

- Flocculation effectiveness is highly dependent on the compound being thoroughly dissolved and mixed with the turbid water.
- Perform toxicity and pH testing to ensure that flocculants meet water quality standards.
- Securely stake flocculent logs and other polymer-treated structures along the flow path based upon manufacturers' specifications and site characteristics.

4. Specifications.

- District Special Provision will be required.
- Refer to manufacturer's specification for chosen product.

#### **41-3.06 Entrance/Exit Controls**

Entrance/exit control BMPs prevent the tracking of sediment attached to equipment and vehicles offsite. The design of entrance/exit control measures will depend upon the site conditions. Generally, these BMPs are not a pay item as the contractor is required to install and maintain per NPDES permits. If the district feels the necessity to require this item in a specific location, a District Special Provision will be required.

##### **41-3.06(a) Stabilized Construction Entrance/Exits**

1. Definition and Purpose. A stabilized pad of coarse aggregate, underlain with geotextiles or a commercially available prefabricated unit designed to vibrate accumulated sediment from tires and under chassis. BMPs are located at any point where traffic will be entering and leaving a construction site. Stabilized construction entrances and exits reduce or eliminate the tracking of sediment (e.g., mud, dirt) onto public right-of-way or streets by construction vehicles.
2. Applications. At all points of construction ingress/egress where sediment can be tracked onto public roads.
3. Design Considerations.
  - Stabilized construction entrances can be expensive to construct and maintain, so it will be necessary to limit the number of access points to the construction site.
  - Design stabilized entrances and exits for the heaviest vehicles and equipment loads.
  - Construct stabilized entrances and exits on level or slightly sloping ground.
  - Aggregate entrances and exits may require periodic top dressing.

- Route runoff from the entrance through a sediment-trapping device.
- If site conditions are such that the entrance does not remove sufficient amounts of sediment from vehicle and equipment tires, then tire washing may also be required; see Section 41-3.06(b).
- A temporary pipe culvert may be needed beneath the entrance as to not impede ditch or surface flow towards the entrance.

4. Specifications.

- Generally not a pay item as the contractor is required to install and maintain per NPDES permits. If the district feels the necessity to require this item in a specific location, include a District Special Provision.
- See *Illinois Urban Manual* practice STD 930 (Stabilized Construction Entrance).
- See *Illinois Urban Manual* STD Drawing IL-630 (Stabilized Construction Entrance Plan) as a plan sheet.

*Note: Use IDOT pay items when incorporating Illinois Urban Manual Standards.*

#### **41-3.06(b) Tire Wash Stations**

1. Definition and Purpose. A designated area where sediment may be washed from equipment tires and chassis prior to exiting the site via a stabilized construction exit. Sediment is collected in a receptacle and disposed of at an approved location. Tire wash stations reduce or eliminate the tracking of sediment (e.g., mud, dirt) onto public right-of-way or streets by construction vehicles and ensure appropriate discharge of sediment-laden wash water.
2. Applications. Tire wash stations are appropriate for the following applications:
  - on sites where conditions are such that a stabilized construction entrance alone does not remove all sediment from vehicle and equipment tires; and
  - in combination with grated wash rack (e.g., cattle guard).
3. Design Considerations.
  - Wash stations require a supply of wash water.
  - Where wash areas are used, provide a construction entrance with two lanes (e.g., to avoid having incoming vehicles drive through the wash area) or have a turnout area.

- Drain wash water away from the construction entrance and adjacent pavement towards a sediment trapping facility; see Section 41-3.04.
- If wash rack is used, have the manufacturer design the wash rack to handle the heaviest anticipated traffic loads.

4. Specifications.

- Generally not a pay item as the contractor is required to install and maintain per NPDES permits. If the district feels the necessity to require this item in a specific location, include a District Special Provision. Ensure the wash area has a stabilized construction entrance.
- See *Illinois Urban Manual* practice STD 930 (Stabilized Construction Entrance).
- See *Illinois Urban Manual* STD Drawing IL-630 (Stabilized Construction Entrance Plan) as a plan sheet.

*Note: Use IDOT pay items when incorporating Illinois Urban Manual Standards.*

**41-3.07 Sediment Control Reference Table**

Figure 41-3.C summarizes the SCPs that were discussed in Section 41-3. The figure may be used by the designer as a supplemental tool to ensure that all BMP options have been considered. It should be noted that multiple BMPs may be required from each category in order to provide comprehensive sediment management on the site.