

**DEPARTMENT OF TRANSPORTATION**  
DIVISION OF ENGINEERING SERVICES  
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*Flex your power!  
Be energy efficient!*

April 29, 2009

04-Ala-84,580-46.4/47.2,21.0/24.0  
04-171334  
HPLUL-6204 (078)

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ALAMEDA COUNTY IN LIVERMORE ON ROUTE 580 FROM 0.2 KM EAST OF PORTOLA AVENUE OVERCROSSING TO 0.1 KM EAST OF AIRWAY BOULEVARD OVERCROSSING AND ON ROUTE 84 FROM 0.3 KM NORTH OF AIRWAY BOULEVARD TO 0.5 KM SOUTH OF PORTOLA AVENUE .

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, May 27, 2009.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions and the Bid book.

Project Plan Sheets 1, 2, 3, 7, 8, 13, 14, 15, 16, 17, 21, 50, 58, 80, 81, 82, 96, 97, 98, 99, 100, 104, 105, 111, 114, 115, 121, 122, 123, 124, 129, 130, 131, 132, 133, 134, 136, 137, 139, 140, 141, 145, 147, 150, 151, 154, 156, 157, 160, 161, 162, 163, 164, 165, 166, 167, 168, 173, 179, 181, 182, 183, 184, 185, 186, 187, 188, 189, 195, 197, 198, 199, 209, 211, 212, 214, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 277, 287, 288, 289, 290, 291 and 302 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 111A, 152A, 159A, 159B, 239A, 239B, 239C, 240A, 240B, 240C and 240D are added. Copies of the added sheets are attached for addition to the project plans.

Project Plan Sheets 146, 148, and 149 are deleted.

In the Special Provisions, Section 5-1.07, " PAYMENTS," the fourth paragraph is revised as follows:

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"In determining the partial payments to be made to the Contractor, only the following listed materials will be considered for inclusion in the payment as materials furnished but not incorporated in the work:

- A. Bar Reinforcing Steel (Bridge and Retaining Wall)
- B. Piling
- C. PTFE Bearing
- D. Joint Seals and Joint Seal Assemblies
- E. Prestressing Steel for Cast-In-Place Members (Sealed Packages Only)
- F. Prestressing Ducts and Anchorages
- G. Miscellaneous Metal (Bridge)
- H. Miscellaneous Metal (Restrainer-Cable Type)
- I. Miscellaneous Iron and Steel
- J. Culvert, Pipe and Appurtenances
- K. Overside Drains and Appurtenances
- L. Sewer Pipes and Appurtenances
- M. Water Pipes and Valves
- N. Geosynthetic Pavement Interlayer
- O. Filter Fabric and rock slope protection fabric
- P. Metal Beam Guard Railing and Appurtenances
- Q. Chain Link Fence and Railing
- R. Sound Wall (Masonry Block)
- S. Crash Cushion
- T. Pavement Markers
- U. Lighting Fixtures
- V. Signal and Lighting Standards
- W. Signal Heads and Mounting Brackets
- X. Luminaires"

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," in the second paragraph, the second sentence is revised as follows:

"Construction activities proposed by this contract shall not be performed on the travel lanes of Interstate 580 between the Airway Boulevard Interchange and the Portola Avenue Interchange until after September 1, 2010."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the third paragraph is revised as follows:

"A first order of work shall be to relocate utilities within Constitution Drive and along the north side of the future westbound ramps. Attention is directed to the details shown on the stage construction and utility plans. The Contractor shall grade the areas that will receive the relocated utilities so that those areas can be accessed by the forces deployed by PG&E, AT&T, Sprint, and Comcast. The Contractor shall coordinate with these forces, through the Engineer, to allow for time requirements for these forces to install conductors and splices so that existing facilities can be abandoned or removed. Attention is directed to "Obstructions," of these special provisions regarding the timing of the relocation of the various utility lines. The existing joint utility trench on Constitution Drive shall not be abandoned until the new joint utility trench is completed and energized."

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In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the third paragraph:

"An existing fire service connection shall be removed and a new fire service connection installed at Constitution Drive at Station C 3+22 Lt. The existing fire service connection shall not be disconnected and removed until the new service is in place and ready to receive connection. The Contractor shall coordinate with the City of Livermore Fire Department, through the Engineer, at least 7 days in advance of shutting down the existing fire service. The disconnection of the existing and the connection of the new fire service shall occur within the same work shift."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the fourth paragraph is deleted.

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the sixteenth paragraph:

"There is an existing overcrossing for the WB Route 580 on-ramp from Portola Avenue. To complete certain work, this overcrossing will need to be demolished and removed. The Contractor will be allowed one full eight-hour complete freeway closure for this operation. The Contractor shall notify the Engineer 45 working days in advance of the demolition. Attention is directed to the Lane Closure Charts in 10-1.24, "MAINTAINING TRAFFIC" of these special provisions for more information. "Late Reopening of Closures" in Section 10-1.25, "CLOSURE REQUIREMENTS AND CONDITIONS" applies."

In the Special Provisions, Section 10-1.20, "OBSTRUCTIONS," the fifth and sixth paragraphs are revised as follows:

"It is anticipated that the following utility facilities will be relocated prior to the dates shown:

Utility	Location	Date
Abandonment of Sprint Fiber Optic Line	Lt Sta "B8M" 72+00 to 73+00 and Collier Canyon Road	May 1, 2010

The following utility facilities will be relocated during the progress of the contract. The Contractor shall notify the Engineer, in writing, prior to doing work in the vicinity of the facility. The utility facility will be relocated within the listed working days, as defined in Section 8-1.06, "Time of Completion," of the Standard Specifications, after the notification is received by the Engineer:

Utility	Location	Working Days
PG&E Overhead Poles	Lt. Sta. "B8M" 56+00 to 73+00 and Rt. Sta. "B8M" 60+40	120
AT&T	Lt. Sta. "C" 1+40 to Rt. Sta. "C" 4+20	40
Comcast	Lt. Sta. "C" 1+40 to Rt. Sta. "C" 4+20	40
PG&E Gas Line	Lt. Sta. "C" 1+40 to Rt. Sta. "C" 4+20	40

"

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In the Special Provisions, Section 10-1.24," MAINTAINING TRAFFIC," all lane closure charts are revised as attached.

In the Special Provisions, Section 10-1.24," MAINTAINING TRAFFIC," the twenty-first paragraph is revised as follows:

"Special days are: The third Monday in January, February 12th, March 31st, and the second Monday in October."

In the Special Provisions, Section 10-1.33," EXISTING HIGHWAY FACILITIES," subsection "RELOCATE FIRE SERVICE," is deleted.

