflow hyds.	= 8, 10	Contrib. drain. area	= 0.830 ac

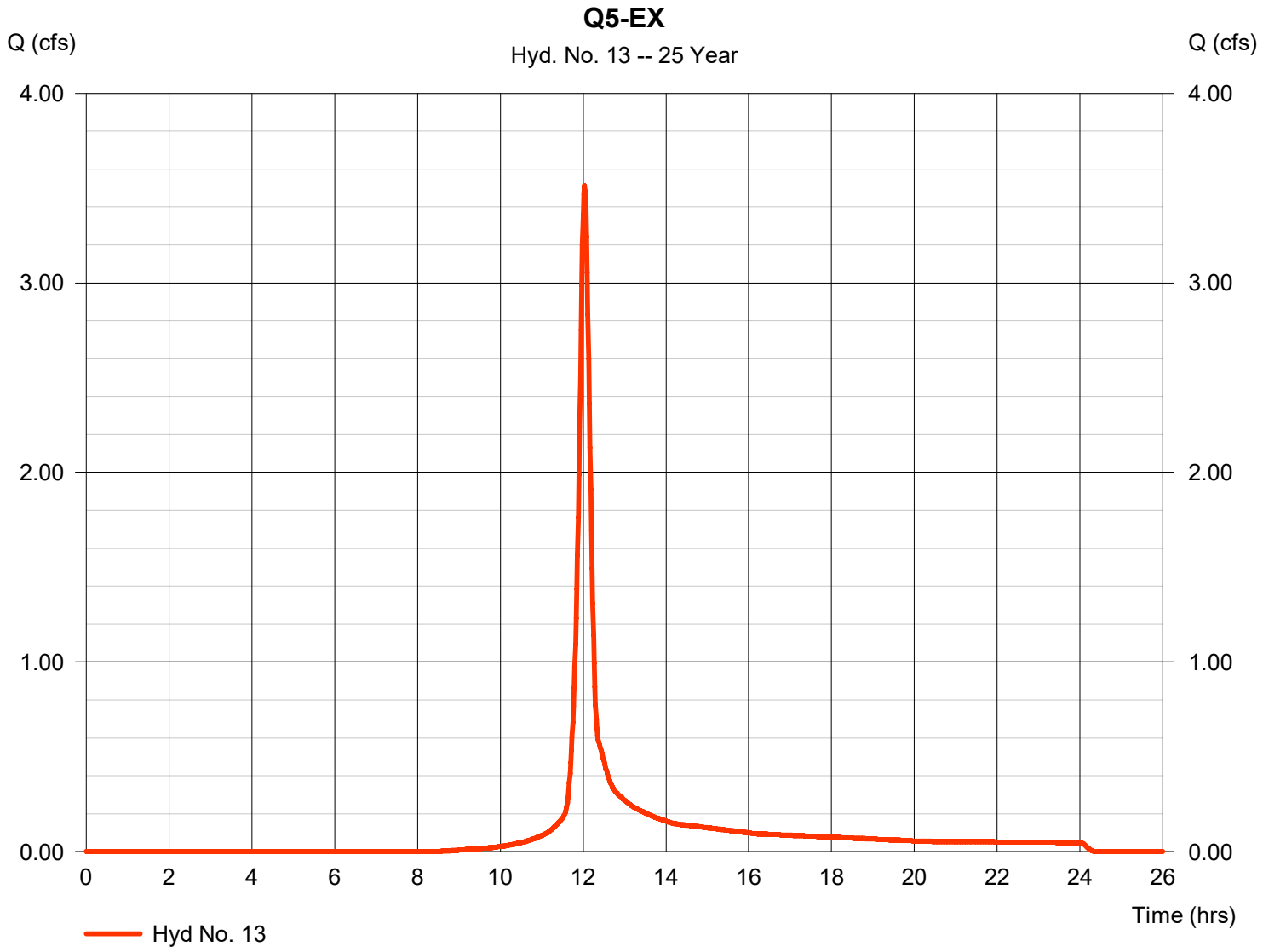


Hydrograph Report

Hyd. No. 13

Q5-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 3.512 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.03 hrs
Time interval	= 1 min	Hyd. volume	= 9,442 cuft
Drainage area	= 1.950 ac	Curve number	= 86
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 14.88 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

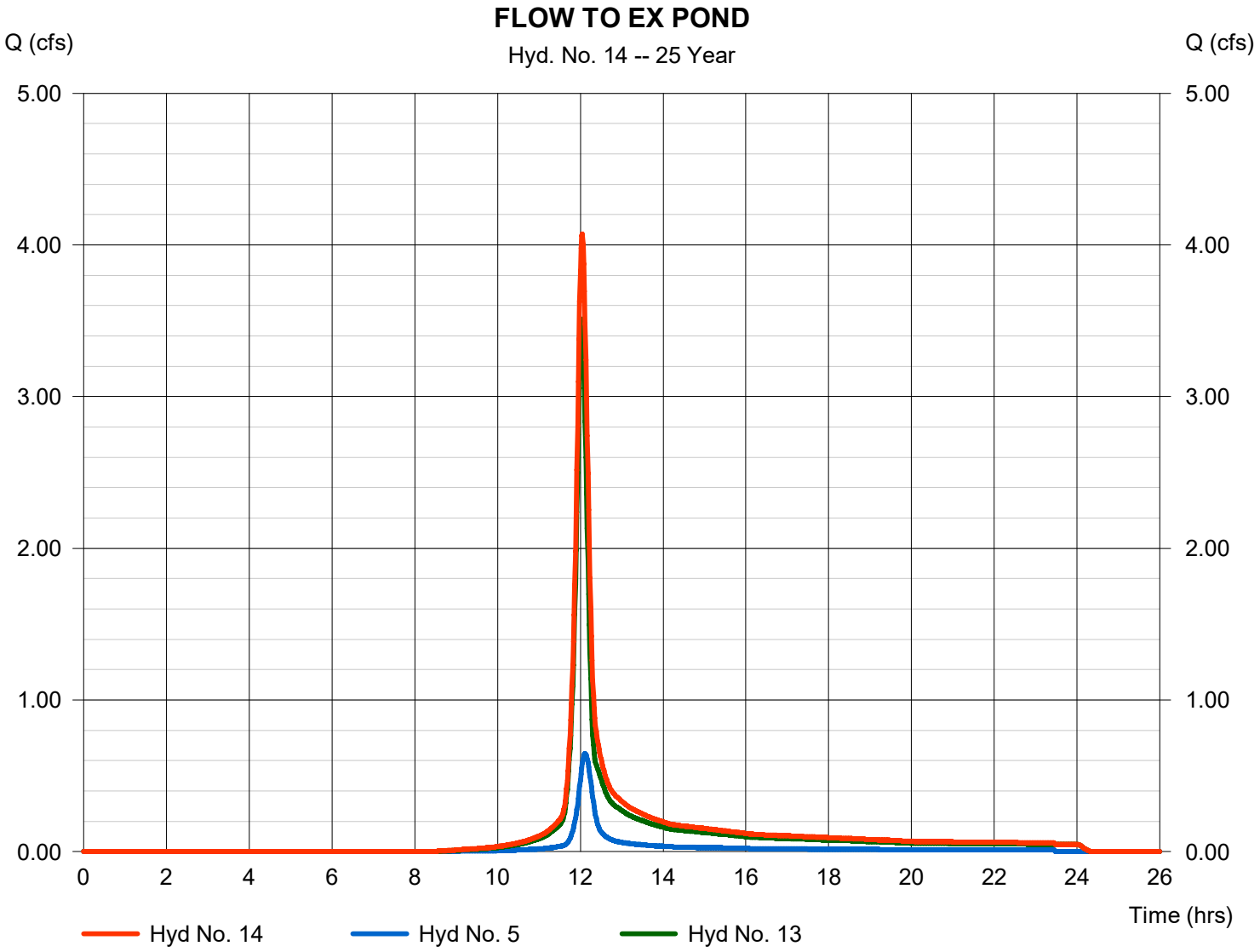


Hydrograph Report

Hyd. No. 14

FLOW TO EX POND

Hydrograph type	= Combine	Peak discharge	= 4.072 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 11,425 cuft
Inflow hyds.	= 5, 13	Contrib. drain. area	= 1.950 ac



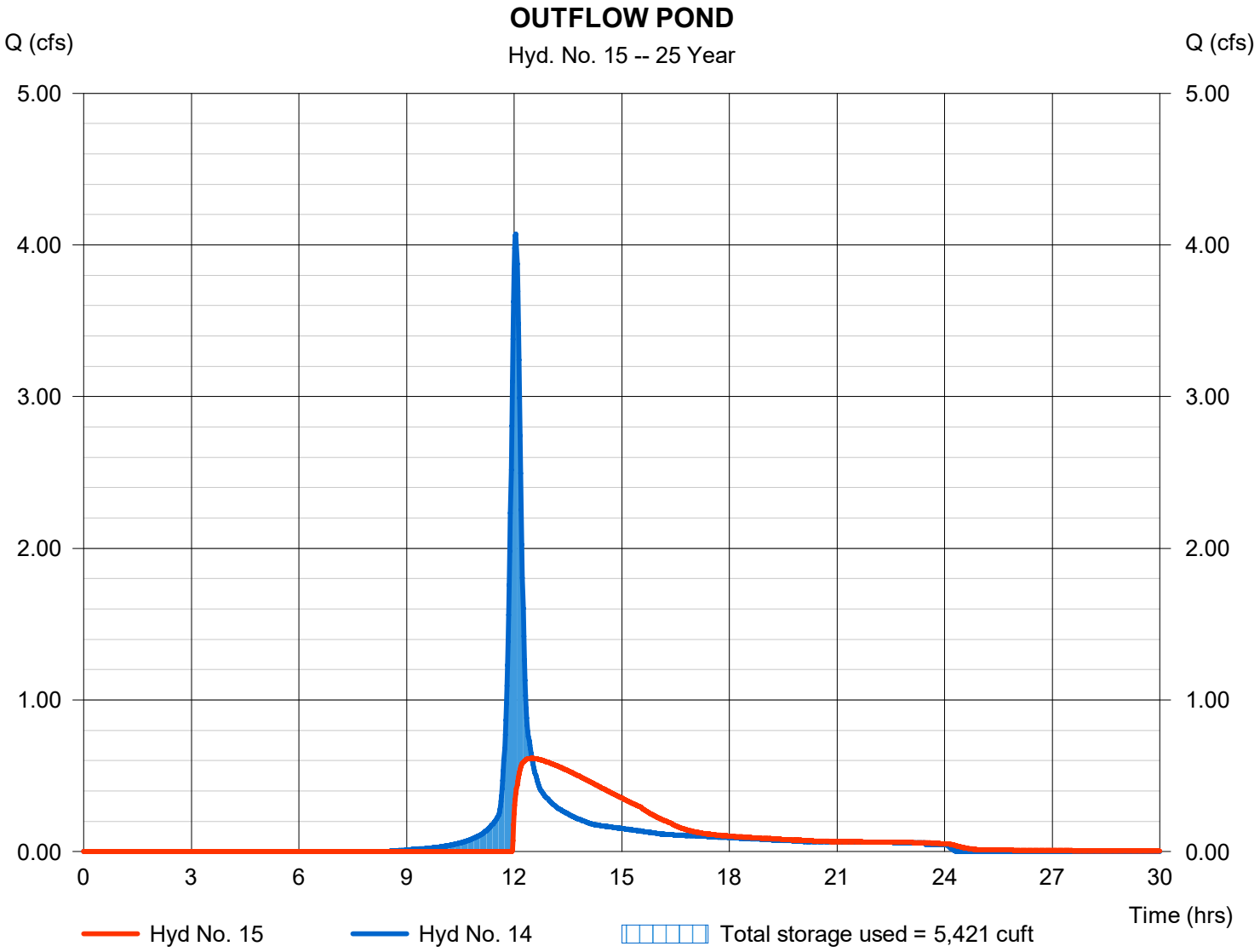
Hydrograph Report

Hyd. No. 15

OUTFLOW POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.614 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.50 hrs
Time interval	=	1 min	Hyd. volume	=	9,380 cuft
Inflow hyd. No.	=	14 - FLOW TO EX POND	Max. Elevation	=	6334.93 ft
Reservoir name	=	EX POND	Max. Storage	=	5,421 cuft

Storage Indication method used.



Pond No. 1 - EX POND

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 6331.90 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6331.90	00	0	0
0.10	6332.00	84	3	3
1.10	6333.00	1,080	488	491
2.10	6334.00	2,434	1,712	2,203
3.10	6335.00	4,612	3,465	5,668
3.60	6335.50	6,042	2,655	8,323

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 16.00	0.00	0.00	0.00
Span (in)	= 16.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 6331.90	0.00	0.00	0.00
Length (ft)	= 40.00	0.00	0.00	0.00
Slope (%)	= 0.50	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)	= 1.37	0.00	0.00	0.00
Crest El. (ft)	= 6333.98	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	---	---	---
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	6331.90	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.01	0	6331.91	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.02	1	6331.92	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.03	1	6331.93	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.04	1	6331.94	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.05	1	6331.95	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.06	2	6331.96	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.07	2	6331.97	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.08	2	6331.98	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.09	3	6331.99	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.10	3	6332.00	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.20	52	6332.10	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.30	100	6332.20	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.40	149	6332.30	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.50	198	6332.40	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.60	247	6332.50	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.70	296	6332.60	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.80	345	6332.70	0.00	---	---	---	0.00	---	---	---	---	---	0.000
0.90	393	6332.80	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.00	442	6332.90	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.10	491	6333.00	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.20	662	6333.10	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.30	833	6333.20	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.40	1,005	6333.30	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.50	1,176	6333.40	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.60	1,347	6333.50	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.70	1,518	6333.60	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.80	1,689	6333.70	0.00	---	---	---	0.00	---	---	---	---	---	0.000
1.90	1,860	6333.80	0.00	---	---	---	0.00	---	---	---	---	---	0.000
2.00	2,031	6333.90	0.00	---	---	---	0.00	---	---	---	---	---	0.000
2.10	2,203	6334.00	0.01 ic	---	---	---	0.01	---	---	---	---	---	0.013
2.20	2,549	6334.10	0.19 ic	---	---	---	0.19	---	---	---	---	---	0.190
2.30	2,896	6334.20	0.30 ic	---	---	---	0.30 ic	---	---	---	---	---	0.296
2.40	3,242	6334.30	0.36 ic	---	---	---	0.36 ic	---	---	---	---	---	0.357
2.50	3,589	6334.40	0.41 ic	---	---	---	0.41 ic	---	---	---	---	---	0.409
2.60	3,935	6334.50	0.46 ic	---	---	---	0.46 ic	---	---	---	---	---	0.455
2.70	4,282	6334.60	0.51 ic	---	---	---	0.50 ic	---	---	---	---	---	0.497

Continues on next page...

EX POND

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
2.80	4,628	6334.70	0.54 ic	---	---	---	0.54 ic	---	---	---	---	---	0.535
2.90	4,975	6334.80	0.57 ic	---	---	---	0.57 ic	---	---	---	---	---	0.571
3.00	5,321	6334.90	0.63 ic	---	---	---	0.61 ic	---	---	---	---	---	0.605
3.10	5,668	6335.00	0.66 ic	---	---	---	0.64 ic	---	---	---	---	---	0.637
3.15	5,933	6335.05	0.66 ic	---	---	---	0.65 ic	---	---	---	---	---	0.652
3.20	6,199	6335.10	0.69 ic	---	---	---	0.67 ic	---	---	---	---	---	0.667
3.25	6,464	6335.15	0.69 ic	---	---	---	0.68 ic	---	---	---	---	---	0.682
3.30	6,730	6335.20	0.72 oc	---	---	---	0.70 ic	---	---	---	---	---	0.696
3.35	6,995	6335.25	0.72 oc	---	---	---	0.71 ic	---	---	---	---	---	0.711
3.40	7,261	6335.30	0.75 oc	---	---	---	0.72 ic	---	---	---	---	---	0.724
3.45	7,526	6335.35	0.75 oc	---	---	---	0.74 ic	---	---	---	---	---	0.738
3.50	7,792	6335.40	0.78 oc	---	---	---	0.75 ic	---	---	---	---	---	0.751
3.55	8,057	6335.45	0.78 oc	---	---	---	0.76 ic	---	---	---	---	---	0.764
3.60	8,323	6335.50	0.78 oc	---	---	---	0.78 ic	---	---	---	---	---	0.778

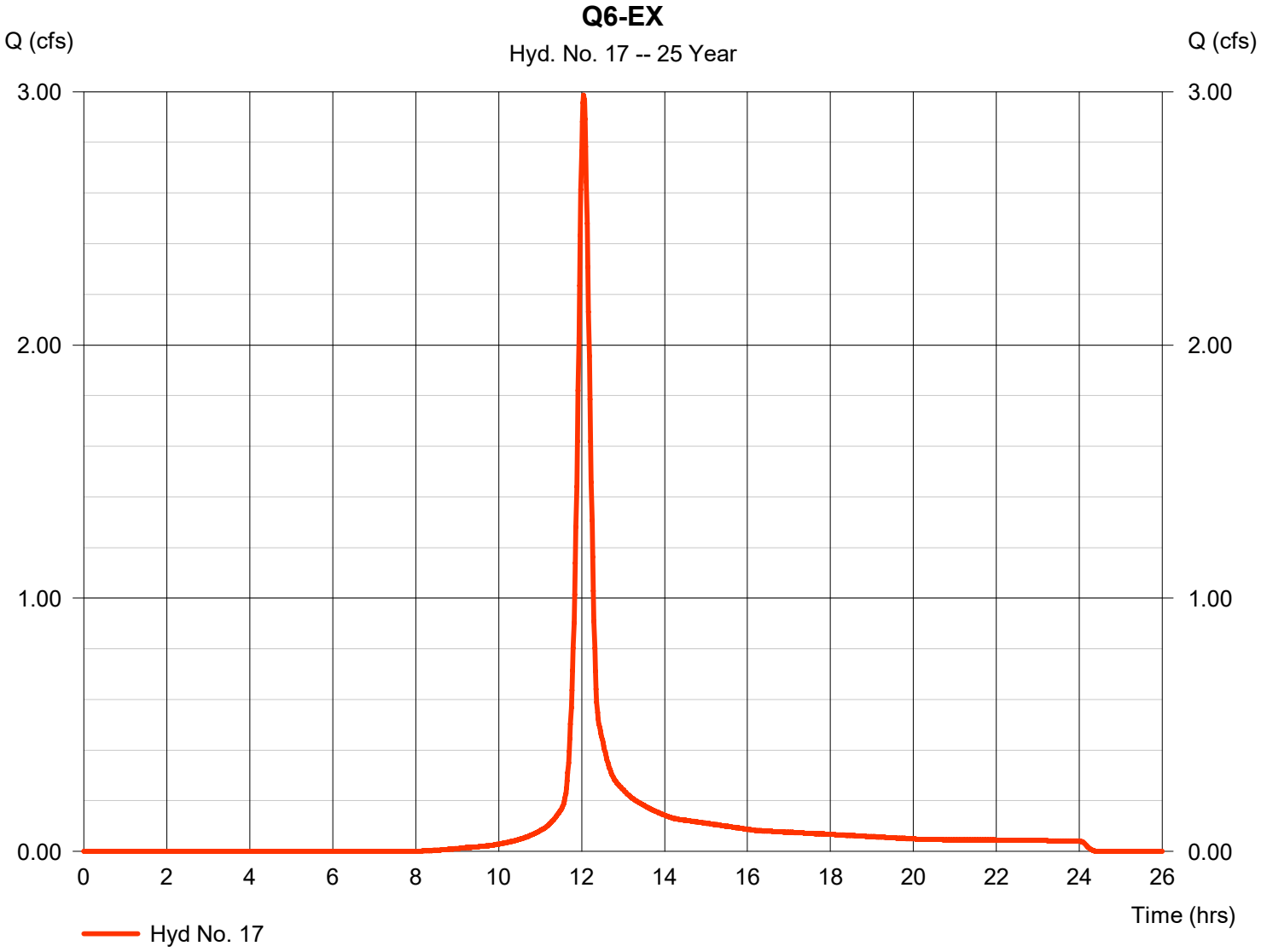
...End

Hydrograph Report

Hyd. No. 17

Q6-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.986 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	8,512 cuft
Drainage area	=	1.650 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.24 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

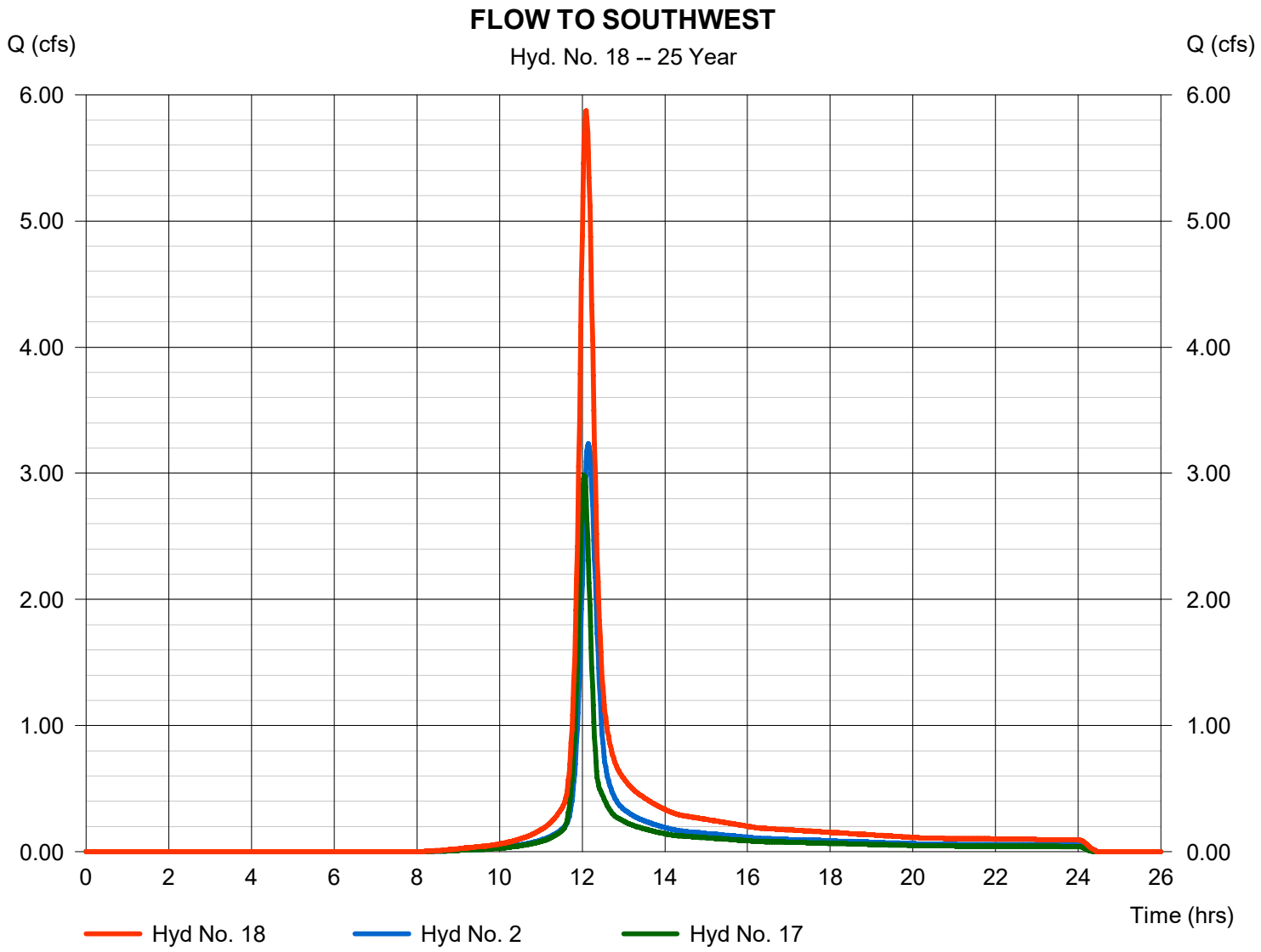


Hydrograph Report

Hyd. No. 18

FLOW TO SOUTHWEST

Hydrograph type	= Combine	Peak discharge	= 5.874 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.10 hrs
Time interval	= 1 min	Hyd. volume	= 19,362 cuft
Inflow hyds.	= 2, 17	Contrib. drain. area	= 1.650 ac

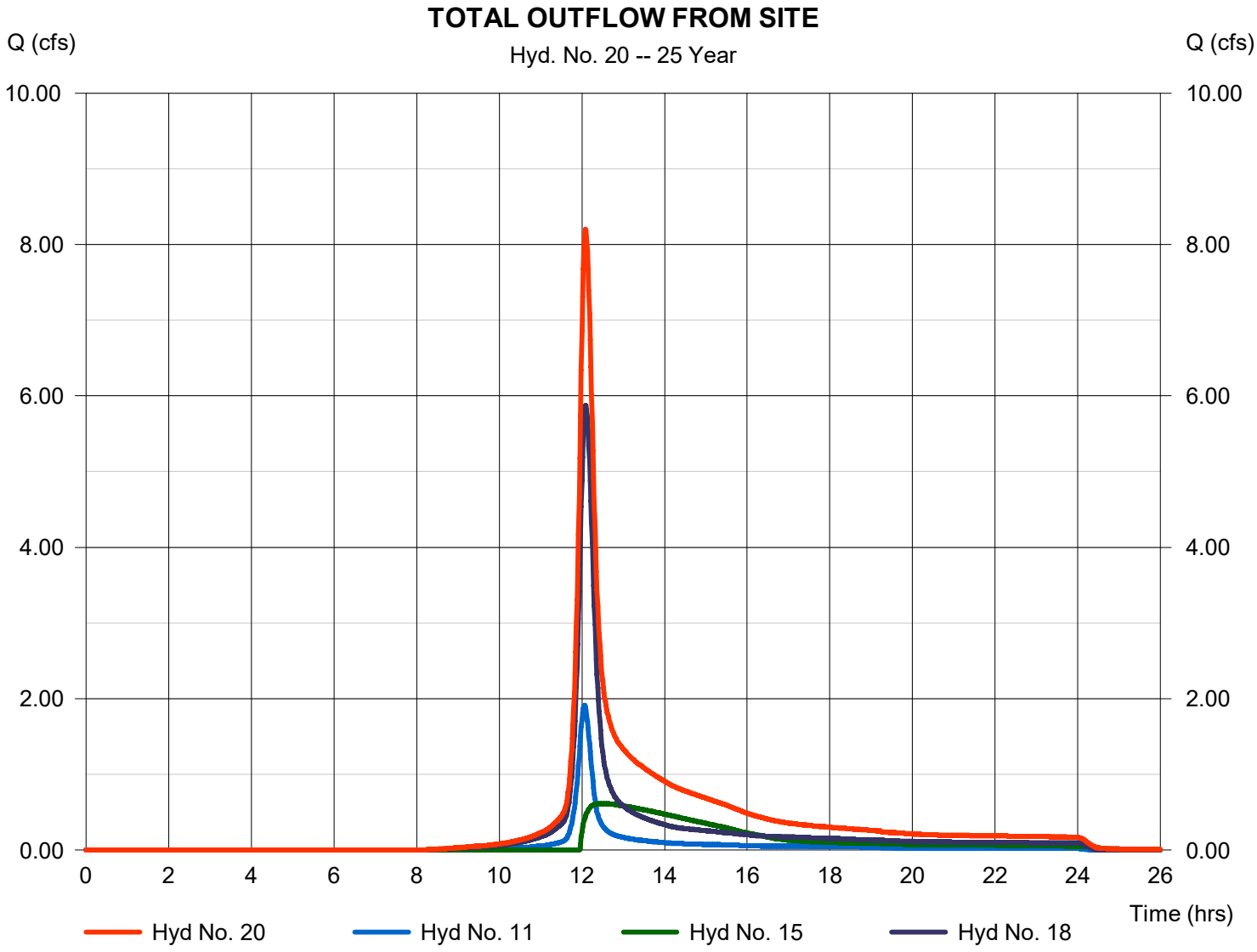


Hydrograph Report

Hyd. No. 20

TOTAL OUTFLOW FROM SITE

Hydrograph type	= Combine	Peak discharge	= 8.202 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 34,370 cuft
Inflow hyds.	= 11, 15, 18	Contrib. drain. area	= 0.000 ac



Hydrograph Summary Report

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

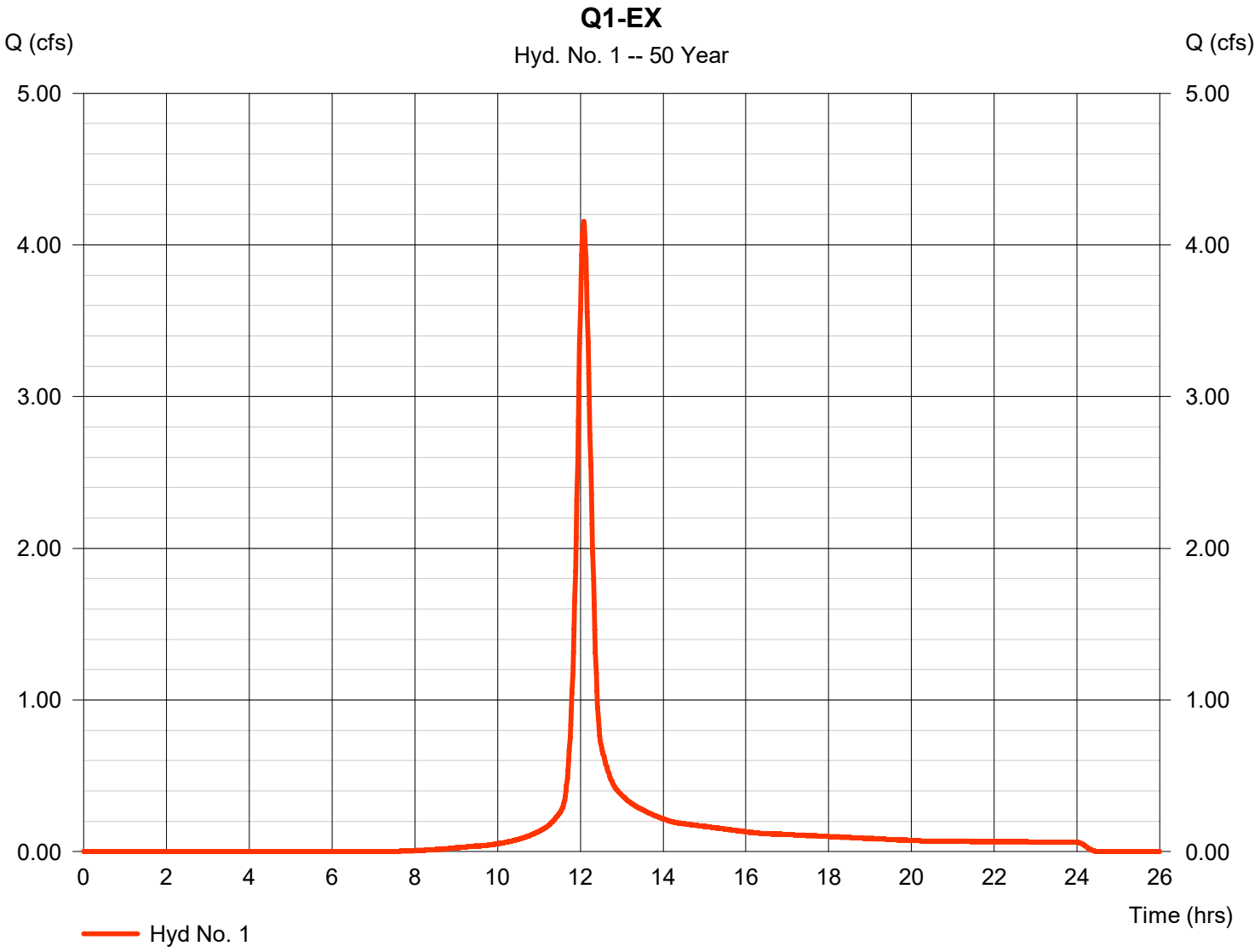
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.154	1	725	12,975	------	------	------	Q1-EX
2	Reach	3.874	1	729	12,973	1	------	------	FLOW TO Q6-EX
4	SCS Runoff	0.843	1	723	2,405	------	------	------	Q2-EX
5	Reach	0.774	1	727	2,400	4	------	------	FLOW TO Q5-EX
7	SCS Runoff	0.543	1	726	1,784	------	------	------	Q3-EX
8	Reach	0.541	1	727	1,648	7	------	------	FLOW TO Q4-EX
10	SCS Runoff	1.794	1	723	5,119	------	------	------	Q4-EX
11	Combine	2.289	1	724	6,767	8, 10	------	------	FLOW TO EAST
13	SCS Runoff	4.218	1	722	11,344	------	------	------	Q5-EX
14	Combine	4.888	1	723	13,745	5, 13	------	------	FLOW TO EX POND
15	Reservoir	0.693	1	751	11,700	14	6335.19	6,667	OUTFLOW POND
17	SCS Runoff	3.567	1	723	10,177	------	------	------	Q6-EX
18	Combine	7.034	1	725	23,149	2, 17	------	------	FLOW TO SOUTHWEST
20	Combine	9.839	1	725	41,616	11, 15, 18,	------	------	TOTAL OUTFLOW FROM SITE

Hydrograph Report

Hyd. No. 1

Q1-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.154 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.08 hrs
Time interval	=	1 min	Hyd. volume	=	12,975 cuft
Drainage area	=	2.130 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.80 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



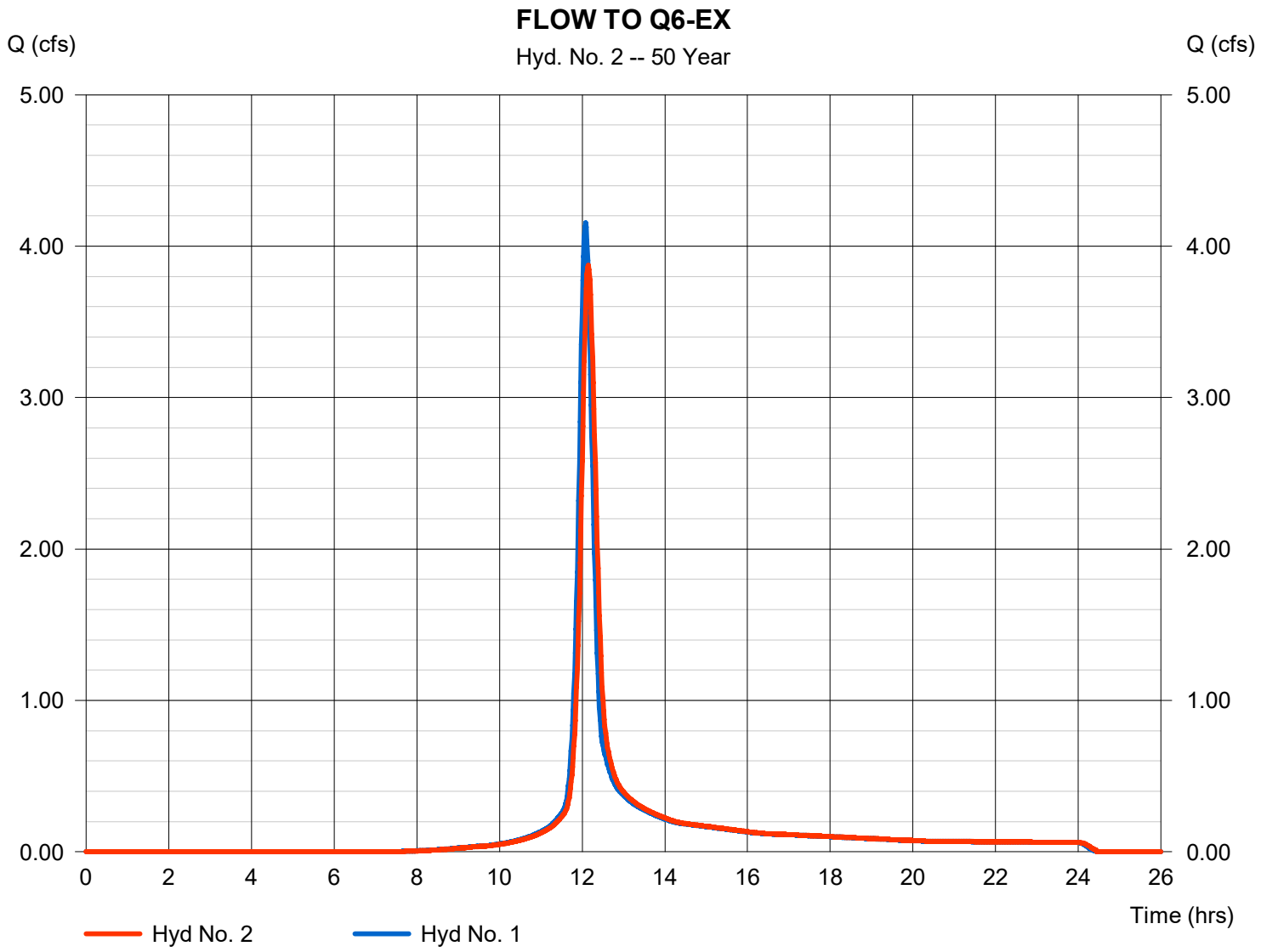
Hydrograph Report

Hyd. No. 2

FLOW TO Q6-EX

Hydrograph type	= Reach	Peak discharge	= 3.874 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 12,973 cuft
Inflow hyd. No.	= 1 - Q1-EX	Section type	= Trapezoidal
Reach length	= 300.0 ft	Channel slope	= 3.7 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 30.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.116	Rating curve m	= 1.071
Ave. velocity	= 1.22 ft/s	Routing coeff.	= 0.2307

Modified Att-Kin routing method used.

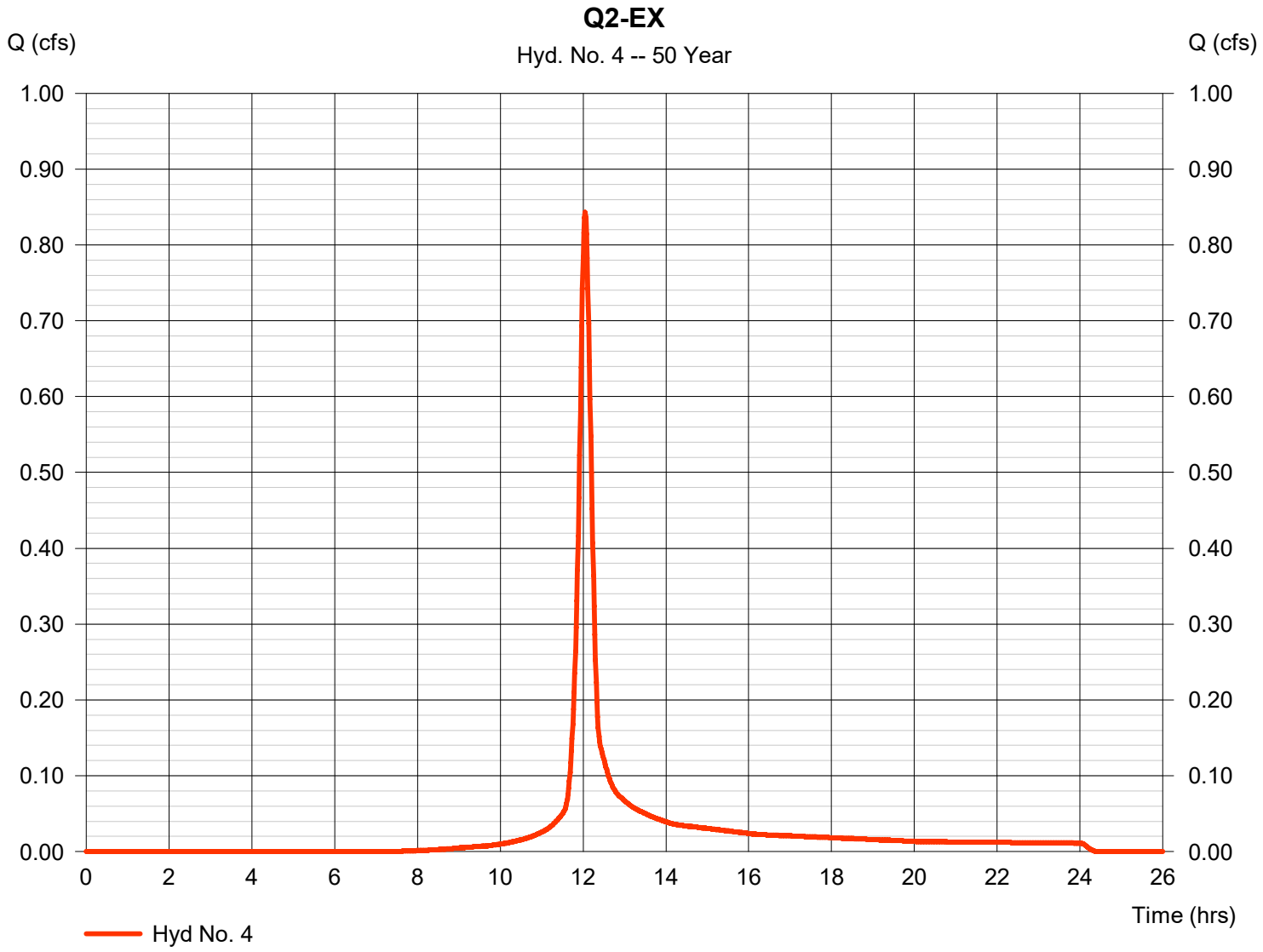


Hydrograph Report

Hyd. No. 4

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.843 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,405 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



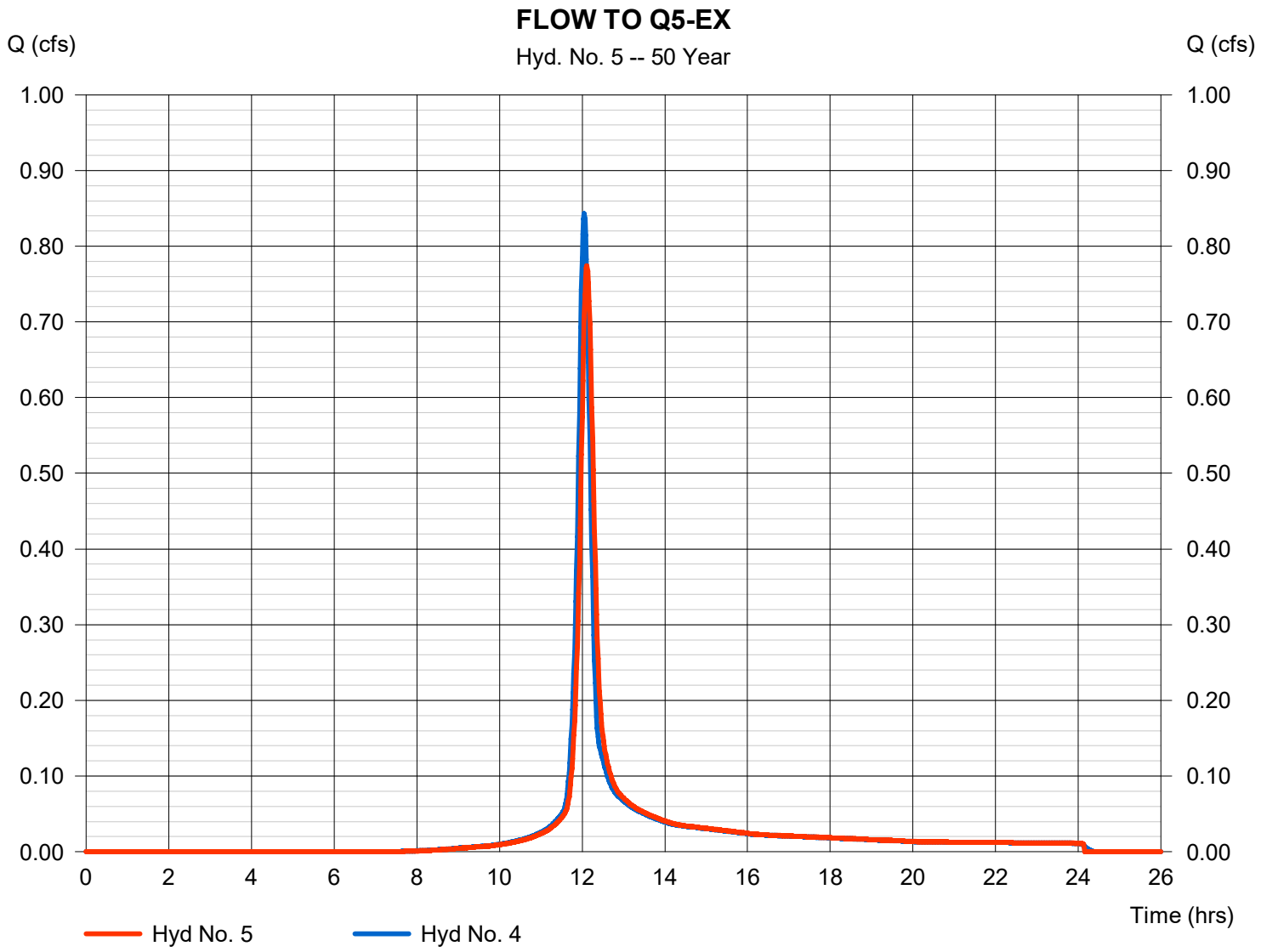
Hydrograph Report

Hyd. No. 5

FLOW TO Q5-EX

Hydrograph type	= Reach	Peak discharge	= 0.774 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 2,400 cuft
Inflow hyd. No.	= 4 - Q2-EX	Section type	= Trapezoidal
Reach length	= 328.0 ft	Channel slope	= 4.2 %
Manning's n	= 0.035	Bottom width	= 17.0 ft
Side slope	= 16.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.317	Rating curve m	= 1.117
Ave. velocity	= 1.26 ft/s	Routing coeff.	= 0.2275

Modified Att-Kin routing method used.

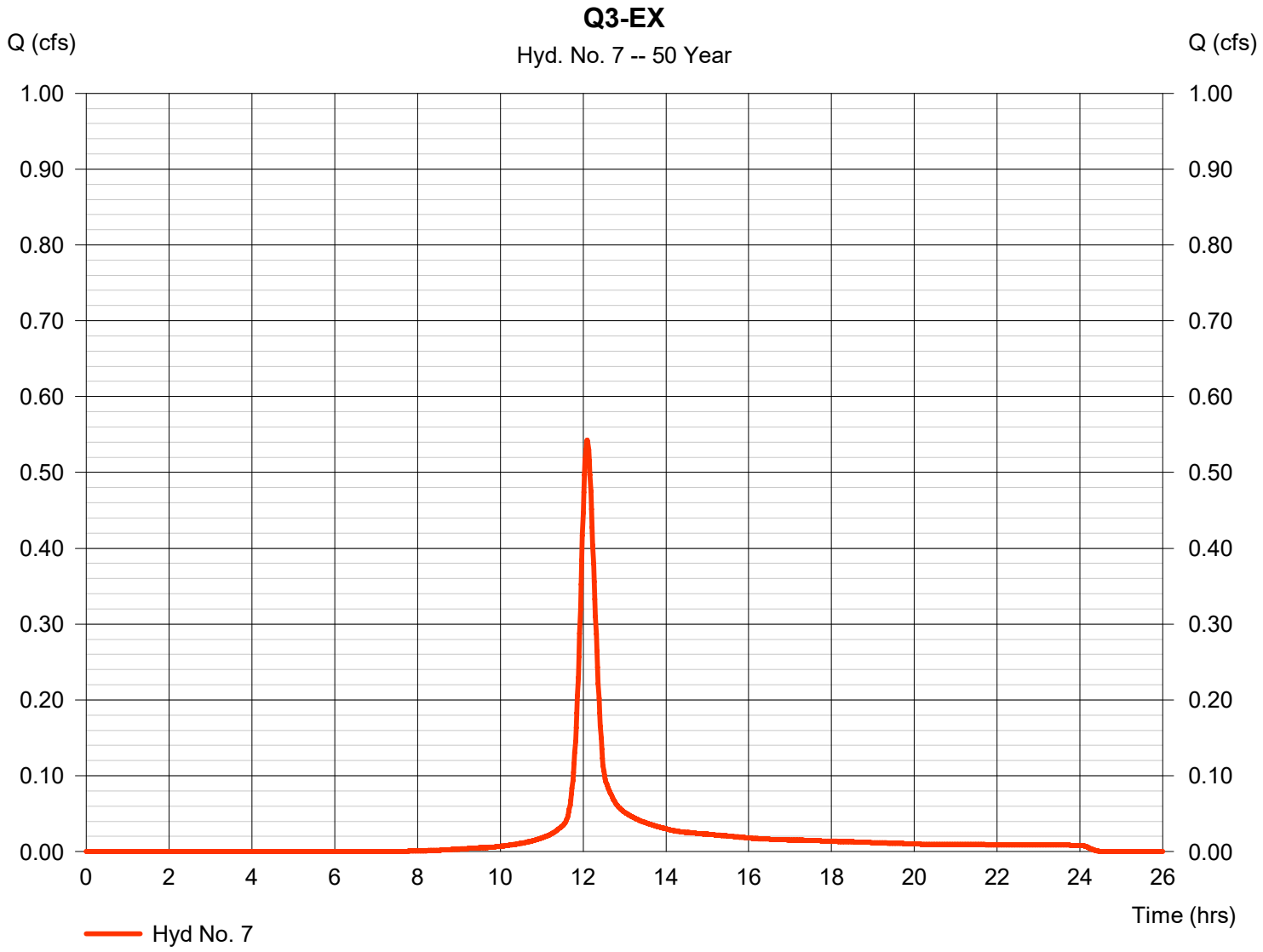


Hydrograph Report

Hyd. No. 7

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.543 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,784 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.42 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



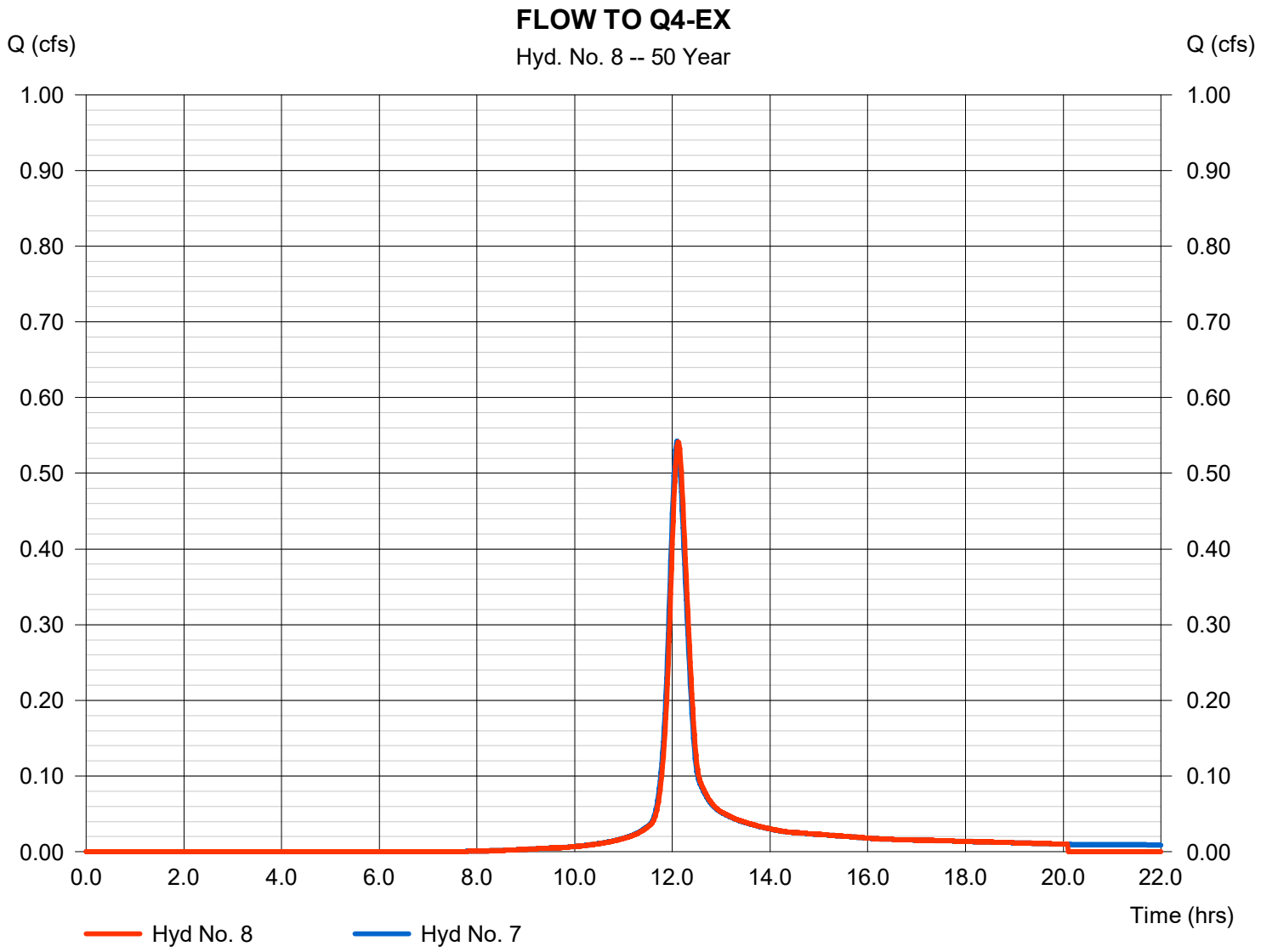
Hydrograph Report

Hyd. No. 8

FLOW TO Q4-EX

Hydrograph type	=	Reach	Peak discharge	=	0.541 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	1,648 cuft
Inflow hyd. No.	=	7 - Q3-EX	Section type	=	Trapezoidal
Reach length	=	152.0 ft	Channel slope	=	4.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	2.954	Rating curve m	=	0.966
Ave. velocity	=	3.14 ft/s	Routing coeff.	=	0.7483

Modified Att-Kin routing method used.

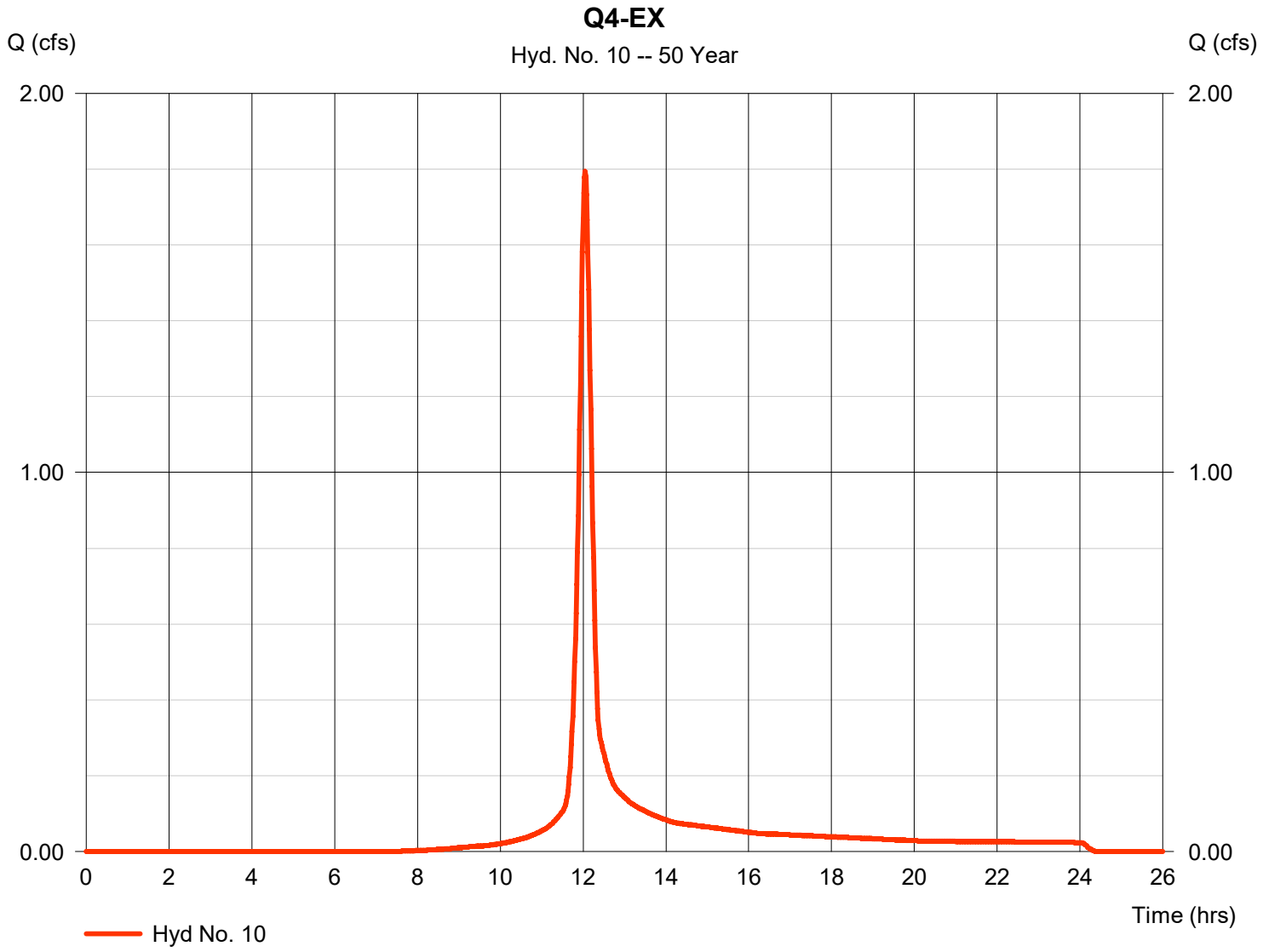


Hydrograph Report

Hyd. No. 10

Q4-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.794 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	5,119 cuft
Drainage area	=	0.830 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.18 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

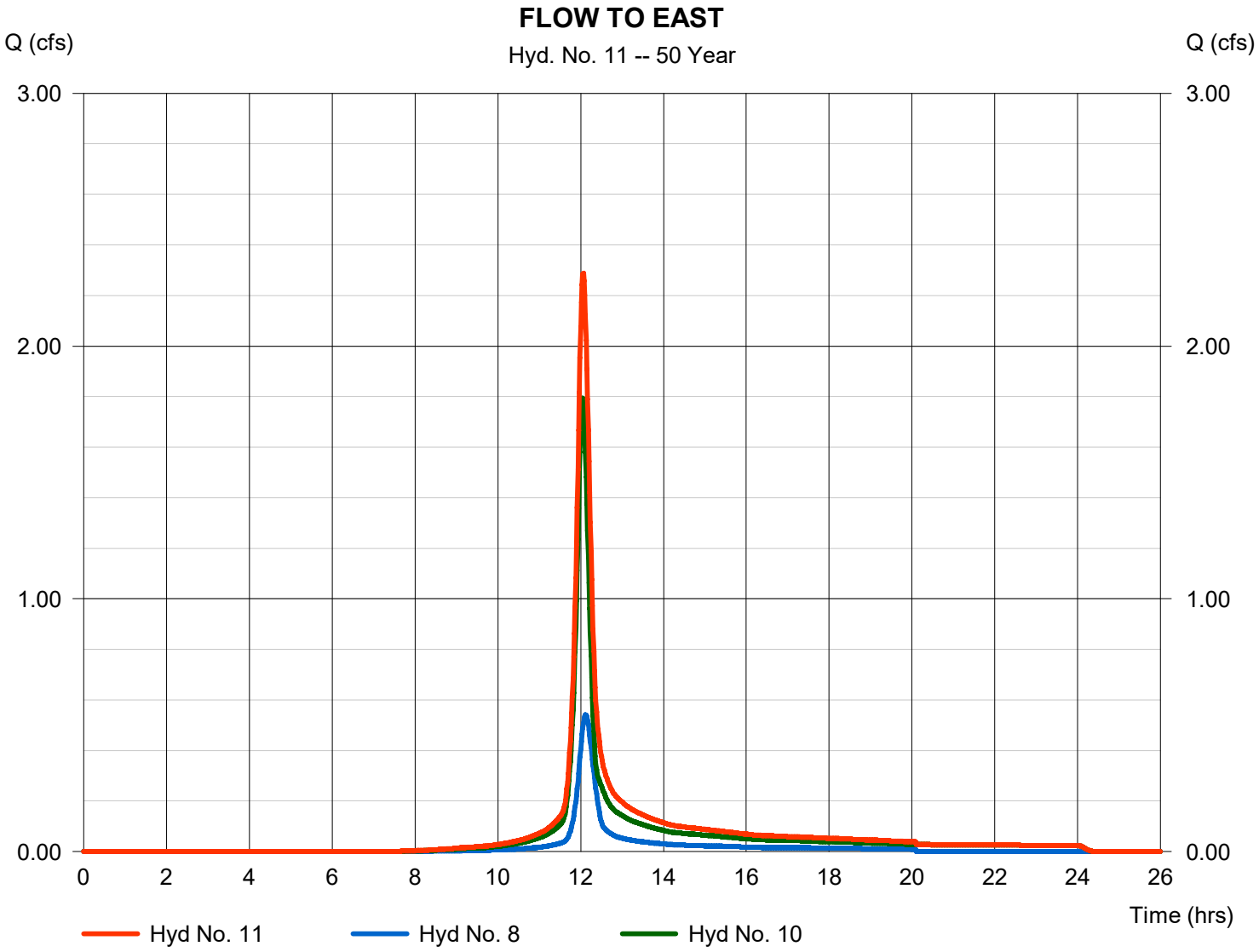


Hydrograph Report

Hyd. No. 11

FLOW TO EAST

Hydrograph type	= Combine	Peak discharge	= 2.289 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 6,767 cuft
Inflow hyds.	= 8, 10	Contrib. drain. area	= 0.830 ac

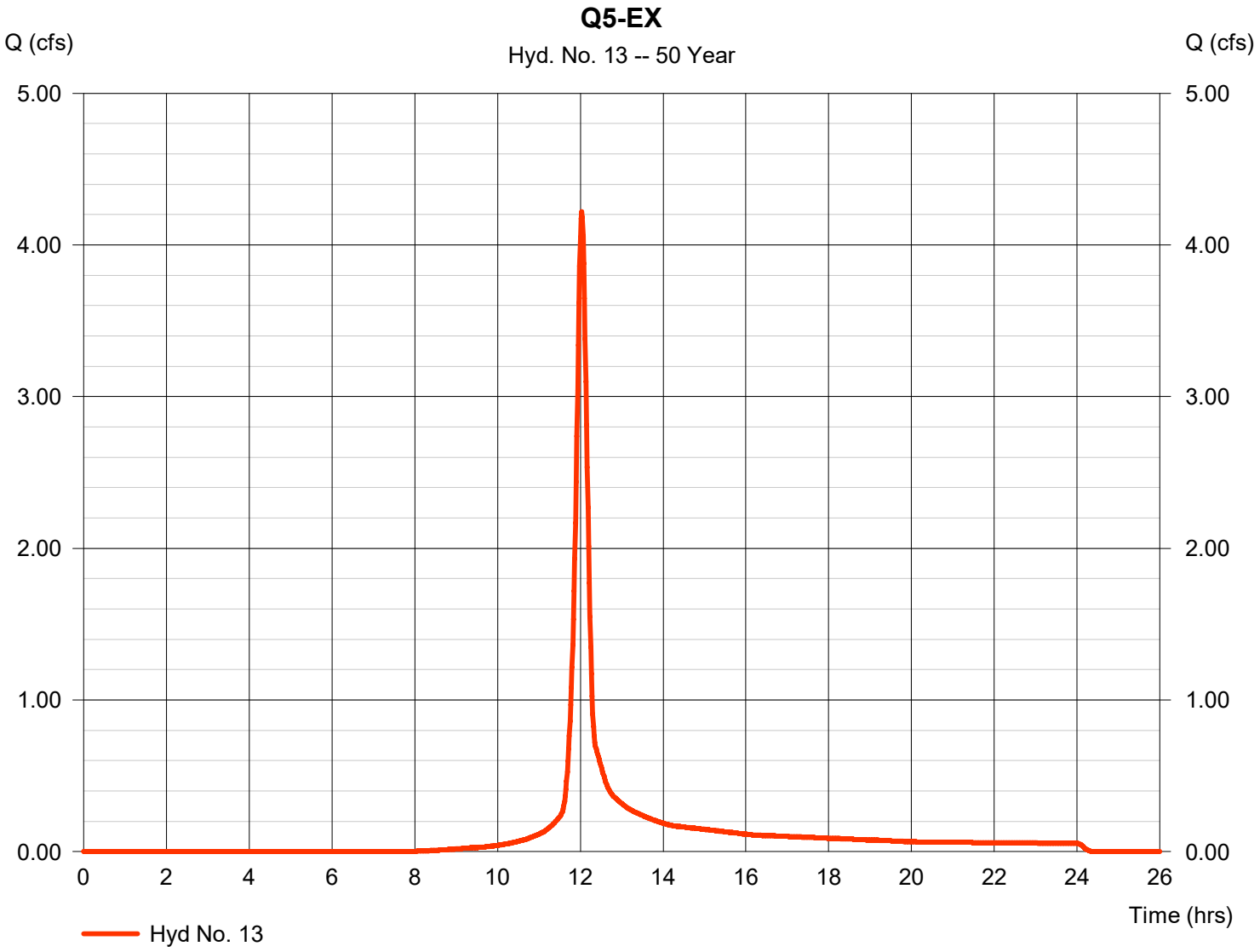


Hydrograph Report

Hyd. No. 13

Q5-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.218 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	11,344 cuft
Drainage area	=	1.950 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.88 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

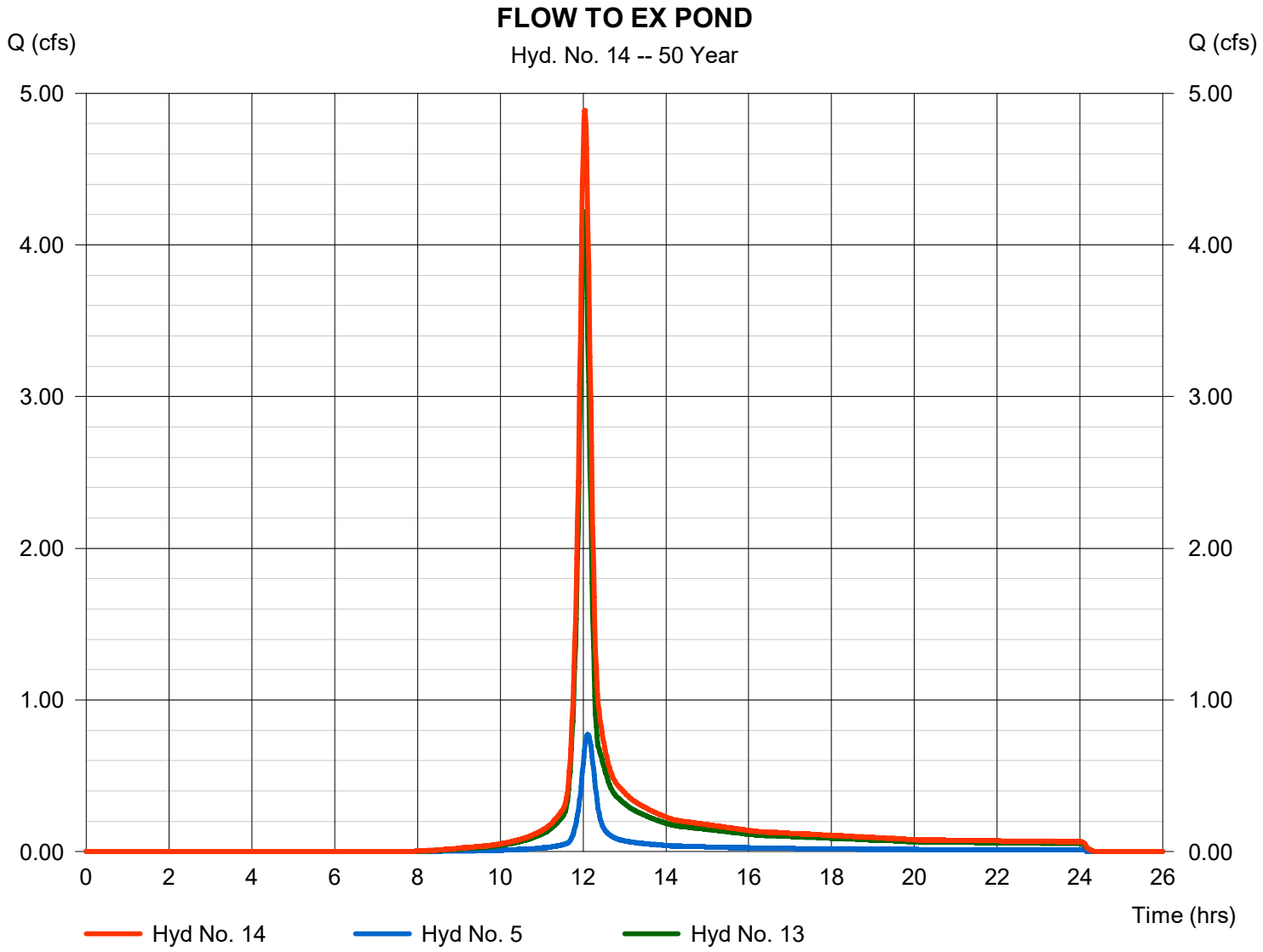


Hydrograph Report

Hyd. No. 14

FLOW TO EX POND

Hydrograph type	= Combine	Peak discharge	= 4.888 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 13,745 cuft
Inflow hyds.	= 5, 13	Contrib. drain. area	= 1.950 ac



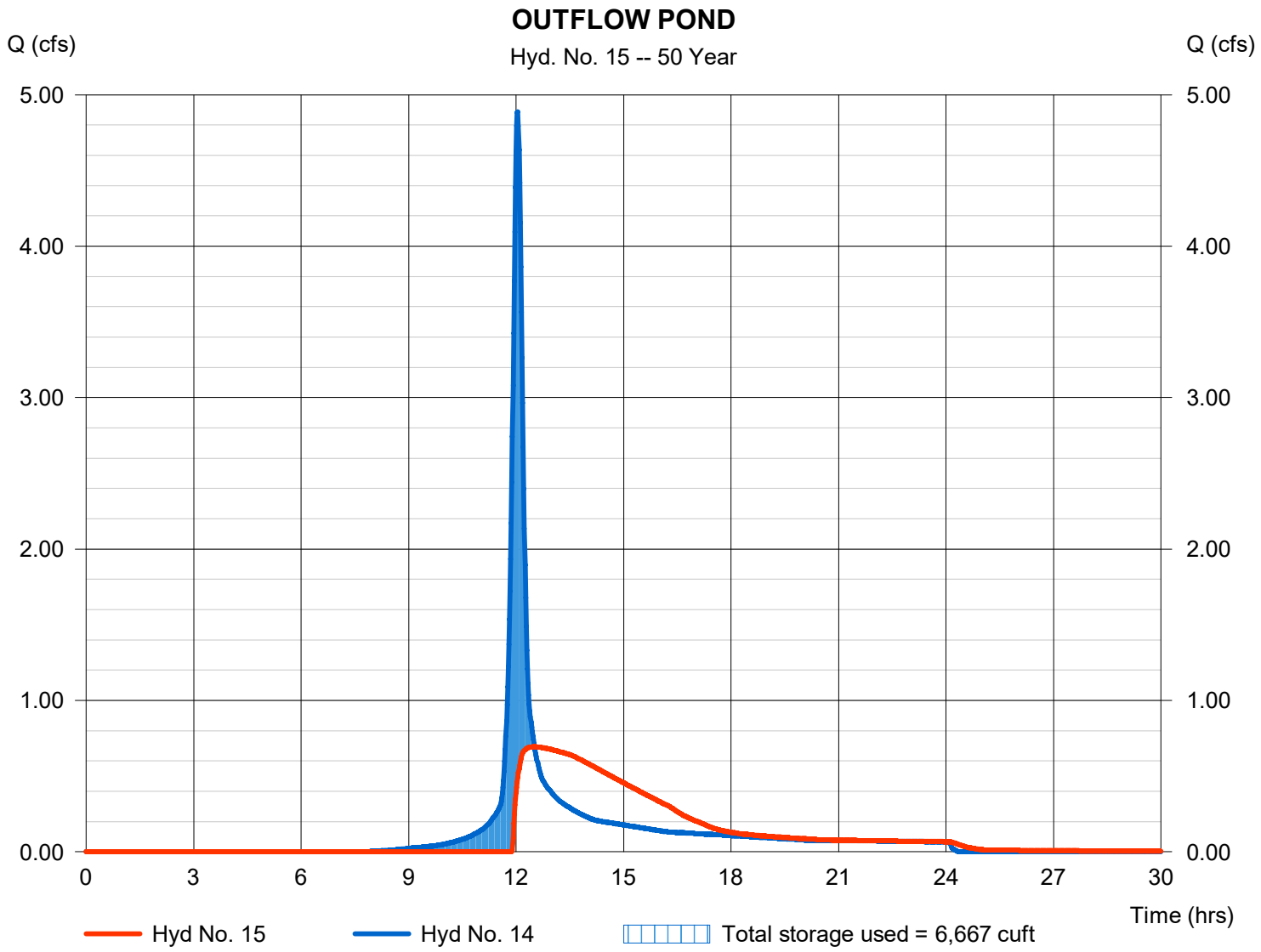
Hydrograph Report

Hyd. No. 15

OUTFLOW POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.693 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.52 hrs
Time interval	=	1 min	Hyd. volume	=	11,700 cuft
Inflow hyd. No.	=	14 - FLOW TO EX POND	Max. Elevation	=	6335.19 ft
Reservoir name	=	EX POND	Max. Storage	=	6,667 cuft

Storage Indication method used.

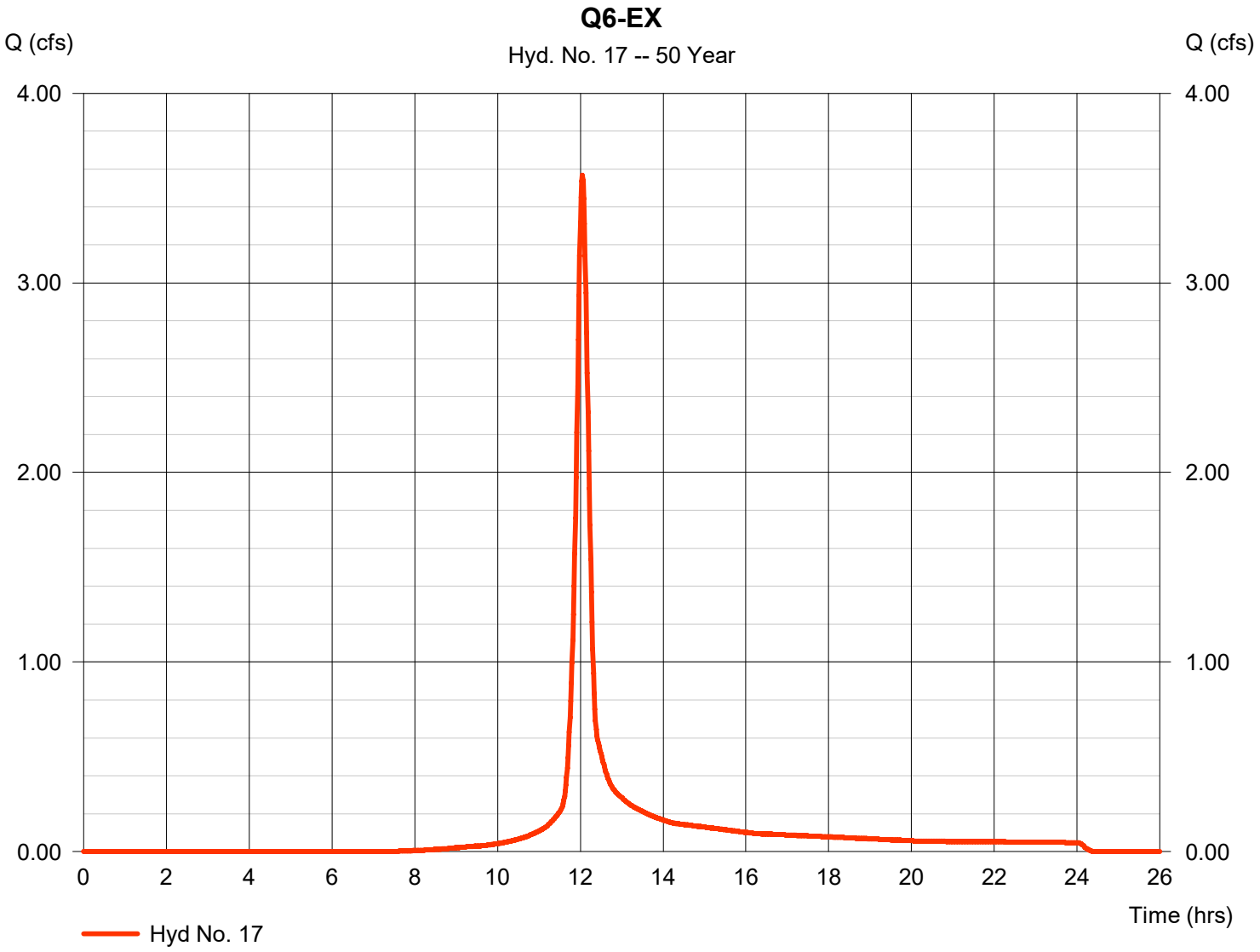


Hydrograph Report

Hyd. No. 17

Q6-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.567 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	10,177 cuft
Drainage area	=	1.650 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.24 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

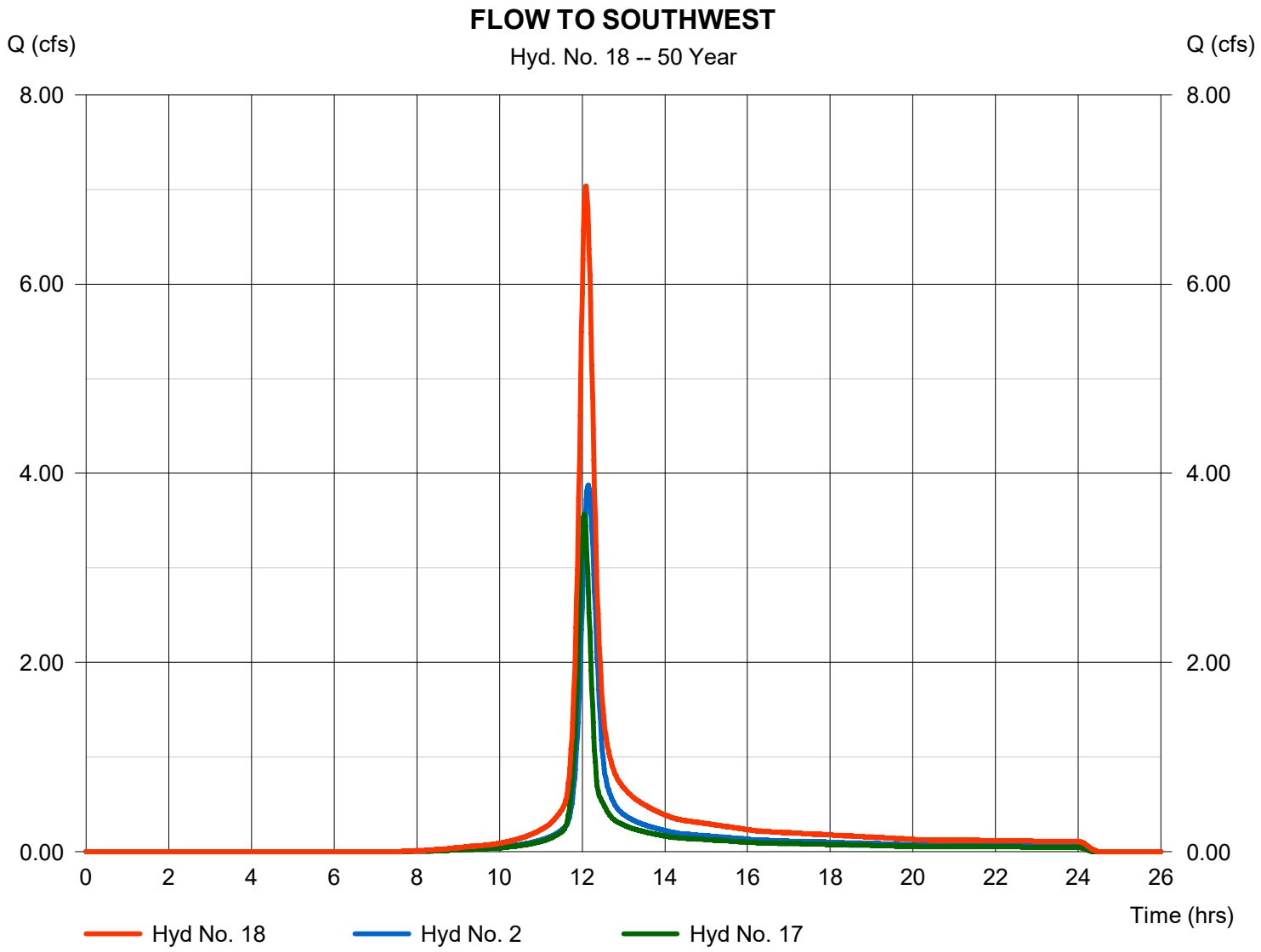


Hydrograph Report

Hyd. No. 18

FLOW TO SOUTHWEST

Hydrograph type	= Combine	Peak discharge	= 7.034 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 23,149 cuft
Inflow hyds.	= 2, 17	Contrib. drain. area	= 1.650 ac

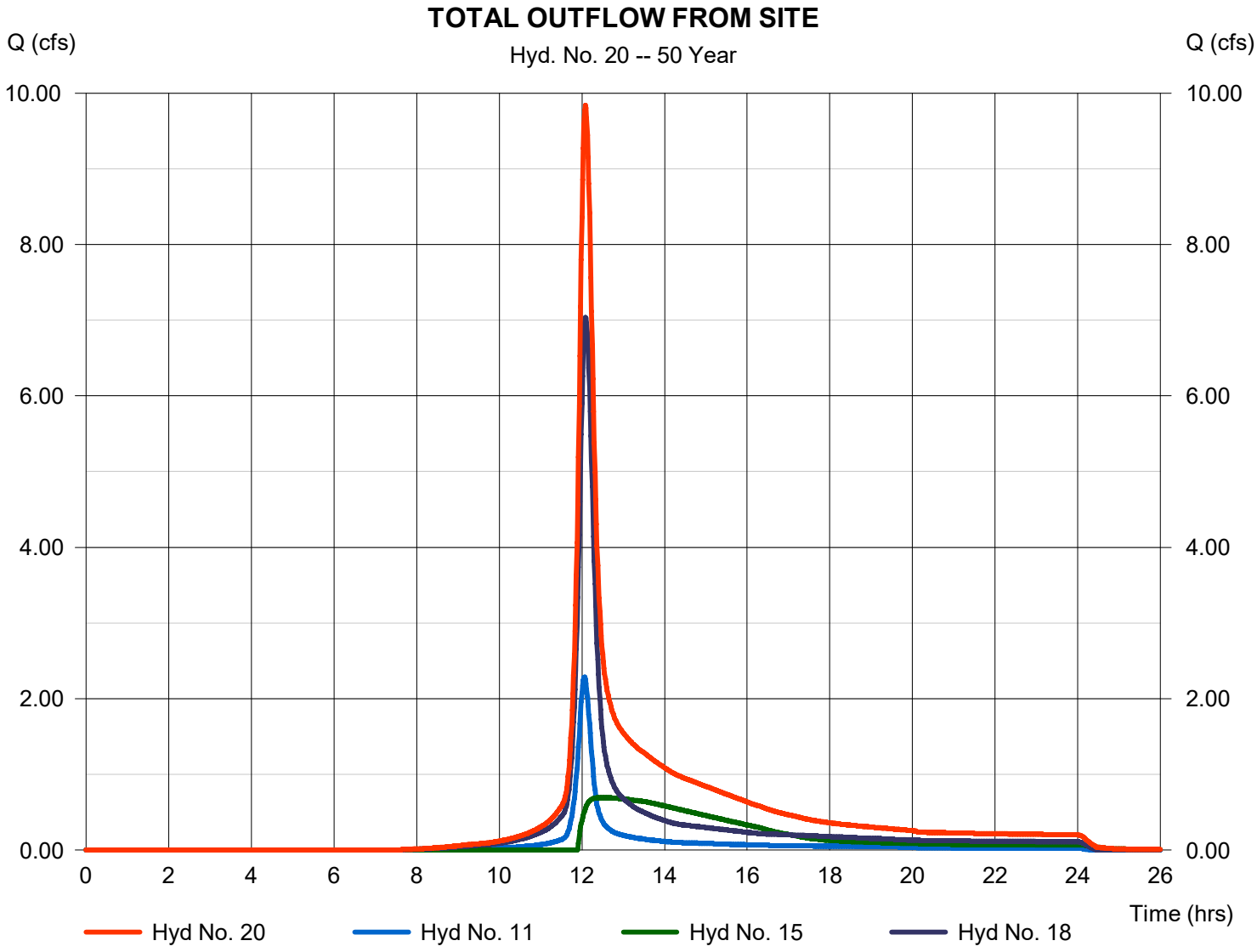


Hydrograph Report

Hyd. No. 20

TOTAL OUTFLOW FROM SITE

Hydrograph type	= Combine	Peak discharge	= 9.839 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 41,616 cuft
Inflow hyds.	= 11, 15, 18	Contrib. drain. area	= 0.000 ac



Hydrograph Summary Report

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

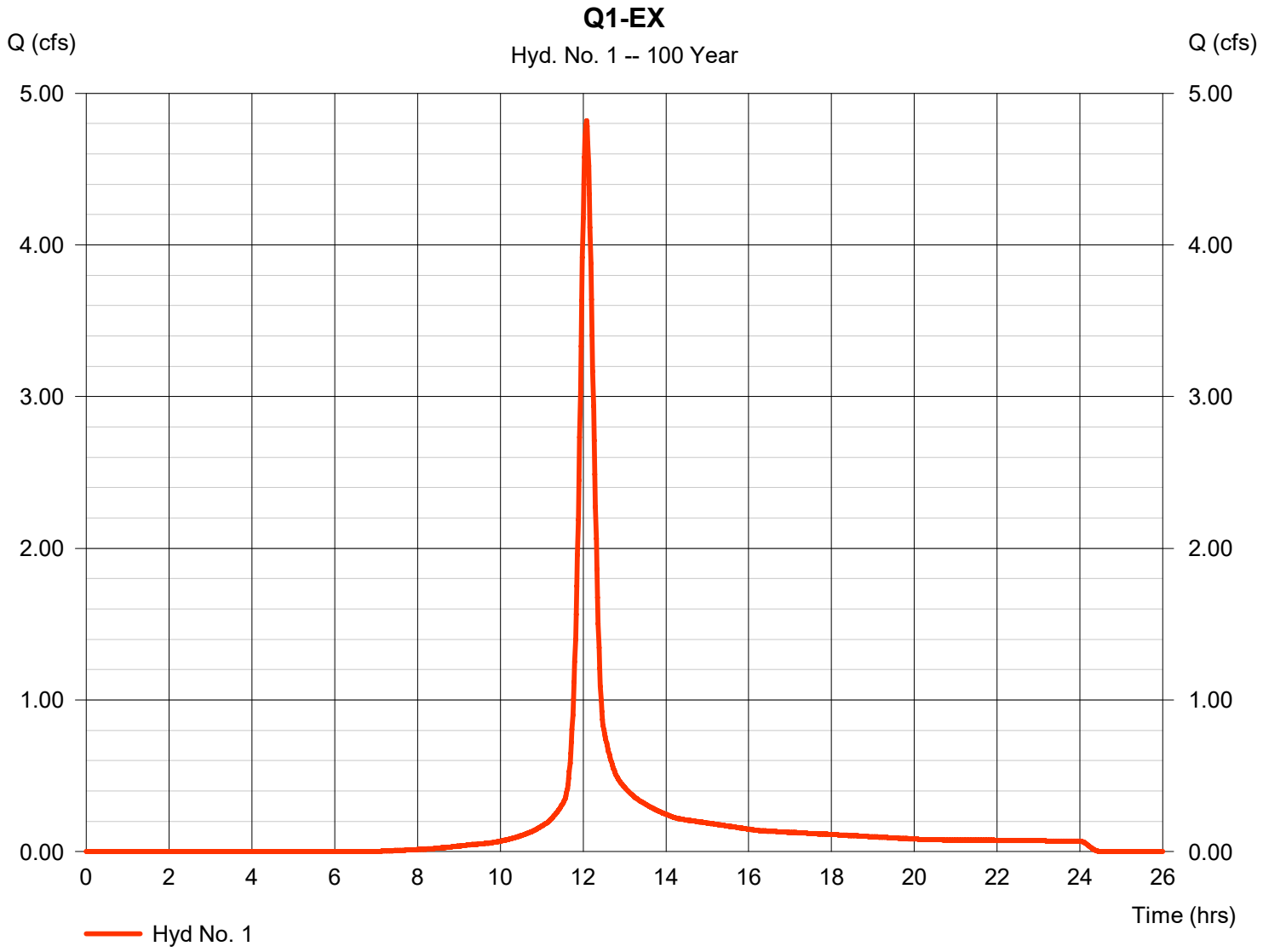
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.821	1	725	15,080	------	------	------	Q1-EX
2	Reach	4.502	1	729	15,077	1	------	------	FLOW TO Q6-EX
4	SCS Runoff	0.978	1	723	2,796	------	------	------	Q2-EX
5	Reach	0.900	1	727	2,791	4	------	------	FLOW TO Q5-EX
7	SCS Runoff	0.630	1	726	2,073	------	------	------	Q3-EX
8	Reach	0.628	1	727	2,015	7	------	------	FLOW TO Q4-EX
10	SCS Runoff	2.081	1	723	5,950	------	------	------	Q4-EX
11	Combine	2.655	1	724	7,964	8, 10	------	------	FLOW TO EAST
13	SCS Runoff	4.913	1	722	13,236	------	------	------	Q5-EX
14	Combine	5.694	1	722	16,027	5, 13	------	------	FLOW TO EX POND
15	Reservoir	0.759	1	752	13,982	14	6335.43	7,948	OUTFLOW POND
17	SCS Runoff	4.136	1	723	11,827	------	------	------	Q6-EX
18	Combine	8.179	1	725	26,904	2, 17	------	------	FLOW TO SOUTHWEST
20	Combine	11.43	1	725	48,851	11, 15, 18,	------	------	TOTAL OUTFLOW FROM SITE

Hydrograph Report

Hyd. No. 1

Q1-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 4.821 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,080 cuft
Drainage area	= 2.130 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.80 min
Total precip.	= 3.24 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



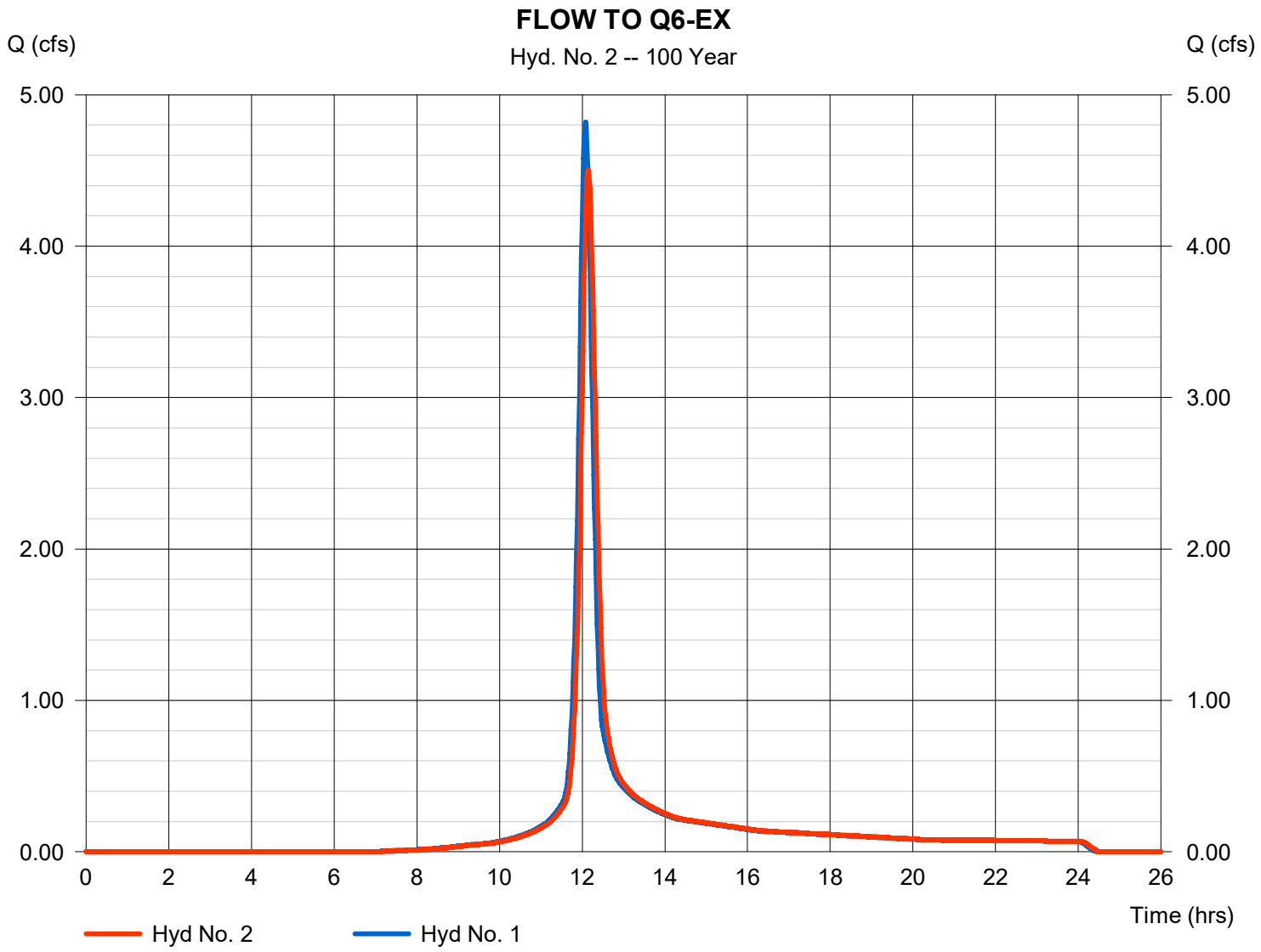
Hydrograph Report

Hyd. No. 2

FLOW TO Q6-EX

Hydrograph type	=	Reach	Peak discharge	=	4.502 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.15 hrs
Time interval	=	1 min	Hyd. volume	=	15,077 cuft
Inflow hyd. No.	=	1 - Q1-EX	Section type	=	Trapezoidal
Reach length	=	300.0 ft	Channel slope	=	3.7 %
Manning's n	=	0.035	Bottom width	=	20.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	1.116	Rating curve m	=	1.071
Ave. velocity	=	1.23 ft/s	Routing coeff.	=	0.2327

Modified Att-Kin routing method used.

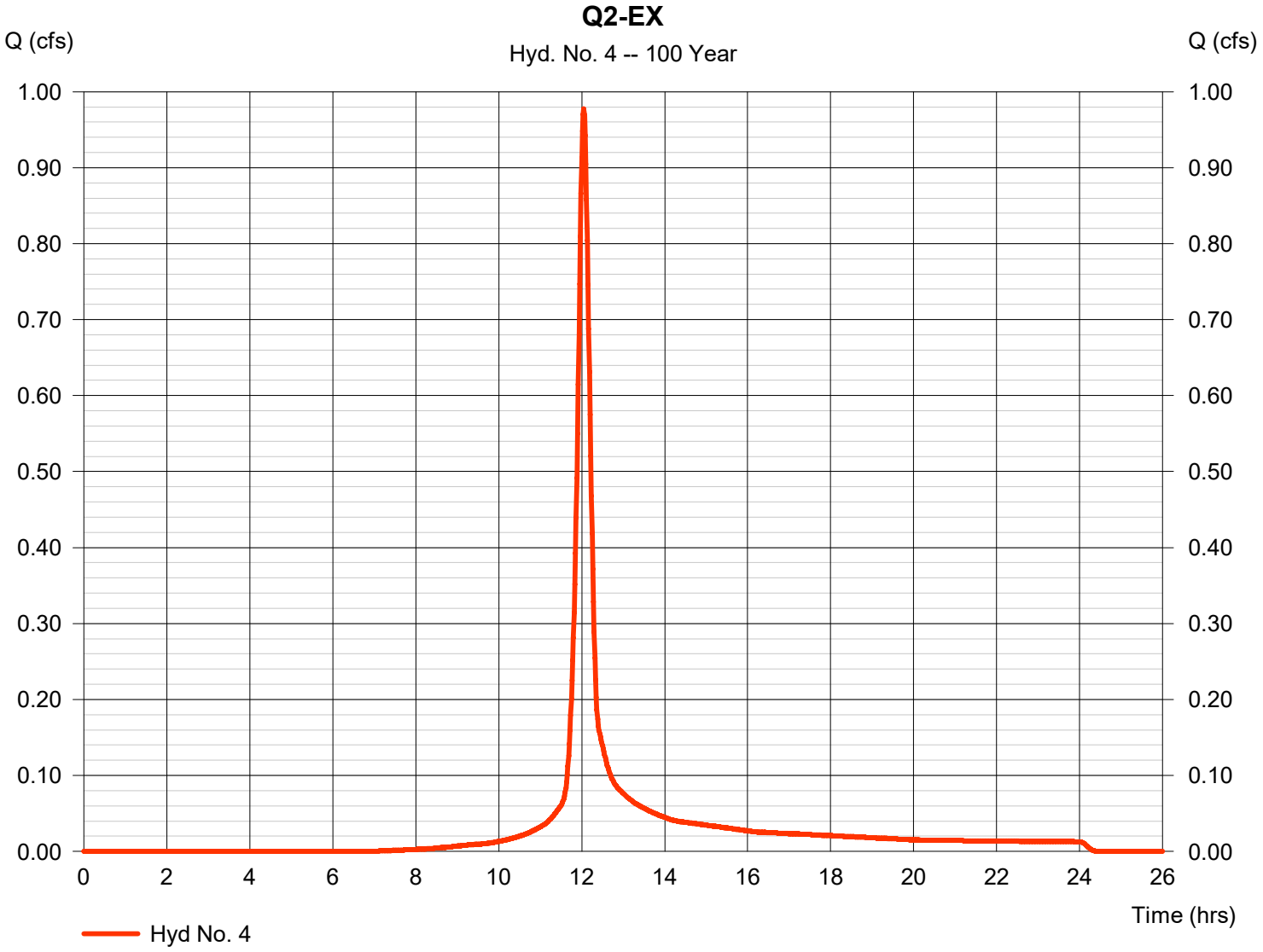


Hydrograph Report

Hyd. No. 4

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.978 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,796 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



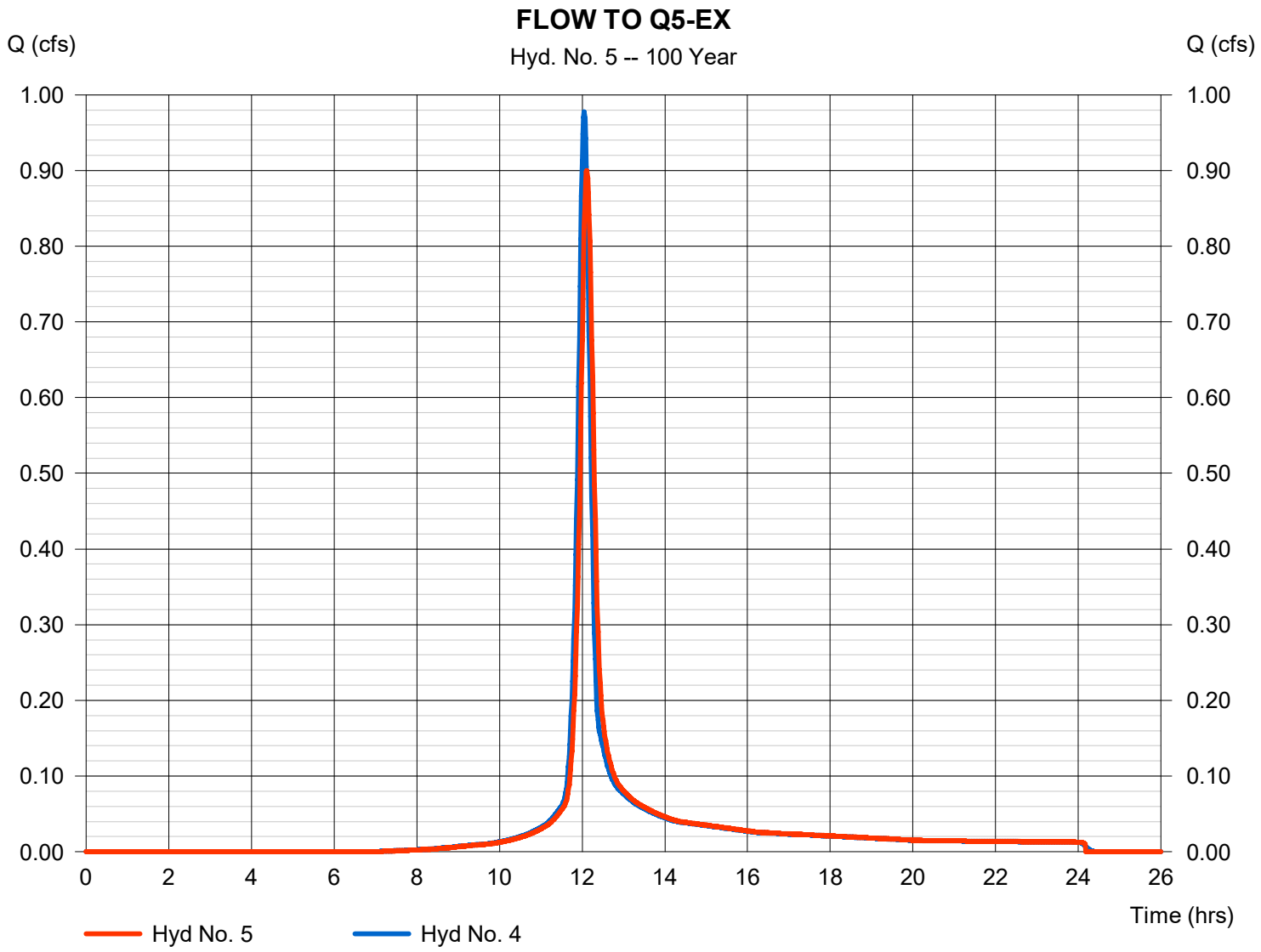
Hydrograph Report

Hyd. No. 5

FLOW TO Q5-EX

Hydrograph type	= Reach	Peak discharge	= 0.900 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 2,791 cuft
Inflow hyd. No.	= 4 - Q2-EX	Section type	= Trapezoidal
Reach length	= 328.0 ft	Channel slope	= 4.2 %
Manning's n	= 0.035	Bottom width	= 17.0 ft
Side slope	= 16.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.317	Rating curve m	= 1.117
Ave. velocity	= 1.28 ft/s	Routing coeff.	= 0.2306

Modified Att-Kin routing method used.

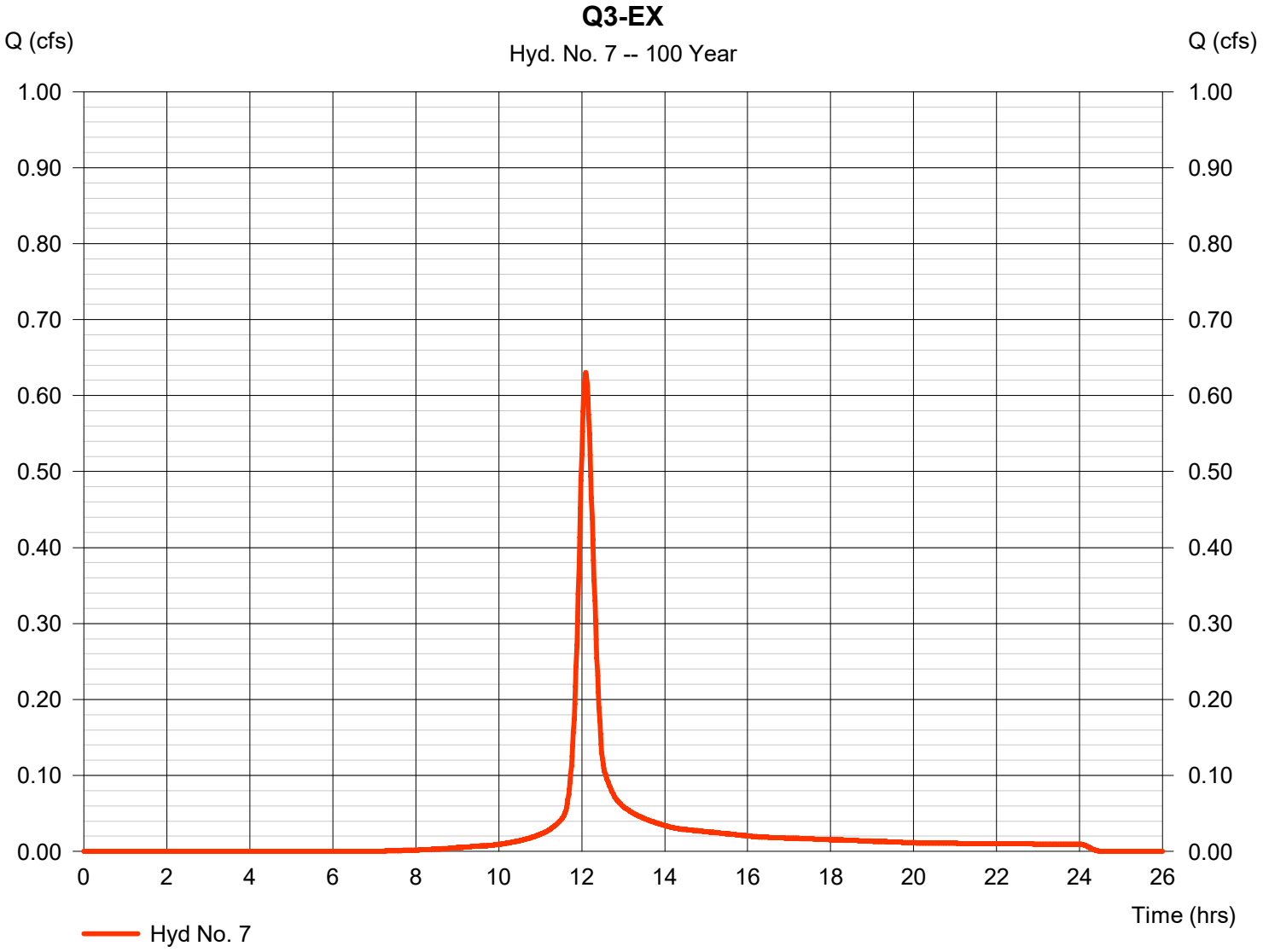


Hydrograph Report

Hyd. No. 7

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.630 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	2,073 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.42 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



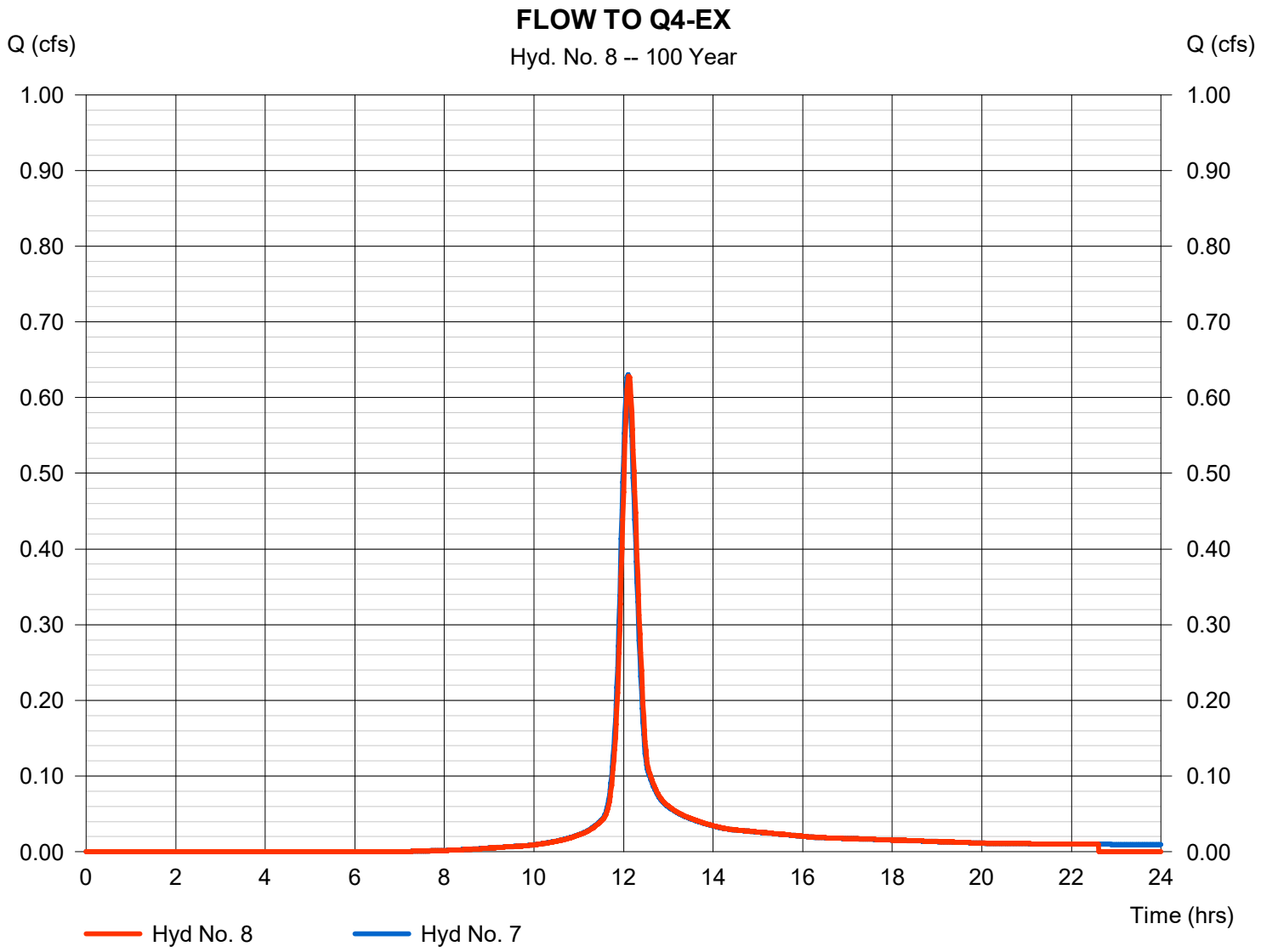
Hydrograph Report

Hyd. No. 8

FLOW TO Q4-EX

Hydrograph type	=	Reach	Peak discharge	=	0.628 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	2,015 cuft
Inflow hyd. No.	=	7 - Q3-EX	Section type	=	Trapezoidal
Reach length	=	152.0 ft	Channel slope	=	4.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	30.0:1	Max. depth	=	1.0 ft
Rating curve x	=	2.954	Rating curve m	=	0.966
Ave. velocity	=	3.12 ft/s	Routing coeff.	=	0.7458

Modified Att-Kin routing method used.

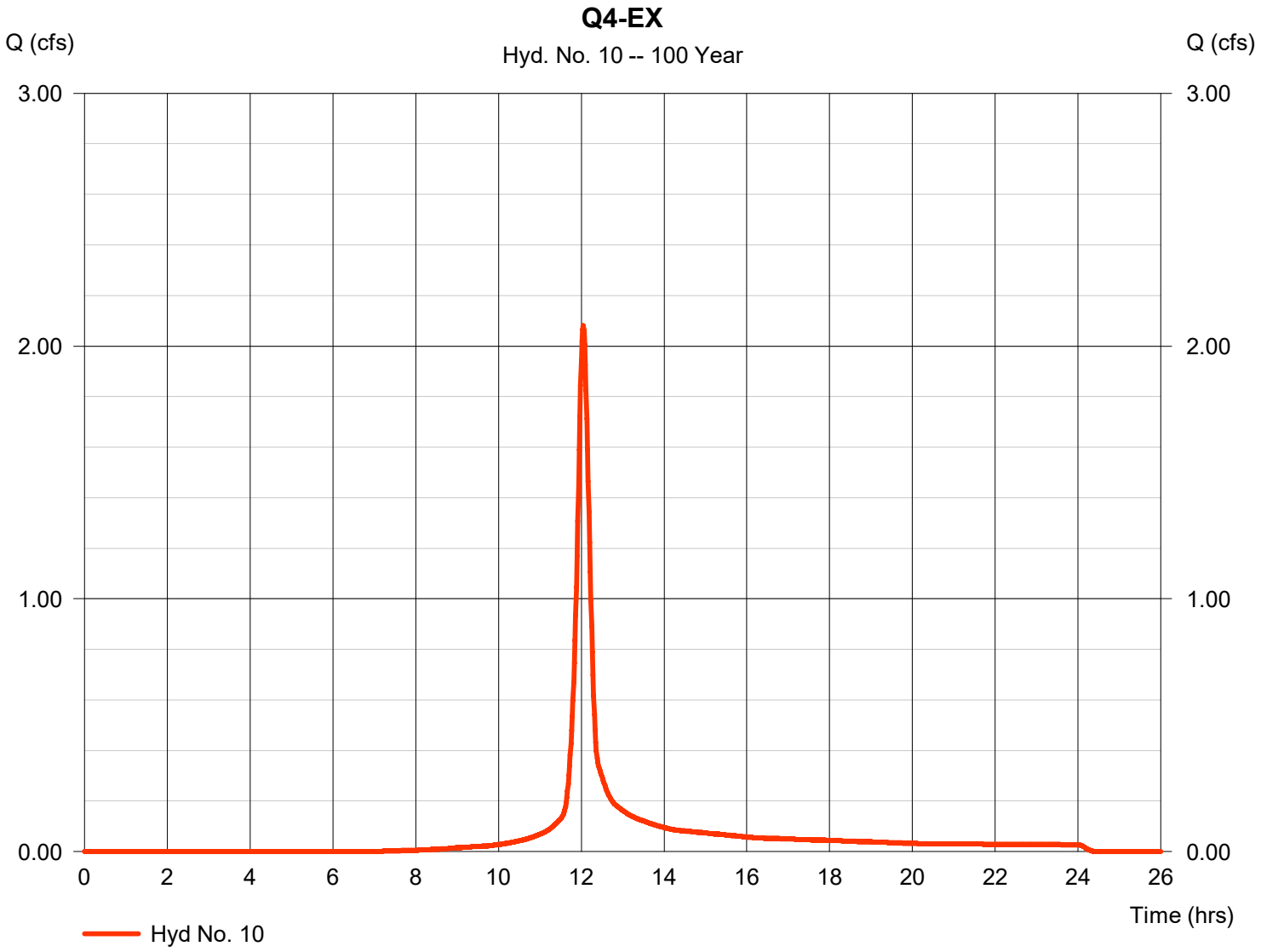


Hydrograph Report

Hyd. No. 10

Q4-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.081 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	5,950 cuft
Drainage area	=	0.830 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.18 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

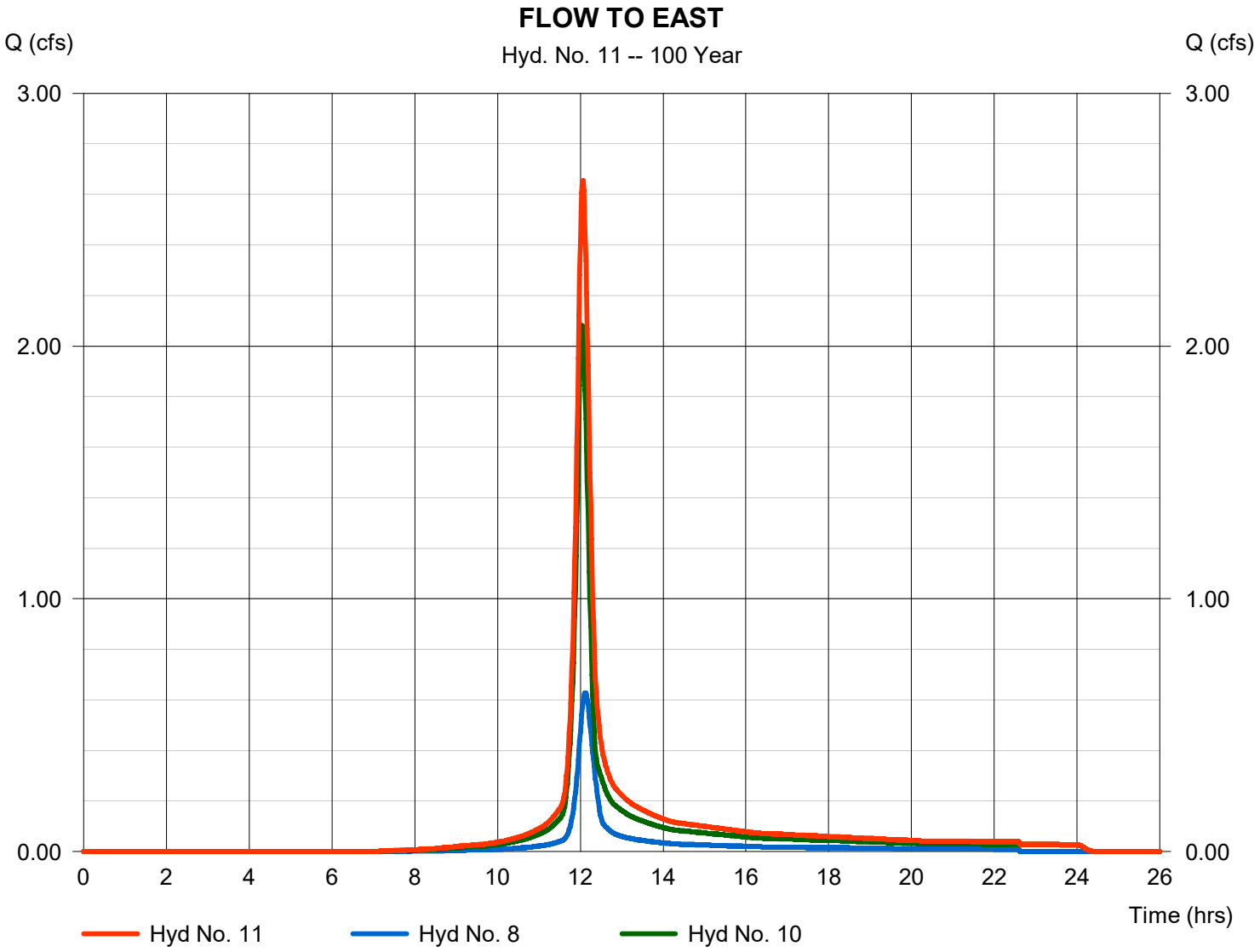


Hydrograph Report

Hyd. No. 11

FLOW TO EAST

Hydrograph type	= Combine	Peak discharge	= 2.655 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.07 hrs
Time interval	= 1 min	Hyd. volume	= 7,964 cuft
Inflow hyds.	= 8, 10	Contrib. drain. area	= 0.830 ac

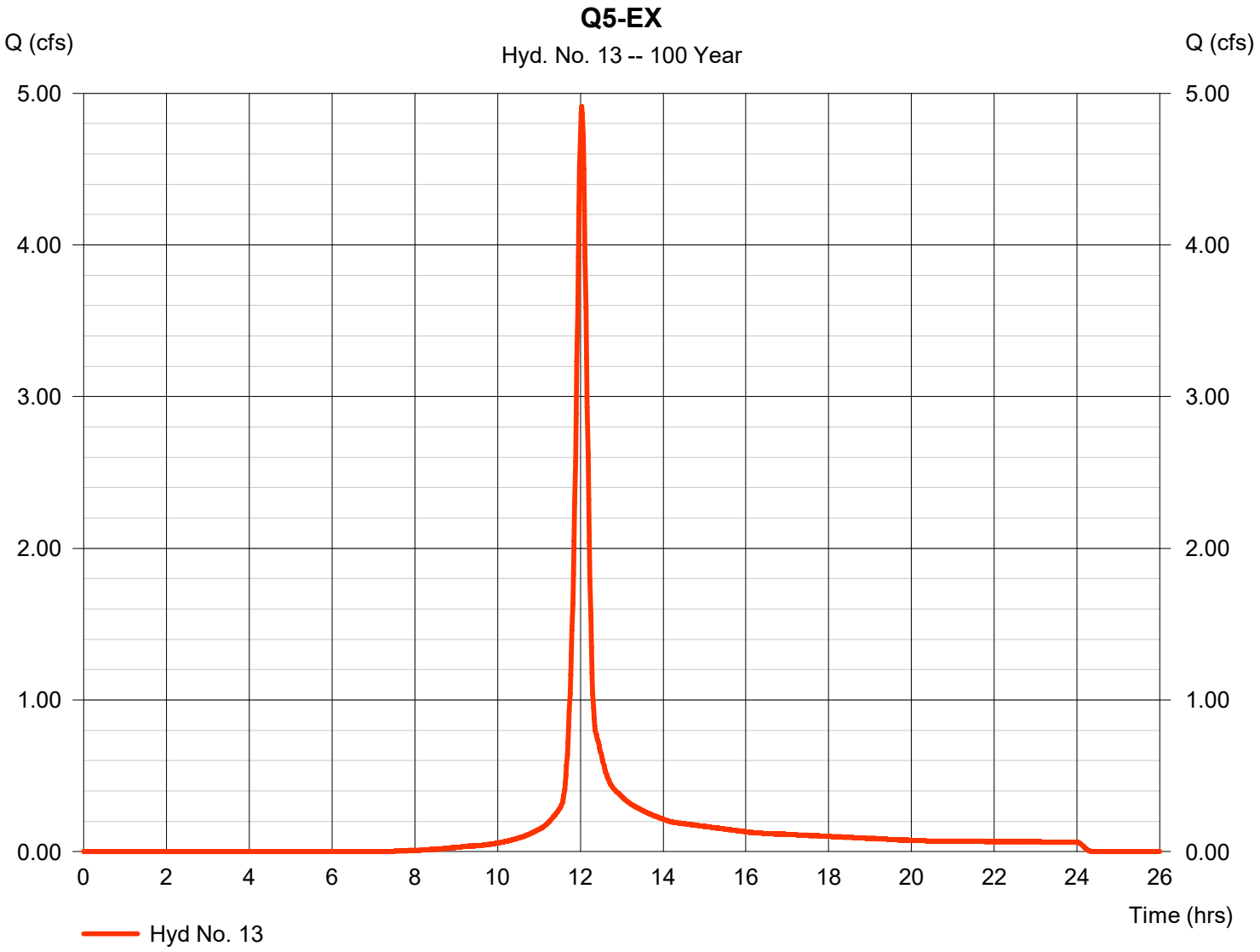


Hydrograph Report

Hyd. No. 13

Q5-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.913 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	13,236 cuft
Drainage area	=	1.950 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.88 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

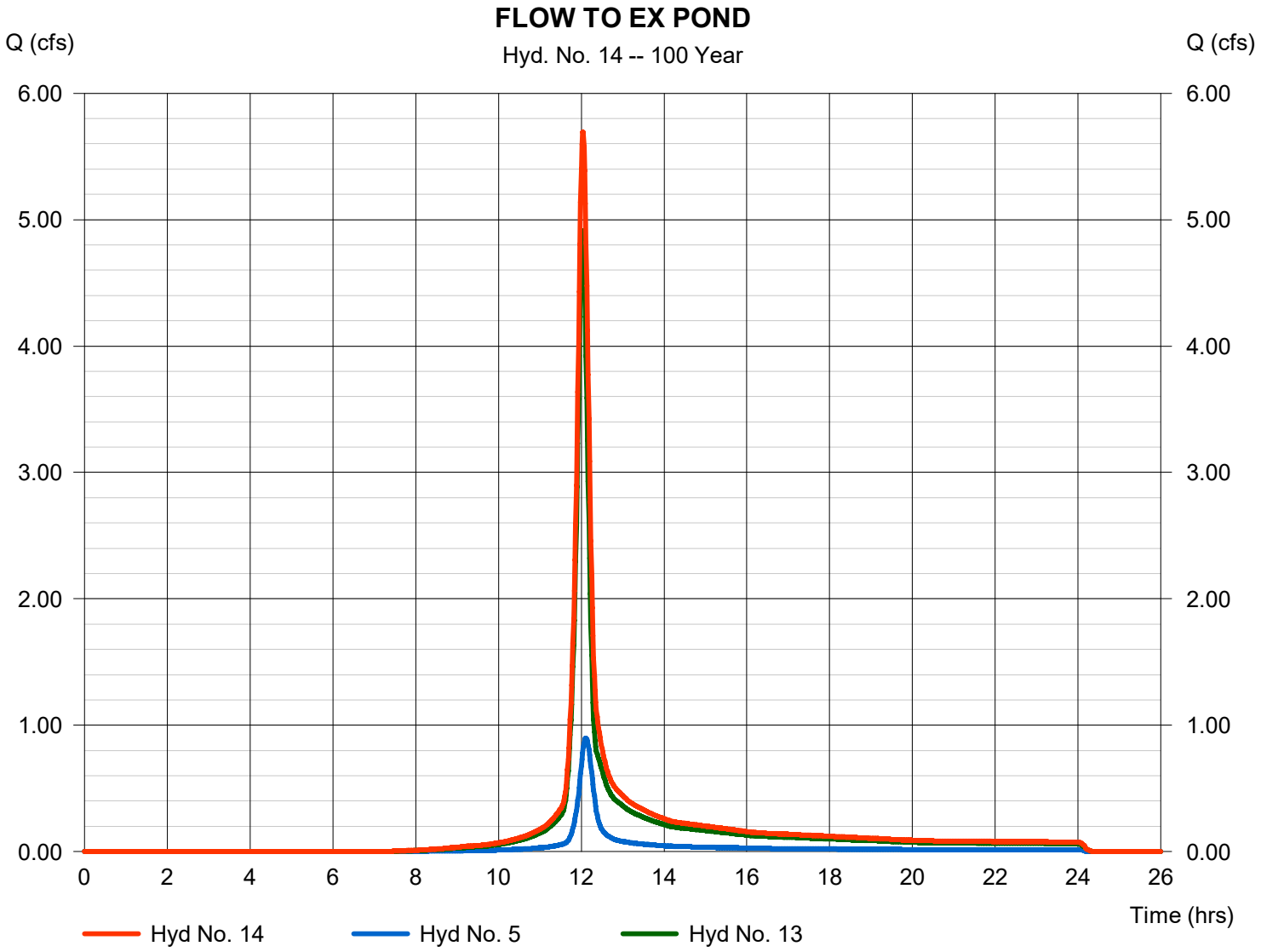


Hydrograph Report

Hyd. No. 14

FLOW TO EX POND

Hydrograph type	=	Combine	Peak discharge	=	5.694 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	16,027 cuft
Inflow hyds.	=	5, 13	Contrib. drain. area	=	1.950 ac



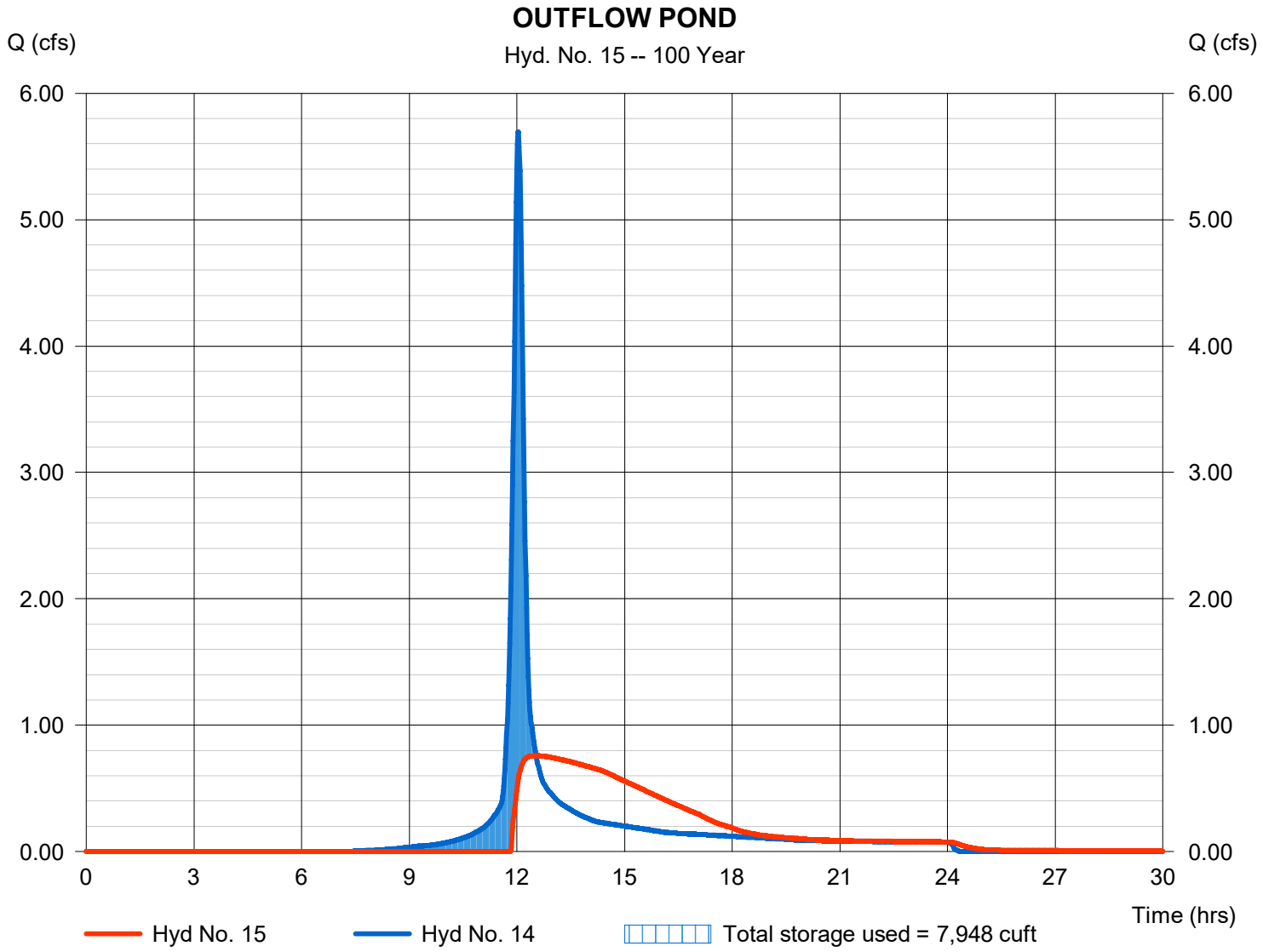
Hydrograph Report

Hyd. No. 15

OUTFLOW POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.759 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.53 hrs
Time interval	=	1 min	Hyd. volume	=	13,982 cuft
Inflow hyd. No.	=	14 - FLOW TO EX POND	Max. Elevation	=	6335.43 ft
Reservoir name	=	EX POND	Max. Storage	=	7,948 cuft

Storage Indication method used.

