

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

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February 28, 2011

04-SCI-17-0.0/2.8

04-264904

Project ID 0400000741

NH-P017(106)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SANTA CLARA COUNTY ON ROUTE 17 FROM 0.1 MILE SOUTH OF SUMMIT RD SEPARATION TO 2.8 MILE NORTH OF SUMMIT RD.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, March 9, 2011.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book and the Federal Minimum Wages with Modification Number 21 dated 02/18/11.

Project Plan Sheets 4, 93, 100, 102, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 161, 173, 185, 189, 190, 196, 198, 199, 200, 201, 202, 204, 205, 206, 207, 208, 209 and 231 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 13A, 13B, 13C, 13D and 13E are added. Copies of the added sheets are attached for addition to the project plans.

In the Special Provisions, Section 5-1.13, "NOISE CONTROL," the third paragraph is deleted.

In the Special Provisions, Section 10-1.02, "ORDER OF WORK," the following paragraph is added to the second paragraph as follows:

"The final placement of the new median concrete barrier shall be laterally within plus or minus one inch from the existing median concrete barrier location. Full compensation for referencing bottom face of the median and outside concrete barrier and maintaining the reference nails until the new median concrete barrier work is complete shall be considered as included in the concrete prices paid for remove concrete barrier (Type 50) and no additional compensation will be allowed therefor."

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In the Special Provisions, Section 10-1.02, "ORDER OF WORK," the third paragraph is revised as follows:

"If any work remains to be completed outside the roadway prism from October 15 to May 15, wildlife exclusion fencing will be created for downdrain areas on vegetated/unpaved slopes where construction is still needed."

In the Special Provisions, Section 10-1.02, "ORDER OF WORK," the following paragraph is added after the seventh paragraph:

"Construction of retaining wall on the northbound shoulder between station 81+50 and station 83+46 shall commence directly after construction staging allows through northbound traffic to use the southbound lanes."

In the Special Provisions, Section 10-1.02, "ORDER OF WORK," the following paragraph is added after the ninth paragraph:

"Any area that is cold planed in a work period shall be paved with Hot Mix Asphalt (Type A) within the same work period before the area is opened to public traffic. Following spreading and compacting of the Hot Mix Asphalt (Type A), a drop off of more than 0.15-foot will not be allowed between adjacent lanes open to public traffic."

In the Special Provisions, Section 10-1.30, "QUICKCHANGE MOVEABLE BARRIER SYSTEM," subsection "MATERIALS," the third item is revised as follows:

"3. Four ABSORB 350, Test Level 3 crash cushions."

In the Special Provisions, Section 10-1.32, "REMOVE CULVERT," under "Summary," of subsection "ALTERNATIVE PIPELINER," is revised as follows:

"This section includes general specifications for installing various types of pipeliners used in rehabilitating host pipes.

At a location where the plans allow more than one type of pipeliner for installation, choose which type of alternative pipeliner to install."

In the Special Provisions, Section 10-1.32, "REMOVE CULVERT," under "Measurement and Payment," of subsection "ALTERNATIVE PIPELINER," the third paragraph is revised as follows:

"The contract unit price paid for linear foot for the different sizes of alternative pipeliner includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, for doing all the work involved in installing and constructing pipeliners in host pipes, grouting annular space, restoring openings, sampling, testing, inspecting completed pipeliner, repair, and site restoration, as shown on the plans, as specified in the Standard Specifications and these provisions, and as directed by the Engineer."

In the Special Provisions, Section 10-1.32, "REMOVE CULVERT," in "Submittals," of subsection "CLEANING, INSPECTING AND PREPARING HOST PIPE," the sub bullet 3.1.5 of bullet 3 "Grouting Plan," is deleted.

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In the Special Provisions, Section 10-1.33, "COMPACTION GROUTING," subsection "CULVERT CONTACT GROUTING," is revised as attached.

In the Special Provisions, Section 10-1.33, "COMPACTION GROUTING," subsection "PLASTIC PIPELINER," under "Submittals," and "Materials," and "Plastic Pipeliner Joints," is revised as attached.

