

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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April 4, 2011

04-Mrn-101-18.6/R22.3

04-264064

Project ID 0400000732

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN MARIN COUNTY IN AND NEAR NOVATO FROM ROUTE 37 TO ATHERTON 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 Tuesday, April 26, 2011.

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

Project Plan Sheets 3, 4, 8, 10, 14, 15, 16, 17, 18, 19, 20, 23, 24, 26, 27, 28, 54, 87, 92, 95, 109, 124, 135, 149, 150, 151, 179, 180, 199, 200, 242, 244, 256, 270, 272, 273, 278, 279, 280, 281, 426, 427, 428, 431, 432, 444, 446, 450, 452, 456, 458, 460, 464 and 466 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 136A and 136B are added. Copies of the added sheets are attached for addition to the project plans.

In the Special Provisions, Section 5-1.135, "AERIALY DEPOSITED LEAD, is added as attached.

In the Special Provisions, Section 8-1.02, "STATE-FURNISHED MATERIALS," the first paragraph is revised as follows:

"The State furnishes you with:

- Laminated wood box posts with metal caps for roadside signs.
- Model 170/2070 controller assemblies, including controller unit, completely wired controller cabinet, and detector sensor units."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the end of second paragraph.

"Top of bank is defined as back of abutment."

In the Special Provisions, Section 10-1.03, "WATER POLLUTION CONTROL," subsection "GENERAL," subsection "Summary," the third paragraph is revised as follows:

"This project is Risk Level 2."

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In the Special Provisions, Section 10-1.16, "COOPERATION," the first paragraph is revised as follows:

"It is anticipated that work by another contractor may be in progress adjacent to or within the limits of this project during progress of the work on this contract. The following table lists contracts anticipated to be in progress during this contract.

Contract No.	Co-Rte-PM	Location	Type of Work
04-1E3004	SF-101-3.4/8.3 SF-280- R6.6/R0.6 MRN-101- 7.4/R20.9	In San Francisco and Marin Counties on Route 101 from 23rd Street O/C to Franklin Avenue Overhead	Treat Bridge Decks
04-0C8524	MRN-101- 12.8/18.8	In San Rafael from 0.1 mile North of San Pedro Road OC to 0.1 Mile South of Novato Blvd OC	Rehabilitate Roadway
04-264074	MRN-101- 23.3/27.6	In Marin and Sonoma Counties, on Route 101, at San Antonio Road	Construct Interchange
04-264084	SON-101-0.4/2.6	In Sonoma County, on Route 101, at Petaluma Blvd South	Construct Interchange
04-264094	MRN-101- 26.5/27.6	In Marin and Sonoma Counties, on Route 101, at and near San Antonio Road	Realign Route 101
N/A	MRN-101-R20.5	Novato Creek	Dredging by Marin County Flood Control and Water Conservation District
04-2640G4	MRN-101- R20.6/R20.9	In Marin County on Route 101 in Novato, from Novato Creek Bridge to Franklin Avenue Overhead	Highway Widening

In the Special Provisions, Section 10-1.32, "EXISTING HIGHWAY FACILITIES," subsection "EARTH MATERIAL CONTAINING LEAD," is revised as attached.

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In the Special Provisions, Section 10-1.33, "REMOVAL OF ASBESTOS CONTAINING MATERIAL - BRIDGE AND NON-BUILDING STRUCTURE," subsection "MEASUREMENT AND PAYMENT," the first paragraph is revised as follows:

"Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing the Asbestos Compliance Plan, including paying the Certified Industrial Hygienist, and for providing personal protective equipment, training, medical surveillance, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer will be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore."

In the Special Provisions, Section 10-1.34, "CLEARING AND GRUBBING," the following paragraph is added as follows:

"The contract lump sum price paid for clearing and grubbing includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved, including removal of stumps and debris from trees cut prior to this project."

In the Special Provisions, Section 10-1.35, "EARTHWORK," the second paragraph is revised as follows:

"Surplus excavated material not designated as hazardous waste due to aurally deposited lead shall become the property of the Contractor and shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications."

In the Special Provisions, Section 10-1.375, "MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATION OF AERIALY DEPOSITED LEAD," is added as attached.

In the Special Provisions, Section 10-1.435, "IMPORTED BIOFILTRATION SOIL," is added as attached.

In the Special Provisions, Section 10-1.795, "UNDERDRAIN (BIOFILTRATION SWALE)," is added as attached.

In the Special Provisions, Section 10-1.82, "MISCELLANEOUS FACILITIES," the first paragraph is revised as follows:

"Precast concrete pipe inlets shall conform to the provisions in Section 70, "Miscellaneous Facilities," of the Standard Specifications ."

