ADDENDUM NO. 2

TO
BID PROPOSAL
AND SPECIFICATIONS
FOR

Wilbur Avenue Overhead Widening
P.W. 259-B

ISSUED: September 13, 2012

THE BID OPENING DATE HAS BEEN CHANGED TO OCTOBER 4, 2012 AT 2:00 PM

This Addendum No. 2 must be signed by the bidder and attached to the CONTRACT PROPOSAL PACKAGE for consideration by the City. The City reserves the right to disregard any proposal, which does not include this Addendum. The City may waive this requirement at its sole discretion.

SEE ATTACHED ADDENDUM ITEMS

Prepared By:

Ahmed Abu-Aly, P.E.

BIDDER'S CERTIFICATION

I acknowledge receipt of this Addendum No. 2 and accept all conditions contained herein.

_____

Bidder's Signature **Date**

_____

Name of Company

ADDENDUM NO. 2: Wilbur Avenue Overhead Widening
P.W. 259-B

ISSUED: September 13, 2012

Bid Book:

Item 1: The signed C&M Agreement with BNSF is attached to this addendum.

Item 2: A hard copy of the Federal Minimum Wage Rates is attached to this addendum.

Special Provisions:

Item 1: Notice to Bidders *(pg. 1)*

The Bid Opening date has been changed to October 4, 2012 at 2:00pm and the deadline for submissions of questions and clarifications concerning the Contract Documents has changed to September 27, 2012 at 5:00pm.

Item 2: Section 3 Award and Execution of Contract *(pg. 16)* third paragraph shall be amended as follows:

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose bid complies with all the requirements prescribed. The award, if made, will be made within 60 days after the opening of the proposals. This period will be subject to extension for such further period as may be agreed upon in writing between the City and the bidder concerned.

Item 3:

a. Section 5-1.19 Burlington Northern Santa Fe Railroad Coordination General *(pg.30)*: Second paragraph shall be amended as follows:

The Contractor must take top of rail survey shots through the construction area at the end of each day that pile driving takes place within twenty-five (25) feet of the tracks. The Contractor shall monitor and record top of rail and track alignment. The movement shall be within the limits defined by local Railroad Manager of Track Maintenance (MTM). Displacements exceeding the limits defined by the MTM must be immediately reported to the Railroad. The track shall be adjusted as necessary at the expense of the Contractor.

b. Section 5-1.19 Burlington Northern Santa Fe Railroad Coordination Fourth Quarter Shutdown *(pg. 31)*: shall be amended as follows:

No work activities within the Railroad Right of Way or that have potential to foul the tracks are permitted between October 1 and December 31.

Attention is directed to Section 10-1.17 "Obstructions" of these special provisions for the description of the 4th Quarter Shutdown.

Item 4: Section 5-1.20 Monthly Employment Report (American Recovery and Reinvestment Act) *(pg. 32)* has been deleted.

Item 5: Section 7-1.12 Indemnification and Insurance *(pg. 39)*: Section C. Workers' Compensation/ Employer's Liability Insurance shall be amended as follows:

The Contractor shall procure Worker's Compensation Insurance as required by the State of California, (self insurance in accordance with the laws of the State of California for State Worker's Compensation is acceptable at Contractor's option). In addition, Contractor shall procure Employers' Liability Insurance, which shall be not less than: (1) Two Million Dollars ($2,000,000) for each accident for bodily injury by accident; (2) Two Million Dollars ($2,000,000 policy limit for bodily injury by disease; and (3) Two Million Dollars ($2,000,000) for each employee for bodily injury by disease.

Item 6: Section 10-1.03 Construction Surveying and Staking *(pg. 56)*: last paragraph shall be amended as follows:

The contract lump sum price paid for construction staking shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in performing the surveys, including all preparation and calculations, in conformance with the Caltrans Surveys Manual, these special provisions, and as directed by the Engineer.

Item 7: Section 10-1.17 Obstructions *(pg. 127)*: 5th paragraph shall be amended as follows:

No work activities within the Railroad Right of Way or that have potential to foul the tracks are permitted between October 1 and December 31. This period shall be defined as the "4th Quarter Shutdown." During this 4th Quarter Shutdown the project will remain active and working days shall not be suspended.

Item 8: Section 10-1.35 Earth Retaining Structures (MSE Wall) *(pg. 184)*: Measurement and Payment shall be amended as follows:

Earth Retaining Structure (MSE Wall) will be measured and paid for by the square foot. Regardless of the type of Earth Retaining Structure (MSE Wall) actually constructed, the square foot area for payment will be based on the length and vertical height of each section of system shown on the plans that was or would have been constructed. The vertical height of each section will be taken as the difference in elevation on the outer face from the bottom of the lowermost face element or top of footing to the top of wall profile. The soil reinforcement base width shown on the plans is based on the standard Caltrans Mechanically Stabilized Embankment design. If the Contractor elects to use an Acceptable Alternative Earth Retaining System the soil reinforcement base width may vary and no additional compensation will be made therefor.

The contract price paid per square foot for Earth Retaining Structure (MSE Wall) at each location shown on the plans shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the Earth Retaining Structure (MSE Wall) and inspection elements, including earthwork, leveling pad, coping, bearing pads, and drainage systems, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Full compensation for structure excavation and structure backfill that is identified on the Mechanically Stabilized Embankment plans shall be included in the contract price paid per square foot for Earth Retaining Structure (MSE Wall), and no separate payment will be made therefor.

Full compensation for furnishing and testing sample mechanical connectors shall be considered as included in the contract price paid per square foot for Earth Retaining Structure (MSE Wall), and no separate payment will be made therefor.

Full compensation for revisions to the barrier support, drainage system, or other facilities made necessary by the use of an alternative earth retaining system shall be considered as included in the contract price paid per square foot for Earth Retaining Structure (MSE Wall), and no separate payment will be made therefor.

The contract price paid per cubic yard for structural concrete, barrier slab shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the barrier slab, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Item 9: Section 10-1.55 Clean and Paint Structural Steel *(pg. 225)* shall be replaced with the following:

10-1.55 CLEAN AND PAINT STRUCTURAL STEEL

New metal surfaces and connections to existing steel shall be cleaned and painted in conformance with the provisions in Section 59-2, "Painting Structural Steel," Section 59-3, "Painting Galvanized Surfaces," and Section 91, "Paint," of the Standard Specifications and these special provisions.

GENERAL

The existing paint systems consist of materials listed in "Existing Highway Facilities" of these special provisions.

Before performing any painting or paint removal, the Contractor shall submit to the Engineer, in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 3 copies of a separate Painting Quality Work Plan (PQWP) for each item of work for which painting or paint removal is to be performed. As a minimum, each PQWP shall include the following:

1. The name of each Contractor or subcontractor to be used.

2. One copy each of all current ASTM and "SSPC: The Society for Protective Coatings" specifications or qualification procedures applicable to the painting or paint removal to be performed. These documents shall become the permanent property of the Department.
3. A copy of the coating manufacturer's guidelines and recommendations for surface preparation, painting, drying, curing, handling, shipping, and storage of painted structural steel, including testing methods and maximum allowable levels for soluble salts.
4. Proposed materials, methods, and equipment to be used.
5. Proof of each of any required certifications, SSPC-QP 1, SSPC-QP 3.

    5.1. In lieu of certification in conformance with the requirements in SSPC-QP 2 for this project, the Contractor may submit written documentation showing conformance with the requirements in Sections 4.2 through 4.6 of SSPC-QP 2, Category A.

6. Proposed methods to control environmental conditions in accordance with the manufacturer's recommendations and these special provisions.
7. Proposed methods to protect the coating during curing, shipping, handling, and storage.
8. Proposed rinse water collection plan.
9. A detailed paint repair plan for the repair of damaged areas.
10. Procedures for containing blast media and water during application of coatings and coating repair of erected steel.
11. Examples of proposed daily reports for all testing to be performed, including type of testing, location, lot size, time, weather conditions, test personnel, and results.

Before submitting the PQWP, a pre-painting meeting between the Engineer, the Contractor, and a representative from each entity performing painting for this project shall be held to discuss the requirements for the PQWP.

The Engineer shall have 20 days to review the PQWP submittal after a complete plan has been received. No painting or paint removal shall be performed until the PQWP for that work is approved by the Engineer. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in reviewing the PQWP, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The Engineer's approval of the Contractor's PQWP shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications.

The Contractor shall provide enclosures to permit cleaning and painting during inclement weather. Provisions shall be made to control atmospheric conditions inside the enclosures within specified limits during cleaning and painting operations, drying to solvent insolubility, and throughout the curing period in accordance with the manufacturer's recommendations and these special provisions. Full compensation for providing and maintaining such enclosures shall be considered as included in the prices paid for the various contract items of work requiring paint and no additional compensation will be allowed therefor.

Fresh, potable water with a maximum chloride content of 75 ppm and a maximum sulfate content of 200 ppm shall be used for water rinsing or pressure washing operations. No continuous recycling of rinse water will be permitted. If rinse water is collected into a tank and

subsequent testing determines the collected water conforms to the specified requirements, reuse may be permitted by the Engineer if no collected water is added to the tank after sample collection for determination of conformance to specified requirements.

CLEANING

New metal surfaces and areas of connections to existing steel, except where galvanized, shall be dry blast cleaned and dry spot blast cleaned, respectively, in conformance with the requirements in SSPC-SP 10, "Near White Blast Cleaning," of the "SSPC: The Society for Protective Coatings." Blast cleaning shall leave surfaces with a dense, uniform, angular anchor pattern of no less than 1.5 mils nor more than 3.5 mils as measured in conformance with the requirements in ASTM Designation: D 4417.

The areas of connections to existing steel to be dry spot blast cleaned shall consist of, as a minimum:

1. New and existing contact surfaces and existing member surfaces under bolt heads, nuts or washers of high-strength bolted connections,
2. Exposed bare surfaces of existing steel remaining after trimming, cutting, drilling or reaming, and
3. Areas of existing steel within a 4-inch radius measured in any direction from the point of application of heat for welding or flame cutting.

The inside surfaces of bolt holes shall be cleaned in conformance with the requirements in SSPC-SP 1, "Solvent Cleaning," of the "SSPC: The Society for Protective Coatings," and visible rust shall be removed.

Mineral and slag abrasives used for blast cleaning steel surfaces shall conform to the requirements for Class A, Grade 2 to 3 abrasives contained in SSPC-AB 1, "Mineral and Slag Abrasives," of the "SSPC: The Society for Protective Coatings," and shall not contain hazardous material.

Steel abrasives used for blast cleaning steel surfaces shall comply with the requirements of SSPC-AB 3, "Ferrous Metallic Abrasive," of the "SSPC: The Society for Protective Coatings." If steel abrasive is recycled through shop or field abrasive blast cleaning units, the recycled abrasive shall conform to the requirements of SSPC-AB 2, "Specification for Cleanliness of Recycled Ferrous Metallic Abrasive," of the "SSPC: The Society for Protective Coatings."

A Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications and a Material Safety Data Sheet shall be furnished before use for each shipment of blast cleaning material for existing steel.

Abrasive blast cleaned surfaces shall be tested by the Contractor for soluble salts using a Class A or B retrieval method as described in Technology Guide 15, "Field Methods for Retrieval and Analysis of Soluble Salts on Steel and Other Nonporous Substrates," of the "SSPC: The Society for Protective Coatings," and cleaned so the maximum level of soluble salts does not exceed the lesser of the coating manufacturer's written recommendations or 10 micrograms per square centimeter. Areas of abrasive blast cleaned steel shall be tested at the rate of 3 tests for the first 1,000 square feet prepared per day, and one test for each additional 1,000 square feet or portion thereof, at locations selected by the Engineer. When less than 1,000 square feet of surface area is

prepared in a shift, at least 2 tests shall be performed. If levels of soluble salts exceed the maximum allowed by these special provisions, the entire area represented by the testing will be rejected. The Contractor shall perform additional cleaning and testing of rejected areas until soluble salt levels conform to these requirements.

Corners shall be chamfered to remove sharp edges.

Thermal cut edges (TCEs) to be painted shall be conditioned before blast cleaning by shallow grinding or other method approved by the Engineer to remove the thin, hardened layer of material resulting from resolidification during cooling.

Visually evident base metal surface irregularities and defects shall be removed in accordance with ASTM Designation: A 6 or AASHTO Designation: M 160 before blast cleaning steel. When material defects exposed by blast cleaning are removed, the blast profile shall be restored by either blast cleaning or by using mechanical tools in accordance with SSPC-SP 11, "Power Tool Cleaning to Bare Metal," of the "SSPC: The Society for Protective Coatings."

PAINTING

Blast cleaned surfaces shall receive a single undercoat consisting of an inorganic zinc rich primer conforming to the requirements in AASHTO Designation: M 300, Type I or Type II.

Inorganic zinc rich primer shall be selected from the Department's Pre-Qualified Products List.

The inside surfaces of bolt holes shall be painted with one application of a zinc rich primer (organic vehicle type) after the application of the undercoat of inorganic zinc on adjacent steel. The steel surfaces adjacent to the bolt holes shall be kept clean and protected from drippings during the application of the primer.

Inorganic zinc rich primer shall be used within 12 hours of initial mixing.

Application of inorganic zinc rich primer shall conform to the provisions in Section 59-2.13, "Application of Zinc-Rich Primer," of the Standard Specifications.

The single undercoat of inorganic zinc rich primer shall be applied to the required dry film thickness in 2 or more applications within 8 hours of the start of blast cleaning. Abrasive blast cleaned steel shall not be exposed to relative humidity exceeding 85 percent before application of inorganic zinc coating.

The total dry film thickness of all applications of the inorganic zinc undercoat, including the surfaces of outside existing members within the grip under bolt heads, nuts and washers, shall be not less than 4 mils nor more than 8 mils, except that the total dry film thickness on each faying (contact) surface of high strength bolted connections shall be between one mil and the maximum allowable dry film thickness for Class B coatings as determined by certified testing in conformance with Appendix A of the "Specification for Structural Joints Using ASTM A325 or A490 Bolts" of the Research Council on Structural Connections (RCSC Specification). Unless otherwise stated, all inorganic zinc rich primer used on faying surfaces shall meet the slip coefficient requirements for a Class B coating on blast-cleaned steel, as specified in the RCSC Specification. The Contractor shall provide results of certified testing showing the maximum allowable dry film thickness for the Class B coating from the qualifying tests for the coating

chosen, and shall maintain the coating thickness on actual faying surfaces of the structure at or below this maximum allowable coating thickness.

Areas where mudcracking occurs in the inorganic zinc coating shall be blast cleaned and repainted with inorganic zinc rich primer to the specified thickness.

Steel surfaces coated with Type II inorganic zinc rich primer shall be protected from conditions that may cause the coating film to dissolve. The Contractor, at the Contractor's expense, shall repair areas where the coating has dissolved by blast cleaning and repainting with inorganic zinc rich primer to the specified thickness.

Dry spray, or overspray, as defined in the Steel Structures Painting Manual, Volume 1, "Good Painting Practice," of the "SSPC: The Society for Protective Coatings," shall be removed before application of subsequent coats or final acceptance. Removal of dry spray shall be by screening or other methods that minimize polishing of the inorganic zinc surface. The dry film thickness of the coating after removal of dry spray shall be in conformance with the provisions for applying the single undercoat, as specified herein.

For damaged areas of the undercoat, the following apply:

1. If the Engineer determines the damaged area is more than 2 percent of the total undercoated surface, the Contractor shall blast clean and repaint damaged areas with inorganic zinc to the specified thickness before erection.
2. If the Engineer determines the damaged area is 2 percent or less of the total undercoated surface, the Contractor may wire brush the damaged surfaces to remove loose or cracked coating and apply 2 coats of organic zinc-rich primer before erection.

The Contractor shall test the inorganic zinc undercoat before application of finish coats. The locations of the tests will be determined by the Engineer. The Contractor shall determine the sequence of the testing operations. The testing for adhesion and hardness shall be performed no sooner than 72 hours after application of the single undercoat of inorganic zinc coating. Satisfactory access shall be provided to allow the Engineer to determine the location of the tests.

The inorganic zinc coating shall pass the following tests:

1. The undercoat shall have a minimum adhesion to steel of 600 psi when measured using a self-aligning adhesion tester in conformance with the requirements in ASTM Designation: D 4541. The Engineer will select 3 locations per girder or 1,000 square feet of painted surface, whichever is less, for adhesion testing. If less than 1,000 square feet of steel is painted in a work shift, the Engineer will select 3 areas painted during the work shift for testing. If 2 or more of the locations tested fail to meet adhesion requirements, the entire area represented by the tests will be rejected. If one of the locations tested fails to meet adhesion requirements, an additional 3 locations shall be tested. Should any of the additional locations fail to meet adhesion requirements, the entire area represented by the tests will be rejected. The Contractor, at the Contractor's expense, shall repair the rejected area by blast cleaning and repainting with inorganic zinc rich primer to the specified thickness. Test locations for areas of inorganic zinc meeting adhesion testing requirements shall be repaired by application of organic zinc primer as specified in Section 91-1.04, "Materials," of the Standard Specifications to the specified minimum dry film thickness.

2. Areas where finish coats are to be applied shall be tested for soluble salts using a Class A or B retrieval method as described in Technology Guide 15, "Field Methods for Retrieval and Analysis of Soluble Salts on Steel and Other Nonporous Substrates," of the "SSPC: The Society for Protective Coatings," and cleaned so the maximum level of soluble salts does not exceed the lesser of the manufacturer's written recommendations or 10 micrograms per square centimeter. Areas of inorganic zinc undercoat shall be tested at the rate of 3 tests for the first 1,000 square feet to be painted per day and one test for each additional 1,000 square feet or portion thereof at locations selected by the Engineer. When less than 1,000 square feet of surface area is painted in a shift, at least 2 tests shall be performed. If levels of soluble salts exceed the maximum allowed by these special provisions, the entire area represented by the testing will be rejected. The Contractor shall perform additional cleaning and testing of rejected areas until soluble salt levels conform to these requirements.
3. The inorganic zinc undercoat shall exhibit a solid, hard, and polished metal surface when firmly scraped with the knurled edge of a quarter. Inorganic zinc coating that is powdery, soft, or does not exhibit a polished metal surface, as determined by the Engineer, shall be repaired by the Contractor, at the Contractor's expense, by blast cleaning and repainting with inorganic zinc coating to the specified thickness.

1. The surface pH of the inorganic zinc undercoat shall be tested by wetting the surface with de-ionized water for a minimum of 15 minutes but no longer than 30 minutes and applying pH paper with a capability of measuring in increments of 0.5 pH units. At least 2 surface pH readings shall be taken for every 500 square feet or portion thereof. If less than 500 square feet of steel is coated in a single shift or day, at least 2 surface pH readings shall be taken for primer applied during that period. Application of finish coats will not be permitted until the surface pH is less than or equal to 7.
2. Dry to solvent insolubility for water borne inorganic zinc primers shall be determined in conformance with the requirements in ASTM Designation: D 4752, except that water shall be the solvent. The resistance rating shall be not less than 4. Areas of inorganic zinc undercoat shall be tested for solvent insolubility at the rate of one test per 500 square feet or portion thereof. Inorganic zinc undercoat represented by the tested area that does not meet the solvent insolubility requirements will be rejected. The Contractor, at the Contractor's expense, shall repair rejected areas by blast cleaning and repainting with inorganic zinc rich primer to the specified thickness.

1. Dry to solvent insolubility for solvent borne inorganic zinc primers shall be determined in conformance with the requirements in ASTM Designation: D 4752. The resistance rating shall be not less than 4. Areas of inorganic zinc undercoat shall be tested for solvent insolubility at the rate of one test per 500 square feet or portion thereof. Inorganic zinc undercoat represented by the tested area that does not meet the solvent insolubility requirements will be rejected. The Contractor, at the Contractor's expense, shall repair rejected areas by blast cleaning and repainting with inorganic zinc rich primer to the specified thickness.
2. Surface hardness of solvent borne inorganic zinc undercoat shall be a minimum 2H when measured in conformance with the requirements in ASTM Designation: D 3363. Areas of inorganic zinc undercoat shall be tested at the rate of one test per 500 square feet or portion thereof. Inorganic zinc undercoat that fails to meet the surface hardness requirements shall be repaired by the Contractor, at the Contractor's expense, by blast cleaning and repainting with inorganic zinc rich primer to the specified thickness.

The Contractor, at the Contractor's expense, shall retest all rejected areas of inorganic zinc undercoat after repairs have been completed.

Finish coats shall not be required for the following work:

1. The connections between existing steel members and new members
2. The widening portions of the bridge and new members

Cleaning and painting of existing contact surfaces of high strength bolted connections that contain rust, loose paint, or other foreign substances, except loose dirt and dust, will be considered as extra work as specified in Section 4-1.03D, "Extra Work," of the Standard Specifications. Cost of repair of damage to existing paint caused by the Contractor's operations shall be borne by the Contractor.

MEASUREMENT AND PAYMENT

Dry spot blast cleaning and undercoat painting of blast cleaned areas of existing surfaces will be measured by the square foot of spot blast cleaned areas, and will be paid for as spot blast clean and paint undercoat.

The contract price paid per square foot for spot blast clean and paint undercoat shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in dry spot blast cleaning and painting undercoat on the existing surfaces complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The contract lump sum price paid for clean and paint structural steel shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cleaning and painting the exposed surfaces of the new structural steel on undercoated areas of existing metal, complete in place, including water rinsing, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Item 10: Section 10-1.78 *(pg. 248)*: Blank Notice of Intent has been deleted.

Project Plans:

Item 1: Sheet SS-1 (25 of 59):

Joint angles have been specified for the ductile iron pipe joints.

Item 2: Sheet RW-1 (42 of 59):

Soil reinforcement base lengths have been specified.

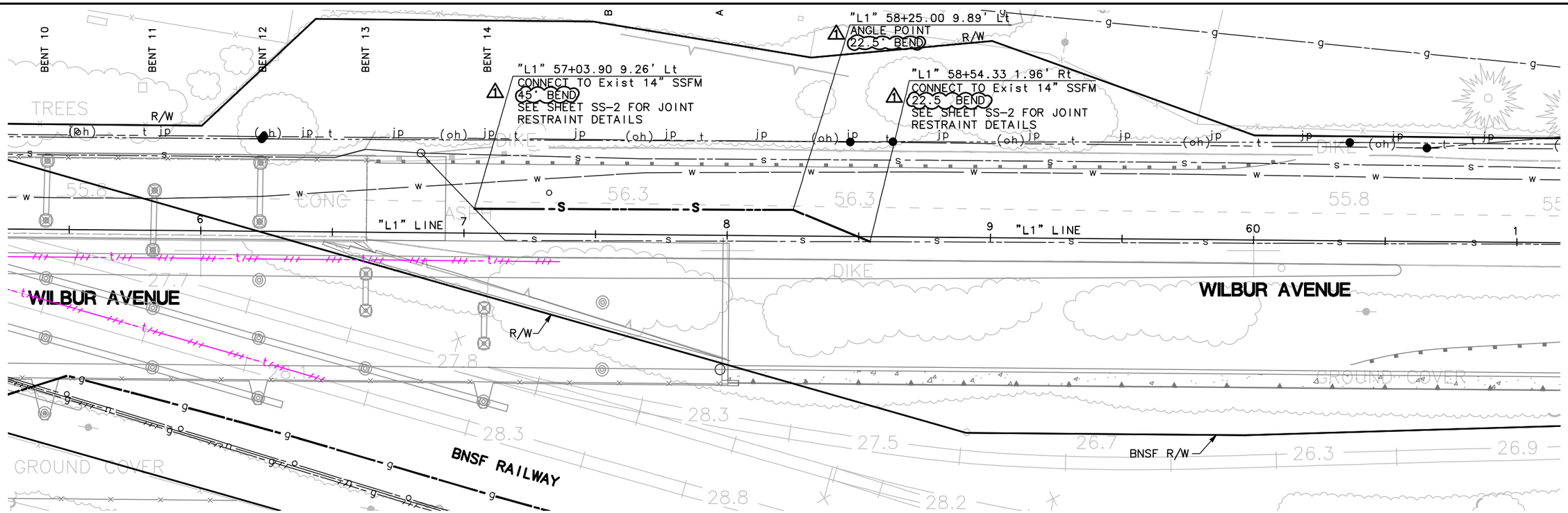
Item 3: Sheet S50 of 56:

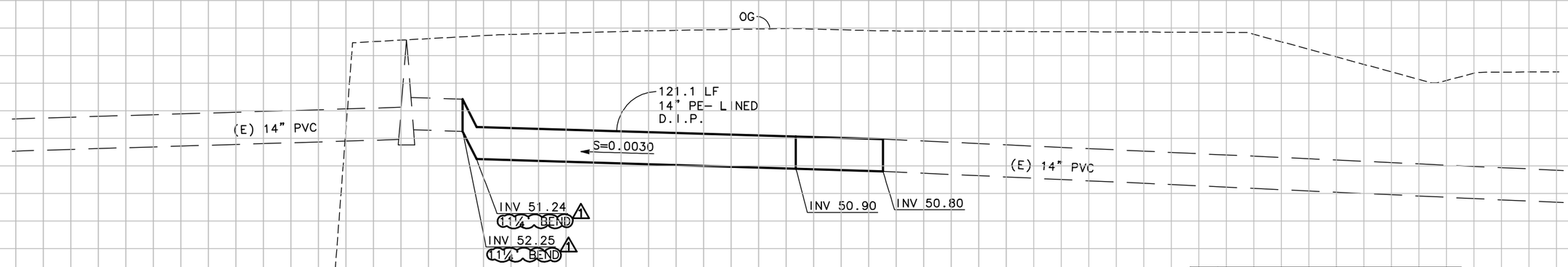
Track elevations have been added for crashwall quantity calculations. Finished grade elevations at each column are shown on "Bent Elevations" on sheets S20 through S25. Straight line interpolations may be used along the crashwalls between columns.

Item 4: Sheet S51 of 56:

Crashwall height dimensions on Details 2 & 3 shall read 12'-0" not 12'-0" Min.

Footing dimension on Detail 3 shall read 1-6" not 1'-6" Min.





No.	REVISIONS Description	By	DATE
1	ADDENDUM #2	CB	9/12/12

SS-1

MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying, and Planning Services
3000 Oak Road, Suite 650
Walnut Creek, CA 94597 925.938.0383

REGISTERED PROFESSIONAL ENGINEER
S. D. DANSKY
No. 60220
Exp. 6/30/14
CIVIL
STATE OF CALIFORNIA
7/13/12
DATE

DATE ACCEPTED: _____
INSPECTED BY: _____
AS BUILT REVISIONS:
DATE: _____
BY: _____

DESIGNED BY: CB
DATE: 7/13/12
CHECKED BY: SD
DATE: 7/13/12
FIELD BOOK: PG.

APPROVED BY
DIRECTOR OF CAPITAL IMPROVEMENTS
DATE: C.E. 57124

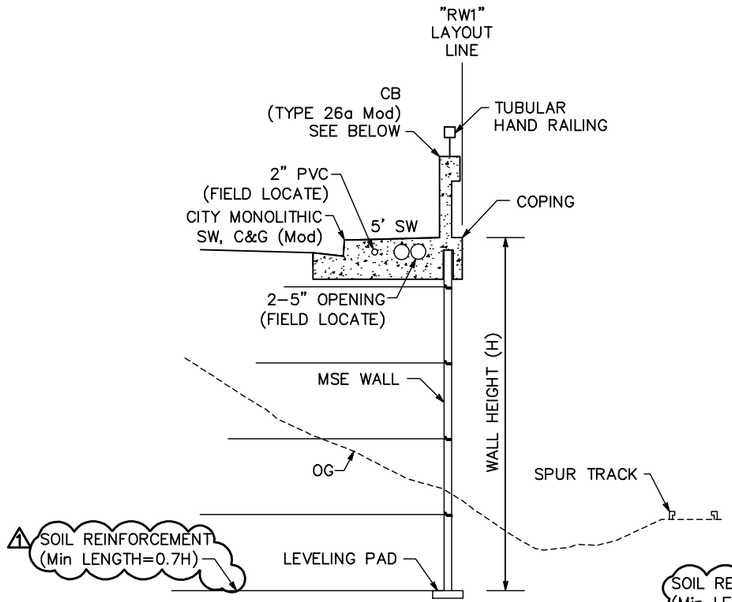
REVISIONS:	NO.	BY:	DATE:
PER ADDENDUM #2	1	CB	9/12/12

ENGINEERING DIVISION
CITY OF ANTIOCH

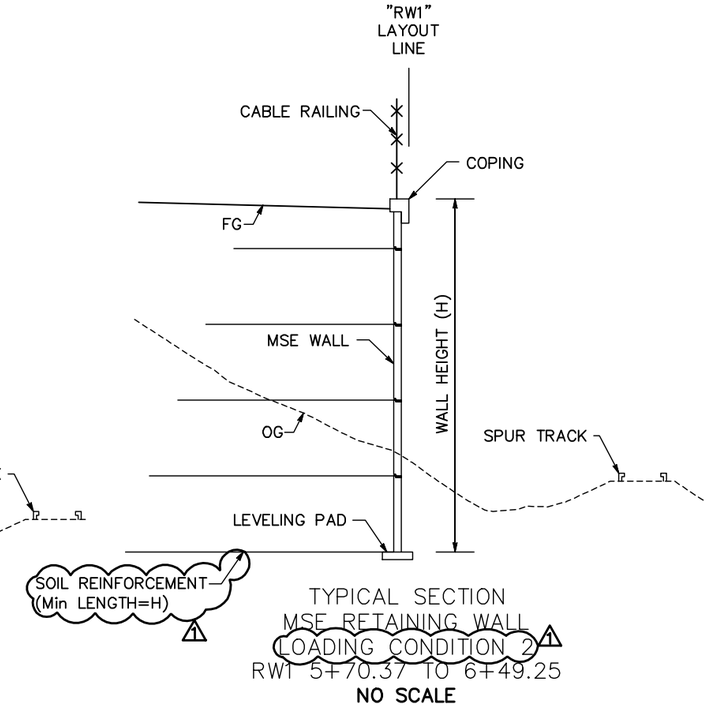
WILBUR AVE.
SANITARY SEWER PROFILE

SCALE:
PUBLIC WORKS PROJECT NO. 259-B
BNSF POST MILE 1150.3
SHEET 25 OF 59 SHEETS

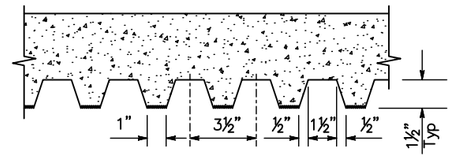
RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3



TYPICAL SECTION
MSE RETAINING WALL
LOADING CONDITION 1 (1)
RW1 1+00.00 TO 5+70.37
NO SCALE

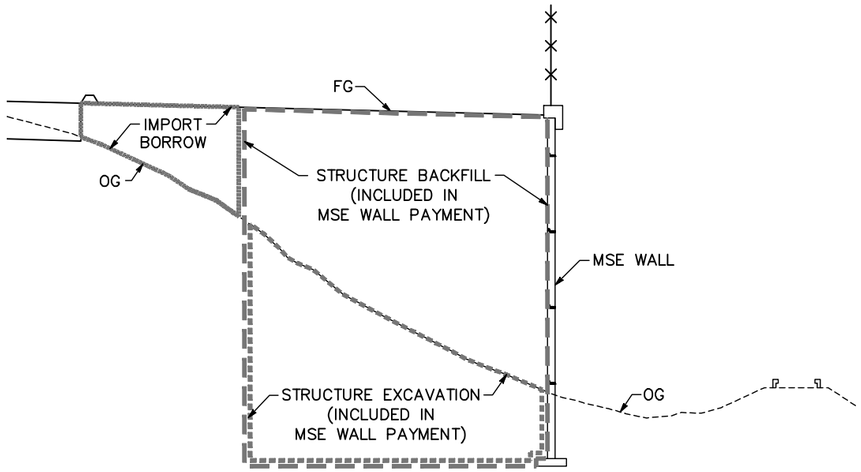


TYPICAL SECTION
MSE RETAINING WALL
LOADING CONDITION 2 (1)
RW1 5+70.37 TO 6+49.25
NO SCALE



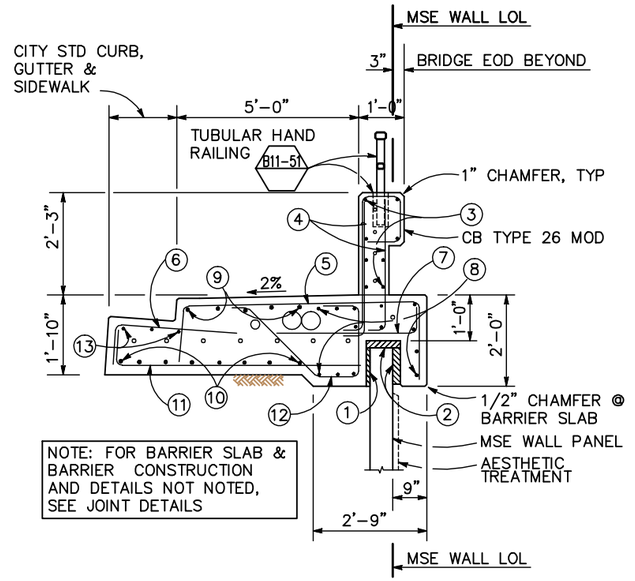
ARCHITECTURAL TREATMENT
FRACTURED RIB TEXTURE
NO SCALE

No.	REVISIONS Description	By	DATE
1	ADDENDUM #2	CB	9/12/12



IMPORT BORROW QUANTITY = TOTAL EMBANKMENT – (Rdwy Ex + Struct Ex + MSE WALL Ex)

MSE RETAINING WALL
PAYMENT DETAILS
NO SCALE



1. 1" EXPANDED POLYSTYRENE
2. 2" EXPANDED POLYSTYRENE
3. #4 (EC) CONT, TOTAL 8
4. #5 (EC) @ 18"
5. #5 12" 12" (EC) @ 9"
6. #5 12" 36" (EC) @ 18"
7. #5 48" 6" (EC) @ 9"
8. #5 (EC) CONT, TOTAL 13
9. #6 (EC) CONT, TOTAL 5
10. #6 (EC) CONT, TOTAL 8
11. #5 6" (EC) @ 9"
12. #5 (EC) @ 9"
13. #5 (EC) CONT, TOTAL 3

CONCRETE BARRIER TYPE 26 MOD @ MSE WALL

FOR ADDITIONAL DETAILS, SEE CALTRANS - BRIDGE STANDARD DETAIL SHEETS - SECTION 13 - MECHANICALLY STABILIZED EMBANKMENT WALLS, DETAILS 1-6 (SHEET 51-56)

RW-2

MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying, and Planning Services
3000 Oak Road, Suite 650
Walnut Creek, CA 94597 925.938.0383

REGISTERED PROFESSIONAL ENGINEER
S. D. DANSKY
No. 60220
Exp. 6/30/14
CIVIL
STATE OF CALIFORNIA
7/13/12 DATE

DATE ACCEPTED:
INSPECTED BY:
AS BUILT REVISIONS:
DATE:
BY:

DESIGNED BY:	CB	
DATE:	7/13/12	
CHECKED BY:	SD	
DATE:	7/13/12	
FIELD BOOK:	PG.	

