

Stabilized Construction Entrance Exit



	BENEFITS		
	L	M	H
Flow Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Runoff Reduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flow Diversion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Commented [SK1]: Minimal revisions since initial discussion.

Replaced granular exit photo with a shaker rack.

Changed "tire" washing to "wheel" washing and included reference in initial description.

Commented [SK2R1]: Expanded the wheel wash section to provide more guidance on locating a wheel wash station and providing appropriate sediment and erosion controls for the runoff.

Description: A stabilized construction entrance-exit is a temporary practice, stabilized layer of large aggregate that is located at any point where traffic enters or leaves a construction site and enters a public road or other paved areas. The purpose is to prevent soil from construction equipment from being deposited on roadways where it can be picked up and carried away by stormwater runoff. Stabilized exits often consist of a layer of large aggregate that helps remove soil from construction equipment. Alternative methods include shaker racks which help to shake sediment loose from vehicles or wheel wash/wash rack systems which use high-pressure water to wash sediment from vehicles before exiting the site. Effectiveness depends on length, depth of rock, frequency of use, and maintenance of temporary rock entrance.

Typical Uses: Used where construction vehicles leave a construction site and enter onto a public street. The purpose of the rock entrance stabilized construction exit is to prevent mud from being tracked out onto the roadway, where it can cause plugging of storm sewers, water quality issues, and fugitive dust problems.

Advantages:

- Low cost (based on stone availability) and easily installed.
- Helps prevent tracking of mud onto public streets, reducing fugitive dust, water quality issues, and clogged storm sewers.
- Provides stable exit/entrance for construction traffic.

Limitations:

- Rock must be replaced once the voids become plugged with mud.
- May not remove all soil from vehicles, especially on muddy sites.
- Rock and sediment must be disposed of upon completion.

Longevity: Varies, based upon site conditions and volume of traffic

SUDAS Specifications: Refer to [Section 9040, 2.14](#) and [3.19](#)

Commented [REL3]: How do you handle containment? Issues with getting water to the wheel wash? Needs to be discussed more. Address containment, drainage, stabilization, etc.

A. Description/Uses

A stabilized construction ~~entrance-exit~~ consists of a pad of large aggregate, often underlain with engineering fabric. Rock ~~entrances-exits~~ should be located at any point where traffic will be leaving a construction site and entering a public roadway.

~~Additional methods, including shaker racks, track-out control mats, and wheel wash/wash rack systems can also be employed to remove additional soil or caked sediment. The stabilized construction entrance reduces the amount of sediment (dust, mud, etc.) tracked offsite by construction equipment, especially if a wash rack is incorporated for removing caked sediment.~~

B. Design Considerations

The ~~entrance-exit~~ from a construction site is a significant source ~~for-of~~ offsite sediment deposition. ~~Entrance-Exits~~ and parking areas are continuously disturbed, leaving no opportunity for vegetation stabilization. During wet weather, these areas often become muddy, and construction vehicles track this mud off of the site and deposit it onto the public roadway where it clogs storm sewers and creates fugitive dust problems.

A stabilized construction ~~entrance-exit~~ can reduce the amount of sediment that is tracked into the street by construction traffic. A rock ~~entrance/entrance-exit~~ stabilizes the access to the site, and helps remove mud ~~and clay~~ from vehicle tires before they leave the site. A stabilized construction ~~entrance-exit~~ should be constructed on every construction site, ~~prior-to-before~~ the mobilization of construction equipment.

