



# Oregon

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DATE: February 20, 2009

## Addenda No. 2

TO: PLAN HOLDERS

PREPARED BY:

  
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APPROVED BY:

 P.E.  
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SUBJECT: Kuebler Blvd SE: I-5 - Commercial (WB) Widening Section  
Kuebler Blvd  
Marion County  
Grading, Drainage, Structure, Paving, Signing, Illumination, Signals, and  
Roadside Development Project  
(Bids to be opened and read February 26, 2009)

### The following change is made to the Project Special Provisions:

Section **00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES -**  
This Section is replaced with Section **00759**. See attachment for full text.

This change will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.

CRL:CRL

Attachments: Replaced Special Provisions Section

## **SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES**

Comply with Section 00759 of the Standard Specifications modified as follows:

### **00759.00 Scope** - Add the following:

This work also consists of construction of porous concrete surfacing, made of Portland cement, aggregate, water, and other approved admixtures.

Add the following subsection

### **00759.13 Porous Concrete Surfacing** - Select a proprietary porous concrete surfacing material, to be constructed at locations shown, from the following list:

- Evolution "Ultimate™" Pervious Concrete, porous concrete surfacing, provided by:  
Evolution Paving Resources,  
Contact: Scott Erickson Telephone: 503-393-5050  
Email: scott@evolutionpaving.com Website: <http://www.evolutionpaving.com/>
- Portland Cement Absorbent Pervious Concrete (PercoCrete), porous concrete surfacing, provided by Michiels International LLC,  
Contact: Frank Michiels Telephone: 206-327-9050  
Email: frankmichiels@comcast.net Website: <http://www.percocrete.com/index.htm>
- Or an approved equal

### **00759.43 Foundation Preparation** - Add the following to the end of this subsection:

Protect subgrade in areas of porous concrete surfacing from over compaction that would affect permeability of subgrade.

Add the following subsections

### **00759.52 Porous Concrete Surfacing:**

**(a) Mix Design** - For proprietary designs, provide a mix design according to the supplier's specifications for the proprietary system selected.

**(b) Batching, Transport, Placement, and Curing** - For proprietary designs, perform batching, transport, placement, and curing according to the supplier's specifications for the proprietary system selected and as shown.

**(c) Expansion and Contraction Joints:** - Construct expansion and contraction joints according to 00759.48 and 00759.49 as applicable at the following spacing:

- Locate expansion joints every 50 feet.
- Locate contraction joints every 5 feet.

**(d) Field Testing** - Engineer will specify the location of the cores, which shall include any areas of the finished surface not appearing pervious. The cores shall be measured for thickness, void structure, and unit weight. Untrimmed, hardened core samples shall be used to determine placement thickness. The average of all production cores shall not be less than the specified thickness with no individual core being more than ½ inch less than the specified thickness. Range of satisfactory void structure is 15% minimum to 25% maximum. Void content must be within ± three (3) percent of the mix design void content. Ranges of satisfactory unit weight values are ±5 pcf of the mix design unit weight.

At the discretion of the engineer, a minimum of one set of tests for each day's placement of pervious concrete in accordance with ASTM C 172 and ASTM C 29 to verify unit weight shall be conducted. Delivered unit weights are to be determined in accordance with ASTM C29 "Jigging method" using a 0.25 cubic foot cylindrical metal measure.

**00759.60 Porous Concrete Surfacing Test Panels** - The Contractor is to complete a satisfactory test panel to demonstrate their ability to place pervious concrete sidewalk, before placing pervious concrete sidewalk as required in the contract. The test panel is to be a minimum of 50 feet long by 5 feet wide and a maximum of one ready-mix truckload. The test panel shall be placed at any location specified to have pervious concrete sidewalk installed. The test panel shall be cured for 7 days and then inspected and tested for acceptance.

The test panel shall be acceptable if the porous concrete surfacing material is placed to the lines and grades shown in the plans, if the material has sufficient infiltration capacity, the approximate minimum infiltration rate required is 10 inches per hour and meets the requirements of 00759.52(c). The Engineer will be solely responsible for determining the acceptability of the test panel surface finish.

Upon acceptance of the test panel by the Engineer the remaining portions of work may be installed. If the test panel is determined to be unacceptable by the Engineer, the test panel shall be removed and disposed of in an appropriate manner. Payment for the removal, haul and disposal of the test panel materials shall be considered to be incidental to the bid item "Porous Concrete Surfacing".

**00759.70 Porous Concrete Surfacing Cleaning and Protection** - After retaining wall construction, planting, seeding, sign installation, and other work behind the curb, but before final acceptance by the Agency, the Contractor shall pressure wash the porous concrete surfacing. The pressure washing shall be completed by a washer working at a minimum of 3000 psi and 1.0 gpm. The nozzle shall be held a maximum of 3 inches off the concrete. The Contractor shall wash the entire top surface of the porous concrete surfacing. Any sections of porous concrete surfacing that breaks up, pits or does not infiltrate at the

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required rate shall be removed in 5 foot sections and replaced with acceptable porous concrete surfacing. The Engineer will be solely responsible for determining the acceptability of the concrete after pressure washing.

Protect porous concrete surfacing from construction and demolition materials, such as, mulch, topsoil, soil conditioner, waste spoils, retaining wall construction, grindings, concrete saw cutting by-products and until all planting and seeding work is complete by covering porous concrete surfacing with plastic sheeting, tarps, or by other approved means.

**00759.90 Payment** - Add the following paragraph:

Item (g) will be full payment to excavate, grade, form, furnish, install, develop expansion and contraction joints, cover, clean and protect the porous concrete, including all equipment, labor, test panels, materials testing, and incidentals necessary to complete the work as specified. Payment shall also include all cost to complete submittals, test panels and verification of batching procedures, quality assurance testing required for acceptance of the porous concrete by the Engineer including all labor, materials (including water), and equipment requirement.