In the Bid book, in the "Bid Item List," Items 35, 56, 68, 69, 81, 82, 83, 84, 85, 86, 87, 88, 91, 92, 93, 94, 95, 96, 97, 99, 116, 124, 125, 129, 130, 141, 142, 146, 166, 167, 170, 174, 175, 177, 179, 182, 184, 185, 189, 190, and 193 are revised, Items 214, 215, 216, and 217 are added and Items 137, 161, and 213 are deleted as attached.

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To Bid book holders:

Replace the entire "Bid Item List" in the Bid book with the attached revised Bid Item List. The revised Bid Item List is to be used in the bid.

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

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

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

Inform subcontractors and suppliers as necessary.

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

**[http://www.dot.ca.gov/hq/esc/oe/project\\_ads\\_addenda/04/04-264064](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-264064)**

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,

  
for REBECCA D. HARNAGEL

Chief, Office of Plans, Specifications & Estimates  
Office Engineer  
Division of Engineering Services

Attachments

### 5-1.135 AERIALLY DEPOSITED LEAD

Aerially deposited lead is present within the project limits. Aerially deposited lead is lead deposited within unpaved areas or formerly unpaved areas, primarily due to vehicle emissions.

Attention is directed to "Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead" and "Supplemental Project Information" of these special provisions. For handling non-hazardous waste earth material, see "Earth Material Containing Lead" of these special provisions.

Portions of the site investigation report are included in the "Material Information" handout. The complete report, entitled "US Route 101 Marin-Sonoma Narrows, Segment A1 Project, Marin County, California," is available for inspection at the Department of Transportation, 111 Grand Avenue, Oakland, CA 94612.

The Department has received from the California Department of Toxic Substances Control (DTSC) a Variance regarding the use of material containing aerially deposited lead. This project is subject to the conditions of the Variance, as amended. The Variance is available for inspection at the Department of Transportation, District 4, 111 Grand Avenue, Oakland, CA 94612.

Once the Contractor has completed the placement of material containing aerially deposited lead in conformance with these special provisions and as directed by the Engineer, the Contractor shall have no responsibility for such materials. The Department will not consider the Contractor a generator of such contaminated materials.

Excavation, reuse, and disposal of material with aerially deposited lead shall be in conformance with all rules and regulations including, but not limited to, those of the following agencies:

- A. United States Department of Transportation,
- B. United States Environmental Protection Agency,
- C. California Environmental Protection Agency,
- D. California Department of Health Services,
- E. Department of Toxic Substances Control,
- F. California Division of Occupational Safety and Health Administration,
- G. Integrated Waste Management Board,
- H. Regional Water Quality Control Board, San Francisco Bay Region,
- I. State Air Resources Control Board, and
- J. Bay Area Air Quality Management District.

Materials containing hazardous levels of lead shall be transported and disposed of in conformance with Federal and State laws and regulations, as amended, and county and municipal ordinances and regulations, as amended. Laws and regulations that govern this work include, but are not limited to:

- A. Health and Safety Code, Division 20, Chapter 6.5 (California Hazardous Waste Control Act),
- B. Title 22, California Code of Regulations, Division 4.5 (Environmental Health Standards for the Management of Hazardous Waste), and
- C. Title 8, California Code of Regulations.

## **EARTH MATERIAL CONTAINING LEAD**

### **General**

This work includes handling earth material containing non-hazardous waste concentrations of lead under the Standard Specifications and these special provisions.

Handle earth material with hazardous waste concentrations of lead under "Aerially Deposited Lead" and "Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead" of these special provisions.

### **Submittals**

Submit a lead compliance plan under Section 7-1.07, "Lead Compliance Plan," of the Standard Specifications.

### **Project Conditions**

Lead is present in earth material within the project limits at the locations shown below in the table "Earth Material Management" at average concentrations below 1,000 mg/kg total lead and below 5 mg/l soluble lead. This earth material within the project limits:

1. Is not a hazardous waste
2. Does not require disposal at a permitted landfill or solid waste disposal facility

Lead has been detected in earth material in unpaved areas of the highway. Non-hazardous- waste levels of lead found within the project limits range from less than 5 to 990 mg/kg total lead with an average concentration of 60 mg/kg total lead as analyzed by EPA Test Method 6010 or EPA Test Method 7000 series and based upon a 95% upper confidence limit. These levels of lead found within the project limits have a predicted average soluble concentration of 2.8 mg/l as analyzed by the California Waste Extraction Test and based upon a 95% upper confidence limit.

