	City of Berea, Kentucky Stormwater Best Management Practices (BMPs) Erosion Prevention Practices (EPPs)	EPP 4.2.3																		
	Activity: Tire Washing Facility (TW)																			
PLANNING CONSIDERATIONS: Design Life: 1 yr Acreage Needed: Minimal Estimated Unit Cost: Medium Annual Maintenance: Negligible		<table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>																		
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Description Suitable Applications Approach	<p>As a result of vehicular ingress and egress to the construction site, the facility would remove mud and dirt from vehicle tires and the undercarriage to prevent materials from depositing onto public roads. This application can be used in conjunction with the stabilized construction entrance, EPP4.2.3.</p> <ul style="list-style-type: none"> ➤ Temporary construction traffic, phased construction projects and off-site road access. ➤ Typically used for large construction sites. <ul style="list-style-type: none"> ➤ Incorporate with the stabilized construction entrance, EPP 4.2.3. ➤ Construct wash rack on level ground when possible, on a pad of course aggregate. Design tire rack to withstand anticipated traffic loads and drain to a detention pond or swale. A typical wash rack has been shown in the standard details. However, wash rack design may consist of other materials or configuration as long as it provides the intended function. ➤ If a swale is required, then it shall provide sufficient grade, width, and depth to carry runoff. ➤ The swale shall carry runoff from the wash area to a sediment-trapping device such as a check dam. ➤ All employees, contractors, subcontractors, and others that leave the site with mud caked tires and/or undercarriages shall use construction entrance. 																			

Activity: Tire Washing Facility (TW)

EPP 4.2.3

**Installation
Procedures for
Tire Washing
Facility**

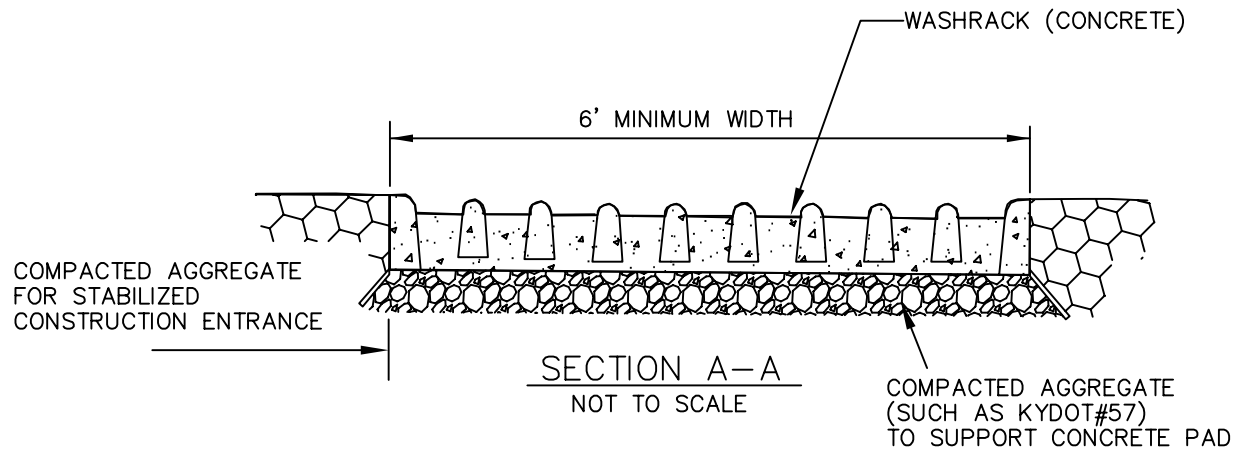
- A geotextile underliner must be placed under the entire length and width of the stabilized entrance, but not under the wash rack.
- Place a layer of KTC No. 1 or No. 2 stone across the full width of the exit and construct on level ground with a minimum thickness of 6-inches.
- The length of the stabilized entrance shall be as required based on the application, unless approved otherwise by the City Engineer.
- The width of the pad shall be a minimum of 12-feet, unless approved otherwise by the City Engineer.
- If a swale is required, then it shall meet specific requirements needed to carry the wash runoff to a sediment-trapping device.