In the Special Provisions, Section 10-1.34, "REHABILITATE RISER," subsection "MEASUREMENT AND PAYMENT," the second paragraph is deleted. In the first sentence of the third paragraph "for rehabilitate riser," is added after "The contract price paid per linear foot, ".

In the Special Provisions, Section 10-1.35, "CLEARING AND GRUBBING," the second paragraph is deleted.

In the Special Provisions, Section 10-1.95, "48" CORRUGATED STEEL PIPE RISER," is added as attached.

In the Bid book, in the "Bid Item List," Items 93 and 99 are revised, Items 139 through 141 are added and Items 46, 77, 92 and 138 are deleted as attached.

To Bid book holders:

Replace pages 5, 6, 7, and 9 of the "Bid Item List" in the Bid book with the attached revised pages 5, 6, 7, 9 and 9A of the Bid Item List. The revised Bid Item List is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This addendum, attachments and federal wages are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-264904

If you are not a Bid book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

CULVERT CONTACT GROUTING

GENERAL

Summary

This work includes injecting grout from within culverts to fill voids between culvert outer wall and surrounding ground.

Culvert contact grouting consists of drillings, void probing, pumping grout into voids, removal of waste products, site cleanup, and all other activities incidental to grouting voids between culvert outer wall and surrounding ground at locations and limits indicated.

Related Sections

Comply with these related sections:

1. Specifications for "Cleaning, Inspecting and Preparing Host Pipe" of these special provisions, including host pipe restoration plan and inspection and evaluation report.
2. Specifications for protection of waterways from work activity related pollution under Section 7-1.01G, "Water Pollution," of the Standard Specifications and "Water Pollution Control" of these special provisions.
3. Specifications for adequate ventilation, lighting, and protection of personnel in confined spaces under Section 7-1.06, "Safety and Health Provisions," of the Standard Specifications.

Submittals

Do not start work until the Engineer accepts your submittals for:

1. Equipment Data: Submit details and data on proposed drilling and grouting equipment to be used in the work
2. Grouting Plan and Grout Mix Formula:

2.1. Submit a grouting plan describing the methods and procedures to be used for the work including:

- 2.1.1 Order of Work
- 2.1.2 Maximum injection pressures
- 2.1.3 Plans for controlling ground water and existing culvert stream flows
- 2.1.4 Pressure gauge, recorder, and field equipment certifications including calibrations by an approved certified laboratory
- 2.1.5 Culvert strut details, as necessary
- 2.1.6 Proposed method for monitoring deformation of the culvert or concrete lining

2.2. Submit grout mix formula of proposed proportions for grouting including:

- 2.2.1 Grout densities and viscosity
- 2.2.2 Initial set time of grout
- 2.2.3 Grout materials and independent testing agency test data as specified in Section 41-1.02, "Materials," of the Standard Specifications
- 2.2.4 Grout working time before 15 percent change in density or viscosity occurs

Quality Control and Assurance

Preinstallation Meeting: Before starting injection of grout, conduct a mandatory preinstallation meeting attended by personnel who are involved in the work including:

1. Project superintendent
2. Supervisory personnel
3. Culvert contact grouting foreman
4. Subcontractors

Schedule a time and date for the preinstallation meeting that is acceptable to the Engineer. Furnish a facility for the pre-construction conference within 5 miles of the job site or at another location acceptable to the Engineer.

MATERIALS

Grout

Grout mix must:

1. Comply with Section 41-1.02, "Materials," of the Standard Specifications
2. Contain not more than 2 percent bentonite by weight of cement, and water
3. Contain not less than 590 pounds of cement per cubic yard

Sand

If sand is used in the grout mix, sand must comply with Section 90-2.02B, "Fine Aggregate," of the Standard Specifications and these grading requirements:

Sieve Size	Percentage Passing
No. 8	100
No. 16	95-100
No. 30	60-85
No. 50	20-50
No. 100	10-30
No. 200	0-20

CONSTRUCTION

General

Perform contact grouting under the accepted grouting plan and these special provisions. Before starting culvert contact grouting work, assemble all plant personnel, equipment and materials at the job site.