In the Special Provisions, Section 10-1.33," EXISTING HIGHWAY FACILITIES," subsection "REMOVE FIRE SERVICE," is added as attached.

In the Special Provisions, Section 10-1.415," COMPOST, INCORPORATE," is added as attached.

In the Special Provisions, Section 10-1.445," IMPORTED TOPSOIL," is added as follows:

**"10-1.445 IMPORTED TOPSOIL**

Imported topsoil shall conform to the provisions in Section 20-2, "Materials," and Section 20-3, "Erosion Control," of the Standard Specifications."

In the Special Provisions, Section 10-1.795," ALTERNATIVE PIPE UNDERDRAIN," is added as follows:

**"10-1.795 ALTERNATIVE PIPE UNDERDRAIN**

Alternative pipe underdrains shall conform to the provisions in Section 68-1, "Underdrains," of the Standard Specifications for the kind of alternative pipe underdrain installed."

In the Special Provisions, Section 10-1.835," BASIN OUTLET STRUCTURE," is added as attached.

In the Special Provisions, Section 10-1.85," SEWER MAINTENANCE HOLE," the following paragraph is added after the second paragraph:

"Maintenance holes in sewers shall be PVC lined. They shall be provided with compatible PVC lining from the top of the base up to and including 1/2-inch minimum of the cast iron frame. PVC-lining shall conform to the PVC-lining requirements found in Section 1.84, "Sanitary Sewer Pipe," in these special provisions."

In the Special Provisions, Section 10-1.85," SEWER MAINTENANCE HOLE," the twenty-sixth paragraph is revised as follows:

"The contract unit price paid for sewer maintenance hole includes furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing sanitary sewer maintenance holes, complete in place, including excavation, leakage testing, reconnection of side street sewer pipe, adjustment of maintenance holes to final grade, furnishing and placing minor concrete, base rock and backfill, PVC-lining, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

In the Special Provisions, Section 10-1.865," FIRE SERVICE," is added as attached.

In the Special Provisions, Section 10-2." HIGHWAY PLANTING AND IRRIGATION SYSTEMS," is added as attached.

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In the Bid book, in the "Bid Item List," Item(s) 23, 25, 30, 59, 84, 86, 89, 90, 107, 108, 109, 125, 157, 158, 159, 160, 161, 173, 174, 177, 178, 179, 198, 202, 204, 206, 207, 212, and 215 are revised, Items 268, 269, 270, 271, 272, 273, 274, 275, and 276 are added, and Items 64, 93, 176, and 267 are deleted as attached.

To Bid book holders:

Replace pages 5,6,7,8,9,10,11,12,13,14,17 of the "Bid Item List" in the Bid book with the attached revised pages 5,6,7,8,9,10,11,12,13,14,17A and 17B 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 office is sending this addendum by GSO overnight mail to all book holders to ensure that each receives it. A copy of this addendum is available for the Contractors' use on the Web site:

**[http://www.dot.ca.gov/hq/esc/oe/weekly\\_ads/addenda.php](http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addenda.php)**

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,

**ORIGINAL SIGNED BY**

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

Attachments

<b>Chart No. 1</b>																							
<b>Freeway/Expressway Lane Requirements</b>																							
County: Alameda						Route/Direction: 580/EB						KP: 21.0/24.0 PM: 13.1/14.9											
Closure Limits: From West of N. Livermore Ave IC to East of Airway Blvd IC																							
<b>FROM HOUR TO HOUR</b>																							
Mondays through Thursdays	2	1	1	1	1	2																	2
Fridays	2	1	1	1	1	2																	
Saturdays	2	2	1	1	1	2	2																
Sundays	2	2	1	1	1	1	2	2															2
Legend:																							
1 Provide at least one through freeway lane open in direction of travel																							
2 Provide at least two adjacent through freeway lanes open in direction of travel																							
Work permitted within project right of way where shoulder or lane closure is not required.																							
REMARKS:																							

<b>Chart No. 2</b>																							
<b>Freeway/Expressway Lane Requirements</b>																							
County: Alameda						Route/Direction: 580/WB						KP: 21.0/24.0 PM: 13.1/14.9											
Closure Limits: From West of N. Livermore Ave IC to East of Airway Blvd IC																							
<b>FROM HOUR TO HOUR</b>																							
Mondays through Thursdays	1	1	1	2																			2
Fridays	1	1	1	2																			2 2
Saturdays	1	1	1	1	2	2																	2
Sundays	2	1	1	1	1	1	2	2															2
Legend:																							
1 Provide at least one through freeway lane open in direction of travel																							
2 Provide at least two adjacent through freeway lanes open in direction of travel																							
Work permitted within project right of way where shoulder or lane closure is not required.																							
REMARKS:																							

**Chart No. 3**  
**Complete Freeway/Expressway Closure Hours**

County: Alameda      Route/Direction: 580/EB      KP: 21.0/24.0 PM: 13.1/14.9

Closure Limits: From west of N. Livermore Ave IC to east of Airway Blvd IC

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	12	1	1	1	1	1	1	2	2	2	2	2
Mondays through Thursdays		C	C	C																				
Fridays		C	C	C																				
Saturdays			C	C	C																			
Sundays			C	C	C	C																		

Legend:

- C Freeway or expressway may be closed completely.
- No complete freeway or expressway closure is permitted.

**REMARKS:**

1. See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic in these special provisions for additional closure restrictions.
2. Complete closure applies only to the erection and/or removal of falsework at Isabel Avenue and Portola Avenue.
3. See Construction Area Signs Plan CS-1.
4. Coordinate this closure with Chart No. 9.
5. For demolition of Portola overcrossing, see Chart Nos. 5 & 6.
6. Modified traffic signal control as well as manual controls such as flagman shall be provided along the detour route; See Detour Plan, Sheets DE-1 and DE-4.

**Chart No. 4**  
**Complete Freeway/Expressway Closure Hours**

County: Alameda      Route/Direction: 580/WB      KP: 21.0/24.0 PM: 13.1/14.9

Closure Limits: From west of N. Livermore Ave IC to east of Airway Blvd IC

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	2	1	1	1	1	1	1	2	2	2	2	2
Mondays through Thursdays	C	C	C																					
Fridays	C	C	C																					
Saturdays			C	C	C																			
Sundays			C	C	C	C																		

Legend:

C Freeway or expressway may be closed completely.

No complete freeway or expressway closure is permitted.