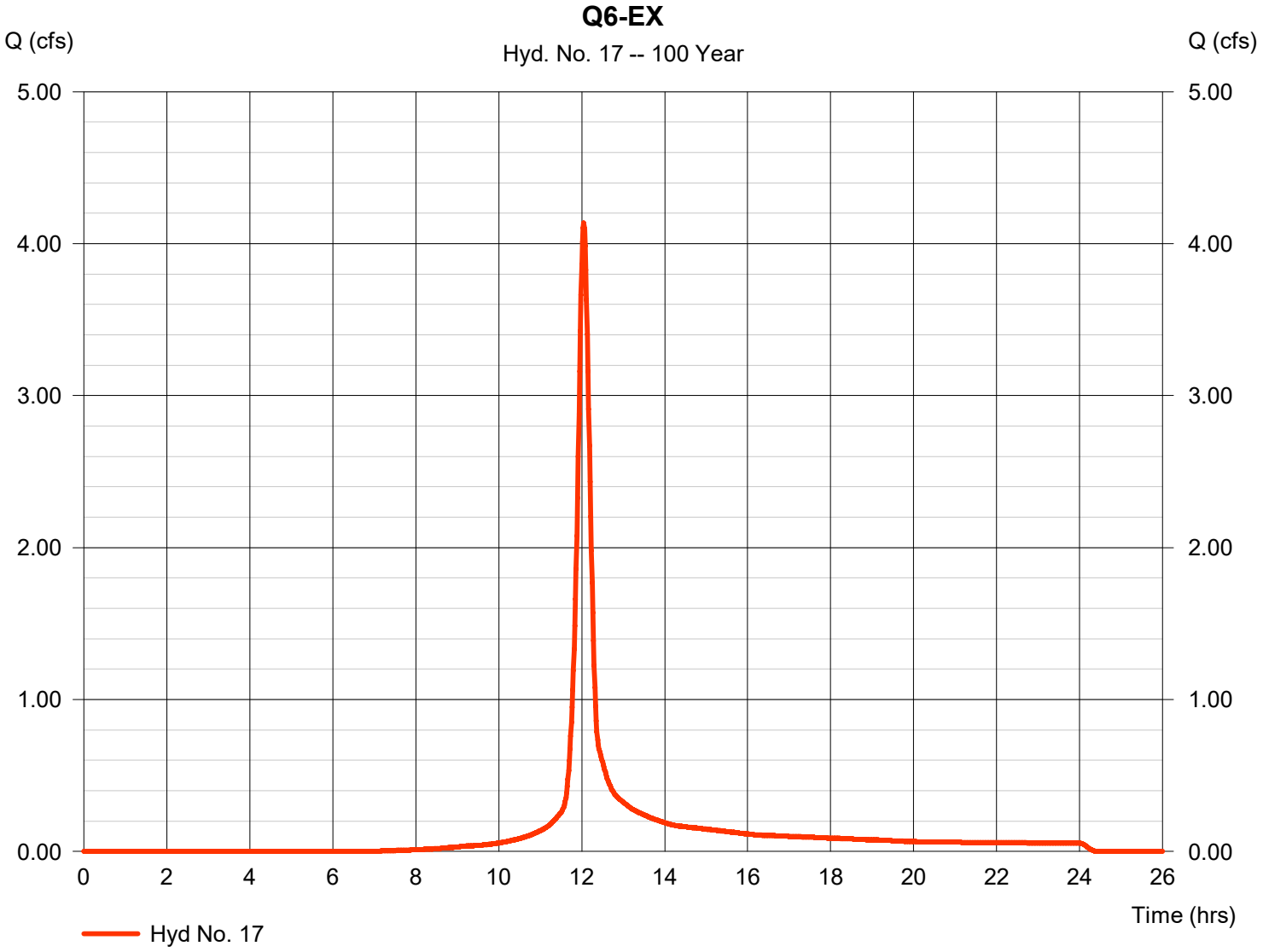


Hydrograph Report

Hyd. No. 17

Q6-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.136 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	11,827 cuft
Drainage area	=	1.650 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.24 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

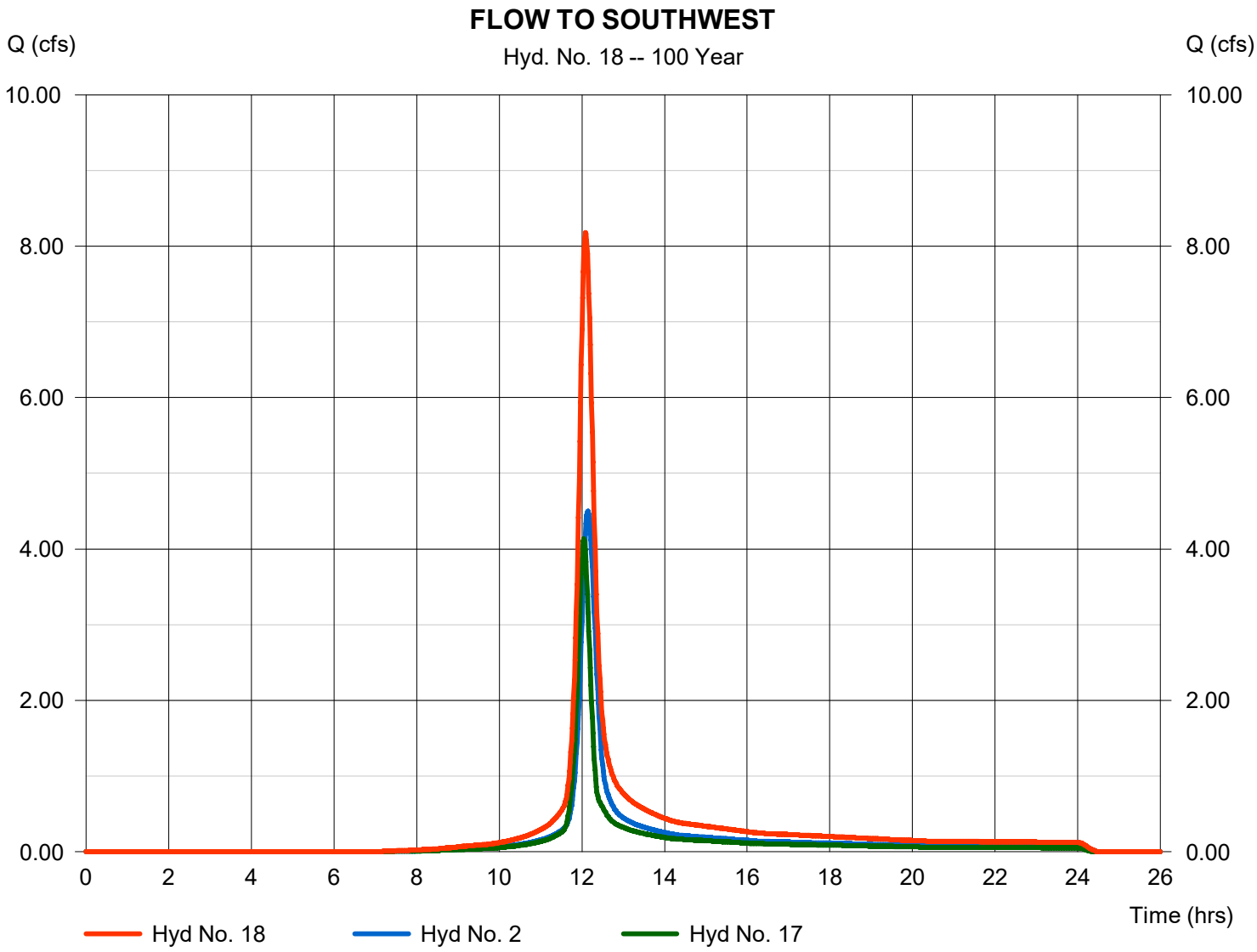


Hydrograph Report

Hyd. No. 18

FLOW TO SOUTHWEST

Hydrograph type	= Combine	Peak discharge	= 8.179 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 26,904 cuft
Inflow hyds.	= 2, 17	Contrib. drain. area	= 1.650 ac

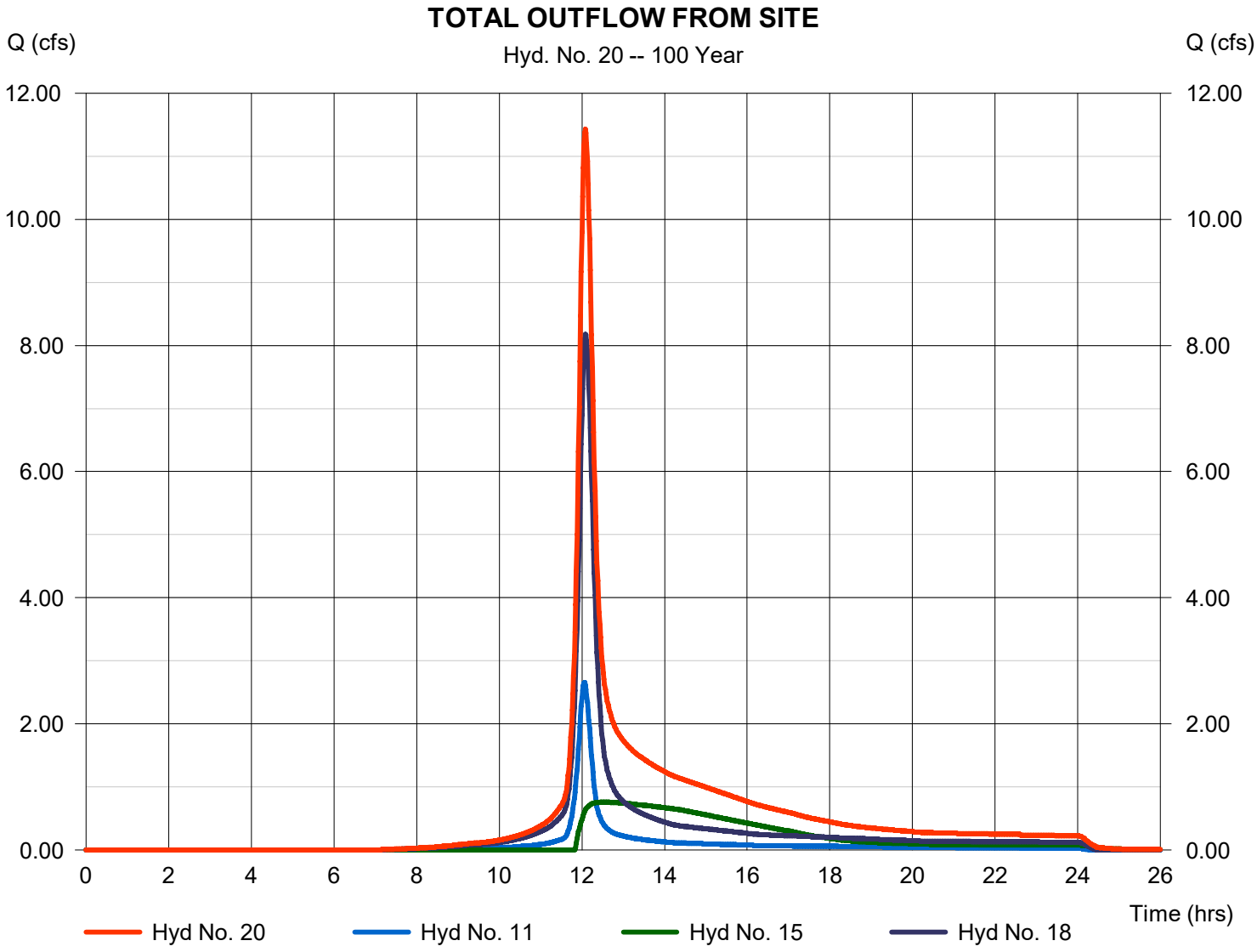


Hydrograph Report

Hyd. No. 20

TOTAL OUTFLOW FROM SITE

Hydrograph type	= Combine	Peak discharge	= 11.43 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 48,851 cuft
Inflow hyds.	= 11, 15, 18	Contrib. drain. area	= 0.000 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.

ecip. file name: K:\LAS SOLERAS TRACT 1 APT AND RETAIL FOR ABACUS\Drainage\LAS SOLERAS TRACT 1.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	1.53	0.00	0.00	0.00	2.61	2.93	3.24
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 E

DEVELOPED CONDITIONS ROUTING CALCULATIONS

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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	------	-------	0.174	-------	-------	0.000	0.454	0.543	0.630	Q3-EX
2	SCS Runoff	------	-------	0.263	-------	-------	0.000	0.638	0.755	0.869	Q4-PRO
4	SCS Runoff	------	-------	0.517	-------	-------	0.000	1.245	1.470	1.692	Q5-PRO
5	Combine	1, 2, 4	-------	0.889	-------	-------	0.000	2.200	2.609	3.010	FLOW TO POND 1
6	Reservoir	5	-------	0.023	-------	-------	0.000	0.096	0.125	0.155	FLOW FROM POND
8	SCS Runoff	------	-------	0.030	-------	-------	0.000	0.116	0.146	0.175	Q6-PRO
10	SCS Runoff	------	-------	0.093	-------	-------	0.000	0.460	0.591	0.724	Q7-PRO
12	SCS Runoff	------	-------	1.304	-------	-------	0.000	2.286	2.575	2.855	Q8-PRO
14	SCS Runoff	------	-------	1.347	-------	-------	0.000	2.363	2.661	2.950	Q9-PRO
15	Reach	14	-------	0.941	-------	-------	0.000	1.946	2.253	2.551	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	------	-------	2.606	-------	-------	0.000	5.154	5.906	6.631	Q10-PRO
18	Combine	10, 12, 15, 17	-------	4.781	-------	-------	0.000	9.600	11.05	12.46	FLOW TO POND 2
19	Reservoir	18	-------	1.021	-------	-------	0.000	2.602	3.075	3.800	FLOW FROM POND 2
21	SCS Runoff	------	-------	0.049	-------	-------	0.000	0.113	0.133	0.152	Q11-PRO
23	SCS Runoff	------	-------	0.273	-------	-------	0.000	0.706	0.843	0.978	Q2-EX
24	Reach	23	-------	0.204	-------	-------	0.000	0.561	0.676	0.790	FLOW TO TIE TO Q1-EX
26	SCS Runoff	------	-------	1.334	-------	-------	0.000	3.475	4.154	4.821	Q1-EX
27	Combine	24, 26	-------	1.519	-------	-------	0.000	3.989	4.779	5.556	FLOW TO Q12-PRO
28	Reach	27	-------	1.470	-------	-------	0.000	3.931	4.721	5.498	FLOW TO Q12-PRO
30	SCS Runoff	------	-------	0.078	-------	-------	0.000	0.294	0.368	0.443	Q12-PRO
31	Combine	28, 30	-------	1.531	-------	-------	0.000	4.175	5.025	5.860	FLOW TO PIPE
33	Combine	6, 8, 19, 21, 31,	-------	3.023	-------	-------	0.000	7.567	8.974	10.38	TOTAL FLOW EXITING THE SITE

Hydrograph Summary Report

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

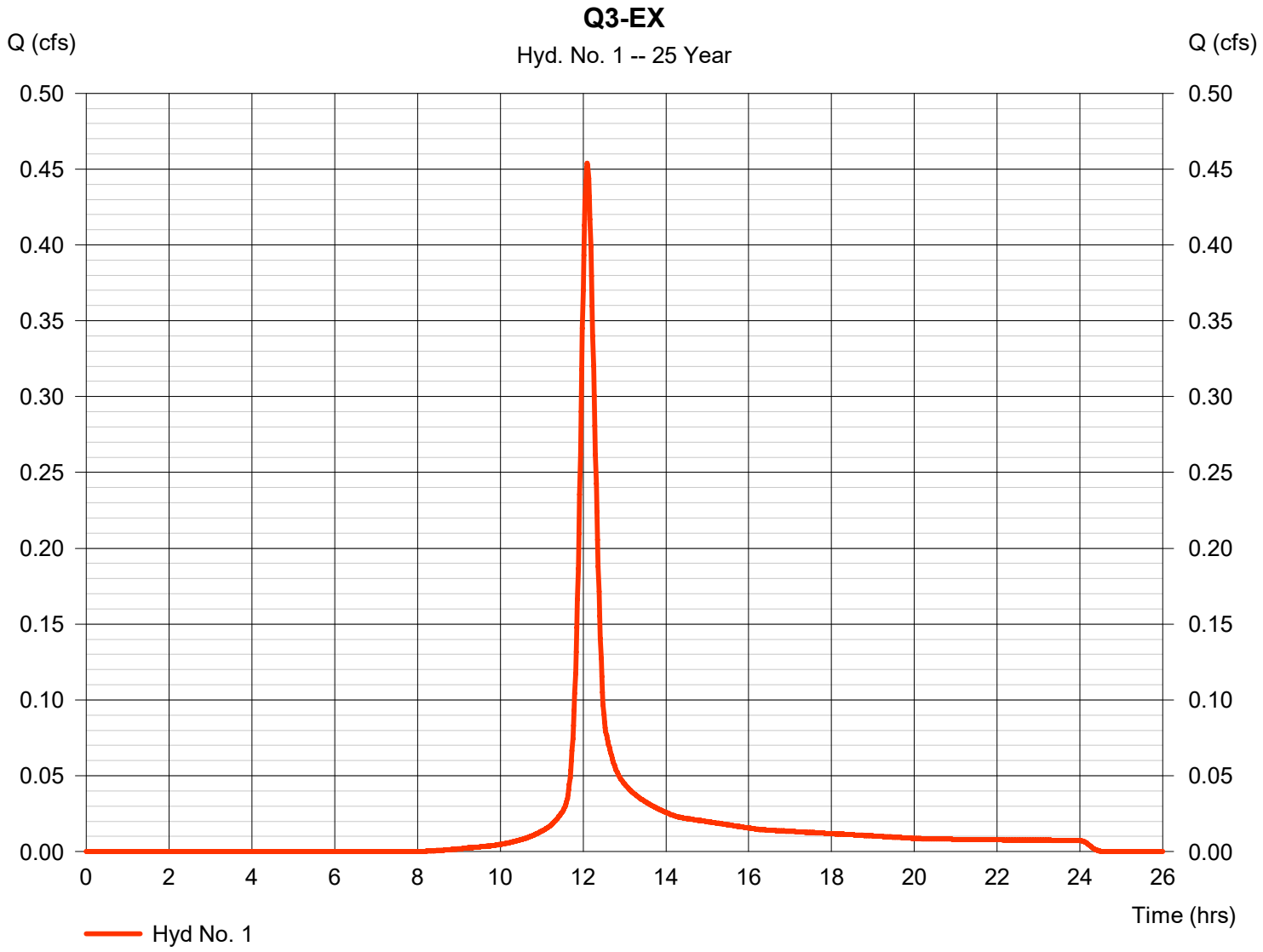
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.454	1	726	1,492	------	------	------	Q3-EX
2	SCS Runoff	0.638	1	718	1,358	------	------	------	Q4-PRO
4	SCS Runoff	1.245	1	718	2,542	------	------	------	Q5-PRO
5	Combine	2.200	1	718	5,392	1, 2, 4	------	------	FLOW TO POND 1
6	Reservoir	0.096	1	827	4,647	5	6335.27	3,252	FLOW FROM POND
8	SCS Runoff	0.116	1	720	265	------	------	------	Q6-PRO
10	SCS Runoff	0.460	1	718	941	------	------	------	Q7-PRO
12	SCS Runoff	2.286	1	717	5,346	------	------	------	Q8-PRO
14	SCS Runoff	2.363	1	717	5,524	------	------	------	Q9-PRO
15	Reach	1.946	1	721	5,521	14	------	------	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	5.154	1	719	12,257	------	------	------	Q10-PRO
18	Combine	9.600	1	719	24,065	10, 12, 15, 17	------	------	FLOW TO POND 2
19	Reservoir	2.602	1	729	23,409	18	6335.50	10,456	FLOW FROM POND 2
21	SCS Runoff	0.113	1	718	232	------	------	------	Q11-PRO
23	SCS Runoff	0.706	1	723	2,012	------	------	------	Q2-EX
24	Reach	0.561	1	729	1,984	23	------	------	FLOW TO TIE TO Q1-EX
26	SCS Runoff	3.475	1	725	10,853	------	------	------	Q1-EX
27	Combine	3.989	1	725	12,836	24, 26	------	------	FLOW TO Q12-PRO
28	Reach	3.931	1	728	12,834	27	------	------	FLOW TO Q12-PRO
30	SCS Runoff	0.294	1	723	806	------	------	------	Q12-PRO
31	Combine	4.175	1	727	13,640	28, 30	------	------	FLOW TO PIPE
33	Combine	7.567	1	727	42,034	6, 8, 19, 21, 31,	------	------	TOTAL FLOW EXITING THE SITE

Hydrograph Report

Hyd. No. 1

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.454 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,492 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.40 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

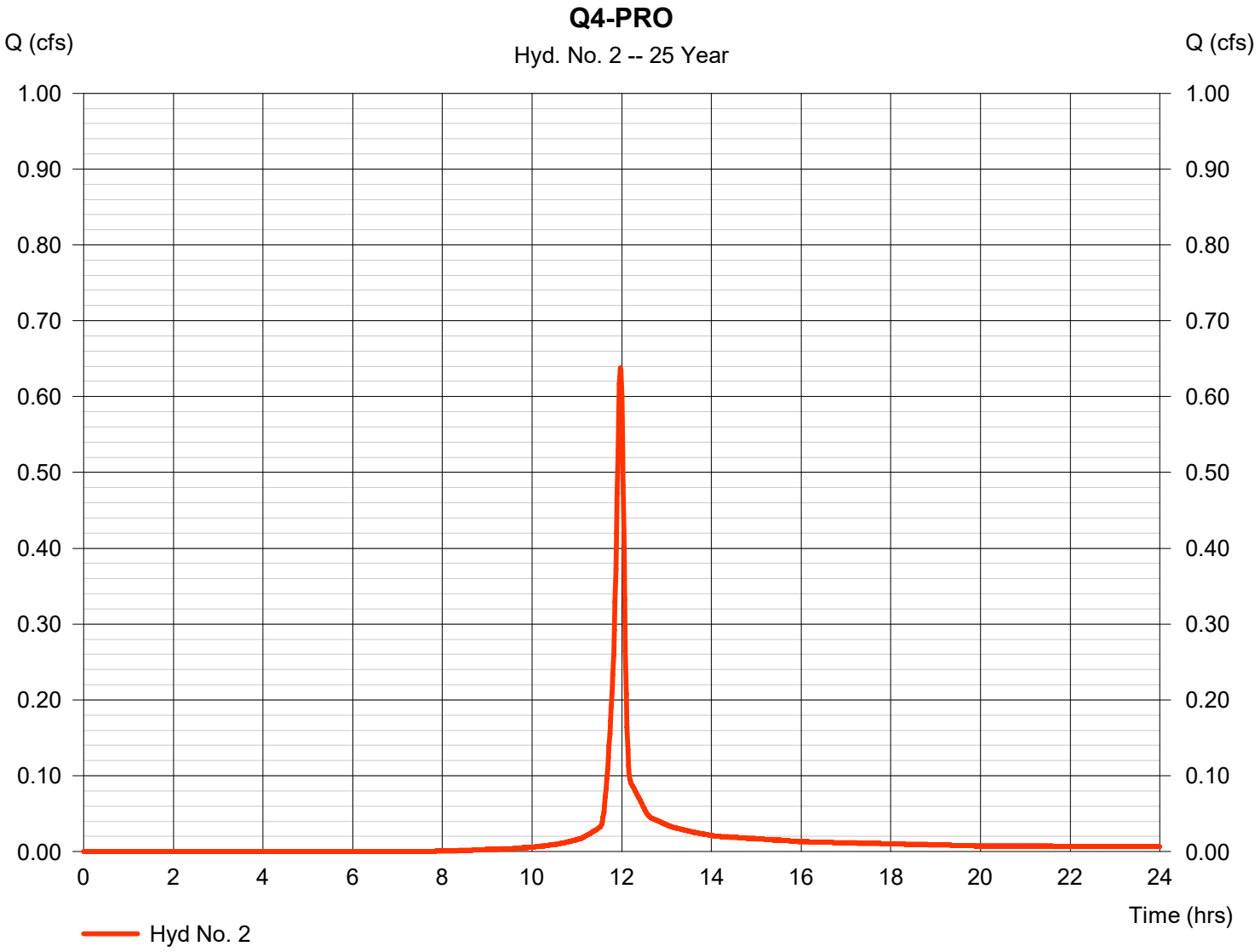


Hydrograph Report

Hyd. No. 2

Q4-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.638 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,358 cuft
Drainage area	=	0.260 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.90 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

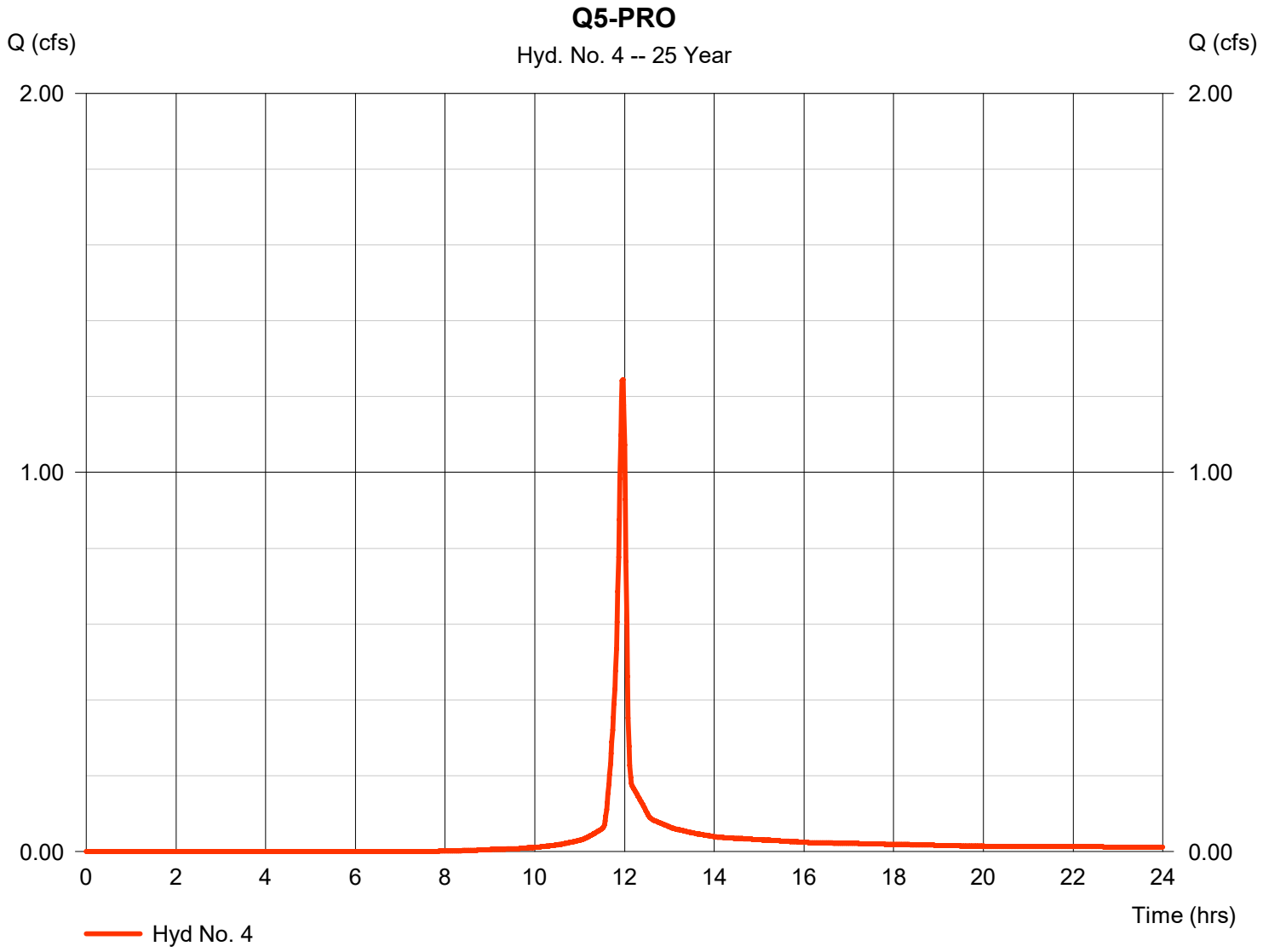


Hydrograph Report

Hyd. No. 4

Q5-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.245 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	2,542 cuft
Drainage area	=	0.460 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

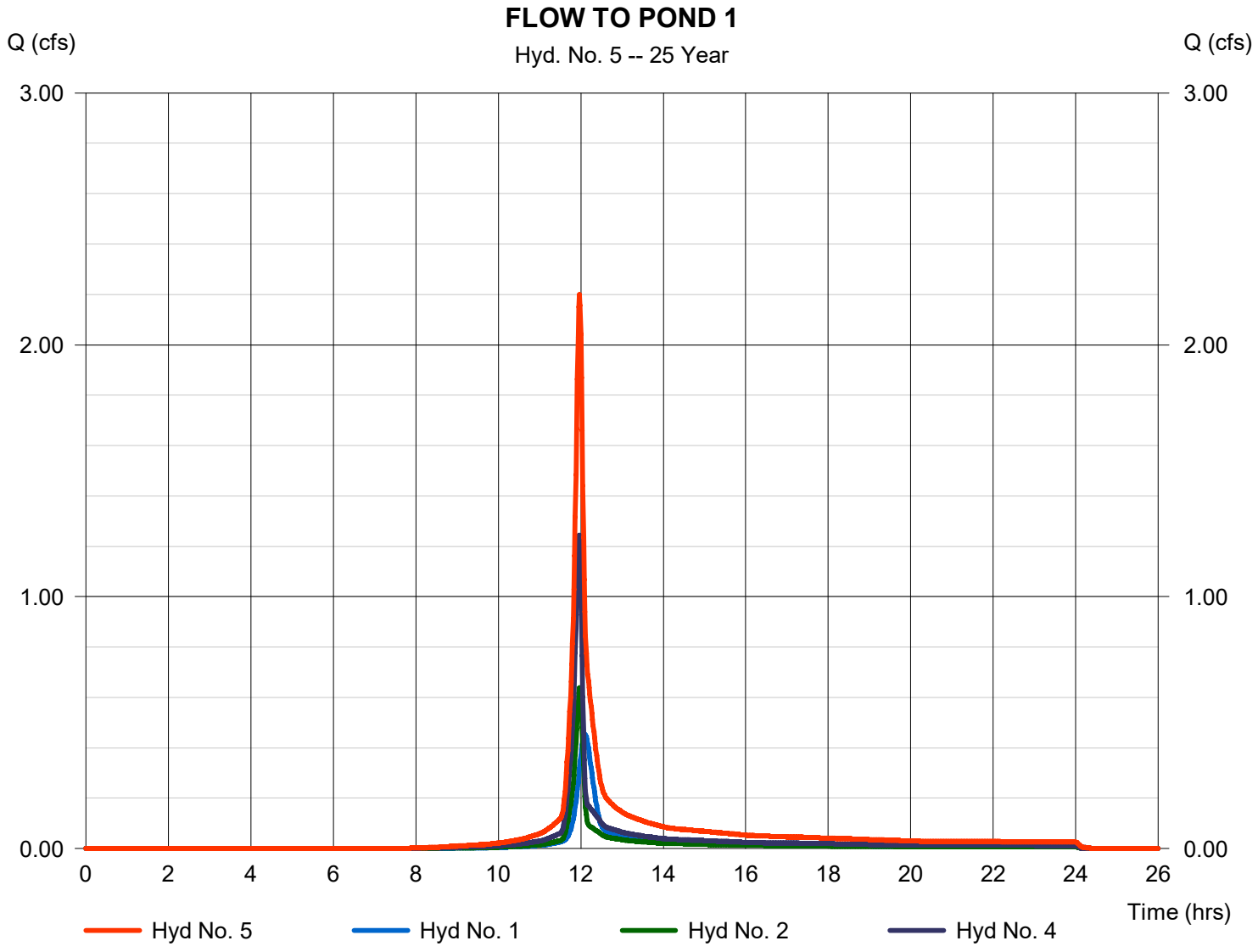


Hydrograph Report

Hyd. No. 5

FLOW TO POND 1

Hydrograph type	=	Combine	Peak discharge	=	2.200 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	5,392 cuft
Inflow hyds.	=	1, 2, 4	Contrib. drain. area	=	1.010 ac



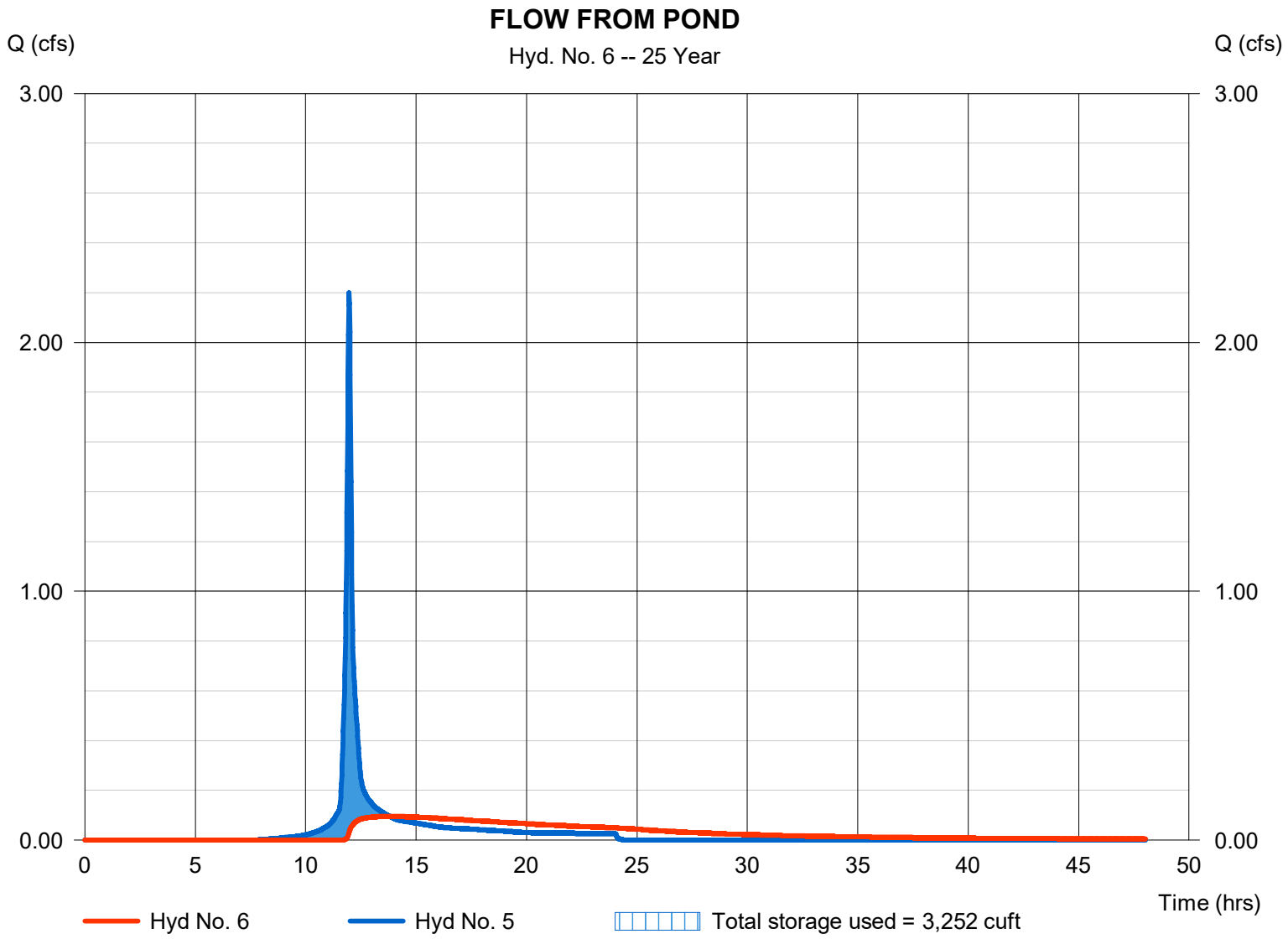
Hydrograph Report

Hyd. No. 6

FLOW FROM POND

Hydrograph type	= Reservoir	Peak discharge	= 0.096 cfs
Storm frequency	= 25 yrs	Time to peak	= 13.78 hrs
Time interval	= 1 min	Hyd. volume	= 4,647 cuft
Inflow hyd. No.	= 5 - FLOW TO POND 1	Max. Elevation	= 6335.27 ft
Reservoir name	= POND 1	Max. Storage	= 3,252 cuft

Storage Indication method used.



Pond No. 3 - POND 1

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 6334.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6334.50	3,665	0	0
0.50	6335.00	4,317	1,995	1,995
1.00	6335.50	5,009	2,332	4,327
1.50	6336.00	5,739	2,687	7,014
2.00	6336.50	6,508	3,062	10,076

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	1
Invert El. (ft)	= 6334.50	0.00	0.00	6334.60
Length (ft)	= 50.00	0.00	0.00	0.10
Slope (%)	= 0.50	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	0.00	0.00	0.00
Crest El. (ft)	= 6336.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	---	---	---
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	6334.50	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.05	200	6334.55	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.10	399	6334.60	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.15	599	6334.65	0.00	---	---	0.00	0.00	---	---	---	---	---	0.002
0.20	798	6334.70	0.00	---	---	0.01	0.00	---	---	---	---	---	0.005
0.25	998	6334.75	0.00	---	---	0.01	0.00	---	---	---	---	---	0.010
0.30	1,197	6334.80	0.00	---	---	0.02	0.00	---	---	---	---	---	0.016
0.35	1,397	6334.85	0.00	---	---	0.02	0.00	---	---	---	---	---	0.022
0.40	1,596	6334.90	0.00	---	---	0.03	0.00	---	---	---	---	---	0.029
0.45	1,796	6334.95	0.00	---	---	0.04	0.00	---	---	---	---	---	0.036
0.50	1,995	6335.00	0.00	---	---	0.04	0.00	---	---	---	---	---	0.044
0.55	2,229	6335.05	0.00	---	---	0.05	0.00	---	---	---	---	---	0.053
0.60	2,462	6335.10	0.00	---	---	0.06	0.00	---	---	---	---	---	0.062
0.65	2,695	6335.15	0.00	---	---	0.07	0.00	---	---	---	---	---	0.071
0.70	2,928	6335.20	0.00	---	---	0.08	0.00	---	---	---	---	---	0.081
0.75	3,161	6335.25	0.00	---	---	0.09	0.00	---	---	---	---	---	0.092
0.80	3,394	6335.30	0.00	---	---	0.10	0.00	---	---	---	---	---	0.102
0.85	3,628	6335.35	0.00	---	---	0.11	0.00	---	---	---	---	---	0.113
0.90	3,861	6335.40	0.00	---	---	0.12	0.00	---	---	---	---	---	0.125
0.95	4,094	6335.45	0.00	---	---	0.14	0.00	---	---	---	---	---	0.137
1.00	4,327	6335.50	0.00	---	---	0.15	0.00	---	---	---	---	---	0.149
1.05	4,596	6335.55	0.00	---	---	0.16	0.00	---	---	---	---	---	0.162
1.10	4,864	6335.60	0.00	---	---	0.17	0.00	---	---	---	---	---	0.175
1.15	5,133	6335.65	0.00	---	---	0.19	0.00	---	---	---	---	---	0.188
1.20	5,402	6335.70	0.00	---	---	0.20	0.00	---	---	---	---	---	0.202
1.25	5,671	6335.75	0.00	---	---	0.22	0.00	---	---	---	---	---	0.216
1.30	5,939	6335.80	0.00	---	---	0.23	0.00	---	---	---	---	---	0.230
1.35	6,208	6335.85	0.00	---	---	0.24	0.00	---	---	---	---	---	0.244
1.40	6,477	6335.90	0.00	---	---	0.26	0.00	---	---	---	---	---	0.259
1.45	6,745	6335.95	0.00	---	---	0.27	0.00	---	---	---	---	---	0.274
1.50	7,014	6336.00	0.00	---	---	0.29	0.00	---	---	---	---	---	0.290
1.55	7,320	6336.05	0.18 ic	---	---	0.31	0.17	---	---	---	---	---	0.480
1.60	7,626	6336.10	0.49 ic	---	---	0.32	0.49	---	---	---	---	---	0.815
1.65	7,933	6336.15	0.93 ic	---	---	0.34	0.91	---	---	---	---	---	1.243
1.70	8,239	6336.20	1.44 oc	---	---	0.35	1.39	---	---	---	---	---	1.749
1.75	8,545	6336.25	1.98 oc	---	---	0.37	1.95	---	---	---	---	---	2.320
1.80	8,851	6336.30	2.60 oc	---	---	0.39	2.56	---	---	---	---	---	2.950
1.85	9,157	6336.35	3.24 oc	---	---	0.40	3.23	---	---	---	---	---	3.633

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
1.90	9,464	6336.40	3.97 oc	---	---	0.42	3.94	---	---	---	---	---	4.367
1.95	9,770	6336.45	4.70 oc	---	---	0.44	4.70 s	---	---	---	---	---	5.137
2.00	10,076	6336.50	5.37 oc	---	---	0.46	5.37 s	---	---	---	---	---	5.824

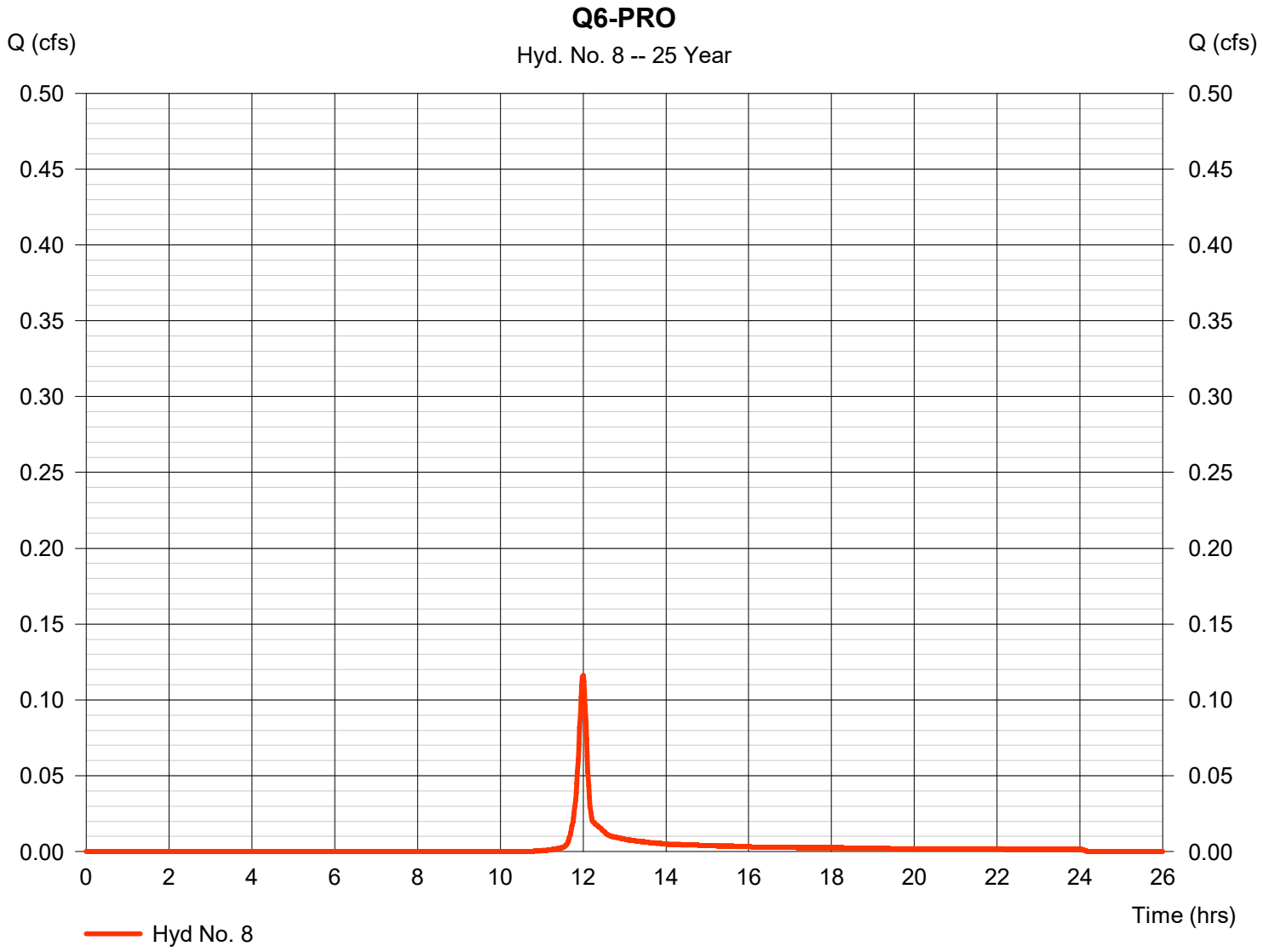
...End

Hydrograph Report

Hyd. No. 8

Q6-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.116 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	265 cuft
Drainage area	=	0.080 ac	Curve number	=	79
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	9.18 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

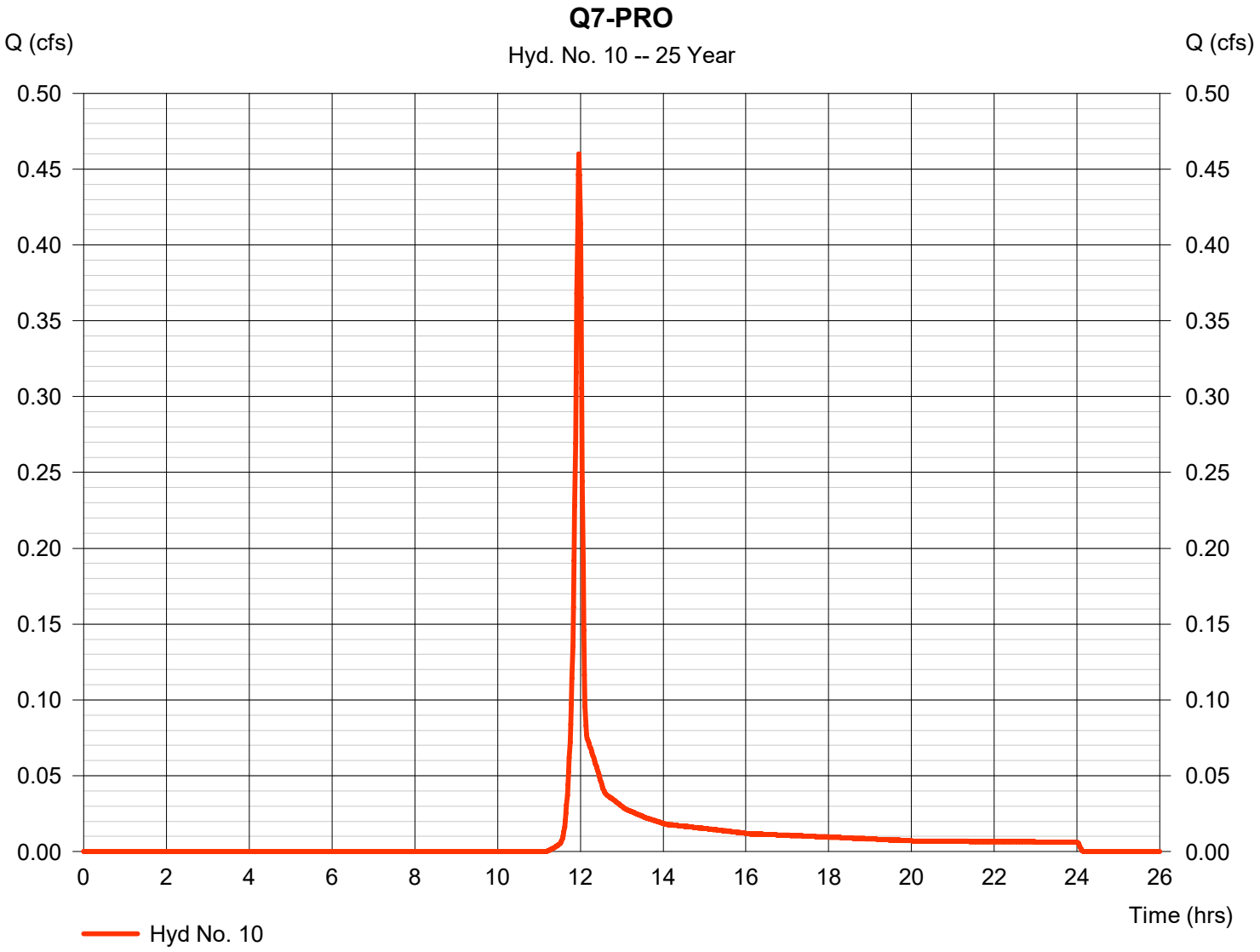


Hydrograph Report

Hyd. No. 10

Q7-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.460 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	941 cuft
Drainage area	=	0.330 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

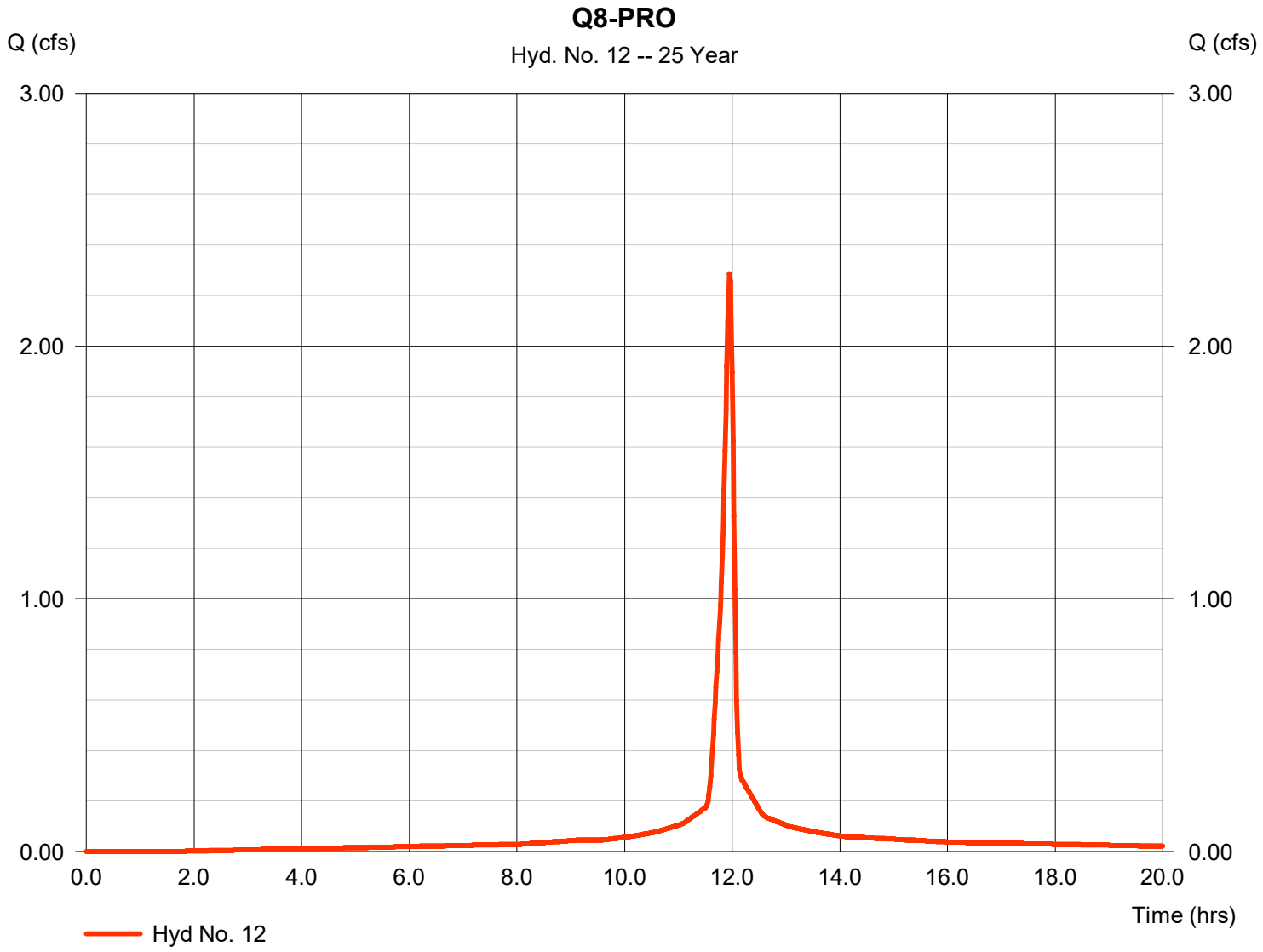


Hydrograph Report

Hyd. No. 12

Q8-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.286 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	5,346 cuft
Drainage area	=	0.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

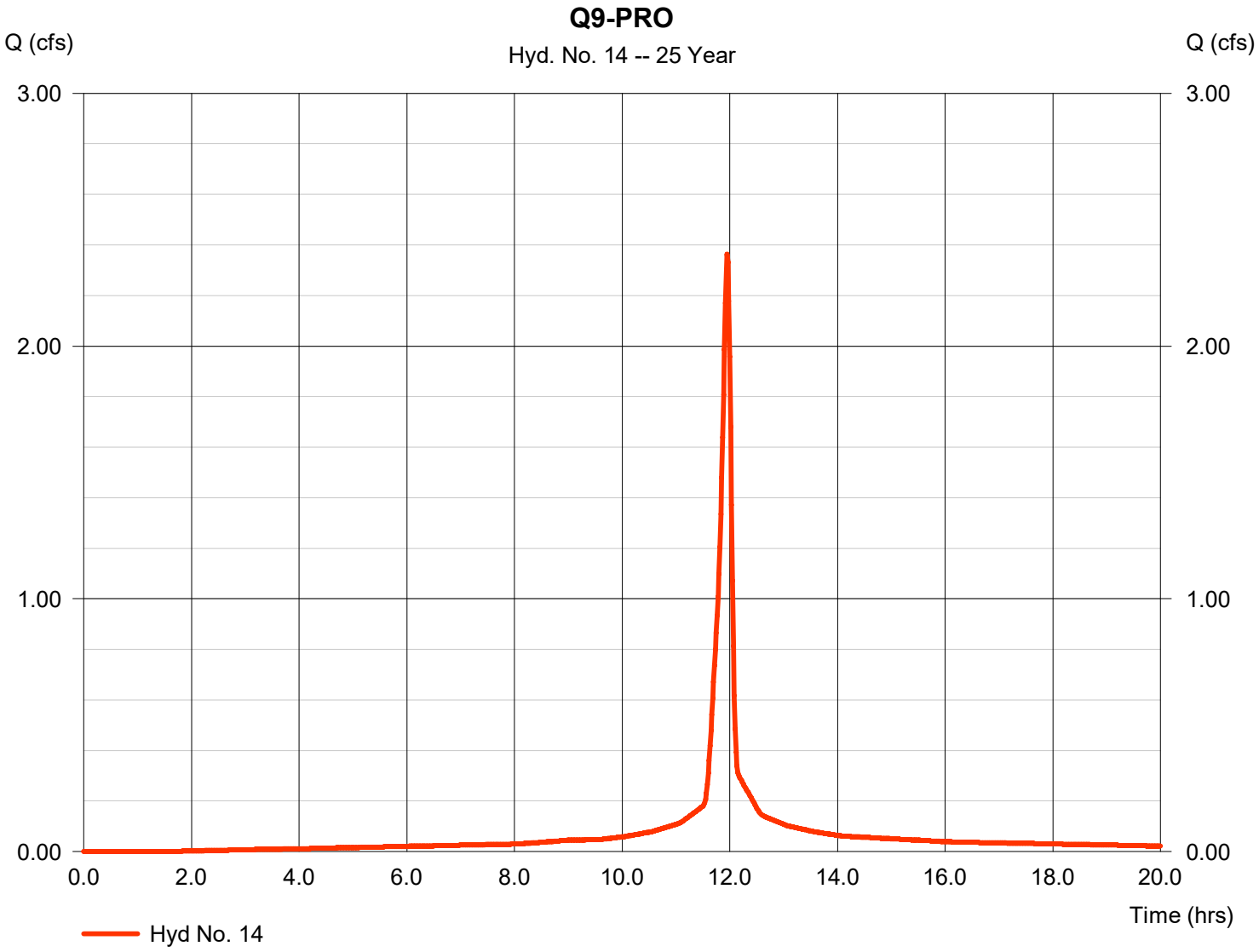


Hydrograph Report

Hyd. No. 14

Q9-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.363 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	5,524 cuft
Drainage area	=	0.620 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



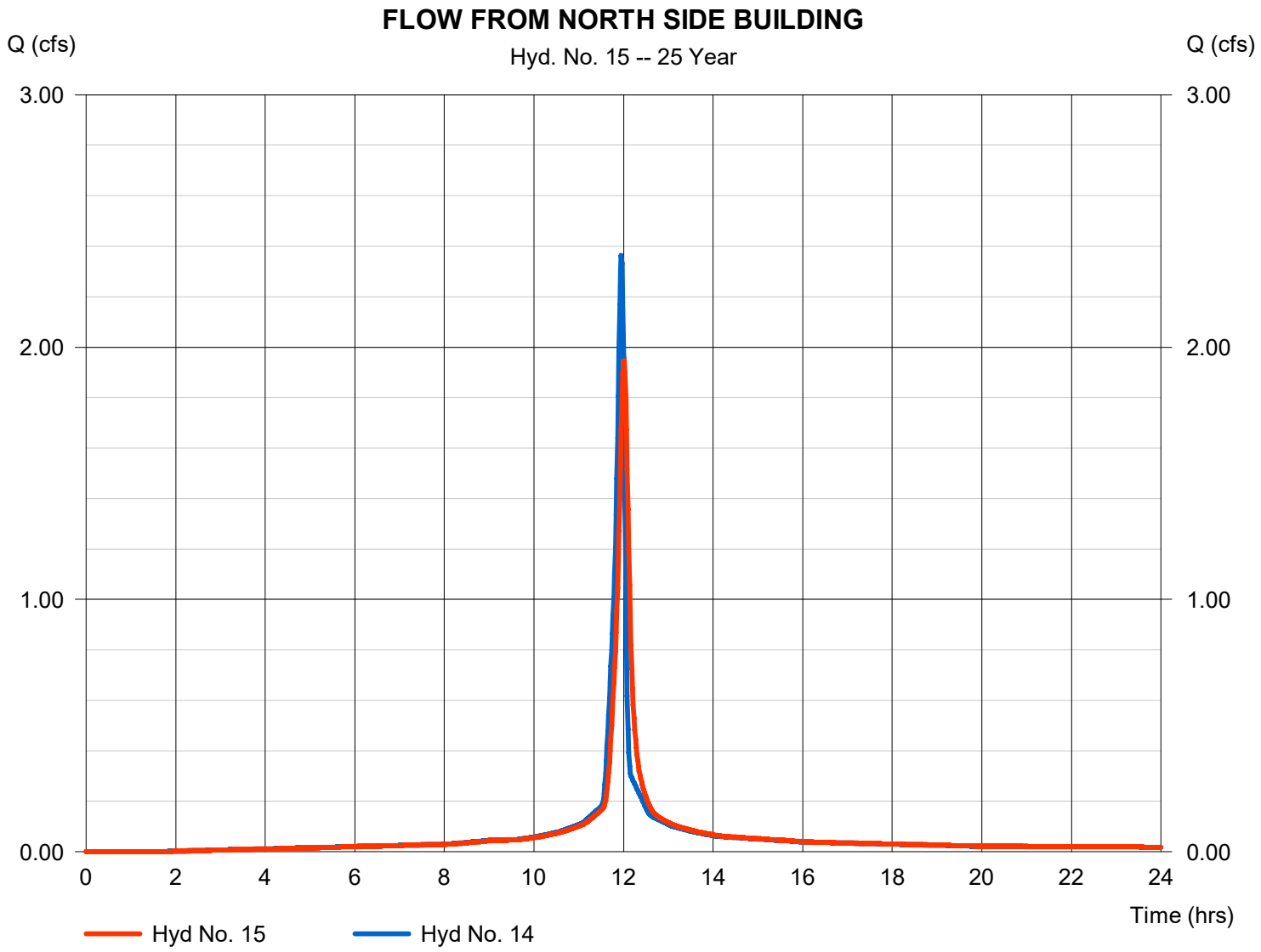
Hydrograph Report

Hyd. No. 15

FLOW FROM NORTH SIDE BUILDING

Hydrograph type	= Reach	Peak discharge	= 1.946 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 5,521 cuft
Inflow hyd. No.	= 14 - Q9-PRO	Section type	= Circular
Reach length	= 509.0 ft	Channel slope	= 0.5 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 2.433	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.1793

Modified Att-Kin routing method used.

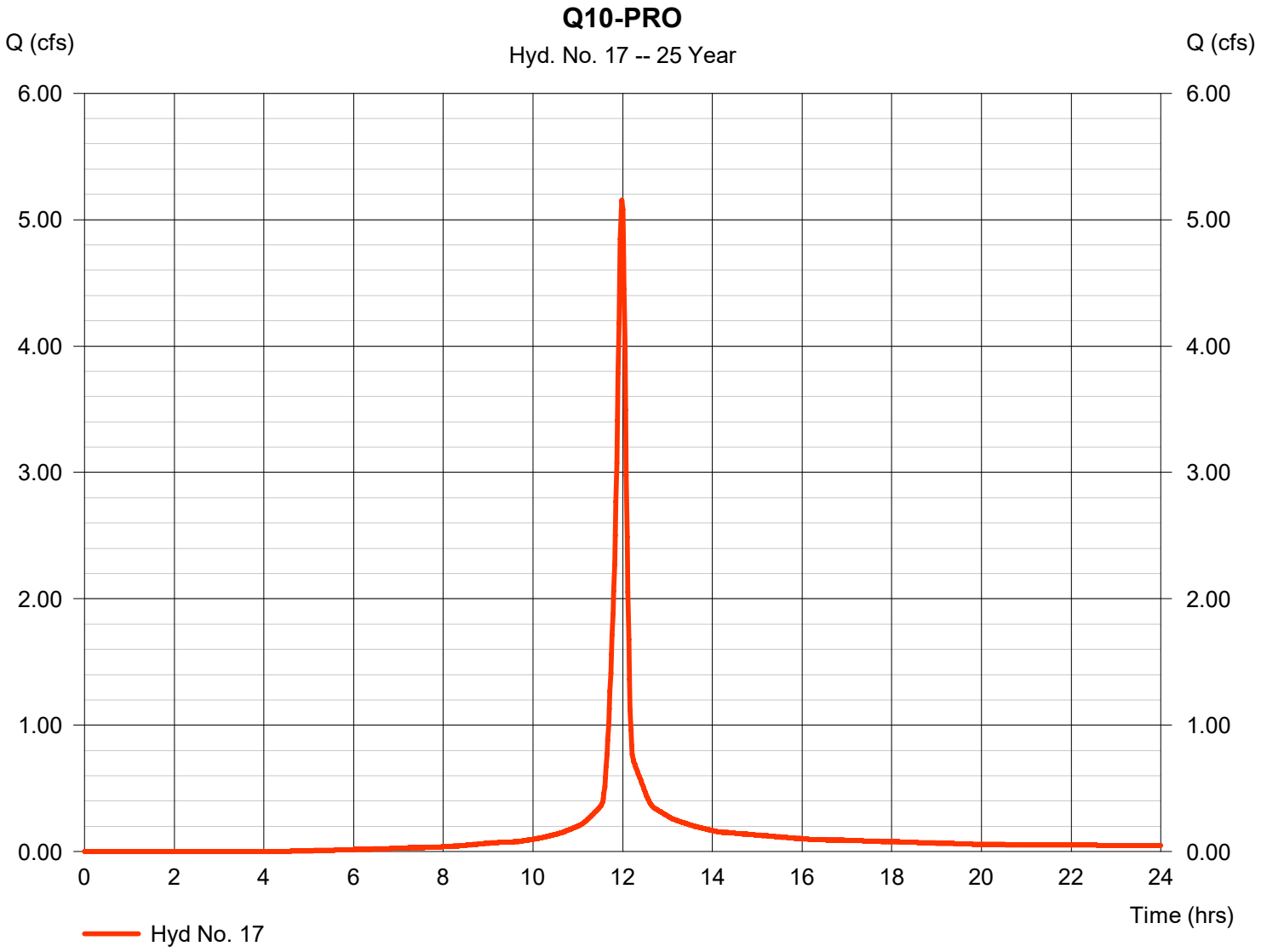


Hydrograph Report

Hyd. No. 17

Q10-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.154 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	12,257 cuft
Drainage area	=	1.710 ac	Curve number	=	94
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.40 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

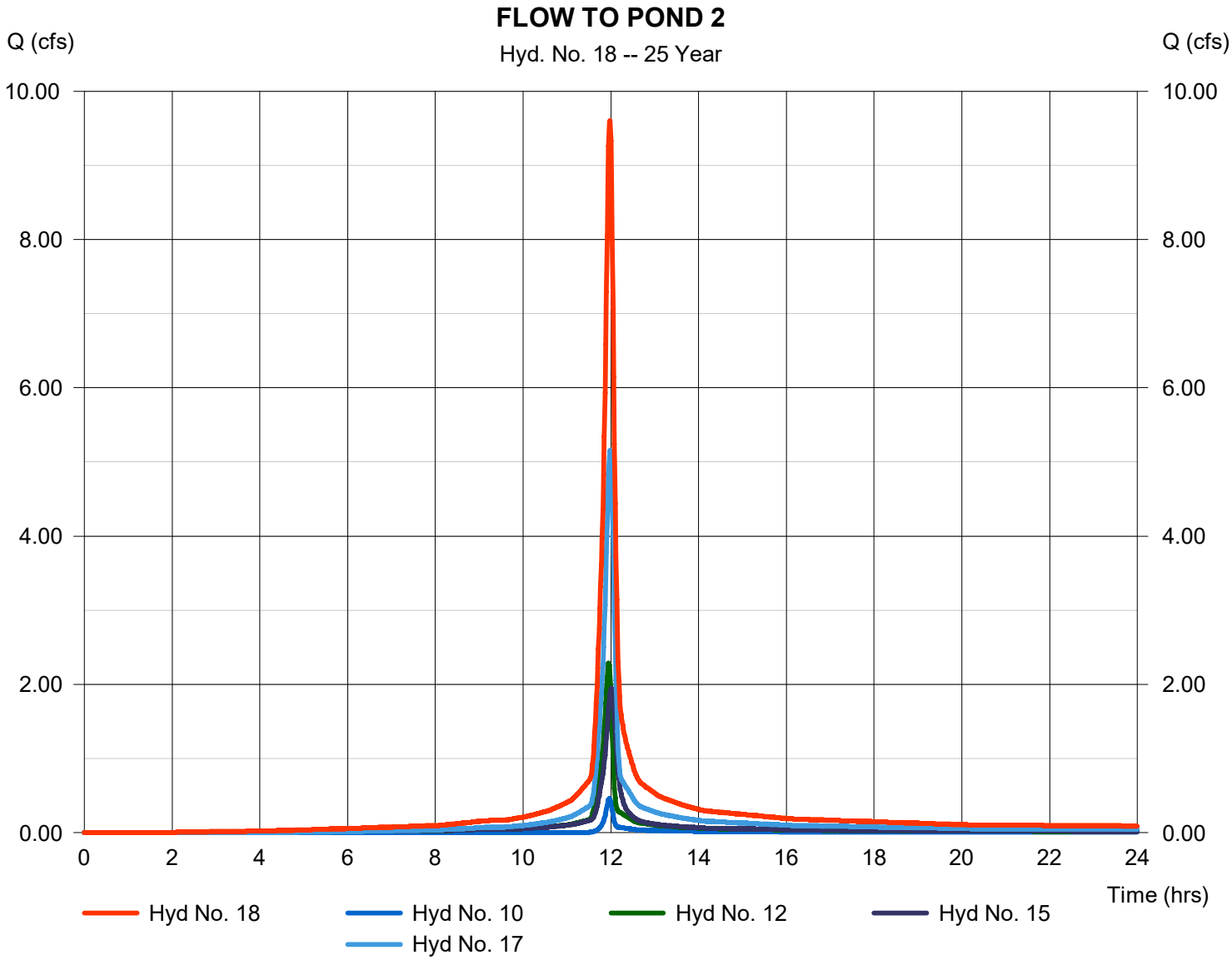


Hydrograph Report

Hyd. No. 18

FLOW TO POND 2

Hydrograph type	=	Combine	Peak discharge	=	9.600 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	24,065 cuft
Inflow hyds.	=	10, 12, 15, 17	Contrib. drain. area	=	2.640 ac



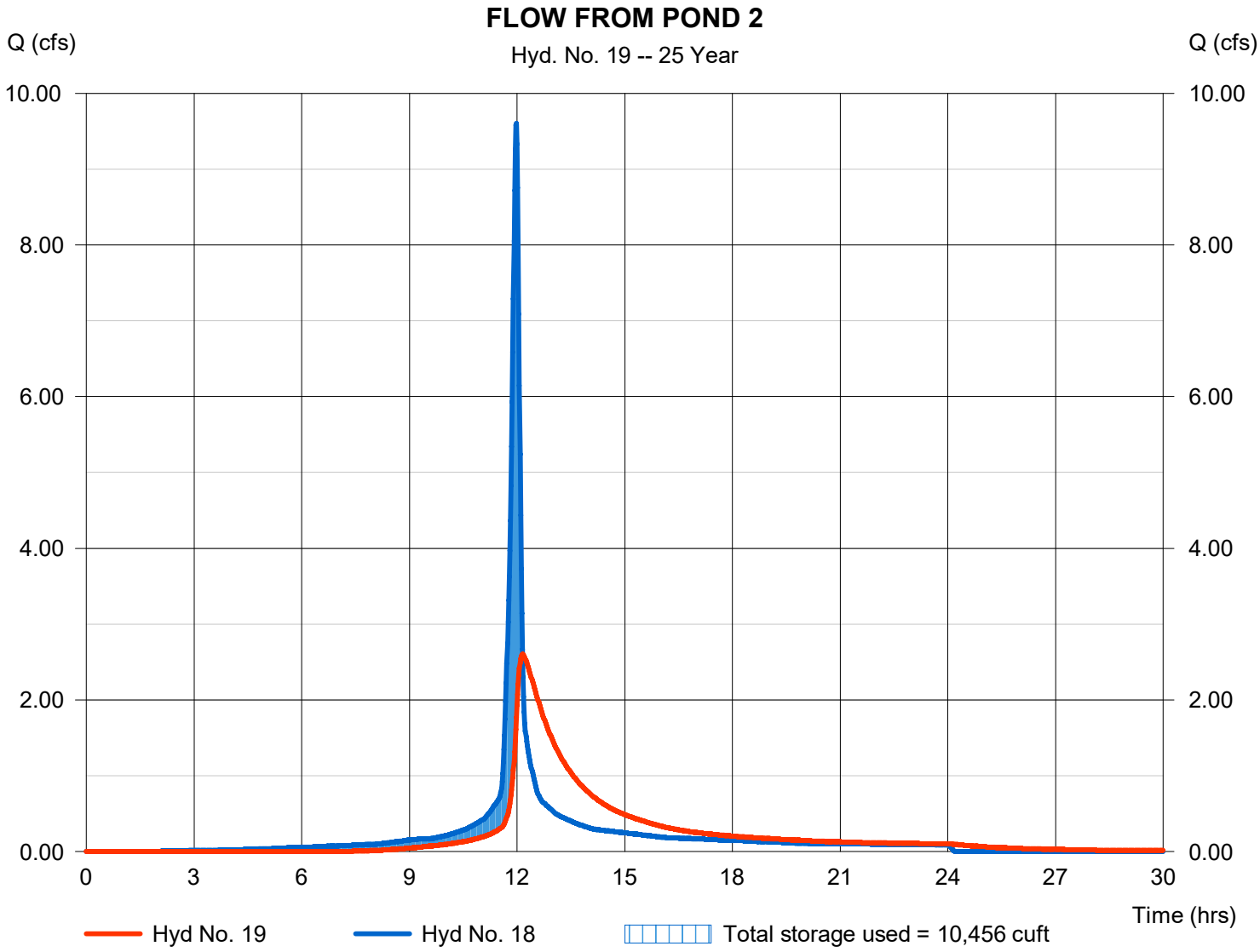
Hydrograph Report

Hyd. No. 19

FLOW FROM POND 2

Hydrograph type	= Reservoir	Peak discharge	= 2.602 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 23,409 cuft
Inflow hyd. No.	= 18 - FLOW TO POND 2	Max. Elevation	= 6335.50 ft
Reservoir name	= POND 2	Max. Storage	= 10,456 cuft

Storage Indication method used.



Pond No. 5 - POND 2

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 6334.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	6334.00	5,932	0	0
0.50	6334.50	6,829	3,190	3,190
1.50	6335.50	7,741	7,285	10,475
2.00	6336.00	8,666	4,102	14,577

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	0.00	0.00	3.00
Span (in)	= 18.00	0.00	0.00	3.00
No. Barrels	= 1	0	0	1
Invert El. (ft)	= 6334.00	0.00	0.00	6334.10
Length (ft)	= 25.00	0.00	0.00	0.10
Slope (%)	= 0.50	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	0.00	0.00	0.00
Crest El. (ft)	= 6335.75	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	---	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

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

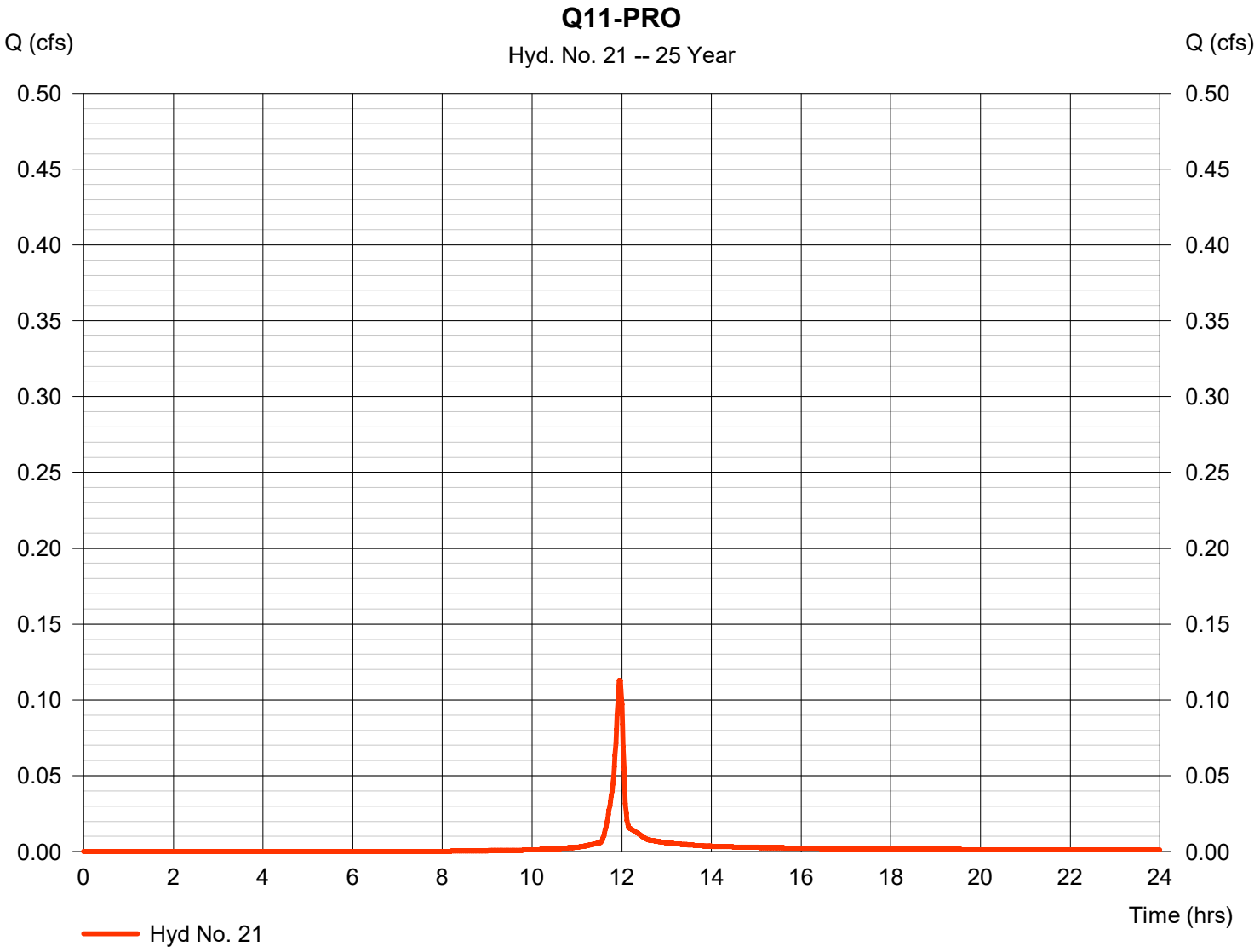
Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	6334.00	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.05	319	6334.05	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.10	638	6334.10	0.00	---	---	0.00	0.00	---	---	---	---	---	0.000
0.15	957	6334.15	0.00	---	---	0.02	0.00	---	---	---	---	---	0.017
0.20	1,276	6334.20	0.00	---	---	0.05	0.00	---	---	---	---	---	0.049
0.25	1,595	6334.25	0.00	---	---	0.09	0.00	---	---	---	---	---	0.091
0.30	1,914	6334.30	0.00	---	---	0.14	0.00	---	---	---	---	---	0.140
0.35	2,233	6334.35	0.00	---	---	0.20	0.00	---	---	---	---	---	0.195
0.40	2,552	6334.40	0.00	---	---	0.26	0.00	---	---	---	---	---	0.257
0.45	2,871	6334.45	0.00	---	---	0.32	0.00	---	---	---	---	---	0.324
0.50	3,190	6334.50	0.00	---	---	0.40	0.00	---	---	---	---	---	0.398
0.60	3,919	6334.60	0.00	---	---	0.56	0.00	---	---	---	---	---	0.557
0.70	4,647	6334.70	0.00	---	---	0.73	0.00	---	---	---	---	---	0.732
0.80	5,376	6334.80	0.00	---	---	0.92	0.00	---	---	---	---	---	0.923
0.90	6,104	6334.90	0.00	---	---	1.13	0.00	---	---	---	---	---	1.128
1.00	6,833	6335.00	0.00	---	---	1.35	0.00	---	---	---	---	---	1.346
1.10	7,561	6335.10	0.00	---	---	1.58	0.00	---	---	---	---	---	1.577
1.20	8,290	6335.20	0.00	---	---	1.82	0.00	---	---	---	---	---	1.819
1.30	9,018	6335.30	0.00	---	---	2.07	0.00	---	---	---	---	---	2.073
1.40	9,747	6335.40	0.00	---	---	2.34	0.00	---	---	---	---	---	2.337
1.50	10,475	6335.50	0.00	---	---	2.61	0.00	---	---	---	---	---	2.610
1.55	10,885	6335.55	0.00	---	---	2.75	0.00	---	---	---	---	---	2.750
1.60	11,295	6335.60	0.00	---	---	2.89	0.00	---	---	---	---	---	2.893
1.65	11,706	6335.65	0.00	---	---	3.04	0.00	---	---	---	---	---	3.038
1.70	12,116	6335.70	0.00	---	---	3.19	0.00	---	---	---	---	---	3.186
1.75	12,526	6335.75	0.00	---	---	3.34	0.00	---	---	---	---	---	3.336
1.80	12,936	6335.80	0.17 ic	---	---	3.49	0.17	---	---	---	---	---	3.657
1.85	13,346	6335.85	0.51 oc	---	---	3.64	0.49	---	---	---	---	---	4.129
1.90	13,756	6335.90	0.91 oc	---	---	3.80	0.90	---	---	---	---	---	4.696
1.95	14,167	6335.95	1.41 oc	---	---	3.96	1.38	---	---	---	---	---	5.343
2.00	14,577	6336.00	1.99 oc	---	---	4.13	1.96	---	---	---	---	---	6.086

Hydrograph Report

Hyd. No. 21

Q11-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.113 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	232 cuft
Drainage area	=	0.040 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

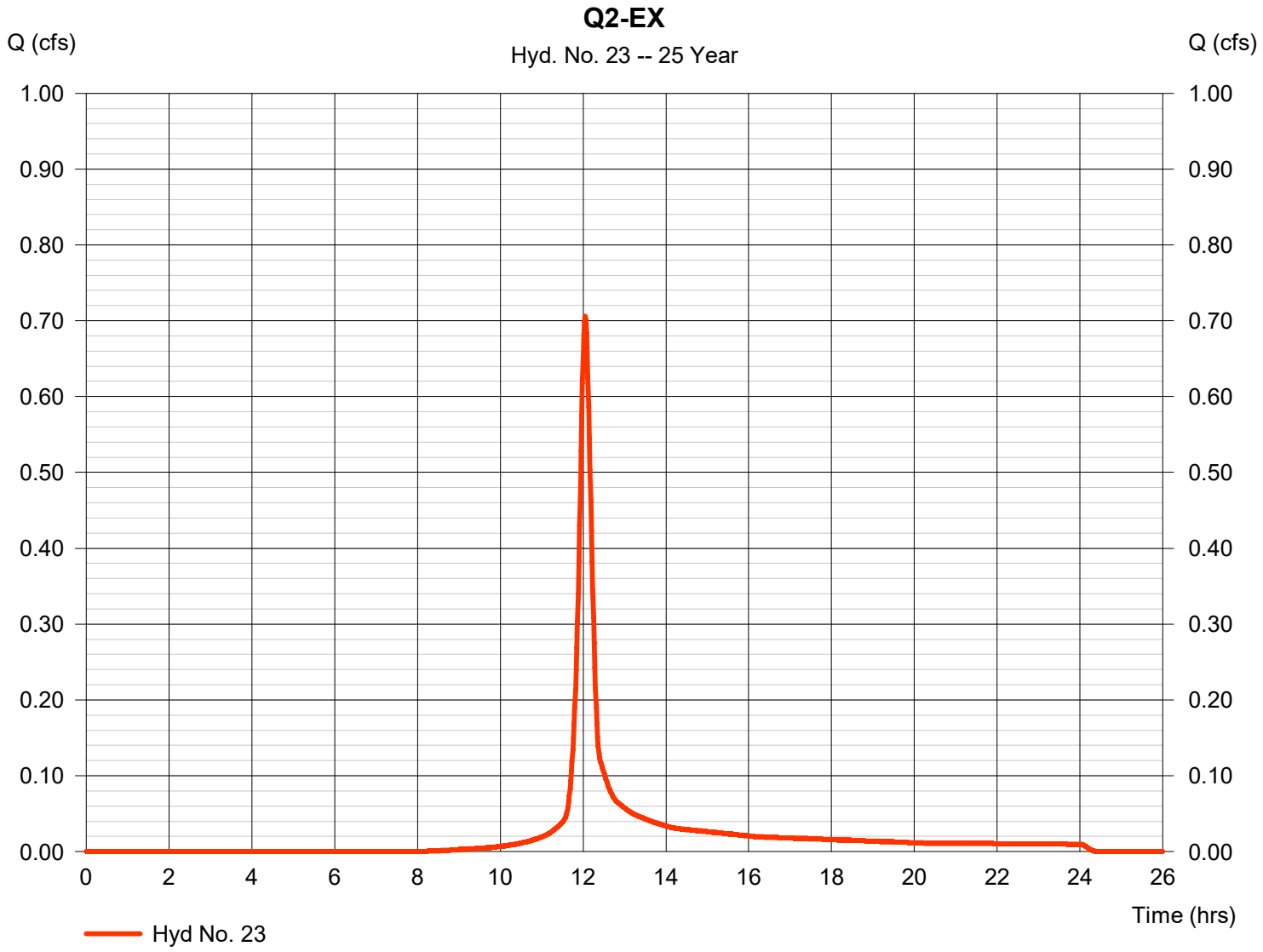


Hydrograph Report

Hyd. No. 23

Q2-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 0.706 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.05 hrs
Time interval	= 1 min	Hyd. volume	= 2,012 cuft
Drainage area	= 0.390 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 16.74 min
Total precip.	= 2.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



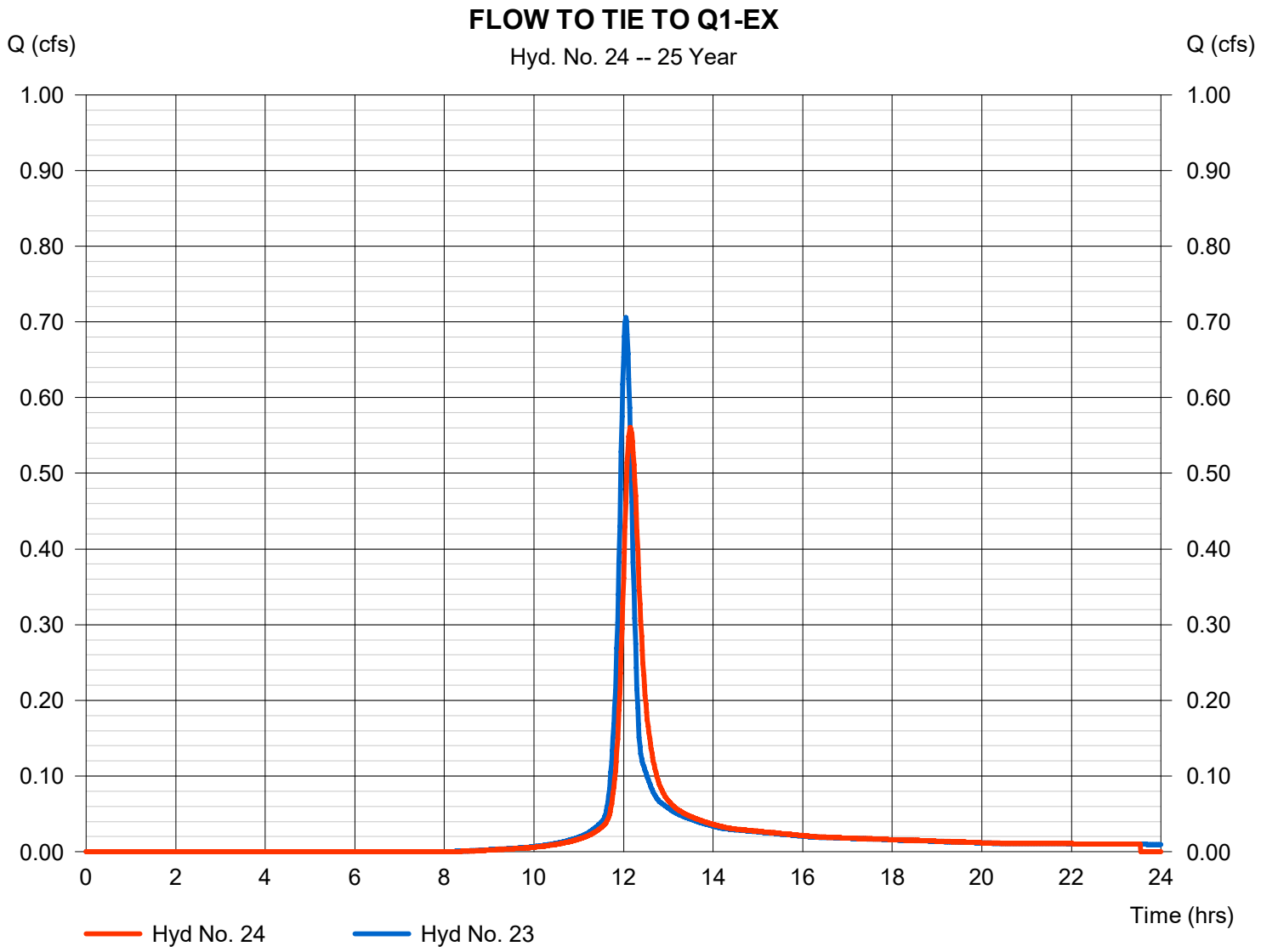
Hydrograph Report

Hyd. No. 24

FLOW TO TIE TO Q1-EX

Hydrograph type	= Reach	Peak discharge	= 0.561 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 1,984 cuft
Inflow hyd. No.	= 23 - Q2-EX	Section type	= Trapezoidal
Reach length	= 258.0 ft	Channel slope	= 0.1 %
Manning's n	= 0.035	Bottom width	= 5.0 ft
Side slope	= 3.0:1	Max. depth	= 1.0 ft
Rating curve x	= 0.412	Rating curve m	= 1.190
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.1169

Modified Att-Kin routing method used.

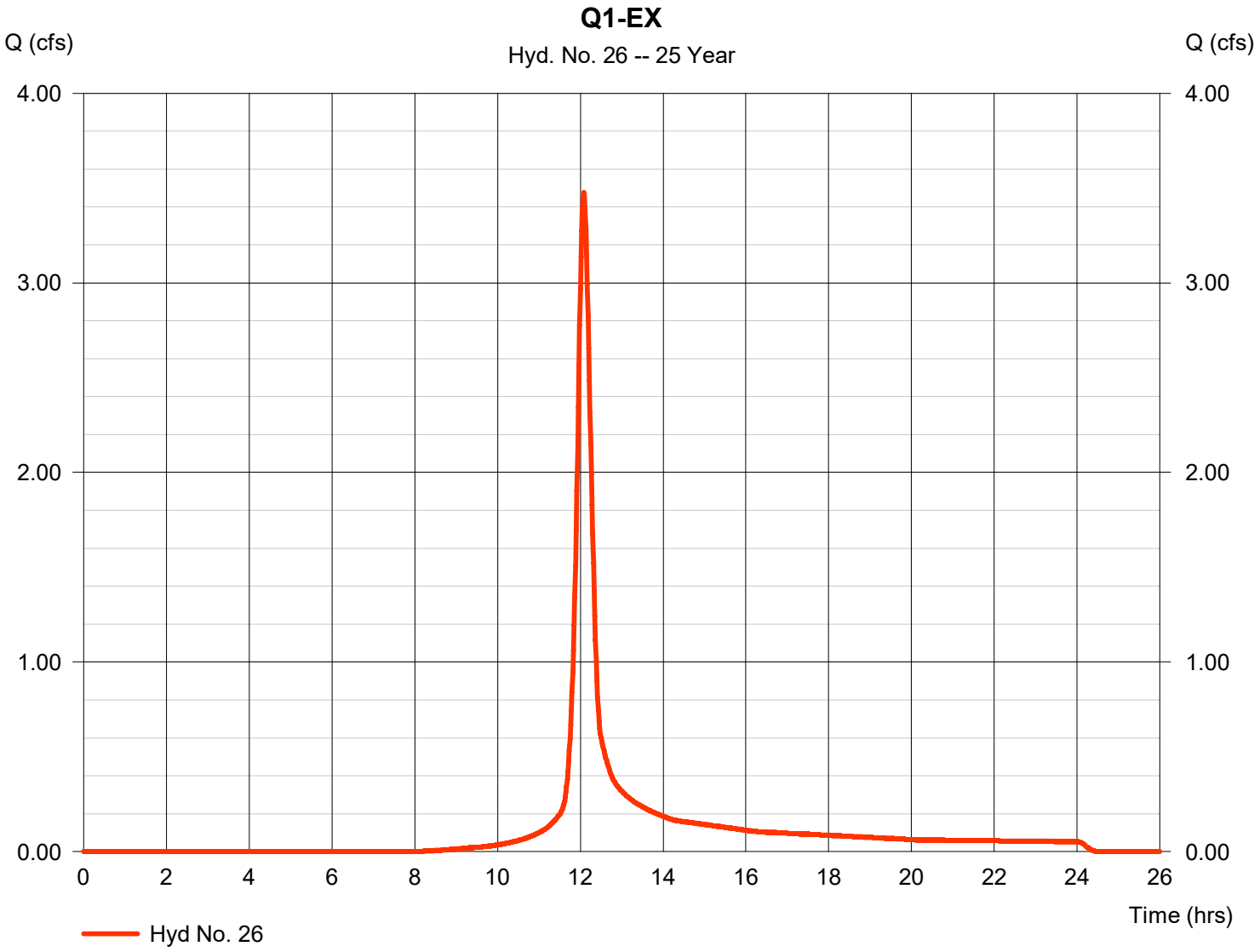


Hydrograph Report

Hyd. No. 26

Q1-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.475 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.08 hrs
Time interval	=	1 min	Hyd. volume	=	10,853 cuft
Drainage area	=	2.130 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.80 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

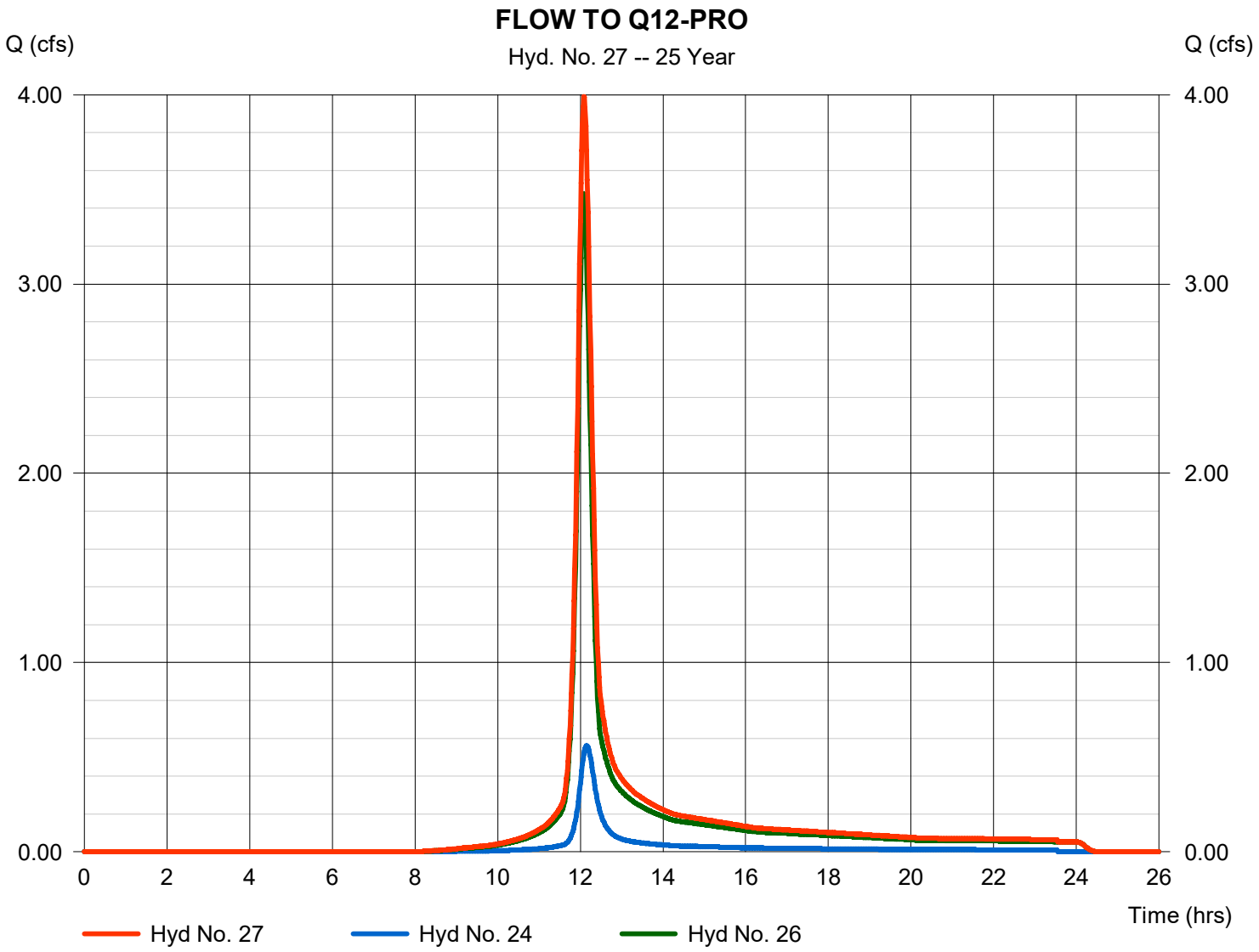


Hydrograph Report

Hyd. No. 27

FLOW TO Q12-PRO

Hydrograph type	= Combine	Peak discharge	= 3.989 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 12,836 cuft
Inflow hyds.	= 24, 26	Contrib. drain. area	= 2.130 ac



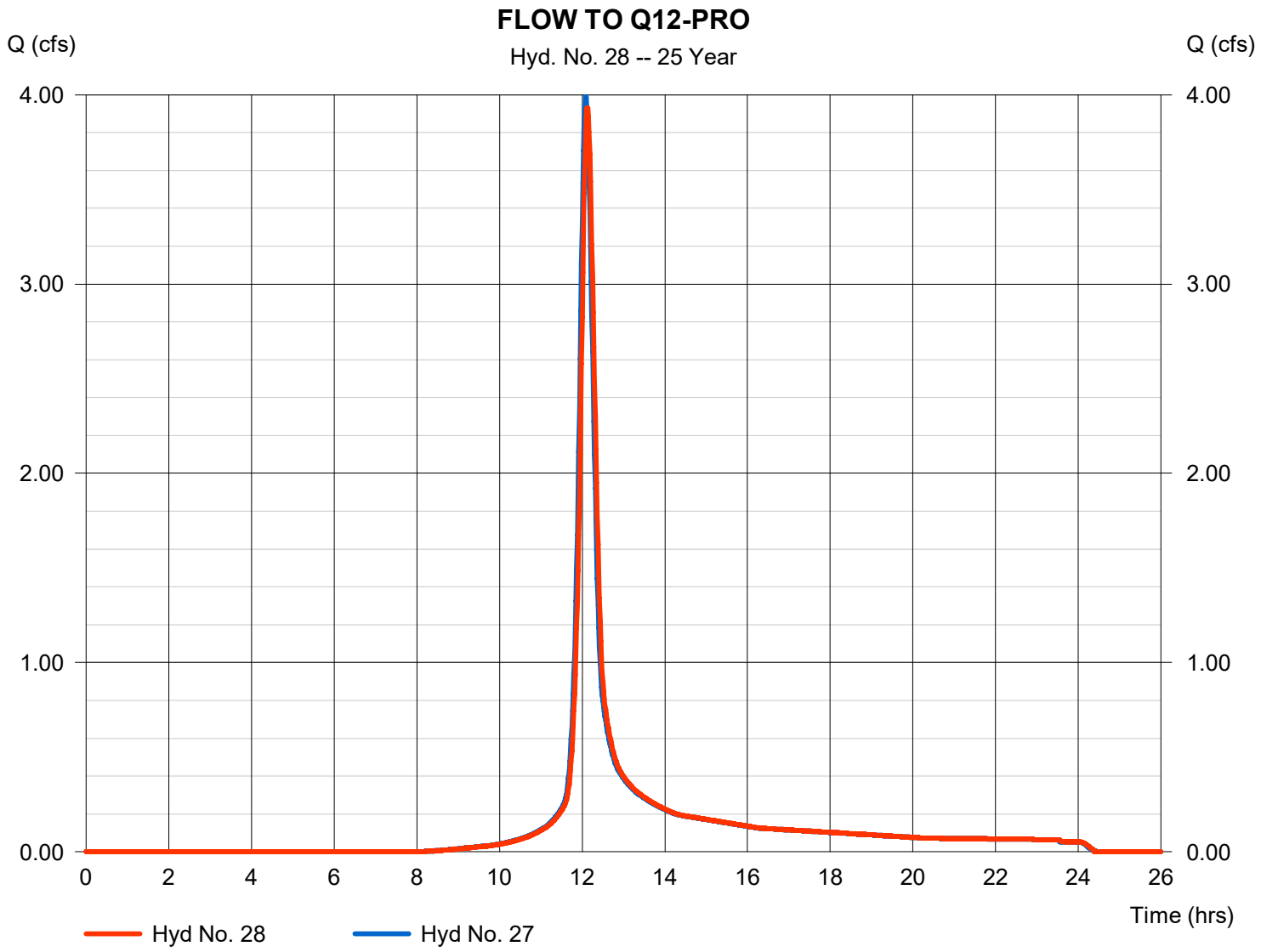
Hydrograph Report

Hyd. No. 28

FLOW TO Q12-PRO

Hydrograph type	= Reach	Peak discharge	= 3.931 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 12,834 cuft
Inflow hyd. No.	= 27 - FLOW TO Q12-PRO	Section type	= Rectangular
Reach length	= 294.0 ft	Channel slope	= 3.5 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 0.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.088	Rating curve m	= 1.646
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.4664

Modified Att-Kin routing method used.

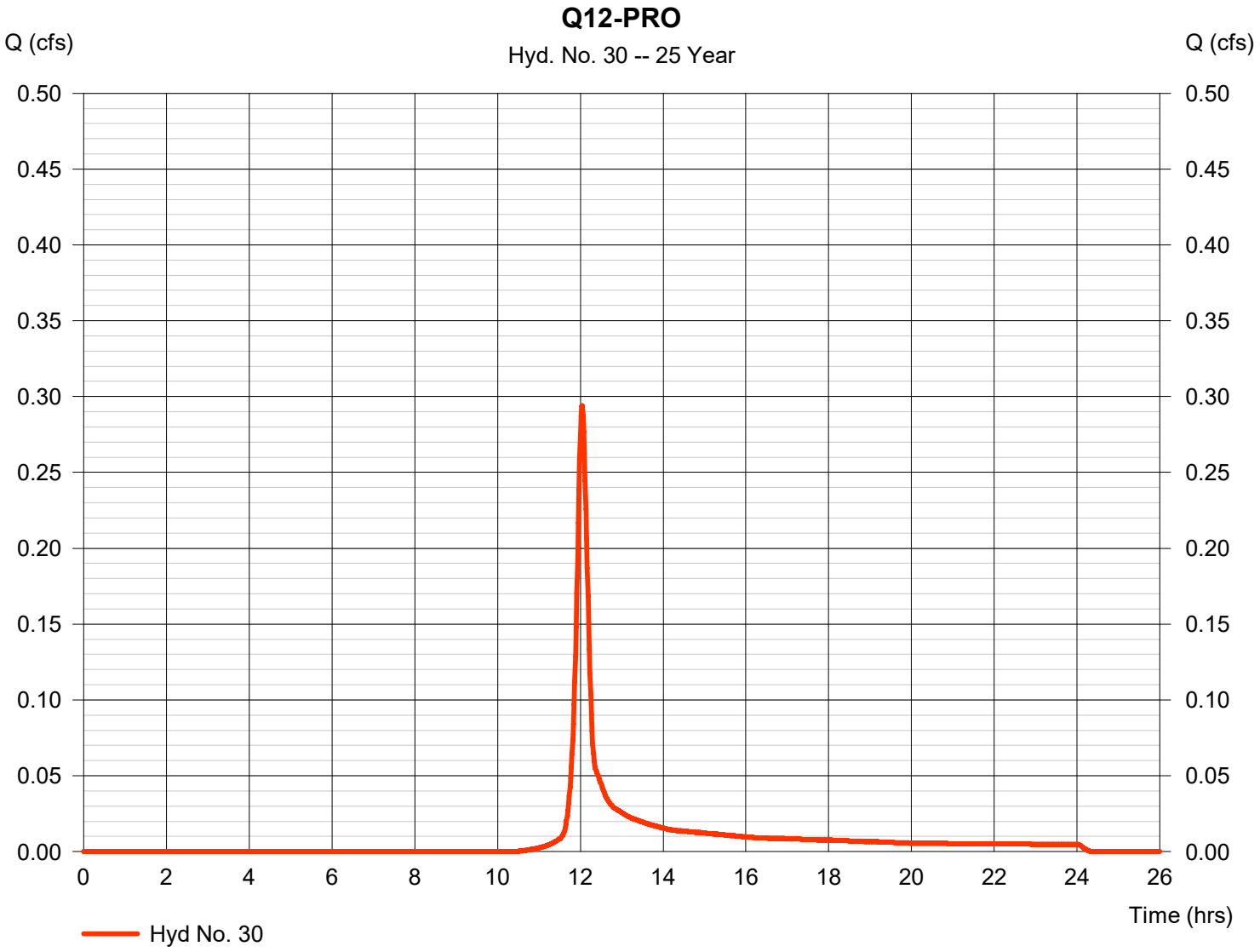


Hydrograph Report

Hyd. No. 30

Q12-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.294 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	806 cuft
Drainage area	=	0.230 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.22 min
Total precip.	=	2.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

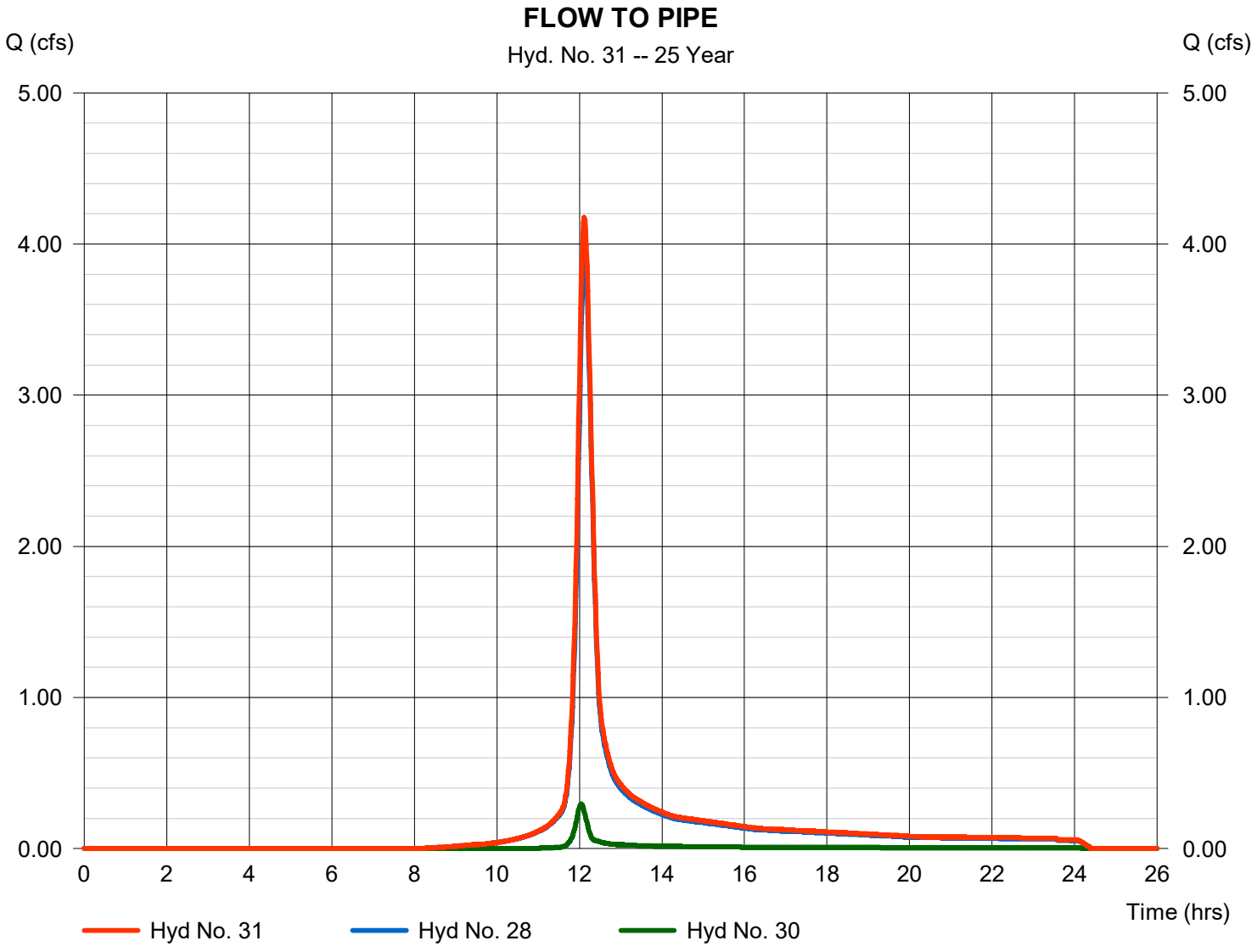


Hydrograph Report

Hyd. No. 31

FLOW TO PIPE

Hydrograph type	= Combine	Peak discharge	= 4.175 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 13,640 cuft
Inflow hyds.	= 28, 30	Contrib. drain. area	= 0.230 ac

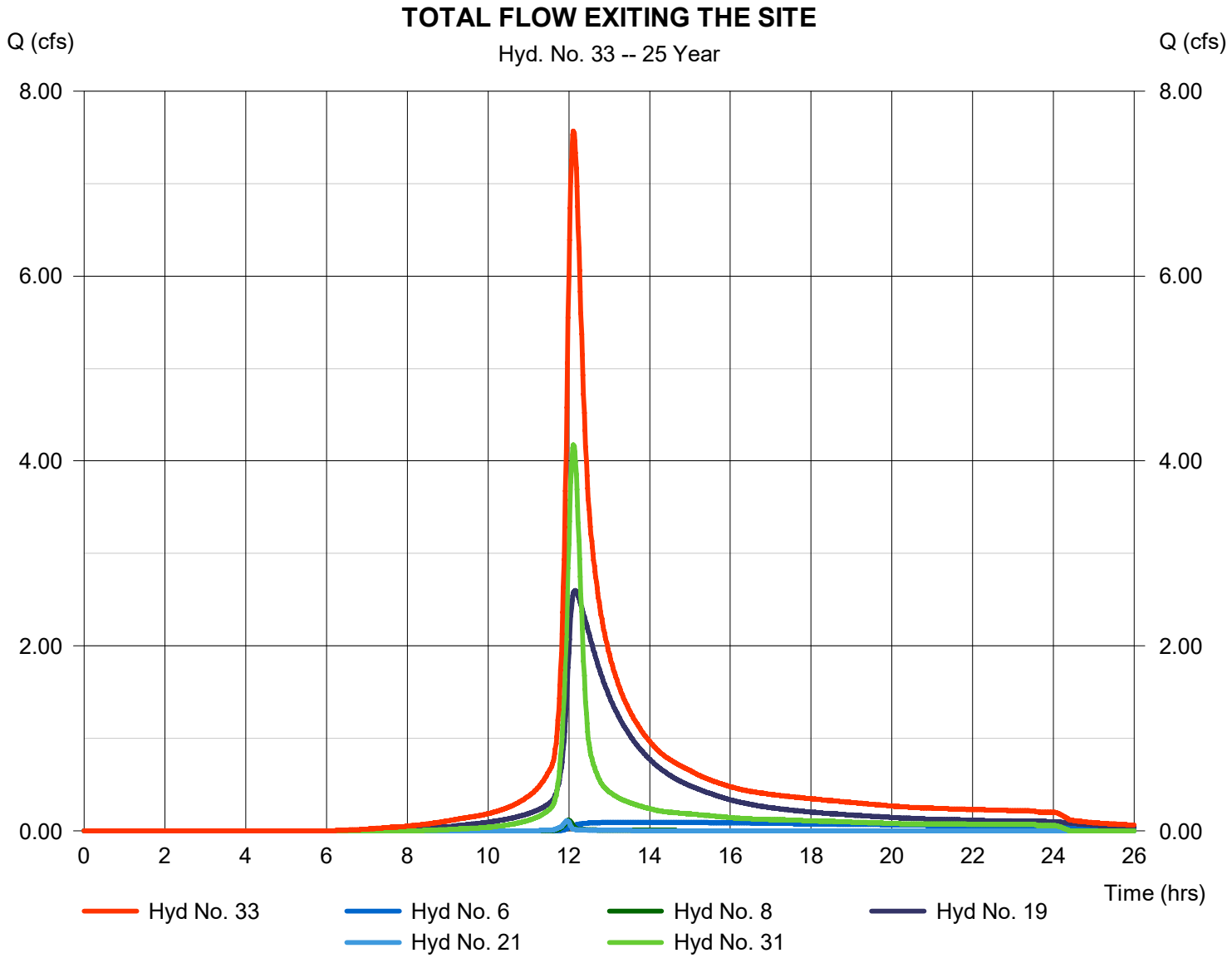


Hydrograph Report

Hyd. No. 33

TOTAL FLOW EXITING THE SITE

Hydrograph type	= Combine	Peak discharge	= 7.567 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 42,034 cuft
Inflow hyds.	= 6, 8, 19, 21, 31	Contrib. drain. area	= 0.120 ac



Hydrograph Summary Report

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

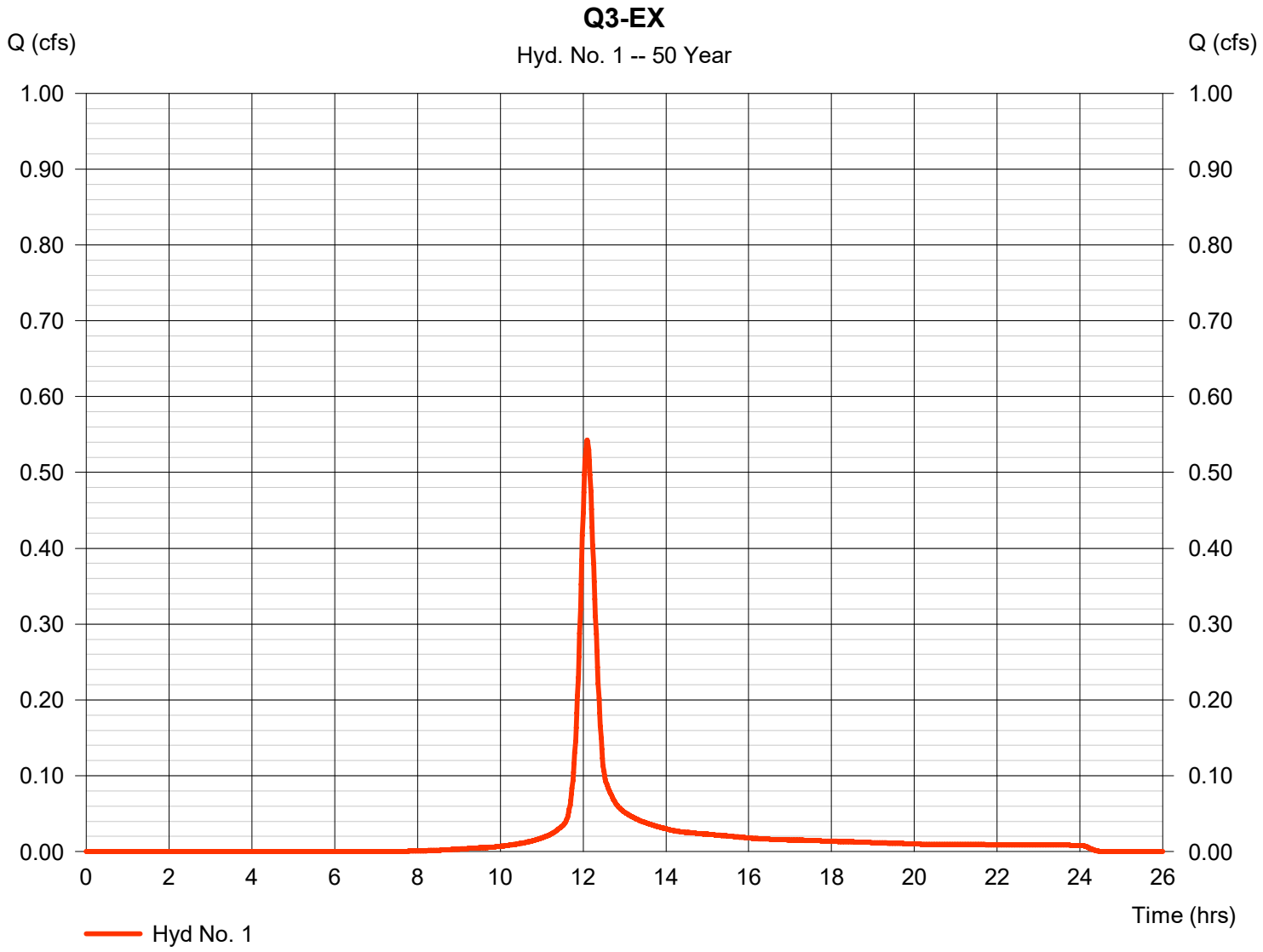
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.543	1	726	1,784	------	------	------	Q3-EX
2	SCS Runoff	0.755	1	718	1,616	------	------	------	Q4-PRO
4	SCS Runoff	1.470	1	717	3,024	------	------	------	Q5-PRO
5	Combine	2.609	1	718	6,423	1, 2, 4	------	------	FLOW TO POND 1
6	Reservoir	0.125	1	813	5,658	5	6335.40	3,854	FLOW FROM POND
8	SCS Runoff	0.146	1	720	330	------	------	------	Q6-PRO
10	SCS Runoff	0.591	1	718	1,196	------	------	------	Q7-PRO
12	SCS Runoff	2.575	1	717	6,061	------	------	------	Q8-PRO
14	SCS Runoff	2.661	1	717	6,263	------	------	------	Q9-PRO
15	Reach	2.253	1	720	6,260	14	------	------	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	5.906	1	719	14,168	------	------	------	Q10-PRO
18	Combine	11.05	1	719	27,685	10, 12, 15, 17	------	------	FLOW TO POND 2
19	Reservoir	3.075	1	729	27,029	18	6335.66	11,808	FLOW FROM POND 2
21	SCS Runoff	0.133	1	717	275	------	------	------	Q11-PRO
23	SCS Runoff	0.843	1	723	2,405	------	------	------	Q2-EX
24	Reach	0.676	1	729	2,398	23	------	------	FLOW TO TIE TO Q1-EX
26	SCS Runoff	4.154	1	725	12,975	------	------	------	Q1-EX
27	Combine	4.779	1	725	15,373	24, 26	------	------	FLOW TO Q12-PRO
28	Reach	4.721	1	727	15,371	27	------	------	FLOW TO Q12-PRO
30	SCS Runoff	0.368	1	722	1,000	------	------	------	Q12-PRO
31	Combine	5.025	1	727	16,371	28, 30	------	------	FLOW TO PIPE
33	Combine	8.974	1	727	49,475	6, 8, 19, 21, 31,	------	------	TOTAL FLOW EXITING THE SITE

Hydrograph Report

Hyd. No. 1

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.543 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	1,784 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.40 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

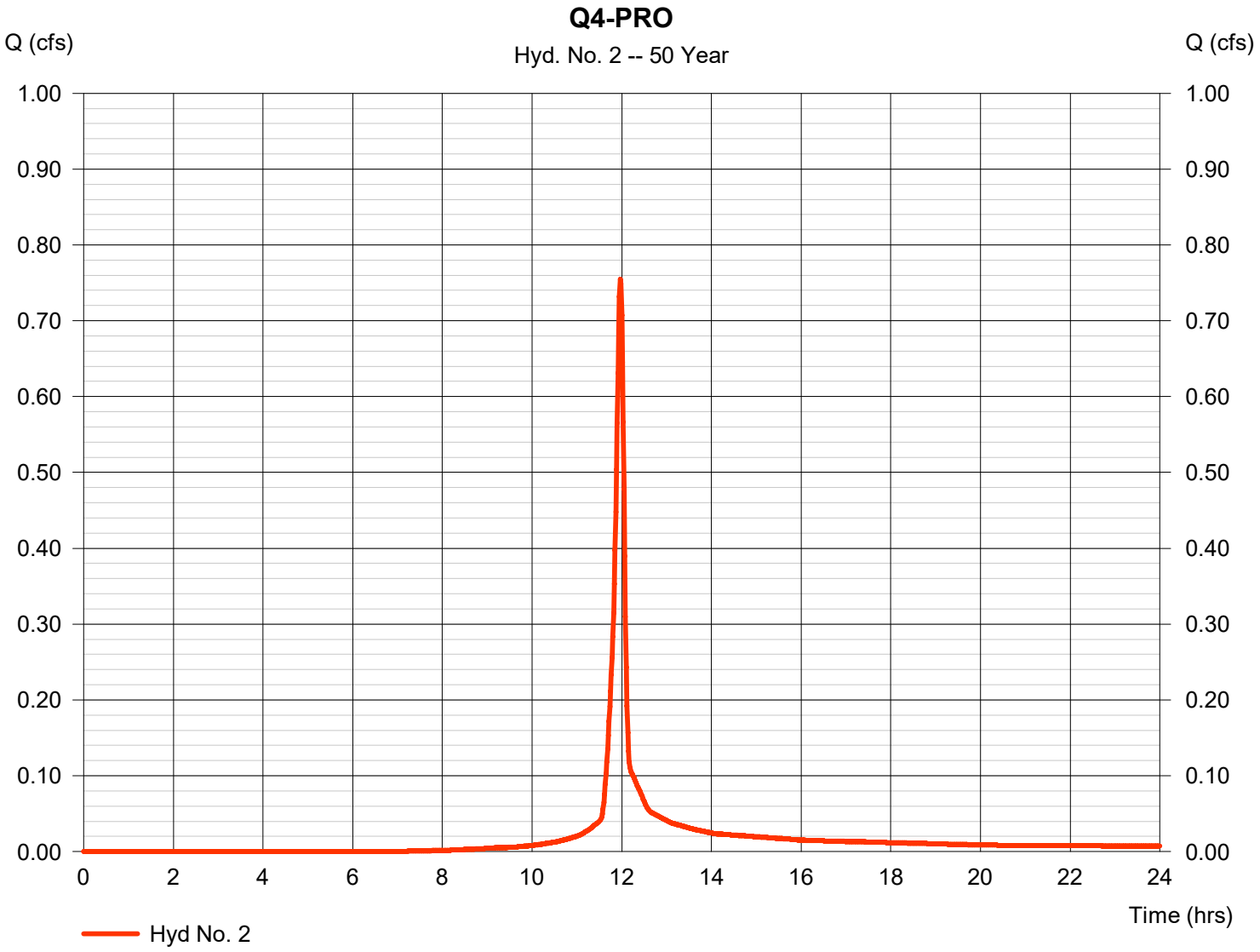


Hydrograph Report

Hyd. No. 2

Q4-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.755 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,616 cuft
Drainage area	=	0.260 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.90 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

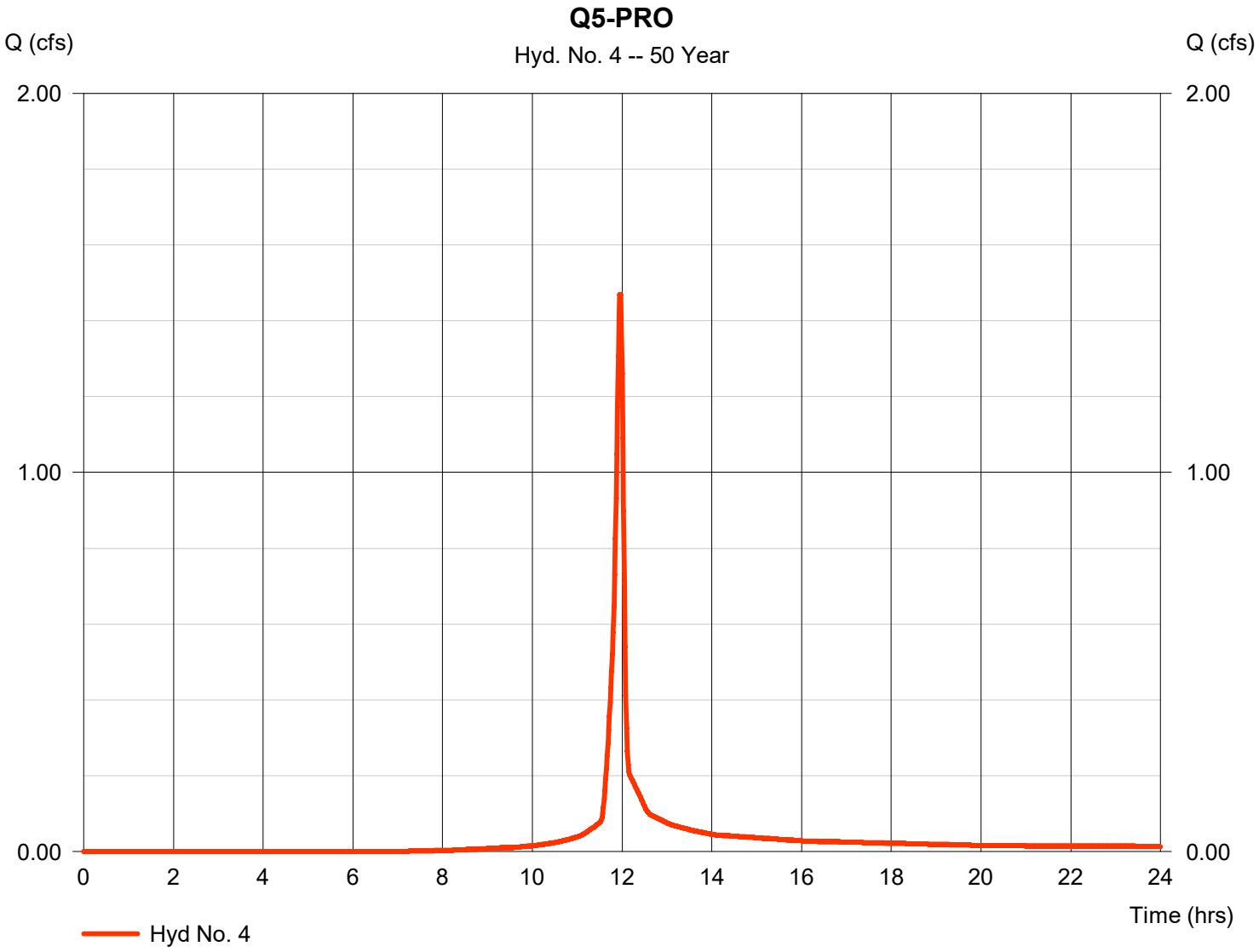


Hydrograph Report

Hyd. No. 4

Q5-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.470 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	3,024 cuft
Drainage area	=	0.460 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

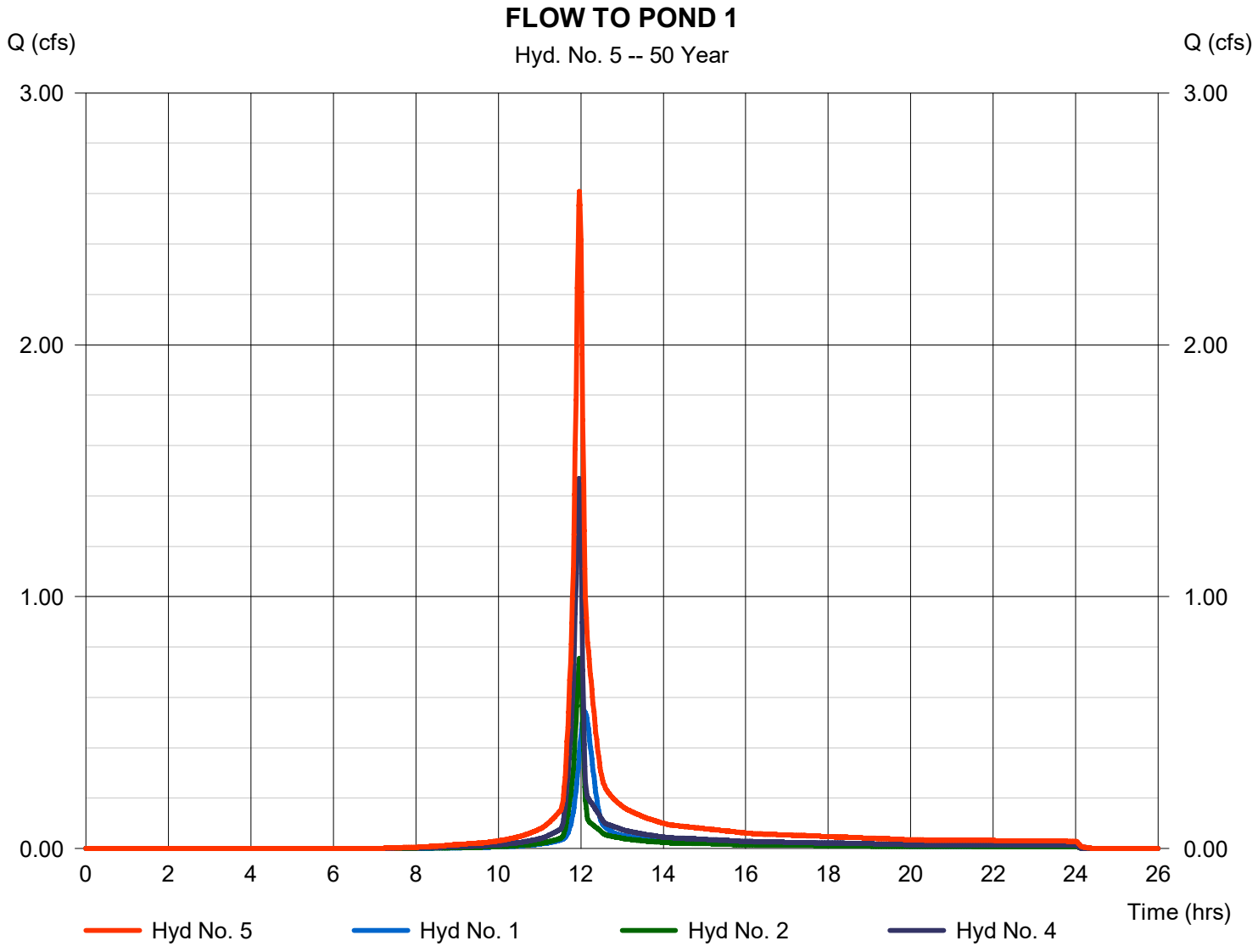


Hydrograph Report

Hyd. No. 5

FLOW TO POND 1

Hydrograph type	=	Combine	Peak discharge	=	2.609 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	6,423 cuft
Inflow hyds.	=	1, 2, 4	Contrib. drain. area	=	1.010 ac



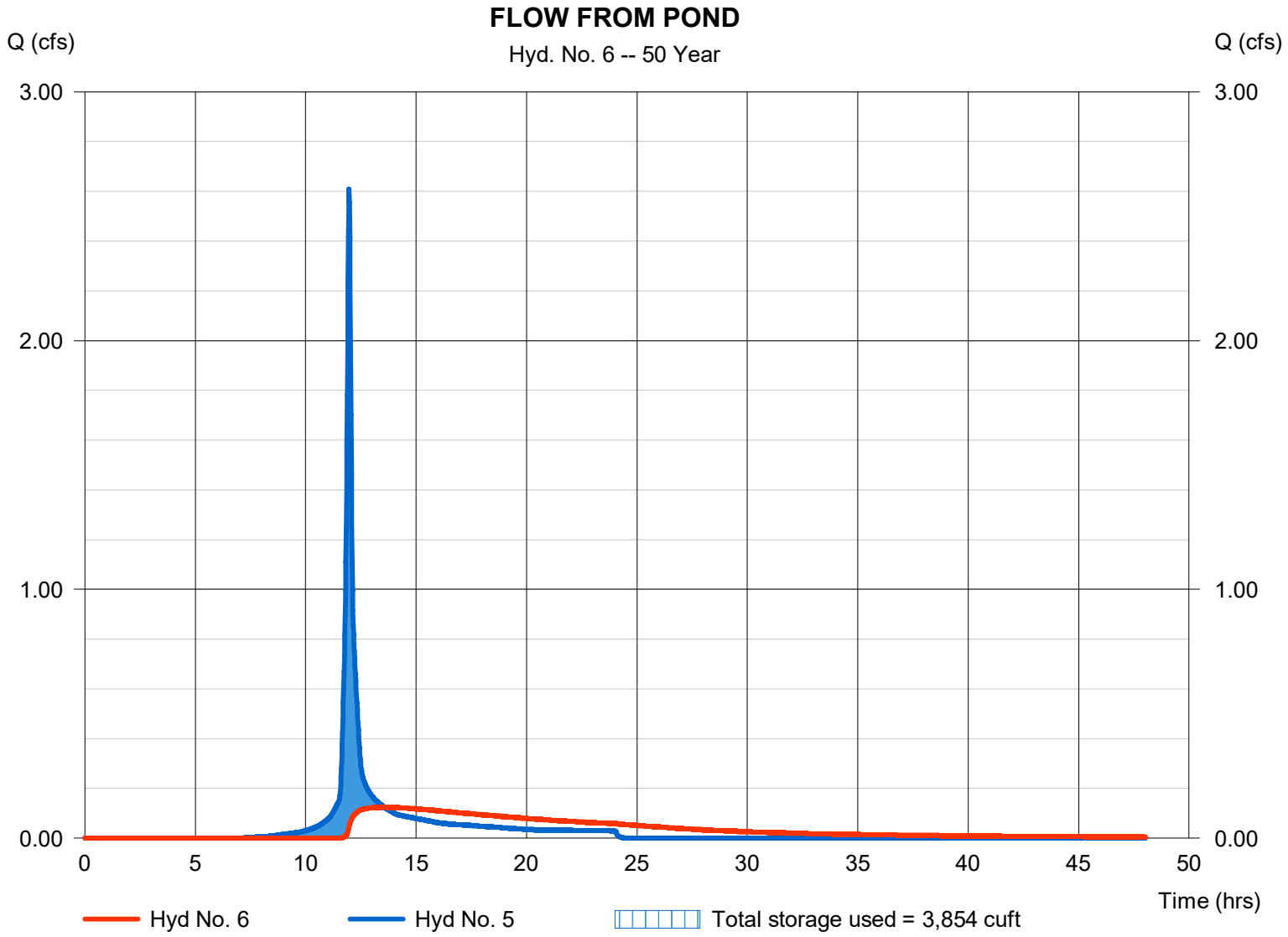
Hydrograph Report

Hyd. No. 6

FLOW FROM POND

Hydrograph type	= Reservoir	Peak discharge	= 0.125 cfs
Storm frequency	= 50 yrs	Time to peak	= 13.55 hrs
Time interval	= 1 min	Hyd. volume	= 5,658 cuft
Inflow hyd. No.	= 5 - FLOW TO POND 1	Max. Elevation	= 6335.40 ft
Reservoir name	= POND 1	Max. Storage	= 3,854 cuft

Storage Indication method used.

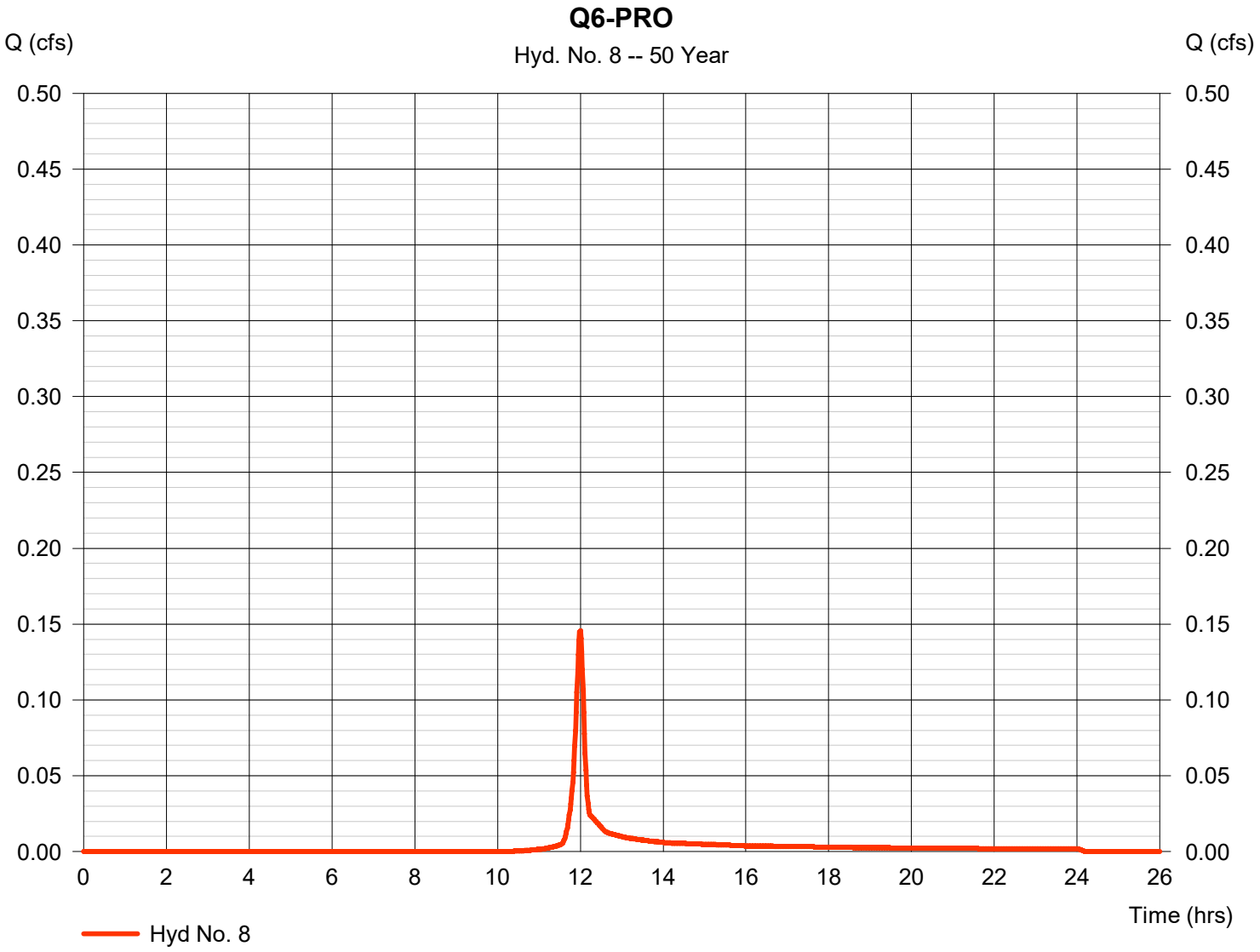


Hydrograph Report

Hyd. No. 8

Q6-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.146 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	330 cuft
Drainage area	=	0.080 ac	Curve number	=	79
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	9.18 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

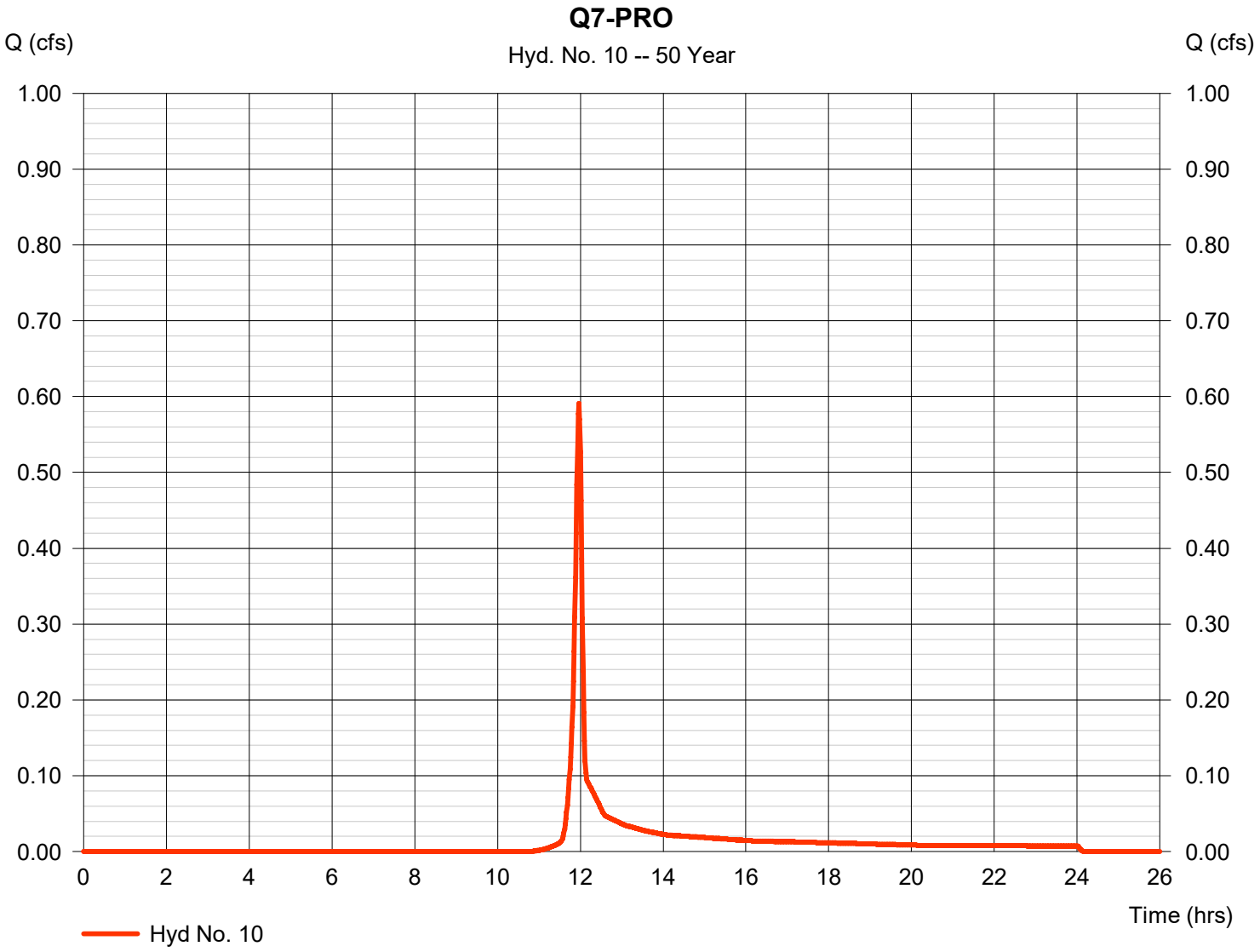


Hydrograph Report

Hyd. No. 10

Q7-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.591 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,196 cuft
Drainage area	=	0.330 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

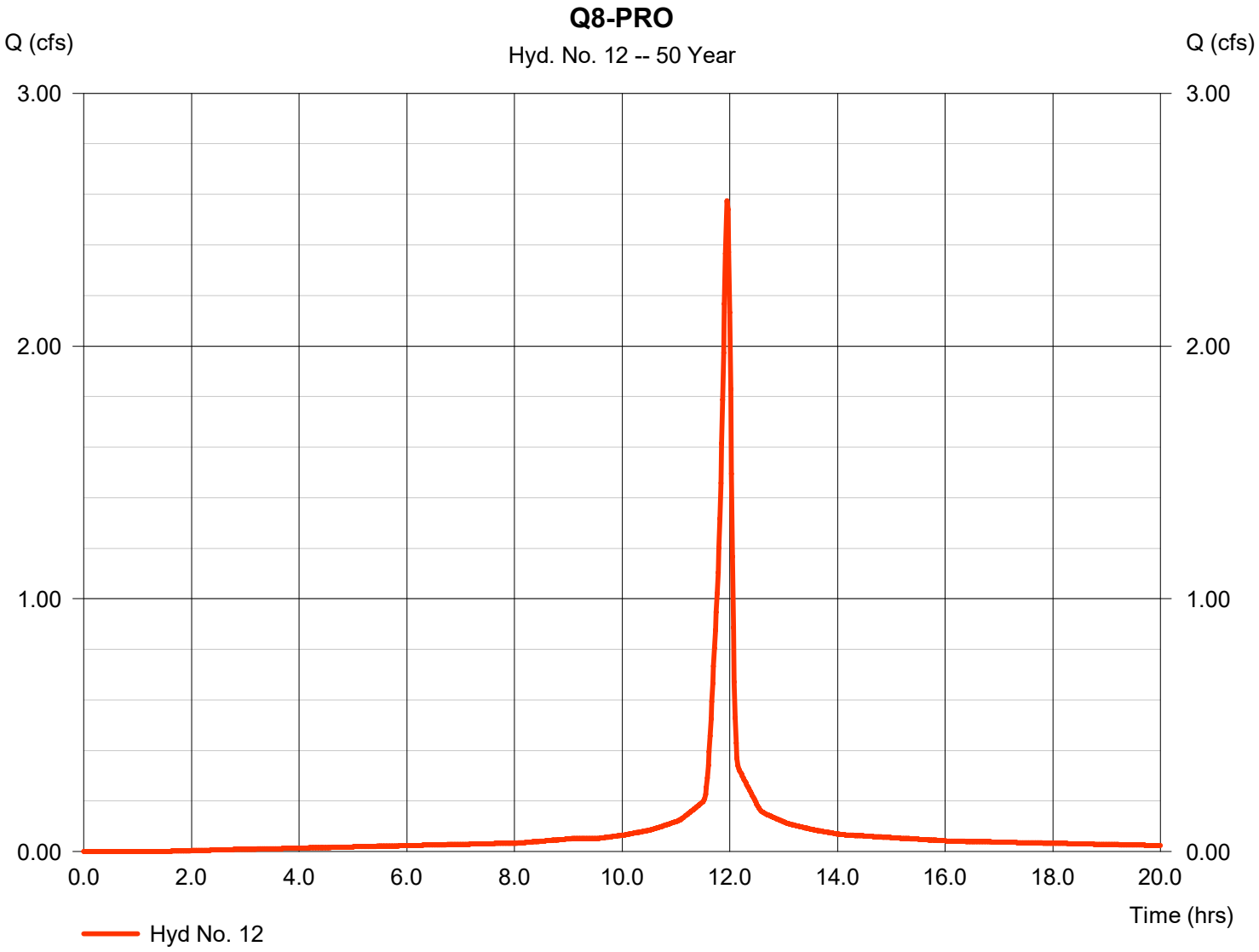


Hydrograph Report

Hyd. No. 12

Q8-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.575 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,061 cuft
Drainage area	=	0.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

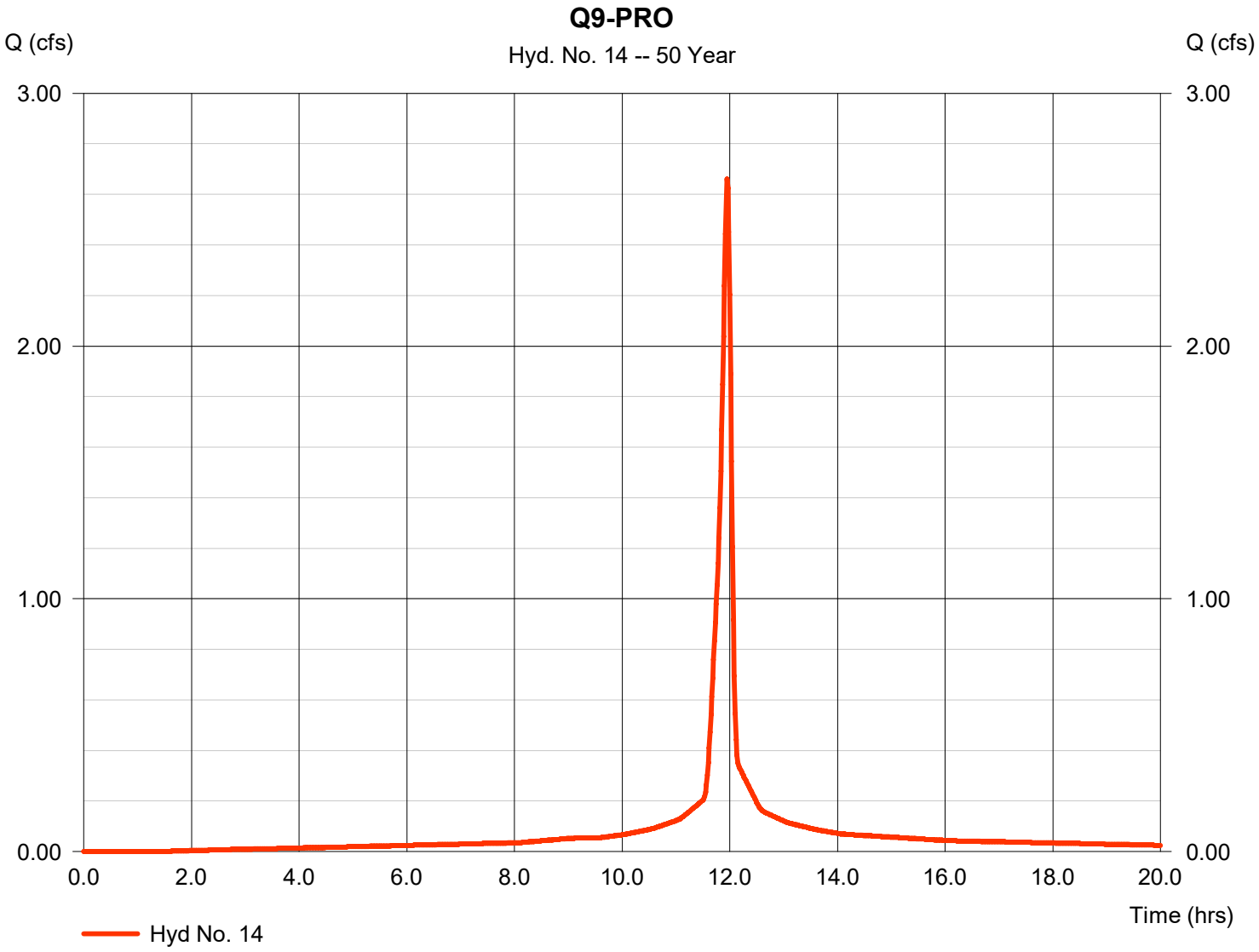


Hydrograph Report

Hyd. No. 14

Q9-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.661 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,263 cuft
Drainage area	=	0.620 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



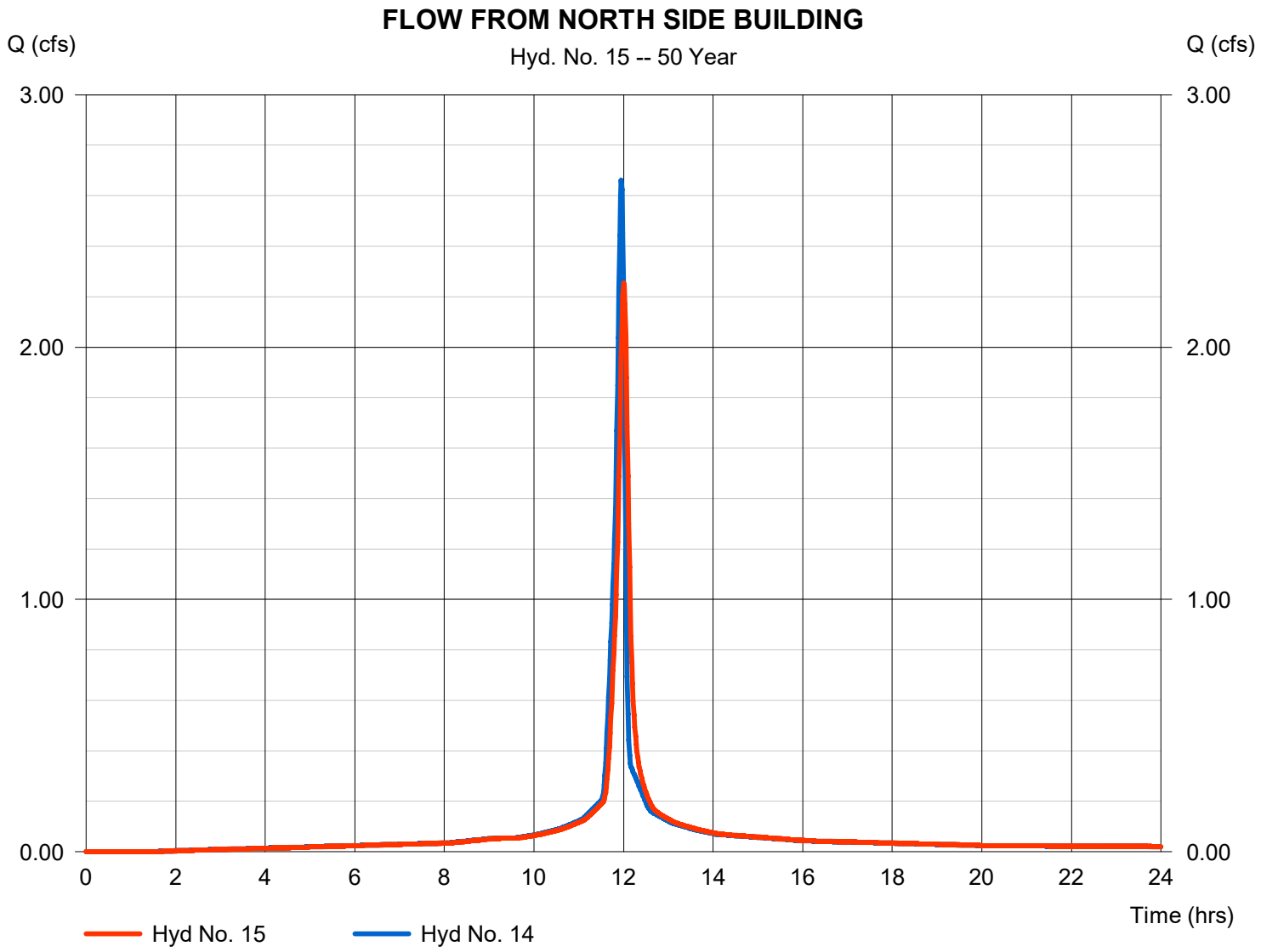
Hydrograph Report

Hyd. No. 15

FLOW FROM NORTH SIDE BUILDING

Hydrograph type	=	Reach	Peak discharge	=	2.253 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	6,260 cuft
Inflow hyd. No.	=	14 - Q9-PRO	Section type	=	Circular
Reach length	=	509.0 ft	Channel slope	=	0.5 %
Manning's n	=	0.025	Bottom width	=	1.5 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	2.433	Rating curve m	=	1.250
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.1997

Modified Att-Kin routing method used.

