

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

June 24, 2010

12-Ora-22,405,605-R0.3/R0.9,22.3/24.0,3.0/R1.6  
 12-071634  
 CMLNN-6071(035)

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ORANGE COUNTY IN SEAL BEACH, LONG BEACH, AND LOS ALAMITOS ON ROUTE 22 FROM 22-605 SEPARATION TO 22-405 SEPARATION, ON ROUTE 405 FROM 0.4 MILE EAST OF SEAL BEACH BOULEVARD OVERCROSSING TO 605-405 SEPARATION, AND ON ROUTE 605 FROM 0.2 MILE SOUTH OF 405-605 SEPARATION TO THE LOS ANGELES COUNTY LINE.

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 Thursday, July 1, 2010.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book, and provide a copy of the Information Handout.

The project location description throughout the Project Plans, Notice to Bidders and Special Provisions, and the Bid book is revised as follows:

"PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN ORANGE AND LOS ANGELES COUNTIES IN SEAL BEACH, LONG BEACH, AND LOS ALAMITOS ON ROUTE 22 FROM 22/605 SEPARATION TO 22/405 SEPARATION, ON ROUTE 405 FROM 0.4 MILE EAST OF SEAL BEACH BOULEVARD OVERCROSSING TO 605/405 SEPARATION, AND ON ROUTE 605 FROM 0.2 MILE SOUTH OF 405/605 SEPARATION TO 0.5 MILE NORTH OF WARDLOW ROAD OVERCROSSING"

The project identification block throughout the Project Plans is revised as follows:

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	LA, Ora	22, 405, 605	R0.3/R0.9, 22.3/24.0, 3.0 (Ora)/R1.1 (LA)	1	1929

12-Ora-22,405,605-R0.3/R0.9,22.3/24.0,3.0/R1.6  
12-071634  
CMLNN-6071(035)

Project Plan Sheets 1, 12, 486, 487, 578, 579, 606, 830, 831, 981, 999, 1018, 1024, 1025, 1026, 1027, 1040, 1042, 1076, 1083, 1084, 1088, 1093, 1100, 1511, 1515, 1517, 1518, 1521, 1532, 1541, 1545, 1546, 1548, 1550, 1552, 1563, 1582, 1585, 1659, 1770, 1821, 1867, 1920, and 1928 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 51A, 116A, 990A, 990B, 990C, 990D, 990E, 1019A, 1019B, 1019C, 1019D, 1019E, 1043A, and 1074A are added. Copies of the added sheets are attached for addition to the project plans.

Project Plan Sheets 1089, 1090, 1091 and 1092 are deleted.

Project Plan Sheets 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, and 578 the item "12" CPS (.079" THICK)" is revised to "12" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK)".

In the Special Provisions, Section 5-1.14, "SUPPLEMENTAL PROJECT INFORMATION," is revised as attached.

In the Special Provisions, Section 5-1.20, "NONHIGHWAY FACILITIES (INCLUDING UTILITIES)," the table in the first paragraph is revised as follows:

"Utility Relocation and Date of the Relocation

<b>Utility (Owner)</b>	<b>Location</b>	<b>Date</b>
16" High Pressure Gas (Southern California Gas)	Seal Beach Boulevard OC - Abutment No. 1 – Abandon and Relocate	12/1/2010
10" and 16" High Pressure Gas (Southern California Gas)	Near SB I-405 On and Off Ramps and at I-405 near NB Off Ramp at Seal Beach Boulevard Interchange – Install Encasement Protection	12/1/2010
16" High Pressure Gas (Long Beach Gas & Oil)	Seal Beach Boulevard OC - Abutment No. 1 – Abandon and Relocate	7/1/2010
16" High Pressure Gas (Long Beach Gas & Oil)	On SB I-405 On and Off Ramps at Seal Beach Boulevard Interchange – Install Encasement Protection	7/1/2010
Underground Telephone Conduit (Verizon)	Seal Beach Boulevard OC - Abutment No. 1 – Abandon and Relocate	9/1/2011
Underground Telephone Conduit (Verizon)	Near SB I-405 On and Off Ramps and at I-405 near NB Off Ramp at Seal Beach Boulevard Interchange – Install Encasement Protection	9/1/2011
Electrical Distribution Wood Power Pole No.1503063E (Southern California Edison)	Along Bixby Channel near Old Ranch Parkway, Station 12+00 - Remove	10/1/2010
Electrical Distribution Wood Power Pole No.1562975E (Southern California Edison)	Along Old Ranch Parkway, Station 12+00 – Relocate pole within Orange County Flood Control District Right-of Way	10/1/2010

12-Ora-22,405,605-R0.3/R0.9,22.3/24.0,3.0/R1.6  
12-071634  
CMLNN-6071(035)

In the Special Provisions, Section 8-2.02, "CORROSION CONTROL FOR PORTLAND CEMENT CONCRETE," the first paragraph is revised as follows:

"Portland cement concrete in contact with soil at all substructure units is considered to be in a corrosive environment and shall conform to the provisions in Section 90, "Portland Cement Concrete," of the Standard Specifications and these special provisions."

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

"Attention is directed to "Concrete Pavement (Ramp Termini Rapid Strength Concrete)" of these special provisions in regards to providing Pre-Operation Conference and the Just-In-Time training prior to commencing pavement replacement operations."

In the Special Provisions, Section 10-1.41, "EARTHWORK," is revised as attached.

In the Special Provisions, Section 10-1.42, "LIGHTWEIGHT EMBANKMENT MATERIAL (CELLULAR CONCRETE)," the third paragraph is revised as follows:

"The Contractor shall submit mix design(s) which will produce a cast density, at point of placement, of maximum 30 pcf with a minimum compressive strength of 60 psi at 28 days and a cast density, at point of placement, of maximum 42 pcf with a minimum compressive strength of 125 psi at 28 days, as shown on the plans. The Contractor shall submit to the Engineer for approval a Work Plan at least 30 working days prior to placment."