### **Construction**

Handle earth material containing lead under all applicable laws, rules, and regulations, including those of the following agencies:

1. Cal/OSHA
2. CA Regional Water Quality Control Board, San Francisco Bay Region
3. CA Department of Toxic Substances Control

The following table lists the locations and corresponding depths of proposed excavation of non-hazardous waste material (earth material containing lead). Manage earth material as shown in the following table.

**Earth Material Management**

Location	Depth	Management requirements
Route 101-median	0-3.5 feet	Manage and handle the material as a single waste decision unit. Do not excavate and separate the material in layers. Properties of material excavated from these locations are assessed for disposal by statistical methods. The assessments are for the material excavated to the full necessary excavation depth for the proposed subsurface scope of work.
Hanna Ranch Road- northbound on-ramp	0-3.5 feet	
Atherton Avenue- northbound on-ramp	0-5.5 feet	
Rowland Boulevard- northbound on-ramp	0-3.5 feet	
Atherton Avenue- southbound on-ramp	0-3.5 feet	
Redwood Road-southbound sound wall (SW1)	0-5.5 feet	
Franklin Avenue-southbound sound wall (SW2)	0-5.5 feet	
Franklin Avenue-northbound sound wall (SW3)	0-5.5 feet	
Cherry Street/Armstrong Avenue-northbound sound wall (SW4)	0-5.5 feet	

If this earth material is disposed of:

1. Dispose of under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications
2. Disclose the lead concentration of the earth material to the receiving property owner when obtaining authorization for disposal on the property
3. Obtain the receiving property owner's acknowledgment of lead concentration disclosure in the written authorization for disposal
4. You are responsible for any additional sampling and analysis required by the receiving property owner

If you choose to dispose of this earth material at a commercial landfill:

1. Transport it to a Class III or Class II landfill appropriately permitted to receive the material
2. You are responsible for identifying the appropriately permitted landfill to receive the earth material and for all associated trucking and disposal costs including any additional sampling and analysis required by the receiving landfill.

**Measurement and Payment**

Full compensation for handling earth material containing lead (non-hazardous waste concentrations) is included in the contract items of work involved, and no additional compensation will be allowed therefor.

## **10-1.375 MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALY DEPOSITED LEAD**

Earthwork involving material containing hazardous waste concentrations of aerially deposited lead shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Attention is directed to "Aerially Deposited Lead" of these special provisions. For handling earth material containing non-hazardous waste concentrations of lead, comply with "Earth Material Containing Lead" of these special provisions.

Type Z-2 material contains aerially deposited lead in average concentrations (using the 95 percent upper confidence limit) greater than or equal to 1000 mg/kg total lead; greater than or equal to 5.0 mg/L soluble lead (as tested using the California Waste Extraction Test) and the material is surplus; or greater than 3397 mg/kg total lead. Type Z-2 material exists at the S. Novato Boulevard on-ramp to southbound Route 101 for a depth of 0 to 3 feet below original ground, in the unpaved area of the proposed roadway excavation to the left of the IL1 line from station 9+00 to station 11+00, and in the unpaved area of the proposed roadway excavation to the right of the IL1 line from station 13+00 to station 19+00. This material is hazardous waste regulated by the State of California and shall be transported to and disposed of at a Class I disposal site. Material excavated from these areas shall be transported by a hazardous waste transporter registered with the DTSC using the required procedures for creating a manifest for the material. The vehicles used to transport the hazardous material shall conform to the current certifications of compliance of the DTSC.

### **LEAD COMPLIANCE PLAN**

Submit a lead compliance plan under Section 7-1.07, "Lead Compliance Plan," of the Standard Specifications.

### **EXCAVATION AND TRANSPORTATION PLAN**

Within 15 days after approval of the contract, the Contractor shall submit 3 copies of an Excavation and Transportation Plan to the Engineer. The Engineer will have 7 days to review the plan. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the plan within 7 days of receipt of the Engineer's comments. The Engineer will have 7 days to review the revisions. Upon the Engineer's approval of the plan, 3 additional copies incorporating the required changes shall be submitted to the Engineer. Minor changes to or clarifications of the initial submittal may be made and attached as amendments to the Excavation and Transportation Plan. In order to allow construction to proceed, the Engineer may conditionally approve the plan while minor revisions or amendments are being completed.

