SECTION 258 TEMPORARY SWALE

258.01 Description. This work consists of constructing, maintaining, and ultimately removing six temporary swales Types A-1, A-2, A-3, B-1, B-2, and B-3 as a temporary measure to prevent clean runoff from entering disturbed areas by intercepting and diverting the runoff to a stabilized outlet or to intercept sediment-laden runoff and divert it to a sediment trapping device. The types of temporary swales shall be constructed as shown on Standard Construction Detail, Temporary Swale, at the locations shown on the Plans, and as directed by the Engineer.

MATERIALS.

258.02 Seed. Seed shall conform to the requirements of Section 734.

258.03 Mulch. Mulch shall be straw and conform to the requirements of Section 735.

258.04 Erosion Control Blanket. Erosion control blanket shall conform to the requirements of Subsection 735.02 (c).

CONSTRUCTION METHODS.

258.05 Construction of Temporary Swale. The Contractor shall construct the temporary swale based upon the type of swale indicated on the Plans. The temporary swale shall be graded to drain. With approval from the Engineer, the location of the temporary swale may be adjusted to meet field conditions and use the most suitable outlet.

The Contractor shall remove and dispose of all brush, stumps, obstructions, and other materials that interfere with the functioning of the swale. The Engineer will approve the removal of any trees that interfere with the functioning of the swale. The swale shall be free of bank projections or other irregularities which may impede the normal flow within the swale. The Contractor shall backfill any depressions or voids in the swale. Backfilled areas shall be compacted with earth moving equipment or tamps.

The Contractor shall place all previously excavated material in areas approved by the Engineer and where the material does not interfere with the functioning of the swale or downstream traps.

258.06 Stabilization of Temporary Swale. Within seven days of the start of construction on the temporary swale, the Contractor shall stabilize all areas affected by the temporary swale with seed and straw mulch. If the operation of the temporary swale is required immediately as a clean water diversion, the Contractor shall stabilize the swale prior to the temporary swale becoming operational using a geotextile liner in accordance with Standard Construction Detail, Geotextile-Lined Channel Diversion.

The Contractor shall place erosion control blankets as shown on Standard Construction Detail, Erosion Control Blanket, and according to Section 735.

258.07 Temporary Swale Drainage. The temporary swale shall have uninterrupted, positive drainage to an outlet. The outlet shall function with a minimum of erosion and reduce runoff velocity prior to discharge.

Diverted runoff from an undisturbed area shall outlet directly into an undisturbed stabilized area at non-erosive velocity. Diverted runoff from a disturbed area shall outlet into a sediment trapping device.

258.08 Maintenance of Temporary Swale. Throughout the Project construction period, the Contractor shall maintain the temporary swale to the original dimensions and function of the temporary swale.

258.09 Sediment Removal. After each rainfall, the Contractor shall check for excessive buildups of sediment which must be removed so that the temporary swale continues to function as intended. The Contractor shall remove all accumulated sediment when it reaches 50% of the height of the swale or when the accumulated sediment impedes drainage of the temporary swale, whichever comes first.

258.10 Removal of Temporary Swale. The temporary swale shall be removed at the end of the construction period or when directed by the Engineer. The Contractor shall not remove a temporary swale which collects runoff from disturbed areas until the disturbed areas are stabilized. The temporary swale and all materials incidental to the temporary swale construction shall be removed. All areas affected by the construction of the temporary swale shall be restored to the original or plan contours and stabilized with seed and mulch.

258.11 Method of Measurement. The quantity of temporary swale Type A-1 will be measured as the actual number of linear feet (linear meters) of temporary swale excavated and accepted. Temporary swale Types A-2, A-3, B-1, B-2, and B-3 will be measured using the same method for measuring temporary swale Type A-1.

The quantity of sediment removal will be measured according to Section 250.

258.12 Basis of Payment. The quantity of temporary swale Types A-1, A-2, A-3, B-1, B-2, and B-3 will be paid for at the Contract unit price per linear foot (linear meter). Price and payment will constitute full compensation for furnishing and placing all materials; for maintaining the temporary swale; for removing all materials incidental to the temporary swale; for excavating and backfilling; for restoring the site; for seeding and mulching; and for all labor, equipment, tools, and incidentals required to complete the work.

The quantity of clearing and grubbing required for the temporary swale construction will be paid for according to Section 201. The quantity of sediment removal will be paid for according to Section 250.

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