12-Ora-22,405,605-R0.3/R0.9,22.3/24.0,3.0/R1.6  
12-071634  
CMLNN-6071(035)

In the Special Provisions, Section 10-1.84, "ARCHITECTURAL SURFACE (TEXTURED CONCRETE)," the fifth paragraph is revised as follows:

"The fractured rib texture shall consist of fractured rib texture with smooth concrete reliefs, score lines, and patterns simulating the shape of the 3D patterns on the plans, recessed 3/4-inch from face of textured concrete as shown on the plans."

In the Special Provisions, Section 10-2.02, "EXISTING HIGHWAY PLANTING," subsection "MAINTAIN EXISTING PLANTED AREAS," the first paragraph is revised as follows:

"Existing planted areas, within the entire highway right of way and project limits, shall be maintained throughout the life of the contract in conformance with these special provisions."

In the Special Provisions, Section 10-2.05, "HIGHWAY PLANTING," subsection "ROADSIDE CLEARING," the second paragraph is revised as follows:

"The project area shall be cleared as specified herein:

- A. Existing plants, wherein shown on the plans to be removed, shall be removed.
- B. Weeds shall be killed and removed within the entire highway right of way, within the project limits, excluding the median areas, new and existing pavement, curb, sidewalk and other surface areas."

In the Bid book, in the "Bid Item List," Items 45, 46, 47, 48, 64, 91, 92, 151, 152, 176, 177, 178, 181, 185, 188, 217, 244, 249, 251, 253, 255, 258, 259, and 260 are revised, Items 298 and 299 are added and Items 201 and 297 are deleted as attached.

To Bid book holders:

Replace the entire pages 5, 6, 7, 10, 11, 12, 13, 15, and 17 of the "Bid Item List" in the Bid book with the attached revised pages 5, 6, 7, 10, 11, 12, 13, 15, and 17 of the Bid Item List. The revised Bid Item List is to be used in the bid.

Attached is a copy of the Information Handout.

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.

Addendum No. 1  
Page 5  
June 24, 2010

12-Ora-22,405,605-R0.3/R0.9,22.3/24.0,3.0/R1.6  
12-071634  
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This addendum and attachments are available for the Contractors' download on the Web site:

**[http://www.dot.ca.gov/hq/esc/oe/project\\_ads\\_addenda/12/12-071634](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/12/12-071634)**

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

IGNACIO SANCHEZ DEL REAL  
Acting Office Chief  
Office of Plans, Specifications & Estimates  
Office Engineer  
Division of Engineering Services

Attachments

### 5-1.14 SUPPLEMENTAL PROJECT INFORMATION

The Department makes the following supplemental project information available:

Supplemental Project Information

Means	Description
Included in the Information Handout	<ol style="list-style-type: none"> <li>1. Aerially Deposited Lead Assessment Report</li> <li>2. Lead Based Paint Inspection Report Freeway Striping</li> <li>3. Report of Initial Site Assessment</li> <li>4. Environmental Site Investigation</li> <li>5. Report of Initial Site Assessment Addendum</li> <li>6. Clean Water Act 401 Water Quality Permit</li> <li>7. U.S. Army Corps of Engineers Nationwide Permit</li> <li>8. Orange County Public Works Encroachment Permit No. 2009-00371</li> <li>9. Materials Report</li> <li>10. Addendum No. 1 to the Materials Report</li> <li>11. Geotechnical Design Report</li> <li>12. Final Foundation Reports for:               <ol style="list-style-type: none"> <li>a. Seal Beach Boulevard Overcrossing</li> <li>b. N405/W22 Connector Overcrossing</li> <li>c. 405/605 HOV Connector</li> <li>d. E22-N405 Separation</li> <li>e. E22-N605 Separation</li> <li>f. E22-N405 Connector Undercrossing</li> <li>g. Special Design Retaining Wall No. 96</li> <li>h. Special Design Retaining Wall No. 419, Sound Wall No. 464 &amp; 490C</li> <li>i. Special Design Retaining Wall No. 442 &amp; 444</li> <li>j. Special Design Retaining Wall No. 453</li> <li>k. Special Design Retaining Wall No. 456 &amp; 457</li> <li>l. Special Design Retaining Wall No. 434</li> <li>m. Special Design Retaining Wall No. 445</li> <li>n. Sign Structures</li> <li>o. Montecito Box Culvert</li> <li>p. Bixby Channel</li> </ol> </li> <li>13. Pile Drivability Analysis and Pile Load Test Report (part of Seal Beach OC Foundation Report)</li> <li>14. Noise Impact Re-assessment Report</li> </ol>
Available for inspection at the District Office	Retaining Wall Aesthetic Concept
Available as specified in the Standard Specifications	Bridge as-built drawings
Available at: <a href="http://www.dot.ca.gov/hq/esc/oe/weekly_ads/index.php">http://www.dot.ca.gov/hq/esc/oe/weekly_ads/index.php</a>	Cross sections

#### 10-1.41 EARTHWORK

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

The presence of high groundwater can be expected during excavation and grading work.

Where a portion of the existing surfacing is to be removed, the outline of the area to be removed shall be cut on a neat line with a power-driven saw to a minimum depth of 0.17-foot before removing the surfacing. Full compensation for cutting the existing surfacing shall be considered as included in the contract price paid per cubic yard for roadway excavation and no additional compensation will be allowed therefor.

The portion of imported borrow placed within 5 feet of the finished grade shall have a Resistance (R-Value) of not less than 40 and a Plasticity Index less than 12.

Reinforcement or metal attached to reinforced concrete rubble placed in embankments shall not protrude above the grading plane. Prior to placement within 2 feet below the grading plane of embankments, reinforcement or metal shall be trimmed to no greater than 3/4 inch from the face of reinforced concrete rubble. Full compensation for trimming reinforcement or metal shall be considered as included in the contract prices paid per cubic yard for the types of excavation shown in the Engineer's estimate, or the contract prices paid for furnishing and placing imported borrow or embankment material, as the case may be, and no additional compensation will be allowed therefor.