The Contractor shall prepare the written, project specific Excavation and Transportation Plan establishing the procedures the Contractor will use to comply with requirements for excavating, stockpiling, transporting, and placing (or disposing) of material containing hazardous waste concentrations of aerially deposited lead. The plan shall conform to the regulations of the DTSC and Cal-OSHA. The sampling and analysis portions of the Excavation and Transportation Plan shall meet the requirements for the design and development of the sampling plan, statistical analysis, and reporting of test results contained in USEPA, SW 846, "Test Methods for Evaluating Solid Waste," Volume II: Field Manual Physical/Chemical, Chapter Nine, Section 9.1. The plan shall contain, but not be limited to the following elements:

- A. Excavation schedule (by location and date),
- B. Temporary locations of stockpiled material,
- C. Sampling and analysis plans for areas after removal of a stockpile,
  - 1. Location and number of samples,
  - 2. Analytical laboratory,
- D. Dust control measures,
- E. Transportation equipment and routes,
- F. Method for preventing spills and tracking material onto public roads,
- G. Truck waiting and staging areas,
- H. Site for disposal of hazardous waste,
- I. Spill Contingency Plan for material containing hazardous waste concentrations of aerially deposited lead.

## **DUST CONTROL**

Excavation, transportation, placement, and handling of material containing hazardous waste concentrations of aerially deposited lead shall result in no visible dust migration. The Contractor shall have a water truck or tank on the job site at all times while clearing and grubbing and performing earthwork operations in work areas containing hazardous waste concentrations of aerially deposited lead.

## **STOCKPILING**

Stockpiles of material containing hazardous waste concentrations of aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or one foot of non-hazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

## **MATERIAL TRANSPORTATION**

Prior to traveling on public roads, loose and extraneous material shall be removed from surfaces outside the cargo areas of the transporting vehicles and the cargo shall be covered with tarpaulins or other cover, as outlined in the approved Excavation and Transportation Plan. The Contractor shall be responsible for costs due to spillage of material containing lead during transport.

The Department will not consider the Contractor a generator of the hazardous material, and the Contractor will not be obligated for further cleanup, removal, or remedial action for such material handled or disposed of in conformance with the requirements specified in these special provisions and the appropriate State and Federal laws and regulations and county and municipal ordinances and regulations regarding hazardous waste.

## **DISPOSAL**

Surplus material for which the lead content is not known shall be analyzed for aerially deposited lead by the Contractor prior to removing the material from within the project limits. The Contractor shall submit a sampling and analysis plan and the name of the analytical laboratory to the Engineer at least 15 days prior to beginning sampling or analysis. The Contractor shall use a laboratory certified by the California Department of Health Services. Sampling shall be at a minimum rate of one sample for each 200 cubic yards of surplus material and tested for lead using EPA Method 6010 or 7000 series.

Materials containing hazardous waste concentrations of aerially deposited lead shall be disposed of within California if possible. The disposal site shall be operating under a permit issued by the appropriate California Environmental Protection Agency board or department. If no California permitted disposal site can accept the roadway excavation (ADL) material, the disposal location will be an appropriate site permitted to accept hazardous waste as directed by the Engineer.

The Engineer will obtain the Environmental Protection Agency Generator Identification Number for hazardous waste disposal. The Engineer will sign all hazardous waste manifests. The Contractor shall notify the Engineer 5 business days before the manifests are to be signed.

Sampling, analyzing, transporting, and disposing of material containing hazardous waste concentrations of aerially deposited lead excavated outside the pay limits of excavation will be at the Contractor's expense.

## **MEASUREMENT AND PAYMENT**

Quantities of roadway excavation (aerially deposited lead), of the types shown in the Engineer's Estimate, will be measured and paid for in the same manner specified for roadway excavation, in Section 19, "Earthwork," of the Standard Specifications.

Full compensation for preparing an approved Excavation and Transportation Plan, transporting material containing hazardous waste concentrations of aerially deposited lead reused in the work from location to location, and transporting and disposing of material containing hazardous waste concentrations of aerially deposited lead shall be considered as included in the contract prices paid per cubic yard for the items of roadway excavation (aerially deposited lead) of the types involved, and no additional compensation will be allowed therefor.

No payment for stockpiling of material containing hazardous waste concentrations of aerially deposited lead will be made, unless the stockpiling is ordered by the Engineer.

Sampling, analyses, and reporting of results for surplus material not previously sampled will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

Additional disposal costs for hazardous waste disposal at an out of state permitted hazardous waste disposal site, will be paid for as extra work as specified in Section 4-1.03D, "Extra Work," of the Standard Specification.

## 10-1.435 IMPORTED BIOFILTRATION SOIL

### GENERAL

#### Summary

This work includes furnishing, and applying imported biofiltration soil.

#### Submittals

Compost: Before mixing compost with sand and topsoil, submit:

1. A Certificate of Compliance from the compost supplier in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.
2. A copy of the compost producer's compost technical data sheet. The compost technical data sheet must include:
  - 2.1. Laboratory analytical test results
  - 2.2. List of product ingredients
3. A copy of the compost producers Seal of Testing Assurance certification.