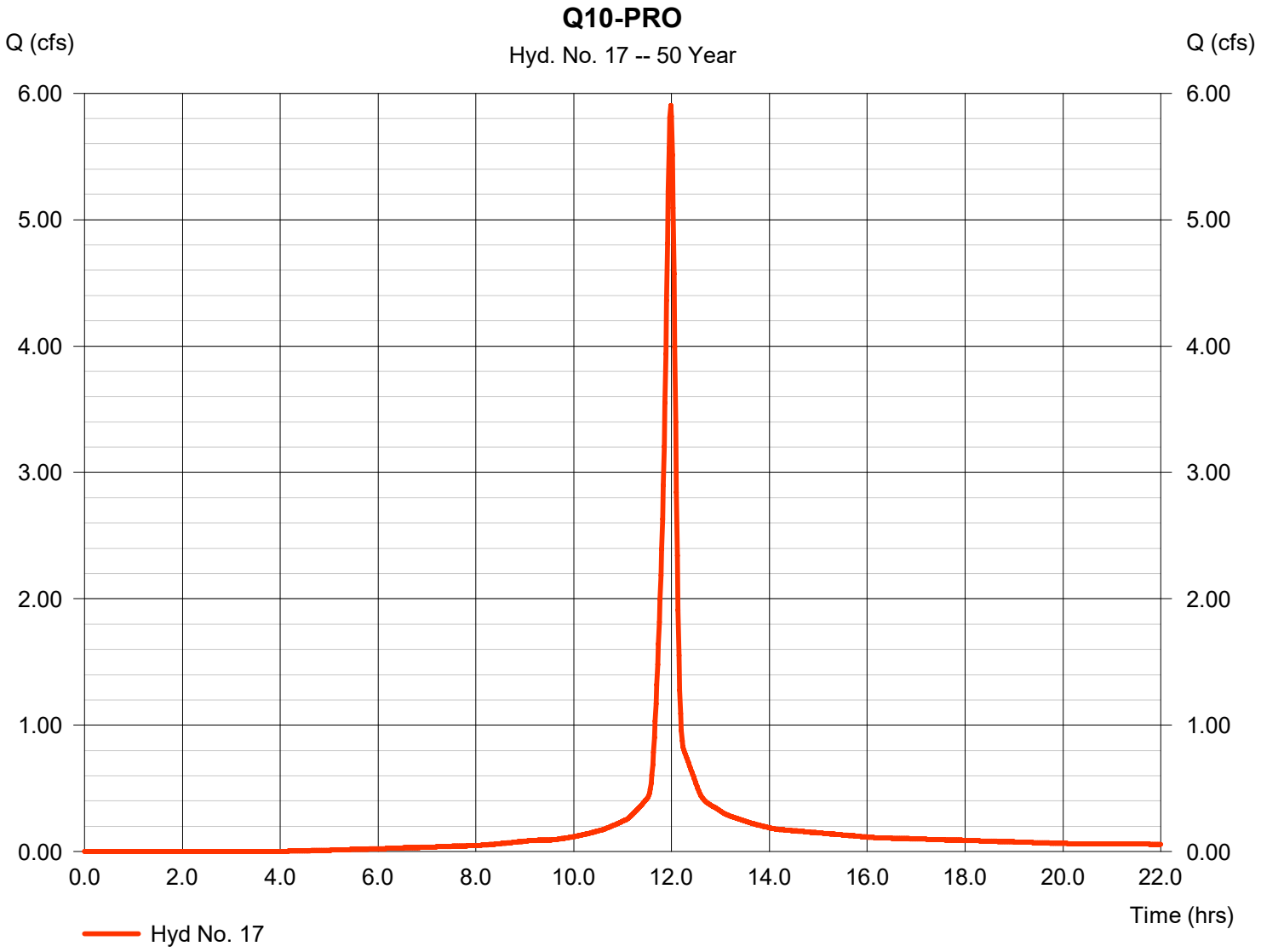


Hydrograph Report

Hyd. No. 17

Q10-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.906 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	14,168 cuft
Drainage area	=	1.710 ac	Curve number	=	94
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.40 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

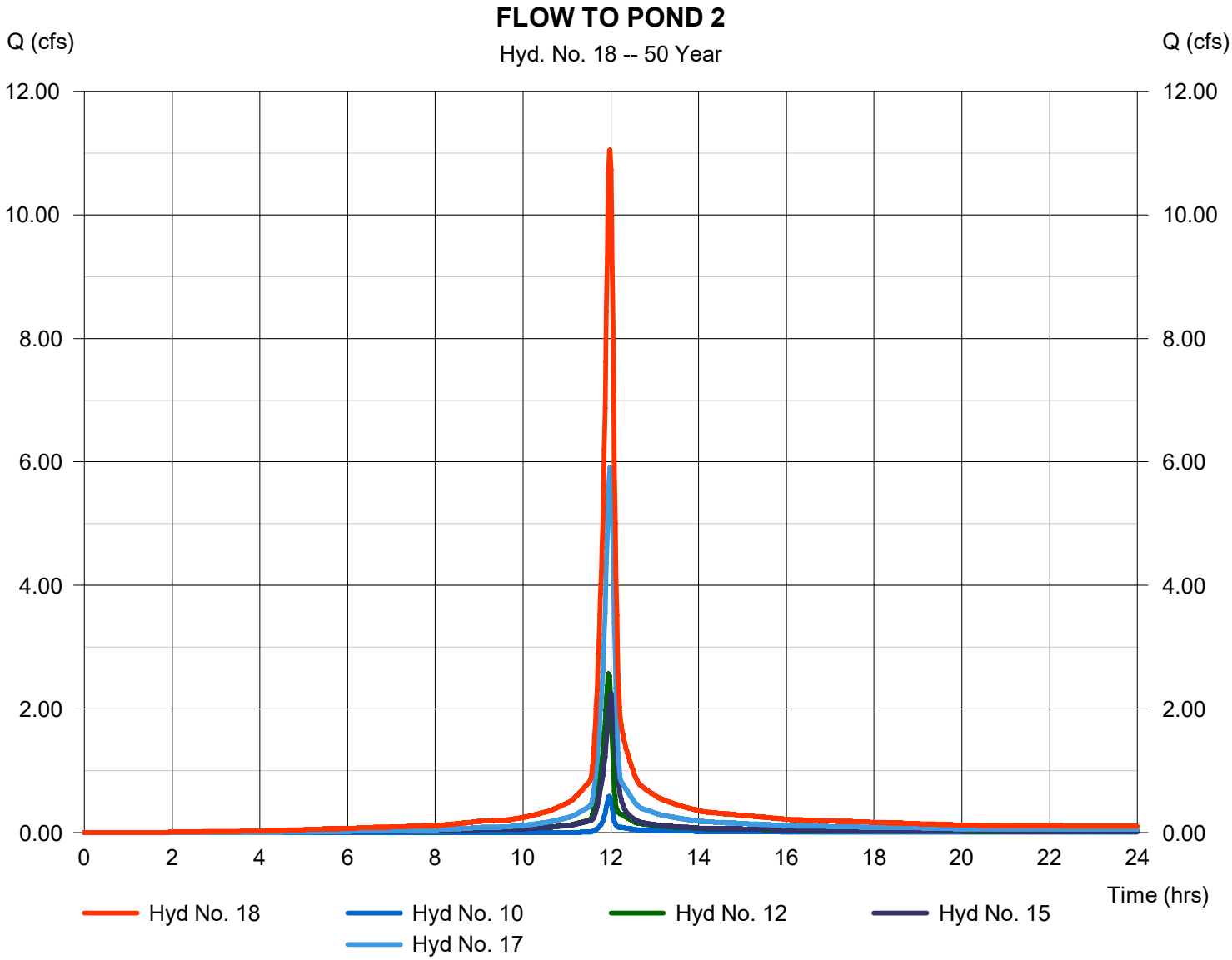


Hydrograph Report

Hyd. No. 18

FLOW TO POND 2

Hydrograph type	=	Combine	Peak discharge	=	11.05 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	27,685 cuft
Inflow hyds.	=	10, 12, 15, 17	Contrib. drain. area	=	2.640 ac



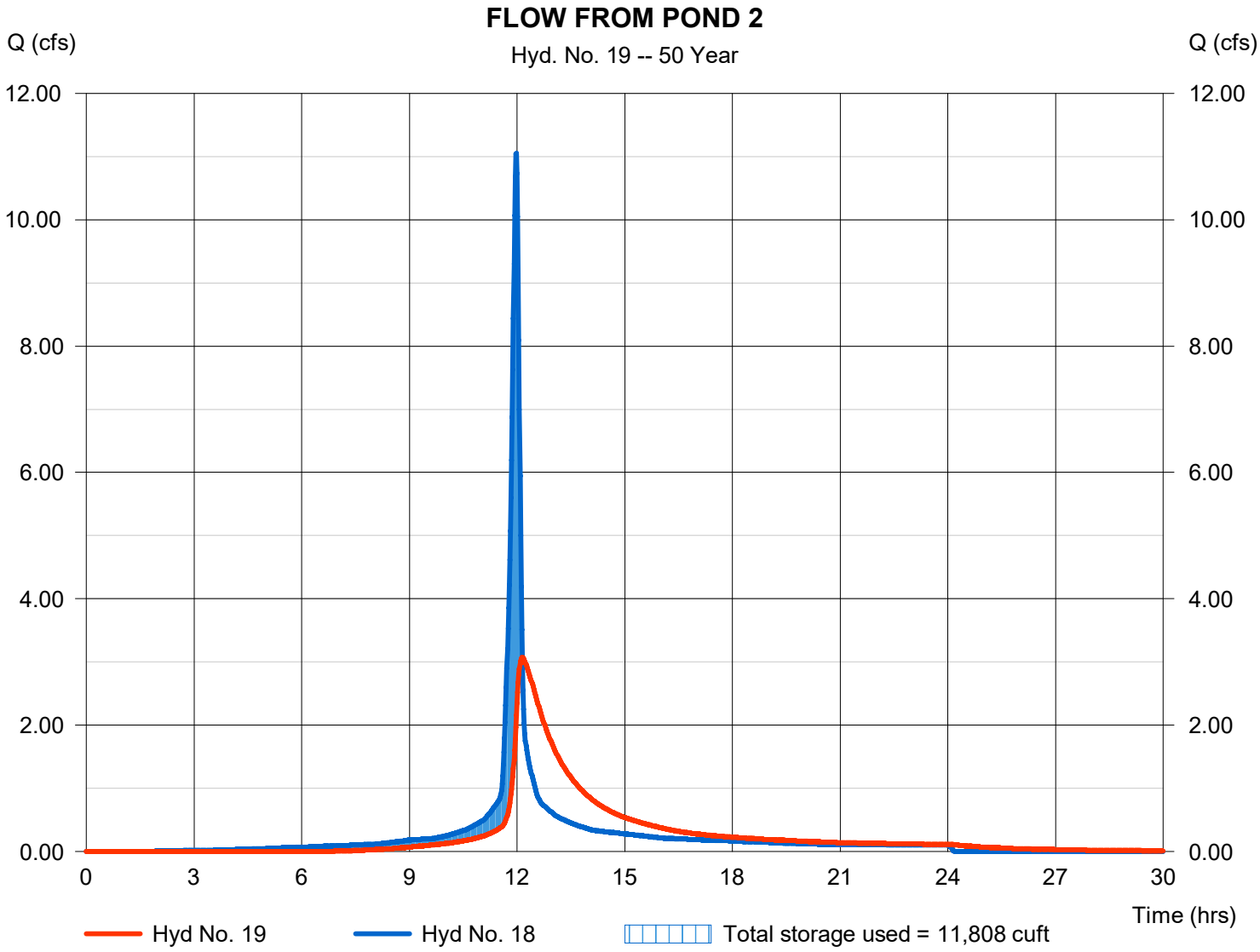
Hydrograph Report

Hyd. No. 19

FLOW FROM POND 2

Hydrograph type	= Reservoir	Peak discharge	= 3.075 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 27,029 cuft
Inflow hyd. No.	= 18 - FLOW TO POND 2	Max. Elevation	= 6335.66 ft
Reservoir name	= POND 2	Max. Storage	= 11,808 cuft

Storage Indication method used.

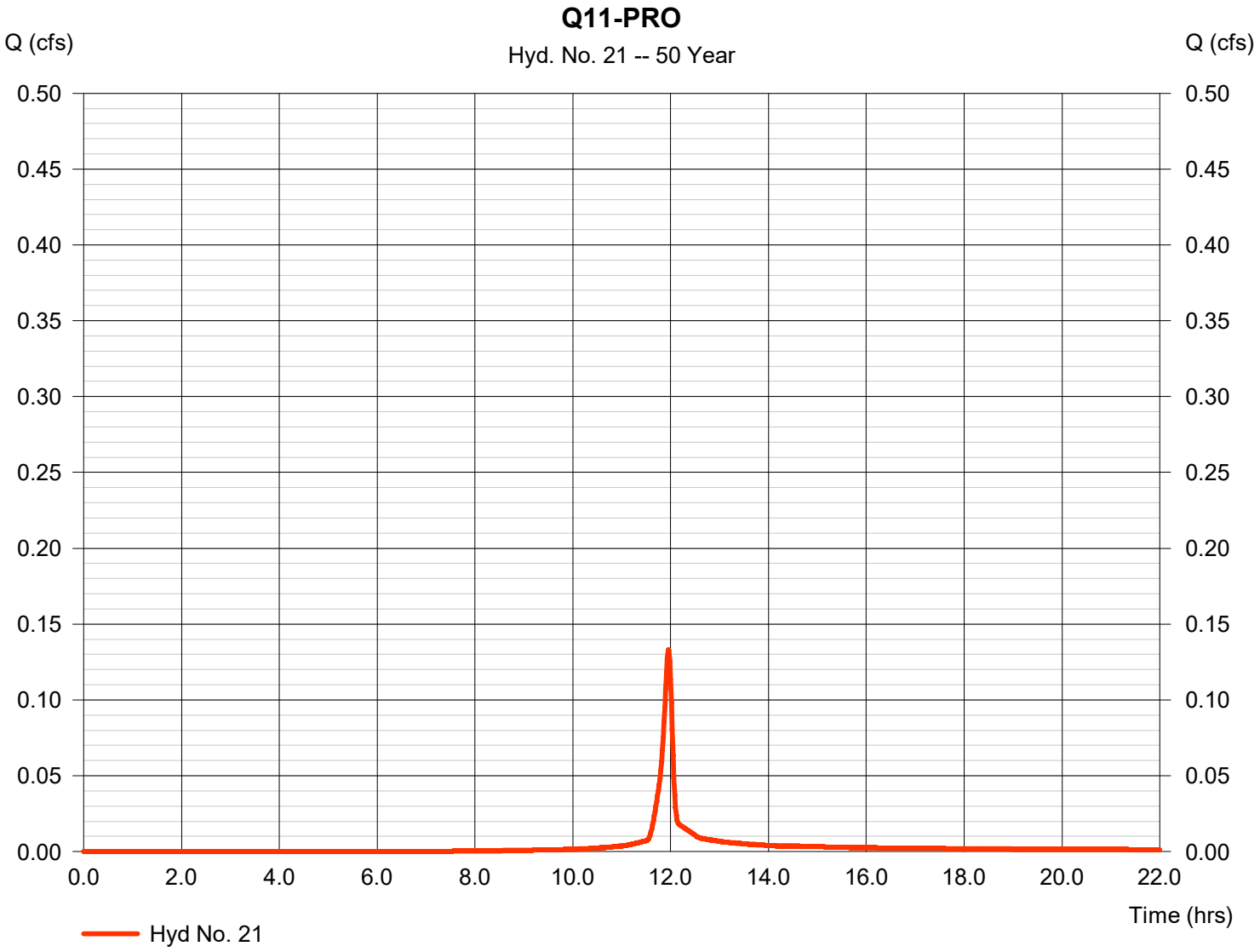


Hydrograph Report

Hyd. No. 21

Q11-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.133 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	275 cuft
Drainage area	=	0.040 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

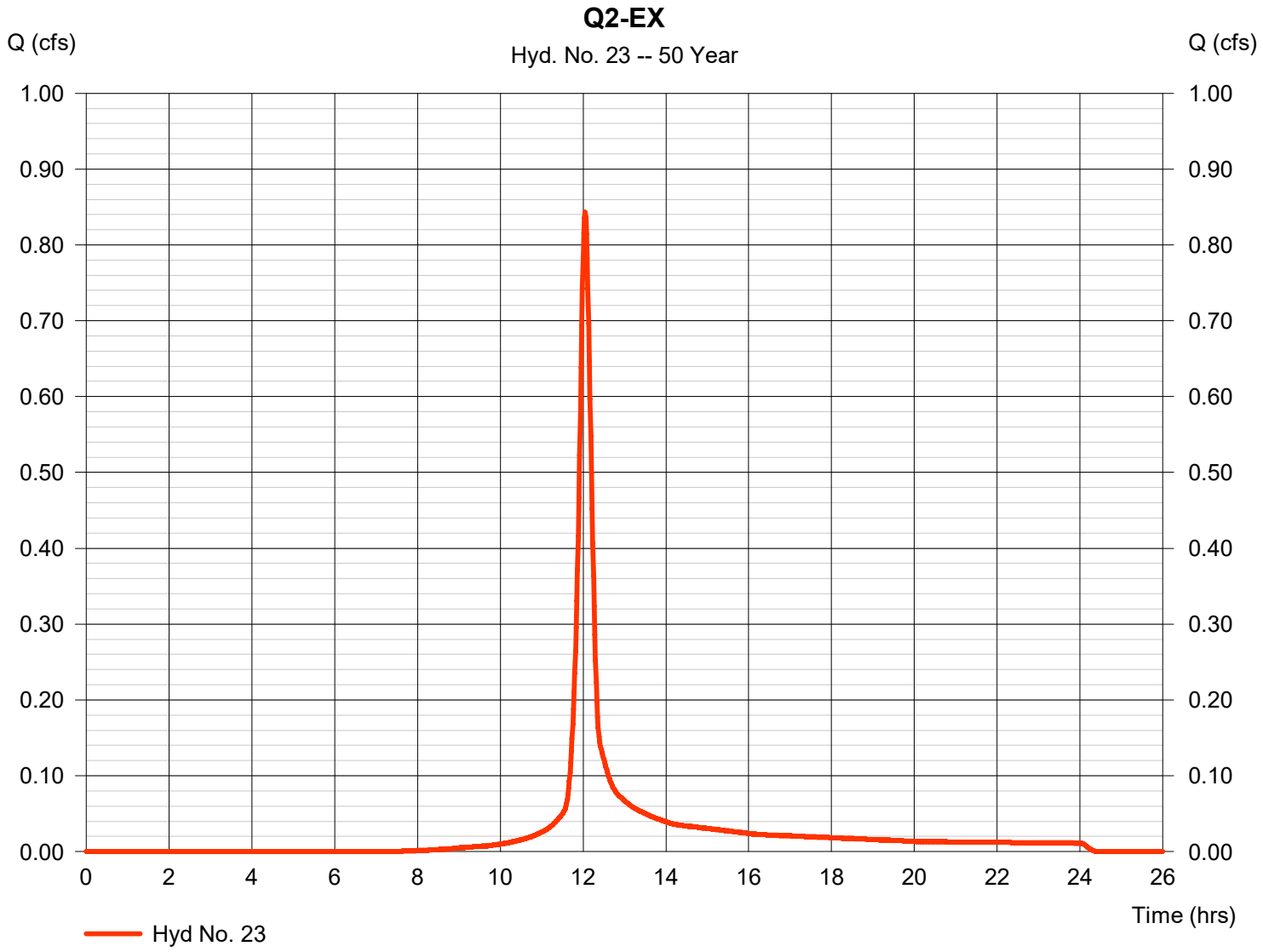


Hydrograph Report

Hyd. No. 23

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.843 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,405 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



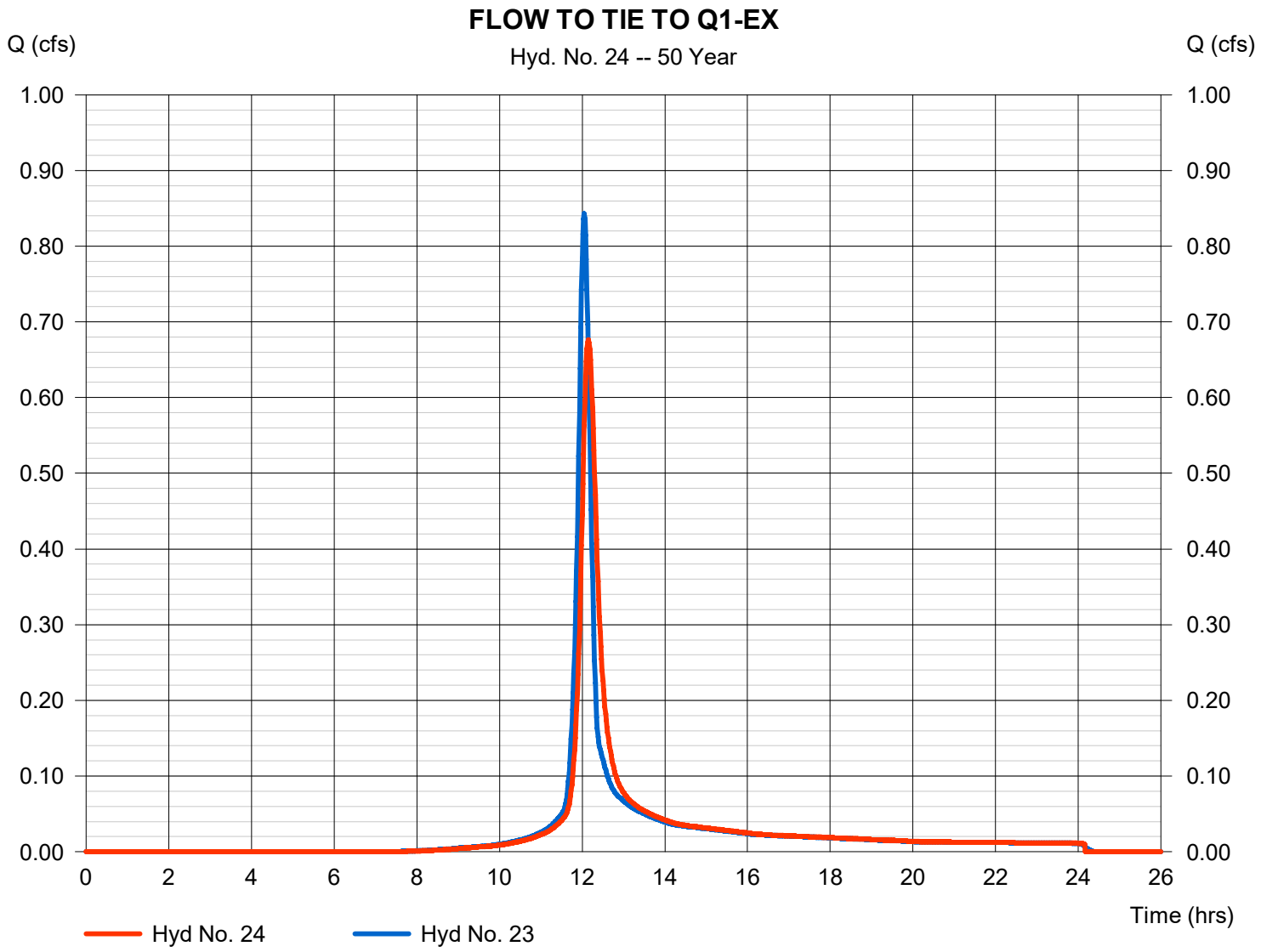
Hydrograph Report

Hyd. No. 24

FLOW TO TIE TO Q1-EX

Hydrograph type	=	Reach	Peak discharge	=	0.676 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.15 hrs
Time interval	=	1 min	Hyd. volume	=	2,398 cuft
Inflow hyd. No.	=	23 - Q2-EX	Section type	=	Trapezoidal
Reach length	=	258.0 ft	Channel slope	=	0.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	3.0:1	Max. depth	=	1.0 ft
Rating curve x	=	0.412	Rating curve m	=	1.190
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.1200

Modified Att-Kin routing method used.

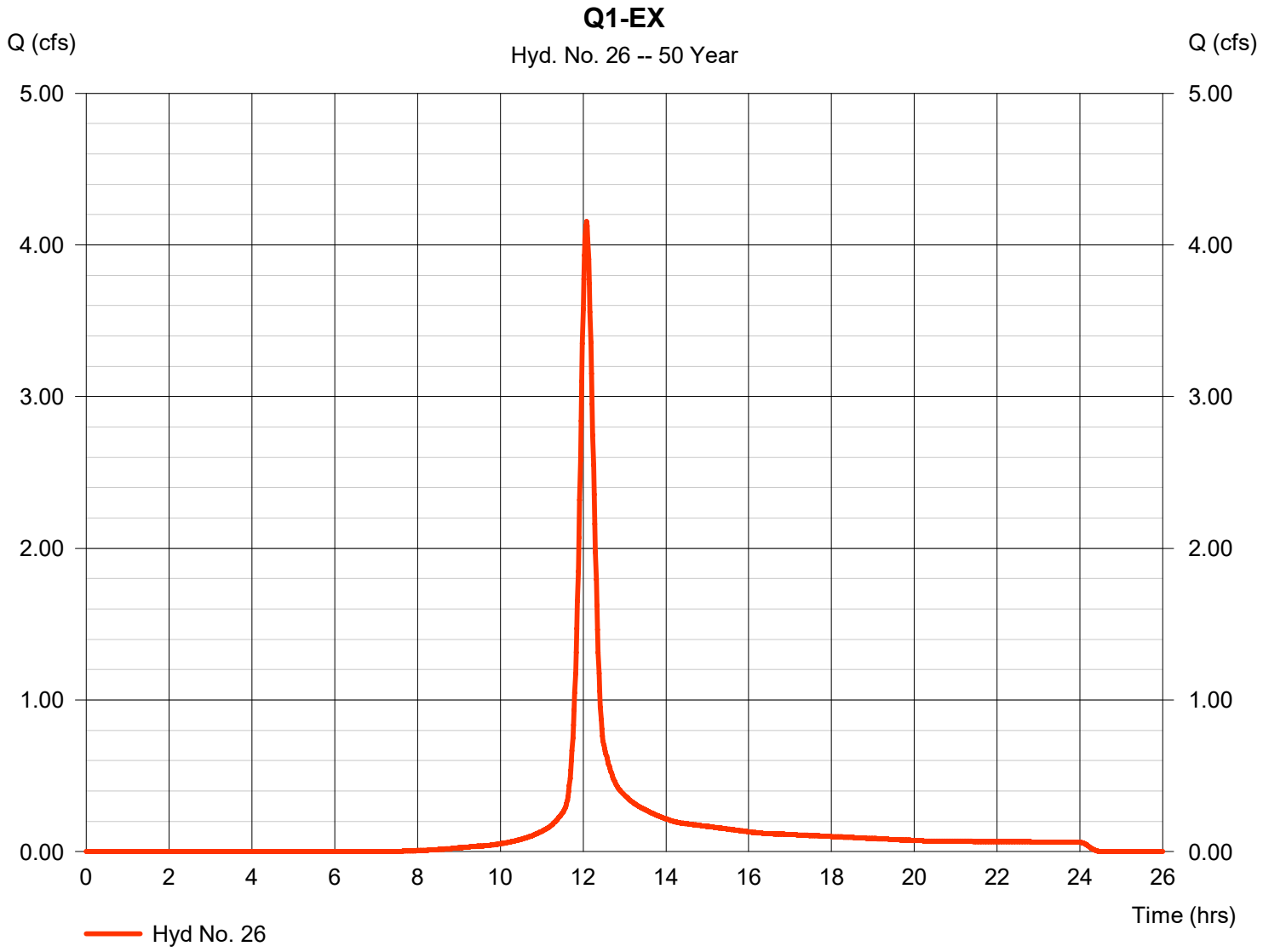


Hydrograph Report

Hyd. No. 26

Q1-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 4.154 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 12,975 cuft
Drainage area	= 2.130 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.80 min
Total precip.	= 2.93 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

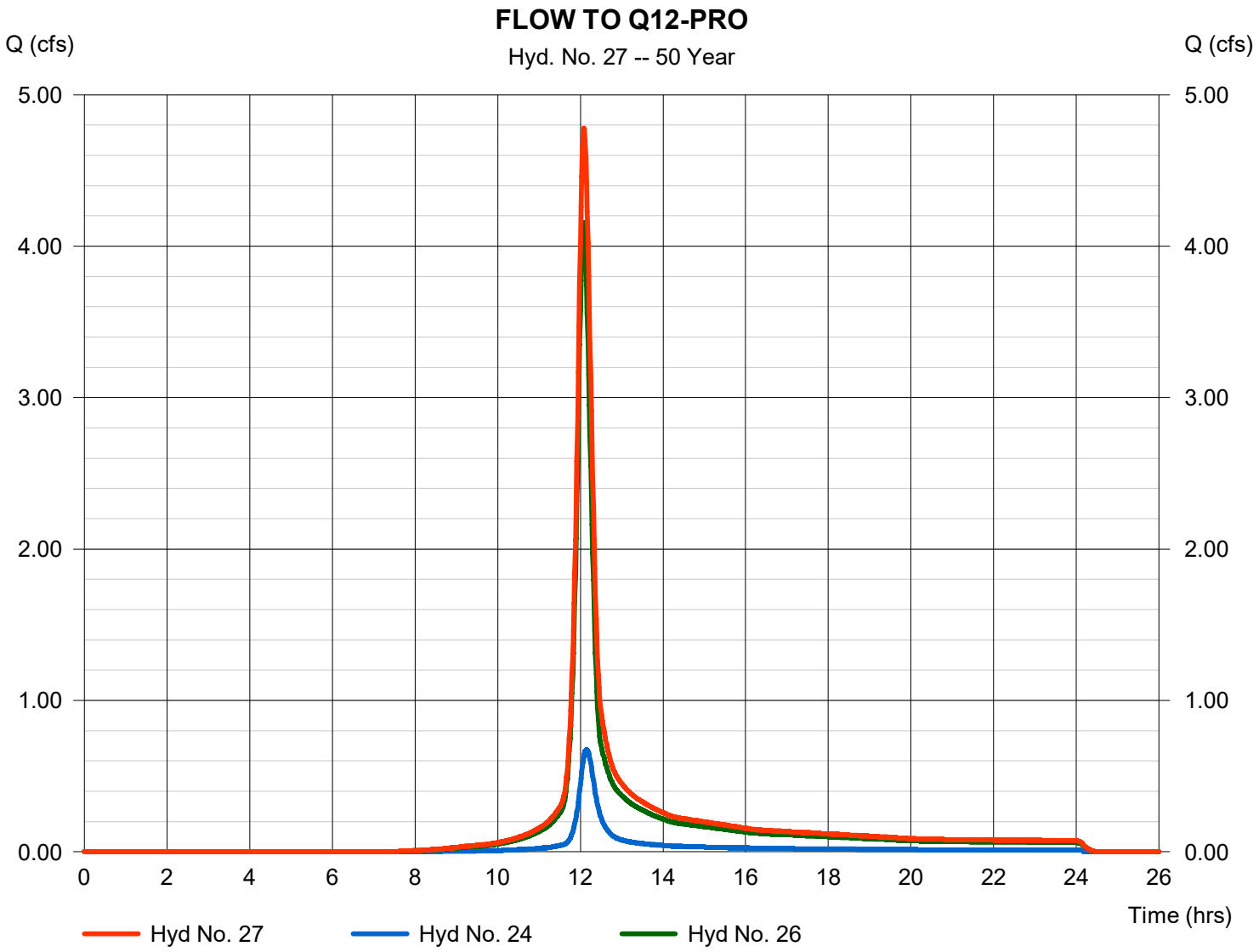


Hydrograph Report

Hyd. No. 27

FLOW TO Q12-PRO

Hydrograph type	= Combine	Peak discharge	= 4.779 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,373 cuft
Inflow hyds.	= 24, 26	Contrib. drain. area	= 2.130 ac



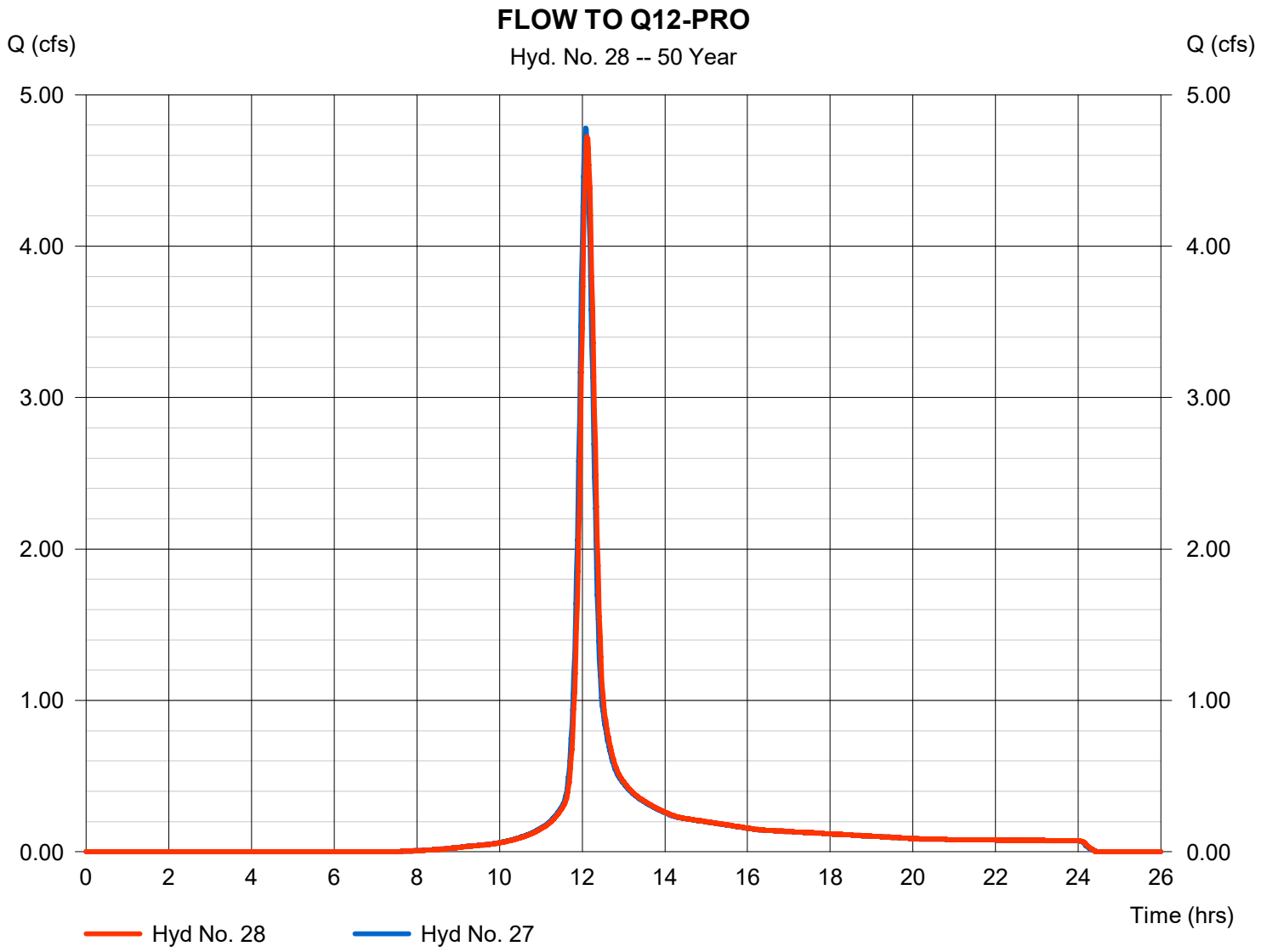
Hydrograph Report

Hyd. No. 28

FLOW TO Q12-PRO

Hydrograph type	= Reach	Peak discharge	= 4.721 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 15,371 cuft
Inflow hyd. No.	= 27 - FLOW TO Q12-PRO	Section type	= Rectangular
Reach length	= 294.0 ft	Channel slope	= 3.5 %
Manning's n	= 0.035	Bottom width	= 20.0 ft
Side slope	= 0.0:1	Max. depth	= 1.0 ft
Rating curve x	= 1.088	Rating curve m	= 1.646
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.4922

Modified Att-Kin routing method used.

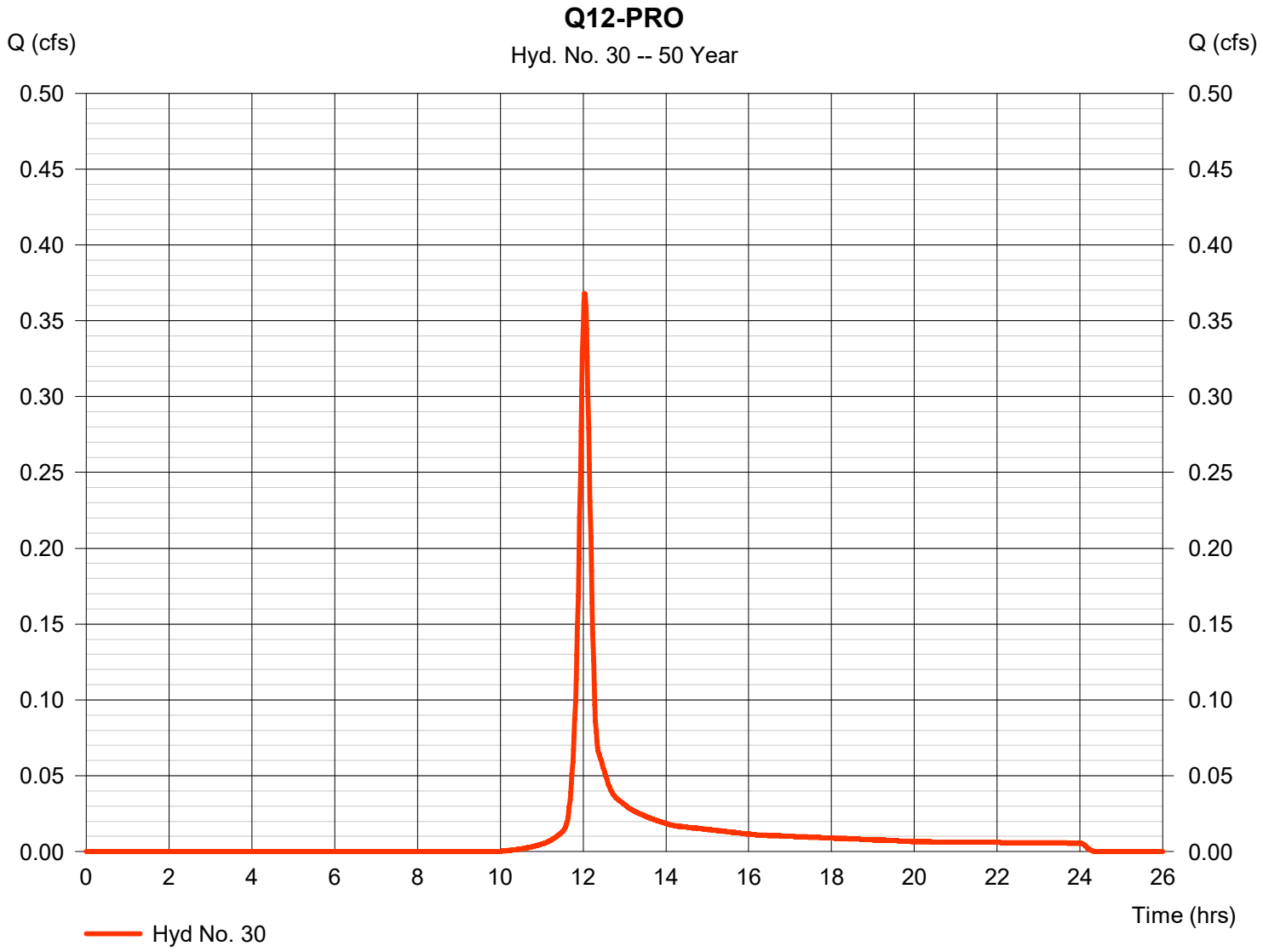


Hydrograph Report

Hyd. No. 30

Q12-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.368 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	1,000 cuft
Drainage area	=	0.230 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.22 min
Total precip.	=	2.93 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

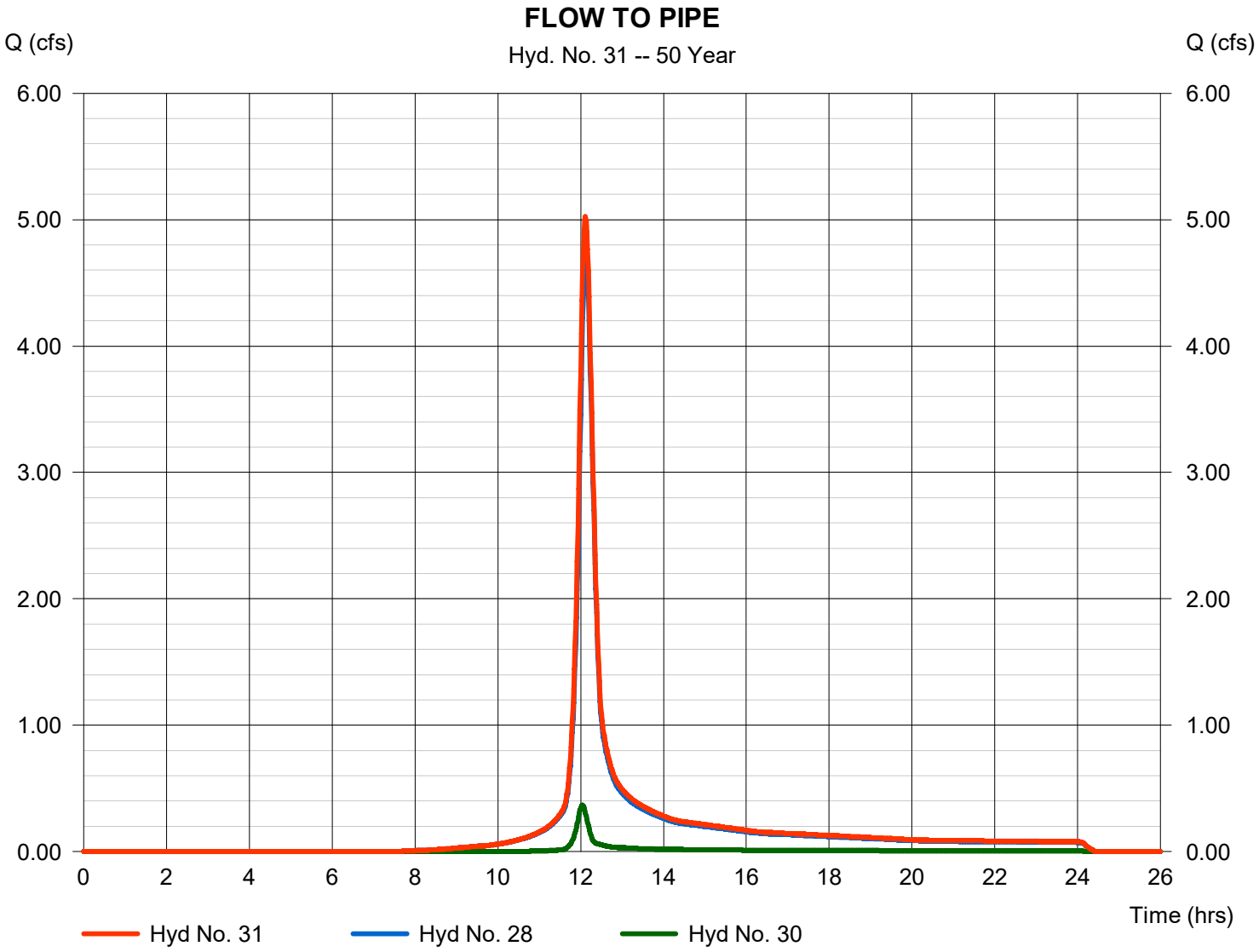


Hydrograph Report

Hyd. No. 31

FLOW TO PIPE

Hydrograph type	= Combine	Peak discharge	= 5.025 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 16,371 cuft
Inflow hyds.	= 28, 30	Contrib. drain. area	= 0.230 ac

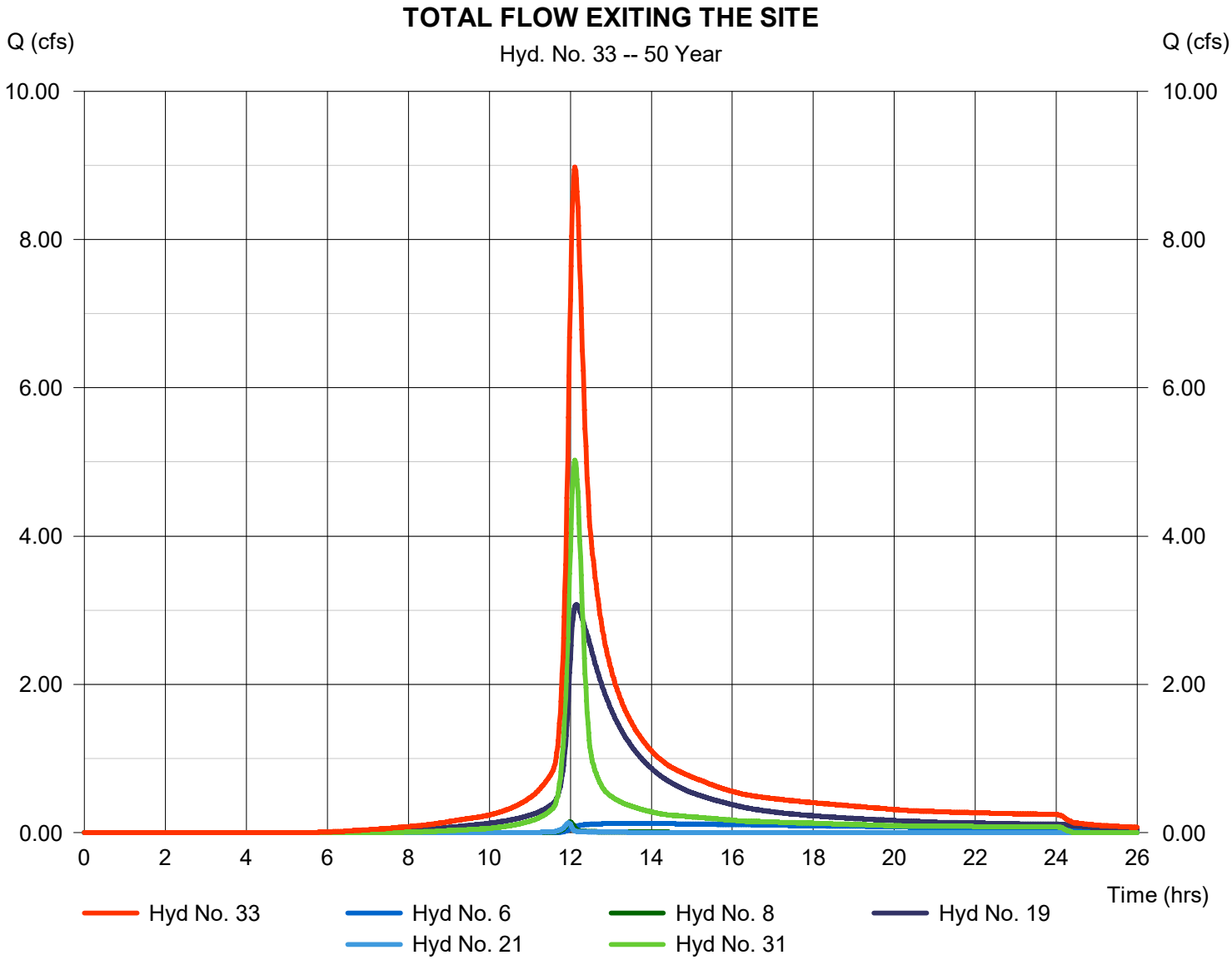


Hydrograph Report

Hyd. No. 33

TOTAL FLOW EXITING THE SITE

Hydrograph type	= Combine	Peak discharge	= 8.974 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 49,475 cuft
Inflow hyds.	= 6, 8, 19, 21, 31	Contrib. drain. area	= 0.120 ac



Hydrograph Summary Report

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

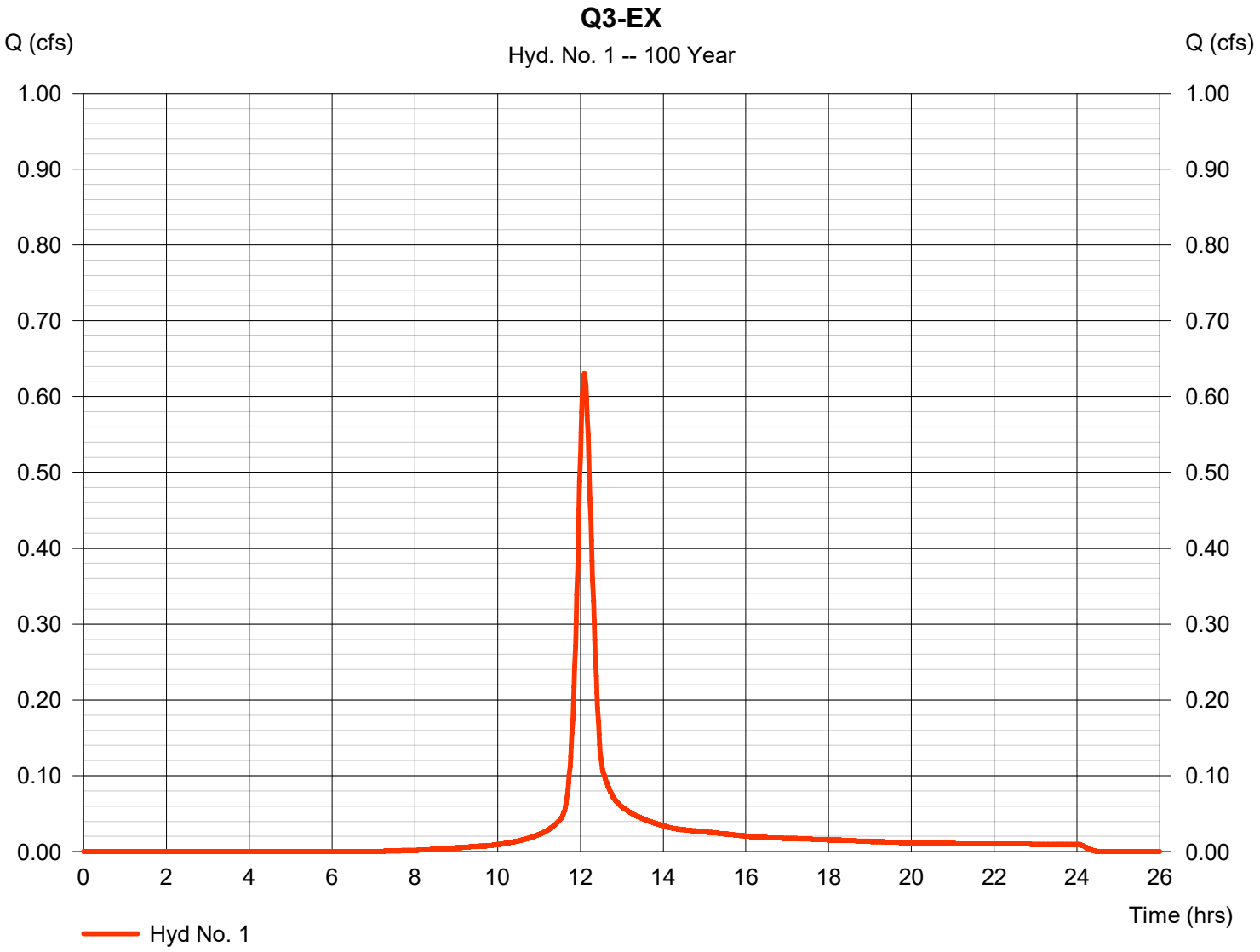
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.630	1	726	2,073	------	------	------	Q3-EX
2	SCS Runoff	0.869	1	718	1,871	------	------	------	Q4-PRO
4	SCS Runoff	1.692	1	717	3,501	------	------	------	Q5-PRO
5	Combine	3.010	1	718	7,444	1, 2, 4	------	------	FLOW TO POND 1
6	Reservoir	0.155	1	802	6,663	5	6335.52	4,449	FLOW FROM POND
8	SCS Runoff	0.175	1	720	397	------	------	------	Q6-PRO
10	SCS Runoff	0.724	1	718	1,458	------	------	------	Q7-PRO
12	SCS Runoff	2.855	1	717	6,755	------	------	------	Q8-PRO
14	SCS Runoff	2.950	1	717	6,980	------	------	------	Q9-PRO
15	Reach	2.551	1	720	6,977	14	------	------	FLOW FROM NORTH SIDE BUILDIN
17	SCS Runoff	6.631	1	719	16,031	------	------	------	Q10-PRO
18	Combine	12.46	1	719	31,221	10, 12, 15, 17	------	------	FLOW TO POND 2
19	Reservoir	3.800	1	728	30,564	18	6335.81	13,060	FLOW FROM POND 2
21	SCS Runoff	0.152	1	717	317	------	------	------	Q11-PRO
23	SCS Runoff	0.978	1	723	2,796	------	------	------	Q2-EX
24	Reach	0.790	1	729	2,789	23	------	------	FLOW TO TIE TO Q1-EX
26	SCS Runoff	4.821	1	725	15,080	------	------	------	Q1-EX
27	Combine	5.556	1	725	17,869	24, 26	------	------	FLOW TO Q12-PRO
28	Reach	5.498	1	727	17,867	27	------	------	FLOW TO Q12-PRO
30	SCS Runoff	0.443	1	722	1,196	------	------	------	Q12-PRO
31	Combine	5.860	1	727	19,063	28, 30	------	------	FLOW TO PIPE
33	Combine	10.38	1	727	56,790	6, 8, 19, 21, 31,	------	------	TOTAL FLOW EXITING THE SITE

Hydrograph Report

Hyd. No. 1

Q3-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.630 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.10 hrs
Time interval	=	1 min	Hyd. volume	=	2,073 cuft
Drainage area	=	0.290 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	21.40 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

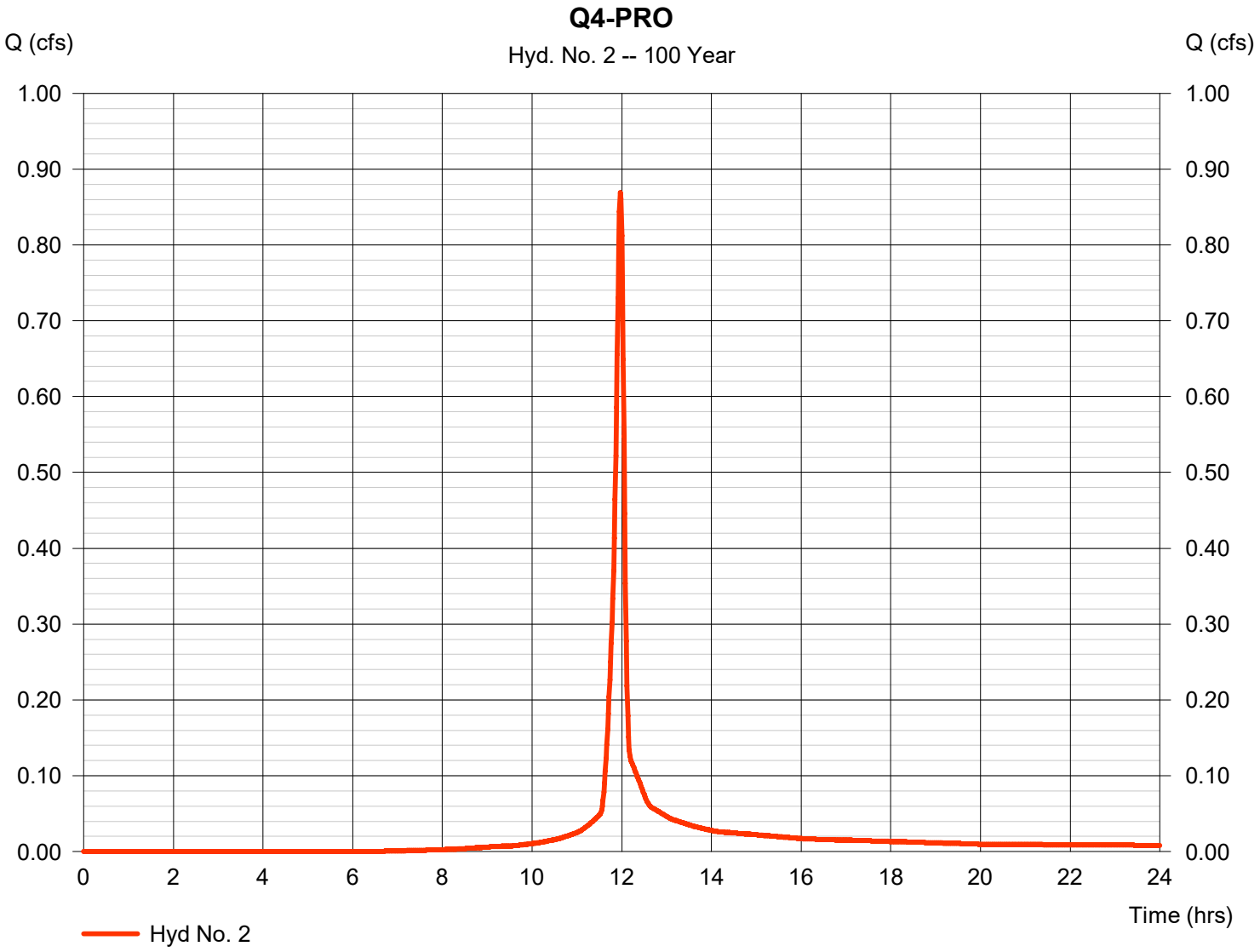


Hydrograph Report

Hyd. No. 2

Q4-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.869 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,871 cuft
Drainage area	=	0.260 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.90 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

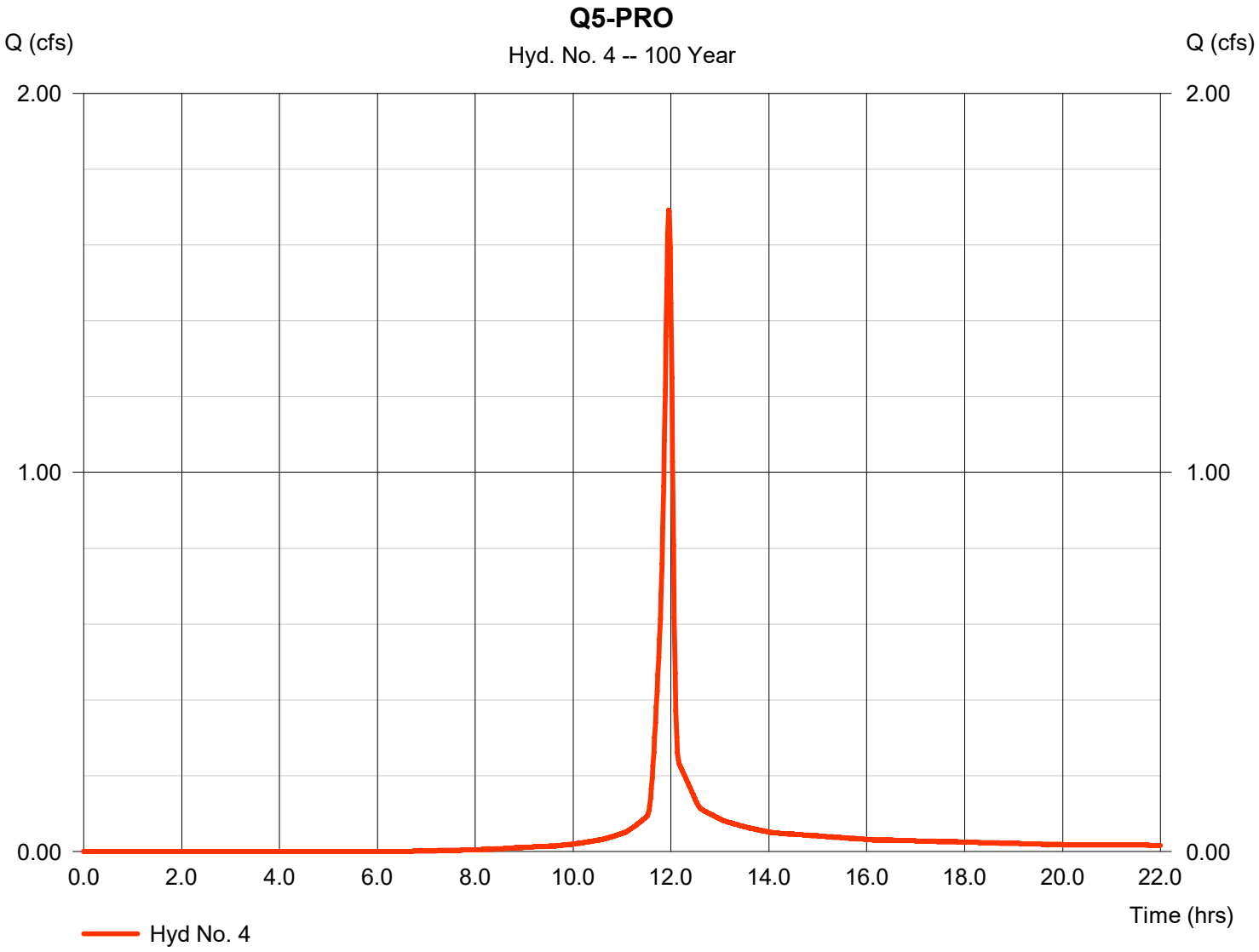


Hydrograph Report

Hyd. No. 4

Q5-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.692 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	3,501 cuft
Drainage area	=	0.460 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

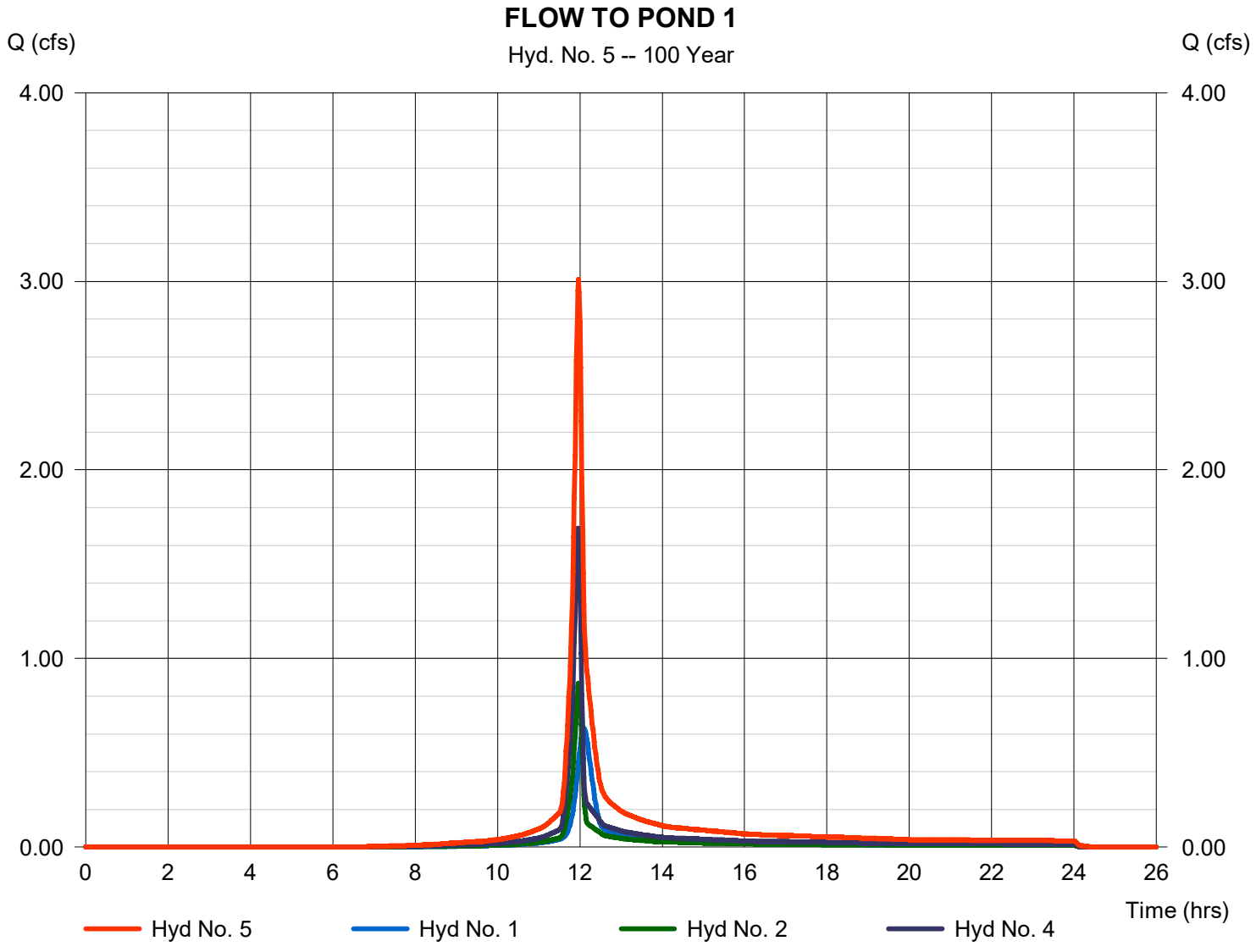


Hydrograph Report

Hyd. No. 5

FLOW TO POND 1

Hydrograph type	=	Combine	Peak discharge	=	3.010 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	7,444 cuft
Inflow hyds.	=	1, 2, 4	Contrib. drain. area	=	1.010 ac



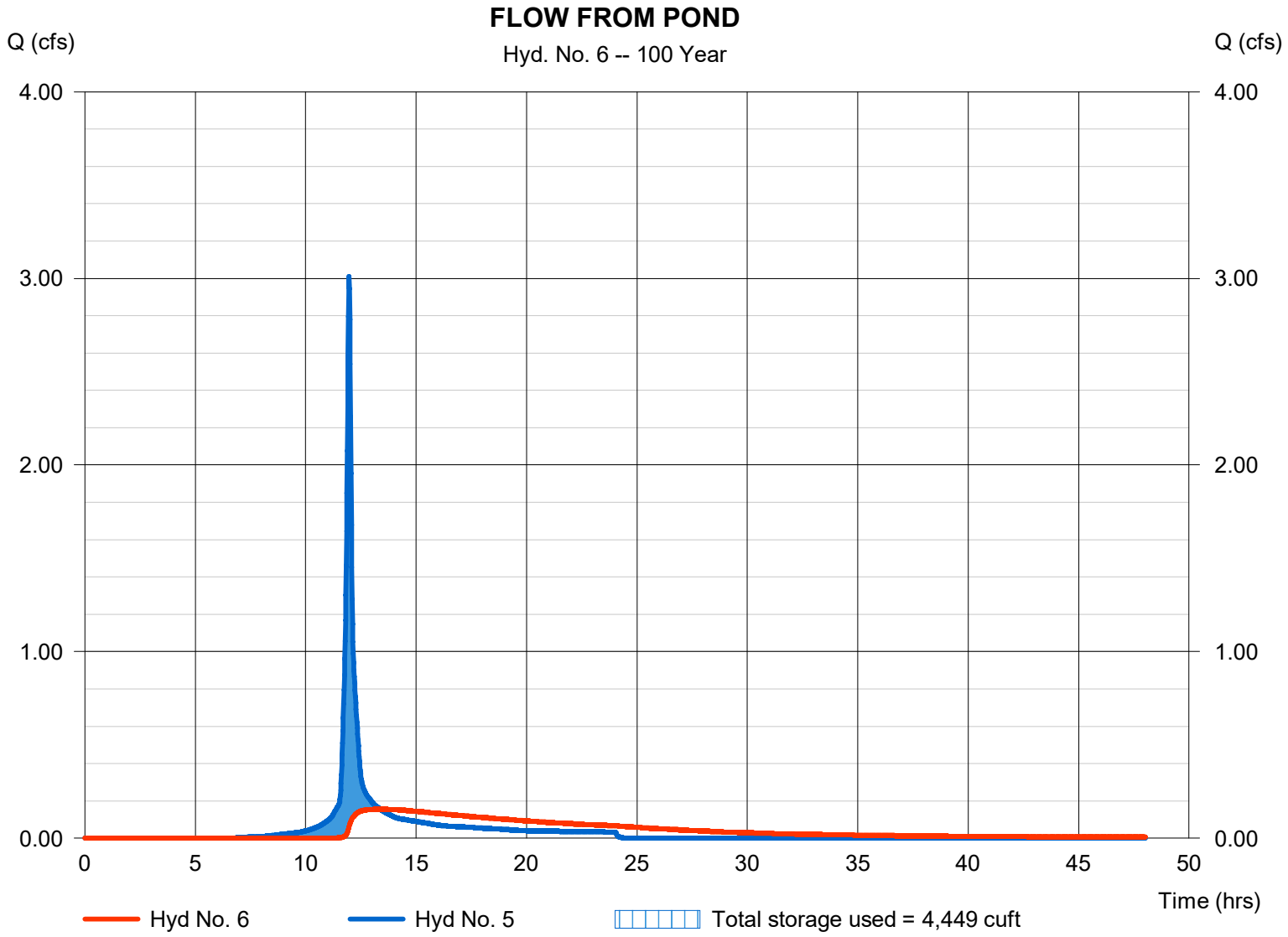
Hydrograph Report

Hyd. No. 6

FLOW FROM POND

Hydrograph type	= Reservoir	Peak discharge	= 0.155 cfs
Storm frequency	= 100 yrs	Time to peak	= 13.37 hrs
Time interval	= 1 min	Hyd. volume	= 6,663 cuft
Inflow hyd. No.	= 5 - FLOW TO POND 1	Max. Elevation	= 6335.52 ft
Reservoir name	= POND 1	Max. Storage	= 4,449 cuft

Storage Indication method used.

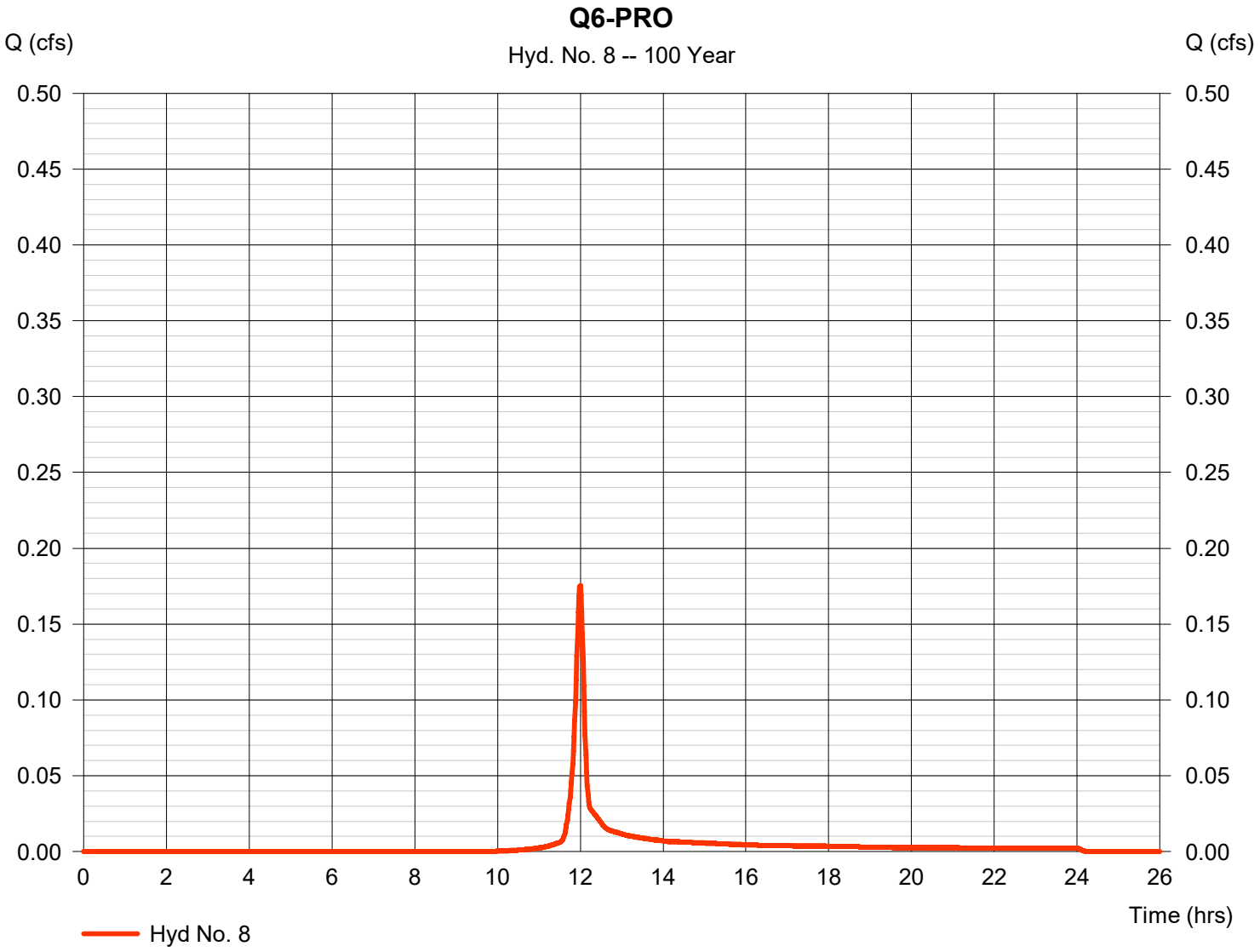


Hydrograph Report

Hyd. No. 8

Q6-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.175 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.00 hrs
Time interval	=	1 min	Hyd. volume	=	397 cuft
Drainage area	=	0.080 ac	Curve number	=	79
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	9.18 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

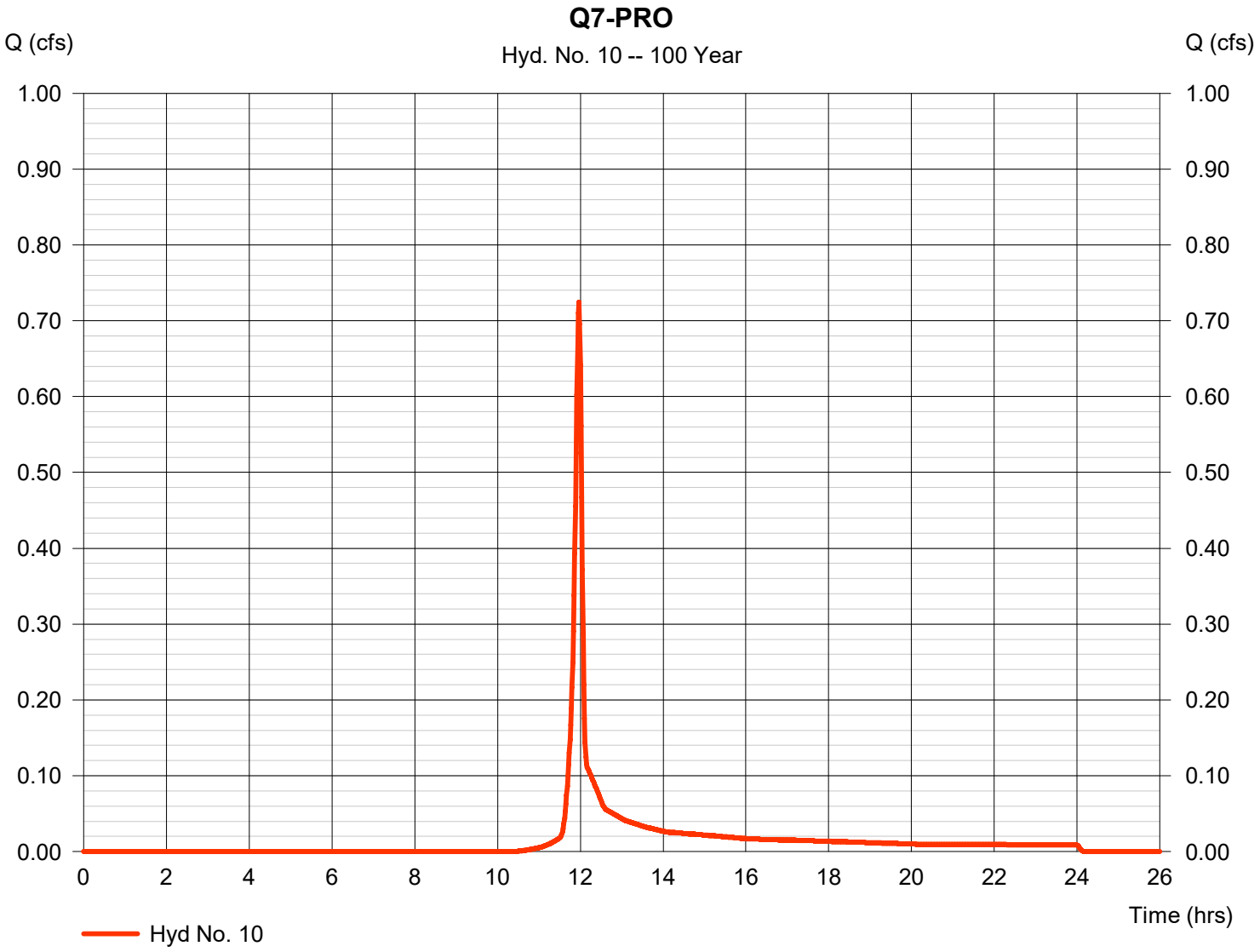


Hydrograph Report

Hyd. No. 10

Q7-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.724 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	1 min	Hyd. volume	=	1,458 cuft
Drainage area	=	0.330 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

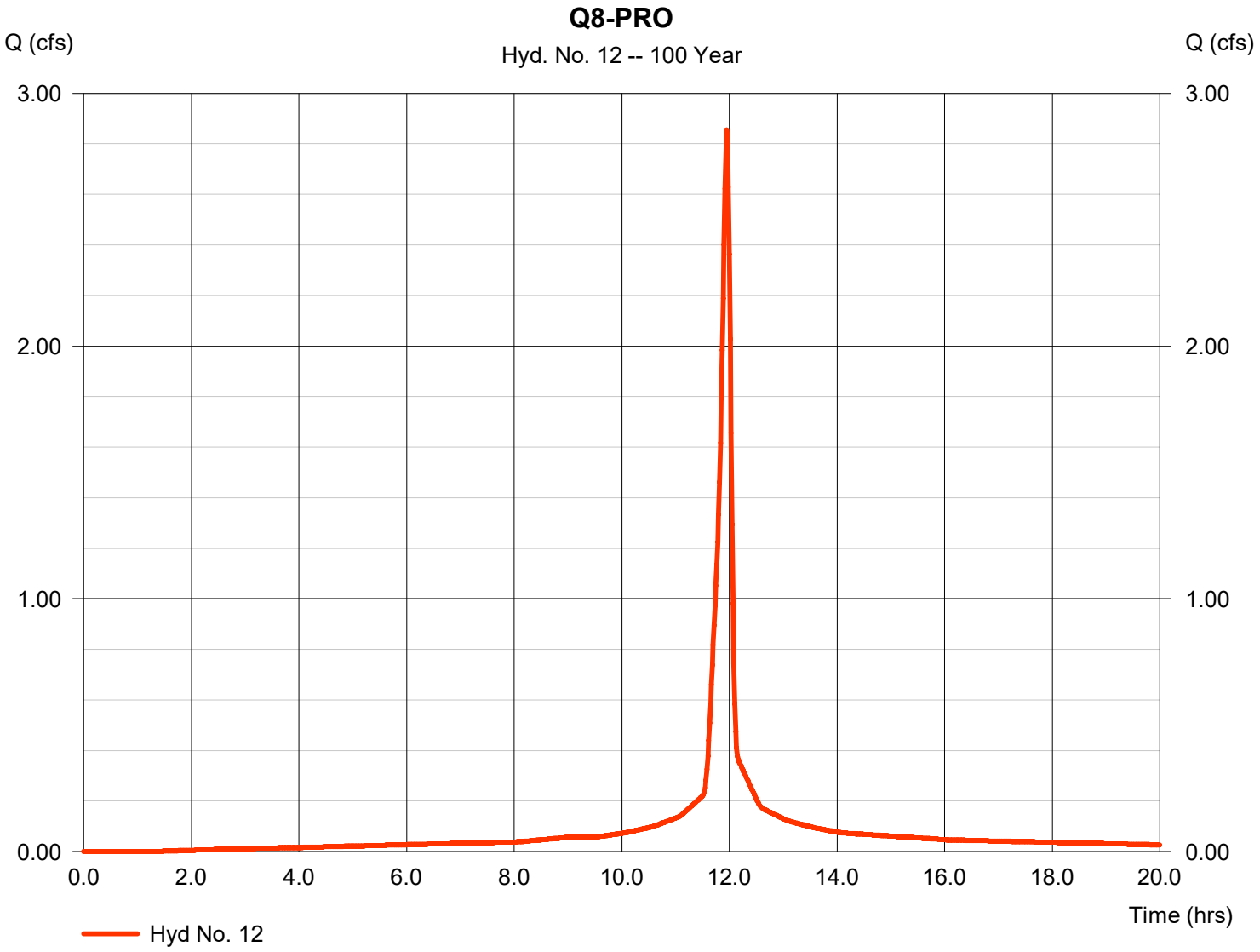


Hydrograph Report

Hyd. No. 12

Q8-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.855 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,755 cuft
Drainage area	=	0.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

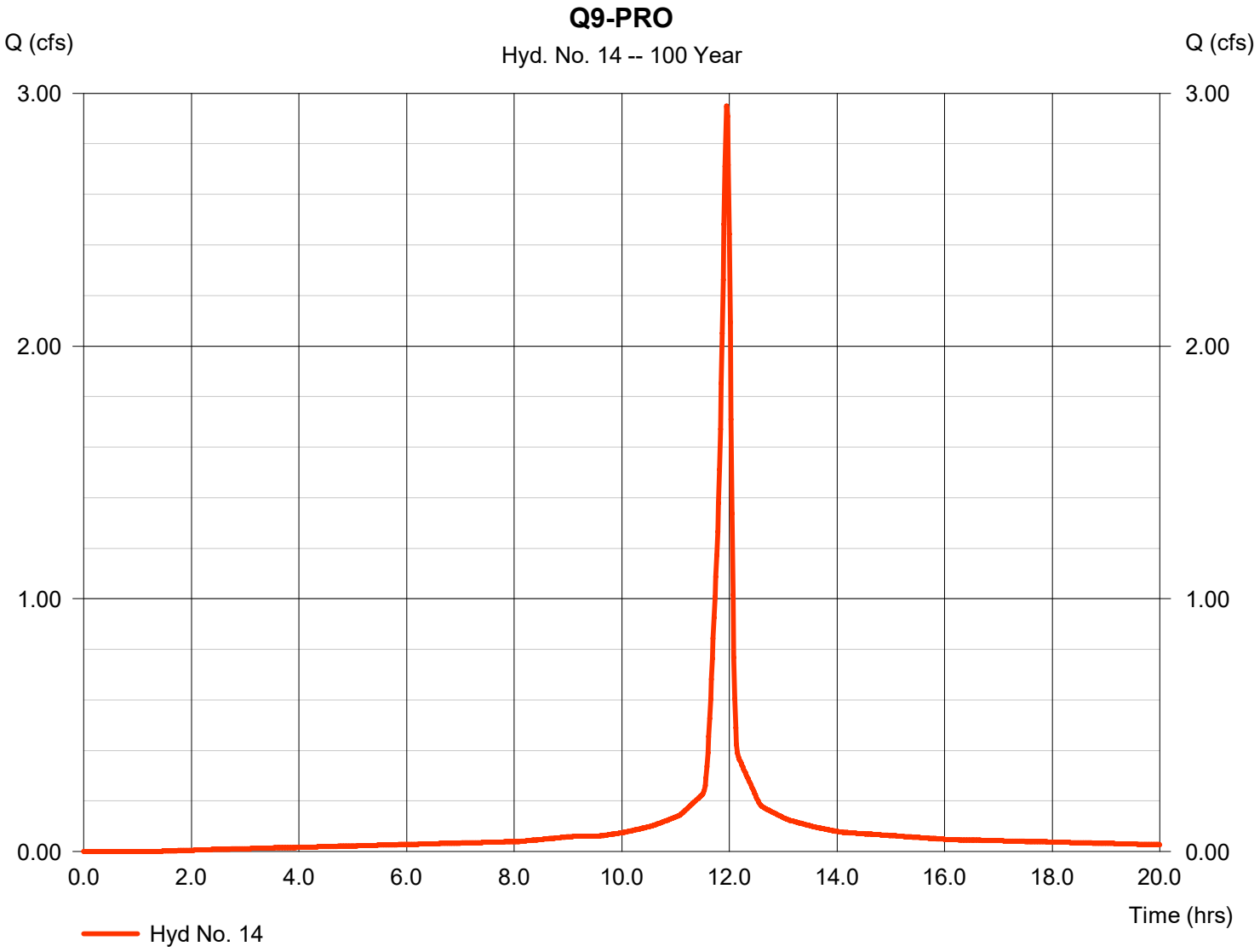


Hydrograph Report

Hyd. No. 14

Q9-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.950 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	6,980 cuft
Drainage area	=	0.620 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



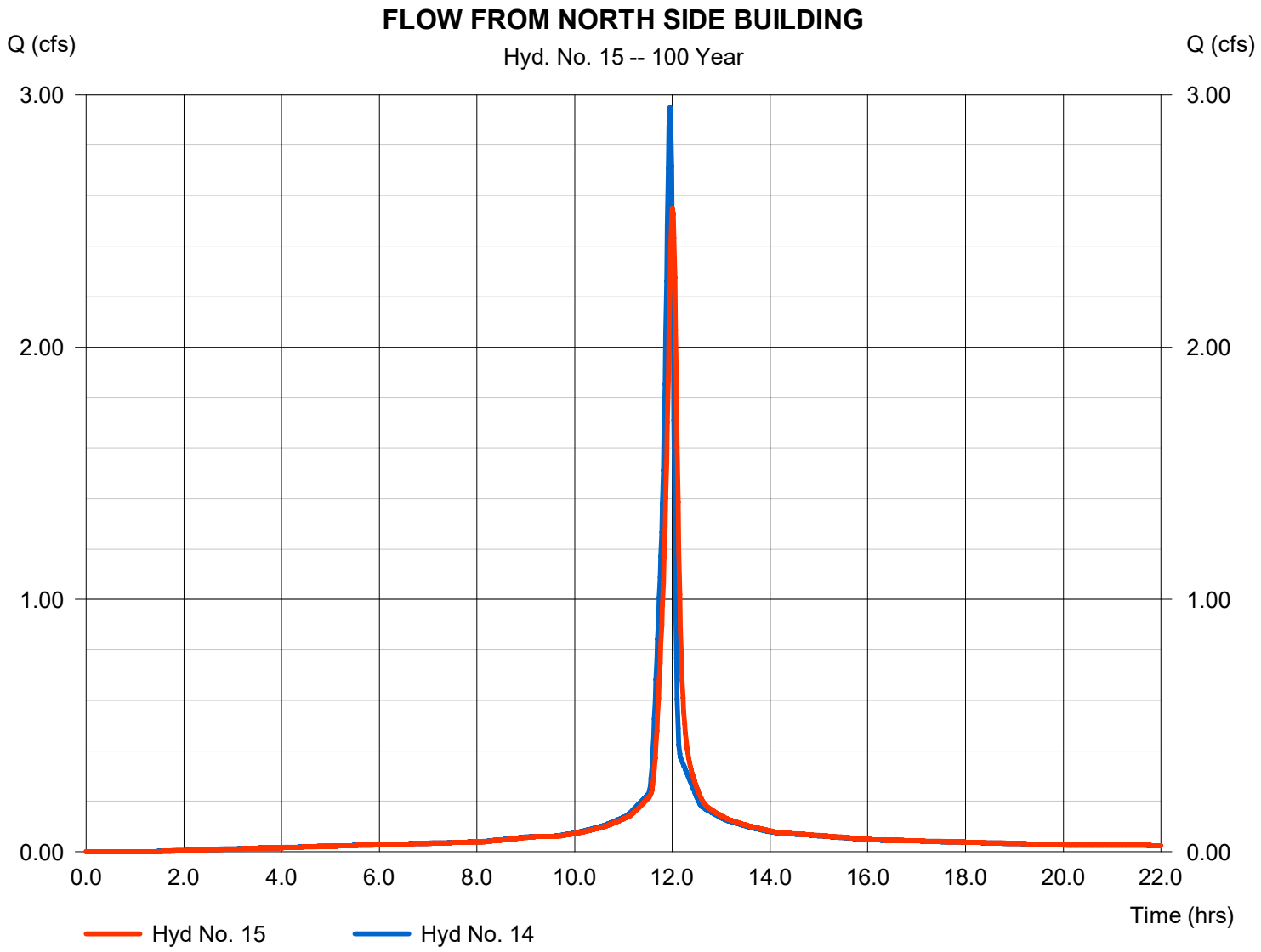
Hydrograph Report

Hyd. No. 15

FLOW FROM NORTH SIDE BUILDING

Hydrograph type	= Reach	Peak discharge	= 2.551 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 1 min	Hyd. volume	= 6,977 cuft
Inflow hyd. No.	= 14 - Q9-PRO	Section type	= Circular
Reach length	= 509.0 ft	Channel slope	= 0.5 %
Manning's n	= 0.025	Bottom width	= 1.5 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 2.433	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.2190

Modified Att-Kin routing method used.

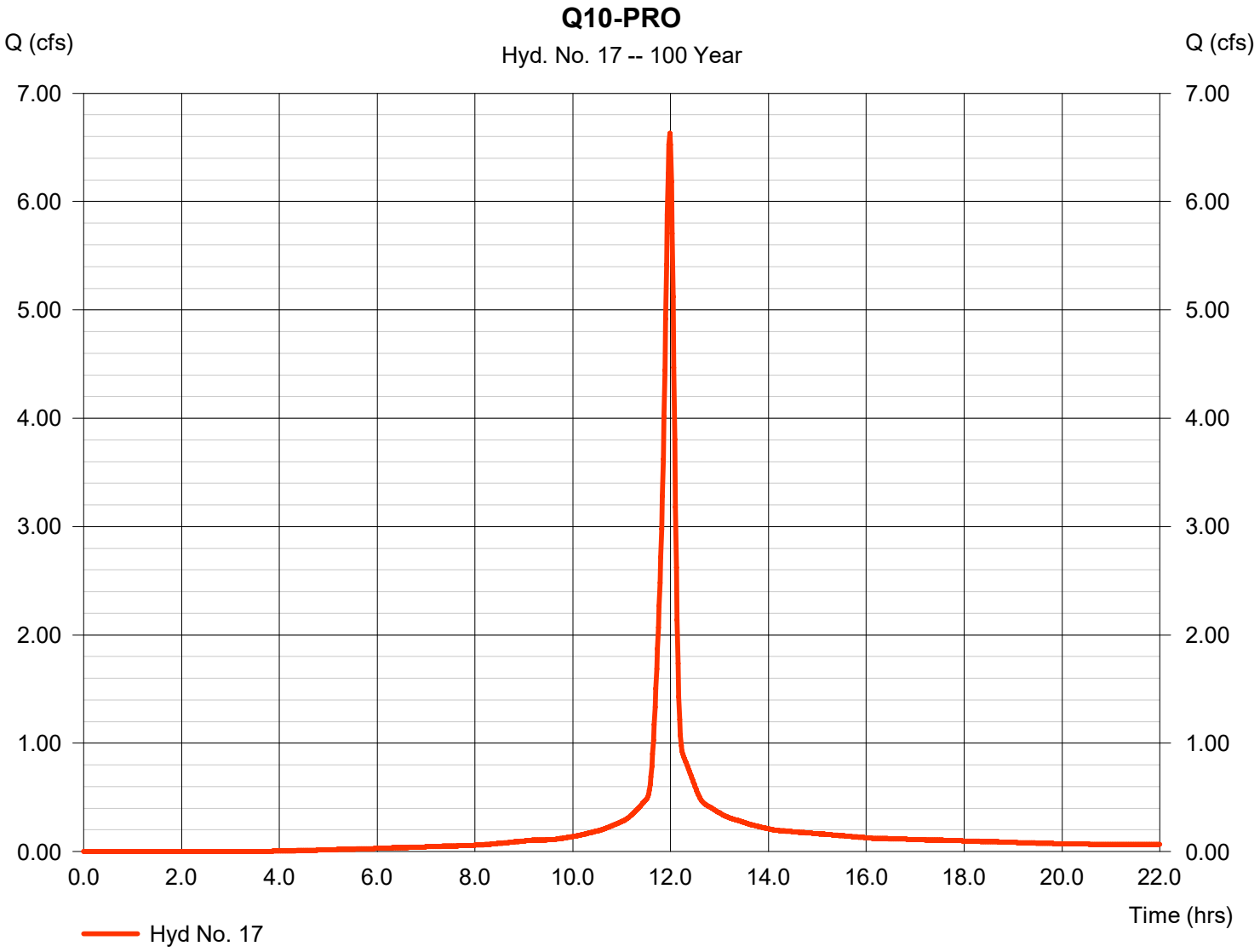


Hydrograph Report

Hyd. No. 17

Q10-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.631 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.98 hrs
Time interval	=	1 min	Hyd. volume	=	16,031 cuft
Drainage area	=	1.710 ac	Curve number	=	94
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.40 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

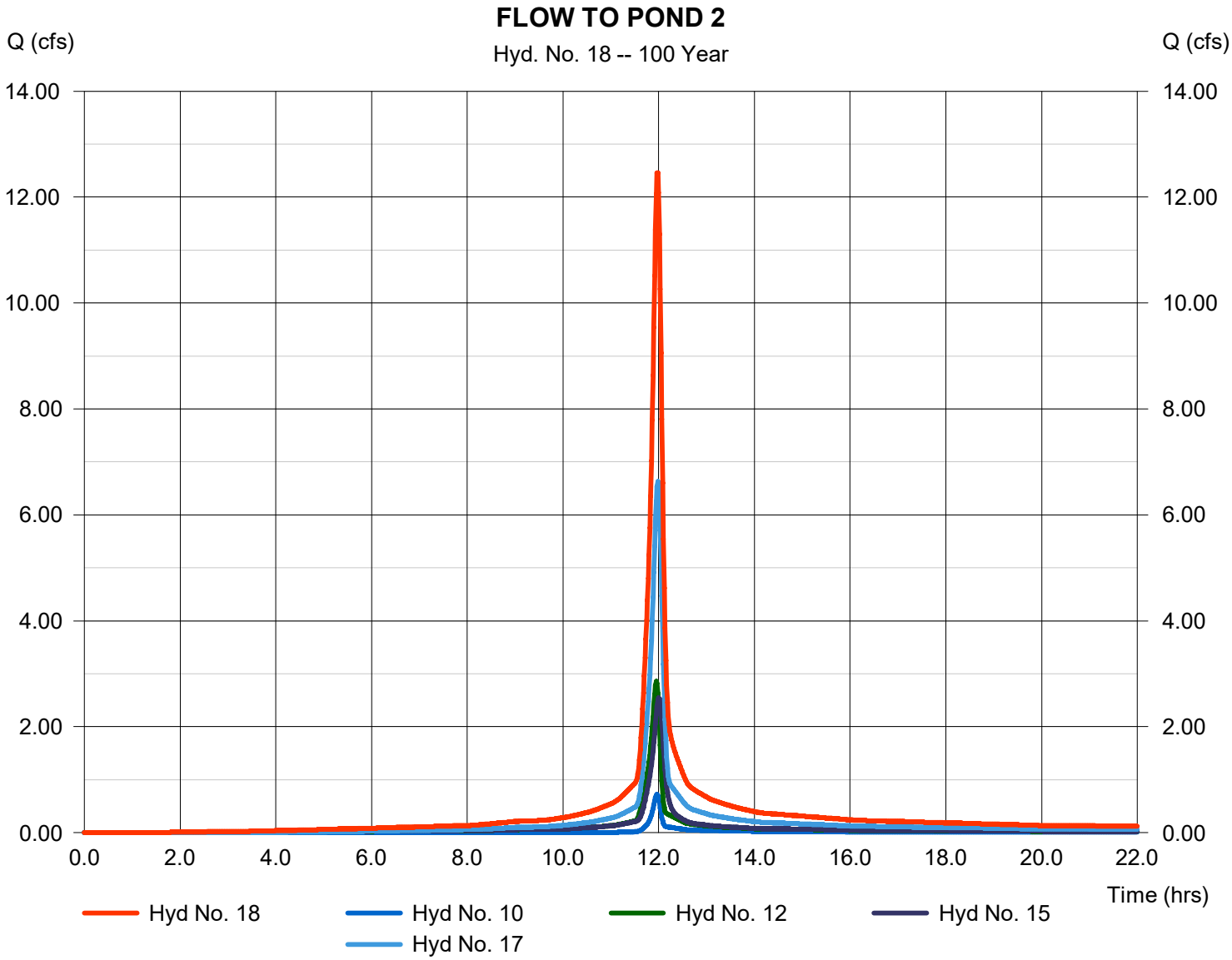


Hydrograph Report

Hyd. No. 18

FLOW TO POND 2

Hydrograph type	= Combine	Peak discharge	= 12.46 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 31,221 cuft
Inflow hyds.	= 10, 12, 15, 17	Contrib. drain. area	= 2.640 ac



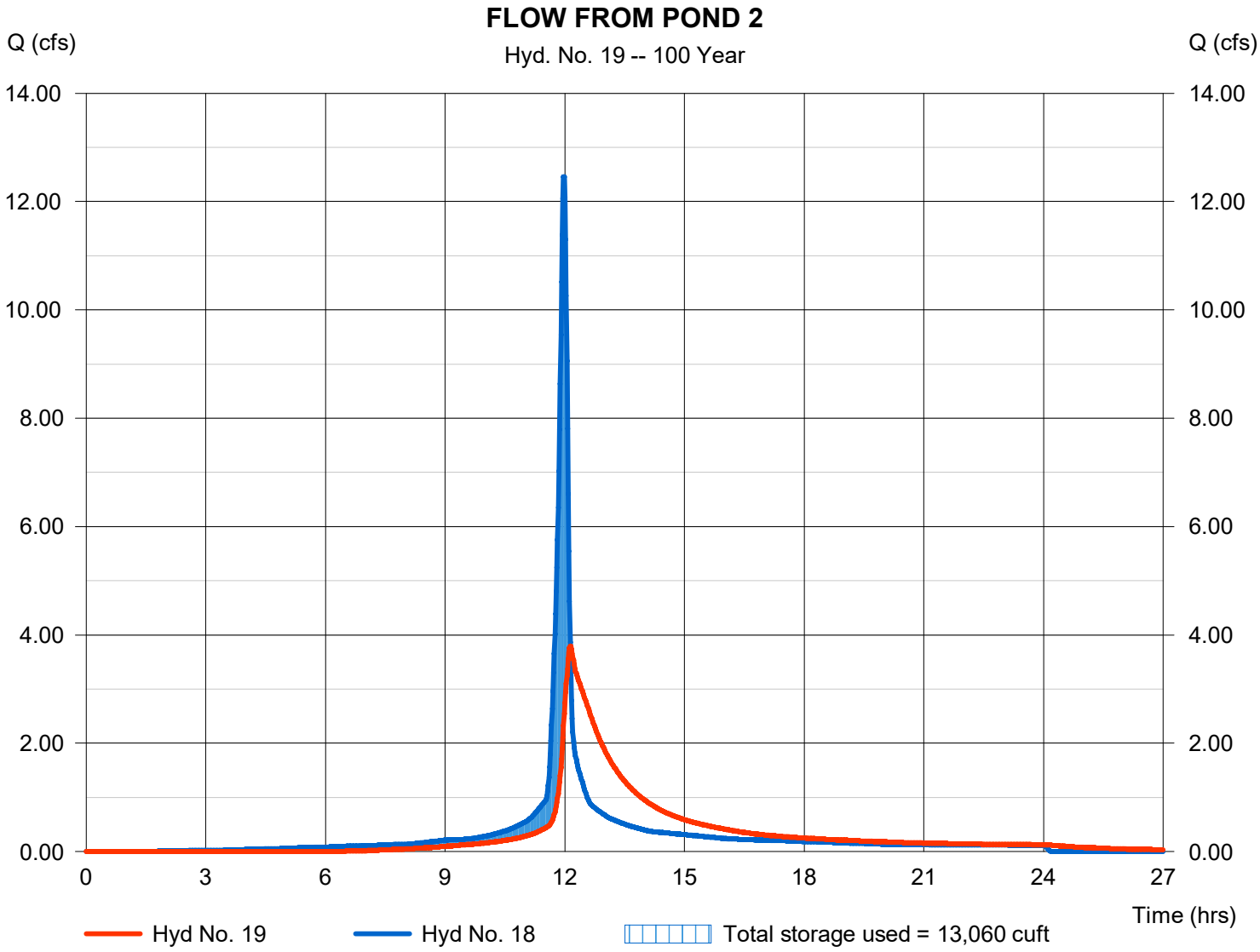
Hydrograph Report

Hyd. No. 19

FLOW FROM POND 2

Hydrograph type	= Reservoir	Peak discharge	= 3.800 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.13 hrs
Time interval	= 1 min	Hyd. volume	= 30,564 cuft
Inflow hyd. No.	= 18 - FLOW TO POND 2	Max. Elevation	= 6335.81 ft
Reservoir name	= POND 2	Max. Storage	= 13,060 cuft

Storage Indication method used.

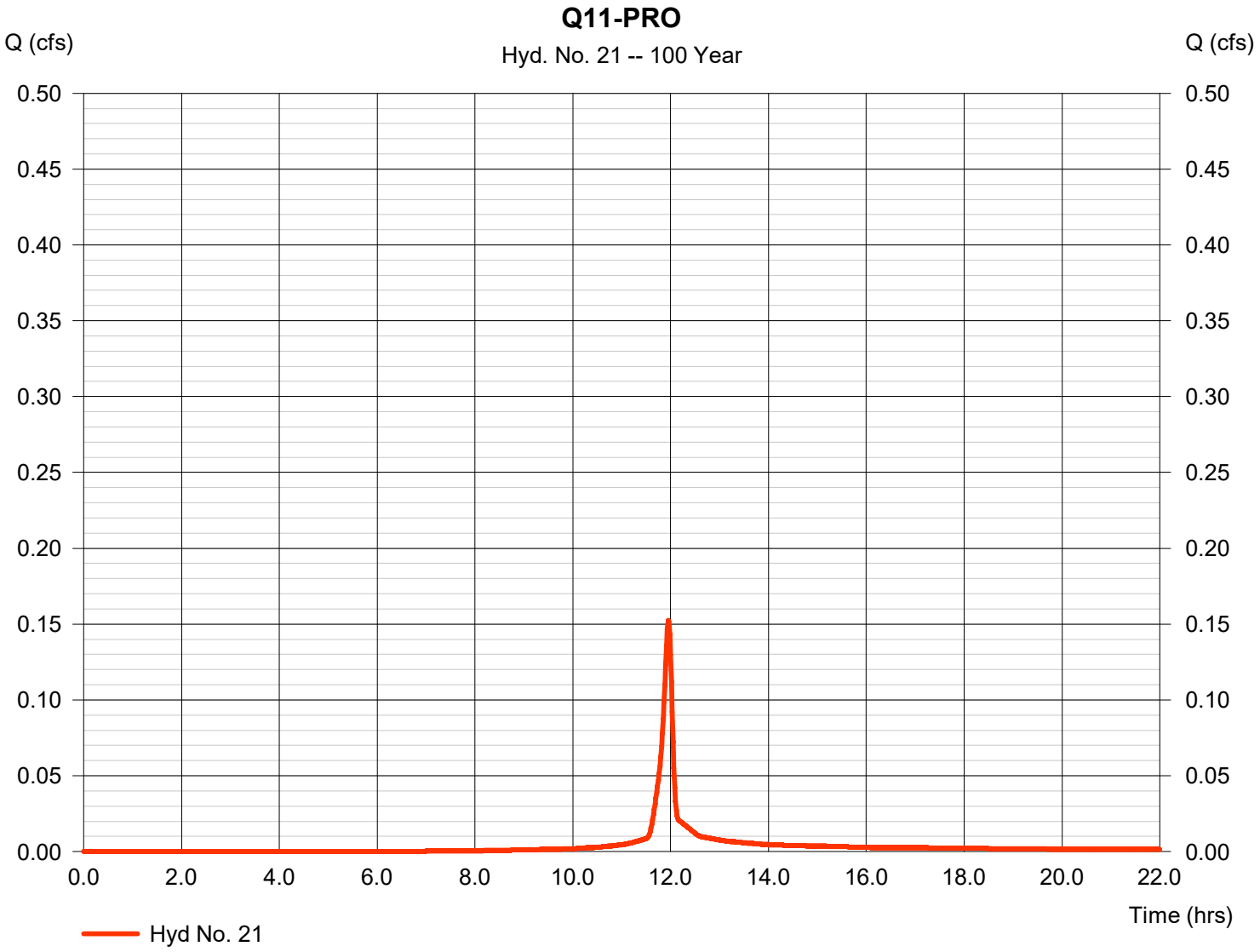


Hydrograph Report

Hyd. No. 21

Q11-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.152 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.95 hrs
Time interval	=	1 min	Hyd. volume	=	317 cuft
Drainage area	=	0.040 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

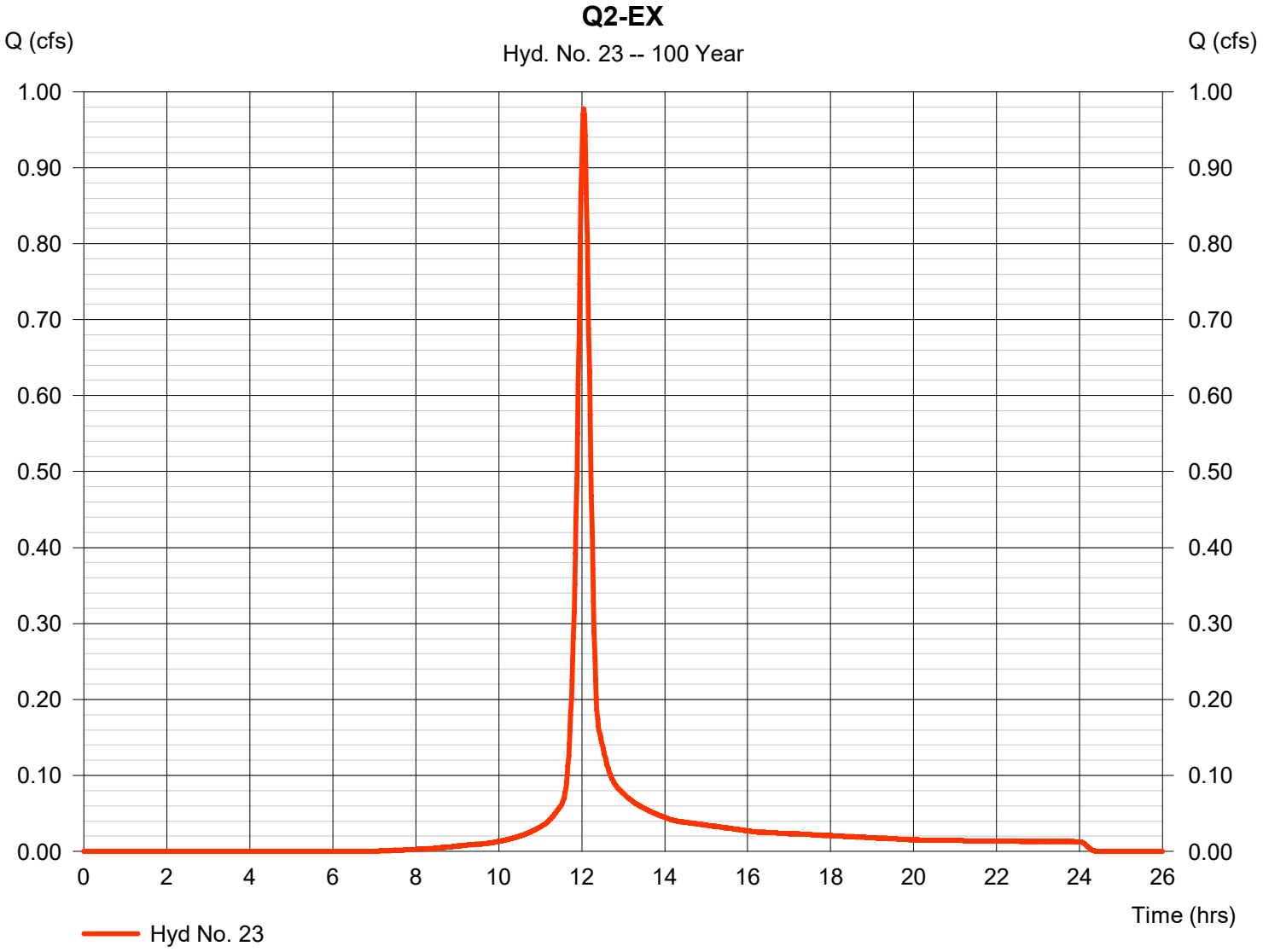


Hydrograph Report

Hyd. No. 23

Q2-EX

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.978 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.05 hrs
Time interval	=	1 min	Hyd. volume	=	2,796 cuft
Drainage area	=	0.390 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	16.74 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



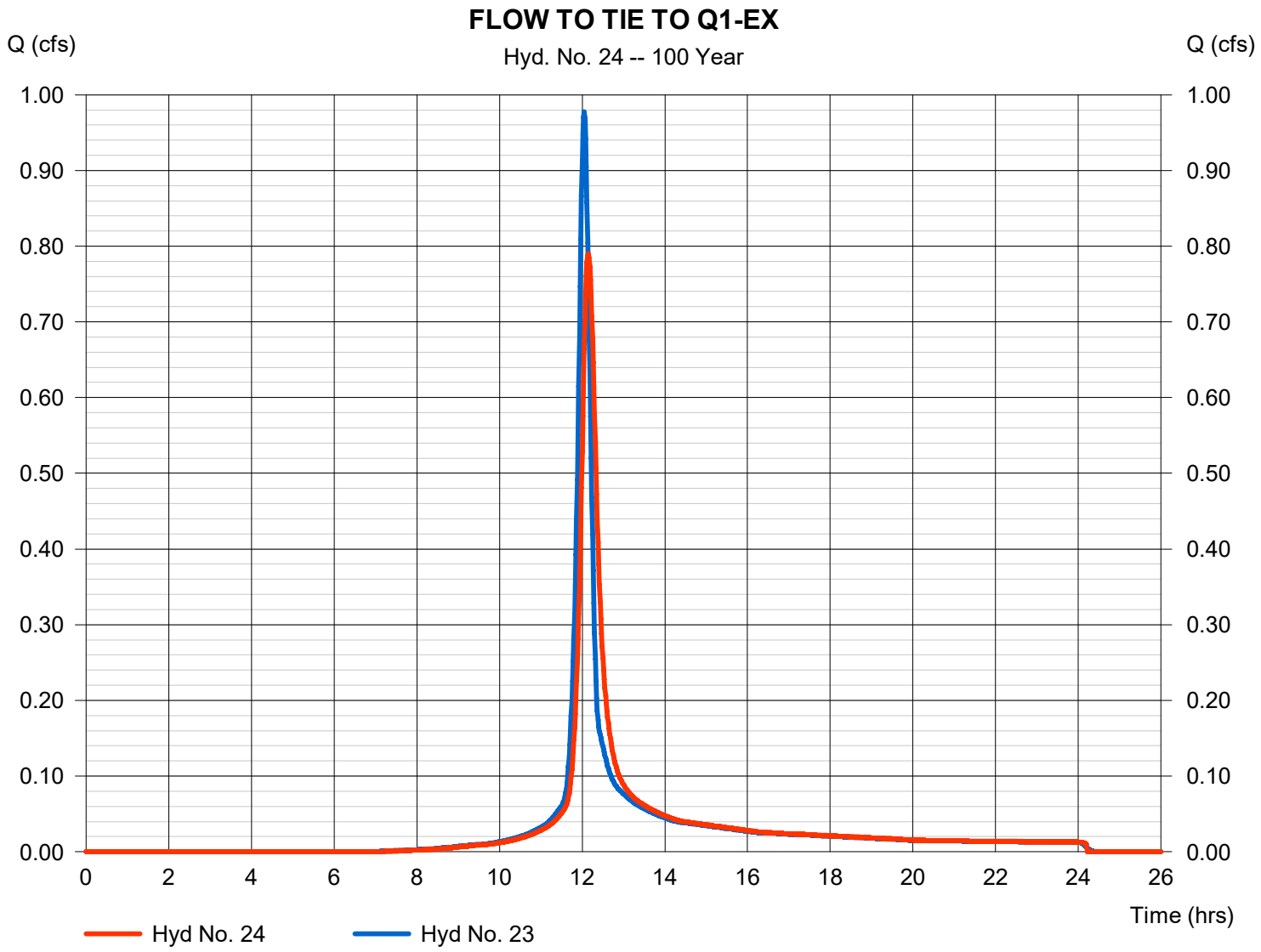
Hydrograph Report

Hyd. No. 24

FLOW TO TIE TO Q1-EX

Hydrograph type	=	Reach	Peak discharge	=	0.790 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.15 hrs
Time interval	=	1 min	Hyd. volume	=	2,789 cuft
Inflow hyd. No.	=	23 - Q2-EX	Section type	=	Trapezoidal
Reach length	=	258.0 ft	Channel slope	=	0.1 %
Manning's n	=	0.035	Bottom width	=	5.0 ft
Side slope	=	3.0:1	Max. depth	=	1.0 ft
Rating curve x	=	0.412	Rating curve m	=	1.190
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.1227

Modified Att-Kin routing method used.

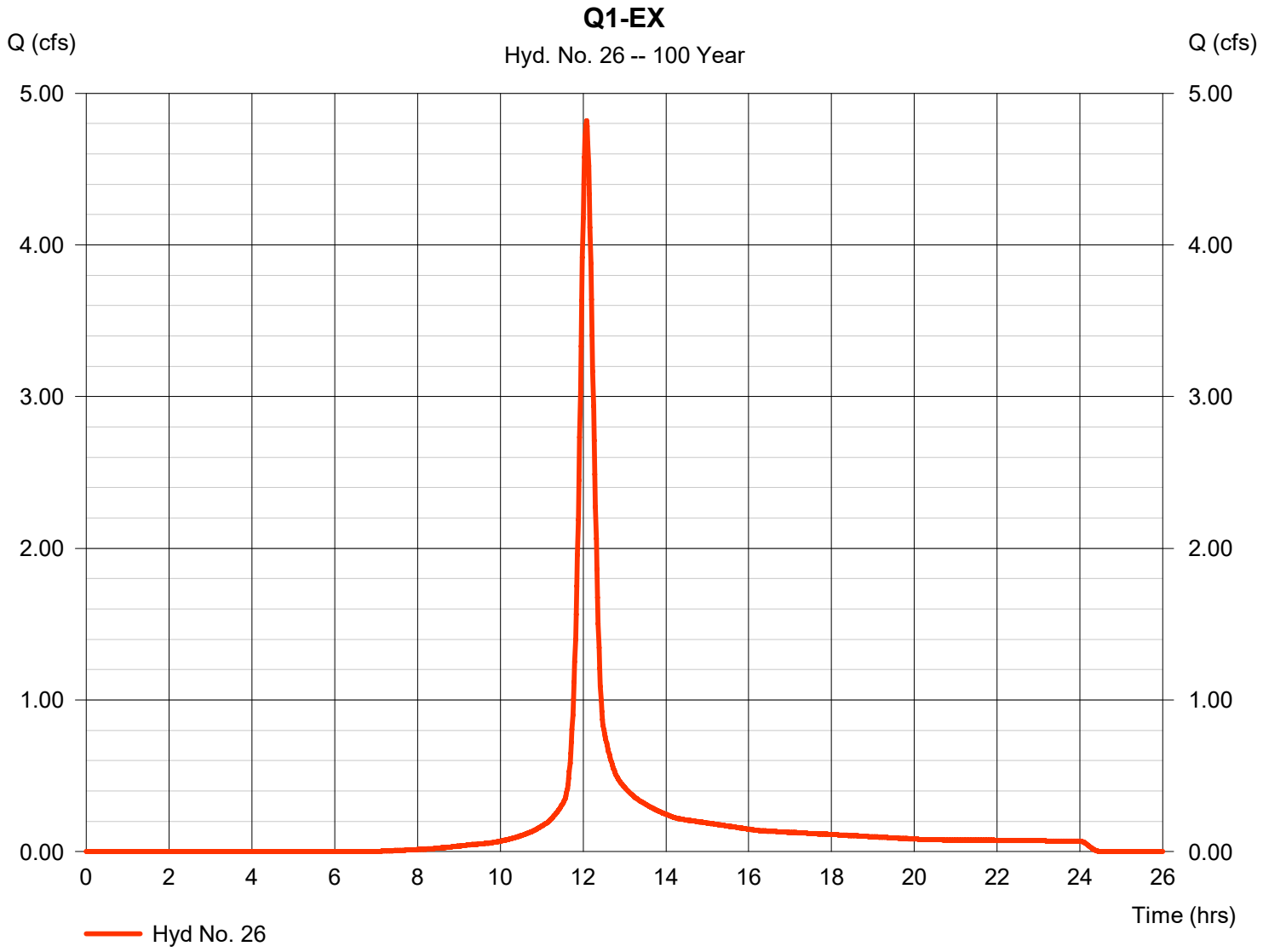


Hydrograph Report

Hyd. No. 26

Q1-EX

Hydrograph type	= SCS Runoff	Peak discharge	= 4.821 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 15,080 cuft
Drainage area	= 2.130 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.80 min
Total precip.	= 3.24 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

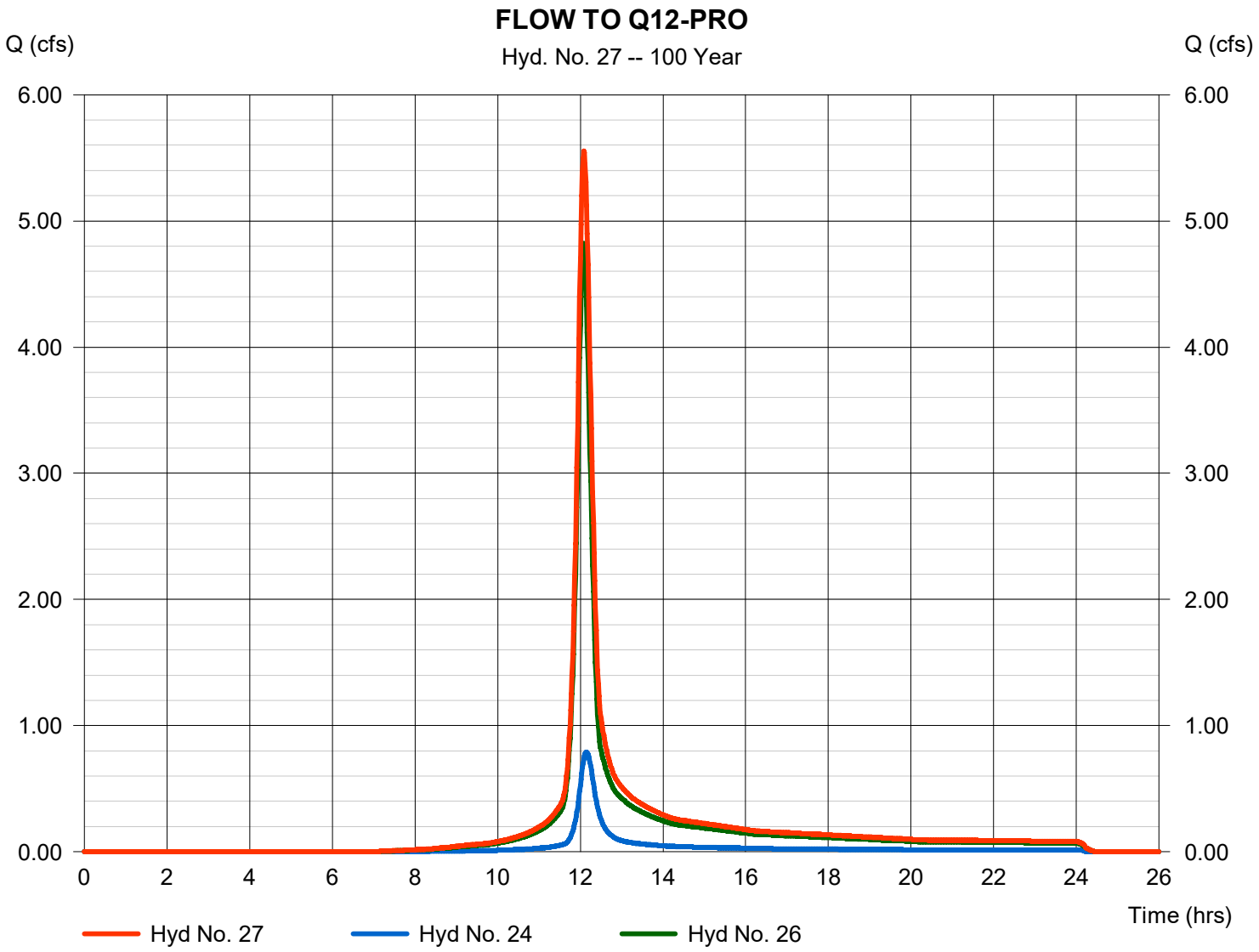


Hydrograph Report

Hyd. No. 27

FLOW TO Q12-PRO

Hydrograph type	= Combine	Peak discharge	= 5.556 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.08 hrs
Time interval	= 1 min	Hyd. volume	= 17,869 cuft
Inflow hyds.	= 24, 26	Contrib. drain. area	= 2.130 ac



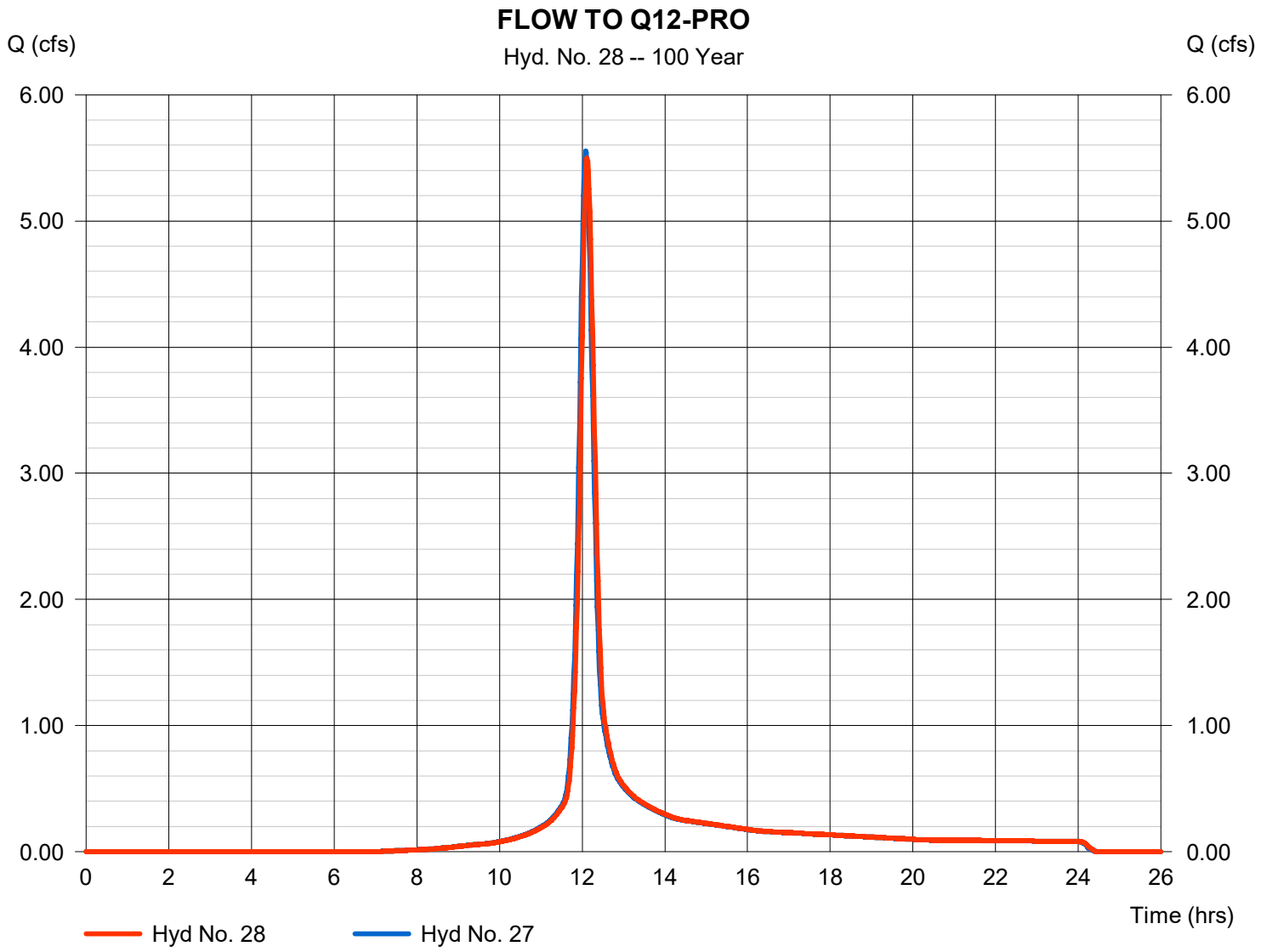
Hydrograph Report

Hyd. No. 28

FLOW TO Q12-PRO

Hydrograph type	=	Reach	Peak discharge	=	5.498 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.12 hrs
Time interval	=	1 min	Hyd. volume	=	17,867 cuft
Inflow hyd. No.	=	27 - FLOW TO Q12-PRO	Section type	=	Rectangular
Reach length	=	294.0 ft	Channel slope	=	3.5 %
Manning's n	=	0.035	Bottom width	=	20.0 ft
Side slope	=	0.0:1	Max. depth	=	1.0 ft
Rating curve x	=	1.088	Rating curve m	=	1.646
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.5145

Modified Att-Kin routing method used.

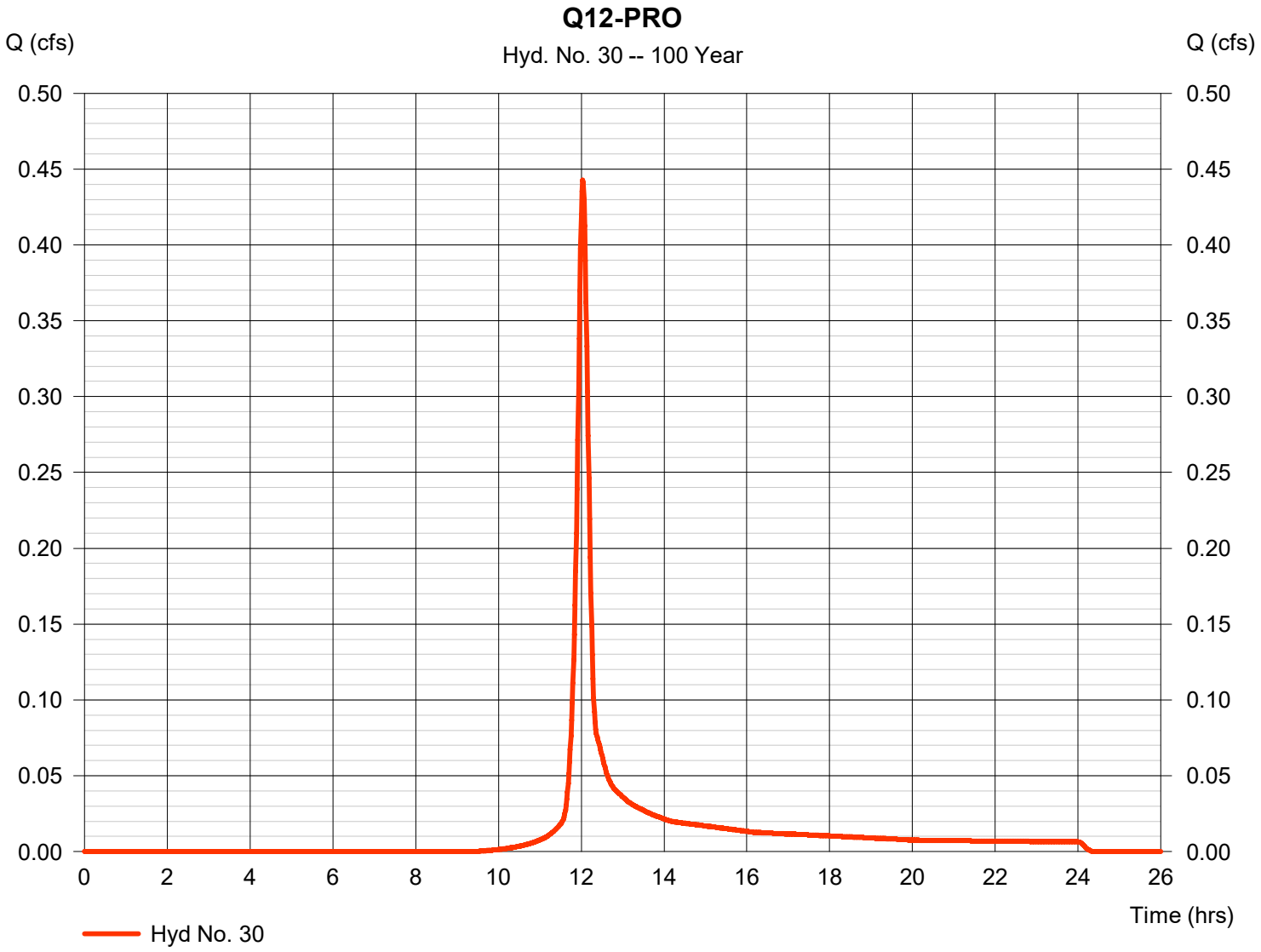


Hydrograph Report

Hyd. No. 30

Q12-PRO

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.443 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	1 min	Hyd. volume	=	1,196 cuft
Drainage area	=	0.230 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.22 min
Total precip.	=	3.24 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

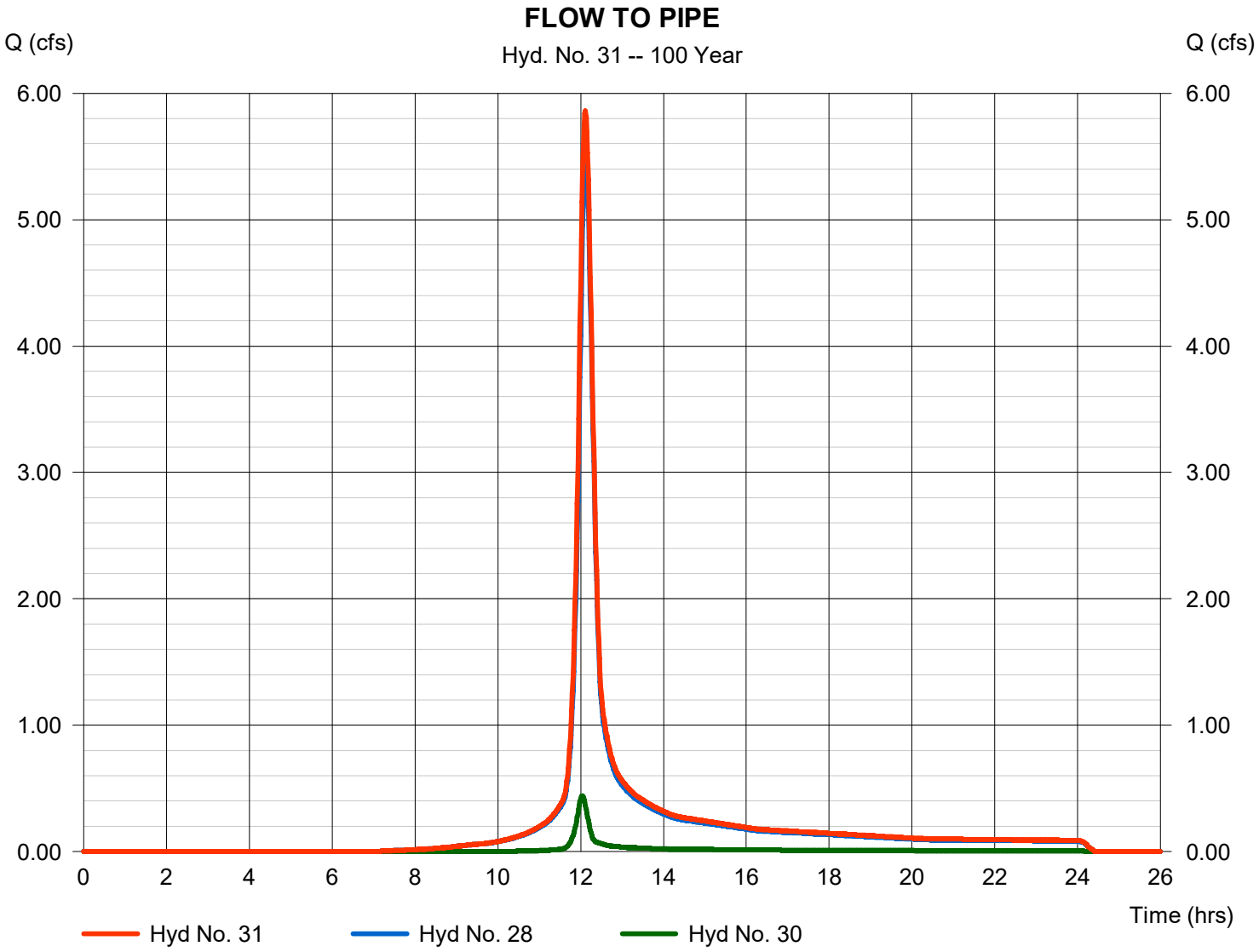


Hydrograph Report

Hyd. No. 31

FLOW TO PIPE

Hydrograph type	= Combine	Peak discharge	= 5.860 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 19,063 cuft
Inflow hyds.	= 28, 30	Contrib. drain. area	= 0.230 ac

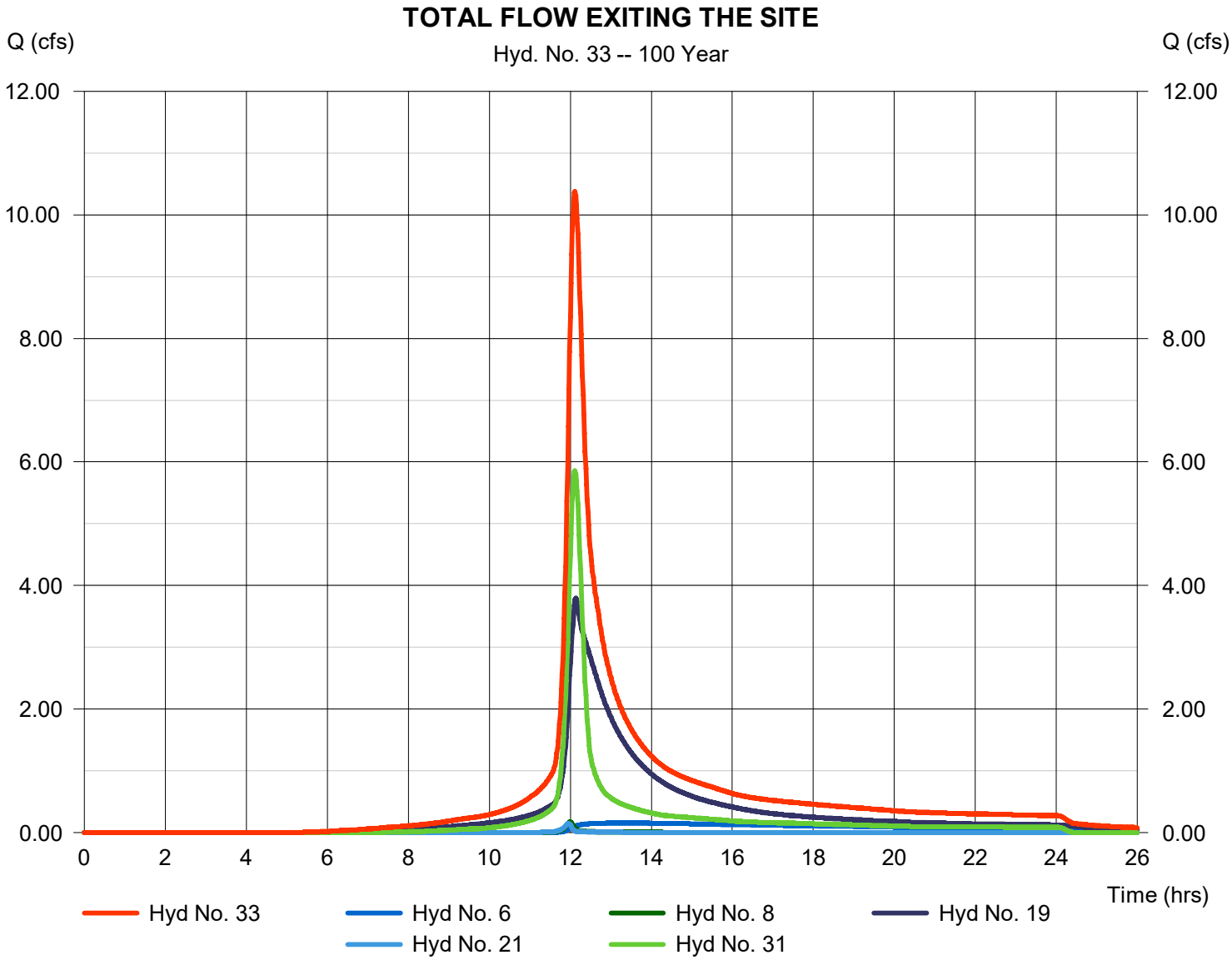


Hydrograph Report

Hyd. No. 33

TOTAL FLOW EXITING THE SITE

Hydrograph type	= Combine	Peak discharge	= 10.38 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 56,790 cuft
Inflow hyds.	= 6, 8, 19, 21, 31	Contrib. drain. area	= 0.120 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

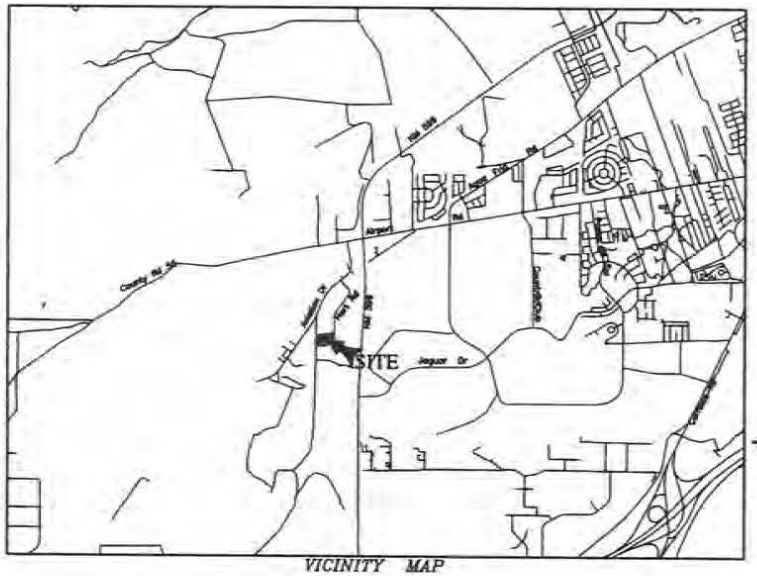
Tc = time in minutes. Values may exceed 60.

ecip. file name: K:\LAS SOLERAS TRACT 1 APT AND RETAIL FOR ABACUS\Drainage\LAS SOLERAS TRACT 1.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	1.53	0.00	0.00	0.00	2.61	2.93	3.24
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

PODS AT HART BUSINESS PARK

PRELIMINARY & FINAL DEVELOPMENT PLAN



VICINITY MAP
1" = 2000'

TOWNSHIP 16N, RANGE 8E,
SECTIONS 10 & 15

OWNER:
SFCC599 LLC
BARRY KEISS, MANAGING MEMBER
680 W. SAN MATEO
SANTA FE, NM 87505

DEVELOPER:
GARY KRUPNICK, PRESIDENT
SAF HART DISTR LLC
WEST RAC CONTRACTING CORP
687 OLD WILLETS PATH
HAUPPAUGE, NY 11788

CONSULTANTS:
SANTA FE ENGINEERING
CIVIL ENGINEER
1599 S. ST. FRANCIS DR. STE B
SANTA FE, NEW MEXICO 87505
(505) 982-2845

JAMES W. SIEBERT & ASSOCIATES, INC.
PLANNING CONSULTANT
915 MERCER STREET
SANTA FE, NM 87505
(505) 983-5588

LARRY MEDRANO
PRECISION SURVEYS
9200 SAN MATEO BOULEVARD,NE
ALBUQUERQUE, NM 87113
(505) 566-5700

YELLOWSTONE LANDSCAPING, INC.
1 CROUCH CT.
SANTA FE, NM 87507
(505) 589-8455

RICHARD KENT
THE KENT ARCHITECTURAL COLLABORATIVE, PLLC
687 OLD WILLETS PATH
HAUPPAUGE, NY 11788
(631) 753-9684

TRUE
MAG.
13°

INDEX TO SHEETS

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STORMWATER MANAGEMENT SYSTEM CERTIFICATION
THE UNDERSIGNED NEW MEXICO PROFESSIONAL ENGINEER HEREBY CERTIFIES THAT THESE RECORD DRAWINGS REFLECT THE CONSTRUCTED DETAILS OF THE HEREIN DESIGNED STORMWATER MANAGEMENT SYSTEM AND COMPLIES WITH SAID PLANS, INCLUDING AUTHORIZED CHANGE ORDERS.

