

Field Observation Report

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To: Jeanne Wolfenbarger
 City of Santa Fe Traffic Engineer
 737 Agua Fria Street
 Santa Fe, NM 87501

Report Date	04/03/2025, Thursday	AECOM Inspector	Seth McVey, PE
Report Number	Report No. 1	Contractor	Concrete Coring Company
CoSF Project Number	N/A	Contractor	Terracon
NMDOT Bridge Number	Bridge No. 8388	Contractor	RoadSafe

Hours Observed: 8:00 am – 12:00 pm (4/3/2025)

Weather – 4/3/2025

High: 60° F & **Low:** 35° F **Conditions:** Sunny

I. PURPOSE:

As part of AECOM’s agreement with the City of Santa Fe for Construction Engineering and Inspection services for the bridge carrying Cerro Gordo Rd over the Santa Fe River (Bridge No. 8388), AECOM and its subconsultant performed concrete coring services of the bridge superstructure on April 3, 2025. These deck cores were taken to evaluate the condition of the existing bridge to determine if the extent of repairs detailed in the repair scoping report, developed by WSP dated 6/25/2024, are sufficient. Five (5) concrete cores were taken at the following locations:

1. Southwest corner: ~2’-7” from west edge of deck (EOD) and ~6’-7” from the south abutment,
2. Southwest corner: ~5’-0” from west EOD and ~6’-7” from the south abutment
3. Midspan of center girder: ~10’-2” from west EOD and ~13’-6” from the south abutment
4. Midspan of west girder: ~2’-7” from west EOD and ~13’-6” from the south abutment
5. Northeast corner: ~5’-0” from east EOD and ~5’-0” from the north abutment

II. EOR OBSERVATIONS:

See attached photo log and descriptions.

III. INSPECTION SUMMARY:

AECOM performed an cursory inspection of the bridge deck prior to the coring and found the bridge condition to be consistent with the descriptions reflected in the 12/4/2023 NMDOT Bridge Inspection Report (BIR), which noted severe scaling, spalling, exposed rebar, and section loss.

The 2023 BIR indicated severe spalling, delamination, scaling, and exposed reinforcement with section loss of the top flange of the girder along both exterior faces of the exterior girders. AECOM observed these defects and found that the defects have worsened (see **Photos 6 & 12-16**). The bridge railing posts are

compromised because of the lack of integrity of concrete holding the posts in place (see **Photos 17 & 18**). The condition of the bridge rails was observed to be in general conformance with the most recent inspection report (see **Photo 19**). The girder soffit was observed by AECOM to exhibit minor to severe efflorescence (see **Photo 9**), particularly at the joints between the girders (see **Photos 7 & 8**). The condition of the masonry abutments was observed to be consistent with the 2023 BIR, with moderate mortar loss, broken rocks, water staining, cracks, and efflorescence (see **Photos 10 & 11**).

In addition to the observations noted above, the cores revealed that the condition of the concrete of the exterior girders is poor. The cores attempted at the southwest corner of the bridge (west girder near the south abutment, cores #1 & 2) were inadequate due to the concrete spalling and crumbling during drilling (see **Photos 24 & 29**). A 5" long core (core #3) was obtained near midspan of the center girder (see **Photo 25**). The concrete of this core appears to be in fair condition; however, Terracon will verify the concrete strength at location #3 with further testing of this core. The concrete core taken near the midspan of the west girder and west EOD (core #4) showed delamination in the concrete up to a depth of approximately 8" into the girder (see **Photo 26**). The core at the northeast corner (core #5) also exhibited poor concrete, as the concrete spalled and crumbled during drilling. This location, however, showed that for approximately 2" of the concrete at the bottom of the 11" core was intact (see **Photo 28**).

