
APPENDIX A3

**Construction Inspection Report
Mountain View Overcrossing
Bridge Penetration**

**Construction Inspection Report
for
Newmark OU Remedial Action
Newmark Groundwater Contamination Superfund Site
South Transmission Pipeline
Mountain View Overcrossing Bridge Penetration**

DRAFT

Prepared for:

**Contract No. 68-W-98-225 / WA No. 015-RARA-09J5
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105**

Prepared by:

**URS Group, Inc.
2520 Ventura Oaks Way, Suite 250
Sacramento, California 95833**

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1.0 INTRODUCTION

This report is a summary of field inspections performed during the construction of the Newmark South Pipeline Mountain View Avenue Overcrossing.

The pipeline construction inspection was performed by URS Group, Inc. (URSG) for the United States Environmental Protection Agency (USEPA). URSG performed the inspection under contract number 68-W9-0054 and work assignment number 54-47-9NJ5.

• JOB DESCRIPTION

The Mountain View Overcrossing is part of the South Transmission Pipeline which connects a series of five extraction wells to a granular activated carbon (GAC) water treatment plant. The water treatment plant removes organic contaminants from the water delivered by the pipeline.

The Mountain View overcrossing is located over the Route 30 Freeway, between 29th Street and 30th Street. The overcrossing consists of a 20-inch TR-Flex ductile iron pipe (DIP) CL 53, encased in a 30-inch steel pipe supported by concrete saddles in the interior of the box girder concrete bridge. This section of pipe in the bridge connects a pipeline on each side of the bridge, which was installed under a separate contract.

William P. Young, Inc. (W.P. Young) was procured and contracted by URSG to complete the construction.

2.0 CONSTRUCTION SUMMARY

2.1 TASKS COMPLETED

March 1998

- The Notice to Proceed was dated March 27, 1998.

March 1998

- The Notice to Proceed was dated March 27, 1998.

April 1998

- A preconstruction meeting was held on April 2.
- During the week ending April 10, traffic control structures were installed and temporary stripping was completed.
- W.P. Young mobilized equipment on April 13.
- On April 14, W.P. Young excavated the south side of the bridge, placed 1 foot of gravel in the bottom of the excavation, and installed two steel trench safety shields.
- Access holes in the bridge deck were cut and the forms were removed from the bridge interior by April 14.
- Core drilling through the bridge commenced on April 20.
- On April 23, the center bent cap supporting bolster was poured.
- The concrete pipe support saddles were poured on April 23.

May 1998

- Core drilling of the 32-inch penetrations was completed on May 4.
- On May 16, W.P. Young started pulling the 30-inch casing through the bridge and was completed on May 18.
- W.P. Young began pushing the 20-inch DIP through the steel casing on May 29, and was finished on May 30.

June 1998

- A hydrostatic test was performed on June 4.
- On June 6, concrete was poured to patch the access holes in the bridge deck.

2.2 PROBLEMS ENCOUNTERED AND RESPECTIVE SOLUTIONS

April 1998

- On April 14, when excavating near the south bridge abutment, an electrical conduit was encountered. The conduit was temporarily relocated to allow construction to continue. When construction was completed, the conduit was replaced in its original position and painted with heavy galvanized paint in accordance with a California Department of Transportation (Cal Trans) request.
- Core drilling of the bent cap started April 16, and was shut down on the April 22 because of concerns of structural damage that might occur if the hole was completed before the bent cap bolster was installed. Costs were incurred because the coring equipment could not be realigned after pulling off and remounting, therefore the remainder of the coring was performed by hand.

May 1998

- There was shortage of supply of 20-foot TR-Flex DIP and none was available until May 28. The project completion time was extended seven working days to accommodate their delay.
- The three redwood skids that were to be used on the 20-inch DIP were too large to fit into the steel casing. By removing the top skid and spreading the bottom two apart, the DIP was able to fit properly within the steel casing.

2.3 QUALITY ASSURANCE TEST SUMMARY

2.3.1 Compaction Testing

Soil compaction tests were taken by CHJ, Inc. (CHJ), a certified independent testing laboratory. CHJ performed tests of the trench backfill and paving base. All of the compaction tests were taken with a nuclear density gauge, using the Nuclear Density Gauge method per ASTM standard D 2922. All of the compaction tests passed. Compaction test results are contained in Appendix A.

2.3.2 Hydrostatic Testing

The hydrostatic test was performed on all newly installed pipelines according to The City of San Bernardino Municipal Water Department (SBMWD) Specification No. 1292, Section 6-1.1. All pipelines tested passed the hydrostatic test.

2.3.3 Concrete Testing

Concrete tests were performed by CHJ. Cylinders were taken during the pour of the center bent cap bolster and the bridge deck repair. The compressive strength tests were performed according to ASTM C39 Standard Method for Testing Compressive Strength of Cylindrical Concrete Specimens. The slump tests were performed according to ASTM C143, Standard Test Method for Slump of Hydraulic Cement Concrete. Concrete test results are contained in Appendix B.

