

## SECTION 01013 - STORMWATER CONTROL, WATER QUALITY BIOSLOPE

*(Follow all instructions and make all edits with "Track Changes" turned on. This Section is not published in the Oregon Standard. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the Project, unless the item(s) that are included in the subsection, paragraph, sentence, or bullet are not required on the Project and then they should be deleted. In general do not re-number or re-letter subsections when item(s) are deleted. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)*

Section 01013 is not a Standard Specification and is included for this Project by Special Provision.

### Description

**01013.00 Scope** - This Work consists of furnishing and installing a water quality bioslope as shown.

### Materials

*(Delete material items that do not apply and include other materials as necessary.)*

**01013.10 Materials** - Furnish Material meeting the following requirements:

Drainage Geotextile, Type 1 .....	02320
Facility Field Markers .....	00842.10
Granular Drain Backfill Material.....	00430.11
Shoulder Aggregate .....	02640.10
Subsurface Drain Pipe .....	00430.10

**01013.11 Ecology Mix** - Furnish an ecology mix composed of the following:

- 3/8" - No. 8 mineral Aggregate gradation meeting the requirements of Section 00680.
- Horticultural grade perlite in a pelletized or granular form, meeting the following gradation:

Sieve Size	Percent Passing (by Weight)
No. 4	99 - 100
No. 18	30 max
No. 30	10 max

- Agricultural grade dolomite lime in a pelletized or granular form, meeting the following gradation:

Sieve Size	Percent Passing (by Weight)
No. 8	80 min
No. 60	25 min

- Agricultural grade gypsum consisting of Calcium Sulfate ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) in a pelletized or granular form, meeting the following gradation:

Sieve Size	Percent Passing (by Weight)
1/4"	99 - 100
No. 20	20 max

Blend the mineral Aggregate, perlite, dolomite, and gypsum so that the mixture is composed of:

- 3 cubic yards of mineral Aggregate per 1 cubic yard of perlite
- 40 pounds of dolomite per 1 cubic yard of perlite
- 12 pounds of gypsum per 1 cubic yard of perlite

Mix the Aggregate, perlite, dolomite, and gypsum before delivery to the Project. Mix the materials in the presence of the Engineer. Provide at least 5 Calendar Days' notice to the Engineer before beginning mixing.

### Construction

**01013.40 General** - Construct water quality bioslope facility as shown. Perform excavation and placement work only when the facility area is dry. Do not stockpile excavated material in the facility area.

**(a) Laying Pipe** - Lay the pipe according to Section 00445. Place pipe with perforations upslope.

**(b) Joining Pipe** - Fasten pipes together with coupling fittings or bands as specified for the type of pipe used. Cap the upstream end of the pipe.

**(c) Inspection and Repair** - Place the ecology mix only after the pipe is laid, joined, and inspected. Remove and reinstall or replace all pipe that is out of alignment, has settled, or is damaged at no additional cost to the Agency.

**(d) Compaction** - After placing the ecology mix and shoulder Aggregate, compact by saturating with water.

**01013.41 Facility Field Markers** - Install field markers as shown and according to Section 00842.

### Maintenance

**01013.70 Cleaning** - Remove all accumulated sediment and debris before completing the facility.

### Measurement

**01013.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

*(Identify bioslopes by the Drainage Facility Identification Number (DFI). List each DFI separately. Obtain the DFI, the items, and the quantities from the Designer. Fill in all the required blanks. Delete items that do not apply. Copy and paste for multiple facilities.)*

**Bioslope**       (DFI)       **Quantities:**

Item	Quantity
Excavation .....	_____ Cu. Yd.
Mineral Aggregate .....	_____ Cu. Yd.
Perlite .....	_____ Cu. Yd.
Dolomite .....	_____ Lbs.
Gypsum .....	_____ Lbs.
Crushed Shoulder Aggregate .....	_____ Cu. Yd.
Drainage Geotextile, Type 1 .....	_____ Sq. Yd.
Granular Drain Backfill.....	_____ Cu. Yd.
_____ Inch Subsurface Drain Pipe .....	_____ Foot

Field facility markers will be measured according to 00842.80.

### Payment

**01013.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Bioslope, \_\_\_\_\_".

The drainage facility identification number is inserted in the blank.

Field facility markers will be paid for according to 00842.90.

Payment will be payment in full for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.