Protection of Work

During grouting activities take necessary precautions to prevent drill cuttings, equipment exhaust oil, wash water, and grout, from defacing or damaging the permanent structure or entering the waterway. Furnish pumps, if necessary, to remove wastewater and grout resulting from grouting activities.

Installing Ports and Probing

Pump grout into voids until no visible evidence of water or air is ejected. Plug grout ports or close port valves when pumping is stopped. Do not let maximum injection pressure at nozzle exceed 5 psi for fluid (unsanded) grout mix. Monitor host pipe displacement during grouting, and reduce injection pressures if displacement exceeds 1/2 inch.

Install culvert struts and monitor deformation as specified in your submittals under sections 2.1.6 and 2.1.7 of these special provisions. At your expense provide any necessary bracing and repair any permanent deformations or cracks resulting from the contact grouting operations.

Inject voids in backfill behind host pipe wall with grout after structural repair of host pipe and when concrete for invert paving achieves 2,500 psi compressive strength. Prevent grout or water from grouting activities to flow into waterways or drainage facilities.

Site Cleanup

Upon completion of work, comply with Section 4-1.02, "Final Cleaning Up," of the Standard Specifications. Dispose of all excess material outside of the highway right of way under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications, including material not incorporated in the work, waste material, wastewater, and debris.

Measurement and Payment

The quantities of dry cement, fly ash, bentonite and sand used in the grout mixture are measured by the cubic yard and are paid for as culvert contact grout. You must determine the quantity of grout materials used and submit it to the Engineer. The Department does not pay for grout that leaks through to the inside of host pipe due to improper preventative measures. The Department does not pay for grout material wasted, disposed of, or remaining on hand after completion of the work.

The contract price paid per cubic yard for culvert contact grouting includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and injecting grout in voids of culvert backfill, complete in place, including submitting grouting plan and grout mix formula to the Engineer, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

PLASTIC PIPELINER

General

Summary

This work includes rehabilitating the interior of host pipes with plastic pipeliner and filling the annular space with grout.

Related Sections

Plastic pipeliner must comply with general specifications under "Alternative Pipeliner" of these special provisions.

Submittals

Submittal procedures must comply with specifications for submittals under "Pipeliner" of these special provisions.

Submit Certificate of Compliance as specified in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for plastic pipeliner, and joint system and couplers.

Do not start any annular space grouting until the Engineer accepts your submittals for:

1. Grout Plan (Annular Space): Submit a separate grout plan for each kind of grout or variation in procedure or installation and the locations or conditions to which each applies. Before grouting activities start you may change the grout mix, procedure or installation if the Engineer approves. Grout plan must include:
 - 1.1. Certified test data by independent testing laboratory verifying:
 - 1.1.1 Proposed grout mix components and proportions
 - 1.1.2 Proposed grout densities and viscosity
 - 1.1.3 Initial set time of the grout
 - 1.1.4 28-day minimum grout compressive strength
 - 1.1.5 Grout working time before a 15 percent change in density or viscosity occurs
 - 1.2. Proposed grouting method and procedures

Materials

General

Plastic pipeliner must comply with details shown on plans for nominal diameter, thickness, and maximum standard dimension ratio.

You may use any of these types of plastic pipeliner:

1. Standard Dimension Ratio (SDR) 35 polyvinyl chloride (PVC) pipe as specified in AASHTO M 278 and ASTM F 679.
2. Polyvinyl chloride (PVC) closed profile wall pipe as specified in ASTM F 1803.
3. High density polyethylene (HDPE) solid wall pipe as specified in AASHTO M 326 and ASTM F 714.

Plastic Pipeliner Joints

Plastic pipeliner joints or couplers must comply with manufacturer's requirements and be compatible with plastic pipeliner installation method (e.g., push only or push/pull into place) and these requirements:

1. Procedures for making heat fusion joints for high density polyethylene (HDPE) solid wall pipe as specified in AASHTO M 326 and ASTM F 714 must comply with procedures specified in ASTM F 2620, "Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings."
2. Joint systems or couplers must comply with "Standard" shear strength provisions as specified in Section 61-1.02, "Performance Requirements for Culvert and Drainage Pipe Joints," of the Standard Specifications.