APPROVED BY
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER
DATE: C.E. 57124

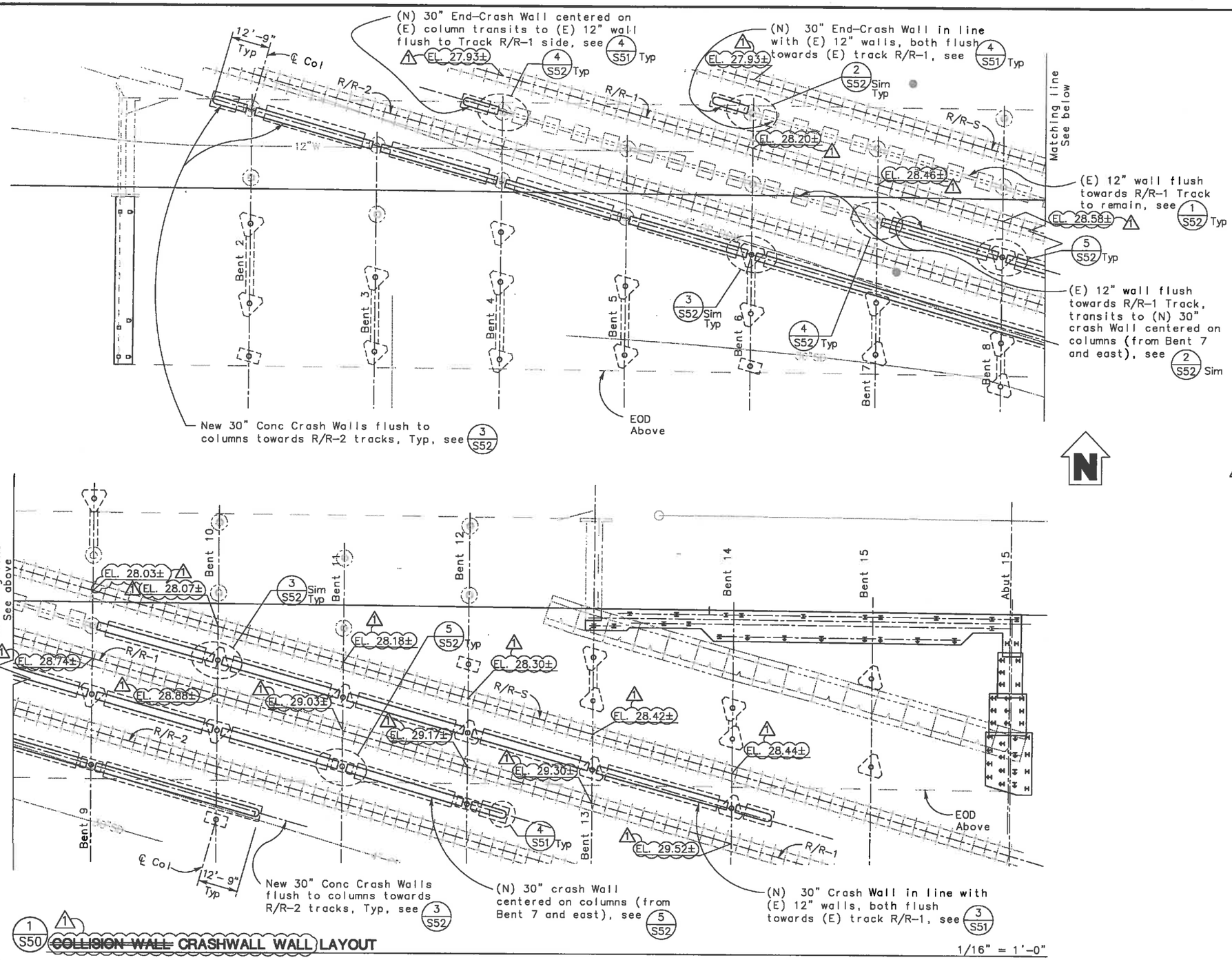
REVISIONS:	NO.	BY:	DATE:
PER ADDENDUM #2	1	CB	9/12/12

ENGINEERING DIVISION
CITY OF ANTIOCH

WILBUR AVE.
RETAINING WALL DETAILS

SCALE: 1" = 20'
PUBLIC WORKS PROJECT NO. 259-B
BNSF POST MILE 1150.3
SHEET 42
OF 59 SHEETS

RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3



1/S50 ~~COLLISION WALL~~ CRASHWALL WALL LAYOUT

1/16" = 1'-0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC			109	115

P. K. Chen 7/13/12
REGISTERED STRUCTURAL ENGINEER DATE

7/13/12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PO-KANG CHEN — No. S 3112 — Exp. 9/30/13 STRUCTURAL — STATE OF CALIFORNIA

MARK THOMAS & CO. INC.
3000 OAK ROAD, SUITE 650
WALNUT CREEK, CA 94597

CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS
P.O. BOX 130
ANTIOCH, CA 94509

NOTES:

1. Contractor shall verify all controlling field dimensions and details before ordering or fabricating any material.
2. All utilities not shown. For all underground and above ground utilities , see "Road Plans."
3. For pile caps, columns and tie beams, see "Foundation Plan" sheets.
4. For locations of cover plates at discontinuity of Crash walls at columns, see "Crash Wall Details No. 2" sheet (S52).
1. 5. Existing RR track elevations are shown for reference only. Contractor shall field verity them prior to their use for Crashwall profile. where Crashwall has tracks on both sides, use higher track elevations for setting top of Crashwalls. Track elevations can be interpolated on straight line basis between shown. Use R/R-1 elevations for Crashwall south of R/R-2.

No.	REVISIONS DESCRIPTION	By	DATE
1	Addendum #2	HM	9/12/12

GEOTECHNICAL ENGINEER APPROVAL DATE

APPROVED BY:
CITY ENGINEER REGISTRATION No.
SIGN OFF DATE

PHOTOGRAMMETRY AS OF:
SURVEYED By
FIELD CHECKED By
DRAWN By
TRACED By
CHECKED By

DESIGN BY H. Mistry CHECKED P. CHEN
DETAILS BY H. Mistry CHECKED P. CHEN
QUANTITIES BY J. SONU CHECKED E. FELIX

PREPARED FOR THE CITY OF ANTIOCH ENGINEERING DIVISION

PO-KANG CHEN
Project Engineer

CU
EA

ORIGINAL SCALE IS IN INCHES FOR REDUCED PLANS 0 1 2 3

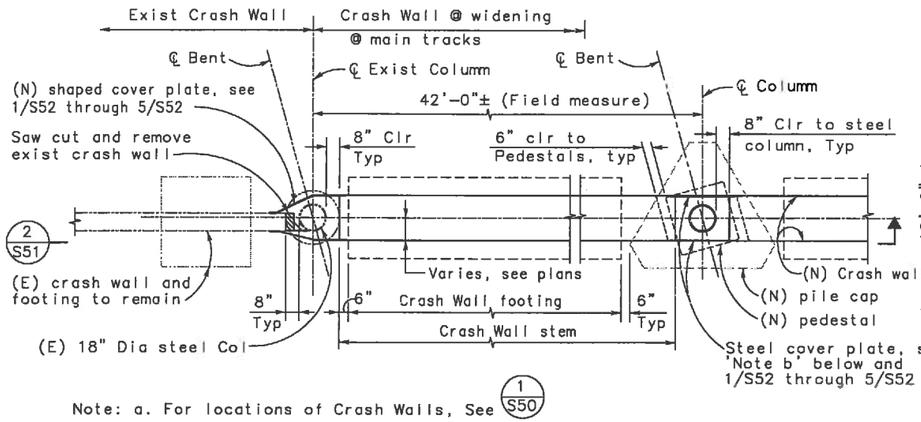
BRIDGE NO. 28C-0054
POST MILE

WILBUR AVE OVERHEAD (WIDENING)
CRASH WALL LAYOUT

DISREGARD PRINTS BEARING EARLIER REVISION DATES

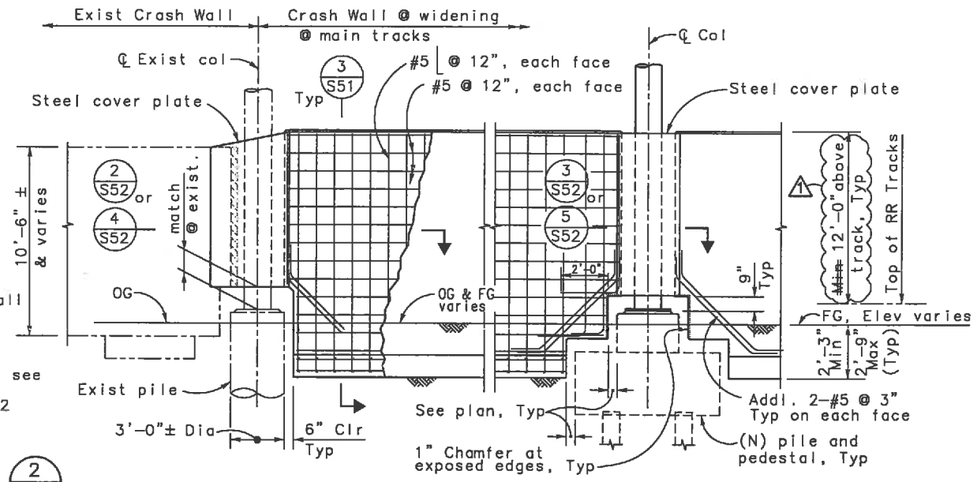
REVISION DATES (PRELIMINARY STAGE ONLY) 7/31/98 9/30/98 3/31/99 7/12/12

SHEET S50 OF 56

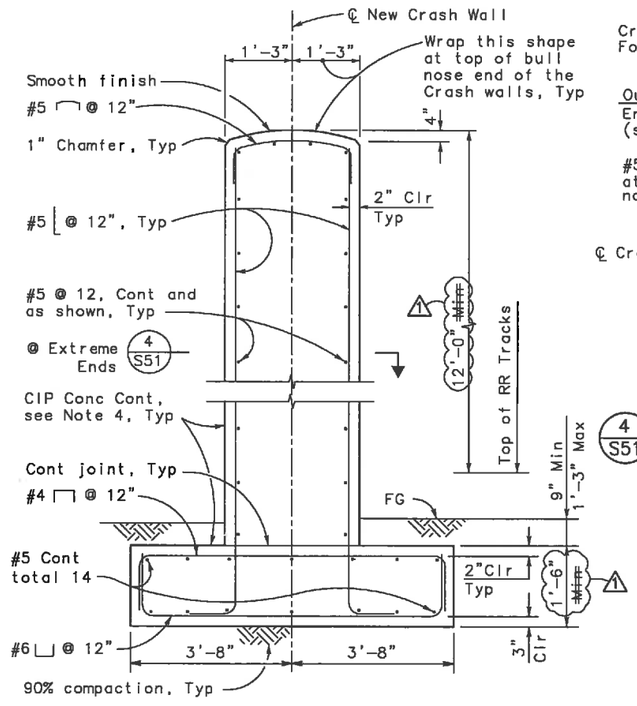


Note: a. For locations of Crash Walls, See 1/S50
b. Use cover plate only on the side facing the existing R/R-1 and proposed future R/R-2. Use 1" chamfer to exposed conc edges.

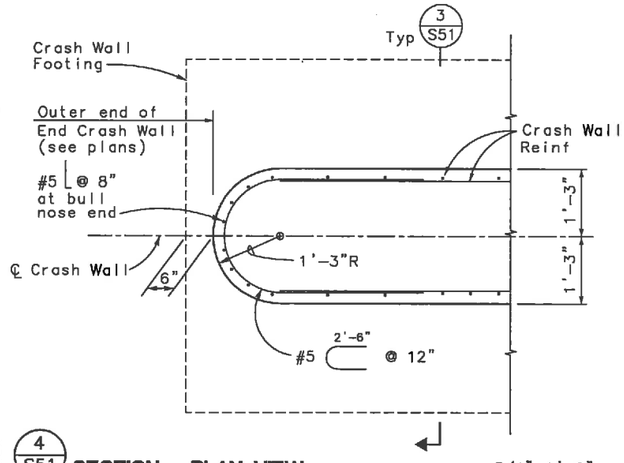
1/S51 PLAN - CRASH WALL 1/4"=1'-0"



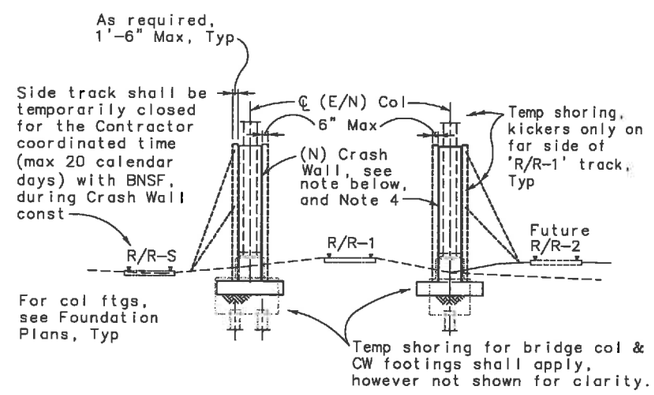
2/S51 ELEVATION - CRASH WALL 1/4"=1'-0"



3/S51 SECTION 3/4"=1'-0"



4/S51 SECTION - PLAN VIEW 3/4"=1'-0"



Note: For Crash **Wall** locations and construction details, see sheet "S-50 to S-52". For temporary shoring, see General Notes 6 & 7 on sheet "S-4".

5/S51 TEMP. SHORING AT CRASH WALL No scale

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	CC			110	115

P. K. Chen 7/13/12
REGISTERED STRUCTURAL ENGINEER DATE

7/13/12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — PO-KANG CHEN — No. S 3112 — Exp. 9/30/13 — STRUCTURAL — STATE OF CALIFORNIA

MARK THOMAS & CO. INC.
3000 OAK ROAD, SUITE 650
WALNUT CREEK, CA 94597

CITY OF ANTIOCH
ENGINEERING DIVISION
P.O. BOX 130
ANTIOCH, CA 94509

Notes:

1. Contractor shall verify all controlling field dimensions and details before ordering or fabricating any material.
2. Contractor shall field coordinate clearances to Crash Walls form existing and new pile caps.
3. For temporary Shoring at excavation near RR-tracks, see Structural General Notes 6 & 7 on sheet S4.
4. Crash Wall concrete shall have minimum f'c = 4000 psi with high early admixture to achieve 3000 psi in 24 hours of concrete pour.

No.	RIVISIONS DESCRIPTION	By	DATE
1	Addendum #2	HM	9/12/12

APPROVED BY:
CITY ENGINEER REGISTRATION No.
SIGN OFF DATE:

No.	RIVISIONS DESCRIPTION	By	DATE

DESIGN	BY H. MISTRY	CHECKED P. CHEN	
DETAILS	BY H. MISTRY	CHECKED P. CHEN	
QUANTITIES	BY J. SONU	CHECKED E. FELIX	

ORIGINAL SCALE IS IN INCHES FOR REDUCED PLANS 0 1 2 3

PREPARED FOR THE CITY OF ANTIOCH ENGINEERING DIVISION

PO-KANG CHEN
Project Engineer

CU
EA

BRIDGE NO. 28C-0054
POST MILE

WILBUR AVE OVERHEAD (WIDENING)
CRASH WALL DETAILS NO. 1

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 7/31/98 9/28/98 9/14/10 2/28/12 7/12/12

SHEET S51 OF 56

WILBR07

>

General Decision Number: CA120029 08/03/2012 CA29

Superseded General Decision Number: CA20100029

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alameda, Calaveras, Contra Costa, Fresno, Kings, Madera, Mariposa, Merced, Monterey, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Stanislaus and Tuolumne Counties in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/06/2012
1	01/20/2012
2	01/27/2012
3	03/02/2012
4	04/20/2012
5	04/27/2012
6	05/04/2012
7	06/01/2012
8	06/08/2012
9	07/13/2012
10	08/03/2012

ASBE0016-001 08/01/2011

AREA 1: ALAMEDA, CONTRA COSTA, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONO, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN JOAQUIN, SHASTA, SIERRA, SISKIYOU, STANISLAU, SUTTER, TEHEMA, TRINITY, TULARE, TUOLUMNE, YOLO, & YUBA COUNTIES

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, Protective Coverings, Coatings, and Finishes to all types of mechanical systems)		
Area 1	$ 53.05	17.25
Area 2	$ 41.40	17.25

ASBE0016-004 01/01/2010

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)	$ 15.18	2.80

BOIL0549-001 01/01/2009

AREA 1: ALAMEDA, CONTRA COSTA, SAN FRANCISCO, SAN MATEO & SANTA CLARA COUNTIES

AREA 2: REMAINING COUNTIES

	Rates	Fringes
BOILERMAKER		
Area 1	$ 40.17	22.32
Area 2	$ 37.01	22.25

BRCA0003-001 06/01/2011

	Rates	Fringes
MARBLE FINISHER	$ 28.02	12.22

BRCA0003-003 06/01/2011

	Rates	Fringes
MARBLE MASON	$ 39.22	18.68

BRCA0003-005 05/01/2011

	Rates	Fringes
BRICKLAYER		
(1) Fresno, Kings, Madera, Mariposa, Merced	$ 34.11	19.34
(7) San Francisco, San Mateo	$ 39.85	22.00
(8) Alameda, Contra Costa, San Benito, Santa Clara	$ 39.63	19.92
(9) Calaveras, San Joaquin, Stanislaus, Toulumne	$ 35.11	18.99
(16) Monterey, Santa Cruz	$ 35.91	22.42

BRCA0003-008 06/01/2011

	Rates	Fringes
TERRAZZO FINISHER	$ 30.30	13.77
TERRAZZO WORKER/SETTER	$ 39.30	21.20

BRCA0003-011 01/01/2011

AREA 1: Alameda, Contra Costa, Monterey, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz

AREA 2: Calaveras, San Joaquin, Stanislaus, Tuolumne

AREA 3: Fresno, Kings, Madera, Mariposa, Merced

	Rates	Fringes
TILE FINISHER		
Area 1	$ 21.44	12.31
Area 2	$ 21.26	12.44
Area 3	$ 21.01	11.58
Tile Layer		
Area 1	$ 38.61	13.73
Area 2	$ 34.41	13.68
Area 3	$ 29.78	13.10

CARP0022-001 07/01/2012

San Francisco County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 38.65	25.68
Journeyman Carpenter	$ 38.50	25.68
Millwright	$ 38.60	27.27

CARP0034-001 07/01/2012

	Rates	Fringes
Diver		
Assistant Tender, ROV Tender/Technician	$ 37.75	28.88
Diver standby	$ 42.53	28.88
Diver Tender	$ 41.53	28.88
Diver wet	$ 85.06	28.88
Manifold Operator (mixed gas)	$ 46.53	28.88
Manifold Operator (Standby)	$ 41.53	28.88

DEPTH PAY (Surface Diving):
050 to 100 ft $2.00 per foot

101 to 150 ft $3.00 per foot
151 to 220 ft $4.00 per foot

SATURATION DIVING:
The standby rate shall apply until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. The diver rate shall be paid for all saturation hours.

DIVING IN ENCLOSURES:
Where it is necessary for Divers to enter pipes or tunnels, or other enclosures where there is no vertical ascent, the following premium shall be paid: Distance traveled from entrance 26 feet to 300 feet: $1.00 per foot. When it is necessary for a diver to enter any pipe, tunnel or other enclosure less than 48" in height, the premium will be $1.00 per foot.

WORK IN COMBINATION OF CLASSIFICATIONS:
Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

CARP0034-003 07/01/2012

	Rates	Fringes
Piledriver	$ 37.75	28.88

CARP0035-007 07/01/2012

AREA 1: Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara counties

AREA 2: Monterey, San Benito, Santa Cruz Counties

AREA 3: Calaveras, Fresno, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tuolumne Counties

	Rates	Fringes
Modular Furniture Installer		
Area 1		
Installer I	$ 22.61	16.71
Installer II	$ 19.18	16.71
Lead Installer	$ 26.06	17.21
Master Installer	$ 30.28	17.21
Area 2		
Installer I	$ 19.96	16.71
Installer II	$ 17.01	16.71
Lead Installer	$ 22.93	17.21
Master Installer	$ 26.56	17.21
Area 3		
Installer I	$ 19.01	16.71
Installer II	$ 16.24	16.71
Lead Installer	$ 21.81	17.21
Master Installer	$ 25.23	17.21

CARP0035-008 07/01/2012

AREA 1: Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara counties

AREA 2: Monterey, San Benito, Santa Cruz Counties

AREA 4: Calaveras, Fresno, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tuolumne Counties

	Rates	Fringes
Drywall Installers/Lathers:		
Area 1	$ 37.50	26.12
Area 2	$ 31.62	26.12
Area 4	$ 30.77	26.12
Drywall Stocker/Scrapper		
Area 1	$ 18.75	15.03
Area 2	$ 15.81	15.03
Area 4	$ 15.39	15.03

CARP0152-001 07/01/2012

Contra Costa County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 38.65	25.68
Journeyman Carpenter	$ 38.50	25.68
Millwright	$ 38.60	27.27

CARP0152-002 07/01/2012

San Joaquin County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 32.77	25.68
Journeyman Carpenter	$ 32.62	25.68
Millwright	$ 35.12	27.27

CARP0152-004 07/01/2012

Calaveras, Mariposa, Merced, Stanislaus and Tuolumne Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 31.42	25.68
Journeyman Carpenter	$ 31.27	25.68
Millwright	$ 33.77	27.27

CARP0217-001 07/01/2012

San Mateo County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 38.65	25.68
Journeyman Carpenter	$ 38.50	25.68
Millwright	$ 38.60	27.27

CARP0405-001 07/01/2012

Santa Clara County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 38.65	25.68
Journeyman Carpenter	$ 38.50	25.68
Millwright	$ 38.60	27.27

CARP0405-002 07/01/2012

San Benito County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold &		

Steel Shoring Erector, Saw Filer	$ 32.77	25.68
Journeyman Carpenter	$ 32.62	25.68
Millwright	$ 35.12	27.27

CARP0505-001 07/01/2012

Santa Cruz County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 32.77	25.68
Journeyman Carpenter	$ 32.62	25.68
Millwright	$ 35.12	27.27

CARP0605-001 07/01/2012

Monterey County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 32.77	25.68
Journeyman Carpenter	$ 32.62	25.68
Millwright	$ 35.12	27.27

CARP0701-001 07/01/2012

Fresno and Madera Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 31.42	25.68
Journeyman Carpenter	$ 31.27	25.68
Millwright	$ 33.77	27.27

* CARP0713-001 07/01/2012

Alameda County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 38.65	25.68
Journeyman Carpenter	$ 38.50	25.68
Millwright	$ 38.60	27.27

CARP1109-001 07/01/2012

Kings County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter	$ 38.50	25.68
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer	$ 31.42	25.68
Journeyman Carpenter	$ 31.27	25.68
Millwright	$ 33.77	27.27

ELEC0006-001 12/01/2011

ALAMEDA, CONTRA COSTA, MONTEREY, SAN BENITO, SAN MATEO, SANTA CLARA, AND SANTA CRUZ COUNTIES

	Rates	Fringes
Sound & Communications		
Installer	$ 30.12	3%+13.70
Technician	$ 34.29	3%+13.70

SCOPE OF WORK: Including any data system whose only function is to transmit or receive information; excluding all other data systems or multiple systems which include control function or power supply; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs for which the conductors for the fire alarm system are installed in conduit; excluding installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excluding energy management systems.

FOOTNOTE: Fire alarm work when installed in raceways (including wire and cable pulling), on projects which involve new or major remodel building construction, for

which the conductors for the fire alarm system are installed in the conduit, shall be performed by the inside electrician.

ELEC0006-004 12/01/2011

SAN FRANCISCO COUNTY

	Rates	Fringes
Sound & Communications		
Installer	$ 30.60	3%+14.20
Technician	$ 38.16	3%+14.20

SCOPE OF WORK: Including any data system whose only function is to transmit or receive information; excluding all other data systems or multiple systems which include control function or power supply; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs for which the conductors for the fire alarm system are installed in conduit; excluding installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excluding energy management systems.

FOOTNOTE: Fire alarm work when installed in raceways (including wire and cable pulling), on projects which involve new or major remodel building construction, for which the conductors for the fire alarm system are installed in the conduit, shall be performed by the inside electrician.

ELEC0006-007 12/01/2010

SAN FRANCISCO COUNTY

	Rates	Fringes
ELECTRICIAN	$ 53.05	22.69

ELEC0006-008 12/01/2011

CALAVERAS, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS AND TUOLUMNE COUNTIES

	Rates	Fringes
Communications System		
Installer	$ 30.12	3%+13.70
Technician	$ 34.29	3%+13.70

SCOPE OF WORK: Including any data system whose only function is to transmit or receive information; excluding all other data systems or multiple systems which include control function or power supply; inclusion or exclusion of

terminations and testings of conductors determined by their function; excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs for which the conductors for the fire alarm system are installed in conduit; excluding installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excluding energy management systems.

FOOTNOTE: Fire alarm work when installed in raceways (including wire and cable pulling), on projects which involve new or major remodel building construction, for which the conductors for the fire alarm system are installed in the conduit, shall be performed by the inside electrician.

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* ELEC0100-002 06/01/2012

FRESNO, KINGS, AND MADERA COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 33.35	3%+18.33

ELEC0100-005 12/01/2011

FRESNO, KINGS, MADERA

	Rates	Fringes
Communications System		
Installer	$ 26.43	3%+13.70
Technician	$ 30.09	3%+13.70

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS Background foreground music, Intercom and telephone interconnect systems, Telephone systems Nurse call systems, Radio page systems, School intercom and sound systems, Burglar alarm systems, Low voltage, master clock systems, Multi-media/multiplex systems, Sound and musical entertainment systems, RF systems, Antennas and Wave Guide,

B. FIRE ALARM SYSTEMS Installation, wire pulling and testing

C. TELEVISION AND VIDEO SYSTEMS Television monitoring and surveillance systems Video security systems, Video

entertainment systems, Video educational systems, Microwave transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter security systems Vibration sensor systems Card access systems Access control systems, Sonar/infrared monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and Data Acquisition) PCM (Pulse Code Modulation) Inventory Control Systems, Digital Data Systems Broadband and Baseband and Carriers Point of Sale Systems, VSAT Data Systems Data Communication Systems RF and Remote Control Systems, Fiber Optic Data Systems

WORK EXCLUDED Raceway systems are not covered (excluding Ladder-Rack for the purpose of the above listed systems). Chases and/or nipples (not to exceed 10 feet) may be installed on open wiring systems. Energy management systems. SCADA (Supervisory Control and Data Acquisition) when not intrinsic to the above listed systems (in the scope). Fire alarm systems when installed in raceways (including wire and cable pulling) shall be performed at the electrician wage rate, when either of the following two (2) conditions apply:
1. The project involves new or major remodel building trades construction.
2. The conductors for the fire alarm system are installed in conduit.

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* ELEC0234-001 06/01/2012

MONTEREY, SAN BENITO AND SANTA CRUZ COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 41.20	21.80

ELEC0302-001 06/01/2011

CONTRA COSTA COUNTY

	Rates	Fringes
CABLE SPLICER	$ 50.49	3%+22.95
ELECTRICIAN	$ 44.21	3%+22.95

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* ELEC0332-001 06/01/2012

SANTA CLARA COUNTY

	Rates	Fringes
CABLE SPLICER	$ 58.16	29.206
ELECTRICIAN	$ 50.27	28.94

FOOTNOTES: Work under compressed air or where gas masks are required, orwork on ladders, scaffolds, stacks, "Bosun's chairs," or other structures and where the workers are not

protected by permanent guard rails at a distance of 40 to 60 ft. from the ground or supporting structures: to be paid one and one-half times the straight-time rate of pay. Work on structures of 60 ft. or over (as described above): to be paid twice the straight-time rate of pay.

ELEC0595-001 06/01/2012

ALAMEDA COUNTY

	Rates	Fringes
CABLE SPLICER	$ 50.63	3%+27.93
ELECTRICIAN	$ 45.00	3%+27.93

ELEC0595-002 12/01/2011

CALAVERAS AND SAN JOAQUIN COUNTIES

	Rates	Fringes
CABLE SPLICER	$ 37.13	9.025%+21.74
ELECTRICIAN		
(1) Tunnel work	$ 34.65	9.025%+21.74
(2) All other work	$ 33.00	9.025%+21.74

ELEC0617-001 06/01/2011

SAN MATEO COUNTY

	Rates	Fringes
ELECTRICIAN	$ 50.00	3%+23.34

ELEC0684-001 01/01/2012

MARIPOSA, MERCED, STANISLAUS AND TUOLUMNE COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 34.60	3%+17.15

CABLE SPLICER = 110% of Journeyman Electrician

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* ELEC1245-001 06/01/2012

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer	$ 48.95	14.05
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment)	$ 39.09	12.97
(3) Groundman	$ 29.91	12.70
(4) Powderman	$ 43.71	13.15

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

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ELEV0008-001 01/01/2012

	Rates	Fringes
ELEVATOR MECHANIC	$ 57.29	23.535

FOOTNOTE:
PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0003-008 07/01/2011

	Rates	Fringes
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:)		
AREA 1:		
(1) Leverman	$ 38.94	25.40
(2) Dredge Dozer; Heavy duty repairman	$ 33.98	25.40
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator	$ 32.86	25.40
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler	$ 29.56	25.40
AREA 2:		
(1) Leverman	$ 40.94	25.40
(2) Dredge Dozer; Heavy duty repairman	$ 35.98	25.40
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator	$ 34.86	25.40
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler	$ 31.56	25.40

AREA DESCRIPTIONS

AREA 1: ALAMEDA,BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2: MODOC COUNTY

THE REMAINGING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:
Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:
Area 1: Remainder
Area 2: Eastern part

COLUSA COUNTY:
Area 1: Eastern part
Area 2: Remainder

ELDORADO COUNTY:
Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY:
Area 1: Remainder
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

LASSEN COUNTY:
Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

MARIPOSA COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

MONTERREY COUNTY
Area 1: Except Southwestern part
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: Al but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:
Area 1: All but the Western border with Mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeastern border with Shasta County
Area 2: Remainder

TUOLUMNE COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

ENGI0003-018 06/27/2011

"AREA 1" WAGE RATES ARE LISTED BELOW

"AREA 2" RECEIVES AN ADDITIONAL $2.00 PER HOUR ABOVE AREA 1 RATES.