Imported borrow shall be mineral material including rock, sand, gravel, or earth. The Contractor shall not use man-made refuse in imported borrow including:

- A. Portland cement concrete
- B. Asphalt concrete
- C. Hot mix asphalt
- D. Material planed from roadway surfaces
- E. Residue from grooving or grinding operations
- F. Metal
- G. Rubber
- H. Mixed debris
- I. Rubble

At the ground surface on which embankment is to be constructed, the Contractor shall scarify the surface a minimum depth of 0.5 foot below the original ground. The Contractor shall moisture condition the scarified soil to  $\pm 2\%$  of optimum moisture content determined by CTM 216 and compact in place the scarified soil to at least 90 percent relative compaction based on CTM 231 before placing any embankment thereon. The Contractor shall provide compaction test results and split samples to the Engineer for verification. The Contractor shall not place any embankment before approval by the Engineer. Quality Control (QC) shall be the responsibility of the Contractor. Quality Assurance (QA) is the prerogative of the Engineer. The QA Inspector is the duly designated person who acts for and on behalf of the Engineer.

The Contractor shall overexcavate the ground surface on which pavement is to be constructed to a minimum depth of 3.5 feet or 5 feet below the original ground, as shown on the plans. The Contractor shall scarify the overexcavation bottom to a minimum depth of 0.67 foot. The Contractor shall, moisture condition the scarified soil to  $\pm 2\%$  of optimum moisture content determined by CTM 216 and compact in place the scarified soil to at least 90 percent relative compaction based on CTM 231 before placing any pavement materials thereon. The Contractor shall provide compaction test results and split samples to the engineer for verification. The Contractor shall not place any embankment before approval by the Engineer.

Imported borrow will be measured and paid for by the cubic yard and the quantity to be paid for will be computed in the following manner:

- A. The total quantity of embankment will be computed in conformance with the provisions for roadway excavation in Section 19-2.08, "Measurement," of the Standard Specifications, on the basis of the planned or authorized cross section for embankments and the measured ground elevation by a method approved by the Engineer. The cross sections have been prepared for this contract and are available as described in "Supplemental Project Information" of these special provisions.

- B. The Contractor, at the Contractor's option, may compact the ground surface on which embankment is to be constructed before placing any embankment thereon. If the compaction results in an average subsidence exceeding 0.25-foot, the ground surface will be measured after completion of the compaction. The Engineer shall be allowed the time necessary to complete the measurement of an area before placement of embankment is started in that area.
- C. The quantities of roadway excavation, structure excavation and ditch excavation, which have been used in the embankment, will be adjusted by multiplying by a grading factor of 0.9. No further adjustment will be made in the event that the grading factor determined by the Engineer does not equal the actual grading factor.
- D. The Contractor may propose a plan whereby the Contractor would be paid on the basis of measured settlement in lieu of the allowance specified above. The proposal shall include complete details of the subsidence-measuring devices and a detailed plan of each installation. If the proposed plan is approved by the Engineer, the Contractor, at the Contractor's expense, shall provide, install and maintain the subsidence-measuring devices. The Engineer will take necessary readings to determine the progress of subsidence, if any, and the Contractor shall provide necessary assistance to make the readings.
- E. Installed devices which are determined by the Engineer to have been damaged will not be used for the determination of subsidence for the area the devices represent in the pattern of approved installations. The subsidence of the area represented by that installation shall be considered zero, regardless of the subsidence measured at other installations.
- F. The volumes required as a result of subsidence will be computed by the average-end-area method from the original measurements and the final measurements, including zero subsidence at all points and for all areas as provided herein. It shall be understood and agreed that the subsidence at the point of intersection of the side slopes (and end slopes at structures) with the ground line as established by the original cross sections shall be considered as zero. Unless otherwise agreed to by the Engineer, the subsidence shall be considered as zero at the points on the cross sections 50 feet beyond the beginning and ending of the instrumented area. The computed volumes for such subsidence will be added to the quantities of embankment measured as specified herein.
- G. Detachable elements of the subsidence-measuring devices which can be salvaged without damage to the work shall remain the property of the Contractor and shall be removed from the highway right of way after final measurements are made.

Settlement periods are required for the bridge approach embankments, roadways, and wall foundations listed in the following tables.

At the locations listed in the following table, excavation for the footings or driving the foundation piles at each location shall not be done until the expiration of the settlement period for the embankment at the adjacent abutment of the same structure or an adjacent structure.

Surcharge embankments shall be constructed at or above the grading plane where listed in the following table:

<b>Bridge Name and Number</b>	<b>Abutment Number</b>	<b>Bent Number</b>	<b>Surcharge Height (feet)</b>	<b>Settlement Period (days)<sup>a</sup></b>
Seal Beach Boulevard OC 55-1099, Stage 1	1 & 3	--	5.0	84
Seal Beach Boulevard OC 55-1099, Stage 2	1 & 3	--	5.0	42
N405-W22 Connector OC 55-1100G	1	--	5.0	84
N405-W22 Connector OC 55-1100G	5	--	5.0	77
I-405/I-605 HOV Connector Sep 55-1098E	1	--	0.0 <sup>b</sup>	126
I-405/I-605 HOV Connector Sep 55-1098E	16	--	5.0	63
E22-N405/I-405 Sep 55-1096G	1	--	10.0	56
E22-N405/I-405 Sep 55-1096G	3	--	0.0 <sup>b</sup>	--
E22-N605/I-405 Sep 55-1097G	1	--	5.0	56
E22-N605/I-405 Sep 55-1097G	5	--	0.0 <sup>b</sup>	98
E22-N405 Connector UC 55-415	1	--	3.0	126
E22-N405 Connector UC 55-415	2	--	0.0 <sup>b</sup>	112

<sup>a</sup> For settlement period calculations, the allowable residual settlement of 0.5 inch was used.