Grout mix for annular space must consist of low density foam concrete composed of water, cementitious materials and optional chemical admixtures, and these requirements:

1. Cementitious materials must comply with Section 90-2.01, "Cementitious Materials," of the Standard Specifications and these conditions:
 - 1.1. Supplementary cementitious materials are not mandatory.
 - 1.2. Supplementary cementitious materials may be used only if you provide written confirmation from the foaming agent manufacturer stating the foaming agent is compatible with the proposed supplementary material.
2. Foaming agent must comply with ASTM C 869.
3. Cast density at point of placement must be from 53 pounds per cubic foot to 68 pounds per cubic foot and minimum compressive strength of 300 pounds per square inch at 28 days.
4. Compressive strength is determined under ASTM C 495 except specimens must be moist cured before 28-day compressive strength test and not be oven dried. If grout plan calls for more than a single lift, make a cylinder or other test to demonstrate that proposed grout mix will have attained adequate stiffness before placement of multiple lifts.

Mix water, cementitious materials and chemical admixtures before adding foaming agent. Add foaming agent at the job site.

10-1.95 48" CORRUGATED STEEL PIPE RISER

GENERAL

48" corrugated steel pipe riser shall be constructed as shown on the plans and in accordance with the Standard Specifications and these special provisions.

MATERIALS

All products and materials shall be furnished of the type indicated on these plans and will comply with the Standard Specifications and these special provisions.

All metal parts, including the debris rack cage and the access ladder, shall be galvanized in accordance with Section 75-1.05, "Galvanizing," of the Standard Specifications.

Fasteners and anchor bolts shall be stainless steel.

CONSTRUCTION

Site Cleanup

Upon completion of work, the Contractor shall comply with Section 4-1.02, "Final Cleaning Up," of the Standard Specifications. All excess material shall be disposed of outside of the highway right-of-way under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications, including material not incorporated in the work, waste material, wastewater, and debris.

MEASUREMENT AND PAYMENT

The 48" corrugated steel pipe riser shall be measured and paid per lineal foot of 48" corrugated steel pipe and by pound for miscellaneous iron and steel.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing and constructing the 48" corrugated steel pipe riser, complete in place, including debris rack cage, access ladder, cutting of slots, and repair and site restoration, as shown on the plans, as specified in the Standard Specifications and these special provisions shall be considered as included in the contract prices paid per lineal foot of 48" corrugated steel pipe and pounds of miscellaneous iron and steel and no additional compensation will be allowed therefore.

BID ITEM LIST
04-264904

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	155115	18" ALTERNATIVE PIPELINER	LF	840		
42	155121	24" ALTERNATIVE PIPELINER	LF	1,290		
43	155127	30" ALTERNATIVE PIPELINER	LF	410		
44	155130	36" ALTERNATIVE PIPELINER	LF	740		
45	155220	CULVERT CONTACT GROUTING	CY	57		
46	BLANK					
47	156585	REMOVE CRASH CUSHION	EA	1		
48	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
49	190105	ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	CY	300		
50	190110	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
51 (F)	042890	STRUCTURE EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD) (SOLDIER PILE WALL)	CY	65		
52 (F)	193029	STRUCTURE BACKFILL (SOLDIER PILE WALL)	CY	40		
53	193114	SAND BACKFILL	CY	120		
54 (F)	193116	CONCRETE BACKFILL (SOLDIER PILE WALL)	CY	120		
55 (F)	193119	LEAN CONCRETE BACKFILL	CY	45		
56	019769	CONCRETE BACKFILL (RAPID STRENGTH CONCRETE)	CY	2,580		
57	198001	IMPORTED BORROW	CY	2,000		
58	203002	EROSION CONTROL (COMPOST BLANKET)	CY	63		
59	203021	FIBER ROLLS	LF	3,170		
60	203026	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	12		