SEE AREA DEFINITIONS BELOW

	Rates	Fringes
OPERATOR: Power Equipment (AREA 1:)		
GROUP 1	$ 37.77	24.00
GROUP 2	$ 36.24	24.00
GROUP 3	$ 34.76	24.00
GROUP 4	$ 33.38	24.00
GROUP 5	$ 32.11	24.00
GROUP 6	$ 30.79	24.00
GROUP 7	$ 29.65	24.00
GROUP 8	$ 28.51	24.00
GROUP 8-A	$ 28.30	24.00
OPERATOR: Power Equipment (Cranes and Attachments - AREA 1:)		
GROUP 1		
Cranes	$ 38.65	24.00
Oiler	$ 29.39	24.00
Truck crane oiler	$ 31.68	24.00
GROUP 2		
Cranes	$ 36.89	24.00
Oiler	$ 29.18	24.00
Truck crane oiler	$ 31.42	24.00
GROUP 3		

Cranes	$ 35.14	24.00
Hydraulic	$ 30.79	24.00
Oiler	$ 28.90	24.00
Truck Crane Oiler	$ 31.18	24.00
OPERATOR: Power Equipment (Piledriving - AREA 1:)		
GROUP 1		
Lifting devices	$ 38.99	24.00
Oiler	$ 29.73	24.00
Truck crane oiler	$ 32.01	24.00
GROUP 2		
Lifting devices	$ 37.17	24.00
Oiler	$ 29.46	24.00
Truck Crane Oiler	$ 31.76	24.00
GROUP 3		
Lifting devices	$ 35.49	24.00
Oiler	$ 29.24	24.00
Truck Crane Oiler	$ 31.47	24.00
GROUP 4	$ 33.72	24.00
GROUP 5	$ 31.08	24.00
GROUP 6	$ 28.85	24.00
OPERATOR: Power Equipment (Steel Erection - AREA 1:)		
GROUP 1		
Cranes	$ 39.62	24.00
Oiler	$ 30.07	24.00
Truck Crane Oiler	$ 32.30	24.00
GROUP 2		
Cranes	$ 37.85	24.00
Oiler	$ 29.80	24.00
Truck Crane Oiler	$ 32.08	24.00
GROUP 3		
Cranes	$ 36.37	24.00
Hydraulic	$ 31.42	24.00
Oiler	$ 29.58	24.00
Truck Crane Oiler	$ 31.81	24.00
GROUP 4	$ 34.35	24.00
GROUP 5	$ 33.05	24.00
OPERATOR: Power Equipment (Tunnel and Underground Work - AREA 1:)		
SHAFTS, STOPES, RAISES:		
GROUP 1	$ 33.87	24.00
GROUP 1-A	$ 36.34	24.00
GROUP 2	$ 32.61	24.00
GROUP 3	$ 31.28	24.00
GROUP 4	$ 30.14	24.00
GROUP 5	$ 29.00	24.00
UNDERGROUND:		
GROUP 1	$ 33.77	24.00
GROUP 1-A	$ 36.34	24.00
GROUP 2	$ 32.51	24.00
GROUP 3	$ 31.18	24.00
GROUP 4	$ 30.04	24.00
GROUP 5	$ 28.90	24.00

FOOTNOTE: Work suspended by ropes or cables, or work on a Yo-Yo Cat: $.60 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Operator of helicopter (when used in erection work); Hydraulic excavator, 7 cu. yds. and over; Power shovels, over 7 cu. yds.

GROUP 2: Highline cableway; Hydraulic excavator, 3-1/2 cu. yds. up to 7 cu. yds.; Licensed construction work boat operator, on site; Power blade operator (finish); Power shovels, over 1 cu. yd. up to and including 7 cu. yds. m.r.c.

GROUP 3: Asphalt milling machine; Cable backhoe; Combination backhoe and loader over 3/4 cu. yds.; Continuous flight tie back machine assistant to engineer or mechanic; Crane mounted continuous flight tie back machine, tonnage to apply; Crane mounted drill attachment, tonnage to apply; Dozer, slope brd; Gradall; Hydraulic excavator, up to 3 1/2 cu. yds.; Loader 4 cu. yds. and over; Long reach excavator; Multiple engine scraper (when used as push pull); Power shovels, up to and including 1 cu. yd.; Pre-stress wire wrapping machine; Side boom cat, 572 or larger; Track loader 4 cu. yds. and over; Wheel excavator (up to and including 750 cu. yds. per hour)

GROUP 4: Asphalt plant engineer/box person; Chicago boom; Combination backhoe and loader up to and including 3/4 cu. yd.; Concrete batch plant (wet or dry); Dozer and/or push cat; Pull- type elevating loader; Gradesetter, grade checker (GPS, mechanical or otherwise); Grooving and grinding machine; Heading shield operator; Heavy-duty drilling equipment, Hughes, LDH, Watson 3000 or similar; Heavy-duty repairperson and/or welder; Lime spreader; Loader under 4 cu. yds.; Lubrication and service engineer (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator, asphalt; Rubber-tired scraper, self-loading (paddle-wheels, etc.); Rubber- tired earthmoving equipment (scrapers); Slip form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed constuction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment)

GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt); Mine or shaft hoist; Portable

crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging capacity over 5 ft. depth; Vermeer T-600B rock cutter or similar

GROUP 6: Armor-Coater (or similar); Ballast jack tamper; Boom- type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self- propelled pipeline wrapping machine; Tractor; Self-loading chipper; Concrete barrier moving machine

GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson; Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and supported); Post driver; Roller (except asphalt); Chip Seal; Self-propelled automatically applied concrete curing mahcine (on streets, highways, airports and canals); Self-propelled compactor (without dozer); Signalperson; Slip-form pumps (lifting device for concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor (shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator; Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (self-propelled floating); Ross Carrier (construction site); Rotomist operator; Self-propelled tape machine; Shuttlecar; Self-propelled power sweeper operator (includes vacuum sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist, single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoe-trencher); Tub grinder wood chipper

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ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Self-propelled boom-type lifting device, over 100 tons

GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Self-propelled boom-type lifting device 45 tons and under; Boom Truck or dual purpose A-frame truck, non-rotating over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Self-propelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Self-propelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler, land or barge mounted 45 tons and under

GROUP 4: Assistant operator in lieu of assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

STEEL ERECTORS

GROUP 1: Crane over 100 tons; Derrick over 100 tons; Self-propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

GROUP 3: Drill doctor; Mine or shaft hoist

GROUP 4: Combination slurry mixer cleaner; Grouting Machine operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and compressor (gunite); Compressor operator; Oiler; Pump operator; Slusher operator

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AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS,TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:
Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:
Area 1: Except Eastern part

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:
Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:
Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:
Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:
Area 1: Southern part
Area 2: Remainder

LASSEN COUNTY:
Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY
Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY
Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:
Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY
Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Reaminder

TEHAMA COUNTY:
Area 1: All but the Western border with mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeaster border with Shasta County
Area 2: Remainder

TULARE COUNTY;
Area 1: Remainder
Area 2: Eastern part

TUOLUMNE COUNTY:
Area 1: Remainder
Area 2: Eastern Part

ENGI0003-019 06/27/2011

SEE AREA DESCRIPTIONS BELOW

	Rates	Fringes
OPERATOR: Power Equipment (LANDSCAPE WORK ONLY)		
GROUP 1		
AREA 1	$ 28.64	19.96
AREA 2	$ 30.64	19.96
GROUP 2		
AREA 1	$ 25.04	19.96
AREA 2	$ 27.04	19.96
GROUP 3		
AREA 1	$ 20.43	19.96
AREA 2	$ 22.43	19.96

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade Operator: All finish grade

work regardless of equipment used, and all equipment with a rating more than 65 HP.

GROUP 2: Landscape Operator up to 65 HP: All equipment with a manufacturer's rating of 65 HP or less except equipment covered by Group 1 or Group 3. The following equipment shall be included except when used for finish work as long as manufacturer's rating is 65 HP or less: A-Frame and Winch Truck, Backhoe, Forklift, Hydragraphic Seeder Machine, Roller, Rubber-Tired and Track Earthmoving Equipment, Skiploader, Straw Blowers, and Trencher 31 HP up to 65 HP.

GROUP 3: Landscae Utility Operator: Small Rubber-Tired Tractor, Trencher Under 31 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:
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Area 2: Eastern part

COLUSA COUNTY:
Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:
Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:
Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY
Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:
Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:
Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:
Area 1: Southern part
Area 2: Remainder

LASSEN COUNTY:
Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY
Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY
Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:
Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY
Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Reaminder

TEHAMA COUNTY:
Area 1: All but the Western border with mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeaster border with Shasta County
Area 2: Remainder

TULARE COUNTY;
Area 1: Remainder
Area 2: Eastern part

TUOLUMNE COUNTY:
Area 1: Remainder
Area 2: Eastern Part

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* IRON0002-004 07/01/2012

	Rates	Fringes
Ironworkers:		
Fence Erector	$ 26.58	16.345
Ornamental, Reinforcing and Structural	$ 33.00	24.985

PREMIUM PAY:

$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland,
Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0036-001 07/01/2007

SAN FRANCISCO AND SAN MATEO COUNTIES:

	Rates	Fringes
MASON TENDER, BRICK	$ 26.93	16.50

FOOTNOTES: Underground work such as sewers, manholes, catch basins, sewer pipes, telephone conduits, tunnels and cut trenches: $5.00 per day additional. Work in live sewage: $2.50 per day additional.

LABO0036-002 07/01/2007

SAN FRANCISCO AND SAN MATEO COUNTIES:

	Rates	Fringes
PLASTER TENDER	$ 26.48	16.23

FOOTNOTES: Work on a suspended scaffold: $5.00 per day additional. Work operating a plaster mixer pump gun: $1.00 per hour additional.

LABO0067-002 12/01/2011

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Asbestos Removal Laborer		
Areas A & B	$ 18.68	8.15
LABORER (Lead Removal)		
Area A	$ 36.25	7.79
Area B	$ 35.25	7.79

ASBESTOS REMOVAL-SCOPE OF WORK: Site mobilization; initial site clean-up; site preparation; removal of asbestos-containing materials from walls and ceilings; or from pipes, boilers and mechanical systems only if they are being scrapped; encapsulation, enclosure and disposal of asbestos-containing materials by hand or with equipment or machinery; scaffolding; fabrication of temporary wooden barriers; and assembly of decontamination stations.

LABO0067-003 07/01/2009

AREA A: ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO & SANTA CLARA

AREA B: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SANCRMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SIERRA, SHASTA, SISKIYOU, SOLANO, SONOMA, STANISLAUS,TEHAMA,TRINITY, TULARE, TUOLUMNE, YOLO & YUBA COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person		
Area A	$ 26.89	14.93
Area B	$ 25.89	14.93

Traffic Control Person I		
Area A	$ 27.19	14.93
Area B	$ 26.19	14.93
Traffic Control Person II		
Area A	$ 24.69	14.93
Area B	$ 23.69	14.93

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0067-006 06/28/2010

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, EL DORADO, FRESNO, GLENN, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Laborers: (CONSTRUCTION CRAFT LABORERS - AREA A:)		
Construction Specialist Group	$ 27.84	15.82
GROUP 1	$ 27.14	15.82
GROUP 1-a	$ 27.36	15.82
GROUP 1-c	$ 27.19	15.82
GROUP 1-e	$ 27.69	15.82
GROUP 1-f	$ 27.72	15.82
GROUP 1-g (Contra Costa County)	$ 27.34	15.82
GROUP 2	$ 26.99	15.82
GROUP 3	$ 26.89	15.82
GROUP 4	$ 20.58	15.82
See groups 1-b and 1-d under laborer classifications.		
Laborers: (CONSTRUCTION CRAFT LABORERS - AREA B:)		
Construction Specialist Group	$ 26.84	15.82
GROUP 1	$ 26.14	15.82
GROUP 1-a	$ 26.36	15.82
GROUP 1-c	$ 26.19	15.82
GROUP 1-e	$ 26.69	15.82
GROUP 1-f	$ 26.72	15.82
GROUP 2	$ 25.99	15.82
GROUP 3	$ 25.89	15.82
GROUP 4	$ 19.58	15.82
See groups 1-b and 1-d under laborer classifications.		
Laborers: (GUNITE - AREA A:)		
GROUP 1	$ 28.10	15.82
GROUP 2	$ 27.60	15.82

GROUP 3	$ 27.60	15.82
GROUP 4	$ 27.60	15.82
Laborers: (GUNITE - AREA B:)		
GROUP 1	$ 27.10	15.82
GROUP 2	$ 26.60	15.82
GROUP 3	$ 26.01	15.82
GROUP 4	$ 25.89	15.82
Laborers: (WRECKING - AREA A:)		
GROUP 1	$ 27.14	15.82
GROUP 2	$ 26.99	15.82
Laborers: (WRECKING - AREA B:)		
GROUP 1	$ 26.14	15.82
GROUP 2	$ 25.99	15.82
Landscape Laborer (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA A:)		
(1) New Construction	$ 26.89	15.82
(2) Establishment Warranty Period	$ 20.58	15.82
Landscape Laborer (GARDENERS, HORTICULURAL & LANDSCAPE LABORERS - AREA B:)		
(1) New Construction	$ 25.89	15.82
(2) Establishment Warranty Period	$ 19.58	15.82

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive $0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in- place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and bucker; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying,

dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive $4.00 per day above Group 1 wage rates. "Sewer cleaner" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shal receive $5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive $ .25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting

or shot crete

GROUP 1-g, CONTRA COSTA COUNTY: Pipelayer (including grade checking in connection with pipelaying); Caulker; Bander; Pipewrapper; Conduit layer; Plastic pipe layer; Pressure pipe tester; No joint pipe and stripping of same, including repair of voids; Precast manhole setters, cast in place manhole form setters

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification "material cleaner" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of "form stripping, cleaning and oiling and moving to the next point of erection".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Gunite laborer

WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

LABO0067-010 07/01/2010

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1	$ 33.35	16.08
GROUP 2	$ 33.12	16.08
GROUP 3	$ 32.87	16.08
GROUP 4	$ 32.42	16.08
GROUP 5	$ 31.88	16.08
Shotcrete Specialist	$ 33.87	16.08

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0073-003 07/01/2011

CALAVERAS, MARIPOSA, MERCED, MONTEREY, SAN BENITO, SAN JOAQUIN, STANISLAUS AND TUOLUMNE COUNTIES:

	Rates	Fringes
LABORER		
Mason Tender-Brick	$ 30.62	14.43

LABO0073-005 07/01/2009

CALAVERAS, FRESNO, KINGS, MADERA, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS & TUOLUMNE

	Rates	Fringes
Plasterer tender	$ 28.37	14.14

LABO0166-001 07/01/2006

ALAMEDA AND CONTRA COSTA COUNTIES:

	Rates	Fringes
Brick Tender	$ 25.91	14.65

FOOTNOTES: Work on jobs where heat-protective clothing is required: $2.00 per hour additional. Work at grinders: $.25 per hour additional. Manhole work: $2.00 per day additional.

LABO0166-002 07/01/2006

ALAMEDA AND CONTRA COSTA COUNTIES:

	Rates	Fringes
Plasterer tender	$ 30.15	15.90

Gun Man $0.75 per hour additional

LABO0270-001 07/01/2008

SANTA CLARA & SANTA CRUZ COUNTIES

	Rates	Fringes
MASON TENDER, BRICK		
Santa Clara	$ 27.93	13.48
Santa Cruz	$ 26.93	13.48

FOOTNOTE: $2.00 per hour for refactory work where heat-protective clothing is required.

LABO0270-005 07/01/2007

SANTA CLARA AND SANTA CRUZ COUNTIES

	Rates	Fringes
PLASTER TENDER		
4 Stories and under	$ 27.62	13.73
5 Stories and above	$ 29.54	13.73

LABO0294-001 07/01/2011

FRESNO, KINGS AND MADERA COUNTIES

	Rates	Fringes
LABORER (Brick)		

Mason Tender-Brick.....$ 30.62 14.43

LABO0297-001 08/01/2007

MONTEREY AND SAN BENITO COUNTIES

	Rates	Fringes
Plasterer tender.....$	23.70	11.50

FOOTNOTE: Mixer person: $4.00 per day additional.

PAIN0016-001 01/01/2012

ALAMEDA, CONTRA COSTA, MONTEREY, SAN BENITO, SAN MATEO, SANTA CLARA, AND SANTA CRUZ COUNTIES

	Rates	Fringes
Painters:.....$	33.09	19.83

PREMIUMS:

EXOTIC MATERIALS - $0.75 additional per hour.
SPRAY WORK: - $0.50 additional per hour.
INDUSTRIAL PAINTING - $0.25 additional per hour
[Work on industrial buildings used for the manufacture and processing of goods for sale or service; steel construction (bridges), stacks, towers, tanks, and similar structures]

HIGH WORK:
over 50 feet - $2.00 per hour additional
100 to 180 feet - $4.00 per hour additional
Over 180 feet - $6.00 per houir additional

PAIN0016-003 01/01/2012

AREA 1: ALAMEDA, CONTRA COSTA, SAN FRANCISCO, SAN MATEO & SANTA CLARA COUNTIES

AREA 2: CALAVERAS, MARIPOA, MERCED, MONTEREY, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, STANISLAUS & TUOLUMNE COUNTIES

	Rates	Fringes
Drywall Finisher/Taper		
AREA 1.....$	40.37	19.64
AREA 2.....$	36.24	18.24

PAIN0016-012 01/01/2012

ALAMEDA, CONTRA COSTA, MARIPOSA, MERCED, MONTEREY, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA AND SANTA CRUZ COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....$	44.87	17.78

PAIN0016-015 01/01/2012

CALAVERAS, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS & TUOLUMNE COUNTIES

	Rates	Fringes
PAINTER	$ 28.35	15.74
Brush	$ 28.35	15.74

FOOTNOTES:
SPRAY/SANDBLAST: $0.50 additional per hour.
EXOTIC MATERIALS: $1.00 additional per hour.
HIGH TIME: Over 50 ft above ground or water level $2.00 additional per hour. 100 to 180 ft above ground or water level $4.00 additional per hour. Over 180 ft above ground or water level $6.00 additional per hour.

PAIN0016-022 01/01/2012

SAN FRANCISCO COUNTY

	Rates	Fringes
PAINTER	$ 36.71	19.83

PAIN0169-001 01/01/2012

FRESNO, KINGS, MADERA, MARIPOSA AND MERCED COUNTIES:

	Rates	Fringes
GLAZIER	$ 32.23	17.60

PAIN0169-005 01/01/2012

ALAMEDA CONTRA COSTA, MONTEREY, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA & SANTA CRUZ COUNTIES

	Rates	Fringes
GLAZIER	$ 41.88	20.39

PAIN0294-004 01/01/2012

FRESNO, KINGS AND MADERA COUNTIES

	Rates	Fringes
PAINTER		
Brush, Roller	$ 25.67	15.68
Drywall Finisher/Taper	$ 30.47	16.86

FOOTNOTE:
Spray Painters & Paperhangers recive $1.00 additional per hour. Painters doing Drywall Patching receive $1.25 additional per hour. Lead Abaters & Sandblasters receive

$1.50 additional per hour. High Time - over 30 feet (does not include work from a lift) $0.75 per hour additional.

PAIN0294-005 01/01/2012

FRESNO, KINGS & MADERA

	Rates	Fringes
SOFT FLOOR LAYER	$ 27.83	15.46

PAIN0767-001 01/01/2012

CALAVERAS, SAN JOAQUIN, STANISLAUS AND TUOLUMNE COUNTIES:

	Rates	Fringes
GLAZIER	$ 32.24	18.59

PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

Employee rquired to wear a body harness shall receive $1.50 per hour above the basic hourly rate at any elevation.

PAIN1176-001 07/01/2011

HIGHWAY IMPROVEMENT

	Rates	Fringes
Parking Lot Striping/Highway Marking:		
GROUP 1	$ 31.35	11.65
GROUP 2	$ 26.65	11.65
GROUP 3	$ 26.96	11.65

CLASSIFICATIONS

GROUP 1: Striper: Layout and application of painted traffic stripes and marking; hot thermo plastic; tape, traffic stripes and markings

GROUP 2: Gamecourt & Playground Installer

GROUP 3: Protective Coating, Pavement Sealing

PAIN1237-003 01/01/2012

CALAVERAS; SAN JOAQUIN COUNTIES; STANISLAUS AND TUOLUMNE COUNTIES:

	Rates	Fringes
SOFT FLOOR LAYER	$ 28.25	16.53

PLAS0066-002 08/01/2011

ALAMEDA, CONTRA COSTA, SAN MATEO AND SAN FRANCISCO COUNTIES:

	Rates	Fringes
PLASTERER	$ 33.13	24.64

PLAS0300-001 07/01/2009

	Rates	Fringes
PLASTERER		
AREA 188: Fresno	$ 29.72	14.21
AREA 224: San Benito, Santa Clara, Santa Cruz	$ 34.22	14.08
AREA 295: Calaveras & San Joaquin Couonties	$ 32.82	15.10
AREA 337: Monterey County	$ 31.01	13.93
AREA 429: Mariposa, Merced, Stanislaus, Tuolumne Counties	$ 32.82	15.30

PLAS0300-005 06/28/2010

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 28.65	18.56

PLUM0038-001 07/01/2011

SAN FRANCISCO COUNTY

	Rates	Fringes
PLUMBER (Plumber, Steamfitter, Refrigeration Fitter)	$ 57.75	39.74

PLUM0038-005 07/01/2011

SAN FRANCISCO COUNTY

	Rates	Fringes
Landscape/Irrigation Fitter (Underground/Utility Fitter)	$ 46.96	28.85

* PLUM0062-001 07/01/2012

MONTEREY AND SANTA CRUZ COUNTIES

	Rates	Fringes
PLUMBER & STEAMFITTER	$ 40.55	23.69

PLUM0159-001 01/01/2012

CONTRA COSTA COUNTY

	Rates	Fringes

Plumber and steamfitter
(1) Refrigeration.....$ 49.33 27.94
(2) All other work.....$ 28.14 27.64

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* PLUM0246-001 07/01/2012

FRESNO, KINGS & MADERA COUNTIES

	Rates	Fringes
PLUMBER & STEAMFITTER	$ 35.45	23.94

PLUM0246-004 01/01/2012

FRESNO, MERCED & SAN JOAQUIN COUNIES

	Rates	Fringes
PLUMBER (PIPE TRADESMAN)	$ 13.00	9.23

PIPE TRADESMAN SCOPE OF WORK:
Installation of corrugated metal piping for drainage, as well as installation of corrugated metal piping for culverts in connection with storm sewers and drains; Grouting, dry packing and diapering of joints, holes or chases including paving over joints, in piping; Temporary piping for dirt work for building site preparation; Operating jack hammers, pavement breakers, chipping guns, concrete saws and spades to cut holes, chases and channels for piping systems; Digging, grading, backfilling and ground preparation for all types of pipe to all points of the jobsite; Ground preparation including ground leveling, layout and planting of shrubbery, trees and ground cover, including watering, mowing, edging, pruning and fertilizing, the breaking of concrete, digging, backfilling and tamping for the preparation and completion of all work in connection with lawn sprinkler and landscaping; Loading, unloading and distributing materials at jobsite; Putting away materials in storage bins in jobsite secure storage area; Demolition of piping and fixtures for remodeling and additions; Setting up and tearing down work benches, ladders and job shacks; Clean-up and sweeping of jobsite; Pipe wrapping and waterproofing where tar or similar material is applied for protection of buried piping; Flagman

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PLUM0342-001 07/01/2011

ALAMEDA & CONTRA COSTA COUNTIES

	Rates	Fringes
PIPEFITTER		
CONTRA COSTA COUNTY	$ 51.21	29.79
PLUMBER, PIPEFITTER, STEAMFITTER		
ALAMEDA COUNTY	$ 51.21	29.79

PLUM0355-004 07/01/2012

ALAMEDA, CALAVERAS, CONTRA COSTA, FRESNO, KINGS, MADERA,

MARIPOSA, MERCED, MONTEREY, SAN BENITO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, STANISLAUS, AND TUOLUMNE COUNTIES:

	Rates	Fringes
Underground Utility Worker /Landscape Fitter	$ 26.35	8.00

PLUM0393-001 01/01/2012

SAN BENITO AND SANTA CLARA COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER	$ 48.80	26.83

* PLUM0442-001 07/01/2012

CALAVERAS, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS & TUOLUMNE COUNTIES

	Rates	Fringes
PLUMBER & STEAMFITTER	$ 35.95	23.79

* PLUM0467-001 07/01/2012

SAN MATEO COUNTY

	Rates	Fringes
Plumber/Pipefitter/Steamfitter	$ 54.00	28.41

ROOF0027-002 09/01/2010

FRESNO, KINGS, AND MADERA COUNTIES

	Rates	Fringes
ROOFER	$ 27.65	8.07

FOOTNOTE: Work with pitch, pitch base of pitch impregnated products or any material containing coal tar pitch, on any building old or new, where both asphalt and pitchers are used in the application of a built-up roof or tear off: $2.00 per hour additional.

ROOF0040-002 08/01/2010

SAN FRANCISCO & SAN MATEO COUNTIES:

	Rates	Fringes
ROOFER	$ 33.33	11.04

* ROOF0081-001 08/01/2011

ALAMEDA AND CONTRA COSTA COUNTIES:

	Rates	Fringes
Roofer	$ 33.16	10.90

ROOF0081-004 08/01/2011

CALAVERAS, MARIPOSA, MERCED, SAN JOAQUIN, STANISLAUS AND TUOLUMNE COUNTIES:

	Rates	Fringes
ROOFER	$ 28.49	10.75

ROOF0095-002 08/01/2011

MONTEREY, SAN BENITO, SANTA CLARA, AND SANTA CRUZ COUNTIES:

	Rates	Fringes
ROOFER		
Journeyman	$ 35.58	10.90
Kettle person (2 kettles); Bitumastic, Enameler, Coal Tar, Pitch and Mastic worker	$ 35.58	10.90
Kettleman (2 kettles), Bitumastic Enameler, Coal Tar, Pitch & Mastic	$ 33.73	9.89

SFCA0483-001 08/01/2011

ALAMEDA, CONTRA COSTA, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES:

	Rates	Fringes
SPRINKLER FITTER (FIRE)	$ 50.59	23.70

SFCA0669-011 04/01/2012

CALAVERAS, FRESNO, KINGS, MADERA, MARIPOSA, MERCED, MONTEREY, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, STANISLAUS AND TUOLUMNE COUNTIES:

	Rates	Fringes
SPRINKLER FITTER	$ 32.33	19.40

SHEE0104-001 01/01/2012

AREA 1: ALAMEDA, CONTRA COSTA, SAN FRANCISCO, SAN MATEO, SANTA CLARA

AREA 2: MONTEREY & SAN BENITO

AREA 3: SANTA CRUZ

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 27.13	21.09
GROUP 2	$ 27.43	21.09
GROUP 3	$ 27.73	21.09
GROUP 4	$ 28.08	21.09
GROUP 5	$ 28.43	21.09

FOOTNOTES:

Articulated dump truck; Bulk cement spreader (with or without auger); Dumpcrete truck; Skid truck (debris box); Dry pre-batch concrete mix trucks; Dumpster or similar type; Slurry truck: Use dump truck yardage rate.
Heater planer; Asphalt burner; Scarifier burner; Industrial lift truck (mechanical tailgate); Utility and clean-up truck: Use appropriate rate for the power unit or the equipment utilized.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Dump trucks, under 6 yds.; Single unit flat rack (2-axle unit); Nipper truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump machine; Fork lift and lift jitneys; Fuel and/or grease truck driver or fuel person; Snow buggy; Steam cleaning; Bus or personhaul driver; Escort or pilot car driver; Pickup truck; Teamster oiler/greaser and/or serviceperson; Hook tender (including loading and unloading); Team driver; Tool room attendant (refineries)

GROUP 2: Dump trucks, 6 yds. and under 8 yds.; Transit mixers, through 10 yds.; Water trucks, under 7,000 gals.; Jetting trucks, under 7,000 gals.; Single-unit flat rack (3-axle unit); Highbed heavy duty transport; Scissor truck; Rubber-tired muck car (not self-loaded); Rubber-tired truck jumbo; Winch truck and "A" frame drivers; Combination winch truck with hoist; Road oil truck or bootperson; Buggymobile; Ross, Hyster and similar straddle carriers; Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 24 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under 7500 gals. Trucks towing tilt bed or flat bed pull trailers; Lowbed heavy duty transport; Heavy duty transport tiller person; Self- propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 25 yds. and under 65 yds.; Water

pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbedk Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low bed Heavy Duty Transport over 7 axles

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union

rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an

interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

OVERPASS AGREEMENT

BNSF File No. BF –
US DOT No: 029684K
Wilbur Avenue Overpass
U.S. D.O.T. No. 029684K
BNSF MP 1150.28
LS 7200, Stockton Subdivision

This Agreement **("Agreement")** is executed to be effective as of this 30TH day of AUGUST, 2012 **("Effective Date")**, by and between BNSF RAILWAY COMPANY, a Delaware corporation **("BNSF")**, and the CITY OF ANTIOCH, a political subdivision of the State of California **("Agency")**.

RECITALS:

WHEREAS, BNSF owns and operates a line of railroad in and through the City of Antioch, State of California;

WHEREAS, Agency desires to improve and enlarge the existing Wilbur Avenue Overpass by widening the structure an additional 54' to the south.

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the parties contained herein, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I – SCOPE OF WORK

1. The term **"Project"** as used herein includes any and all work related to the widening of the existing Wilbur Avenue Overpass (hereinafter referred to as the **"Structure"**), more particularly described on the Exhibit A attached hereto and incorporated herein, including, but not limited to, any and all changes to telephone, telegraph, signal and electrical lines and appurtenances, temporary and permanent track work, fencing, grading, alterations to or new construction of drainage facilities, preliminary and construction engineering and contract preparation. During construction of the Structure, vehicular traffic will be temporarily relocated on the existing Wilbur Avenue Overpass Structure. Additionally, temporary controls during construction must be in compliance with Section 8A-5, "Traffic Controls during Construction and Maintenance" of the Uniform Traffic Control Devices Manual, U.S. Department of Transportation.

ARTICLE II – BNSF OBLIGATIONS

In consideration of the covenants of Agency set forth herein and the faithful performance thereof, BNSF agrees as follows:

1. Upon Agency's payment to BNSF of the sum of Twenty-One Thousand One Hundred Sixty One and No/100 DOLLARS ($21,161.00), BNSF shall grant to Agency, its successors and assigns, upon and subject to the terms and conditions set forth in this Agreement, a temporary non-exclusive license (hereinafter called, "Temporary Construction License") to construct the Structure across or upon the portion of BNSF's right-of-way described further on Exhibit A, excepting and reserving BNSF's rights, and the rights of any others who have obtained, or may obtain, permission or authority from BNSF, to do the following:

(a) Operate, maintain, renew and/or relocate any and all existing railroad track or tracks, wires, pipelines and other facilities of like character upon, over or under the surface of said right-of-way;

(b) Construct, operate, maintain, renew and/or relocate upon said right-of-way, without limitation, such facilities as the BNSF may from time to time deem appropriate, provided such facilities do not materially interfere with the Agency's use of the Structure;

(c) Otherwise use or operate the right-of-way as BNSF may from time to time deem appropriate, provided such use or operations does not materially interfere with the Agency's use of the Structure.

The Temporary Construction License shall be in the form attached hereto as Exhibit B and by this reference made a part hereof, and shall be for a term beginning on the Effective Date and ending on the earlier of (i) substantial completion of the Structure, or (ii) twenty-four (24) months following the Effective Date. The Temporary Construction License and related rights to be given by BNSF to Agency shall be without warranty of title of any kind, express or implied, and no covenant of warranty of title will be implied from the use of any word or words therein contained. The Temporary Construction License shall be for construction of the Structure and for no other purpose. Agency acknowledges and agrees that Agency shall not have the right, under the Temporary Construction License, to use the Structure. In the event Agency is evicted by anyone owning, or claiming title to or any interest in said right-of-way, BNSF will not be liable to Agency for any damages, losses or any expenses of any nature whatsoever. The granting of similar rights to others, subsequent to the date of this Agreement, will not impair or interfere with the rights granted to Agency pursuant to the Temporary Construction License.

Upon payment to BNSF of the additional sum of One Hundred Eleven Thousand Five Hundred Twelve and No/100 DOLLARS ($111,512.00), such payment to be made within thirty (30) days of the giving of the notice required pursuant to Article III, Section 17 of this Agreement, and provided further that Agency is in compliance with the terms and conditions of this Agreement, BNSF shall deliver to Agency, its successors and assigns, an easement (hereinafter called, the "Easement") to enter upon and use that portion of BNSF's right-of-way as is necessary to use and maintain the Structure. The Easement shall be substantially in the form attached hereto as Exhibit B-1 and by this reference made a part hereof. If Agency fails to pay BNSF within the thirty day time period hereinabove set forth, BNSF may stop construction of the Project until full payment is received by BNSF.

2. BNSF will furnish all labor, materials, tools, and equipment for railroad work required for the construction of the Project, such railroad work and the estimated cost thereof being as shown on Exhibit D attached hereto and made a part hereof. In the event construction on the Project has not commenced within six (6) months following the Effective Date, BNSF may, in its sole and absolute discretion, revise the cost estimates set forth in said Exhibit D. In such event, the revised cost estimates will become a part of this Agreement as though originally set forth herein. Any item of work incidental to the items listed on Exhibit D not specifically mentioned therein may be included as a part of this Agreement upon written approval of Agency, which approval will not be unreasonably withheld. Construction of the Project must include the following railroad work by BNSF:

(a) Procurement of materials, equipment and supplies necessary for the railroad work;

(b) Preliminary engineering, design, and contract preparation;

(c) Furnishing of flagging services during construction of the Project as required and set forth in further detail on Exhibit C, attached to this Agreement and made a part hereof;

(d) Furnishing engineering and inspection as required in connection with the construction of the Project;

(e) Providing a contract project coordinator, at Agency's expense, to serve as a project manager for the Project; and

3. BNSF will do all railroad work set forth in Article II, Section 2 above on an actual cost basis, when BNSF, in its sole discretion, determines it is required by its labor agreements to perform such work with its own employees working under applicable collective bargaining agreements.

4. Agency agrees to reimburse BNSF for work of an emergency nature caused by Agency or Agency's contractor in connection with the Project which BNSF deems is reasonably necessary for the immediate restoration of railroad operations, or for the protection of persons or BNSF property. Such work may be performed by BNSF without prior approval of Agency and Agency agrees to fully reimburse BNSF for all such emergency work.

5. BNSF may charge Agency for insurance expenses, including self-insurance expenses, when such expenses cover the cost of Employer's Liability (including, without limitation, liability under the Federal Employer's Liability Act) in connection with the construction of the Project. Such charges will be considered part of the actual cost of the Project, regardless of the nature or amount of ultimate liability for injury, loss or death to BNSF's employees, if any.

