

## **INDIANA DEPARTMENT OF TRANSPORTATION**

Driving Indiana's Economic Growth

## Design Memorandum No. 08-12 Technical Advisory

May 29, 2008

то:	All Design, Operations, and District Personnel, and Consultants
FROM:	/s/ Anthony L. Uremovich
	Anthony L. Uremovich
	Design Resources Engineer
	Production Management Division
SUBJECT:	Stable Construction Entrances
<b>REVISES:</b>	Indiana Design Manual Section 37-2.0
EFFECTIVE	Sentember 4 2008 Letting

Most construction projects will require the contractor to have temporary entrance points from off-road locations on to public roads. Recurring Special Provision 108-C-192 requires the contractor to install stable construction entrances at these points in order to control movement of sediment off the project site by construction traffic. This special provision is required in each contract except for a mowing or herbicide contract. If the special provision is required, the designer should include an undistributed quantity of 100 tons (100 Mg) of No. 2 stone in the preliminary estimate of quantities and cost estimate. This minimum quantity should be sufficient to provide two stable construction entrances. If the designer anticipates that additional entrances will be required, the quantity should be adjusted accordingly. The locations of such entrances should not be shown on the plans.

Recurring Special Provision 108-C-192 is attached herewith.

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108-C-192 TEMPORARY EROSION CONTROL MEASURES

(Adopted 09-27-06)

The Standard Specifications are revised as follows:

SECTION 108, BEGIN LINE 107, DELETE AND INSERT AS FOLLOWS:

An amended Erosion Control Plan shall be submitted in accordance with 327 IAC 15-5 for those areas not included in the Department submittal or as necessary for changes initiated by the Contractor. Items to include consist of sequencing of operations, borrow and disposal areas, and haul roads as well as any revision to the Department's submittal. *If borrow and stockpile sites are used, the Contractor shall indicate the erosion and sediment control measures to be implemented and the sequencing of the erosion and sediment control measures to be used on the sites. The Contractor shall also state where the spoil from the project, if any, will be placed. The Contractor shall provide this information following the quidelines for Rule 5 (327IAC 15-5). The Contractor shall also submit a sequencing of the erosion and sediment control measures to be used on the project to:* 

IDEM	Indiana Dept. of Transportation
Rule 5 Coordinator	Rick Phillabaum
100 N. Senate Avenue	Room N642
Mail Code 65-42 Rm 1255	100 N. Senate Avenue
Indianapolis, IN 46204	Indianapolis, IN 46204

The borrow, stockpile, and spoil sites must be permitted by the IDEM Notice of Intent, NOI. The Contractor shall submit either a new IDEM NOI or revise the original NOI for the project. A copy of the revised NOI or the new NOI shall be given to the Engineer.

All information shall be submitted and approved prior to land disturbing activities. All appropriate erosion control items shall be in place prior to disturbing the project site. A copy of the amended plan shall be provided to the Engineer.

The Contractor shall designate one or more of its employees as an Erosion Control Supervisor. The Erosion Control Supervisor shall to be responsible for the preparation, submittal, and ensuring receipt of the approval of the amended erosion control plan. Such individual(s) shall also be responsible for obtaining all other necessary permits including the wetland inspection and archaeological record check and field survey in accordance with 203.08, and for all environmental inspections. Such individual(s) shall oversee the installation of all erosion control measures and shall conduct regular weekly and post-event inspections and perform all other tasks related to the installation, maintenance, and removal of erosion control measures. The Erosion Control Supervisor shall accompany personnel from IDEM or other governmental agencies, as required, during site visits by those agencies. And The Erosion Control Supervisor shall be responsible for completion of all reports in accordance with 205.

A minimum of 10 days prior to commencing work, the Contractor shall prepare and submit to the Engineer, for approval, an erosion control plan that includes, at a minimum, the following items:

- (a) Locations of all proposed soil stockpiles, borrow areas, or disposal areas.
- (b) Locations of all proposed vehicle and equipment parking areas, vehicle and equipment fueling locations, placement of the site construction trailers, location of all on-site batch plants, and designated concrete truck washout areas.
- (c) Proposed construction sequence and phasing of erosion control measures.
- (d) Location of all construction entrances where vehicles and equipment will enter and exit the site.
- (e) Material handling and spill prevention plan, which shall include a list of expected materials that may be present on the site during construction operations, as well as a written description of how these materials will be handled to minimize the potential that the materials may enter the storm water runoff from the site.
- (f) Statements that the erosion control measures for the project shall, at a minimum, be inspected on a weekly basis and within 24 h of every 1/2 in. (13 mm) rain event.
- (g) Monitoring and maintenance plan for erosion control measures.