ENGINEER'S SUBSTANTIAL IMPLEMENTATION CERTIFICATION
I, THE UNDERSIGNED NEW MEXICO 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 _____ (DATE) IS IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN PREPARED BY _____ DATED _____.

MICHAEL S. GONZEL, N.M.P.E. NO. 9731 _____ DATE
SANTA FE ENGINEERING CONSULTANTS, LLC

APPROVED BY THE SANTA FE PLANNING COMMISSION AT THEIR MEETING OF _____ AS CASE NO.: _____

CITY ENGINEER FOR LAND USE _____ DATE _____

CITY PLANNER _____ DATE _____

Santa Fe Engineering Consultants, LLC
SFEC

YELLOWSTONE

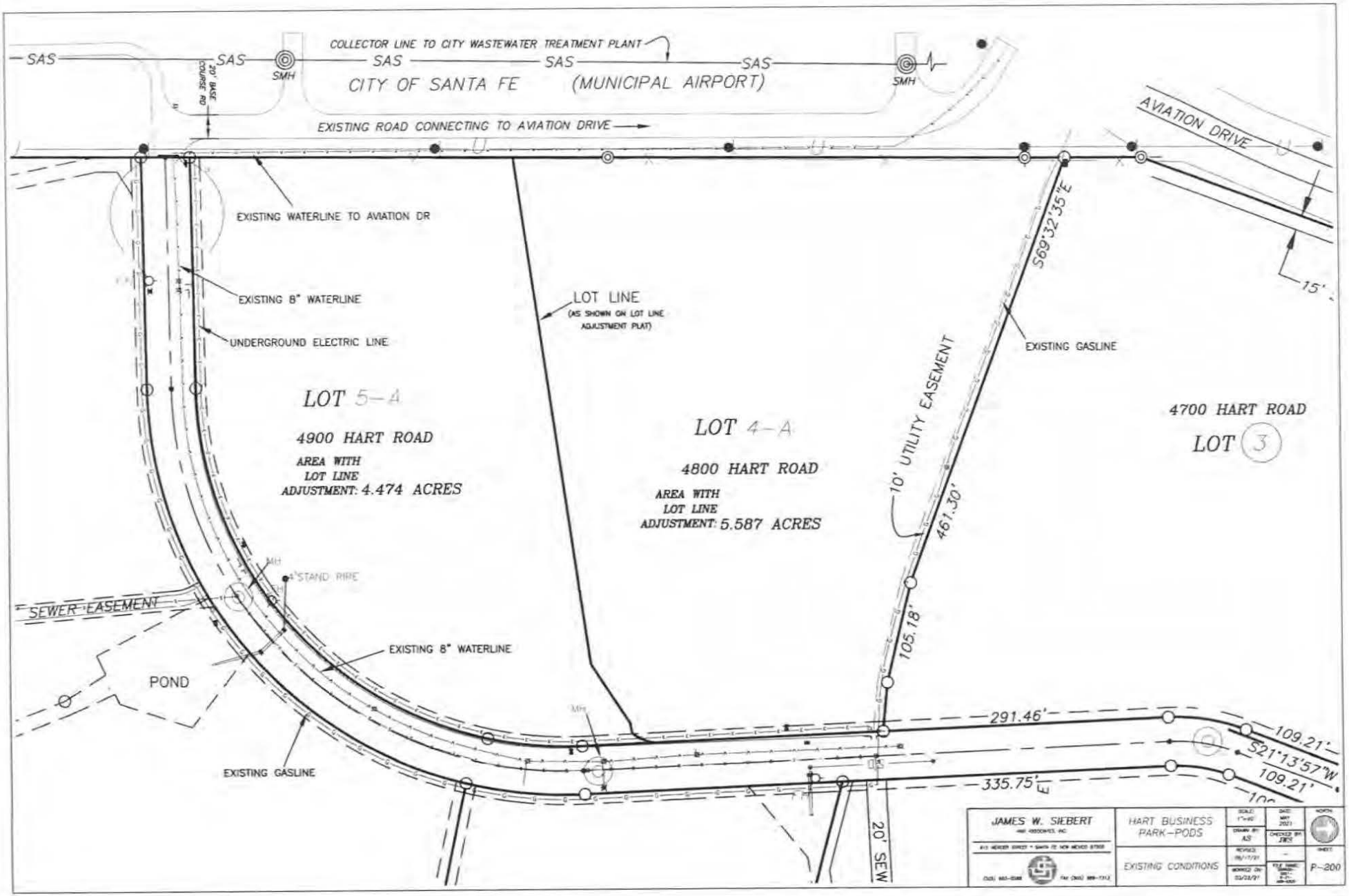
PRECISION SURVEYS, INC.

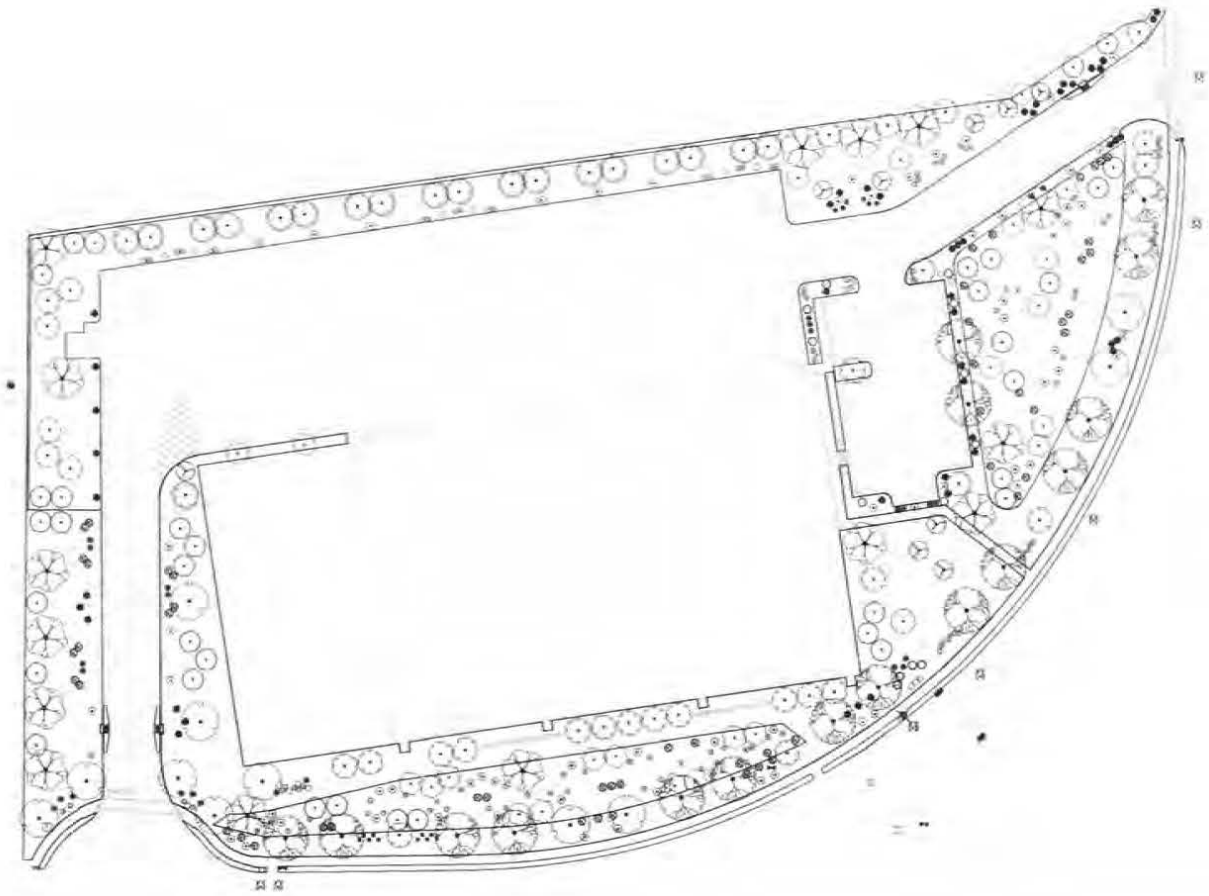
JAMES W. SIEBERT

PODS AT HART BUSINESS PARK

COVER SHEET

SCALE: AS SHOWN
DRAWN BY: AS
DATE: 05/14/21
REVISED ON: 06/21/21
CHECKED BY: JWS
JOB NO.: 2021
SHEET: P-100


SAS
SAS
SMH
COLLECTOR LINE TO CITY WASTEWATER TREATMENT PLANT
SAS
SAS
SAS
SMH
CITY OF SANTA FE
(MUNICIPAL AIRPORT)
20' BASE COURSE RD
EXISTING ROAD CONNECTING TO AVIATION DRIVE
AVIATION DRIVE
EXISTING WATERLINE TO AVIATION DR
EXISTING 8" WATERLINE
UNDERGROUND ELECTRIC LINE
LOT LINE
(AS SHOWN ON LOT LINE ADJUSTMENT PLAT)
S69°32'35"E
15'
EXISTING GASLINE
10' UTILITY EASEMENT
461.30'
LOT 5-A
4900 HART ROAD
AREA WITH LOT LINE ADJUSTMENT: 4.474 ACRES
LOT 4-A
4800 HART ROAD
AREA WITH LOT LINE ADJUSTMENT: 5.587 ACRES
4700 HART ROAD
LOT (3)
MH
4" STAND PIPE
SEWER EASEMENT
EXISTING 8" WATERLINE
POND
105.18'
291.46'
109.21'
S21°13'57"W
109.21'
335.75'
EXISTING GASLINE
20' SEW
JAMES W. SIEBERT
HART BUSINESS PARK-PODS
EXISTING CONDITIONS
P-200



WATER BUDGET

YEAR 1 AND 2
DRIP IRRIGATION TO TREES AND SHRUBS
4 MONTHS AT 1 RUN TIME PER MONTH
4 MONTHS AT 1 RUN TIME PER WEEK
4 MONTHS AT 4 RUN TIMES PER WEEK
APPROX. 90 RUN CYCLES PER YEAR
161 TREES/968 GALLONS PER RUN CYCLE
357 SHRUBS/714 GALLONS PER RUN CYCLE
1680 GALLONS PER RUN CYCLE X 90 RUN TIMES= 151,200 GPY/.46 ACRE FT.

YEAR 3 AND BEYOND
DRIP IRRIGATION TO TREES AND SHRUBS
4 MONTHS AT 1 RUN TIME PER MONTH
4 MONTHS AT 1 RUN TIME PER WEEK
4 MONTHS AT 3 RUN TIMES PER WEEK
APPROX. 77 RUN CYCLES PER YEAR
161 TREES/966 GALLONS PER RUN CYCLE
357 SHRUBS/714 GALLONS PER RUN CYCLE
1680 GALLONS PER RUN CYCLE X 77 RUN TIMES= 129,360 GPY/.39 ACRE FT.

LANDSCAPE DATA

PROPOSED OPEN SPACE	79,939 SF
REQUIRED TREES/OPEN SPACE	
ONE TREE PER 500 SF OF REQUIRED OPEN SPACE (79,939 SF less 17,799 SF ponding= 62,140/500 SF)	125
MINIMUM 25% EVERGREEN	32
PROPOSED TREES	125
REQUIRED SHRUBS/OPEN SPACE	
TWO SHRUBS PER 500 SF OF REQUIRED OPEN SPACE (79,939 SF less 17,799 SF ponding= 62,140/500 SF)	249
MINIMUM 25% EVERGREEN	63
PROPOSED SHRUBS	249
PONDING AREA	
REQUIRED TREES/PONDING AREA (17,925 sq ft)	
ONE TREE PER 500 SF OF PONDING AREA (17,799 SF/500 SF = 36)	36
PROPOSED TREES	36
REQUIRED SHRUBS/PONDING AREA	
THREE SHRUBS PER 500 SF OF PONDING AREA (17,799 SF/500 SF = 36 x 3 = 108)	108
PROPOSED SHRUBS	108
STREET TREE REQUIREMENTS	
ONE TREE MINIMUM 1 PER 25 to 30 L.F (839 LINEAR FEET/30 = 28)	
REQUIRED/PROPOSED TREES	28
PARKING LOT TREES	
ONE TREE PER 90 SF OF PARKING SPACE (21 X 10=210/90= 3)	
REQUIRED/PROPOSED TREES	5
TOTAL REQUIRED SHRUBS/5 GAL	357
TOTAL PROVIDED SHRUBS/5 GAL (Including evergreen and deciduous)	357
TOTAL REQUIRED TREES/2" CAL OR 6' HT	161
TOTAL PROVIDED TREES/2" CAL OR 6' HT (Including evergreen and deciduous)	161

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Albuquerque, NM 87184
505 898 9815
design@yellowstonelandscape.com

Date: 05.13.2021
Revisions:
05.19.2021
05.27.2021

Drawn by: HA
Reviewed by: CM

Hart Pods

Santa Fe, NM

NORTH

Scale: 1" = 30'

15 0 30 60

Sheet Title:
Landscape Plan

Sheet Number:
SHEET L-100

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME
	11	CRATAEGUS PHAENOPYRUM / WASHINGTON HAWTHORN
	24	FORESTIERA NEOMEXICANA / NEW MEXICAN PRIVET
	32	PYRUS CALLERYANA 'CLEVELAND SELECT' / CLEVELAND SELECT PEAR
	18	ULMUS PARVIFOLIA 'ALLEE' / ALLEE LACEBARK ELM
	15	ULMUS PROPINQUA 'EMERALD SUNSHINE' / EMERALD SUNSHINE ELM
	9	VITEX AGNUS-CASTUS / CHASTE TREE

EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME
	19	JUNIPERUS SCOPULORUM / ROCKY MOUNTAIN JUNIPER
	35	PINUS CEMBROIDES EDULIS / PINYON PINE

DESERT ACCENTS	QTY	BOTANICAL / COMMON NAME
	10	AGAVE PARRYI / PARRY'S AGAVE
	66	HESPERALOE PARVIFLORA / RED YUCCA

GRASSES	QTY	BOTANICAL / COMMON NAME
	10	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS
	8	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS
	22	MUHLENBERGIA CAPILLARIS 'REGAL MIST' TM / MUHLY

DECIDUOUS SHRUBS	QTY	BOTANICAL / COMMON NAME
	13	BUDDLEJA DAVIDII / BUTTERFLY BUSH
	20	LAVANDULA ANGUSTIFOLIA / ENGLISH LAVENDER
	54	PEROVSKIA ATRIPLICIFOLIA / RUSSIAN SAGE

EVERGREEN SHRUBS	QTY	BOTANICAL / COMMON NAME
	85	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE
	51	ROSMARINUS OFFICINALIS 'ARP' / ARP ROSEMARY
	18	SANTOLINA CHAMAECYPARISSUS / LAVENDER COTTON

MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY
	7/8" SANTA FE BROWN GRAVEL OVER WEED BARRIER	62,381 SF
	2-4" WALLIN COBBLE OVER WEED BARRIER	17,799 SF

LANDSCAPE NOTES

PLANTING BEDS TO BE MULCHED AT A 2"-3" DEPTH OVER FILTER FABRIC

ALL MULCH TO BE 2" BELOW ADJACENT SIDEWALK OR CURB

PLANTINGS TO BE WATERED WITH AN AUTOMATIC DRIP IRRIGATION SYSTEM

BACKFLOW PREVENTER IS PROPOSED/SEE DETAIL

EXISTING NATIVE LANDSCAPE AREAS NOT DISTURBED TO BE PROTECTED WITH TEMPORARY FENCING DURING CONSTRUCTION

PLANTS LOCATED IN BOTTOM THIRD OF POND AREAS ARE ADAPTABLE TO PERIODS OF SUBMERSION

STREET TREES PROVIDED AT 1 PER 25 TO 30 LF OF STREET FRONTAGE AND TO BE 2" CALIPER IN SIZE.

STREET TREES TO BE LOCATED/ADJUSTED TO BE A MINIMUM OF 15' FROM STREET LIGHT STANDARDS AND FIRE HYDRANTS PER ZONING SECTION 14-8.4 (G) (3) (e) (f)

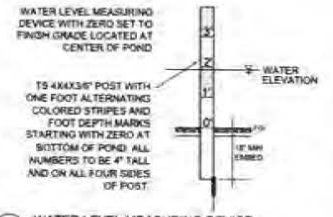
STREET TREES WILL BE INSTALLED SO AS TO NOT BLOCK SIGNAGE ON STREETS.

ALL PROJECT STREET TREES SHALL BE IRRIGATED AND MAINTAINED BY THE DEVELOPER.

NO OBJECTS, WALLS, FENCES, PARKED VEHICLES AND/OR VEGETATION SHALL BE PLACED WITHIN SIGHT TRIANGLES BETWEEN A HEIGHT OF 3' AND 6'

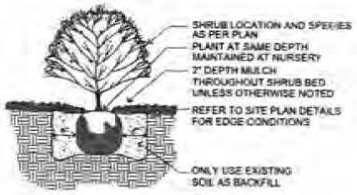
THIS LANDSCAPE PLAN COMPLIES WITH CITY OF SANTA FE ORDINANCE 14-8.4 LANDSCAPE AND SITE DESIGN.

THIS LANDSCAPE PLAN WILL INCORPORATE ANY PASSIVE WATER HARVESTING TECHNIQUES FOR LANDSCAPE IRRIGATION PURPOSES AS PROPOSED BY THE GRADING & DRAINAGE PLAN. WHENEVER POSSIBLE: DETENTION & RETENTION PONDS WILL BE TREATED AS AN INTEGRATED LANDSCAPE FEATURE RATHER THAN A SINGLE PURPOSE FLOOD CONTROL POND.



1 WATER LEVEL MEASURING DEVICE

2 TREE INSTALLATION DETAIL



3 SHRUB INSTALLATION DETAIL

YELLOWSTONE
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505.898.9815
design@yellowstonelandscape.com

Date: 05.13.2021
Revisions:
- 05.19.2021
- 05.27.2021

Drawn by: HA
Reviewed by: CM

Hart Pods

Santa Fe, NM

NORTH

Scale: 1" = 30'

15' 0 30 60

Sheet Title:
Landscape Plan

Sheet Number:
SHEET L-100A

IRRIGATION LEGEND

Symbol	Item - Description	Manufacturer / Model	Size
C	Controller Location as shown on plans	Rainbird ESP-LXMe	8 Station
	Ball Gate Valve assumed pipeline connections	Lasco Ball Valve	
M	Reduced Pressure Backflow Preventer/Master Valve, Assembly w/ Valve Box	Febco 825Y Rainbird PEB NOR-12"	1" 1"
	Automatic Drip Valve with pressure regulating filter in valve box	Rainbird PEB Rainbird HRF-100-XBY NOR-12"	1"
	Manual Drain Valve (Not Shown) install @ low point of spray zones	Spears Ball Valve 10" Round Box	1"
	Poly Drip Line w / Point Drip 6 emitters per tree 2 emitters per shrub 4.6" depth here	Agri-flex T-Hf	.6" 2 GPH
	PVC Mainline 36" depth here	See Id	1 In
	New PVC Sleeve	Class 200	2" Ser
MV1 1" DRIP	Watering Sequence Valve Size Valve Type		

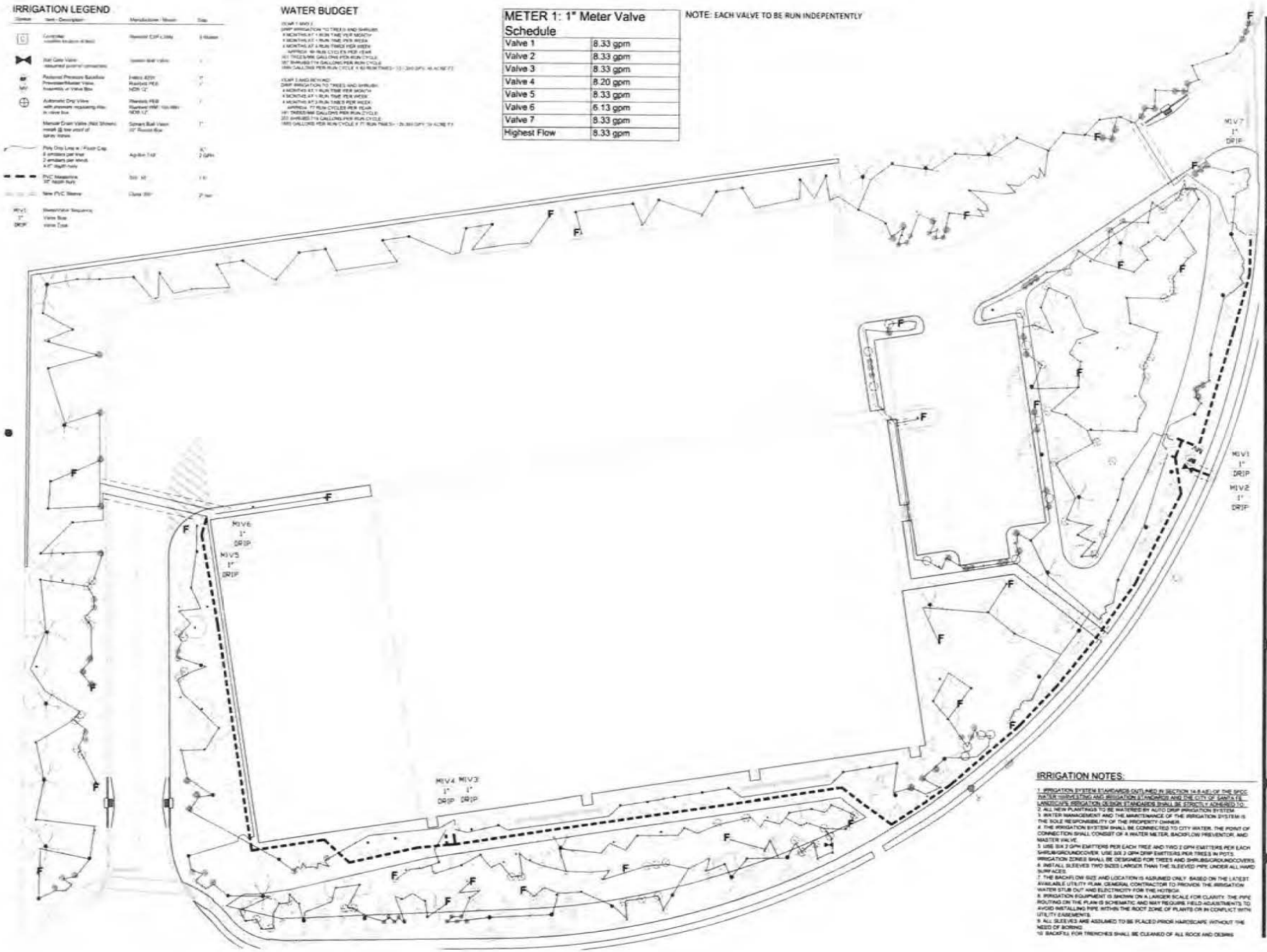
WATER BUDGET

(YEAR 1 AND 2
DRIP IRRIGATION TO TREES AND SHRUBS
4 MONTHS AT 1 RUN TIME PER MONTH
4 MONTHS AT 1 RUN TIME PER WEEK
4 MONTHS AT 2 RUN TIMES PER WEEK
APPROX. 96 RUN CYCLES PER YEAR
167 TREES/996 GALLONS PER RUN CYCLE
357 SHRUBS/774 GALLONS PER RUN CYCLE
1990 GALLONS PER RUN CYCLE X 92 RUN TIMES= 183,080 GPY/ 49 ACRE FT

YEAR 3 AND BEYOND
DRIP IRRIGATION TO TREES AND SHRUBS
4 MONTHS AT 1 RUN TIME PER MONTH
4 MONTHS AT 1 RUN TIME PER WEEK
4 MONTHS AT 2 RUN TIMES PER WEEK
APPROX. 77 RUN CYCLES PER YEAR
167 TREES/996 GALLONS PER RUN CYCLE
357 SHRUBS/774 GALLONS PER RUN CYCLE
1990 GALLONS PER RUN CYCLE X 77 RUN TIMES= 153,230 GPY/ 39 ACRE FT

METER 1: 1" Meter Valve Schedule	
Valve 1	8.33 gpm
Valve 2	8.33 gpm
Valve 3	8.33 gpm
Valve 4	8.20 gpm
Valve 5	8.33 gpm
Valve 6	6.13 gpm
Valve 7	8.33 gpm
Highest Flow	8.33 gpm

NOTE: EACH VALVE TO BE RUN INDEPENTENTLY



IRRIGATION NOTES:

1. IRRIGATION SYSTEM STANDARDS OUTLINED IN SECTION 14-8.4(E) OF THE SFCC WATER HARVESTING AND IRRIGATION ORDINANCE AND THE CITY OF SANTA FE LANDSCAPE IRRIGATION DESIGN STANDARDS SHALL BE STRICTLY ADHERED TO.
2. ALL NEW PLANTINGS TO BE WATERED BY AUTO DRIP IRRIGATION SYSTEM.
3. WATER MANAGEMENT AND THE MAINTENANCE OF THE IRRIGATION SYSTEM IS THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER.
4. THE IRRIGATION SYSTEM SHALL BE CONNECTED TO CITY WATER. THE POINT OF CONNECTION SHALL CONSIST OF A WATER METER, BACKFLOW PREVENTOR, AND MASTER VALVE.
5. USE SIX 2 GPH EMITTERS PER EACH TREE AND TWO 2 GPH EMITTERS PER EACH SHRUB/GROUNDCOVER. USE SIX 2 GPH DRIP EMITTERS PER TREES IN POTS.
IRRIGATION ZONES SHALL BE DESIGNED FOR TREES AND SHRUBS/GROUNDCOVERS.
6. INSTALL SLEEVES TWO SIZES LARGER THAN THE SLEEVED PIPE UNDER ALL HARD SURFACES.
7. THE BACKFLOW SIZE AND LOCATION IS ASSUMED ONLY. BASED ON THE LATEST AVAILABLE UTILITY PLAN, GENERAL CONTRACTOR TO PROVIDE THE IRRIGATION WATER STUB OUT AND ELECTRICITY FOR THE HOTBOX.
8. IRRIGATION EQUIPMENT IS SHOWN ON A LARGER SCALE FOR CLARITY. THE PIPE ROUTING ON THE PLAN IS SCHEMATIC AND MAY REQUIRE FIELD ADJUSTMENTS TO AVOID INSTALLING PIPE WITHIN THE ROOT ZONE OF PLANTS OR IN CONFLICT WITH UTILITY EASEMENTS.
9. ALL SLEEVES ARE ASSUMED TO BE PLACED PRIOR HARDSCAPE WITHOUT THE NEED OF BORING.
10. BACKFILL FOR TRENCHES SHALL BE CLEANED OF ALL ROCK AND DEBRIS

YELLOWSTONE
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design@yellowstonelandscape.com

Date: 05.19.2021
Revisions:

Drawn by: HA
Reviewed by: CM

Hart Pods

Santa Fe, NM

NORTH

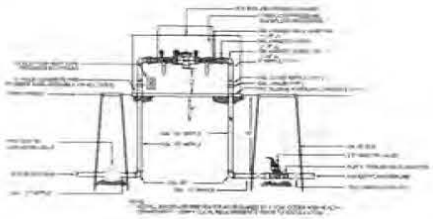
Scale: 1" = 20'

10 0 20 40

Sheet Title:
Irrigation Plan

Sheet Number:

SHEET L-200



1 RP BACKFLOW/MASTER VALVE DETAIL
N.T.S

A NDS 6" ROUND BOX
B FINISH GRADE
C SPEARS SCH 80 BALL VALVE SIZE TO MAINLINE
D MAINLINE/24" BURY
E 8" X 8" X 16" CMU CONCRETE BLOCK
F 4" LAYER OF 3/4" GRAVEL

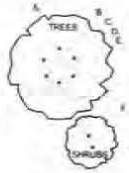
2 ISOLATION VALVE DETAIL
N.T.S

A NDS 6" ROUND BOX
B FINISH GRADE
C SPEARS SCH 80 BALL VALVE SIZE TO MAINLINE
D MAINLINE/24" BURY
E 8" X 8" X 16" CMU CONCRETE BLOCK
F 3/4" GRAVEL SUMP UNDER MANUAL DRAIN TO BE A MINIMUM OF 12" DEEP

3 MANUAL DRAIN VALVE DETAIL
N.T.S

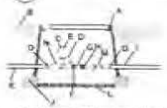
3"x3/4" tee
3/4" drip line
1" PVC or Poly from valve
Drip valve assembly

4 DRIP VALVE DETAIL
N.T.S



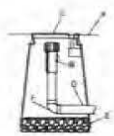
A TREE TRUNK/ ROOT CROWN
B 24" CIRCLE FROM TRUNK
C EMITTERS
D 12" DISTRIBUTION LINE
E PE DRIPLINE
F EMITTER PLACED WITHIN 8" OF PLANT STEM
NOTE: PLACE EMITTER ABOVE PLANT ON SLOPE

5 EMITTER PLACEMENT DETAIL
N.T.S



A CARSON PRODUCTS INC. 1419-18 BODY (ABS) VALVE BOX W/ BOLT DOWN COVER (ABS) AND ONE 9" EXTENSION
B FINISH GRADE
C 24" WIRE LOOP
D AUTOMATIC VALVE: SEE IRRIGATION LEGEND
E DRY SPLICE CONNECTION OR EQUAL
F SCH 80 NIPPLE
G SCH 80 COUPLING
H "WYE" STRAINER STRAINER SHALL BE INSTALLED TO PROVIDE ACCESS FOR MAINTENANCE AND REPLACEMENT OF ITS ITEM
I LATERAL LINE/24" BURY
J 8" X 8" X 16" CMU CONCRETE BLOCK
K MASTER LINE/24" BURY
L 4" LAYER OF 3/4" GRAVEL
M PRESSURE REGULATOR
N SPEARS SCH 80 BALL VALVE
O TRUE UNION COUPLING

6 DRIP VALVE WITH FILTER & PRESSURE REGULATOR
N.T.S



A FINISH GRADE
B END FLUSH CAP
C 9" ROUND BOX WITH LID
D 3/4" POLY DRIP PIPE
E 2" DEPTH OF GRAVEL
F 90° PVC FITTING

7 END FLUSH CAP
N.T.S

A WALL MOUNT CONTROLLER (see plan for model)
B 2" PVC SCH 40 CONDUIT AND FITTINGS
C WIRES TO REMOTE CONTROL VALVES
D JUNCTION BOX
E 1" PVC SCH 40 CONDUIT AND FITTINGS TO POWER SUPPLY

8 WALL MOUNTED AUTOMATIC CONTROLLER
N.T.S

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Date: 05.19.2021
Revisions:

Drawn by: HA
Reviewed by: CM

Hart Pods
Santa Fe, NM

NORTH
Scale: 1" = 30'
15 0 30 60

Sheet Title:
Irrigation Detail Sheet

Sheet Number:
SHEET L-201

Plat of
Lots 4-A and 5-A
Hart Business Park
Section 15, Township 16 North, Range 8 East, N.M.P.M.
Santa Fe, Santa Fe County, New Mexico
May 2021

Location Map

Utility Companies

_____ DATE

_____ DATE

_____ DATE

_____ DATE

Santa Fe County Signatures

_____ DATE

City of Santa Fe Approval & Review

_____ DATE

_____ DATE

_____ DATE

_____ DATE

Notes

Flood Zone

Lot of Record and Other Reference Documents

Dedication and Affidavit

_____

_____

Legal Description

Purpose

Notes

Surveyor's Certificate

LARRY M. MEDRANO
NEW MEXICO
11993
REGISTERED PROFESSIONAL SURVEYOR

_____ DATE

SHEET S-100

COORDINATE AND DIMENSION INFORMATION				PLSS INFORMATION				PROPERTY INFORMATION		
NM-C	GRID	STANDARD		LAND GRANT: N/A				PROPERTY OWNER: CCSF-HAM LLC		
NAD83	NAVD88		0° 00' 00.00" YES	SECTION: 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4600 & 4900 HART ROAD	
OPUS SOLUTION: 2104054173D1 TRS7586863528S1			N + 0					UPC: 1048059442350500000		
GRID TO GROUND: 1.00036715	GROUND		E + 0	CITY: SANTA FE		COUNTY: SANTA FE	STATE: NM	1048059441946500000		
GROUND TO GRID: 0.99969301	GRID		±0.07 YES							

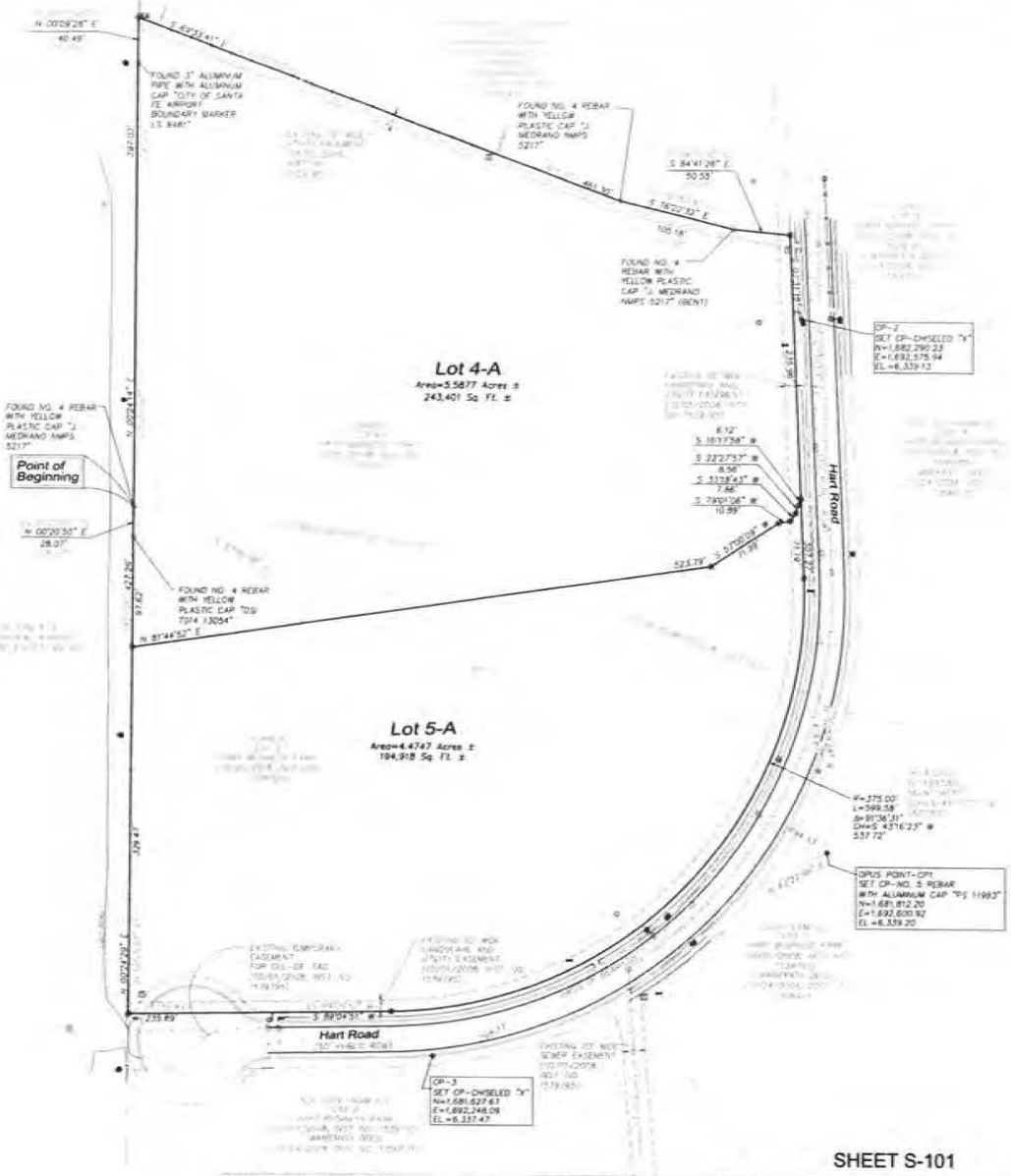
PRECISION SURVEYS, INC.
OFFICE LOCATION: 4200 San Mateo Boulevard, NE, Albuquerque, NM 87113
505.884.5705 PHONE
505.884.7900 FAX

PROJECT INFORMATION	
CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO: 21S026P	SHEET NUMBER: 1 OF 2

Plat of
Lots 4-A and 5-A

Hart Business Park

Section 15, Township 16 North, Range 8 East, N.M.P.M.
Santa Fe, Santa Fe County, New Mexico
April 2021



Legend

SHEET S-101

COORDINATE AND DIMENSION INFORMATION				PLSS INFORMATION				PROPERTY INFORMATION		
NM-C	GRID	STANDARD		LAND GRANT: N/A				PROPERTY OWNER: CCSF-NMM LLC		
NAD83	NAVD88			SECTION: 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD	
OPUS SOLUTION: 210405MT001.TRS75869653851			N = 0 E = 0	CITY: SANTA FE		COUNTY: SANTA FE	STATE: NM	UPC: 1046094423502000000 1046094419460000000		
GRID TO GROUND: 1.00038715 GROUND TO GRID: 0.99960301	GROUND GRID		±0.00'	YES						

PRECISION SURVEYS, INC.

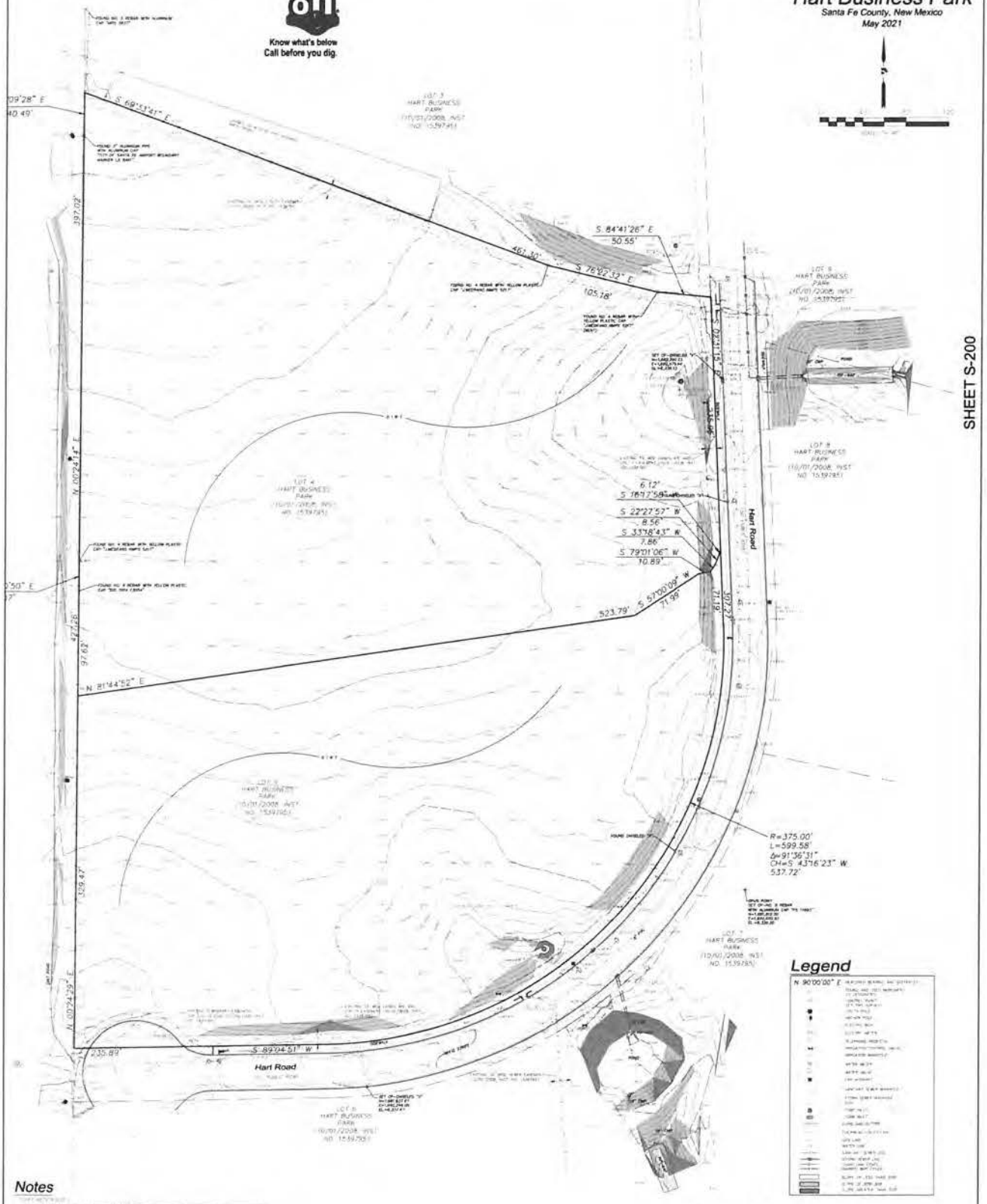
PROJECT INFORMATION	
CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO: 216036P	SHEET NUMBER: 2 OF 2

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

See Sheet 2 of 2 for Invert Details

811
Know what's below
Call before you dig.

Topographic Survey and Slope Analysis Map of
Lots 4 and 5
Hart Business Park
Santa Fe County, New Mexico
May 2021



SHEET S-200

Legend

Notes

Surveyor's Certificate

LARRY W. MEDANO
11993
NEW MEXICO

COORDINATE AND DIMENSION INFORMATION				PLSS INFORMATION				PROPERTY INFORMATION		
NM-C	GRID	STANDARD		LAND GRANT: SANTA FE GRANT				PROPERTY OWNER: CCSF-HAM/LLC		
NAD83	NAVD88	0° 00' 00.00"	YES	SECTION: 10 & 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD	
OPUS SOLUTION: 2104098MT001 TRS7569853851		N + 0		CITY: N/A		COUNTY: SANTA FE	STATE: NM	UPC: 1046094423502000000, 1046094419465000000		
GRID TO GROUND: 1.00039715	GROUND	E + 0								
GROUND TO GRID: 0.99960301	GRID	±0.00'	YES							

PRECISION SURVEYS, INC.
OFFICE LOCATION: 3200 San Mateo Boulevard, SE, Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

PROJECT INFORMATION	
CREW/TECH: MT/ML	DATE OF SURVEY: 03-31-04/14/2021
DRAWN BY: JK	CHECKED BY: LM
PS JOB NO.: 21603ET	SHEET NUMBER: 1 OF 2

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

811
Know what's below
Call before you dig.

Topographic Survey of
Lots 4 and 5
Hart Business Park
Santa Fe County, New Mexico
April 2021

SHEET S-201

COORDINATE AND DIMENSION INFORMATION				PLSS INFORMATION				PROPERTY INFORMATION			PROJECT INFORMATION	
STATE PLANE ZONE: NM-C	DMD CHECKING DISMISSION FOR: GRID	TYPE: STANDARD		LAND GRANT: SANTA FE GRANT				PROPERTY OWNER: CDSF-NMM LLC			CREATED BY: MTML	DATE OF SURVEY: 03-31-04-14-2021
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88	ROTATION ANGLE: 0° 00' 00.00"	ROTATE ON GROUND: YES	SECTION: 10 & 15	TOWNSHIP: 16 NORTH	RANGE: 8 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: HART BUSINESS PARK	ADDRESS: 4800 & 4900 HART ROAD		DRAWN BY: JK	CHECKED BY: LM
COMBINED SCALE FACTOR: OPUS SOLUTION: 2104059MT001.TRS-7504986532851		BASE POINT FOR SCALING AND/OR ROTATION: N = 0 E = 0		CITY: N/A		COUNTY: SANTA FE	STATE: NM	UPC: 1046094423502060000 1046094419465000000			FB/ JOB NO.: 2165367	SHEET NUMBER: 2 OF 2
GRID TO GROUND: 1.00????????	ELEVATION MASK: GROUND											
GROUND TO GRID: 0.99987???????	ELEVATION REFERENCE: GRID	ELEVATION VALUE: 62.00'	FLIP ANTENNA: YES									

PRECISION SURVEYS, INC.

OFFICE LOCATION:
1200 San Mateo Boulevard, NE
Albuquerque, NM 87113
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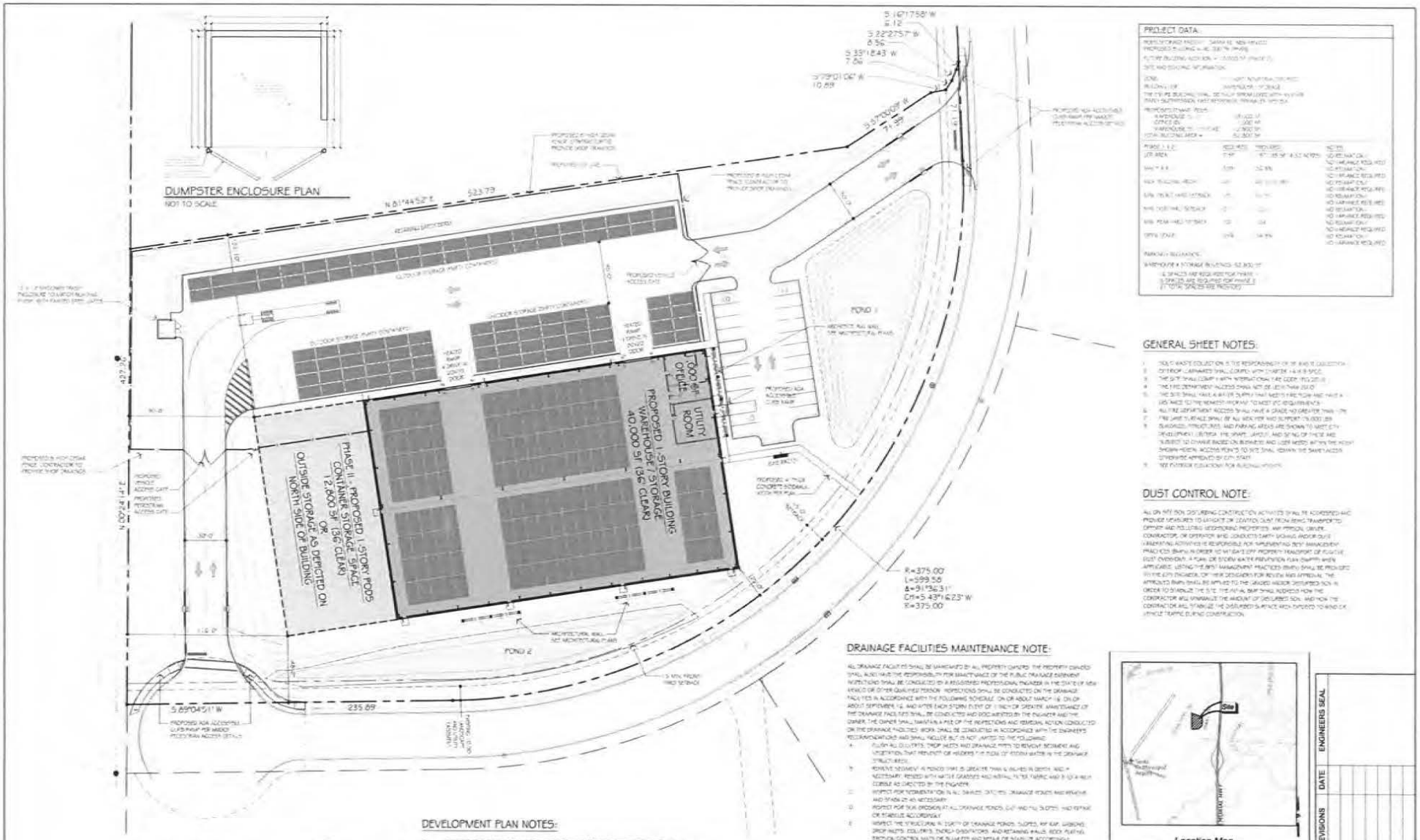
505.856.7900 FAX



DEVELOPMENT PLAN

SCALE: 1" = 30'-0"

REFER TO CIVIL SITE PLAN FOR ADDITIONAL INFORMATION

GUNNISON'S PRAIRIE DOG NOTE:

THE PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE U.S. WILDLIFE SERVICE GUIDELINES WHERE APPLICABLE. (A.R.U.S.)

DEVELOPMENT PLAN NOTES:

A. PROPERTY DEVELOPMENT SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF CHAPTER 16, SAND DEVELOPMENT CODE, SPCC 2000 - AND SUBSEQUENT AMENDMENTS

B. PROPERTY DEVELOPMENT SHALL 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 OF BUILDING PERMIT.

C. EACH LOT SHALL BE SERVED BY SEPARATE WATER AND SEWER LINES.

D. SHALL COMPLY WITH INTERNATIONAL FIRE CODE (IFC) 2009 EDITION.

E. PRIOR TO ANY NEW CONSTRUCTION, PLAT SHALL BE SUBMITTED TO FIRE DEPARTMENT FOR COMPLIANCE WITH INTERNATIONAL FIRE CODE (IFC).

F. NO FENCES, WALLS OR OTHER OBSTRUCTIONS SHALL BE PLACED ON ZONE/DEDICATED ACCESS OR WITHIN PUBLIC DRAINAGE EASEMENTS.

G. WASTEWATER UTILITY EXPANSION CHARGES (UEC) SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION

H. FIRE SERVICE REQUIREMENTS WILL BE DETERMINED BY THE FIRE DEPARTMENT PRIOR TO DEVELOPMENT OR ISSUANCE OF A BUILDING PERMIT.

PROJECT DATA:

PHASE I, II & III	REQUIRED	PROVIDED	NOTES
LOT AREA	1 AC	4.11 AC (179,105 SF)	NO MIN. REQUIRED
MAX. F.A.R.	0.50	0.22	NO MAX. REQUIRED
MAX. BUILDING HEIGHT	45'	30'	NO MAX. REQUIRED
MIN. FRONT YARD SETBACK	15'	15'	NO SETBACK REQUIRED
MIN. SIDE YARD SETBACK	10'	10'	NO SETBACK REQUIRED
MIN. REAR YARD SETBACK	10'	10'	NO SETBACK REQUIRED
OPEN SPACE	10%	14.9%	NO MINIMUM REQUIRED
			NO GREENBELT REQUIRED
			NO LANDSCAPE REQUIRED

PARKING REQUIRED:

WAREHOUSE & STORAGE BUILDINGS: 52,800 SF

- 6 SPACES ARE REQUIRED FOR PHASE I
- 5 SPACES ARE REQUIRED FOR PHASE II
- 27 TOTAL SPACES ARE PROVIDED

GENERAL SHEET NOTES:

1. SOLID WASTE COLLECTION IS THE RESPONSIBILITY OF OF EACH LOT OWNER/TENANT.
2. EXTERIOR LUMINAIRES SHALL COMPLY WITH CHAPTER 14-8.9 SFCC.
3. THE SITE SHALL COMPLY WITH INTERNATIONAL FIRE CODE (IFC) 2009.
4. THE FIRE DEPARTMENT ACCESS SHALL NOT BE LESS THAN 20'-0".
5. THE SITE SHALL HAVE A WATER SUPPLY THAT MEETS FIRE FLOW AND HAVE A FIRE HYDRANT WITHIN 400' DISTANCE TO THE REMOTEST PROPERTY THAT NEEDS FIRE PROTECTION AS REQUIRED BY THE FIRE DEPARTMENT.
6. ALL FIRE DEPARTMENT ACCESS SHALL HAVE A GRADE NO GREATER THAN 10%.
7. FIRE LANE SURFACE SHALL BE ALL WEATHER AND SUPPORT 75,000 LBS.
8. BUILDINGS, STRUCTURES, AND PARKING AREAS ARE SHOWN TO MEET CITY DEVELOPMENT CRITERIA. THE SPACE, LAYOUT, AND SIZING OF THESE ARE SUBJECT TO CHANGE BASED ON BUSINESS AND USER NEEDS WITHIN THE ROOM SHOWN HEREIN. ACCESS POINTS TO SITE SHALL REMAIN THE SAME UNLESS OTHERWISE APPROVED BY CITY STAFF.
9. SEE EXTERIOR ELEVATIONS FOR BUILDING HEIGHTS.

DUST CONTROL NOTE:

ALL ON SITE SOIL DISTURBING CONSTRUCTION ACTIVITIES SHALL BE ADDRESSED AND PROVIDE MEASURES TO AFFECT OR LIMIT FUGITIVE DUST FROM BEING TRANSPORTED OFFSITE AND TO OTHER NEIGHBORING PROPERTIES. ANY PERSON, OWNER, CONTRACTOR, OR OPERATOR WHO CONDUCTS EARTH MOVING 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 SEDIMENT AND STORM WATER PREVENTION PLAN (SWPPP) WHEN APPLICABLE, LISTING THE BMPs MANAGEMENT PRACTICES (BMPs) SHALL BE PROVIDED TO THE CITY ENGINEER OR HIS/HER DESIGNEE FOR REVIEW AND APPROVAL. THE APPROVED BMPs SHALL BE IMPLIED TO THE GRADED AND/OR DISTURBED SOIL IN ORDER TO STABILIZE THE SITE. THE ACTUAL 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.

DRAINAGE FACILITIES MAINTENANCE NOTE:

ALL DRAINAGE FACILITIES SHALL BE MAINTAINED BY ALL PROPERTY OWNERS. THE PROPERTY OWNERS SHALL ALSO HAVE THE RESPONSIBILITY FOR MAINTENANCE OF THE PUBLIC DRAINAGE EASEMENT. 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 OUTLETS, TRAP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND VEGETATION THAT REDUCES OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURES.

B. REMOVE SEDIMENT IN PONDS THAT IS GREATER THAN 6 INCHES IN DEPTH AND, IF NECESSARY, REVEGETATE WITH WATER GRASSES AND INSTALL FILTER FABRIC AND 3-12 INCH CURBS AS DIRECTED BY THE ENGINEER.

C. INSPECT FOR DETERIORATION IN ALL DAMAGED OUTLETS, DRAINAGE PONDS AND REPAIR 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, OUTLETS, POND DIVERSIONS, AND RETAINING WALLS. BOOT, PLASTIC, EROSION CONTROL MATS OR BLANKETS AND REPAIR OR STABILIZE ACCORDINGLY.

Location Map

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

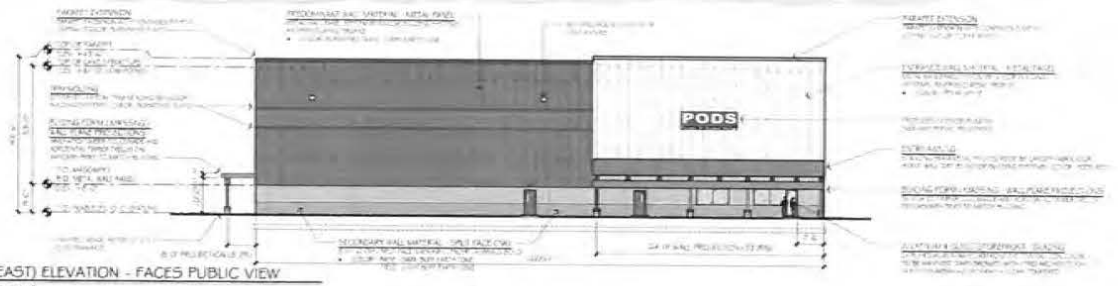
CASE # _____

ARCHITECT:
THE KENT ARCHITECTURAL COLLABORATIVE, PLLC
687 OLD WILLETS PATH
HAUPPAUGE • NEW YORK 11788
631.793.9684
rkent.tkac@gmail.com

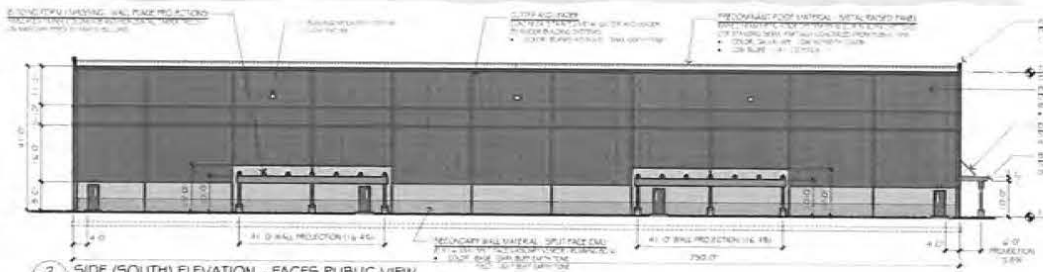
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DEVELOPMENT PLAN

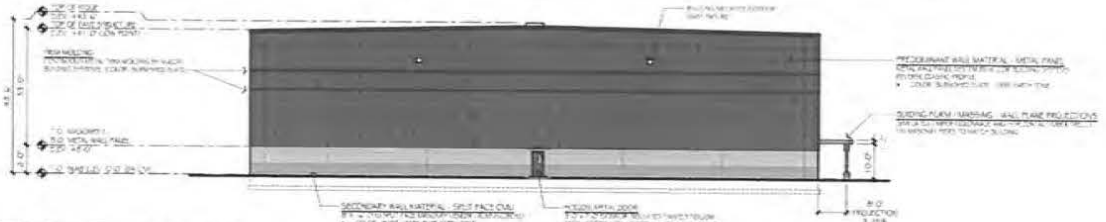
DATE:	SCALE:	SHEET:
MAY 2021	1/16" = 1'-0"	A-100



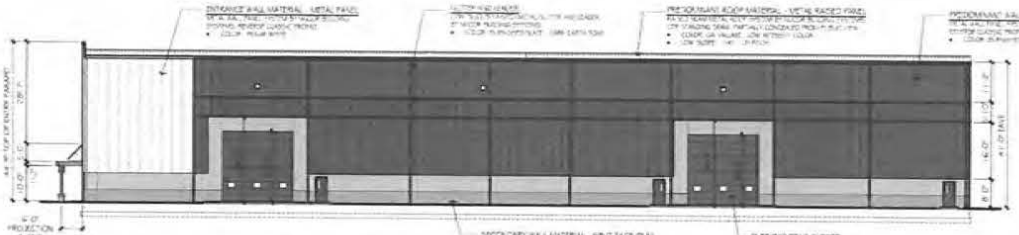
1 / A200 FRONT (EAST) ELEVATION - FACES PUBLIC VIEW
SCALE: 1/16" = 1'-0"



2 / A200 SIDE (SOUTH) ELEVATION - FACES PUBLIC VIEW
SCALE: 1/16" = 1'-0"



3 / A200 REAR (SOUTH) ELEVATION - NO PUBLIC VIEW
SCALE: 1/16" = 1'-0"



4 / A200 SIDE (WEST) ELEVATION - NO PUBLIC VIEW
SCALE: 1/16" = 1'-0"

CASE # _____

TABLE 14-8.7-2: ARCHITECTURAL DESIGN STANDARDS AND POINT ALLOCATIONS

ARCHITECTURAL DESIGN STANDARDS	REQUIRED	PROVIDED	POINTS
WALLS			
PREDOMINANT EXTERIOR SURFACE MATERIAL	METAL SIDING, SLATTED CORRUGATED SYSTEMS, GUARD RAILS, WOOD SIDING AND SIMILAR MATERIALS	CMU SPLIT FACE MASONRY AND ALSO PREDOMINANT METAL WALL PANEL MATERIAL WEIGHT	10
COLOR OF PREDOMINANT EXTERIOR SURFACE MATERIAL	EARTH TONES: CREAMS AND PASTELS OF EARTH TONE HUES, INCLUDING BUT NOT NECESSARILY LIMITED TO BEIGE, PEACH AND TERRA COTTA COLORS	CMU SPLIT FACE MASONRY WHERE TO BE LIGHT BUFF AND DARK BUFF METAL WALL PANEL TO BE SURFINISH 6 LITE COAT 2 MATT FINISH	10
ROOFS			
SLOPE	FLAT ROOF SURFACES NOT ENTIRELY CONCEALED FROM PUBLIC VIEW BY PARAPETS, UNIFORMLY SLOPING ROOFS OR ANY COMBINATION OF FLAT AND UNIFORMLY SLOPING ROOFS, HAVING A HEIGHT, FROM EAVE LINE TO PEAK, THAT DOES NOT EXCEED THE AVERAGE HEIGHT OF THE SUPPORTING WALLS AND HAVING A SLOPE WITH GREATER THAN OR EQUAL TO FOUR FEET OF VERTICAL RISE FOR EVERY 12 FEET OF HORIZONTAL RUN	ROOF HAS A PITCH OF 1/4":12" AND IS NOT CONCEALED FROM PUBLIC VIEW AND DOES NOT EXCEED THE AVERAGE HEIGHT OF THE SUPPORTING WALLS	10
PREDOMINANT MATERIAL	STANDING "A" AT OR BETTER SEAM METAL ROOFING OR MEMBRANE ASPHALT OR GRAVEL SURFACES, EXPOSED TO PUBLIC VIEW	ROOF IS GRADED TO SCUPPERS AT ROOFTOP	5
PREDOMINANT COLOR	LOW (ATTENDANT) COLORS OTHER THAN THOSE STATED ABOVE	ROOF TO BE GALVANIZED METAL PANEL	5
BUILDING FORM			
VARIATION	ONE STORY BUILDINGS WITH OVER 10,000 SQUARE FEET OF GROSS FLOOR AREA AND MULTI-TAPE BUILDINGS WITH OVER 20,000 SQUARE FEET OF GROSS FLOOR AREA WHICH ARE DESIGNED WITH WALL PLANE PROJECTIONS OF OFFSETS ON EACH PUBLICLY VISIBLE FACADE HAVING A DEPTH OF AT LEAST THREE PERCENT OF THE LENGTH OF THE FACADE AND EXTENDING AT LEAST 20 PERCENT OF THE LENGTH OF THE FACADE	EAST ELEVATION PROJECTION LENGTH: 44 FT / 34.6% PROJECTION DEPTH: 3 FT / 3.4% EAST ELEVATION PROJECTION LENGTH: 107 FT / 61.9% PROJECTION DEPTH: 3 FT / 3.4%	30
DOORS AND WINDOWS			
AREA	ALL WALL SURFACES WHICH ARE NOT LOCATED INDOOR PORTALS OR UNOPPOSED HAVING A HORIZONTAL DEPTH OF AT LEAST SIX FEET, AND WHICH DO NOT INCLUDE SOLAR PENETRATION, HAVE LESS THAN OR EQUAL TO SIX PRACTICAL OPENINGS CONSISTING OF DOORS, WINDOWS, GLAZING AND DEEP PENETRATIONS	DOORS, WINDOWS, GLAZING AND OTHER PENETRATIONS ACCOUNT FOR LESS THAN 60% OF THE TOTAL WALL SURFACE AREA	30
LOCATION	ALL DOORS, WINDOWS AND GLAZED SURFACES, ON STRUCTURES HAVING A GROSS FLOOR AREA GREATER THAN 50 SQUARE FEET, ARE LOCATED AT LEAST TWO FEET FROM OUTSIDE BUILDING CORNERS	ALL DOORS, WINDOWS AND GLAZED SURFACES TO BE LOCATED AT LEAST TWO FEET FROM OUTSIDE BUILDING CORNERS	20
GLAZING	ALL GLAZING IS CLEAR OR TINTED NEUTRAL GRAY	GLAZING TO BE VITRO ARCHITECTURAL GLASS SOLARBAN 60 OR GRAY + CLEAR	-10
EQUIPMENT			
SCREENING	ALL BUILDING MOUNTED EQUIPMENT SET FORTH IN PARAGRAPH (A) ABOVE TO BE SCREENED, AND/OR PAINTED TO MATCH + SIMILAR ADJACENT SURFACES	ALL BUILDING MOUNTED EQUIPMENT SET FORTH IN PARAGRAPH (A) ABOVE TO BE PAINTED TO MATCH VISUALLY ADJACENT SURFACES	5
		TOTAL POINTS	60

REVISIONS	DATE	ENGINEERS SEAL

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FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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ARCHITECT
KENT
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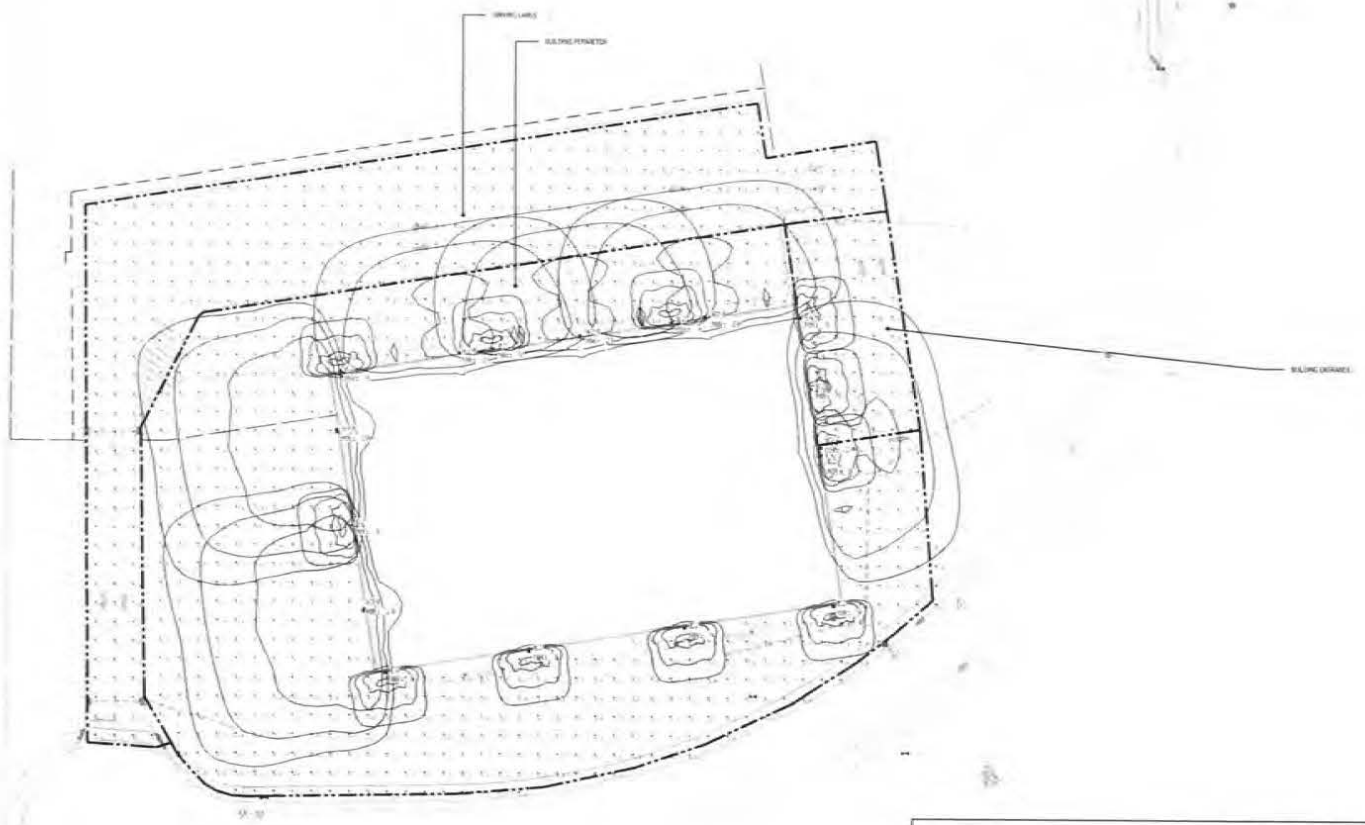
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

BUILDING ELEVATIONS

DATE	SCALE	SHEET
MAY 2021	1/16" = 1'-0"	A-200



SITE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

SITE LIGHTING FIXTURE SCHEDULE

TYPE	CATALOG No.	DESCRIPTION	LAMP	VOLTS	MNT HT	B-U-G	REMARKS
S2	MCGRAW-EDISON Cat No: GT-4F-4SW-LED-777-T4FT-BZ-MSWM-LCE	EXTERIOR WALL MOUNTED LED FIXTURE	34W LED	UNV	9'-0"	B1-U0-G1	PROVIDE INTEGRAL EMERG BATTERY BACKUP
WP4	MCGRAW-EDISON Cat No: GLEDEN-SAMC-738-U-1498-HSS	EXTERIOR WALL MOUNTED LED FIXTURE	22W LED	UNV	28'-0"	B3-U0-G4	
WP5	MCGRAW-EDISON Cat No: GLEDEN-SAMC-738-U-1498-HSS	EXTERIOR WALL MOUNTED LED FIXTURE	44SW LED	UNV	28'-0"	B4-U0-G5	

NOTES:
1. ALL SITE LIGHTING FIXTURES SHALL HAVE 0 UPLIGHT PER IES TM-15-07.
2. ALL SITE POLE-MOUNTED FIXTURES SHALL BE MOUNTED AT HEIGHTS LISTED.
3. SITE LIGHTING POLES SHALL BE SET BACK 2' FROM TRAFFIC CURBING AND 1' FROM SIDEWALKS. SETBACK IS FROM FACE OF CURB/SIDEWALK TO NEAREST BASE POINT. POLE CENTERS SHALL ALIGN WITH FOUNDATION CENTERS.
4. PROVIDE POLES WITH ASSOCIATE EPA RATING FOR SPECIFIED FIXTURES AT 120 MPH (3SEC WIND SPEED) WITH ASCE 7-05.
5. COOPERATIVE FINAL FIXTURE SELECTIONS, COLOR TEMPERATURE, AND FINISHES WITH ARCHITECT AND OWNER.
6. PROVIDE ALL REQUIRED MOUNTING HARDWARE, COMPONENTS, ACCESSORIES, POLE BASES, PHOTOCELLS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION.

DESIGN ILLUMINANCE VALUES

STEM CODE OF ORDINANCES - CHAPTER 19 - ARTICLE 14-8, PARAGRAPH 14-8.3 - OUTDOOR LIGHTING

PARKING LOTS - MINIMUM HORIZONTAL ILLUMINANCE - 1.0 FC

BUILDING ENTRANCE - MINIMUM HORIZONTAL ILLUMINANCE - 5.0 FC

	AVERAGE	MAX	MIN	MAX/MIN	AVG/MIN	U.F.
BUILDING PERIMETER	1.76	7.7	0.0	-	-	0.0
DRIVE LANES	6.30	9.2	3.0	-	2.1	0.5
BUILDING ENTRANCE	7.25	9.6	6.2	25.00	1.25	0.8

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TRAFFIC DIV.		
FIRE		
LANDSCAPE		
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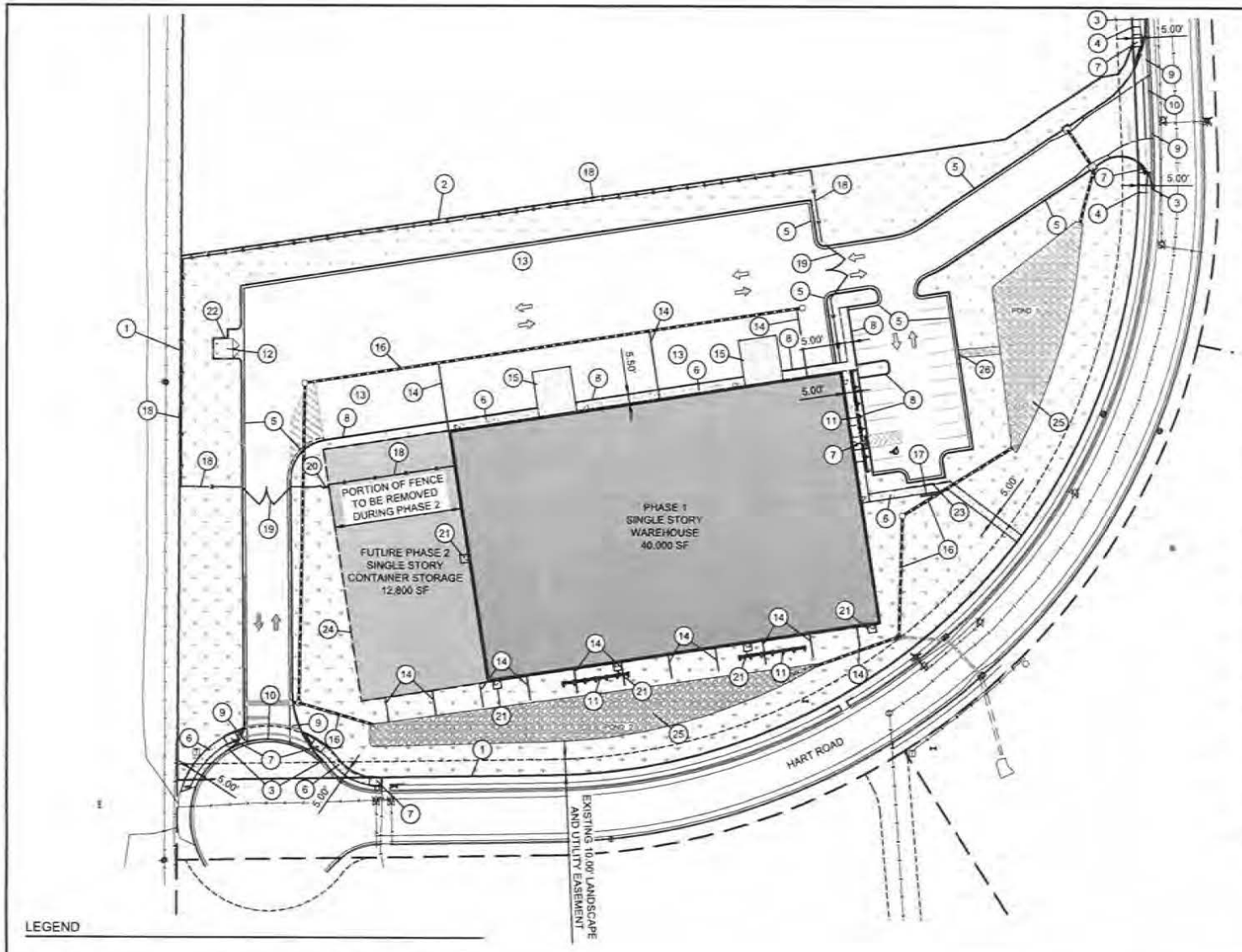
West Rac
Contracting Corp.
CONSTRUCTION MANAGEMENT & GENERAL CONTRACTING
687 OLD WILLETS PATH
HAUPPAUGE, NEW YORK 11788
TEL: 631-435-0010
FAX: 631-273-7073

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

PHOTOMETRIC SITE PLAN

DATE	SCALE	SHEET
MAY 2021	As Indicated	A-300



KEYED NOTES

1. PROPERTY LINE
2. PROPOSED LOT LINE
3. TIE TO EXISTING CURB
4. TIE TO EXISTING SIDEWALK
5. PROPOSED 2' STANDARD CURB AND GUTTER SEE SHEET C-106
6. PROPOSED 4" THICK CONCRETE SIDEWALK, WIDTH PER PLAN, SEE SHEET C-106
7. PROPOSED ADA ACCESSIBLE CURB RAMP PER NMDOT PEDESTRIAN ACCESS DETAILS
8. PROPOSED 6" STAND-UP CURB SEE SHEET C-106
9. PROPOSED FILLET CURB RETURN SEE SHEET C-106
10. PROPOSED 5' TYPE II VALLEY GUTTER SEE SHEET C-106
11. ARCHITECTURAL WALL, SEE ARCHITECTURAL PLANS
12. TRASH ENCLOSURE
13. OUTDOOR POD STORAGE LOCATION
14. PVC PIPE FROM ROOF RUNDOWN, SEE SHEET C-106
15. PROPOSED HEATED CONCRETE APRON
16. PROPOSED STORM SEWER SEE C-600 SERIES FOR PLAN AND PROFILES
17. BIKE RACKS
18. PROPOSED 8' HIGH CEDAR FENCE. CONTRACTOR TO PROVIDE SHOP DRAWINGS
19. PROPOSED VEHICLE ACCESS GATE
20. PROPOSED PEDESTRIAN ACCESS GATE
21. PROPOSED 5'x5'x4" THICK CONCRETE PAD
22. 8" CMU BLOCK RETAINING WALL
23. 8" CMU BLOCK RETAINING WALL W/ PEDESTRIAN SAFETY RAILING
24. BUILDING STEM WALL. SEE STRUCTURAL DETAILS
25. PONDING AREA
26. CURB CUT SEE SHEET C-106

LEGEND

- PROPOSED LANDSCAPE AREAS
- CONCRETE SIDEWALK
- ASPHALT PAVEMENT
- HEATED CONCRETE APRON
- DIRECTION OF TRAFFIC FLOW

CIVIL SITE PLAN

SCALE: 1" = 30'

0 15 30 60

SCALE: 1" = 30'

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PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

CIVIL SITE PLAN

DATE	SCALE	SHEET
MAY 2021	1" = 30'	C-100

PARKING CALCULATIONS

1. PROPOSED DEVELOPMENT METHOD OF OPERATION
   - A. POD CONTAINERS ARE ORDERED ONLINE.
   - B. POD CONTAINERS ARE DELIVERED TO CUSTOMERS FOR PACKING. CUSTOMERS HAVE THE OPTION TO STORE A POD CONTAINER ON THEIR PROPERTY OR AT A PODS STORAGE LOCATION.
   - C. ONCE POD CONTAINERS ARE PACKED PODS PICKS THEM UP AND STORES THEM IN A WAREHOUSE.
   - D. NO CUSTOMERS ARE ALLOWED TO ENTER THE WAREHOUSE TO ACCESS POD CONTAINERS.
   - E. IF A POD CONTAINER NEEDS TO BE ACCESSED BY A CUSTOMER, THE CUSTOMER WILL BE REQUIRED TO MAKE AN APPOINTMENT. THE POD CONTAINER IS REMOVED FROM THE WAREHOUSE AND PLACED IN OUTDOOR STORAGE. A CUSTOMER CAN MAKE AN APPOINTMENT TO ACCESS THEIR POD CONTAINER OUTSIDE OF THE BUILDING. ACCORDING TO THE OWNER, THIS MAY HAPPEN 3-4 TIMES PER WEEK.
   - F. WHEN THE CUSTOMER IS DONE WITH THE POD CONTAINER, PODS WILL DELIVER THE POD CONTAINER FOR UNPACKING AND WILL PICK UP THE CONTAINER WHEN UNPACKED.
   - G. ALL TRANSACTIONS ARE TO BE DONE ONLINE. THERE SHOULD BE NO CUSTOMERS GOING TO THE FACILITY EXCEPT THOSE WHO NEED ACCESS TO A POD CONTAINER, WHICH DOES NOT OCCUR REGULARLY.

2. CITY CODE 14-8 DEVELOPMENT AND DESIGN STANDARDS DOES NOT PROVIDE PARKING REQUIREMENTS FOR A "PODS" TYPE STORAGE FACILITY. IT DOES INCLUDE WAREHOUSING WHICH REQUIRES ONE SPACE PER 500 SQUARE FEET OF LEASABLE AREA. THIS RESULTS IN A TOTAL OF 106 PARKING SPACES FOR 52,800 SQUARE FEET. THIS AMOUNT OF PARKING IS NOT APPROPRIATE FOR THE PROPOSED FACILITY AND IS A WASTE OF VALUABLE RESOURCES AND SPACE. IN ORDER TO PROVIDE A "LOW IMPACT DEVELOPMENT," AN ALTERNATIVE METHOD OF CALCULATING PARKING WAS PERFORMED.

3. PARKING WAS CALCULATED USING THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) PARKGEN WEB-BASED APPLICATION, VERSION 1.1, BASED UPON THE "PARKING GENERATION MANUAL, 5TH EDITION," BY ITE, DATED FEBRUARY 20, 2020. ACCORDING TO ITE, A WAREHOUSE CONSISTS OF A BUILDING USED FOR THE STORAGE OF MATERIALS AND MAY ALSO INCLUDE OFFICE AND MAINTENANCE AREAS.

   ACCORDING TO ITE, THE PEAK PERIOD OF PARKING DEMAND IS ON A WEEKDAY FROM 11:00 AM TO 4:00 PM. ITE PREPARED A STATISTICAL ANALYSIS OF 31 SITES, MOST WITH SIZES SIMILAR TO THE PROPOSED PODS STORAGE FACILITY. THE RESULTS ARE AS FOLLOWS:

   PHASE 1 - 40,000 S.F. CALCULATED PARKING DEMAND.

AVERAGE RATE	16 TOTAL
FITTED CURVE	14 TOTAL

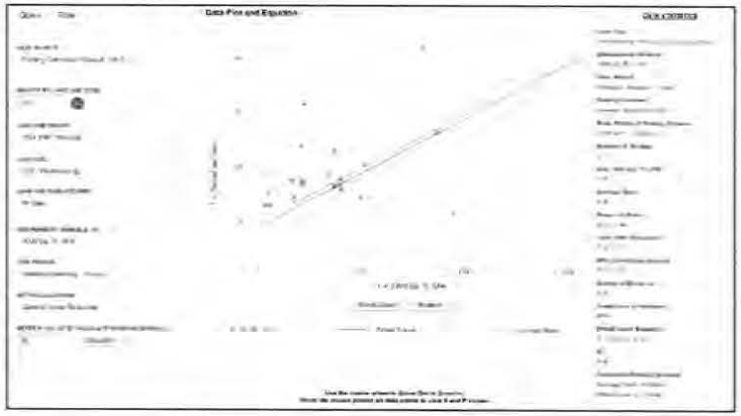
   PHASE 2 - 12,800 S.F. CALCULATED PARKING DEMAND.

AVERAGE RATE	5 TOTAL
FITTED CURVE	3 TOTAL

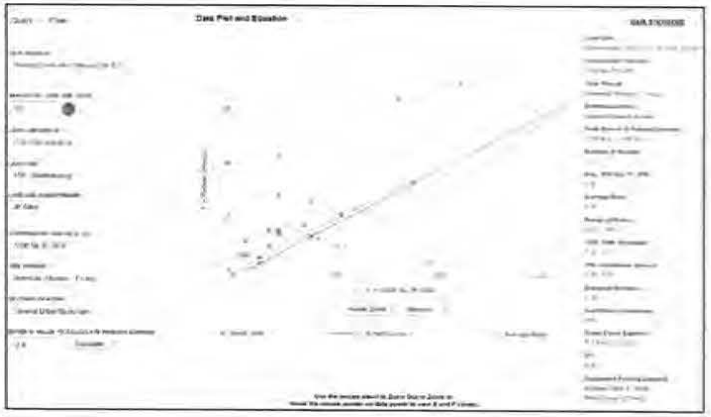
   PHASE 1 AND PHASE 2 - 52,800 S.F. CALCULATED PARKING DEMAND.

AVERAGE RATE	21 TOTAL
FITTED CURVE	19 TOTAL

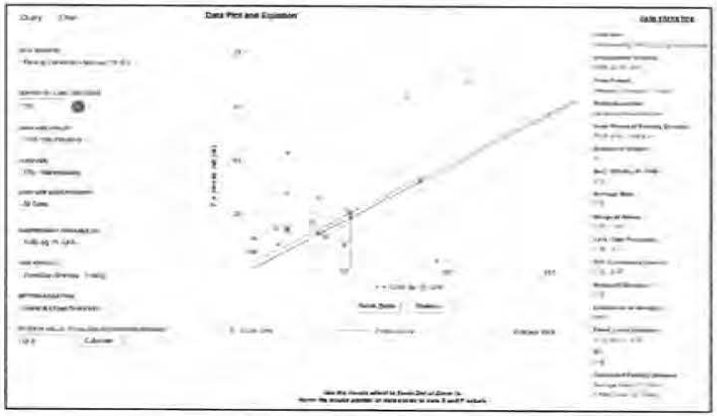
4. THIS IS A NATIONAL CHAIN AND THIS AMOUNT OF PARKING MEETS THEIR STANDARDS.



PHASE 1 PARKING CALCULATION
40,000 SF WAREHOUSE
PER THE ITE PARKGEN WEB-BASED
APPLICATION VERSION 1.1



PHASE 2 PARKING CALCULATION
12,800 SF WAREHOUSE
PER THE ITE PARKGEN WEB-BASED
APPLICATION VERSION 1.1



PHASE 1 & 2 PARKING CALCULATION
52,600 SF WAREHOUSE
PER THE ITE PARKGEN WEB-BASED
APPLICATION VERSION 1.1

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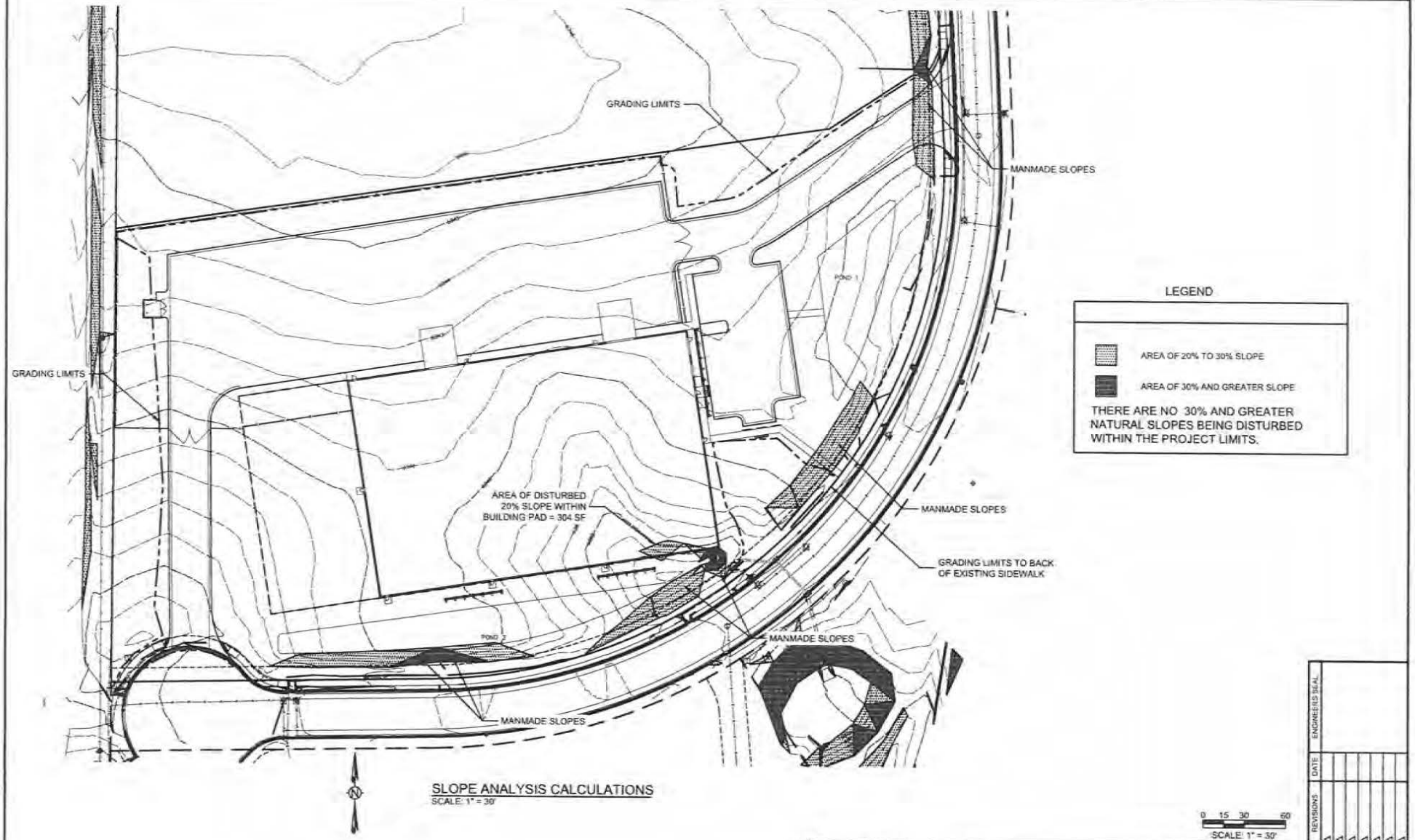
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

PARKING CALCULATIONS

DATE:	SCALE:	SHEET:
MAY 2021	N.T.S.	C-101



SLOPE ANALYSIS CALCULATIONS

SCALE: 1" = 30'

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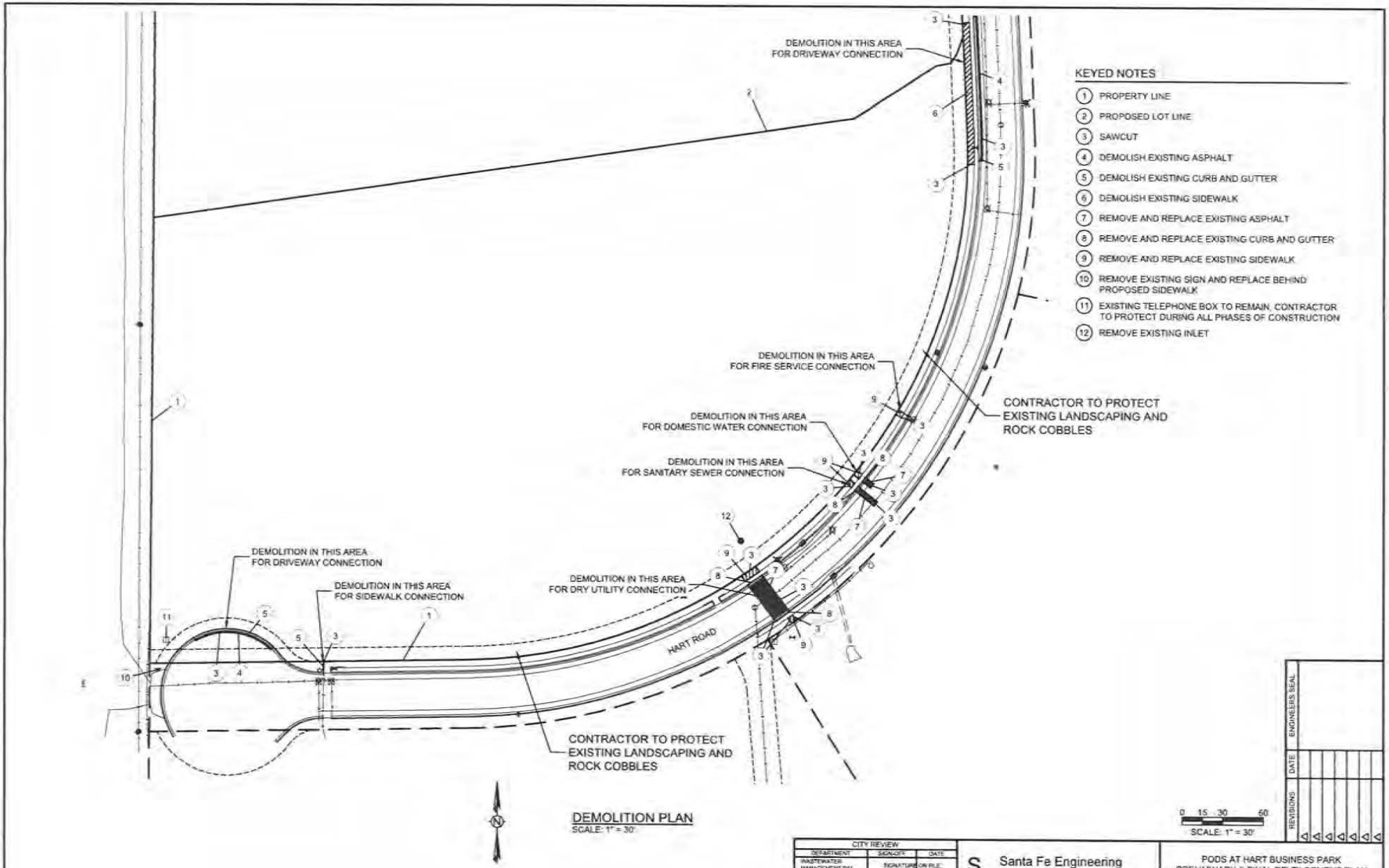
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

SLOPE ANALYSIS CALCULATIONS

DATE:	SCALE:	SHEET:
MAY 2021	1" = 30'	C-102

ENGINEER'S SEAL | DATE | REVISIONS



DEMOLITION PLAN

SCALE: 1" = 30'

0 15 30 60

SCALE: 1" = 30'

CITY REVIEW		
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PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DEMOLITION PLAN

DATE	SCALE	SHEET
MAY 2021	1" = 30'	C-103

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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 ¾"
    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 Precision Surveys, Inc. 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.

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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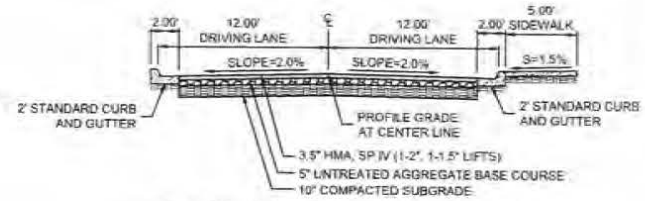
http://www.SFENGR.com

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

GENERAL NOTES

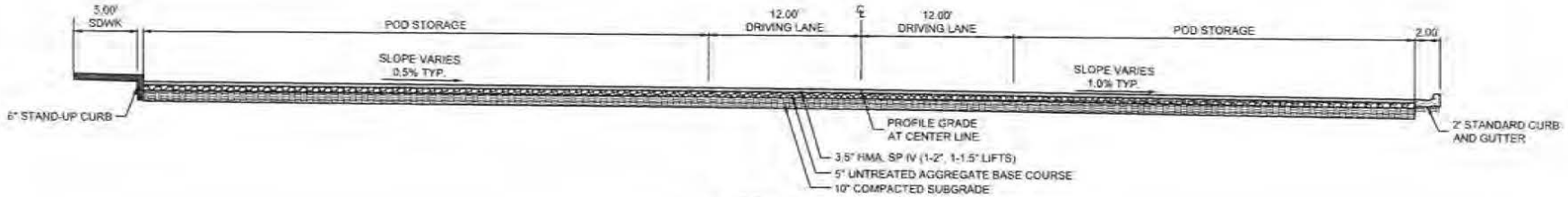
DATE	SCALE	SHEET
MAY 2021	N.T.S.	C-104

ENGINEER'S SEAL | DATE | REVISIONS



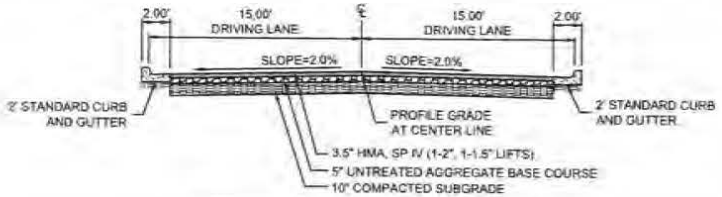
TYPICAL SECTION - MAIN DRIVEWAY

STA: 0+00.00 TO 2+38.08



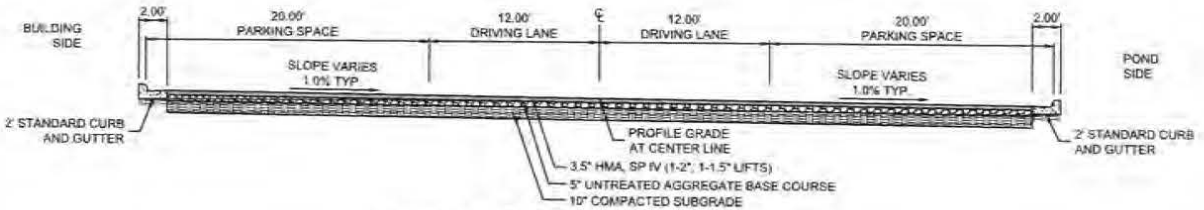
TYPICAL SECTION - MAIN DRIVEWAY

STA: 2+38.08 TO 6+20.15



TYPICAL SECTION - MAIN DRIVEWAY

STA: 6+20.15 TO 8+68.39



TYPICAL SECTION - CUSTOMER PARKING LOT

NOTE:
SURFACING THICKNESSES BASED UPON REPORT ENTITLED "GEOTECHNICAL EVALUATION REPORT, NEW PODS WAREHOUSE, 900 Hart Road, Santa Fe, New Mexico, WT Reference No. 3221JJ028", PREPARED BY WESTERN TECHNOLOGIES, INC. DATED APRIL 27, 2021

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
ST. OBJECTS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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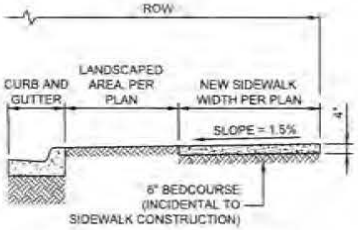
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

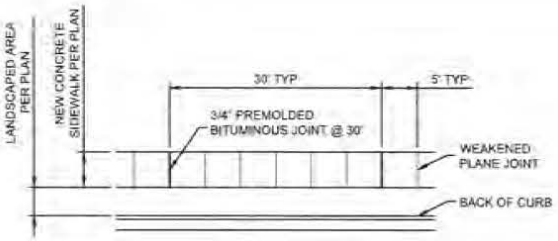
TYPICAL SECTIONS

DATE:	SCALE:	SHEET:
MAY 2021	N.T.S.	C-105

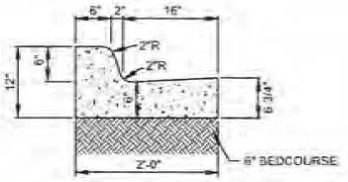
ENGINEER'S SEAL | DATE | REVISIONS



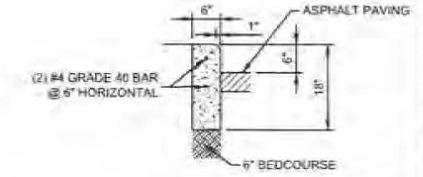
TYPICAL SIDEWALK SECTION



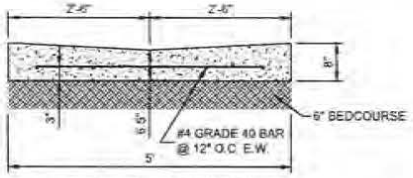
TYPICAL SIDEWALK PLAN



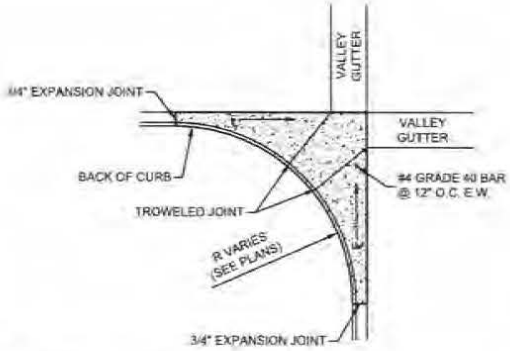
STANDARD CURB AND GUTTER



6" STAND-UP CURB



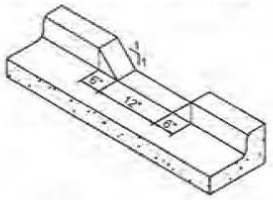
5' - TYPE II VALLEY GUTTER



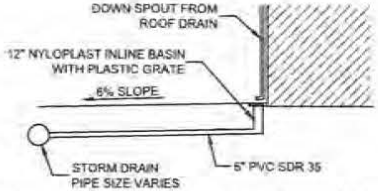
NOTES:
1. POUR FILLETS MONOLITHICALLY.
2. PROVIDE A REINFORCING CONTINUATION BETWEEN FILLETS AND VALLEY GUTTERS WITH A 30" REBAR LAP BETWEEN FILLETS AND VALLEY GUTTERS BEING CAST WITHIN 30 CALENDAR DAYS

FILLET CURB RETURN

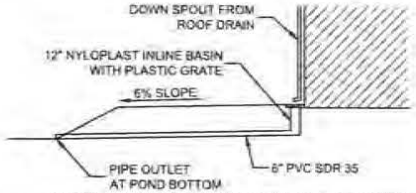
LOCATE CURB CUTS AS SHOWN ON PLANS.
GRADE SWALES TO DRAIN.
SEE LANDSCAPE AND GRADING PLANS.



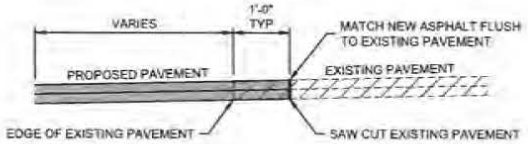
CURB CUT DETAIL



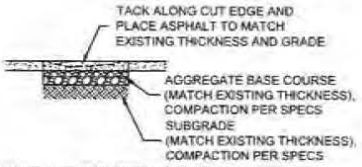
ROOF DRAIN DETAIL WITH INLET TO STORM DRAIN



ROOF DRAIN DETAIL WITH OUTLET TO POND



TYPICAL SAW CUT DETAIL



TYPICAL PAVEMENT PATCHING DETAIL

REVISIONS	DATE	ENGINEERS SEAL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURES ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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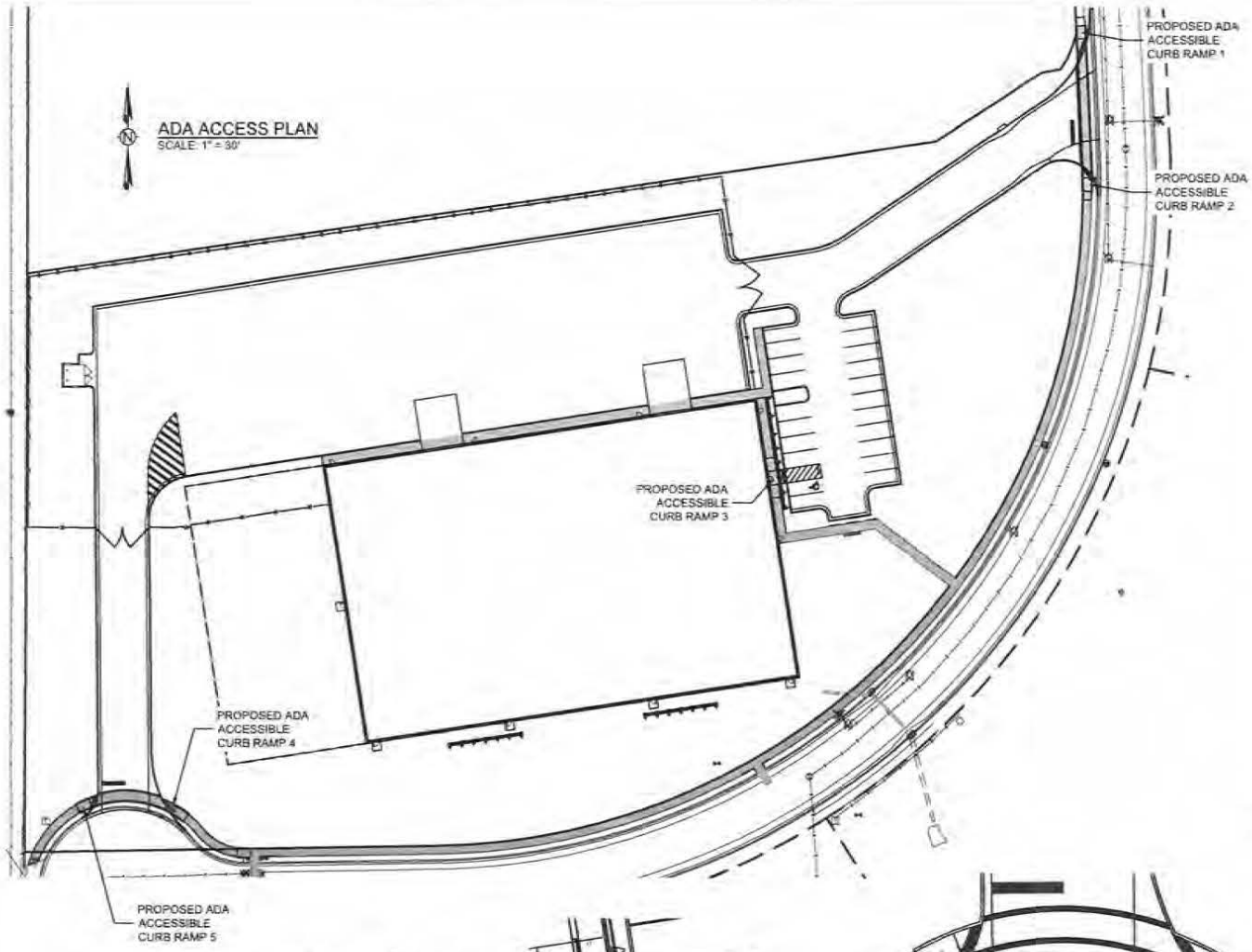
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

TYPICAL DETAILS

DATE:	SCALE:	SHEET:
MAY 2021	N.T.S.	C-106



ADA ACCESS PLAN
SCALE: 1" = 30'

ADA COMPLIANCE GENERAL NOTES

1. THE CONTRACTOR SHALL ENSURE ADA COMPLIANCE FOR CONSTRUCTION OF REQUIRED ADA ACCESSIBLE FEATURES AND APPURTENANCES, AND AS DETAILED IN THE APPROVED CONSTRUCTION PERMIT DOCUMENTS.
2. ALL CONSTRUCTION WORK SHALL COMPLY WITH, IN ORDER OF PRECEDENCE: SANTA FE CITY CODE, GOVERNOR'S COMMISSION ON DISABILITY (GCD), ICC ANSI A117.1-2009, CHAPTERS 1-5 AND CHAPTER 7, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION), AND AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS.
3. CURB RAMPS SHALL FOLLOW NMDOT PEDESTRIAN ACCESS ROUTE DETAILS (SERIAL 608) WITH REQUIRED TURNING SPACE AND 7% RUNNING SLOPES TYPICAL AND 8.3% MAXIMUM. CURB RAMP LANDING TYPICAL SLOPE IS 1% AND SHALL NOT EXCEED 2% RUNNING AND CROSS SLOPE.
4. SIDEWALK RUNNING SLOPES SHALL NOT EXCEED 5% WITHOUT HANDRAIL(S). CROSS SLOPES SHALL NOT EXCEED 2%.
5. PROVIDE DETECTABLE WARNING SURFACES AT CURB RAMPS AND TRANSITIONS TO DRIVEWAY AND INTERSECTION CROSSINGS ALONG THE ACCESSIBLE PATHS OF TRAVEL.
6. PER ICC ANSI A117.1-2009, SIDEWALKS SHALL COMPLY WITH SECTION 302, FLOOR SURFACE, 303.4 RAMPS, 401 ACCESSIBLE ROUTES, 403 WALKING SURFACES, 405 RAMPS.
7. ALL PARKING AND WALK SURFACES ALONG THE ACCESSIBLE PATH OF TRAVEL SHALL BE FIRM, STABLE AND SLIP RESISTANT.
8. ANSI 502.7 SIGNAGE WITH REQUIRED LANGUAGE ARE REQUIRED AT ALL ADA PARKING SPACES. PARKING SIGNAGE HEIGHT PER CITY OF SANTA FE CODE IS 7'-0" TO BOTTOM OF SIGN. LOCATE VAN ACCESSIBLE PARKING SIGN IMMEDIATELY BELOW THE RESERVED PARKING SIGN AT WALL MOUNTED LOCATIONS AND 6'8 TO BOTTOM OF VAN ACCESSIBLE SIGN AT SIGNS LOCATED THE IN PEDESTRIAN WAY. SEE DETAIL, SHEET C-204.
9. ACCESSIBLE PARKING SPACE GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION.
10. VAN ACCESSIBLE PARKING SPACES SHALL BE 8'-0" WIDE WITH AN 8'-0" WIDE ACCESS AISLE OR 11'-0" WIDE WITH A 5'-0" WIDE ACCESS AISLE. SEE DETAIL, SHEET C-204.
11. WHEEL STOPS ARE ENCOURAGED AT ALL ADA ACCESSIBLE PARKING SPACES TO HELP ENSURE REQUIRED CLEARANCE ALONG THE ACCESSIBLE PATH OF TRAVEL IS MAINTAINED.
12. WHERE EXISTING SIDEWALKS ADJOIN NEW ADA ACCESSIBLE FEATURES, THE CONTRACTOR SHALL PROVIDE FOR MODIFICATIONS WHERE POSSIBLE AND AS NECESSARY TO PROVIDE FOR UNINTERRUPTED, CONTINUOUS ACCESS BETWEEN EXISTING AND NEW WORK.

LEGEND

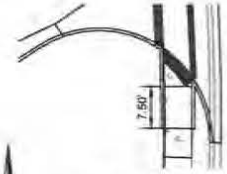
ADA ACCESSIBLE ROUTE

NOTE: ACCESSIBLE GRADES AT PAVEMENT ARE CONSIDERED PART OF LEVEL LANDING

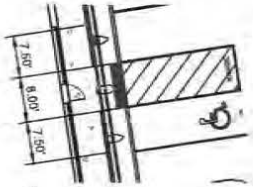
0 15 30 60
SCALE: 1" = 30'

0 5 10 20
SCALE: 1" = 10'

CURB RAMP 1
SCALE: 1" = 10'



CURB RAMP 2
SCALE: 1" = 10'



CURB RAMP 3
SCALE: 1" = 10'

CURB RAMPS 4 & 5
SCALE: 1" = 10'

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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PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

ADA ACCESS PLAN

DATE	SCALE	SHEET
MAY 2021	AS NOTED	C-107

ENGINEER'S SEAL | DATE | REVISIONS

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.

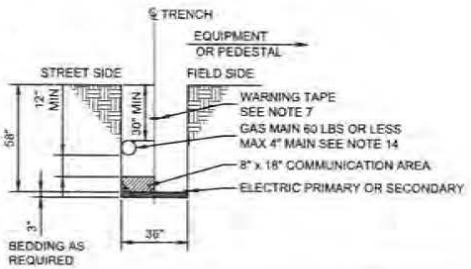
CABLE TELEVISION SERVICE TO BE DESIGNED BY COMCAST.

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.	SIGNATURES ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

CASE #_____

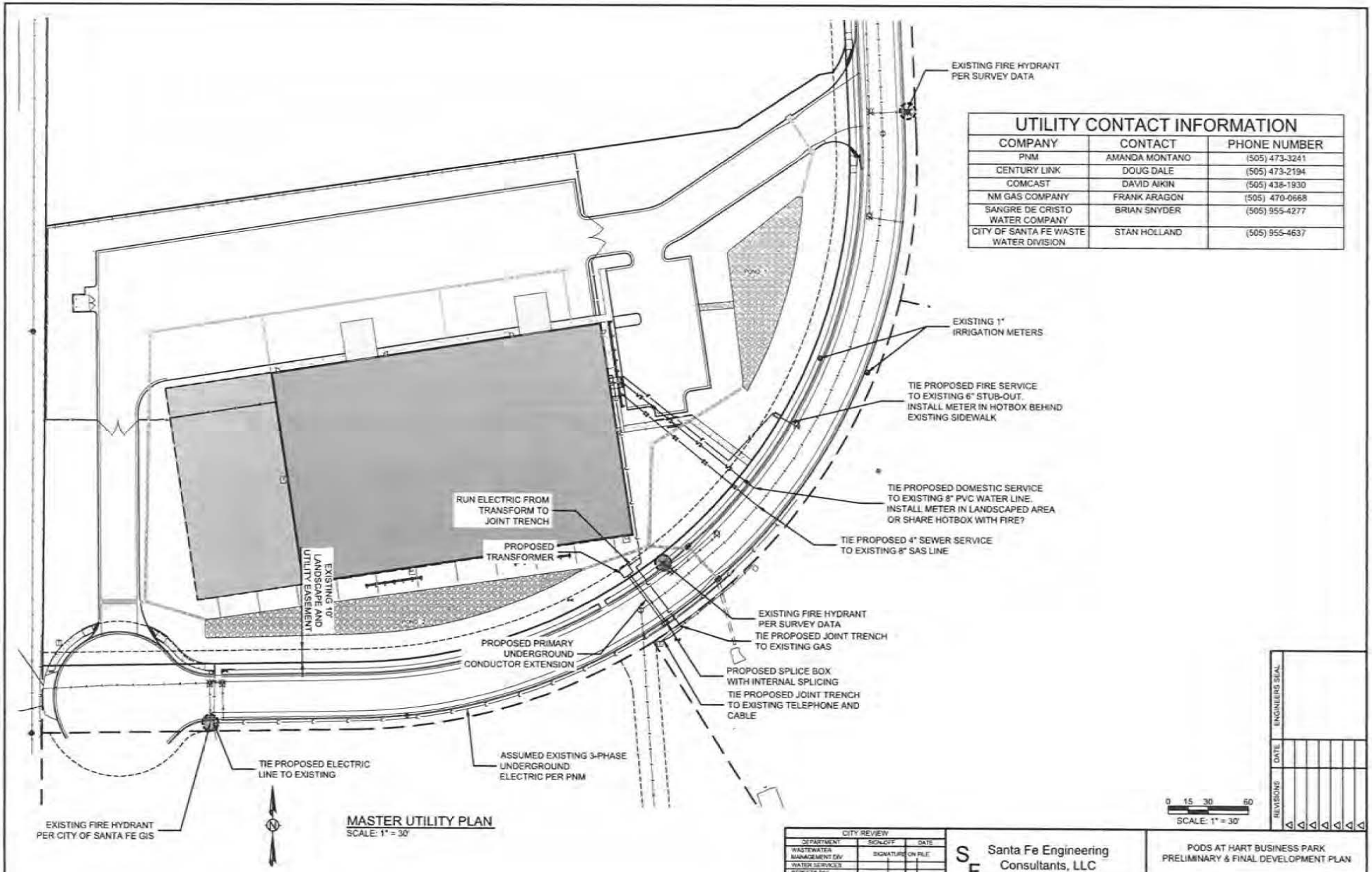
Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

UTILITY NOTES AND DETAILS

DATE	SCALE	SHEET
MAY 2021	N.T.S.	C-250

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

MASTER UTILITY PLAN
SCALE: 1" = 30'

0 15 30 60
SCALE: 1" = 30'

ENGINEER'S SEAL | DATE | REVISIONS

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

CASE # _____ CITY USE ONLY

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PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

MASTER UTILITY PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1" = 30'	C-201

GRADING NOTES

1. THE LIMITS OF 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 WHICH EVER IS MORE CONSERVITIVE. 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 PERVIOUS 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 1/4" LOWER THAN THE FLOOR SLAB ELEVATION
11. THE MAXIMUM CROSS SLOPE OF WALKING SURFACES SHALL NOT EXCEED 2%.

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:

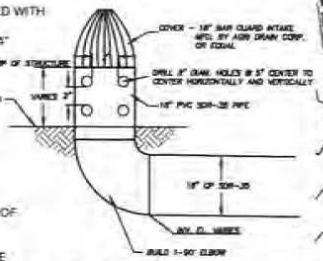
- THE REDUCTION OF VEHICLE SPEEDS: ESTABLISH A MAXIMUM SPEED LIMIT OR INSTALL TRAFFIC CALMING DEVICES TO REDUCE SPEEDS TO A RATE TO MITIGATE OFF-PROPERTY TRANSPORT OF DUST ENTRAINED BY VEHICLES.
- THE MINIMIZATION OF DROP HEIGHT: DRIVERS AND OPERATORS SHALL UNLOAD TRUCK BEDS AND LOADER OR EXCAVATOR BUCKETS 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.

CITY OF SANTA FE REQUIREMENTS

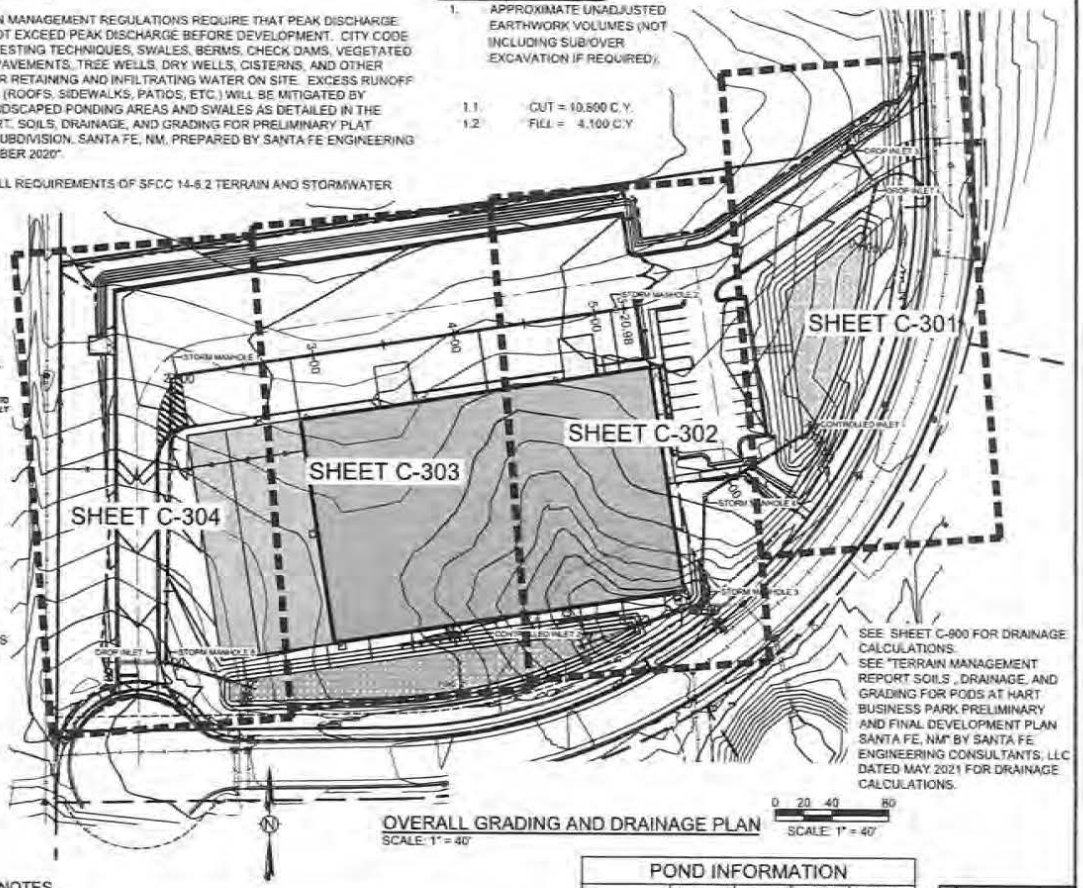
1. THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. CITY CODE ALLOWS PASSIVE WATER HARVESTING TECHNIQUES, SWALES, BERMS, CHECK DAMS, VEGETATED GROUND COVER, PERMEABLE PAVEMENTS, TREE WELLS, DRY WELLS, 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.



TYPICAL CONTROLLED INLET DETAIL
N.T.S.
(FINAL PLANS WILL PROVIDE ELEVATIONS FOR CONTROLLED OUTLET)

EARTHWORK NOTES:

1. APPROXIMATE UNADJUSTED EARTHWORK VOLUMES (NOT INCLUDING SUB/OVER EXCAVATION IF REQUIRED):
   1.1 CUT = 10,500 C.Y.
   1.2 FILL = 4,100 C.Y.



SEE SHEET C-900 FOR DRAINAGE CALCULATIONS.
SEE "TERRAIN MANAGEMENT REPORT SOILS , DRAINAGE, AND GRADING FOR PODS AT HART BUSINESS PARK PRELIMINARY AND FINAL DEVELOPMENT PLAN SANTA FE, NM" BY SANTA FE ENGINEERING CONSULTANTS, LLC DATED MAY 2021 FOR DRAINAGE CALCULATIONS.

OVERALL GRADING AND DRAINAGE PLAN
SCALE: 1" = 40'

0 20 40 80
SCALE: 1" = 40'

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.

POND INFORMATION

NAME	BOTTOM ELEV.	TOP ELEV.	AREA (SF)	VOLUME (CF)
POND 1	6334.50	6336.50	6508	10,078
POND 2	6334	6339	8658	14,577

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	ENGINEERS SEAL

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

CASE # _____

Santa Fe Engineering Consultants, LLC
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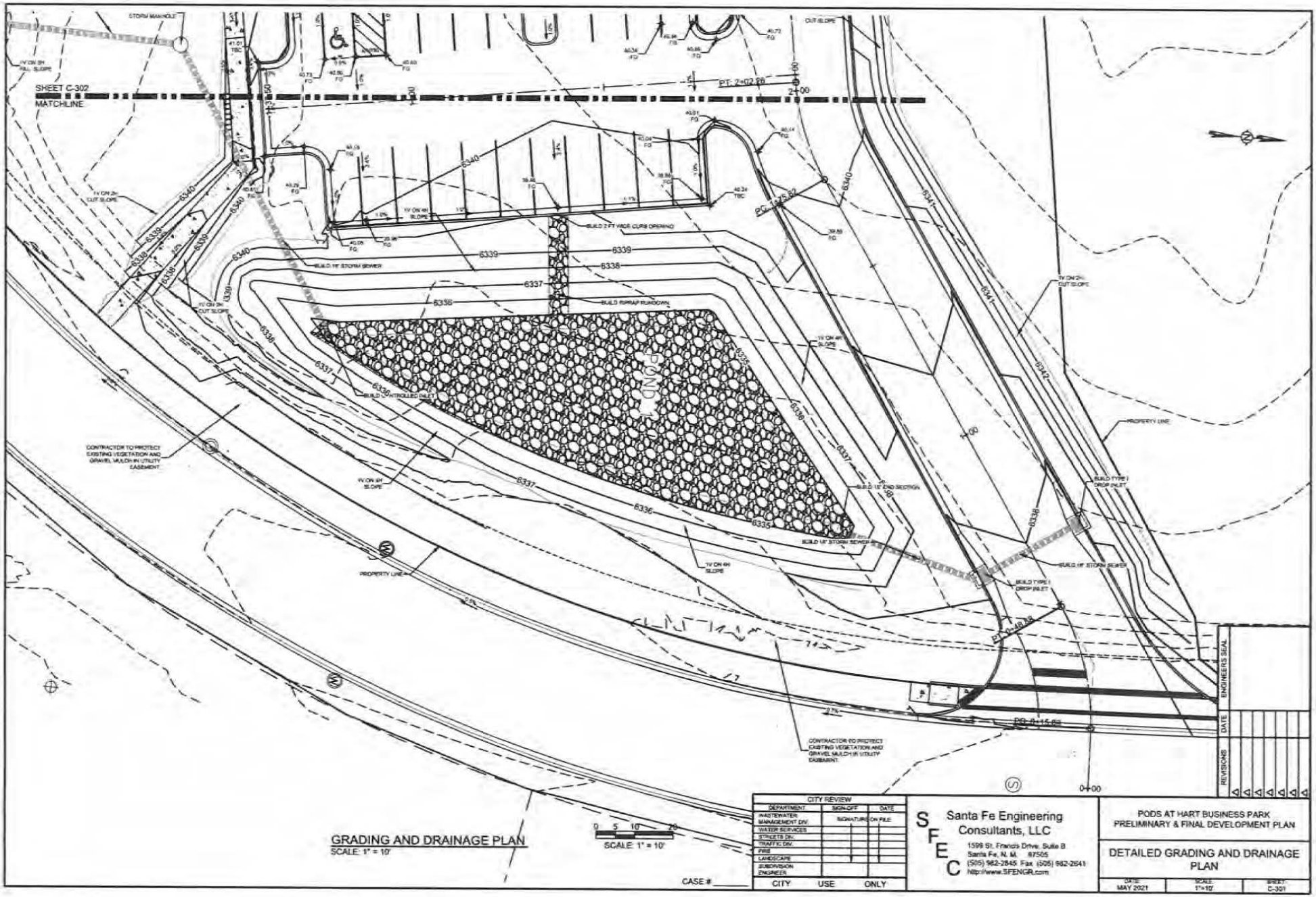
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

OVERALL GRADING AND DRAINAGE PLAN

DATE	SCALE	SHEET
MAY 2021	1"=40'	C-300



GRADING AND DRAINAGE PLAN
SCALE: 1" = 10'

SCALE: 1" = 10'

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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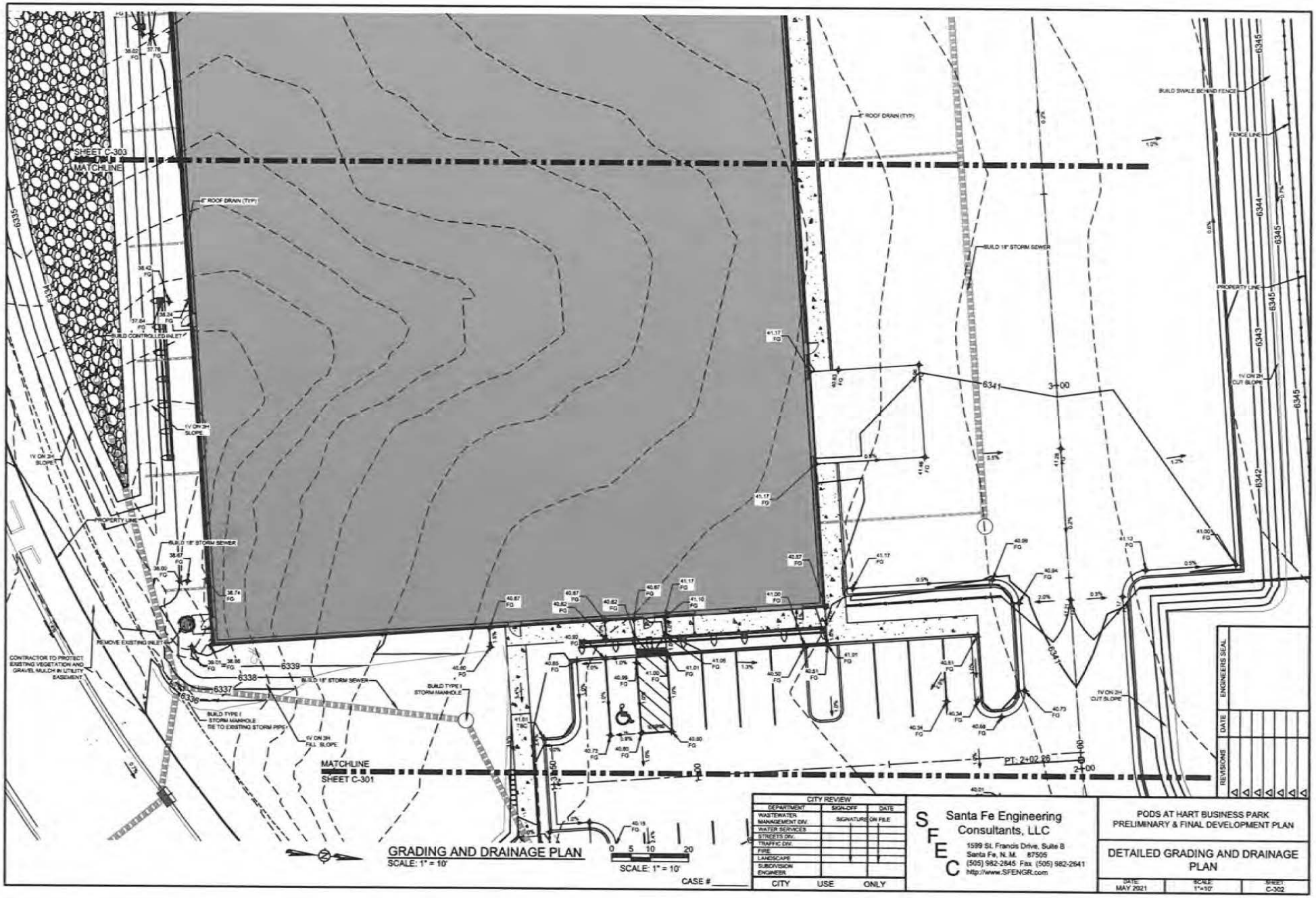
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DETAILED GRADING AND DRAINAGE PLAN

DATE	SCALE	SHEET
MAY 2021	1"=10'	C-301

ENGINEER'S SEAL
DATE
REVISIONS



GRADING AND DRAINAGE PLAN
SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

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

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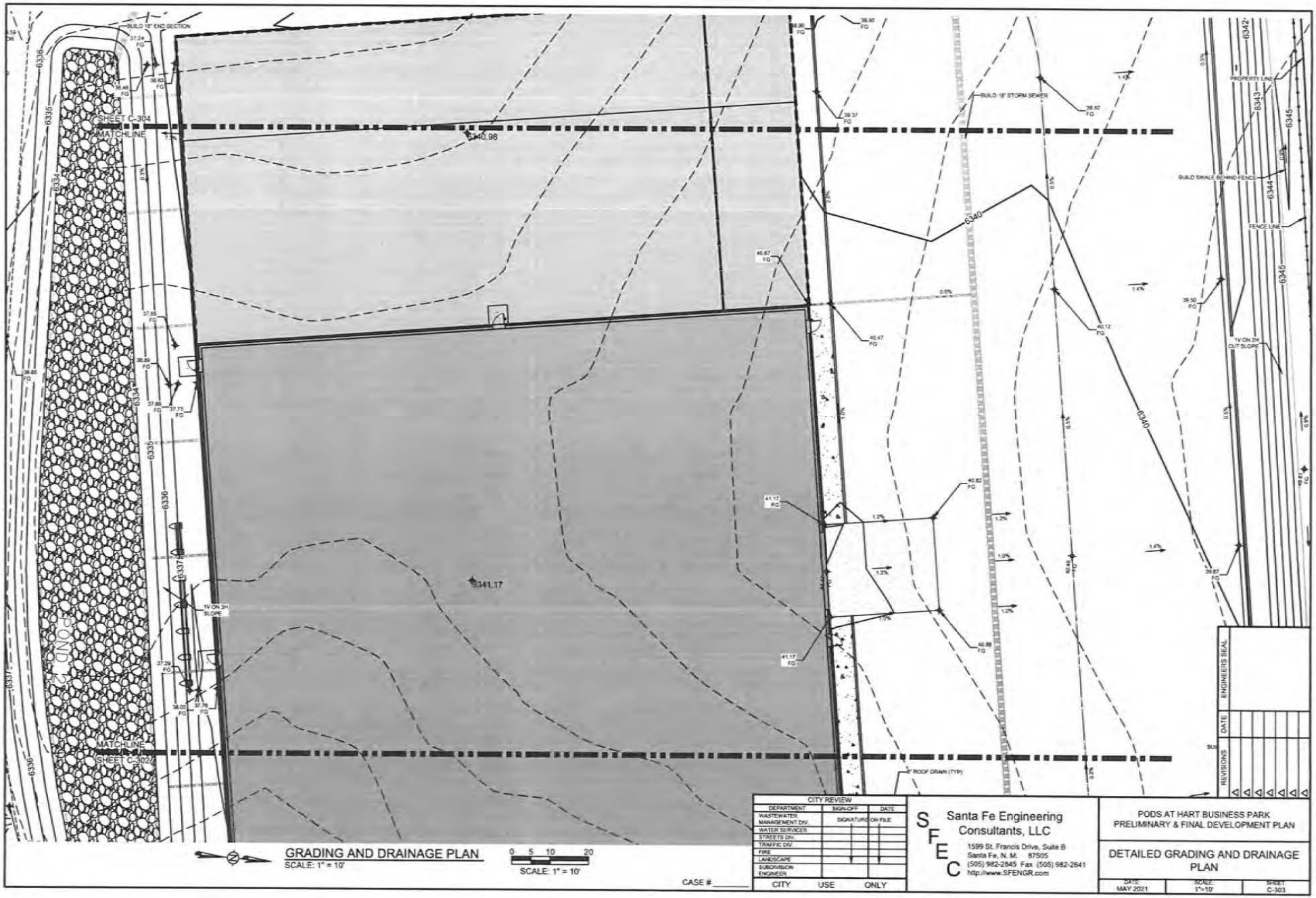
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1"=10'	C-302

REVISIONS	DATE	ENGINEERS SEAL



GRADING AND DRAINAGE PLAN
SCALE: 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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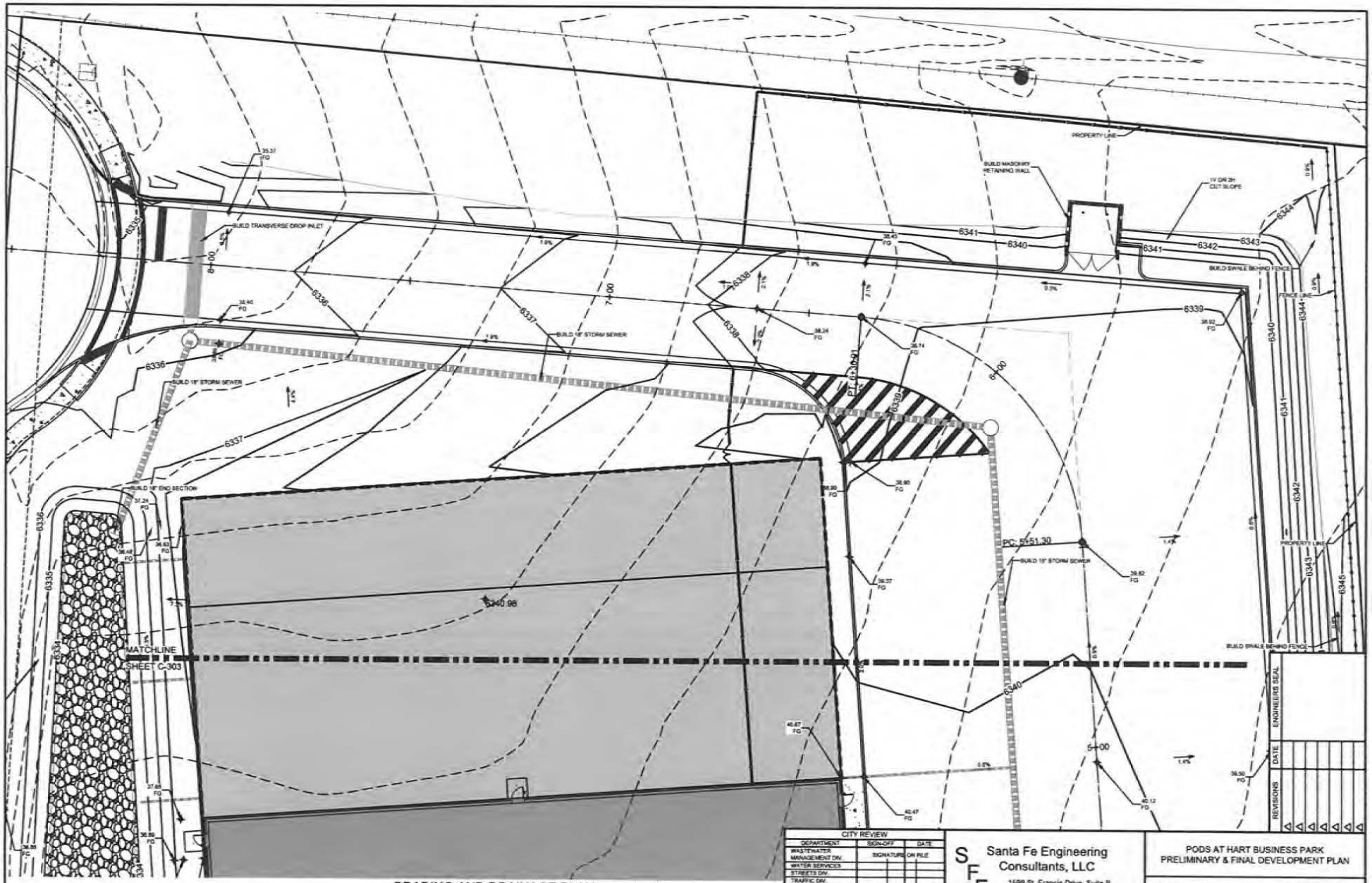
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DETAILED GRADING AND DRAINAGE PLAN

DATE	SCALE	SHEET
MAY 2021	1"=10'	C-303

ENGINEER'S SEAL
DATE
REVISIONS



GRADING AND DRAINAGE PLAN
SCALE: 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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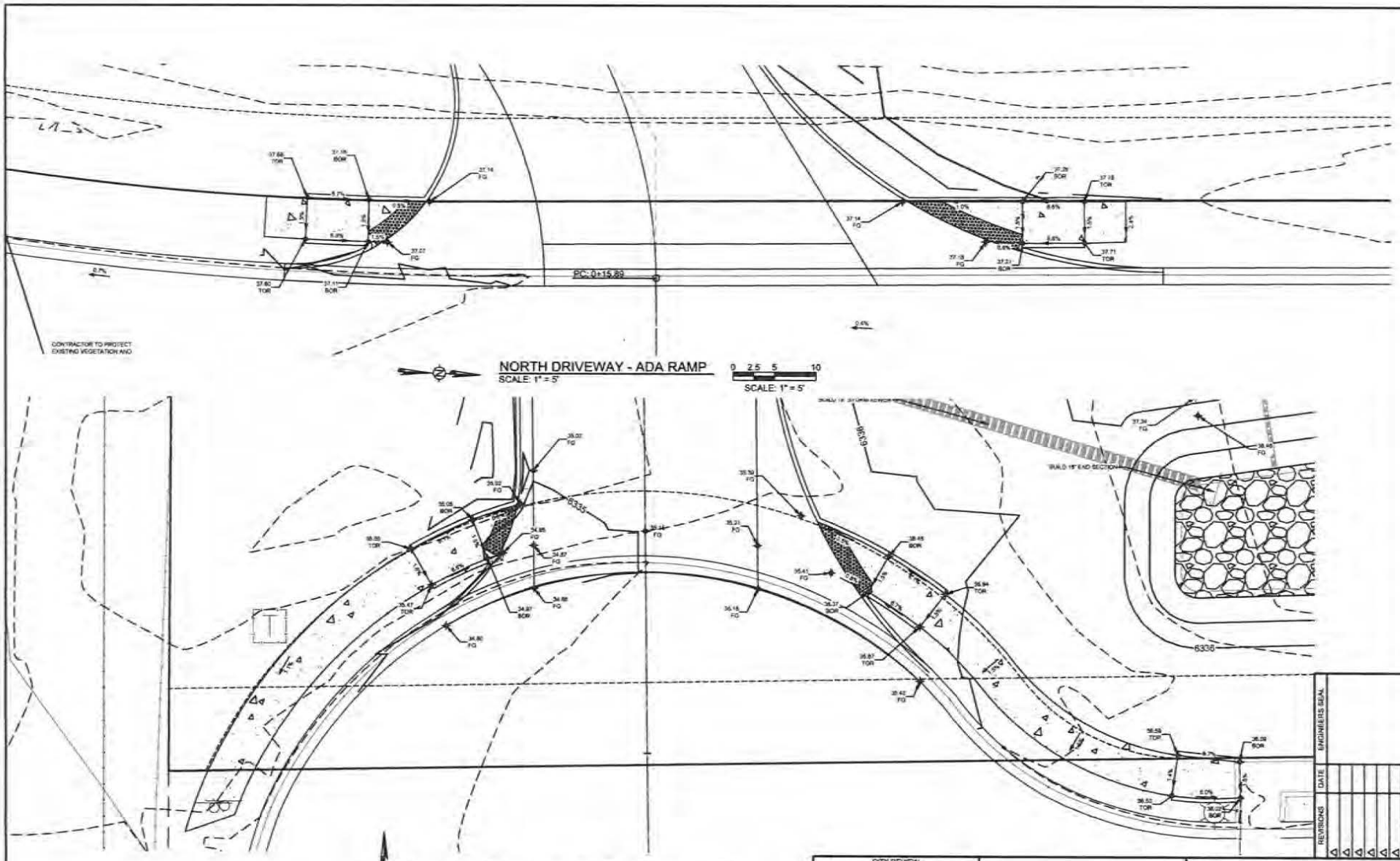
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1"=10'	C-304

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		
CITY USE ONLY		

CASE # _____

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
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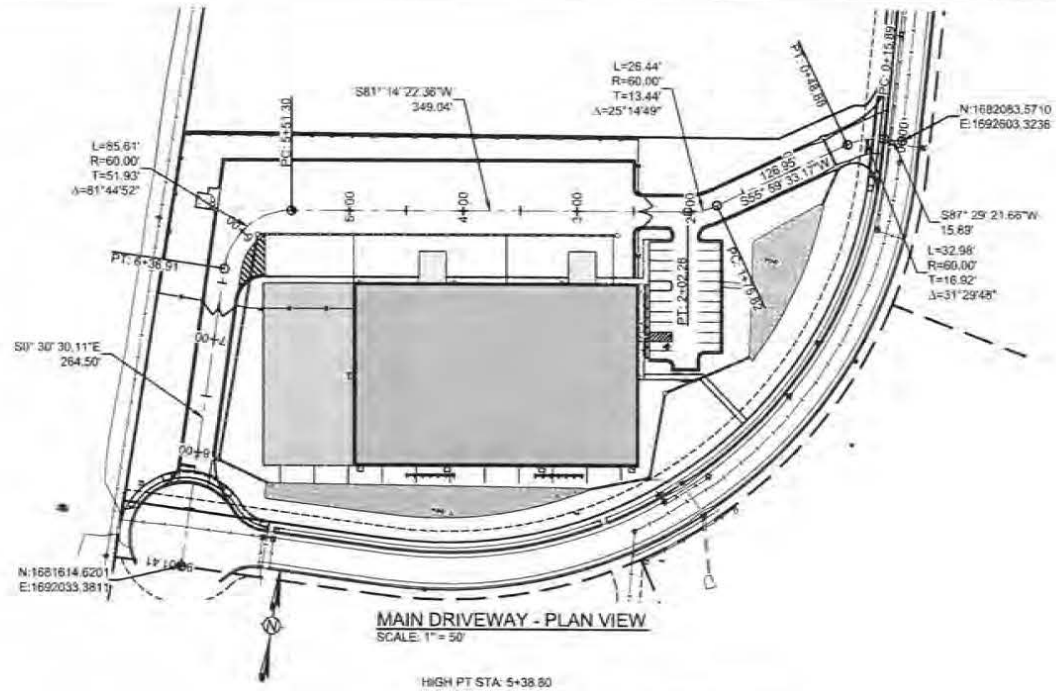
http://www.SFENGR.com

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

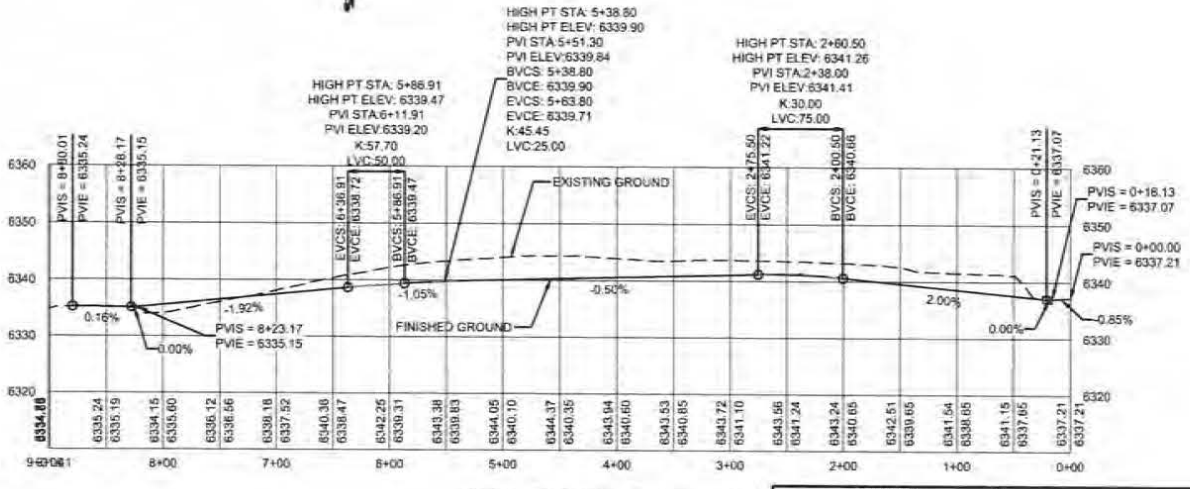
DETAILED GRADING AND DRAINAGE PLAN - ADA RAMPS

DATE:	SCALE:	SHEET:
MAY 2021	1"=5'	C-305

ENGINEER'S SEAL | DATE | REVISIONS



MAIN DRIVEWAY - PLAN VIEW
SCALE: 1" = 50'



MAIN DRIVEWAY - PROFILE VIEW
SCALE: HORIZ: 1" = 50'
VERT: 1" = 10'

SCALE: 1" = 50'

SCALE: 1" = 10'

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

CITY USE ONLY

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PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

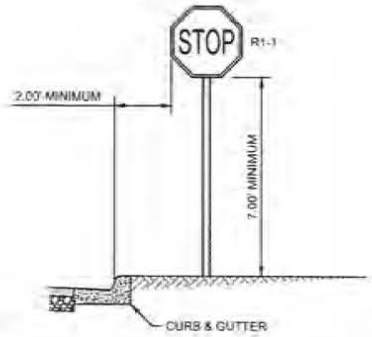
DRIVEWAY PLAN AND PROFILES

DATE	SCALE	SHEET
MAY 2021	1" = 50'	C-400

ENGINEERS SEAL

DATE

REVISIONS



TYPICAL SIGN PLACEMENT
SCALE: N.T.S.