6. During the construction of the Project, BNSF will send Agency progressive invoices detailing the costs of the railroad work performed by BNSF under this Agreement. Agency must reimburse BNSF for completed force-account work within thirty (30) days of the date of the invoice for such work. Upon completion of the Project, BNSF will send Agency a detailed invoice of final costs, segregated as to labor and materials for each item in the recapitulation shown on Exhibit D. Pursuant to this section and Article IV, Section 7 herein, Agency must pay the final invoice within ninety (90) days of the date of the final invoice. BNSF will assess a finance charge of .033% per day (12% per annum) on any unpaid sums or other charges due under this Agreement which is past its credit terms. The finance charge continues to accrue daily until the date payment is received by BNSF, not the date payment is made or the date postmarked on the payment. Finance charges will be assessed on delinquent sums and other charges as of the end of the month and will be reduced by amounts in dispute and any unposted payments received by the month's end. Finance charges will be noted on invoices sent to Agency under this section. **For purposes of computing the time limits prescribed by Section 911.2 of the California Government Code for the presentment of a claim against the Agency, the cause of action for failure to reimburse BNSF for the costs of the Railroad work performed by it pursuant to this Agreement shall be deemed to have accrued one hundred and eighty (180) days of the date of the final invoice.**

ARTICLE III – AGENCY OBLIGATIONS

In consideration of the covenants of BNSF set forth herein and the faithful performance thereof, Agency agrees as follows:

1. Agency must furnish to BNSF plans and specifications for the Project. Four sets of said plans (reduced size 11" x 17"), together with two copies of calculations, and two copies of specifications in **English Units**, must be submitted to BNSF for approval prior to commencement of any construction. BNSF will give Agency final written approval of the plans and specifications substantially in the form of Exhibit E, attached to this Agreement and made a part hereof. Upon BNSF's final written approval of the plans and specifications, said plans and specifications will become part of this Agreement and are hereby incorporated herein. Any approval of the plans and specifications by BNSF shall in no way obligate BNSF in any manner with respect to the finished product design and/or construction. Any approval by BNSF shall mean only that the plans and specifications meet the subjective standards of BNSF, and such approval by BNSF shall not be deemed to mean that the plans and specifications or construction is structurally sound and appropriate or that such plans and specifications meet applicable regulations, laws, statutes or local ordinances and/or building codes.

2. Agency must make any required application and obtain all required permits and approvals for the construction of the Project.

3. Agency must provide for and maintain minimum vertical and horizontal clearances, as required in Exhibit C and as approved by BNSF as part of the plans and specifications for the Project.

4. Agency must acquire all rights of way necessary for the construction of the Project.

5. Agency must make any and all arrangements, in compliance BNSF's Utility Accommodation Manual (http://www.bnsf.com/communities/faqs/pdf/utility.pdf), for the installation or relocation of wire lines, pipe lines and other facilities owned by private persons, companies, corporations, political subdivisions or public utilities other than BNSF which may be necessary for the construction of the Project.

6. Agency must construct the Project as shown on the attached Exhibit A and do all work ("Agency's Work") provided for in the plans and specifications for the Project, except railroad work that will be performed by BNSF hereunder. Agency must furnish all labor, materials, tools and equipment for the performance of Agency's Work. The principal elements of Agency's Work are as follows:

(a) Construction of the Structure;

(b) All necessary grading and paving, including backfill of excavations and restoration of disturbed vegetation on BNSF's right-of-way;

(c) Provide suitable drainage, both temporary and permanent;

(d) Provide appropriate pedestrian control during construction;

(e) Installation and maintenance of an 8-ft. high fence and/or concrete combination (throw fence) on the outside barrier of the Structure;

(f) Job site cleanup including removal of all construction materials, concrete debris, surplus soil, refuse, contaminated soils, asphalt debris, litter and other waste materials to the satisfaction of BNSF;

7. Agency must apply and maintain said D.O.T. Crossing number **029684K** and Public Utility Commission crossing number **002-1150.30-A** in a conspicuous location on the Structure.

8. Agency's Work must be performed by Agency or Agency's contractor in a manner that will not endanger or interfere with the safe and timely operations of BNSF and its facilities.

9. For any future inspection or maintenance, either routine or otherwise, performed by subcontractors on behalf of the Agency, Agency shall require the subcontractors to execute and deliver to BNSF a letter agreement in the form of Exhibit C-1. Prior to performing any future maintenance with its own personnel, Agency shall: comply with all of BNSF's applicable safety rules and regulations; require any Agency employee performing maintenance to complete the safety training program at the BNSF's Internet Website "contractororientation.com"; notify BNSF when, pursuant to the requirements of Exhibit C, a flagger is required to be present; procure, and have approved by BNSF's Risk Management Department, Railroad Protective Liability insurance.

10. Agency must require its contractor(s) to notify BNSF's Roadmaster at least thirty (30) calendar days prior to requesting a BNSF flagman in accordance with the requirements of Exhibit C. Additionally, Agency must require its contractor(s) to notify BNSF's Manager of Public Projects thirty (30) calendar days prior to commencing work on BNSF property or near BNSF tracks.

11. Agency or its contractor(s) must submit four (4) copies of any plans (including two sets of calculations in **English Units**) for proposed shoring, falsework or cribbing to be used over, under, or adjacent to BNSF's tracks to BNSF's Manager of Public Projects for approval. The shoring, falsework or cribbing used by Agency's contractor shall comply with the BNSF Bridge Requirements set forth on Exhibit F, and BNSF's Instructions FOR PREPARATION OF DEMOLITION PLANS as set forth in Exhibit G with both Exhibits attached to this Agreement and incorporated herein, and all applicable requirements promulgated by state and federal agencies, departments, commissions and other legislative bodies. Exemptions or Waivers to the requirements specified in Exhibit F will not be allowed unless otherwise approved in writing by BNSF.

Falsework shall be designed according to the State of California, Department of Transportation FALSEWORKMANUAL available at this Web Site: http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCompleteManuals/FalseworkManual(Rev32).pdf. Any Demolition shall not commence until BNSF approves AGENCY demolition plan in writing.

12. Agency must include the following provisions in any contract with its contractor(s) performing work on said Project:

(a) The Contractor is placed on notice that fiber optic, communication and other cable lines and systems (collectively, the "Lines") owned by various telecommunications companies may be buried on BNSF's property or right-of-way. The locations of these Lines have been included on the plans based on information from the telecommunications companies. The contractor will be responsible for contacting BNSF's Engineering Representative Jason Sanchez (909) 386-4075, BNSF's Signal Representative Jerry Langdon (760) 326-5443, and the telecommunications companies and notifying them of any work that may damage these Lines or facilities and/or interfere with their service. The contractor must also mark all Lines shown on the plans or marked in the field in order to verify their locations. The contractor must also use all reasonable methods when working in the BNSF right-of-way or on BNSF property to determine if any other Lines (fiber optic, cable, communication or otherwise) may exist.

(b) The Contractor will be responsible for the rearrangement of any facilities or Lines determined to interfere with the construction. The Contractor must cooperate fully with any telecommunications company(ies) in performing such rearrangements.

(c) Failure to mark or identify these Lines will be sufficient cause for BNSF's engineering representative Jason Sanchez to stop construction at no cost to the Agency or BNSF until these items are completed.

(d) In addition to the liability terms contained elsewhere in this Agreement, the contractor hereby indemnifies, defends and holds harmless BNSF for, from and against all cost, liability, and expense whatsoever (including, without limitation, attorney's fees and court costs and expenses) arising out of or in any way contributed to by any act or omission of Contractor, its subcontractors, agents and/or employees that cause or in any way or degree contribute to (1) any damage to or destruction of any Lines by Contractor, and/or its subcontractors, agents and/or employees, on BNSF's property or within BNSF's right-of-way, (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on BNSF's property or within BNSF's right-of-way, and/or (3) any claim or cause of action for alleged loss of profits or revenue by, or loss of service by a customer or user of such telecommunication company(ies). **THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF BNSF.**

13. Agency must require compliance with the obligations set forth in this agreement, including Exhibit C and Exhibit C-1, and incorporate in each prime contract for construction of the Project, or the specifications therefor (i) the provisions set forth in Article III; (ii) the provisions set forth in Article IV; and (iii) the provisions set forth in Exhibit C and Exhibit C-l, attached hereto and by reference made a part hereof.

14. Except as otherwise provided below in this Section 14, all construction work performed hereunder by Agency for the Project will be pursuant to a contract or contracts to be let by Agency, and all such contracts must include the following:

(a) All work performed under such contract or contracts within the limits of BNSF's right-of-way must be performed in a good and workmanlike manner in accordance with plans and specifications approved by BNSF;

(b) Changes or modifications during construction that affect safety or BNSF operations must be subject to BNSF's approval;

(c) No work will be commenced within BNSF's right-of-way until each of the prime contractors employed in connection with said work must have (i) executed and delivered to BNSF a letter agreement in the form of Exhibit C-I, and (ii) delivered to and secured BNSF's approval of the required insurance; and

(d) To facilitate scheduling for the Project, Agency shall have its contractor give BNSF's representative Jason Sanchez 4 weeks advance notice of the proposed times and dates for work windows. BNSF and Agency's contractor will establish mutually agreeable work windows for the Project. BNSF has the right at any time to revise or change the work windows, due to train operations or service obligations. BNSF will not be responsible for any additional costs and expenses resulting from a change in work windows. Additional costs and expenses resulting from a change in work windows shall be accounted for in the contractor's expenses for the Project.

(e) The plans and specifications for the Project must be in compliance with the Bridge Requirements set forth on Exhibit F, attached to this Agreement and incorporated herein.

15. Agency must advise the appropriate BNSF Manager of Public Projects, in writing, of the completion date of the Project within thirty (30) days after such completion date. Additionally, Agency must notify BNSF's Manager of Public Projects, in writing, of the date on which Agency and/or its Contractor will meet with BNSF for the purpose of making final inspection of the Project.

16. **TO THE FULLEST EXTENT PERMITTED BY LAW, AGENCY HEREBY RELEASES, INDEMNIFIES, DEFENDS AND HOLDS HARMLESS BNSF, ITS AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS AND ATTORNEYS' FEES) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON (INCLUDING, WITHOUT LIMITATION, THE EMPLOYEES OF THE PARTIES HERETO) OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART) (I) THE USE, OCCUPANCY OR PRESENCE OF AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES OR AGENTS IN, ON, OR ABOUT THE CONSTRUCTION SITE, (II) THE PERFORMANCE, OR FAILURE TO PERFORM BY THE AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS, ITS WORK OR ANY OBLIGATION UNDER THIS AGREEMENT, (III) THE SOLE OR CONTRIBUTING ACTS OR OMISSIONS OF AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS IN, ON, OR ABOUT THE CONSTRUCTION SITE, (IV) AGENCY'S BREACH OF THE TEMPORARY CONSTRUCTION LICENSE OR EASEMENT GRANTED TO AGENCY PURSUANT TO ARTICLE II OF THIS AGREEMENT, (V) ANY RIGHTS OR INTERESTS GRANTED TO AGENCY PURSUANT TO THE TEMPORARY CONSTRUCTION LICENSE OR EASEMENT DISCUSSED IN ARTICLE II OF THIS AGREEMENT, (VI) AGENCY'S OCCUPATION AND USE OF BNSF'S PROPERTY OR RIGHT-OF-WAY, INCLUDING, WITHOUT LIMITATION, SUBSEQUENT MAINTENANCE OF THE STRUCTURE BY AGENCY, OR (VII) AN ACT OR OMISSION OF AGENCY OR ITS OFFICERS, AGENTS, INVITEES, EMPLOYEES OR CONTRACTORS OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER.THE LIABILITY ASSUMED BY AGENCY WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THEDAMAGE, DESTRUCTION,**

INJURY OR DEATH WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF BNSF.

17. Agency must give BNSF's Manager of Public Projects written notice to proceed ("**Notice to Proceed**") with the railroad work after receipt of necessary funds for the Project. BNSF will not begin the railroad work (including, without limitation, procurement of supplies, equipment or materials) until written notice to proceed is received from Agency.

ARTICLE IV – JOINT OBLIGATIONS

IN CONSIDERATION of the premises, the parties hereto mutually agree to the following:

1. All work contemplated in this Agreement must be performed in a good and workmanlike manner and each portion must be promptly commenced by the party obligated hereunder to perform the same and thereafter diligently prosecuted to conclusion in its logical order and sequence. Furthermore, any changes or modifications during construction which affect BNSF will be subject to BNSF's written approval prior to the commencement of any such changes or modifications from the BNSF Project Manager.

2. The work hereunder must be done in accordance with the Bridge Requirements set forth on Exhibit F, the "Instructions for Preparation of Demolition Plans" as set forth in Exhibit G, and the detailed plans and specifications approved by BNSF.

3. Agency must require its contractor(s) to reasonably adhere to the Project's construction schedule for all Project work. The parties hereto mutually agree that BNSF's failure to complete the railroad work in accordance with the construction schedule due to inclement weather or unforeseen railroad emergencies will not constitute a breach of this Agreement by BNSF and will not subject BNSF to any liability. Regardless of the requirements of the construction schedule, BNSF reserves the right to reallocate the labor forces assigned to complete the railroad work in the event of an emergency to provide for the immediate restoration of railroad operations (BNSF or its related railroads) or to protect persons or property on or near any BNSF owned property. BNSF will not be liable for any additional costs or expenses resulting from any such reallocation of its labor forces. The parties mutually agree that any reallocation of labor forces by BNSF pursuant to this provision and any direct or indirect consequences or costs resulting from any such reallocation will not constitute a breach of this Agreement by BNSF.

4. BNSF will have the right to stop construction work on the Project if any of the following events take place: (i) Agency (or any of its contractors) performs the Project work in a manner contrary to the plans and specifications approved by BNSF; (ii) Agency (or any of its contractors), in BNSF's opinion, prosecutes the Project work in a manner which is hazardous to BNSF property, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project; or (iv) Agency fails to pay BNSF for the Easement pursuant to Article II, Section 1 of this Agreement. The work stoppage will continue until all necessary actions are taken by Agency or its contractor to rectify the situation to the satisfaction of BNSF's Division Engineer or until additional insurance has been delivered to and accepted by BNSF. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, BNSF may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of BNSF. BNSF's right to stop the work is in addition to any other rights BNSF may have including, but not limited to, actions or suits for damages or lost profits. In the event that BNSF desires to stop construction work on the Project, BNSF agrees to immediately notify the following individual in writing:

Ron Bernal, P.E.
Director of Public Works/City Engineer
City of Antioch
P.O. Box 5007
Antioch, CA 94531

5. Agency must supervise and inspect the operations of all Agency contractors to assure compliance with the plans and specifications approved by BNSF, the terms of this Agreement and all safety requirements of the BNSF railroad. If BNSF determines that proper supervision and inspection is not being performed by Agency personnel at any time during construction of the Project, BNSF has the right to stop construction (within or adjacent to its operating right-of-way). Construction of the Project will not proceed until Agency corrects the situation to BNSF's reasonable satisfaction. If BNSF feels the situation is not being corrected in an expeditious manner, BNSF will immediately notify Ron Bernal at (925) 779-6820 for appropriate corrective action.

6. Pursuant to this section and Article II, Section 6 herein, Agency must, reimburse BNSF in full for the actual costs of all work performed by BNSF under this Agreement. **In any action brought under this Agreement, the prevailing Party shall be entitled to recover its actual costs and attorneys fees pursuant to California Civil Code Section 1717, as well as other litigation costs, including expert witness fees. The prevailing Party shall also be entitled to recover all actual attorneys' fees and litigation costs incurred in connection with the enforcement of a judgment arising from such action or proceeding.**

7. All expenses detailed in statements sent to Agency pursuant to Article II, Section 6 herein will comply with the terms and provisions of the Federal Aid Highway Program Manual, U.S. Department of Transportation, as amended from time to time, which manual is hereby incorporated into and made a part of this Agreement by reference. The parties mutually agree that BNSF's preliminary engineering, design, and contract preparation costs described in Article II, Section 2 herein are part of the costs of the Project even though such work may have preceded the date of this Agreement.

8. The parties mutually agree that no construction activities for the Project, or future maintenance of the Structure once completed will be permitted during the fourth quarter of each calendar year. Emergency work will be permitted only upon prior notification to BNSF's NetworkOperationsCenter (telephone number: 800 832-5452). The parties hereto mutually understand and agree that trains cannot be subjected to delay during this time period.

9. Subject to the restrictions imposed by Article IV, Section 8 above, the construction of the Project will not commence until Agency gives BNSF's Manager of Public Projects thirty (30) days prior written notice of such commencement. The commencements notice will reference BNSF's file number 029684K and D.O.T. Crossing No. 029684K and must state the time that construction activities will begin.

10. In addition to the terms and conditions set forth elsewhere in this Agreement, including, but not limited to, the terms and conditions stated in Exhibit F, BNSF and Agency agree to the following terms upon completion of construction of the Project:

(a) Agency will own and maintain, at its sole cost and expense, the Structure, the highway approaches, and appurtenances thereto, lighting, drainage and any access roadways to BNSF gates installed pursuant to this Agreement. BNSF may, at its option, perform maintenance on the Structure in order to avoid conflicts with train operations. BNSF will notify Agency prior to performing any such maintenance on the Structure. In the event such maintenance involves emergency repairs, BNSF will notify Agency at its earliest opportunity. Agency must fully reimburse BNSF for the costs of maintenance performed by BNSF pursuant to this subsection (b).

(b) Agency must, at Agency's sole cost and expense, keep the Structure painted and free from graffiti.

(c) Agency must apply and maintain vertical clearance signs, which consistently and accurately describe the minimum actual vertical clearance from the bottom of the Structure to the top of any pavement.

(d) Agency must provide BNSF with any and all necessary permits and maintain roadway traffic controls, at no cost to BNSF, whenever requested by BNSF to allow BNSF to inspect the Structure or to make emergency repairs thereto.

(e) It is expressly understood by Agency and BNSF that any right to install utilities will be governed by a separate permit or license agreement between the parties hereto.

(f) Agency must keep the Structure and surrounding areas clean and free from birds, pigeons, scavengers, vermin, creatures and other animals.

(g) If Agency (including its contractors and agents) or BNSF, on behalf of Agency, performs (i) alterations or modifications to the Structure, or (ii) any maintenance or other work on the Structure with heavy tools, equipment or machinery at ground surface level horizontally within 25'-0" of the centerline of the nearest track, or (iii) any maintenance or other work outside the limits of the deck of the Structure vertically above the top of the rail, then Agency or its contractors and/or agents must procure and maintain the insurance set forth in Exhibit C-1.

11. Agency hereby grants to BNSF, at no cost or expense to BNSF, a permanent right of access from Agency property to BNSF tracks for maintenance purposes.

12. Agency must provide one set of as built plans (prepared in **English Units)** to BNSF, as well as one set of computer diskettes containing as built CAD drawings of the Structure and identifying the software used for the CAD drawings. The "as built plans" must comply with the Bridge Requirements set forth on Exhibit F and depict all information in BNSF engineering stationing and mile post pluses. The "as built plans" must also include plan and profile, structural bridge drawings and specifications, and drainage plans. All improvements and facilities must be shown.

13. Subject to the restrictions imposed by Article IV, Section 8 above, Agency must notify and obtain prior authorization from BNSF's Manager of Public Projects before entering BNSF's right-of-way for **INSPECTION OR MAINTENANCE** purposes, and the BNSF Manager of Public Projects will determine if flagging is required. If the construction work hereunder is contracted, Agency must require its prime contractor(s) to comply with the obligations set forth in Exhibit C and Exhibit C-1, as the same may be revised from time to time. Agency will be responsible for its contractor(s) compliance with such obligations.

14. BNSF may, at its expense, make future changes or additions to the railroad components of the Structure if necessary or desirable, in BNSF's sole discretion, including, without limitation the following: (i) the right to raise or lower the grade or change the alignment of its tracks, (ii) the right to lay additional track or tracks, or (iii) the right to build other facilities in connection with the operation of its railroad. Such changes or additions must not change or alter the highway components of the Structure. If it becomes necessary or desirable in the future to change, alter, widen or reconstruct the highway components of the Structure to accommodate railroad projects, the cost of such work, including any cost incidental to alteration of railroad or highway facilities made necessary by any such changes to the Structure, will be the sole responsibility of the Agency.

15. Agency may, at Agency's sole expense, alter or reconstruct the highway components of the Structure if necessary or desirable, due to traffic conditions or pedestrian or other recreational traffic, provided, however, that any such alteration or reconstruction must not encroach further upon or occupy the surface of BNSF's right-of-way to a greater extent than is contemplated by the plans and specifications to be approved by BNSF pursuant to Article III, Section 1 herein, without obtaining BNSF's prior written consent and the execution of a supplement to this Agreement or the completion of a separate agreement.

16. Any books, papers, records and accounts of the parties hereto relating to the work hereunder or the costs or expenses for labor and material connected with the construction will at all reasonable times be open to inspection and audit by the agents and authorized representatives of the parties hereto, as

well as the State of California and the Federal Highway Administration, for a period of one (1) year from the date of the final BNSF invoice under this Agreement.

17. The covenants and provisions of this Agreement are binding upon and inure to the benefit of the successors and assigns of the parties hereto. Notwithstanding the preceding sentence, neither party hereto may assign any of its rights or obligations hereunder without the prior written consent of the other party.

18. In the event construction of the Project does not commence within 3 years of the Effective Date, this Agreement will become null and void.

19. Neither termination nor expiration of this Agreement will release either party from any liability or obligation under this Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration.

20. To the maximum extent possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is prohibited by, or held to be invalid under, applicable law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

21. This Agreement (including exhibits and other documents, manuals, etc. incorporated herein) is the full and complete agreement between BNSF and Agency with respect to the subject matter herein and supersedes any and all other prior agreements between the parties hereto.

22. Any notice provided for herein or concerning this Agreement must be in writing and will be deemed sufficiently given when sent by certified mail, return receipt requested, to the parties at the following addresses:

BNSF Railway Company:

BNSF's Manager of Public Projects
John R. Stilley
740 East Carnegie Drive
San Bernardino, California 92408

City of Antioch

Ron Bernal, P.E.
Director of Public Works/City Engineer
City of Antioch
P.O. Box 5007
Antioch, CA 94531

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and attested by its duly qualified and authorized officials as of the day and year first above written.

BNSF RAILWAY COMPANY

By: _____
Printed Name: _____
Title: Vice President Engineering

WITNESS:

_____

AGENCY

CITY OF ANTIOCH

By: _____
Printed Name: RON BERNAL
Title: DIRECTOR OF PUBLIC WORKS / CITY ENGINEER

WITNESS:

_____

Exhibit A

(Plan / Profile Sheets)

EXHIBIT "A"

ATTACHED TO CONTRACT BETWEEN

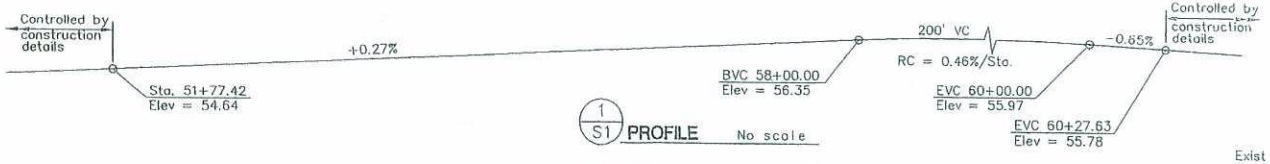
THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY

AND

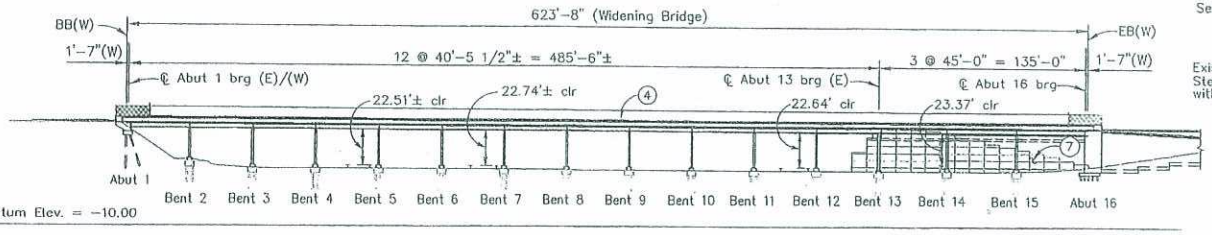
CITY OF ANTIOCH

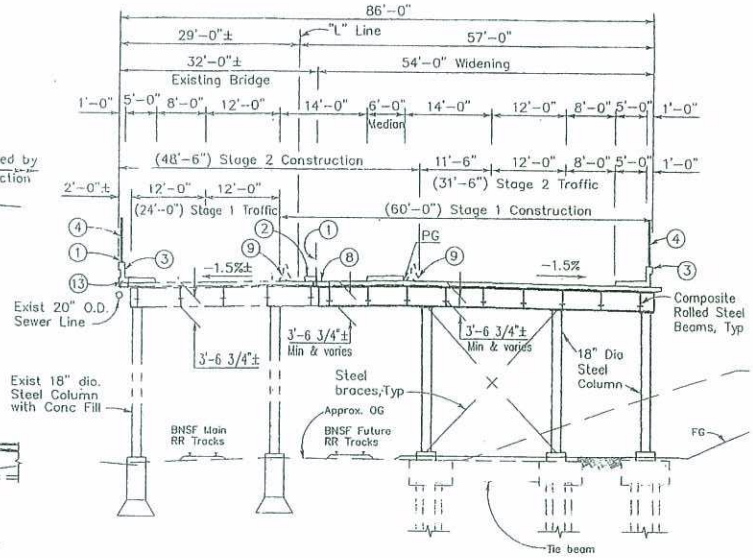
FORT WORTH, TX
SCALE AS SHOWN
CALIFORNIA DIVISION
DATE: JULY 2010

M.W. FRANKE
VICE PRESIDENT AND
CHIEF ENGINEER
DESCRIPTION APPROVED

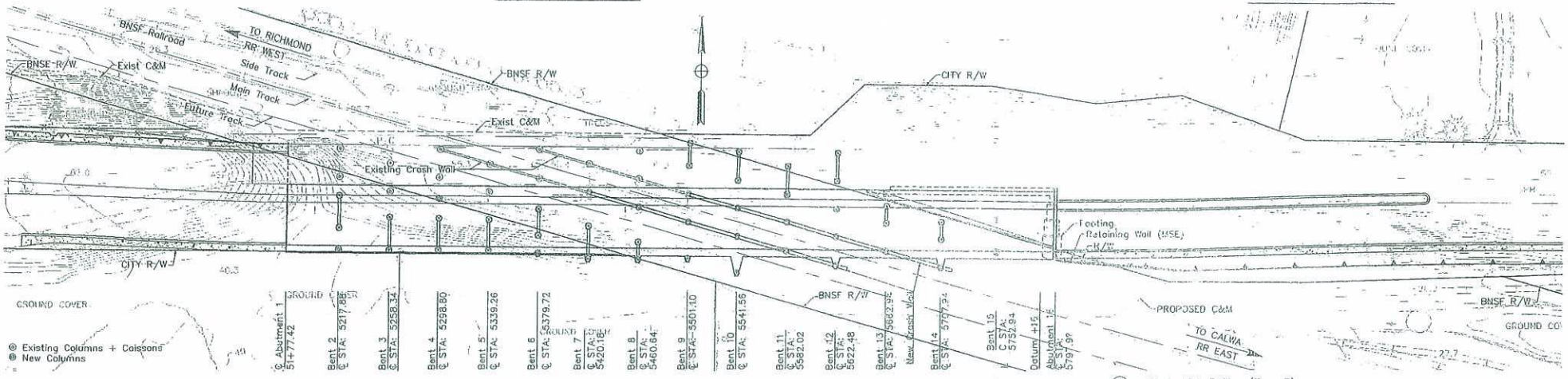


1/S1 PROFILE No scale





ELEVATION 1"=40'



SECTION 1"=10'

PLAN 1"=40'

PM 1150.3
AT SANDO
CONTRA COSTA COUNTY
CALIFORNIA

LEGEND

1. Remove Existing Steel Railing
2. Remove existing Conc Curb
3. Concrete Barrier (Type 26 Modified)
4. Chain Link Railing (Type 7)
5. Existing Concrete Collision Walls
6. New Concrete Collision Walls
7. Existing Metal Bin Type Retaining Wall
8. Closure Pour
9. Temporary Railing (Type K)
10. MBGR, see 'Road Plans'
11. Paint "Wilbur Avenue Overhead"
12. Paint "28C-0054" & "RR PM 1150.3"

BNSF FILE NO. 05000051

Exhibit B

(Easement Agreement to be Negotiated Directly with Justin Moon at JLL)

Justin M. Moon
Jones Lang LaSalle Americas, Inc.
3017 Lou Menk Drive, Suite 100
Fort Worth, Texas 76131
Telephone +1 817-230-2623
Fax +1 817-306-8129
justin.moon@am.jll.com
www.joneslanglasalle.com
Jones Lang LaSalle - Proud Real Estate Partner of BNSF

EASEMENT AGREEMENT

FOR CONSTRUCTION OF A SEPARATED GRADE CROSSING

(Overpass Agreement)

THIS EASEMENT AGREEMENT FOR CONSTRUCTING A NEW CROSSING AT SEPARATED GRADES ("**Easement Agreement**") is made and entered into as of the ____ day of _____ 2012 ("**Effective Date**"), by and between BNSF RAILWAY COMPANY, a Delaware corporation ("**Grantor**"), and the CITY OF ANTIOCH, a Municipal Corporation of the State of California ("**Grantee**").

A. Grantor owns or controls certain real property situated at or near the vicinity of Antioch, County of Contra Costa, State of California, at Mile Post 1150.20, as described or depicted on **Exhibit "A"** attached hereto and made a part hereof (the "**Premises**")

B. Grantor and Grantee have entered into that certain Overpass Agreement dated as of _____ concerning improvements on or near the Premises (the "Overpass **Agreement**").

C. Grantee has requested that Grantor grant to Grantee an easement over the Premises for the Easement Purpose (as defined below).

D. Grantor has agreed to grant Grantee such easement, subject to the terms and conditions set forth in this Easement and in the Overpass Agreement incorporated herein as if fully set forth in this instrument which terms shall be in full force and effect for purposes of this Easement even if the Overpass Agreement is, for whatever reason, no longer in effect.

NOW, THEREFORE, for and in consideration of the foregoing recitals which are incorporated herein, the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1 Granting of Easement.

1.1 Easement Purpose. The "**Easement Purpose**" shall be for the purposes set forth in the Overpass Agreement. Any improvements to be constructed in connection with the Easement Purpose are referred to herein as "**Improvements**" and shall be constructed, located, configured and maintained by Grantee in strict accordance with the terms of this Easement Agreement and the Overpass Agreement.

1.2 Grant. Grantor does hereby grant unto Grantee a non-exclusive easement ("**Easement**") over the Premises for the Easement Purpose and for no other purpose. The Easement is granted subject to any and all restrictions, covenants, easements, licenses, permits, leases and other encumbrances of whatsoever nature whether or not of record, if any, relating to the Premises and subject to all with all applicable federal, state and local laws, regulations, ordinances, restrictions, covenants and court or administrative decisions and orders, including Environmental Laws (defined below) and zoning laws (collectively, "**Laws**"). Grantor may not make any alterations or improvements or perform any maintenance or repair activities within the Premises except in accordance with the terms and conditions of the Overpass Agreement.

1.3 Reservations by Grantor. Grantor excepts and reserves the right, to be exercised by Grantor and any other parties who may obtain written permission or authority from Grantor:

(a) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any existing pipe, power, communication, cable, or utility lines and appurtenances and other facilities or structures of like character (collectively, "**Lines**") upon, over, under or across the Premises;

(b) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; and

(c) to use the Premises in any manner as the Grantor in its sole discretion deems appropriate, provided Grantor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Grantee for the Easement Purpose.

Section 2 **Term of Easement**. The term of the Two (2) Permanent Easements, unless sooner terminated under provisions of this Easement Agreement, shall be perpetual. The term of this Temporary Construction Easement, unless sooner terminated under provisions of this Easement Agreement, shall expire on the date that is twenty-four (24) months after the Effective Date.

Section 3 **No Warranty of Any Conditions of the Premises.** Grantee acknowledges that Grantor has made no representation whatsoever to Grantee concerning the state or condition of the Premises, or any personal property located thereon, or the nature or extent of Grantor's ownership interest in the Premises. Grantee has not relied on any statement or declaration of Grantor, oral or in writing, as an inducement to entering into this Easement Agreement, other than as set forth herein. GRANTOR HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS OR IMPLIED, AS TO THE DESIGN OR CONDITION OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, ITS MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, THE QUALITY OF THE MATERIAL OR WORKMANSHIP OF ANY SUCH PROPERTY, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTOR SHALL NOT BE RESPONSIBLE TO GRANTEE OR ANY OF GRANTEE'S CONTRACTORS FOR ANY DAMAGES RELATING TO THE DESIGN, CONDITION, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTEE ACCEPTS ALL RIGHTS GRANTED UNDER THIS EASEMENT AGREEMENT IN THE PREMISES IN AN "AS IS, WHERE IS" AND "WITH ALL FAULTS" CONDITION, AND SUBJECT TO ALL LIMITATIONS ON GRANTOR'S RIGHTS, INTERESTS AND TITLE TO THE PREMISES. Grantee has inspected or will inspect the Premises, and enters upon Grantor's rail corridor and property with knowledge of its physical condition and the danger inherent in Grantor's rail operations on or near the Premises. Grantee acknowledges that this Easement Agreement does not contain any implied warranties that Grantee or Grantee's Contractors (as hereinafter defined) can successfully construct or operate the Improvements.

