

**DEPARTMENT OF TRANSPORTATION**  
DIVISION OF ENGINEERING SERVICES  
OFFICE ENGINEER, MS 43  
1727 30<sup>TH</sup> STREET  
P.O. BOX 168041  
SACRAMENTO, CA 95816-8041  
FAX (916) 227-6214  
TTY 711



*Flex your power!  
Be energy efficient!*

January 4, 2011

03-But-70-3.3/6.1  
03-0E9304  
Project ID 0300000060  
NH-P070(124)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN BUTTE COUNTY FROM 0.7 MILE SOUTH OF EAST GRIDLEY ROAD TO 0.6 MILE NORTH OF COX LANE.

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, January 19, 2011.

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

In the Special Provisions, Section 10-1.065, "TEMPORARY HYDROSEED," is added as attached.

In the Special Provisions, Section 10-1.35, "EROSION CONTROL (SEEDING)," is deleted.

In the Special Provisions, Section 10-1.355, "EROSION CONTROL (DRY SEED)," is added as attached.

In the Bid book, in the "Bid Item List," Items 93 and 94 are added and Item 92 is deleted as attached.

To Bid book holders:

Replace page 7 of the "Bid Item List" in the Bid book with the attached revised page 7 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.

Addendum No. 2  
Page 2  
January 4, 2011

03-But-70-3.3/6.1  
03-0E9304  
Project ID 0300000060  
NH-P070(124)E

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/03/03-0E9304](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/03/03-0E9304)**

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

Sincerely,



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

Attachments

## **10-1.065 TEMPORARY HYDROSEED**

### **GENERAL**

#### **Summary**

This work includes applying, maintaining, and removing temporary hydroseed. Hydroseed uses a mixture of tackifier, fiber, seed, and water to stabilize active and nonactive disturbed soil areas.

The SWPPP must describe and include the use of temporary hydroseed as a water pollution control practice for soil stabilization.

#### **Submittals**

At least 5 business days before applying hydroseed, submit:

1. Material Safety Data Sheet for the tackifier.
2. Product label describing the tackifier as an erosion control product.
3. List of pollutant indicators and potential pollutants for the use of temporary hydroseed. Pollutant indicators are described under "Sampling and Analysis Plan for Non-Visible Pollutants" in the Preparation Manual.
4. Determination of acute and chronic toxicity for aquatic organisms conforming to EPA methods for the tackifier.
5. Composition of ingredients including chemical formulation.

Submit a Certificate of Compliance as specified in Section 6-1.07, "Certificates of Compliance" of the Standard Specifications for:

1. Tackifier
2. Fiber
3. Seed

#### **Quality Control and Assurance**

Retain and submit records of temporary hydroseed applications including:

1. Compliance with specified rates
2. Application area
3. Application time
4. Quantity

### **MATERIALS**

#### **Tackifier**

The tackifier must be:

1. Nonflammable
2. Nontoxic to aquatic organisms
3. Free from growth or germination inhibiting factors

Tackifier classified as plant-based product must be:

1. A natural high molecular weight polysaccharide
2. A high viscosity hydrocolloid that is miscible in water
3. Functional for at least 180 days
4. Labeled as guar

Guar must be:

1. A guar gum based product derived from the ground endosperm of the guar plant, cyanmopsis tetragonolobus
2. Treated with dispersant agents for easy mixing
3. Able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water

**Fiber**

Fiber must be wood fiber, cellulose fiber, alternate fiber, or a combination of these fibers as specified. Fiber must be:

- 1. Free from lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, or chlorine bleach
- 2. Free from synthetic or plastic materials
- 3. At most 7 percent ash

If wood fiber is specified, wood fiber must be:

- 1. Long strand, whole wood fibers, thermo-mechanically processed from clean, whole wood chips
- 2. Not made from sawdust, cardboard, paper, or paper byproducts
- 3. At least 25 percent of fibers 3/8 inch long
- 4. At least 40 percent held on a No. 25 sieve

If cellulose fiber is specified, cellulose fiber must be made from natural or recycled pulp fiber, such as wood chips, sawdust, newsprint, chipboard, corrugated cardboard, or a combination of these materials.

If alternate fiber is specified, alternate fiber must be:

- 1. Long strand, whole natural fibers made from clean straw, cotton, corn, or other natural feed stock
- 2. At least 25 percent of fibers 3/8 inch long
- 3. At least 40 percent held on a No. 25 sieve

**Coloring Agent**

Use a biodegradable nontoxic coloring agent free from copper, mercury, and arsenic to ensure the hydroseed contrasts with the application area.

**Seed**

Seed for erosion control must comply with "Erosion Control (Hydroseed)" of these special provisions.