<sup>b</sup> At this location, the surcharge embankment shall be constructed by extending the grading plane (GP) in the "Elevation" view of the "Bridge Embankment Surcharge" detail of Standard Plan A62B horizontally to the centerline of abutment."

Settlement periods are required for the roadway embankments at the earth retaining, embankment structure, retaining wall, and sound wall structures listed in the following table.

Surcharge embankments shall be constructed at or above the grading plane where listed in the following table:

Earth Retaining Structure Number	Surcharge Height (feet)	Settlement Period (days)
Retaining Wall 419 (55E0100), Stage 1, North of "SB" Line Station 47+50	5.0	84
Retaining Wall 419 (55E0100), Stage 1, South of "SB" Line Station 47+50	3.0	84
Retaining Wall 414, Stage 1, South of "SB" Line Station 57+00	5.0	84
Retaining Wall 414, Stage 1, North of "SB" Line Station 57+00	5.0	70
Retaining Walls 456 & 457 (55E0105), South of 405/605 HOV Connector 55-1098E Abutment 1	0.0	126
Retaining Walls 442 & 444 (55E0102), East of N405-W22 Connector OC 55-1100G	2.0	56
Soundwall 445 (55E0103), North of Beverly Manor Road	5.0	63
Soundwall 434 (55E0101), North of Old Ranch Parkway Ramp (continuation of RW 442) between "OR" Stations 4+75 and 16+50	7.0	49
Retaining Wall 453 (55E0104), West of N405-W22 Connector OC, Abutment 1, West of "A-2" Line Station 16+50	2.0	77
Retaining Wall 453 (55E0104), West of N405-W22 Connector OC, Abutment 1, East of "A-2" Line Station 16+50	5.0	84
Retaining Wall 96 (55E0106), between E22-N605/I-405 Sep 55-1097G and E22-N405 Connector UC 55-0415 on "C-1" Line	3.0	126
Montecito Box Culvert (West), West of I-405 between "A" Line Stations 463+50 and 464+50	0.0	119

Roadway Embankment	Surcharge Height (feet)	Settlement Period (days)
E22-N405/I-405 Sep 55-1096G Roadway, South of Abutment 1, North of Station "C2" 6+00	0.0	56
E22-N605/I-405 Sep 55-1097G Roadway, South of Abutment 1, North of "C-1" Station 15+00	0.0	56
E22-N405 Connector UC 55-0415 Roadway, North of Abutment 2, South of "C-2" Station 33+50	0.0	56
Stage 1, North of 55-1099 Abutment 1, North of Station 47+50	5.0	84
Stage 1, North of 55-1099 Abutment 1, South of Station 47+50	3.0	84
Stage 2, North of 55-1099 Abutment 1, North of Station 47+50	5.0	42
Stage 2, North of 55-1099 Abutment 1, South of Station 47+50	3.0	42
Stage 2, North of 55-1099 Abutment 3, South of Station 57+00	5.0	42
Stage 2, North of 55-1099 Abutment 3, North of Station 57+00	3.0	42
West of N405-W22 Connector OC, Abutment 1, West of "A-2" Station 16+50	2.0	77
North of Beverly Manor Road, between "C-3" Stations 36+14 and "A" Station 438+86	5.0	63
North of Old Ranch Parkway Ramp between "A-2" Station 33+80 and "OR" Station 16+50	7.0	49
West of N405-W22 Connector OC, Abutment 1, East of "A-2" Station 16+50	5.0	84
Between E22-N605/I-405 Sep 55-1097G and E22-N405 Connector UC 55-0415 on "C-1" Line	3.0	126
South of 405/605 HOV Connector 55-1098E Abutment 1	0.0	126
South of N405-W22 Connector 55-1100G between "A" Line Stations 446+00 and 449+00	0.0	112
Between N405-W22 Connector 55-1100G and Montecito Box between "A" Line Stations 452+00 and 463+50	0.0	252
North of Montecito Box between "A" Line Stations 464+50 and 468+50	0.0	252
North of "A" Line Station 468+50	0.0	112

The duration of the required settlement period at each location will be determined by the Engineer. The estimated duration of the settlement periods are listed in the tables of settlement data. The Engineer may order an increase or decrease in any settlement period. An ordered increase or decrease in any settlement period will result in an increase or decrease in the number of contract working days if the settlement period involved is considered to be the current controlling operation in conformance with the provisions in Section 8-1.06, "Time of Completion," of the Standard Specifications. Adjustments of contract time due to increases or decreases in settlement periods will be made by contract change order.

The removal of surplus embankment material placed as a settlement or surcharge embankment, including material removed to conform to the finished slope lines shown on the plans, will be paid for at the contract price per cubic yard for roadway excavation.

#### **Settlement Monitoring Program**

The Contractor shall perform settlement monitoring consisting of measurements and plottings of settlement platforms, survey monuments, and surface monuments at all listed bridge approach embankments and structures.

### Settlement Platforms

The Contractor shall install and maintain settlement platforms in conformance with the requirements in California Test 112. The settlement platforms shall be installed at the following locations:

Structure Name and Number	Settlement Monitor
Seal Beach Boulevard Overcrossing 55-1099	Both Abutments
N405 – W22 Connector Separation 55-1100G	Both Abutments
405/605 HOV Connector 55-1098E	Both Abutments
E22 – N405/ 405 Separation 55-1096G	Both Abutments
E22 - N605/405 Separation 55-1097G	Both Abutments
E22 – N405 Connector Undercrossing 55-0415	Both Abutments
Retaining Wall 414	New Embankment
Retaining Wall 55E0100 - Wall 419	New Embankments
Sound Wall 55E0103 - Wall 445	New Embankments
Sound Wall 55E0101 - Wall 434	New Embankments

Settlement platforms shall be installed on existing ground prior to embankment construction. Monitoring shall commence when embankment placement begins, and shall continue in accordance with the following schedule:

- |  |                                  |
|--|----------------------------------|
| A. Initial Reading   | Prior to embankment construction |
| B. During Embankment Construction                          | Every working day                |
| C. First Month After Completion of Embankment Construction | Once per week                    |
| D. Thereafter  | Once per two weeks               |

The Contractor shall perform the settlement monitoring and submit settlement plots to the Engineer for review within two (2) working days after each reading. Settlement monitoring data shall be collected and plotted by a surveyor who is registered as a Professional Land Surveyor in the State of California. Data collection procedures shall conform to the requirements of California Test 112. Data shall be plotted as settlement (accurate to 0.1-foot) versus time.