BID ITEM LIST

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Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	203027	EROSION CONTROL (BONDED FIBER MATRIX) (SQFT)	SQFT	39,000		
62	250401	CLASS 4 AGGREGATE SUBBASE	CY	1,650		
63	390132	HOT MIX ASPHALT (TYPE A)	TON	15,800		
64	390134	HOT MIX ASPHALT (OPEN GRADED)	TON	7,620		
65	394060	DATA CORE	LS	LUMP SUM	LUMP SUM	
66	394073	PLACE HOT MIX ASPHALT DIKE (TYPE A)	LF	14,500		
67	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	780		
68	394076	PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	4,080		
69	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	3,000		
70	394090	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	SQYD	0.5		
71	397001	ASPHALTIC EMULSION (PAINT BINDER)	TON	50		
72	019770	COMPACTION GROUTING	CF	6,530		
73	042891	30" DRILLED HOLE	LF	810		
74	042892	STEEL SOLDIER PILE (W 14 X 176)	LF	900		
75 (F)	042893	STRUCTURAL CONCRETE, CAP	CY	35		
76 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	219		
77	BLANK					
78	511106	DRILL AND BOND DOWEL	LF	18		
79	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	104		
80	562002	METAL (BARRIER MOUNTED SIGN)	LB	3,680		

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Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81 (F)	575004	TIMBER LAGGING	MFBM	7.5		
82	042894	CLEAN AND PAINT STEEL SOLDIER PILING	LS	LUMP SUM	LUMP SUM	
83	620061	12" ALTERNATIVE PIPE CULVERT (TYPE A)	LF	38		
84	620101	18" ALTERNATIVE PIPE CULVERT (TYPE A)	LF	5,480		
85	620102	18" ALTERNATIVE PIPE CULVERT (TYPE B)	LF	270		
86	620141	24" ALTERNATIVE PIPE CULVERT (TYPE A)	LF	1,950		
87	620142	24" ALTERNATIVE PIPE CULVERT (TYPE B)	LF	330		
88	620181	30" ALTERNATIVE PIPE CULVERT (TYPE A)	LF	52		
89	620182	30" ALTERNATIVE PIPE CULVERT (TYPE B)	LF	290		
90	620715	18" ALTERNATIVE SLOTTED PIPE	LF	9,760		
91	655516	JACKED 24" REINFORCED CONCRETE PIPE (CLASS V)	LF	200		
92	BLANK					
93	665047	48" CORRUGATED STEEL PIPE (.109" THICK)	LF	4		
94	690112	12" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK)	LF	1,740		
95	690117	18" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK)	LF	540		
96	690124	24" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK)	LF	330		
97	690132	30" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK)	LF	110		
98	690137	36" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK)	LF	220		
99	692301	ANCHOR ASSEMBLY	EA	175		
100	702123	24" TO 18" CORRUGATED STEEL ECCENTRIC REDUCER (.079" THICK)	EA	1		

BID ITEM LIST

04-264904

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	832002	METAL BEAM GUARD RAILING (STEEL POST)	LF	5,950		
122	832070	VEGETATION CONTROL (MINOR CONCRETE)	SQYD	1,600		
123 (F)	839521	CABLE RAILING	LF	197		
124	839541	TRANSITION RAILING (TYPE WB)	EA	3		
125	839553	END SECTION	EA	2		
126	839565	TERMINAL SYSTEM (TYPE SRT)	EA	13		
127	839576	END CAP (TYPE A)	EA	4		
128	839581	END ANCHOR ASSEMBLY (TYPE SFT)	EA	3		
129	839601	CRASH CUSHION (TYPE CAT)	EA	1		
130	839602	CRASH CUSHION (TYPE CAT) BACKUP	EA	1		
131	839701	CONCRETE BARRIER (TYPE 60)	LF	14,200		
132	840515	THERMOPLASTIC PAVEMENT MARKING	LF	3,370		
133	840560	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)	LF	95,900		
134	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	2,470		
135	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	1,550		
136	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
137	860810	INDUCTIVE LOOP DETECTOR	LS	LUMP SUM	LUMP SUM	
138	BLANK					
139	190101	ROADWAY EXCAVATION	CY	2,500		
140	129000	TEMPORARY RAILING (TYPE K)	LF	190		