Imported biofiltration soil: Imported biofiltration soil must be accompanied by a Certificate of Compliance, from the soil supplier, in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

#### Quality Control and Assurance

Saturated hydraulic conductivity for imported biofiltration soil must be at least 5 inches per hour.

### MATERIAL

Imported biofiltration soil consists of a uniform mixture of sand, compost, and topsoil. The ratio of the components of imported biofiltration soil by volume must consist of two-parts sand; one-part compost; 0.5-part topsoil.

#### Sand

Sand must be free of wood, waste, coating such as clay, stone dust, carbonate, or any other deleterious material. All aggregate passing No. 200 sieve size must be non-plastic. Sand must be graded within the following limits:

Sieve Sizes	Percentage Passing
3/8"	100
No. 4	90 - 100
No. 8	70 - 100
No. 16	40 - 95
No. 30	15 - 70
No. 40	5-55
No. 100	0 - 15
No. 200	0 - 5

Grain size analysis results of the sand component must be performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.

## **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	6.5–8.0
Soluble Salts	TMECC 04.10-A Electrical Conductivity 1:5 Slurry Method dS/m (mmhos/cm)	0–6.0
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	35–75
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	Inches      % Passing 3            100% 1/2         0 – 95% 1/4         0-75%  Max. Length 4 inches
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).

### **Topsoil**

Topsoil must be free of wood, waste or other deleterious material. The topsoil texture must be loamy. Overall dry weight percentages must be 60 to 90 percent sand, with less than 20 percent passing the No.200 sieve, less than 5 percent clay, and no gravel.

### **CONSTRUCTION**

Comply with Section 20-3.02, "Preparation," of the Standard Specifications.

Place imported biofiltration soil in lifts 8 to 12 inches. Lifts are not to be compacted.

### **MEASUREMENT AND PAYMENT**

Quantity of imported biofiltration soil is measured by the cubic yard.

The contract unit price paid per cubic yard for imported biofiltration soil includes full compensation for furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved in imported biofiltration soil, including testing, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

**10-1.795 UNDERDRAIN (BIOFILTRATION SWALE)**

Perforated plastic pipe underdrains for biofiltration swale shall conform to the provisions in Section 68-1, "Underdrains," of the Standard Specifications and these special provisions.

The contract price paid per linear foot for perforated plastic pipe underdrains shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing pipe underdrains complete in place, including non-perforated connecting pipe, excavation, filter fabric, and permeable material, and structure backfill if required, as shown on the plans, as specified in the Standard Specifications and the special provisions, and as directed by the Engineer.