Prepared by:



Seth McVey, PE | Bridge Engineer

4/7/2025

Date

Checked by:



Gregory Gonzales | Bridge Engineer

4/7/2025

Date

EOR Acceptance:



Richard Rotto, P.E. | Vice President

4/7/2025

Date

Copies to:

City of Santa Fe Project Manager: Jeanne Wolfenbarger

CITY OF SANTA FE PROJECT No.: N/A
 INSPECTION DATE: 4/3/2025

BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
 LOCATION: BRIDGE SITE



Photo No.	1	
Location	Northeast Corner of Bridge (looking Southwest)	
Description	East Elevation	

Photo No.	2	
Location	Northwest Corner of Bridge (looking Southeast)	
Description	West Elevation	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	3	
Location	North Approach (looking Down and South)	
Description	Typical Deck	

Photo No.	4	
Location	North End of Bridge (looking North)	
Description	North Approach Roadway	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	5	
Location	South End of Bridge (looking South)	
Description	South Approach Roadway	

Photo No.	6	
Location	Southwest Edge of Deck (looking East)	
Description	Severe Spalling Exposing Reinforcement with Corrosion and Section Loss	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	7	
Location	Deck Soffit, Joint Between West Girder and Center Girder at South End (looking Up and North)	
Description	Severe Efflorescence & Minor to Moderate Abrasion	

Photo No.	8	
Location	Deck Soffit, Joint Between East Girder and Center Girder at South End (looking Up and North)	
Description	Severe Efflorescence & Minor to Moderate Abrasion	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	9	
Location	Southwest Corner of Bridge, Under Bridge (looking Up and Northwest)	
Description	Typical Deck Soffit	

Photo No.	10	
Location	South Abutment (looking North)	
Description	Typical North Abutment	

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Photo No.	11	
Location	North Abutment (looking South)	
Description	Typical South Abutment	

Photo No.	12	
Location	Northeast Edge of Deck (looking West)	
Description	Severe Spalling Exposing Reinforcement with Corrosion and Section Loss	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	13	
Location	East Edge of Deck Near Midspan (looking Up and North)	
Description	Typical Condition of Edge of Deck Soffit	

Photo No.	14	
Location	West Edge of Deck Near Midspan (looking Up and South)	
Description	Typical Condition of Edge of Deck Soffit	

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Photo No.	15	
Location	West Edge of Deck Near Midspan (looking Up and North)	
Description	Typical Condition of Edge of Deck Soffit	

Photo No.	16	
Location	East Edge of Deck Near Midspan (looking Up and South)	
Description	Typical Condition of Edge of Deck Soffit	

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Photo No.	17	
Location	Northeast Corner of Bridge (looking Down and Southwest)	
Description	Typical Condition of Railing Base Plate	

Photo No.	18	
Location	Southwest Corner of Bridge (looking Down and Northeast)	
Description	Typical Condition of Railing Base Plate	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	19	
Location	Bridge Deck (looking Northeast)	
Description	Typical Condition of Railing	

Photo No.	20	
Location	Southwest Corner of Bridge (looking Down and West)	
Description	Southwest Coring Location #1	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	21	
Location	West Girder Near Midspan (looking Down and West)	
Description	West Coring Location #4	

Photo No.	22	
Location	Northeast Corner of Bridge (looking Down and East)	
Description	Northeast Coring Location #5	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	23	
Location	Center of Center Girder Near Midspan (looking Down and West)	
Description	Coring Location #3	

Photo No.	24	
Location	Southwest Corner of Bridge, Coring #1 (looking Down and West)	
Description	Condition of Concrete After Coring, Concrete Observed to Not Hold Together to Obtain a Core	

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Photo No.	25	
Location	N/A	
Description	Core #3 from Center of Bridge at Center Girder	

Photo No.	26	
Location	N/A	
Description	Core #4 from Near Midspan of West Girder at West Edge of Deck	

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Photo No.	27	
Location	Northeast Corner of Bridge (looking Down and East)	
Description	Condition of Concrete After Coring #5, Concrete Observed to Not Hold Together to Obtain a Core	

Photo No.	28	
Location	N/A	
Description	Core #4 from Northeast Corner of Bridge	

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BRIDGE NAME: CERRO GORDO RD. OVER SANTA FE RIVER
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Photo No.	29	
Location	Southwest Corner of Bridge (looking North)	
Description	Core #1 Concrete in Drill	