

1 Make this section a part of the Standard Specifications:

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3 **"SECTION 663 - EROSION CONTROL MATTING**

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5 **663.01 Description.** This section describes furnishing and installing an erosion  
6 control matting on cut and fill slope faces, including drainage swales, as shown  
7 on the contract documents.

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9 **663.02 Materials.**

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11 **(A) General.** The erosion control matting shall be a multi-layered  
12 geosynthetic netting specifically designed for erosion control as a long-  
13 term installation. The erosion control matting shall provide erosion  
14 protection for at least 36 months during vegetation establishment. The  
15 matting shall allow grass or other natural ground cover to grow and take  
16 root through the matting. The internal matrix material color shall be green  
17 or brown and the outer net material shall be black.

18  
19 **(B) Physical Properties.** The erosion control matting shall have the  
20 following minimum physical properties;

21  
22 **(1)** Materials shall be manufactured from polyethylene,  
23 polypropylene, polyolefin or nylon.

24  
25 **(2)** Thickness of the erosion control matting shall be 0.30 inches  
26 minimum according to ASTM D 5199.

27  
28 **(3) Ultraviolet stability** . – ASTM D 4355 (tensile strength  
29 retained after 1000 hours) 80%.

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31 **(4) Porosity** (calculation based upon weight, thickness and  
32 specific gravity) minimum 95%.

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34 **(5) Resiliency** (thickness retained after 3 cycles of a 100 psi  
35 load for 60 seconds followed by 60 seconds without load-thickness  
36 measured 30 minutes after load removed by ASTM D 1777) 75%  
37 minimum.

38  
39 **(6) Tensile strength** – ASTM D 5305, 2-inch Strip Test, 95 x 95  
40 lbs/foot minimum.

41  
42 **(7) Elongation** – ASTM D 5305, 2-inch Strip Test, 70% x 70%  
43 maximum,

44  
45 **(C) Brochures and Manufacturer's Certification.** The manufacturer  
46 of the erosion control matting shall submit brochures and certifications

47 stating the quality of the material meet the intended use on the project.  
48 The certification shall clearly show the product number or other similar  
49 control number, which match the markings on the product delivered to the  
50 site. The manufacturer shall furnish certified test reports with each  
51 shipment attesting that the erosion control matting meets the requirements  
52 of the specification for material physical properties. Samples of the erosion  
53 control matting shall also be submitted to the Engineer.

### 54 55 **663.03 Construction.**

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57 **(A) General.** Place erosion control matting on cut and fill slope  
58 faces, including drainage swales, as shown on contract documents.

#### 59 60 **(B) Installation.**

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62 **(1) Installation Plan.** Submit an installation plan prior to any  
63 work on the slope.

64  
65 **(2) Site Preparation.** Grade and compact the slope face  
66 properly. Remove all materials such as rocks and vegetation that  
67 would interfere with the soil and the erosion control matting.

68  
69 **(3) Anchor Trenches.** Anchor trenches shall be as  
70 recommended by the manufacturer. The trenches shall be a  
71 minimum of eight inches deep and eight inches wide before placing  
72 the erosion control matting. Backfill and compact trenches properly  
73 to the original requirements of the slope.

74  
75 **(4) Planting.** Install the erosion control matting prior to  
76 hydro-mulching to retain good seed distribution and avoid  
77 disturbance of the hydro-mulching by work crews. Hydro-mulching  
78 may be done before mat placement; however, the disturbed areas  
79 must be corrected by re-hydro-mulching at no cost to the State.

80  
81 **(5) Placement.** Place the erosion control matting according to  
82 the manufacturer's recommendations. The matting roll ends shall  
83 be overlapped a minimum of 18 inches. The adjacent edges of the  
84 matting shall be overlapped a minimum of 3 inches.

85  
86 **(6) Anchoring.** Anchor the erosion control matting at overlaps  
87 with 12-inch x 2-inch x 12-inch 8G metal staples. The distribution of  
88 the staples shall be a minimum of two per square yard and spaced  
89 as recommended by the matting manufacturer. The Engineer will  
90 not allow wood anchors, such as pegs or stakes of any kind.  
91 Alternate anchoring methods may be allowed if approved by the  
92 matting manufacturer and accepted by the Engineer:

For installation in rock area, anchor matting according to the manufacturer's recommendations.

**(7) Repairs.** Correct tears and holes in the erosion control matting with a minimum of 3-foot overlap in each direction of the damage. Re-hydromulch the repaired area if ordered by the Engineer. Repair and/or replace the damaged or defective erosion control matting at no additional cost to the State.

**663.04 Measurement.** The Engineer will measure erosion control matting per square yard in accordance with the contract documents.

**663.05 Payment.** The Engineer will pay for the accepted erosion control matting at the contract price per square yard. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay Item when included in the proposal schedule:

Pay Item	Pay Unit
Erosion Control Matting	Square Yard"

**END OF SECTION 663**