**REMARKS:**

1. See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic in these special provisions for additional closure restrictions.
2. Complete closure applies only to the erection and/or removal of falsework at Isabel Avenue and Portola Avenue.
3. See Construction Area Signs Plan CS-1.
4. Coordinate this closure with Chart No. 10.
5. For demolition of Portola overcrossing, see Chart Nos. 5 & 6.
6. Modified traffic signal control as well as manual controls such as flagman shall be provided along the detour route; See Detour Plan, Sheets DE-1 and DE-4.



<b>Chart No. 6</b>	
<b>Complete Freeway/Expressway Closure Hours</b>	
County: Alameda	Route/Direction: 580/WB KP: 21.0/24.0 PM: 13.1/14.9
Closure Limits: From west of N. Livermore Ave IC to east of Airway Blvd IC	
<b>FROM HOUR TO HOUR</b>	<b>2 1 2 3 4 5 6 7 8 9 1 1 12 1 1 1 1 1 1 2 2 2 2 2</b>
Saturday	
Sunday	C C C C C C C C
Legend:	
<input type="checkbox"/> C	Freeway or expressway may be closed completely.
<input type="checkbox"/>	No complete freeway or expressway closure is permitted.
REMARKS:	
<ol style="list-style-type: none"> <li>1. See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic in these special provisions for additional closure restrictions.</li> <li>2. THIS CHART ONLY APPLIES TO THE ONE-TIME DEMOLITION OF THE EXISTING WB ON-RAMP OVERCROSSING FROM PORTOLA AVENUE.</li> <li>3. See Construction Area Signs Plan CS-1.</li> <li>4. This chart to be used in conjunction with Chart No. 5.</li> <li>5. Coordinate this closure with Chart No. 10.</li> <li>6. Modified traffic signal control as well as manual controls such as flagman shall be provided along the detour route; See Detour Plan, Sheet DE-4.</li> </ol>	

**Chart No. 7  
Conventional Highway Lane Requirements**

County: Alameda      Route/Direction: Route      KP: 45.5/46.6 PM: 28.3/29.0

Closure Limits: From Jack London Blvd to Airway Blvd

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	12	1	1	1	1	1	1	2	2	2	2	2
Mondays through Thursdays	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1	1	1	1
Fridays	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1	1	1	1
Saturdays	1	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	1	1	1	1	1	1
Sundays	1	1	1	1	1	1	1	1	1	1	S	S	1	1	1	1	1	1	1	1	1	1	1	1

Legend:

**1** Provide at least one through traffic lane open in direction of travel

**S** Shoulder closure permitted

1. REMARKS: See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic of these special provisions for additional closure restrictions.

**Chart No. 8  
Conventional Highway Lane Requirements**

County: Alameda      Route/Direction: Route      KP: 45.5/46.6 PM: 28.3/29.0

Closure Limits: From Airway Blvd to Jack London Blvd

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	12	1	1	1	1	1	1	2	2	2	23	
Mondays through Thursdays	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1	1
Fridays	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	1	1	1
Saturdays	1	1	1	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	1	1	1
Sundays	1	1	1	1	1	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	1	1	1	1

Legend:

- 1.) Provide at least one through traffic lane open in direction of travel
- S) Shoulder closure permitted

1. REMARKS: See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic of these special provisions for additional closure restrictions.

**Chart No. 9  
Complete Ramp Closure Hours/Ramp Lane Requirements**

County: Alameda	Route/Direction: 580/EB	KP: 21.0/24.0 PM: 13.1/14.9
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Closure Limits: Airway Boulevard On-Ramp and Isabel Avenue Loop/Diagonal On-Ramps

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	12	1	1	1	1	1	1	2	2	2	2	2
Mondays through Thursdays			C	C	C																			
Fridays			C	C	C																			
Saturdays				C	C	C																		
Sundays				C	C	C	C																	

**Legend:**

C Ramp may be closed completely

Work permitted within project right of way where shoulder or lane closure is not required.

**REMARKS:**

1. Complete closure applies only to the erection and/or removal of falsework at Portola Avenue, and bridge removal.
2. See Construction Area Signs Plan CS-1.
3. Ramp closures to occur in conjunction with complete freeway closure.
4. Modified traffic signal control as well as manual controls such as flagman shall be provided along the detour route; See Detour Plan, Sheets DE-1 and DE-4.
5. Signing at on-ramps for closure and detouring traffic.

**Chart No. 10  
Complete Ramp Closure Hours/Ramp Lane Requirements**

County: Alameda	Route/Direction: 580/WB	KP: 21.0/24.0 PM: 13.1/14.9
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Closure Limits: Portola Ave On-Ramp, N. Livermore Ave On-Ramp, and Isabel Ave

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	12	1	1	1	1	1	1	2	2	2	2	2
Mondays through Thursdays	C	C	C																					
Fridays	C	C	C																					
Saturdays			C	C	C																			
Sundays			C	C	C	C																		

Legend:

- C Ramp may be closed completely
- Work permitted within project right of way where shoulder or lane closure is not required.

**REMARKS:**

1. Complete closure applies only to the erection and/or removal of falsework at Portola Avenue, and bridge removal.
2. See Construction Area Signs Plan CS-1.
3. Ramp closures to occur in conjunction with complete freeway closure.
4. Modified traffic signal control as well as manual controls such as flagman shall be provided along the detour route; See Detour Plan, Sheets DE-1, DE-2, and DE-4.
5. Signing at on-ramps for closure and detouring traffic.

**Chart No. 11**  
**Complete Ramp Closure Hours/Ramp Lane Requirements**

County: Alameda      Route/Direction: 580/EB      KP: 21.0/24.0 PM: 13.1/14.9

Closure Limits: Portola Avenue Off-Ramp

FROM HOUR TO HOUR	2	1	2	3	4	5	6	7	8	9	1	1	12	1	1	1	1	1	1	2	2	2	2	2		
Mondays through Thursdays	C	C	C	C	C	C																		C		
Fridays	C	C	C	C	C	C																		C		
Saturdays	C	C	C	C	C	C	C	C	C															C	C	
Sundays	C	C	C	C	C	C	C	C	C	C														C	C	C

Legend:

Ramp may be closed completely

Work permitted within project right of way where shoulder or lane closure is not required.

**REMARKS:**

1. Complete closure applies only to the erection and/or removal of falsework at Portola Avenue, and bridge removal.
2. See Construction Area Signs Plan CS-1.
3. Ramp closures to occur in conjunction with complete freeway closure.
4. Modified traffic signal control as well as manual controls such as flagman shall be provided along the detour route.