At the discretion of the Engineer, the settlement period may be reduced if monitoring results indicate that the embankment settlement is complete.

### Survey Monuments

The Contractor shall install and maintain standard survey monument in accordance with Standard Plan A74. The survey monuments shall be installed in a timely manner at the centerline of structure approach embankments or at edge of shoulder adjacent to walls at spacing as directed by the Engineer at:

Structure Name and Number	Survey Monuments
Seal Beach Boulevard Overcrossing 55-1099	Both Abutments and 2 other locations as directed by the Engineer
N405-W22 Connector Overcrossing 55-1100G	Both Abutments and 2 other locations as directed by the Engineer
I-405/I-605 Connector 55-1098E	Both Abutments and 2 other locations as directed by the Engineer
E22 – N405/405 Separation 55-1096G	Abutment 1 and 2 other locations as directed by the Engineer
E22 - N605/405 Separation 55-1097G	Both Abutments and 2 other locations as directed by the Engineer
E22 – N405 Connector Undercrossing 55-0415	Abutment 1 and 2 other locations as directed by the Engineer
Retaining Wall Number 55E0100 - Wall 419	Maximum Height and 2 other locations as directed by the Engineer
Retaining Wall Number 55E0105 - Walls 456 & 457	At Third Points along the Walls
Sound Wall Number 55E0103 - Wall 445	Maximum Height and at 200 feet
Retaining Wall Number 55E0102 - Walls 442 & 444	Maximum Height and at 200 feet
Retaining Wall Number 55E0104 - Wall 453	Maximum Height and at 200 feet
Retaining Wall Number 55E0106 - Wall 96	Maximum Height and at 200 feet
Sound Wall Number 55E0101 - Wall 434	Maximum Height and at 200 feet
Montecito Box Culvert Extension	2 locations as directed by the Engineer
E22-N405/I-405 Sep 55-1096G Roadway, South of Abutment 1, North of Station "C2" 6+00	Maximum Height and at 200 feet
E22-N605/I-405 Sep 55-1097G Roadway, South of Abutment 1, North of "C-1" Station 15+00	Maximum Height and at 200 feet
E22-N405 Connector UC 55-0415 Roadway, North of Abutment 2, South of "C-2" Station 33+50	Maximum Height and at 200 feet
Stage 1, North of 55-1099 Abutment 1, North of Station 47+50	Maximum Height and at 200 feet
Stage 1, North of 55-1099 Abutment 1, South of Station 47+50	Maximum Height and at 200 feet
Stage 2, North of 55-1099 Abutment 1, North of Station 47+50	Maximum Height and at 200 feet
Stage 2, North of 55-1099 Abutment 1, South of Station 47+50	Maximum Height and at 200 feet
Stage 2, North of 55-1099 Abutment 3, South of Station 57+00	Maximum Height and at 200 feet
Stage 2, North of 55-1099 Abutment 3, North of Station 57+00	Maximum Height and at 200 feet
West of N405-W22 Connector OC, Abutment 1, West of "A-2" Station 16+50	Maximum Height and at 200 feet
North of Beverly Manor Road, between "C-3" Station 36+14 and "A" Station 438+86	Maximum Height and at 200 feet
North of Old Ranch Parkway Ramp between "A-2" Station 33+80 and "OR" Stations 16+50	Maximum Height and at 200 feet
West of N405-W22 Connector OC, Abutment 1, East of "A-2" Station 16+50	Maximum Height and at 200 feet
Between E22-N605/I-405 Sep 55-1097G and E22-N405 Connector UC 55-0415 on "C-1" Line	Maximum Height and at 200 feet
South of N405-W22 Connector 55-1100G between "A" Line Stations 446+00 and 449+00	Maximum Height and at 200 feet
Between N405-W22 Connector 55-1100G and Montecito Box between "A" Line Stations 452+00 and 463+50	Maximum Height and at 200 feet
North of Montecito Box between "A" Line Stations 464+50 and 468+50	Maximum Height and at 200 feet
North of "A" Line Station 468+50	Maximum Height and at 200 feet

CONTRACT NO. 12-071634

REVISED PER ADDENDUM NO. 1 DATED JUNE 24, 2010

### Surface Monuments

The Contractor shall place surface monuments on the faces of walls to facilitate measurement of vertical and lateral wall movements at:

Structure Name and Number	Surface Monuments
Retaining Wall Number 55E0105 - Walls 456 & 457	Second Panel Tier & Top at 200 feet
Retaining Wall Number 55E0102 - Walls 442 & 444	Second Panel Tier & Top at 200 feet
Retaining Wall Number 55E0104 - Wall 453	Second Panel Tier & Top at 200 feet
Retaining Wall Number 55E0106 - Wall 96	Second Panel Tier & Top at 200 feet
Sound Wall Number 55E0103 – Wall 445	Second Panel Tier & Top at 200 feet
Sound Wall Number 55E0101 – Wall 434	Second Panel Tier & Top at 200 feet

Movement monitoring shall commence when the second tier of wall panels has been placed and shall continue in accordance with the following schedule:

A.	Initial Reading	Second tier of panels placed
B.	During Wall Construction	Every working day
C.	First Month After Completion of Entire Wall	Once per week
D.	First Four Months After Completion of Entire Wall	Once per two weeks
E.	Thereafter	Once per month

The Contractor shall perform the movement monitoring and submit movement plots to the Engineer for review within two (2) working days after each reading. Movement monitoring data shall be collected and plotted by a surveyor who is registered as a Professional Land Surveyor in the State of California. Data collection procedures shall conform to the requirements of California Test 112. Data shall be plotted as movement (accurate to 0.01-foot) versus time.