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070012	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
2	070018	TIME-RELATED OVERHEAD	LS	LUMP SUM	LUMP SUM	
3	071321	TEMPORARY FENCE (TYPE CL-6)	LF	59		
4	071325	TEMPORARY FENCE (TYPE ESA)	LF	19,200		
5	074015	TEMPORARY ACTIVE TREATMENT SYSTEM	LS	LUMP SUM	LUMP SUM	
6	074016	CONSTRUCTION SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
7	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
8	074029	TEMPORARY SILT FENCE	LF	3,720		
9	074033	TEMPORARY CONSTRUCTION ENTRANCE	EA	19		
10	074034	TEMPORARY COVER	SQYD	15,000		
11	074035	TEMPORARY CHECK DAM	LF	1,820		
12	074037	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	6		
13	074038	TEMPORARY DRAINAGE INLET PROTECTION	EA	170		
14	074040	TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	SQYD	6,370		
15	074041	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
16	074042	TEMPORARY CONCRETE WASHOUT (PORTABLE)	LS	LUMP SUM	LUMP SUM	
17	074055	TEMPORARY SOIL BINDER	SQYD	300,000		
18	074056	RAIN EVENT ACTION PLAN	EA	90		
19	074057	STORM WATER ANNUAL REPORT	EA	3		
20	074058	STORM WATER SAMPLING AND ANALYSIS DAY	EA	40		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
22	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
23	120120	TYPE III BARRICADE	EA	53		
24	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	LF	89,100		
25	120165	CHANNELIZER (SURFACE MOUNTED)	EA	760		
26	120300	TEMPORARY PAVEMENT MARKER	EA	11,800		
27	128650	PORTABLE CHANGEABLE MESSAGE SIGN	LS	LUMP SUM	LUMP SUM	
28	129000	TEMPORARY RAILING (TYPE K)	LF	47,500		
29	129100	TEMPORARY CRASH CUSHION MODULE	EA	210		
30	019965	ALTERNATIVE TEMPORARY CRASH CUSHION	EA	130		
31	019966	CLEANING AND INSPECTING PIPE	EA	2		
32	150206	ABANDON CULVERT	EA	5		
33	019967	ABANDON IRRIGATION CROSSOVER	EA	5		
34	150605	REMOVE FENCE	LF	1,200		
35	150662	REMOVE METAL BEAM GUARD RAILING	LF	20,300		
36	150713	REMOVE PAVEMENT MARKING	SQFT	1,470		
37	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	88,200		
38	150742	REMOVE ROADSIDE SIGN	EA	12		
39	150760	REMOVE SIGN STRUCTURE	EA	2		
40	150763	REMOVE SIGN PANEL	EA	9		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	150771	REMOVE ASPHALT CONCRETE DIKE	LF	3,910		
42	150805	REMOVE CULVERT	EA	23		
43	150820	REMOVE INLET	EA	62		
44	150823	REMOVE DOWNDRAIN	EA	3		
45	150829	REMOVE RETAINING WALL	LF	46		
46	151270	SALVAGE METAL BRIDGE RAILING	LF	820		
47	152394	RELOCATE SIGN STRUCTURE	LS	LUMP SUM	LUMP SUM	
48	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	16,100		
49	153210	REMOVE CONCRETE	CY	180		
50	155003	CAP INLET	EA	9		
51	157561	BRIDGE REMOVAL (PORTION), LOCATION A	LS	LUMP SUM	LUMP SUM	
52	157562	BRIDGE REMOVAL (PORTION), LOCATION B	LS	LUMP SUM	LUMP SUM	
53	157563	BRIDGE REMOVAL (PORTION), LOCATION C	LS	LUMP SUM	LUMP SUM	
54	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
55	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
56	190101	ROADWAY EXCAVATION	CY	37,700		
57	190110	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
58 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	CY	1,444		
59 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	CY	2,969		
60 (F)	042961	STRUCTURE EXCAVATION (CRASH WALL)	CY	1,080		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	CY	945		
62 (F)	193006	STRUCTURE BACKFILL (SLURRY CEMENT)	CY	1,605		
63 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	CY	2,660		
64 (F)	193030	PERVIOUS BACKFILL MATERIAL	CY	46		
65 (F)	193031	PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	CY	83		
66 (F)	042962	STRUCTURE BACKFILL (CRASH WALL)	CY	645		
67	193114	SAND BACKFILL	CY	49		
68	194001	DITCH EXCAVATION	CY	1,690		
69	198007	IMPORTED MATERIAL (SHOULDER BACKING)	TON	1,540		
70	203002	EROSION CONTROL (COMPOST BLANKET)	CY	810		
71	203021	FIBER ROLLS	LF	6,810		
72	203025	COMPOST (INCORPORATE)	SQYD	10,200		
73	203026	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	12		
74	203031	EROSION CONTROL (HYDROSEED) (SQFT)	SQFT	611,000		
75	203034	ROLLED EROSION CONTROL PRODUCT (NETTING)	SQFT	41,500		
76	204013	PLANT (GROUP M)	EA	1,390		
77	204017	PLANT (GROUP W)	EA	28		
78	208808	8" WELDED STEEL PIPE CONDUIT (.250" THICK)	LF	350		
79	208906	EXTEND 8" CONDUIT	LF	300		
80	220101	FINISHING ROADWAY	LS	LUMP SUM	LUMP SUM	