2.4 AGENCY INVOLVEMENT

The following agencies were involved in the construction of the Mountain View Avenue Overcrossing pipeline:

1. Cal Trans inspected all bridge structural modifications.
2. SBMWD was responsible for inspection of the pipeline, purchasing construction materials, and approving the compaction, hydrostatic, and concrete testing.
3. The City of San Bernardino Public Works Department was responsible for traffic control inspection and road inspection. This included traffic control permits, asphalt compaction and subgrade compaction.

2.5 CHANGE ORDER SUMMARY

The three change orders issued during the contract are found in Appendix C.

2.6 PUNCH LIST ITEMS

Three punch list items were outstanding upon final inspection. The items included the following:

1. Repair one broken sprinkler head
2. Provide hydro-seed in the work area
3. Remove the portable toilet

W.P. Young successfully completed the contract by completing the punch list items.

2.7 CONCLUSION

The scope of work associated with the South Pipeline Mountain View Avenue Overcrossing was completed according to the plans and specifications. The pipeline was ready for use pending the South Plant start-up.

Appendix A
Construction Inspection Report
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Compaction Test Results

FIELD COMPACTION TEST SUMMARY SHEET

PROJECT: URS GREINER, INC. CALIFORNIA - WATER LINE TRENCH BACKFILL AND FINISH GRADE, MOUNTAIN VIEW AVENUE, SAN BERNARDINO, CALIFORNIA

Job No. 97722-1
Sheet 1 of 1

Date	Test No.	Location of Test	Depth Of Cut (ft.)	Depth Of Fill (ft.)	Depth Of Test (ft.)	DENSITIES			MC (%)	Soil Type	Remarks or Retest of
						Dry (lbs./cu. ft.)	Max. (lbs./cu. ft.)	Rel. (%)			
6/4/98	BF-1	Mt. View, S. of 30 Freeway		2.0	0.0-0.5	121.3	124.0	98	8.5	2	
6/7/98	FG-1	Mt. View, S. of 30 Freeway			0.0-0.5	118.4	123.0	96	10.9	7	
	BF-2	Mt. View at 30th Street		4.5	1.5-2.0	115.7	124.0	93	12.0	2	
	FG-2	Mt. View at 30th Street			0.0-0.5	119.2	123.0	97	11.7	7	

EGEND: (SG) Tests on Subgrade Elevation; (BF) Tests on Backfill; (FP) Tests on Fill in Progress; (FG) Tests on Finish Grade Elevation; (MC) Moisture Content; (RX) Rock Corrected; (*) Denotes Failure

Appendix B
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Concrete Test Results

Concrete Test Results

Date Cast	Location	Cylinder Number	Date Tested	Age Tested (days)	Total Load (lbs)	Compressive Strength (psi)	Slump (inches)
4/23/98	Center reinforcing bolster, south side	85721	4/30/98	7	109,190	3,860	4.5
4/23/98	Center reinforcing bolster, south side	85722	5/21/98	28	152,610	5,400	4.5
4/23/98	Center reinforcing bolster, south side	85723	5/21/98	28	155,400	5500	4.5
4/23/98	Center reinforcing bolster, south side	85724	4/27/98	4	90,650	3210	4.5
6/5/98	Bridge Deck repair holes	87081	6/12/98	7	120,540	4260	5
6/5/98	Bridge Deck repair holes	87082	7/3/98	28	172,060	6090	5
6/5/98	Bridge Deck repair holes	87083	7/3/98	28	177,990	6300	5

Appendix C
Construction Inspection Report
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Change Orders

URS Greiner, Inc. - California
MODIFICATION

Contract Number
SC-98-F-0103
MOD # 01

PR#: 98-0103

Project # 62470.20.20

Site Name: ARCS-Lorentz

Contractor/Vendor Name, Address, & Phone No.:

William P. Young Construction, Inc.
426 Lincoln Center Drive
Foster City, CA 94404
Phone: (650) 377-0480

The contractor/vendor hereby accepts the offer represented by this modification and is subject to, and agrees to perform, according to all of its terms and conditions set forth herein. The individual signing this agreement must be authorized by the company's Board of Directors, Partners, etc., to contractually bind the company.

Issued By / Bill To:

URS Greiner, Inc. - California
2710 Gateway Oaks Dr., Suite 250 North
Sacramento, CA 95833
Attn: Jamie Babby
Phone: (916) 569-5525
Fax: (916) 929-8944

Signature

Date

Type/Print Name

Type/Print Title

Signature

Effective Date

Robert C. Leighton
Program Administrator

- a. This modification is written to increase the number of schedule days.
- b. Amend PART I - THE SCHEDULE, clause F.2, PERIOD OF PERFORMANCE, paragraph (b) to
- c. All other terms and conditions remain the same.