At the discretion of the Engineer, the movement monitoring frequency may be reduced if monitoring results indicate that the wall movement is complete.

Full compensation for settlement and movement monitoring program shall be considered as included in the contract prices paid for the various items of work involved, and no additional compensation will be allowed therefor.

If the Contractor elects to use the "Weep Hole and Geocomposite Drain" alternative where permitted on the plans, the geocomposite drain shall conform to the details shown on the plans and the following:

- A. Geocomposite wall drain shall consist of a manufactured core not less than 0.25 inch thick nor more than 2 inches thick with one or both sides covered with a layer of filter fabric that will provide a drainage void. The drain shall produce a flow rate through the drainage void of at least 2.0 gallons per minute per foot of width at a hydraulic gradient of 1.0 and a minimum externally applied pressure of 3,500 psf.
- B. A Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications shall be furnished for the geocomposite drain certifying that the drain produces the required flow rate and complies with these special provisions. The Certificate of Compliance shall be accompanied by a flow capability graph for the geocomposite drain showing flow rates for externally applied pressures and hydraulic gradients. The flow capability graph shall be stamped with the verification of an independent testing laboratory.
- C. Filter fabric for geocomposite wall drain shall conform to the provisions in Section 88-1.02, "Filtration," of the Standard Specifications. Filter fabric shall be Class A.
- D. The manufactured core shall be either a preformed grid of embossed plastic, a mat of random shapes of plastic fibers, a drainage net consisting of a uniform pattern of polymeric strands forming 2 sets of continuous flow channels, or a system of plastic pillars and interconnections forming a semirigid mat.
- E. The core material and filter fabric shall be capable of maintaining the drainage void for the entire height of geocomposite drain. Filter fabric shall be integrally bonded to the side of the core material with the drainage void. Core material manufactured from impermeable plastic sheeting having nonconnecting corrugations shall be placed with the corrugations approximately perpendicular to the drainage collection system.
- F. The geocomposite drain shall be installed with the drainage void and the filter fabric facing the embankment. The fabric facing the embankment side shall overlap a minimum of 3 inches at all joints and wrap around the exterior edges a minimum of 3 inches beyond the exterior edge. If additional fabric is needed to provide overlap at joints and wrap-around at edges, the added fabric shall overlap the fabric on the geocomposite drain at least 6 inches and be attached thereto.

- G. Should the fabric on the geocomposite drain be torn or punctured, the damaged section shall be replaced completely or repaired by placing a piece of fabric that is large enough to cover the damaged area and provide a minimum 6-inch overlap.
- H. Plastic pipe shall conform to the provisions for edge drain pipe and edge drain outlets in Section 68-3, "Edge Drains," of the Standard Specifications.
- I. Treated permeable base to be placed around the slotted plastic pipe at the bottom of the geocomposite drain shall be cement treated permeable base conforming to the provisions for cement treated permeable base in Section 29, "Treated Permeable Bases," of the Standard Specifications and these special provisions.
- J. The treated permeable base shall be enclosed with a high density polyethylene sheet or PVC geomembrane, not less than 10 mils thick, that is bonded with a suitable adhesive to the concrete and geocomposite drain. Surfaces to receive the polyethylene sheet shall be cleaned before applying the adhesive. The treated permeable base shall be compacted with a vibrating shoe type compactor.

Full compensation for furnishing and placing pervious backfill material behind vertical wall channel at Montecito Reinforced Concrete Box Culvert Extension shall be considered as included in the cost of the various items of work involved, and no additional compensation shall be allowed therefor.

Full compensation for furnishing and placing low expansion material shall be considered as included in the cost of the various items of earthwork involved, and no additional compensation shall be allowed therefor.

If structure excavation or structure backfill for bridges is not otherwise designated by type and payment for the structure excavation or structure backfill has not otherwise been provided for in the Standard Specifications or these special provisions, the structure excavation or structure backfill will be measured and paid for as structure excavation (bridge) or structure backfill (bridge), respectively.