SIGN FACE DETAILS
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.

0 15 30 60
SCALE: 1" = 30'

ENGINEER'S SEAL	DATE	REVISIONS

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

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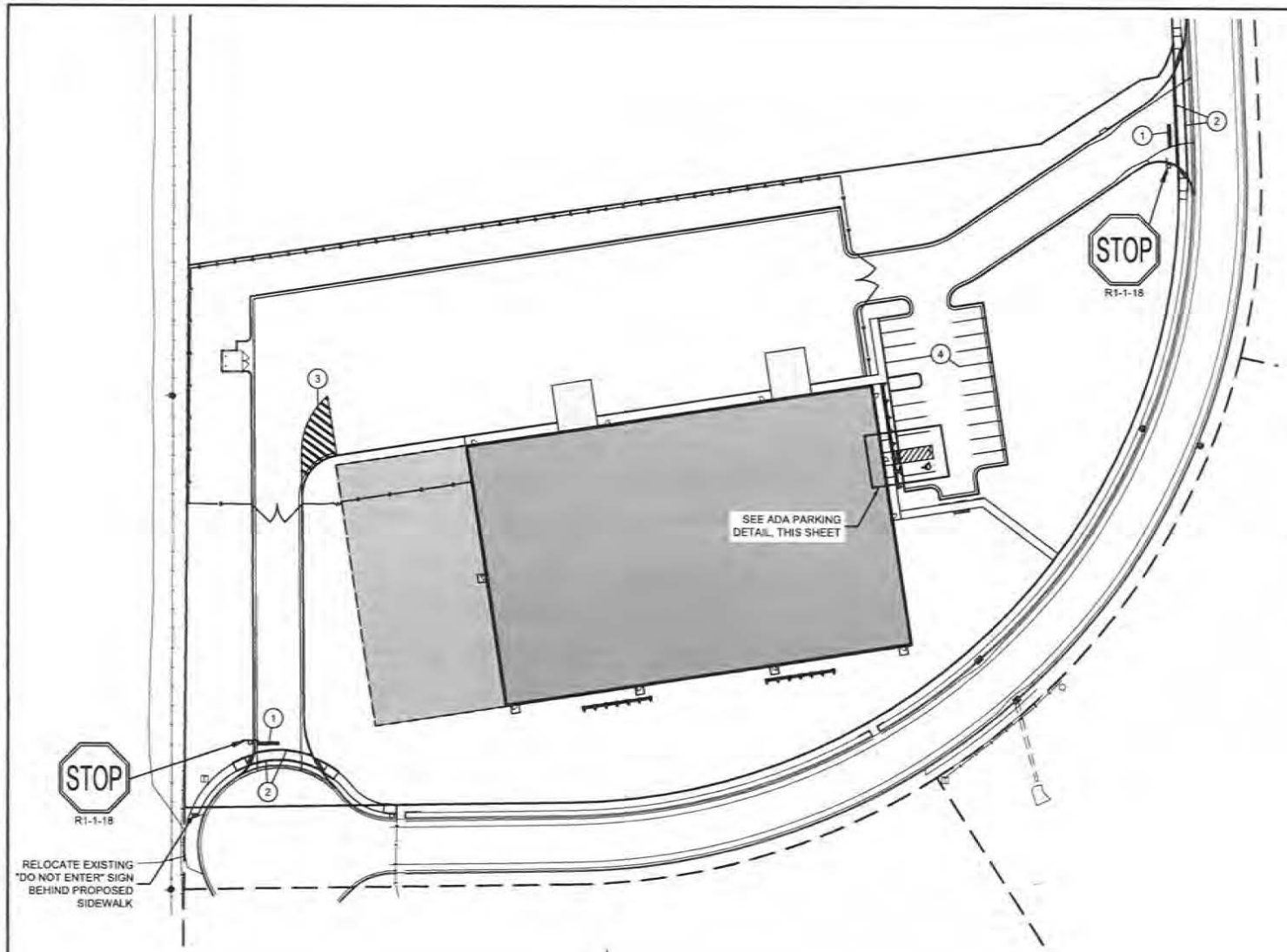
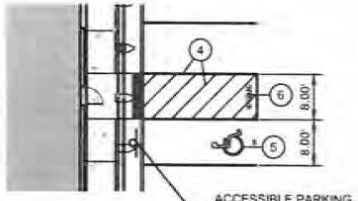
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

SIGNING AND STRIPING NOTES AND DETAILS

DATE	SCALE	SHEET
MAY 2021	1" = 30'	C-500



STRIPING KEY ⓧ	
1	24" WHITE STOP BAR - RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE
2	12" WHITE CROSSWALK - RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE
3	16" YELLOW STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
4	4" WHITE STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
5	HOT THERMO PRE-FORMED ADA ACCESSIBLE PAVEMENT MARKING
6	WORDS "NO PARKING", W/ 1" MIN. HEIGHT AND 2" MIN. WIDTH LETTER SIZE



ADA PARKING DETAIL
SCALE: 1" = 10'

SIGNING AND STRIPING PLAN
SCALE: 1" = 30'

0 5 10 20
SCALE: 1" = 10'

0 15 30 60
SCALE: 1" = 30'

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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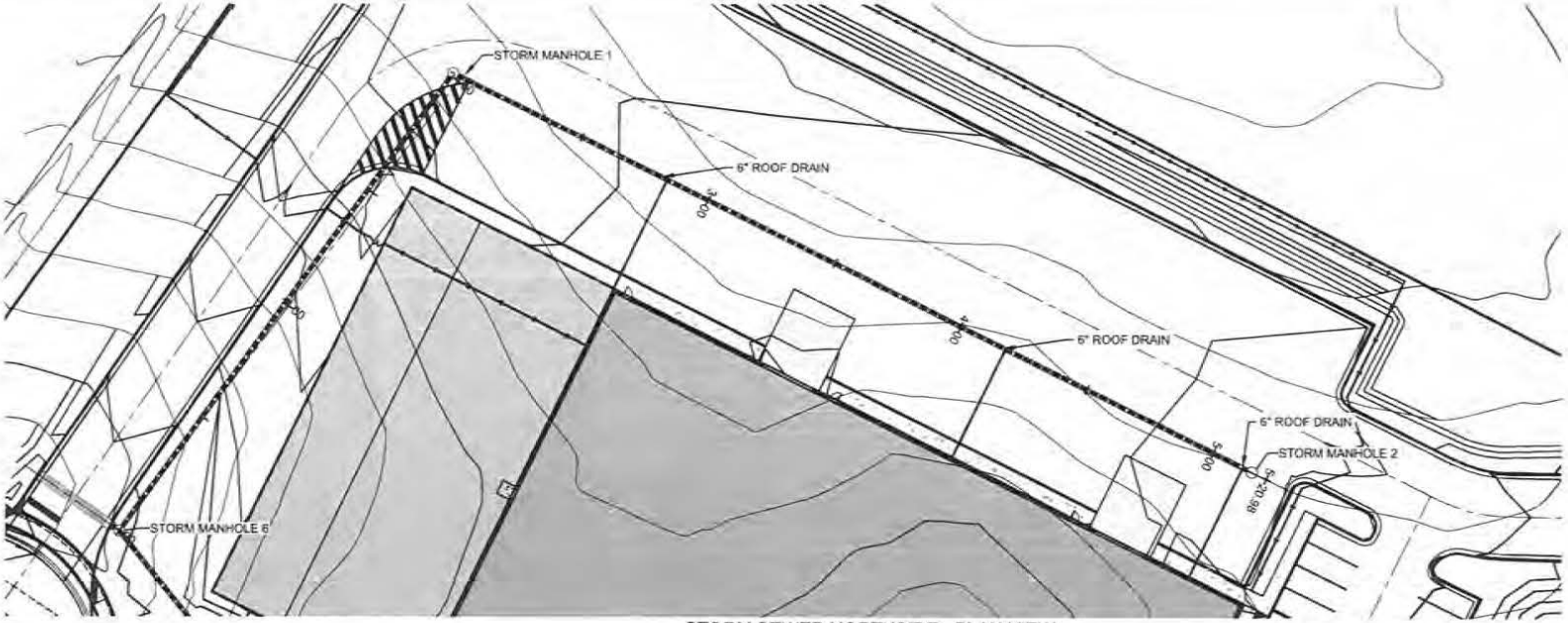
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

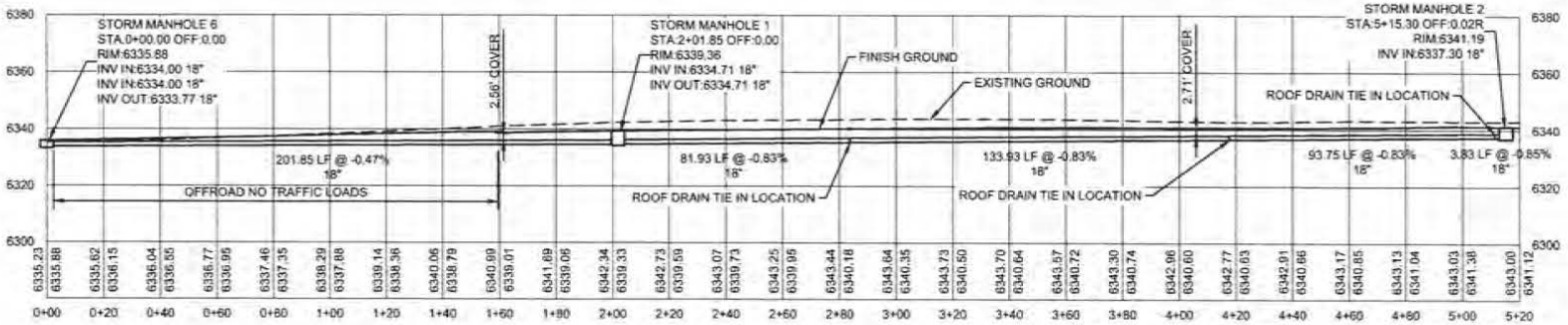
SIGNING AND STRIPING PLAN

DATE	SCALE	SHEET
MAY, 2021	AS NOTED	C-501

REVISIONS | DATE | ENGINEERS SEAL



STORM SEWER NORTHSIDE - PLAN VIEW
SCALE: 1" = 20'



STORM SEWER NORTHSIDE - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 20'

0 10 20 40
SCALE: 1" = 20'

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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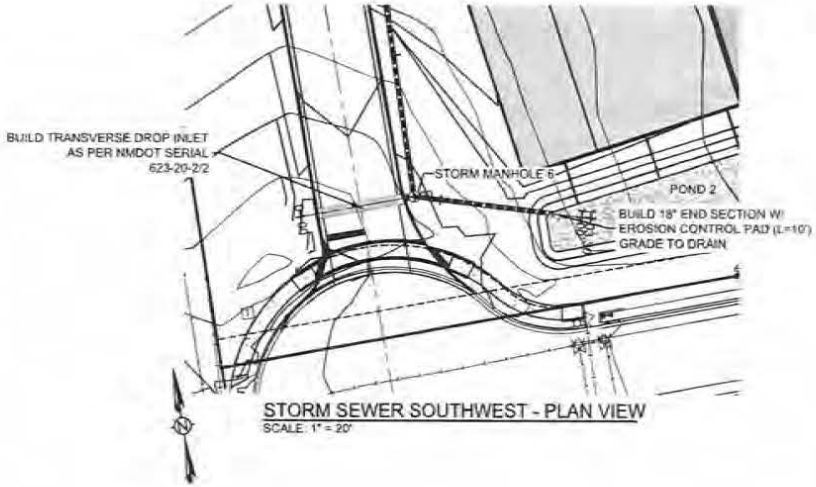
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

STORM SEWER PLAN AND PROFILE

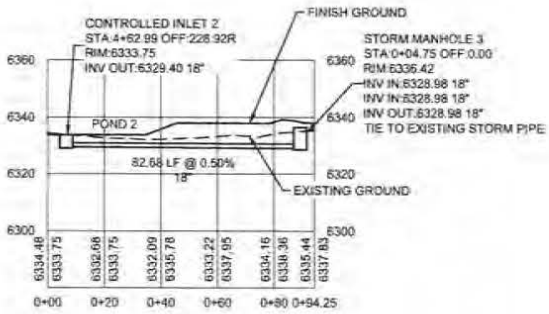
DATE:	SCALE:	SHEET:
MAY 2021	1"=20'	C-600

REVISIONS	DATE	ENGINEERS SEAL

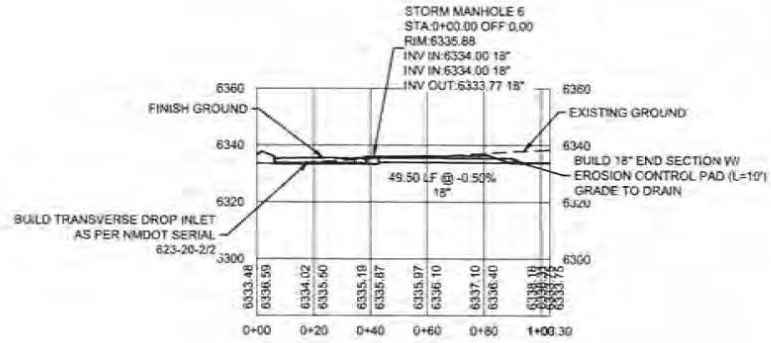
STORM SEWER SOUTH - PLAN VIEW
SCALE: 1" = 20'



STORM SEWER SOUTHWEST - PLAN VIEW
SCALE: 1" = 20'



STORM SEWER SOUTH - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 20'



STORM SEWER SOUTHWEST - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 20'

0 10 20 40
SCALE: 1" = 20'

REVISIONS	DATE	ENGINEERS SEAL

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

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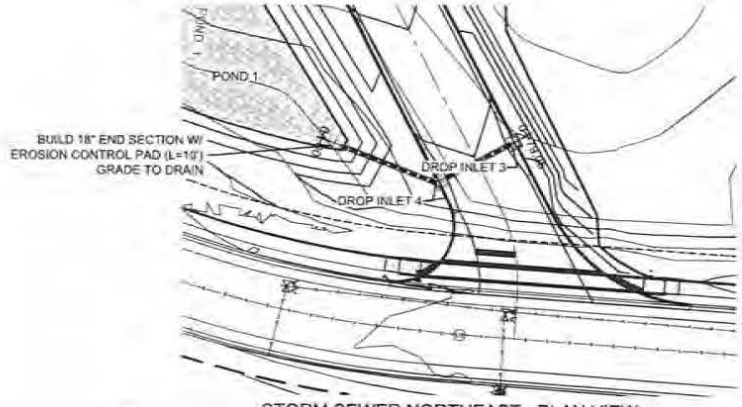
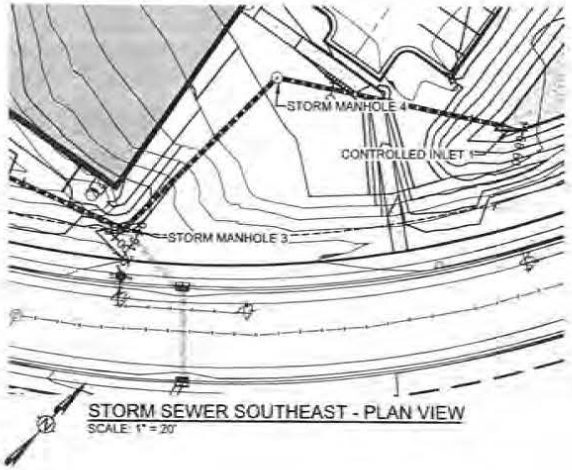
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

STORM SEWER PLAN AND PLOT

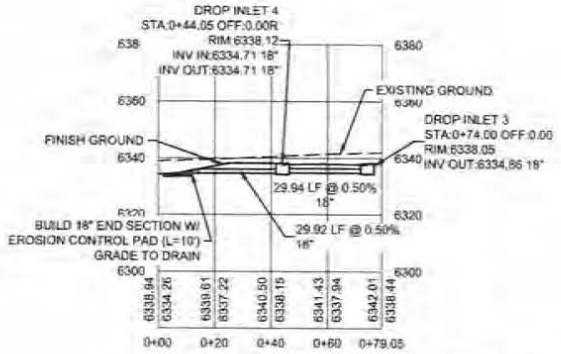
DATE:	SCALE:	SHEET:
MAY 2021	1"=20'	C-601



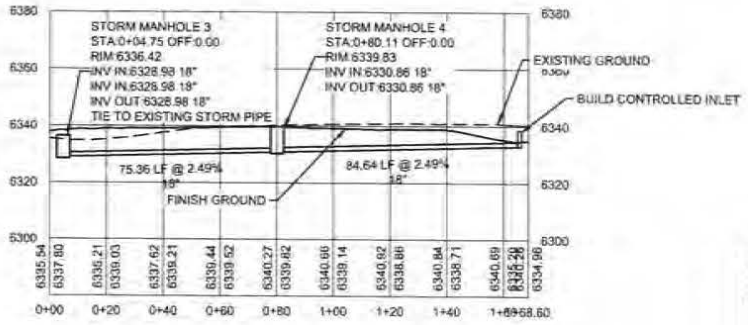
STORM SEWER NORTHEAST - PLAN VIEW
SCALE: 1" = 20'



STORM SEWER SOUTHEAST - PLAN VIEW
SCALE: 1" = 20'



STORM SEWER NORTHEAST - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 20'



STORM SEWER SOUTHEAST - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 20'

0 10 20 40
SCALE: 1" = 20'

CASE # _____

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

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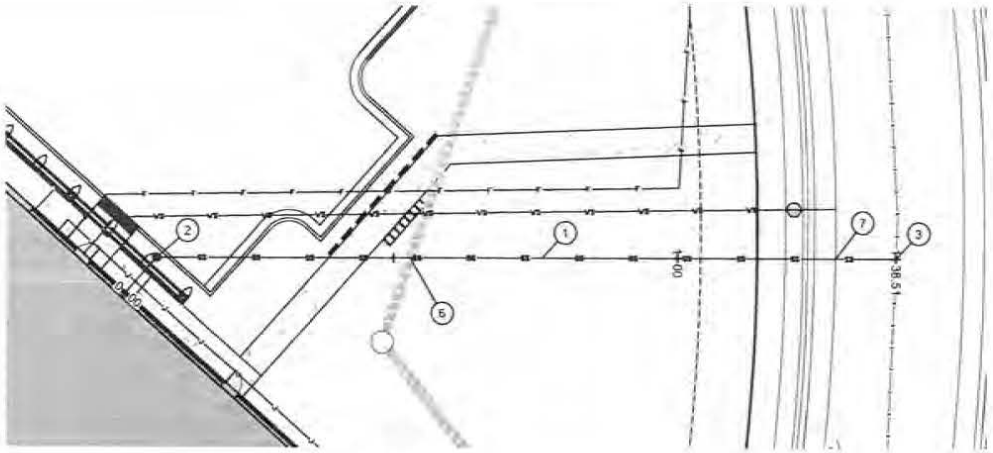
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

STORM SEWER PLAN AND PROFILE

DATE	SCALE	SHEET
MAY 2021	1"=20'	C-602

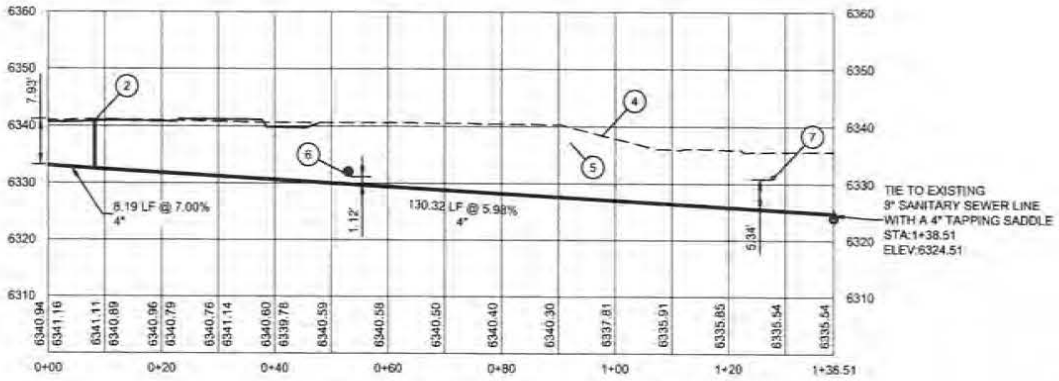
REVISIONS	DATE	ENGINEER'S SEAL



KEYED NOTES

1. PROPOSED 4" SEWER SERVICE
2. PROPOSED CLEANOUT
3. TIE TO EXISTING SANITARY SEWER LINE
4. EXISTING GROUND
5. FINISHED GROUND
6. PROPOSED 18" STORM SEWER CROSSING
7. APPROX. EXISTING 8" WATER LINE CROSSING AT 4' MIN. DEPTH

SANITARY SEWER SERVICE - PLAN VIEW
SCALE: 1" = 10'



SANITARY SEWER SERVICE - PLAN VIEW
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

0 5 10 20
SCALE: 1" = 10'

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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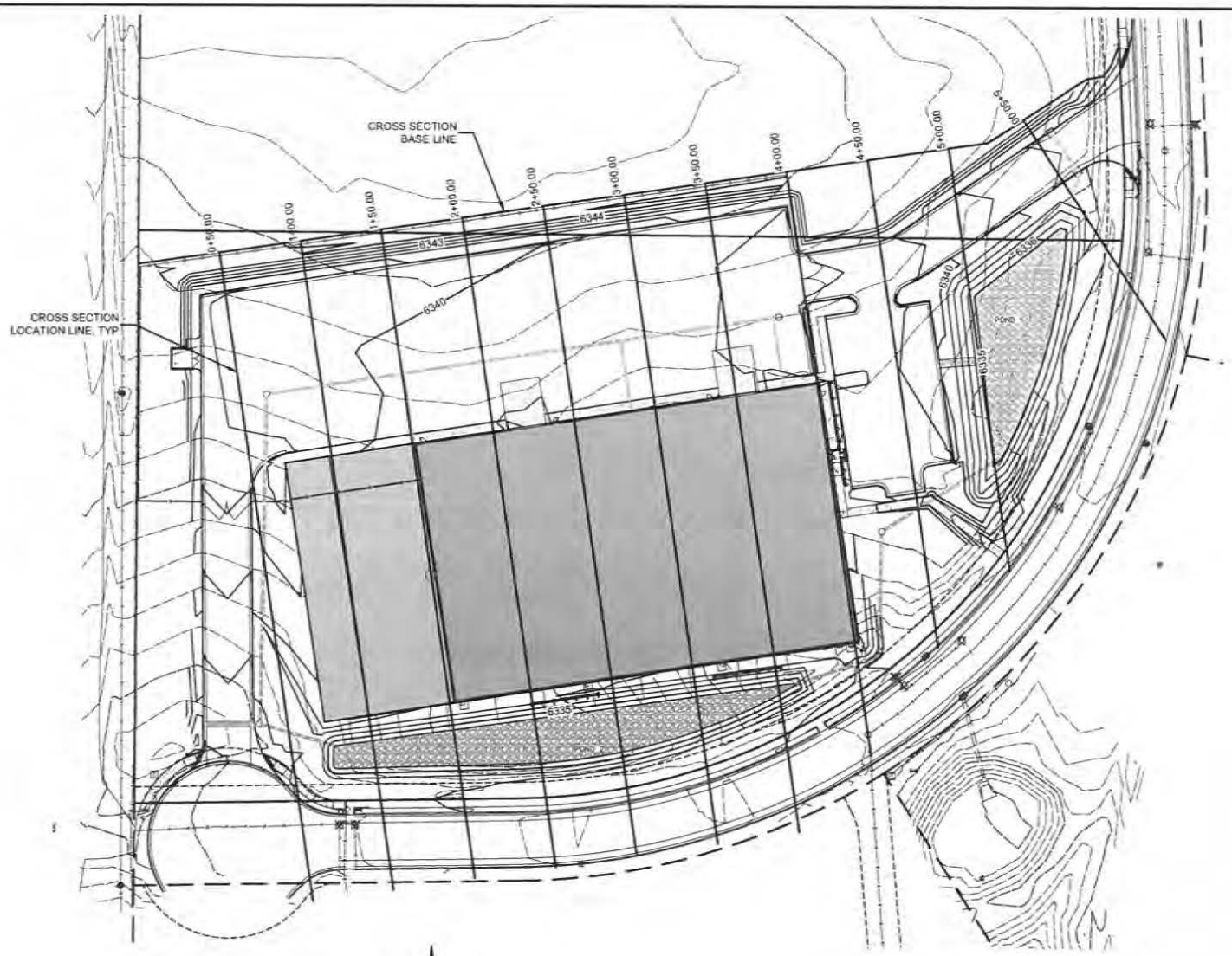
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

SANITARY SEWER PLAN AND PROFILE

DATE	SCALE	SHEET
MAY 2021	1" = 10'	C-700



CROSS SECTION LOCATION PLAN

SCALE: 1" = 30'

0 15 30 60

SCALE: 1" = 30'

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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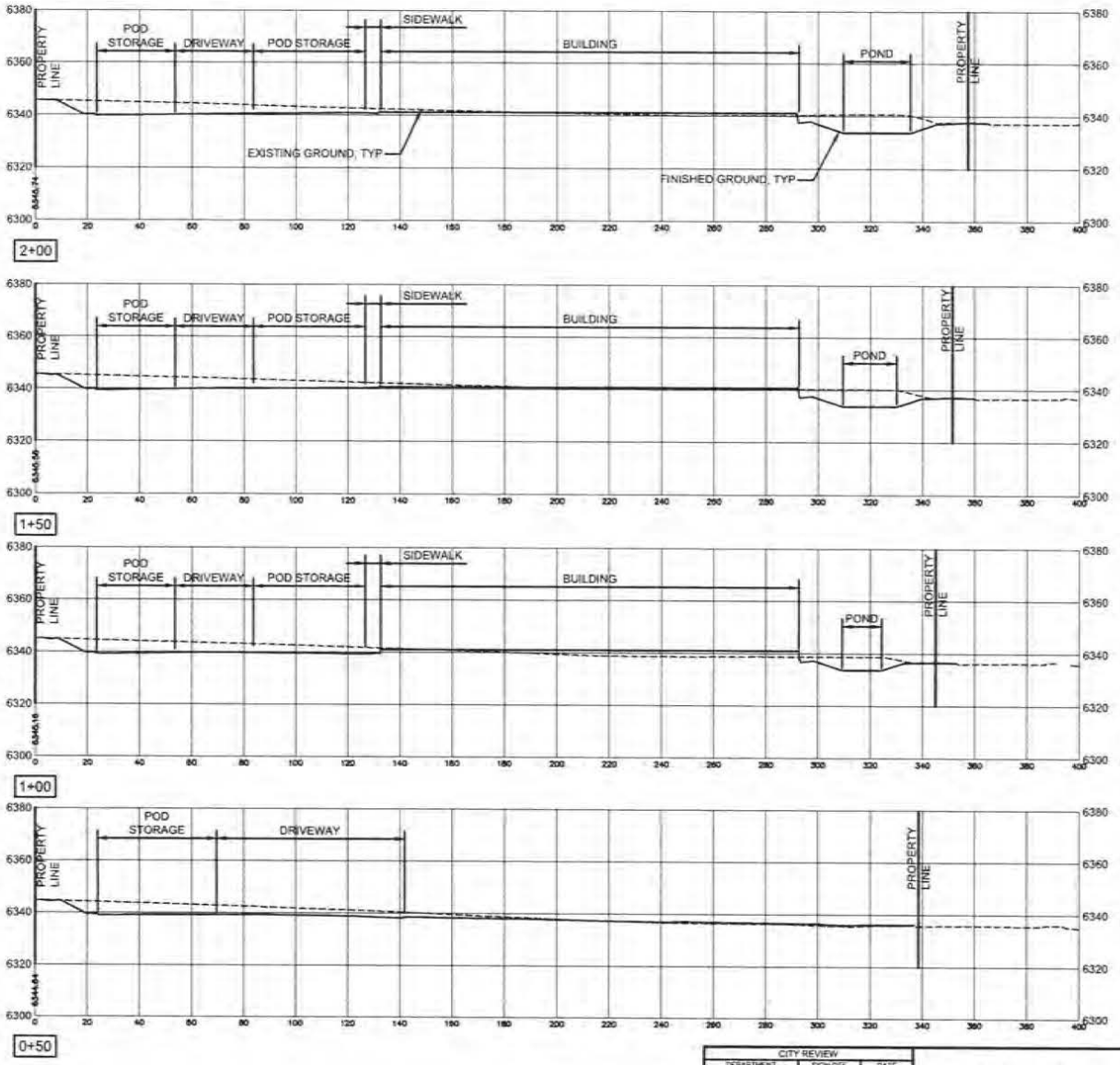
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

CROSS SECTION LOCATION PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1" = 30'	C-600



0 10 20 40
SCALE: 1" = 20'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURES ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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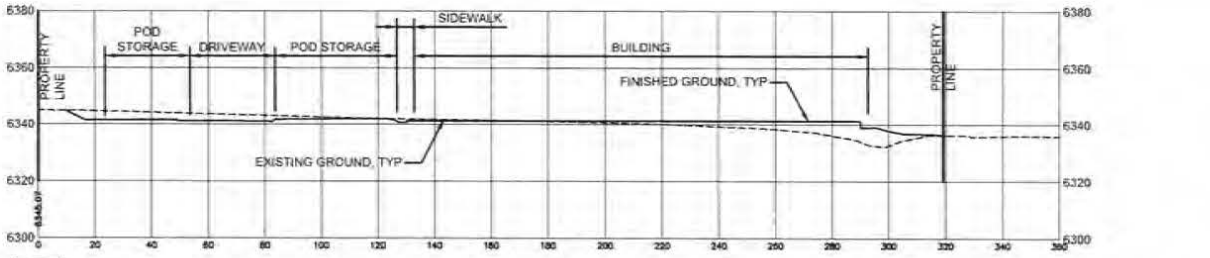
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

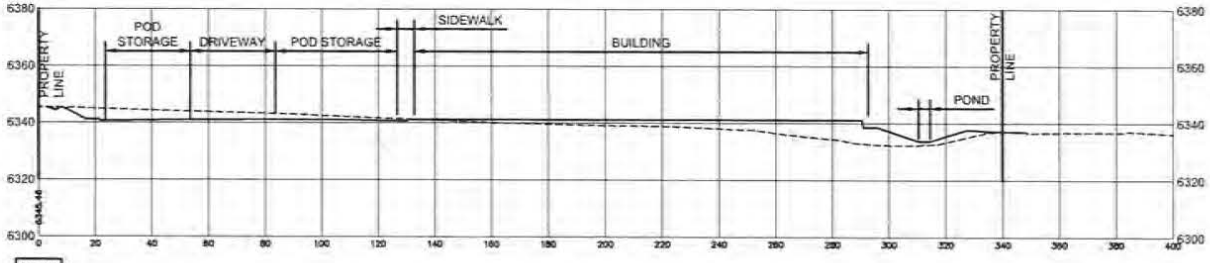
CROSS SECTIONS

DATE:	SCALE:	SHEET:
MAY 2021	1" = 20'	C-501

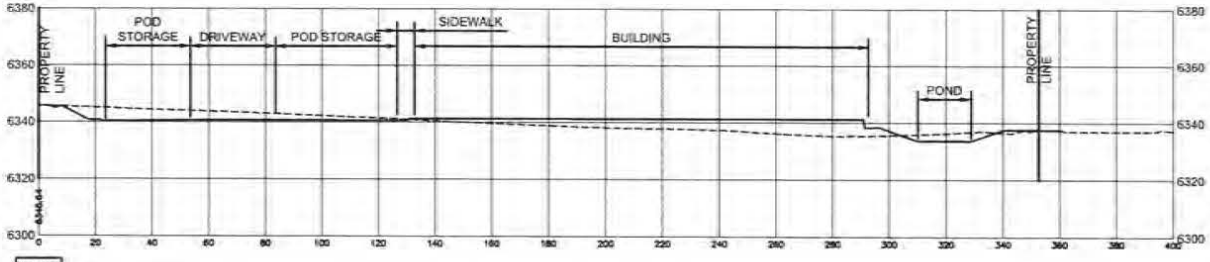
REVISIONS	DATE	ENGINEERS SEAL



4+00



3+50



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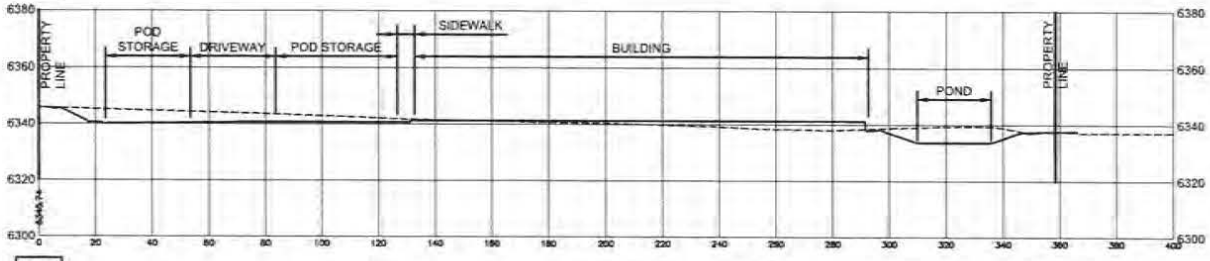

2+50

0 10 20 40

SCALE: 1" = 20'

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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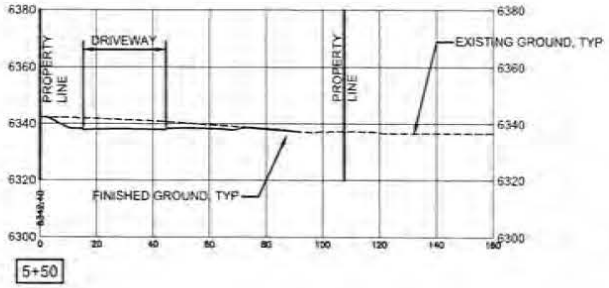
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

CROSS SECTIONS (CONT'D)

DATE:	SCALE:	SHEET:
MAY 2021	1" = 20'	C-502

REVISIONS	DATE	ENGINEER'S SEAL



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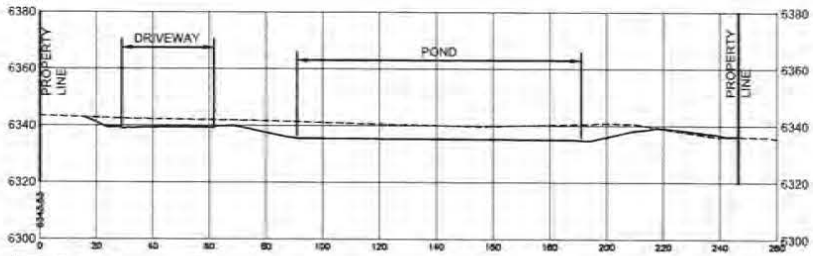

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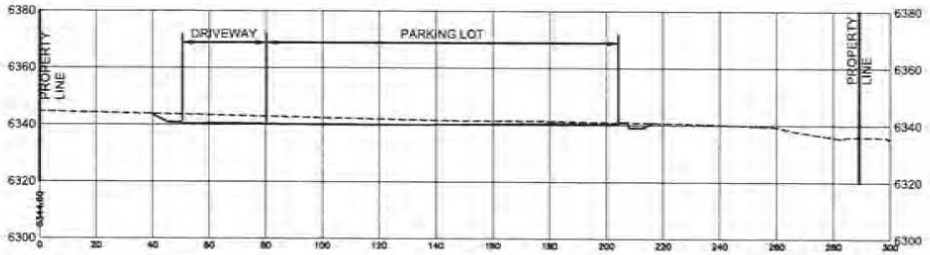

4+50

REVISIONS	DATE	ENGINEERS SEAL

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

0 10 20 40
SCALE: 1" = 20'

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PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

CROSS SECTIONS (CONT'D)

DATE	SCALE	SHEET
MAY 2021	1" = 20'	C-603

STORM WATER POLLUTION PREVENTION PLAN
PODS STORAGE FACILITY
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, Hart Road to the South and East, and a paved access road to Aviation Drive to the 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°37'22" N
Longitude: 106°04'32" W

1.3 The total area of the site:

4.4711 ± acres

1.4 The area of the site that is expected to be disturbed:

4.4711 ± 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 P-100.

1.7.2 Drainage patterns:

Grading and Drainage Plans, C-300 series.

1.7.3 Approximate slopes after major grading:

Permanent Erosion Control Plan, C-902.

1.7.4 Outline area of disturbance:

Permanent Erosion Control Plan, sheet C-902.

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 C-901.

1.7.7 Areas where stabilization practices are expected to occur:

Permanent Erosion Control Plan, sheet C-902.

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

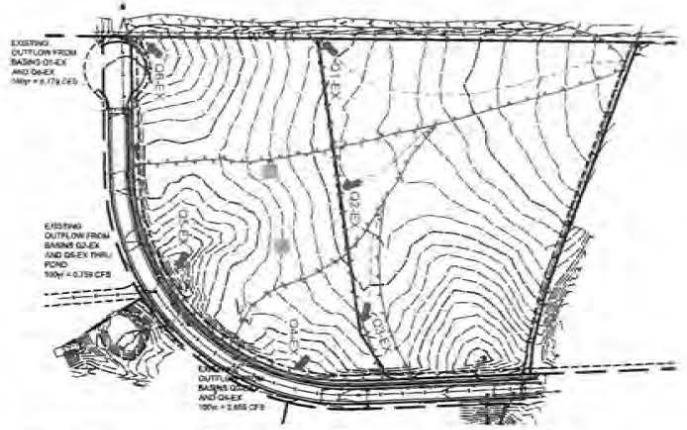
Copies of SWPP Plans, inspection records, spill reports, all reports required by NPDES Permit coverage, and data used to complete the NOI shall be retained by the permitees.

2.7 Plan Amendment:

This SWPP Plan will be amended when:

There is a change in design, construction, operation, or maintenance.

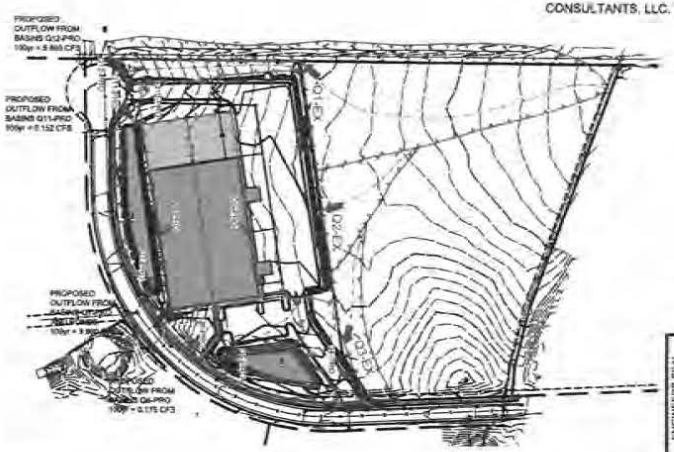
If the inspection report identifies problems or inadequacies with the current BMPs, the SWPP Plan shall be modified as necessary to include additional or modified BMP's designed to correct the problems.



0 50 100 200
SCALE: 1" = 100'

EXISTING CONDITIONS DRAINAGE MAP
SCALE: 1" = 100'

REFERENCE:
"TERRAIN MANAGEMENT REPORT SOILS, DRAINAGE, AND GRADING FOR PODS AT HART BUSINESS PARK" DATED MAY 2021BY SANTA FE ENGINEERING CONSULTANTS, LLC.



0 50 100 200
SCALE: 1" = 100'

DEVELOPED CONDITIONS DRAINAGE MAP
SCALE: 1" = 100'

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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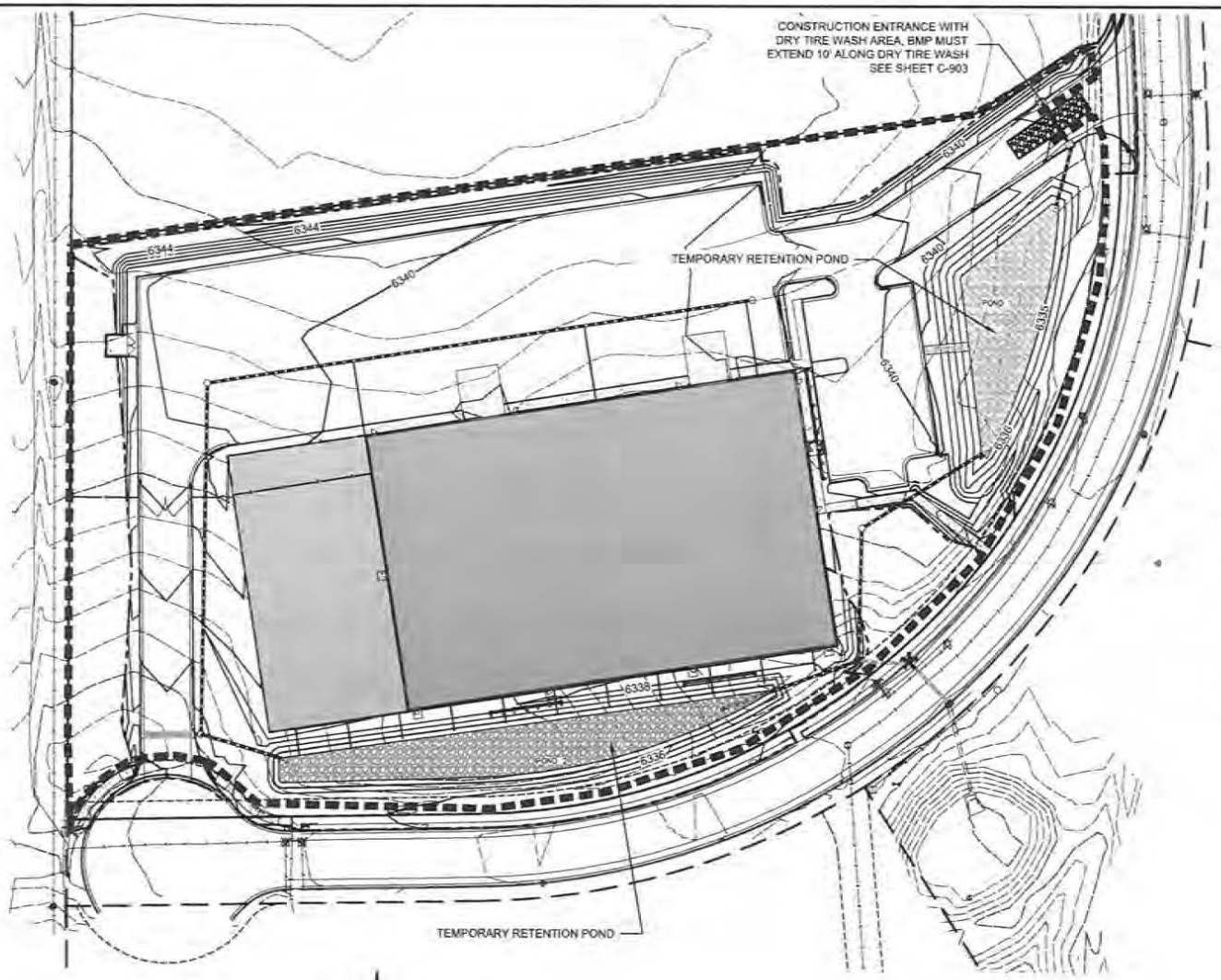
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

STORM WATER POLLUTION PREVENTION PLAN

DATE:	SCALE:	SHEET:
MAY 2021	1" = 200'	C-900



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.

TEMPORARY EROSION CONTROL PLAN

SCALE: 1" = 30'

0 15 30 60
SCALE: 1" = 30'

LEGEND

EPA APPROVED BMP SEE SHEET C-904 & C-905 FOR DETAILS

* INLET PROTECTION SEE SHEET C-904 & C-905 FOR DETAILS

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		

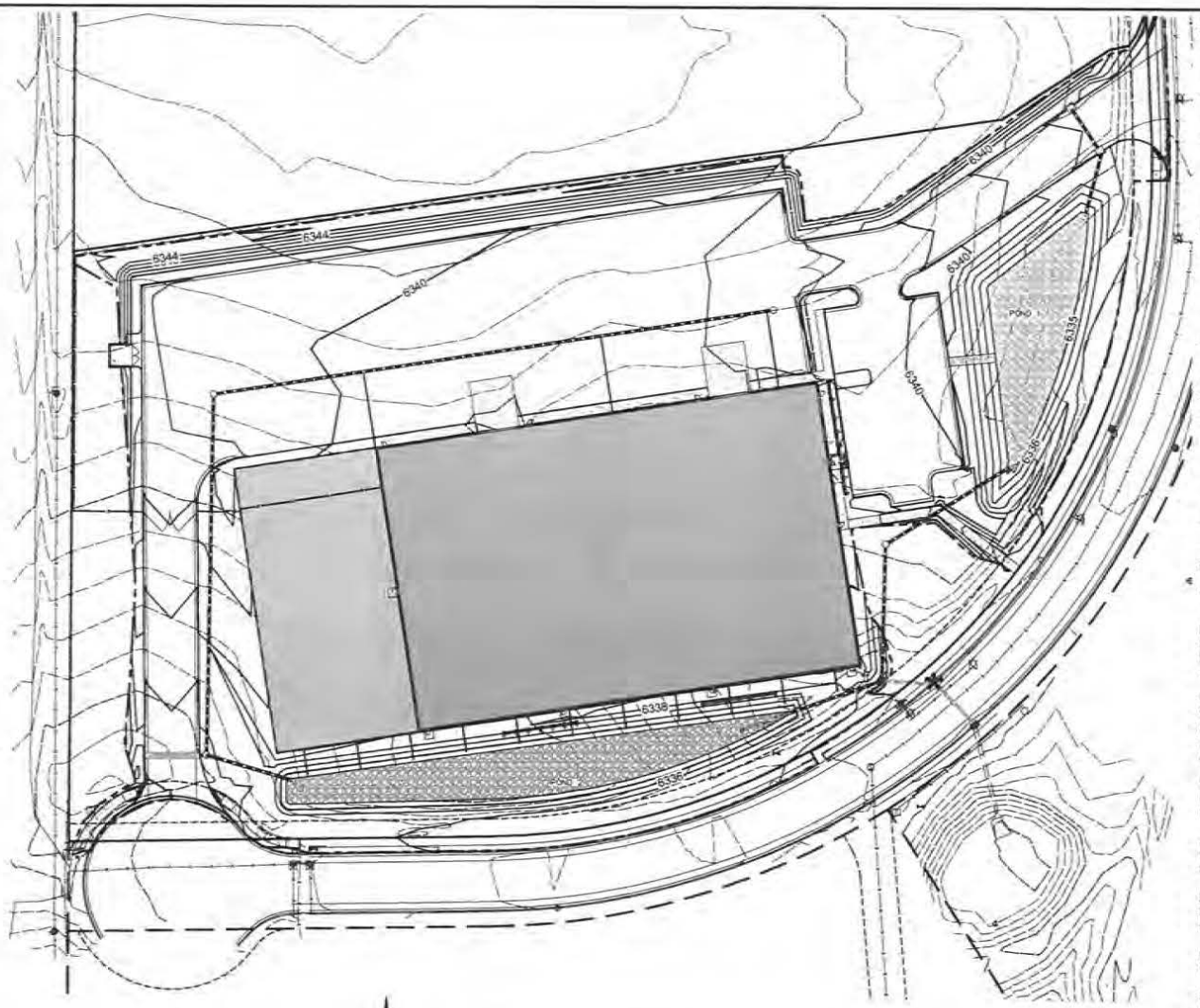
Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

TEMPORARY EROSION CONTROL PLAN

DATE	SCALE	SHEET
MAY 2021	1" = 30'	C-901

REVISIONS | DATE | ENGINEERS SEAL



PERMANENT EROSION CONTROL PLAN
SCALE: 1" = 30'

0 15 30 60
SCALE: 1" = 30'

LONG TERM MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

1. THE STORM WATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED.
2. 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.
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 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.

WATER LEVEL MEASUREMENT

1. THE CONTRACTOR SHALL INSTALL A STAFF GAUGE AT EACH POND TO MEASURE SEDIMENT ACCUMULATION (SEE DETAIL, SHEET C-903). STAFF GAUGE MARKINGS SHALL BE IN 0.25' INCREMENTS WITH 0 AT THE BOTTOM OF THE POND AND LABELED FOOT MARKS TO THE TOP OF THE POND. UV RESISTANT MATERIALS SHALL BE USED INCLUDING: FIBERGLASS, STAINLESS STEEL, PVC, ALUMINUM / DIE-BOND BACKED, LEXAN OR POLYCARBONTE COATED MYLAR. SHOP DRAWING SUBMITTALS ARE REQUIRED PRIOR TO CONSTRUCTION.
2. THE STAFF GAUGE SHALL BE CLEANED DURING SPRING AND FALL MAINTENANCE TO REMOVE ANY ACCUMULATION ON THE GAUGE.

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, DRAINAGE 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.

REVISIONS	DATE	ENGINEER'S SEAL

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

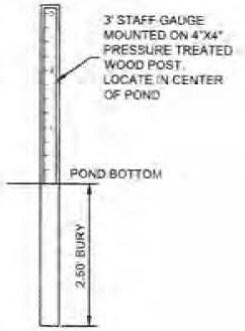
CASE # _____

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2941
http://www.SFENGR.com

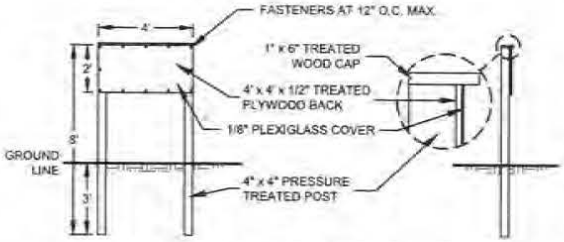
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

PERMANENT EROSION CONTROL PLAN

DATE	SCALE	SHEET
MAY 2021	1" = 30'	C-902



POST AND STAFF GAUGE
SCALE: N.T.S.



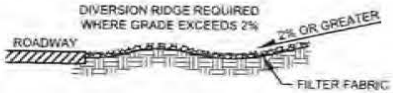
N.P.D.E.S. PERMIT POSTING BOARD
(LOCATED AT MAIN ENTRANCE)

CITY OF SANTA FE NPDES STORMWATER MANAGEMENT NOTES

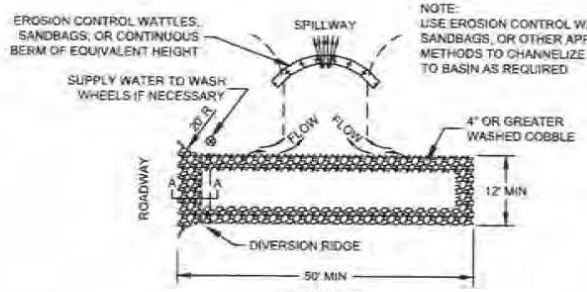
1. DEVELOPMENT IS SUBJECT TO THE REQUIREMENTS OF THE SFCC CHAPTER XIII STORMWATER UTILITY INCLUDING THE STORMWATER UTILITY SERVICE CHARGE AND STORMWATER ILLICIT DISCHARGE CONTROL REQUIREMENTS.
2. DEVELOPMENT IS SUBJECT TO THE REQUIREMENTS OF NPDES GENERAL MS4 DISCHARGE PERMIT NO. NMR040000 AND NPDES 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

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

CITY REVIEW		
DEPARTMENT	SIGNOFF	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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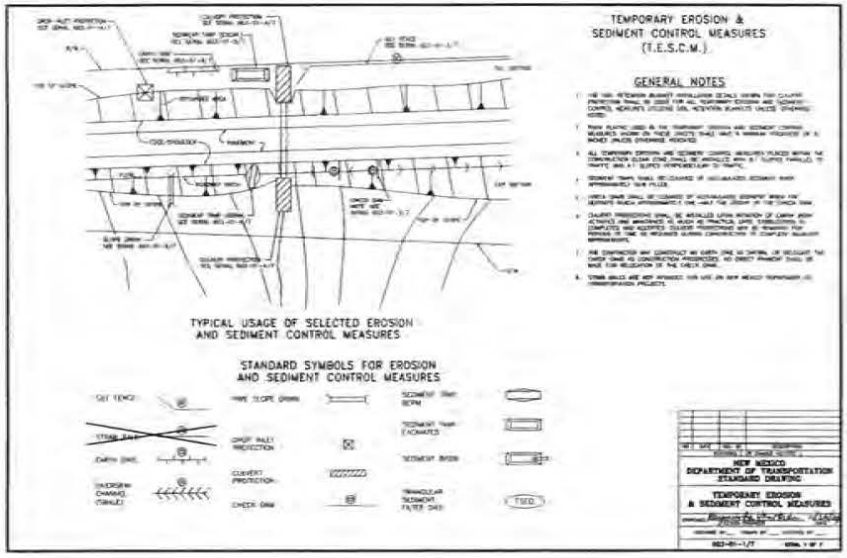
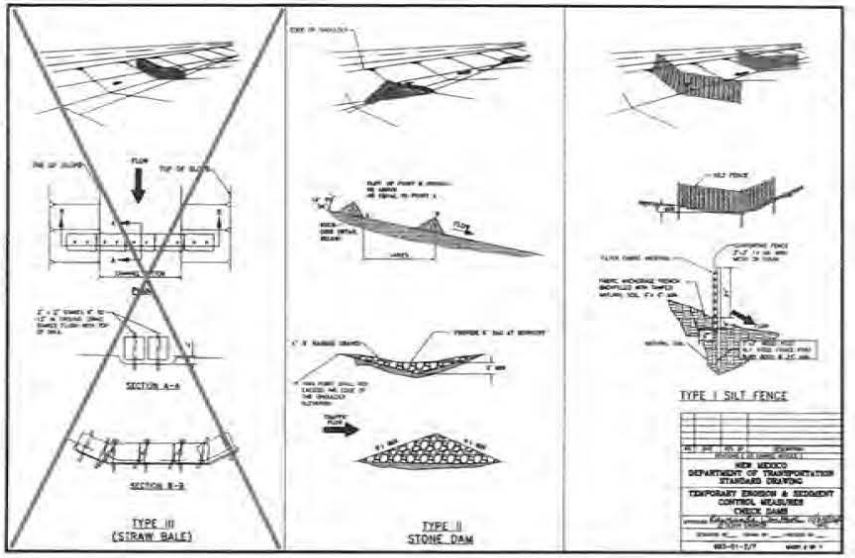
PODS AT HART BUSINESS PARK
PRELIMINARY & FINAL DEVELOPMENT PLAN

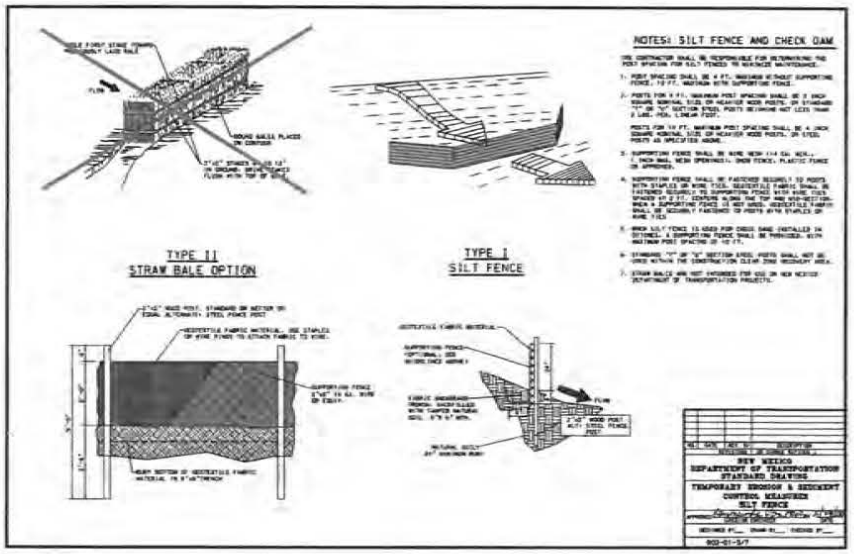
STORM WATER CONTROL DETAILS

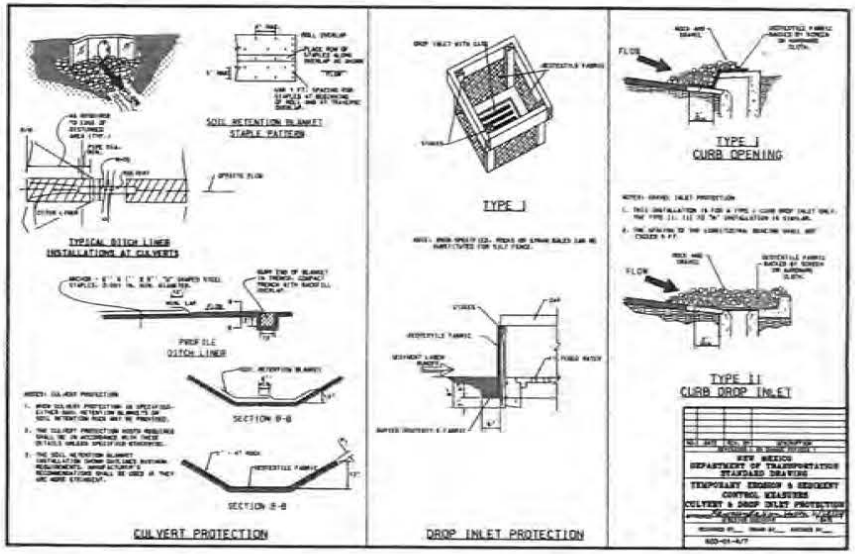
DATE	SCALE	SHEET
MAY 2021	N.T.S.	C-903

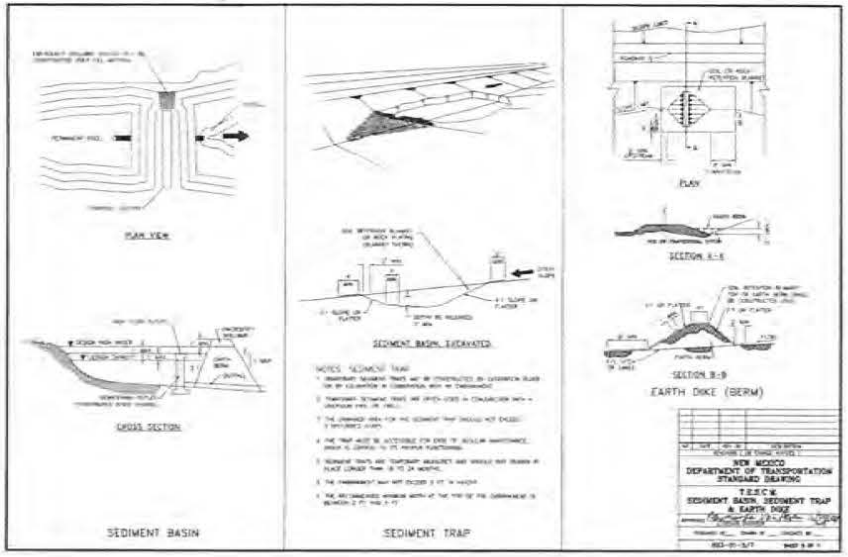
REVISIONS	DATE	ENGINEERS SEAL

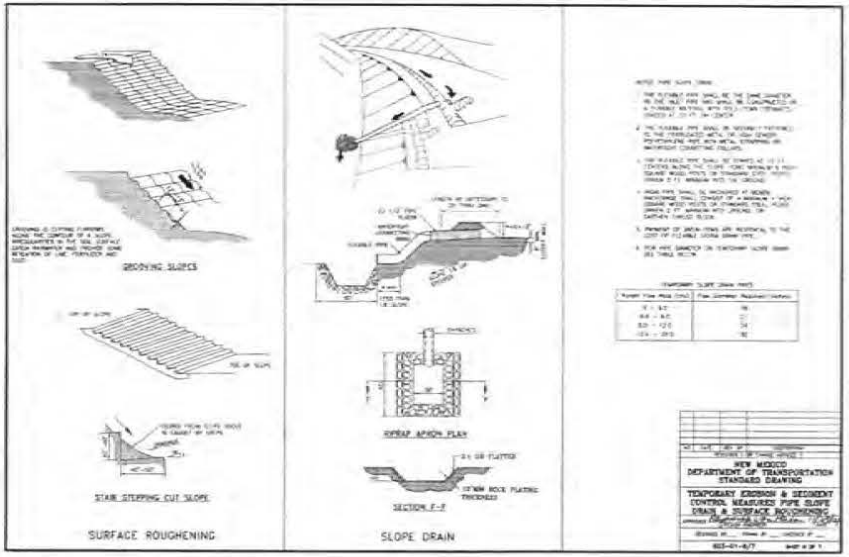

TEMPORARY EROSION &
SEDIMENT CONTROL MEASURES
(T.E.S.C.M.)
GENERAL NOTES
TYPICAL USAGE OF SELECTED EROSION
AND SEDIMENT CONTROL MEASURES
STANDARD SYMBOLS FOR EROSION
AND SEDIMENT CONTROL MEASURES
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
TEMPORARY EROSION
& SEDIMENT CONTROL MEASURES

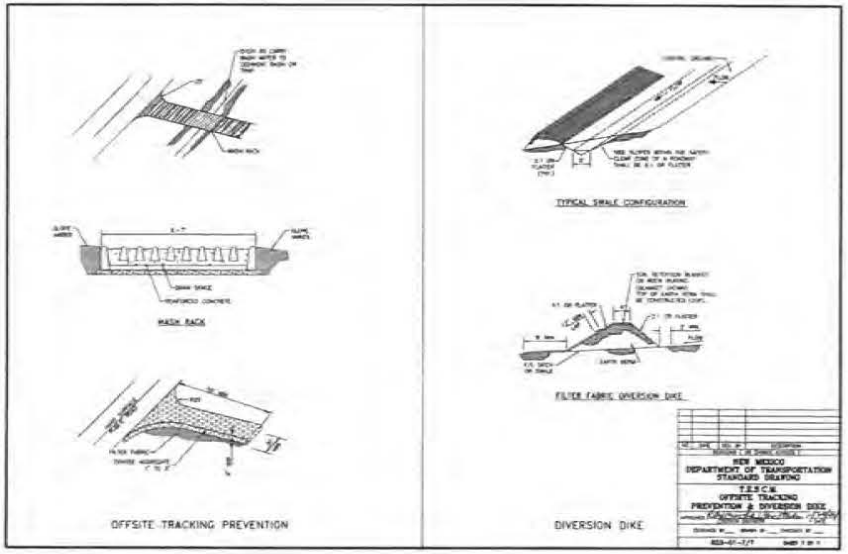

SECTION A-A
SECTION B-B
TYPE III
(STRAW BALE)
TYPE II
STONE DAM
TYPE I SILT FENCE
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
TEMPORARY EROSION & SEDIMENT
CONTROL MEASURES
CHECK DAMS

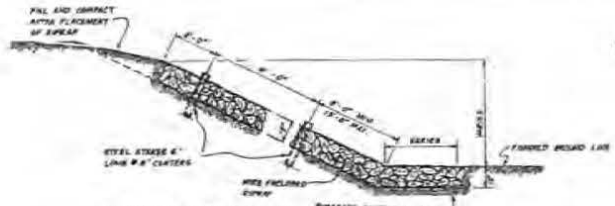

NOTES: SILT FENCE AND CHECK DAM
TYPE II
STRAW BALE OPTION
TYPE I
SILT FENCE
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
TEMPORARY EROSION & SEDIMENT
CONTROL MEASURES
SILT FENCE


SOIL RETENTION BLANKET
STAPLE PATTERN
TYPICAL DITCH LINER
INSTALLATIONS AT CULVERTS
PROFILE
DITCH LINER
SECTION B-B
SECTION B-B
CULVERT PROTECTION
TYPE J
DROP INLET PROTECTION
TYPE J
CURB OPENING
TYPE JJ
CURB DROP INLET
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
TEMPORARY EROSION & SEDIMENT
CONTROL MEASURES
CULVERT & DROP INLET PROTECTION

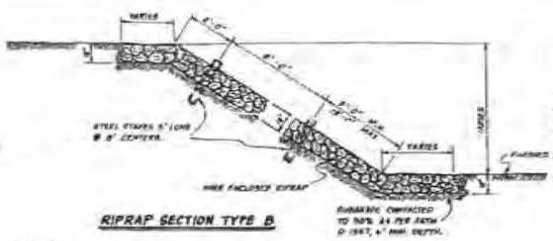

PLAN VIEW
CROSS SECTION
SEDIMENT BASIN
SEDIMENT BASIN EXCAVATED
SEDIMENT TRAP
PLAN
SECTION A-A
SECTION B-B
EARTH DIKE (BERM)
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
T.E.S.C.M.
SEDIMENT BASIN, SEDIMENT TRAP
& EARTH DIKE


GROOVING SLOPES
STAIR STEPPING CUT SLOPE
SURFACE ROUGHENING
RIPRAP APRON PLAN
SECTION E-E
SLOPE DRAIN
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
TEMPORARY EROSION & SEDIMENT
CONTROL MEASURES PIPE SLOPE
DRAIN & SURFACE ROUGHENING

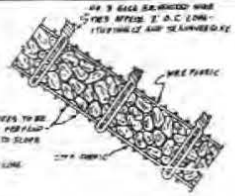

WASH RACK
OFFSITE TRACKING PREVENTION
TYPICAL SWALE CONFIGURATION
FILTER FABRIC DIVERSION DIKE
DIVERSION DIKE
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING
T.E.S.C.M.
OFFSITE TRACKING
PREVENTION & DIVERSION DIKE



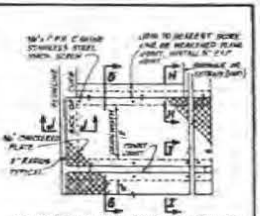
RIPRAP SECTION TYPE A



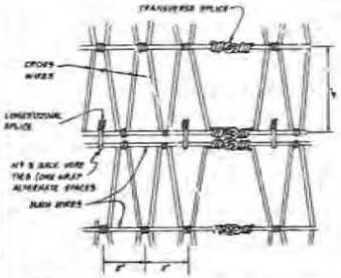
RIPRAP SECTION TYPE B



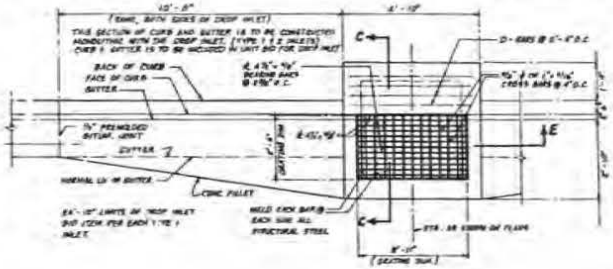
TYPICAL SECTION



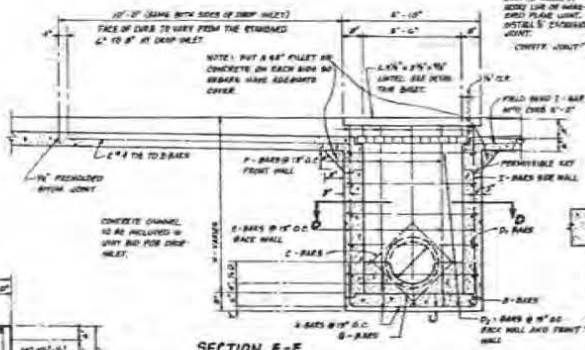
SINGLE AND OR MULTIPLE CULVERT PLAN



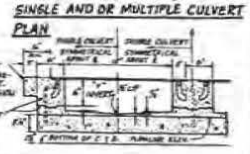
DETAIL OF WIRE FABRIC AND NORMAL SPLICE



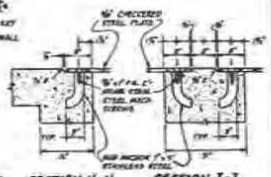
TYPE-I INLET PLAN



SECTION E-E

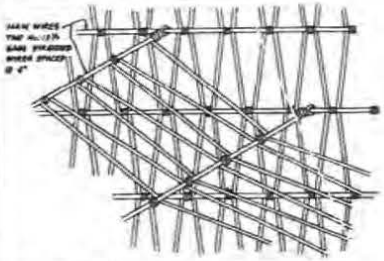


SECTION G-G

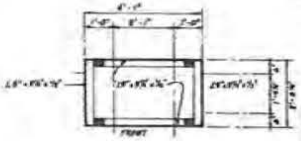


SECTION H-H

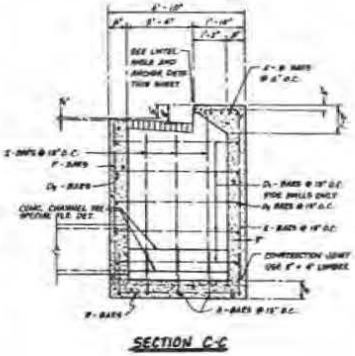
SECTION I-I



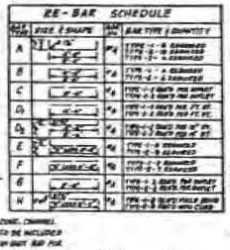
DETAIL OF SPLICE @ SKEWED INTERSECTION



GRATING FRAME DETAIL

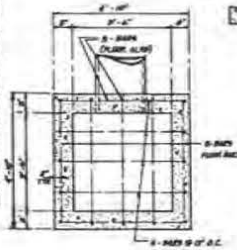


SECTION C-C

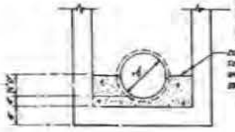


RE-BAR SCHEDULE

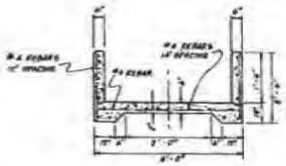
MARK	SIZE & SHAPE	BAR TYPE & QUANTITY
A		
B		
C		
D_1		
D_2		
E		
F		
G		
H		



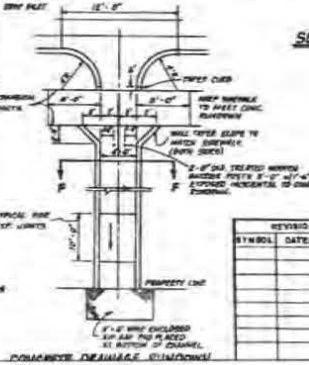
SECTION D-D



SPECIAL FLOW DETAIL



TYPICAL RUNDOWN DETAIL SECTION F-F



CONCRETE DRAINAGE RUNDOWN

SECTION J-J DOWEL DETAIL

SIDEWALK CULVERT DETAIL

RIPRAP - GENERAL NOTES:

1. WIRE FABRIC IS TO BE GALVANIZED "G" WEAVE AT THE FOLLOWING CONSTRUCTION: MAIN WIRES: TWO NO. 12½ GAGE STRANDED WIRES SPACED AT 6" CROSS WIRES: SINGLE NO. 12½ GAGE WIRES SPACED AT 2" WITH NOT LESS THAN TWO TURNS AROUND THE MAIN WIRES. APPROXIMATE WEIGHT: 68 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 4 x 4 x ¼ 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 LENGTHS OF SLOPE, IN ITS PLACE OR LESS, ONLY ONE ROW OF STEEL STAKES, 5 FEET FROM THE TOP SHALL BE USED. EXCEPT, WILL BE REQUIRED UNLESS OTHERWISE NOTED ON PLANS.
4. AS AN ALTERNATE, WIRE FABRIC MAY BE GALVANIZED STEEL WIRE MEETING THE REQUIREMENTS FOR CLASS 3, FINISH B, MEDIUM TEMPER, STOCKMESH COATED WIRE AS SET FORTH IN FEDERAL SPECIFICATION QQ-W-461. THE WIRES SHALL BE CONTINUOUS, HAVE A DIAMETER OF NOT LESS THAN 0.109 INCH AND SHALL BE TRIPLE TWISTED TO FORM A UNIFORM HEXAGONAL MESH PATTERN WITH A NOMINAL OPENING SIZE OF 3" x 4".
5. DETAIL FROM U.M.C. & D. DETAIL, SPECIAL DATE 1961-62.

GENERAL NOTES:

1. ALIGNING OF CURB TOOL (CURB, SIDEWALK, C.I.P. CONCRETE THAT EXCEED HORIZONTAL C.I.P. EXPANSION AND CONTROL JOINTS AS SPECIFIED IN THE PLANS.
2. BOTTOM SLAB OF CHANNEL SHALL BE FINISHED SMOOTH AND TROWELLED WITH NON-SKID FINISH.
3. ALL EXPOSED CONC. SURFACE SHALL MATCH ADJACENT CONC. FINISH AND SCREENED OR EQUIVALENT CURB AND GUTTER.
4. SIDEWALK REPLACED DURING CONSTRUCTION TO BE POURED MONOLITHICALLY WITH CURB OR WALL.
5. FOR ALL CONCRETE, THE MINIMUM STRENGTH COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 4,000 POUNDS PER SQUARE INCH, 7 - SACK MIX AND THAT THE MAXIMUM COMPOSITE AGGREGATE SIZE ALLOWED SHALL BE 1 INCH. SYNTHETIC OF 4# - 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 DRIVABLE CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

REVISION		
SYMBOL	DATE	BY

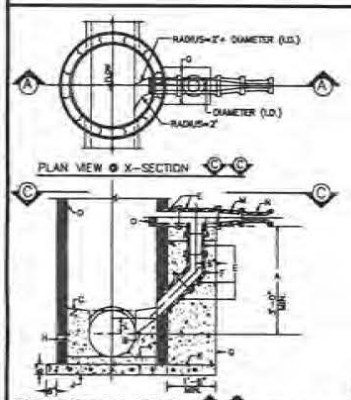
CITY OF SANTA FE

DRAINAGE DETAILS

DRAWN BY: CHARLIE FINE CHECKED BY: DATE: SHT

LEGEND

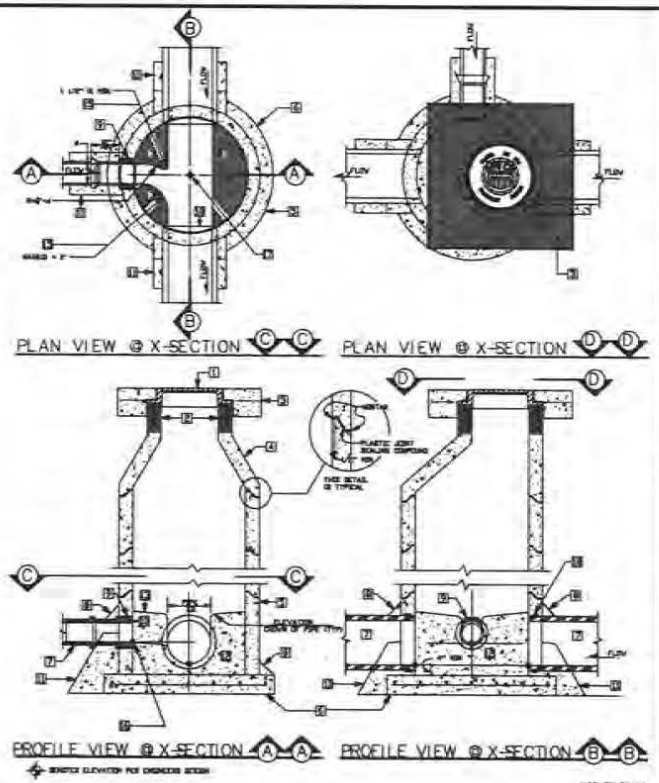
ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with multiple 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) in bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CM-6
13	SHELF, to be 6"(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

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)

NOT TO SCALE

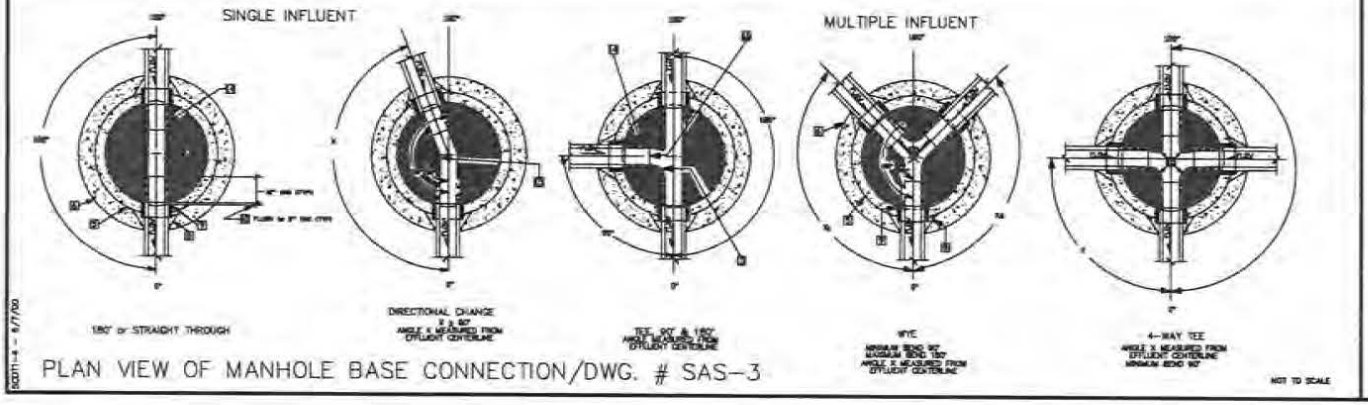
GENERAL NOTES

CONSTRUCTION REQUIREMENTS

INSTALLATION

CONSTRUCTION MATERIALS

FIELD QUALITY CONTROL



PLAN VIEW OF MANHOLE BASE CONNECTION/DWG. # SAS-3

NOT TO SCALE

CITY OF SANTA FE
WATER QUALITY DIVISION

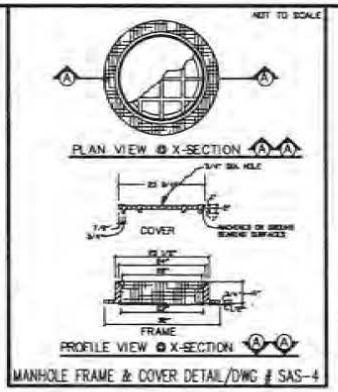
TITLE: SANITARY SEWER
STANDARD CONSTRUCTION DETAILS

SHEET C-1001

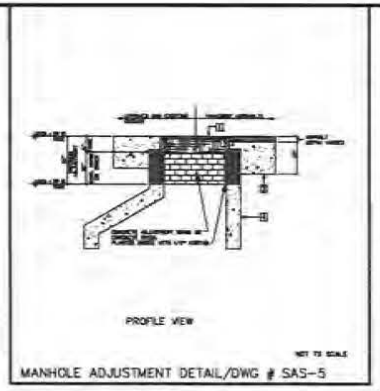
ROOT1-4 - 6/7/00

LEGEND

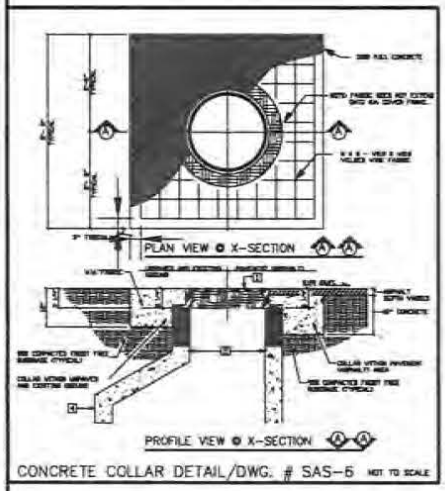
ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE BRICK, with suitable sized openings, refer to general note CM-3A
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-5
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



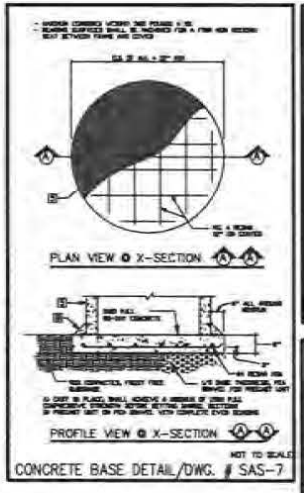
MANHOLE FRAME & COVER DETAIL/DWG # SAS-4



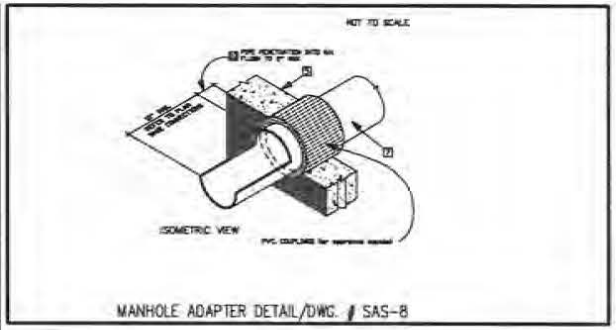
MANHOLE ADJUSTMENT DETAIL/DWG # SAS-5



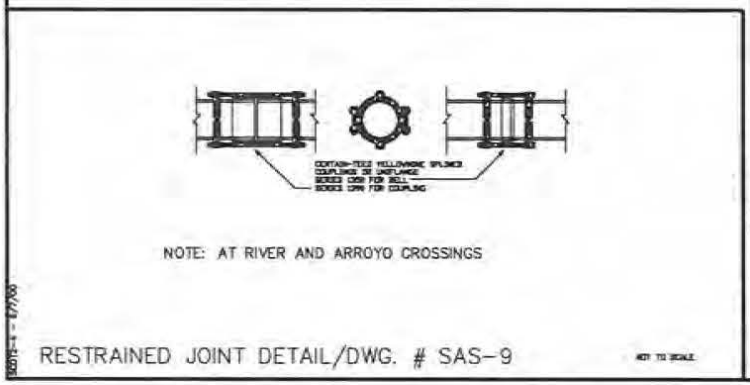
CONCRETE COLLAR DETAIL/DWG. # SAS-6 NOT TO SCALE



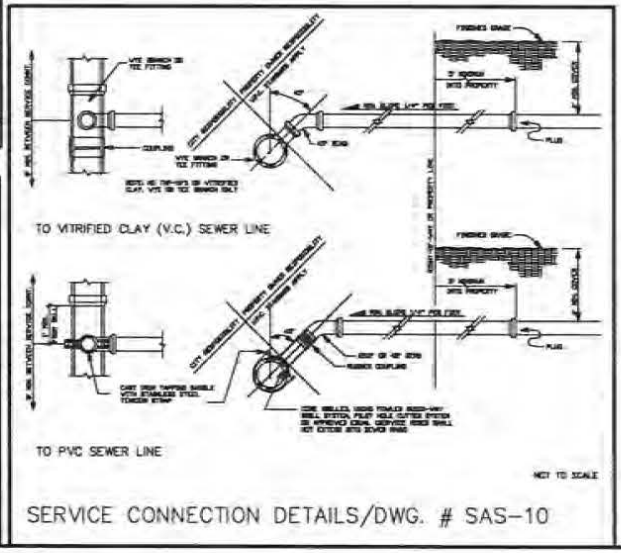
CONCRETE BASE DETAIL/DWG. # SAS-7



MANHOLE ADAPTER DETAIL/DWG. # SAS-8



RESTRAINED JOINT DETAIL/DWG. # SAS-9 NOT TO SCALE



SERVICE CONNECTION DETAILS/DWG. # SAS-10

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

INSTALLATION

CONSTRUCTION MATERIALS

FIELD QUALITY CONTROL

CITY OF SANTA FE
WATER QUALITY DIVISION

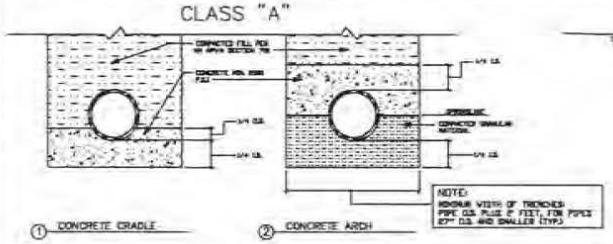
TITLE: SANITARY SEWER
STANDARD CONSTRUCTION DETAILS

SHEET C-1002

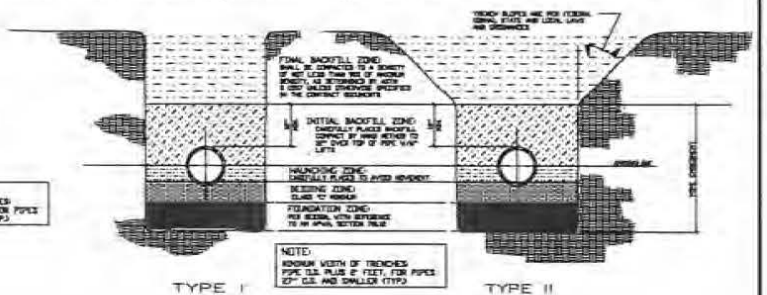
TRENCH BEDDING AND INSTALLATION DETAILS/DWG. # SAS-11

NOT TO SCALE

CLASS "A"

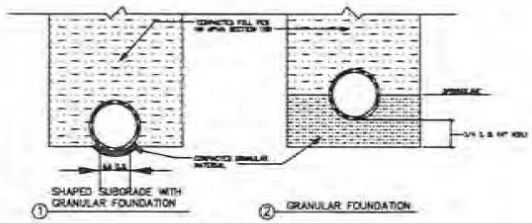


① CONCRETE CRADLE ② CONCRETE ARCH



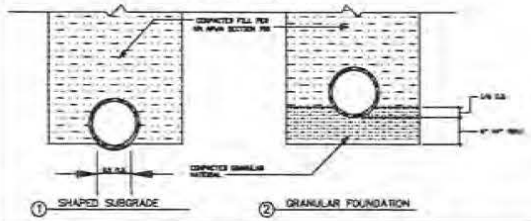
TYPE I TYPE II

CLASS "B"

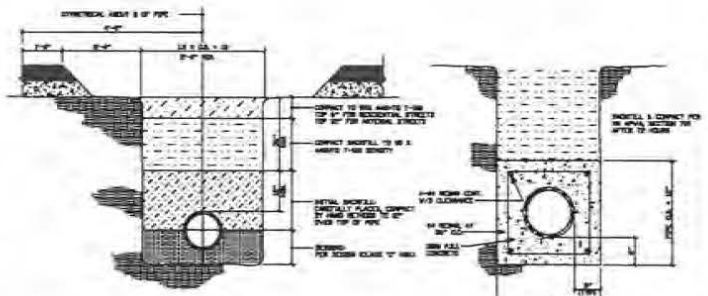


① SHAPED SUBGRADE WITH GRANULAR FOUNDATION ② GRANULAR FOUNDATION

CLASS "C"



① SHAPED SUBGRADE ② GRANULAR FOUNDATION



PAVED AREAS

CONCRETE ENCASEMENT

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1

CR-2

CR-3

CR-4

CR-5

CR-6

INSTALLATION

I-1

I-2

I-3

CONSTRUCTION MATERIALS

CM-1

CM-2

CM-3

FIELD QUALITY CONTROL

FQC-1

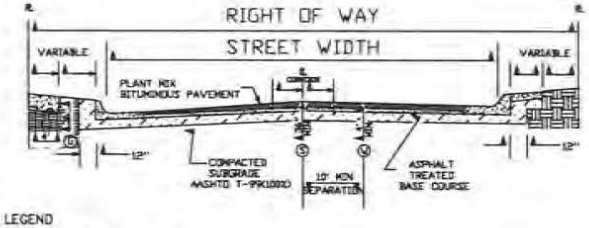
FQC-2

FQC-3

FQC-4

NOTE:

TYPICAL UTILITIES SEPARATION DETAIL/DWG. # SAS-12

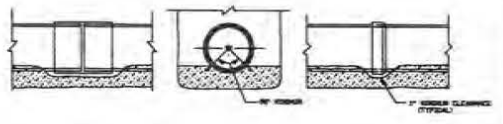


LEGEND

S SEWER
G GAS
W WATER
P PROPERTY LINE
C CENTER LINE

NOT TO SCALE

BELL OR COUPLING INSTALLATION DETAIL/DWG. # SAS-13



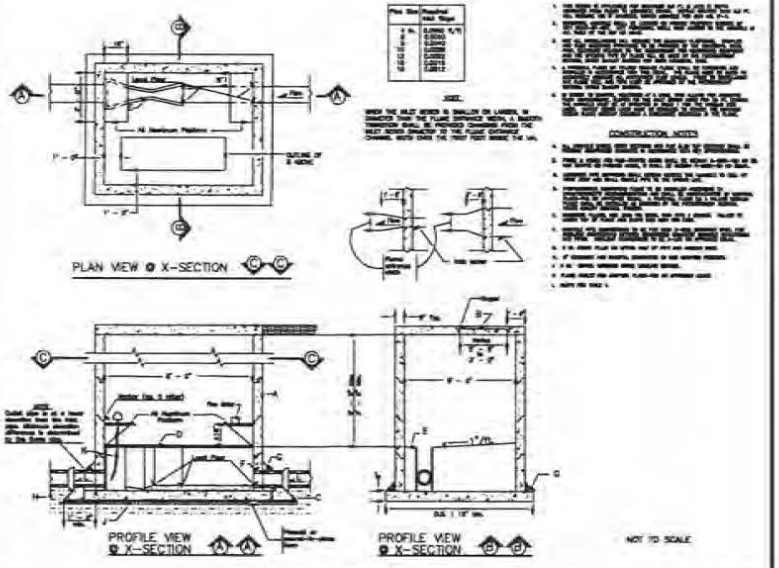
NOT TO SCALE

CITY OF SANTA FE
WATER QUALITY DIVISION

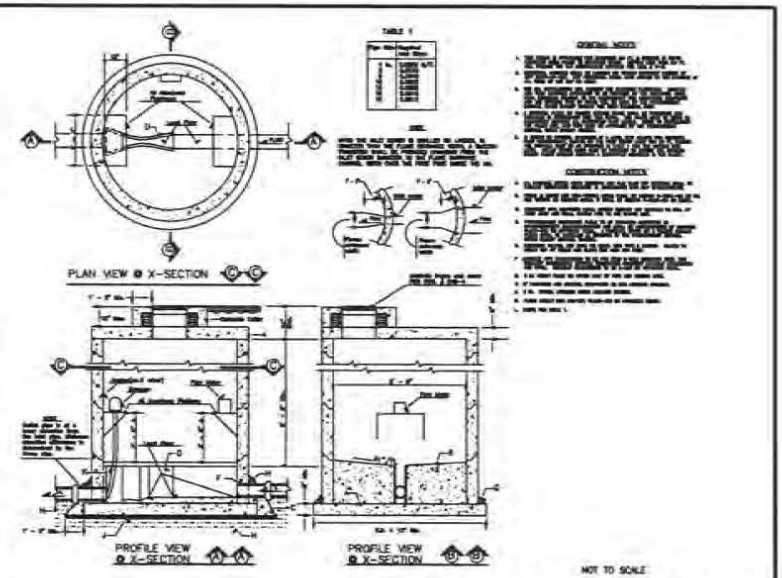
TITLE: SANITARY SEWER
STANDARD CONSTRUCTION DETAILS

DATE: JULY 1992

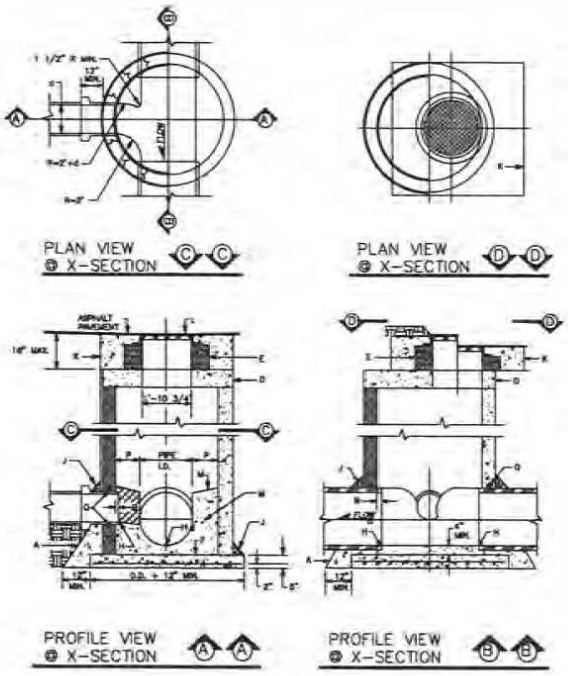
SHEET C-1003



SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (6x8 RECTANGULAR)/DWG # IP-2



SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (8 FT. DIA.)/DWG. # IP-1



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 "S" M.H. FOR DEPTHS OF 8' OR MORE.
3. DESIGN APPLIES TO 4', 6' & 8' MANHOLES.
4. M.H. GREATER THAN 15' 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

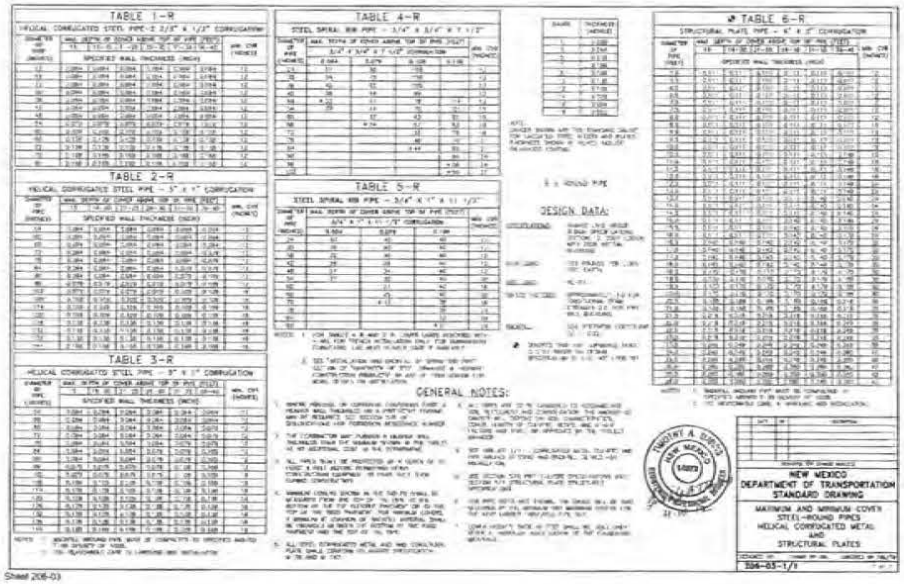
A. CONCRETE PIPE SUPPORT SHALL EXTEND OUTSIDE OF M.H. TO BELL OF FIRST JOINT & SHALL CRADLE PIPE TO SPRING LINE. NOT APPLICABLE FLEXIBLE PIPE.
B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 3" MAX., MEASURED AT SPRING LINE OF PIPE.
C. PRECAST CONCRETE CONE?
D. USE MAX. 4 COURSES OR, NO BRICK ON UNPAVED STREET FOR FUTURE ADJ. OF M.H. FRAME TO PAVEMENT GRADE, PLASTER INSIDE WITH 1/2" MORTAR.
E. CONCRETE BASE TO BE POURED IN PLACE USING NO. 4 BARS AT 8" O.C. EA. WAY FOR M.H. DEPTH OF 10' OR GREATER, NO. 4 BARS AT 12" O.C. EA. WAY FOR M.H. LESS THAN 10' IN DEPTH.
H. MIN. CLEAR OF STUB OR LATERAL AS SHOWN ON PLANS.
J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
K. USE 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
O. SHELF TO BE 6" WIDE MIN.
Q. APPROVED WATERSTOP TO BE COMPATIBLE WITH TYPE OF PIPE.

MANHOLE TYPE "C" DETAIL/DWG. # SAS-14 NOT TO SCALE

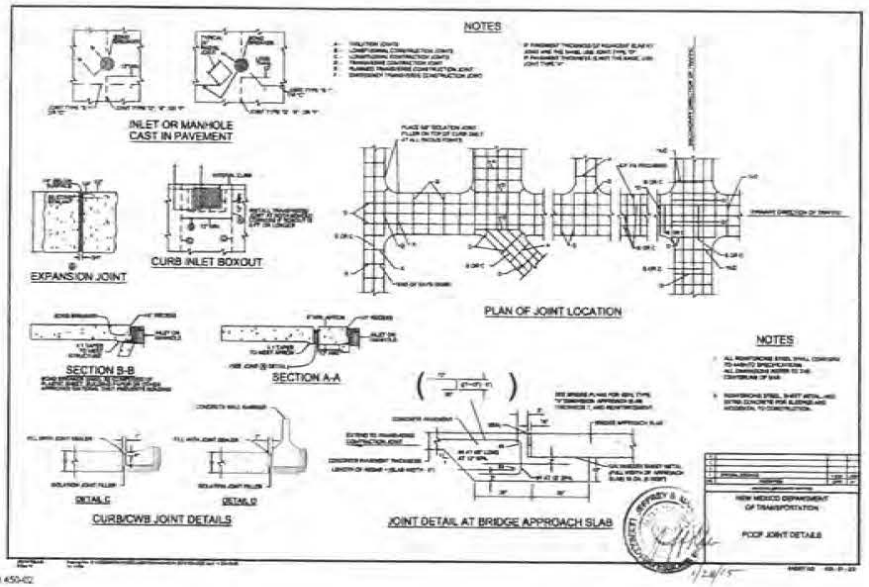
CITY OF SANTA FE
WATER QUALITY DIVISION

TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

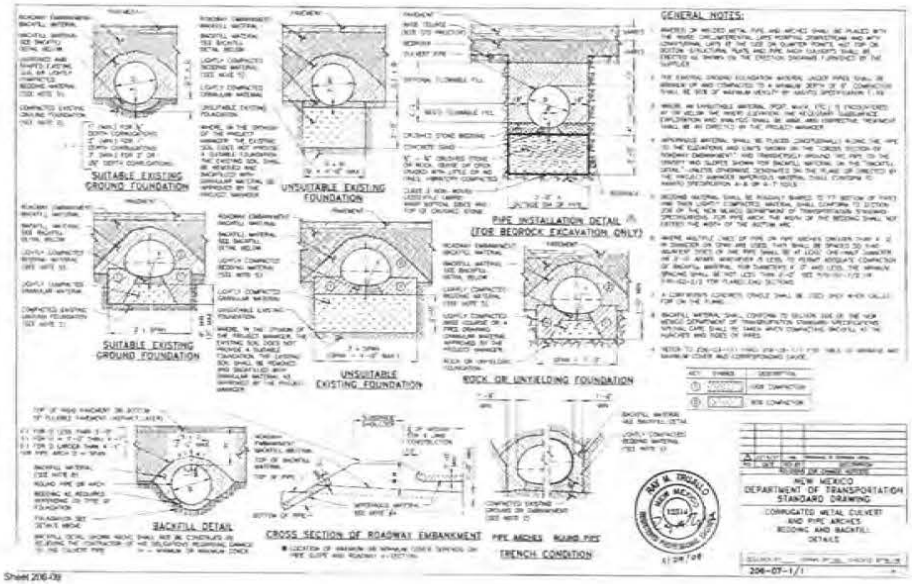
SHEET C-1004



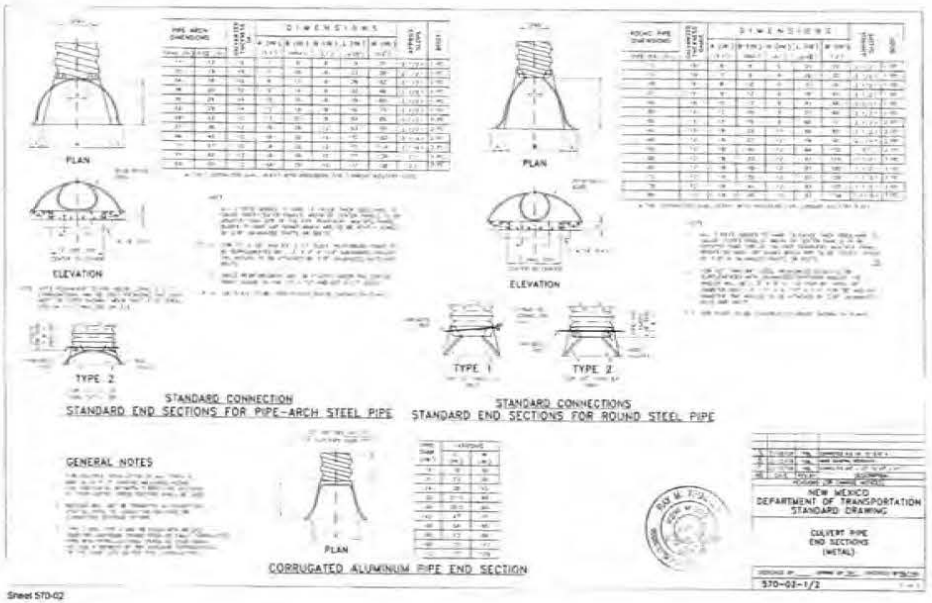
Sheet 206-03



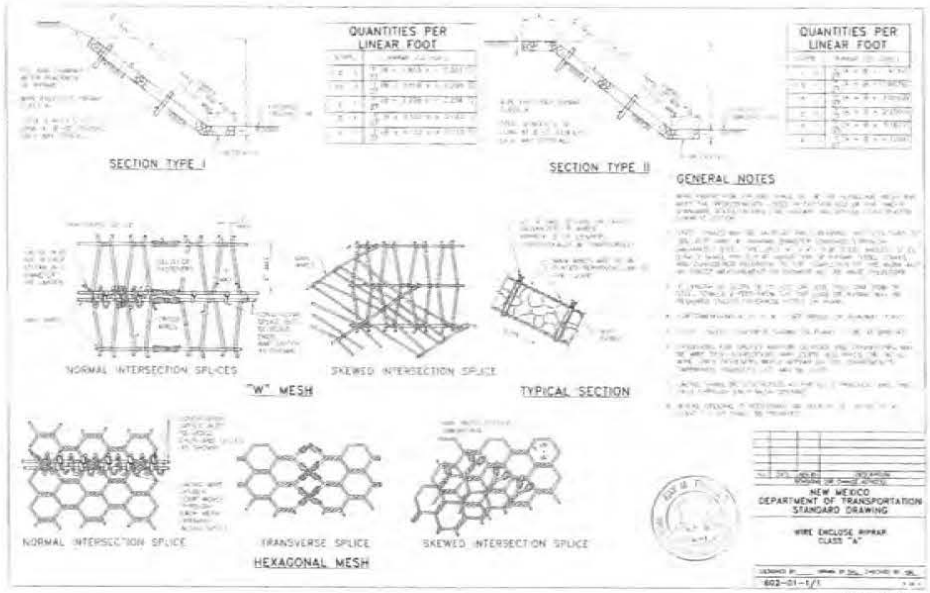
Sheet 450-02



Sheet 206-09



Sheet 570-02



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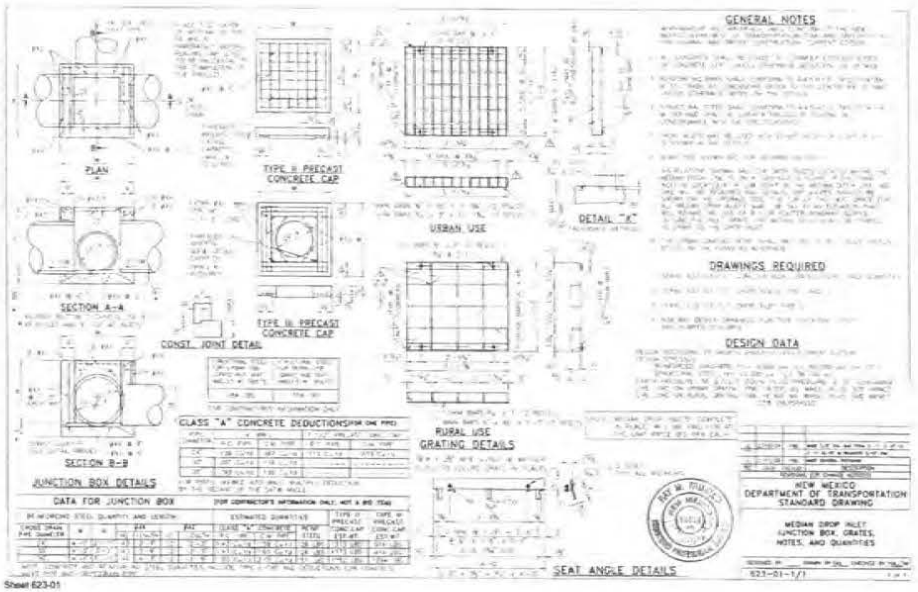

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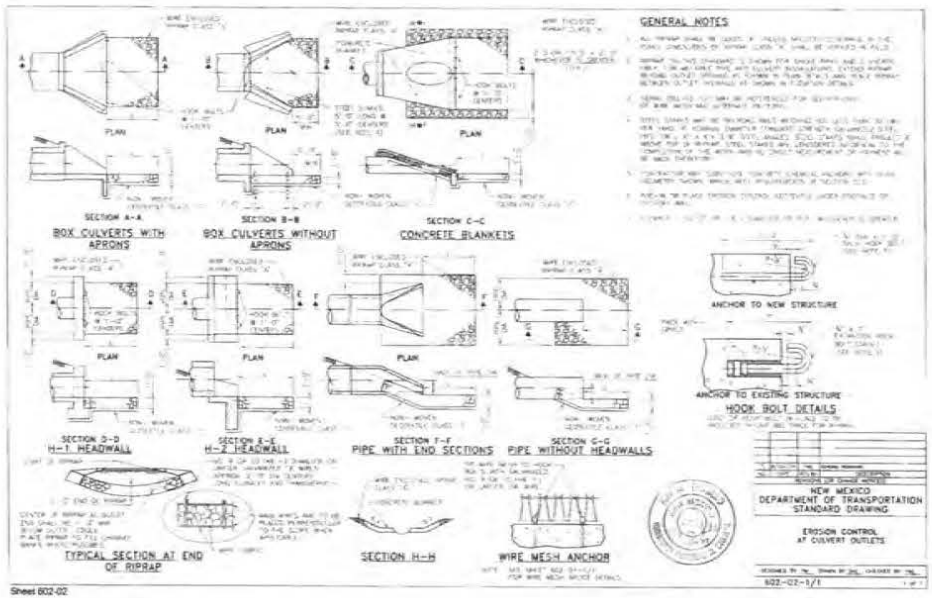

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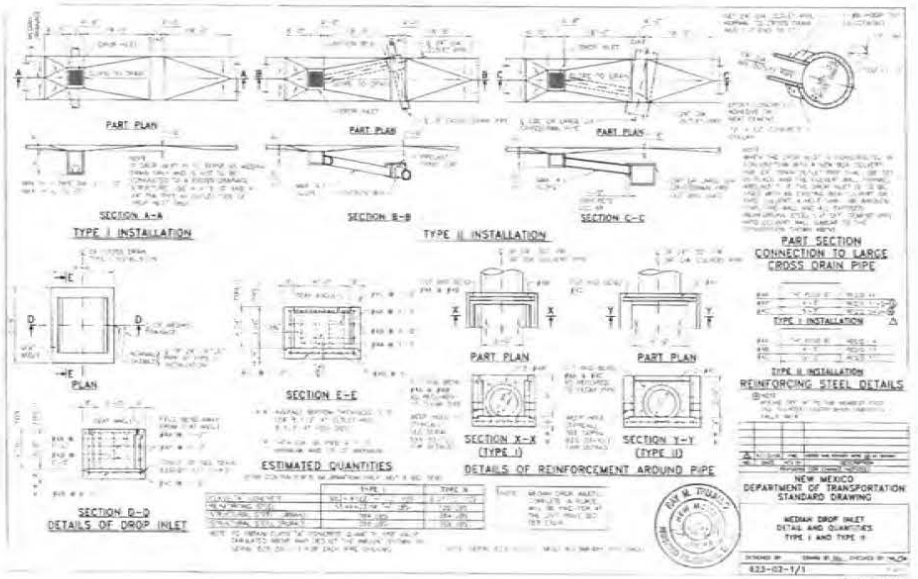

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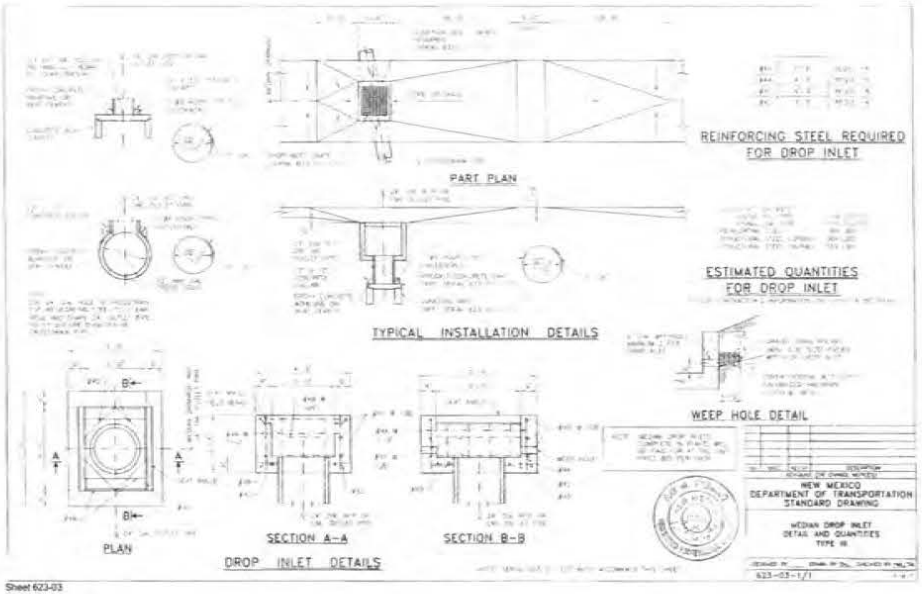

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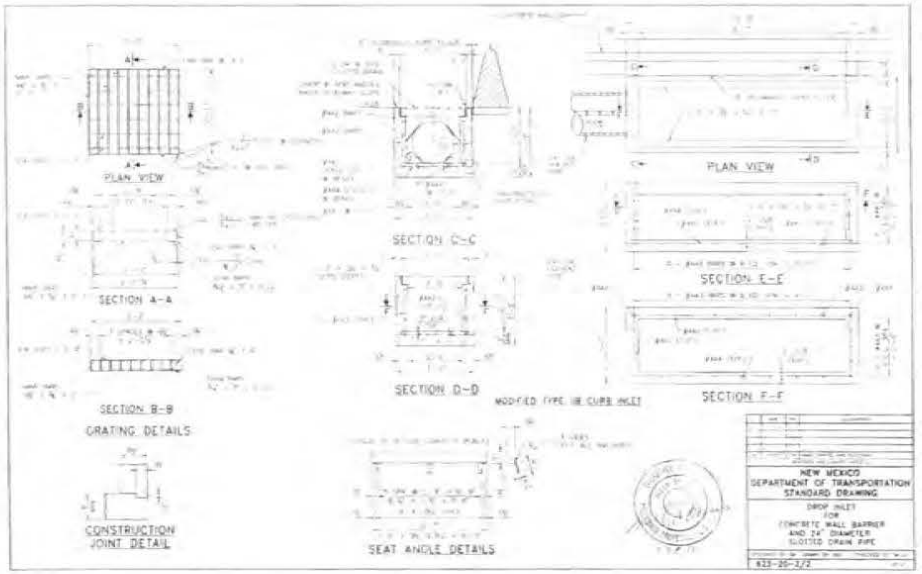

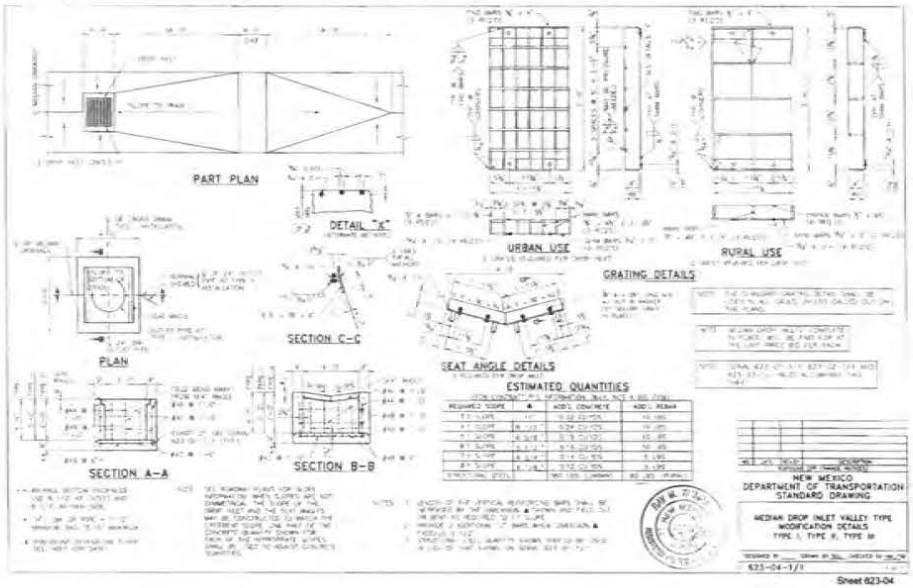

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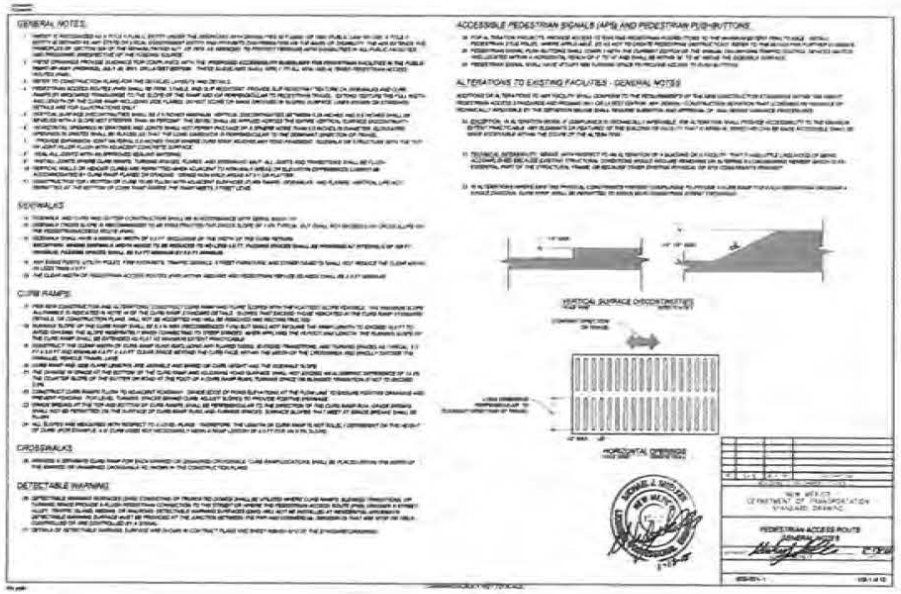
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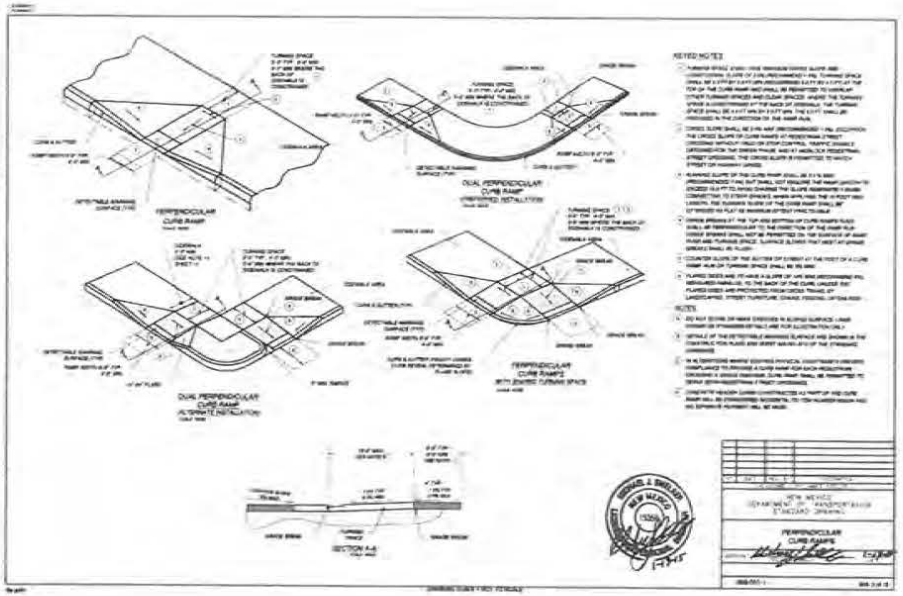
ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES
SIDEWALKS
CURB RAMPS
CROSSWALKS
DETECTABLE WARNING
VERTICAL SURFACE DISCONTINUITIES
HORIZONTAL GRADES
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING
PEDESTRIAN ACCESS ROUTE
GENERAL NOTES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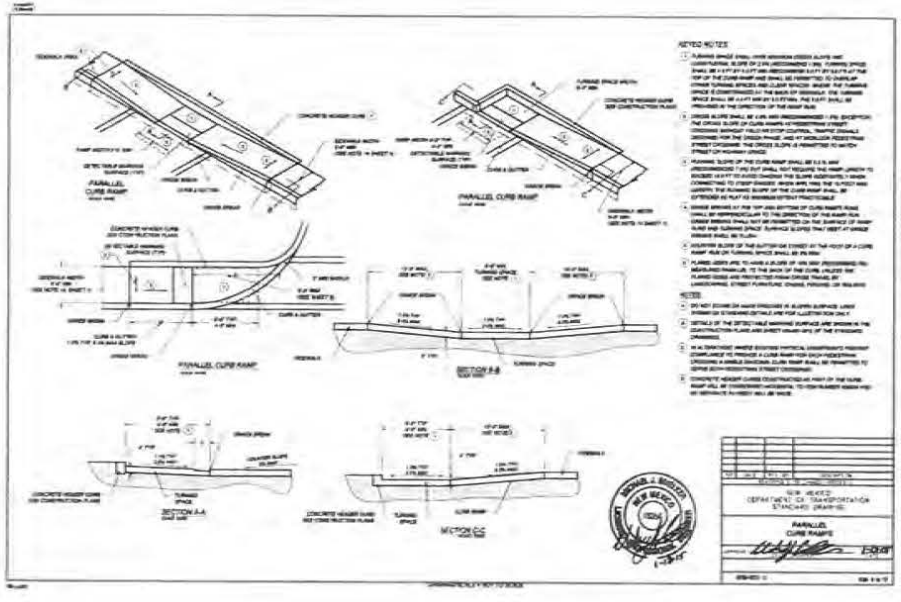
DUAL PERPENDICULAR CURB RAMP
DUAL PERPENDICULAR CURB RAMP ALTERNATE INSTALLATION
PERPENDICULAR CURB RAMPS WITH SHARED TURNING SPACE
SECTION A-A
NOTES
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING
PERPENDICULAR CURB RAMPS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SECTION B-B
SECTION A-A
SECTION C-C
NOTES
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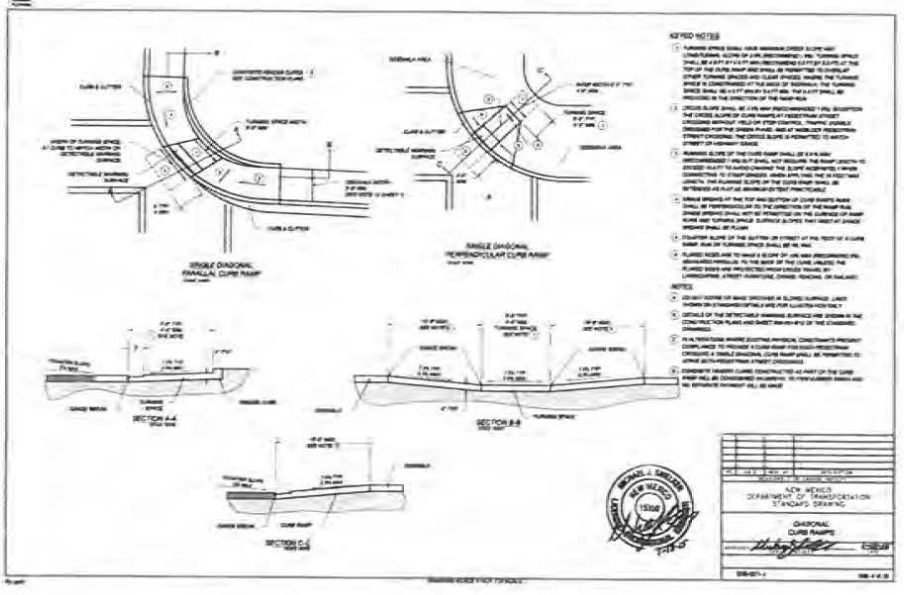
PARALLEL CURB RAMPS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SINGLE DIAGONAL PERPENDICULAR CURB RAMP
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SECTION B-B
SECTION C-C
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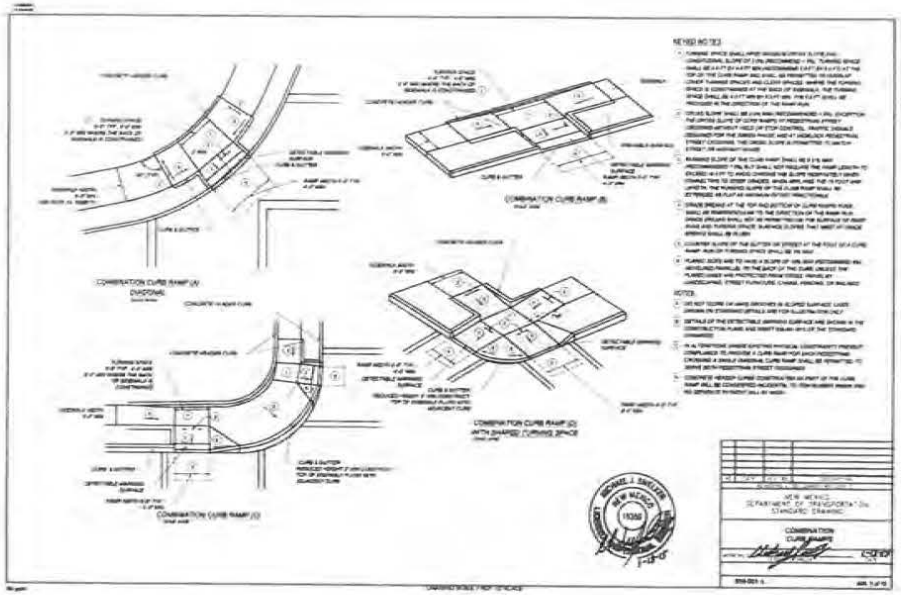
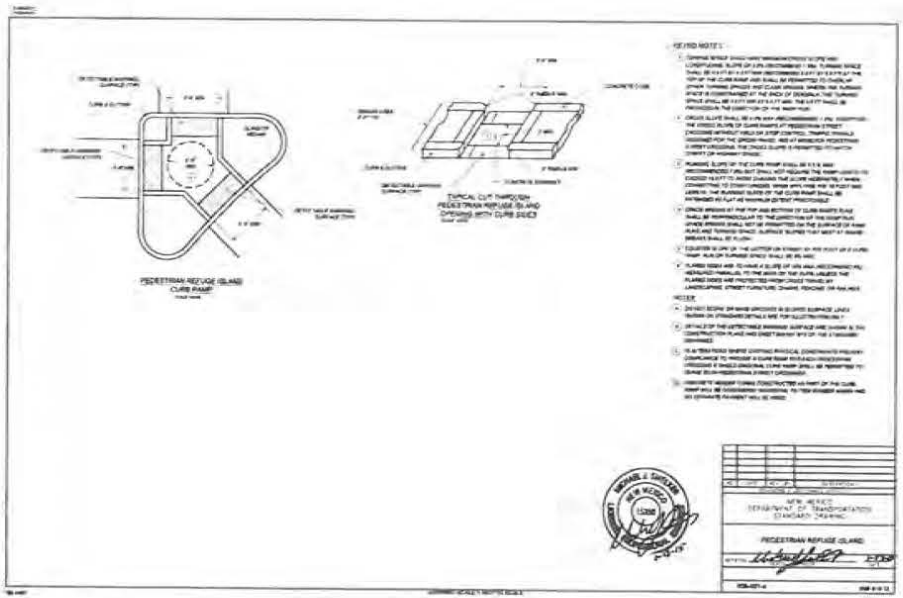
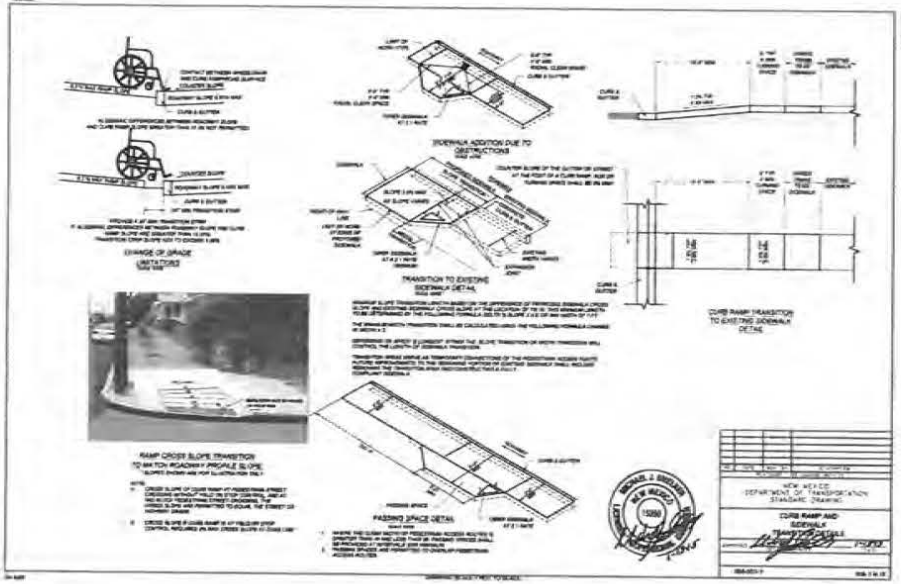
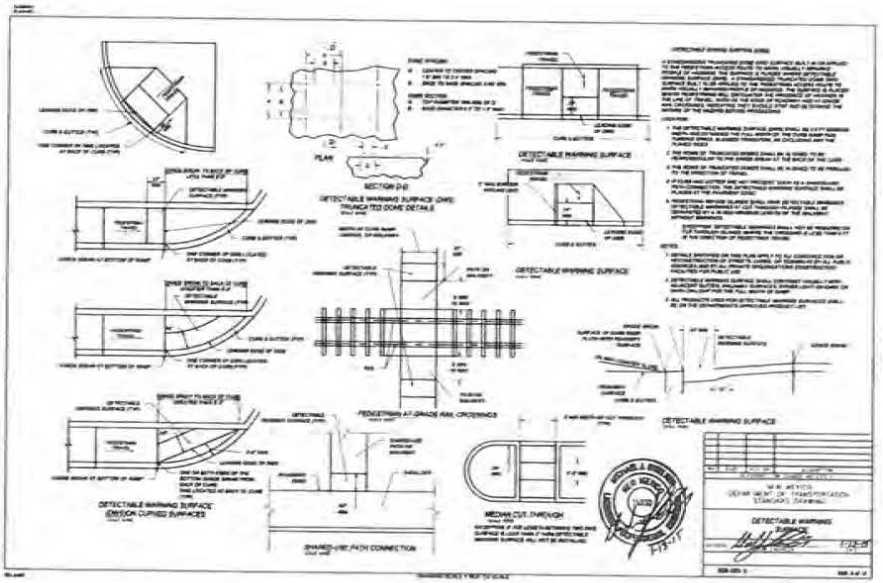
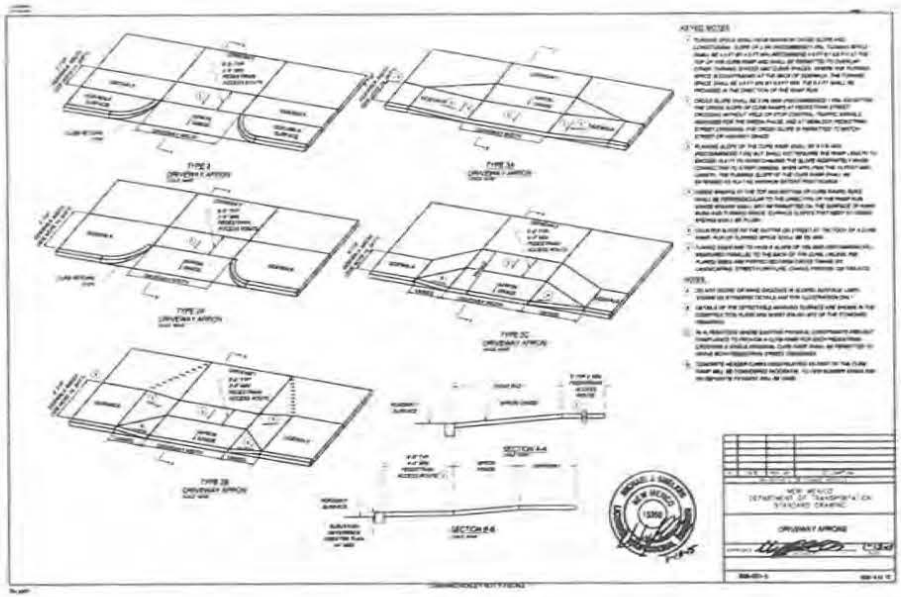
DIAGONAL CURB RAMPS

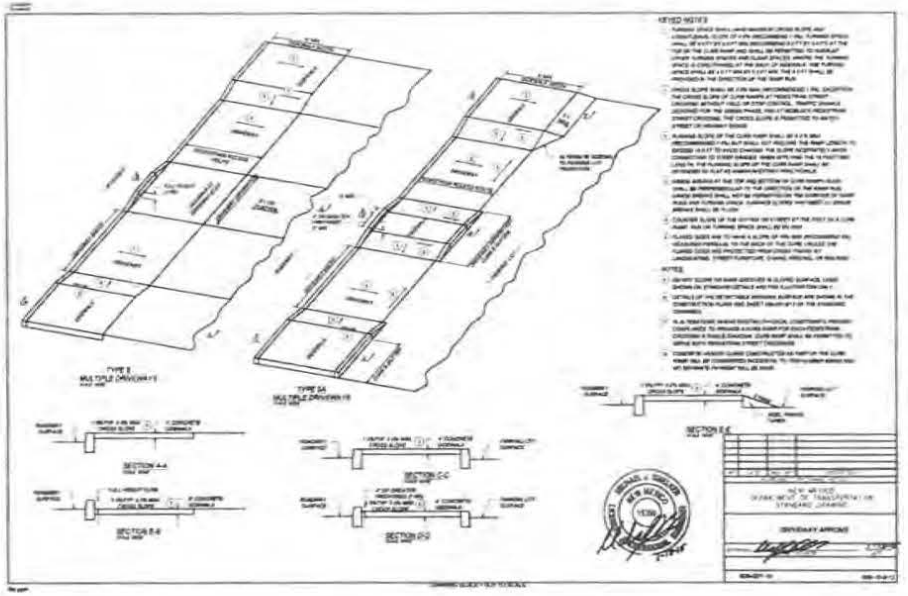


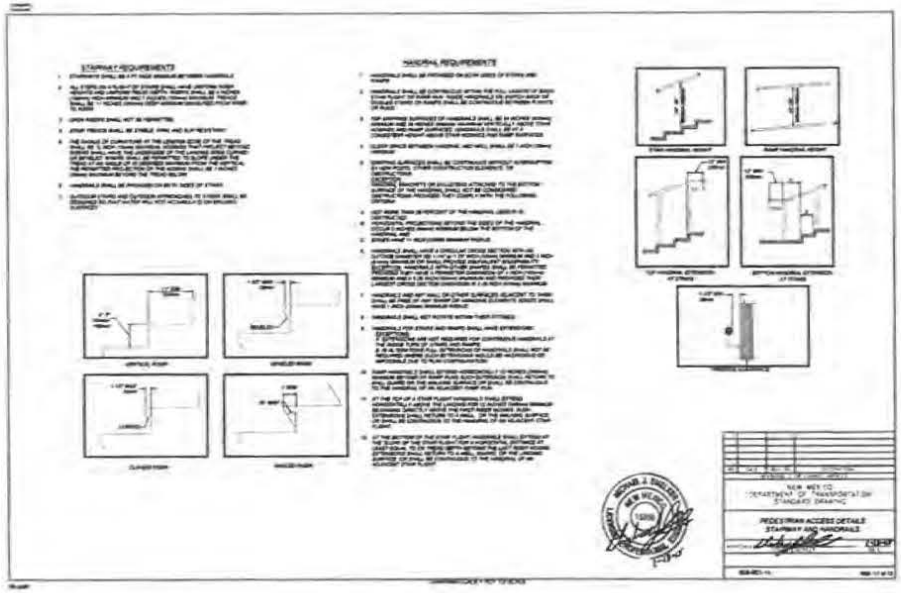


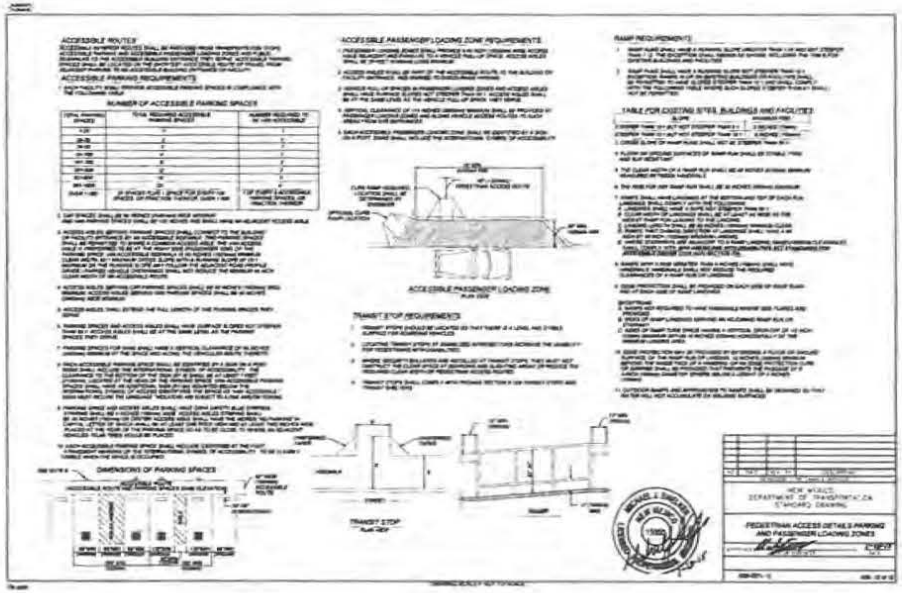










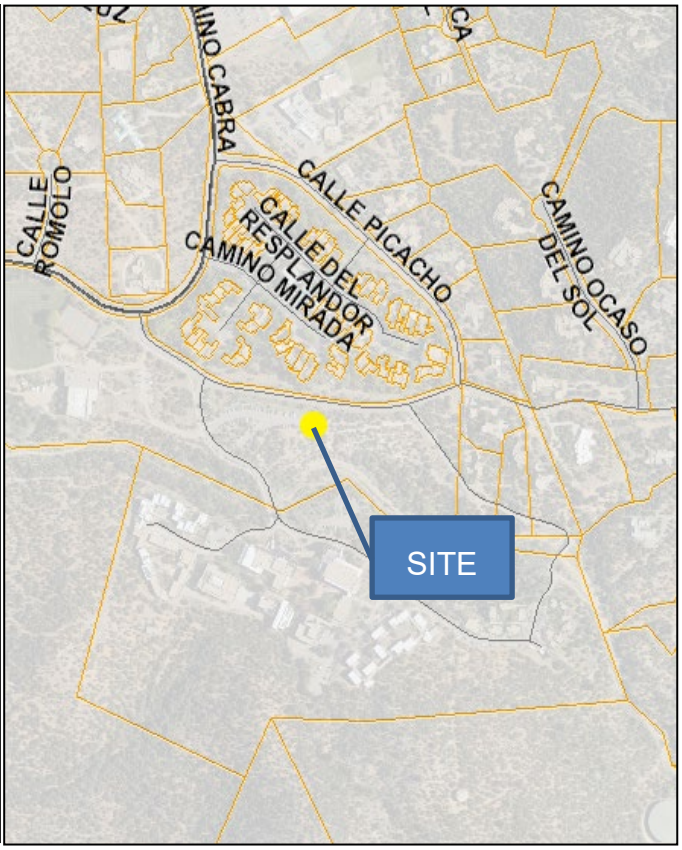


Land Use Department
Planning Commission Staff Report

Case No:	2020-2639
Hearing Date:	July 1, 2021
Applicant:	Gravity Pad Partners, LLC
Request:	Telecommunication Facility
Location:	1160 Camino De Cruz Blanca
Case Mgr.:	Daniel A. Esquibel
Zoning:	R-1PUD (Residential-Residential- 1 Dwelling units per acre)
Overlay:	Historic Review District
Pre-app. Mtg:	May 14, 2020
ENN Mtg.:	June 30, 2020, and May 25, 2021

Proposal:

Request approval of a new telecommunication facility with a waiver to height, pursuant to Section 14-6.2(E) "Telecommunication Facilities". The property is approximately 19.04 acres, zoned R-1PUD (Residential – one dwelling unit per acre, Planned Unit Development), and is within the Historic Design Review Overlay.