Section 4 **Nature of Grantor's Interest in the Premises.** GRANTOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND GRANTEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE. In case of the eviction of Grantee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Grantor of the affected rail corridor, Grantor shall not be liable to refund Grantee any compensation paid hereunder.

Section 5 **Improvements.** Grantee shall take, in a timely manner, all actions necessary and proper to the lawful establishment, construction, operation, and maintenance of the Improvements, including such actions as may be necessary to obtain any required permits, approvals or authorizations from applicable governmental authorities. Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance, or future alteration of the Improvements shall be made and maintained in such manner, form and extent as will provide adequate drainage of and from the adjoining lands and premises of the Grantor; and wherever any such fill or embankment shall or may obstruct the natural and pre-existing drainage from such lands and premises of the Grantor, the Grantee shall construct and maintain such culverts or drains as may be requisite to preserve such natural and pre-existing drainage, and shall also wherever necessary, construct extensions of existing drains, culverts or ditches through or along the premises of the Grantor, such extensions to be of adequate sectional dimensions to preserve the present flowage of drainage or other waters, and of materials and workmanship equally as good as those now existing. In the event any construction, repair, maintenance, work or other use of the Premises by Grantee will affect any Lines, fences, buildings, improvements or other facilities (collectively, "**Other Improvements**"), Grantee will be responsible at Grantee's sole risk to locate and make any adjustments necessary to such Other Improvements. Grantee must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and obtain the owner's written approval prior to so affecting the Other Improvements. Grantee must

mark all Other Improvements on the Plans and Specifications and mark such Other Improvements in the field in order to verify their locations. Grantee must also use all reasonable methods when working on or near Grantor property to determine if any Other Improvements (fiber optic, cable, communication or otherwise) may exist. The Grantee agrees to keep the above-described premises free and clear from combustible materials and to cut and remove or cause to be cut and removed at its sole expense all weeds and vegetation on said premises, said work of cutting and removal to be done at such times and with such frequency as to comply with Grantee and local laws and regulations and abate any and all hazard of fire.

Section 6 **Taxes and Recording Fees**. Grantee shall pay when due any taxes, assessments or other charges (collectively, "**Taxes**") levied or assessed upon the Improvements by any governmental or quasi-governmental body or any Taxes levied or assessed against Grantor or the Premises that are attributable to the Improvements. Grantee agrees to purchase, affix and cancel any and all documentary stamps in the amount prescribed by statute, and to pay any and all required transfer taxes, excise taxes and any and all fees incidental to recordation of the Memorandum of Easement. In the event of Grantee's failure to do so, if Grantor shall become obligated to do so, Grantee shall be liable for all costs, expenses and judgments to or against Grantor, including all of Grantor's legal fees and expenses.

Section 7 **Environmental.**

7.1 Compliance with Environmental Laws. Grantee shall strictly comply with all federal, state and local environmental Laws in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Toxic Substances Control Act (collectively referred to as the "**Environmental Laws**"). Grantee shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on the Premises. Grantee shall not handle, transport, release or suffer the release of "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws.

7.2 Notice of Release. Grantee shall give Grantor immediate notice to Grantor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Grantee's use of the Premises. Grantee shall use its best efforts to promptly respond to any release on or from the Premises. Grantee also shall give Grantor immediate notice of all measures undertaken on behalf of Grantee to investigate, remediate, respond to or otherwise cure such release or violation.

7.3 Remediation of Release. In the event that Grantor has notice from Grantee or otherwise of a release or violation of Environmental Laws which occurred or may occur during the term of this Easement Agreement, Grantor may require Grantee, at Grantee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises. If during the construction or subsequent maintenance of the Improvements, soils or other materials considered to be environmentally contaminated are exposed, Grantee will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof, will be made only by an agency having the capacity and authority to make such a determination.

7.4 Preventative Measures. Grantee shall promptly report to Grantor in writing any conditions or activities upon the Premises known to Grantee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Grantee's reporting to Grantor shall not relieve Grantee of any obligation whatsoever imposed on it by this Easement Agreement. Grantee shall promptly respond to Grantor's request for information regarding said conditions or activities.

7.5 Evidence of Compliance. Grantee agrees periodically to furnish Grantor with proof satisfactory to Grantor that Grantee is in compliance with this **Section 7**. Should Grantee not comply fully with the above-stated obligations of this **Section 7**, notwithstanding anything contained in any other provision hereof, Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice of termination upon

Grantee. Upon termination, Grantee shall remove the Improvements and restore the Premises as provided in **Section 9**.

Section 8 Default and Termination.

8.1 Grantor's Performance Rights. If at any time Grantee, or Grantee's Contractors, fails to properly perform its obligations under this Easement Agreement, Grantor, in its sole discretion, may: (i) seek specific performance of the unperformed obligations, or (ii) at Grantee's sole cost, may arrange for the performance of such work as Grantor deems necessary for the safety of its rail operations, activities and property, or to avoid or remove any interference with the activities or property of Grantor, or anyone or anything present on the rail corridor or property with the authority or permission of Grantor. Grantee shall promptly reimburse Grantor for all costs of work performed on Grantee's behalf upon receipt of an invoice for such costs. Grantor's failure to perform any obligations of Grantee or Grantee's Contractors shall not alter the liability allocation set forth in this Easement Agreement.

8.2 Abandonment. Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice in writing upon Grantee if Grantee should abandon or cease to use the Premises for the Easement Purpose. Any waiver by Grantor of any default or defaults shall not constitute a waiver of the right to terminate this Easement Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect Grantor's ability to enforce any section of this Easement Agreement.

8.3 Effect of Termination or Expiration. Neither termination nor expiration will release Grantee from any liability or obligation under this Easement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date the Premises are restored as required by **Section 9**.

8.4 Non-exclusive Remedies. The remedies set forth in this **Section 8** shall be in addition to, and not in limitation of, any other remedies that Grantor may have under the Overpass Agreement, at law or in equity.

Section 9 Surrender of Premises.

9.1 Removal of Improvements and Restoration. Upon termination of this Easement Agreement, whether by abandonment of the Easement or by the exercise of Grantor's termination rights hereunder, Grantee shall, at its sole cost and expense, immediately perform **the following:**

(a) remove all or such portion of Grantee's Improvements and all appurtenances thereto from the Premises, as Grantor directs at Grantor's sole discretion;

(b) repair and restore any damage to the Premises arising from, growing out of, or connected with Grantee's use of the Premises;

(c) remedy any unsafe conditions on the Premises created or aggravated by Grantee; and

(d) leave the Premises in the condition which existed as of the Effective Date.

9.2 Limited License for Entry. If this Easement Agreement is terminated, Grantor may direct Grantee to undertake one or more of the actions set forth above, at Grantee's sole cost, in which case Grantee shall have a limited license to enter upon the Premises to the extent necessary to undertake the actions directed by Grantor. The terms of this limited license include all of Grantee's obligations under this Easement Agreement. Termination will not release Grantee from any liability or obligation under this Easement Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination, or, if later, the date when Grantee's Improvements are removed and the Premises are restored to the condition that existed as of the Effective Date. If Grantee fails to surrender the Premises to Grantor upon any termination of the Easement, all liabilities and obligations of Grantee hereunder shall continue in effect until the Premises are surrendered.

Section 10 **Liens**. Grantee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Grantee on the Premises or attributable to Taxes that are the responsibility of Grantee pursuant to **Section 6**. Grantor is hereby authorized to post any notices or take any other action upon or with respect to the Premises that is or may be permitted by Law to prevent the attachment of any such liens to any portion of the Premises; provided, however, that failure of Grantor to take any such action shall not relieve Grantee of any obligation or liability under this **Section 10** or any other section of this Easement Agreement.

Section 11 **Tax Exchange**. Grantor may assign its rights (but not its obligations) under this Easement Agreement to Goldfinch Exchange Company LLC, an exchange intermediary, in order for Grantor to effect an exchange under Section 1031 of the Internal Revenue Code. In such event, Grantor shall provide Grantee with a Notice of Assignment, attached as Exhibit C, and Grantee shall execute an acknowledgement of receipt of such notice.

Section 12 **Notices**. Any notice required or permitted to be given hereunder by one party to the other shall be delivered in the manner set forth in the Overpass Agreement. Notices to Grantor under this Easement shall be delivered to the following address: BNSF Railway Company, Real Estate Department, 2500 Lou Menk Drive, Ft. Worth, TX 76131, Attn: Permits, or such other address as Grantor may from time to time direct by notice to Grantee.

Section 13 **Recordation**. It is understood and agreed that this Easement Agreement shall not be in recordable form and shall not be placed on public record and any such recording shall be a breach of this Easement Agreement. Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as **Exhibit "B-1"** (the "**Memorandum of Easement**") subject to changes required, if any, to conform such form to local recording requirements. The Memorandum of Easement shall be recorded in the real estate records in the county where the Premises are located. If a Memorandum of Easement is not executed by the parties and recorded as described above within 10 days of the Effective Date, Grantor shall have the right to terminate this Easement Agreement upon notice to Grantee.

Section 14 **Miscellaneous**.

14.1 All questions concerning the interpretation or application of provisions of this Easement Agreement shall be decided according to the substantive Laws of the State of **[Texas]** without regard to conflicts of law provisions.

14.2 In the event that Grantee consists of two or more parties, all the covenants and agreements of Grantee herein contained shall be the joint and several covenants and agreements of such parties. This instrument and all of the terms, covenants and provisions hereof shall inure to the benefit of and be binding upon each of the parties hereto and their respective legal representatives, successors and assigns and shall run with and be binding upon the Premises.

14.3 If any action at law or in equity is necessary to enforce or interpret the terms of this Easement Agreement, the prevailing party or parties shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party or parties may be entitled.

14.4 If any provision of this Easement Agreement is held to be illegal, invalid or unenforceable under present or future Laws, such provision will be fully severable and this Easement Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof will remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there will be added automatically as a part of this Easement Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

14.5 This Easement Agreement is the full and complete agreement between Grantor and Grantee with respect to all matters relating to Grantee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Grantee's use of the Premises as described herein. However,

nothing herein is intended to terminate any surviving obligation of Grantee or Grantee's obligation to defend and hold Grantor harmless in any prior written agreement between the parties.

14.6 Time is of the essence for the performance of this Easement Agreement.

ADMINISTRATIVE FEE

15. Grantee acknowledges that a material consideration for this agreement, without which it would not be made, is the agreement between Grantee and Grantor, that the Grantee shall pay upon return of this Agreement signed by Grantee to Grantor's Broker a processing fee in the amount of $**2,000.00** over and above the agreed upon Acquisition Price. Said fee shall be made payable to BNSF Railway Company by a separate check.

[Signature page follows]

Witness the execution of this Easement Agreement as of the date first set forth above.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: David P. Schneider
Title: General Director-Land Revenue Management

GRANTEE:

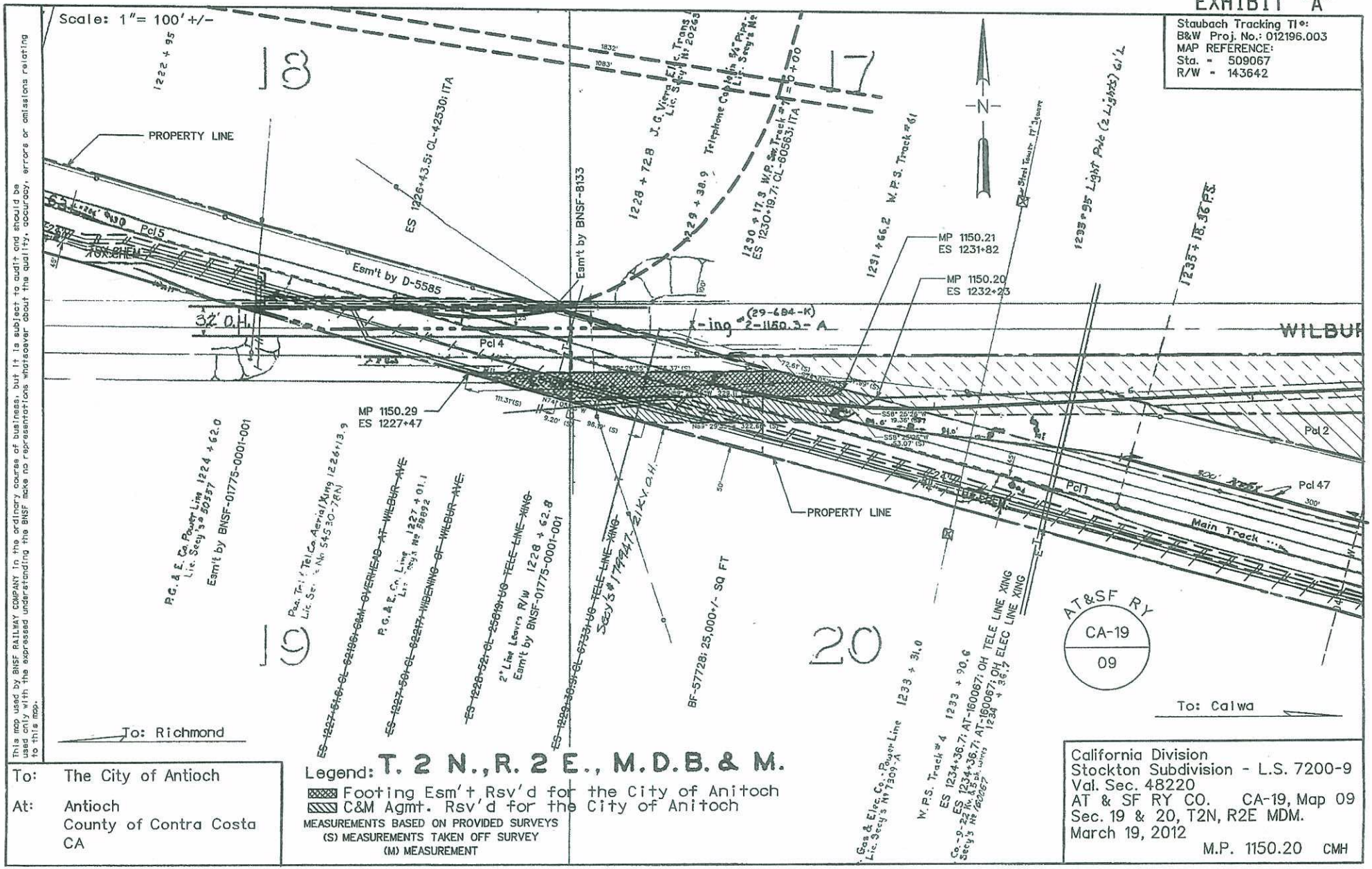
CITY OF ANTIOCH, a Municipal Corporation of the State of California

By: RDS _____
Name: ~~RONALD~~ RON BERNAL JR
Title: DIRECTOR OF PUBLIC WORKS/CITY ENGR.

EXHIBIT A

Premises

EXHIBIT "A"



This map used by BNSF RAILWAY COMPANY in the ordinary course of business, but it is subject to audit and should be used only with the expressed understanding the BNSF make no representations whatsoever about the quality, accuracy, errors or omissions relating to this map.

To: The City of Antioch

At: Antioch
County of Contra Costa
CA

Legend: **T. 2 N., R. 2 E., M.D.B. & M.**

Footing Esm't Rsv'd for the City of Anitoch
C&M Agmt. Rsv'd for the City of Anitoch

MEASUREMENTS BASED ON PROVIDED SURVEYS
(S) MEASUREMENTS TAKEN OFF SURVEY
(M) MEASUREMENT

California Division
Stockton Subdivision - L.S. 7200-9
Val. Sec. 48220
AT & SF RY CO. CA-19, Map 09
Sec. 19 & 20, T2N, R2E MDM.
March 19, 2012
M.P. 1150.20 CMH

DRAWING NO. 3-54255

EXHIBIT B

MEMORANDUM OF EASEMENT

MEMORANDUM OF EASEMENT

THIS MEMORANDUM OF EASEMENT is hereby executed this _____ day of_____, 2012, by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Grantor**"), whose address for purposes of this instrument is 2500 Lou Menk Drive, Fort Worth, Texas 76131, and the **CITY OF ANTIOCH**, a Municipal Corporation of the State of California ("**Grantee**"), whose address for purposes of this instrument is 200 H Street, Antioch, California 94531, which terms "Grantor" and "Grantee" shall include, wherever the context permits or requires, singular or plural, and the heirs, legal representatives, successors and assigns of the respective parties:

WITNESSETH:

WHEREAS, Grantor owns or controls certain real property situated in Contra Costa County, California as described on **Exhibit "A"** attached hereto and incorporated herein by reference (the "**Premises**');

WHEREAS, Grantor and Grantee entered into an Easement Agreement, dated _____, 2012 (the "**Easement Agreement**") which set forth, among other things, the terms of an easement granted by Grantor to Grantee over and across the Premises (the "**Easement**"); and

WHEREAS, Grantor and Grantee desire to memorialize the terms and conditions of the Easement Agreement of record.

For valuable consideration the receipt and sufficiency of which are hereby acknowledged, Grantor does grant unto Grantee and Grantee does hereby accept from Grantor the Easement over and across the Premises.

The term of the Permanent Easements, unless sooner terminated under provisions of the Easement Agreement, shall be perpetual.

All the terms, conditions, provisions and covenants of the Easement Agreement are incorporated herein by this reference for all purposes as though written out at length herein, and both the Easement Agreement and this Memorandum of Easement shall be deemed to constitute a single instrument or document. This Memorandum of Easement is not intended to amend, modify, supplement, or supersede any of the provisions of the Easement Agreement and, to the extent there may be any conflict or inconsistency between the Easement Agreement or this Memorandum of Easement, the Easement Agreement shall control.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Memorandum of Easement to as of the date and year first above written.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: David P. Schneider
Title: General Director-Land Revenue Management

STATE OF TEXAS §
§
COUNTY OF TARRANT §

This instrument was acknowledged before me on the _____ day of _____, 2012, by _____ (name) as _____(title) of **BNSF RAILWAY COMPANY**, a Delaware corporation.

_____
Notary Public

My appointment expires:_____

(Seal)

GRANTEE:
CITY OF ANTIOCH, a Municipal Corporation of the State of California

By: _____
Name: ROWLAND BERNALJR
Title: DIRECTOR OF PUBLIC WORKS / CITY ENGINEER

STATE OF _____ §
§
COUNTY OF _____ §

This instrument was acknowledged before me on the _____ day of _____, 2012, by _____ (name) as _____(title) of _____, a _____.

See Attached

_____
Notary Public

My appointment expires:_____

(Seal)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California

County of Contra Costa

On 9/12/13 before me, Sharon P. Daniels, Notary Public, personally appeared Rowland Eugene Bernal, Jr. who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Sharon P. Daniels

Sharon P. Daniels

SHARON P. DANIELS
Commission # 1930293
Notary Public - California
Contra Costa County
My Comm. Expires Apr 14, 2015

EXHIBIT C

NOTICE OF ASSIGNMENT

Goldfinch Exchange Company LLC
A Delaware limited liability company
40 Lake Bellevue Drive, Suite 275
Bellevue, WA 98005
425-646-4020
425-637-2873 fax

NOTICE OF ASSIGNMENT

TO: CITY OF ANTIOCH, a Municipal Corporation of the State of California, and any assignees or exchange intermediaries of Buyer

You and BNSF Railway Company ("BNSF") have entered into the Easement Agreement, dated _____ for the sale of the real property described therein. You are hereby notified that BNSF has assigned its rights as Grantor, but not its obligations, to Goldfinch Exchange Company LLC for the purpose of effecting a tax deferred exchange under Internal Revenue Code Section 1031. This is an assignment of rights only and BNSF will deed the property directly to you.

ACKNOWLEDGED:

_____
CITY OF ANTIOCH, a Municipal Corporation of the State of California

Exhibit C

(Agreement between BNSF and Contractor)

EXHIBIT "C"

CONTRACTOR REQUIREMENTS

1.01 General:

- **1.01.01** The Contractor must cooperate with **BNSF RAILWAY COMPANY**, hereinafter referred to as "**Railway**" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property", during the construction of The Wilbur Avenue Overpass Road Widening Project.

- **1.01.02** The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1". Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.

- **1.01.03** The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.

- **1.01.04** The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations.Railway will have the right to stop construction work on the Project if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the Project work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway's opinion, prosecutes the Project work in a manner which is hazardous to Railway property, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project; or (iv) Contractor fails to pay Railway for the Temporary Construction License or the Easement. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway's Division Engineer or until additional insurance has been delivered to and accepted by Railway. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, Railway may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway's right to stop the work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop construction work on the Project, Railway agrees to immediately notify the following individual in writing:

Ron Bernal, P.E.
Director of Public Works/ City Engineer
City of Antioch
P.O. Box 5007
Antioch, CA 94531

- **1.01.05** The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.

- **1.01.06** The Contractor must notify The Director of Public Works at (925) 779-6820 and Railway's Manager Public Projects, telephone number (909) 386-4474 at least thirty (30) calendar days before commencing any work on Railway Property. Contractor's notification to Railway must refer to Railway's file 029579J.

- **1.01.07** For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.

- **1.01.08** Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

1.02 Contractor Safety Orientation

- **1.02.01 No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.contractororientation.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway'sRepresentative.**

1.03 Railway Requirements

- **1.03.01** The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.

- **1.03.02** The Contractor must notify the Railway's Division EngineerJohn Palacios at (559) 457-7589 and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.

- **1.03.03** The Contractor must abide by the following temporary clearances during construction:

    - 9'Horizontally from centerline of nearest track
    - 21'-6" Vertically above top of rail
    - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
    - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
    - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
    - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts

- **1.03.04** Upon completion of construction, the following clearances shall be maintained:

    - 25' Horizontally from centerline of nearest track
    - 22'-7" Vertically above top of rail

- **1.03.05** Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the City of Antioch and must not be undertaken until approved in writing by the Railway, and until the City of Antioch has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

- **1.03.06** In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Agency.

- **1.03.07** The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by City of Antioch for approval before work is undertaken and this work must not be undertaken until approved by the Railway.

- **1.03.08** At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railways tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.

- **1.03.09** Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.

- **1.03.10** The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan:

- **1.04.01** Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site **www.contractororientation.com**, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.

1.05 Railway Flagger Services:

- **1.05.01** The Contractor must give Railway's Roadmaster Wayne Morris (209) 460-6340a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.

- **1.05.02** Unless determined otherwise by Railway's Project Representative, Railway flagger will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:

- **1.05.02a** When, upon inspection by Railway's Representative, other conditions warrant.

- **1.05.02b** When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.

- **1.05.02c** When work in any way interferes with the safe operation of trains at timetable speeds.

- **1.05.02d** When any hazard is presented to Railwaytrack, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.

- **1.05.02e** Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

- **1.05.03** Flagging services will be performed by qualified Railway flaggers.

- **1.05.03a** Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.

- **1.05.03b** Each time a flagger is called; the minimum period for billing will be the eight (8) hour basic day.

- **1.05.03c** The cost of flagger services provided by the Railway will be borne by the City of Antioch.The estimated cost for one (1) flagger is approximately between $800.00-$1,600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. **THE FLAGGING RATE IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF FLAGGING PURSUANT TO THIS PARAGRAPH.**

- **1.05.03d** The average train traffic on this route is 16 freight trains per 24-hour period at a timetable speed 55 MPH and 8 passenger trains at a timetable speed of 79 MPH.

1.06 Contractor General Safety Requirements

- **1.06.01** Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.

- **1.06.02** Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).

- **1.06.03** Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.

- **1.06.04** When Contractor employees are required to work on the Railway Property after normal working hours or on weekends; the Railway's representative in charge of the project must be notified. A minimum of two employees must be present at all times.

- **1.06.05** Anyemployees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.

- **1.06.06** Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machinewhich may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.

- **1.06.07** For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.

- **1.06.08** All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site,**www.contractororientation.com**, however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats; c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railway's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. **(NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)**

- **1.06.09 THE CONTRACTOR MUST NOT PILE OR STORE ANY MATERIALS, MACHINERY OR EQUIPMENT CLOSER THAN 25'-0" TO THE CENTER LINE OF THE NEAREST RAILWAY TRACK. MATERIALS, MACHINERY OR EQUIPMENT MUST NOT BE STORED OR LEFT WITHIN 250 FEET OF ANY HIGHWAY/RAIL AT-GRADE CROSSINGS OR TEMPORARY CONSTRUCTION CROSSING, WHERE STORAGE OF THE SAME WILL OBSTRUCT THE VIEW OF A TRAIN APPROACHING THE CROSSING. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST ESTABLISH A STORAGE AREA WITH CONCURRENCE OF THE RAILWAY'S REPRESENTATIVE.**

- **1.06.10** Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)

- **1.06.11** Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.

- **1.06.12** All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.07 Excavation:

- **1.07.01** Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact **BNSF's Field Engineering Representative Jason Sanchez (909) 386-4075.** All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. **It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.**

- **1.07.02** The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.

- **1.07.03** All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.

- **1.07.04** Any excavations, holes or trenches on theRailway's Property must be covered guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

1.08 Hazardous Waste, Substances and Material Reporting:

- **1.08.01** If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

1.09 Personal Injury Reporting

- **1.09.01** The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

(If injuries are in connection with rail equipment accident/incident, highway rail grade crossing accident or automobile accident, ensure that appropriate information is obtained, forms completed and that data entry personnel are aware that injuries relate to that specific event.)

Injured Person Type:

- ☐ Passenger on train (C)
- ☐ Non-employee (N)
  (i.e., emp of another railroad, or, non-BNSF emp involved in vehicle accident, including company vehicles)
- ☐ Contractor/safety sensitive (F)
- ☐ Contractor/non-safety sensitive (G)
- ☐ Volunteer/safety sensitive (H)
- ☐ Volunteer/other non-safety sensitive (I)
- ☐ Non-trespasser (D) - to include highway users involved in highway rail grade crossing accidents who did not go around or through gates
- ☐ Trespasser (E) - to include highway users involved in highway rail grade crossingaccidents who went around or through gates
- ☐ Non-trespasser (J) - Off railroad property

If train involved, Train ID: _____

Transmit attached information to Accident/Incident Reporting Center by:
Fax 1-817-352-7595 or byPhone 1-800-697-6736**or email to:** Accident-Reporting.Center@BNSF.com

Officer Providing Information:

_____ _____ _____
(Name) (Employee No.) (Phone #)

REPORT PREPARED TO COMPLY WITH FEDERAL ACCIDENT REPORTING REQUIREMENTS AND PROTECTED FROM DISCLOSURE PURSUANT TO 49 U.S.C. 20903 AND 83 U.S.C. 490

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IT IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

1. Accident City/St: _____ 2. Date: _____ Time: _____

County: _____ 3. Temperature: _____ 4. Weather: _____
(if non BNSF location)

Mile Post / Line Segment: _____

5. Driver's License No (and state) or other ID: _____ **SSN (required)**: _____

6. Name (last, first, mi): _____

7. Address: _____ City: _____ St: _____ Zip: _____

8. Date of Birth: _____ and/or Age: _____ Gender: _____
(if available)

Phone Number: _____ Employer: _____

9. Injury: _____ 10. Body Part: _____
(i.e., Laceration, etc.) (i.e., Hand, etc.)

11. Description of Accident (To include location, action, result, etc.): _____

_____

_____

_____

12. Treatment:

- ☐ First Aid Only _____
- ☐ Required Medical Treatment _____
- ☐ Other Medical Treatment _____

13. Dr. Name: _____ Date: _____

14. Dr. Address:

Street: _____ City: _____ St: _____ Zip: _____

15. Hospital Name: _____

16. Hospital Address:

Street: _____ City: _____ St: _____ Zip: _____

17. Diagnosis: _____

REPORT PREPARED TO COMPLY WITH FEDERAL ACCIDENT REPORTING REQUIREMENTS AND PROTECTED FROM DISCLOSURE PURSUANT TO 49 U.S.C. 20903 AND 83 U.S.C. 490

WILBUR AVENUE OVERPASS EXHIBIT "C-1"

AgreementBetween
BNSF RAILWAY COMPANY
And the
CONTRACTOR

BNSF RAILWAY COMPANY
Attention: Manager Public Projects

Railway File:029579J
Agency Project:Wilbur Avenue Overpass Widening

Gentlemen:

The undersigned (hereinafter called, the "Contractor"), has entered into a contract (the "Contract") dated _____, 20__, with The City of Antioch for the performance of certain work in connection with the following project: Wilbur Avenue Overpass Widening. Performance ofsuch work will necessarily require Contractor to enter **BNSF RAILWAY COMPANY** ("Railway") right of way and property ("Railway Property"). The Contract provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for the City of Antioch (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1.RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. **THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE**

PROXIMATELY CAUSED BY THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF RAILWAY.

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE LOCOMOTIVE INSPECTION ACT, WHENEVER SO CLAIMED.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. **THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILWAY FOR RAILWAY'S ACTS OF NEGLIGENCE.**

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

Section 2.TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3.INSURANCE

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement thefollowing insurance coverage:

A. Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $5,000,000 each occurrence and an aggregate limit of at least $10,000,000 but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

This policy shallalso contain the following endorsements, which shallbe indicated on the certificate of insurance:

- The definition of insured contract shallbe amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to ***Railway*** employees.

No other endorsements limiting coverage as respects obligations under thisAgreement may be included on the policy with regard to the work being performed under this agreement.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.

- The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railway.

D. Railroad Protective Liability insurance naming only the ***Railway*** as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 12 04 and include the following:

- Endorsed to include the Pollution Exclusion Amendment
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to remove any exclusion for punitive damages.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to the ***Railway*** prior to performing any work or services under this Agreement
- Definition of "Physical Damage to Property" shall be endorsed to read: "means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured' care, custody, and control arising out of the acts or omissions of the contractor named on the Declarations.

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate (if available) in Railway's Blanket Railroad Protective Liability Insurance Policy.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages.

Contractor agrees to waive its right of recovery against ***Railway*** for all claims and suits against ***Railway***. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against ***Railway*** for all claims and suits. Contractor further

waives its right of recovery, and its insurers also waive their right of subrogation against ***Railway*** for loss of its owned or leased property or property under Contractor's care, custody, or control.

Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Contractor is not allowed to self-insure without the prior written consent of ***Railway.*** If granted by ***Railway***, self-insured retention or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. Any and all ***Railway*** liabilities that would otherwise, in accordance with the provisions of this ***Agreement***, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the Work, Contractor shall furnish to ***Railway*** an acceptable certificate(s) of insurance from an authorized representative evidencing the required coverage(s), endorsements, and amendments. The certificate should be directed to the following addresses:

BNSF Railway Company
c/o CertFocus
P.O. Box 140528
Kansas City, MO 64114
Toll Free: 877-576-2378
Fax number: 817-840-7487
Email:BNSF@certfocus.com
www.certfocus.com

Contractor shall notify ***Railway*** in writing at least 30 days prior to any cancellation, non-renewal, substitution, or material alteration.

Any insurance policy must be written by a reputable insurance company acceptable to ***Railway*** or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

If coverage is purchased on a "claims made" basis, Contractor hereby agrees to maintain coverage in force for a minimum of three years after expiration, cancellation or termination of this contract. Annually, Contractor agrees to provide evidence of such coverage as required hereunder.

Contractor represents that this ***Agreement*** has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this ***Agreement***.

Not more frequently than once every five years, ***Railway*** may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain the insurance coverage(s) set forth herein, naming ***Railway***as an additional insured, and shallrequire that the subcontractor shall release, defend, and indemnify ***Railway*** to the same extent and under the same terms and conditions as Contractor is required to release, defend, and indemnify ***Railway*** herein.

Failure to provide evidence as required by this section shall entitle, but not require, ***Railway*** to terminate this ***Agreement*** immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this ***Agreement***. Damages recoverable by ***Railway***shall not be limited by the amount of the required insurance coverage.

In the event of a claim or lawsuit involving ***Railway*** arising out of this agreement, Contractor will make available any required policy covering such claim or lawsuit.

These insurance provisions are intended to be a separate and distinct obligation on the part of the Contractor. Therefore, these provisions shall be enforceable and Contractor shall be bound thereby regardless of whether or not indemnity provisions are determined to be enforceable in the jurisdiction in which the work covered hereunder is performed.

For purposes of this section, ***Railway*** means "Burlington Northern Santa Fe LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

Section 4.EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Contract, and the Contractor Requirements set forth on Exhibit "C" attached to the Contract and this Agreement, , including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5.TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability

to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay are currently $382.20 per hour per incident. **THE RATE THEN IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF TRAIN DELAY PURSUANT TO THIS AGREEMENT.**

Contractor and its subcontractors must give Railway's representative Jason Sanchez at (909) 386-4075 (4) weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

Contractor	**BNSF Railway Company**
By: _____	By: _____
Printed Name: _____	Name: _____ Manager Public Projects
Title: _____	Accepted and effective this _____day of 20__.
Contact Person: _____	
Address: _____	
City: _____	
State: _____ Zip: _____	
Fax: _____	
Phone: _____	
E-mail: _____	

EXHIBIT D

(Cost Estimates for Railroad Work here)

***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY
FHPM ESTIMATE FOR
CITY OF ANTIOCH, CA

LOCATION SANDO | DETAILS OF ESTIMATE | PLAN ITEM : 000197521 | VERSION 2

PURPOSE, JUSTIFICATION AND DESCRIPTION

PIP ENGINEERING INSPECTION NC DIV STOCKTON SUB LS 7200 MP 1150.279 WILBUR AVE, ANTICOH, CA

DESCRIPTION OF PROJECT AS PROVIDED BY PROJECT ENGINEER: ESTIMATE FOR ENGINEERING INSPECTION AT WILBUR AVE IN ANTIOCH, CA.