The erosion control plan shall be signed by the Erosion Control Supervisor. The Engineer will submit the erosion control plan, for approval, to IDEM through the Department's Office of Environmental Services Permit Coordinator.

The name(s) of the designated individual(s) *Erosion Control Supervisor* shall be furnished the Engineer at, or prior to, the preconstruction meeting. Should the designated individual(s) need to be replaced during the contract, replacements shall be designated within seven calendar days and notification shall be furnished the Engineer.

Permanent erosion control measures shall be incorporated into the work at the earliest practicable time as the construction progresses to stabilize the site.

In order to minimize pollution to bodies of water, the practices and controls set out below shall be followed.

- (a) When work areas are located in or adjacent to bodies of water, such areas shall be separated by a dike or other barrier to keep contained. Sediment disturbance of these bodies of waters shall be minimized during the construction and removal of such barriers.
- (b) All waterways shall be cleared as soon as practicable of false-work, temporary piling, debris, or other obstructions placed during construction operations.

- (c) Water from aggregate washing or other operations containing sediment shall be treated by filtration, a settling basin, or other means sufficient to reduce the sediment content.
- (d) Pollutants such a fuels, lubricants, asphalt, sewage, wash water, or waste from concrete mixing operations, and other harmful materials shall not be discharged into existing bodies of water.
- (e) All applicable regulations and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the contract.

SECTION 108, AFTER LINE 177, INSERT AS FOLLOWS:

The cost of preparation of the erosion control plan shall be included in the cost of the various erosion and sediment control items.

SECTION 205, AFTER LINE 33, INSERT AS FOLLOWS:

Temporary erosion control measures shall be placed as soon as possible. Silt fence and sediment traps shall be installed prior to beginning earth disturbing activities.

Temporary seeding shall be placed on disturbed areas that are expected to be undisturbed for over 7 days or as directed by the Engineer.

Check dams shall be installed as soon as possible in areas of construction. Once ditches are to grade, permanent erosion control measures shall be placed as soon as possible and no later than 5 workdays after ditch grading is completed. During construction, if ditch flow patterns change, erosion control measures may need to be moved or adjusted so that no areas are left unprotected.

Pipe end sections and anchors shall be placed when the structure is installed. If the pipe end sections or anchors cannot be placed at the same time, temporary riprap splashpads shall be placed at the outlets of the pipes until the pipe end sections or anchors can be placed.

SECTION 205, AFTER LINE 108, INSERT AS FOLLOWS:

## (o) Stable Construction Entrance

The Contractor shall provide a stable construction entrance at the points where construction traffic will enter onto an existing road. This entrance shall be a minimum of 12 ft wide, 50 ft long, and constructed of 12 in. of No. 2 stone. The radii shall be large enough to accommodate the vehicles utilizing the entrance. Additional stone may be required, as directed, to maintain the usefulness of the stable construction entrance. Where there in insufficient room for a stable construction entrance, other measures shall be taken to prevent the tracking of sediment onto the pavement.

SECTION 205, AFTER LINE 118, DELETE AND INSERT AS FOLLOWS:

## 205.04 Maintenance

Temporary erosion and sediment control measures shall be inspected by the Contractor's Erosion Control Supervisor once every seven days and after each rain activities activity. Inspections shall be documented and records shall be maintained by the Contractor, to be made available for review upon request. Records shall include, at a minimum, the date, the inspector's name, the maintenance and corrections needed based on this inspection, and the status of previously identified deficiencies. The temporary protection measures shall be returned to good working conditions within 48 hours after inspection or as directed. Sediment shall be removed as approved and disposed of in accordance with 201.03 and 203.08. *Inspection records shall be kept until the entire contract is complete and has been permanently stabilized*.

SECTION 205, AFTER LINE 148, INSERT AS FOLLOWS:

No. 2 stone for stable construction entrances will be measured by the ton (megagram) in accordance with 109.01(b).

SECTION 205, LINE 166, INSERT AS FOLLOWS: for at the contract unit price per each unit installed. *No. 2 stone for stable construction entrances will be paid for at the contract unit price per ton.* 

SECTION 205, AFTER LINE 213, INSERT AS FOLLOWS:

The cost of constructing, maintaining, and removal of the stable construction entrance shall be included in the cost of No. 2 stone.