Regional Engineers

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 Special Provision for Erosion Control Blanket

 April 18, 2025

This special provision was developed by the Bureau of Design and Environment (BDE), in conjunction with ICT Research Project R27-229, to eliminate plastic netting from all erosion control blankets, remove heavy duty blankets, and add a wildlife safe option when there is a threatened or endangered species in the project area.

This special provision should be inserted into contracts containing any erosion control blanket (temporary, permanent, or wildlife friendly).

Designer Note: Designers should use the wildlife friendly erosion control blanket pay item(s) if there is a commitment to do so in the Phase I Natural Resource Review (NRR) Memorandum.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the August 1, 2025 and subsequent lettings. The Project Coordination and Implementation Section will include a copy in the contract.

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# EROSION CONTROL BLANKET (bde)

Effective: August 1, 2025

Revise Article 251.02 of the Standard Specifications to read:

“ **251.02 Materials.** Materials shall be according to the following.

Item Article/Section

(a) Compost 1081.05(b)

(b) Mulch 1081.06(a)

(c) Chemical Mulch Binder 1081.06(a)(3)

(d) Chemical Compost Binder 1081.06(a)(4)

(e) Erosion Control Blanket 1081.10(a)

(f) Wildlife Friendly Erosion Control Blanket 1081.10(b)

(g) Wire Staples 1081.10(c)

(h) Wood Stakes 1081.10(d)

(i) Turf Reinforcement Mat 1081.10(e)”

Revise the first and second sentences of Article 251.04 of the Standard Specifications to read:

“ **251.04 Erosion Control Blanket.** All erosion control blanket materials shall be placed on the areas specified within 24 hours of seed placement.”

Revise the second paragraph of Article 251.04 of the Standard Specifications to read:

“ After the area has been properly shaped, fertilized (when applicable), and seeded, the blanket shall be laid out flat, evenly, and smoothly, without stretching the material. The erosion control blanket shall be placed according to the manufacture’s recommendations.”

Revise the second sentence of Article 251.06(b) of the Standard Specifications to read:

“ Erosion control blanket, wildlife friendly erosion control blanket, and turf reinforcement mat will be measured for payment in square yards (square meters).”

Revise Article 251.07 of the Standard Specifications to read:

“ **251.07 Basis of Payment.** This work will be paid for at the contract unit price per acre (hectare) for MULCH, of the method specified; and at the contract unit price per square yard (square meter) for EROSION CONTROL BLANKET, WILDLIFE FRIENDLY EROSION CONTROL BLANKET, or TURF REINFORCEMENT MAT.”

Revise first sentence of Article 280.04(h) of the Standard Specifications to read:

“ This system consists of temporarily installing erosion control blanket or wildlife friendly erosion control blanket over areas that are to be reworked during a later construction phase.”

Revise Article 280.08(g) of the Standard Specifications to read:

“ (g) Temporary Erosion Control Blanket. Temporary erosion control blanket will be paid for at the contract unit price per square yard (square meter) for TEMPORARY EROSION CONTROL BLANKET or TEMPORARY WILDLIFE FRIENDLY EROSION CONTROL BLANKET.

The work of removing, storing, and reinstalling the blanket over areas to be reworked more than once will not be paid for separately but shall be included in the cost of the temporary erosion control blanket or temporary wildlife friendly erosion control blanket.”

Revise Article 1081.10 of the Standard Specifications to read:

“ **1081.10 Erosion Control Blankets.** The manufacturer shall furnish a certificate with each shipment stating the amount of product furnished and that the material complies with these requirements.

(a) Erosion Control Blanket. Erosion control blanket shall be covered on top and bottom, also known as double net, with a 100 percent biodegradable woven, natural fiber or jute net meeting the following.

|  |  |
| --- | --- |
| Material | Minimum Value |
| Excelsior | 80% |
| Straw | 100% |
| Coconut or Coir | 100% Coconut or Coir |
| Straw/Coconut or Coir | 70% Straw / 30% Coconut or Coir |

(b) Wildlife Friendly Erosion Control Blanket. Wildlife friendly erosion control blanket shall be according to Article 1081.10(a) except the netting shall be loose weave, also known as leno weave or gauze weave, with a moveable joint.

(c) Wire Staples. Staples shall be made from No. 11 gauge or heavier uncoated black carbon steel wire, a minimum of 1 in. (25 mm) wide at the top and a minimum overall length of 8 in. (200 mm).

(d) Wood Stakes. Hardwood blanket anchors shall be nominally 7 in. (180 mm) long from neck of hook to tip of anchor. The anchor shall have a minimum 1/2 in. (13 mm) curving hook to hold the blanket in place.

(e) Turf Reinforcement Mat (TRM). The TRM shall be comprised of non-degradable, ultraviolet stabilized synthetic fibers, filaments, netting, and/or wire mesh processed into a three-dimensional reinforced mat. The mats may include degradable material to assist with vegetation establishment. Soil filled mats will not be allowed.

The TRM shall meet the following physical and performance properties:

|  |  |  |
| --- | --- | --- |
| Property | Value | Test Method |
| Tensile Strength,lb/ft (kN/m)  | 150 (2.19) min. | ASTM D 6818 |
| UV Stability,(% Tensile Retained) | 80 min. | ASTM D 4355(1000 Hour Exposure) |
| Resiliency,(% Thickness Retained) | 80 min. | ASTM D 6524 |
| Allowable Shear Stress,lb/sq ft (Pa) 1/ | 8 (384) | ECTC approved test method and independent laboratory |

1/ Minimum shear stress the TRM (fully vegetated) can sustain without physical damage or excess erosion (> 1/2 in. (13 mm) soil loss) during a 30 minute flow event in large scale testing.

For TRMs containing degradable components, all property values shall be obtained on the non-degradable portion of the matting alone.”

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