BILLING FOR THIS PROJECT SHOULD BE DIRECTED TO: CITY OF ANTIOCH ,CA

RFA REQUESTED BY: JASON SANCHEZ ON 12/21/11.
AFE REQUESTED BY:

MAINTAIN PROPRIETARY CONFIDENTIALITY
THE PHYSICAL LIMITS OF THIS PROJECT ARE DESCRIBED BY LINE SEGMENT, MILE POST RANGES, AND IN SOME CASES TRACK NUMBER. THIS IS THE PRIMARY AREA FOR THE PROJECT. THERE WILL BE CASES WHERE WORK MAY OCCUR BEYOND THE DEFINED LIMITS. PROJECTS THAT INCLUDE SIGNAL, ELECTRICAL, OR TELECOMMUNICATION EQUIPMENT MAY REQUIRE ACTIVITY BEYOND THESE DEFINED TRACK LIMITS. ALL OR PORTIONS OF SOME PROJECTS MAY OCCUR IN AREAS WHERE NO MILEPOST SIGNS EXIST SUCH AS YARDS.
THIS ESTIMATE IS GOOD FOR 90 DAYS. THEREAFTER THE ESTIMATE IS SUBJECT TO CHANGE IN COST FOR LABOR, MATERIAL, AND OVERHEAD.

DESCRIPTION	QUANTITY U/M	COST	TOTAL $
**********			
LABOR			
**********			
TOTAL LABOR COST		0	0
**********			
MATERIAL			
**********			
TOTAL MATERIAL COST		0	0
**********			
OTHER			
**********			
DESIGN SUPPORT	1.0 LS	25,000	
INSPECTION	1.0 LS	300,000	
SURVEY AND TESTING	1.0 LS	50,000	
TOTAL OTHER ITEMS COST		375,000	375,000
PROJECT SUBTOTAL			375,000
CONTINGENCIES			11,132
BILL PREPARATION FEE			3,862
GROSS PROJECT COST			389,994
LESS COST PAID BY BNSF			0
TOTAL BILLABLE COST			389,994

***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY
FHPM ESTIMATE FOR
CITY OF ANTIOCH, CA

LOCATION SANDO | DETAILS OF ESTIMATE | PLAN ITEM : 000197520 | VERSION 1

PURPOSE, JUSTIFICATION AND DESCRIPTION

PIP FLAGGING NC DIV STOCKTON SUB LS 7200 MP 1150.279 WILBUR AVE, ANTICOH, CA

DESCRIPTION OF PROJECT AS PROVIDED BY PROJECT ENGINEER: ESTIMATE FOR FLAGGING AT WILBUR AVE IN ANTIOCH, CA.

BILLING FOR THIS PROJECT SHOULD BE DIRECTED TO: CITY OF ANTIOCH ,CA

RFA REQUESTED BY: JASON SANCHEZ ON 12/21/11.
AFE REQUESTED BY:

MAINTAIN PROPRIETARY CONFIDENTIALITY
THE PHYSICAL LIMITS OF THIS PROJECT ARE DESCRIBED BY LINE SEGMENT, MILE POST RANGES, AND IN SOME CASES TRACK NUMBER. THIS IS THE PRIMARY AREA FOR THE PROJECT. THERE WILL BE CASES WHERE WORK MAY OCCUR BEYOND THE DEFINED LIMITS. PROJECTS THAT INCLUDE SIGNAL, ELECTRICAL, OR TELECOMMUNICATION EQUIPMENT MAY REQUIRE ACTIVITY BEYOND THESE DEFINED TRACK LIMITS. ALL OR PORTIONS OF SOME PROJECTS MAY OCCUR IN AREAS WHERE NO MILEPOST SIGNS EXIST SUCH AS YARDS.
THIS ESTIMATE IS GOOD FOR 90 DAYS. THEREAFTER THE ESTIMATE IS SUBJECT TO CHANGE IN COST FOR LABOR, MATERIAL, AND OVERHEAD.

DESCRIPTION	QUANTITY U/M	COST	TOTAL $
**********			
LABOR			
**********			
FLAGGING - OTHER R.O.W.- CAP	4965.0 MH	106,003	
PAYROLL ASSOCIATED COSTS		64,142	
DA OVERHEADS		102,133	
EQUIPMENT EXPENSES		35,055	
INSURANCE EXPENSES		16,684	
TOTAL LABOR COST		324,017	324,017
**********			
MATERIAL			
**********			
TOTAL MATERIAL COST		0	0
**********			
OTHER			
**********			
TOTAL OTHER ITEMS COST		0	0
PROJECT SUBTOTAL			324,017
CONTINGENCIES			32,418
BILL PREPARATION FEE			3,565
GROSS PROJECT COST			360,000
LESS COST PAID BY BNSF			0
TOTAL BILLABLE COST			360,000

Exhibit E

(Plan Acceptance)

John R. Stilley

Manger Public Projects

BNSF Railway Company

740 East Carnegie Drive
San Bernardino, CA 92408

(909) 386-4474 (office)
(909) 386-4479 (fax)
john.stilley@bnsf.com

Exhibit E

Date:

Mr. Ron Bernal, P.E.
Director of Public Works/City Engineer
City of Antioch
P.O. Box 5007
Antioch, CA 94531

Re: Final Approval of Plans and Specifications dated _____, 20__, drafted by _____ (hereinafter called, the "Plans and Specifications")

Dear Mr. Bernal:

This letter serves as BNSF RAILWAY COMPANY's ("BNSF") final written approval of the Plans and Specifications covering the construction of the Wilbur Avenue Overpass Widening. This final written approval is given to the City of Antioch ("Agency") pursuant to Article III, Section 1 of that certain Overpass Agreement between BNSF and Agency, dated _____, 20___. If the Plans and Specifications are revised by Agency subsequent to the date set forth above, this letter shall no longer serve as final written approval of the Plans and Specifications and Agency must resubmit said Plans and Specifications to BNSF for final written approval.

Regards,

John R. Stilley
Manager Public Projects

Exhibit F

(BNSF Bridge Requirements)

EXHIBIT F

BNSF Bridge Requirements

BRIDGE DESIGN, PLANS & SPECIFICATIONS:

Except for the design of temporary falsework and shoring, BNSF's review of the Structure plans will be limited to the vertical and horizontal clearances, sight distance for existing train signals, foundation dimensions and drainage characteristics as they relate to existing and future tracks. BNSF will not review structural design calculations for the permanent Structure unless a member or members are influenced by railroad live loads.

Temporary falsework and shoring plans and calculations must be reviewed and approved by BNSF prior to beginning construction. The Agency shall perform an independent review of the design calculations for temporary falsework and shoring prior to submitting them to BNSF for approval. Temporary construction clearances must be no less than 15 feet measured horizontally from the centerline of the nearest track and 21 feet-6inches measured vertically from the top of rail of the most elevated track to the bottom of lowest temporary falsework member. State regulatory agencies may have more restrictive requirements for temporary railroad clearances.

For the permanent Structure, the Agency will submit plans showing the least horizontal distance from the centerline of existing and future tracks to the face of the nearest member of the proposed Structure. The location of the least horizontal distance must be accurately described such that BNSF can determine where it will occur in both the horizontal and vertical plane. If the permanent member is within 25 feet of the nearest track (or future track), collision walls shall be incorporated into the permanent Structure design according to American Railway Engineering and Maintenance Association Manual of Recommended Practice - Chapter 8 - Article 2.1.5.

For the permanent Structure, the Agency will submit plans showing the least vertical clearance from top of the most elevated rail of existing and future tracks to the lowest point of the proposed Structure. A profile of the existing top of rail elevation shall be plotted on the bridge plans. The profile shall extend for 500 feet in each direction of the proposed overpass and a separate profile shall be plotted for each track. If the existing top of rail profile(s) is not uniform such that a sag exists in the vicinity of the proposed Structure, the permanent Structure vertical clearance shall be increased sufficiently to accommodate a raise in the track profile to remove the sag. Prior to beginning construction of the permanent Structure, the top of rail elevations should be checked and verified that they have not changed from the assumed elevations utilized for the design of the bridge.

Prior to issuing any invitation to bid on construction of the Structure, the Agency should conduct a pre-bid meeting where prospective Contractors have the opportunity to communicate with BNSF personnel regarding site specific train speeds, train density, and general safety requirements for men and equipment working near live tracks. Any invitation to bid and specifications for the Structure must be submitted to BNSF for review and approval prior to letting of bids for the Project.

BRIDGE CONSTRUCTION:

After awarding the bid, but prior to the Contractor entering BNSF's right-of–way or property, the Agency should conduct a pre-construction meeting with BNSF personnel in attendance to reiterate the safety requirements of construction activity adjacent to live tracks.

During construction, BNSF may require an independent engineering inspector to be present during certain critical activities of the Project, including but not limited to: driving foundation piles, erecting falsework, construction of shoring and retaining walls, placing concrete, placing soil

backfill and compaction processes. The Agency shall reimburse BNSF for all costs of supplemental inspection services.

Within 90 days of the conclusion of the Project and final acceptance by BNSF, the Agency will provide BNSF with a complete electronic set of the bridge plans labeled "As Built". Those plans will reflect any and all deviations from the original plans that occurred during construction. The "As Built" plans will be submitted in Micro Station *.dgn electronic format (preferred) or AutoCAD *.dwg format. Electronic plans are to be submitted in the original format used for CAD plan preparation and not converted to another format prior to submission. Actual measured "as constructed" clearances shall be shown as well as depth, size and location of all foundation components. The plans shall show dimensioned locations of existing and relocated utilities.

BRIDGE MAINTENANCE:

The Agency will be responsible for maintenance and repair of the Structure including the earth retention components, embankment slopes, erosion control, surface drainage, fencing, deck drains, landscaping, paint, walkways, handrails, lighting, and other improvements associated with the Project.

Fencing and other pedestrian access controls within BNSF's right-of-way and incorporated into the Project shall be designed and maintained by the Agency. Trespasser control shall be the responsibility of the Agency. Graffiti removal will be the responsibility of the Agency.

BRIDGE INSPECTION:

The Agency will conduct annual routine structural inspections. In the event of an earthquake, fire, flood, damage from vehicular impacts or other emergent situations, the Agency will provide an immediate inspection by qualified personnel and notify BNSF of damage that may affect safe passage of trains. If necessary, the Agency will embargo weights or provide lane closures or other such measures to protect the structural integrity of the Structure such that there can be continuous safe passage of trains until repairs are made.

BRIDGE ALTERATIONS:

Except as provided otherwise by this Agreement, there will be no alterations made to the Structure that will alter the railroad vertical or horizontal clearances provided by the original design. Pipelines will be not be added or attached to the Structure without first submitting plans and calculations to BNSF for review and approval.

EXHIBIT G

INSTRUCTIONS FOR PREPARATION OF DEMOLITION PLANS FOR STRUCTURES OVER THE BNSF RAILROAD

SECTION I. GENERAL

A. The Contractor will abide by and adhere to the requirements of the Exhibit C. Should there be a discrepancy between the requirements contained in the Exhibit C and this Exhibit G, the Exhibit C will govern.

B. The Contractor's work shall in no way impede train operations.

1. The term "Overhead" refers to the structure to be demolished.
2. The words "demolition" and "removal" will be used interchangeably in this Exhibit G.
3. The term "Railroad" refers to the Railroad's Engineer or designated representative.

C. Safety takes precedence over productivity. The Contractor shall be responsible for planning and executing all procedures necessary to remove the Overhead in a safe, predictable manner. All employees of the Contractor and Subcontractors must be Safety Trained. Refer to http:// www.contractororientation.com.

D. The Contractor shall develop a Demolition Plan ONLY AFTER CONSULTING WITH THE RAILROAD TO GET AN ESTIMATE OF THE RANGE OF WORK WINDOWS THAT MIGHT NORMALLY BE AVAILABLE FOR THE JOB SITE.

1. A Work Window is the elapsed time between approaching trains.

2. An estimate of the availability of Work Windows can be used by the Contractor to design a Demolition Plan. The estimated Work Window is a guideline and not to be considered as a guarantee for available working time.

3. Work Windows will vary significantly, depending on the location. Low speed - low train density tracks have predictable Work Windows. The opposite is true for high density - high speed main tracks. The Railroad shall, at its sole discretion, furnish a range of Work Windows that might be expected at a specific location under normal train traffic conditions.

4. The Contractor shall plan the demolition procedures based upon the smallest ESTIMATED Work Window. Do not assume the longest Work Window will be available on any given day. Do not assume the same Work Windows will be available from one day to the next.

5. The Contractor will give BNSF's Project Engineer at telephone number 909-386-4075, Four (4) weeks advance notice of the proposed times and dates for Work Windows. BNSF and the contractor will establish mutually agreeable Work Windows for the Project. Any request for Work Windows with less than Four (4) weeks advance notice will have a reduced probability of approval. BNSF has the right at any time to revise or change the Work Windows, due to train operations or service obligations. BNSF will not be responsible for any additional costs and expenses resulting from a change in Work Windows. Additional costs and expenses resulting from a change in Work Windows shall be accounted for in the contractor's expenses for the Project.

E. The Railroad's tracks and property shall be protected at all times.

1. Removal procedures shall take into account SEVERE WEATHER CONDITIONS, including high winds, heavy rains and snowfall accumulation.

2. The contractor shall ensure that all areas adjacent to active tracks shall remain free from hazards.
   a) Trainmen must have an unobstructed walkway available parallel to all active tracks pursuant to the California Public Utilities Commission General Order 118.
   b) All open excavations shall be protected with fencing.
   c) Do not store materials or equipment within 25 feet of the centerline of an active track.

3. Protect the project area from vandalism.
   a) Do not leave debris where vandals could place it on the tracks or drop it onto the tracks from the Overhead.
   b) Secure all heavy equipment from potential movement by vandals.
   c) Do not store flammable materials on railroad right of way. Remove combustible waste materials daily. Do not store fuel or other flammable liquids on railroad right of way.

F. All demolition materials and scrap shall be disposed of outside the Railroad right-of-way at no expense to the Railroad. At the conclusion of the project, the area must be left in a clean and graded condition to the exclusive satisfaction of the Railroad.

G. No work is allowed within 25 feet of the nearest track unless protected by a Railroad Flagger. Refer to Exhibit C Section 1.05, Protection of Railway Facilities and Railway Flagger Services for additional flagging requirements.

H. The staged demolition of any portion of the Overhead over or adjacent to operational tracks will not jeopardize the stability of other parts of the Overhead awaiting demolition.

1. Where multiple tracks are involved, the Demolition Plan should be engineered as much as practical such that no more than one track is rendered impassable at any given moment.

I. No blasting will be permitted on Railroad's right-of-way.

SECTION II. DEMOLITION PLAN

A. The Contractor shall submit a detailed Demolition Plan to the Railroad. The Demolition Plan shall encompass the following:

1. Provide a scale drawing showing the plan view, elevation and location of the Overhead and locations of any access roads needed on railroad right of way to access the job site. The as-built drawings may be used for the submittal provided the removal steps are clearly marked and legible.

2. Indicate the position of all railroad tracks below the bridge. Identify each track as mainline, siding, spur, etc. Identify locations where temporary crossings will be installed to cross equipment over each track.

3. List in sequential order, all procedures necessary to remove the bridge in a safe and controlled manner. Include step by step details of each sequence and the elapsed time required to execute the sequence. The Demolition Plan must specify which, if any, sequences will render a track impassable to trains during execution of the sequence. If more than one track is adjacent to the work area, specify which tracks will be impassable during execution of each sequence.

4. Include text, drawings or photos to communicate the types of equipment that will be utilized. Include diagrams showing the position of the equipment in relation to the tracks. Where cranes are to be used, furnish the lifting capacities of the crane at the anticipated radius and the weights of components to be removed.

5. For every sequence, specify the minimum horizontal clearance from centerline of track and the minimum vertical clearance above top of rail for equipment, falsework, rubble shields and temporary

supports. If a crane is to be utilized, include clearances for the backswing radius of the crane counterweight and the position of the outriggers. Refer to the Frame Protection Details drawings, three sheets, attached hereto and made a part hereof, for the minimum allowable vertical and horizontal clearances.

6. If the Demolition Plan includes concrete demolition, include the details of rubble control such as maximum anticipated size of rubble, drop distance, shield size and shield position.

7. The Demolition Plan will indicate locations and types of temporary supports, shoring, cables or bracing required.

a) Excavations and shoring design shall be according to the attached "GENERAL SHORING REQUIREMENTS" drawings, two pages, attached hereto and made a part hereof.
b) Falsework shall be designed according to the State of California, Department of Transportation FALSEWORK MANUAL available at this Web Site: http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCompleteManuals/FalseworkManual(Rev34).pdf
c) Plans shall conform to the appropriate Federal, State and local regulations and building codes.

8. If any temporary supports interfere with the natural drainage along the Railroad right-of-way, a temporary drainage diversion plan shall be included in the Demolition Plan. The drainage plan shall route all surface water away from the railroad tracks.

a) Do not block drainage in side ditches with debris.
b) Do not place footing blocks in drainage ditches.
c) Surface runoff must be diverted away from the footing block excavations to avoid saturation of the underlying supporting soils.

9. The Demolition Plan shall include details, limits, and locations of protective shields or other measures designed to protect the rails, ties and ballast from falling debris. Include details of catchment apparatus necessary to protect the tracks from rolling debris that may fall onto side slopes. Include the design load for the shields for both the maximum static load and the maximum anticipated impact loads from falling debris. Specify the type of equipment that will be utilized to remove the debris and shields from operational tracks.

10. Protection of the track ballast section must be provided to avoid contamination of the rock with fine dust and mud produced during demolition activities. Filter fabric or some other effective means to prevent ballast contamination should be incorporated into the Demolition Plan.

11. All overhead and underground utilities in the area affected by removal of the bridge shall be located on the drawings, including any fiber optic, railroad signal, and communication lines.

12. Indicate the limits of demolition of substructures, including depths and dimensions of excavations that might be necessary to demolish buried footings.

13. The Demolition Plan should include details of planned on-site fire suppression.

B. The Contractor shall submit to the Railroad: three (3) complete sets of the Demolition Plan to BNSF's Assistant Director Structural Engineering for review and comments. The Demolition Plan should be sent in PDF format for files up to (2) megabytes by email attachment to: Ronald.Berry@bnsf.com. Should the Demolition Plan exceed a two (2) megabyte PDF file, a CD of the plans and specifications should be sent via overnight mail service to mailing address, Assistant Director Structures, 4515 Kansas Avenue, Kansas City, KS 66106.

1. The Plan shall be sealed by a Civil or Structural Engineer registered in the state where the proposed demolition will take place.

2. A minimum of four (4) weeks shall be expected for the Railroad's review after the complete submittal is received.

3. No removal operations will be permitted over the Railroad right of way until the submitted material has been reviewed and approved.

C. Approval and/or comments furnished by the Railroad in the course of review of the Contractor's Demolition Plan will not relieve the Contractor of the ultimate responsibility for the safe and secure demolition of the Overhead.

SECTION III. PROCEDURE

A. The Demolition Plan must be executed such that stability is continuously maintained for the standing portions of the Overhead over all tracks.

1. All members of the Overhead being demolished must be continuously supported to resist high winds, including wind buffets and suction forces generated by high speed trains.

B. Prior to proceeding with bridge removal, the sealing Civil or Structural Engineer, or his authorized representative, shall inspect all components of the temporary support shoring, including temporary bracing and protective coverings, insuring conformity with the working drawings.

1. The sealing Engineer shall certify in writing to the Railroad that the work is in conformance with the drawings and that the materials and workmanship are satisfactory.

2. A copy of this certification shall be available at the job site at all times.

C. All substructures shall be removed to at least six (6) feet below the final finished grade or at least six (6) feet below base of rail whichever is lower, unless otherwise specified by the Railroad.

D. All debris and refuse shall be removed from the railroad right of way by the Contractor. The premises shall be left in a neat and presentable condition to the exclusive satisfaction of the Railroad. Soils contaminated by fuel spills, hydraulic oil leaks, etc. will be removed from railroad right of way and replaced to the exclusive satisfaction of the Railroad.

E. If any hazardous materials are discovered, provide material protection as specified in local hazardous material codes and immediately contact the Railroad.

1. If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at **1(800) 832-5452**, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

2. If pipelines are attached to the Overhead, pipes must be purged of flammable or hazardous materials prior to beginning demolition.

3. Fuel spills, hydraulic fluid releases, equipment oil leaks or any other release of contaminants must be reported to the Railroad. Contaminated soils must be removed and replaced to the satisfaction of the Railroad and local regulatory agencies.

F. The work progress shall be reviewed and logged by the Contractor's Engineer. Should an unplanned event occur, the Contractor shall inform the Railroad and submit a procedure to correct or remedy the occurrence.

G. Beam removal and all other demolition procedures shall take place as much as practicable with equipment positioned adjacent to and clear of all live tracks or positioned on the Overhead structure above the track. In the rare case that beams require removal with equipment positioned fouling a live track or from below the Overhead, the following steps shall be taken before beams are allowed to straddle the tracks:

1. Certain territories with high density train traffic, especially where multiple main tracks are affected, may not grant Work Windows on all tracks simultaneously. Beam removal from the underside of Overheads may not be possible unless the procedure can be accomplished in very short Work Windows or be engineered such that only one track is affected.

2. The work shall be scheduled well in advance but no later than the requirements in Section 1, paragraph 5 of this Exhibit G. The Work windows are subject to the Railroad's operational requirements for continuous train operations. The beam removal plan must be engineered to minimize the Work Window time.

3. The rails, ties and ballast shall be protected. No equipment will be crossed over or placed on the tracks unless pre-approved by the Railroad.

4. The beams shall be blocked to prevent the beams from coming into contact with the rails. Blocking shall not be placed on the rails or ties.

5. Upon approach of a train, the beams and all personnel and equipment will be moved a position to provide a minimum of 15 feet horizontal clearance and 21 ft. 6 in. vertical clearance from the nearest rail. Care must be exercised to insure that crane booms are rotated to a position parallel with the track.

SECTION IV. TRACK PROTECTION

A. The track protective cover shall be constructed before beginning bridge removal work and will be supported by falsework or members of the existing Overhead. The following are examples of protective covers that may be acceptable:

1. A decking supported by the bridge or a suspended cover from the bridge above the track clearance envelope.

2. A track shield cover over the tracks per the attached detail.

3. A framed cover outside the track clearance envelope.

4. A catcher box or loader bucket under decking and parapets overhanging the exterior girders.

5. Protection of the track ballast section must be provided to avoid contamination of the rock with fine dust and mud produced during demolition activities. Filter fabric or some other effective means to prevent ballast contamination should be incorporated into the Demolition Plan.

B. Construction equipment shall not be crossed over or placed on the tracks unless the rails, ties and ballast are protected against damage.

1. Track protection is required for all equipment including rubber tired equipment.

2. A list of equipment to be crossed over or positioned on the tracks along with the intended method of protection shall be submitted to the railroad for approval prior to use at the job site.

C. Temporary haul road crossings shall be either timbers or precast concrete panels. The type of crossing shall be determined by the Railroad.

1. Solid timbers or ballast with timber headers shall be used between multiple tracks.

2. If the job site is accessible to the public, all temporary haul road crossings shall be protected with barricades or locked gates when the Contractor is not actively working at the site.

3. Installation and removal of temporary track crossings for equipment shall be scheduled well in advance with the Railroad but no later than the requirements in Section 1, paragraph 5 of this Exhibit G.

SECTION V. CRANES

A. When cranes are operated over or adjacent to the tracks the following is required:

1. The Contractor shall verify that the foundations, soil conditions, and buried utility lines under the crane and crane outriggers can support the loads induced by the crane under an assumed maximum capacity lift. The size and material type of crane mats shall be rigid and of sufficient capacity to safely distribute the crane loads.

2. Front end loaders and backhoes cannot be used in place of a crane to lift materials over the tracks. These types of equipment do not have the necessary safety features built into the machines to circumvent overloading and tipping. Only cranes with the rated capacity to handle the loads may be used.

3. Additional track protection may be required for a crane when crossing over the track. The protection methods shall be submitted to the Railroad for review and comment well in advance of intended use.

4. Cranes and other equipment utilizing outriggers shall not place outriggers on the tracks or ballast.

5. Cranes or crane booms shall not be positioned within the track clearance envelope without Railroad Flagman protection. Cranes operating from a position farther than 25 ft. from the nearest track will need a Railroad Flagman present if the boom length is such that it could fall onto a track.

6. Upon approach of a train, the crane body shall be rotated to position the boom in a line parallel with the track. Any suspended load shall be made stationary by lowering it until contact is made with the ground. During passage of the train, the Crane Operator must stop all movements. Crane Operators shall remain in the cab with motor at idle with the load lines, boom, rotation and travel controls locked and stationary until the full length of the train has passed the job site.

7. Cranes will not be utilized during high winds.

SECTION VI. CUTTING TORCHES

A. When a cutting torch or welding equipment is used in the demolition process, the following steps shall be taken:

1. Fire suppression equipment is required on-site.

2. Do not use a torch over, between, or adjacent to the tracks unless a steel plate protective cover is used to shield against sparks and slag coming into contact with timber ties. Care shall be taken to make

certain the use of a steel plate does not come in contact with the rails. See "Track Shield Details" for other requirements. Details of the shield shall be submitted to the Railroad for approval.

3. Wet the ties below the steel plate and wet other timbers and flammable demolition debris located near cutting areas.

4. Monitor the work site for at least three hours after cutting has ceased to detect a smoldering fire.

B. Extensive overhead cutting may require more robust fire suppression equipment and precautions than what would normally be required for routine cuts.

1. On days when extensive torch cutting is planned, the Contractor shall have a larger water supply on hand or take other measures as needed to effectively suppress fires.

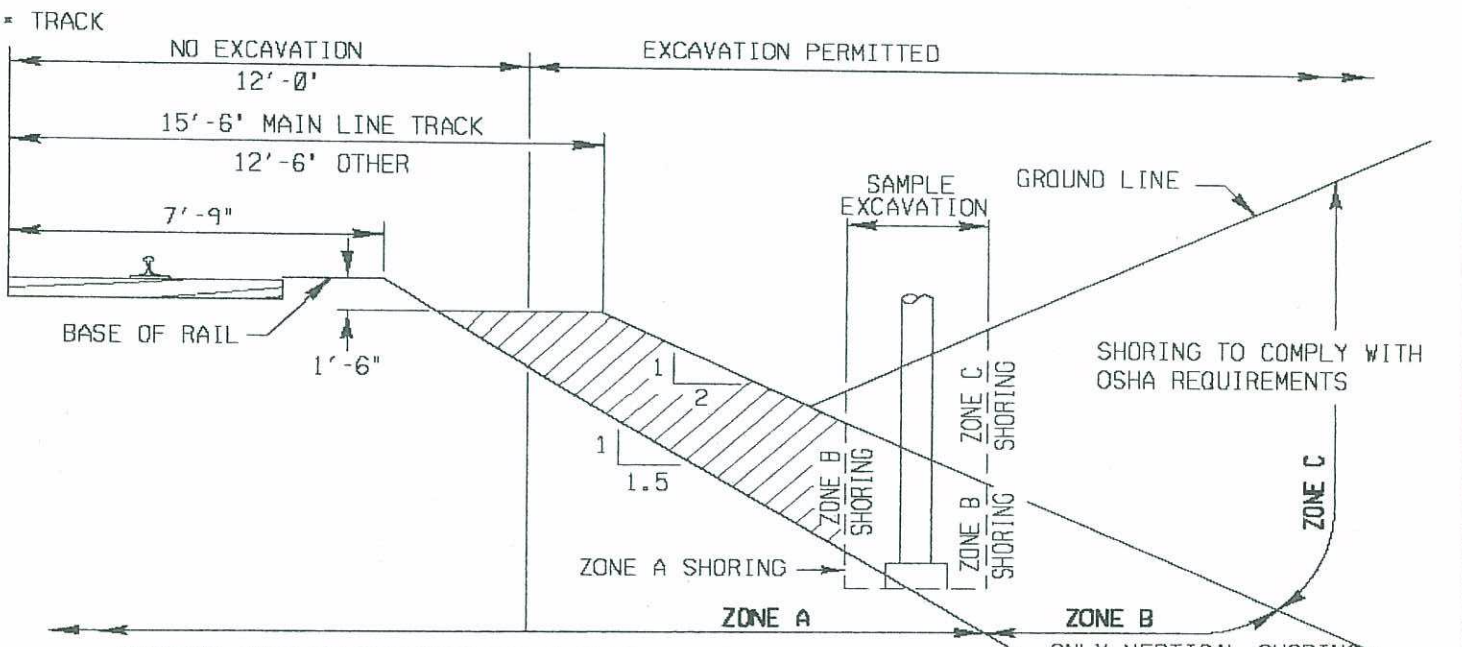
2. Overhead torch cutting and welding must cease upon approach and passage of a train.

3. Extensive torch cutting shall not take place during high winds.

4. Contractor will clear vegetation and other combustible debris from the surrounding work areas prior to engaging in extensive torch cutting.

SECTION VII. UTILITIES

A. The demolition operations shall be planned such that overhead and underground utility lines are operating safely at all times. The utility lines shall be protected if affected by demolition operations. Underground utility lines shall be protected from concentrated soil loads under crane outriggers and heavy rubber tired front loaders or similar equipment. All the work associated with utility lines should be coordinated by the contractor with the respective utility companies.



GENERAL NOTES:

ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO ℄ OF TRACK.

PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE RAILROAD DETAILED PLANS INDICATING THE NATURE AND EXTENT OF THE TRACK PROTECTION SHORING PROPOSED. THE CONTRACTOR SHALL INSTALL THE TEMPORARY SHORING SYSTEM PER THE APPROVED PLANS. DESIGN OF THE TEMPORARY SHORING SYSTEM TO COMPLY WITH **GUIDELINES FOR TEMPORARY SHORING.**

FOR EXCAVATIONS WHICH ENCROACH INTO ZONE A OR B, SHORING PLANS SHALL BE ACCOMPANIED BY DESIGN CALCULATIONS. PLANS AND CALCULATIONS MUST BE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE WORK WILL BE PERFORMED.

GENERAL EXCAVATION ZONES

SCALE: (NOT TO SCALE)

REVISIONS		
DATE	LTR.	DESCRIPTION
5/03	L	FORMERLY UPRR C.E. 106613
/		
/		
/		
/		
/		

DESIGN BY: PSP | DRAWN BY: JPB | CHECKED BY: AA

APPROVED: K.H. Jennison — CHIEF - ENGINEERING STANDARDS

9-1-84 — CHIEF - ENGINEERING STANDARDS

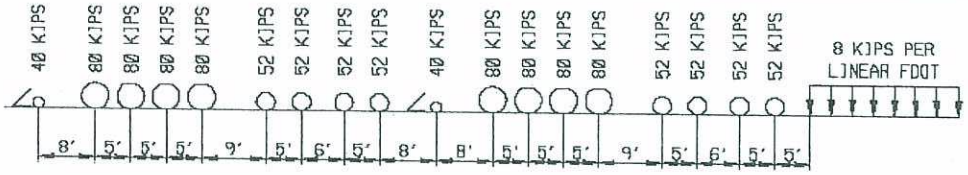
BRIDGE STANDARDS

GENERAL SHORING REQUIREMENTS

FILE DRAWN: UPRR | DATE: 5-8-03

PLAN NO.: 716668 | SHEET: 1 OF 2

FIGURE 1



COOPER E80 LOAD

SCALE: (NOT TO SCALE)

VERTICAL PRESSURE Q SHALL BE BASED ON A DISTRIBUTION WIDTH LD.
LD IS THE LENGTH OF TIE PLUS H_1.
H_1 IS THE HEIGHT FROM THE BOTTOM OF TIE TO THE TOP OF SHORING.
H_2 IS THE DEPTH OF POINT BEING EVALUATED WITH THE BOUSSINESQ EQUATION.
S IS A DISTANCE PERPENDICULAR FROM CENTERLINE OF TRACK TO THE FACE OF SHORING.
D IS FROM TOP OF SHORING TO ONE FOOT BELOW DREDGE LINE.
ZP IS THE MINIMUM EMBEDMENT DEPTH.
LENGTH OF TIE IS 9 FEET
Q IS THE INTENSITY OF STRIP LOAD DUE TO E80 RAILROAD LIVE LOAD
AND SHALL BE CALCULATED AS FOLLOWS:

FOR $H_1 = 0$ LD = LENGTH OF TIE; THEREFORE, $Q = \frac{80{,}000 \text{ LB}}{(5 \text{ FEET})(9 \text{ FEET})} = 1{,}778 \text{ PSF}$

FOR $H_1 > 0$ LD = LENGTH OF TIE + H_1; THEREFORE, $Q = \frac{80{,}000 \text{ LB}}{(5 \text{ FEET})(LD)}$

CASE 1: LATERAL LIVE LOAD PRESSURE PS, DUE TO E80 LOADING FOR TRACK **PARALLEL** TO SHORING SYSTEM IS CALCULATED USING THE BOUSSINESQ STRIP LOAD EQUATION.

$$PS = \frac{2Q}{\pi}(\beta + \sin\beta \sin^2\alpha - \sin\beta \cos^2\alpha)$$

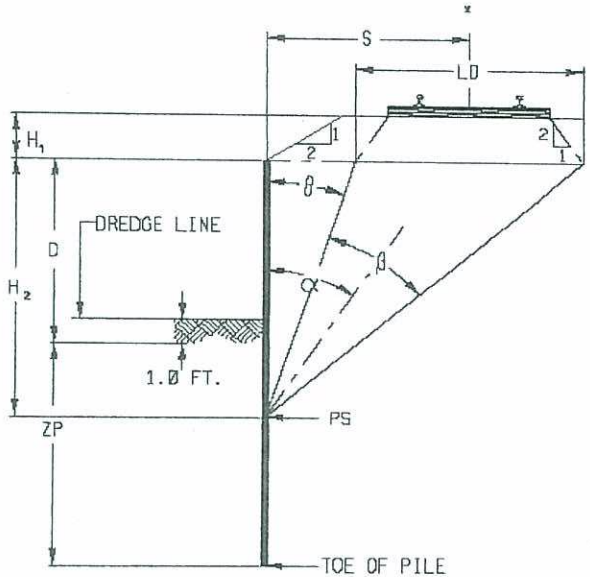
THE ABOVE EQUATION CAN BE SIMPLIFIED INTO THE FOLLOWING EQUIVALENT FORM:

$$PS = \frac{2Q}{\pi}[\beta - \sin\beta \cos(2\alpha)]$$

α AND β ARE ANGLES MEASURED IN RADIANS, $\alpha = \theta + \frac{\beta}{2}$

CASE 2: LIVE LOAD PRESSURE DUE TO E80 LOADING FOR TRACK AT A **RIGHT ANGLE** TO THE SHORING SYSTEM CAN BE CALCUATED USING THE FOLLOWING EQUATION.