### **REMOVE FIRE SERVICE**

Existing fire service, consisting of backflow prevention assembly, valves, riser extension, thrust blocks, concrete pad, and elbows, , where shown on the plans to be removed, shall be completely removed and disposed of.

Attention is directed to, "Order of Work," in these special provisions regarding coordination with Engineer for work on City's water systems.

Full compensation for disposing of materials off-site, backfilling, and disassembling the fire service assembly shall be considered as included in the contract unit price paid for remove fire service and no additional compensation will be allowed therefor.

### **10-1.835 BASIN OUTLET STRUCTURE**

Basin outlet structures shall be constructed in accordance with the details shown on the plans and these special provisions.

The basin outlet structure includes the corrugated steel pipe riser, ladder, orifice trash rack, connecting ring, bolts and nuts, reinforced concrete pad, rock slope protection, and steel grate.

Corrugated steel pipe riser shall conform to the provisions in Section 70, "Miscellaneous Facilities," of the Standard Specifications. Galvanizing of the Corrugated steel pipe riser and ladder shall be galvanized in accordance with the requirements as specified in Section 75-1.05, "Galvanizing," of the Standard Specifications.

Orifice trash rack, steel grate, ladder, bolts, nuts, frame anchors, and other connecting hardware shall conform to the provisions in Section 75-1.02, "Miscellaneous Iron and Steel," of the Standard Specifications.

Welding shall conform to "Welding," elsewhere in these special provisions.

Reinforced concrete pad shall conform to the provisions in Section 90-10, "Minor Concrete" of the Standard Specifications. Rock slope protection shall be light and conform to the provisions in Section 72-2, "Rock Slope Protection," of the Standard Specifications.

### **MEASUREMENT AND PAYMENT**

Basin outlet structure will be measured by the unit.

The unit price paid for basin outlet structures shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the basin outlet structure complete in place, as shown on the plans, and as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Full compensation for the corrugated steel riser, ladder, orifice trash rack, connecting ring, reinforced concrete pad, rock slope protection, steel grate, excavation and backfill, and galvanizing shall be considered as included in the contract unit price paid for basin outlet structure and no separate payment will be made therefor.

### **10-1.865 FIRE SERVICE**

Fire service consisting of the detector check assembly, elbows and fittings, check valves, thrust blocks, concrete pad, electrical conduit, and connecting pipes shall be furnished and installed in conformance to the details shown on the plans, as specified in these special provisions, and as directed by the Engineer.

Attention is directed to, "Order of Work," in these special provisions regarding shutting down the fire service line and coordination with Engineer, City of Livermore Fire Department, and City of Livermore Water Resource Department for work on City's water systems.

The work to connect and test the new fire service must be completed within the same working day to minimize disruptions in service to affected facilities.

All pipes and fittings shall have a minimum working pressure of 560 newtons and conform to the following:

Polyvinyl Chloride Pipe shall meet the requirements of AWWA C-900 "Polyvinyl Chloride (PVC) Pressure Pipe." Pipe shall meet AWWA Class 150 minimum. All Class 150 pipe shall meet the requirements of DR 18 and Class 200 pipe shall meet the requirements of DR 14 with cast iron outside diameter.

All pipes shall be suitable for use as a pressure conduit. Provisions shall be made for expansion and contraction at each joint with an "O" ring elastomeric gasket seal meeting the requirements of ASTM D-1869 and F-477. Solvent welded joints will not be permitted. The bell section shall be designed to be at least as strong as the pipe wall.

Fittings for PVC pipe shall be cast iron only.

Cast iron fittings shall be Class D fittings conforming to ASTM Designation 126 and shall be 560 newtons standard. All fitting shall be flanged.

### **MEASUREMENT AND PAYMENT**

The contract unit price paid for fire service includes furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing fire service including excavation and backfill, detector check assembly, pipe connections and elbows, check valve, and thrust blocks, complete in place as shown on the plans, as specified in these special provisions, and as directed by the Engineer.

### **10-1.415 COMPOST, INCORPORATE**

This work includes incorporating compost into the surface of areas 1:4 (vertical:horizontal) or flatter where shown on the plans. Compost, incorporate must comply with Section 20-3, "Erosion Control," of the Standard Specifications and these special provisions.

Apply compost when an area is ready to receive it as determined by the Engineer.

### **MATERIALS**

#### **Compost**

The compost producer must be fully permitted as specified under the California Integrated Waste Management Board, Local Enforcement Agencies and any other State and Local Agencies that regulate solid waste facilities. If exempt from State permitting requirements, the composting facility must certify that it follows guidelines and procedures for production of compost meeting the environmental health standards of Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7.

The compost producer must be a participant in the United States Composting Council's Seal of Testing Assurance program.

Compost may be derived from any single or mixture of any of the following feedstock materials:

1. Green material consisting of chipped, shredded, or ground vegetation; or clean processed recycled wood products
2. Biosolids
3. Manure
4. Mixed food waste

Compost feedstock materials such that weed seeds, pathogens and deleterious materials are reduced as specified under Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7, Section 17868.3.

Compost must not be derived from mixed municipal solid waste and must be reasonably free of visible contaminants. Compost must not contain paint, petroleum products, pesticides or any other chemical residues harmful to animal life or plant growth. Compost must not possess objectionable odors.

Metal concentrations in compost must not exceed the maximum metal concentrations listed in Title 14, California Code of Regulations, Division 7, Chapter 3.1, Section 17868.2.

Compost must comply with the following:

**Physical and Chemical Requirements**

Property	Test Method	Requirement
PH	TMECC 04.11-A Elastometric pH 1:5 Slurry Method pH Units	6.0-8.0
Soluble Salts	TMECC 04.10-A Electrical Conductivity 1:5 Slurry Method dS/m (mmhos/cm)	0-10.0
Moisture Content	TMECC 03.09-A Total Solids & Moisture at 70+/- 5 deg C % Wet Weight Basis	30-60
Organic Matter Content	TMECC 05.07-A Loss-On-Ignition Organic Matter Method (LOI) % Dry Weight Basis	30-65
Maturity	TMECC 05.05-A Germination and Vigor Seed Emergence Seedling Vigor % Relative to Positive Control	80 or Above 80 or Above
Stability	TMECC 05.08-B Carbon Dioxide Evolution Rate mg CO <sub>2</sub> -C/g OM per day	8 or below
Particle Size	TMECC 02.02-B Sample Sieving for Aggregate Size Classification % Dry Weight Basis	Millimeters % Passing 76.0 99% 9.5 < 25% Max. Length 100 millimeters
Pathogen	TMECC 07.01-B Fecal Coliform Bacteria < 1000 MPN/gram dry wt.	Pass
Pathogen	TMECC 07.01-B Salmonella < 3 MPN/4 grams dry wt.	Pass
Physical Contaminants	TMECC 02.02-C Man Made Inert Removal and Classification: Plastic, Glass and Metal % > 4mm fraction	Combined Total: < 1.0
Physical Contaminants	TMECC 02.02-C Man Made Inert Removal and Classification: Sharps (Sewing needles, straight pins and hypodermic needles) % > 4mm fraction	None Detected

NOTE: TMECC refers to "Test Methods for the Examination of Composting and Compost," published by the United States Department of Agriculture and the United States Compost Council (USCC).