Case #2020-2639. 1160 Camino De Cruz Blanca Telecommunications Facility. Gravity Pad Partners, LLC, Agent, for AT&T/FirstNet NML0255, Applicant, requests approval of a new telecommunication facility with a waiver to height, pursuant to Section 14-6.2(E) "Telecommunication Facilities". The property is approximately 19.04 acres, zoned R-1PUD (Residential – one dwelling unit per acre, Planned Unit Development), and is within the Historic Design Review Overlay.

I. RECOMMENDATION

The Land Use Department recommends **APPROVAL**, subject to the recommended conditions of approval, included in Section II of this report.

Three motions will be required in this case:

- ***APPROVE or DENY*** *the Telecommunication Facility under Subsection 14-6.2(E) subject to conditions of approval recommended by staff.*
- ***APPROVE or DENY*** *the waiver to height pursuant to Subsection 14-6.2(E)(8) subject to conditions of approval recommended by staff.*
- ***APPROVE or DENY*** *the Findings of Fact and Conclusions of Law listed in Exhibit A.*

II. CONDITIONS OF APPROVAL

The following are the staff-recommended conditions of approval for this project:

Table 1 Conditions of Approval

#	Condition of approval	Dept/Division	Completion Date
1	The construction plans shall include a note stating that no antenna shall extend past the top of the City-approved height for the tower. This condition extends to all antennas that may co-locate on the tower in the future.	Current Planning Division	Prior to filing an application for building permit
2	The plans shall include measures to restore all public and private property to its pre-construction state, including any improvements, landscaping, fixtures, structures, or facilities damaged during construction.		
3	Pursuant to Section 106 of the National Historic Preservation Act (NHPA) and the FCC's Nationwide Programmatic Agreement, Section VII, the Applicant must enter into a Memorandum of Agreement (MOA) with the Federal Communications Commission (FCC), the State Historic Preservation Office (SHPO), the City, and any other consulting parties to resolve the adverse effect to the St. John's College Campus, which is listed on the National Register.		
4	The MOA must include a provision that limits the height of the tower, antennas, and any future co-locations to the maximum height approved by the City.		
5	The tower elevation drawings must be revised to reflect the City-approved heights for the tower, antennas, and base station.		
6	The MOA must include provisions to minimize the visual impacts of the tower, antenna, and ground equipment, as required by SFCC § 14-6.2(E)(5)(c)(ii). Acceptable methods include concealment, screening, camouflaging, color, materials, texture, shape, size, and location. The proposed equipment will be placed above ground, designed in a manner not to disrupt or alter the natural forms and landscape. The MOA provisions related to visual impacts shall extend to co-locations to ensure uniformity of the tower concealment and minimization of visual impacts.		
7	The applicant shall monitor the base station for maintenance and repair issues, and shall post a sign with contact information to allow persons to report maintenance and repair issues. The applicant must		

	address maintenance and repair issues within 30 days from first contact regarding the issue. The construction plans must reflect the location and design of the information sign. The property owner shall also be held responsible for violations of this condition.		
8	Any generators proposed by the applicant or telecommunication co-locations shall include a noise analysis showing compliance with SFCC § 14-10.2 *"Noise."*		
9	The applicant shall submit a reclamation plan, including a reroute for access to the trail head if required.		
10	The construction plans shall include a note stating the applicant shall comply with SFCC § 14-6.2(E)(5)(l) (Certification).		
11	The Applicant shall seek review and approval from the Historic District Review Board (HDRB)		

III. EXECUTIVE SUMMARY

Gravity Pad Partners, LLC, Agent for AT&T and FirstNet, is requesting to construct a new "*Telecommunications Facilities" (base station)* located at 1160 Camino De Cruz Blanca, off the east end of the St. John's College parking area. The base station design before the Planning Commission is the second design iteration. The first design was presented and denied by the Historic District Review Board (HDRB) on August 11, 2020. The first design was a 75' high mono-pine tower and related equipment. The Applicant has now filed a second application with a new design that consists of a 65' high monopole design tower, open antennas and related ground equipment. The tower will be set back approximately 72 feet from the north property line. As set forth in Subsection 14-12.1, telecommunications facilities are defined as follows:

> *TELECOMMUNICATIONS FACILITIES*
> *The plant, equipment and property, including but not limited to, fiber optic lines, cables, wires, conduits, ducts, pedestals, towers, antennas, electronics and other appurtenances used or to be used to transmit, receive, distribute, provide or offer telecommunication services.*

Review by the Planning Commission is required because the *base station* is in an R-1 District (Residential-1 dwelling unit per acre), and included in the request is a waiver to allow the antennas and tower to exceed the 35-foot height limit for nonresidential use structures in an R-1 District. The Applicant is requesting a waiver pursuant to Subsection 14-6.2(E)(8) "Waivers," to allow both the antenna heights and tower height a maximum height of 65 feet. The waiver will address both the proposed antenna height and any "co-location" on the tower exceeding the 35' height limit allowed by the district.

Subsection 14-6.2(E)(5)(k) requires towers to be set back from property lines by a distance that is at least equal to the height of the tower. The proposed distance to all surrounding property lines exceeds the height of the tower with the closest property line approximately 72 feet, which is the north property line adjacent to Camino De Cruz Blanca.

This public hearing addresses compliance with Subsection 14-6.2(E)(5) *"General Requirements"* and Subsection 14-6.2(E)(8) *"Waivers".*

The Planning Commission does not have authority to consider radio frequency (RF) emissions as part of its review of this case. Federal law provides that no state or local government may regulate the placement, construction, or modification of telecommunications facilities based on the environmental effects of RF emissions. In this context, federal courts in New Mexico have concluded that "environmental effects" include health effects. The Commission's review and decision to approve or deny must not be based upon the environmental or health impacts of RF emissions but rather upon the criteria provided in this report.

The Applicants have complied with all process requirements of Chapter 14 as follows:

- Pursuant to Subsection 14-3.1(E) *"Pre-application"*: Conducted on May 14, 2020;
- Pursuant to Subsection 14-3.1(F) *"Early Neighborhood Notification" ("ENN")*: Conducted two ENN meetings:
    - Virtual meeting conducted with Microsoft Teams on June 30, 2020 (required for Telecommunication before the Planning Commission); and
    - Virtual meeting conducted with Zoom on May 25, 2021 (required by the Land Use Department for changes to the Telecommunication proposal discussed at the May 14, 2020 ENN);
- Pursuant to Subsection 14-3.1(H) "*Notice Requirements*" for ENN's and Public Hearings.

IV. GENERAL REQUIREMENTS

"All towers and antennas, whether administratively approved or requiring planning commission or historic districts review board approval, shall comply with all applicable city codes and with the following":

Table 2 General Requirements:

Criterion (a) Zoning Districts; Location:	**Criterion Met:**
Telecommunications facilities* are permitted in all zoning districts in accordance with the requirements of this section. However, to the maximum extent technically feasible, *telecommunications facilities* shall be sited:** ***(i) **on existing *structures*;** ***(ii)*** **in *nonresidential* districts; and** ***(iii)*** **in C-2, I-1 and I-2 districts.**	(Yes/No/Conditional/N/A) **YES**

Telecommunication coverage and capacity go hand in hand. Telecommunication facilities are constructed throughout Santa Fe to build networks for the various Telecommunication companies (reference Exhibit F4). The telecommunication facility is proposed on private property within the St. John's College. The proposed location addresses capacity and coverage needs specific to this area for AT&T and FirstNet. However, other Telecommunication companies may be interested in servicing this area and propose co-location on the tower. The proposal is to construct a monopole to mount antennas, and related antenna equipment, and to construct an area on the ground for the transceiver and related ground equipment. Telecommunication facilities are permitted in all zoned districts but are desired in nonresidential, C-2 or I-2 districts. It is not technically feasible to locate this telecommunication facility in a nonresidential, C-2 or I-2 district as they do not exist within the submitted search ring which address the service area. There are no commercially zoned parcels closer than 2 miles from the site.	
Criterion (b) Maximum Height; ***Telecommunications facilities* located on existing *structures* shall not exceed the height of the *structure* upon which the facility is located unless otherwise allowed under this section. *Telecommunications facilities* located on new *structures* shall not exceed the maximum height for *buildings* otherwise allowed as set forth in Chapter 14 with the exception that in C-2, I-1 and I-2 districts the height limit of *telecommunications facilities* shall be one hundred feet.**	**Criterion Met:** (Yes/No/Conditional/N/A) **CONDITIONAL**
The allowed height in an R-1 District is 35 feet for nonresidential structures on private property. The application includes a waiver request to allow a 65-foot new monopole tower and antennas. If the Planning Commission approves the height waiver, which is addressed in Section V of this staff report, then this criterion will be satisfied. If the Planning Commission denies the waiver, the Applicant will be required to lower the tower and top of antennas to a height of 35 feet. The plans identify an inconsistent height elevation. The east tower elevation identifies top of antennas mounted to a maximum height of 65 feet, while the west tower elevation identifies antenna heights exceeding the Applicant's 65' height waiver request. Under staff's recommended conditions of approval, the tower elevation drawings will need to be revised to reflect City approved heights prior to submitting an application for building permit. The maximum approved height will include and restrict the height of the top of the antenna(s). Staff also recommends a condition that would require the Applicant to include mitigation measures in the Applicant's MOA with the FCC and SHPO that will prohibit any future co-located antennas from exceeding the approved Planning Commission height.	

Criterion (c) Aesthetic Requirements; **Subject to applicable federal standards and design and safety codes, the following criteria must be met:** **(i) *telecommunications facilities* shall be installed underground to the maximum extent technically feasible;** **(ii) if above ground, the *telecommunications facilities* shall be designed, installed and maintained in such a manner as to minimize the visual impact upon adjacent lands, public *rights of way* and *residentially zoned property*. Acceptable methods to minimize visual impact include concealment, *screening*, camouflaging, color, materials, texture, shape, size and location;** **(iii) consideration shall be given to minimize disruption to or *alteration* of the natural land forms and *landscape*; and** **(iv) permanent lighting of *telecommunications facilities* shall not be allowed unless there is no alternative available to comply with federal law, in which case all proposed lighting shall be shown in the *application*. Permanent lighting shall not include equipment status indicator lights exceeding fifteen watts of power.**	**Criterion Met:** (Yes/No/Conditional/N/A) **CONDITIONAL**

(i) A criterion that requires placement of telecommunication equipment underground conflicts with 47 U.S.C. § 332 (7)(B)(i)(II), which prohibits City regulation from prohibiting or having the effect of prohibiting the provision of service. The FCC has opined that *"undergrounding requirements can amount to effective prohibitions by materially inhibiting the deployment of wireless service.[1]"* Staff recommends that SFCC Subsection 14-6.2(E)(5)(c)(i) is preempted by federal law and not enforceable.

(ii) St. John's College is listed on the National Registry of Historic Places. The Applicant is working with SHPO to complete the process required by Section 106 of the National Historic Preservation Act. The City is participating as a consulting party. In this process, the Applicant originally proposed a 95' tower designed to look like a pine tree ("monopine"), with related antennas and ground equipment. Based on initial input from SHPO, the Applicant revised the proposed height to 65', changed the design to be a monopole tower with visible antennas and ground equipment, and provided photo simulations. On February 11, 2021, the SHPO formally concluded that the proposal would have an adverse effect on the campus and recommended that the Applicant either (1) change the design or location to remove the adverse effect or (2) develop an MOA to resolve the adverse effect. The Applicant has decided to seek zoning approval from the City before developing an MOA. As a result, the Commission's approval of this application is contingent upon the Applicant entering into an MOA with the FCC, SHPO, and the City. Staff's conditions of approval require the Applicant to incorporate provisions into the MOA that will minimize visual impacts of the monopole tower, antenna, and ground equipment, using acceptable methods as described in 14-6.2(E)(5)(c)(ii).

(iii) The proposed equipment will be placed above ground, designed in a manner not to disrupt or alter the natural forms and landscape. Concealment will satisfy the requirements of 14-6.2(E)(5)(c)(iii).

(iv) The Applicant is not proposing permanent lighting.

Criterion (d) Archaeological Requirements; **Compliance with Section 14-5.3 SFCC 1987 regarding the city's archaeological review districts is required.**	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
Comments received from the City Historic Preservation Division state that archaeological reconnaissance is not triggered by this application.	
Criterion (e) Signs; **Signs are not allowed unless required for safety reasons or otherwise in compliance with federal, state or local law, or unless permitted by the city;**	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The Applicant has addressed this criterion.	

[1] FCC FACT SHEET Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment; Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment Declaratory Ruling and Third Report and Order WT Docket No. 17-79; WC Docket No. 17-84.

Criterion (f) Telecommunications facilities Maintenance; **All telecommunications facilities shall be maintained so as to be safe, orderly, attractive and in conformity with all applicable federal, state and city laws, ordinances, regulations and codes. Weeds, trash and graffiti shall be promptly removed. All lockable telecommunications facilities shall be kept locked when not being actively serviced. All non-lockable telecommunications facilities shall be kept closed when not being actively serviced.**	**Criterion Met:** (Yes/No/conditional/N/A) **CONDITIONAL**
The Applicant did not address this requirement. Staff's conditions of approval require that Gravity Pad LLC shall monitor the base station for maintenance and repair and provide a sign with contact information to allow neighborhood contact for maintenance and repair issues. All maintenance and repair issues shall be complete within 30 days from contact of the issue. The property owner shall also be responsible for any violation of this section.	
Criterion (g) Noise; **All *telecommunications facilities* shall be designed, constructed and installed in such a manner as to minimize noise to the maximum extent feasible, but in no event shall noise exceed the standards set forth in Article 10-2 SFCC 1987.**	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
14-10.2 *"Noise"* requires that dBA noise levels in an R-1 Residential Districts not exceed 50 dBA from 7:00 AM – 9:00 PM, and 55 dBA from 9:00 PM – 7:00 AM. No waiver is requested from *SFCC* 14-10.2 *"Noise"*, and this ordinance applies to this proposal and all co-locations to the base station. The Applicant states that *"[a]t no time will the proposed site exceed the standards set forth in Article 10-2 SFCC 1987."* Staff's conditions of approval require that any proposed generator shall include a noise analysis showing compliance with SFCC 14-10.2 *"Noise."*	
Criterion (h) Restoration of Improvements; **Promptly upon completion of a tower or antenna construction, all public and private property improvements, landscaping, fixtures, structures and facilities damaged in the course of construction shall be restored to a condition not less than its condition before commencement of construction or as otherwise agreed to by the applicant.**	**Criterion Met:** (Yes/No/conditional/N/A) **CONDITIONAL**
The Applicant did not address this requirement. Staff's conditions of approval require the Applicant to submit a reclamation plan prior to filing an application for building permit.	
Criterion (i) Airport; **Telecommunications facilities within the Class D airspace surrounding the Santa Fe Airport shall be constructed in conformity with all applicable FAA regulations. A copy of any submittals required to be made to the FAA shall be provided to the city's airport manager at the time the submittal is made to the FAA.**	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The proposal is not within a Class D airspace and is not required to submit notification to the FAA.	

Criterion (j) Co-location Requirement; **A tower or tower alternative shall not be approved unless the applicant and the telecommunications owner agree to allow on a nondiscriminatory basis, to the maximum extent technically feasible, the co-location of other antennas on commercially reasonable terms on the approved tower or tower alternative.**	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The Applicant has designed the tower to accommodate co-location. Two telecommunications providers currently propose to locate on the tower: AT&T and First Net.	
Criterion (k) Tower Setbacks and Separation Distances Between Towers; **All towers shall be set back a distance equal to at least one hundred percent of the height of the tower from any adjoining lot line, measured from the base of the tower. A tower shall not be sited closer than one thousand (1,000) linear feet to another tower, measured from the base of the towers, unless co-location on the existing tower is not technically feasible or would have a significant adverse visual impact. (Ord. No. 2014-31 § 13)**	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The proposed height of the monopole is 65 feet. The nearest property line from the approximate center of the tower is approximately 75 feet. The distance to the closest existing Telecommunication Stealth Facility is approximately 1.3 miles (7,300 feet).	
Criterion (l) Certification; **On or before one year after the date of any final action approving an application and annually thereafter, the applicant shall provide to the land use director the certification of qualified independent parties that based on an inspection of the approved telecommunications facilities their structural integrity remains intact and they remain in compliance with the radio frequency exposure limits set out in 47 C.F.R. 1.310 Table I (A) and (B).**	**Criterion Met:** (Yes/No/conditional/N/A) **CONDITIONAL**
The Applicant did not address this requirement. Staff's conditions of approval require the applicant to add a note to the development plans stating that the Applicant shall comply with SFCC 14-6.2(E)(5)(l).	

V. WAIVER

Subsection 14-6.2(E)(8) "Waivers" states:

(a) The Planning Commission may grant a waiver of the standards set forth in this section or otherwise within its jurisdiction only if the planning commission finds that the waiver:

(i) is in the best interest of the community as a whole;	**Criterion Met:** (Yes/No/Conditional/N/A) **YES**

As it is stated below, it is not uncommon to find households opting to use mobile phones as primary sources of voice communication versus the landline telephone, and for internet access. The use of mobile technology in household appliances and entertainment systems is also more commonplace. Mobile technology has also enhanced communications for life saving technology within both the public safety and medical fields. FirstNet is an Applicant in this proposal. FirstNet was established out of the 9/11 Commission to enhance communication used by Fire, Police and Emergency Medical Services (EMS). Congress established the First Responder Network Authority (FirstNet) in 2012 as part of the Middle Class Tax Relief and Job Creation Act of 2012.[2] The FirstNet network is being built by AT&T. Staff finds that these circumstances satisfy the criterion of 14-6.2(E)(8)(A)(i).	
(ii) will expedite the approval of an *antenna* or *tower*;	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The applicant has stated to *"expedite the approval of any colocation carrier that wanted to locate on the site."*	
(iii) will not jeopardize the public health, safety and welfare, to the extent the *city* has jurisdiction;	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The applicant is proposing to develop the Telecommunication in accordance with FCC and City standards, including the deployment on the tower of a FirstNet Network.	
(iv) will either mitigate the adverse visual impacts of *antenna* and *tower* proliferation or limit the need for construction of new *tower*s or *antenna*s;	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The Applicant has agreed and engineered the Base Station to accommodate colocation required by Chapter 14-6.2(E). The applicant is development a MOA as part of the Section 106 Process between the SHPO and FCC to best mitigate to the extent technically feasible adverse visual impacts.	
(v) will better serve the purposes set forth in Subsection 14-6.2(E)(1);	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The Applicant is in al Section 106 process with the SHPO and FCC with the City of Santa Fe as Co Consultants. Following the outcome of City review, the applicant will submit a MOA to address adverse visual impacts to the extent technically feasible. Modification to the application have already been made by the application that reduced the height of the Tower to help address visual impact issues.	
(vi) if the proposed site is located in the escarpment or south-central highway corridor overlay districts, that the *applicant* has demonstrated to the satisfaction of the planning commission that it has explored all alternatives to the proposed site and to the proposed design and that location outside those districts is not practicable.	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The proposed site is not located within the escarpment or south-central highway corridor overlay districts.	

[2] SEC. 6204. Establishment Of The First Responder Network Authority.

(vii)	improved *telecommunication services* to Santa Fe residents and institutions.	**Criterion Met:** (Yes/No/conditional/N/A) **YES**
The applicant is proposing to enhance service with limited to no service in the area. The construction of the Base Station will improve service for AT&T customers in the area, as well as provided FirstNet service in the area. Colocation of other carriers will expand additional carrier service to area residents and institutions.		

The Applicant has addressed items (i) through (vii) above (reference Exhibit G *"Applicant Submittals"*).

Subsection14-6.2(E)(8)(b) "Wavers" identifies *"Factors to be considered in granting a waiver"* to justify the Findings which include:

(i) the design of the proposed telecommunications facilities, with particular reference to design elements that reduce or eliminate adverse visual impact including lighting;

Staff Review:
The design of the proposed tower is being processed by the SHPO along with the City through the Planning Commission and Historic Districts Review Board (HDRB). The application is subject to Section 106 review with the SHPO, and the City acting as a consulting party. The original design was a 75-foot-high monopine tower. As a result of the Section 106 process the Applicant reduced the tower from a 75-foot-high monopine tower to a 65' high monopole design. Comments and correspondence received from the SHPO regarding the tower design stated despite the reduction to 65' in height, "*Section 106 consultation found that the proposed cell tower would result in an adverse effect to the St. Johns College Campus, which is listed on the National Register."* The Applicant is now proposing a 65' high monopole design through the City. Following the City process the Applicant submit a MOA in accordance with Section 106 procedures with the SHPO and the FCC to address adverse impacts, pending the outcome of City Review. The MOA will address agreed mitigation methods for the monopole tower. Due to this ongoing process, Staff's conditions require that the MOA include mitigation measures that follow acceptable methods to minimize the visual impact such as concealment, screening, camouflaging, color, materials, texture, shape, size, and location. The proposed equipment will be placed above ground, designed not to disrupt or alter the natural forms and landscape. Concealment shall satisfy the requirements of 14-6.2(E)(5)(c)(ii).

(ii) the nature of uses on adjacent and nearby properties, including proximity to residentially zoned property, the BCD and historic, escarpment and south-central highway corridor overlay district;

Staff Review:
The College is made up of several tracts of land. The project site is located on a tract of land approximately 19.04 acres adjoining Camino De Cruz Blanca. The property is

zoned R-1 (Residential- 1 Dwelling unit per acre) and is within the Historic Review District overlay district. The College is an institutional use allowed within an R-1 District. The project tract includes tennis courts, soccer fields, parking areas, and the College facility buildings. The adjacent uses consist of the additional college facilities and residential lands (reference Table 3 and Figure 1 below).

Table 3 Adjacent Uses

Direction	USE	Approximate Distance (ft)	Zoning
North	Los Miradores	150	Residential
East	Single Family	637	
West	Tennis courts, a soccer field, park, parking areas, buildings.	924	Institutional
South	College Campus and Student Dorms	443	

Figure 1 Distance to Uses (reference Exhibit F3)

(iii) the surrounding topography;

Staff Review:
The topography around the site is hilly and located within the City's Mountainous and Difficult Terrain.

(iv) the surrounding vegetation;

Staff Review:
The surrounding vegetation consists of mature evergreen and shrubs throughout the area. An arroyo runs along the southern boundary of the project tract and has been identified as a FEMA flood zone. The arroyo separates the main college campus and project site. The proposed project site is located at the east end of the parking area for the lower trailhead for the Atalaya Mountain Trail. The trailhead access will need to be rerouted around the telecommunication facility.

(v) the availability of existing towers or other structures for co-location or of alternative antenna configurations with less visual impact;

Staff Review:
There are no towers in the area, the Applicant has proposed a tower design that will allow co-location. The applicant has stated in the ENN that colocation on existing structures are not feasible due to the property owner constraints or network incompatibility. The Applicant will need to address co-location in the MOA to insure uniformity of the tower concealment and mitigation to visual impacts.

(vi) the proposed ingress and egress; and

Staff Review:
The Applicant will utilize existing ingress/egress from the College entrance to access the site.

(vii) improved telecommunication services to Santa Fe residents and institutions.

Staff Review:
The telecommunication industry has seen vast changes in technology from its introduction by the American Telephone & Telegraph (AT&T) Company in 1943 in its analog form through today with the implementation of its digital form and efficient use of bandwidth. In today's era, the *"Fourth Generation"* technology (Long Term Evolution and Long Term Evolution Advanced i.e. 4GLTE, 4GLTE Advanced) has revolutionized the mobile platform by increasing speed and bandwidth with Generation 5 under development and now being deployed throughout the United States.

It is not uncommon to find households opting to use mobile phones as primary sources of voice communication versus the landline telephone, and for internet access. The use of mobile technology in household appliances and entertainment systems is also more commonplace. Mobile technology has also enhanced communications for life saving technology within both the public safety and medical fields.

The telecommunication industry continues to advance itself toward its migration to the *"Fifth Generation"* (5G) technology for faster download and upload speeds, beaming technology and low latency[3] mobile communication.

New technology often meets with stagnant legislation that fails to keep up with the industries changes and demands. These demands include:

- Medical monitoring,
- Autonomous vehicles,
- Machine automation,
- Machine-to-machine communication,
- Global Positioning Systems (GPS) for use in mapping and direction,
- Voice and video communication,
- Email and text data,
- Entertainment i.e. social media, gaming, movie streaming,
- Cloud based application i.e. IOS Siri, Google Now and Microsoft Cortana, and
- The internet of things (IoT) i.e. smart devices such as watches, thermostats, and home and business security surveillance monitors etc.

The list of mobile uses is extensive and continuously increasing. As the population of these technologies increases the demand on the Telecommunication Industry is to provide more bandwidth with faster and reliable mobile service. A Telecommunication Facility in the area will improve telecommunication services to residents, institutions and visitors by adding capacity, along with improving the overall telecommunication network service within the City of Santa Fe. There will also be the potential for co-location for diversity of carrier services such as T-Mobile, Verizon and Dish Network etc.

VI. EARLY NEIGHBORHOOD NOTIFICATION

Neighborhood meetings and two Early Neighborhood Notification (ENN) meetings were held regarding the proposed telecommunication facility and waiver. The first ENN occurred on June 30, 2020, and the second ENN occurred on May 25, 2021. Both ENN's were conducted virtually; first, via Microsoft Teams and the second via Zoom.

[3] Latency is another element that contributes to network speed. The term latency refers to any of several kinds of delays typically incurred in processing of network data. A so-called low latency network connection is one that experiences small delay times, while a high latency connection suffers from long delays.

June 30, 2020, ENN:
The meeting attendance included the Applicants, City staff, plus many members of the public. The meeting began with a staff introduction regarding city process, followed by a presentation of the proposal by the Applicants. Questions and answers followed the presentation.

Members of the public noted four main concerns:

1. The concern that was raised identified the location of the tower and the negative visual impacts to the residences of Los Miradores to the north, single-family residences to the east, and travelers along Camino De Cruz Blanca.
2. The monopine design did not blend in with the immediate environment identifying the only 75' high pine tree in the area bringing more attention to the structure as a telecommunication tower.
3. The College property had other tower locations including building mounted antennas that were less impactive to the neighbors and travelers along Camino De Cruz Blanca.
4. Why a co-location on the city water tank located southeast of the college was not a viable location.

May 25, 2021, ENN:
The meeting attendance included the Applicant, City staff, and many members of the public. The meeting began with a staff introduction regarding city process, followed by a presentation of the proposal by the Applicants. Questions and answers followed the presentation. The second meeting addressed changes to the tower design, which came about as a result of the Section 106 review with the SHPO and included a reduction in height from 75' to 65' and a monopole design versus a monopine design. The position of the attendees did not waver from the first ENN on Jun 30, 2020, except for one who argued that the Applicant should not be allowed to continue through the application process because the application has already been denied by the Historic District Review Board (HDRB). The position of the City Attorney's Office is that the Board's denial of the initial application does not preclude the opportunity of the Applicant to submit a new application with a revised design and additional information.

VII. EXPIRATION DATE

Per 14-3.19(B)(6), the approval shall expire three years after issuance of this final action unless actual development of the site or off-site improvements has begun and is continued pursuant to SFCC Section 14-3.19(B)(6) or a time extension is granted pursuant to SFCC Section 14-3.19(C).

VIII. EXHIBITS:

EXHIBIT A: Findings of Fact and Conclusions of Law

EHXIBIT B: SHPO and HDRB Comments and review

1) HDRB action letter to the applicant
2) Correspondence from City Historic Division addressing archaeological concerns.
3) SHPO response to Section 106

EXHIBIT C: Early neighborhood Notification

1) Guidelines (June 30, 2020)
2) Meeting Notes (June 30, 2020)
3) Guidelines (May 25, 2021)
4) Meeting Notes (May 25, 2021)

Exhibit D: Correspondence

Exhibit E: United States Code (USC) and Code of Federal Regulations (CFR)

EXHIBIT F: Maps and Photos

1) Zoning Map
2) Aerial Photo
3) Use Distance
4) Telecommunication networks with the city

EXHIBIT G: Applicant Submittals*

1) Application Materials

* Maps and other exhibits are reproduced and archived separately from this staff report. File copies are available for review at the Land Use Department office at 200 Lincoln Avenue, West Wing.

APPROVED AS TO FORM:

Title	**Name**	**Initials**
Interim Planning & Land Use Department Director	Jason Kluck	*JMK*
Land Use Current Planning Planner Manager	Noah Berke, AICP	*NLB*
Land Use Department Case Manager	Dan Esquibel	DAE

July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT A

Findings of Fact and Conclusions of Law

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

Case #2020-2639
Address – St. John's College, 1160 Camino de Cruz Blanca
Agent's Name – Gravity Pad Partners, LLC
Owner/Applicant's Name – AT&T/FirstNet NML0255

THIS MATTER came before the Planning Commission (Commission) for hearing on July 1, 2021 upon the application (Application) of Gravity Pad Partners, LLC, as agent for AT&T/FirstNet NML0255 (Applicant). The Applicant requests approval of a new telecommunications facility and a waiver to the maximum height allowed in an R-1 zoning district (Project). The proposed Project site is located at the St. John's College Campus at 1160 Camino del Cruz Blanca and is approximately 19.04 acres (Property). The Property is zoned R-1 PUD (Residential – one dwelling unit per acre, Planned Unit Development), and is within the Historic Design Review overlay district.

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

FINDINGS OF FACT

Background

1. The St. John's College campus is zoned R-1 PUD (Residential – 1 dwelling unit per acre; planned unit development) and is located within the City's Historic Review District overlay district.
2. On September 16, 2021, the Applicant submitted an application for a new telecommunications facility on the campus.
3. The proposed project site is located at the east end of the northern parking area adjacent to the lower trailhead for the Atalaya Mountain Trail.
4. In the application, the Applicant proposed to construct a new telecommunications tower on the campus to a height of 75 feet, designed to look like a single pine tree, or "monopine," with the antennas hidden by "foliage."
5. The proposed telecommunications facility would also include an equipment enclosure at ground level, with dimensions of 72" by 102".
6. The purpose of the tower is to provide improved communications capability for emergency services and first responders, as well as enhanced personal wireless service in the surrounding area.
7. The Applicant has designed the tower and ground equipment to accommodate additional FCC wireless carriers that want to co-locate on the tower in the future.
8. St. John's College is listed on the National Register of Historic Places.
9. Because the College is listed on the National Register, the Applicant has been working with State Historic Preservation Office (SHPO) of the New Mexico Department of Cultural

Affairs to complete the process required by Section 106 of the National Historic Preservation Act.

10. On December 7, 2020, the City sent a letter to the Applicant, requesting to participate in the Section 106 process as a consulting party; and on February 25, 2021, the Applicant sent a letter to the City, granting the City's request to participate as a consulting party.
11. Based on initial input from SHPO, the Applicant reduced the proposed tower height to 65', changed the design of the tower from a monopine to a monopole with visible antennas and ground equipment, and provided photo simulations showing what the proposed 65' monopole tower would look like from a variety of vantage points.
12. On February 11, 2021, after reviewing the photo simulations, the SHPO formally concluded that the proposed telecommunications facility would have an adverse effect on the federally listed property due to the tower's inconsistent design with the property's setting, including the architecture and landscape design.
13. The SHPO found that the industrial design and height of the tower would have an overwhelming presence and would detract from the campus's historic setting.
14. The SHPO recommended that the Applicant either (1) change the design or location to remove the adverse effect on the registered property, or (2) develop a Memorandum of Agreement (MOA) with the FCC, SHPO, and City to resolve the adverse effect, as contemplated by the FCC's Nationwide Programmatic Agreement, Section VII.
15. The Applicant has decided to seek zoning approval from the City before developing an MOA with the FCC, SHPO, and City.
16. On March 19, 2021, the Applicant submitted revised plans, reflecting the reduced 65' height and revised monopole design.

Procedural Requirements

17. 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.l(E)]; (b) an Early Neighborhood Notification (ENN) meeting [SFCC §1 4-3.1(F)(2)(a)(ix)]; and (c) compliance with notice and public hearing requirements [SFCC § 14-3.1(H)-(I)].
18. A pre-application conference was held on May 14, 2020.
19. The Applicant conducted two virtual ENN meetings, on June 30, 2020 (to discuss the original application), and on May 25, 2021 (to discuss the revised height and design).
20. Pursuant to SFCC Section 14-3.1(H), notice of the ENN meetings was properly given.
21. The ENN meeting was attended by representatives of the Applicant, City staff, and many members of the public. Members of the public raised concerns about the location of the tower; negative visual impacts on nearby residences and travelers on Camino de Cruz Blanca; the proposed design of the monopine; the perceived availability of other, less impactful locations; and whether the new telecommunications facility could be added to an existing tower or structure.
22. City Land Use Department staff reviewed the Application and related materials and information submitted by the Applicant for conformity with applicable Code requirements and provided the Commission with a written report of its findings (Staff Report).
23. SFCC Section 14-6.2(E)(6) sets forth certain submittal requirements that must be included with an application for a telecommunications facility (Submittal Requirements).

24. Staff determined that the Application would meet the Submittal Requirements and the requirements for Planning Commission approval set forth in SFCC Section 14-6.2(E)(5) and (8) if the Commission approves the Application subject to certain conditions of approval, as set forth in the Staff Report.

SFCC Section 14-6.2(E) - General

25. The Santa Fe City Code ("SFCC") Section 14-6.2(E)(4)(a) provides that a "tower or antenna that is not otherwise permitted or administratively approved shall be reviewed and approved by the [Commission] for compliance with this section and all applicable city codes."
26. Pursuant to SFCC Section 14-6.2(E)(4)(a), to approve an application, the Commission must "determine that: (i) the application complies with [SFCC Section 14-6.2(E)]; (ii) the proposed telecommunications facilities are necessary to close a demonstrated significant gap in service coverage of the applicant based on actual signal strength data for the area where the gap is claimed and for the type of gap claimed; (iii) the applicant has demonstrated that no other less intrusive means or alternative to the proposed telecommunications facilities siting and design is practicable."
27. Pursuant to SFCC Section 14-6.2(E)(4)(d), the Commission may place conditions upon its approval of the application if the conditions do not prohibit or have the effect of prohibiting the provision of telecommunication services.
28. Pursuant to SFCC Section 14-6.2(E)(4)(a)(i), the Commission finds that the Application complies with SFCC Section 14-6.2(E) if the Application is approved subject to the conditions of approval set forth in the Staff Report and the Applicant demonstrates that a height waiver is warranted.
29. Pursuant to SFCC Section 14-6.2(E)(4)(a)(ii), and based on the information set forth in the Staff Report and exhibits and the additional testimony and evidence presented at the hearing, the Commission finds that the proposed telecommunications facilities are necessary to close a demonstrated significant gap in service coverage.
30. Pursuant to SFCC Section 14-6.2(E)(4)(a)(iii), and based on the information set forth in the Staff Report and exhibits and the additional testimony and evidence presented at the hearing, the Commission finds that the Applicant has demonstrated that no other less intrusive means or alternative to the proposed telecommunications facilities siting and design is practicable.

SFCC Section 14-6.2(E)(8) – Height Waiver

31. The maximum allowable height for a nonresidential structure in an R-1 zoning district is 35 feet.
32. The Applicant requests for a waiver to allow the antennas and tower to be constructed to a maximum height of 65 feet.
33. Pursuant to SFCC Section 14-6.2(E)(5)(b), "[t]elecommunications facilities located on new structures shall not exceed the maximum height for buildings otherwise allowed as set forth in Chapter 14 with the exception that in C-2, I-1 and I-2 districts the height limit of telecommunications facilities shall be one hundred feet."

34. Under SFCC Section 14-6.2(E)(8)(a), the Commission may grant a waiver to the standards set forth in SFCC Section 14-6.2(E)(8)(a) or otherwise within its jurisdiction if the Commission finds that the waiver meets the criteria set forth in SFCC Section 14-5.2(E)(8)(a)(i)-(vi).
35. SFCC Section 14-6.2(E)(8)(b)(i)-(vii) lists factors that the Commission must consider in granting a waiver, including the proposed design of the telecommunications facilities, the uses on nearby properties, the surrounding topography and vegetation, the availability of existing towers or other structures for co-location, the proposed ingress and egress to the site, and whether the Project will result in improved telecommunication services to Santa Fe residents.
36. The Staff Report includes an analysis of the factors set forth in SFCC Section 14-6.2(E)(8)(b)(i)-(vii).
37. Pursuant to SFCC Section 14-6.2(E)(8)(a)(i), the Commission finds that granting the height waiver is in the best interest of the community as a whole because it will expand wireless coverage for both personal and emergency uses and facilitate the use of advanced and developing technology.
38. Pursuant to SFCC Section 14-6.2(E)(8)(a)(ii), the Commission finds that granting the height waiver will expedite the approval of the proposed telecommunications facilities and the co-location by other carriers who wish to use the site in the future.
39. Pursuant to SFCC Section 14-6.2(E)(8)(a)(iii), the Commission finds that granting the height waiver will not jeopardize the public health, safety and welfare to the extent that the City has jurisdiction to regulate these matters. The telecommunications facilities will be developed in accordance with FCC and City standards and will include the deployment of a FirstNet network, which will provide important tools to public safety agencies and first responders, allowing them to get more information quickly. Pursuant to SFCC Section 14-6.2(E)(4)(c) and federal law, the Commission may not regulate the placement of telecommunications facilities on the basis of the environmental effects of radio frequency emissions where such telecommunications facilities comply with FCC regulations.
40. Pursuant to SFCC Section 14-6.2(E)(8)(a)(iv), the Commission finds that granting the height waiver will mitigate the adverse impacts of tower proliferation and limit the need for construction of new towers or antennas because the Applicant has engineered the tower and base station to accommodate co-location, as required by SFCC Section 14-6.2(E). The Commission further finds that the adverse visual impacts of the antenna will be mitigated through the pending Section 106 process.
41. Pursuant to SFCC Section 14-6.2(E)(8)(a)(v), the Commission finds that granting the height waiver will better serve the purposes of the City's telecommunications ordinance because the height is required to support the desired coverage and technology, the proposed height has already been reduced through the pending Section 106 process, and the MOA required by federal law will be designed to further mitigate adverse impacts of the height.
42. Pursuant to SFCC Section 14-6.2(E)(8)(a)(vi), the Commission finds that the proposed site is not located in the escarpment or south central highway corridor overlay districts.
43. Based on the information set forth in the Staff Report and exhibits and the additional testimony and evidence introduced at the hearing, the Commission finds that all criteria for granting a waiver to the maximum height in an R-1 zoning district have been met.

CONCLUSIONS OF LAW

Under the circumstances and given the evidence and testimony submitted during the hearing, the Board concludes as follows:

1. The Commission has the authority to review and approve or deny the Application, including the request to exceed the maximum height allowed in an R-1 zoning district.
2. The Project is subject to the requirements and standards set forth in SFCC Section 14-6.2(E), Telecommunications.
3. The Application will meet the general requirements set forth in SFCC Section 14-6.2(E)(5) and the Submittal Requirements set forth in SFCC Section 14-6.2(E)(6) if the Application is approved with the conditions recommended by staff, which must be met before the Applicant files an application for a construction permit.
4. The Applicant has demonstrated that the waiver criteria set forth in SFCC Section 14-6.2(E)(8)(b) have been met as required to obtain a waiver to exceed the maximum height allowed in an R-1 zoning district.
5. The Application should be approved subject to the conditions recommended by staff because the conditions are necessary for compliance with SFCC Section 14-6.2(E) and do not prohibit or have the effect of prohibiting the provision of telecommunication services.
6. The Commission's approval of these written Findings of Fact and Conclusions of Law constitutes the date of final action by the City Planning Commission.
7. To obtain full City zoning approval of the Project, the Applicant must also obtain review and approval from the Historic Districts Review Board.

WHEREFORE, IT IS ORDERED ON THIS 1ST DAY OF JULY 2021 BY THE PLANNING COMMISSION OF THE CITY OF SANTA FE:

Considering the forgoing findings and conclusions, the Commission approves the Application, including the request for a waiver to the maximum height allowed in the R-1 zoning district, subject to the conditions of approval recommended by staff. The approval shall expire three years after issuance of this final action unless actual development of the site or off-site improvements has begun and is continued pursuant to SFCC Section 14-3.19(B)(6) or a time extension is granted pursuant to SFCC Section 14-3.19(C).

_____ _____
Brian Gutierrez Date:
Chairperson

FILED:

_____ _____
_____ _____
Kristine Bustos-Mihelcic Date:
City Clerk

APPROVED AS TO FORM:

_____ _____

_____ _____

Sally A. Paez Date:
Assistant City Attorney

July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT B

SHPO and HDRB Comments and review

Attachments:

1) HDRB action letter to the applicant
2) Correspondence from City Historic Division addressing archaeological concerns.
3) SHPO response to Section 106

EXHIBIT B1

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

PROJECT DESCRIPTION: Sean Milks of Gravity Pad Partners, LLC, agent for St. John's College, owner, proposes to install a 75'-tall AT&T "monopine" telecommunications tower. A telecommunications waiver is requested to exceed the maximum allowable height, per Section 14-6.2(E)(8)(c).

Case number: **2020-002194-HDRB**
Project Type: HDRB

PROJECT LOCATION (S): 1160 Camino de Cruz Blanca

OW – St. John's College Attn: Michael Duran 1160 Camino de Cruz Blanca Santa Fe, NM 87505
MichaelDuran@sjc.edu

AP – Gravity Pad Partners LLC Attn: Sean Milks 205 Tierra Corrales Corrales, NM 87048 sean@thefsg.com

BOARD ACTION

This is to certify that the Historic Districts Review Board (Board) acted on your request at its hearing held August 11, 2020. The Board denied the proposal on the basis that the applicant failed to demonstrate with substantial evidence that the requirements set forth in the Santa Fe City Code (SFCC) Subsections 14-6.2(E)(4)(b) and 14-6.2(E)(8)(c) have been met. Specifically, the applicant failed to demonstrate that no other less intrusive means or alternative to the proposed siting and design is practicable because the applicant did not show that existing structures or towers of a lower height would be inadequate to allevaite the gap in coverage. Additionally, the applicant failed to qualify for a waiver to the maximum allowable height of sixteen feet (16') because the applicant failed to show that that the proposal would not damage the character of the historic district and that the proposal would provide the least negative impact with respect to the purposes of the Historic Districts Ordinance, SFCC § 14-5.2. For further information please call 955-6605.

Sincerely,

Lisa Gavioli Roach

Lisa Gavioli Roach
Historic Preservation Division Manager

EXHIBIT B2

Re: St. Johns Tower

Nicole Thomas <nicole@wonderstoneconsulting.com>

Fri 6/4/2021 8:29 AM

To: ESQUIBEL, DANIEL A. <daesquibel@santafenm.gov>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Dan,
No archaeological work is needed. The project doesn't meet the threshold for the district it is in, but also, as part of the Section 106 compliance a study was performed.
Thanks,
Nicole

From: ESQUIBEL, DANIEL A. <daesquibel@santafenm.gov>
Date: Wednesday, June 2, 2021 at 11:53 AM
To: Nicole Thomas <nicole@wonderstoneconsulting.com>
Subject: RE: St. Johns Tower

Is there archaeological requirements for this proposed tower?

Dan Esquibel
Planner Senior
Land Use Dept., Current Planning Division
Office: 505-955-6587
Email: daesquibel@santafenm.gov

EXHIBIT B3

Michelle Lujan Grisham
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 FAX (505) 827-6338

February 11, 2021

Sean Milks
Gravity Pad Partners, LLC
sean@thefsg.com

Re: Log 113831, St. Johns Cell Tower, 1160 Camino De Cruz Blanca, Santa Fe

Dear Mr. Milks:

I am writing in regard to Gravity Pad Partners' Section 106 SHPO submittal (FCC File No. 0009221522) and subsequent photo simulation for a proposed cell tower at the St. Johns College Campus. The original Section 106 consultation found that the proposed cell tower would result in an adverse effect to the St. Johns College Campus, which is listed on the National Register. Our office, however, recommended that a photo simulation of the cell tower be completed to better assess whether the tower would result in an adverse effect. Based on review of the photo simulation and the original Section 106 submittal, as well as our own records, SHPO concurs that the tower will result in an adverse effect to the National Register listed St. Johns Campus due to the tower's inconsistent design with the property's setting, including its architecture and landscape design.

We noted in the St. Johns National Register nomination the following: "St. John's College in Santa Fe is significant at the state level under National Register Criterion C in the area of landscape architecture because its landscape plan, designed by Garrett Eckbo, reflects mid-20th-century ideas in landscape design." The proposed tower will stand at 95-feet tall and its industrial design will not blend with the property's setting; rather its overwhelming presence will detract from the campus's historic setting. We recommend that you first determine whether the tower's design or location can be changed to reach a no adverse effect. If this is not possible, the proponent must develop a memorandum of agreement (MOA) to resolve the adverse effect (please refer to the FCC's Nationwide Programmatic Agreement, Section VII). Prior to developing a plan to resolve the adverse effect and develop the MOA, we strongly recommend that you set up a meeting with our office and other interested consulting parties to determine how to best proceed with the MOA. Our office has example and template MOAs and can assist with the development of an MOA.

Please contact me if you would like to discuss this project further. I can be reached at andy.wakefield@state.nm.us or 505.827.6162.

Sincerely,

S. Andy Wakefield

S. Andrew Wakefield
Archaeologist

From: towernotifyinfo@fcc.gov
To: Wakefield, Andy, DCA
Subject: [EXT] Section 106 Notification of SHPO/THPO Concurrence- Email ID #5561653
Date: Thursday, February 11, 2021 3:15:36 PM

This is to notify you that the Lead SHPO/THPO has concurred with the following filing:
Date of Action: 02/11/2021
Direct Effect: Adverse Effect on one or more Historic Properties in APE
Visual Effect: No Adverse Effect on Historic Properties in APE
Comment Text: Log 113831. We recommend that the proponent first determine whether the tower's design or location can be changed to reach a no adverse effect. If this is not possible, the proponent must develop a memorandum of agreement (MOA) to resolve the adverse effect (please refer to the FCC's Nationwide Programmatic Agreement, Section VII). Prior to developing a plan to resolve the adverse effect and develop the MOA, we strongly recommend that you set up a meeting with our office and other interested consulting parties to determine how to best proceed with the MOA. Our office has example and template MOAs and can assist with the development of an MOA.

File Number: 0009221522
TCNS Number: 204259
Purpose: Update
Original Purpose: New Tower Submission Packet

Notification Date: 7AM EST 11/18/2020

Applicant: Gravity Pad Partners LLC
Consultant: Hammerstone Environmental
Positive Train Control Filing Subject to Expedited Treatment Under Program Comment: No
Site Name: St. John's
Site Address: 1160 Camino De Cruz Blanca
Detailed Description of Project:
Site Coordinates: 35-40-6.7 N, 105-54-42.4 W
City: Santa Fe
County: SANTA FE
State:NM
Lead SHPO/THPO: State Historic Preservation Office of New Mexico

NOTICE OF FRAUDULENT USE OF SYSTEM, ABUSE OF PASSWORD AND RELATED MISUSE
Use of the Section 106 system is intended to facilitate consultation under Section 106 of the National Historic Preservation Act and may contain information that is confidential, privileged or otherwise protected from disclosure under applicable laws. Any person having access to Section 106 information shall use it only for its intended purpose. Appropriate action will be taken with respect to any misuse of the system.

Re: FCC Section 106 (St. John's Tower) (Log 113831)

From: Sean Milks <sean@thefsg.com>
Sent: Thursday, February 11, 2021 3:52 PM
To: Wakefield, Andy, DCA <Andy.Wakefield@state.nm.us>
Cc: Esquibel, Daniel <daesquibel@santafenm.gov>; BERKE, NOAH L. <nlberke@santafenm.gov>; PAEZ, SALLY A. <sapaez@santafenm.gov>; Nicole Thomas <nicole@wonderstoneconsulting.com>; Moffson, Steven, DCA <Steven.Moffson@state.nm.us>; Ensey, Michelle, DCA <michelle.ensey@state.nm.us>; 'Kevin Winner (kevin@winnermanagement.net)' <kevin@winnermanagement.net>; Richard <richardburleson70@yahoo.com>
Subject: [EXT] Re: FCC Section 106 (St. John's Tower) (Log 113831)

Thank you for the clarification Andy. So at this point what do you think we can do in an effort to not have the site as adverse affect? We have to be taller than the tree line. Do you feel that the monopine would blend in better at the 65 ft level? Any feedback would be appreciated.

Thank you,

Sean Milks
602-330-5150

From: "Wakefield, Andy, DCA" <Andy.Wakefield@state.nm.us>
Date: Thursday, February 11, 2021 at 2:45 PM
To: Sean Milks <sean@thefsg.com>
Cc: "Esquibel, Daniel" <daesquibel@santafenm.gov>, "BERKE, NOAH L." <nlberke@santafenm.gov>, "PAEZ, SALLY A." <sapaez@santafenm.gov>, Nicole Thomas <nicole@wonderstoneconsulting.com>, "Moffson, Steven, DCA" <Steven.Moffson@state.nm.us>, "Ensey, Michelle, DCA" <michelle.ensey@state.nm.us>, "'Kevin Winner (kevin@winnermanagement.net)'" <kevin@winnermanagement.net>, Richard <richardburleson70@yahoo.com>
Subject: RE: FCC Section 106 (St. John's Tower) (Log 113831)

Hi Sean,

Yes, I put 95 feet from the original submittal, but our analysis of whether it was an adverse effect was based on the photo simulations, which would have been the 65 feet. Our assessment concurs with your contractor's original assessment of adverse effect.

Please let me know if you would like to discuss this further.

Thanks.

Andy Wakefield
Archaeologist
New Mexico Historic Preservation Division
Bataan Memorial Building
407 Galisteo Street, Suite 236
Santa Fe, New Mexico 84501
505.827.6162

From: Sean Milks [mailto:sean@thefsg.com]
Sent: Thursday, February 11, 2021 3:03 PM
To: Wakefield, Andy, DCA
Cc: Esquibel, Daniel; BERKE, NOAH L.; PAEZ, SALLY A.; Nicole Thomas; Moffson, Steven, DCA; Ensey, Michelle, DCA; 'Kevin Winner (kevin@winnermanagement.net)'; Richard
Subject: [EXT] Re: FCC Section 106 (St. John's Tower) (Log 113831)

Hi Andy,

Thank you for the letter and your response. The letter states that the monopole at 95' would have an adverse affect on the St. John's campass however we have lowered the site to 65'. Can you please confirm that you still feel the site will have an adverse affect if it was lowered to 65'?

Thank you,

Sean Milks
602-330-5150

From: "Wakefield, Andy, DCA" <Andy.Wakefield@state.nm.us>
Date: Thursday, February 11, 2021 at 1:54 PM
To: Sean Milks <sean@thefsg.com>
Cc: "Esquibel, Daniel" <daesquibel@santafenm.gov>, "BERKE, NOAH L." <nlberke@santafenm.gov>, "PAEZ, SALLY A." <sapaez@santafenm.gov>, Nicole Thomas <nicole@wonderstoneconsulting.com>, "Moffson, Steven, DCA" <Steven.Moffson@state.nm.us>, "Ensey, Michelle, DCA" <michelle.ensey@state.nm.us>
Subject: RE: FCC Section 106 (St. John's Tower) (Log 113831)

Hi Sean,

Please see the attached SHPO consultation letter for this project. These comments and SHPO concurrence with the adverse effect assessment will also be submitted through the FCC E106 system.

Please contact me if you would like to discuss this further.

Thanks.

Andy Wakefield
Archaeologist
New Mexico Historic Preservation Division
Bataan Memorial Building
407 Galisteo Street, Suite 236
Santa Fe, New Mexico 84501
505.827.6162

July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT C

Early neighborhood Notification

Attachments:

1) Guidelines (June 30, 2020)
2) Meeting Notes (June 30, 2020)
3) Guidelines (May 25, 2021)
4) Meeting Notes (May 25, 2021)

EXHIBIT C1

ENN GUIDELINES

Applicant Information

Project Name: NML0255 St. John's College

Name: Milks (Last) Sean (First) C (M.I.)

Address: P.O. Box 2755 (Street Address) (Suite/Unit #)

Corrales (City) NM (State) 87048 (ZIP Code)

Phone: 602 330-5150 E-mail Address: SeanC@TheFSG.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.***

please see Attached

(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.***

please see attached

(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.***

please see Attached

(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.***

please see attached

(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.***

Please see attached

(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.***

please see attached

(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.***

Please see Attached

(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.***

please see Attached

(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.***

please see attached

(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.***

Please see attached

(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.***

please see Attached

(l) ADDITIONAL COMMENTS (optional)

(a) Effect on character and appearance of the surrounding neighborhoods

Architectural design review – The proposed site is a new 75' telecommunications Monopine located next to several other existing monopines near the parking lot of the St. John's College located at 1160 Camino de Cruz Blanca, Santa Fe, NM 87505. The exact location of the proposed lease area is depicted on the attached site plan attached to this letter. The proposed ground space for the tower and equipment will be directly below the monopine and will be hidden behind a 6 ft Coyote fence to match the existing fence in the area. The entire area will be approximately 50' x 50'.

Historic Districts – The proposed site location is located within the boundaries of the City of Santa Fe Historic Review District and will be subject to all associated reviews and approvals.

Lighting – No lighting is proposed for this project, which is in accordance with the City's regulations/direction.

Signs – There will be no signage on the existing telecommunications facility. No additional signage is proposed except as required by law.

Telecommunications – This is for AT&T/FirstNet increased coverage and capacity in this area, and for providing enhanced E-911 services for all first responders.

Open space and trails and parks – AT&T/FirstNet is proposing to build a site in an unincorporated area of the St. John's campus, next to a parking lot. The proposed location will not take up any parking spaces and will not interfere with any of the walking trails that surround the St. John's campus. The equipment area is minimal impact to open space, trails or parks, and further will be mitigated by fencing that blends into the surrounding area. Access to the trail will not be impacted by this proposal as our equipment area will be located north of the trail.

Landscaping – Landscaping is not required, and is not being proposed.

BCD regulations are met – The proposed site is not located in the Business Capital District so there will be no impact to the BCD.

Number of stories of buildings – Not applicable for this proposal.

The average setbacks – The site meets or exceeds the setbacks for this area.

Mass and scale of the project – The proposal is to build a new 75' monopine that will be located near several other existing monopines. The proposed facility will be disguised as best as possible to blend in with the natural surroundings. The proposed ground space for the tower and equipment will be directly below the monopine and will be hidden behind a 6 ft Coyote fence to match the existing fence in the area. The site is unmanned and

generates low DB levels, no dust, odor or vibration that would adversely affect the surrounding area.

Architectural style of any construction – The proposed site is designed to aesthetically blend into the area by building a monopine where there are existing monopines. AT&T/FirstNet proposed colors consistent with Santa Fe's color pallet and the existing fencing in the area for the ground equipment will further integrate the site into the area by designing it to blend in to the surrounding area as much as possible.

Access to public places, open spaces or trails – The proposed site creates no adverse effect on access to public places, open spaces or access to trails.

(b) Effect on protection of the physical environment

Terrain management – The proposed ground equipment compound is located next to the parking lot and would have a minimal effect on the physical environment.

Escarpment – This proposal will not adversely impact the topography of the subject parcel or surrounding parcels.

Landscape – Landscaping is not required, and is not being proposed.

BCD – This site is not in the Business Capital District.

Architectural design – The proposed site is designed to aesthetically blend into the area by building a monopine in an area where there are existing trees. Although we can't make it invisible, we are proposing a location that that would blend in to the landscape. The panel antennas will be painted to match the foliage of the leaves on the tree. The 6' coyote fencing will match the existing fence the is currently in the area which will further integrate the site into the area by designing it to blend in to the surrounding area.

Flood plain – this proposed site is not in an identified flood zone. Flood control regulations will be met or mitigated as required.

Trash generation – This is proposed as an unmanned facility and will not generate trash.

Lighting - No lighting is proposed for this project, which is in accordance with the City's regulations/direction.

Fire risk – The proposed site will comply with Santa Fe fire code. The system is monitored 24 hours a day, seven days a week by an automated system as well as by the AT&T Mobility network operations center.

Use of hazardous materials – This project will not generate hazardous materials because of this proposal.

Easements – A power and/or phone easement will be required to provide electricity and communications for the proposed site and will not impact open space or other environmental features.

(c) **Impacts on any prehistoric, historic, archaeological, or cultural sites or structures, including acequias and the historic downtown**

BCD - This site is not in the Business Capital District.

Historic Districts – The proposed site location is located within the boundaries of the City of Santa Fe Historic Review District and will be subject to all associated reviews and approvals.

Archaeological review – As part of FCC requirements, all wireless license holders must perform a full environmental study including NEPA and SHPO reports before construction of a new communications site to identify any potential impact to endangered species or subsurface artifacts. AT&T/FirstNet follows the recommendations of these reports including archeological surveys, if required. Based upon past information, it does not appear that there will be any negative environmental or cultural impacts from this proposal. If mitigation however is required, AT&T/FirstNet will comply with that mitigation.

Project's compatibility with any historic or cultural sites located on the property where the project is proposed – There are no know historic or cultural sites located on the property.

(d) **Relationship to existing density and land use within the surrounding area**

The proposed facility is unmanned and will not affect parking, pedestrian safety, congestion, flow of pedestrian or vehicular traffic for the disabled, children, low-income and elderly services. AT&T/FirstNet will utilize an access easement to visit the site for monthly maintenance and/or emergencies.

This proposed wireless telecommunications facility will provide better continuous coverage for AT&T/FirstNet customers in Santa Fe. The added E-91 services will also cover the St. John's college campus for the students/faculty in case of an emergency. The improved coverage will enhance the daily lives of the citizens of Santa Fe with fewer dropped calls and improved access to internet services.

The mission of the Economic Development (ED) Division of the City of Santa Fe is to achieve long-term sustainable and focused economic growth by building a diverse, innovative economy with high-wage, high-impact jobs that provide opportunity and prosperity for the City's residents, businesses and entrepreneurs.

AT&T/FirstNet communication network in Santa Fe helps to foster this goal by the following:

1. Improving the climate for doing business in Sant Fe by improving the communication infrastructure that all business needs to thrive.
2. Ensuring that Santa Fe's skilled and competitive workforce can communicate effectively.
3. Attracting and retaining entry level and high-end job opportunities by delivering the nation's fastest wireless network to the Santa Fe residents.

(g) **Effect upon availability of affordable housing and availability of housing choices for all Santa Fe residents.**

The proposed plan for AT&T/FirstNet will not affect affordable housing and the availability of housing choice for Santa Fe residents. As many residential land line phones are being replaced by mobile phones the necessity of better coverage, capacity, and internet coverage is more important than ever for households and families.

(h) **Effect upon public services such as firs, police protection, school services and other public services and other public services or infrastructure elements such as water, power, sewer, communications, bus systems, commuter or other services or facilities.**

The proposed wireless telecommunications facility is an unmanned facility. Maintenance is required approximately once a month for a few hours unless there is an emergency or equipment outages that require repairs. This proposal will not require school services, water, sewer, gas, bus systems, or other public services or facilities other than police and fire protection as well as power and telephone line use.

The power and telephone usage at the proposed location are consistent with standard commercial demands and would not interfere with the existing power and telephone usage in the City of Santa Fe. The proposed location would improve the coverage and capacity for AT&T/FirstNet in this area. This proposed facility will enhance the communications in this area for emergency providers and personnel using AT&T/FirstNet, as well as providing emergency E-911 wireless services for the first responders.

(i) **Impacts upon water supply, availability and conservation methods**.

The proposed wireless telecommunications facility is an unmanned facility that does not require water; therefore, this is not applicable where water conservation and sewer usage is concerned. There will not be any distribution lines interfered with for this proposal.

(j) **Effect on opportunities for community integration and social balance through mixed land use, pedestrian oriented design, and linkages among neighborhoods and recreational activity and employment centers.**

The proposed facility is an unmanned facility where it offers wireless phone and internet coverage for AT&T/FirstNet customers. This proposal offers covers and capacity for

AT&T/FirstNet customers where there is limited coverage and capacity currently. This proposal promotes community integration, social balance, and takes into consideration pedestrian-oriented design, linkages among neighborhoods, recreational activity and employment centers by offering the necessary wireless coverage to contract others through their wireless devices.

(k) **Effect upon Santa Fe's urban form**

The proposed wireless communication site will have little effect on the physical aspect of Santa Fe's urban form as AT&T/FirstNet proposes to install antennas on a concealed monopine. The supporting equipment cabinets will be placed below the monopine and behind a 6' coyote fence to match the existing fencing in the area.

By integrating this proposed site on the monopine, it limits the impact urban design, as it blends in with the surrounding environment. Socially the urban form is positively impacted by the proposed site as it expands the ability of citizens to communicate with each other and share information to enhance their lives and culture. In addition, it will provide improved access to essential E-911 services increasing safety and security in the City of Sant Fe

EXHIBIT C2

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

Project Name	ENN: Telecommunication Facility and Waiver
Project Location	1160 Camino De Cruz Blanca Road
Project Description	New Telecommunications Facility with waiver to height and setback.
Applicant / Owner	Gravity Pad Towers
Agent	Sean Milks
Pre-App Meeting Date	May 14, 2020
ENN Meeting Date	June 30, 2020
ENN Meeting Location	Virtual Meeting via Microsoft Teams
Application Type	ENN
Land Use Staff	Dan Esquibel
Other Staff	None
Attendance	N/A

Notes/Comments:
The meeting attendance included the Applicants, City staff, plus many members of the public. The meeting began with a staff introduction regarding city process, followed by a presentation of the proposal by the Applicants. Questions and answers followed the presentation.

Members of the public noted four main concerns:

1. The concern that was raised identified the location of the tower and the negative visual impacts to the residences of Los Miradores to the north, single-family residences to the east, and travelers along Camino De Cruz Blanca.

2. The mono-pine design did not blend in with the immediate environment identifying the only 75’ high pine tree in the area bringing more attention to the structure as a telecommunication tower.
3. The College property had other tower locations including building mounted antennas that were less impactive to the neighbors and travelers along Camino De Cruz Blanca.
4. Why a co-location on the city water tank located southeast of the college was not a viable location.

EXHIBIT C3

ENN GUIDELINES

Applicant Information

Project Name: NML0253 ST. John's college

Name: Mills (Last) Sean (First) C (M.I.)

Address: P.O. Box 2755 (Street Address) Suite/Unit #

Española (City) NM (State) 87048 (ZIP Code)

Phone: (602) 330-5150 E-mail Address: Sean@Thefsg.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.*

See Attached

(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.*

N

(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.*

N

(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.*

(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.*

(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.*

(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.*

(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.*

(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.***

(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.***

(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.***

(l) ADDITIONAL COMMENTS (optional)

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: NM 2255 St. John's College monopole
2. Location of Property: 1160 Camino de Cruz Blanca, 87505
3. Owner/Agent Name: Gravity AAD Partners
   Mailing Address: P.O. Box 2755, Corrales, NM 87048
   Phone & Fax: 602-330-5150
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	N/A	N/A

5. Elementary School Zone for Proposed Development: N/A
6. Middle School Zone for Proposed Development: N/A
7. High School Zone for Proposed Development: N/A
8. Build out Rates (Year/s: #/yr): N/A

Educational Services Center
610 Alta Vista
Santa Fe, NM 87505
Telephone (505) 467-2000
www.sfps.info

For questions & submittal, contact:
Santa Fe Public Schools, Property & Asset Management,
2195 Zia Road, Santa Fe NM 87505
505 467 3400

(a) Effect on character and appearance of the surrounding neighborhoods

Architectural design review – The proposed site is a new 65' telecommunications Monopole, lowered 15' from the original proposed site, located next to near the parking lot of the St. John's College located at 1160 Camino de Cruz Blanca, Santa Fe, NM 87505. The exact location of the proposed lease area is depicted on the attached site plan attached to this letter. The proposed ground space for the tower and equipment will be directly below the monopole and will be hidden behind a 6 ft Coyote fence to match the existing fence in the area. The entire area will be approximately 50' x 50'.

Historic Districts – The proposed site location is located within the boundaries of the City of Santa Fe Historic Review District and will be subject to all associated reviews and approvals.

Lighting – No lighting is proposed for this project, which is in accordance with the City's regulations/direction.

Signs – There will be no signage on the existing telecommunications facility. No additional signage is proposed except as required by law.

Telecommunications – This is for AT&T/FirstNet increased coverage and capacity in this area, and for providing enhanced E-911 services for all first responders.

Open space and trails and parks – AT&T/FirstNet is proposing to build a site in an unincorporated area of the St. John's campus, next to a parking lot. The proposed location will not take up any parking spaces and will not interfere with any of the walking trails that surround the St. John's campus. The equipment area is minimal impact to open space, trails or parks, and further will be mitigated by fencing that blends into the surrounding area. Access to the trail will not be impacted by this proposal as our equipment area will be located north of the trail.

Landscaping – Landscaping is not required, and is not being proposed.

BCD regulations are met – The proposed site is not located in the Business Capital District so there will be no impact to the BCD.

Number of stories of buildings – Not applicable for this proposal.

The average setbacks – The site meets or exceeds the setbacks for this area.

Mass and scale of the project – The proposal is to build a new 65' monopole. The proposed facility will be disguised as best as possible to blend in with the natural surroundings. The proposed ground space for the tower and equipment will be directly below the monopole and will be hidden behind a 6 ft Coyote fence to match the existing fence in the area. The site is unmanned and generates low DB levels, no dust, odor or vibration that would adversely affect the surrounding area.

Architectural style of any construction – The proposed site is designed to aesthetically blend into the area by building a monopole that has the smallest possible circumference and array of antennas. AT&T/FirstNet proposed colors consistent with Santa Fe's color pallet and the existing fencing in the area for the ground equipment will further integrate the site into the area by designing it to blend in to the surrounding area as much as possible.

Access to public places, open spaces or trails – The proposed site creates no adverse effect on access to public places, open spaces or access to trails.

(b) Effect on protection of the physical environment

Terrain management – The proposed ground equipment compound is located next to the parking lot and would have a minimal effect on the physical environment.

Escarpment – This proposal will not adversely impact the topography of the subject parcel or surrounding parcels.

Landscape – Landscaping is not required, and is not being proposed.

BCD – This site is not in the Business Capital District.

Architectural design – The proposed site is designed to aesthetically blend into the area by building a shorter monopole in an area where there are existing trees. Although we can't make it invisible, we are proposing a location that that would blend in to the landscape as much as possible. The 6' coyote fencing will match the existing fence the is currently in the area which will further integrate the site into the area by designing it to blend in to the surrounding area.

Flood plain – this proposed site is not in an identified flood zone. Flood control regulations will be met or mitigated as required.

Trash generation – This is proposed as an unmanned facility and will not generate trash.

Lighting - No lighting is proposed for this project, which is in accordance with the City's regulations/direction.

Fire risk – The proposed site will comply with Santa Fe fire code. The system is monitored 24 hours a day, seven days a week by an automated system as well as by the AT&T Mobility network operations center.

Use of hazardous materials – This project will not generate hazardous materials because of this proposal.

Easements – A power and/or phone easement will be required to provide electricity and communications for the proposed site and will not impact open space or other environmental features.

(c) **Impacts on any prehistoric, historic, archaeological, or cultural sites or structures, including acequias and the historic downtown**

BCD - This site is not in the Business Capital District.

Historic Districts – The proposed site location is located within the boundaries of the City of Santa Fe Historic Review District and will be subject to all associated reviews and approvals.

Archaeological review – As part of FCC requirements, all wireless license holders must perform a full environmental study including NEPA and SHPO reports before construction of a new communications site to identify any potential impact to endangered species or subsurface artifacts. AT&T/FirstNet follows the recommendations of these reports including archeological surveys, if required. Based upon past information, it does not appear that there will be any negative environmental or cultural impacts from this proposal. If mitigation however is required, AT&T/FirstNet will comply with that mitigation.

Project's compatibility with any historic or cultural sites located on the property where the project is proposed – There are no know historic or cultural sites located on the property.

(d) **Relationship to existing density and land use within the surrounding area**

The proposed facility is unmanned and will not affect parking, pedestrian safety, congestion, flow of pedestrian or vehicular traffic for the disabled, children, low-income and elderly services. AT&T/FirstNet will utilize an access easement to visit the site for monthly maintenance and/or emergencies.

This proposed wireless telecommunications facility will provide better continuous coverage for AT&T/FirstNet customers in Santa Fe. The added E-91 services will also cover the St. John's college campus for the students/faculty in case of an emergency. The improved coverage will enhance the daily lives of the citizens of Santa Fe with fewer dropped calls and improved access to internet services.

The mission of the Economic Development (ED) Division of the City of Santa Fe is to achieve long-term sustainable and focused economic growth by building a diverse, innovative economy with high-wage, high-impact jobs that provide opportunity and prosperity for the City's residents, businesses and entrepreneurs.

AT&T/FirstNet communication network in Santa Fe helps to foster this goal by the following:

1. Improving the climate for doing business in Sant Fe by improving the communication infrastructure that all business needs to thrive.
2. Ensuring that Santa Fe's skilled and competitive workforce can communicate effectively.
3. Attracting and retaining entry level and high-end job opportunities by delivering the nation's fastest wireless network to the Santa Fe residents.

(g) **Effect upon availability of affordable housing and availability of housing choices for all Santa Fe residents.**

The proposed plan for AT&T/FirstNet will not affect affordable housing and the availability of housing choice for Santa Fe residents. As many residential land line phones are being replaced by mobile phones the necessity of better coverage, capacity, and internet coverage is more important than ever for households and families.

(h) **Effect upon public services such as firs, police protection, school services and other public services and other public services or infrastructure elements such as water, power, sewer, communications, bus systems, commuter or other services or facilities.**

The proposed wireless telecommunications facility is an unmanned facility. Maintenance is required approximately once a month for a few hours unless there is an emergency or equipment outages that require repairs. This proposal will not require school services, water, sewer, gas, bus systems, or other public services or facilities other than police and fire protection as well as power and telephone line use.

The power and telephone usage at the proposed location are consistent with standard commercial demands and would not interfere with the existing power and telephone usage in the City of Santa Fe. The proposed location would improve the coverage and capacity for AT&T/FirstNet in this area. This proposed facility will enhance the communications in this area for emergency providers and personnel using AT&T/FirstNet, as well as providing emergency E-911 wireless services for the first responders.

(i) **Impacts upon water supply, availability and conservation methods**.

The proposed wireless telecommunications facility is an unmanned facility that does not require water; therefore, this is not applicable where water conservation and sewer usage is concerned. There will not be any distribution lines interfered with for this proposal.

(j) **Effect on opportunities for community integration and social balance through mixed land use, pedestrian oriented design, and linkages among neighborhoods and recreational activity and employment centers.**

The proposed facility is an unmanned facility where it offers wireless phone and internet coverage for AT&T/FirstNet customers. This proposal offers covers and capacity for

AT&T/FirstNet customers where there is limited coverage and capacity currently. This proposal promotes community integration, social balance, and takes into consideration pedestrian-oriented design, linkages among neighborhoods, recreational activity and employment centers by offering the necessary wireless coverage to contract others through their wireless devices.

(k) **Effect upon Santa Fe's urban form**

The proposed wireless communication site will have little effect on the physical aspect of Santa Fe's urban form as AT&T/FirstNet proposes to install antennas on a slimline monopole. The supporting equipment cabinets will be placed below the monopole and behind a 6' coyote fence to match the existing fencing in the area.

By integrating this proposed site on the shorter 65' monopole, it limits the impact urban design, as it blends in with the surrounding environment. Socially the urban form is positively impacted by the proposed site as it expands the ability of citizens to communicate with each other and share information to enhance their lives and culture. In addition, it will provide improved access to essential E-911 services increasing safety and security in the City of Sant Fe

EXHIBIT C4

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

Project Name	ENN: Telecommunication Facility and Waiver
Project Location	1160 Camino De Cruz Blanca Road
Project Description	New Telecommunications Facility with waiver to height.
Applicant / Owner	Gravity Pad Towers
Agent	Sean Milks
Pre-App Meeting Date	May 14, 2020
ENN Meeting Date	May 25, 2021
ENN Meeting Location	Virtual Meeting via Zoom
Application Type	ENN
Land Use Staff	Dan Esquibel
Other Staff	None
Attendance	N/A

Notes/Comments:
The meeting attendance included the Applicant, City staff, and many members of the public. The meeting began with a staff introduction regarding city process, followed by a presentation of the proposal by the Applicants. Questions and answers followed the presentation. The second meeting addressed changes to the tower design which came about as a result of the Section 106 review with the SHPO and included a reduction in height from 75' to 65' and a monopole design versus a mono-pine design.

The position of the attendees did not waver from the first ENN on Jun 30, 2020, except for one which identified that the applicant should not be allowed to continue through the application process because the application has already been denied by the Historic District Review Board.

July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT D

Correspondence

ST JOHN'S College

May 26, 2021

To: Dan Esquibel, City Planner, City of Santa Fe
From: Daniel Campbell, Director of Public Safety, St. John's College Santa Fe
Re: Cell Tower proposal, Sean Milks

Mr. Esquibel, my name is Daniel Campbell, and I am the new Director of Public Safety for St. John's College Santa Fe. Since I started in January of this year, I have been inquiring about why the area of the college does not have cell service coverage. I have been told that attempts have been made in the past but did not find success with city council because of the neighborhood association. I am not going to mince words; the reality is the neighborhood association and others in the area are resistant because a cell tower is not aesthetically pleasing. When considering the needs and services being denied to community members not having cell service, this is not only an issue of equity, but an issue of public safety.

I think it would be prudent to offer more information about myself to give you background on my perspective. Prior to taking this position with St. John's College, I spent over 20 years in law enforcement with the Albuquerque Police Department. My career exposed me to different aspects of being a first responder from being first on scene to running a critical incident as the Incident Commander. I have a background and personal experience in emergency management. With that being said, I know the value of communication during a critical incident. Where the neighborhood and fellow community members see a view obstruction, I see a potential for someone in a crisis not being able to get the help they need.

I think it is valuable to give you a recent history of events that have created concern for having to deal with poor or no cell communication. The reality is our campus relies on landline service to call our public safety department. This can be a problem if all my staff is out on a patrol or handling a situation. This means that we must forward the landline to our cell phone. This can create problems where there is spotty or no signal. We have had many calls that started with the phrase, "I couldn't get ahold of Public Safety." A review of these situations all share the same pattern. The team member monitoring calls was away from the landline and never received a call on the cell phone. Without compromising staff, student, and facility confidentiality, we have had situations where someone on campus was experiencing a mental health crisis and/or other type of medical emergency. One situation that comes directly to mind was a member of our campus having a medical emergency walking to the security post at the front of the campus to contact the public safety staff. This was another situation where the public safety officer's cell phone did not have service and the calls did not reach them. I could go on with numerous examples that include community members on the trails and predatory animal sightings on campus, but that would only take away from your time. Instead, I would like to offer my practical reasons and concerns for the need to improve cell service in the area.

Let me start by saying that communication is essential in the event of an emergency. First response to an event begins with having the ability to report an incident as it is happening. This can be lifesaving if the caller is already injured, or harm is imminent. Communication is also part

of an Emergency Response Plan as it is essential to coordinate with others as they implement Protective Actions. Finally, it is not just a St. John's issue, it is a community issue. We have a high school and elementary next door, and those kids, teachers, and staff may need to rely on cell communication in the event of an emergency.

The following are various contingencies and practical applications not being addressed with our current lack of cell service.

1. **Human Threat** – As of the date of this letter there are currently 17,399 gun violence deaths in the United States.
    a. **Workplace violence** is a growing concern nationwide and can result in death or bodily harm not only to individual parties but the entire workplace. The United States is recording gun violence incidents at alarming rates. Workplace violence events are often unexpected with little to no warning. Not everyone has the advantage to get on a landline to report.
    b. **Active Shooters** are always a real threat, especially to educational institutions. Our college, Santa Fe Prep, and Atalaya Elementary provide easy targets, especially due to the remote mountainous location. A shooter can kill their victims, then escape into the mountains avoiding immediate capture.
    c. **Domestic Violence** is also a trend that is continuing to rise, and our campus is not immune. Victims of domestic violence may need to rely on a cell phone as they may not be able to escape to an area with a landline. Not to mention, many victims have concealed their phones to secretly text for help or call and keep the line open for first responders. This is something I know from personal experience as I have felt the anxiety of trying to get to a victim in trouble.

2. **Nature –** Nature is often a threat that goes unnoticed until it is right on top of you.
    a. **Animals** - About a month ago St. John's had a bobcat sighting on campus. Furthermore, St. John's is in an area where a bear could easily wander onto campus. If a student, staff, or faculty member is walking the trail, or outside and not able to get into a campus building, this could be disastrous for both the person and the animal.
    b. **Natural Disasters** - Snow, thunderstorms, and other weather events can happen rapidly, and if you are hiking, it may be difficult to navigate back to shelter without assistance. It is not uncommon for a new and even experience hiker to get lost. Having cell service on the trail could mean locating them quickly.

3. **Emergency Notification** - Omnilert/e2campus is St. John's emergency notification service. This program has Wi-Fi push notification abilities, but if you are beyond Wi-Fi range it is useless unless there is also cell service. We use this service to send out various types of high priority and emergency notification.

4. **First Responders** - Fire, police, as well as search and rescue may need to rely on cell service, especially if the person needing help does not know their location. This could mean using the map application on their phone and dropping a pin to help first responders locate them quickly. Furthermore, first responders' radios also rely on cell towers as

repeaters/boosters; this is how their radios can work over a great distance. I know as a matter of fact, that prior to the digital age, radio communication (analog) was easily broken especially in rural areas. (First-hand knowledge).

Mr. Esquibel, these are a few examples to the importance to having adequate cell service. I am also fully aware that the local community can be quite outspoken, and at times, litigious. The reality is that despite the "eye sore" this tower could ultimately mean the difference between life and death. I hope that at some point our neighbors and community members can recognize the importance communication plays in emergency response and coordination. The truth is this is probably not something that has ever crossed their minds. This is not a criticism; it is a fact. As a retired police officer who has spoken many times in front of community member meetings, these types of actions have to be explained to those who do not have the experience. Regardless of the counter arguments for not wanting this cell tower, I know that I am speaking from experience. I have spent my adult life serving my community. I know the panic when someone needs help and the relief everyone feels when you arrive on scene. So, I say with confidence that a human life is worth exponentially more than an obstructed view; in fact, there is no comparison.

Thank you for your time and consideration. If you wish to speak to me further about this, please feel free to reach out to me anytime.

Sincerely,

Daniel Campbell
Director of Public Safety
St. John's College Santa Fe
Cell: (505) 280-8243
e-mail: daniel.campbell@sjc.edu

July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT E

Code and FCC References

United States Code Annotated
Title 47. Telecommunications (Refs & Annos)
Chapter 5. Wire or Radio Communication (Refs & Annos)
Subchapter III. Special Provisions Relating to Radio (Refs & Annos)
Part I. General Provisions

47 U.S.C.A. § 332

§ 332. Mobile services

Effective: March 23, 2018
Currentness

(a) Factors which Commission must consider

In taking actions to manage the spectrum to be made available for use by the private mobile services, the Commission shall consider, consistent with section 151 of this title, whether such actions will--

(1) promote the safety of life and property;

(2) improve the efficiency of spectrum use and reduce the regulatory burden upon spectrum users, based upon sound engineering principles, user operational requirements, and marketplace demands;

(3) encourage competition and provide services to the largest feasible number of users; or

(4) increase interservice sharing opportunities between private mobile services and other services.

(b) Advisory coordinating committees

(1) The Commission, in coordinating the assignment of frequencies to stations in the private mobile services and in the fixed services (as defined by the Commission by rule), shall have authority to utilize assistance furnished by advisory coordinating committees consisting of individuals who are not officers or employees of the Federal Government.

(2) The authority of the Commission established in this subsection shall not be subject to or affected by the provisions of part III of Title 5 or section 1342 of Title 31.

(3) Any person who provides assistance to the Commission under this subsection shall not be considered, by reason of having provided such assistance, a Federal employee.

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(4) Any advisory coordinating committee which furnishes assistance to the Commission under this subsection shall not be subject to the provisions of the Federal Advisory Committee Act.

(c) Regulatory treatment of mobile services

(1) Common carrier treatment of commercial mobile services

(A) A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this chapter, except for such provisions of subchapter II as the Commission may specify by regulation as inapplicable to that service or person. In prescribing or amending any such regulation, the Commission may not specify any provision of section 201, 202, or 208 of this title, and may specify any other provision only if the Commission determines that--

(i) enforcement of such provision is not necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with that service are just and reasonable and are not unjustly or unreasonably discriminatory;

(ii) enforcement of such provision is not necessary for the protection of consumers; and

(iii) specifying such provision is consistent with the public interest.

(B) Upon reasonable request of any person providing commercial mobile service, the Commission shall order a common carrier to establish physical connections with such service pursuant to the provisions of section 201 of this title. Except to the extent that the Commission is required to respond to such a request, this subparagraph shall not be construed as a limitation or expansion of the Commission's authority to order interconnection pursuant to this chapter.

(C) As a part of making a determination with respect to the public interest under subparagraph (A)(iii), the Commission shall consider whether the proposed regulation (or amendment thereof) will promote competitive market conditions, including the extent to which such regulation (or amendment) will enhance competition among providers of commercial mobile services. If the Commission determines that such regulation (or amendment) will promote competition among providers of commercial mobile services, such determination may be the basis for a Commission finding that such regulation (or amendment) is in the public interest.

(D) The Commission shall, not later than 180 days after August 10, 1993, complete a rulemaking required to implement this paragraph with respect to the licensing of personal communications services, including making any determinations required by subparagraph (C).

(2) Non-common carrier treatment of private mobile services

A person engaged in the provision of a service that is a private mobile service shall not, insofar as such person is so engaged, be treated as a common carrier for any purpose under this chapter. A common carrier (other than a person that was treated as

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a provider of a private land mobile service prior to August 10, 1993) shall not provide any dispatch service on any frequency allocated for common carrier service, except to the extent such dispatch service is provided on stations licensed in the domestic public land mobile radio service before January 1, 1982. The Commission may by regulation terminate, in whole or in part, the prohibition contained in the preceding sentence if the Commission determines that such termination will serve the public interest.

(3) State preemption

(A) Notwithstanding sections 152(b) and 221(b) of this title, no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services. Nothing in this subparagraph shall exempt providers of commercial mobile services (where such services are a substitute for land line telephone exchange service for a substantial portion of the communications within such State) from requirements imposed by a State commission on all providers of telecommunications services necessary to ensure the universal availability of telecommunications service at affordable rates. Notwithstanding the first sentence of this subparagraph, a State may petition the Commission for authority to regulate the rates for any commercial mobile service and the Commission shall grant such petition if such State demonstrates that--

(i) market conditions with respect to such services fail to protect subscribers adequately from unjust and unreasonable rates or rates that are unjustly or unreasonably discriminatory; or

(ii) such market conditions exist and such service is a replacement for land line telephone exchange service for a substantial portion of the telephone land line exchange service within such State.

The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition. If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such periods of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unjustly or unreasonably discriminatory.

(B) If a State has in effect on June 1, 1993, any regulation concerning the rates for any commercial mobile service offered in such State on such date, such State may, no later than 1 year after August 10, 1993, petition the Commission requesting that the State be authorized to continue exercising authority over such rates. If a State files such a petition, the State's existing regulation shall, notwithstanding subparagraph (A), remain in effect until the Commission completes all action (including any reconsideration) on such petition. The Commission shall review such petition in accordance with the procedures established in such subparagraph, shall complete all action (including any reconsideration) within 12 months after such petition is filed, and shall grant such petition if the State satisfies the showing required under subparagraph (A)(i) or (A)(ii). If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such period of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unjustly or unreasonably discriminatory. After a reasonable period of time, as determined by the Commission, has elapsed from the issuance of an order under subparagraph (A) or this subparagraph, any interested party may petition the Commission for an order that the exercise of authority by a State pursuant to such subparagraph is no longer necessary to ensure that the rates for commercial mobile services are just and reasonable and not unjustly or unreasonably discriminatory. The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition in whole or in part.

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(4) Regulatory treatment of communications satellite corporation

Nothing in this subsection shall be construed to alter or affect the regulatory treatment required by title IV of the Communications Satellite Act of 1962 of the corporation authorized by title III of such Act.

(5) Space segment capacity

Nothing in this section shall prohibit the Commission from continuing to determine whether the provision of space segment capacity by satellite systems to providers of commercial mobile services shall be treated as common carriage.

(6) Foreign ownership

The Commission, upon a petition for waiver filed within 6 months after August 10, 1993, may waive the application of section 310(b) of this title to any foreign ownership that lawfully existed before May 24, 1993, of any provider of a private land mobile service that will be treated as a common carrier as a result of the enactment of the Omnibus Budget Reconciliation Act of 1993, but only upon the following conditions:

(A) The extent of foreign ownership interest shall not be increased above the extent which existed on May 24, 1993.

(B) Such waiver shall not permit the subsequent transfer of ownership to any other person in violation of section 310(b) of this title.

(7) Preservation of local zoning authority

(A) General authority

Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

(B) Limitations

(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

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(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) Definitions

For purposes of this paragraph--

(i) the term “personal wireless services” means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term “personal wireless service facilities” means facilities for the provision of personal wireless services; and

(iii) the term “unlicensed wireless service” means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v) of this title).

(8) Mobile services access

A person engaged in the provision of commercial mobile services, insofar as such person is so engaged, shall not be required to provide equal access to common carriers for the provision of telephone toll services. If the Commission determines that subscribers to such services are denied access to the provider of telephone toll services of the subscribers' choice, and that such denial is contrary to the public interest, convenience, and necessity, then the Commission shall prescribe regulations to afford subscribers unblocked access to the provider of telephone toll services of the subscribers' choice through the use of a carrier identification code assigned to such provider or other mechanism. The requirements for unblocking shall not apply to mobile satellite services unless the Commission finds it to be in the public interest to apply such requirements to such services.

(d) Definitions

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For purposes of this section--

(1) the term "commercial mobile service" means any mobile service (as defined in section 153 of this title) that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission;

(2) the term "interconnected service" means service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission) or service for which a request for interconnection is pending pursuant to subsection (c)(1)(B); and

(3) the term "private mobile service" means any mobile service (as defined in section 153 of this title) that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission.

CREDIT(S)

(June 19, 1934, c. 652, Title III, § 332, formerly § 331, as added Pub.L. 97-259, Title I, § 120(a), Sept. 13, 1982, 96 Stat. 1096; renumbered § 332, Pub.L. 102-385, § 25(b), Oct. 5, 1992, 106 Stat. 1502; amended Pub.L. 103-66, Title VI, § 6002(b)(2)(A), Aug. 10, 1993, 107 Stat. 393; Pub.L. 104-104, § 3(d)(2), Title VII, §§ 704(a), 705, Feb. 8, 1996, 110 Stat. 61, 151, 153; Pub.L. 115-141, Div. P, Title IV, § 402(g), Mar. 23, 2018, 132 Stat. 1089.)

47 U.S.C.A. § 332, 47 USCA § 332
Current through PL 117-15 with the exception of PL 116-283, Div. A, Title XVIII, which takes effect January 1, 2022.

End of Document

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United States Code Annotated
Title 47. Telecommunications (Refs & Annos)
Chapter 13. Public Safety Communications and Electromagnetic Spectrum Auctions
Subchapter IV. Spectrum Auction Authority

47 U.S.C.A. § 1455

§ 1455. Wireless facilities deployment

Effective: March 23, 2018
Currentness

(a) Facility modifications

(1) In general

Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104-104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) Eligible facilities request

For purposes of this subsection, the term "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves--

(A) collocation of new transmission equipment;

(B) removal of transmission equipment; or

(C) replacement of transmission equipment.

(3) Applicability of environmental laws

Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

(b) Federal easements, rights-of-way, and leases

(1) Grant

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If an executive agency, a State, a political subdivision or agency of a State, or a person, firm, or organization applies for the grant of an easement, right-of-way, or lease to, in, over, or on a building or other property owned by the Federal Government for the right to install, construct, modify, or maintain a communications facility installation, the executive agency having control of the building or other property may grant to the applicant, on behalf of the Federal Government, subject to paragraph (3), an easement, right-of-way, or lease to perform such installation, construction, modification, or maintenance.

(2) Application

(A) In general

The Administrator of General Services shall develop a common form for applications for easements, rights-of-way, and leases under paragraph (1) for all executive agencies that, except as provided in subparagraph (B), shall be used by all executive agencies and applicants with respect to the buildings or other property of each such agency.

(B) Exception

The requirement under subparagraph (A) for an executive agency to use the common form developed by the Administrator of General Services shall not apply to an executive agency if the head of an executive agency notifies the Administrator that the executive agency uses a substantially similar application.

(3) Timely consideration of applications

(A) In general

Not later than 270 days after the date on which an executive agency receives a duly filed application for an easement, right-of-way, or lease under this subsection, the executive agency shall--

(i) grant or deny, on behalf of the Federal Government, the application; and

(ii) notify the applicant of the grant or denial.

(B) Explanation of denial

If an executive agency denies an application under subparagraph (A), the executive agency shall notify the applicant in writing, including a clear statement of the reasons for the denial.

(C) Applicability of environmental laws

Nothing in this paragraph shall be construed to relieve an executive agency of the requirements of division A of subtitle III of Title 54 or the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(D) Point of contact

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Upon receiving an application under subparagraph (A), an executive agency shall designate one or more appropriate individuals within the executive agency to act as a point of contact with the applicant.

(c) Master contracts for communications facility installation sitings

(1) In general

Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104-104; 110 Stat. 151) or any other provision of law, the Administrator of General Services shall--

(A) develop one or more master contracts that shall govern the placement of communications facility installations on buildings and other property owned by the Federal Government; and

(B) in developing the master contract or contracts, standardize the treatment of the placement of communications facility installations on building rooftops or facades, the placement of communications facility installations on rooftops or inside buildings, the technology used in connection with communications facility installations placed on Federal buildings and other property, and any other key issues the Administrator of General Services considers appropriate.

(2) Applicability

The master contract or contracts developed by the Administrator of General Services under paragraph (1) shall apply to all publicly accessible buildings and other property owned by the Federal Government, unless the Administrator of General Services decides that issues with respect to the siting of a communications facility installation on a specific building or other property warrant nonstandard treatment of such building or other property.

(3) Application

(A) In general

The Administrator of General Services shall develop a common form or set of forms for communications facility installation siting applications that, except as provided in subparagraph (B), shall be used by all executive agencies and applicants with respect to the buildings and other property of each such agency.

(B) Exception

The requirement under subparagraph (A) for an executive agency to use the common form or set of forms developed by the Administrator of General Services shall not apply to an executive agency if the head of the executive agency notifies the Administrator that the executive agency uses a substantially similar application.

(d) Definitions

In this section:

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(1) Communications facility installation

The term "communications facility installation" includes--

(A) any infrastructure, including any transmitting device, tower, or support structure, and any equipment, switches, wiring, cabling, power sources, shelters, or cabinets, associated with the licensed or permitted unlicensed wireless or wireline transmission of writings, signs, signals, data, images, pictures, and sounds of all kinds; and

(B) any antenna or apparatus that--

(i) is designed for the purpose of emitting radio frequency;

(ii) is designed to be operated, or is operating, from a fixed location pursuant to authorization by the Federal Communications Commission or is using duly authorized devices that do not require individual licenses; and

(iii) is added to a tower, building, or other structure.

(2) Executive agency

The term "executive agency" has the meaning given such term in section 102 of Title 40.

CREDIT(S)

(Pub.L. 112-96, Title VI, § 6409, Feb. 22, 2012, 126 Stat. 232; Pub.L. 115-141, Div. P, Title VI, § 606(a), Mar. 23, 2018, 132 Stat. 1101.)

47 U.S.C.A. § 1455, 47 USCA § 1455
Current through PL 117-15 with the exception of PL 116-283, Div. A, Title XVIII, which takes effect January 1, 2022.

End of Document

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47 C.F.R. § 1.6001

§ 1.6001 Purpose.

Effective: January 14, 2019
Currentness

This subpart implements 47 U.S.C. 332(c)(7) and 1455.

SOURCE: 56 FR 57598, Nov. 13, 1991; 57 FR 187, Jan. 3, 1992; 58 FR 27473, May 10, 1993; 59 FR 22985, May 4, 1994; 61 FR 45618, Aug. 29, 1996; 61 FR 46561, Sept. 4, 1996; 61 FR 52899, Oct. 9, 1996; 62 FR 37422, July 11, 1997; 63 FR 67429, Dec. 7, 1998; 63 FR 71036, Dec. 23, 1998; 64 FR 63251, Nov. 19, 1999; 65 FR 10720, Feb. 29, 2000; 65 FR 19684, April 12, 2000; 65 FR 31281, May 17, 2000; 69 FR 77938, Dec. 29, 2004; 71 FR 26251, May 4, 2006; 74 FR 39227, Aug. 6, 2009; 75 FR 9797, March 4, 2010; 76 FR 43203, July 20, 2011; 77 FR 71137, Nov. 29, 2012; 78 FR 10100, Feb. 13, 2013; 78 FR 15622, March 12, 2013; 78 FR 41321, July 10, 2013; 78 FR 50254, Aug. 16, 2013; 79 FR 48528, Aug. 15, 2014; 80 FR 1268, Jan. 8, 2015; 81 FR 40821, June 23, 2016; 81 FR 52362, Aug. 8, 2016; 81 FR 79930, Nov. 14, 2016; 81 FR 86601, Dec. 1, 2016; 82 FR 8171, Jan. 24, 2017; 82 FR 18581, April 20, 2017; 82 FR 20839, May 4, 2017; 82 FR 24561, May 30, 2017; 82 FR 41103, Aug. 29, 2017; 82 FR 41544, Sept. 1, 2017; 82 FR 55331, Nov. 21, 2017; 82 FR 58758, Dec. 14, 2017; 83 FR 2556, Jan. 18, 2018; 83 FR 4600, Feb. 1, 2018; 83 FR 7401, Feb. 21, 2018; 83 FR 46836, Sept. 14, 2018; 83 FR 47095, Sept. 18, 2018; 83 FR 48963, Sept. 28, 2018; 83 FR 51884, Oct. 15, 2018; 83 FR 61089, Nov. 27, 2018; 83 FR 63095, Dec. 7, 2018; 84 FR 8618, March 11, 2019; 84 FR 50999, Sept. 26, 2019; 84 FR 57363, Oct. 25, 2019, unless otherwise noted.

AUTHORITY: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

Current through October 22, 2020; 85 FR 67311.

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47 C.F.R. § 1.6002

§ 1.6002 Definitions.

Effective: December 5, 2019
Currentness

Terms not specifically defined in this section or elsewhere in this subpart have the meanings defined in this part and the Communications Act of 1934, 47 U.S.C. 151 et seq. Terms used in this subpart have the following meanings:

(a) Action or to act on a siting application means a siting authority's grant of a siting application or issuance of a written decision denying a siting application.

(b) Antenna, consistent with § 1.1320(d), means an apparatus designed for the purpose of emitting radiofrequency (RF) radiation, to be operated or operating from a fixed location pursuant to Commission authorization, for the provision of personal wireless service and any commingled information services. For purposes of this definition, the term antenna does not include an unintentional radiator, mobile station, or device authorized under part 15 of this chapter.

(c) Antenna equipment, consistent with § 1.1320(d), means equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.

(d) Antenna facility means an antenna and associated antenna equipment.

(e) Applicant means a person or entity that submits a siting application and the agents, employees, and contractors of such person or entity.

(f) Authorization means any approval that a siting authority must issue under applicable law prior to the deployment of personal wireless service facilities, including, but not limited to, zoning approval and building permit.

(g) Collocation, consistent with § 1.1320(d) and the Nationwide Programmatic Agreement (NPA) for the Collocation of Wireless Antennas, appendix B of this part, section I.B, means—

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(1) Mounting or installing an antenna facility on a pre-existing structure; and/or

(2) Modifying a structure for the purpose of mounting or installing an antenna facility on that structure.

(3) The definition of "collocation" in § 1.6100(b)(2) applies to the term as used in that section.

(h) Deployment means placement, construction, or modification of a personal wireless service facility.

(i) Facility or personal wireless service facility means an antenna facility or a structure that is used for the provision of personal wireless service, whether such service is provided on a stand-alone basis or commingled with other wireless communications services.

(j) Siting application or application means a written submission to a siting authority requesting authorization for the deployment of a personal wireless service facility at a specified location.

(k) Siting authority means a State government, local government, or instrumentality of a State government or local government, including any official or organizational unit thereof, whose authorization is necessary prior to the deployment of personal wireless service facilities.

(l) Small wireless facilities are facilities that meet each of the following conditions:

(1) The facilities—

(i) Are mounted on structures 50 feet or less in height including their antennas as defined in § 1.1320(d); or

(ii) Are mounted on structures no more than 10 percent taller than other adjacent structures; or

(iii) Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater;

(2) Each antenna associated with the deployment, excluding associated antenna equipment (as defined in the definition of antenna in § 1.1320(d)), is no more than three cubic feet in volume;

(3) All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume;

(4) The facilities do not require antenna structure registration under part 17 of this chapter;

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(5) The facilities are not located on Tribal lands, as defined under 36 CFR 800.16(x); and

(6) The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in § 1.1307(b).

(m) Structure means a pole, tower, base station, or other building, whether or not it has an existing antenna facility, that is used or to be used for the provision of personal wireless service (whether on its own or comingled with other types of services).

Credits

[84 FR 59567, Nov. 5, 2019]

SOURCE: 56 FR 57598, Nov. 13, 1991; 57 FR 187, Jan. 3, 1992; 58 FR 27473, May 10, 1993; 59 FR 22985, May 4, 1994; 61 FR 45618, Aug. 29, 1996; 61 FR 46561, Sept. 4, 1996; 61 FR 52899, Oct. 9, 1996; 62 FR 37422, July 11, 1997; 63 FR 67429, Dec. 7, 1998; 63 FR 71036, Dec. 23, 1998; 64 FR 63251, Nov. 19, 1999; 65 FR 10720, Feb. 29, 2000; 65 FR 19684, April 12, 2000; 65 FR 31281, May 17, 2000; 69 FR 77938, Dec. 29, 2004; 71 FR 26251, May 4, 2006; 74 FR 39227, Aug. 6, 2009; 75 FR 9797, March 4, 2010; 76 FR 43203, July 20, 2011; 77 FR 71137, Nov. 29, 2012; 78 FR 10100, Feb. 13, 2013; 78 FR 15622, March 12, 2013; 78 FR 41321, July 10, 2013; 78 FR 50254, Aug. 16, 2013; 79 FR 48528, Aug. 15, 2014; 80 FR 1268, Jan. 8, 2015; 81 FR 40821, June 23, 2016; 81 FR 52362, Aug. 8, 2016; 81 FR 79930, Nov. 14, 2016; 81 FR 86601, Dec. 1, 2016; 82 FR 8171, Jan. 24, 2017; 82 FR 18581, April 20, 2017; 82 FR 20839, May 4, 2017; 82 FR 24561, May 30, 2017; 82 FR 41103, Aug. 29, 2017; 82 FR 41544, Sept. 1, 2017; 82 FR 55331, Nov. 21, 2017; 82 FR 58758, Dec. 14, 2017; 83 FR 2556, Jan. 18, 2018; 83 FR 4600, Feb. 1, 2018; 83 FR 7401, Feb. 21, 2018; 83 FR 46836, Sept. 14, 2018; 83 FR 47095, Sept. 18, 2018; 83 FR 48963, Sept. 28, 2018; 83 FR 51884, Oct. 15, 2018; 83 FR 61089, Nov. 27, 2018; 83 FR 63095, Dec. 7, 2018; 84 FR 8618, March 11, 2019; 84 FR 50999, Sept. 26, 2019; 84 FR 57363, Oct. 25, 2019, unless otherwise noted.

AUTHORITY: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

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47 C.F.R. § 1.6003

§ 1.6003 Reasonable periods of time to act on siting applications.

Effective: January 14, 2019
Currentness

(a) Timely action required. A siting authority that fails to act on a siting application on or before the shot clock date for the application, as defined in paragraph (e) of this section, is presumed not to have acted within a reasonable period of time.

(b) Shot clock period. The shot clock period for a siting application is the sum of—

(1) The number of days of the presumptively reasonable period of time for the pertinent type of application, pursuant to paragraph (c) of this section; plus

(2) The number of days of the tolling period, if any, pursuant to paragraph (d) of this section.

(c) Presumptively reasonable periods of time—

(1) Review periods for individual applications. The following are the presumptively reasonable periods of time for action on applications seeking authorization for deployments in the categories set forth in paragraphs (c)(1)(i) through (iv) of this section:

(i) Review of an application to collocate a Small Wireless Facility using an existing structure: 60 days.

(ii) Review of an application to collocate a facility other than a Small Wireless Facility using an existing structure: 90 days.

(iii) Review of an application to deploy a Small Wireless Facility using a new structure: 90 days.

(iv) Review of an application to deploy a facility other than a Small Wireless Facility using a new structure: 150 days.

(2) Batching.

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(i) If a single application seeks authorization for multiple deployments, all of which fall within a category set forth in either paragraph (c)(1)(i) or (iii) of this section, then the presumptively reasonable period of time for the application as a whole is equal to that for a single deployment within that category.

(ii) If a single application seeks authorization for multiple deployments, the components of which are a mix of deployments that fall within paragraph (c)(1)(i) of this section and deployments that fall within paragraph (c)(1)(iii) of this section, then the presumptively reasonable period of time for the application as a whole is 90 days.

(iii) Siting authorities may not refuse to accept applications under paragraphs (c)(2)(i) and (ii) of this section.

(d) Tolling period. Unless a written agreement between the applicant and the siting authority provides otherwise, the tolling period for an application (if any) is as set forth in paragraphs (d)(1) through (3) of this section.

(1) For an initial application to deploy Small Wireless Facilities, if the siting authority notifies the applicant on or before the 10th day after submission that the application is materially incomplete, and clearly and specifically identifies the missing documents or information and the specific rule or regulation creating the obligation to submit such documents or information, the shot clock date calculation shall restart at zero on the date on which the applicant submits all the documents and information identified by the siting authority to render the application complete.

(2) For all other initial applications, the tolling period shall be the number of days from—

(i) The day after the date when the siting authority notifies the applicant in writing that the application is materially incomplete and clearly and specifically identifies the missing documents or information that the applicant must submit to render the application complete and the specific rule or regulation creating this obligation; until

(ii) The date when the applicant submits all the documents and information identified by the siting authority to render the application complete;

(iii) But only if the notice pursuant to paragraph (d)(2)(i) of this section is effectuated on or before the 30th day after the date when the application was submitted; or

(3) For resubmitted applications following a notice of deficiency, the tolling period shall be the number of days from—

(i) The day after the date when the siting authority notifies the applicant in writing that the applicant's supplemental submission was not sufficient to render the application complete and clearly and specifically identifies the missing documents or information that need to be submitted based on the siting authority's original request under paragraph (d)(1) or (2) of this section; until

(ii) The date when the applicant submits all the documents and information identified by the siting authority to render the application complete;

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(iii) But only if the notice pursuant to paragraph (d)(3)(i) of this section is effectuated on or before the 10th day after the date when the applicant makes a supplemental submission in response to the siting authority's request under paragraph (d)(1) or (2) of this section.

(e) Shot clock date. The shot clock date for a siting application is determined by counting forward, beginning on the day after the date when the application was submitted, by the number of calendar days of the shot clock period identified pursuant to paragraph (b) of this section and including any pre-application period asserted by the siting authority; provided, that if the date calculated in this manner is a "holiday" as defined in § 1.4(e)(1) or a legal holiday within the relevant State or local jurisdiction, the shot clock date is the next business day after such date. The term "business day" means any day as defined in § 1.4(e)(2) and any day that is not a legal holiday as defined by the State or local jurisdiction.

SOURCE: 56 FR 57598, Nov. 13, 1991; 57 FR 187, Jan. 3, 1992; 58 FR 27473, May 10, 1993; 59 FR 22985, May 4, 1994; 61 FR 45618, Aug. 29, 1996; 61 FR 46561, Sept. 4, 1996; 61 FR 52899, Oct. 9, 1996; 62 FR 37422, July 11, 1997; 63 FR 67429, Dec. 7, 1998; 63 FR 71036, Dec. 23, 1998; 64 FR 63251, Nov. 19, 1999; 65 FR 10720, Feb. 29, 2000; 65 FR 19684, April 12, 2000; 65 FR 31281, May 17, 2000; 69 FR 77938, Dec. 29, 2004; 71 FR 26251, May 4, 2006; 74 FR 39227, Aug. 6, 2009; 75 FR 9797, March 4, 2010; 76 FR 43203, July 20, 2011; 77 FR 71137, Nov. 29, 2012; 78 FR 10100, Feb. 13, 2013; 78 FR 15622, March 12, 2013; 78 FR 41321, July 10, 2013; 78 FR 50254, Aug. 16, 2013; 79 FR 48528, Aug. 15, 2014; 80 FR 1268, Jan. 8, 2015; 81 FR 40821, June 23, 2016; 81 FR 52362, Aug. 8, 2016; 81 FR 79930, Nov. 14, 2016; 81 FR 86601, Dec. 1, 2016; 82 FR 8171, Jan. 24, 2017; 82 FR 18581, April 20, 2017; 82 FR 20839, May 4, 2017; 82 FR 24561, May 30, 2017; 82 FR 41103, Aug. 29, 2017; 82 FR 41544, Sept. 1, 2017; 82 FR 55331, Nov. 21, 2017; 82 FR 58758, Dec. 14, 2017; 83 FR 2556, Jan. 18, 2018; 83 FR 4600, Feb. 1, 2018; 83 FR 7401, Feb. 21, 2018; 83 FR 46836, Sept. 14, 2018; 83 FR 47095, Sept. 18, 2018; 83 FR 48963, Sept. 28, 2018; 83 FR 51884, Oct. 15, 2018; 83 FR 61089, Nov. 27, 2018; 83 FR 63095, Dec. 7, 2018; 84 FR 8618, March 11, 2019; 84 FR 50999, Sept. 26, 2019; 84 FR 57363, Oct. 25, 2019, unless otherwise noted.

AUTHORITY: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

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47 C.F.R. § 1.6100

§ 1.6100 Wireless Facility Modifications.

Effective: January 14, 2019
Currentness

(a) [Reserved by 83 FR 51886]

(b) Definitions. Terms used in this section have the following meanings.

(1) Base station. A structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network. The term does not encompass a tower as defined in this subpart or any equipment associated with a tower.

(i) The term includes, but is not limited to, equipment associated with wireless communications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

(ii) The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including Distributed Antenna Systems and small-cell networks).

(iii) The term includes any structure other than a tower that, at the time the relevant application is filed with the State or local government under this section, supports or houses equipment described in paragraphs (b)(1)(i) through (ii) of this section that has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support.

(iv) The term does not include any structure that, at the time the relevant application is filed with the State or local government under this section, does not support or house equipment described in paragraphs (b)(1)(i)-(ii) of this section.

(2) Collocation. The mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

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(3) Eligible facilities request. Any request for modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station, involving:

(i) Collocation of new transmission equipment;

(ii) Removal of transmission equipment; or

(iii) Replacement of transmission equipment.

(4) Eligible support structure. Any tower or base station as defined in this section, provided that it is existing at the time the relevant application is filed with the State or local government under this section.

(5) Existing. A constructed tower or base station is existing for purposes of this section if it has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, provided that a tower that has not been reviewed and approved because it was not in a zoned area when it was built, but was lawfully constructed, is existing for purposes of this definition.

(6) Site. For towers other than towers in the public rights-of-way, the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site, and, for other eligible support structures, further restricted to that area in proximity to the structure and to other transmission equipment already deployed on the ground.

(7) Substantial change. A modification substantially changes the physical dimensions of an eligible support structure if it meets any of the following criteria:

(i) For towers other than towers in the public rights-of-way, it increases the height of the tower by more than 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater; for other eligible support structures, it increases the height of the structure by more than 10% or more than ten feet, whichever is greater;

> (A) Changes in height should be measured from the original support structure in cases where deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height should be measured from the dimensions of the tower or base station, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act.

(ii) For towers other than towers in the public rights-of-way, it involves adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for other eligible support structures, it involves adding an appurtenance to the body of the structure that would protrude from the edge of the structure by more than six feet;

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(iii) For any eligible support structure, it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets; or, for towers in the public rights-of-way and base stations, it involves installation of any new equipment cabinets on the ground if there are no pre-existing ground cabinets associated with the structure, or else involves installation of ground cabinets that are more than 10% larger in height or overall volume than any other ground cabinets associated with the structure;

(iv) It entails any excavation or deployment outside the current site;

(v) It would defeat the concealment elements of the eligible support structure; or

(vi) It does not comply with conditions associated with the siting approval of the construction or modification of the eligible support structure or base station equipment, provided however that this limitation does not apply to any modification that is non-compliant only in a manner that would not exceed the thresholds identified in § 1.40001(b)(7)(i) through (iv).

(8) Transmission equipment. Equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

(9) Tower. Any structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

(c) Review of applications. A State or local government may not deny and shall approve any eligible facilities request for modification of an eligible support structure that does not substantially change the physical dimensions of such structure.

(1) Documentation requirement for review. When an applicant asserts in writing that a request for modification is covered by this section, a State or local government may require the applicant to provide documentation or information only to the extent reasonably related to determining whether the request meets the requirements of this section. A State or local government may not require an applicant to submit any other documentation, including but not limited to documentation intended to illustrate the need for such wireless facilities or to justify the business decision to modify such wireless facilities.

(2) Timeframe for review. Within 60 days of the date on which an applicant submits a request seeking approval under this section, the State or local government shall approve the application unless it determines that the application is not covered by this section.

(3) Tolling of the timeframe for review. The 60–day period begins to run when the application is filed, and may be tolled only by mutual agreement or in cases where the reviewing State or local government determines that the application is incomplete. The timeframe for review is not tolled by a moratorium on the review of applications.

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(i) To toll the timeframe for incompleteness, the reviewing State or local government must provide written notice to the applicant within 30 days of receipt of the application, clearly and specifically delineating all missing documents or information. Such delineated information is limited to documents or information meeting the standard under paragraph (c)(1) of this section.

(ii) The timeframe for review begins running again when the applicant makes a supplemental submission in response to the State or local government's notice of incompleteness.

(iii) Following a supplemental submission, the State or local government will have 10 days to notify the applicant that the supplemental submission did not provide the information identified in the original notice delineating missing information. The timeframe is tolled in the case of second or subsequent notices pursuant to the procedures identified in this paragraph (c)(3). Second or subsequent notices of incompleteness may not specify missing documents or information that were not delineated in the original notice of incompleteness.

(4) Failure to act. In the event the reviewing State or local government fails to approve or deny a request seeking approval under this section within the timeframe for review (accounting for any tolling), the request shall be deemed granted. The deemed grant does not become effective until the applicant notifies the applicable reviewing authority in writing after the review period has expired (accounting for any tolling) that the application has been deemed granted.

(5) Remedies. Applicants and reviewing authorities may bring claims related to Section 6409(a) to any court of competent jurisdiction.

Credits

[80 FR 28203, May 18, 2015; 83 FR 51886, Oct. 15, 2018]

SOURCE: 56 FR 57598, Nov. 13, 1991; 57 FR 187, Jan. 3, 1992; 58 FR 27473, May 10, 1993; 59 FR 22985, May 4, 1994; 61 FR 45618, Aug. 29, 1996; 61 FR 46561, Sept. 4, 1996; 61 FR 52899, Oct. 9, 1996; 62 FR 37422, July 11, 1997; 63 FR 67429, Dec. 7, 1998; 63 FR 71036, Dec. 23, 1998; 64 FR 63251, Nov. 19, 1999; 65 FR 10720, Feb. 29, 2000; 65 FR 19684, April 12, 2000; 65 FR 31281, May 17, 2000; 69 FR 77938, Dec. 29, 2004; 71 FR 26251, May 4, 2006; 74 FR 39227, Aug. 6, 2009; 75 FR 9797, March 4, 2010; 76 FR 43203, July 20, 2011; 77 FR 71137, Nov. 29, 2012; 78 FR 10100, Feb. 13, 2013; 78 FR 15622, March 12, 2013; 78 FR 41321, July 10, 2013; 78 FR 50254, Aug. 16, 2013; 79 FR 48528, Aug. 15, 2014; 80 FR 1268, Jan. 8, 2015; 81 FR 40821, June 23, 2016; 81 FR 52362, Aug. 8, 2016; 81 FR 79930, Nov. 14, 2016; 81 FR 86601, Dec. 1, 2016; 82 FR 8171, Jan. 24, 2017; 82 FR 18581, April 20, 2017; 82 FR 20839, May 4, 2017; 82 FR 24561, May 30, 2017; 82 FR 41103, Aug. 29, 2017; 82 FR 41544, Sept. 1, 2017; 82 FR 55331, Nov. 21, 2017; 82 FR 58758, Dec. 14, 2017; 83 FR 2556, Jan. 18, 2018; 83 FR 4600, Feb. 1, 2018; 83 FR 7401, Feb. 21, 2018; 83 FR 46836, Sept. 14, 2018; 83 FR 47095, Sept. 18, 2018; 83 FR 48963, Sept. 28, 2018; 83 FR 51884, Oct. 15, 2018; 83 FR 61089, Nov. 27, 2018; 83 FR 63095, Dec. 7, 2018; 84 FR 8618, March 11, 2019; 84 FR 50999, Sept. 26, 2019; 84 FR 57363, Oct. 25, 2019, unless otherwise noted.

AUTHORITY: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

Notes of Decisions (5)

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July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT F

Maps and Photos

Attachments:

1. Zoning Map
2. Aerial Photo
3. Use Distance
4. Telecommunication networks with the city

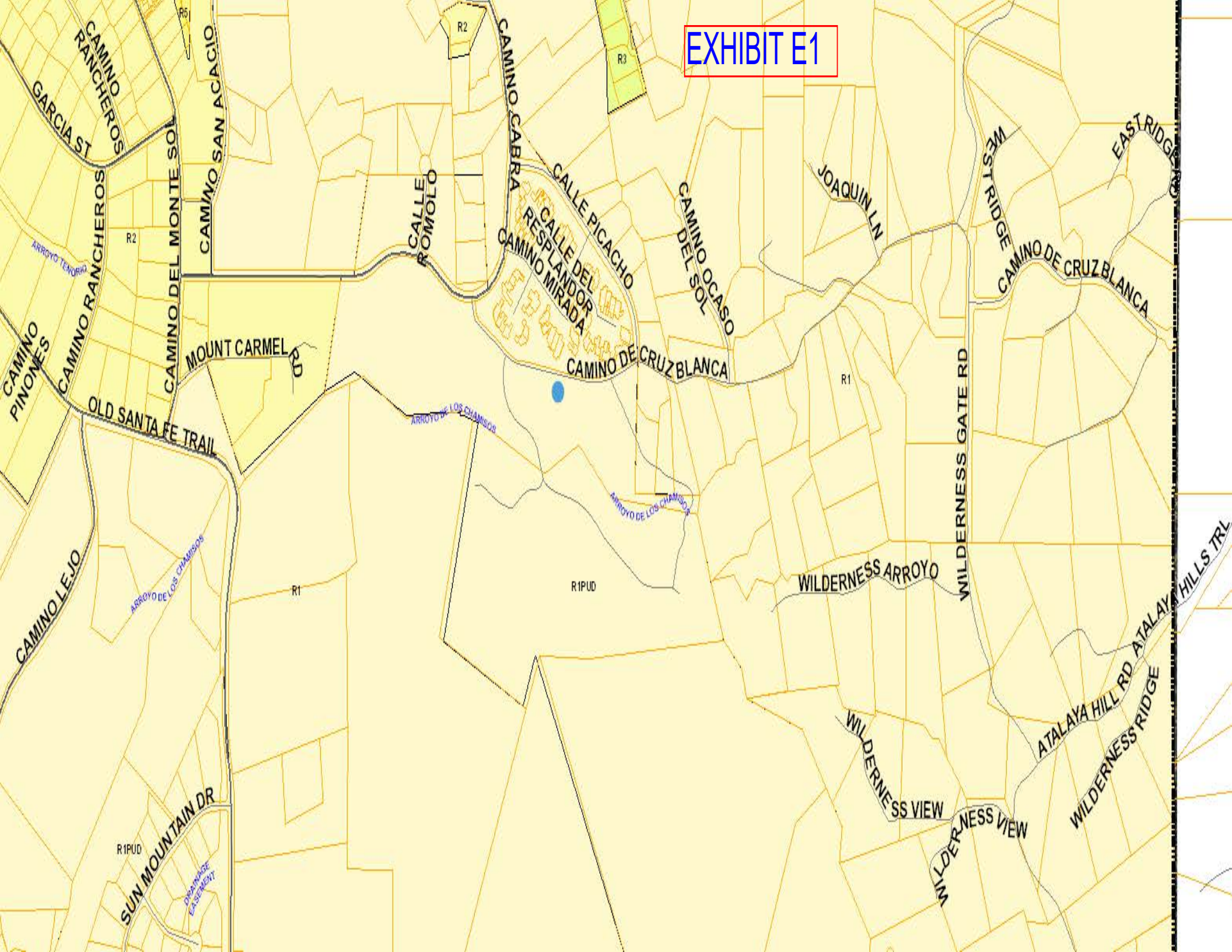


EXHIBIT E1
CAMINO RANCHEROS
GARCIA ST
CAMINO SAN ACACIO
CAMINO CABRA
CALLE ROMOLO
CALLE PICACHO
CALLE DEL RESPLANDOR
CAMINO MIRADA
CAMINO OCASO DEL SOL
JOAQUIN LN
WEST RIDGE
EAST RIDGE RD
CAMINO DE CRUZ BLANCA
CAMINO DEL MONTE SOL
CAMINO RANCHEROS
CAMINO PINONES
MOUNT CARMEL RD
OLD SANTA FE TRAIL
ARROYO TENORIO
ARROYO DE LOS CHAMISOS
WILDERNESS GATE RD
WILDERNESS ARROYO
CAMINO LEJO
SUN MOUNTAIN DR
DRAINAGE EASEMENT
WILDERNESS VIEW
ATALAYA HILL RD
WILDERNESS RIDGE
R1
R1PUD
R2
R3
R5

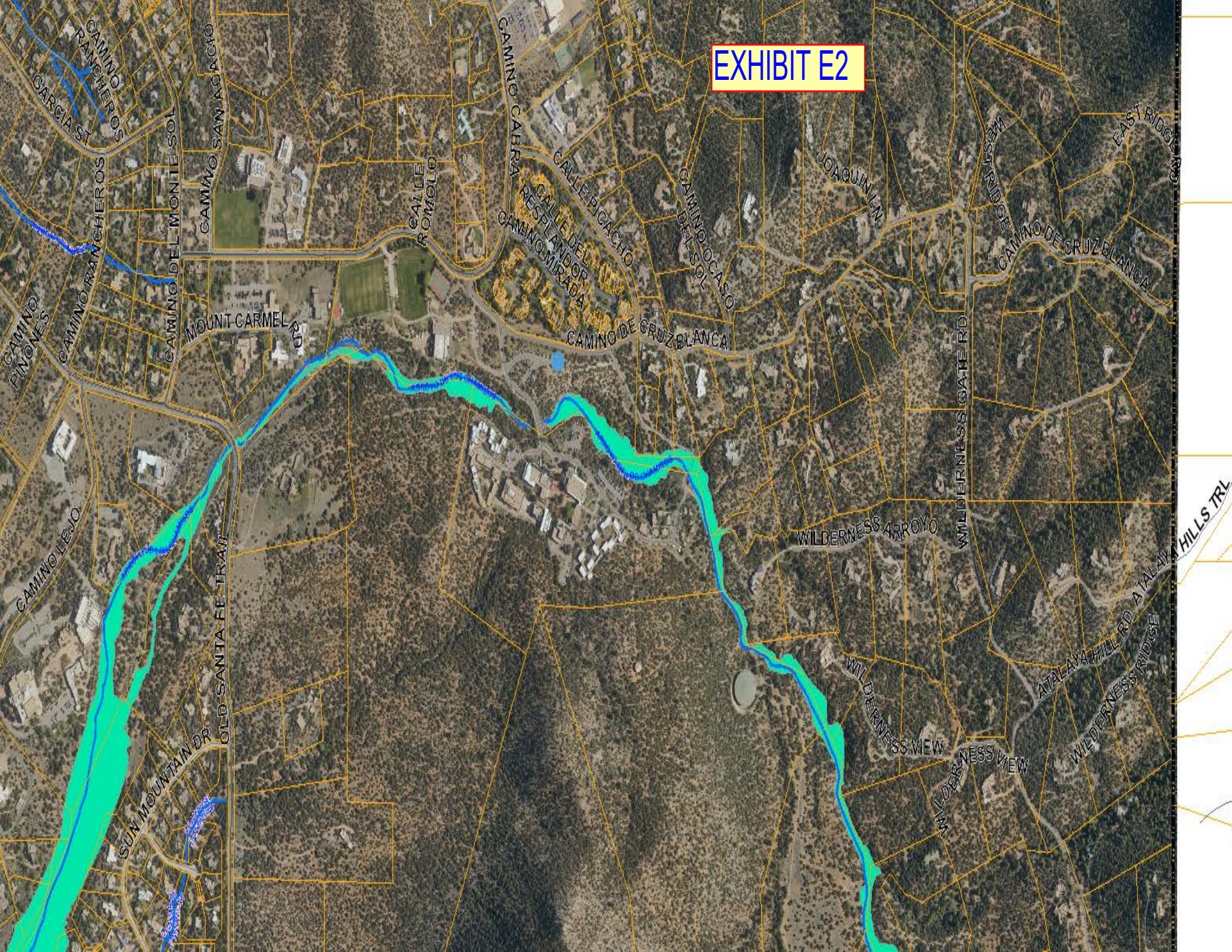
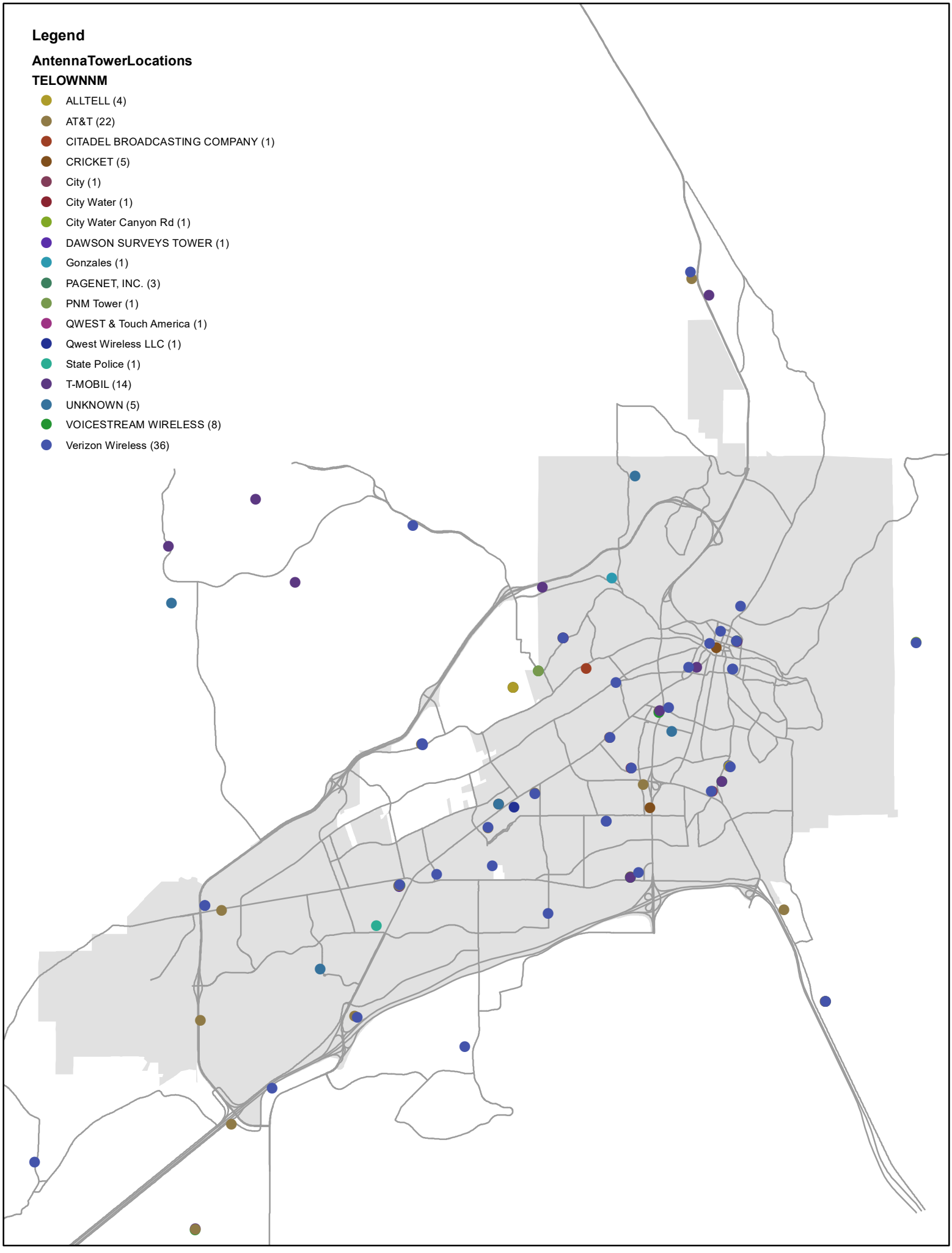


EXHIBIT E2
CAMINO RANCHEROS
GARCIA ST
CAMINO RANCHEROS
CAMINO DEL MONTE SOL
CAMINO SANTIAGO
CALLE ROMOLO
CAMINO CABRA
CALLE DEL RESPLANDOR
CAMINO MIRADA
CALLE PICACHO
CAMINO OCASO
DEL SOL
JOAQUIN LN
WEST RIDGE
EAST RIDGE RD
CAMINO DE CRUZ BLANCA
CAMINO PINONES
CAMINO RANCHEROS
MOUNT CARMEL RD
CAMINO DE CRUZ BLANCA
WILDERNESS GATE RD
CAMINO LEJO
OLD SANTA FE TRAIL
SUN MOUNTAIN DR
WILDERNESS ARROYO
WILDERNESS VIEW
WILDERNESS VIEW
ATALAYA HILL RD
ATALAYA HILLS TRL
WILDERNESS RIDGE

EXHIBIT E3
Total: 924.35 ft
924.35 ft
Total: 150.78 ft
150.78 ft
CAMINO DE CRUZ BLANCA
637.90 ft
Total: 637.90 ft
443.03 ft
Total: 443.03 ft


Legend
AntennaTowerLocations
TELOWNNM
ALLTELL (4)
AT&T (22)
CITADEL BROADCASTING COMPANY (1)
CRICKET (5)
City (1)
City Water (1)
City Water Canyon Rd (1)
DAWSON SURVEYS TOWER (1)
Gonzales (1)
PAGENET, INC. (3)
PNM Tower (1)
QWEST & Touch America (1)
Qwest Wireless LLC (1)
State Police (1)
T-MOBIL (14)
UNKNOWN (5)
VOICESTREAM WIRELESS (8)
Verizon Wireless (36)

July 01, 2021
Planning Commission
Case #2020-2639
1160 Camino De Cruz Blanca Road
Telecommunication Facility and Waiver

EXHIBIT G

Application Materials

Attachment:

1. Application Narrative Letter-Land Use
2. S255 Application Narrative Letter-Revised
3. S255 Compatibility visual impact letter
4. Revised waiver letter
5. Noise Letter
6. FAA Information
7. Search Ring
8. 0232062-SEAL-tower drawings
9. Photo SIM's SJC Parking Lot visibility assessment rev
10. NML00255 LTE Propagation Maps
11. 0255.14623999.FCD_REV 1.LTE 1C.10-22-20 (PART A)-C-1.1
12. 0255.14623999.FCD_REV 2.LTE 1C 03-18-21 (PART A)
13. 0255.14623999.FCD_REV 2.LTE 1C 03-18-21 (PART B)

EXHIBIT G1

Gravity Pad Partners, LLC.
PO Box 2755
Corrales, New Mexico 87048

6/17/2021

City of Santa Fe
Land Use Planning Department
P.O. Box 909
Santa Fe, NM 87501

Re Application letter/Zoning Application for a Telecommunications Facility located at the St. John's College – 1160 Camino de Cruz Blanca, Santa Fe, NM 87505 – AT&T/FirstNet NML0255

Application Narrative Letter

Dear Mr. Esquibel,

The following is in response to your October 1st 2020 letter. Below is a complete letter, revising and/or answering the items missing from our application.

- 14.6.2(E)(5)(c)(iv): "aesthetic requirements, Permanent Lighting". As per the FAA approval letter, dated 04/24/2020, the proposed Monopole is not required to be lite. The only light that will be installed is the technician light that is over the outdoor equipment. It is only turned on when the technician has to be at the site at night during an emergency. The light will not be installed higher then 8 feet and will not be seen by the surrounding neighbors.
- 14.6.2(e)(5)(d) "Archaeological requirements" The proposed facility performed and submitted a complete NEPA report to capture any and all archaeological requirements. Once the report is finalized a copy will be submitted to the City of Santa Fe for its records.
-

First, we met with the St. John's College executive board and went over the entire 250-acre campus for areas that would minimize the overall appearance of the site. We narrowed it down to 3 locations that spread across the North portion of the campus. After that we met with the neighbors that has land in close proximity and asked for their input. The location that was chosen by us is what we present to you here now. This location, 400 feet just East of the Northern most parking lot. Understanding that we can't completely camouflage the monopole, this location will blend in to the area as much as possible. The ground equipment will be behind a coyote fence that will completely hide it from view at ground level.

Second, the site was chosen using propagation maps/studies to determine the maximum amount of coverage for a large percentage of the campus as well as the surrounding roads and neighborhoods. The site will be able to communicate with the next closest site (S246) located at the St. John's Church.

Third, we looked for any existing structures that could be used. None of the rooftops/structures on campus were tall enough to meet the coverage objective as well as communicate with the next closest site.