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	250401	CLASS 4 AGGREGATE SUBBASE	CY	26,600		
82	260201	CLASS 2 AGGREGATE BASE	CY	770		
83	280000	LEAN CONCRETE BASE	CY	17,800		
84	374207	CRACK TREATMENT	LNMI	19		
85	390095	REPLACE ASPHALT CONCRETE SURFACING	CY	2,190		
86	390131	HOT MIX ASPHALT	TON	30,000		
87	390134	HOT MIX ASPHALT (OPEN GRADED)	TON	11,600		
88	390137	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TON	10,600		
89	394050	RUMBLE STRIP	STA	14		
90	394060	DATA CORE	LS	LUMP SUM	LUMP SUM	
91	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	570		
92	394075	PLACE HOT MIX ASPHALT DIKE (TYPE D)	LF	6,280		
93	394076	PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	620		
94	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	1,360		
95	394090	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	SQYD	1,760		
96	397005	TACK COAT	TON	120		
97	401108	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)	CY	12		
98	490603	24" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	1,860		
99	490611	72" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	208		
100	490618	96" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	105		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101	042963	FURNISH PILING (CLASS 140) (ALTERNATIVE X)	LF	813		
102	042964	DRIVE PILE (CLASS 140) (ALTERNATIVE X)	EA	12		
103	042965	FURNISH PILING (CLASS 200) (ALTERNATIVE X)	LF	274		
104	042966	DRIVE PILE (CLASS 200) (ALTERNATIVE X)	EA	4		
105	042967	FURNISH PILING (CLASS 90 MODIFIED) (ALTERNATIVE X)	LF	1,015		
106	042968	DRIVE PILE (CLASS 90 MODIFIED) (ALTERNATIVE X)	EA	43		
107	495115	FURNISH 24" CAST-IN-STEEL SHELL CONCRETE PILING	LF	658		
108	495116	DRIVE 24" CAST-IN-STEEL SHELL CONCRETE PILE	EA	8		
109	498016	16" CAST-IN-DRILLED-HOLE CONCRETE PILING (SOUND WALL)	LF	4,720		
110	498022	24" CAST-IN-DRILLED-HOLE CONCRETE PILING (SOUND WALL)	LF	82		
111	500001	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LUMP SUM	LUMP SUM	
112 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	187		
113 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	1,880		
114 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	CY	1,376		
115 (F)	042969	STRUCTURAL CONCRETE, CRASH WALL	CY	691		
116 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	233.2		
117 (F)	019968	MINOR CONCRETE (APRON)	CY	101		
118 (F)	510524	MINOR CONCRETE (SOUND WALL)	CY	9		
119 (F)	019969	MINOR CONCRETE (HEADWALL)	CY	11		
120	511035	ARCHITECTURAL TREATMENT	SQFT	2,600		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	511047	ANTI-GRAFFITI COATING	SQFT	86,600		
122	511106	DRILL AND BOND DOWEL	LF	152		
123	042970	JACKING SUPERSTRUCTURE	LS	LUMP SUM	LUMP SUM	
124 (F)	518002	SOUND WALL (MASONRY BLOCK)	SQFT	39,272		
125 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	1,011,390		
126 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	98,570		
127 (F)	042971	BAR REINFORCING STEEL (CRASH WALL)	LB	87,500		
128 (F)	520120	HEADED BAR REINFORCEMENT	EA	408		
129 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	LB	66,747		
130 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	66,747		
131	560233	FURNISH FORMED PANEL SIGN (OVERHEAD)	SQFT	1,210		
132	560244	FURNISH LAMINATED PANEL SIGN (1"-TYPE A)	SQFT	300		
133	560245	FURNISH LAMINATED PANEL SIGN (1"-TYPE B)	SQFT	180		
134	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	15		
135	560249	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED)	SQFT	940		
136	561005	36" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	120		
137	BLANK					
138	561016	60" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	69		
139	562002	METAL (BARRIER MOUNTED SIGN)	LB	72		
140	566011	ROADSIDE SIGN - ONE POST	EA	32		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141	566012	ROADSIDE SIGN - TWO POST	EA	4		
142	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	16		
143	568016	INSTALL SIGN PANEL ON EXISTING FRAME	SQFT	1,210		
144	568023	INSTALL ROADSIDE SIGN (LAMINATED WOOD BOX POST)	EA	2		
145	620100	18" ALTERNATIVE PIPE CULVERT	LF	4,870		
146	620140	24" ALTERNATIVE PIPE CULVERT	LF	44		
147	650038	54" REINFORCED CONCRETE PIPE	LF	230		
148	019970	48" REINFORCED CONCRETE PIPE (CLASS II)	LF	400		
149	019971	18" REINFORCED CONCRETE PIPE (CLASS II, RUBBER GASKET JOINT)	LF	3,170		
150	652215	24" REINFORCED CONCRETE PIPE (CLASS II, RUBBER GASKET JOINT)	LF	420		
151	655532	JACKED 48" REINFORCED CONCRETE PIPE (CLASS V)	LF	470		
152	019972	14" X 23" OVAL SHAPED REINFORCED TE PIPE (CLASS III, RUBBER GASKET JOINT)	LF	530		
153	019973	12" CORRUGATED STEEL PIPE (.168" THICK)	LF	13		
154	019974	18" CORRUGATED STEEL PIPE (.168" THICK)	LF	80		
155	019975	24" CORRUGATED STEEL PIPE (.168" THICK)	LF	5		
156	680405	8" PERFORATED STEEL PIPE UNDERDRAIN (.064" THICK)	LF	48		
157	019976	18" CORRUGATED STEEL PIPE DOWNDRAIN (.168" THICK)	LF	85		
158	690105	8" CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK)	LF	53		
159	692305	12" ANCHOR ASSEMBLY	EA	4		
160	705011	18" STEEL FLARED END SECTION	EA	2		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	BLANK					
162	707117	36" PRECAST CONCRETE PIPE INLET	LF	120		
163	721010	ROCK SLOPE PROTECTION (BACKING NO. 1, METHOD B)	CY	250		
164 (F)	721810	SLOPE PAVING (CONCRETE)	CY	96		
165	042972	SLOPE PAVING (CONCRETE) (CONCRETE PAVER)	SQFT	2,100		
166	729010	ROCK SLOPE PROTECTION FABRIC	SQYD	530		
167	731502	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	CY	450		
168 (F)	750001	MISCELLANEOUS IRON AND STEEL	LB	50,419		
169	800321	CHAIN LINK FENCE (TYPE CL-4, VINYL-CLAD)	LF	150		
170	800360	CHAIN LINK FENCE (TYPE CL-6)	LF	70		
171	802580	12' CHAIN LINK GATE (TYPE CL-6)	EA	2		
172	820112	MARKER (CULVERT)	EA	93		
173	019977	MARKER (CULVERT, BARRIER MOUNTED)	EA	12		
174	832001	METAL BEAM GUARD RAILING	LF	1,100		
175	832070	VEGETATION CONTROL (MINOR CONCRETE)	SQYD	6,330		
176 (F)	833033	CHAIN LINK RAILING (TYPE 7 MODIFIED)	LF	109		
177	839310	DOUBLE THRIE BEAM BARRIER	LF	8,750		
178	839312	DOUBLE THRIE BEAM BARRIER (STEEL POST)	LF	1,240		
179	839541	TRANSITION RAILING (TYPE WB)	EA	10		
180	839542	TRANSITION RAILING (TYPE DTB)	EA	6		