$PS = K_A Q$
WHERE $K_A = \tan^2(45 - \frac{\phi}{2})$
ϕ IS THE ANGLE OF INTERNAL FRICTION IN DEGREES



PLAN

SCALE: (NOT TO SCALE)

REVISIONS		
DATE	LTR.	DESCRIPTION
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DESIGN BY: PSB | DRAWN BY: JFS | CHECKED BY: AA

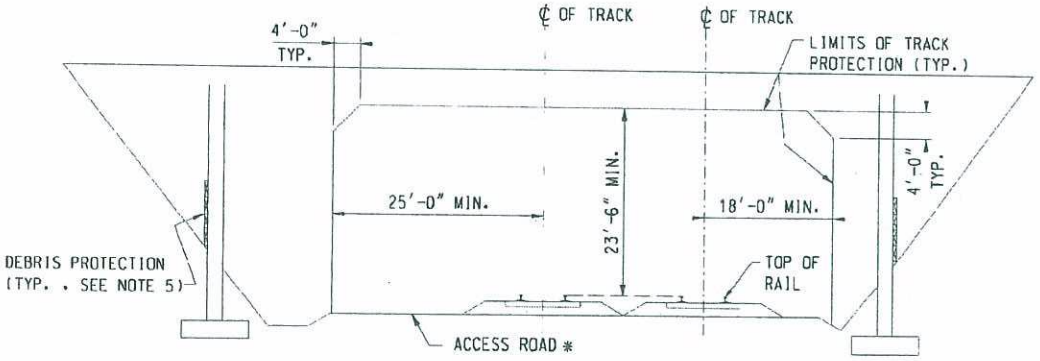
APPROVED:
K.H. Jennison
CHIEF - ASSISTANT DIRECTOR STRUCTURES DESIGN
9-1-14
DATE - CHIEF SPECIAL PROJECTS STRUCTURES DESIGNER

BRIDGE SHORING STANDARDS

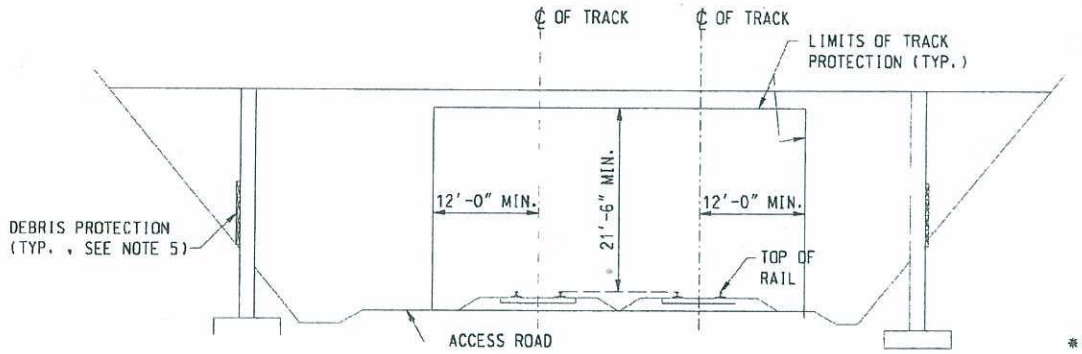
GENERAL SHORING REQUIREMENTS

FILE OWNER: UPRR | DATE:
PLAN NO.: 71000L | SHEET: 2 OF 2

FIGURE 2



BRIDGE ELEVATIONS
STANDARD LIMITS OF PROTECTION FOR FRAME PROTECTION



BRIDGE ELEVATION
MINIMUM LIMITS OF PROTECTION FOR FRAME PROTECTION
(SPECIAL PERMISSION REQUIRED, SEE NOTE 1)

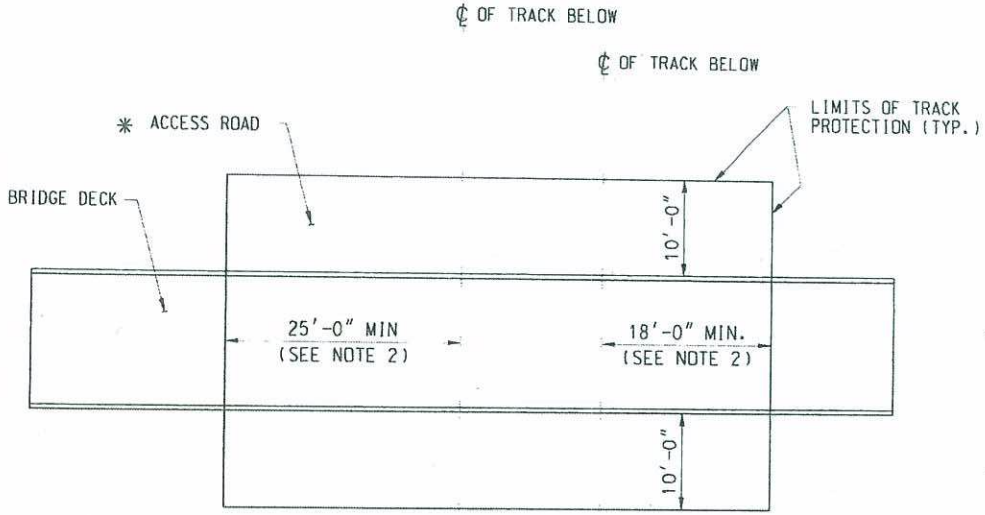
1. THE STANDARD LIMITS OF PROTECTION NOTED ARE THE MIN. CLEARANCES ALLOWED WITHOUT SPECIAL PERMISSION FROM THE RAILROAD. THE REDUCED CLEARANCES NOTED MAY BE ALLOWED BY THE RAILROAD. SPECIAL PERMISSION FOR THE REDUCED CLEARANCES IS REQUIRED FROM THE RAILROAD AND PUBLIC AGENCY.
2. THE PROTECTION FRAME SHALL AS A MINIMUM MATCH THE DEMOLITION LIMITS SHOWN AND EXTEND PAST THE BRIDGE WIDTH AS SHOWN ON THE ATTACHED DEMOLITION PLAN SHEET.
3. FOR ADDITIONAL CLEARANCE AND PROTECTION INFORMATION REFER TO CONTRACT EXHIBITS.
4. THE PROTECTION FRAME SHALL PREVENT DEMOLITION DEBRIS, DUST AND FINE MATERIAL FROM FALLING INTO THE RAILROAD TRACKS, ACCESS ROAD OR TRAINS. THE FRAME SHALL BE DESIGNED BY THE CONTRACTOR TO SUPPORT THE ANTICIPATED DEMOLITION LOADS, AND IN ACCORDANCE WITH CALTRANS FALSEWORK MANUAL FOR STRUCTURES OVER THE RAILROAD.
5. DEBRIS PROTECTION IS REQUIRED NEAR THE BASE OF THE SIDE SLOPES AND ADJACENT TO ROADS USED BY DEMOLITION EQUIPMENT TO PREVENT DEBRIS FROM ROLLING ONTO TRACK, ACCESS ROAD OR DITCH. USE TIMBERS AS REQUIRED TO STOP LARGE PIECES OF ROLLING DEBRIS.
6. ANY ACTIVITY WITHIN 25 FEET OF THE NEAREST RAIL OF A TRACK REQUIRES A FLAGMAN.

* IF NO ACCESS ROAD USE MIN. DIMENSION FROM OTHER SIDE OF DETAIL

BNSF RAILWAY

DEMOLITION FRAME PROTECTION DETAILS

DATE: OCTOBER 17, 2007 SHEET: 1 OF 3

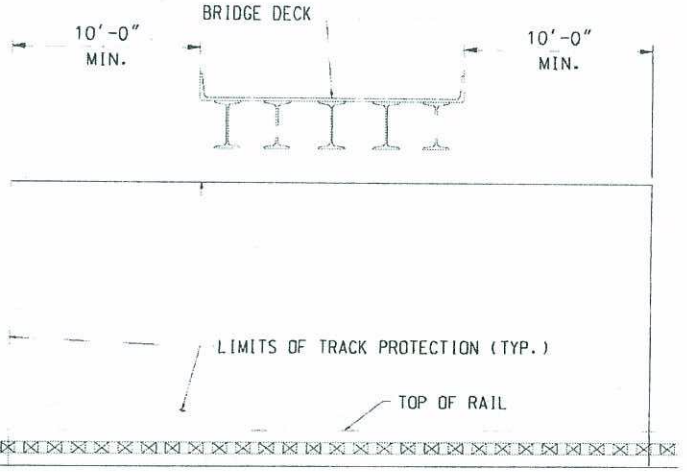


BRIDGE PLAN

STANDARD LIMITS OF PROTECTION FOR FRAME PROTECTION

NOTES:

1. SEE GENERAL NOTES ON BRIDGE ELEVATION SHEET.
2. STANDARD LIMITS OF PROTECTION ARE SHOWN. FOR MIN. LIMITS OF PROTECTION DIMENSIONS, SEE BRIDGE ELEVATION. MINIMUM LIMITS OF PROTECTION.



BRIDGE DECK CROSS SECTION

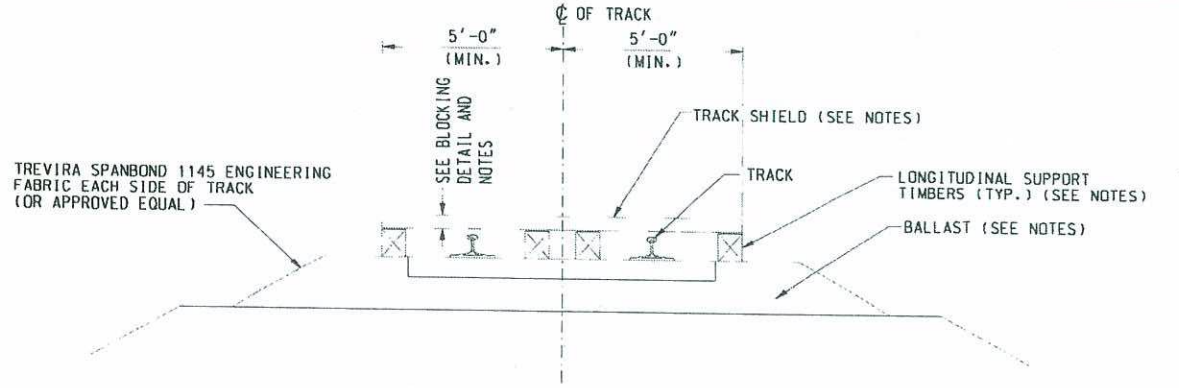
STANDARD LIMITS OF PROTECTION

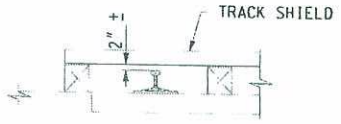
* IF NO ACCESS ROAD, USE MIN. DIMENSION FROM OTHER SIDE

BNSF RAILWAY

DEMOLITION FRAME PROTECTION DETAILS

DATE: OCTOBER 17, 2007 SHEET: 2 OF 3





BLOCKING DETAIL

TRACK SHIELD DETAIL
FOR DEBRIS FALLING FROM BRIDGE DECK REMOVAL
(WHEN TRACK TIME WINDOW IS AVAILABLE)

NOTES:

1. A FLAG MAN IS REQUIRED AT ALL TIMES DURING THE USE OF A TRACK SHIELD.
2. THE TRACK SHIELD SHALL BE DESIGNED BY THE CONTRACTOR AND SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT THE ANTICIPATED LOADS, INCLUDING IMPACT AND PUNCTURE. THE SHIELD SHALL PREVENT MATERIALS AND EQUIPMENT OR DEBRIS FROM FALLING ONTO THE RAILROAD TRACK. ADDITIONAL LAYERS OF MATERIALS SHALL BE FURNISHED AS NECESSARY TO PREVENT FINE MATERIALS OR DEBRIS FROM SIFTING DOWN UPON THE TRACK.
3. THE SHIED SHALL BE PREFABRICATED AND FURNISHED WITH LIFTING HOOKS TO SIMPLIFY REMOVAL.
4. THE SHIELD SHALL BE OF SUFFICIENT STRENGTH TO SPAN BETWEEN IT'S SUPPORTS WITHOUT BEARING UPON THE RAILS AND TO WITHSTAND DROPPING RUBBLE.
5. BEFORE REMOVAL THE SHIELD SHALL BE CLEANED OF ALL DEBRIS AND FINE MATERIAL. GEOFABRIC SHALL LINE THE BALLAST SECTION TO PREVENT CONTAMINATION.
6. THE TRACK SHIELD SHALL EXTEND AT LEAST 20 FEET BEYOND THE LIMITS OF DEMOLITION TRANSVERSE TO THE EDGE OF THE BRIDGE.
7. LONGITUDINAL SUPPORT TIMBERS FOR THE SHIELD SHALL NOT EXTEND ABOVE THE TOP OF RAIL WHEN THE SHIELD IS REMOVED. BLOCKING FROM THE TOP OF RAIL TO THE BOTTOM OF THE SHIELD MAY BE ATTACHED TO THE SHIELD. REMAINING TIMBERS SHALL BE ANCHORED.
8. FOR TRAIN PASSAGE, THE RUBBLE SHALL BE REMOVED TO A MINIMUM OF 8'-6" FROM THE NEAREST RAIL AND TO AN ELEVATION NO HIGHER THAN THE TOP OF RAIL.
9. AT THE END OF THE DAY, THE RUBBLE SHALL BE REMOVED COMPLETELY TO A MINIMUM OF 10'-0" FROM THE NEAREST RAIL AND DOWN TO ORIGINAL GRADE. GEOFABRIC BARRIER SHALL BE USED TO PREVENT BALLAST CONTAMINATION BY FINE MATERIALS.
10. CARE SHALL BE TAKEN TO NOT PLACE METAL ACROSS THE TRACK RAILS. RAILROAD COMMUNICATION ARE SENT THROUGH THE RAILS AND WILL BE DISRUPTED BY A SHORT BETWEEN RAILS.
11. DETAILS SHOWN APPLY FOR TIMBER TIES. SPECIAL DETAILS ARE REQUIRED FOR CONCRETE TIES.

BNSF RAILWAY

DEMOLITION TRACK SHIELD DETAIL

DATE: OCTOBER 17, 2007 SHEET: 3 OF 3

EXHIBIT "H"

Burlington Northern Santa Fe

UTILITY ACCOMMODATION POLICY

Engineering Services
4515 Kansas Avenue
Kansas City, KS 66106

April 16, 2004
Revised May 5, 2007

TABLE OF CONTENTS

****

PART 1

GENERAL POLICY

****

PART 1 - GENERAL POLICY

A. Policy Application

1. Purpose

This policy is to prescribe the accommodation, location and method of installation, adjustments, removal, relocation and maintenance of utility facilities within the property of Burlington Northern & Santa Fe Railway Company, referred to hereafter as BNSF. The policy was developed in the interest of safety, protection, utilization, and future development of BNSF with due consideration given to public and private service afforded by adequate and economical utility installations.

2. Application

The policy concerning utility accommodations shall apply to all:

a. New utility installations.

b. Additions to existing utility installations.

c. Adjustment and relocation of utilities.

d. Existing or planned utility installations for which agreements with BNSF were entered prior to the date of the adoption of this policy.

e. Existing utility installations that do not meet the license requirements may remain at the discretion of BNSF.

Various types of utility lines not specifically discussed herein shall be considered within the provisions of this policy. It shall be the general practice to consider all lines carrying caustic, flammable or explosive materials under the provisions for high-pressure gas and liquid fuel lines.

3. Scope

Utilities include lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water and other similar commodities which are privately, publicly or cooperatively owned and which serve directly or indirectly the public or any part thereof.

A Utility Agreement License allowing a Utility Owner the privilege of placing its facilities in or on railroad property does not constitute permanent right for such usage. Any removal, remodeling, maintenance or relocation of the facilities, whether or not required by BNSF, will be accomplished promptly by the Utility Owner at no cost to BNSF.

4. Exceptions

Exceptions to any design, location or methods of installation provisions contained in this policy must be authorized by BNSF. Requests for exceptions will be considered only where it is shown that extreme hardship and/or unusual conditions provide justification and where alternate measures can be prescribed in keeping with the intent of this policy. All requests for exceptions shall be fully documented including design data, cost comparisons and other pertinent information.

5. Liability

The Utility Owner, it successor, or assigns shall assume all risk and liability for accidents and damages that may occur to persons or property on account of this work, and shall indemnify and hold BNSF harmless from any and all costs, liabilities, expenses, suits, judgments or damages to persons or property or claims of any nature whatsoever arising out of or in connection with the permit, or the operation and performance thereunder by the utility, its agents, employees or subcontractors. In this regard, it is further understood and agreed that the utility may be required to obtain insurance coverage as determined by BNSF.

The Utility Owner agrees that if liability insurance is required, it will file with the designated office, prior to granting of the license, "Certificates of Insurance" or other evidence to show that the appropriate insurance is carried.

Insurance as may be required shall be maintained in force until the final release of the Utility Owner by BNSF from all obligations under the terms of the license. The insurance contract shall cover claims for such length of time as law permits said claims. The insurance document shall include a clause requiring the insurer to notify BNSF ten (10) days in advance of any cancellation or change in insurance contacts.

The Utility Owner is responsible for any subcontractor to be knowledgeable of the policy and to require all work to be in compliance with this policy. Subcontractors must carry a liability insurance policy unless the subcontractor is covered by the Utility Owner's insurance.

6. Replacement of Facility

Replacement of existing facility with the same facilities or facilities of a different type, or design, is to be considered as a new utility installation and all work shall adhere to this policy.

7. Change in Ownership

It is the Utility Owner's responsibility to inform BNSF, in writing, of any name, ownership or address changes.

8. Noncompliance

Noncompliance with any terms of this Utility Accommodation Policy or Utility License Agreements may be considered as cause for discontinuance of construction or operations until compliance is assured. Continued noncompliance will result in the revocation of the license. The cost of any work required by BNSF in the removal of non-complying construction will be assessed against the Utility Owner.

9. Discharge of Waste Material

Applications for a Utility License Agreement for the installation of utility facilities which will discharge materials into the nation's waters, must comply with all applicable requirements of Corps of Engineers, and other federal, state or local environmental protection agencies. Identification of applicable requirements and administration of compliance procedures are the responsibility of the Utility Owner.

B. Utility License Agreement Requirements

1. General

Utility License Agreements are required when utility facilities are installed, relocated, removed or maintained along or across all BNSF property.

If liability insurance is required, then evidence of adequate liability insurance is to be on file with BNSF for each agreement.

2. Applications

Approved requests to install, maintain, relocate or remove a utility within the property of BNSF shall be authorized by a Utility License Agreement. The applications for utility license agreements along with plans for the proposed installation shall be submitted to BNSF and approved before construction has commenced.

3. Location

a. Utility lines shall be located to avoid or minimize the need for adjustments for future railroad improvements and to permit access to the utility lines for their maintenance with minimum interference to railroad traffic.

b. Pipelines shall be installed under tracks by boring, jacking, or in some cases, open-trenching. **WATER JETTING IS NOT PERMITTED.**

c. Where practical, pipelines carrying liquefied petroleum gas shall cross the railway where the tracks are carried on an embankment.

d. All high-pressure pipelines (greater than 60-psi internal pressure), except those in public roads, shall be prominently marked at the property line (on both sides of the track for under crossings) by signs which state the size of the line and its depth.

Example:

CAUTION: 30-inch diameter high-pressure Gas main 7 feet deep.

4. Design Considerations

a. The design of any utility installation will be the responsibility of the Utility Owner. An installation within the railroad property must be reviewed and approved by the railroad with regard to location and the manner of adjustment. This includes the measures to be taken to preserve the safety and flow of rail traffic, structural integrity of the roadway or structure, ease of maintenance and the integrity of the utility facility. Utility installations, on, over or under BNSF property shall conform with requirements contained herein and/or as a minimum, the appropriate requirements outlined in the following:

1) Safety Rules for the Installation and Maintenance of Electric Supply and Communication Lines-National Electric Safety Code.

2) Title 49 C.F.R. Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards and Amendments.

3) Title 49 C.F.R. Part 195, Transportation of Liquids by Pipelines and Amendments.

4) American Society for Testing and Materials (ASTM) Specifications - latest edition.

5) Manual on Uniform Traffic Control Devices - with revisions.

6) Rules and Regulations for Public Water Systems - latest edition, published by the appropriate State Health Department.

b. All utility installations on, over or under BNSF property shall be of durable materials designed for long service life and relatively free from routine servicing and maintenance. Conformance with current applicable material specifications and codes is mandatory.

c. References given to any manual, publication or specification are intended to be the most current edition. If a conflict occurs between any publication and this manual, the most restrictive specification will be used.

d. For all boring and jacking installations under main and passing tracks, greater than 26 inches in diameter, and at a depth of between 5.5 and 10.0 feet below top of tie, a geotechnical study will need to be performed to determine the presence of granular material and/or high water table elevation, at the sole expense of the Permittee. The study will include recommendations and a plan for a procedure to prevent failure and a collapse of the bore. Generally, core samples are to be taken near the ends of tie at the proposed location, at least as deep as the bottom of the proposed horizontal bore. Test results must be reviewed and approved by BNSF, or its agent, prior to boring activities commencing. BNSF reserves the rights, based on test results, to require the Permittee to select an alternate location, or to require additional engineering specifications be implemented, at the sole expense of the Permittee, in order to utilize existing location.

C. Safety

1. A safety orientation course should be completed by all workers prior to entering BNSF property. It is the contractor's responsibility to conduct the safety training and implementation of a safety program for its employees. Training materials are available on the web site: www.contractororientation.com. The contractor must comply with all federal, state and local safety regulations.

2. Flagging

   When work is performed within twenty-five (25) feet of the centerline of the track, railroad flagging will be required.

   a. Railroad flagging will be required:

      1) During the period of construction when it is necessary for the Contractor to operate equipment in the vicinity of, or over, BNSF property which may endanger railroad operations, or

      2) Two or more railroad flagmen may be required at other times that the Railway Company Roadmaster's sole discretion shall deem necessary.

   b. Flagging services shall be performed by BNSF employees and the total cost borne by the Utility Owner.

   c. The Utility Owner will be billed monthly at a rate to be determined by BNSF to include labor and payroll associated costs plus any expenses incurred by BNSF for flagging services.

   d. A written request for flagging services will be required at least 72 hours prior to the time when such services are needed. This request is made to the BNSF Roadmaster, as noted in agreement.

3. Material Storage

Storage of materials, parking of equipment and vehicles when not used in actual utility work will not be permitted on railroad property.

D. Maintenance and Servicing Utilities

1. Utility Owner's Responsibility

a. Maintenance of the utility is the responsibility of the Utility Owner.

b. Maintenance must be performed to keep the facility in an as-constructed condition, and in a good state of repair in accordance with the requirements of Federal, State and Local laws, regulatory standards and utility codes.

c. It is the Utility Owner's responsibility to replace and stabilize all earth cover and vegetation when it has eroded over an underground utility facility where such erosion is due to, or caused by, the placement or existence of the underground utility facility.

d. The Utility Owner shall be responsible for any settlement of backfill, fills, and embankments that may occur.

2. Emergency Maintenance

a. Emergency maintenance of utilities located on railroad property is permissible without obtaining a Utility License Agreement if an emergency exists that is dangerous to the life, safety or welfare of the public and which requires immediate repair. The Utility Owner shall take all necessary and reasonable safety measures to protect the public and the railroad.

b. The Utility Owner, in such and event, will advise the Railway Company's Roadmaster as soon as possible. Damage to the right-of-way and facilities will be restored to its original condition. A Utility License Agreement should be requested by the Utility Owner within the second working day provided the work is not covered under any previously granted license. Flagging requirements described earlier apply in all situations.

E. Preservation, Restoration and Cleanup

1. Disturbed Areas

   a. Areas of railroad property, disturbed by the installation, maintenance, removal and relocation of utilities shall be kept to a minimum.

   b. Disturbed areas shall be returned to normal grade and elevation, with compaction of backfill material, and all excess or undesirable material removed by the Utility Owner. The Utility Owner shall replace destroyed vegetation by sodding, or seeding, fertilizing and mulching, or a combination thereof.

   c. The Utility Owner shall provide protection against erosion in disturbed areas that are subject to erosion. Such protection may be in the form of rock riprap, wash checks, hay or straw cover, or other material that is approved and does not interfere with railroad maintenance.

2. Drainage Facilities

   Care shall be taken to avoid disturbing existing drainage facilities. Underground utility facilities shall be bedded with pervious material and outlets provided for entrapped water. Underdrains should be provided where necessary.

3. Cleanup

   Unused material or debris shall be removed from the work site area. At the end of every construction day, construction equipment and materials shall be removed as far from the operating railroad tracks as possible (minimum 25 feet from centerline).

F. Protection of Vegetation

1. Trimming, Clearing or Removal of Vegetation

   a. Consistent with the preservation of planted vegetation, consideration will be given to Utility Owners for the necessary trimming, clearing or removal of vegetation to provide adequate clearance of overhead wires. Such work will be done in accordance with established practices and standards; however, approval will not be granted for wasteful or wanton trimming, or removal in order to provide easy solutions to a difficult situation.

   b. No trees, shrubs, bushes, vines or ground cover on railroad property shall be sprayed, trimmed, cut down, rooted up, removed or mutilated in any manner unless a permit is granted by BNSF to do such work.

2. Chemical Brush Control

   a. Spraying brush and seedling tree growth to prevent re-sprouting may be permitted, and when permitted, shall be carried out with extreme caution and careful performance. The Utility Owner shall be responsible for the performance of their employees or contractors in the application of brush control and approved by BNSF Environmental Department.

   b. All spraying shall be done by a herbicide applicator that is licensed in the state where the work is to be performed.

   c. Permit applications for spraying shall list the kinds of chemical weed and brush killers that will be used. When liability insurance is required, it shall be provided by the herbicide applicator, or be insured under the liability insurance of the Utility Owner.

   d. Plants over five (5) feet in height should not be sprayed for control. Brush over five (5) feet in height, which is to be removed, should be cut and the stumps treated to prevent growth. Shrubbery type growth such as dogwood, sumac, redbud, plum, etc., should not be sprayed as a general rule. Steep slopes, where brushy growth is a major factor in preventing erosion, should not be sprayed.

3. Tree Pruning

   a. Tree pruning on railroad property for utility lines will utilize the best horticultural practices. All cut branches, dead limbs, etc., shall be removed. Such materials shall not be burned or disposed of on railroad property unless permission is granted by Utility License Agreement.

   b. Should burning be permitted, the Utility Owner will be held liable for any damage to grass, crops, native shrubs and trees arising from careless burning of such brush.

   c. Any and all limbs trimmed shall be removed with a clean cut and all limb scars over one (1) inch in diameter shall be treated with appropriate tree paint.

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PART 2

UTILITIES PARALLELING

RAILROAD PROPERTY

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PART 2 - UTILITIES PARALLELING RAILROAD PROPERTY

A. General Provisions

This section of the policy applies to all public and private utilities, including electric power, telephone (including fiber optics), telegraph, cable television, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar lines that are located, adjusted or relocated within the property under the jurisdiction of BNSF. Such utilities may involve underground, surface or overhead facilities.

Any utility line greater than five hundred (500) feet in length will be considered a parallel line and is to be located on uniform alignment, within ten (10) feet or less of the property line so as to provide a safe environment and to preserve space for future railroad improvements or other utility installations. BNSF Engineering must approve any installation over one mile.

Utilities will be located so as to provide a safe environment and shall conform to the current "National Electrical Safety Code," "American Waterworks Association Specifications," Federal Pipeline Safety Regulations," and "The American Railway Engineering and Maintenance Association Specifications." Where laws or orders of public authority prescribe a higher degree of protection, then the higher degree of protection prescribed shall supersede the provisions of this manual.

B. Overhead Installations

1. Minimum four feet clearance required above signal and communication lines.

2. Poles must be located 50 feet out from the centerline of railroad main, branch and running tracks, CTC sidings, and heavy tonnage spurs. Pole location adjacent to industry tracks; must provide at least a 10-foot clearance from the centerline of track, when measured at right angles. If located adjacent to curved track, then said clearance must be increased at a rate of 1-½ inches per degree of curved track.

3. Regardless of the voltage, unguyed poles shall be located a minimum distance from the centerline of any track, equal to the height of the pole above the ground-line plus 10 feet. If guying is required, the guys shall be placed in such a manner as to keep the pole from leaning/falling in the direction of the tracks.

4. Poles (including steel poles) must be located a minimum distance from the railroad signal and communication line equal to the height of the pole above the ground-line or else be guyed at right angles to the lines. High voltage towers (34.5kV and higher) must be located off railroad right of way.

5. For proposed electrical lines paralleling tracks, BNSF may request that an inductive interference study be performed at the expense of the utility owner. Inductive interference from certain lines have the potential to disrupt the signal system in the track causing failures in the track signals and highway grade crossing warning devices. The General Director of Signals will determine the need for a study on a case-by-case basis.

C. Underground Installations

1. Underground utility installations should be located on top of the back slope at the outer limits of the railroad property.

2. If the pipeline is located forty (40) feet or less from centerline of track, the pipeline shall be encased in a steel pipe subject to approval from BNSF. No pipe may be placed closer than twenty-five (25) feet from centerline of track. Pipe must be buried with a minimum cover of three (3) feet.

   a. If less than minimum depth is necessary because of existing utilities, water table, ordinance or similar reasons, the line shall be rerouted.

   b. Locations where it will be difficult to attain minimum depth due to wet or rocky terrain shall be avoided. Any location change from plan must be approved by BNSF.

3. The use of plastic carrier pipe for sewer, water, natural gas and other liquids is acceptable under specific circumstances. The use of plastic pipe is satisfactory if the pipe is designed to meet AREMA and all applicable federal and state codes, and if the carrier pipe is properly encased with a steel casing pipe for the entire length on BNSF right of way.

4. Manholes shall be limited to those necessary for installation and maintenance of underground lines. Manholes vary as to size and shape depending on the type of utility they serve. To conserve space, their dimensions should be minimally acceptable by good engineering and safety standards. In general, the only equipment to be installed in manholes located on railroad property is that which is essential to the normal flow of the utility, such as circuit reclosers, cable splices, relays, valves and regulators. Other equipment should be located outside the limits of the railroad property. Manholes shall not protrude above the surrounding ground nor be located in the shoulder, shoulder slope, ditch, backslope, or within twenty-five (25) feet of the centerline of track without approval of BNSF.

5. Electric Power Lines

   a. A minimum depth of 3.0 feet below natural grade (BNG) will be maintained for 750 volts and less, and 4.0 feet BNG for greater than 750 volts.

   b. A 6-inch wide warning tape will be installed, 1.0 foot BNG directly over the underground power line where located on Railroad right-of-way outside the track ballast sections.

6. Fiber Optic Lines

   a. A minimum depth of 4.0 feet BNG for fiber optic cable wirelines.

   b. Whenever feasible, all cable should be laid within 5 feet from property lines.

   c. A 6-inch wide warning tape will be installed, 1.0 foot BNG directly over the underground fiber optic line where located on Railroad right-of-way outside the track ballast sections.

D. Attachment to Bridges and Other Structures

The Utility Owner will not be permitted to attach to BNSF bridges or route facilities through drainage structures or cattle passes. Utilities are not to be attached to other railroad structures without the written approval of BNSF Structures Department. As a general rule, overhead power, communication and cable television line crossings at bridges must be avoided. Pipelines laid longitudinally on railroad property shall be located as far as practical from any tracks or other important structures. If located within forty (40) feet of the centerline of any track, the carrier pipe shall be encased or be of special design as approved by BNSF Engineering.

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PART 3

UTILITIES CROSSING

RAILROAD PROPERTY

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PART 3 - UTILITIES CROSSING RAILROAD PROPERTY

A. General Provisions

This section of the policy applies to all public and private utilities, including electric power, telephone (including fiber optics), telegraph, cable television, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar lines that are located, adjusted or relocated within the property under the jurisdiction of BNSF. Such utilities may involve underground, surface or overhead facilities.