Before compost application, submit a copy of the compost producer's compost technical data sheet and a copy of the compost producers Seal of Testing Assurance certification. The compost technical data sheet must include:

1. Laboratory analytical test results
2. Directions for product use
3. List of product ingredients

Before compost application, submit a Certificate of Compliance under Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

#### **APPLICATION**

Before application of compost, soil surface preparation must comply with Section 19-2.05, "Slopes," of the Standard Specifications. Vegetative growth, temporary erosion control materials, and other debris must be removed from areas to receive compost, incorporate.

Apply and incorporate compost in separate applications in the following sequence to embankment and excavation slopes:

1. Apply compost to a depth of 100 millimeters by using specialized equipment such as a pneumatic blower or side discharge spreader.
2. You may incorporate the compost by hand using a backhoe, bulldozer, or grading blade to a depth of 300 to 450 millimeters. Do not incorporate compost to a strip 0.6 meters wide adjacent to the edge of pavement.
  3. Following incorporation, compact the area to a relative compaction between 82 percent and 90 percent except as otherwise specified in Section 19-5 "Compaction," of the Standard Specifications.
  4. Apply erosion control (Type D) specified and paid for elsewhere in these special provisions.

#### **MEASUREMENT AND PAYMENT**

Compost, incorporate will be measured by the square meter.

The contract price paid per square meter for compost, incorporate includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying compost, incorporate complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

## **SECTION 10-2 HIGHWAY PLANTING AND IRRIGATION SYSTEMS**

### **10-2.01 GENERAL**

The work performed in connection with highway planting and irrigation systems shall conform to the provisions in Section 20, "Erosion Control and Highway Planting," of the Standard Specifications and these special provisions.

#### **COST BREAK-DOWN**

The Contractor shall furnish the Engineer a cost break-down for the contract lump sum item of highway planting. The cost break-down table shall be submitted to the Engineer for approval within 15 working days after the contract has been approved. The cost break-down table will be approved, in writing, by the Engineer before any partial payment will be made for the item of highway planting.

Attention is directed to "Time-Related Overhead" of these special provisions regarding compensation for time-related overhead.

The cost break-down shall be completed and furnished in the format shown in the sample of the cost break-down included in this section. Line item descriptions of work shown in the samples are the minimum to be submitted. Additional line item descriptions of work may be designated by the Contractor. If the Contractor elects to designate additional line item descriptions of work, the quantity, value and amount for those line items shall be completed in the same manner as for the line item descriptions shown in the samples. The line items and quantities given in the sample are to show the manner of preparing the cost break-down to be furnished by the Contractor.

The Contractor shall determine the quantities required to complete the work shown on the plans. The quantities and their values shall be included in the cost break-down submitted to the Engineer for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-down submitted for approval.

The sum of the amounts for the line items of work listed in the cost break-down table for highway planting work shall be equal to the contract lump sum price bid for the work. Overhead and profit, except for time-related overhead, shall be included in each individual line item of work listed in the cost break-down table.

No adjustment in compensation will be made in the contract lump sum price paid for highway planting due to differences between the quantities shown in the cost break-down table furnished by the Contractor and the quantities required to complete the work as shown on the plans and as specified in these special provisions.

Individual line item values in the approved cost break-down table will be used to determine partial payments during the progress of the work and as the basis for calculating an adjustment in compensation for the contract lump sum item of highway planting due to changes in line items of work ordered by the Engineer. When the total value of ordered changes to line items of work increases or decreases the lump sum price bid for highway planting by more than 25 percent, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the total pay quantity of an item of work in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications.

**HIGHWAY PLANTING COST BREAK-DOWN**

**Contract No. 04-171334**

UNIT DESCRIPTION	UNIT	APPROXIMATE QUANTITY	VALUE	AMOUNT
Plant (Group M)	EA	7000		
Roadside Clearing	M2	5300		

**TOTAL \_\_\_\_\_**

**10-2.02 EXISTING HIGHWAY PLANTING**

In addition to the provisions in Section 20, "Erosion Control and Highway Planting," of the Standard Specifications, work performed in connection with existing highway planting shall conform to the provisions in "Existing Highway Facilities," of these special provisions.

**10-2.03 (BLANK)**

**10-2.04 HIGHWAY PLANTING**

The work performed in connection with highway planting shall conform to the provisions in Section 20-4, "Highway Planting," of the Standard Specifications and these special provisions.

**ROADSIDE CLEARING**

Prior to preparing planting areas, trash and debris shall be removed from these areas as required under Construction Site Management of the special provisions.

The project area shall be cleared as specified herein:

- A. Weeds shall be killed and removed within planting areas where plants are to be planted in groups or rows 4.6 m or less apart and from within an area extending 2 m beyond the outer limits of the groups or rows of plants.
- B. At locations where liner plants are to be planted, weeds shall be killed and removed within the entire area.

After the initial roadside clearing is complete, additional roadside clearing work shall be performed as necessary to maintain the areas, as specified above, in a neat appearance until the start of the plant establishment period. This work shall include the following:

- A. Trash and debris shall be removed.
- B. Weed growth shall be killed before the weeds reach the seed stage of growth or exceed 150 mm in length, whichever occurs first.
- C. Weeds in plant basins, including basin walls, shall be removed by hand pulling, after the plants have been planted.

**Weed Control**

Weed control shall also conform to the following:

- A. Removed weeds and ground cover shall be disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Roadside clearing work shall not include work required to be performed as clearing and grubbing as specified in Section 16, "Clearing and Grubbing," of the Standard Specifications.

**PESTICIDES**

Pesticides shall not be used on this project.

**PREPARING PLANTING AREAS**

Plants adjacent to drainage ditches shall be located so that after construction of the basins, no portion of the basin walls shall be less than the minimum distance shown on the plans for each plant involved.

**LINER PLANTS**

Liner plants shall be furnished in containers with a minimum size of 32 mm x 32 mm x 76 mm or 38 mm (diameter) x 152 mm. Liner plant containers made of biodegradable material shall not be used. All liner plants shall be removed from their containers at the time of planting.