**BID ITEM LIST**  
**04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
181	839576	END CAP (TYPE A)	EA	1		
182	839578	END CAP (TYPE TC)	EA	22		
183	839581	END ANCHOR ASSEMBLY (TYPE SFT)	EA	13		
184	839584	ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	5		
185	839585	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	15		
186 (F)	839725	CONCRETE BARRIER (TYPE 736)	LF	1,113		
187 (F)	839727	CONCRETE BARRIER (TYPE 736 MODIFIED)	LF	1,310		
188	839734	CONCRETE BARRIER (TYPE 736SV)	LF	1,680		
189	019978	CONCRETE BARRIER (TYPE 60 MODIFIED)	LF	160		
190	019979	CONCRETE BARRIER (TYPE 60C MODIFIED)	LF	6,760		
191	019980	CONCRETE BARRIER (TYPE 60D MODIFIED)	LF	1,010		
192	019981	CONCRETE BARRIER (TYPE 60E MODIFIED)	LF	330		
193	019982	CONCRETE BARRIER (TYPE 60R)	LF	260		
194	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	80,100		
195	840505	6" THERMOPLASTIC TRAFFIC STRIPE	LF	690		
196	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	10,700		
197	840508	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	1,640		
198	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	1,440		
199	840525	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	90,100		
200	840526	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	2,190		

**BID ITEM LIST****04-264064**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
201	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	11,200		
202	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
203	860460	LIGHTING AND SIGN ILLUMINATION	LS	LUMP SUM	LUMP SUM	
204	860503	EXTINGUISHABLE MESSAGE SIGN	LS	LUMP SUM	LUMP SUM	
205	019983	RELOCATE CHANGEABLE MESSAGE SIGN	LS	LUMP SUM	LUMP SUM	
206	860792	COMMUNICATION CONDUIT (BRIDGE)	LS	LUMP SUM	LUMP SUM	
207	860797	ELECTRIC SERVICE (IRRIGATION)	LS	LUMP SUM	LUMP SUM	
208	019984	WIRELESS MAGNETOMETER VEHICLE DETECTION SYSTEM	LS	LUMP SUM	LUMP SUM	
209	860930	TRAFFIC MONITORING STATION	LS	LUMP SUM	LUMP SUM	
210	860990	CLOSED CIRCUIT TELEVISION SYSTEM	LS	LUMP SUM	LUMP SUM	
211	861100	RAMP METERING SYSTEM	LS	LUMP SUM	LUMP SUM	
212	019985	FIBER OPTIC CONDUIT SYSTEM	LS	LUMP SUM	LUMP SUM	
213	BLANK					
214	680902	6" PERFORATED PLASTIC PIPE UNDERDRAIN	LF	1,550		
215	020692	IMPORTED BIOFILTRATION SOIL	CY	740		
216	190105	ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	CY	3,960		
217	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID  
FOR ITEMS:**

**\$** \_\_\_\_\_

**TOTAL BID  
FOR TIME:**

$$\frac{\text{WORKING DAYS BID}}{\text{(Not to exceed 300 Days)}} \times \frac{\$11,717.00}{\text{COST PER DAY}} = \text{\$ } \underline{\hspace{2cm}}$$

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

**\$** \_\_\_\_\_