KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 1990 EDITION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of the Kansas Department of Transportation.

Create a new Subsection in Section 2100:

SECTION 2100

EROSION CONTROL MATERIALS

1.0 DESCRIPTION.

This specification covers erosion control products manufactured from wood, straw or coconut fiber mat, synthetic mat, paper mat, jute mesh or other material that is placed on slopes or ditches for short-term or long-term protection of seeded areas.

2.0 REQUIREMENTS.

a. Provide prequalified erosion control materials of the class and type specified in the Contract documents.

b. Erosion control products are categorized as follows:

(1) Class 1. "Slope Protection"
- (a) Type A. Slopes 1:3 or flatter – Clay soils
- (b) Type B. Slopes 1:3 or flatter – Sandy soils
- (c) Type C. Slopes steeper than 1:3 – Clay soils
- (d) Type D. Slopes steeper than 1:3 – Sandy soils

(2) Class 2. "Flexible Channel Liner"
- (a) Type E. Short-term duration (Up to 5 years) Shear Stress (t_d) 0 to 96 Pa
- (b) Type F. Short-term duration (Up to 5 years) Shear Stress (t_d) 0 to 192 Pa
- (c) Type G. Long-term duration (Longer than 5 years) Shear Stress (t_d) 0 to 287 Pa
- (d) Type H. Long-term duration (Longer than 5 years) Shear Stress (t_d) 0 to 383 Pa

Only 100% synthetic products are acceptable for use in Class 2, Type H applications.

c. Anchors. Provide and use anchors as recommended by the erosion control product manufacturer. In the absence of any recommendations by the manufacturer, provide and use the following:

(1) For "Slope Protection"

Wire Staple Anchors, minimum size.

Wire Diameter	3.05 mm
Leg Length (Heavy Soil)	150.0 mm
Leg Length (Light Soil)	200.0 mm
Crown Width	25.0 mm

(2) For "Flexible Channel Liner"

(a) Wire Staple Anchors, minimum size.

Wire Diameter	4.11 mm
Leg Length (Heavy Soil)	250.0 mm
Leg Length (Light Soil)	350.0 mm
Crown Width	50.0 mm

(b) Metal Stake Pin Anchors, minimum size.

Pin Diameter	4.5 mm nominal
Pin Length (Heavy Soil)	250.0 mm
Pin Length (Light Soil)	350.0 mm
Steel Washer Diameter	38.0 mm nominal

(c) Hardwood Stake Anchors, minimum size.

Light Soil	25.0 mm x 75.0 mm x 450.0 mm
Heavy Soil	25.0 mm x 75.0 mm x 300.0 mm

3.0 TEST METHODS.

Erosion Control products will be tested and evaluated by the Texas Department of Transportation and the Texas Transportation Institute following procedures outlined in the Texas DOT Erosion Control Report. Anchors are evaluated on the basis of their performance in the field.

4.0 PREQUALIFICATION.

Prequalification procedures may be obtained by writing to the Texas Department of Transportation, Director of Construction and Maintenance, 125 East 11th Street, Austin, TX 78701-2483. A list of prequalified materials based on the annual Texas DOT Erosion Control Report and field performance within Kansas will be maintained by the KDOT Bureau of Materials and Research. The KDOT prequalified list establishes the acceptable materials to be incorporated into KDOT projects. Products will remain on the KDOT list provided field performance is satisfactory or the manufacturer requests the removal of their own product.

5.0 BASIS OF ACCEPTANCE.

a. Erosion Control Materials.

(1) Prequalification as required by **subsection 4.0**.

(2) Receipt and approval of a Type C certification as specified in **Section 2600**.
(3) Field observation prior to or during material installation.

b. Anchors. Field observation prior to or during material installation.

08-03-02 M&R (REK)

193010001 Matl for Erosion Control (Type A)	m^2	90M-193-R*	PRCT
193010002 Matl for Erosion Control (Type B)	m^2	90M-193-R*	PRCT
193010003 Matl for Erosion Control (Type C)	m^2	90M-193-R*	PRCT
193010004 Matl for Erosion Control (Type D)	m^2	90M-193-R*	PRCT
193020001 Matl for Erosion Control (Type E)	m^2	90M-193-R*	PRCT
193020002 Matl for Erosion Control (Type F)	m^2	90M-193-R*	PRCT
193020003 Matl for Erosion Control (Type G)	m^2	90M-193-R*	PRCT
193020004 Matl for Erosion Control (Type H)	m^2	90M-193-R*	PRCT