At the option of the Contractor, seedling plants may be furnished in lieu of liner plants. Seedling plants shall be bare root. If the Contractor elects to furnish seedling plants, the plants will be measured and paid for by the unit as plant (Group M).

Liner plants shall not be planted until the soil is moist to a minimum depth of 200 mm, unless otherwise approved in writing by the Engineer.

4.Planting holes for liner plants shall be large enough to accommodate the total length and width of the roots.

Full compensation for excavating plant holes for liner plants shall be considered as included in the lump sum price paid for highway planting and no separate payment will be made therefor.

**PLANT ESTABLISHMENT WORK**

The plant establishment period shall be Type 2 and shall not be less than 250 working days.

The center to center spacing of replacement plants for unsuitable ground cover plants shall be determined by the number of completed plant establishment working days at the time of replacement and the original spacing in conformance with the following:

ORIGINAL SPACING (Millimeters)	SPACING OF REPLACEMENT GROUND COVER PLANTS (Millimeters)		
	Number of Completed Plant Establishment Working Days		
	1-125	126-190	191-End of Plant Establishment
230	230	150	150
300	300	230	150
460	460	300	230
600	600	460	300
910	910	600	460

Weeds within plant basins, including basin walls and ground cover, shall be controlled by hand pulling.

Weeds outside of mulched areas, plant basins, ground cover, the median, and paved areas shall be controlled by mowing. At locations where proposed planting areas are 3.6 m or more from the edges of existing plantings to remain and from shoulders, dikes, curbs, sidewalks, fences, and walls, the mowing limit shall be 2 m beyond the outer limits of the proposed planting area.

At the option of the Contractor, plants of a larger container size than those originally specified may be used for replacement plants during the first 125 working days of the plant establishment period.

After 125 working days of the plant establishment period have been completed, replacement of plants, except for ground cover plants, shall be No. 1 size for seedlings, pot and liner size plants; No. 5 size for No. 1 size plants; No. 15 size for No. 5 size plants; and other plant replacement plants shall be the same size as originally specified.

The final inspection shall be performed in conformance with the provisions in Section 5-1.13, "Final Inspection," of the Standard Specifications and shall be completed a minimum of 20 working days before the estimated completion of the contract.