1. **Location:** A stabilized construction ~~entrance-exit~~ should be located at every point where construction traffic leaves a construction site. Vehicles leaving the site should travel over the entire length of the rock ~~entrance-exit~~. When possible, the ~~entrance-exit~~ should be located on level ground, at a location with appropriate sight distance. Construction vehicles should be prohibited from leaving the site at locations other than the stabilized construction ~~entrance-exit~~. Fencing should be constructed if necessary. If additional access to the site is required, additional rock ~~entrances-exits~~ should be constructed.
2. **Site Preparation:** The area of the ~~entrance-exit~~ should be excavated to the proposed thickness of the stone, stripping any topsoil, vegetation, and soft soils as necessary to provide a stable subgrade. When soft soil conditions exist, or when earthmoving or other heavy equipment will use the ~~entrance-exit~~, a subgrade stabilization fabric should be placed over the entire length and width of the ~~entrance-exit~~ ~~prior-to-before~~ placing the rock.
3. **Drainage:** Slopes should not exceed 15% and should be carefully graded to drain transversely to prevent runoff from the ~~entrance-exit~~ from flowing into the street. All surface water flowing off of the construction ~~entrance-exit~~ should be directed to a sediment removal device (sediment basin or trap, silt fence, filter sock, etc.).
4. **Shaker Rack:** A shaker rack (also called a track out pad, rumble rack, etc.) located in advance of the rock exit can be used to remove loose material before vehicles track across the rock. This approach removes more material than the rock alone and can help keep the rock exit clean longer, reducing the frequency of replacement.
45. **Fire-Wheel Washing or "Wash-rack":** A properly constructed rock ~~entrance-exit~~ should not be relied upon to remove all the mud from construction traffic. In some cases, the action of tires moving over a ~~shaker rack or~~ gravel pad may not adequately clean tires. If conditions on the site are such that the majority of the mud is not removed by ~~these practices, the vehicles traveling over the rock, then~~ the tires of the vehicles should be washed before entering the public road. Manual washing of the tires should be provided, or automated wash racks should be installed.

Commented [SK4]: Language noting that every exit location to a site needs to be stabilized

Commented [SK5]: There was a discussion on wheel wash / wash racks. This language was already included. Not too detailed, but enough to make people aware that these exist.

When wheel washing is provided, the location of the wash station must be carefully considered. The wash station needs to be located near an available water source (fire hydrant, service line, etc.) unless water is being provided from a portable source. It may be necessary to elevate the wash station or locate it near a natural high point to allow sediment-laden wash water to drain to an appropriate sediment removal device. Additional drainage features such as culverts or swales may need to be installed to direct the sediment-laden water to an appropriate location. These conveyance features should employ appropriate erosion control features to prevent erosion from the flowing wash water. All wheel wash water must be carried away from the directed entrance to a sediment removal device (sediment basin or trap, silt fence, filter tube, etc.). All sediment shall be prevented from entering storm drains, ditches, or watercourses.

C. Application

1. **Exit Length:** Minimum of 50 feet with an exception for ~~single-single~~ family residential lots which should be 30 feet. For sites that will be utilizing the ~~exit entrance~~ to haul a large volume of earth, the length of the ~~exit entrance~~ should be increased.
2. **Exit Width:** Minimum of 20 feet wide. Busy ~~exits entrances~~ will need the capability of handling a lane of traffic each way, typically 30 feet wide. Flare the ~~exit entrance~~ where it meets the existing road to provide a turning radius.
3. **Geotextile:** If soft soil conditions exist, or when earthmoving or other heavy equipment will utilize the ~~exit entrance~~, a layer of subgrade stabilization fabric should be placed over the prepared subgrade ~~prior to before~~ placement of the rock to minimize migration of stone into the underlying soil by heavy vehicle loads. The barrier created by the fabric also aids in ~~the~~ removal of the stone upon completion of the project, or as required for maintenance.
4. **Stone:** The rock for the ~~exit entrance~~ should consist of a nominal 2 to ~~3-3~~ inch clean crushed stone or recycled concrete. A 6 to 12-inch thick layer of stone, depending on anticipated traffic, should be placed over the entire length and width of the construction ~~exit entrance~~. Rock with smaller aggregate does not adequately remove mud and clay from vehicles, and may be picked up by vehicle tires and carried out into the street.
5. **Shaker Rack:** A variety of manufactured systems are available or can be configured by the contractor. The shaker rack system should be wide enough to handle the widest vehicles anticipated. The rack should have at least 4 inches of soil storage space below the top of the rack or be installed over a pad of coarse aggregate.

D. Maintenance

Construction ~~exits entrances~~ should be inspected daily to ensure that mud and dirt are not being tracked onto roadways. All sediment deposited on ~~paved~~ roadways should be removed at the end of each workday. It may not be, not washed into the stormwater system or ~~into~~ waterways, at the end of each workday. If tracking into the roadway continues to occur, the construction exit may need to be expanded, or additional practices implemented, to eliminate tracking.

Stabilized construction ~~Rock exits entrances~~ may require that additional stone to be placed if the existing material becomes buried or if the subgrade is soft or becomes saturated.

Upon completion of the project the rock ~~exit entrance~~, engineering fabric, and any accumulated sediment should be removed and disposed of.