INDIANA DEPARTMENT OF TRANSPORTATION



STORMWATER QUALITY BEST MANAGEMENT PRACTICES CONSTRUCTION SITES

Vehicle Tracking Pads

When to use:

- Where construction vehicles leave active construction areas onto surfaces where runoff is not checked by sediment controls
- At all points of egress to public roads

Advantages:

- Cost-effective
- Highly effective for sediment control

Limitations:

- Can require intensive maintenance
- Stone can become quickly saturated under muddy conditions

BMP Type: Construction

Practice

Installation Cost: \$2000-\$4000

Maintenance Effort: High Runoff Rate Control: No Runoff Volume Control: No

Description:

A temporary construction entrance is a stone pad located where vehicles leave a construction site. The purpose of the stone pad is to provide an area where mud can be removed from tires before a vehicle leaves the site. The stone pad consists of clean rock designed in such a way that vehicle tires will sink in slightly. This helps remove mud from the tires as the vehicle passes over the pad.

The effectiveness of temporary rock construction entrances for trapping sediment depends upon the length, depth of rock, frequency of use and maintenance, as well as the type of structure used. A newly installed rock construction entrance will be relatively effective. However, once the rock voids become clogged with mud, the practice will not serve its intended purpose until the rock is replaced. Include a wash rack where vehicle tires can be washed to increase effectiveness.



Vehicle Tracking Pads

Design and Installation:

- Vehicle tracking pads are constructed of aggregate. It is recommended the construction entrance consist of 6 inches of INDOT riprap, uniform B placed over 6 inches of crushed INDOT No. 53 stone.
- The rock entrance should be at least 50 ft long; however, longer entrances may be required to adequately clean tires.
- Geotextile fabric may be needed under the rock to prevent migration of mud from the underlying soil into the stone.
- If tires are cleaned with water, the wash water should be directed to a suitable settling area.
- A wash rack installed on the rock pad may make washing more convenient and effective. The
 wash rack would consist of a heavy grating over a lowered area. The grating may be a
 prefabricated rack, such as a cattle guard, or it may be constructed on site of structural steel.
 In any case, the wash rack must be strong enough to support the vehicles that will cross it.
- A pipe or culvert shall be constructed under the entrance if needed to prevent surface water flowing across the entrance from being directed out onto paved surfaces.
- A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces. A water bar is a permanent ridge, or ridge and channel, constructed diagonally across a sloping road,

Monitoring and Maintenance:

Vehicle construction pads shall be inspected by the Contractor once every seven days and after rain activities. 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. Any evidence of erosion problems in unutilized areas shall be repaired within 48 hours after inspection or as directed. Sediment shall be removed as approved and disposed of outside the floodplain, wetlands and buffer areas in an approved disposal site or fill area and then stabilized.

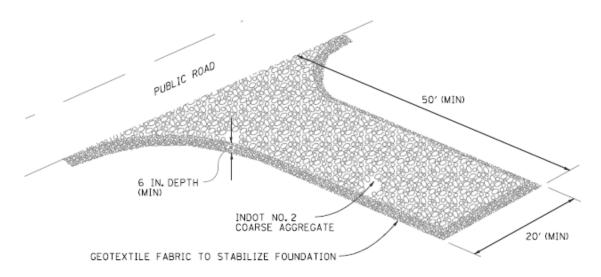
In addition to the vehicle tracking pad, it is recommended that a street sweeper and scraper be kept on site during construction operations and the street areas adjacent to the tracking pad should be cleaned daily at the end of each construction day. The rock pad should be visually inspected for needed maintenance throughout the day when construction conditions are muddy. Additionally, the pad must be inspected by the end of the next business day following each measurable storm event.

Whenever the existing rock becomes buried, the pad will require top-dressing with additional rock, or removal and reinstallation of the pad. Areas used for sediment trapping may also need to be cleaned out. If conditions on the site are such that the majority of the mud is not removed by the vehicles traveling over the gravel, additional sediment tracking control measures should be added to prevent the tracking of mud or dirt onto the roadway. Such measures may include tire washes, rumble racks constructed of steel panels with ridges, street sweeping, or vacuuming.

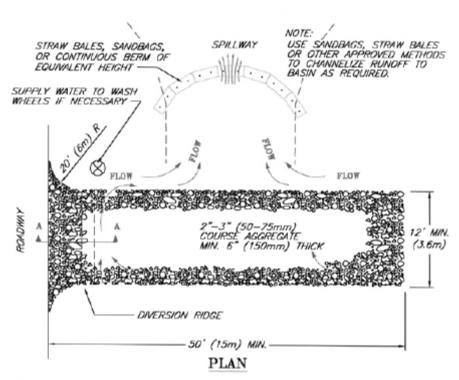
Wash water should be carried away from the entrance to a settling area to remove sediment. wash rack may also be used to make washing more convenient and effective. Mud spilled dropped, washed or tracked onto public roads, or any surface where runoff is not checked be sediment controls, shall be removed immediately.	d,
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Vehicle Tracking Pads

Drawings:



Vehicle Tracking Pad – Isometric View



Vehicle Tracking Pad with Water Bar Diversion

Vehicle Tracking Pads



Cross Section of Water Bar Diversion