**10-2.05 (BLANK)**

**BID ITEM LIST**  
**04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	120152	TEMPORARY PAVEMENT MARKING (TAPE)	M2	14		
22	015065	TEMPORARY OBJECT MARKER (TYPE P)	EA	19		
23	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	M	17 300		
24	120165	CHANNELIZER (SURFACE MOUNTED)	EA	220		
25	120300	TEMPORARY PAVEMENT MARKER	EA	1180		
26	128650	PORTABLE CHANGEABLE MESSAGE SIGN	EA	6		
27	129000	TEMPORARY RAILING (TYPE K)	M	4940		
28	129100	TEMPORARY CRASH CUSHION MODULE	EA	98		
29	015066	CAP SEWER MAINTENANCE HOLE	EA	7		
30	150206	ABANDON CULVERT	M	390		
31	015067	ABANDON 300 MM WATER LINE (CITY WATER)	M	210		
32	015068	ABANDON 300 MM WATER LINE (RECYCLED WATER)	M	250		
33	015069	ABANDON 360 MM WATER LINE (CITY WATER)	M	95		
34	015070	ABANDON 600 MM WATER LINE (RECYCLED WATER)	M	55		
35	150241	ABANDON SEWER	M	420		
36	015071	ABANDON VALVE (CITY WATER)	EA	4		
37	015072	ABANDON VALVE (RECYCLED WATER)	EA	12		
38	150305	OBLITERATE SURFACING	M2	6500		
39	150608	REMOVE CHAIN LINK FENCE	M	3710		
40	150662	REMOVE METAL BEAM GUARD RAILING	M	470		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	150668	REMOVE FLARED END SECTION	EA	5		
42	015073	REMOVE ROCK SLOPE PROTECTION	EA	6		
43	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	M	15 300		
44	150715	REMOVE THERMOPLASTIC PAVEMENT MARKING	M2	9		
45	150722	REMOVE PAVEMENT MARKER	EA	1120		
46	150744	REMOVE ROADSIDE SIGN (WOOD POST)	EA	28		
47	150745	REMOVE ROADSIDE SIGN (METAL POST)	EA	14		
48	150747	REMOVE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	7		
49	150760	REMOVE SIGN STRUCTURE	EA	4		
50	150771	REMOVE ASPHALT CONCRETE DIKE	M	31		
51	150805	REMOVE CULVERT	M	64		
52	015074	REMOVE 300 MM WATER LINE (CITY WATER)	M	56		
53	015075	REMOVE VALVE (CITY WATER)	EA	1		
54	015076	REMOVE WATER METER (CITY WATER)	EA	1		
55	015077	REMOVE WATER METER (RECYCLED WATER)	EA	2		
56	015078	REMOVE FIRE HYDRANT (RECYCLED WATER)	EA	3		
57	015079	REMOVE VALVE (RECYCLED WATER)	EA	1		
58	015080	REMOVE RISER (RECYCLED WATER)	EA	1		
59	150820	REMOVE INLET	EA	6		
60	150821	REMOVE HEADWALL	EA	1		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	150826	REMOVE MANHOLE	EA	4		
62	150841	REMOVE SEWER PIPE	M	40		
63	150860	REMOVE BASE AND SURFACING	M3	1650		
64	BLANK					
65	015082	ADJUST WATER VALVE BOX FRAME AND COVER TO GRADE (CITY WATER)	EA	1		
66	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	M2	121 000		
67	153211	REMOVE CONCRETE SIDEWALK AND DRIVEWAY	M2	170		
68	153214	REMOVE CONCRETE CURB	M	610		
69	153215	REMOVE CONCRETE (CURB AND GUTTER)	M	500		
70	153229	REMOVE CONCRETE BARRIER (TYPE K)	M	160		
71	155003	CAP INLET	EA	11		
72	157550	BRIDGE REMOVAL	LS	LUMP SUM	LUMP SUM	
73	157561	BRIDGE REMOVAL (PORTION), LOCATION A	LS	LUMP SUM	LUMP SUM	
74	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
75	190101	ROADWAY EXCAVATION	M3	20 300		
76	190108	ROADWAY EXCAVATION (TYPE Y-2) (AERIALY DEPOSITED LEAD)	M3	3450		
77	190110	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
78	190113	ASBESTOS COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
79 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	M3	2030		
80 (F)	192008	STRUCTURE EXCAVATION (TYPE A)	M3	1625		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	M3	295		
82 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	M3	1420		
83 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	M3	907		
84 (F)	193114	SAND BACKFILL	M3	439.1		
85 (F)	193116	LOW EXPANSION MATERIAL BACKFILL	M3	8847		
86	194001	DITCH EXCAVATION	M3	1300		
87	198001	IMPORTED BORROW	M3	195 000		
88	200052	PRUNE EXISTING PLANTS	LS	LUMP SUM	LUMP SUM	
89	203016	EROSION CONTROL (TYPE D)	HA	2.4		
90	203018	EROSION CONTROL (NETTING)	M2	5230		
91	203021	FIBER ROLLS	M	6850		
92	203026	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	15		
93	BLANK					
94	208731	200 MM CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT	M	190		
95	220101	FINISHING ROADWAY	LS	LUMP SUM	LUMP SUM	
96	240100	LIME	TONN	760		
97	015085	LIME STABILIZATION	M2	11 900		
98	250401	CLASS 4 AGGREGATE SUBBASE	M3	17 800		
99	260301	CLASS 3 AGGREGATE BASE	M3	13 500		
100	270065	ASPHALTIC EMULSION (CURING SEAL)	TONN	8		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101	280000	LEAN CONCRETE BASE	M3	2240		
102	390131	HOT MIX ASPHALT	TONN	32 400		
103	390137	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TONN	6240		
104	390138	RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)	TONN	6410		
105	391007	PAVING ASPHALT (BINDER, GEOSYNTHETIC PAVEMENT INTERLAYER)	TONN	7		
106	393003	GEOSYNTHETIC PAVEMENT INTERLAYER	M2	6160		
107	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	M	240		
108	394076	PLACE HOT MIX ASPHALT DIKE (TYPE E)	M	2930		
109	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	M	160		
110	394090	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	M2	12		
111	490655	400 MM CAST-IN-DRILLED-HOLE CONCRETE PILING	M	1460		
112	041531	FURNISH PILING (CLASS 900) (ALTERNATIVE 'X')	M	2739		
113	041532	DRIVE PILE (CLASS 900) (ALTERNATIVE 'X')	EA	152		
114	490700	FURNISH PILING (CLASS 900) (ALTERNATIVE W)	M	2331		
115	490701	DRIVE PILE (CLASS 900) (ALTERNATIVE W)	EA	140		
116	041533	FURNISH PILING (CLASS 625) (ALTERNATIVE 'X')	M	1159		
117	041534	DRIVE PILE (CLASS 625) (ALTERNATIVE 'X')	EA	96		
118	500001	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LUMP SUM	LUMP SUM	
119	510000	SEAL COURSE CONCRETE	M3	174		
120 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	M3	786		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	M3	6727		
122 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	M3	436		
123 (F)	510085	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	M3	64		
124 (F)	510086	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	M3	116		
125 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	M3	296.7		
126 (F)	511063	FRACTURED FIN TEXTURE	M2	470		
127	511106	DRILL AND BOND DOWEL	M	42		
128 (F)	518002	SOUND WALL (MASONRY BLOCK)	M2	1610		
129	518050	PTFE BEARING	EA	2		
130	519117	JOINT SEAL (MR 30 MM)	M	30		
131	519120	JOINT SEAL (MR 15 MM)	M	25		
132	519126	JOINT SEAL ASSEMBLY (MR 80 MM)	M	79		
133	519127	JOINT SEAL ASSEMBLY (MR 90 MM)	M	13		
134	519144	JOINT SEAL (MR 50 MM)	M	27		
135 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	KG	1 008 200		
136 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	KG	16 107		
137 (F)	560203	FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	KG	5500		
138 (F)	560204	INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	KG	5500		
139 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	KG	40 090		
140 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	KG	40 090		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141	560233	FURNISH FORMED PANEL SIGN (OVERHEAD)	M2	190		
142	015086	FURNISH SINGLE SHEET ALUMINUM SIGN (2.0 MM-UNFRAMED) (OVERHEAD)	M2	8		
143	560236	FURNISH LAMINATED PANEL SIGN (63.5 MM-TYPE B)	M2	8		
144	560238	FURNISH SINGLE SHEET ALUMINUM SIGN (1.6 MM-UNFRAMED)	M2	70		
145	560239	FURNISH SINGLE SHEET ALUMINUM SIGN (2.0 MM-UNFRAMED)	M2	34		
146	560241	FURNISH SINGLE SHEET ALUMINUM SIGN (1.6 MM-FRAMED)	M2	3		
147	560242	FURNISH SINGLE SHEET ALUMINUM SIGN (2.0 MM-FRAMED)	M2	42		
148 (F)	561015	1524 MM CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	M	30		
149	562001	METAL (ROADSIDE SIGN)	KG	230		
150	562002	METAL (BARRIER MOUNTED SIGN)	KG	12		
151	566011	ROADSIDE SIGN - ONE POST	EA	75		
152	566012	ROADSIDE SIGN - TWO POST	EA	14		
153	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	33		
154	568007	INSTALL SIGN OVERLAY	M2	8		
155	568016	INSTALL SIGN PANEL ON EXISTING FRAME	M2	47		
156	015087	150 MM HIGH DENSITY POLYETHYLENE PIPE	M	9		
157	620905	300 MM ALTERNATIVE PIPE CULVERT (TYPE A)	M	4.3		
158	620910	450 MM ALTERNATIVE PIPE CULVERT (TYPE A)	M	870		
159	620914	600 MM ALTERNATIVE PIPE CULVERT (TYPE A)	M	200		
160	620920	750 MM ALTERNATIVE PIPE CULVERT (TYPE A)	M	290		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	620925	900 MM ALTERNATIVE PIPE CULVERT (TYPE A)	M	260		
162	015088	1500 MM ALTERNATIVE PIPE CULVERT (TYPE A)	M	29		
163	015089	300 MM POLYVINYL CHLORIDE PRESSURE PIPE (CITY WATER)	M	250		
164	015090	100 MM POLYVINYL CHLORIDE PRESSURE PIPE (RECYCLED WATER)	M	13		
165	015091	360 MM POLYVINYL CHLORIDE PRESSURE PIPE (CITY WATER)	M	85		
166	015092	150 MM POLYVINYL CHLORIDE PRESSURE PIPE (RECYCLED WATER)	M	25		
167	015093	250 MM POLYVINYL CHLORIDE PRESSURE PIPE (RECYCLED WATER)	M	9		
168	015094	300 MM POLYVINYL CHLORIDE PRESSURE PIPE (RECYCLED WATER)	M	230		
169	015095	600 MM POLYVINYL CHLORIDE PRESSURE PIPE (RECYCLED WATER)	M	60		
170	015096	1050 MM REINFORCED CONCRETE PIPE SEWER (T-LOCK POLYVINYL CHLORIDE LINER)	M	22		
171	015097	1830 MM REINFORCED CONCRETE PIPE (CLASS IV)	M	170		
172	015098	JACKED 1830 MM REINFORCED CONCRETE PIPE (CLASS IV)	M	58		
173	664015	450 MM CORRUGATED STEEL PIPE (2.01 MM THICK)	M	54		
174	692385	450 MM ANCHOR ASSEMBLY	EA	6		
175	703481	600 MM WELDED STEEL PIPE CASING (BRIDGE)	M	48		
176	BLANK		E			
177	705336	450 MM ALTERNATIVE FLARED END SECTION	EA	6		
178	705337	600 MM ALTERNATIVE FLARED END SECTION	EA	6		
179	705339	900 MM ALTERNATIVE FLARED END SECTION	EA	2		
180	015099	WATER METER (CITY WATER)	EA	1		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
181	015100	WATER METER (RECYCLED WATER)	EA	3		
182	015101	100 MM GATE VALVE (RECYCLED WATER)	EA	2		
183	015102	150 MM GATE VALVE (RECYCLED WATER)	EA	4		
184	015103	250 MM GATE VALVE (RECYCLED WATER)	EA	1		
185	015104	300 MM GATE VALVE (CITY WATER)	EA	2		
186	015105	300 MM GATE VALVE (RECYCLED WATER)	EA	3		
187	015106	360 MM BUTTERFLY VALVE (CITY WATER)	EA	2		
188	015107	600 MM BUTTERFLY VALVE (RECYCLED WATER)	EA	3		
189	015108	300 MM AIR PRESSURE VALVE (CITY WATER)	EA	2		
190	015109	300 MM AIR RELEASE VALVE (RECYCLED WATER)	EA	1		
191	015110	600 MM AIR RELEASE VALVE (RECYCLED WATER)	EA	1		
192	015111	300 MM BLOW OFF VALVE (CITY WATER)	EA	1		
193	015112	300 MM BLOW OFF VALVE (RECYCLED WATER)	EA	1		
194	015113	600 MM BLOW OFF VALVE (RECYCLED WATER)	EA	1		
195	015114	RECYCLED WATER WARNING SIGN	EA	3		
196	015115	WATER LINE ANGLE MARKER (CITY WATER)	EA	2		
197	015116	WATER LINE ANGLE MARKER (RECYCLED WATER)	EA	2		
198	707252	1800 MM PRECAST CONCRETE PIPE MANHOLE	M	10.6		
199	015117	300 MM POLYVINYL CHLORIDE SEWER	M	340		
200	015118	375 MM POLYVINYL CHLORIDE SEWER	M	85		