Lastly, the proposed site will not only provide emergency services through the AT&T/FirstNet network for first responders but the tower will be able to accommodate all of the FCC wireless carriers for future use. That means we will only need one site for any future needs including 5G.

14-5.2 Historic Districts

On behalf of the St. John's College and AT&T/FirstNet, this letter is provided as part of the Historic Design Review Board 14-5.2 and Telecommunications Facilities 14-6.2E, submittal requirements for the above referenced property. The proposal is for approval of installation of a new 65' Monopole, with antennas which protects from public view coyote fencing to match the existing fence to screen the ground equipment as required by 14-5.2(I)(1)(e). The proposal is also for approval to construct an equipment enclosure, at ground level 72" X 102". The alterations are proposed on the Non-Contributing dirt area next to the parking lot (no parking spaces in this area) at the North area lot

1160 Camino de Cruz Blanca known as the St. John's College, is located directly off of Camino de Cruz Blanca. The total acreage is 250.01 acres + (10,890,000 ± square feet). The property is within the 65' of the Camino de Cruz Blanca road just off of the north parking lot area.

This proposal is request for approval of a 65' monopole for the AT&T/FirstNet for E911 and emergency services for the first responders as well as ground equipment to be hidden behind a 6ft coyote fence similar to the fence that currently on the property. This monopole will also be capable of accommodating additional FCC wireless carriers in the future use.

The construction of the coyote screening wall to conceal the ground equipment in a residential area is required in the historic district and will match the existing coyote fencing running along the North property line along Camino de Cruz Blanca. This request for the coyote fence complies with all the criteria listed as follows:

(i) Do not damage the streetscape;
   a. The character of the streetscape is not compromised. The applicants' fence and ground equipment will not be visible from the street.

(ii) Prevent a hardship to the public welfare;
   a. The proposal will create a hardship for the public welfare. In fact public welfare will be increased as the addition of the wireless facility will increase cell phone users access to the E911 services and wireless communications in the surrounding neighborhoods as well as the St. John's campus.

(iii) Strengthen the unique heterogeneous character of the City by providing a full range of design options to ensure that residents reside within the Historic Districts:
   a. The proposed monopole would be next to and around other trees to assist with the stealth design. While the site will not be invisible it does blend in with the landscape.

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(iv) Are due to special conditions and circumstances which are peculiar to the land or structures involves and which are not applicable to other lands or structures involved and which are not applicable to other lands or structures in the related streetscape;

a. Due to the location of the site, well away from the main campus and tucked away between the walking trails and the North parking, this unique heterogeneous feature to blend in with the existing trees will assist with the site blending in to the landscape and to match the existing coyote fencing to hide the ground equipment which will not be seen from any streetscape.

(v) Are due to special conditions and circumstances which are not a result of the actions of the applicant;

a. There is a demonstrated need for improved wireless services and most importantly emergency 911 for the entire campus as well as the neighboring public/private streets and homes around the St. John's College. Cell phone demand has increased exponentially, access to E911 is a major concern for the safety and welfare of Santa Fe residents. Due to the lack of tall structures in the area of the St. John's College, AT&T/FirstNet Radio engineers have solved the "gap" with the proposal of the monopole.

(vi) Provide the least negative impact with respect to the purpose of the section as set forth in 14-5.2(A)(1).

a. The request is in keeping with the general provisions and purpose of the section as set forth in 14-5.2(I)(1)(a&b), 14-5.2(I)(1(e), and Subsection 14-5.2(D).

14-6.2(E) **Telecommunication Facilities**

(4)(a) A tower or antenna that is not otherwise permitted or administratively approved shall be reviewed and approved by the planning commission for compliance with the section and all applicable city codes. In approving an application, the planning commission shall determine that:

(i) The application complies with this section;

(ii) The proposed telecommunications facilities are necessary to close a demonstrated significant gap in service coverage of the applicant based on actual signal strength data for the area where the gap is claimed and for the type of gap claimed;

The proposed site located at 1160 Camino de Cruz Blanca, Santa Fe, NM 87505 has been identified by AT&T Mobility and FirstNet for a coverage and capacity site. This location will off load traffic from the S246 St. John's Church located at 1200 Old Pecos trail. This site is exceeding the capacity and is 1.40 miles away so the coverage is extremely lacking. Currently, wireless users in the St. John's College area are experiencing slower speeds, difficulty accessing the E911 Services, high capacity internet resources and general poor call quality, which is even more prevalent as the demand grows in the City of Santa Fe for wireless services. The proposed site will greatly improve access to Emergency 911 services, the reliability of voice and data capacity to residents and visitors in the St. John's campus area and the neighborhood near and around the College including the Santa Fe Preparatory school. Our population is turning to more and more reliance of wireless devices and AT&T/FirstNet is committed to meet that demand. The capacity improvement is necessary to improve wireless users experience when it comes to data

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speeds, latency, and availability of the network. The St. John's college site, allows for improved E911 service in the area which means increased reliability of access to emergency service for the health and safety of the population of Santa Fe.

(iii) The applicant has demonstrated that no other less intrusive means or alternative to the proposed telecommunications facilities siting and design is practicable;
Since 2010, there has been several attempts to secure a cell site in this location to bridge the gap between the existing wireless facility at 1200 old Pecos Trail (S246) and the proposed site. AT&T Mobility has analyzed the feasibility of alternative site in the surrounding vicinity. It was determined that:

- **The lack of coverage in this area is caused by the distance of the next closest site (1.40 miles) as well as elevation change.**
- **Population Density – The addition of the new site will distribute cell phone user traffic more evenly. By successfully optimizing the distribution of cell phone user traffic, there will be less congestion, higher data speed, better quality voice and video calls.**

St. John's College NML0255 solves all of these issues in the St. John's College campus/neighborhood

Technical information supports the proposed height of the proposed antennas radius centers. The proposed site with antenna centerlines of 62' will allow for better optimization of serving the radius, permitting radio engineers to increase or decrease the service area to absorb users from, or disperse users to, nearby sites. Those using E911 services and wireless customers will benefit from improved call quality and increase data throughout speeds.

Due to the small size of the search area (approximately 0.50 miles) AT&T/FirstNet is limited to alternative wireless facility options (see search area map). Potential medium height structures within the search ring was limited to considering the potential medium height structures within the search ring AT&T/FirstNet opted to work with the St. John's College for a monopole structure in an area of the campus that currently is not being utilized. The College was extremely concern of the lack of emergency services for an active shooter situation.

Following is a list of the sites considered:

- 3 other locations on the St. John's College Campus.
- The existing water tank up on the hill behind the College to the East. The elevation was 200 ft higher and was creating interference with the other existing sites
- The lower east end of the College didn't not work also because of the elevation and was causing interference with the other sites. Ultimately the College preferred it in the proposed location.
- The Santa Fe Preparatory school gym. In 2011 an attempt was researched to see if a roof mounted solution would work but because of the lower elevation of the school it was not able to cover over 70% of the St. John's campus.

Acknowledgement

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June 17, 2021

I acknowledge that the application and related submittal constitute a public record under the New Mexico inspection of Public Records Act and are required to be made available to members of the public for inspection upon request in accordance with City practice.

By: ____*Sean Milks*_____

Name: Sean Milks
Title: Site acquisition Director, Gravity Pad Partners, LLC, on behalf of AT&T/FirstNet

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PO Box 2755
Corrales, NM 87048

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EXHIBIT G2

Gravity Pad Partners, LLC.
PO Box 2755
Corrales, New Mexico 87048

06/17/2021

City of Santa Fe
Land Use Department
Dan Esquibel Planner Senior
801 W. San Mateo Road
Santa Fe, NM 87505

Re Letter of Application for a Telecommunications Facility located at the St. John's College – 1160 Camino de Cruz Blanca, Santa Fe, NM 87505 – AT&T/FirstNet NML0255

Application Submittal requirement

Dear Mr. Esquibel,

The following is an application letter as required by section 14-6.2 E (6) of the City of Santa Fe telecommunications ordinance. The proposed telecommunications facility is described as the following: The proposal is for approval of installation of a new 65' Monopole, with coyote fencing to match the existing fence to screen the ground equipment as required by 14-5.2(I)(1)(e). The proposal is also for approval to construct an equipment enclosure, at ground level 72" X 102". The alterations are proposed on the Non-Contributing dirt area next to the parking lot (no parking spaces in this area) at the North area lot. This letter will be signed an authorized applicant and will attesting to its trust and completeness. coverage maps showing the level of existing RF coverage and RF coverage after construction of the proposed telecommunications facilities.

(iii) The search ring of the specific area is attached to the application. It shows the specific area on where our site needs to be in relation to our specific network. This area would meet our coverage objective.

We originally met with the St. John's College and explained the area that our radio Frequency engineers had us look for a site near the hiking trails near the northern parking lot. This specific area has the elevation and clearance needed to communicate with AT&T site number S246 St. John's Church located at 1200 Old Pecos Trail.

This area was reviewed and approved by the St. John's College. We had numerous meeting with the neighborhoods in an effort to come up with a specific location and/or design type. Despite our numerous efforts to come up with an agreed upon site location, the neighborhood representatives would not agree to any of the 3 locations. They simply do not want to see the 65' Monopole yet want to have the service.

We have dropped the setback waiver as the location of the tower will meet the 1:1 setback from the property line.

We discussed the idea of lowering the proposed site by 15'. The engineers explained that we could in fact lower the site by 15' however by doing this it would have less coverage for the surrounding areas of Santa Fe. The other issue with lowering the height of the site, future carriers such as Verizon, T-Mobile and Dish network couldn't use the site because it would not see over the existing trees. Our original plan of 80' will allow for one site to be built with the capability of accommodating all of the FCC wireless carriers. There would not be a need for a 2nd or 3rd site needed for the area.

(b) Section 14-5.2 The reason we chose a Monopole with a coyote fence was chosen because we feel it was the least intrusive site design. Although the site has to be a lot taller than the existing trees, the color of the monopole helps blend into the landscape. A standard monopole, grey in color is the normal site design and is the smallest overall structure that can be used. The 65' Monopole, along with a coyote fence to match the existing fence would not make the site invisible but would blend in better than any other site design.

(c) As per the FCC 47 C.RR,1,1310 the City can't tell us where we have to put the site. We have 3 locations that will all work. We are willing to work with the City to place the site in the best location for everyone involved.

Acknowledgement

I acknowledge that the application and related submittal constitute a public record under the New Mexico inspection of Public Records Act and are required to be made available to members of the public for inspection upon request in accordance with City practice.

By: ____Sean Milks_____ Name: Sean Milks

Title: Site acquisition Director, Gravity Pad Partners, LLC, on behalf of AT&T/FirstNet

Gravity Pad Towers, LLC.
PO Box 2755
Corrales, NM 87048
towers@gravitypad.com
Fax: 240-332-0899

EXHIBIT G3

Gravity ~~Pad~~ Partners, LLC.
PO Box 2755
Corrales, New Mexico 87048

06/17/2021

City of Santa Fe
Land Use Department
Dan Esquibel Planner Senior
801 W. San Mateo Road
Santa Fe, NM 87505

Re Letter regarding compatibility, visual impacts for a Telecommunications Facility located at the St. John's College – 1160 Camino de Cruz Blanca, Santa Fe, NM 87505 – AT&T/FirstNet NML0255

Statement regarding compatibility, visual impacts

Dear Mr. Esquibel,

The following is a Letter regarding compatibility, visual impacts on the proposed Monopole site with the St. John's College as per the City of Santa Fe ordinance.

> The proposed telecommunications facility is designed, constructed and will be installed in such a manner as to minimize the visual impact upon adjacent lands, public rights of way and residentially zoned property. We used a monopole to minimize visual impact using the smallest overall structure possible, color, materials, texture, shape, size and location. Much consideration has been involved in the design of the equipment cabinet. We purposely went with a smaller, shorter cabinet and took the location of the trees and existing coyote fencing to place the equipment area away from the general public. By using the same coyote fencing both in height and design in an effort to match the existing area as to blend as much as possible. The placement of the equipment is installed as to minimize the impact to adjacent lands, public rights of way and residentially zoned property. The monopole itself is the smallest site out of the 3 site types. The color grey, while not making it invisible, will blend in with the trees in the area.

Sincerely,

Sean Milks

Sean Milks

Gravity Pad Partners, LLC.
PO Box 2755
Corrales, NM 87048
towers@gravitypad.com
Fax: 240-332-3119

EXHIBIT F4

Gravity Pad Partners, LLC.
PO Box 2755
Corrales, New Mexico 87048

10/16/2020

City of Santa Fe
Land Use Department
Dan Esquibel Planner Senior
801 W. San Mateo Road
Santa Fe, NM 87505

Re Letter of Application for a Telecommunications Facility located at the St. John's College – 1160 Camino de Cruz Blanca, Santa Fe, NM 87505 – AT&T/FirstNet NML0255

Waiver letter

Dear Mr. Esquibel,

The following is a waiver letter for the St. John's College telecommunications site as per the City of Santa Fe ordinance subsection 14-6.2 (E)(8).

AT&T Mobility/FirstNet is respectfully requesting a waiver regarding the height limitation for the proposed site. This proposal exceeds the height limits for structures in an R-1PUD District and height limits within the Historic Review District. This request is in accordance with 14-6.2(e)(8). The current allowable height is 36 feet. The entire area is R-1PUD and the 36 feet is not high enough for the site to see over the trees so that is why we are requesting the waiver. In order to provide much needed coverage in the area, this waiver has to be approved or the college nor any of the surrounding neighborhoods will benefit from Cellular telecommunications.

The following will address all of the standards set forth in 14-6.2(E)(8)(a) as well as each of the factors set forth in 14-6.2(E)(8)(b).

14-6.2(E)(8)(a)

(i) The proposed telecommunications facility is in the best interest of the community as a whole. The current service is either non-existent or marginal at best. The AT&T Mobility/FirstNet federally funded project is to provide emergency services in areas that do not currently have E911 for the first responders. The College has expressed a huge concern regarding an active shooter situation and the lack of wireless coverage on the campus as well as the surrounding neighborhoods. This site would provide this service as well as collocation services for the remaining FCC wireless carriers.

(ii) As owner of the site, Gravity Pad would agree to expedite the approval of any colocation carrier that wanted to locate on the site.

(iii) By building the site it not only would not jeopardize the public health, safety and welfare, it is being proposed to do just that. The site is designed and being proposed with the main purpose to serve the residence and visitors of Santa Fe.

(iv) The proposed telecommunication facility unfortunately can not be invisible. We feel the design and location of the site will help mitigate the adverse visual impacts of the community. No matter where the site would be built, it would have some sort of adverse visual impact on someone. The proposed location, which is surrounded by trees in every direction will not hide the site completely, but it will blend in to the best possible way. The service to the campus and surrounding neighborhoods will be at a maximum effectiveness in the current location.

(v) The site is not being proposed in the escarpment or south central highway corridor overlay districts so this section does not apply.

(b)

(i) The design of the proposed telecommunications site are using the elements that reduce and eliminate adverse visual impact as much as possible. First, the ground equipment is being housed behind a 6ft coyote fence, including the access gate and will match the existing 6ft coyote fence that surrounds the property to the North. Second, the Monopole was designed to be the same color as the surrounding trees. Although the height is above the tree line in order for the site to transmit the signals it is the least visually intrusive site that we could build. The monopole branches and foliage hides the antennas and we paint and cover the antennas with "socks" so they can't be seen from a distance. The lower portion of the tree has fake bark to also assist with making he site the least visually intrusive as possible using the latest technology available.

(ii) The nature of the underline use of the property is a College campus. Because of the open spaces and trees with the walking trails and being away from the public most of the time is one of many factors in choosing the locations. The property is completely surrounded by residential homes and thus was not possible to locate the site else where.

(iii) The surrounding topography made it difficult to pick the exact location. We chose the proposed site so not to affect the beginning of the walking trails and didn't want to take up any parking spaces in the process.

(iv) The surrounding vegetation was also considered when choosing the location. The proposed location also limits the amount of bushes that would need to be relocated and we feel that none of the existing trees will have to be removed or replanted.

(v) There is not another existing tower or structure within 1 mile of the proposed site.

(vi) The proposed ingress and egress is directly in front of the parking lot and will not affect any parking spots.

(vii) The proposed site is being designed to provide the residents and visitors including the institutions optimum cellular communications including data and emergency services for the first responders. Currently you can not make a phone call with any carrier in any of the buildings with confidence. This not only would provide AT&T Mobility/FirstNet but it would be designed to accommodate the other wireless providers as well.

Gravity Pad Towers, LLC.
PO Box 2755
Corrales, NM 87048
towers@gravitypad.com
Fax: 240-332-0899

March 4, 2021

Acknowledgement

I acknowledge that the application and related submittal constitute a public record under the New Mexico inspection of Public Records Act and are required to be made available to members of the public for inspection upon request in accordance with City practice.

By: _____
Name: Sean Milks
Title: Site acquisition Director, Gravity Pad Partners, LLC, on behalf of AT&T/FirstNet
STATE OF NEW MEXICO

COUNTY OF BERNALILLO

This instrument was acknowledged before me this 8th day of March, 2021, by Sean Milks as the Managing member of Gravity Pad Partners, a New Mexico corporation on behalf of said corporation.

_____
Notary Public: Kevin Winner
My Commission Expires: 10/30/21

OFFICIAL SEAL
KEVIN WINNER
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 10/30/21

Gravity Pad Towers, LLC.
PO Box 2755
Corrales, NM 87048
towers@gravitypad.com
Fax: 240-332-0899

EXHIBIT G5

Gravity Pad Partners, LLC.
PO Box 2755
Corrales, New Mexico 87048

09/16/2020

City of Santa Fe
Land Use Department
Dan Esquibel Planner Senior
801 W. San Mateo Road
Santa Fe, NM 87505

Re Letter of Noise information for a Telecommunications Facility located at the St. John's College – 1160 Camino de Cruz Blanca, Santa Fe, NM 87505 – AT&T/FirstNet NML0255

Noise Information on decibel levels and emergency operating conditions

Dear Mr. Esquibel,

The following is a Letter of Noise Information on decibel levels and emergency operating conditions on The proposed Monopine site with the St. John's College as per the City of Santa Fe ordinance.

The proposed telecommunications facility is designed, constructed and will be installed in such a manner as to minimize noise to the maximum extent feasible. At no time will the proposed site exceed the standards set forth in Article 10-2 SFCC 1987.

Sincerely,

Sean Milks

Sean Milks

Gravity Pad Partners, LLC.
PO Box 2755
Corrales, NM 87048
towers@gravitypad.com
Fax: 240-332-3119

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

EXHIBIT G6

Aeronautical Study No.
2020-ASW-5098-OE

Issued Date: 04/24/2020

Kevin Winner
Gravity Pad BTS LLC
PO Box 2755
Corrales, NM 87048

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower St Johns College Monopine
Location:	Santa Fe, NM
Latitude:	35-40-06.70N NAD 83
Longitude:	105-54-42.40W
Heights:	7352 feet site elevation (SE) 95 feet above ground level (AGL) 7447 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 10/24/2021 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (206) 231-2993, or lynnette.farrell@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASW-5098-OE.

Signature Control No: 436189536-437559152 (DNE)
Lynnette Farrell
Technician

Attachment(s)
Frequency Data
Map(s)

cc: FCC

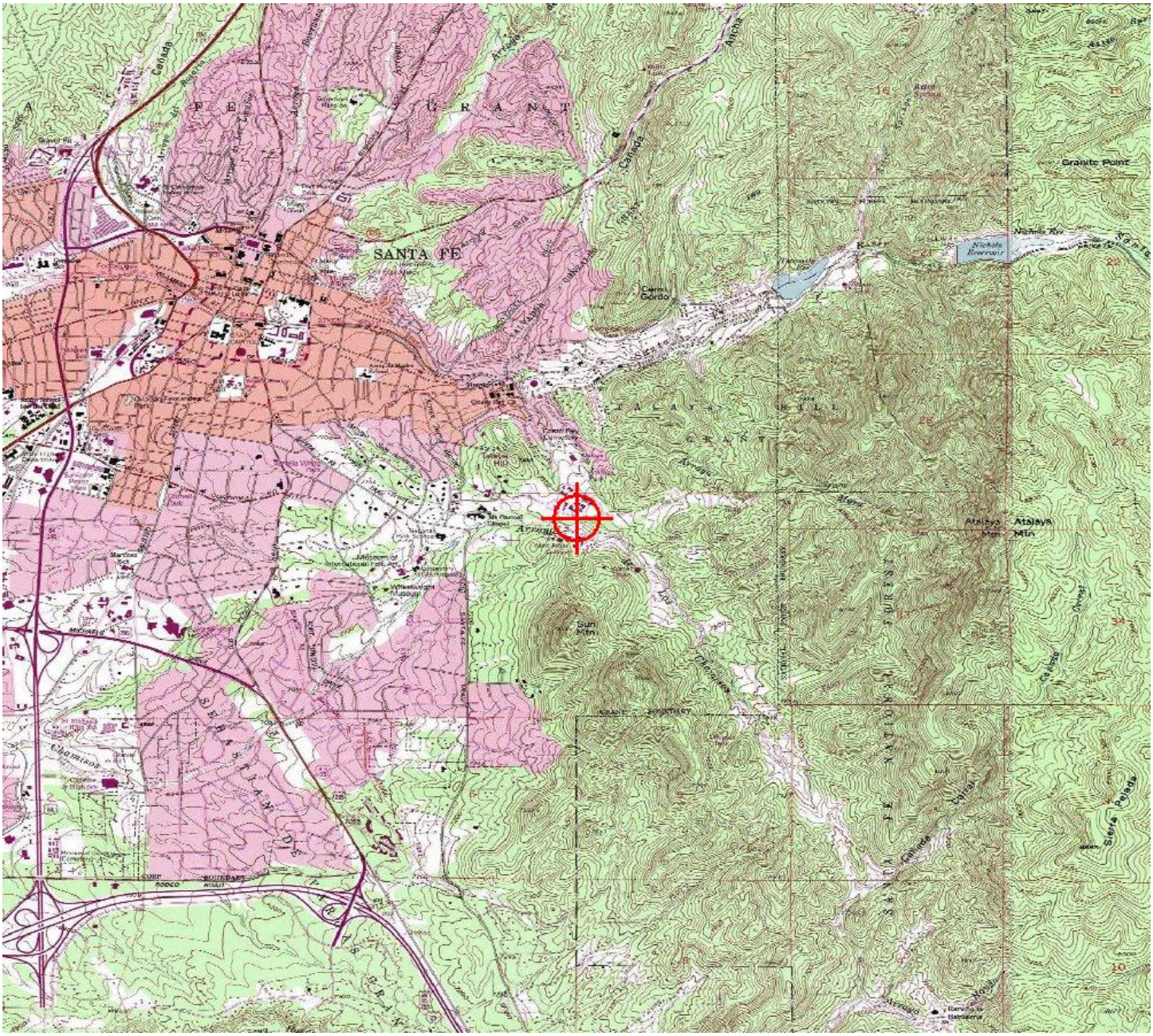
Frequency Data for ASN 2020-ASW-5098-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
806	824	MHz	500	W
806	901	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W

List of telecommunications facilities planned by AT&T/FirstNet wireless within 3 miles of the proposed site at 1160 Camino de Cruz Blanca:

There currently are no proposed sites by AT&T/FirstNet within 3 miles of the proposed facility.

TOPO Map for ASN 2020-ASW-5098-OE



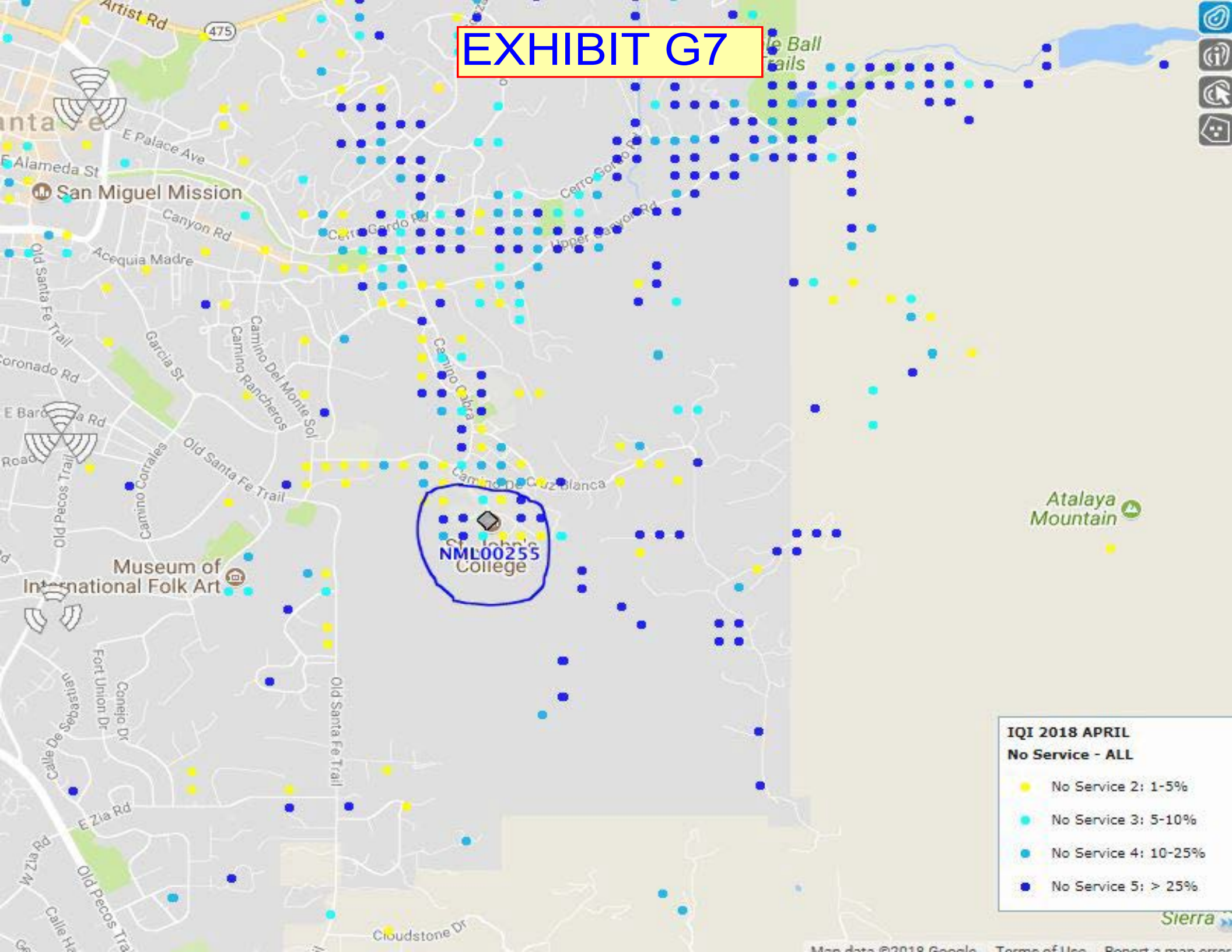
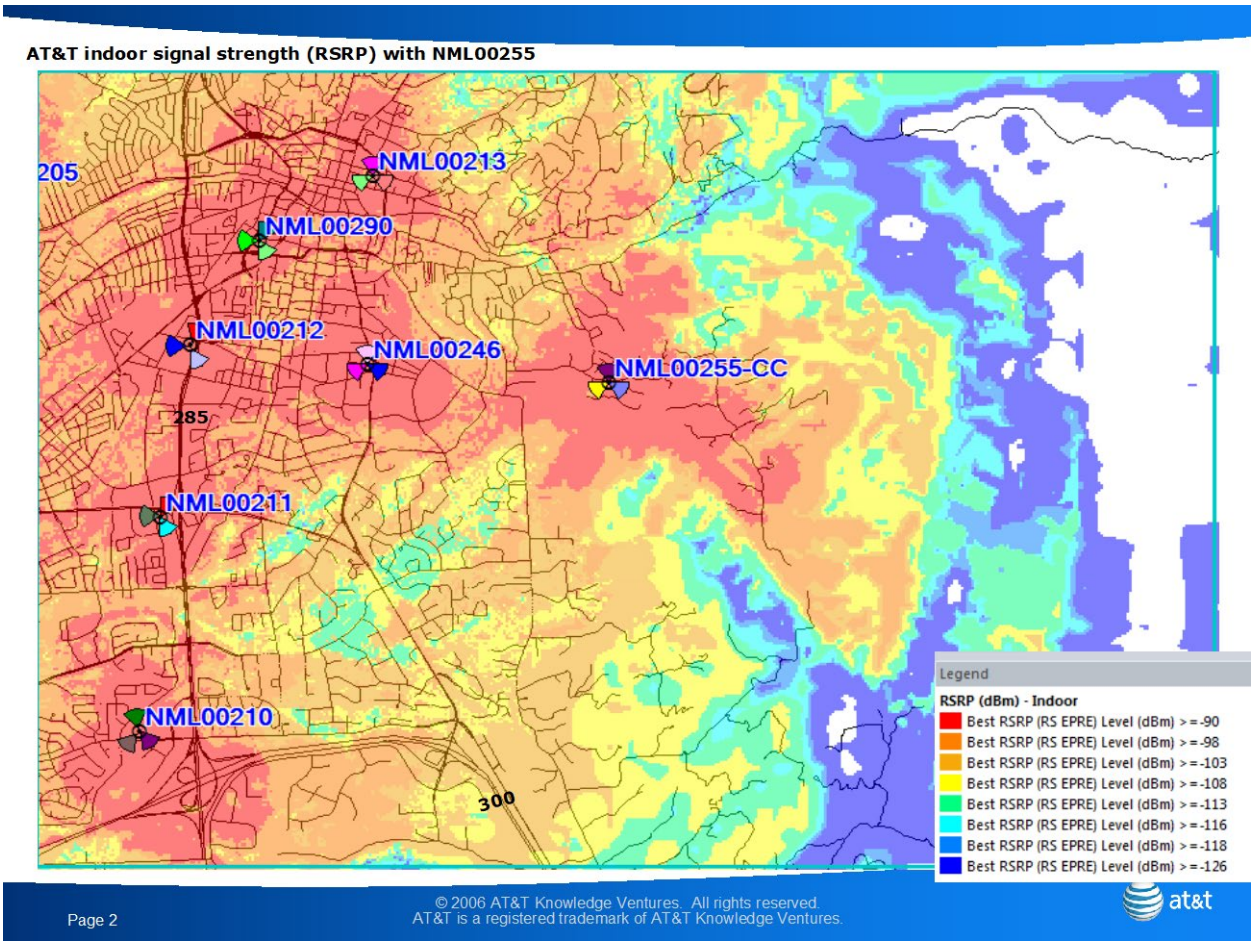


EXHIBIT G7
Artist Rd
475
E Palace Ave
E Alameda St
San Miguel Mission
Canyon Rd
Acequia Madre
Old Santa Fe Trail
Garcia St
Camino Del Monte Sol
Camino Rancheros
Camino Cabra
Camino de Cruz Blanca
Old Pecos Trail
Camino Corrales
Museum of International Folk Art
NML00255
College
Atalaya Mountain
Fort Union Dr
Conejo Dr
Calle De Sebastian
E Zia Rd
W Zia Rd
Cloudstone Dr
Cerro Gordo Rd
Upper Canyon Rd
IQI 2018 APRIL
No Service - ALL
No Service 2: 1-5%
No Service 3: 5-10%
No Service 4: 10-25%
No Service 5: > 25%
Sierra
Map data ©2018 Google
Terms of Use
Report a map error

EXHIBIT G8



List of telecommunications facilities owned/leased by AT&T/FirstNet wireless within 3 miles of the proposed site at 1160 Camino de Cruz Blanca:

-	NML0246 St. John's Church	1200 Old Pecos Trail	35.671228, -105.936473
-	NML00210 BLM building	301 Dinosaur Trai	35.598439, -106.037895l
-	NML00211 Pollon Plaza	2009 South Pacheco	35.65846, -105.95861
-	NML00212 Montoya building	329 W Cordova road	35.673711, -105.954639
-	NML00290 Hotel Santa Fe	537 S. Guadalupe	35 40' 57.7", -105 56' 49.2"
-	NML00213 Ft. Marcy tower	222 E. Marcy Street	35 41' 16.986", -105 56'5.505"
-	NML00239 School for the deaf	4851 Paseo del Sol	35 37' 17.1", -106 2' 41.5"
-	NML00243 Bailios	3294 Cerrillos Rd.	35 38' 58.9", -105 59' 53.2"
-	NML00251 St. Francis	122 HWT 599	35 42' 42.356, -105 56' 22.085"
-	NML00254 Old Pecos	3101 Old Pecos Trail	35 38'36.348", -105 55' 44.644"
-	NML00289 State Capital	1120 Paseo De Peralta	35 40' 55.9", -105 56' 10.1"

EXHIBIT G9

1 Fairholm Avenue
Peoria, IL 61603 USA
Phone 309-566-3000
FAX 309-566-3079

January 28, 2020

Winner Management
Attn: Kevin Winner
P. O. Box 2755
Corrales, NM. 87048

Reference: 65' Future 95' Tapered Steel Pole
Sandoval County, NM.

File Number: 232062

Copies	Drawing Number	Description
1	232062 -01-D1R1	Design Sealed for the State of New Mexico
1	232062-01-F1R1	Foundation
1	B090548	Foundation Notes

Email: kevin@winnermanagement.net

Sincerely,

Danny Otten

crp

1 Fairholm Avenue
Peoria, IL 61603 USA
Phone: (309)-566-3000
Fax: (309)-566-3079

DATE: JANUARY 28, 2020

PURCHASER: WINNER MANAGEMENT

PROJECT: 65 FT TAPERED STEEL POLE

FILE NUMBER: 232062

DRAWINGS: 232062-01-D1 R1 , 232062-01-F1 R1 , B090548

I CERTIFY THAT THE REFERENCED DRAWINGS WERE PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH THE DESIGN AND LOADING CRITERIA SPECIFIED BY THE PURCHASER AND THAT I AM A REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW MEXICO.

THE REFERENCED FOUNDATION DESIGN IS BASED ON PRESUMPTIVE SOIL PARAMETERS. A GEOTECHNICAL SITE INVESTIGATION SHALL BE PERFORMED PRIOR TO INSTALLATION FOR COMPETENT PROFESSIONAL EXAMINATION AND VALIDATION OF THE SUITABILITY OF THE PRESUMPTIVE SOIL PARAMETERS FOR THE SITE.

CERTIFIED BY: _____

DATE: 1/28/20

FABIB JIRJI AZOURI
NEW MEXICO
13991
REGISTERED PROFESSIONAL ENGINEER

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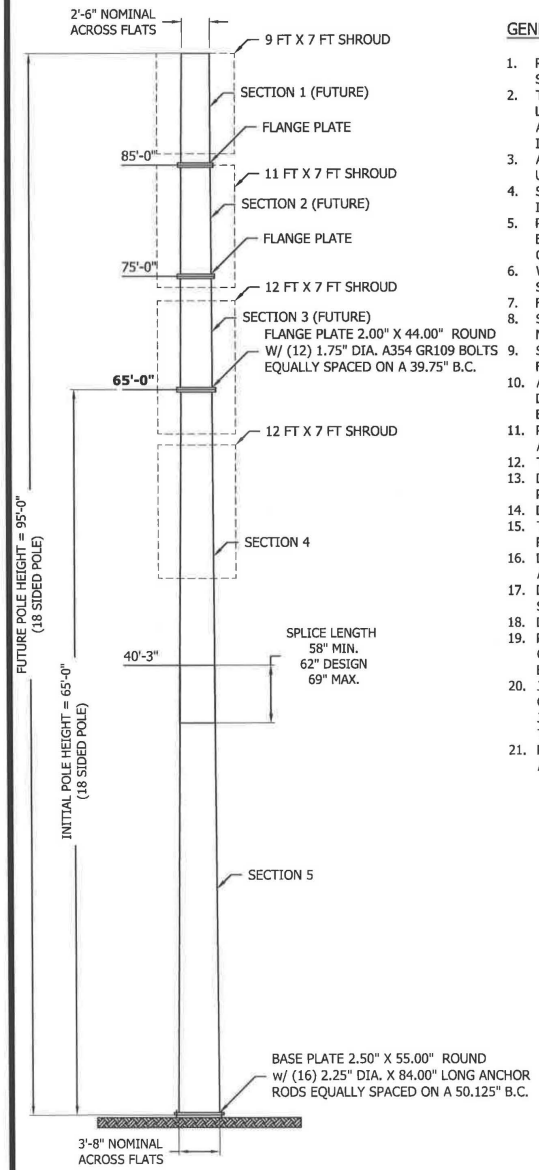

GENERAL NOTES

1. ROHN PRODUCTS POLE DESIGNS CONFORM TO ANSI/TIA-222-G UNLESS OTHERWISE SPECIFIED UNDER POLE DESIGN LOADING.
2. THE DESIGN LOADING CRITERIA INDICATED HAS BEEN PROVIDED TO ROHN. THE DESIGN LOADING CRITERIA HAS BEEN ASSUMED TO BE BASED ON SITE-SPECIFIC DATA IN ACCORDANCE WITH ANSI/TIA-222-G AND MUST BE VERIFIED BY OTHERS PRIOR TO INSTALLATION.
3. ANTENNAS AND LINES LISTED IN POLE DESIGN LOADING TABLE ARE PROVIDED BY OTHERS UNLESS OTHERWISE SPECIFIED.
4. STEP BOLTS WITH SAFETY CLIMB SYSTEM ARE PROVIDED AS A CLIMBING FACILITY FOR THE INSTALLATION OF THE STRUCTURE.
5. POLE MEMBER DESIGN DOES NOT INCLUDE STRESSES DUE TO ERECTION SINCE ERECTION EQUIPMENT AND CONDITIONS ARE UNKNOWN. DESIGN ASSUMES COMPETENT AND QUALIFIED PERSONNEL WILL ERECT THE POLE.
6. WORK SHALL BE IN ACCORDANCE WITH ANSI/TIA-222-G, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
7. FIELD CONNECTIONS SHALL BE BOLTED. NO FIELD WELDS SHALL BE ALLOWED.
8. STRUCTURAL BOLTS SHALL CONFORM TO GRADE A325 PER ASTM F3125, EXCEPT WHERE NOTED.
9. STRUCTURAL STEEL AND CONNECTION BOLTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION, IN ACCORDANCE WITH ANSI/TIA-222-G.
10. ALL HIGH STRENGTH BOLTS ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS". NO OTHER MINIMUM BOLT TENSION OR TORQUE VALUES ARE REQUIRED.
11. PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
12. TOLERANCE ON POLE STEEL HEIGHT IS EQUAL TO PLUS 1% OR MINUS 1/2%.
13. DESIGN ASSUMES THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA-222-G.
14. DESIGN ASSUMES LEVEL GRADE AT POLE SITE.
15. THE PURCHASER SHALL VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED TIA REV. G "PRESUMPTIVE" CLAY SOIL PARAMETERS.
16. DESIGN ASSUMES ALL ANTENNAS ARE MOUNTED SYMMETRICALLY TO MINIMIZE TORQUE, IF APPLICABLE.
17. DESIGN ASSUMES ALL PANEL ANTENNAS WITH MOUNTING FRAMES ARE MOUNTED SYMMETRICALLY.
18. DESIGN ASSUMES ALL TRANSMISSION LINES ARE ROUTED INTERNALLY.
19. POLE SHAFT CONFORMS TO ASTM A572 GR 65. POLE BASE PLATE AND TOP PLATE STEEL CONFORMS TO ASTM A572 GR 50 WITH CHARPY IMPACT REQUIREMENTS. POLE ANCHOR BOLTS CONFORM TO ASTM A615 GR75.
20. JACKING LUGS ARE PROVIDED ABOVE AND BELOW EACH SLIP JOINT TO FACILITATE THE USE OF JACKING DEVICES. NON-STAINING LUBRICANTS SHALL BE APPLIED TO THE SLIP JOINTS. JACKING FORCES SHOULD BE APPLIED UNTIL THE JOINT IS TIGHT WITH NO GAPS GREATER THAN 1/4".
21. POLE DESIGN INCLUDES (3) FUTURE 10 FT EXTENSION TO 75, 85, & 95 FT WITH FUTURE ANTENNA LOADING.

MAXIMUM FACTORED REACTIONS			
DOWNLOAD	=	56.6	KIPS
SHEAR	=	24.0	KIPS
O.T.M	=	1,622.7	FT-KIPS

TOWER DESIGN LOADING
DESIGN WIND LOAD PER ANSI/TIA-222-G USING THE FOLLOWING DESIGN CRITERIA: ASCE 7-16 ULTIMATE WIND SPEED (NO ICE): 104 MPH BASIC WIND SPEED (W/ICE): 30 MPH PER ASCE 7-16 DESIGN ICE THICKNESS: 0.50" PER ASCE 7-16 EXPOSURE CATEGORY: C STRUCTURE CLASS: II TOPOGRAPHIC CATEGORY: 1 EARTHQUAKE SPECTRAL RESPONSE ACCELERATION: S_S: 0.442, S_1: 0.144, SITE CLASS: D THIS STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE FOLLOWING LOADS:

ELEVATION (FT)	ANTENNA LOADING	LINE SIZE (NOM)
TOP	LIGHTNING ROD	-
[FUTURE] C.L. @ 91	84" DIA. X 108" LONG SHROUD	(9) 1-5/8"
[FUTURE] C.L. @ 80	84" DIA. X 132" LONG SHROUD	(9) 1-5/8"
[FUTURE] C.L. @ 67	84" DIA. X 144" LONG SHROUD	(9) 1-5/8"
C.L. @ 54	84" DIA. X 144" LONG SHROUD	(9) 1-5/8"

POLE DESIGN INCLUDES (3) FUTURE 10 FT EXTENSIONS TO 75, 85, & 95 FEET WITH FUTURE ANTENNA LOADING, LINES, AND 7 FT DIA. SHROUDS

SECTION SCHEDULE						
SECTION	LENGTH (FT)	DIAMETER		WALL THICK (IN)	Fy (KSI)	WEIGHT (KIPS)
		BOT	TOP			
1 (FUTURE)	10.00	31.53	30.00	0.2500	65.0	0.9
2 (FUTURE)	10.00	33.04	31.53	0.2500	65.0	0.9
3 (FUTURE)	10.00	34.55	33.04	0.2500	65.0	1.0
4	29.96	39.19	34.55	0.2500	65.0	3.1
5	40.21	44.00	37.76	0.2500	65.0	4.7

NOTE:
FOR POLYGONAL POLES, DIAMETER IS MEASURED ACROSS FLATS. TABULATED WEIGHTS ARE APPROXIMATE. REFER TO ASSEMBLY DRAWING FOR FINAL WEIGHTS. ALL WEIGHTS SHALL BE VERIFIED PRIOR TO LIFTING.

FILE NO.
232062

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
1	REVISED INITIAL HEIGHT TO 65 FT DATE: 1/28/2020	SWG	HA	HA

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PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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WINNER MANAGEMENT
DESIGN PROFILE
65 FT OF 95 FT TSP

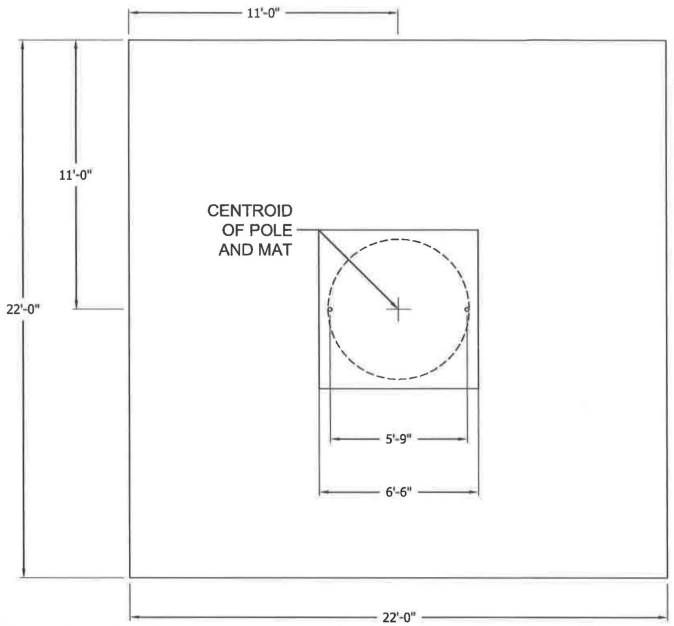
DWN:	CHK'D:	DATE:
SWG	HA	1/27/2020

ENG'R:	SHEET #:
HA	1 OF 1

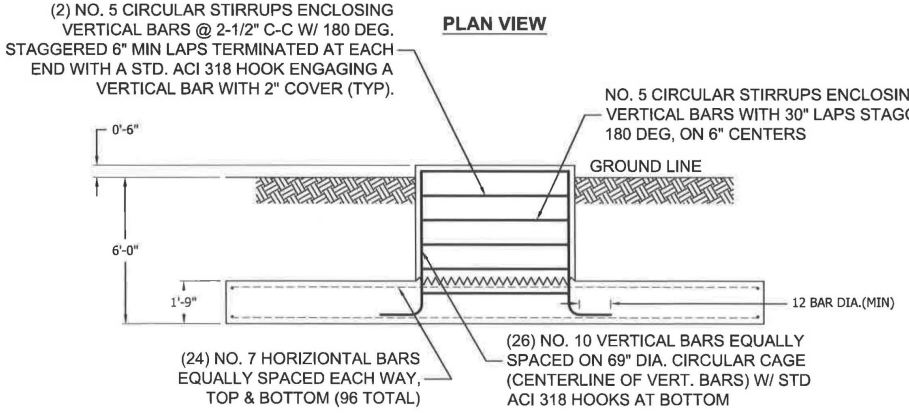
PRJ. ENG'R:	PRJ. MANG'R:
SWG	

DRAWING NO:	REV:
232062-01-D1	1

NOTE: SEE DRAWING NO. B090548 FOR STANDARD FOUNDATION NOTES.



PLAN VIEW



ELEVATION VIEW

FACTORED REACTIONS

O.T.M. =	1,622.7 FT-K
DOWNLOAD =	56.6 KIPS
SHEAR =	24.0 KIPS

CONCRETE VOLUME

SQUARE PIER	7.4 CU.YDS
PAD	31.4 CU.YDS
TOTAL	38.8 CU.YDS

FILE NO. 232062

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
1	UPDATED REACTIONS DATE: 1/28/2020	SWG		

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MAT W/RAISED PIER
PRESUMPTIVE CLAY PER ANSI/TIA-222-G

DWN:	CHK'D:	DATE:
SWG	HA	11/5/2019

ENG'R:	SHEET #:
HA	1 OF 1

PRJ. ENG'R:	PRJ. MANG'R:
SWG	

DRAWING NO:	REV:
232062-01-F1	1

STANDARD FOUNDATION NOTES
ANSI/TIA-222-G

1. STANDARD FOUNDATION DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-G, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES" FOR THE FOLLOWING PRESUMPTIVE CLAY SOIL PARAMETERS:

N (blows/ft) [blows/m]	Φ (deg)	Y (lb/ft3) [kN/m3]	C (psf) [kPa]	Ultimate Bearing (psf) [kPa]		Ultimate Skin Friction (psf) [kPa]	k (pci) [kN/m3]	ε_{50}
				Shallow Fnds.	Deep Fnds.			
8 [26]	0	110 [17]	1000 [48]	5000 [240]	9000 [431]	500 [24]	150 [41,000]	0.01
GROUND WATER TABLE IS AT OR BELOW FOUNDATION DEPTH MAXIMUM FROST PENETRATION DEPTH LESS THAN FOUNDATION DEPTH								

2. THE PURCHASER SHALL VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL DESIGN PARAMETERS AND THAT THE DEPTH OF STANDARD FOUNDATIONS ARE ADEQUATE BASED ON THE FROST PENETRATION AND/OR ZONE OF SEASONAL MOISTURE VARIATION AT THE SITE. FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT PRESUMPTIVE CLAY SOIL PARAMETERS ARE NOT APPLICABLE FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.
3. A SITE-SPECIFIC INVESTIGATION IS REQUIRED FOR CLASS III STRUCTURES IN ACCORDANCE WITH ANSI/TIA-222-G.
4. FOUNDATION DESIGNS ASSUME FIELD INSPECTIONS WILL BE PERFORMED BY THE PURCHASER'S REPRESENTATIVE TO VERIFY THAT CONSTRUCTION MATERIALS, INSTALLATION METHODS AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON THE CONDITIONS EXISTING AT THE SITE.
5. WORK SHALL BE IN ACCORDANCE WITH THE PROJECT CONSTRUCTION DOCUMENTS, LOCAL CODES, SAFETY REGULATIONS AND UNLESS OTHERWISE NOTED, THE LATEST REVISION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.
6. CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE STATE REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.
7. PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR RESISTANCE TO LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENT OF ACI 318 SHALL BE SATISFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. AS A MINIMUM, CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI (31.0 MPa) IN 28 DAYS.
8. MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 3/4 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING SHALL BE UTILIZED TO PREVENT HONEYCOMBS OR VOIDS.
9. REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED. SPLICES IN REINFORCEMENT SHALL NOT BE ALLOWED UNLESS OTHERWISE INDICATED.
10. REINFORCING CAGES SHALL BE BRACED TO RETAIN PROPER DIMENSIONS DURING HANDLING, THROUGHOUT PLACEMENT OF CONCRETE AND DURING EXTRACTION OF TEMPORARY CASING.
11. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.
12. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES (76 mm) UNLESS OTHERWISE NOTED. APPROVED SPACERS SHALL BE USED TO INSURE A 3 INCH (76 mm) MINIMUM COVER ON REINFORCEMENT. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES (76 mm) NOR BE LESS THAN 2 INCHES (51 mm).
13. SPACERS SHALL BE ATTACHED INTERMITTENTLY THROUGHOUT THE ENTIRE LENGTH OF VERTICAL REINFORCING CAGES TO INSURE CONCENTRIC PLACEMENT OF CAGES IN EXCAVATIONS.
14. FOUNDATION DESIGNS ASSUME STRUCTURAL BACKFILL TO BE COMPACTED IN 8 INCH (200 mm) MAXIMUM LAYERS TO 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 110 POUNDS PER CUBIC FOOT (17 kN/m3).
15. FOUNDATION DESIGNS ASSUME AN INSTALLATION ON A PROPERLY DRAINED LEVEL SITE.
16. FOUNDATION INSTALLATION SHALL BE SUPERVISED BY PERSONNEL KNOWLEDGEABLE AND EXPERIENCED WITH THE PROPOSED FOUNDATION TYPE. CONSTRUCTION SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED INSTALLATION PRACTICES.
17. ALL CONSTRUCTION AND SAFETY EQUIPMENT AND TEMPORARY SUPPORTS REQUIRED FOR CONSTRUCTION SHALL BE DETERMINED, FURNISHED AND INSTALLED BY THE CONTRACTOR BASED ON THE MEANS AND METHODS CHOSEN BY THE CONTRACTOR. ALL CONSTRUCTION ACTIVITIES SHALL BE PREFORMED BY COMPETENT, QUALIFIED AND TRAINED PERSONNEL.
18. FOR FOUNDATION AND ANCHOR TOLERANCES SEE ANCHOR ROD LAYOUT DRAWING.
19. LOOSE MATERIAL SHALL BE REMOVED FROM BOTTOM OF EXCAVATION PRIOR TO CONCRETE PLACEMENT. SIDES OF EXCAVATION SHALL BE ROUGH AND FREE OF LOOSE CUTTINGS.
20. CONCRETE SHALL BE PLACED IN A MANNER THAT WILL PREVENT SEGREGATION OF CONCRETE MATERIALS, INFILTRATION OF WATER OR SOIL AND OTHER OCCURRENCES WHICH MAY DECREASE THE STRENGTH OR DURABILITY OF THE FOUNDATION.
21. FREE FALL CONCRETE MAY BE USED PROVIDED FALL IS VERTICAL DOWN WITHOUT HITTING SIDES OF EXCAVATION, FORMWORK, REINFORCING BARS, ANCHORAGES, FORM TIES, CAGE BRACING OR OTHER OBSTRUCTIONS. UNDER NO CIRCUMSTANCES SHALL CONCRETE FALL THROUGH WATER.
22. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL EXCEPT FOR PIERS SUPPORTED ON SPREAD FOUNDATIONS. FORMS FOR PIERS SHALL BE REMOVED PRIOR TO PLACING STRUCTURAL BACKFILL.
23. CONSTRUCTION JOINTS, IF REQUIRED IN DRILLED PIER OR CAISSON FOUNDATIONS, SHALL BE AT LEAST 12 INCHES (305 mm) BELOW BOTTOM OF EMBEDMENTS AND MUST BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH (6 mm). FOUNDATION DESIGN ASSUMES NO OTHER CONSTRUCTION JOINTS.
24. CONSTRUCTION JOINTS, IF REQUIRED AT THE BASE OF PIERS SUPPORTED ON SPREAD FOUNDATIONS, SHALL BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH (6 mm). FOUNDATION DESIGN ASSUMES NO OTHER CONSTRUCTION JOINTS.
25. CASING, IF USED, SHALL NOT BE LEFT IN PLACE. EQUIPMENT, PROCEDURES, AND PROPORTIONS OF CONCRETE MATERIALS SHALL INSURE CONCRETE WILL NOT BE ADVERSELY DISTURBED UPON CASING REMOVAL. DRILLING FLUID, IF USED, SHALL BE FULLY DISPLACED BY CONCRETE AND SHALL NOT BE DETRIMENTAL TO CONCRETE OR SURROUNDING SOIL. CONTAMINATED CONCRETE SHALL BE REMOVED FROM TOP OF FOUNDATION AND REPLACED WITH FRESH CONCRETE.
26. TOP OF FOUNDATION SHALL BE SLOPED TO DRAIN WITH A FLOATED FINISHED. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" X 3/4" (19 mm X 19 mm) MINIMUM.
27. FOR ANCHOR BLOCK TYPE FOUNDATIONS, FOR GUYED MASTS, ADDITIONAL CORROSION PROTECTION MAY BE REQUIRED FOR STEEL GUY ANCHORS IN DIRECT CONTACT WITH SOIL. DESIGN ASSUMES PERIODIC INSPECTIONS WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE TO DETERMINE IF ADDITIONAL ANCHOR CORROSION PROTECTION MEASURES SHALL BE IMPLEMENTED BASED ON OBSERVED SITE-SPECIFIC CONDITIONS.

FILE NO.

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
5	ADDED NOTES BELOW TABLE DATE: 12/19/2018	JHY	HA	HA

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PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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ANSI/TIA-222-G
STANDARD FOUNDATION DESIGN NOTES

DWN:	CHK'D:	DATE:
FAD	HA	11/20/2009

ENG'R:	SHEET #:
HA	1 OF 1

PRJ. ENG'R:	PRJ. MANG'R:

DRAWING NO:	REV:
B090548	5

TowerSoft
ENGINEERING SOFTWARE

TSTower - v 5.8.5 Tower Analysis Program
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ROHN Products

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Peoria, IL

R1

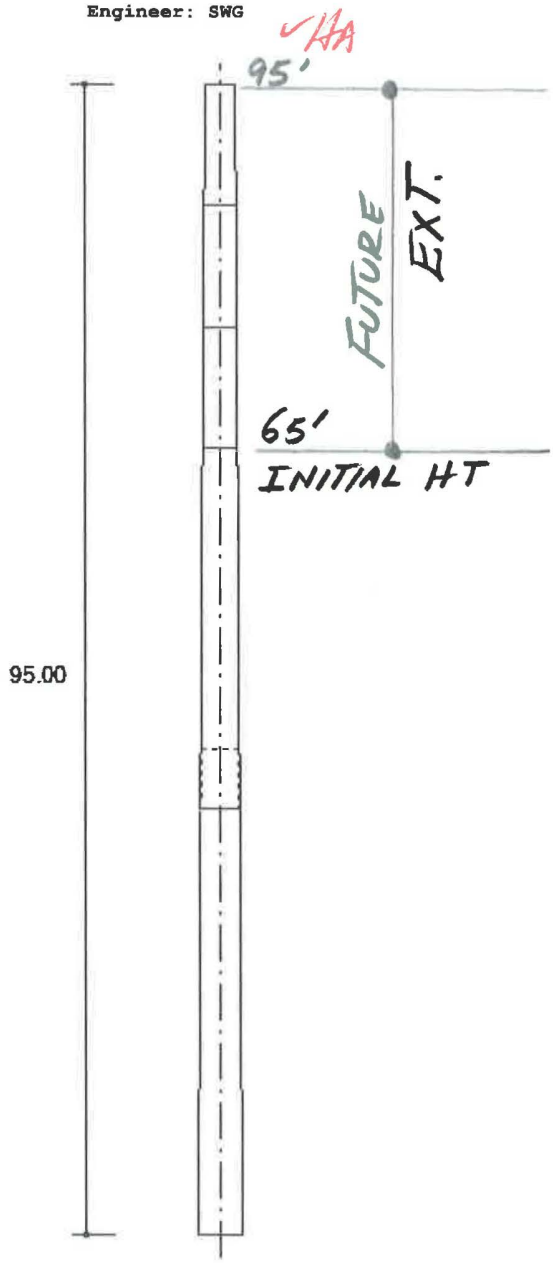
File: W:\Jobs\2019\232062\232062.out
Contract: 232062
Project: 65 FT OF 95 FT TSP
Date and Time: 1/28/2020 9:39:50 AM

Revision: 1
Site:
Engineer: SWG

DESIGN SPECIFICATION

Design Standard: ANSI/TIA-222-G-2005 Add.2
Ultimate Design Wind Speed (No Ice) = 104.0 (mph)
Nominal Design Wind Speed (No Ice) = 80.6 (mph)
Basic Wind Speed (With Ice) = 30.0 (mph)
Design Ice Thickness = 0.25 (in)
Structure Class = II
Exposure Category = C
Topographic Category = 1

Sct.	Length (ft)	Overlap (ft)	Top Dia. (in)	Bot Dia. (in)	Thick. (in)	
5	10.00	0.00	30.00	31.53	0.2500	FUTURE
4	10.00	0.00	31.53	33.04	0.2500	
3	10.00	0.00	33.04	34.55	0.2500	
2	29.96	0.00	34.55	39.14	0.2500	
1	40.21	5.17	37.84	44.00	0.2500	



MAXIMUM BASE REACTIONS

Download (Kips)	56.6
Shear (Kips)	24.0
Moment (Kipsft)	1623.0

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Section A: PROJECT DATA

Project Title:	65 FT OF 95 FT TSP
Customer Name:	WINNER MANAGEMENT
Site:	
Contract No.:	232062
Revision:	1
Engineer:	SWG
Date:	Jan 28 2020
Time:	09:39:38 AM
Design Standard:	ANSI/TIA-222-G-2005 Addendum 2

GENERAL DESIGN CONDITIONS

Start wind direction:	0.00 (Deg)
End wind direction:	315.00 (Deg)
Increment wind direction:	45.00 (Deg)
Elevation above ground:	0.00(ft)
Gust Response Factor Gh:	1.10
Structure class:	II
Exposure category:	C
Topographic category:	1
Material Density:	490.1(lbs/ft^3)
Young's Modulus:	29000.0(ksi)
Poisson Ratio:	0.30
Weight Multiplier:	1.06

WIND ONLY CONDITIONS:

Ultimate Design Wind Speed (No Ice):	104.00(mph)
Nominal Design Wind Speed (No Ice):	80.56(mph)
Directionality Factor Kd:	0.95
Importance Factor I:	1.00
Wind Load Factor:	1.60
Dead Load Factor:	1.20

WIND AND ICE CONDITIONS:

Basic Wind Speed (With Ice):	30.00(mph)
Directionality Factor Kd:	0.95
Wind Load Importance Factor Iw:	1.00
Ice Thickness Importance Factor Ii:	1.00
Ice Thickness:	0.25(in)
Ice Density:	56.19(lbs/ft^3)
Wind Load Factor:	1.00
Dead Load Factor:	1.20
Ice Load Factor:	1.00

WIND ONLY SERVICEABILITY CONDITIONS:

Serviceability Wind Speed:	60.00(mph)
Directionality Factor Kd:	0.85
Importance Factor I:	1.00
Wind Load Factor:	1.00
Dead Load Factor:	1.00

EARTHQUAKE CONDITIONS:

Site class definition:	D
Spectral response acceleration Ss:	0.442
Spectral response acceleration S1:	0.144
Accelaration-based site coefficient Fa:	1.446
Velocity-based site coefficient Fv:	2.224
Design spectral response acceleration Sds:	0.426
Design spectral response acceleration Sd1:	0.214
Seismic analysis method:	1

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Fundamental frequency of structure f1:	0.677
Total seismic shear Vs (Kips) :	2.43

Analysis performed using: TowerSoft Finite Element Analysis Program

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Section B: STRUCTURE GEOMETRY

Total Height (ft)	Bottom Diameter (in)	Top Diameter (in)
95.00	44.00	30.00

Sect. No.	Length (ft)	Overlap (ft)	Bot Dia. (in)	Top Dia. (in)	Thick. (in)	Sides	Joint Type	Yield Stress (ksi)	Mass (lbs)	Calculated Taper (in/ft)
5 FUTURE	10.00	0.00	31.53	30.00	0.2500	18-sided	Flange	65.0	873.4	0.15300
4 FUTURE	10.00	0.00	33.04	31.53	0.2500	18-sided	Flange	65.0	916.9	0.15100
3 FUTURE	10.00	0.00	34.55	33.04	0.2500	18-sided	Flange	65.0	960.2	0.15100
2	29.96	0.00	39.14	34.55	0.2500	18-sided	Telescopic	65.0	3137.7	0.15308
1	40.21	5.17	44.00	37.84	0.2500	18-sided	Flange	65.0	4681.1	0.15308
Total Mass:									10569.4	

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Section D: TRANSMISSION LINE DATA

Transmission Lines Position

No.	Bot El (ft)	Top El (ft)	Desc.	Radius (ft)	Az.	Orient.	No.	Shielded	Shielded Lines	Antenna
1	0.00	95.00	3/8" CABLE	3.00	0.00	0.00	1	No	0	
2	0.00	90.50	LDF7P-50A	0.00	0.00	0.00	9	Yes	9	
3	0.00	79.50	LDF7P-50A	0.00	0.00	0.00	9	Yes	9	
4	0.00	67.00	LDF7P-50A	0.00	0.00	0.00	9	Yes	9	
5	0.00	54.00	LDF7P-50A	0.00	0.00	0.00	9	Yes	9	

Transmission Lines Details

No.	Desc.	Width (in)	Depth (in)	Unit Mass (lb/ft)
1	3/8" CABLE	0.38	0.38	1.00
2	LDF7P-50A	2.01	2.01	0.92
3	LDF7P-50A	2.01	2.01	0.92
4	LDF7P-50A	2.01	2.01	0.92
5	LDF7P-50A	2.01	2.01	0.92

Utilization of the cross-section for TX Lines: 10.94%

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Section F: POINT LOAD DATA

Structure Azimuth from North:0.00

POINT LOADS

No.	Description	Elev. (ft)	Radius (ft)	Azim. (Deg)	Orient. (Deg)	Vertical Offset (ft)	Tx Line	Comments
1	LIGHTNING ROD	95.00	0.00	0.0	0.0	0.00		
2	9 FT SHROUD	90.50	0.00	0.0	0.0	0.00		
3	11 FT SHROUD	79.50	0.00	0.0	0.0	0.00		
4	12 FT SHROUD	67.00	0.00	0.0	0.0	0.00		
5	12 FT SHROUD	54.00	0.00	0.0	0.0	0.00		

POINT LOADS WIND AREAS AND WEIGHTS

No.	Description	Frontal Bare Area (ft^2)	Lateral Bare Area (ft^2)	Frontal Iced Area (ft^2)	Lateral Iced Area (ft^2)	Weight Bare (Kips)	Weight Iced (Kips)	Gh
1	LIGHTNING ROD	1.00	1.00	2.00	2.00	0.10	0.20	1.10
2	9 FT SHROUD	114.00	114.00	228.00	228.00	3.00	9.00	1.10
3	11 FT SHROUD	139.00	139.00	278.00	278.00	3.00	9.00	1.10
4	12 FT SHROUD	152.00	152.00	304.00	304.00	3.00	9.00	1.10
5	12 FT SHROUD	152.00	152.00	304.00	304.00	3.00	9.00	1.10

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Section H: STRUCTURE DISPLACEMENT DATA

Load Combination Wind Only - Serviceability

Wind Direction Maximum displacements

Elev. (ft)	N-S Disp (in)	W-E Disp (in)	Vert.Disp (in)	N-S Rot (deg)	W-E Rot (deg)	Twist Rot (deg)
95.00	11.5	-11.5	-0.1	-0.84	-0.84	0.00
93.33	11.2	-11.2	-0.1	-0.84	-0.84	0.00
91.67	10.9	-10.9	-0.1	-0.84	-0.84	0.00
90.00	10.6	-10.6	-0.1	-0.84	-0.84	0.00
88.33	10.3	-10.3	-0.1	-0.84	-0.84	0.00
86.67	10.0	-10.0	-0.1	-0.84	-0.84	0.00
85.00	9.7	-9.7	-0.1	-0.83	-0.83	0.00
83.33	9.4	-9.4	-0.1	-0.83	-0.83	0.00
81.67	9.1	-9.1	-0.1	-0.83	-0.83	0.00
80.00	8.8	-8.8	-0.1	-0.83	-0.83	0.00
78.33	8.6	-8.6	-0.1	-0.83	-0.83	0.00
76.67	8.3	-8.3	-0.1	-0.82	-0.82	0.00
75.00	8.0	-8.0	-0.1	-0.82	-0.82	0.00
73.33	7.7	-7.7	-0.1	-0.81	-0.82	0.00
71.67	7.4	-7.4	-0.1	-0.81	-0.81	0.00
70.00	7.1	-7.1	-0.1	-0.80	-0.81	0.00
68.33	6.8	-6.8	0.0	-0.80	-0.80	0.00
66.67	6.6	-6.6	0.0	-0.79	-0.79	0.00
65.00	6.3	-6.3	0.0	-0.78	-0.79	0.00
60.09	5.5	-5.5	0.0	-0.76	-0.76	0.00
55.18	4.7	-4.7	0.0	-0.73	-0.73	0.00
50.27	4.0	-4.0	0.0	-0.69	-0.69	0.00
45.36	3.3	-3.3	0.0	-0.64	-0.64	0.00
40.45	2.7	-2.7	0.0	-0.59	-0.59	0.00
35.28	2.1	-2.1	0.0	-0.53	-0.53	0.00
29.40	1.5	-1.5	0.0	-0.46	-0.46	0.00
23.52	0.9	-0.9	0.0	-0.37	-0.37	0.00
17.64	0.5	-0.5	0.0	-0.29	-0.29	0.00
11.76	0.2	-0.2	0.0	-0.19	-0.19	0.00
5.88	0.1	-0.1	0.0	-0.10	-0.10	0.00
0.00	0.0	0.0	0.0	0.00	0.00	0.00

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Section K: POLE OUTPUT LOAD DATA

Load Combination — Max Envelope
Wind Direction — Maximum

Elev. (ft)	Axial Ld. (kips)	Shear Ld. (kips)	Torque (kipsft)	Bend Mom. (kipsft)
95.00	0.32	0.09	0.00	0.00
93.33	0.32	0.09	0.00	0.16
93.33	0.53	0.20	0.01	0.16
91.67	0.53	0.20	0.01	0.49
91.67	3.63	1.53	0.01	0.49
90.00	3.63	1.53	0.01	3.04
90.00	10.57	4.50	0.02	3.04
88.33	10.57	4.50	0.02	10.52
88.33	10.80	4.60	0.02	10.52
86.67	10.80	4.60	0.02	18.03
86.67	11.03	4.71	0.03	18.03
85.00	11.03	4.71	0.03	25.87
85.00	11.27	4.82	0.03	25.87
83.33	11.27	4.82	0.03	33.90
83.33	11.50	4.93	0.04	33.90
81.67	11.50	4.93	0.04	42.11
81.67	11.74	5.04	0.04	42.11
80.00	11.74	5.04	0.04	50.50
80.00	18.70	8.52	0.05	50.50
78.33	18.70	8.52	0.05	64.41
78.33	21.84	10.07	0.05	64.41
76.67	21.84	10.07	0.05	81.18
76.67	22.10	10.18	0.06	81.19
75.00	22.10	10.18	0.06	98.14
75.00	22.36	10.29	0.06	98.15
73.33	22.36	10.29	0.06	115.29
73.33	22.62	10.40	0.07	115.29
71.67	22.62	10.40	0.07	132.61
71.67	22.89	10.51	0.07	132.62
70.00	22.89	10.51	0.07	149.77
70.00	23.15	10.62	0.08	149.78
68.33	23.15	10.62	0.08	167.46
68.33	25.34	11.74	0.08	167.47
66.67	25.34	11.74	0.09	187.02
66.67	33.30	15.90	0.09	187.03
65.00	33.30	15.90	0.09	213.51
65.00	33.87	16.11	0.10	213.53
60.09	33.87	16.11	0.10	291.93
60.09	34.73	16.43	0.11	291.96
55.18	34.73	16.43	0.11	372.43
55.18	42.92	20.40	0.13	372.46
50.27	42.92	20.40	0.13	472.41
50.27	46.16	21.85	0.14	472.44
45.36	46.16	21.85	0.14	578.82
45.36	47.12	22.13	0.16	578.85
40.45	47.12	22.13	0.16	687.34
40.45	48.11	22.41	0.17	687.36
35.28	48.11	22.41	0.17	803.09
35.28	49.56	22.70	0.19	803.11
29.40	49.56	22.70	0.19	935.95
29.40	51.09	22.98	0.21	935.97
23.52	51.09	22.98	0.21	1070.50
23.52	52.29	23.22	0.22	1070.51
17.64	52.29	23.22	0.22	1206.54
17.64	53.51	23.44	0.24	1206.54
11.76	53.51	23.44	0.24	1344.68
11.76	54.75	23.63	0.25	1344.68

5.88	54.75	23.63	0.25	1483.27
5.88	55.99	23.81	0.27	1483.26
0.00	55.99	23.81	0.27	1623.04
Base	56.61	23.98	0.26	1623.04

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Section L: STRENGTH ASSESSMENT DATA
Load Combination Max Envelope
Wind Direction Maximum

Elev. (ft)	Axial Ld. (kips)	Axial Cap (kips)	Moment (kipsft)	Mom. Cap (kipsft)	Assess.
95.00	0.32	1675.53	0.00	1024.76	0.000
93.33	0.32	1685.36	0.16	1039.68	0.000
93.33	0.53	1685.36	0.16	1039.68	0.000
91.67	0.53	1695.11	0.49	1054.66	0.001
91.67	3.63	1695.11	0.49	1054.66	0.002
90.00	3.63	1704.78	3.04	1069.69	0.003
90.00	10.57	1704.78	3.04	1069.69	0.007
88.33	10.57	1714.38	10.52	1084.77	0.008
88.33	10.80	1714.38	10.52	1084.77	0.012
86.67	10.80	1723.90	18.03	1099.91	0.019
86.67	11.03	1723.90	18.03	1099.91	0.019
85.00	11.03	1733.35	25.87	1115.09	0.026
85.00	11.27	1733.35	25.87	1115.09	0.026
83.33	11.27	1742.59	33.90	1130.13	0.033
83.33	11.50	1742.59	33.90	1130.13	0.033
81.67	11.50	1751.76	42.11	1145.21	0.040
81.67	11.74	1751.76	42.11	1145.21	0.040
80.00	11.74	1760.86	50.50	1160.34	0.046
80.00	18.70	1760.86	50.50	1160.34	0.048
78.33	18.70	1769.88	64.41	1175.52	0.059
78.33	21.84	1769.88	64.41	1175.52	0.060
76.67	21.84	1778.82	81.18	1190.74	0.073
76.67	22.10	1778.82	81.19	1190.74	0.073
75.00	22.10	1787.69	98.14	1206.00	0.087
75.00	22.36	1787.69	98.15	1206.00	0.087
73.33	22.36	1796.48	115.29	1221.31	0.100
73.33	22.62	1796.48	115.29	1221.31	0.100
71.67	22.62	1805.20	132.61	1236.65	0.113
71.67	22.89	1805.20	132.62	1236.65	0.113
70.00	22.89	1813.85	149.77	1252.03	0.125
70.00	23.15	1813.85	149.78	1252.03	0.125
68.33	23.15	1822.42	167.46	1267.46	0.138
68.33	25.34	1822.42	167.47	1267.46	0.138
66.67	25.34	1830.91	187.02	1282.91	0.152
66.67	33.30	1830.91	187.03	1282.91	0.154
65.00	33.30	1839.33	213.51	1298.41	0.172
65.00	33.87	1840.56	213.53	1300.68	0.172
60.09	33.87	1865.22	291.93	1347.17	0.225
60.09	34.73	1865.22	291.96	1347.17	0.225
55.18	34.73	1889.22	372.43	1393.93	0.276
55.18	42.92	1889.22	372.46	1393.93	0.278
50.27	42.92	1912.54	472.41	1440.94	0.338
50.27	46.16	1912.54	472.44	1440.94	0.339
45.36	46.16	1935.20	578.82	1488.15	0.400
45.36	47.12	1935.20	578.85	1488.15	0.400
40.45	47.12	1957.19	687.34	1535.55	0.459
40.45	48.11	1957.19	687.36	1535.55	0.460
35.28	49.56	1964.47	803.11	1551.61	0.530
29.40	49.56	1989.65	935.95	1608.62	0.594
29.40	51.09	1989.65	935.97	1608.62	0.595
23.52	51.09	2013.87	1070.50	1665.78	0.656
23.52	52.29	2013.87	1070.51	1665.78	0.656
17.64	52.29	2037.14	1206.54	1723.04	0.714
17.64	53.51	2037.14	1206.54	1723.04	0.714
11.76	53.51	2059.44	1344.68	1780.33	0.769
11.76	54.75	2059.44	1344.68	1780.33	0.770
5.88	54.75	2080.78	1483.27	1837.60	0.821

5.88	55.99	2080.78	1483.26	1837.60	0.822
0.00	55.99	2101.17	1623.04	1894.81	0.871

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Section M: SECTION PROPERTIES DATA

Elev. (ft)	Diam. (in)	Width (in)	Thick. (in)	W/t	Area (in^2)	S (in^3)
95.0	30.0	4.8	0.250	19.2	23.6	173.25
93.3	30.3	4.8	0.250	19.3	23.8	176.24
93.3	30.3	4.8	0.250	19.3	23.8	176.24
91.7	30.5	4.9	0.250	19.5	24.0	179.26
91.7	30.5	4.9	0.250	19.5	24.0	179.26
90.0	30.8	4.9	0.250	19.7	24.2	182.31
90.0	30.8	4.9	0.250	19.7	24.2	182.31
88.3	31.0	5.0	0.250	19.9	24.4	185.38
88.3	31.0	5.0	0.250	19.9	24.4	185.38
86.7	31.3	5.0	0.250	20.1	24.6	188.48
86.7	31.3	5.0	0.250	20.1	24.6	188.48
85.0	31.5	5.1	0.250	20.2	24.8	191.60
85.0	31.5	5.1	0.250	20.2	24.8	191.60
83.3	31.8	5.1	0.250	20.4	25.0	194.71
83.3	31.8	5.1	0.250	20.4	25.0	194.71
81.7	32.0	5.1	0.250	20.6	25.2	197.84
81.7	32.0	5.1	0.250	20.6	25.2	197.84
80.0	32.3	5.2	0.250	20.8	25.4	201.00
80.0	32.3	5.2	0.250	20.8	25.4	201.00
78.3	32.5	5.2	0.250	20.9	25.6	204.18
78.3	32.5	5.2	0.250	20.9	25.6	204.18
76.7	32.8	5.3	0.250	21.1	25.8	207.39
76.7	32.8	5.3	0.250	21.1	25.8	207.39
75.0	33.0	5.3	0.250	21.3	26.0	210.63
75.0	33.0	5.3	0.250	21.3	26.0	210.63
73.3	33.3	5.4	0.250	21.5	26.2	213.88
73.3	33.3	5.4	0.250	21.5	26.2	213.88
71.7	33.5	5.4	0.250	21.7	26.4	217.17
71.7	33.5	5.4	0.250	21.7	26.4	217.17
70.0	33.8	5.5	0.250	21.8	26.6	220.47
70.0	33.8	5.5	0.250	21.8	26.6	220.47
68.3	34.0	5.5	0.250	22.0	26.8	223.81
68.3	34.0	5.5	0.250	22.0	26.8	223.81
66.7	34.3	5.5	0.250	22.2	27.0	227.16
66.7	34.3	5.5	0.250	22.2	27.0	227.16
65.0	34.6	5.6	0.250	22.4	27.2	230.55
65.0	34.6	5.6	0.250	22.4	27.2	231.04
60.1	35.3	5.7	0.250	22.9	27.8	241.31
60.1	35.3	5.7	0.250	22.9	27.8	241.31
55.2	36.1	5.9	0.250	23.5	28.4	251.79
55.2	36.1	5.9	0.250	23.5	28.4	251.79
50.3	36.8	6.0	0.250	24.0	29.0	262.50
50.3	36.8	6.0	0.250	24.0	29.0	262.50
45.4	37.6	6.1	0.250	24.5	29.6	273.43
45.4	37.6	6.1	0.250	24.5	29.6	273.43
40.5	38.3	6.3	0.250	25.0	30.2	284.58
40.5	38.3	6.3	0.250	25.0	30.2	284.58
35.3	39.1	6.4	0.250	25.6	30.9	296.56
35.3	38.6	6.3	0.250	25.2	30.4	288.40
29.4	39.5	6.5	0.250	25.9	31.1	302.15
29.4	39.5	6.5	0.250	25.9	31.1	302.15
23.5	40.4	6.6	0.250	26.5	31.9	316.21
23.5	40.4	6.6	0.250	26.5	31.9	316.21
17.6	41.3	6.8	0.250	27.1	32.6	330.59
17.6	41.3	6.8	0.250	27.1	32.6	330.59
11.8	42.2	6.9	0.250	27.8	33.3	345.30
11.8	42.2	6.9	0.250	27.8	33.3	345.30
5.9	43.1	7.1	0.250	28.4	34.0	360.32
5.9	43.1	7.1	0.250	28.4	34.0	360.32

0.0	44.0	7.3	0.250	29.0	34.7	375.66

Note: w/t values marked with * (asterisk) indicate width to thickness exceeding maximum allowable values by standards.

Customer: WINNER MANAGEMENT
Project: 65 FT OF 95 FT TSP
Site: CORRALES #2- NM
Engr. File: 232062
Build Code: ANSI/TIA-222-G-2005

ROHN Products

R1

Mat Foundation

ver.2.2.14

Design Parameters

	Load Case					
Description	**1**	**2**	**3**	**4**	**5**	**Service**
Total Moment, ft-kips	1,622.74	1,613.46	289.13	184.22	182.88	502.00
Total Shear, kips	23.98	23.96	4.14	2.43	2.43	7.43
Total Tower Wt, kips	30.17	22.61	56.61	30.23	22.67	25.19
Max. Uplift, kips	N/A	N/A	N/A	N/A	N/A	N/A
Shear, kips	N/A	N/A	N/A	N/A	N/A	N/A
Max Download, kips	N/A	N/A	N/A	N/A	N/A	N/A
Shear	N/A	N/A	N/A	N/A	N/A	N/A
Soil L.F.	1.20	0.90	1.20	1.20	0.90	1.00
Concrete L.F.	1.20	0.90	1.20	1.20	0.90	1.00

Foundation	
Ht. AGL, ft	0.50
Depth, ft.	6.00
Pole	
Butt OD, ft	3.67
Offset, in	.00
Soil	N/A
Blow Count	N/A
Inplace Unit Wt, pcf	110.00
Submerged Unit Wt, pcf	60.00
Friction Angle, ϕ, deg.	30.00
Cohesion, ksf	N/A
Uplift Angle, deg.	30.00
Water Depth, ft	None
Ult Bearing Capacity, ksf	5.00

Mat	
Thickness, ft	1.75
Width, ft	22.00
EA, in	18.00
Batter, in/ft	0.00

Anchor Bolts	
Diameter, in	2.2500
No.	16
Length, in	84.00
Bolt Circle, in	50.13
Projection, in	13.00
Concrete	
28 Day Strength, ksi	4.50
Dry Unit Wt, pcf	150.00
Wet Unit Wt, pcf	88.00

Pier	
Height, ft	4.75
Diameter, ft	6.50
No. Piers	1
Shape	Square

Pocket	
Diameter, in	N/A
Thickness, ft	N/A

Rebar Fy	
Vertical, ksi	60.00
Circular, ksi	60.00
Horizontal, ksi	60.00

↳ REV 'G' PRESUMPTIVE 'CLAY'

Results

ϕM_N – Parallel Axis	3,335.67	ft-kips
ϕM_N – Diagonal Axis	3,399.77	ft-kips
Moment – Interaction Ratio	0.530	
ϕV_N – Lateral Load	92.85	kips
Lateral Load – Interaction Ratio	0.258	

Final Mat Dimension : 22.00 x 22.00 x 1.75 ft. thick w/ (1) 6.50 ft. Square Pier

Final Pocket Dimension : Pockets not required

Total Volume of Concrete : 38.8 yd^3

Designed By: SWG
Date: 28 Jan,20 @ 09:48 AM

Checked By: HA
Date: 1/20/20

Customer: WINNER MANAGEMENT
Project: 65 FT OF 95 FT TSP
Site: CORRALES #2- NM
Engr. File: 232062
Build Code: ANSI/TIA-222-G-2005

ROHN Products

Mat Foundation

ver.2.2.14

OTM Capacity

Controlling Load Case: 2 [Wind w/Min. Dead Load]
Foundation Width = 22.00 ft
M_U = 1,769.2 ft-kips

	ϕM_N, ft-kips	x, ft	N	σ_{ur}
Parallel	3,335.7	4.502	0.205	5.00
Diagonal	3,399.8	9.952	0.320	5.00

ϕM_N= 3,335.67 ft-kips IRatio = 0.530
ϕV_N = 92.85 kips IRatio = 0.258

Mat Design

γ_e = 121.67 pcf

						Moment, ft-kips/ft		Shear, kips/ft	
Exterior Slab	**x, ft**	**N**	**σ_R, ksf**	**P_s kips**	**P_{su} kips**	**DownLoad Side**	**Uplift Side**	**Download Side**	**Uplift Side**
Parallel	14.639	0.665	1.49	17.70	0.00	20.26	31.92	5.23	7.51
Diagonal	18.143	0.583	1.52	17.70	0.00	13.18	19.18	4.54	6.04

Punching Shear	**Download**			**Uplift**			**Description**
	Interior	**Edge**	**Corner**	**Interior**	**Edge**	**Corner**	
b_o, ft	31.33	N/A	N/A	N/A	N/A	N/A	2-Way Shear
Vsu, psi	54.92	N/A	N/A	N/A	N/A	N/A	
ϕVc, psi	211.09	N/A	N/A	N/A	N/A	N/A	
IR	0.26	N/A	N/A	N/A	N/A	N/A	
0.5*M_{ut}, ft-kips	521.0			N/A			Moment transfer to slab
B_e, ft	11.8			N/A			
M_u, ft-kips/ft	44.3			N/A			
Edge Distances: a = 11.00 ft. b = 11.00 ft. c = 11.00 ft.							

Summary	**Max. Value**	**Utilization**
Slab Moment, ft-kips/ft	44.34	0.779
Slab Shear, kips/ft	7.51	0.343
Punching Shear, psi	54.92	0.260
Soil Bearing Required, σ_{UR}, ksf	2.02	0.405

Mat Reinforcement	
Min. Steel Area (Strength)	.501 in^2/ft.
Min. Steel Area (Temperature)	.227 in^2/ft.
Steel Strain Actual	0.020
Minimum Steel Strain Required	0.005

24 - #7 Horizontal bars equally spaced @11.22 in., each way, top and bottom, total of 96, A_s = 0.656 in^2/ft

Designed By: SWG
Date: 28 Jan,20 @ 09:48 AM

Checked By: HA
Date: 1/20/20

Customer:	WINNER MANAGEMENT
Project:	65 FT OF 95 FT TSP
Site:	CORRALES #2- NM
Engr. File:	232062
Build Code:	ANSI/TIA-222-G-2005

ROHN Products

Mat Foundation

ver.2.2.14

Pier Design

Controlling Load Case: 1 [Wind w/Max. Dead Load]

C = 30.17 kips	Vc = 23.98 kips	Mc = 1,736.65 ft-kips
T = .00 kips	Vt = .00 kips	Mt = .00 ft-kips
Fy = 60.00 ksi	Fyt = 60.00 ksi	L.F. = 1.00
H = 78.00 in.	Ds = 69.00 in.	F'c = 4.50 ksi
U = 1.00	Irs = Square	

*** **NOTE**: Pier cross section is Square ***

SUMMARY OF ANALYSIS

Minimum area of steel required	= 30.420 in^2	(Rhomin = 0.0050)
Area of steel provided.	= 32.936 in^2	(Rhoactual = 0.0054)
Maximum steel area limit	= 382.270 in^2	(Rhomax = 0.0628)

(26) #10 Vertical Bars equally spaced w/ #5 Circular Ties @ 6" on center.

CIRCULAR TIE DATA

Vu < 0.85*Vc/2, shear reinforcement is not required

Use maximum tie spacing specified in ACI 318,
Section 7.10.5 for compression reinforcement.

DEVELOPMENT LENGTH MODIFIERS FOR BAR DEVELOPMENT

Modifier for tension development = 0.667
Modifier for compression development = 0.165
REQUIRED Ld = MODIFIER * BASIC Ld * ACI 318 MODIFIERS, (12 in. min.)

Designed By: SWG
Date: 28 Jan,20 @ 09:48 AM

Checked By: HA
Date: 1/28/20

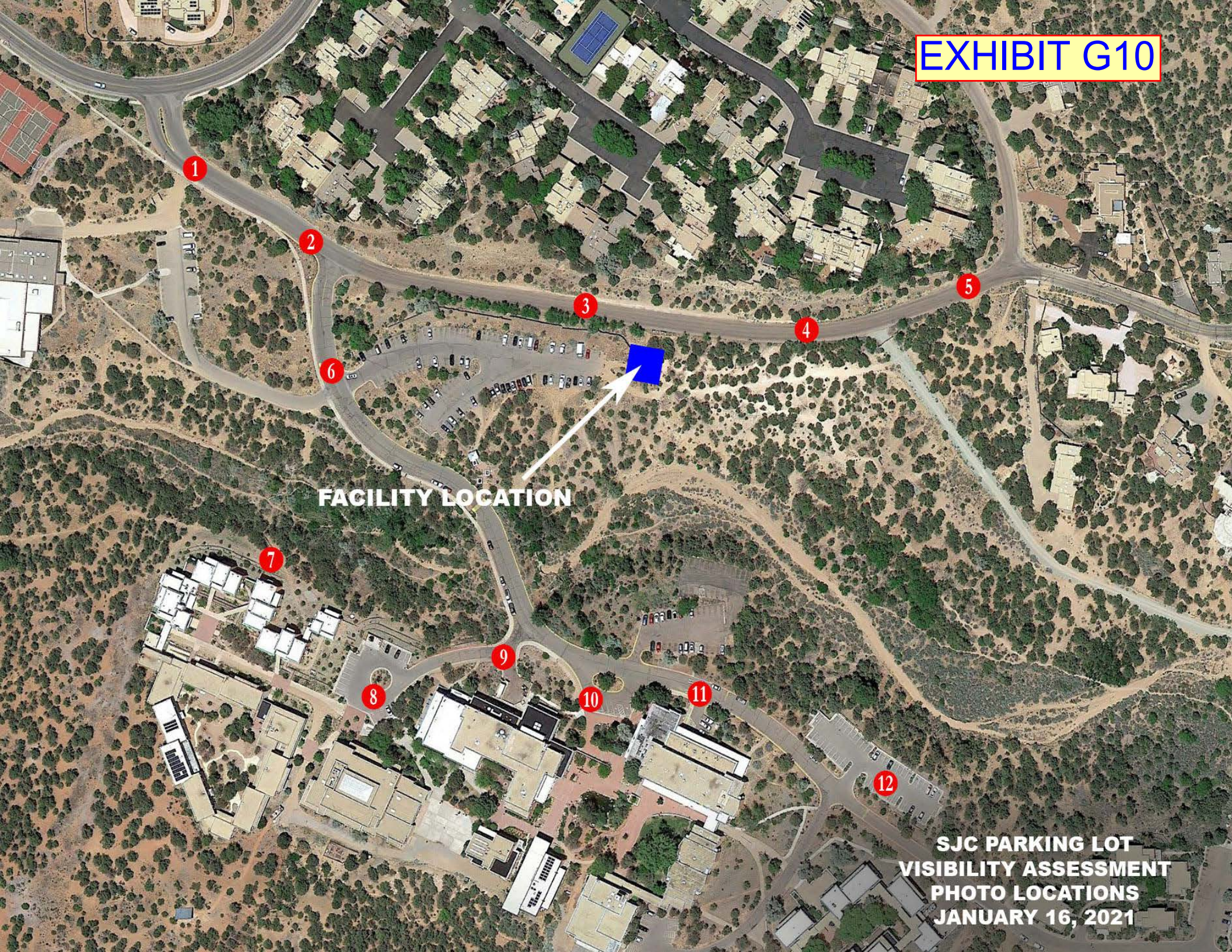
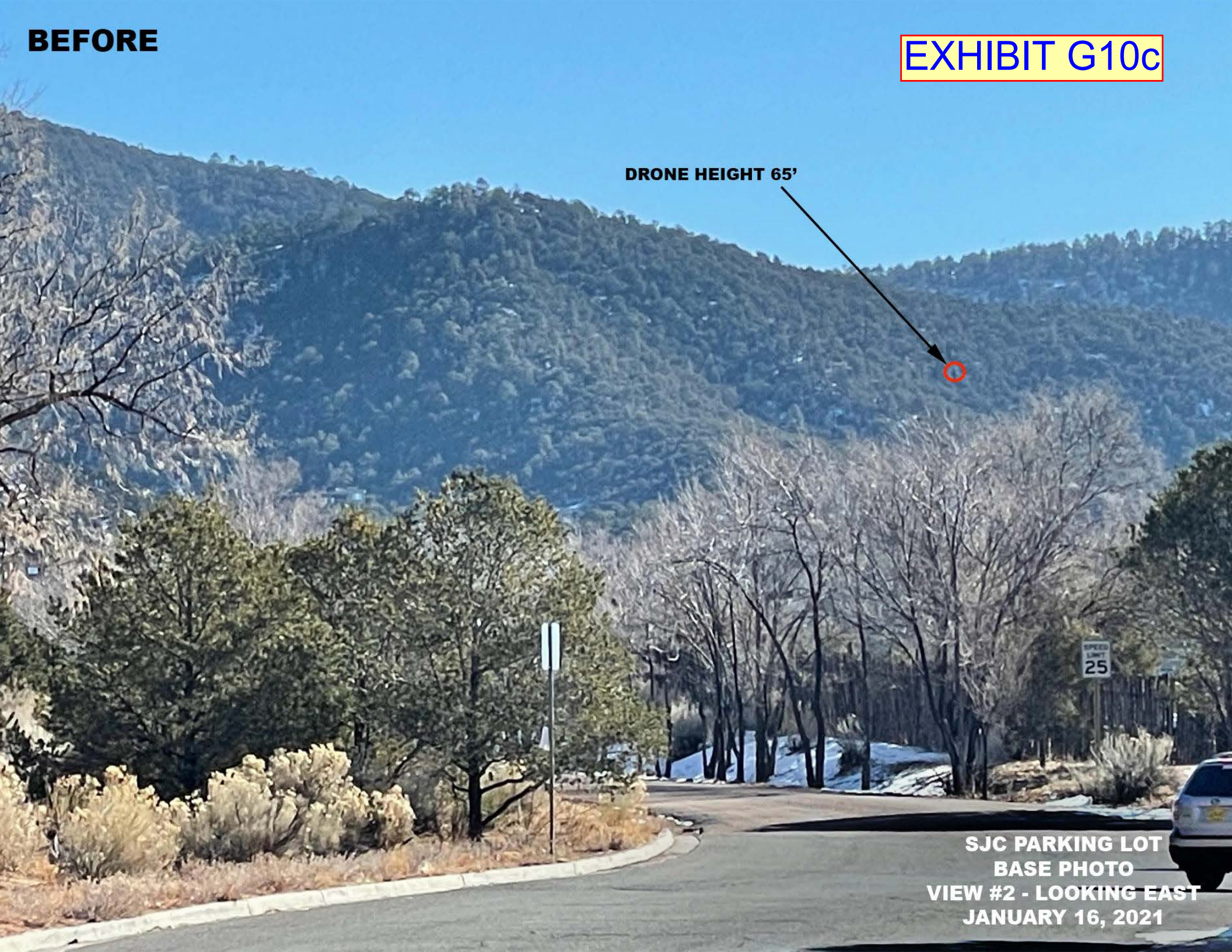


EXHIBIT G10
1
2
3
4
5
6
FACILITY LOCATION
7
8
9
10
11
12
SJC PARKING LOT
VISIBILITY ASSESSMENT
PHOTO LOCATIONS
JANUARY 16, 2021

EXHIBIT G10a

EXHIBIT G10b


BEFORE
EXHIBIT G10c
DRONE HEIGHT 65'
SPEED LIMIT
25
SJC PARKING LOT
BASE PHOTO
VIEW #2 - LOOKING EAST
JANUARY 16, 2021

AFTER
EXHIBIT G10d
SPEED LIMIT
25
SJC PARKING LOT
PHOTO SIMULATION
VIEW #2 - LOOKING EAST
JANUARY 16, 2021

EXHIBIT G10e

EXHIBIT G10f

BEFORE
EXHIBIT G10g
65’
SJC PARKING LOT
BASE PHOTO
VIEW #4 - LOOKING WEST
JANUARY 16, 2021

AFTER

EXHIBIT G10h

BEFORE
EXHIBIT G10i
DRONE HEIGHT 65’
NO PARKING ART TIME
SJC PARKING LOT
BASE PHOTO
VIEW #5 - LOOKING WEST
JANUARY 16, 2021

AFTER
EXHIBIT G10j
NO PARKING ART TIME
SJC PARKING LOT
PHOTO SIMULATION
VIEW #5 - LOOKING WEST
JANUARY 16, 2021

EXHIBIT G10k
DRONE HEIGHT 65’
FREEING MINDS
A Campaign for St. John’s College
SJC PARKING LOT
BASE PHOTO
VIEW #6 - LOOKING EA
JANUARY 16, 2021

EXHIBIT G10I
FREEING MINDS
A Campaign for St. John's College
SJC PARKING LOT
PHOTO SIMULATION
VIEW #6 - LOOKING EA
JANUARY 16, 2021

BEFORE

EXHIBIT G10m

AFTER

EXHIBIT G10n

BEFORE

EXHIBIT G10o

AFTER

EXHIBIT G10p

BEFORE

EXHIBIT G10q

SJC PARKING LOT
BASE PHOTO
VIEW #9 - LOOKING NORTHEAST
JANUARY 16, 2021

AFTER

EXHIBIT G10r

BEFORE

EXHIBIT G10s

AFTER

EXHIBIT G10t

BEFORE

EXHIBIT G10u

AFTER

EXHIBIT G10v

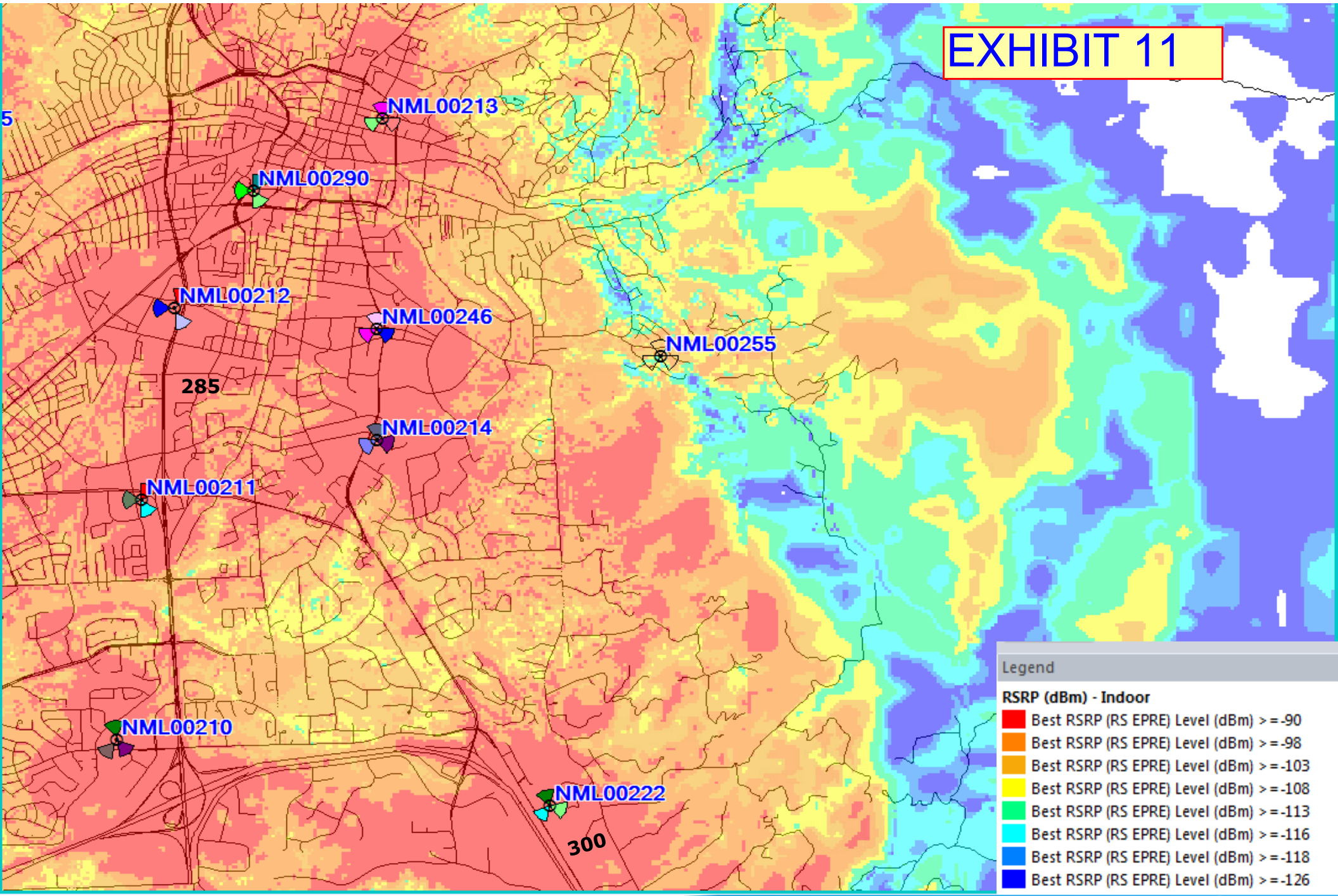
BEFORE

EXHIBIT G10w

AFTER

EXHIBIT G10x

AT&T indoor signal strength (RSRP) without NML00255



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AT&T indoor signal strength (RSRP) with NML00255

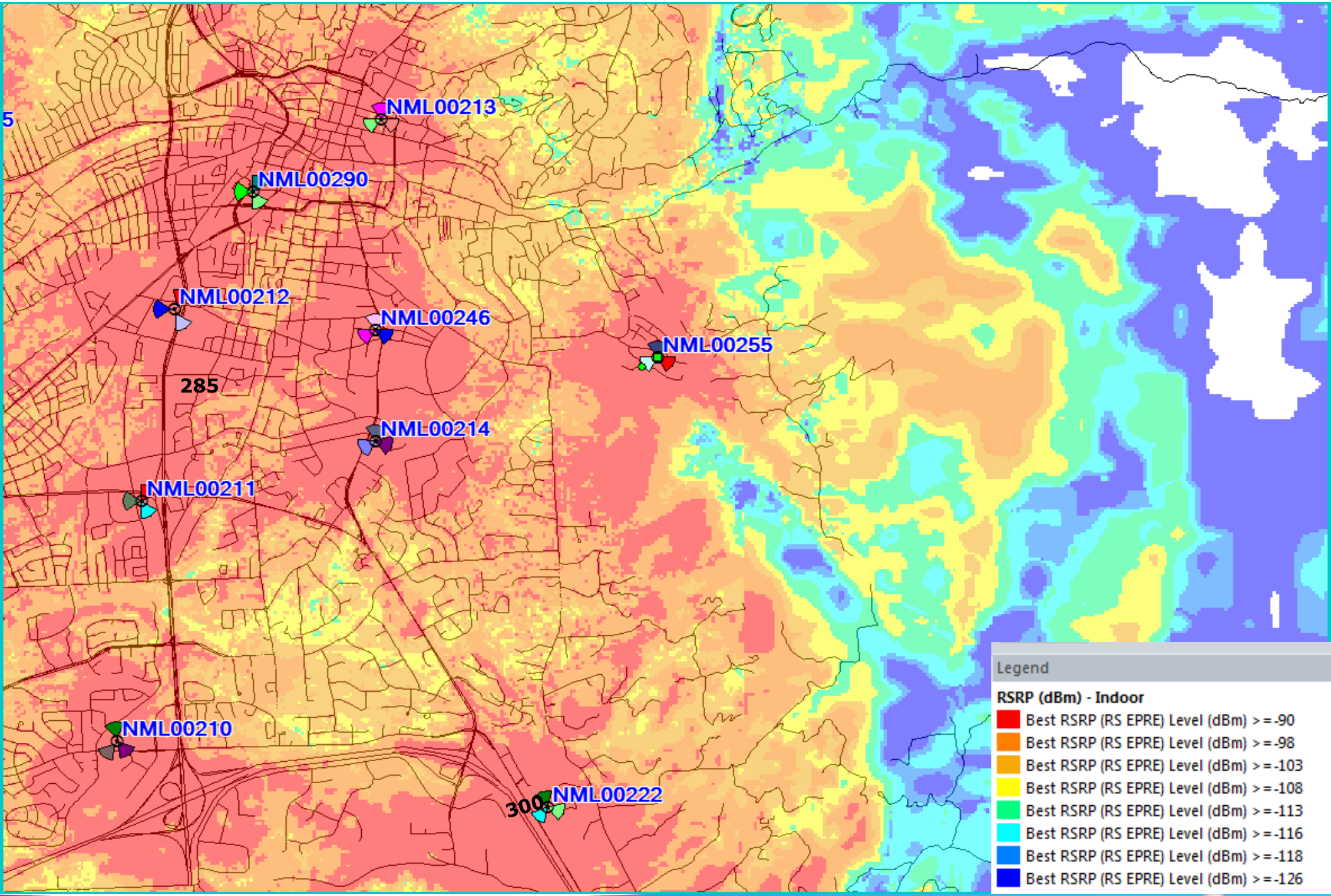

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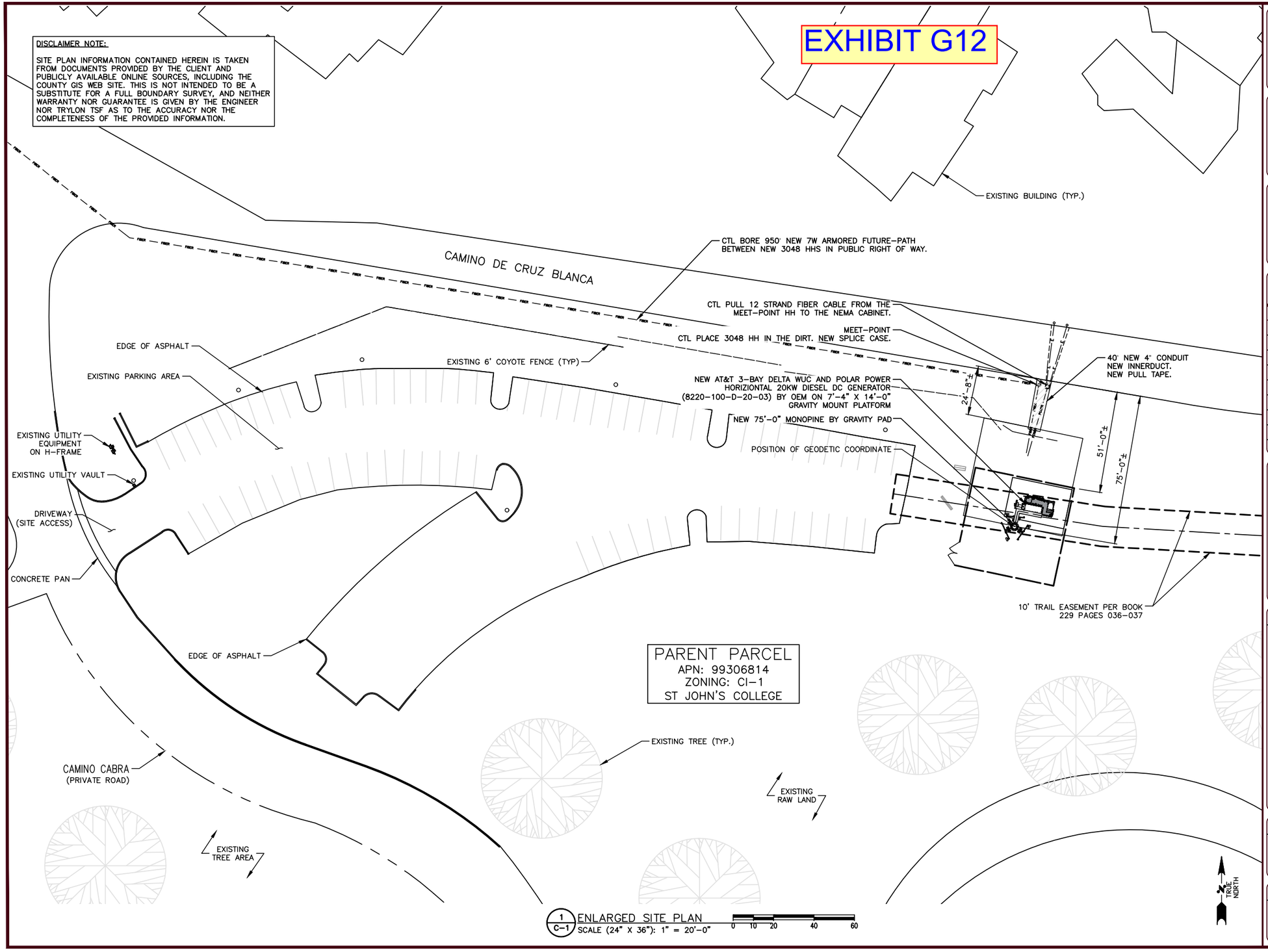
EXHIBIT G12

DISCLAIMER NOTE:

SITE PLAN INFORMATION CONTAINED HEREIN IS TAKEN FROM DOCUMENTS PROVIDED BY THE CLIENT AND PUBLICLY AVAILABLE ONLINE SOURCES, INCLUDING THE COUNTY GIS WEB SITE. THIS IS NOT INTENDED TO BE A SUBSTITUTE FOR A FULL BOUNDARY SURVEY, AND NEITHER WARRANTY NOR GUARANTEE IS GIVEN BY THE ENGINEER NOR TRYLON TSF AS TO THE ACCURACY NOR THE COMPLETENESS OF THE PROVIDED INFORMATION.



1/C-1 ENLARGED SITE PLAN
SCALE (24" X 36"): 1" = 20'-0"
0 10 20 40 60

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
C	02/28/20	UPDATED AS PER REDLINES	AVP
D	03/02/20	UPDATED AS PER REMARKS	VEN
E	03/04/20	UPDATED AS PER REMARKS	AVP
F	04/06/20	UPDATED AS PER REMARKS	AVP
G	04/24/20	UPDATED AS PER REMARKS	AVP
H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRUCTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP

SITE INFORMATION

SITE ID:
NML00255

SITE NAME:
SJC PARKING LOT

FA #: 14623999

USID #:
275858

SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505

COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

ENLARGED SITE PLAN

SHEET NO.

C-1.1

EXHIBIT G13

PROJECT INFORMATION

PROJECT MANAGER	
COMPANY:	MD7
ADDRESS:	10590 WEST OCEAN AIR DRIVE, SUITE 300 SAN DIEGO, CA 92130
CONTACT:	RYAN LARSON
PHONE:	(858) 964-7441
E-MAIL:	RLARSON@MD7.COM
PROJECT OWNER	
COMPANY:	AT&T
ADDRESS:	1355 WEST UNIVERSITY DRIVE MESA, AZ 85201-5419
PROFESSIONAL OF RECORD	
COMPANY:	TRYLON TSF
ADDRESS:	1825 W. WALNUT HILL LANE, SUITE 120 IRVING, TX 75038
CONTACT:	KATYA SERAVALLE
PHONE:	1-855-669-5421
E-MAIL:	KATYA.SERAVALLE@TRYLON.COM
TOWER OWNER	
NAME:	GRAVITY PAD PARTNERS, LLC
ADDRESS:	PO BOX 2755 CORRALES, NM 87048
PROPERTY OWNER	
NAME:	ST JOHNS COLLEGE
ADDRESS:	CAMINO DE LA CRUZ BLANCA SANTA FE, NM 87501

GENERAL NOTES

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, PORTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED

SITE INFORMATION

SITE ADDRESS:	1160 CAMINO DE CRUZ BLANCA SANTA FE, NM 87505
LATITUDE:	35.668550° 35° 40' 06.78" N
LONGITUDE:	-105.911781° 105° 54' 42.41" W
LAT / LONG TYPE:	NAD83
GROUND ELEVATION:	7352'± AMSL
ZONING/JURISDICTION:	CITY OF SANTA FE
APN:	99306814
PROPOSED LEASE AREA:	600 SQ.FT.
OCCUPANCY GROUP:	U-UNMANNED WCF
CONSTRUCTION TYPE:	II-B
COUNTY:	SANTA FE COUNTY
EXISTING USE:	UNMANNED TELECOMMUNICATIONS FACILITY
HANDICAP REQUIREMENTS:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.

811 Know what's below. Call before you dig.

AT&T

N255 / NML00255

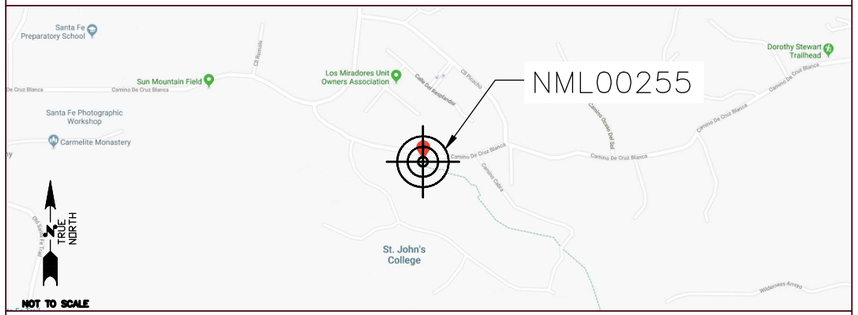
SJC PARKING LOT

1160 CAMINO DE CRUZ BLANCA
SANTA FE, NM 87505

FA#: 14623999 USID: 275858

LTE 1C PTN: 3903A0LD5C

VICINITY MAP



DRIVING DIRECTIONS

FROM ALBUQUERQUE INTERNATIONAL SUNPORT, 2200 SUNPORT BLVD, ALBUQUERQUE, NM 87106:
GET ON I-25 N FROM SUNPORT BLVD, SUNPORT LOOP SE AND SUNPORT BLVD. HEAD EAST ON SUNPORT BLVD. USE THE MIDDLE LANE TO STAY ON SUNPORT BLVD. SLIGHT RIGHT TO STAY ON SUNPORT BLVD. KEEP LEFT TO STAY ON SUNPORT BLVD. USE THE LEFT LANE TO TURN SLIGHTLY LEFT TO STAY ON SUNPORT BLVD. USE THE LEFT LANE TO MERGE WITH SUNPORT LOOP SE. KEEP LEFT TO CONTINUE ON SUNPORT BLVD. USE THE RIGHT 2 LANES TO TURN RIGHT TO MERGE WITH I-25 N TOWARD I-40 N/DOWNTOWN/SANTA FE. FOLLOW I-25 N TO NM-466 N/OLD PECOS TRAIL IN SANTA FE COUNTY. TAKE EXIT 284 FROM I-25 N. MERGE WITH I-25 N. TAKE EXIT 284 FOR NM-466/OLD PECOS TR. CONTINUE ON NM-466 N/OLD PECOS TRAIL. TAKE E ZIA RD AND OLD SANTA FE TRAIL TO CAMINO DE CRUZ BLANCA IN SANTA FE. TURN LEFT ONTO NM-466 N/OLD PECOS TRAIL (SIGNS FOR SANTA FE). TURN RIGHT ONTO E ZIA RD. TURN LEFT ONTO OLD SANTA FE TRAIL. TURN RIGHT ONTO CAMINO DEL MONTE SOL. TURN RIGHT ONTO CAMINO DE CRUZ BLANCA. TURN RIGHT TO STAY ON CAMINO DE CRUZ BLANCA. DESTINATION WILL BE ON THE RIGHT

BUILDING CODES

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITIONA OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

1. BUILING CODE: 2015 NM BUILDING CODE
2. PLUMBING CODE: 2012 NM PLUMBING CODE
3. MECHANICAL CODE: 2012 NM MECHANICAL CODE
4. ELECTRICAL CODE: 2017 NM ELECTRICAL CODE
5. LIGHTNING PROTECTION CODE: NFPA 780-2017
6. TIA-222-G

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

RFDS DATA

RFDS NAME:	NML00255-1C,2C,3C,4C
RFDS ID:	3493096
VERSION:	1.00
DATE:	10/23/2019
UPDATED BY:	ac7856
DATE/TIME UPDATED:	10/23/2019 3:02:51 PM
NUMBER OF SECTORS:	3
NUMBER OF ANTENNAS:	3
NUMBER OF RRHs:	6
NUMBER OF FIBER/DC SQUIDS:	1
NUMBER OF FIBER TRUNK CABLES:	1
NUMBER OF DC TRUNK CABLES:	3

APPROVALS

AT&T (RF): _____ DATE: _____

AT&T (CONST): _____ DATE: _____

AT&T (SAM): _____ DATE: _____

LANDLORD: _____ DATE: _____

LANDLORD: _____ DATE: _____

JURISDICTIONAL APPROVALS

PROJECT DESCRIPTION

THIS PROJECT WILL BE COMPRISED OF:
CHANGES ON THE NEW MONOPOLE:

- INSTALL (1) NEW 65'-0" MONOPOLE TOWER BY GRAVITY PAD
- INSTALL NEW TRIPLE T-ARM MONOPOLE MOUNT WITH REINFORCEMENT
- INSTALL (1) NEW 8'-0" PANEL ANTENNAS PER SECTOR, TOTAL OF (3)
- INSTALL (2) NEW REMOTE RADIO HEAD (RRH) PER SECTOR, TOTAL OF (6)
- INSTALL (1) NEW DC/FIBER SURGE PROTECTOR ON TOWER
- INSTALL (3) NEW DC POWER CABLE TRUNKS
- INSTALL (1) NEW FIBER CABLE TRUNK
- PAINT TOWER EQUIPMENT TO MATCH MONOPOLE BRANCHES

CHANGES ON THE EXISTING AT&T EQUIPMENT ENCLOSURE AREA:

- INSTALL NEW 8' HIGH WOODEN COYOTE FENCE COMPOUND BY GRAVITY PAD
- INSTALL (1) NEW 3-BAY DELTA WALK-UP-CABINET (WUC) ON GRAVITY MOUNT COMBO PLATFORM
- INSTALL (1) POLAR POWER HORIZONTAL 20KW DIESEL DC GENERATOR (8220-100-D-20-03) BY OEM ON GRAVITY MOUNT COMBO PLATFORM
- INSTALL (1) NEW FACTORY-INSTALLED EMERSON 5100 -48VDC POWER PLANT OUTFITTED WITH (7) NEW HE 2KW -48VDC RECTIFIERS BY OEM
- INSTALL (1) NEW GPS ANTENNA ON WIC BY AT&T
- INSTALL (1) NEW ICE BRIDGE FROM WIC TO TOWER BY AT&T
- INSTALL (2) NEW DC-12 ON WIC BY OEM
- INSTALL (1) NEW METER, 200A, 120/240V, 1PH, 3 WIRE, 4 CLIP AND DISCONNECT ON PROPOSED H-FRAME BY GRAVITY PAD
- INSTALL (1) NEW GROUND RING IN AT&T LEASE AREA BY AT&T
- INSTALL (1) NEW TRANSFORMER BOX ON PAD BY PNM
- INSTALL (1) NEW NEMA BOX FOR FIBER SERVICE ON H-FRAME

DC POWER PLAN REVIEW

- NEW DC BREAKERS AS FOLLOWS:
- (2) 15A [NEQ. 00706] 7705 SIAD
- (2) 20A [NEQ. 00466] NOKIA FSM4 BBU W/ ASIA
- (3) 50A [NEQ. 00710] B12/B14 AIRSCALE 320W AHLBA RRH
- (3) 50A [NEQ. 00710] B25/B66 AIRSCALE 320W AHFIB RRH
- (2) 60A [NEQ. 00711] FUSE PANEL
- SITE HAS A PERMANENT STANDBY GENERATOR, MINIMUM REQUIRED BATTERY BACKUP TIME IS 2.0 HOURS

BATTERY CHECK:

- INSTALL (8) NEW MARATHON M12V190FT BATTERIES, CONFIGURED AS (4) CELLS PER STRING @ -48VDC NOMINAL TO ACHIEVE 3.30 HRS OF BATTERY RESERVE CAPACITY

ELECTRICAL PANEL REVIEW:

- SEE PROPOSED AC PANEL SCHEDULE

HVAC UNITS:

- WUC IS OEM EQUIPPED WITH FACTORY THERMOSYPHON COOLING SYSTEM.

SHEET INDEX

SHEET #	DESCRIPTION	REVISION #
T-1	TITLE SHEET	2
LS-1	SITE SURVEY	2
C-1	OVERALL SITE PLAN	2
C-1.1	ENLARGED SITE PLAN	2
C-2	COMPOUND PLAN	2
C-3	EQUIPMENT AND ANTENNA LAYOUTS	2
C-4	ELEVATIONS	2
E-1	PANEL SCHEDULE AND GROUNDING PLANS	2
E-2	ONE LINE DIAGRAM AND FAULT CALCULATIONS	2

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
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SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

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0	05/28/20	ISSUE FOR CONSTRUCTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

CLIFF ABERNATHY NEW MEXICO 22991 PROFESSIONAL ENGINEER 3-19-21

SITE INFORMATION

SITE ID:
NML00255

SITE NAME:
SJC PARKING LOT

FA #: 14623999

USID #:
275858

SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505

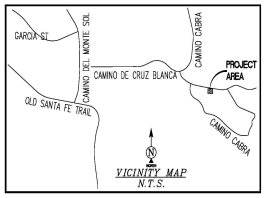
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

TITLE SHEET

SHEET NO.

T-1



SURVEY DATE
11/21/2019

BASIS OF BEARING
BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM NEW MEXICO STATE PLANE COORDINATE CENTRAL ZONE, DETERMINED BY GPS OBSERVATIONS.

BENCHMARK
PROJECT ELEVATIONS ESTABLISHED FROM GPS DERIVED ORTHOMETRIC HEIGHTS BY APPLICATION OF NGS 'GEOID 12B' MODELED SEPARATIONS TO ELLIPSOID HEIGHTS DETERMINED BY OBSERVATIONS OF THE 'SMARTNET' REAL TIME NETWORK. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD88.

FLOOD ZONE
THIS PROJECT APPEARS TO BE LOCATED WITHIN OTHER AREAS "ZONE X". ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, MAP ID #35049C0416E, DATED 12/04/2012.

UTILITY NOTES
SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS ARE DEFINITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT BLUE STAKE AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

SURVEYOR'S NOTES
THIS MAP WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THIS MAP IS SUBJECT TO ALL LEGAL EASEMENTS AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, THAT WOULD BE DISCLOSED IN SUCH TITLE REPORT.

THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY. SUFFICIENT INFORMATION TO PRECISELY MAP THE SUBJECT PARCEL AND THE RIGHT-OF-WAY OF CAMINO DE CRUZ BLANCA WAS NOT AVAILABLE AT THE TIME OF THIS SURVEY.

ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES.

CONTOURS DERIVED FROM DIRECT FIELD OBSERVATIONS AND FOLLOWS THE CURRENT NATIONAL MAP STANDARDS FOR VERTICAL ACCURACY.

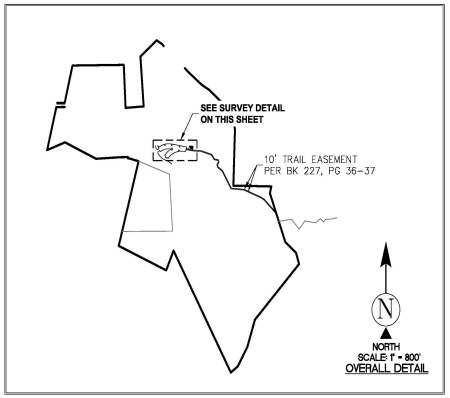
LEASE AREA LEGAL DESCRIPTION
A PORTION OF SAINT JOHN'S COLLEGE PROPERTY WITHIN THE CITY OF SANTA FE, COUNTY OF SANTA FE, NEW MEXICO BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

NOTE: COORDINATES SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM NEW MEXICO STATE PLANE COORDINATE CENTRAL ZONE, DETERMINED BY GPS OBSERVATIONS.

BEGINNING AT A POINT BEING THE SOUTHWEST CORNER OF SAID LEASE AREA, FROM WHICH AN IRON PIPE AT THE SOUTHWEST CORNER OF SAINT JOHNS COLLEGE TRACT K AS SHOWN ON UNRECORDED LEASE AREA SITE SURVEY BY SIERRA LAND SURVEYING INC. DATED FOR REVIEW NOVEMBER 3, 2001, WITH A NORTHING OF 1697644.94 AND AN EASTING OF 1739891.15, BEARS SOUTH 40°19'10" WEST, 1509.63 FEET; AND FROM WHICH AN IRON PIPE ALONG THE EAST LINE OF SECURITY TRACT AS SHOWN ON SAID SURVEY, WITH A NORTHING OF 1698413.17 AND AN EASTING OF 1740587.61, BEARS SOUTH 36°13'06" 474.47 FEET; THENCE FROM SAID POINT OF BEGINNING NORTH 11°53'46" EAST, 20.00 FEET; THENCE SOUTH 78°06'14" EAST, 30.00 FEET; THENCE SOUTH 11°53'46" WEST, 20.00 FEET; THENCE NORTH 78°06'14" WEST, 30.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 600 SQUARE FEET (0.01 ACRES) OF LAND, MORE OR LESS.

ACCESS NOTE
RESERVING NONEXCLUSIVE RIGHT OF USE ACROSS LESSOR'S PROPERTY FOR NECESSARY APPURTENANCES TO CONSTRUCT, OPERATE, AND MAINTAIN A COMMUNICATION FACILITY FOR ITEMS SUCH AS, BUT NOT LIMITED TO INGRESS, EGRESS, PARKING, VEHICULAR MANEUVERING, EQUIPMENT, AND UTILITIES.

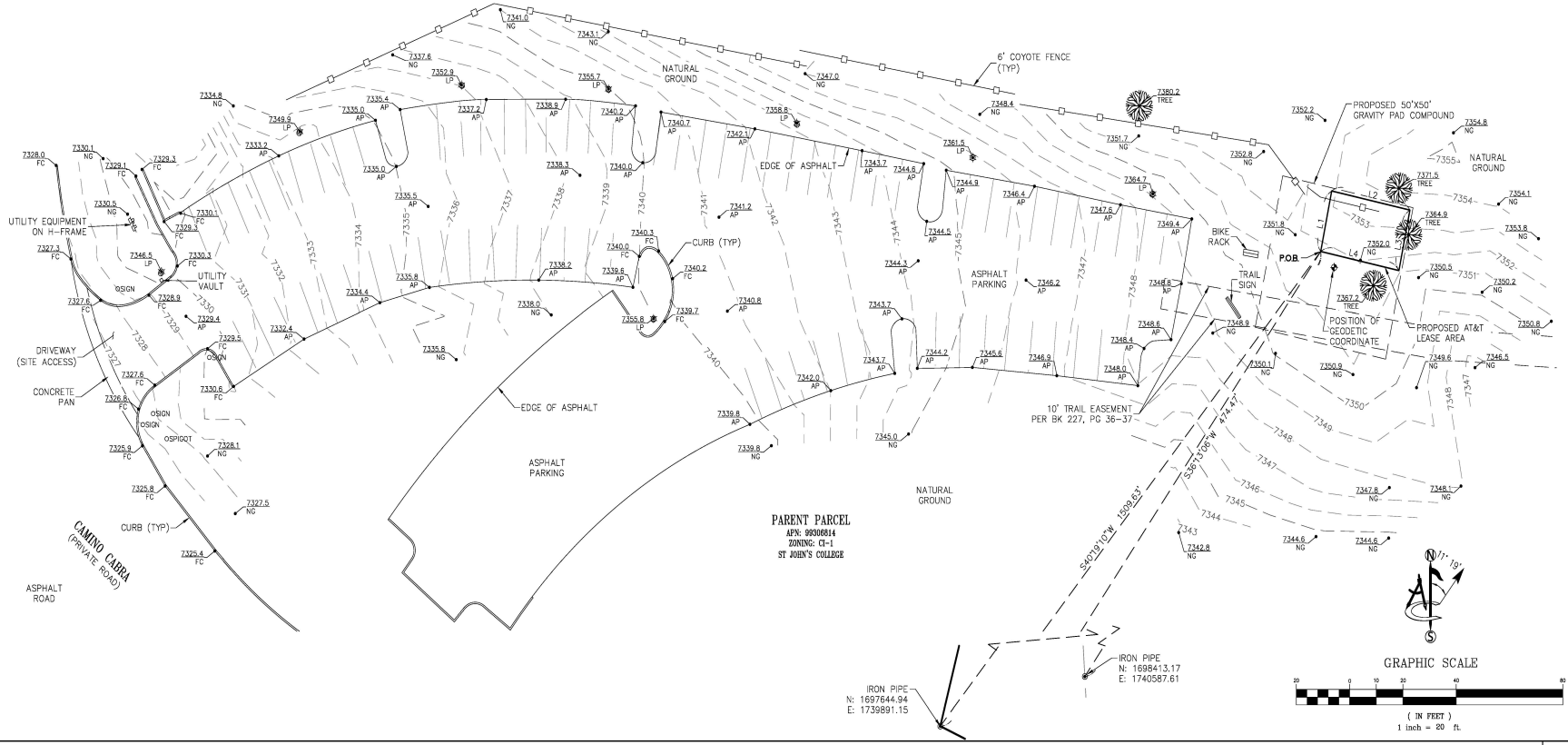


LEGEND

FC AP	FACE OF CURB TOP OF ASPHALT	LP NG	TOP OF LIGHT POLE NATURAL GROUND
	DECIDUOUS TREE		EVERGREEN TREE
7330.1	SPOT ELEVATION		POSITION OF GEODETIC COORDINATE
			SUBJECT PROPERTY LINE
			ADJACENT PROPERTY LINE
			MAJOR CONTOUR INTERVAL
			MINOR CONTOUR INTERVAL
			MINOR CONTOUR INTERVAL

POSITION OF GEODETIC COORDINATE
LATITUDE 35° 40' 06.77" (35.668547°) NORTH (NAD83)
LONGITUDE 105° 54' 42.41" (105.911781°)WEST(NAD83)
GROUND ELEVATION @ 7352.0' (NAVD88)

LINE TABLE		
LINE#	LENGTH	DIRECTION
L1	20.00'	N11°53'46"E
L2	30.00'	S78°06'14"E
L3	20.00'	S11°53'46"W
L4	30.00'	N78°06'14"W



AT&T

ambit consulting
410 E. SOUTHERN AVE.
TEMPE, ARIZONA 85282
PH. (480) 659-4072
www.ambitconsulting.us

PLANS PREPARED BY:

Trylon

1825 W. WALNUT HILL LANE SUITE 302
IRVING, TX 75038

NO.	DATE	DESCRIPTION	BY
1	12/03/19	PRELIMINARY	LO
2	12/19/19	DESIGN	CK
3	04/06/20	COMMENTS	MF
4	05/12/20	REVISE LEASE	RAG

SITE INFORMATION:

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FA#: 14623999
USID: 275858

1160 CAMINO DE CRUZ BLANCA
SANTA FE, NM 87505

SANTA FE COUNTY

SEAL:

SHEET TITLE:

SURVEY PLAN

SHEET NUMBER:

LS-1

SITE PLAN

PARCEL ID: 16002422

PARCEL ID: 99306846

PARCEL ID: 99306813

PARCEL ID: 18102778

PARCEL ID: 11491968

PARCEL ID: 16008567

EXISTING RAW LAND

EXISTING TREE AREA

CAMINO CABRA

CLL PICACHO

CAMINO DE CRUZ BLANCA

HH 1209
EXISTING SPLICE CASE

460' EXISTING PEST DUCT.
CTL PLACE 460' 2W MICRO-DUCT

CTL JET 72 STRAND MICRO-FIBER CABLE
FROM HH 1209 TO THE NEW MEET-POINT HH.

CTL PLACE NEW 3048 HH OVER EXISTING PEST DUCT.
LEAVE 100' 72 STRAND MICRO-FIBER COIL.

EXISTING CUST-HH-1

825'-10"±

CTL BORE 950' NEW 7W ARMORED FUTURE-PATH
BETWEEN NEW 3048 HHS IN PUBLIC RIGHT OF WAY.

EXISTING 6' COYOTE FENCE (TYP)

MEET-POINT
CTL PLACE 3048 HH IN THE DIRT. NEW SPLICE CASE.
CTL PULL 12 STRAND FIBER CABLE FROM THE
MEET-POINT HH TO THE NEMA CABINET.

POSITION OF GEODETIC COORDINATE
NEW 65'-0" MONOPOLE BY GRAVITY PAD
NEW AT&T 3-BAY DELTA WUC AND POLAR POWER
HORIZIONTAL 20KW DIESEL DC GENERATOR
(8220-100-D-20-03) BY OEM ON 7'-4" X 14'-0"
GRAVITY MOUNT PLATFORM

49'-9"±

595'-2"±

EDGE OF ASPHALT

EXISTING PARKING AREA

EXISTING UTILITY EQUIPMENT
ON H-FRAME

EXISTING UTILITY VAULT

DRIVEWAY
(SITE ACCESS)

CONCRETE PAN

EDGE OF ASPHALT

357'-5"±

1
C-2

40' NEW 4" CONDUIT
NEW INNERDUCT.
NEW PULL TAPE.

10' TRAIL EASEMENT PER BOOK
229 PAGES 036-037

PARENT PARCEL
APN: 99306814
ZONING: CI-1
ST JOHN'S COLLEGE

CAMINO CABRA
(PRIVATE ROAD)

PROPERTY LINE
(TYP.)

EXISTING BUILDING (TYP.)

EXISTING TREE (TYP.)

TRUE NORTH

1
C-1
OVERALL SITE PLAN
SCALE (24" X 36"): 1" = 100'-0"

0 50 100 200 300

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1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
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IRVING, TEXAS 75038
1-855-669-5421

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CLIFF ABERNATHY
NEW MEXICO
22991
PROFESSIONAL ENGINEER
3-19-21

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SANTA FE, NM 87505

COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

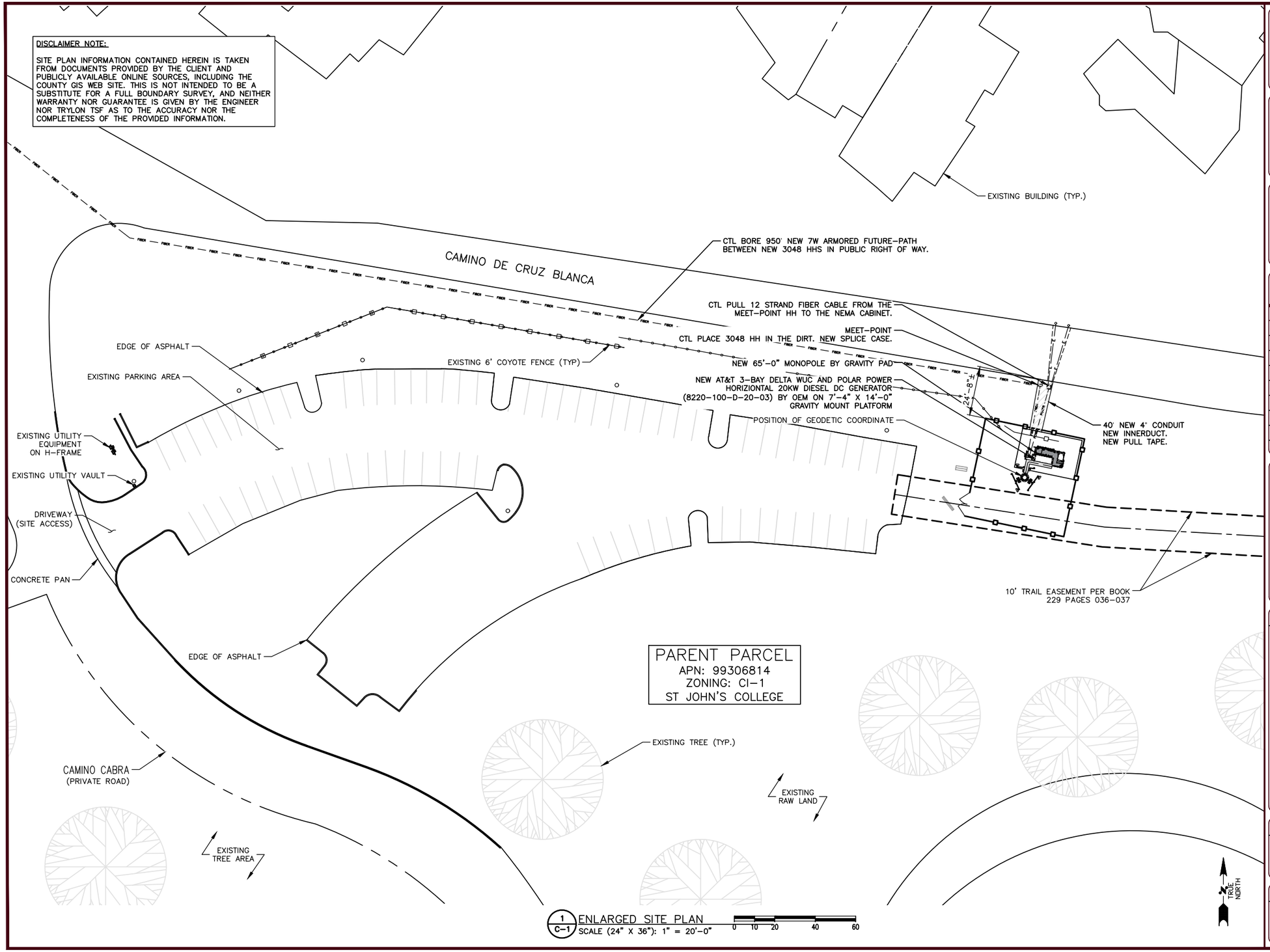
OVERALL SITE PLAN

SHEET NO.

C-1

DISCLAIMER NOTE:

SITE PLAN INFORMATION CONTAINED HEREIN IS TAKEN FROM DOCUMENTS PROVIDED BY THE CLIENT AND PUBLICLY AVAILABLE ONLINE SOURCES, INCLUDING THE COUNTY GIS WEB SITE. THIS IS NOT INTENDED TO BE A SUBSTITUTE FOR A FULL BOUNDARY SURVEY, AND NEITHER WARRANTY NOR GUARANTEE IS GIVEN BY THE ENGINEER NOR TRYLON TSF AS TO THE ACCURACY NOR THE COMPLETENESS OF THE PROVIDED INFORMATION.



1 C-1 ENLARGED SITE PLAN
SCALE (24" X 36"): 1" = 20'-0"
0 10 20 40 60

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CLIFF ABERNATHY 22991 NEW MEXICO PROFESSIONAL ENGINEER
12-14-21

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COUNTY:
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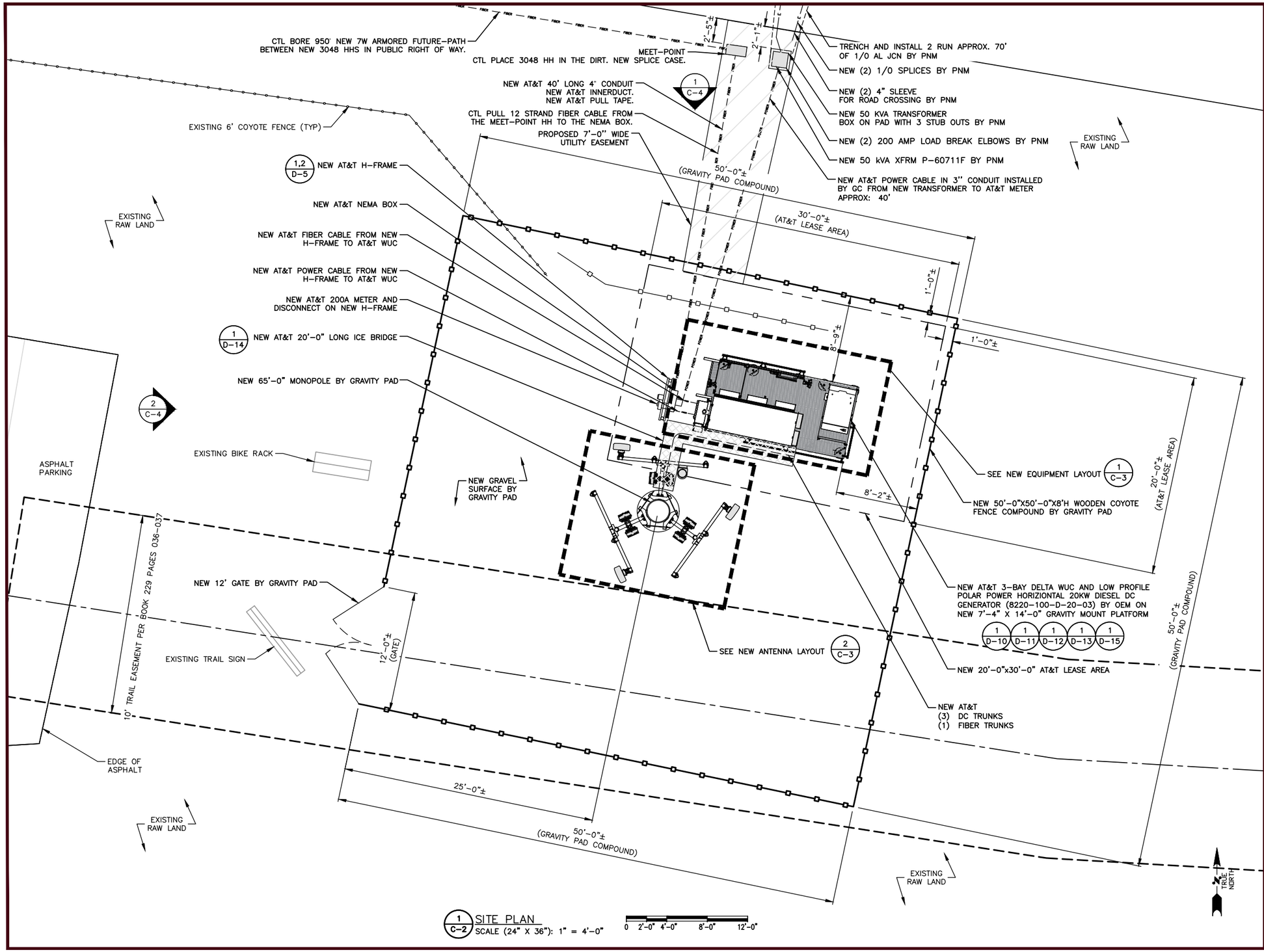
SHEET DESCRIPTION

ENLARGED SITE PLAN

SHEET NO.