**CONSTRUCTION**

**Application**

Apply temporary hydroseed when an area is ready to receive temporary erosion control under "Move-in/Move-out (Temporary Erosion Control)."

The ratio of water to fiber and tackifier in the mixture must be as recommended by the manufacturer. The proportions of various erosion control materials may be changed by the Engineer to meet field conditions.

Use hydroseeding equipment to apply hydroseed.

Apply hydroseed:

- 1. At application rate indicated. Successive applications or passes may be needed to achieve the indicated rate:

Material	Application Rate lbs/acre
Wood Fiber	1200
Tackifier	45
Seed	38

- 2. To form a continuous mat with no gaps between the mat and the soil surface.
- 3. From 2 or more directions to achieve a continuous mat.
- 4. In layers to avoid slumping and to aid drying.
- 5. During dry weather or at least 24 hours before predicted rain.

Do not apply hydroseed if:

- 1. Water is standing on or moving across the soil surface
- 2. Soil is frozen
- 3. Air temperature is below 40 °F during the tackifier curing period unless allowed by the tackifier manufacturer and approved by the Engineer

Do not allow over-spray onto the traveled way, sidewalks, lined drainage channels, or existing vegetation.

**Maintenance**

Reapply hydroseed within 24 hours of discovering visible erosion, unless the Engineer approves a longer period.

Temporary hydroseed disturbed or displaced by your vehicles, equipment, or operations must be reapplied at your expense.

Cleanup, repair, removal, disposal, or replacement due to improper installation or your negligence are not included in the cost for performing maintenance.

**Removal**

Remove hydroseed by mechanically blending it into the soil with track laying equipment, disking, or other approved method.

**MEASUREMENT AND PAYMENT**

Temporary hydroseed is measured by the square yard from measurements along the slope of the areas covered by the hydroseed.

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

The State and you share the cost of maintaining the temporary hydroseed. The State determines the maintenance cost under Section 9-1.03, "Force Account Payment," of the Standard Specifications and pays you one-half of that cost.

## 10-1.355 EROSION CONTROL (DRY SEED)

### GENERAL

#### Summary

This work includes removing and disposing of weeds, scarifying the soil, furnishing and incorporating commercial fertilizer, organic fertilizer, and dry applying seed to erosion control (dry seed) areas shown on the plans.

Comply with Section 20-3, "Erosion Control," of the Standard Specifications.

The Engineer will designate the ground location of all erosion control (dry seed) areas in increments of 0.25 acre or smaller by directing the placing of stakes or other suitable markers. Furnish all tools, labor, materials, and transportation required to adequately indicate the various erosion control (dry seed) locations.

### MATERIALS

#### Seed

Comply with "Erosion Control (Hydroseed)" of these special provisions.

#### Commercial Fertilizer

Must comply with "Erosion Control (Hydroseed)" of these special provisions.

### CONSTRUCTION

#### Site Preparation

Immediately prior to applying seed to erosion control (dry seed) areas, trash and debris and weeds must be removed.

After removal work and just prior to seed application, erosion control (dry seed) areas must be scarified to a minimum depth of one inch.

Removed weeds must 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.

#### Application

Apply the following mixture at the rates indicated:

Material	Pounds Per Acre (Slope Measurement)
Seed	38
Organic Fertilizer	200

Seed and commercial fertilizer, organic fertilizer, must be incorporated into the soil to a maximum depth of 1/4 inch by raking or dragging.

The Engineer may change the rates of erosion control (dry seed) materials to meet field conditions.

For any area where erosion control (dry seed) materials are to be applied, the application of all erosion control (dry seed) materials to be applied to that area must be completed within 72 hours from when the first materials were applied.

### MEASUREMENT AND PAYMENT

Erosion control (dry seed) will be measured by square foot or by the acre, whichever is designated in the Engineer's Estimate. The area will be calculated on the basis of actual or computed slope measurements.

The contract price paid per square foot or acre for erosion control (dry seed) includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in erosion control (dry seed) complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

**BID ITEM LIST**

**03-0E9304**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	820112	MARKER (CULVERT)	EA	10		
82	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	57,800		
83	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	2,640		
84	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	1,380		
85	840521	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6-1)	LF	150		
86	840525	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	41,000		
87	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	2,460		
88	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS		LUMP SUM	LUMP SUM
89	860925	TRAFFIC MONITORING STATION (COUNT)	LS		LUMP SUM	LUMP SUM
90	861501	MODIFY SIGNAL AND LIGHTING	LS		LUMP SUM	LUMP SUM
91	861503	MODIFY LIGHTING	LS		LUMP SUM	LUMP SUM
92	BLANK					
93	074053	TEMPORARY HYDROSEED	SQYD	72,600		
94	999990	MOBILIZATION	LS		LUMP SUM	LUMP SUM

**TOTAL BID:**

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