**BID ITEM LIST**  
**12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	018500	TEMPORARY CURB RAMP DETECTABLE WARNING SURFACE	SQFT	120		
42	141103	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	18,200		
43	150608	REMOVE CHAIN LINK FENCE	LF	4,740		
44	150662	REMOVE METAL BEAM GUARD RAILING	LF	9,440		
45	150713	REMOVE PAVEMENT MARKING	SQFT	770		
46	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	289,000		
47	150722	REMOVE PAVEMENT MARKER	EA	17,400		
48	150742	REMOVE ROADSIDE SIGN	EA	95		
49	150747	REMOVE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	26		
50	150760	REMOVE SIGN STRUCTURE	EA	17		
51	150804	REMOVE DRAINAGE FACILITY	EA	61		
52	150805	REMOVE CULVERT	LF	2,790		
53	018501	REMOVE SLOPE DRAIN	EA	3		
54	150825	REMOVE REINFORCED CONCRETE BOX CULVERT	LF	990		
55	150829	REMOVE RETAINING WALL	SQFT	9,060		
56	150846	REMOVE CONCRETE PAVEMENT	SQYD	40,700		
57	152440	ADJUST MANHOLE TO GRADE	EA	1		
58	152641	MODIFY SIGN STRUCTURE	EA	1		
59	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	4,220		
60	018502	REMOVE CONCRETE (HEADWALL)	CY	18		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	153214	REMOVE CONCRETE CURB	LF	6,200		
62	153218	REMOVE CONCRETE SIDEWALK	SQFT	5,060		
63	153220	REMOVE CONCRETE (CHANNEL)	CY	480		
64	153221	REMOVE CONCRETE BARRIER	LF	18,400		
65	018503	REMOVE CONCRETE (DITCH)	LF	13,400		
66	153246	REMOVE CONCRETE (MISCELLANEOUS)	SQFT	76		
67	153250	REMOVE SOUND WALL	SQFT	39,300		
68	156590	REMOVE CRASH CUSHION (SAND FILLED)	EA	1		
69	157551	BRIDGE REMOVAL, LOCATION A	LS	LUMP SUM	LUMP SUM	
70	157552	BRIDGE REMOVAL, LOCATION B	LS	LUMP SUM	LUMP SUM	
71	157554	BRIDGE REMOVAL, LOCATION D	LS	LUMP SUM	LUMP SUM	
72	157555	BRIDGE REMOVAL, LOCATION E	LS	LUMP SUM	LUMP SUM	
73	157566	BRIDGE REMOVAL (PORTION), LOCATION F	LS	LUMP SUM	LUMP SUM	
74	042614	BRIDGE REMOVAL (PORTION), LOCATION 10	LS	LUMP SUM	LUMP SUM	
75	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
76	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
77	190101	ROADWAY EXCAVATION	CY	356,000		
78	190106	ROADWAY EXCAVATION (TYPE Z-3) (AERIALY DEPOSITED LEAD)	CY	3,260		
79	190107	ROADWAY EXCAVATION (TYPE Y-1) (AERIALY DEPOSITED LEAD)	CY	8,700		
80	190108	ROADWAY EXCAVATION (TYPE Y-2) (AERIALY DEPOSITED LEAD)	CY	2,720		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	190110	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
82	190111	ADL BURIAL LOCATION REPORT	LS	LUMP SUM	LUMP SUM	
83 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	CY	28,055		
84 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	CY	5,728		
85 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	CY	17,025		
86 (F)	193006	STRUCTURE BACKFILL (SLURRY CEMENT)	CY	190		
87	018504	BACKFILL (SLURRY CEMENT)	CY	51		
88 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	CY	7,074		
89 (F)	193030	PERVIOUS BACKFILL MATERIAL	CY	161		
90 (F)	193031	PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	CY	143		
91 (F)	042615	LIGHTWEIGHT FILL (CELLULAR CONCRETE) (CLASS II)	CY	15,100		
92 (F)	042616	LIGHTWEIGHT FILL (CELLULAR CONCRETE) (CLASS IV)	CY	2,800		
93	194001	DITCH EXCAVATION	CY	15,300		
94 (F)	197028	EARTH RETAINING STRUCTURE, LOCATION 3	SQFT	15,100		
95 (F)	197029	EARTH RETAINING STRUCTURE, LOCATION 4	SQFT	25,100		
96 (F)	042617	EARTH RETAINING STRUCTURE, LOCATION 5	SQFT	17,250		
97 (F)	042618	EARTH RETAINING STRUCTURE, LOCATION 6	SQFT	4,000		
98 (F)	042619	EARTH RETAINING STRUCTURE, LOCATION 7	SQFT	8,950		
99 (F)	042620	PRECAST CONCRETE WALL	SQFT	14,750		
100	198001	IMPORTED BORROW	CY	149,000		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141	498016	16" CAST-IN-DRILLED-HOLE CONCRETE PILING (SOUND WALL)	LF	8,540		
142	498022	24" CAST-IN-DRILLED-HOLE CONCRETE PILING (SOUND WALL)	LF	840		
143	500001	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LUMP SUM	LUMP SUM	
144 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	7,837		
145 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	33,032		
146 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	CY	2,200		
147 (F)	510072	STRUCTURAL CONCRETE, BARRIER SLAB	CY	2,207		
148 (F)	510086	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	CY	792		
149 (F)	510090	STRUCTURAL CONCRETE, BOX CULVERT	CY	1,712		
150 (F)	018507	CLASS 1 CONCRETE (BIXBY CHANNEL)	CY	2,541		
151 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	1,177		
152 (F)	510524	MINOR CONCRETE (SOUND WALL)	CY	466		
153 (F)	511064	FRACTURED RIB TEXTURE	SQFT	25,692		
154 (F)	042625	SLATE TEXTURE	SQFT	80		
155	511106	DRILL AND BOND DOWEL	LF	75		
156	511110	DRILL AND BOND DOWEL (CHEMICAL ADHESIVE)	EA	34		
157 (F)	518002	SOUND WALL (MASONRY BLOCK)	SQFT	103,957		
158	518050	PTFE BEARING	EA	18		
159	518051	PTFE SPHERICAL BEARING	EA	15		
160	519092	JOINT SEAL ASSEMBLY (MR 2 1/2")	LF	42		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	519093	JOINT SEAL ASSEMBLY (MR 3")	LF	189		
162	519094	JOINT SEAL ASSEMBLY (MR 3 1/2")	LF	147		
163	519097	JOINT SEAL ASSEMBLY (MR 5")	LF	42		
164	519098	JOINT SEAL ASSEMBLY (MR 5 1/2")	LF	59		
165	519099	JOINT SEAL ASSEMBLY (MR 6")	LF	101		
166	519100	JOINT SEAL (MR 2")	LF	60		
167	519109	JOINT SEAL ASSEMBLY (MR 6 1/2")	LF	59		
168	042626	JOINT SEAL ASSEMBLY (MR 10 1/2")	LF	59		
169	042627	JOINT SEAL ASSEMBLY (MR 13")	LF	59		
170 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	10,650,900		
171 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	285,385		
172 (F)	520105	BAR REINFORCING STEEL (SOUND WALL)	LB	52,400		
173 (F)	520107	BAR REINFORCING STEEL (BOX CULVERT)	LB	252,000		
174 (F)	018508	BAR REINFORCING STEEL (CHANNEL)	LB	272,865		
175 (F)	520120	HEADED BAR REINFORCEMENT	EA	29,967		
176 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	LB	640,160		
177 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	640,160		
178	560233	FURNISH FORMED PANEL SIGN (OVERHEAD)	SQFT	8,660		
179	560244	FURNISH LAMINATED PANEL SIGN (1"-TYPE A)	SQFT	150		
180	560245	FURNISH LAMINATED PANEL SIGN (1"-TYPE B)	SQFT	310		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
181	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	890		
182	560249	FURNISH SINGLE SHEET ALUMINUM 0.080"-UNFRAMED)	SQFT	610		
183	560251	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED)	SQFT	130		
184	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	300		
185	561014	54" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	140		
186	561016	60" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	640		
187	018509	METAL (SOUND WALL MOUNTED SIGN)	LB	560		
188	562004	METAL (RAIL MOUNTED SIGN)	LB	1,530		
189	566011	ROADSIDE SIGN - ONE POST	EA	60		
190	566012	ROADSIDE SIGN - TWO POST	EA	13		
191	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	41		
192	568023	INSTALL ROADSIDE SIGN (LAMINATED WOOD BOX POST)	EA	4		
193	610001	FIELD LEAKAGE TESTING	LF	1,650		
194 (F)	018510	2" PLASTIC PIPE	LF	2,081		
195 (F)	680207	3" PLASTIC PIPE	LF	3,456		
196 (F)	018511	4" PLASTIC PIPE	LF	3,809		
197	650014	18" REINFORCED CONCRETE PIPE	LF	2,070		
198	650018	24" REINFORCED CONCRETE PIPE	LF	8,330		
199	650026	36" REINFORCED CONCRETE PIPE	LF	320		
200	650034	48" REINFORCED CONCRETE PIPE	LF	30		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
201	BLANK					
202	700617	DRAINAGE INLET MARKER	EA	3		
203	703233	GRATED LINE DRAIN	LF	2,060		
204	042628	12" WELDED STEEL PIPE CASING (BRIDGE)	LF	192		
205	703460	24" WELDED STEEL PIPE CASING (BRIDGE)	LF	302		
206	042629	36" WELDED STEEL PIPE CASING (BRIDGE)	LF	112		
207	018512	16" WELDED STEEL PIPE (0.375" WALL THICKNESS)	LF	160		
208	018513	24" WELDED STEEL PIPE (0.375" WALL THICKNESS)	LF	35		
209	705311	18" ALTERNATIVE FLARED END SECTION	EA	3		
210	705315	24" ALTERNATIVE FLARED END SECTION	EA	3		
211	721009	ROCK SLOPE PROTECTION (FACING, METHOD B)	TON	40		
212	721420	CONCRETE (DITCH LINING)	CY	1,390		
213 (F)	721810	SLOPE PAVING (CONCRETE)	CY	79		
214 (F)	042630	SLOPE PAVING (CONCRETE)(RIVER COBBLE)	CY	151		
215	729010	ROCK SLOPE PROTECTION FABRIC	SQYD	8,350		
216	018514	MINOR CONCRETE (CURB, GUTTER, SIDEWALK, BUS PAD, ROCK BLANKET AND ANCHOR BLOCK)	CY	500		
217 (F)	750001	MISCELLANEOUS IRON AND STEEL	LB	124,838		
218 (F)	750041	ISOLATION CASING	LB	49,700		
219 (F)	750498	MISCELLANEOUS METAL (RESTRAINER - CABLE TYPE)	LB	2,525		
220 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	2,220		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
241 (F)	839707	CONCRETE BARRIER (TYPE 60GA)	LF	2,962		
242	839708	CONCRETE BARRIER (TYPE 60GC)	LF	330		
243	839710	CONCRETE BARRIER (TYPE 60S)	LF	1,060		
244	018515	CONCRETE BARRIER (TYPE 60R)	LF	2,430		
245 (F)	042631	CONCRETE BARRIER (TYPE 60D) (MODIFIED)	LF	1,220		
246 (F)	839727	CONCRETE BARRIER (TYPE 736 MODIFIED)	LF	15,030		
247	839731	CONCRETE BARRIER (TYPE 736B)	LF	300		
248 (F)	839734	CONCRETE BARRIER (TYPE 736SV)	LF	2,835		
249	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	255,000		
250	840505	6" THERMOPLASTIC TRAFFIC STRIPE	LF	4,260		
251	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	25,700		
252	840508	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	12,300		
253	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	4,440		
254	840521	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6-1)	LF	260		
255	840525	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	141,000		
256	840526	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	2,910		
257	840550	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	2,890		
258	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	40,900		
259	850101	PAVEMENT MARKER (NON- REFLECTIVE)	EA	11,000		
260	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	12,600		

