622S.1 Description

This item shall govern furnishing and installing a temporary or permanent ridge of compacted soil that is located immediately above cut or fill slopes. The temporary or permanent ridge shall be constructed with sufficient grade to intercept storm water run-off from small upland areas and to divert the flow from the exposed slopes to an acceptable outlet as indicated on the Drawings or as directed by the Engineer or designated representative.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text, the inch-pound units are given preference followed by SI units shown within parentheses.

622S.2 Submittals

The submittal requirements for this specification item shall include:

A. Characteristics (LL, PI, maximum density, etc.) of proposed embankment material;
B. Identification of the type, source, mixture, pure live seed (PLS) and rate of application of the seeding;
C. Identification of the type, source, and mixture of the sodding;
D. Type of mulch;
E. Type of tacking agent;
F. Type, chemical analysis and rate of application of fertilizer;
G. Type, characteristics, gradation, etc. of proposed riprap;
H. Type, characteristics, and application method of proposed soil retention blanket;
I. Type, characteristics, and application method of proposed soil retention blanket, slope stabilization;
J. The manufacturer, model and description of the proposed dust control equipment,
K. The sprinkling plan including application rate, pattern of sprinkling and scheduled times of application.

622S.3 Materials

A. Dikes shall be constructed from suitable embankment material approved by the Engineer or designated representative or from a borrow material meeting the requirements of Standard Specification Item No. 130S, "Borrow", Type A.
B. Stone Riprap shall consist of fieldstone, rough unhewn quarry stone or broken concrete conforming to Standard Specification Item No. 591S, "Riprap for Slope Protection".
C. Seeding shall conform to Standard Specification Item No. 604S, "Seeding for Erosion Control".
D. Sodding shall conform to Standard Specification Item No. 602S, "Sodding for Erosion Control".
E. Soil Retention Blanket shall conform to Standard Specification Item No. 605S, "Soil Retention Blanket".

G. Water for embankment, erosion control and dust control shall conform to Standard Specification Item Nos. 604S, "Seeding for Erosion Control" and 220S, "Sprinkling for Dust Control".

622S.4 Construction Methods

The Contractor shall minimize the area disturbed by the activity defined by this specification Item and Standard Detail No. 622S-1, "Diversion Dike". Prior to placement of the Diversion Dike, all clearing and grubbing operations (Standard Specification Item No. 102S) shall have been completed on the areas over which the Diversion Dike is to be placed. The surface of the ground, which is to receive the Diversion Dike, shall be loosened by scarifying or plowing to a minimum depth of 4 inches (100 mm), except for the case of solid rock. The material, that has been loosened, shall be re-compacted simultaneously with the Diversion Dike. The Diversion Dike shall be placed in successive 6-inch (150 mm) layers for the full width of the Diversion Dike. Soils shall be sprinkled as required and compacted to the extent necessary to provide not less than 90 percent of the maximum dry density as determined in accordance with TxDOT Test Methods Tex-114-E and Tex 115-E. The top 4 inches (100 mm) shall be compacted to 85 percent of the maximum dry density to facilitate seeding.

Diverted runoff from a protected or stabilized area shall have its outlet flow directed to an undisturbed stabilized area or into a level spreader (Standard Specification Item No. 634S and Standard Detail No. 634S-1) or grade stabilization structure (Standard Specification Item No. 625S and Standard Detail No. 625S-1). Diverted runoff from a disturbed or exposed area sediment basin or to an area protected by any of these practices.

The structure shall be inspected monthly and after every rainfall. Repairs shall be made, as needed in the opinion of the Engineer or designated representative, by the Contractor throughout the duration of this contract or until the Engineer or designated representative gives written permission to remove a temporary structure.

The temporary Diversion Dike shall be removed, when directed by the Engineer or designated representative, and the area shall be leveled off and protected by erosion control measures appropriate for the terrain as indicated on the Drawings. Permanent Diversion Dikes shall be seeded and shall conform to Standard Specification Item No. 604S, "Seeding for Erosion Control".

622S.5 Measurement

Work performed as prescribed by this item will be measured by the lineal foot (lineal meter: 1 meter equals 3.281 feet) along the centerline of the Diversion Dike.

622S.6 Payment

This item will be paid for at the contract unit bid price for "Diversion Dike". The price shall include full compensation for: a) all work specified herein, b) furnishing, hauling and placing of all materials and c) all water required to perform all operations necessary to complete the work.

Payment will be made under one of the following:
Pay Item No. 622S-A: Diversion Dike, Temporary Per Lineal Foot.
Pay Item No. 622S-B: Diversion Dike, Permanent Per Lineal Foot.

End

SPECIFIC CROSS REFERENCE MATERIALS

Specification Item 622S "Diversion Dike"

City of Austin Standard Specifications

Designation Description
Item No. 102S Clearing and Grubbing
Item No. 130S Borrow
Item No. 220S Sprinkling for Dust Control
Item No. 591S Riprap for Slope Protection
Item No. 602S Sodding for Erosion Control
Item No. 604S Seeding for Erosion Control
Item No. 605S Soil Retention Blanket
Item No. 606S Fertilizer
Item No. 607S Stabilization for Erosion Control
Item No. 625S Grade Stabilization Structure
Item No. 634S Level Spreader

City of Austin Standard Details

Designation Description
No. 622S-1 Diversion Dike
No. 625S-1 Grade Stabilization Structure
No. 634S-1 Level Spreader

Texas Department of Transportation: Manual of Testing Procedures

Designation Description
Tex-114-E Laboratory Compaction Characteristics and Moisture-Density Relationship of Subgrade & Embankment Soil
Tex-115-E Field Method for Determination of In-Place Density of Soils and Base Materials

RELATED CROSS REFERENCE MATERIALS

City of Austin Land Development Code

Designation Description
Chapter 25 Drainage
Section 25-7-61 Criteria for Approval of Plats, Construction Plans, And Site Plans
Section 25-7-61 (A) (4) "temporary and permanent measures to control erosion."
Section 25-7-65 Fiscal Security
Article 5 Erosion and Sedimentation Control; Overland Flow
Section 25-8-181 Erosion and Sedimentation Control
Section 25-8-182 Development Completion
Section 25-8-183 Modification of Erosion Control and Construction Sequencing Plans
Section 25-8-323 Temporary Storage Areas; Topsoil Protection
Section 25-8-341 (B) "A cut must be restored and stabilized"
Section 25-8-342 (B) "A fill must be restored and stabilized"

RELATED CROSS REFERENCE MATERIALS (Continued)

Specification Item 622S "Diversion Dike"
### City of Austin Environmental Criteria Manual

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### City of Austin Standard Specifications

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