Installations crossing the property of the railroad, to the extent feasible and practical, are to be perpendicular to the railroad alignment and preferably at not less than forty-five (45) degrees to the centerline of the track. Utilities shall not be placed within culverts or under railroad bridges, buildings or other important structures.

Utilities will be located so as to provide a safe environment and shall conform to the current "National Electrical Safety Code," "American Waterworks Association Specifications," Federal Pipeline Safety Regulations," and "The American Railway Engineering and Maintenance Association Specifications." Where laws or orders of public authority prescribe a higher degree of protection, then the higher degree of protection prescribed shall supersede the provisions of this manual.

B. Overhead Installations

1. Minimum four feet clearance required above signal and communication lines.

2. Poles must be located 50 feet out from the centerline of railroad main, branch and running tracks, CTC sidings, and heavy tonnage spurs. Pole location adjacent to industry tracks; must provide at least a 10-foot clearance from the centerline of track, when measured at right angles. If located adjacent to curved track, then said clearance must be increased at a rate of 1-½ inches per degree of curved track.

3. Regardless of the voltage, unguyed poles shall be located a minimum distance from the centerline of any track, equal to the height of the pole above the ground-line plus 10 feet. If guying is required, the guys shall be placed in such a manner as to keep the pole from leaning/falling in the direction of the tracks.

4. Poles (including steel poles) must be located a minimum distance from the railroad signal and communication line equal to the height of the pole above the ground-line or else be guyed at right angles to the lines. High voltage towers (34.5kV and higher) must be located off railroad right of way.

5. Crossings will not be installed under or within 500 feet of the end of any railroad bridge, or 300 feet from the centerline of any culvert or switch area.

6. Complete spanning of the property is encouraged with supportive structures and appurtenances located outside railroad property. For electric supply lines, normally the crossing span shall not exceed 150 feet with adjacent span not exceeding 1-1/2 times the crossing span length. For communication lines, the crossing span shall not exceed 100 feet in heavy loading districts, 125 feet in medium loading districts, and 150 feet in light loading districts; and the adjacent span shall not exceed 1-1/2 times the crossing span length. For heavier type construction, longer spans will be considered.

7. Joint-use construction is encouraged at locations where more than one utility or type of facility is involved. However, electricity and petroleum, natural gas or flammable materials shall not be combined. Pipe truss design and layout will need to be reviewed and approved by BNSF Engineering.

8. To ensure that overhead wire crossings are clear from contact with any equipment passing under such wires, communication lines shall be constructed with a minimum clearance above top of rail of twenty-four (24) feet, and electric lines with a minimum clearance of twenty-six and one-half (26 1/2) feet or greater above top of rail when required by the "National Electric Safety Code" or state and local regulations. Electric lines must have a florescent ball marker on low wire over centerline of track.

9. The utility owner will label the posts closest to the crossing with the owner's name and telephone number for emergency contact.

10. All overhead flammable and hazardous material lines will need BNSF Engineering approval, but should be avoided if possible.

11. For proposed electrical lines crossing tracks, BNSF may request that an inductive interference study be performed at the expense of the utility owner. Inductive interference from certain lines have the potential to disrupt the signal system in the track causing failures in the track signals and highway grade crossing warning devices. The General Director of Signals will determine the need for a study on a case-by-case basis.

C. Underground Installations

1. General

   a. All underground utility crossings of railroad trackage shall be designed to carry Cooper's E-80 Railroad live loading with diesel impact (AREMA Cooper's loading Section 8-2-8). This 80,000-lb. axle load may be distributed laterally a distance of three (3) feet, plus a distance equal to the depth from structure grade line to base of rail, on each side of centerline of single tracks, or centerline of outer track where multiple tracks are to be crossed. In no case shall railroad loading design extend less than ten (10) feet laterally from centerline of track. Longitudinally, the load may be distributed between the five-foot axle spacing of the Cooper configuration. Railroad loading criteria will also apply

where future tracks on BNSF are contemplated, to the extent this information is available.

b. All utility crossings under ditches and railroad trackage should have a minimum depth of cover of three (3) feet below the flow line of the ditch or ground surface and five and one-half (5-1/2) feet from base of rail. In fill sections, the natural ground line at the toe of slope will be considered as ditch grade. The depth of cover shall not be less than that meeting applicable industry standards.

c. For all boring and jacking installations under main and passing tracks, greater than 26 inches in diameter, and at a depth of between 5.5 and 10.0 feet below top of tie, a geotechnical study will need to be performed to determine the presence of granular material and/or high water table elevation, at the sole expense of the Permittee. The study will include recommendations and a plan for a procedure to prevent failure and a collapse of the bore. Generally, core samples are to be taken near the ends of tie at the proposed location, at least as deep as the bottom of the proposed horizontal bore. Test results must be reviewed and approved by BNSF, or its agent, prior to boring activities commencing. BNSF reserves the rights, based on test results, to require the Permittee to select an alternate location, or to require additional engineering specifications be implemented, at the sole expense of the Permittee, in order to utilize existing location.

d. The use of plastic carrier pipe for sewer, water, natural gas and other liquids is acceptable under specific circumstances. The use of plastic pipe is satisfactory if the pipe is designed to meet all applicable federal and state codes, and if the carrier pipe is properly encased within a steel casing pipe per AREMA standards. This casing must extend the full width of the right of way. Casing may be omitted only for gaseous products if the carrier pipe is steel and is placed ten (10) feet minimum below the base of rail per AREMA standards.

2. General Design and Construction Requirements

a. If the minimum depth is not attainable because of existing utilities, water table, ordinances, or similar reasons, the line shall be rerouted.

b. Locations that are considered unsuitable or undesirable are to be avoided. These include deep cuts and in wet or rocky terrain or where it will be difficult to obtain minimum depth.

c. Underground installations may be made by open-trenching from the property line to the toe of the fill slope in fill sections and to the toe of the shoulder slope in cut sections but to no closer than thirty (30) feet of the centerline of track. The remainder will be tunneled, augured, jacked or directional-bored through the roadbed. Refer to the following sections for required encasement of utilities and boring requirements.

d. Manholes should be located outside railroad property, when possible. No manhole will be located in the shoulder, shoulder slope, ditch or backslope, or within twenty-five (25)

feet of the centerline of track, and shall not protrude above the surrounding ground without approval of BNSF.

e. Utilities will not be attached to or routed through drainage structures or cattle passes. Utilities are not to be attached to other railroad structures without written approval of the BNSF Structures Department.

f. Jacking pits shall be located a minimum of thirty (30) feet from the centerline of track.

3. Pipeline Requirements

a. Pipeline designs are to specify the type and class of material, maximum working pressures and test and design pressure. Pipelines which are not constructed, operated and maintained under regulations established under US Department of Transportation Hazardous Materials Regulations Board, shall upon revisions in the class of material or an increase in the maximum operating pressure, must obtain BNSF Engineering approval.

b. Pipelines carrying oil, liquefied petroleum gas, natural or manufactured gas and other flammable products shall conform to the requirements of the current AREMA, ANSI/ASME B 31.4 Code for pressure piping - Liquid Petroleum Transportation Piping Systems; ANSI B 31.8 Code for pressure piping - Gas Transmission and Distribution Piping Systems; other applicable ANSI codes and 49 C.F.R. Part 192 or Part 195 - Transportation of Hazardous Liquids by Pipeline, except that the maximum allowable stress of design of steel pipe shall not exceed the following percentages of the specified minimum yield strength (multiplied by longitudinal joint factor) of the pipe as defined in the ANSI codes.

c. Pipelines under railroad tracks and across railroad property shall be encased in a larger pipe or conduit called "casings." Generally, casings shall extend from right-of-way line to right-of-way line, unless otherwise approved.

d. Pipelines and casing pipes shall be suitably insulated from underground conduits carrying electric wires on railroad property.

e. Reinforced concrete pipe will need to be encased for a distance as wide as the embankment at the utility crossing. This is to protect against track failure due to joint separation.

4. Encasement of Utilities

a. Casings are oversized load-bearing conduits or ducts through which a utility is inserted:

1) To protect the railroad from damages and to provide for repair, removal and replacement of the utility without interference to railway traffic.

2) To protect the carrier pipe from external loads or shock, either during or after construction.

3) To convey leaking fluids or gases away from the area directly beneath the railroad trackage to a point of venting at the railroad property line.

b. Casings may be omitted for **gaseous products only** under the following circumstances:

1) Carrier pipe must be steel and the wall thickness must conform to E-80 loading for casing pipe shown in the tables as included in the AREMA manual Chapter 1, Part 5 for Pipeline Crossings. The length of thicker-walled pipe shall extend from railroad right-of-way line to right-of-way line. This will generally result in thicker-walled pipe on railroad right-of-way.

2) All steel pipe shall be coated and cathodically protected.

3) The depth from base of rail to top of pipe shall not be less than ten (10) feet below base of rail. The depth from ditches or other low points on railroad right-of-way shall not be less than six (6) feet from ground line to top of pipe.

c. In circumstances where it is not feasible to install encasement from right-of-way line to right-of-way line, casing pipe under railroad tracks and across railroad property shall extend to the greater of the following distances, measured at right angles to the centerline of track:

1) Two (2) feet beyond toe of slope.

2) Three (3) feet beyond ditch line.

3) Twenty-five (25) feet from centerline of outside track when casing is sealed at both ends.

4) Forty-five (45) feet from centerline of outside track when casing is open at both ends.

5) If additional track is planned for future construction, casing must extend far enough to meet above distances given the additional track requirement.

d. Pipelines and casing pipe shall be suitably insulated from underground conduits carrying electric wires on railroad property.

e. Casing pipe and joints shall be made of metal, and of leakproof construction. Casings shall be capable of withstanding the railroad loadings and other loads superimposed upon them.

f. Wall thickness designations for steel casing pipe for E-80 loading (including impact) are:

Nominal Diameter, (Inches)	Min. Thickness for Coated (Inches)	Non Coated (Inches)
14 and Under	0.188	0.188
16	0.219	0.281
18	0.250	0.312
20 and 22	0.281	0.344
24	0.312	0.375
26	0.344	0.406
28	0.375	0.438
30	0.406	0.469
32	0.438	0.500
34 and 36	0.469	0.531
38, 40 and 42	0.500	0.563
44 and 46	0.531	0.594
48	0.563	0.625
50	0.594	0.656
52	0.625	0.688
54	0.656	0.719
56 and 58	0.688	0.750
60	0.719	0.781
62	0.750	0.813
64	0.718	0.844
66 and 68	0.813	0.875
70	0.844	0.906
72	0.875	0.938

1) Steel pipe shall have minimum yield strength of 35,000 pounds per square inch.

2) All metallic casing pipes are to be designed for effective corrosion control, long service life and relatively free from routine servicing and maintenance. Corrosion control measures must include cathodic protection.

3) Cast iron may be used for casing. It shall conform to ANSI A21. The pipe shall be connected with mechanical-type joints. Plain-end pipe shall be connected with compression-type couplings. The strength of the cast iron pipe to sustain external loads shall be computed in accordance with the most current ANSI A21.1 "Manual for the Computation of Strength and Thickness of Cast Iron Pipe."

g. The inside diameter of the casing pipe shall be such that the carrier pipe can be removed without disturbing the casing. All joints or couplings, supports, insulators or centering devices for the carrier pipe shall be considered in the selection of the casing diameter.

h. For flexible casing pipe, a minimum vertical deflection clearance of the casing pipe shall be three percent (3%) of its diameter plus one-half (1/2) inch so that no loads from the roadbed, track, railroad traffic or casing pipe are transmitted to the carrier pipe. When insulators are used on the carrier pipe, the relationship of the casing size to the size of the carrier pipe is:

Diameter of Carrier Pipe	Inside Dia. of Casing Pipe Equals Outside Dia. of Carrier Pipe Plus
0" - 8"	2"
10" - 16"	3-1/4"
Over 16"	4-1/2"

5. Casing and Pipeline Installation

a. Casing and pipeline installations should be accomplished by directional boring, jack-and-bore, tunneling or other approved methods. Tunneling construction under tracks will be permitted only under direct supervision of a BNSF Engineer. Tunneling procedures and equipment, as well as structural design, must have BNSF Structures Department approval prior to starting any work on BNSF property. Generally, tunneling shall not be considered where less than six (6) feet of cover exists, or where excessively sandy, loose or rocky soils are anticipated.

Rail elevations over the work must be monitored at intervals prescribed by BNSF to detect any track movement. Movements of over one-quarter (1/4) inch vertically shall be immediately reported to the BNSF Roadmaster. Due to the danger to rail traffic that is caused by only small amounts of track movement, BNSF forces may have to be called to surface the track several times.

The following requirements shall apply to these construction methods:

1) The use of water under pressure jetting or puddling will not be permitted to facilitate boring, pushing or jacking operations. Some boring may require water to lubricate cutter and pipe, and under such conditions, is considered dry boring.

2) Where unstable soil conditions exist, boring or tunneling operations shall be conducted in such a manner as not to be detrimental to the railroad being crossed.

3) If excessive voids or too large a bored hole is produced during casing or pipeline installations, or if it is necessary to abandon a bored or tunneled hole, prompt remedial action should be taken by the Utility Owner.

4) All voids or abandoned holes caused by boring or jacking are to be filled by pressure grouting. The grout material should be sand cement slurry with a minimum of two (2) sacks of cement per cubic yard and a minimum of water to assure satisfactory placement.

5) The hole diameter resulting from bored or tunneled installations shall not exceed the outside diameter of the utility pipe, cable or casing (including coating) by more than one and one-half (1-1/2) inches for pipes with an inside diameter of twelve (12) inches or less, or two (2) inches on pipes with an inside diameter greater than twelve (12) inches.

6) Pits for boring, tunneling or jacking will not be permitted within thirty (30) feet of the centerline of track; or closer to the track than the toe of fill slopes in fill sections, or toe of shoulder slopes in ditch sections when pipes are allowed on the railroad property.

c. Vents. In casing pipe installations, vents are appurtenances by which fluids or gases between carrier and casing may be inspected, sampled, exhausted or evacuated.

1) Vents shall be located at the high end of short casings and at both ends of casing longer than one hundred fifty (150) feet.

2) Vent standpipes shall be located and constructed so as not to interfere with maintenance of the railroad or to be concealed by vegetation. Where possible, they shall be marked and located at the property line. The markers shall give the name and address of the owner, and a phone number to contact in case of emergency.

3) Casing pipe, when sealed, shall be properly vented. Vent pipes shall be of sufficient diameter, but in no case less than two (2) inches in diameter and shall be attached near each end of casing, projecting through ground surface at property lines.

4) Vent pipes shall extend not less than four (4) feet above ground surface. Top of vent pipes shall be fitted with a down-turned elbow, properly screened; or a relief valve.

5) For pipelines carrying flammable materials, vent pipes on casings shall be at least 16 feet (vertically) from aerial electric wires. Casings shall be suitably insulated from underground conduits carrying electric wires on Railroad right-of-way.

d. Shut-Off Valves

1) The Utility Owner shall install accessible emergency shut-off valves within effective distances on each side of the railroad. Where pipelines are provided with automatic control stations, no additional valves will be required.

2) Locating a shut-off valve on railroad property should be avoided. If approval is acquired, a guardrail must protect the shut-off valve.

3) When a guardrail is required, its height shall be four (4) feet above the ground line. All four corner posts shall be driven to a minimum depth of four (4) feet below ground line. There shall be a minimum clearance of two (2) feet from the valve to the

guardrail. The steel pipes for the four corner posts and guardrail shall have a minimum diameter of four (4) inches. All joints will be welded with a one-quarter (1/4) inch fillet weld all around.

6. Water Lines

   a. Where casing pipe is used, venting is not required; however, sealing will be required if the ends of the casing are not above high water.

   b. Where non-metallic pipe is permitted and installed, steel casings are required from right of way line to right of way line.

   c. Manholes should be located outside the railroad property. Manholes shall not be located within twenty-five (25) feet of railroad trackage, in the shoulder, shoulder slope, ditch or backslope; and shall not protrude above the surrounding ground without the approval of BNSF Engineering.

   d. The Utility Owner shall place a readily identifiable and suitable marker at each railroad property line where it is crossed by a water line.

7. Sewer Lines

   a. New and relocated sewer lines shall be constructed with satisfactory joints, materials and designs which will provide protection and resistance to damage from sulfide gases and other corrosive elements to which they may be exposed.

   b. Where casing pipe is used, venting and sealing of casing will be required.

   c. Where non-metallic pipe is permitted and installed, a durable metal wire shall be concurrently installed; or other means shall be provided for detection purposes.

   d. Manholes should be located outside the railroad property. Manholes shall not be located within twenty-five (25) feet of railroad trackage, in the shoulder, shoulder slope, ditch or backslope; and shall not protrude above the surrounding ground without the approval of BNSF Engineering.

8. Electric Power Lines

   a. A minimum depth of 5.5 feet below the base of rail (BBR) will be maintained.

   b. A minimum depth of 3.0 feet below natural grade (BNG) will be maintained for 750 volts and less, and 4.0 feet BNG for greater than 750 volts.

   c. The wireline must be encased completely across the Railroad right-of-way with a rigid metallic conduit.

d. Crossings will not be installed under or within 50 feet of the end of any Railroad bridge, centerline of any culvert or switch area.

e. A BNSF signal representative must be present during installation if railroad signals are in the vicinity of wireline crossings unless signal representative authorizes otherwise.

f. Markers that identify the Utility Owner shall be placed at both property lines for utilities crossing the railroad property. For parallel lines markers shall be placed above the cable at intervals no less than 300' apart. The markers should identify the owner, type of cable and emergency telephone number. A 6-inch wide warning tape will be installed, 1.0 foot BNG directly over the underground power line where located on Railroad right-of-way outside the track ballast sections.

g. Above-ground utility appurtenances installed as a part of an underground installation shall be located at or near the railroad property line and shall not be any closer than twenty-five (25) feet to the centerline of track.

9. Fiber Optic Lines.

a. The same requirements for electric power line crossings will apply for fiber optic line crossings except for the following:

b. A minimum depth of 4.0 feet BNG for fiber optic cable wirelines.

c. BNSF Engineering must approve any specialized equipment used to install cable. No rail plow will be allowed for installation purposes.

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PART 4

PLANS, APPROVALS AND PROCEDURES

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PART 4 - PLANS, APPROVALS AND PROCEDURES

A. Plans and Approvals

1. Design

   a. The design of all utility installations will be the responsibility of the Utility Owner.

   b. The plans for the proposed installation shall be submitted to and meet the approval of BNSF Engineering before construction is initiated.

   c. Plans shall be drawn to scale showing the relationship of the proposed utility line to the railroad tracks, the angle of crossing, location of valves and vents, the railroad mile post and engineering station, railroad property lines and general layout of tracks and other railroad facilities. The plans should include a cross-section (or sections) from the field survey that will show utility placement in relation to actual profile of ground and tracks. If tunneling is proposed, method of supporting tracks or driving of tunnel shall be shown. The geotechnical study, when required, should be included.

   d. The plans should contain the following data for carrier pipe and casing pipe:

      Contents to be carried
      Inside diameter
      Pipe material
      Specifications and grade of material
      Wall thickness
      Actual working pressure
      Type of joints
      Longitudinal joint factor
      Coating
      Method of installation
      Vents-Number, Size, Height above ground
      Seals-Both ends, One end
      Cover (top of tie to top of pipe or casing)
      Cover (other than under tracks)
      Cover (at ditches)
      Cathodic protection
      Type, Size and Spacing of insulators or supports

   e. When a geotechnical study is required, the findings and protection plan shall be prepared by a licensed civil engineer and included with the plans. The geotechnical crew will need to be properly permitted to enter BNSF right-of-way and a BNSF flagman will be required when working within 25 feet of the track.

2. Approvals

a. Approval of plans and application forms is required for all installations of utilities prior to initiation of work on railroad property.

b. If surveying is necessary for the completion of an application, a "Right of Entry" or "Release of Claim and Indemnity" must be executed and referenced.

B. License Procedures

1. Applications should be submitted to:

   Staubach Global Services
   Permits Department
   3017 Lou Menk Drive, Suite 100
   Fort Worth, TX 76131-2800

2. Upon receipt of the application, a letter will be forwarded acknowledging receipt and advising of the Permit & Contract file reference number that has been assigned and the person who should be contacted for further inquiries.

3. Office Hours: 8:00 A.M. to 5:00 P.M. Monday through Friday, CT
   Phone Number: (toll free) 866-498-6647.

4. Agreements will be required for all encroachments on railroad property.

5. Generally, agreement-processing time will be thirty to sixty days. Please allow sufficient lead-time for document handling prior to desired construction date. Before construction begins, agreements must be executed by Utility Owner and returned. Verbal authorizations will not be granted or permitted. A minimum of seventy-two (72) hours advance notice after execution of an agreement will be required prior to initiation of construction.

6. License fees must be submitted at the time the agreement is executed and returned.

7. Applications are to be made on the standard application form including an Exhibit "A."

C. Construction

1. The execution of the work on railroad property shall be subject to the inspection and direction of the Roadmaster or his representative.

2. A representative of BNSF Signal Department must be present during installation if railroad signals are in the vicinity of the construction.

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PART 5

APPENDIX

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REFERENCES

American National Standards Institute (ANSI) Codes, 1430 Broadway, NY, NY 10018.

American Railway Engineering and Maintenance of Way Association (AREMA) Specifications.

American Society for Testing and Materials (ASTM) Specifications.

American Water Works Association Standards and Specifications, AWWA, 2 Park Avenue, NY, NY 10016.

Manual on Uniform Traffic Control Devices - with revisions, US Department of Transportation, Federal Highway Administration.

National Electrical Safety Code, US Department of Commerce, National Bureau of Standards.

Pipeline Safety Regulations - Code of Federal Regulations, Tile 49 - Transportation, Parts 191-192-Natural Gas; Part 195-Liquid Petroleum Gas.

Rules and Regulations for Public Water Systems - latest edition, State Health Departments.

Rules and Regulations promulgated by the Hazardous Materials Regulation Board of the US Department of Transportation.

Statutory Provisions, 23 U.S.C. 109 and 111.

DEFINITION OF TERMS

The terminology used in this Policy strives for conventional meaning and to insure uniform interpretation. To this end, the following definitions apply:

ACCESS CONTROL: Restriction of access to and from abutting lands to railroad property.

AREMA: American Railroad Engineering and Maintenance of Way Association.

ANSI: American National Standard Institute.

ASTM: American Society for Testing and Materials.

BACKFILL: Replacement of soil around and over an underground utility facility.

BORING: Piercing a hole under the surface of the ground without disturbing the earth surrounding the hole. Boring may be accomplished by any approved manner. Water jetting or puddling will not be permitted. Holes may be mechanically bored and cased using a cutting head and continuous auger mounted inside of the casing. Small diameter holes may be augured and the casing or utility facility pushed in later.

BNSF: Burlington Northern and Santa Fe Railway Company.

BURY: Placement of the utility facility below grade of roadway, ditch or natural ground to a specified depth.

CARRIER: Pipe directly enclosing a transmitted fluid (liquid or gas).

CASING: A larger pipe enclosing a carrier.

CFR: Code of Federal Regulations.

COATING: Material applied to or wrapped around a pipe.

COMMUNICATION LINE: Fiber optic, telephone cable and similar lines, not exceeding four hundred (400) volts to ground or seven hundred fifty (750) volts between any two (2) points of the circuit, the transmittal power of which does not exceed one hundred fifty (150) watts.

CONDUIT OR DUCT: An enclosed tubular runway for protecting wires or cables.

COVER: The depth of material placed over a utility. Depth of cover is measured from top of utility casing or carrier pipe (if no casing is required) to the natural ground line or construction line above the utility.

DIRECT BURIAL: Installing a utility underground without encasement, by plowing or trenching. No rail plows will be permitted.

ELECTRIC SUPPLY: Electric light, power supply, and trolley lines, irrespective of voltage used for transmitting a supply of electrical energy.

ENCASEMENT: Structural element surrounding a pipe or cable.

FLEXIBLE PIPE: A plastic, fiberglass, or metallic pipe having a large ration of diameter to wall thickness that can be deformed without undue stress. Copper or aluminum pipe shall be considered as flexible pipe.

GROUNDED: Connected to the earth or to some extended conducting bodies which intentionally or accidentally is connected with the earth.

GROUT: A cement mortar or slurry of fine sand or clay as conditions govern.

JACK-AND-BORE: The installation method whereby the leading edge of the jacked pipe is well ahead of the cutting face of the auger bit. The auger is removing waste from inside the pipe as it is being jacked. This method greatly reduces the likelihood of subsidence of granular material during installation.

JACKING: The installation of small pipes by the use of hydraulic jacks or rams to push the pipe under the traveled surface of a road, railroad roadbed, or other facility.

LICENSE:

UTILITY LICENSE AGREEMENTS are executed for all utility facilities located on railroad property.

MANHOLE: An opening to an underground utility system which workmen or other may enter for the purpose of maintaining, inspecting, or making installations.

NATURAL GAS PIPELINES:

DISTRIBUTION SYSTEM - A pipeline other than a gathering or transmission line.

SERVICE LINE - A distribution line that transports gas from a common source of supply to a customer meter.

TRANSMISSION SYSTEM - A pipeline other than a gathering line that transports gas from a gathering line or storage facility to a distribution center or storage facility. It operates at a hoop stress of twenty percent (20%) or more of the Specified Minimum Yield Strength.

NORMAL: Crossing at a right angle.

PERMITS:

PERMIT TO BE ON BNSF PROPERTY FOR UTILITY SURVEY is to be executed prior to all survey work on railroad property.

PIPE: A tubular product made as a production item for sale as such. Cylinders formed from plate in the course of fabrication of auxiliary equipment are not pipes as defined here.

PRESSURE: Relative internal pressure in PSI (pounds per square inch) gauge.

PRIVATE LINES: Any privately owned facilities which convey or transmit the commodities outlined under the definition for Utilities but are devoted exclusively to private use.

PUBLIC LINES: Those facilities which convey or transmit the commodities outlined under the definition for Utilities and directly or indirectly serve the public or any part thereof.

RIGHT OF WAY: A general term denoting land, property of interest therein, usually in a strip, acquired for or devoted to railroad transportation purposes.

SEAL: A material placed between the carrier pipe and casing to prevent the intrusion of water, where ends of casing are below the ground surface.

SHOULDER: That portion of the roadbed outside the ballast.

TRENCHED: Installed in a narrow excavation.

TUNNELING: Excavating the earth ahead of a large diameter pipe by one or more of the following processes: 1) The earth ahead of the pipe will be excavated by men using hand tools while the pipe is pushed through the holes by means of jacks, rams or other mechanical devices, 2) The excavation is carried on simultaneously with the installation of tunnel liner plates, and/or 3) The tunnel liner plates are installed immediately behind the excavation as it progresses and are assembled completely away from the inside.

UTILITY OWNER: All privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water and other similar commodities, including fire and police signal systems and street lighting systems which directly or indirectly serve the public.

APPLICANT'S PIPELINE CROSSING CHECKLIST

Installation must comply with Standard Specifications.

Installation is located at least fifty (50) feet from the end of any railroad bridge or centerline of any culvert.

Steel casing must extend completely across railroad property if carrier pipe is made of plastic.

Approval for installation may be given if pipeline is uncased and commodity is gaseous and the carrier pipe is made of steel, buried a minimum of ten (10) feet below base of rail and six (6) feet below ground line for its entire length across railroad property.

A BNSF Signal representative may be present during installation if railroad signals are in vicinity of installation, unless plans have been approved prior to installation.

Applications and Policy are available on-line at:

http://www.bnsf.com/tools/realestate/

Date: _____

APPLICATION FOR PIPE LINE CROSSING OR LONGITUDINAL

The Staubach Company
Permit Department
3017 Lou Menk Dr., Ste. 100
Fort Worth, TX 76131-2800

APPLICANT'S TAX I.D. NO./SS#_____

ATTN: Permit Specialist for _____*(State)*

We submit for your approval the following specifications for a pipe line we propose to build across **THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY** right-of-way, as shown on enclosed sketch.

Legal name of company or municipality who will own the pipeline _____
State in which incorporated _____
If not incorporated, correct name of owners or all partners: _____
Correct mailing address _____ Zip Code _____
Type of Encroachment: Crossing _____ Longitudinal _____ Telephone _____
Location of encroachment _____ 1/4 Sec _____ Twsp _____ Rng _____ MP _____ + _____
Name of nearest town on Railroad _____ County _____ State _____
Name of nearest roadway crossing Railroad _____
Within limits of public road or street ☐ Yes ☐ No **If yes, distance from center line of road or street** _____ **ft.**
Width of public road or street _____ **ft.**

	CARRIER	CASING
Contents to be handled through pipe	_____	_____
Emergency Contact: _____ **Emergency Telephone:**		_____
Length of pipe on Railroad Co. property (Plastic pipe must be encased full width of right of way)	_____ ft.	_____ ft.
Inside diameter of pipe	_____ in.	_____ in.
Pipe Material	_____	_____
Specification & grade (Min. yield strength casing 35,000 psi.)	_____	_____
Wall Thickness (Min. wall thickness of casing pipe under 14 in.-0.188 in. E-80 Loading)	_____ in.	_____ in.
Actual working pressure	_____ psi	
Type of joint - (mechanical or welded type)	_____	_____
Longitudinal Joint Factor	_____	
Coating	_____	
Distance Base of rail to top of pipe (Flammable, contents, steam, water or non-flammable - min. 5 1/2 ft. under main track.) (Uncased, gaseous products - min. 10' under track)	_____	_____
Minimum ground cover on Railroad Co. property (min. 3 ft.)	_____	_____
Cathodic protection casing-(flammable substance)	_____	_____
Type of insulators or supports _____ Size _____ Space		_____
Number of vents _____ Size _____ Height above ground (Flammable substances require 2 vents)		_____

Method of crossing: Jacking _____ Trench _____ Dry Bore Only _____
(If trenched - Railroad furnish flagman at applicant's expense.)
(If bored or jacked - Jacking Pit location minimum 30 ft. from centerline of nearest track.) Pit must not be open more than 48 hours. Also, it must be protected when not in use.
Does pipeline support oil or gas well? ☐ Yes ☐ No
If yes, advise distance the well is from Railway property - _____ ft. Name of well _____
Was this service requested by BNSF? Yes or No (circle one) If yes, who requested _____
Telephone # of Requestor _____.

Attached to this sheet is location plan and detail sketch. Sketch shows tie-down measurement to centerline of nearest road crossing, bridge or other railroad structure. Please authorize us to proceed with this installation or advise what changes are necessary to meet your specifications.

Signed: _____
Print Name: _____
Title: _____
Telephone: _____

April 16, 2004

Date: _____

APPLICATION FOR WIRE LINE CROSSING OR LONGITUDINAL

The Staubach Company
Permit Department
3017 Lou Menk Dr., Ste. 100
Fort Worth, TX 76131-2800

TAX I.D. NO./SS# _____

ATTN: Permit Specialist for _____(State)

We submit for your approval the following specifications for a wire line we propose to build across **THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY** Right-of-way, as shown on enclosed drawing.

Legal name of company or municipality who will own the wireline _____
State in which incorporated _____
If not incorporated, correct name of owners or all partners: _____
Correct mailing address _____ Zip Code _____
Telephone _____
Location of crossing _____ 1/4 Sec _____ Twsp _____ Rng _____
Name of nearest town on Railroad _____ State _____
Type of Encroachment: Crossing ___ Longitudinal ___ Railroad Mile Post _____
Name of nearest public roadway crossing Railroad _____ County _____
Within limits of public road or street? ☐ Yes ☐ No **If yes, distance from center line of road or street** _____ **ft.**
Width of public road or street ____ **ft.**
Kind of encroachment: Electric _____ Telephone _____ Other _____
No. of wires/cables _____ Type of wires/cable _____ Volts _____ Phase _____ Cycles _____
No. of conduits _____ No. of occupied conduits _____ No. of vacant conduits _____
Length of encroachment _____ Adjacent spans _____ ft. _____ ft.
Appurtenances on Ry. Co. Property _____
Wire clearance over or under top of rail _____ ft. _____ ft.
If under track, size & kind of conduit _____
Wire clearance over Ry. Co. wire lines _____ ft. _____ ft.
Was this service requested by BNSF? Yes or No (circle one)
If yes, who requested? _____ Telephone: _____

Attached to this sheet is a pole head diagram (if required) and location plan. Location plan shows tie-down measurement to centerline of nearest road crossing, bridge or other railroad structure. Please authorize us to proceed with construction of this encroachment as proposed or advise what changes are necessary to meet your specifications.

Signed: _____

Print Name: _____

Title: _____

Telephone: _____

POLE HEAD AND DATA SHEET

This completed form to accompany application to construct a wire line on THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY right-of-way.

Name of Company _____

Location of encroachment _____ ft. Sec. _____ Twsp. _____ Rng. _____

Nearest Town _____ County _____

POLES
Kind _____ Size _____
Height _____
Class _____
Set-in Earth-Rock _____

GUY WIRES
Overhead _____ Down _____
Kind _____ Size _____

CROSS ARMS
Material _____
Size _____ X _____ X _____

FRONT ELEVATION

INSULATORS
Material _____
Type _____ Size _____

BRACKETS
Material _____
Type _____ Size _____

CONDUCTORS
Material _____
Kind _____ Size _____

LINE CHARACTERISTICS

Voltage _____
Phase _____ Cycle _____

SIDE ELEVATION