**BID ITEM LIST****12-071634**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
281	018530	TEMPORARY TRAFFIC MONITORING STATION (LOCATION 6)	LS	LUMP SUM	LUMP SUM	
282	018531	TEMPORARY TRAFFIC MONITORING STATION (LOCATION 7)	LS	LUMP SUM	LUMP SUM	
283	018532	TEMPORARY TRAFFIC MONITORING STATION (LOCATION 8)	LS	LUMP SUM	LUMP SUM	
284	860930	TRAFFIC MONITORING STATION	LS	LUMP SUM	LUMP SUM	
285	018533	TEMPORARY CLOSED CIRCUIT TELEVISION SYSTEM	LS	LUMP SUM	LUMP SUM	
286	018534	MODIFY RAMP METERING SYSTEM (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
287	018535	MODIFY RAMP METERING SYSTEM (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
288	018536	TEMPORARY RAMP METERING SYSTEM (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
289	018537	TEMPORARY RAMP METERING SYSTEMER (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
290	861497	MODIFY SIGNAL AND LIGHTING (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
291	861498	MODIFY SIGNAL AND LIGHTING (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
292	018538	TEMPORARY SIGNAL AND LIGHTING (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
293	018539	TEMPORARY SIGNAL AND LIGHTING (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
294	018540	COMMUNICATION SYSTEM	LS	LUMP SUM	LUMP SUM	
295	869075	SYSTEM TESTING AND DOCUMENTATION	LS	LUMP SUM	LUMP SUM	
296	869080	TRAINING	LS	LUMP SUM	LUMP SUM	
297	BLANK					
298	665112	12" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK)	LF	14		
299	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID: \_\_\_\_\_**