

INDIANA DEPARTMENT OF TRANSPORTATION



INTER-DEPARTMENT COMMUNICATION
Standards Section C Room N642



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DESIGN MEMORANDUM No. 00-19 TECHNICAL ADVISORY

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich
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SUBJECT: Temporary Erosion and Sediment Control

EFFECTIVE: September 11, 2001, Letting

The Standard Specifications and Standard Drawings for temporary erosion control measures have been revised with the date of September 2001. A design policy has been developed which is described in new Design Manual Chapter 37. The revised Standard Specifications show which pay items have been added or deleted. The Standard Drawings which have been revised are referenced below. All such documents are attached herewith. The Standard Drawings which have been discontinued are as follows:

205-TECB-01 and -02
205-TECD-03 and -05
205-TECP-01, -03, -04, and -05
205-TECS-03 and -04

Temporary measures to be used to control erosion and sediment in transverse sheet flow include silt fence and interceptor ditch. The silt fence should be used at the base of a side slope. The interceptor ditch should be used to protect a work area or slope. A slope drain should be used with an interceptor ditch if the cut or fill height is greater than 3 m (10 ft). The interceptor ditch is not a separate pay item.

Temporary measures used to control erosion and sediment in longitudinal ditch flow include check dams, ditch inlet protection, and sediment traps. Check dams lower the velocity of flow in a ditch. Revetment riprap should be used if the check dam is to be placed outside the construction clear zone. Straw bales should be used if the check dam is to be placed inside the construction clear zone. Inlet protection measures keep sediment from entering storm sewers. There are three types of devices which the contractor may choose from, as shown on the Standard Drawings. The sediment trap retains sediment from entering another undisturbed legal drainage body, therefore it is the last measure used in the sediment control process.

The sediment basin is used to control erosion and sediment in enclosed areas such as interchanges, rest areas, weigh stations, or replacement wetlands. Since the size of such areas is variable, no standard details have been developed, but a schematic detail is shown as Figure 37-3C in new Design Manual Chapter 37.

Temporary seeding and temporary mulching are to be used to stabilize areas already disturbed by construction operations, but no further work is expected to take place in such areas for 15 calendar days or longer. Standard details have not been developed for this work. Guidelines for determining quantities are shown in new Design Manual Section 37-3.02(03).

The revised standard drawings are as follows:

205-TECD-01, Temporary Check Dam, Revetment Riprap
205-TECD-02, Temporary Check Dam, Straw Bales
205-TECD-04, Temporary Sediment Trap
205-TECI-01, Temporary Ditch Inlet Protection, Aggregate Ring
205-TECI-02, Temporary Ditch Inlet Protection, Geotextile Box
205-TECI-03, Temporary Ditch Inlet Protection, Slotted Barrel
205-TECP-02, Temporary Silt Fence
205-TECS-01, Temporary Interceptor Ditch
205-TECS-02, Temporary Slope Drain

The new code numbers, pay item names, and pay units are as follows:

205-06931 Temporary Check Dam, Revetment Riprap Mg (TON)
205-06932 Temporary Check Dam, Straw Bales m (LFT)
205-06936 Temporary Sediment Trap Mg (TON)
205-06935 Temporary Sediment Basin EACH
205-06933 Temporary Ditch Inlet Protection EACH
205-06937 Temporary Silt Fence m (LFT)
205-06938 Temporary Slope Drain m (LFT)
205-06930 Splashpad, Riprap Mg (TON)
205-06934 Temporary Mulching Mg (TON)

The code number and pay item for temporary seeding are unchanged.

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Attachments

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