C-1.1



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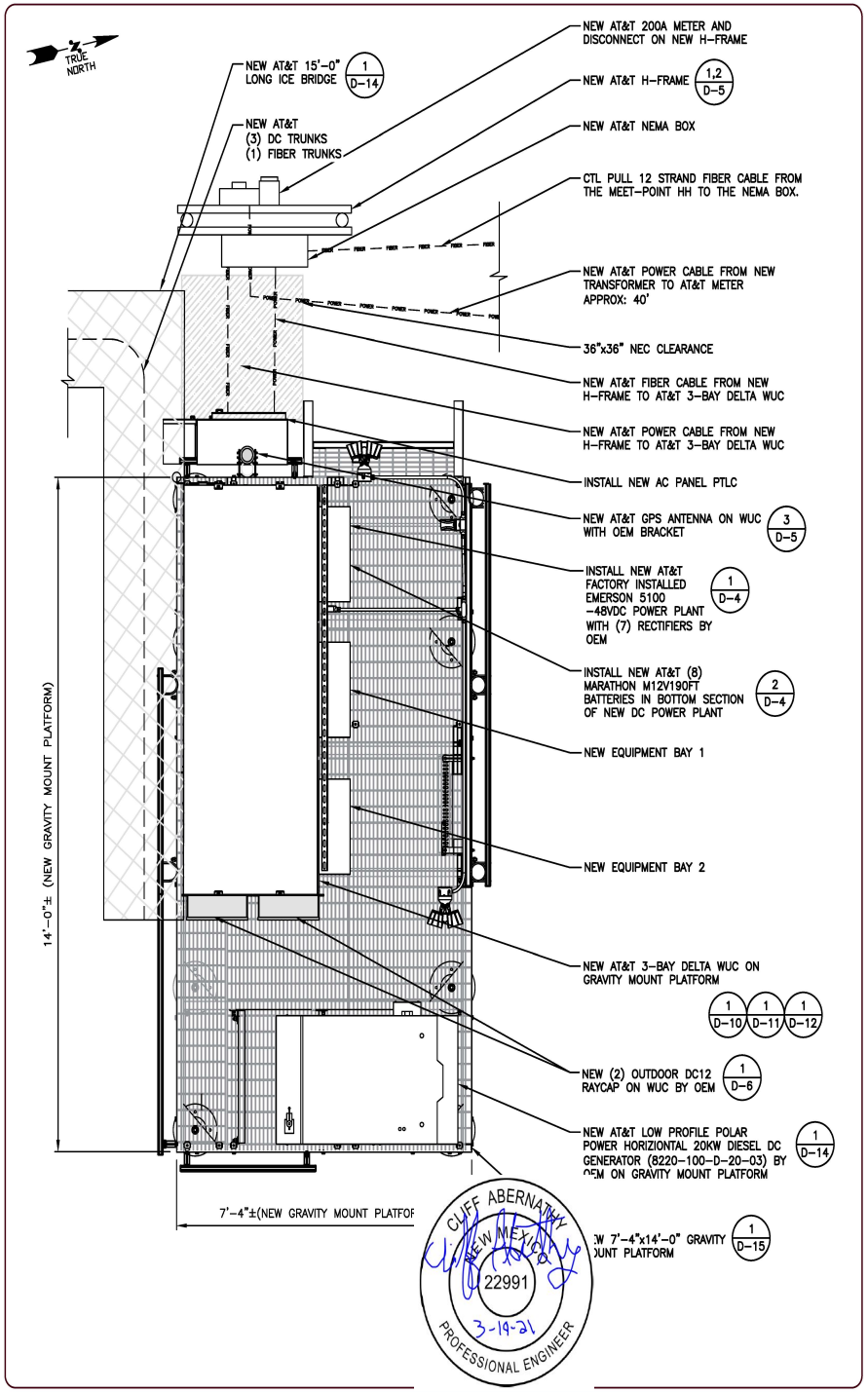
SHEET DESCRIPTION

COMPOUND PLAN

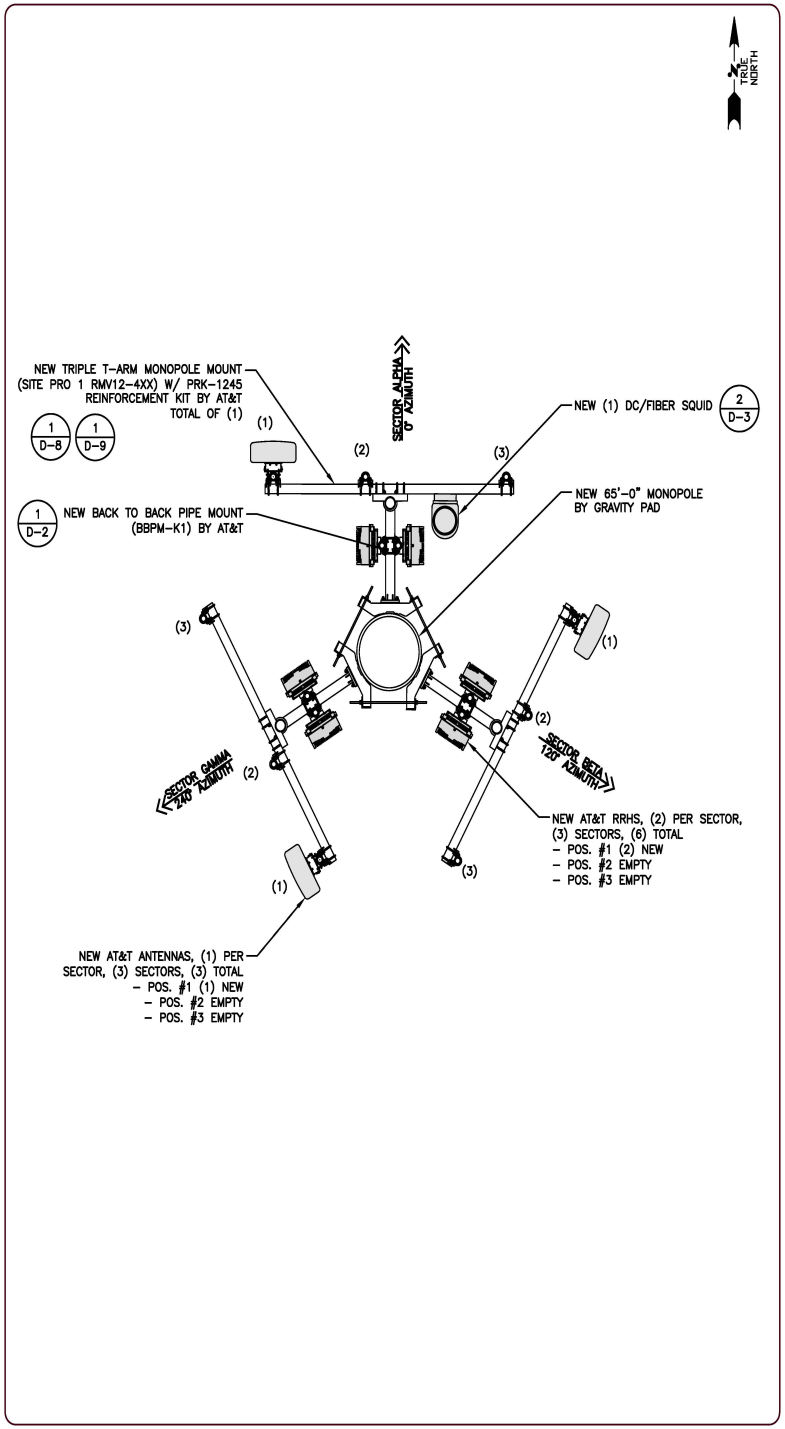
SHEET NO.

C-2



1 C-3 EQUIPMENT PLAN – NEW
SCALE (24" X 36"): 1" = 16"

0 0'-8" 1'-4" 2'-8" 4'-0"



2 C-3 ANTENNA PLAN – NEW
SCALE (24" X 36"): 1" = 2'-0"

0 1'-0" 2'-0" 4'-0" 6'-0"

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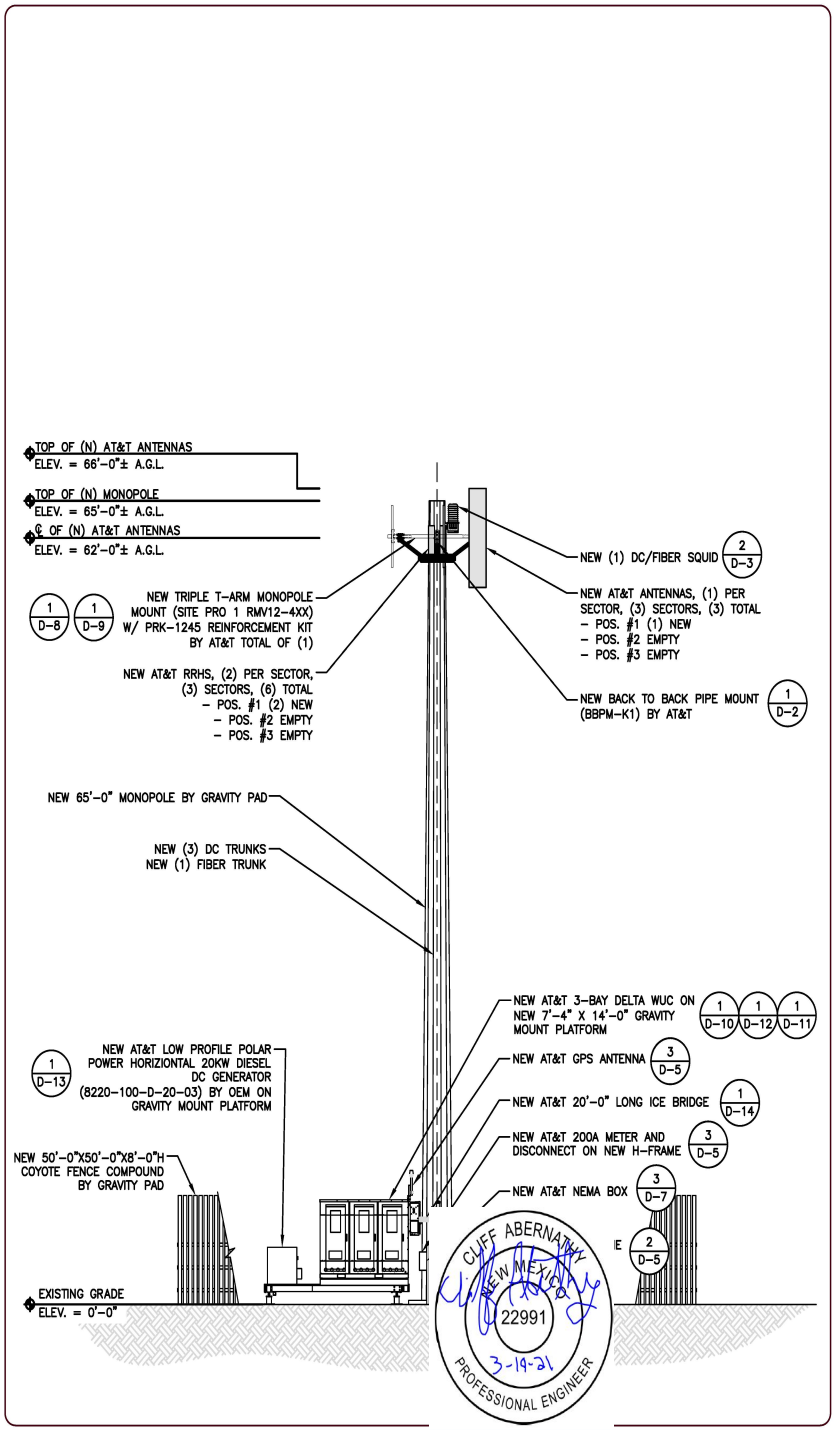
SHEET DESCRIPTION

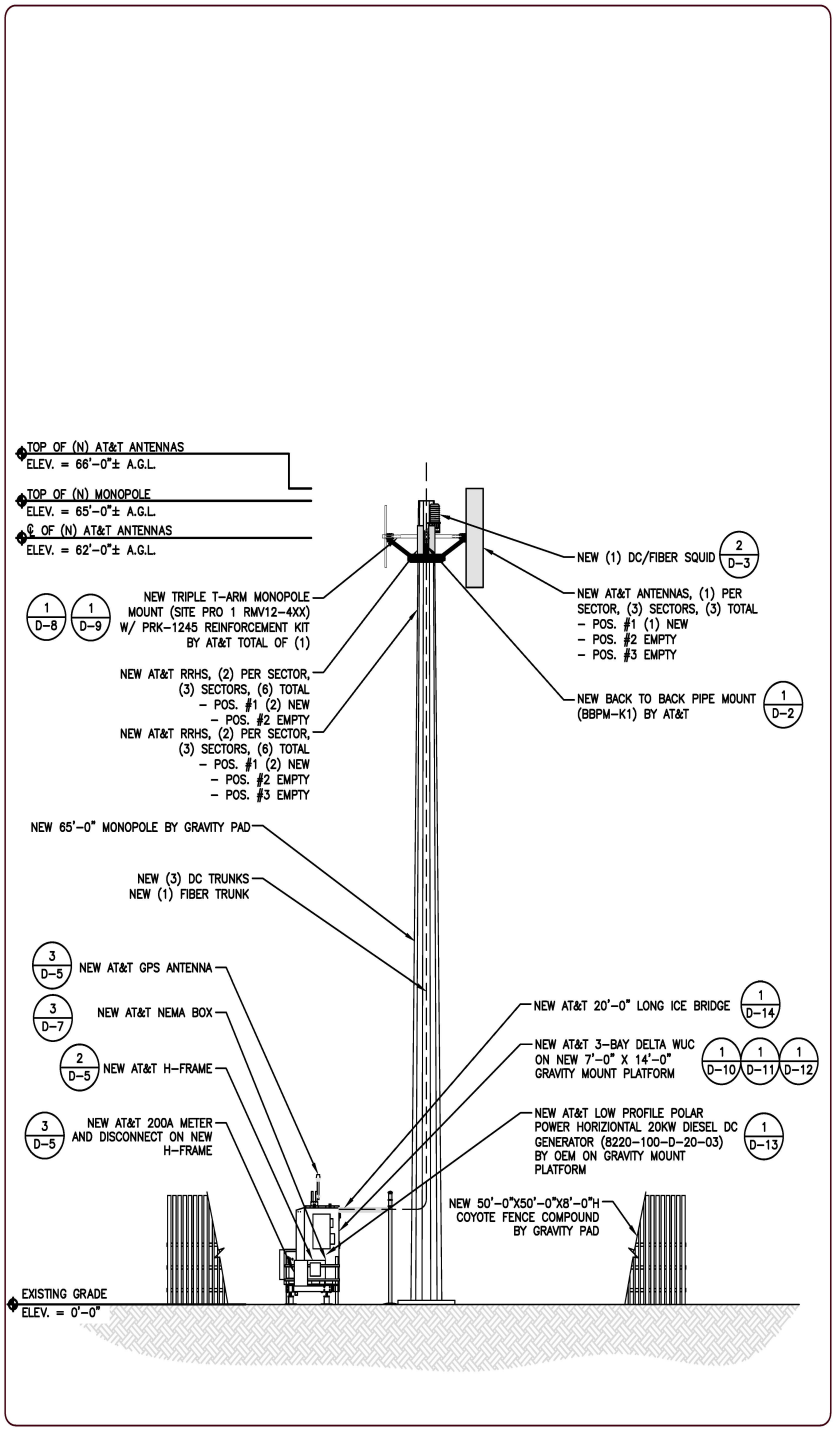
EQUIPMENT AND ANTENNA LAYOUTS

SHEET NO.

C-3



1 C-4 NORTH ELEVATION - NEW
SCALE (24" X 36"): 1" = 5'-4"
0 2'-8" 5'-4" 10'-8" 16'-0"



2 C-4 WEST ELEVATION - NEW
SCALE (24" X 36"): 1"=5'-4"
0 2'-8" 5'-4" 10'-8" 16'-0"

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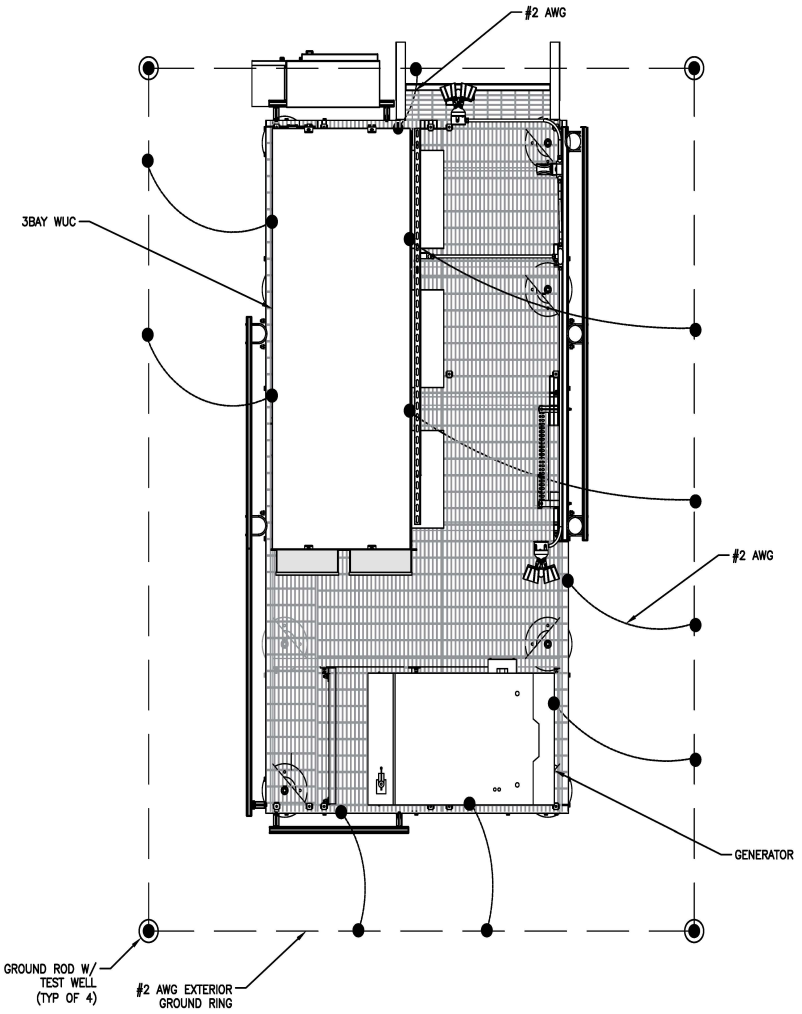
SHEET DESCRIPTION

ELEVATIONS

SHEET NO.

C-4

NOTE:
GC TO TIE INTO TOWER GROUND RING PER AT&T SPECS



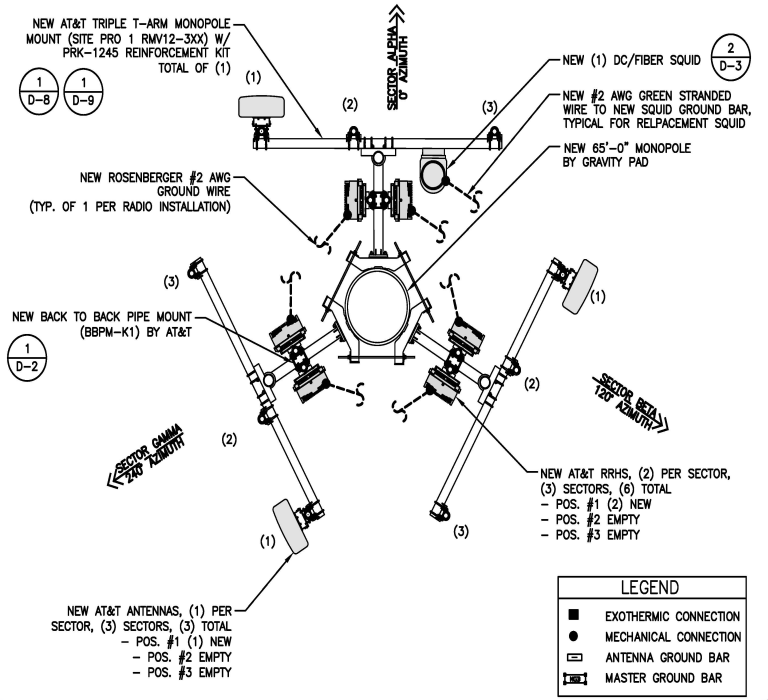
LEGEND
EXOTHERMIC CONNECTION
MECHANICAL CONNECTION
ANTENNA GROUND BAR
MASTER GROUND BAR

NOTE:
-ALL NEW EQUIPMENT MUST BE GR(
RING OR HALO PER AT&T SPECIFICA
-CONTRACTOR TO REPLACE ALL MIS
GROUNDING CONNECTIONS AS REQUI

CLIFF ABERNATHY NEW MEXICO 22991 3-19-21 PROFESSIONAL ENGINEER

1 E-1 EQUIPMENT PLAN – NEW
SCALE (24" X 36"): 1'=16"

0 0'-8" 1'-4" 2'-8" 4'-0"



LEGEND
EXOTHERMIC CONNECTION
MECHANICAL CONNECTION
ANTENNA GROUND BAR
MASTER GROUND BAR

2 E-1 ANTENNA GROUNDING PLAN
SCALE (11" X 17"): 1" = 2'-0"

0 1'-0" 2'-0" 4'-0" 6'-0"

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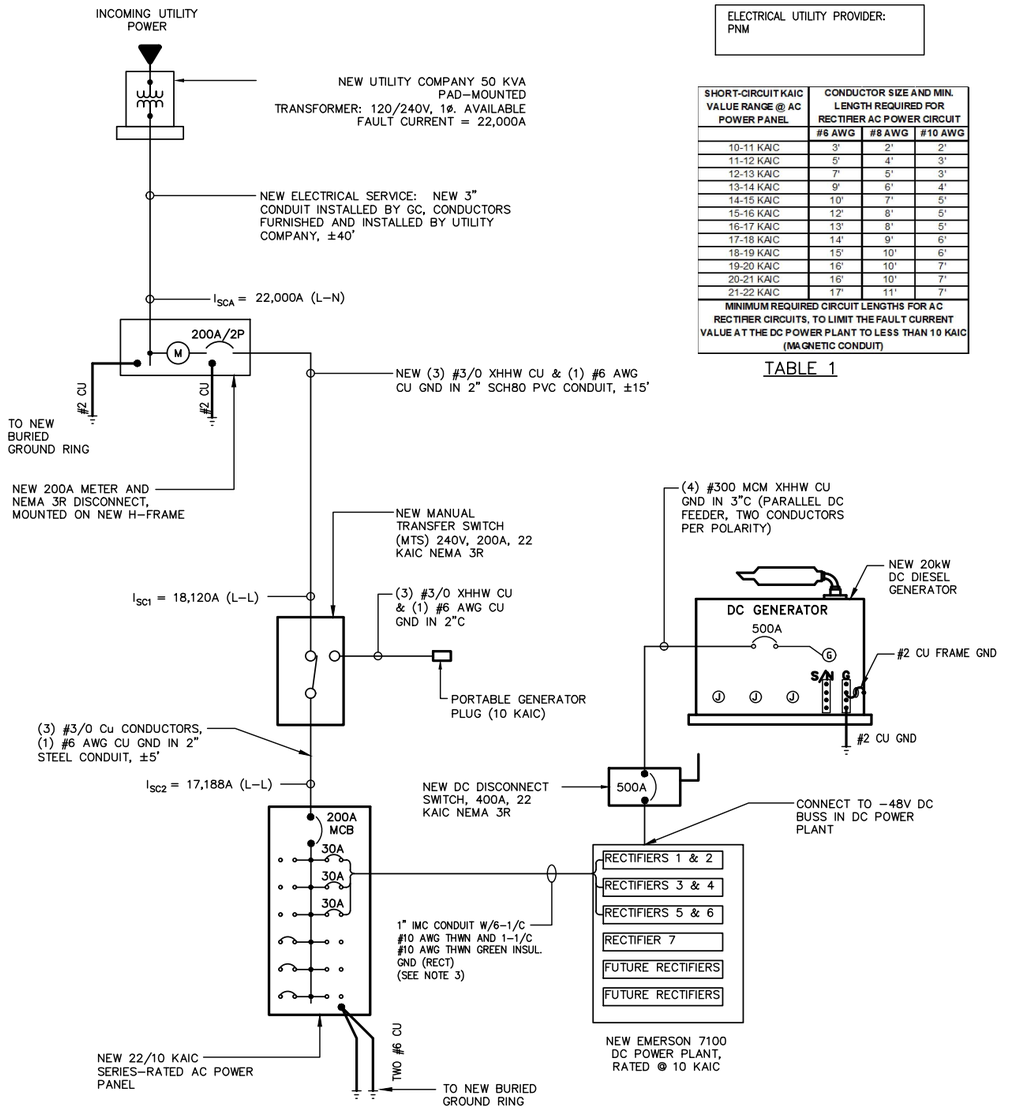
SHEET DESCRIPTION

PANEL SCHEDULE AND GROUNDING PLANS

SHEET NO.

E-1



ELECTRICAL UTILITY PROVIDER:
PNM

SHORT-CIRCUIT KAIC VALUE RANGE @ AC POWER PANEL	CONDUCTOR SIZE AND MIN. LENGTH REQUIRED FOR RECTIFIER AC POWER CIRCUIT		
	#6 AWG	#8 AWG	#10 AWG
10-11 KAIC	3'	2'	2'
11-12 KAIC	5'	4'	3'
12-13 KAIC	7'	5'	3'
13-14 KAIC	9'	6'	4'
14-15 KAIC	10'	7'	5'
15-16 KAIC	12'	8'	5'
16-17 KAIC	13'	8'	5'
17-18 KAIC	14'	9'	6'
18-19 KAIC	15'	10'	6'
19-20 KAIC	16'	10'	7'
20-21 KAIC	16'	10'	7'
21-22 KAIC	17'	11'	7'
MINIMUM REQUIRED CIRCUIT LENGTHS FOR AC RECTIFIER CIRCUITS, TO LIMIT THE FAULT CURRENT VALUE AT THE DC POWER PLANT TO LESS THAN 10 KAIC (MAGNETIC CONDUIT)			

TABLE 1

NOTES:

1) ALL CIRCUIT BREAKERS AND/OR FUSES SHALL BE SERIES RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT INDICATED. THE SERIES COMBINATION RATINGS SHALL BE MARKED ON THE EQUIPMENT BY THE MANUFACTURER IN ACCORDANCE WITH NEC ARTICLE 110.22 & 240.86.

2) PROVIDE WARNING LABELS PER N.E.C. 110.22 FOR BOTH THE PANEL AND MAIN DISCONNECT. THE MARKING SHALL BE READILY VISIBLE AND STATE THE FOLLOWING:
"CAUTION – SERIES COMBINATION SYSTEM RATED 22KAIC/10KAIC. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED".

3) CONDUCTORS FROM NEW AC POWER PANEL TO NEW DC POWER PLANT HAVE BEEN DERATED FOR MORE THAN (3) CURRENT-CARRYING CONDUCTORS WITHIN A SINGLE CONDUIT.

NML00255
AC POWER PANEL No. 001 (PROPOSED)
120/240 VOLTS, 1-PHASE, 3-WIRE, 200A
MAIN BREAKER RATING (A): 200 SYSTEM VOLTAGE (V): 240

DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	POSN	BKR	c/nc	VA	DESCRIPTION
EMERSON RECTIFIERS #1 & #2	2000	nc	30	1	2720		2	20	nc	720	INTERIOR RECEPTACLES
	2000	nc		3		2240	4	20	nc	240	SITE LIGHTS
EMERSON RECTIFIERS #3 & #4	2000	nc	30	5	2240		6	15	nc	240	WUC RECEPTACLE
	2000	nc		7		2180	8	20	nc	180	EXTERIOR GFCI
EMERSON RECTIFIERS #5 & #6	2000	nc	30	9	2250		10	20	nc	250	GENSET BTTY CHARGER
	2000	nc		11		3000	12	20	nc	1000	GENSET BLOCK HEATER
EMERSON RECTIFIERS #7 & #8	2000	nc	30	13	2000		14				BLANK
	2000	nc		15		2000	16				BLANK
EMERSON RECTIFIERS #9 & #10	2000	nc	30	17	2000		18				BLANK
	2000	nc		19		2000	20				BLANK
EMERSON RECTIFIERS #11 & #12	2000	nc	30	21	2000		22				BLANK
	2000	nc		23		2000	24				BLANK
EMERSON RECTIFIERS #13 & #14	2000	nc	30	25	2000		26				BLANK
	2000	nc		27		2000	28				BLANK
SPARE (OFF)			30	29	0		30				BLANK
				31		0	32				BLANK
BLANK				33	0		34				BLANK
BLANK				35		0	36				BLANK
BLANK				37	0		38				BLANK
BLANK				39		0	40				BLANK
BLANK				41	0		42				BLANK
PHASE TOTALS (VA):					15210	15420					
CURRENT PER PHASE (A):					127	129	Amperes/phase cannot exceed main breaker rating				
PANEL TOTAL (VA):					30630		Legend: c = continuous, nc = non-continuous				
PANEL CAPACITY (KVA):					48.0		CONNECTED LOAD (KVA):			30.6	
PANEL LOADING (100% non-cont. load) (KVA):					30.6						
PANEL LOADING (125% continuous load) (KVA):					0.0						
PANEL LOADING (TOTAL) (KVA):					30.6						
SPARE CAPACITY (KVA):					17.4						

NOTE:

NEW ELECTRICAL EQUIPMENT SHORT-CIRCUIT INTERRUPT RATINGS ARE BASED UPON FUTURE INSTALLATION OF A 200KVA, 1ø TRANSFORMER TO SUPPORT (4) 200A ELECTRICAL SERVICES.

AC LINE-LINE FAULT CURRENT CALCULATIONS NOTE: CALCULATIONS BASED UPON THE POINT-TO-POINT METHOD		
ENTER THE FOLLOWING INPUTS:		
AVAILABLE FAULT CURRENT, FROM GOVERNING UTILITY COMPANY (LEAVE BLANK IF UNKNOWN)	22000	AMPS
FAULT CURRENT AT ELECTRIC METER		
SHORT CIRCUIT CURRENT RMS SYMMETRICAL	22000	AMPS
LINE-LINE FAULT CURRENT AT SECONDARY: I_{SC2-LL} = I_{LL-L}/TOTAL IMPEDANCE	22000	AMPS
LINE-NEUTRAL FAULT CURRENT AT SECONDARY: I_{SC2-LN} = I_{LL-N}/TOTAL IMPEDANCE	22000	AMPS
FAULT CURRENT AT MANUAL TRANSFER SWITCH		
CABLE LENGTH FROM METER TO MTS ("L")	15	FEET
TYPE OF CABLE ("Cu" FOR COPPER, "Alu" FOR ALUMINUM)	Cu	1 CORE CABLE
SYSTEM VOLTAGE (LINE-LINE)	240	VOLTS
VOLTAGE SYSTEM, NUMBER OF PHASES	1	
SYSTEM VOLTAGE (LINE-NEUTRAL)	120	VOLTS
NUMBER OF CONDUCTORS PER PHASE ("N")	1	
CABLE SIZE, AWG	#3/0	
PHASE CONDUCTOR CROSS-SECTIONAL AREA (CIRCULAR MILS)	167800	
TYPE OF RACEWAY	MAGNETIC	
PHASE CONDUCTOR CONSTANT ("C_1")	12844	
NEUTRAL CONDUCTOR CONSTANT ("C_2")	12844	
F_{SC-LL}: F_{SC-LL}=(2 x L x I_{SC})/(C_1 x N x V_{LL}), SINGLE-PHASE OR =(1.732 x L x I_{SC})/(C1 x N x V_{LL}), THREE-PHASE	0.2141	
F_{SC-LN}: F_{SC-LN}=(2 x L x I_{SC})/(C_2 x N x V_{LN}), SINGLE-PHASE OR =(1.732 x L x I_{SC})/(C2 x N x V_{LN}), THREE-PHASE	0.4282	
M_{SC-LL}: M_1=(1/(1+F_1))	0.8237	
M_{SC-LN}: M_2=(1/(1+F_2))	0.7002	
LINE-LINE FAULT CURRENT AT MANUAL TRANSFER SWITCH: [ISC,L-L x M1]	18120	AMPS
LINE-NEUTRAL FAULT CURRENT AT MANUAL TRANSFER SWITCH: [ISC,L-N x M2]	15404	AMPS
FAULT CURRENT AT AC POWER PANEL		
CABLE LENGTH FROM MANUAL TRANSFER SWITCH TO AC POWER PANEL ("L")	5	FEET
TYPE OF CABLE ("Cu" FOR COPPER, "Alu" FOR ALUMINUM)	Cu	1 CORE CABLE
SYSTEM VOLTAGE (LINE-LINE)	240	VOLTS
VOLTAGE SYSTEM, NUMBER OF PHASES	1	
SYSTEM VOLTAGE (LINE-NEUTRAL)	120	VOLTS
NUMBER OF CONDUCTORS PER PHASE ("N")	1	
CABLE SIZE, AWG	#3/0	
PHASE CONDUCTOR CROSS-SECTIONAL AREA (CIRCULAR MILS)	167800	
TYPE OF RACEWAY	NONMAGNETIC	
PHASE CONDUCTOR CONSTANT ("C_1")	13923	
NEUTRAL CONDUCTOR CONSTANT ("C_2")	13923	
F_{SC-LL}: F_{SC-LL}=(2 x L x I_{SC})/(C_1 x N x V_{LL}), SINGLE-PHASE OR =(1.732 x L x I_{SC})/(C1 x N x V_{LL}), THREE-PHASE	0.0542	
F_{SC-LN}: F_{SC-LN}=(2 x L x I_{SC})/(C_2 x N x V_{LN}), SINGLE-PHASE OR =(1.732 x L x I_{SC})/(C2 x N x V_{LN}), THREE-PHASE	0.0922	
M_{SC-LL}: M_1=(1/(1+F_1))	0.9486	
M_{SC-LN}: M_2=(1/(1+F_2))	0.9156	
LINE-LINE FAULT CURRENT AT AC POWER PANEL: [ISC,L-L x M1]	17188	AMPS
LINE-NEUTRAL FAULT CURRENT AT AC POWER PANEL: [ISC,L-N x M2]	14104	AMPS

1 E-2 ONE LINE DIAGRAM AND FALUT CALCULATIONS

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
D	03/02/20	UPDATED AS PER REMARKS	VEN
E	03/04/20	UPDATED AS PER REMARKS	AVP
F	04/06/20	UPDATED AS PER REMARKS	AVP
G	04/24/20	UPDATED AS PER REMARKS	AVP
H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRUCTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

CLIFF ABERNATHY NEW MEXICO 22991 PROFESSIONAL ENGINEER 3-19-21

SITE INFORMATION

SITE ID:
NML00255

SITE NAME:
SJC PARKING LOT

FA #: 14623999

USID #:
275858

SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA, SANTA FE, NM 87505

COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

ONE LINE DIAGRAM AND FALUT CALCULATIONS

SHEET NO.

E-2

EXHIBIT G14

APPROVALS			
		DATE:	
AT&T (CONST):		DATE:	
AT&T (SAM):		DATE:	
LANDLORD:		DATE:	
LANDLORD:		DATE:	

N255 / NML00255

SJC PARKING LOT

1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505

FA#: 14623999 USID: 275858

LTE 1C PTN: 3903A0LD5C

PART "B" STANDARD DETAILS, NOTES, SCHEMATICS, AND DIAGRAMS

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, PORTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

GENERAL NOTES

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE: REFERENCE SITE SPECIFIC DRAWINGS

ELECTRICAL CODE: REFERENCE SITE SPECIFIC DRAWINGS

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70
NATIONAL ELECTRICAL CODE 2017 (WITH CITY AMENDMENTS)
LIGHTNING PROTECTION CODE: NFPA 780 – 2017, LIGHTNING PROTECTION CODE

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT
IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")
TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS
TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS
ANSI T1.311, FOR TELECOM – DC POWER SYSTEMS – TELECOM, ENVIRONMENTAL PROTECTION
FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

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1355 WEST UNIVERSITY DRIVE
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CLIFF ABERNATHY NEW MEXICO 22991 PROFESSIONAL ENGINEER 3-19-21

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SANTA FE COUNTY

SHEET DESCRIPTION

TITLE SHEET

SHEET NO.

T-1

SPECIFICATIONS

GENERAL CONSTRUCTION NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
OWNER – AT&T MOBILITY
OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF OWNER.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. DELETED.

7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

9. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. CONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE OWNER. ROUTING OF TRENCHING SHALL BE APPROVED BY OWNER.

10. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

11. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

12. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS UNLESS OTHERWISE SPECIFIED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

15. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, U.N.O.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 AND LARGER	2 IN.
#5 AND SMALLER & WWF	1–1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER, NOR CAST AGAINST THE GROUND:	
SLAB AND WALL	3/4 IN.
BEAMS AND COLUMNS	1–1/2 IN.

5. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, U.N.O., IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOV SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPT SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEE APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE I RAMSET/REDHEAD OR APPROVED EQUAL.

7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN LESS THAN 50 CUBIC YARDS (UBC 1905.6.1.3) IN THAT EVENT THE FOLLOWING SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
(A) RESULTS OF CONCRETE CYLINDER TESTS PERFORMED AT THE SUPPLIER'S PLANT,
(B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE TEST.

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

GROUNDING NOTES:

1. THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE OWNER FOR RESOLUTION.

2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.

3. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. TESTS SHALL BE PERFORMED IN ACCORDANCE WITH 24782-000-3PS-E000-0001, DESIGN & TESTING OF FACILITY GROUNDING FOR CELL SITES.

4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.

6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED WITH STAINLESS STEEL HARDWARE TO THE BRIDGE AND THE TOWER GROUND BAR.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

11. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

12. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

13. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/TIA 222. FOR TOWERS BEING BUILT TO REV G OF THE STANDARD, THE WIRE SIZE OF THE BURIED GROUND RING AND CONNECTIONS BETWEEN THE TOWER AND THE BURIED GROUND RING SHALL BE CHANGED FROM 2 AWG TO 2/0 AWG. IN ADDITION, THE MINIMUM LENGTH OF THE GROUND RODS SHALL BE INCREASED FROM 8 FEET TO 10 FEET.

SITE WORK GENERAL NOTES:

1. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.

6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.

7. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE AT&T MOBILITY ITION FOR SITE SIGNAGE.

ITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS IT AND TOWER AREAS.

L OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN S, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE FINISHED SURFACE APPLICATION.

AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY ER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND D TO PREVENT EROSION.

RACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. CONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. CONTRACTOR SHALL SUBMIT MODIFICATIONS TO OWNER FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS)SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODEJS SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS..

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S)..

8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS WHERE PERMITTED SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES. USE LOW PROFILE TIE WRAPS.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR 2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

23. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.

24. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

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0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

SITE INFORMATION

SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

SPECIFICATIONS

SHEET NO.

T-2

LEGEND

NEW ANTENNA	EARTH
EXISTING ANTENNA	PLYWOOD
GROUND ROD	SAND
GROUND BUS BAR	WOOD CONT.
MECHANICAL GRND. CONN.	WOOD BLOCKING
CADWELD	STEEL
GROUND ACCESS WELL	CENTERLINE
ELECTRIC BOX	PROPERTY/LEASE LINE
TELEPHONE BOX	GROUND CONDUCTOR
LIGHT POLE	COAXIAL CABLE
FND. MONUMENT	CHAIN LINK FENCING
SPOT ELEVATION	OVERHEAD TELEPHONE/OVERHEAD POWER
SET POINT	OVERHEAD TELEPHONE LINE
REVISION	OVERHEAD POWER LINE
GRID REFERENCE	POWER RUN
DETAIL REFERENCE	FIBER/POWER RUN
ELEVATION REFERENCE	TELCO RUN
SECTION REFERENCE	POWER/TELCO RUN
EXISTING MASONRY	GROUNDING CONDUCTOR
CONCRETE	GROUNDING CONDUCTOR
	CONDUIT UNDERGROUND
	FUSE, SIZE AND TYPE AS INDICATED.

	SAFETY SWITCH, 2P-240V-60A W/60A FUSES, NEMA 3R ENCLOSURE, SQ D CATALOG NO. H222NRB
	MANUAL TRANSFER SWITCH, 2P-240V-200A, NO FUSE, NEMA 3R ENCLOSURE
	LIGHTING FIXTURE, 1/175W. METAL HALIDE, HUBBELL CAT #MIC-0175H-336
	5/8" X 10'-0" ,CU. GND ROD IN TEST WELL 30" MIN. BELOW GRADE.
	CHEMICAL GROUND ROD (KIT GROUND ROD)
	CADWELD CONNECTION
	MECHANICAL CONNECTION
	HALO GROUND CONNECTION
	CIRCUIT BREAKER
	UTILITY METER BASE
	TRANSFORMER
	STEPDOWN TRANSFORMER
	RECEPTACLE, 2P-3W-125V-15A, DUPLEX, GROUND TYPE, HUBBEL CATALOG #5362
S	TOGGLE SWITCH, 1P-125V-15A, HUBBELL CATALOG #HBL 1201CN
S_{WP}	TOGGLE SWITCH, 1P-120V-15A, "WP"
	IONIZATION SMOKE DETECTOR W/ALARM HORN & AUXILIARY CONTACT, 120 VAC, GENTEX PART NO. 7100F
	POLE
	(N) POLE MOUNTED XFMER
	EXISTING POLE MOUNTED XFMR
	(N) PAD MOUNTED XFMER
	EXISTING PAD MOUNTED XFMER

ABBREVIATIONS

A.B.	ANCHOR BOLT
ABV.	ABOVE
AC	ALTERNATE CURRENT/AIR CONDITIONER
ACCA	ANTENNA CABLE COVER ASSEMBLY
ADD'L	ADDITIONAL
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
ALUM.	ALUMINUM
ALT.	ALTERNATE
ANT.	ANTENNA
APPROX.	APPROXIMATE(LY)
ARCH.	ARCHITECT(URAL)
AT.	AMPERE TRIP
AWG.	AMERICAN WIRE GAUGE
BATT.	BATTERY
BD.	BOARD
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.N.	BOUNDARY NAILING
BR.	BRANCH
BRKR.	BREAKER
BTCW.	BARE TINNED COPPER WIRE
BTS.	BASE TRANSMISSION SYSTEM
B.O.F.	BOTTOM OF FOOTING
B/U	BACK-UP CABINET
C	CONDUIT
CAB.	CABINET
CANT.	CANTILEVER(ED)
CB.	CIRCUIT BREAKER
CDMA	CODE-DIVISION MULTIPLE ACCESS (2G & 3G)
CDUK	CONSOLIDATION DISTRIBUTION UNIT KIT
C.I.P.	CAST IN PLACE
CKT.	CIRCUIT
CLG.	CEILING
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT (JAMB BLOCKS)
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION(OR)
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
d	PENNY (NAILS)
DBL.	DOUBLE
DC	DIRECT CURRENT
DEM.	DEMAND
DEPT.	DEPARTMENT
D.F.	DOUGLAS FIR
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DWG.	DRAWING(S)
DWL.	DOWEL(S)
EA.	EACH
EGR.	EMERGENCY GENERATOR RECEPTACLE
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMT.	ELECTRICAL METALLIC TUBING
E.N.	EDGE NAIL
ENCL.	ENCLOSURE
ENG.	ENGINEER
EQ.	EQUAL
EXIST.(E)	EXISTING
EXT.	EXTERIOR
FAB.	FABRICATION(OR)
FAC.	FACTOR
F/A	FIRE ALARM
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
FIN.	FINISH(ED)
FLR.	FLOOR
FLUOR	FLUORESCENT
FDN.	FOUNDATION
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.S.	FINISH SURFACE
FT.(')	FOOT (FEET)
FTG.	FOOTING
FU	FUSE
G	GROUND
GR	GROWTH (CABINET)
GA.	GAUGE
GEN.	GENERATOR
GI.	GALVANIZE(D)
G.F.C. I.	GROUND FAULT CIRCUIT INTERRUPTER
GLB.	GLUE LAMINATED BEAM
GND	GROUND
GPS	GLOBAL POSITIONING SYSTEM
GRND.	GROUND
GSM	GLOBAL SYSTEM MOBILE (2G+ MOBILE TECH.)
HDBC	HARD DRAWN COPPER WIRE
HDR.	HEADER
HGR.	HANGER
HPS	HIGH PRESSURE SODIUM
HT.	HEIGHT
ICGB.	ISOLATED COPPER GROUND BUS
IN.(")	INCH(ES)
INT.	INTERIOR
LB.(#)	POUND(S)
L.B.	LAG BOLTS
L.F.	LINEAR FEET (FOOT)
LG.	LENGTH
L.	LONG(ITUDINAL)
LPS	LOW PRESSURE SODIUM
LTE	LONG TERM EVOLUTION (
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTD.	MOUNTED
MTG.	MOUNTING
MTL.	METAL
MTS.	MANUAL TRANSFER SWITCI
N	NEUTRAL
(N)	NEW
NEMA	NATIONAL ELECTRICAL MAI
NO.(#)	NUMBER
N.T.S.	NOT TO SCALE
OBIF	OPTICAL BASEBAND INTER
OH	OVERHEAD
O.C.	ON CENTER
OPNG.	OPENING
P	POLE
PCS	PERSONAL COMMUNICATION SERVICES
PH	PHASE
PLY.	PLYWOOD
PNLBD	PANELBOARD
PPC	POWER PROTECTION CABINET
PRC	PRIMARY RADIO CABINET
PRI	PRIMARY
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PWR.	POWER (CABINET)
QTY.	QUANTITY
RAD.(R)	RADIUS
RBS	RADIO BASE STATION (BASE STATION 3G NETWORKS)
RCPT.	RECEPTACLE
REF.	REFERENCE
REINF.	REINFORCEMENT(ING)
REQ'D.	REQUIRED
RGS.	RIGID GALVANIZED STEEL
RRU	REMOTE RADIO UNIT (RADIO TRANSCEIVER)
RX-AIT	RECEIVER AIR INTERFACE TRAY
SAF	SAFETY
SCH.	SCHEDULE
SDBC	SOFT DRAWN BARE COPPER
SEC	SECONDARY
SHT.	SHEET
SIM.	SIMILAR
S.N.	SOLID NEUTRAL
SPEC.	SPECIFICATION(S)
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL
SURF	SURFACE
SW	SWITCH
TEL.	TELEPHONE
TEMP.	TEMPORARY
	UNTED AMPLIFIER
	Y VOLTAGE)
	NTENNA
	JRB
	OUNDATION
	ATE (PARAPET)
	EEL
	ALL
	OUND
	ERS LABORATORY INC.
	MOBILE TECH. SYS.
	E TECH.)
	DTED OTHERWISE
	RNATING CURRENT
	FIELD
	I)
W.	WIDE
W.P.	WEATHERPROOF
WT.	WEIGHT
WT.	WEIGHT
XFER	TRANSFER
XFMR	TRANSFORMER
XLPE	CROSS-LINK POLYETHYLENE
℄	CENTERLINE
℄	PLATE, PROPERTY LINE

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

GENERAL REQUIREMENTS

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.

5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

6. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. THE ANCHOR BOLT DOWEL AND ROD SHALL BE STAINLESS STEEL WITH STAINLESS STEEL WASHERS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.

4. COMPACTED SUBBASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.

COMPACTION EQUIPMENT:

HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

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SITE INFORMATION

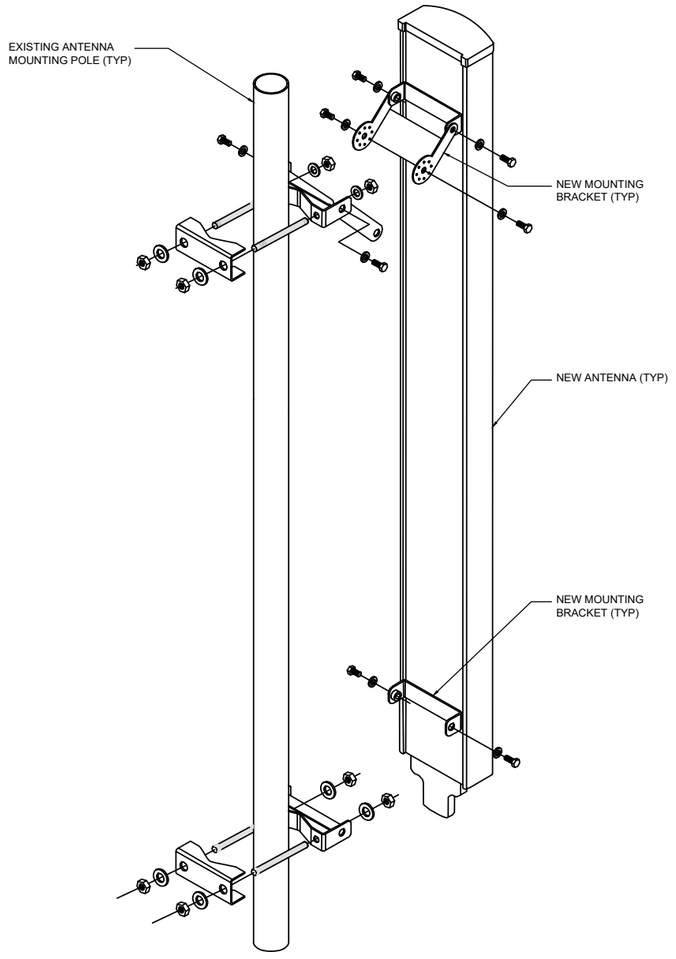
SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

GENERAL REQUIREMENTS, LEGENDS & ABBREVIATIONS

SHEET NO.

T-3



NOTE:
ALL PIPES BRACKETS AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE

1 / D-1 ANTENNA MOUNTING DETAIL

General Specifications

Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Total Input Power, maximum	900 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	12
RF Connector Quantity, low band	4
RF Connector Quantity, high band	8
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	954.0 N @ 150 km/h 214.5 lbf @ 150 km/h

NNH4-65C-R6-V3

Wind Loading, lateral	331.0 N @ 150 km/h 74.4 lbf @ 150 km/h
Wind Loading, maximum	1235.0 N @ 150 km/h 277.6 lbf @ 150 km/h
Effective Projected Area (EPA), frontal	0.90 m^2 | 9.69 ft^2
Effective Projected Area (EPA), lateral	0.31 m^2 | 3.34 ft^2
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Length	2438.0 mm | 96.0 in
Width	498.0 mm | 19.6 in
Depth	197.0 mm | 7.8 in
Net Weight, without mounting kit	46.3 kg | 102.1 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male

2 / D-1 NNH4-65C-R6-V3 ANTENNA DETAIL

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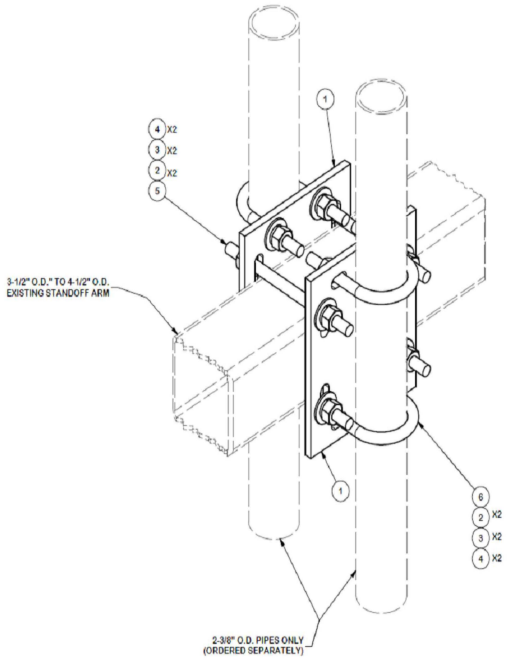
SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

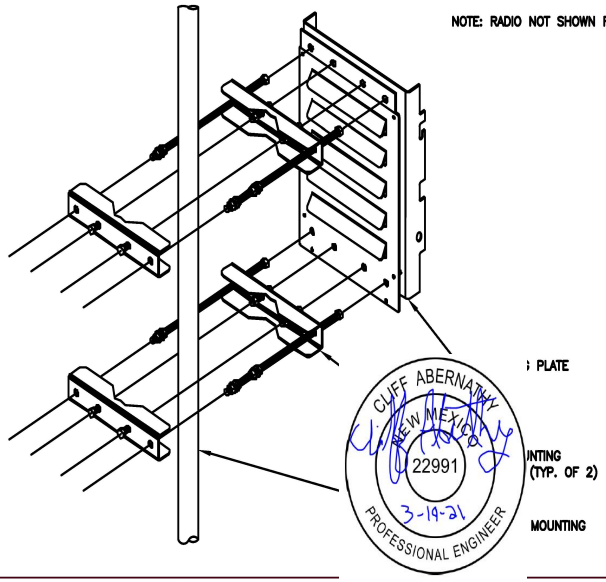
DETAILS

SHEET NO.

D-1



BACK TO BACK PIPE MOUNT (BBPM-K1)



NOTE: RADIO NOT SHOWN FOR CLARITY.

PLATE

(TYP. OF 2)

MOUNTING

CLIFF ABERNATHY
NEW MEXICO
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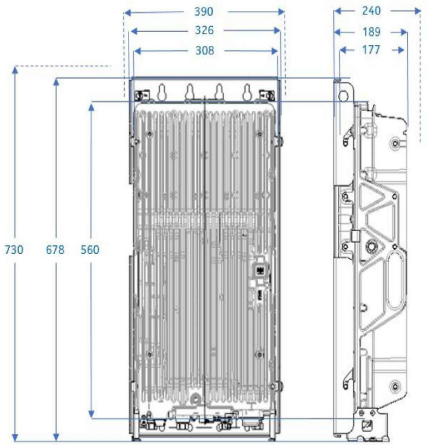
3-19-21
PROFESSIONAL ENGINEER

1/D-2 RRU MOUNTING DETAIL

AHLBA Dimensions



All dimensions in mm

Core: 560 X 308 X 177 = 31L
Envelope: 678 X 326 X 189 = 42L
Envelope with cover (dotted lines): 730 X 390 X 240

Product name	AirScale Dual RRH 4T4R B12/14 320W AHLBA - 474240A
Supported frequency bands	3GPP Band 12 and Band 14
Frequencies	Band 12: DL 729–745MHz, UL 699–715MHz Band 14: DL 758–768MHz, UL 788–798MHz
Number of TX/RX ports	4
Instantaneous Bandwidth IBW	Band 12: 16MHz, Band 14: 10MHz
Occupied Bandwidth OBW	Band 12: 15MHz, Band 14: 10MHz
Output power	80W per TX port shared between bands (e.g. 4x40W per band)
Dimensions (mm) height x width x depth	730x390x240 (overall not-to-exceed with cover and bracket)
Weight (kg)	<46 (overall not-to-exceed with cover and bracket)
Supply Voltage / Voltage Range	DC-48V / -36V to -60V
Typical Power Consumption	525W (ETSI 24h Avg – 4x20W per band, 40W per TX port)
Antenna ports	4TX/RX, 4.3-10+
Optical ports	2 x CPRI 9.8 Gbps
ALD control interfaces	AISG3.0 from ANT1, 2, 3, 4 and RET (Power supply ANT1 and ANT3)
Other interfaces	External alarm MDR-26 serial connector (4 inputs) DC circular power connector
Operational temperature range	-40°C to 55°C (with no solar load)
Ingress protection class	IP65
Installation options	Pole or wall, vertical or horizontal book mount
Surge protection	Class II 5kA

2/D-2 AIRSCALE DUAL RRH 4T4R B12/14 320W

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IRVING, TEXAS 75038
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0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
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2	03/18/21	UPDATED AS PER REMARKS	ARS

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SHEET DESCRIPTION

DETAILS

SHEET NO.

D-2

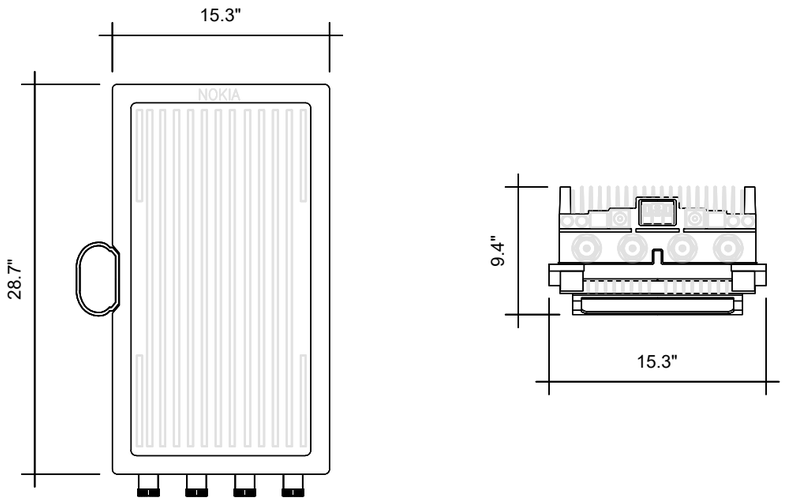
NOKIA AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB

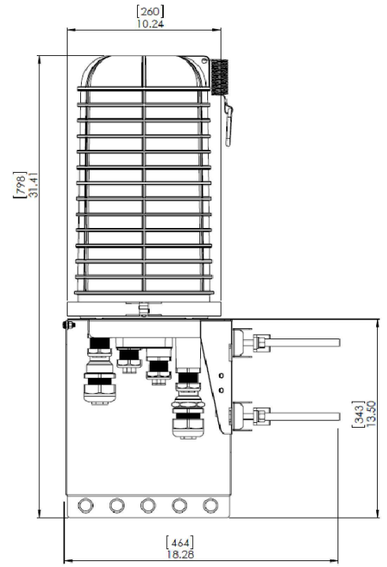
DIMENSIONS, HxWxD: 560 X 308 X 149 (MM) (CORE)
28.7" X 15.3" X 9.4" (CORE)

730 X 390 X 240 (MM)
(OVERALL NOT-TO-EXCEED WITH COVER AND BRACKET)

28.7" X 15.3" X 9.4"
(OVERALL NOT-TO-EXCEED WITH COVER AND BRACKET)

WEIGHT: < 40 (kg)
< 88.2 lbs
(OVERALL NOT-TO-EXCEED WITH COVER AND BRACKET)





Electrical		
Model Number		DC9-48-60-24-8C-EV
CEQ / ANT Number		CEQ.21427
Number of Circuits Protected		9
Surge Protective Device (SPD) Type per UL 1449 4th Edition		Type 2
Surge Protection Class as per IEC 61643-11		Class I
Nominal Operating DC Voltage [U_c]		-48 VDC
Nominal Discharge Current [I_n] per UL 1449 4th Edition		20 kA 8/20 µs
Maximum Impulse (Lightning) Current [I_{max}] per IEC 61643-11		12.5 kA 10/350 µs
Maximum Continuous Operating DC Voltage [U_c] (MCOV)		60 VDC
Voltage Protection Level [U_p] at 12.5kA per IEC 61643-11		160 V
Voltage Protection Level [U_p] at 5kA per IEC 61643-11		145 V
Voltage Protection Rating (VPR) per UL 1449 4th Edition		330 V
Suppression Technology		MOV
Strikesorb Module Type 2CA (UL 1449 4th edition)		30-V1-2CEV
Protection Modes:	Normal Mode	-48V to Return
	Common Mode	Return to Ground
Mechanical		
Connection Terminal (Suppression) Method (for all power cables)		Compression lug 2 hole, #10, 5/8 pitch, #12 – #4 AWG [3.3 – 21.15 mm²]
Connection Terminal (Terminal Block) Method	Copper	#12 to #4 AWG [3.3 – 21.15 mm²]
Fiber Connection Method		LC-LC Single Mode
Environmental Ingress Protection (IP) Rating		IP 68
Operating Temperature (°C)		-40° C to +100° C
Storage Temperature (°C)		-70° C to +80° C
Cold Temperature Cycling IEC 61300-2-22		-30° C to +60° C 200 hrs @5 PSI
Resistance to Aggressive Materials CEI IEC 61073-2		Including Acids and Bases
UV Protection ISO 4892-2 Method A		Xenon-Arc 2160 hrs
Enclosure Type		Outdoor NEMA 4X
Enclosure Dimensions (L x W x H)		18.28" x 10.24" x 31.4" [464 x 260 x 797 mm]
Weight*		System: 16.0 lbs [7.25 kg] Mount: 10.2 lbs [4.62 kg] Total: 26.2 lbs [11.87 kg]
Combined Wind Loading	Sustained | Gust	150 mph Sustained: 105.7 lbs [470 N] | 195 mph Gust: 213.6 lbs [950 N]
Optional Kits Available		
Trunk Gland Kit A	CEQ.21428	Oval Gasket for 4AWG and 6AWG Trunk
Trunk Gland Kit B	CEQ.21429	Oval Gasket for (2) 4AWG Trunks
Trunk Gland Kit C	CEQ.21434	Oval Gasket for (2) 8AWG Trunks

1 D-3 NOKIA AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB

2 D-3 DC9-48-60-24-8C-EV DETAIL

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CLIFF ABERNATHY 22991 NEW MEXICO PROFESSIONAL ENGINEER 3-19-21

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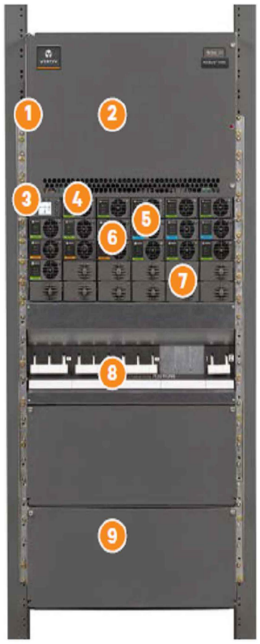
SHEET DESCRIPTION

DETAILS

SHEET NO.

D-3



PHYSICAL CHARACTERISTICS			
Mounting	Standard 19" rack mounting	Standard 19" and 23" rack mounting	
Distribution Shelf / Cabinet Dimensions (H x W x D)	1U x 19" x 15" shelf	4U x (19" or 23") x 15" cabinet (19" depth with AC/solar termination panel)	8U x (19" or 23") x 15" cabinet
Module Shelf Dimensions (H x W x D)	1U x 19" x 15"	1U x (19" or 23") x 15"	1U x (19" or 23") x 15"
System Dimensions (H x W x D)	(3.5" up to 5.25") x 19" x 15"	(8.75" to 7.5") x (19" or 23") x 23.14" (with batteries)	
AC Accessibility	Rear/front		Rear
DC Load Accessibility	Front		h front and top access

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

1 D-4 EMERSON NETSURE 5100 POWER PLANT DETAIL
SCALE: NTS

TECHNICAL CHARACTERISTICS AND DATA

Nominal voltage	12 V
Float charge	2,29 V/C @ 20 °C
Capacity	CP 10min 1,6V/C 20°C 4600W/Bloc CC 10h 1,8V/C 20°C 190Ah
Short circuit current	3653 A (IEC60896-21/22)
Internal resistance	3,4 mΩ (IEC60896-21/22)
Terminal	F-M6-90°
Terminal Torque	11 Nm
Container	UL 94-HB (Polypropylene)
Temperature range	-40°C to 55°C
Dimensions (l x b/w x h)	125 x 559 x 318 mm
Weight	62 kg
Origin	Castanheira, Portugal

2 D-4 MARATHON M12V190FT BATTERY DETAIL
SCALE: NTS

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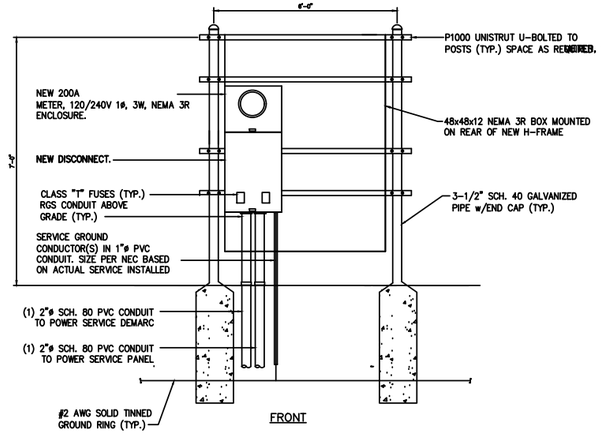
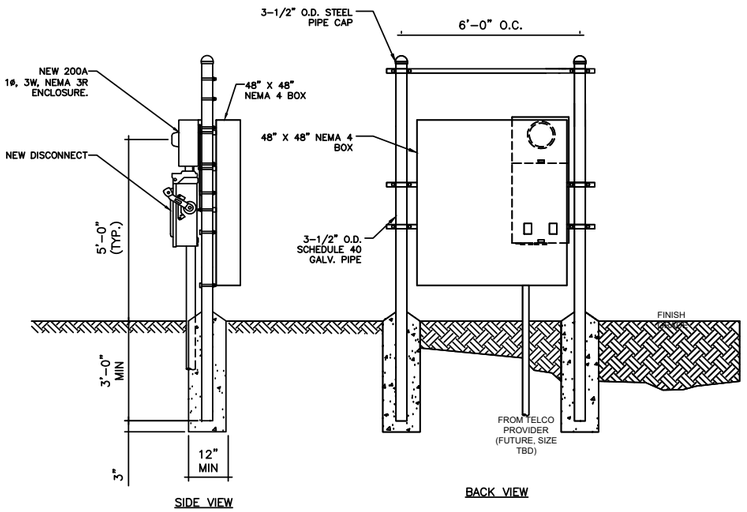
SHEET DESCRIPTION

DETAILS

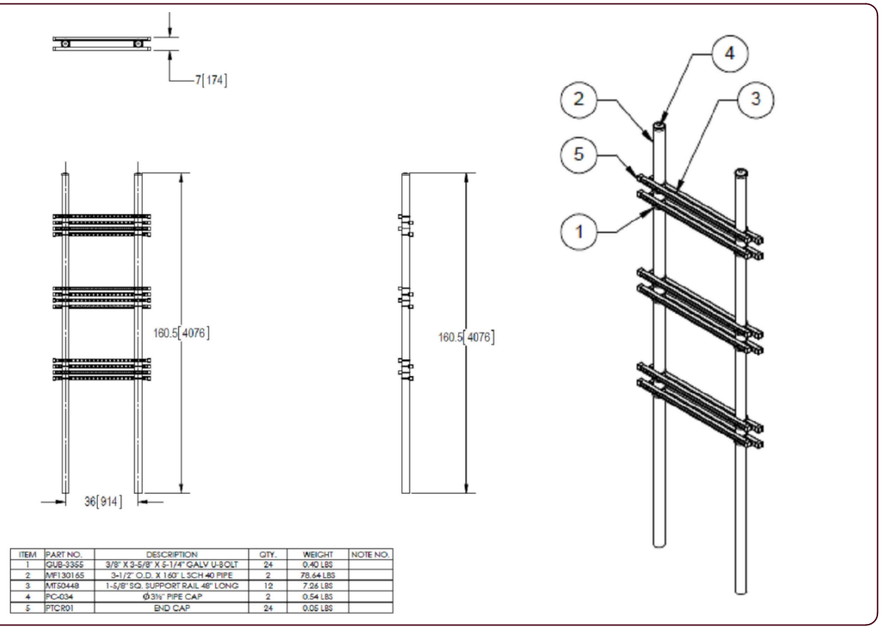
SHEET NO.

D-4



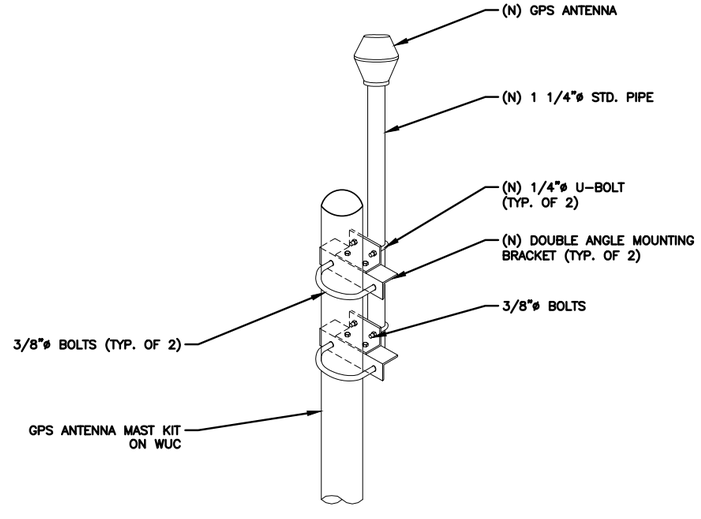


1/D-5 METER & DISCONNECT MOUNTING DETAIL



ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	QUB-3365	3/8" X 3-5/8" X 6-1/4" GALV U-BOLT	24	0.40 LBS	
2	MF130165	3-1/2" O.D. X 160" L SCH 40 PIPE	2	78.64 LBS	
3	MT50448	1-5/8" SQ. SUPPORT RAIL 48" LONG	12	7.26 LBS	
4	PC-034	Ø3½" PIPE CAP	2	0.54 LBS	
5	PTCR01	END CAP	24	0.05 LBS	

2/D-5 H-FRAME MTC401548H DETAIL



3/D-4 GPS ANTENNA MOUNTING DETAIL

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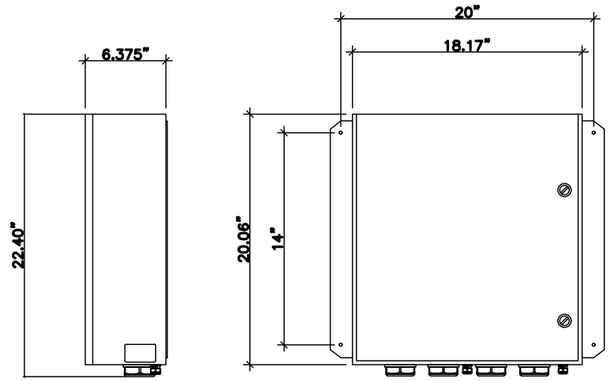
DETAILS

SHEET NO.

D-5

RAYCAP DC12-48-60-0-25E DC SURGE SUPPRESSOR

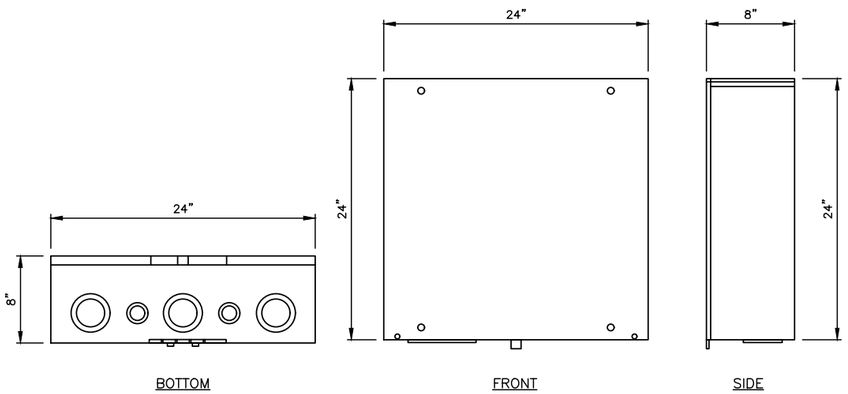
- DIMENSIONS, HXWXD: 20.06"X18.17"X6.375"
- WEIGHT: ±56.3 LBS (INCLUDES MOUNTING KIT)
- COLOR: LIGHT THAN



1 / D-6 OUTDOOR DC12 DETAIL
SCALE: NTS

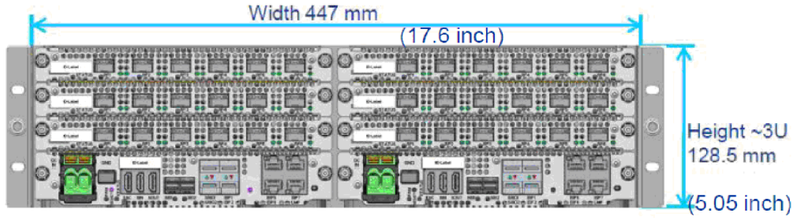
HOFFMAN A24R248 NEMA BOX

- DIMENSIONS, HxWxD: 24"x24"x8"
- WEIGHT: ±30.0 LBS
- COLOR: GREY

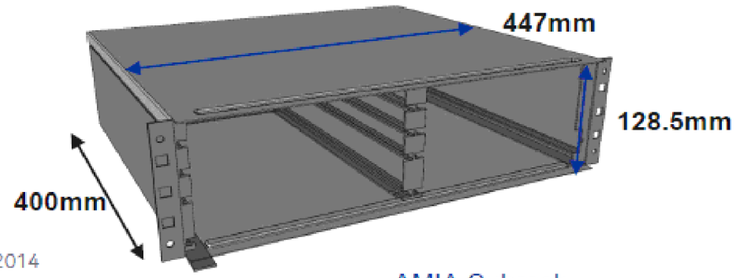


2 / D-6 NEMA BOX DETAIL
SCALE: NTS

FSM4 Physical dimensions



- Size: 3 RU, 19" rack-mountable, 40cm(15.75 inch) deep
- Max weight - 50 lbs
- W X D X H - 17.6 inch x 15.75 inch x 5.05 inch



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AMIA Subrack

3 / D-6 FSM4 DETAIL
SCALE: NTS

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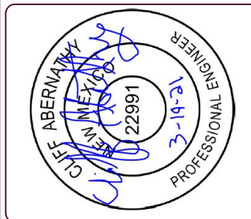

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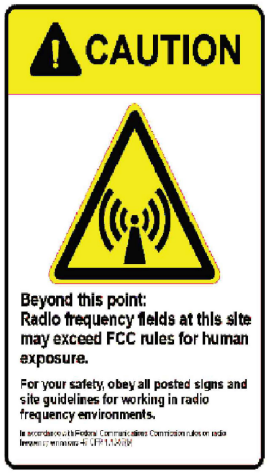
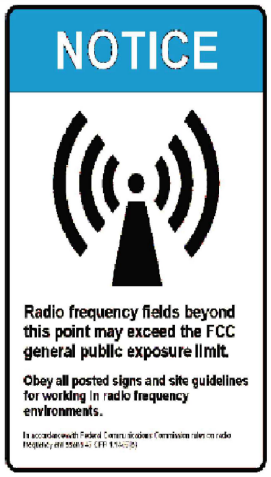
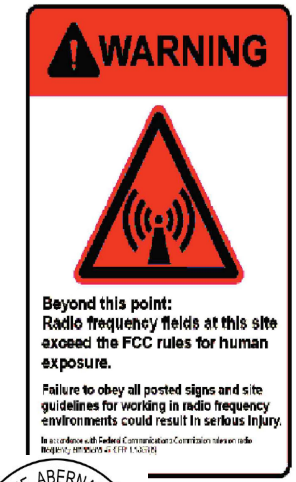
D-6

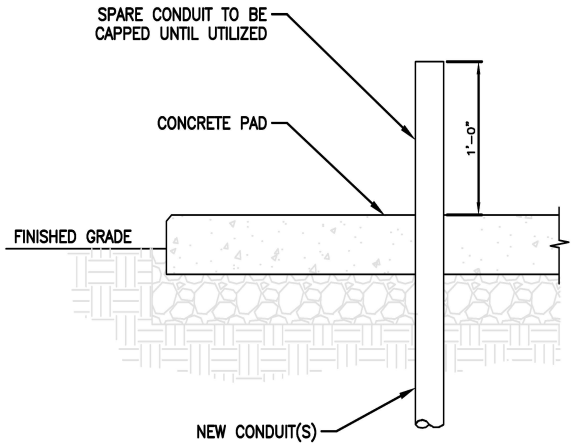






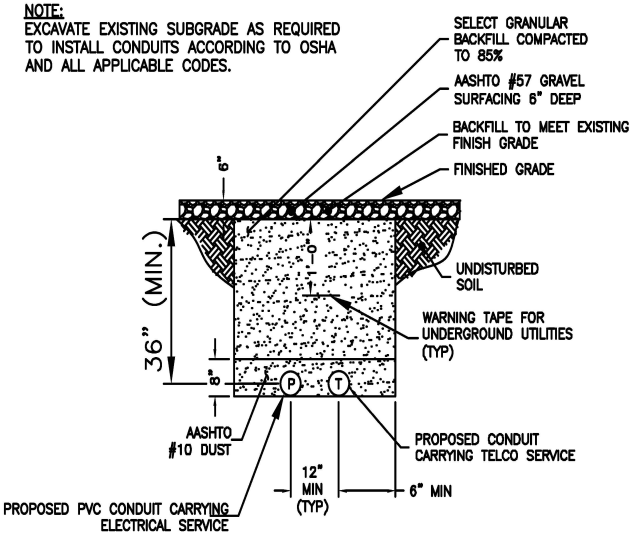
1 D-7 RF SAFETY SIGNAGE DETAIL
SCALE: NTS

NOTE:
ALL CONDUITS SHALL BE INSTALLED WITH PULL STRINGS



2 D-7 CONDUIT PENETRATION DETAIL
SCALE: NTS

NOTE:
EXCAVATE EXISTING SUBGRADE AS REQUIRED TO INSTALL CONDUITS ACCORDING TO OSHA AND ALL APPLICABLE CODES.



3 D-7 TYPICAL TRENCH DETAIL
SCALE: NTS

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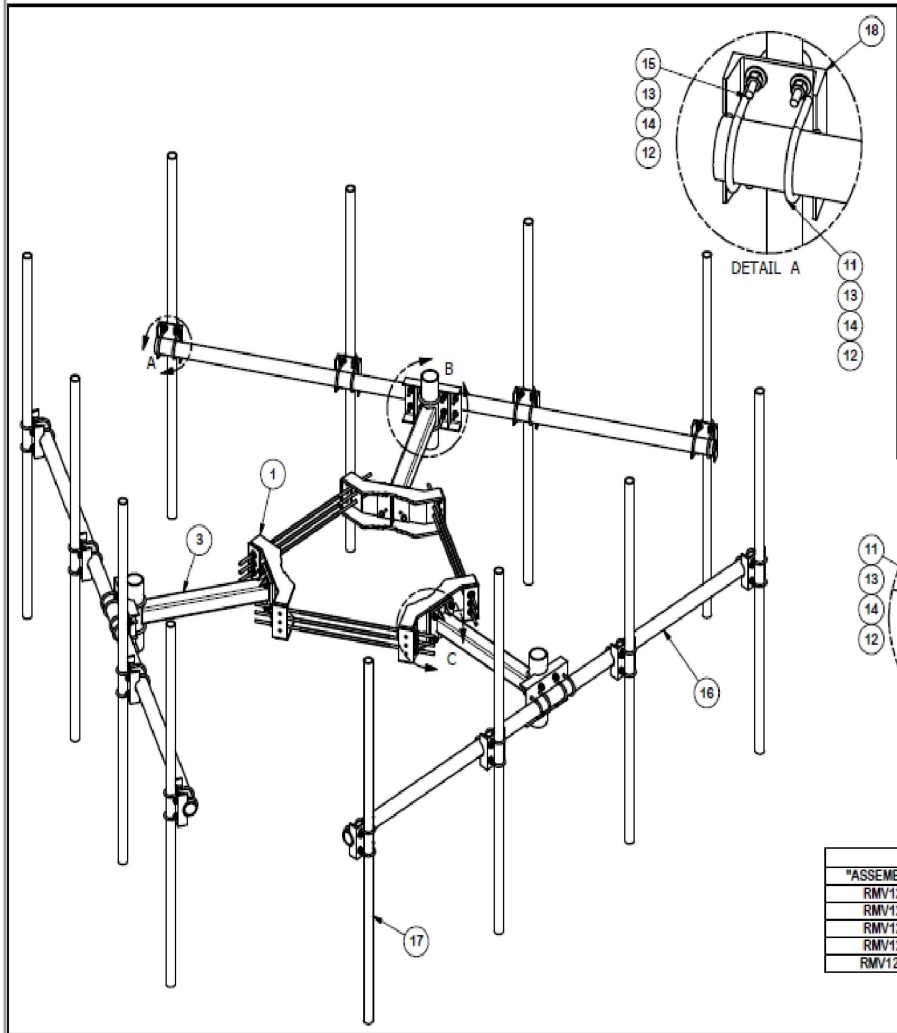
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

DETAILS

SHEET NO.

D-7



PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-LWRM	RING MOUNT WELDMENT		68.81	206.42
2	9	G58R-24	5/8" x 24" THREADED ROD (HDG.)		0.40	3.59
2	9	G58R-48	5/8" X 48" GALV THREADED ROD		4.39	39.52
3	3	X-SV197-36	SUPPORT ARM WELDMENT - 36"		67.29	201.88
4	12	A58234	5/8" x 2-3/4" HDG A325 HEX BOLT	2.75	0.36	4.27
5	12	A58FW	5/8" HDG A325 FLATWASHER		0.03	0.41
6	42	G58LW	5/8" HDG LOCKWASHER		0.03	1.10
7	24	A58NUT	5/8" HDG A325 HEX NUT		0.13	3.12
8	6	X-UB5458	5/8" X 4-5/8" X 7" X 3" U-BOLT (HDG.)		0.26	1.54
9	18	G58FW	5/8" HDG USS FLATWASHER		0.07	1.27
10	18	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	2.34
11	36	X-UB1306	1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.)		0.26	9.25
12	114	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	8.17
13	114	G12FW	1/2" HDG USS FLATWASHER		0.03	3.89
14	114	G12LW	1/2" HDG LOCKWASHER		0.01	1.59
15	24	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.26	6.17
16	3	P3150	3-1/2" X 150" SCH 40 GALVANIZED PIPE	150.000 in	94.80	284.40
17	12	A	B	C	D	
18	12	X-SP219	SMALL SUPPORT CROSS PLATE	8.250 in	8.61	103.33
19	3	X-SP216	LARGE SUPPORT CROSS PLATE		20.83	62.48

ANTENNA PIPES

"ASSEMBLY NO."	PART NO. "A"	PART DESCRIPTION "B"	LENGTH "C"	UNIT WT. "D"	TOTAL WT.
RMV12-463	P263	2-3/8" O.D. SCH. 40 PIPE	63"	19.22	1,219.29
RMV12-472	P272	2-3/8" O.D. SCH. 40 PIPE	72"	23.07	1,265.49
RMV12-484	P284	2-3/8" O.D. SCH. 40 PIPE	84"	26.91	1,311.57
RMV12-496	P296	2-3/8" O.D. SCH. 40 PIPE	96"	30.76	1,357.77
RMV12-4126	P126	2-3/8" O.D. SCH. 40 PIPE	126"	40.76	1477.77

RE	DESCRIPTION OF REVISIONS
A	REMOVED FLATWASH. AT ARM TO CLAMP RING CONNECT
B	ADDED 10' 6" ANTENNA MOUNTING PIPES

REVISION HISTORY

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PROPRIETARY NOTE:
DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

DESCRIPTION: MONOPOLE TRIPLE T-ARM FOR 12 ANTENNAS

SITE PRO 1 — A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4516	CEK 4/15/2011		SEE "ASSEMBLY NO."
CLASS: 81	SUB: 01	DRAWING USAGE: CUSTOMER	CHECKED BY: BMC 7/2/2015
			DWG. NO.: RMV12-4XX

PAGE 1 OF 2

PROPOSED RMV12-4XX MOUNT DETAIL

1 / D-8 SECTOR FRAME DETAIL

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
D	03/02/20	UPDATED AS PER REMARKS	VEN
E	03/04/20	UPDATED AS PER REMARKS	AVP
F	04/06/20	UPDATED AS PER REMARKS	AVP
G	04/24/20	UPDATED AS PER REMARKS	AVP
H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

SITE INFORMATION

SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

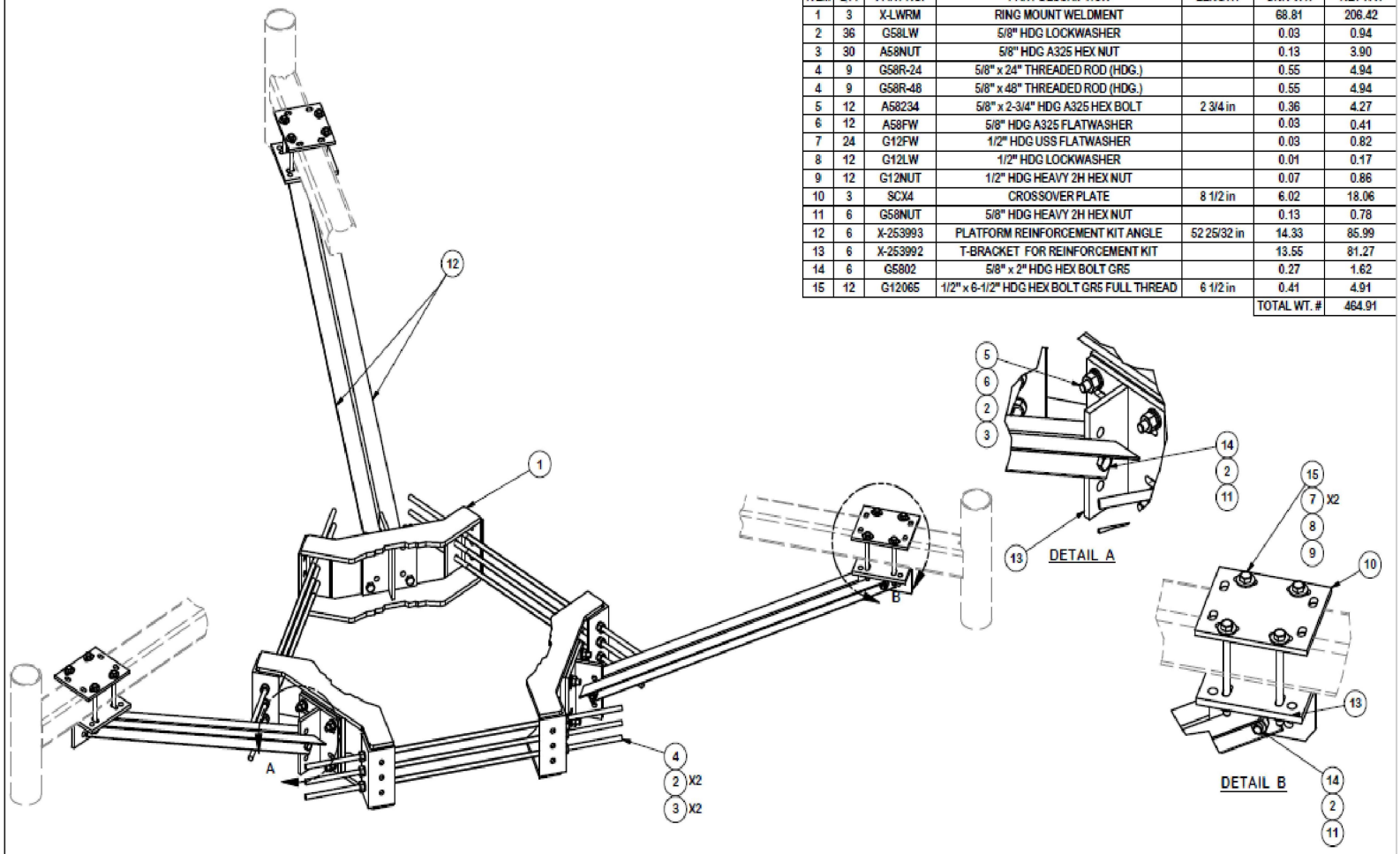
SHEET DESCRIPTION

DETAILS

SHEET NO.

D-8

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-LWRM	RING MOUNT WELDMENT		68.81	206.42
2	36	G58LW	5/8" HDG LOCKWASHER		0.03	0.94
3	30	A58NUT	5/8" HDG A325 HEX NUT		0.13	3.90
4	9	G58R-24	5/8" x 24" THREADED ROD (HDG.)		0.55	4.94
4	9	G58R-48	5/8" x 48" THREADED ROD (HDG.)		0.55	4.94
5	12	A58234	5/8" x 2-3/4" HDG A325 HEX BOLT	2 3/4 in	0.36	4.27
6	12	A58FW	5/8" HDG A325 FLATWASHER		0.03	0.41
7	24	G12FW	1/2" HDG USS FLATWASHER		0.03	0.82
8	12	G12LW	1/2" HDG LOCKWASHER		0.01	0.17
9	12	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.86
10	3	SCX4	CROSSOVER PLATE	8 1/2 in	6.02	18.06
11	6	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	0.78
12	6	X-253993	PLATFORM REINFORCEMENT KIT ANGLE	52 25/32 in	14.33	85.99
13	6	X-253992	T-BRACKET FOR REINFORCEMENT KIT		13.55	81.27
14	6	G5802	5/8" x 2" HDG HEX BOLT GR5		0.27	1.62
15	12	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD	6 1/2 in	0.41	4.91
					TOTAL WT. #	464.91



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
** L OTHER MACHINING *(± 0.030")*
L OTHER ASSEMBLY *(± 0.060")*

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DESCRIPTION
PLATFORM REINFORCEMENT
ON A 12" TO 45" POLE
4' 6" ANGLE

SITE PRO 1 — A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.	PAGE
4488	CEK 4/10/2014		PRK-1245	1 OF 2
CLASS	SUB.	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 4/10/2014	PRK-1245

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

PROPOSED PRK-1245 REINFORCING KIT DETAIL

1 / D-9 SECTOR FRAME DETAIL

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
D	03/02/20	UPDATED AS PER REMARKS	VEN
E	03/04/20	UPDATED AS PER REMARKS	AVP
F	04/06/20	UPDATED AS PER REMARKS	AVP
G	04/24/20	UPDATED AS PER REMARKS	AVP
H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

SITE INFORMATION

SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

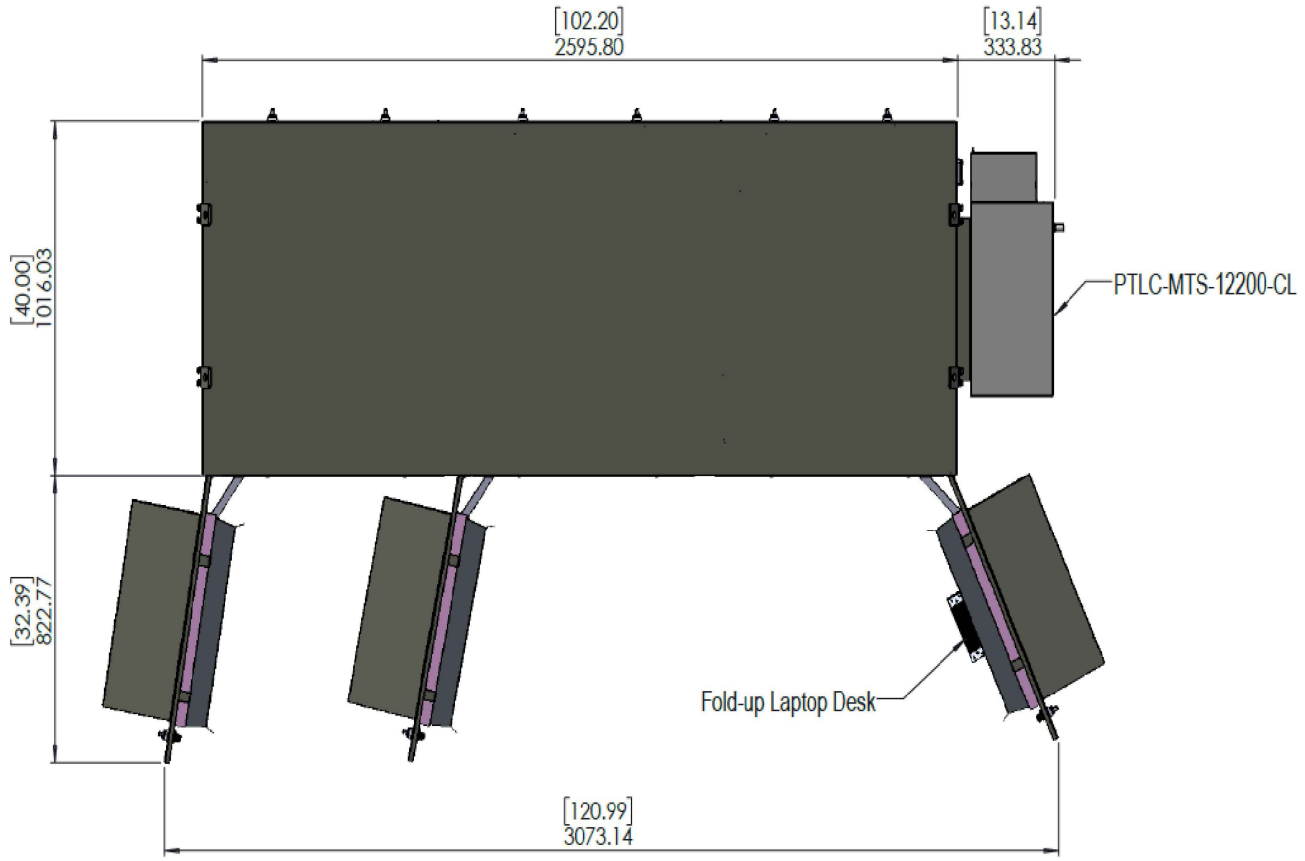
SHEET DESCRIPTION

DETAILS

SHEET NO.

D-9

NEQ. 20111



1 D-10 WUC SHELTER PLAN
SCALE: 1-1/2" = 1'-0"

台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

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DIMENSIONAL TOLERANCES — HOLES : ±0.05 ANGLES : ±0.5°

( )		( )		( )	
<30	±0.25	DECIMALS	UP~100 ±0.2	250~300 ±0.4	UP~600 ±1.5
>30~100	±0.35	X ±0.3	100~150 ±0.25	300~350 ±0.45	600~900 ±2.4
>100~300	±0.5	X.X ±0.2	150~200 ±0.3	350~400 ±0.5	900~OVER ±3.1
ABOVE 300	±0.6	X.XX±0.1	200~250 ±0.35		

SCALE 1:14 | UNIT mm | USED ON -

Drawn: 02.28.2018 Bryan Kearse
Design: 02.28.2018 Bryan Kearse

THIRD ANGLE PROJECTION

Description: FOOTPRINT w/DOOR SWING

A3 SIZE

Part No. ESOF030-HCV01 REV. 0A

SHEET 2 OF 2 ISSUE DATE: 07.18.2017

CLIFF ABERNATHY NEW MEXICO 22991 3-19-21 PROFESSIONAL ENGINEER

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

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SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

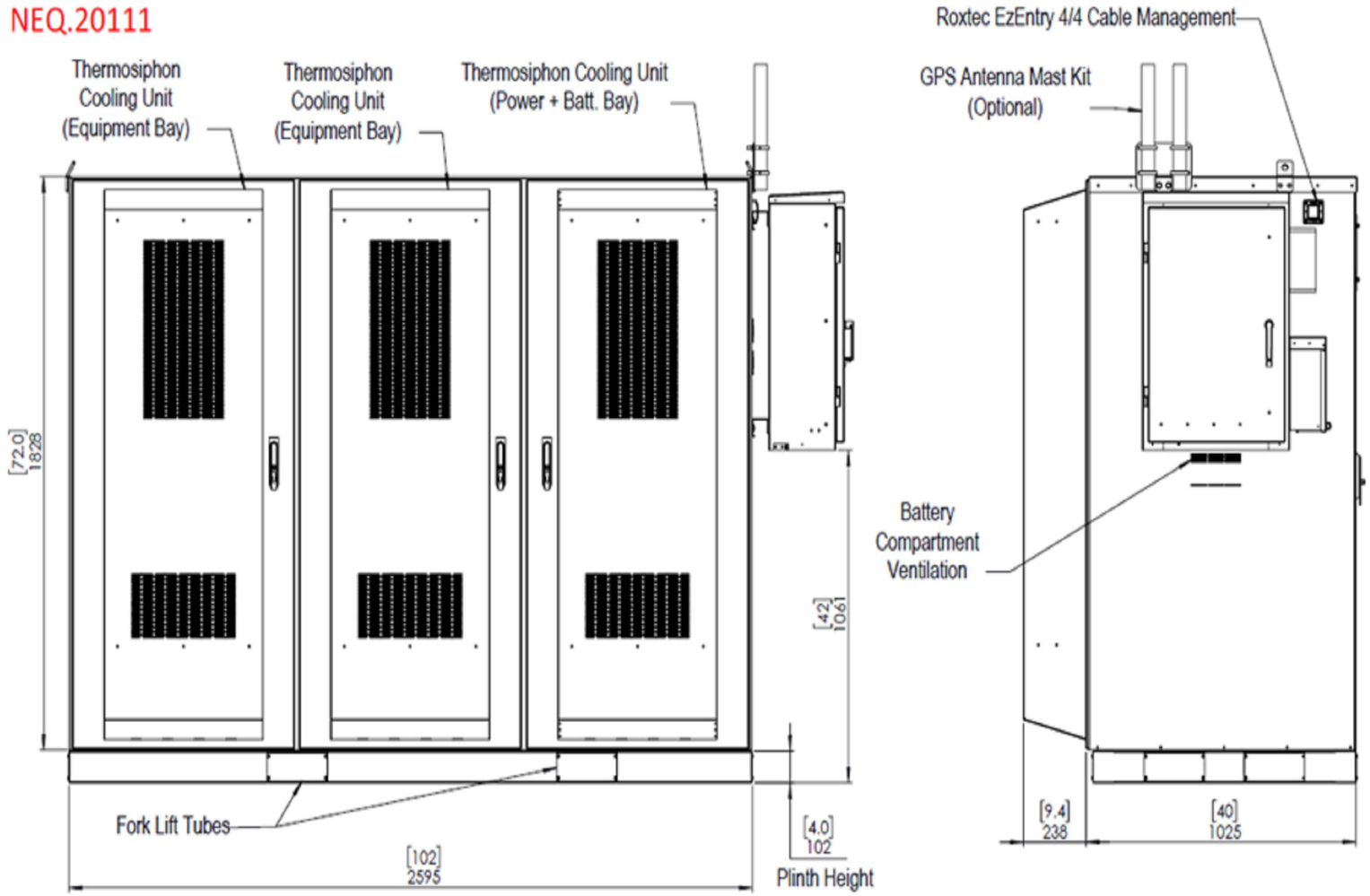
SHEET DESCRIPTION

DETAILS

SHEET NO.

D-10

NEQ.20111



Note:
1. Total System Cooling Capacity (as shown) is 9100W
2. 2nd Equipment Bay Thermosiphon Cooling Door can be added as field install kit for future site growth

CLIFF ABERNATHY NEW MEXICO 22991 3-19-21 PROFESSIONAL ENGINEER

1 D-11 WUC ELEVATION
SCALE: 1" = 1'-0"

台達電子工業股份有限公司 DELTA ELECTRONICS, INC.

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DIMENSIONAL TOLERANCES HOLES: ±0.05 ANGLES: ±0.5°

( )		( )		( )		( )	
<30	±0.25	DECIMALS		UP~100	±0.2	250~300	±0.4	UP~600	±1.5
>30~100	±0.35	X	±0.3	100~150	±0.25	300~350	±0.45	600~900	±2.4
>100~300	±0.5	X.X	±0.2	150~200	±0.3	350~400	±0.5	900~OVER	±3.1
ABOVE 300	±0.8	X.XX	±0.1	200~250	±0.35				

SCALE 1:14 | UNIT mm | USED ON *

THIRD ANGLE PROJECTION

Drawn: 04.27.2018 Bryan Kearse
Design: 04.27.201* DEIC

Description: EXTERIOR CABINET LAYOUT

A3 SIZE

Part No. ESOF030-HCU01

REV 0E

SHEET 7 OF 13 | ISSUE DATE: 04.27.2018

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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REV	DATE	DESCRIPTION	BY
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H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

SITE INFORMATION

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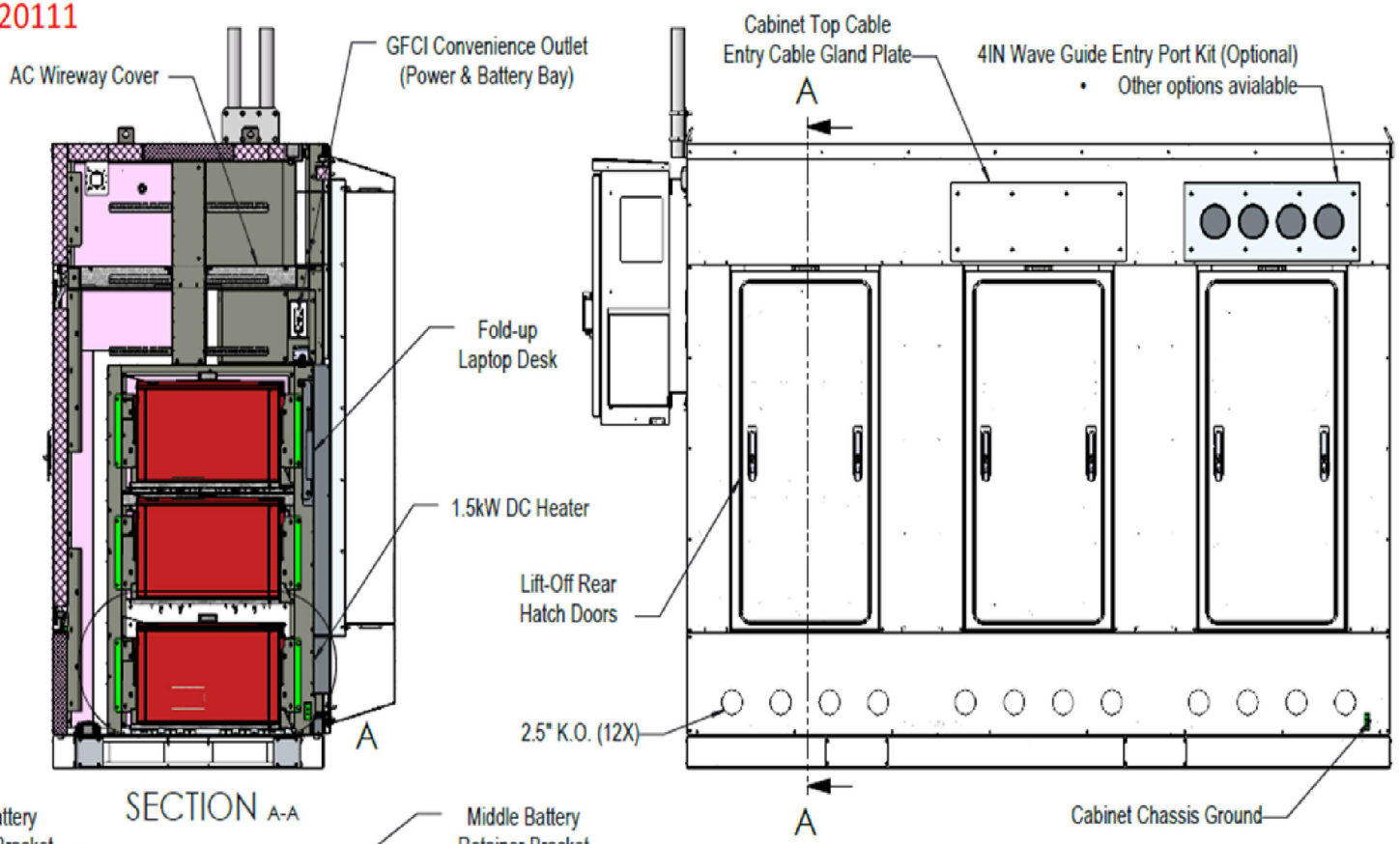
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

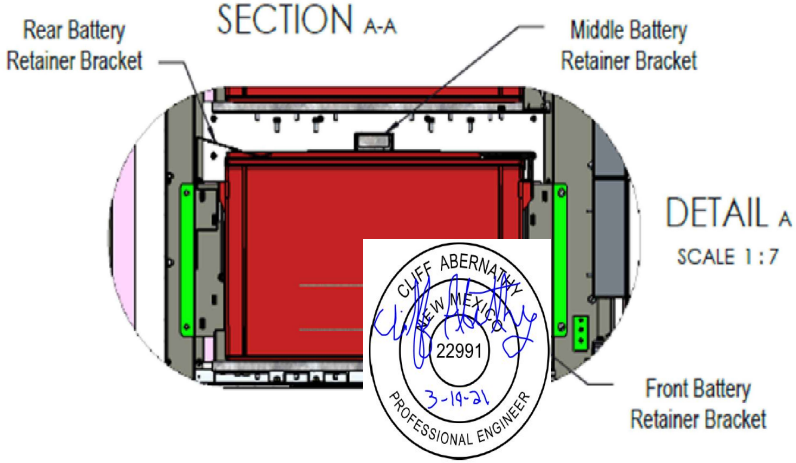
SHEET DESCRIPTION
DETAILS

SHEET NO.
D-11

NEQ.20111



SECTION A-A



DETAIL A
SCALE 1 : 7

1 D-12 WUC ELEVATION
SCALE: 1" = 1'-0"

台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

Drawn: 04.27.2018 Bryan Kearse
Design: 04.27.2018 DEIC

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DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		DECIMALS		UP~100	±0.2	250~300	±0.4	UP~600	±1.5
<30	±0.25	X	±0.3	100~150	±0.25	300~350	±0.45	600~900	±2.4
>30~100	±0.35	X.X	±0.2	150~200	±0.3	350~400	±0.5	900~OVER	±3.1
>100~300	±0.5	X.XX	±0.1	200~250	±0.35				
ABOVE 300	±0.5								

SCALE 1:14 | UNIT mm | USED ON

THIRD ANGLE PROJECTION

Description: CABINET LAYOUT

A3 SIZE

Part No. ESOF030-HCU02

REV. 0E

SHEET 3 OF 13 | ISSUE DATE: 04.27.2018

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
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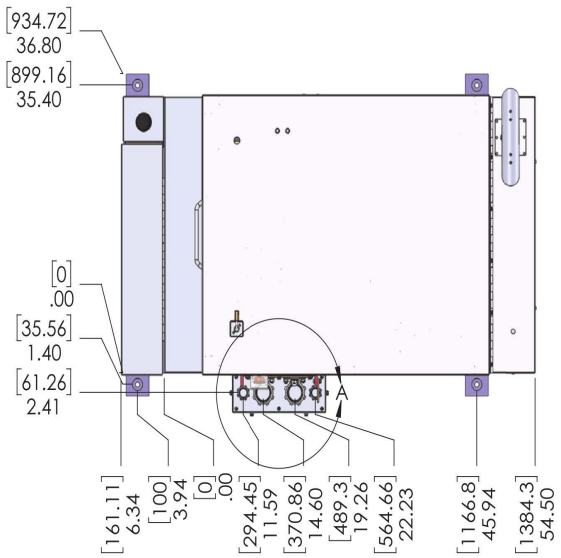
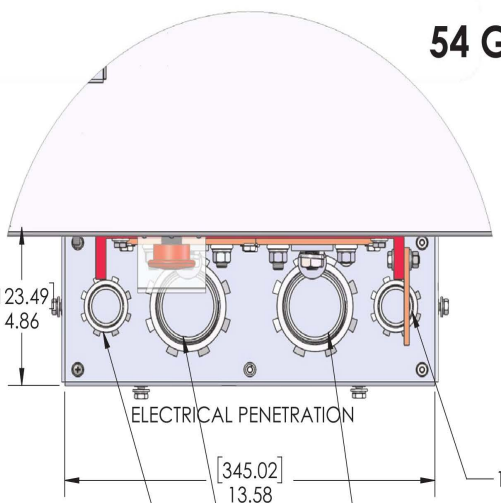
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

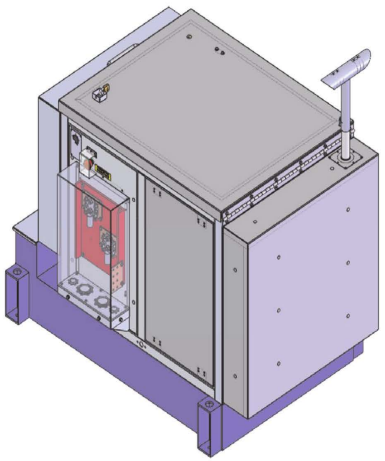
SHEET DESCRIPTION
DETAILS

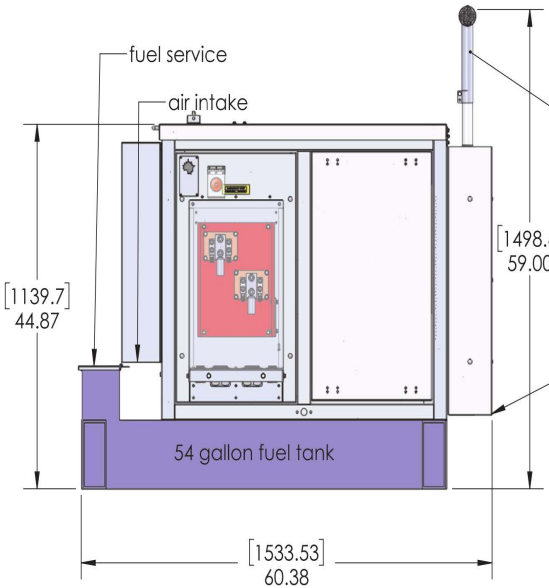
SHEET NO.
D-12

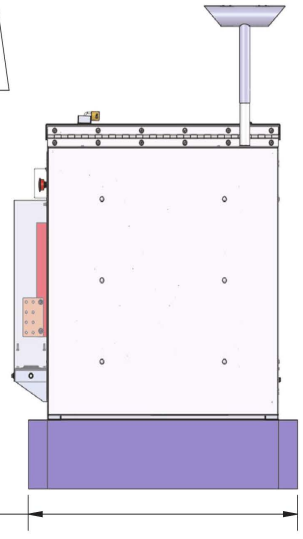
54 GALLON TANK CONFIGURATION











REV	DESCRIPTION
	INITIAL RELEASE

ENTS:

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

PROPRIETARY AND CONFIDENTIAL
ORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF POWER INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT TTEN PERMISSION OF POLAR POWER INC. IS PROHIBITED.

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ±1/32" DECIMALS X.X±0.1" X.XX±0.03" X.XXX±0.010" ANGLES ±1/2°
MATERIAL --
FINISH
DO NOT SCALE DRAWING

CAD GENERATED DRAWING
DO NOT MANUALLY UPDATE

APPROVALS	DATE
DRAWN GLEESON	2/16/17
CHECKED	
ENG APPR.	
MFG APPR.	
Q.A.	

POLAR POWER INC.
249 E GARDENA BLVD, GARDENA, CA 90248

TITLE: GENERATOR ENCLOSURE, BASE ASSY, TALLER

SIZE	DWG. NO.	REV
B	88-25-0100-1	A-5

SCALE: 1:16 WEIGHT: 1 SHEET 1 OF 3

1 / D-13 PROPOSED POLAR POWER DC GENERATOR (8220-100-D-20-03) DETAIL

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
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G	04/24/20	UPDATED AS PER REMARKS	AVP
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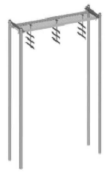
0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

SITE INFORMATION

SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA,
SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION
DETAILS

SHEET NO.
D-13



WB-K410-B15

Safety Grated Waveguide Bridge Kit, 24 in x 10 ft, with four 15 ft 4 in direct burial posts

Product Classification

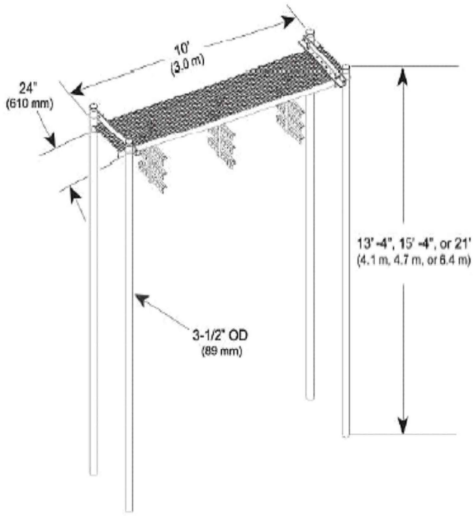
Product Type	Waveguide bridge kit

Dimensions

Height	4572.0 mm | 180.0 in
Length	3.0 m | 10.0 ft
Weight	270.4 kg | 596.0 lb

General Specifications

Application	Direct burial
Cable Runs, quantity	24
Includes	Caps | Channel | Hardware | Posts | Support brackets | Trapeze
Material Type	Hot dip galvanized steel
Package Quantity	1
Pipe Length	4.7 m | 15.3 ft
Pipe, quantity	4



MT-287

Wedge Anchor, 3/4 in x 7 in

Product Classification

Product Type	Anchor

Dimensions

Pipe Outer Diameter	19.1 mm | 3/4 in
Height	25.4 mm | 1.0 in
Length	177.8 mm | 7.0 in
Width	25.4 mm | 1.0 in

General Specifications

Material Type	Plated steel
Includes	Anchors
Package Quantity	1

WB-T24-3

Trapeze Kit, triple tee, 24 in wide, three rungs

Product Classification

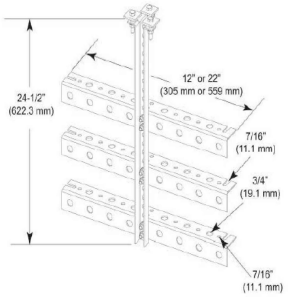
Product Type	Trapeze kit

Dimensions

Width	609.6 mm | 24.0 in
Height	76.2 mm | 3.0 in
Length	635.0 mm | 25.0 in
Weight	5.9 kg | 13.0 lb

General Specifications

Application	Waveguide bridge kit, 24 in
Cable Runs, quantity	24
Hole Size	3/4 in | 7/16 in
Hole, quantity	24
Includes	Angle brackets | Mounting hardware
Material Type	Hot dip galvanized steel
Mounting	Waveguide bridge channel
Package Quantity	1
Rungs, quantity	3



WB-CY210

Safety Grated Waveguide Bridge Channel, 24 in x 10 ft

Product Classification

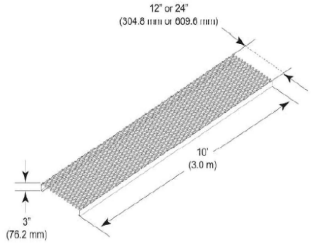
Product Type	Waveguide bridge channel

Dimensions

Height	76.2 mm | 3.0 in
Length	3.0 m | 10.0 ft
Weight	50.4 kg | 111.0 lb

General Specifications

Application	Waveguide bridge kit, 24 in
Includes	Bridge channel
Material Type	Hot dip galvanized steel
Package Quantity	1



MF-273

Direct Burial Pipe Column, 15 ft 4 in

Product Classification

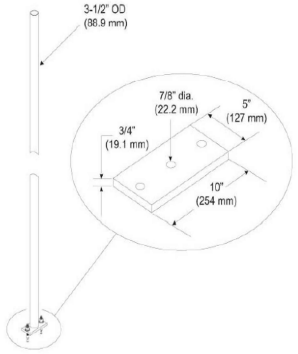
Product Type	Pipe column

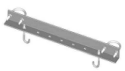
Dimensions

Height	4673.6 mm | 184.0 in
Length	88.9 mm | 3.5 in
Pipe Outer Diameter	88.9 mm | 3 1/2 in
Weight	52.6 kg | 116.0 lb

General Specifications

Application	Direct burial
Includes	Anchors | Pipe
Material Type	Hot dip galvanized steel
Mounting	Waveguide bridge support bracket
Package Quantity	1
Pipe Length	4.7 m | 15.3 ft
Pipe, quantity	1





WB-CS24-3

Safety Grated Channel Support, 24 in wide for 3-1/2 in OD pipe

Product Classification

Product Type	Support bracket

Dimensions

Height	101.6 mm | 4.0 in
Length	101.6 mm | 4.0 in
Weight	8.2 kg | 18.0 lb

General Specifications

Application	Waveguide bridge kit, 24 in
Includes	Channel support bracket | Hardware
Material Type	Hot dip galvanized steel
Mounting	Pipe, 88.9 mm (3-1/2 in) OD
Package Quantity	1

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SHEET DESCRIPTION

DETAILS

SHEET NO.

D-14

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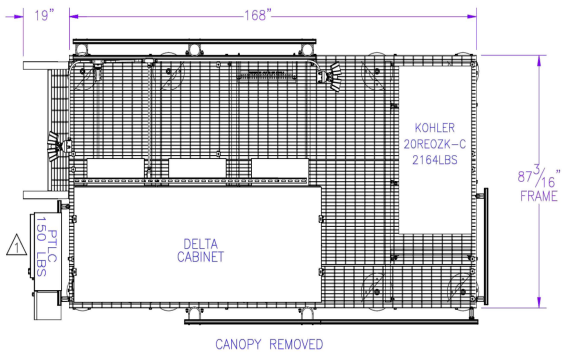
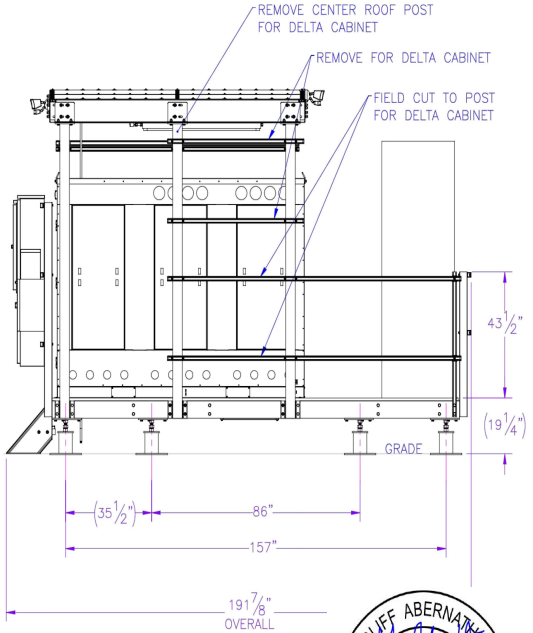
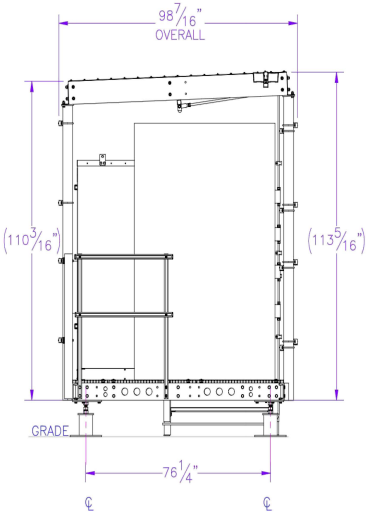
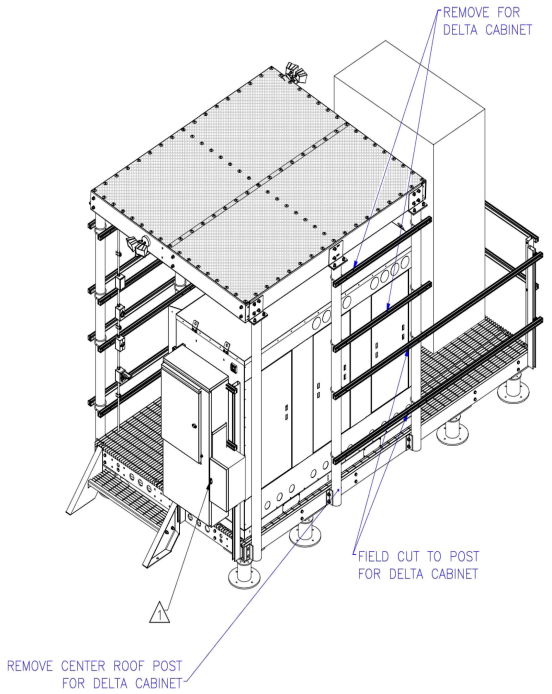
REVISIONS				
REV.	DESCRIPTION	DATE	BY	APPROVED
1	REPLACED PTLC-MTS WITH PTLC-ATS	01.22.2019	RLWJr	

SALES









SURFACE FINISH √ UNLESS OTHERWISE SPECIFIED	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVALS	DATE	ELECTRO MECHANICAL INDUSTRIES, INC. 11230 NEESHAW DRIVE HOUSTON, TEXAS 77065 1-800-453-0050
MATERIAL SEE PARTS LIST	TOLERANCES .0 ± .06 .00 ± .01 .000 ± .005	DRAWN RLWJr	01.14.2019	TITLE: 87"X168" BOLT TOGETHER PLATFORM GRAVITY MOUNT W EXPANDED METAL CANOPY SALES
THIRD ANGLE PROJECTION	FRACTIONS ± 1/16	CHECKED		
	ANGLES ± .25°	ENGINEER/DESIGNER		
	HOLES:	PRODUCTION		
NEXT ASSY / USED ON	DRILLED OR PUNCHED +1/32			SIZE B DRAWING NO. 1000-0010-0131 REV 1
APPLICATIONS	BURNED +1/32			SCALE: 1:40 WEIGHT: 3413.3 lbs. SHEET 1 OF 1

CLIFF ABERNATHY
NEW MEXICO
22991
3-19-21
PROFESSIONAL ENGINEER

1 / D-15 GRAVITY MOUNT PLATFORM FOR WUC

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
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SHEET DESCRIPTION

GRAVITY PLATFORM DETAILS

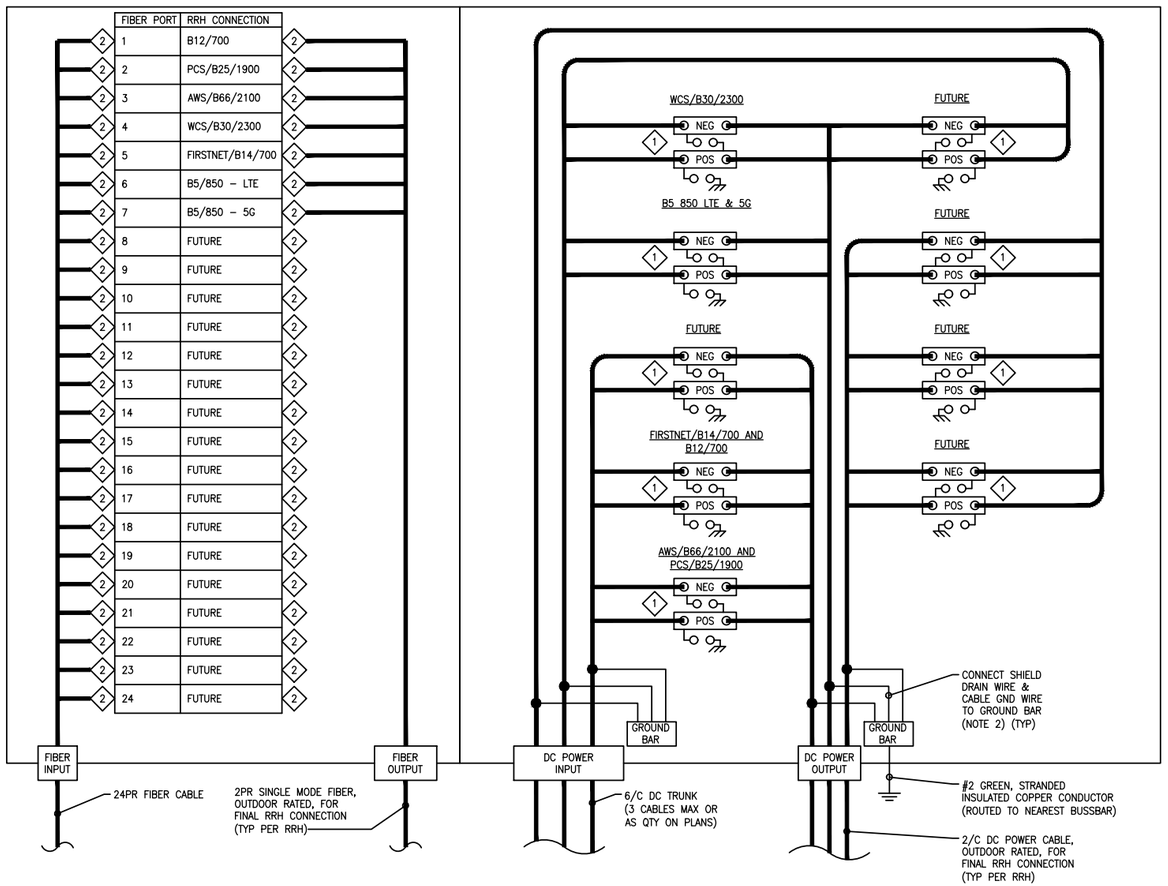
SHEET NO.

D-15

DC9 FIBER CONNECTIONS

FIBER PORT	RRH CONNECTION
1	B12/700
2	PCS/B25/1900
3	AWS/B66/2100
4	WCS/B30/2300
5	FIRSTNET/B14/700
6	B5/850 – LTE
7	B5/850 – 5G
8	FUTURE
9	FUTURE
10	FUTURE
11	FUTURE
12	FUTURE
13	FUTURE
14	FUTURE
15	FUTURE
16	FUTURE
17	FUTURE
18	FUTURE
19	FUTURE
20	FUTURE
21	FUTURE
22	FUTURE
23	FUTURE
24	FUTURE

DC9 DC POWER CONNECTIONS



NOTES:
1. TRUNK GLAND KITS:
   - TRUNK GLAND KIT A: OVAL GASKET FOR #4 AND #6AWG TRUNK (CEQ. 21428)
   - TRUNK GLAND KIT B: OVAL GASKET FOR (2) #4 AWG TRUNKS (CEQ. 21429)
   - TRUNK GLAND KIT C: OVAL GASKET FOR (2) #8 AWG TRUNKS (CEQ. 21434)
2. WHEN SHIELDED CABLE IS USED CONNECT CABLE SHIELD DRAIN WIRE AND GROUND WIRE TO GROUND BAR.
3. FIRST SQUID INSTALLED WILL BE ALARMED TO THE LOWEST BAND (OR FIRST INSTALLED) RRH ON ALPHA SECTOR. IN THE EVENT THE ALARM CABLE CANNOT BE CONNECTED TO ALPHA IT WILL BE ACCEPTABLE TO ALARM TO THE CLOSEST PHYSICAL SECTOR ON AN EXCEPTION BASIS.
4. 2ND SQUID INSTALLED WILL BE ALARMED TO THE LOWEST BAND (OR FIRST INSTALLED) RRH ON BETA SECTOR.
4. 3RD SQUID INSTALLED WILL BE ALARMED TO THE LOWEST BAND (OR FIRST INSTALLED) RRH ON GAMMA SECTOR.
5. AN RRH WILL NEVER HAVE MORE THAN ONE SQUID ALARMED ON IT.
6. SQUID ALARMS ARE NOT TO BE DAISY CHAINED.

◇2 = LC CONNECTOR

◇1 = STRIKESORB PROTECTION MODULE BY RAYCAP

1 / D-15 DC SURGE SUPPRESSION SYSTEM

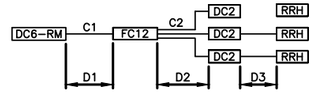


FIGURE 1 – TRUNK CABLE TO JUNCTION BOX

MAXIMUM CABLE LENGTHS FOR FIGURE 1

C1 SIZE	C2 SIZE	D2 LENGTH (FT.)	D1 LENGTH (FT) 75	100	125	150	175	200	
8AWG	8AWG		191	166	141	116	91	66	250
	10AWG		119	103	88	72	56	41	16
	12AWG		75	65	55	45	36	26	10
10AWG	8AWG		145	105	65	25	–	–	6
	10AWG		90	65	40	15	–	–	–
	12AWG		57	41	25	10	–	–	–
12AWG	8AWG		75	11	–	–	–	–	–
	10AWG		47	7	–	–	–	–	–
	12AWG		29	4	–	–	–	–	–

CABLE C3 MAY BE EITHER 10AWG OR 12AWG. LENGTH D3 IS 16 FEET ALL CASES

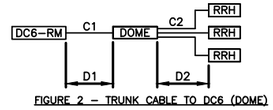


FIGURE 2 – TRUNK CABLE TO DC6 (DOME)

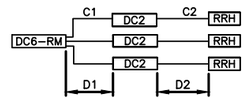


FIGURE 3 – DIRECT CABLE TO DC2

MAXIMUM CABLE LENGTHS FOR FIGURES 2 AND 3

D1/D2 LENGTH (FT)			
CABLE	8 AWG	10 AWG	12 AWG
C1	265	165	104
C2	16	16	16

NOTES:
1. CABLES LENGTHS ARE APPLICABLE FOR ALU 700MHZ & AWS FREQUENCY RRH MODELS.
2. NOMINAL SYSTEM VOLTAGE IS –48V DC, SUPPLIED FROM A 48V BATTERY. NORMAL OPERATING VOLTAGE IS 52V.
3. CABLE LENGTHS BASED ON ROSENBERGER CABLES.

2 / D-15 LTE CONDUCTOR SIZES

3 / D-15 NOT USED

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SHEET DESCRIPTION

CONNECTION DIAGRAM AND CONDUIT SIZES

SHEET NO.

D–16

AT&T New Site Build: Desert Southwest Market (DSW) External Alarming Template: ARIZONA/NEW MEXICO v1.0 4/7/17

Indoor Alarm Block #1: Positions 1-16 (+9 vacant positions)			
Alarm # (pair)	Normal Contact State (NC or NO)	AT&T Alarm Label/Verbiage	Comments or Factory Alarm
1	NC	RBS PNC DC MJ	MAJOR
2	NC	RBS PNC DC MN	MINOR
3	NC	RBS SIDE LIGHT FAILURE	MAJOR
4			
5	NC	RBS PWR AC SPD	MAJOR
6	NC	RBS GMA FAIL	MAJOR
7	NC	RBS TWR LIGHT BEACON FAIL	CRITICAL
8			
9			
10	NC	RBS TWR STROBE LIGHT FAIL	CRITICAL
11	NC	RBS PNC FUSE FAIL	MAJOR
12		RBS TMA PDU FUSE FAIL	MAJOR
13	NC	RBS RXAIT FAIL	CRITICAL
14			
15	NC	RBS LTE RRU AT DC SYS SPD	MAJOR
16	NC	RBS HYDROGEN DETECTED	CRITICAL
Vacant			
Vacant			
Vacant			
Vacant			
Vacant			
Vacant			
Vacant			
Vacant			
Vacant			

Indoor Alarm Block #2: Positions 17-32 (+9 vacant positions)			
Alarm # (pair)	Normal Contact State (NC or NO)	AT&T Alarm Label/Verbiage	Comments or Factory Alarm
17	NC	RBS INTRUSION	MAJOR
18	NC	RBS SMOKE	CRITICAL
19	NC	RBS COMMERCIAL POWER FAIL	CRITICAL
20	NC	RBS HVAC 1 FAIL	CRITICAL
21	NC	RBS HVAC 2 FAIL	CRITICAL
22	NC	RBS TEMP HIGH	CRITICAL
23	NC	RBS DC RECT MJ	MAJOR
24	NC	RBS DC RECT MN	MAJOR
25	NC	RBS BATT ON DISCHARGE	CRITICAL
26	NC	RBS DC HIGH VOLT	CRITICAL
27	NO	RBS GENERATOR FUEL LEAK	CRITICAL
28	NO	RBS GENERATOR RUNNING	MAJOR
29	NO	RBS GENERATOR FUEL LOW	CRITICAL
30	NO	RBS GENERATOR FAIL	CRITICAL
31	NO	RBS GENERATOR THEFT	CRITICAL
32	NO	RBS GENERATOR MJ	MAJOR
Vacant			
Vacant			
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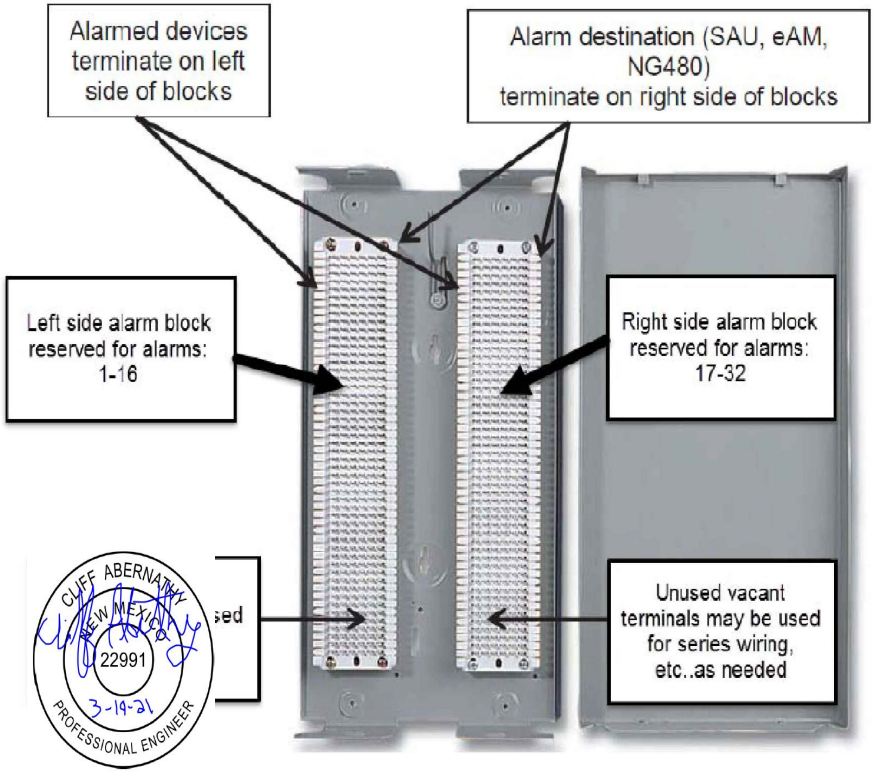
Vacant			

Shelter OEM installed 50 pair 3x3 66 blocks



1 D-17 LTE ALARM BLOCK ASSIGNMENTS

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LTE ALARM BLOCK ASSIGNMENTS

SHEET NO.

D-17

GROUNDING NOTES

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS.
2. ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
3. GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
4. ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE CONNECTIONS: EXOTHERMIC WELD TYPE.
5. GROUND RING SHALL BE LOCATED A MINIMUM OF 30" BELOW GRADE OR 6" MINIMUM BELOW THE FROST LINE, WHICH EVER IS DEEPER.
6. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.
7. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
8. GROUND BARS:
   A. EQUIPMENT GROUND BUS BAR (EGB) LOCATED AT BOTTOM OF ANTENNA POLE/MAST FOR MAKING GROUNDING JUMPER CONNECTIONS TO COAX FEEDER CABLES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. JUMPERS (FURNISHED BY OWNERS) SHALL BE INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.

   B. MAIN GROUND BUS BAR (MGB) LOCATED NEAR THE BASE OF THE RADIO EQUIPMENT CABINET(S) SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
9. ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
10. OBSERVE N.E.C. AND LOCAL UTILITY REQUIREMENTS FOR ELECTRICAL SERVICE GROUNDING.
11. GROUNDING ATTACHMENT TO TOWER SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS OR AT GROUNDING POINTS PROVIDED (2 MINIMUM).

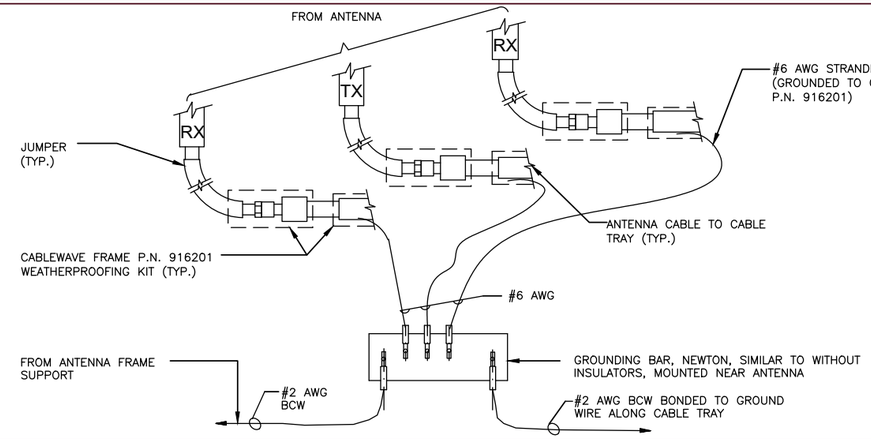
GROUNDING LEGEND

GROUNDING LINE TYPE:

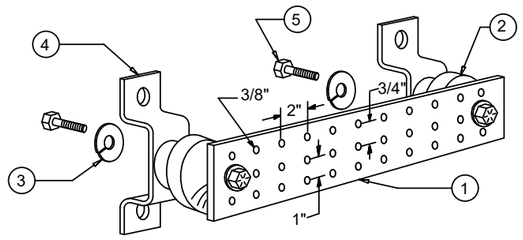
NEW CONDUIT	
POWER	
GAS	
GROUNDING	
WATER	
STREET LIGHT	
SEWER	
OVERHEAD POWER / TELCO	OHT/OHP
OVERHEAD POWER	OHP
OVERHEAD TELCO	OHT
FIBER	
STORM DRAIN	

GROUNDING SYMBOLS:

- 5/8" X 10'-0" .CU. GND ROD IN TEST WELL 30" MIN. BELOW GRADE.
- CHEMICAL GROUND ROD (XIT GROUND ROD)
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- HALO GROUND CONNECTION
- GROUND BAR



1 / G-1 ANTENNA CABLE GROUND



1- TINNED COPPER GROUND BAR, 1/4"x4"x20", NEWTON INSTRUMENT CO. CAT. NO. B-6142 OR EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.

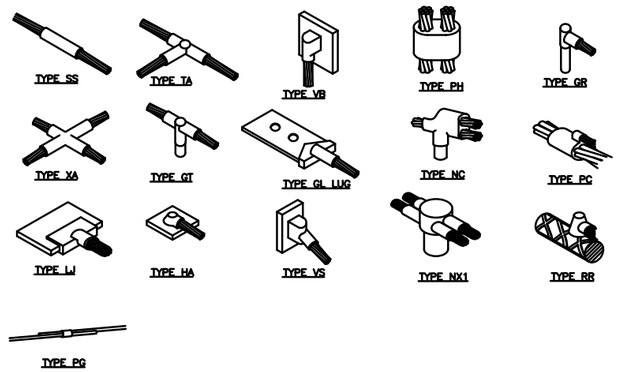
2- INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4

3- 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8

4- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-5056

5- 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1

2 / G-1 MASTER GROUND BAR



3 / G-1 CADWELDS

AT&T
1355 WEST UNIVERSITY DRIVE
MESA, AZ 85201

md7
10590 WEST OCEAN AIR DRIVE SUITE 300
SAN DIEGO, CA 92130

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
D	03/02/20	UPDATED AS PER REMARKS	VEN
E	03/04/20	UPDATED AS PER REMARKS	AVP
F	04/06/20	UPDATED AS PER REMARKS	AVP
G	04/24/20	UPDATED AS PER REMARKS	AVP
H	05/13/20	UPDATED AS PER REMARKS	AVP
0	05/28/20	ISSUE FOR CONSTRCUTION	AVP
1	10/22/20	UPDATED AS PER REMARKS	AVP
2	03/18/21	UPDATED AS PER REMARKS	ARS

CLIFF ABERNATHY NEW MEXICO 22991 PROFESSIONAL ENGINEER

SITE INFORMATION

SITE ID:
NML00255
SITE NAME:
SJC PARKING LOT
FA #: 14623999
USID #:
275858
SITE ADDRESS:
1160 CAMINO DE CRUZ BLANCA, SANTA FE, NM 87505
COUNTY:
SANTA FE COUNTY

SHEET DESCRIPTION

GROUNDING PLANS, DETAILS & NOTES

SHEET NO.

G-1