Maintenance

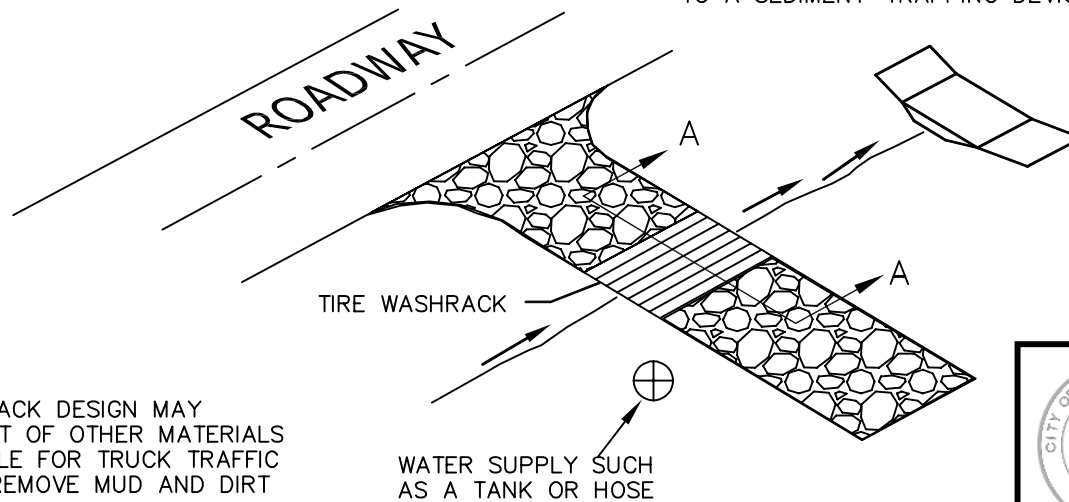
- Remove accumulated sediment to maintain system performance, in the wash rack and/or sediment trap.
- Inspect at the end of each shift or workday for damage and repair as needed.
- Remove any mud tracked onto adjacent roadway by sweeping or scraping as necessary.

**Inspection
Checklist**

- Vehicles are leaving the site through designated construction exit(s).
- Mud, dust or dirt is removed prior to exit onto the adjacent road.
- The construction exit is sufficiently maintained to prevent mud, dirt, fines and dust from being tracked off-site.
- Stones under wash rack have been maintained and free of deleterious materials.



SWALE OR DITCH TO CARRY RUNOFF
TO A SEDIMENT-TRAPPING DEVICE



NOTE:
WASHRACK DESIGN MAY
CONSIST OF OTHER MATERIALS
SUITABLE FOR TRUCK TRAFFIC
THAT REMOVE MUD AND DIRT



City of Berea
Stormwater Manual

Tire Washing Details

EPP 4.2.2

SOURCE: LOUISVILLE MSD & TDEC

CONSTRUCTION SPECIFICATIONS

Aggregate Size: Stone should be in accordance with KTC NO. 1 or NO. 2 stone specifications (1.5 to 3.5 inch stone), washed, and well graded.

Pad Thickness: The gravel pad should have a minimum thickness of 6 inches.

Pad Length and Width: At a minimum, the width should equal full width of all points of vehicular egress, but not less than 20 feet wide. Pad length should be no less than 50 feet.

Washing: If the action of the vehicle traveling over the gravel pad does not sufficiently remove the material, the tires should be washed prior to exit onto public roadways. When washing is required, the wash rack should be designed for the anticipated traffic loads and placed on level ground, on a pad of coarse aggregate (such as KTC #57). A typical wash rack is shown in Figure 2. The wash rack design may consist of other materials suitable for truck traffic that remove mud and dirt. The wash rack should have provisions that intercept the sediment-laden runoff and direct it into a sediment trap or sediment basin.

Location: The exit should be located wherever traffic will be leaving a construction site directly onto a public roadway.

It is recommended that the exit area be excavated to a depth of 3 inches and be cleared of all vegetation and roots.

Waterbar Diversion: On sites where the grade toward the public roadway is greater than 2%, a waterbar diversion 6 to 8 inches high with 3:1 side slopes should be constructed across the foundation of the construction exit to prevent storm water runoff from leaving the site.


Geotextile: The geotextile under-liner must be placed the full length and width of the exit.

INSPECTIONS

Inspections of construction exit should be made at the end of each shift or workday.

MAINTENANCE

The exit should be maintained in a condition that will prevent tracking or flow of material onto public rights-of-way. This may require periodic top dressing with fresh stone, as conditions demand, and repair and/or clean out of any structures to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed immediately.

	City of Berea Stormwater Manual
Tire Washing Details	
	EPP 4.2.2

SOURCE: LOUISVILLE MSD & TDEC