**BID ITEM LIST****04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
201	015119	SEWER MAINTENANCE HOLE	EA	8		
202	719589	MINOR CONCRETE (BACKFILL)	M3	110		
203	721008	ROCK SLOPE PROTECTION (LIGHT, METHOD B)	M3	310		
204	721011	ROCK SLOPE PROTECTION (BACKING NO. 2, METHOD B)	M3	72		
205	015120	ROCK SLOPE PROTECTION (1/4 T, BACKING NO. 1, METHOD B)	M3	2900		
206	729010	ROCK SLOPE PROTECTION FABRIC	M2	860		
207	731501	MINOR CONCRETE (CURB)	M3	79		
208	731502	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	M3	27		
209	731504	MINOR CONCRETE (CURB AND GUTTER)	M3	220		
210	731511	MINOR CONCRETE (ISLAND PAVING)	M3	55		
211	731516	MINOR CONCRETE (DRIVEWAY)	M3	7		
212	731521	MINOR CONCRETE (SIDEWALK)	M3	280		
213	731623	MINOR CONCRETE (CURB RAMP)	M3	10		
214	015121	MINOR CONCRETE (CONTRASTING SURFACE TREATMENT)	M3	180		
215 (F)	750001	MISCELLANEOUS IRON AND STEEL	KG	8505		
216 (F)	750498	MISCELLANEOUS METAL (RESTRAINER - CABLE TYPE)	KG	1470		
217 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	KG	150		
218 (F)	750505	BRIDGE DECK DRAINAGE SYSTEM	KG	2700		
219	800382	CHAIN LINK FENCE (TYPE CL-0.9, VINYL-CLAD)	M	200		
220	800391	CHAIN LINK FENCE (TYPE CL-1.8)	M	2450		

**BID ITEM LIST**  
**04-171334**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
261	861103	RAMP METERING SYSTEM (LOCATION 3)	LS	LUMP SUM	LUMP SUM	
262	861104	RAMP METERING SYSTEM (LOCATION 4)	LS	LUMP SUM	LUMP SUM	
263	015123	SIGNAL INTERCONNECT	LS	LUMP SUM	LUMP SUM	
264	015124	GENERAL PACKET RADIO SYSTEM WIRELESS MODEM ASSEMBLY	EA	4		
265	015125	JOINT TRENCH	LS	LUMP SUM	LUMP SUM	
266	015126	FIRE HYDRANT (RECYCLED WATER)	EA	3		
267	BLANK					
268	200001	HIGHWAY PLANTING	LS	LUMP SUM	LUMP SUM	
269	200101	IMPORTED TOPSOIL	M3	84		
270	203025	COMPOST, INCORPORATE	M2	1710		
271	204099	PLANT ESTABLISHMENT WORK	LS	LUMP SUM	LUMP SUM	
272	016687	150 MM ALTERNATIVE PERFORATED PIPE UNDERDRAIN	M	200		
273	016688	BASIN OUTLET STRUCTURE	EA	3		
274	016689	REMOVE FIRE SERVICE	EA	1		
275	016690	FIRE SERVICE	EA	1		
276	99990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**BID ITEM LIST**  
**04-171334**

**TOTAL BID  
FOR ITEMS:**

\$ \_\_\_\_\_

**TOT  
AL BID  
FOR  
TIME:**

\_\_\_\_\_ **\$7,200.00** \_\_\_\_\_  
**WORKING DAYS** **COST PER DAY**  
(Not to exceed 800 Days)

\$ \_\_\_\_\_

**TOTAL BID FOR COMPARISON (COST PLUS  
TIME):**

\$ \_\_\_\_\_