

Construction Entrance/Exit Pad Standard

This standard is intended to guide stormwater professionals on the purpose, design, placement, material selection, installation, inspection, and maintenance of aggregate construction entrance/exit pads when used as a temporary sediment control practice during construction to minimize the amount of soil track-out and other construction-related debris onto adjacent streets or roads. Consult with product specifications for alternative manufactured construction entrance/exit pads or systems.

Keywords: construction entrance/exit pad, track-out control, runoff, sediment control

1 DEFINITION

- 1.1 An aggregate pad, manufactured product, mechanical system, or washing system installed to provide a stable surface for construction vehicles to traverse as they enter or exit the site. It is also intended to minimize the amount of soil track-out from construction vehicles onto a street or road.

2 PURPOSE

- 2.1 To capture soil and other construction-related debris and minimize track-out onto streets or roads. by construction vehicles, and to restrict site access by construction vehicles to properly designated entrances and exits.

3 DESIGN

- 3.1 **Length:** The length of the construction entrance/exit pad should be long enough to allow for multiple tire rotations of the largest construction vehicle anticipated to use the pad. The pad is typically 50 ft (15 m) long, however may be longer or shorter depending on site specific characteristics and limitations.
- 3.2 **Width:** The width of the construction entrance/exit pad should be large enough to allow for the widest construction vehicle anticipated to use the pad. The pad is typically 12 ft (3.6 m) wide; however, may be wider or narrower depending on site specific characteristics and limitations. Consider a width of 20 ft (6.1 m) to allow for two travel lanes in and out of the pad.
- 3.3 **Slope:** The area should be graded and crowned to allow for positive drainage. When possible, slope the pad towards the construction site to prevent runoff from discharging off-site. If the construction exit pad is sloped towards a street or road, consider constructing a berm across the pad to divert runoff.
- 3.4 **Turning Radius:** Consider required turning radius for vehicles entering or exiting the site by flaring the end of the pad where it meets the street or road so that the wheels do not travel over unprotected soil and to minimize damage to pavements.
- 3.5 **Stabilization:** A nonwoven geotextile underlayment should be placed directly on top of the soil to act as a barrier between the soil and aggregate (or base layer if applicable), preventing soil erosion, and promoting stabilization.
- 3.6 **Thickness:** Aggregate pads should be at least 6 in. (15 cm) thick when placed. The thickness of the construction exit pad should be determined based on the anticipated traffic volume and the size of the construction vehicles that will use the pad.

- 3.7 **Base Layer:** A base course of larger sized aggregate, such as riprap, may be used to maintain stability and is installed beneath the aggregate pad for longer duration projects requiring a construction exit pad.

4 PAD LOCATION

- 4.1 The construction entrance/exit pad(s) should be located where vehicles either entering or exiting the site can easily access it.
- 4.2 To prevent vehicle bypass, measures may be needed to enforce use of construction entrance/exit pad.
- 4.3 The pad should be in a position that allows for the easy installation and maintenance of complimentary sediment control devices.
- 4.4 For visibility to approaching traffic, avoid placing construction entrance/exit pads along curves or steep grades on the street or road.

5 MATERIALS

- 5.1 Angular aggregate shall be crushed stone and should generally be 2.5 to 4 in. (6.3 to 10.2 cm) in size, large enough to adequately flex tire treads and avoid accumulation of soil on the surface. The aggregate shall meet the material requirements for Coarse Aggregate as defined by the appropriate regulatory authority.
- 5.2 The aggregate should be durable, resistant to erosion, and able to provide good traction for construction vehicles.
- 5.3 The nonwoven geotextile underlayment should be of sufficient strength to provide material separation and maintain stability and prevent sinking or shifting of the construction exit pad. Field observations indicate 8 oz/yd² (190 g/m²) nonwoven geotextile is adequate.

6 INSTALLATION

- 6.1 Construction entrance/exit pads should be installed prior to site disturbance and implemented alongside other erosion and sediment control practices as part of a comprehensive stormwater pollution prevention plan.
- 6.2 **Site Preparation:** Clear, strip topsoil, and grade the area where the construction entrance/exit pad will be installed. The surface should be free of debris, rocks, and other obstructions that could interfere with the stability of the pad.
- 6.3 **Geotextile Underlay:** extend the nonwoven geotextile to the

footprint of the construction entrance/exit pad and secure to the ground until aggregate is placed. If the construction exit pad is excavated below grade, the nonwoven geotextile should extend up the sides of the excavation.

- 6.4 **Base layer:** if required, place base layer on top of the nonwoven geotextile underlay.
- 6.5 **Aggregate Layer:** Place a 6 in. (15 cm) layer of aggregate over base layer or nonwoven geotextile underlay. The surface should be smooth and properly sloped to provide drainage.

7 INSPECTION AND MAINTENANCE

- 7.1 **Regular Inspection and Maintenance:** The construction entrance/exit pad should be inspected regularly to identify any damage, erosion, or excess soil accumulation that may have occurred. Maintenance shall occur promptly to restore function. Inspection frequency may vary depending on regulatory requirements.
- 7.2 **Repair Damage:** Any damage identified during the inspection should be repaired promptly to ensure that the pad remains effective. This may include refreshing or adding aggregate as voids are filled with soil.
- 7.3 **Check Slope:** The slope of the construction entrance/exit pad should be checked periodically to ensure that it is still directing water away from the practice and into appropriate sediment control device(s).
- 7.4 **Remove Debris:** Any debris that has accumulated on the construction entrance/exit pad should be removed promptly. This may include rocks, sediment, or other construction-related debris.
- 7.5 **Soil Removal:** track-out onto the street or road should be removed as soon as practicable, prior to subsequent rain events.
- 7.6 **Maintain Sediment Control Devices:** The construction entrance/exit pad should be designed to work in conjunction with sediment control devices such as silt fences, sediment basins, or sediment ponds. These sediment control devices should also be regularly inspected and maintained to ensure that they are functioning effectively.
- 7.7 **Monitor Traffic:** The traffic volume and size of construction vehicles should be monitored to ensure that the construction entrance/exit pad is adequate for the anticipated traffic. If the traffic volume or vehicle size increases, the construction exit pad may need to be enlarged or reinforced to accommodate the increased demand.
- 7.8 **Longevity:** The Construction entrance/exit pad will last longer if site is stable and vehicle volume is reduced.

8 SAFETY

- 8.1 **Visibility:** Construction entrance/exit pads should be clearly marked with signs or other indicators to alert drivers and pedestrians to their presence. Additionally, they should be well-lit if construction vehicles will be using them at night.
- 8.2 **Stability:** The construction entrance/exit pad should be stable

and free of debris or other hazards that could cause a construction vehicle to lose control.

- 8.3 **Slope:** The slope of the construction entrance/exit pad should be designed to ensure that construction vehicles can safely enter and exit the pad without tipping or losing control.
- 8.4 **Drainage:** The construction entrance/exit pad should be designed to ensure that water does not accumulate on the pad, as this can create hazardous conditions for construction vehicles.
- 8.5 **Size:** The size of the construction entrance/exit pad should be appropriate for the anticipated traffic volume and vehicle size, to ensure that vehicles can safely enter and exit the site.
- 8.6 **Traffic Control:** Traffic control measures such as cones, barricades, or flaggers may be necessary to ensure that vehicles enter and exit the construction site safely. These measures may be particularly important in areas with heavy pedestrian or vehicular traffic.
- 8.7 **Maintenance:** Regular inspection and maintenance of the construction entrance/exit pad is essential to ensure that it remains safe and effective for use.

9 DISCLAIMER

- 9.1 These design standards are intended to ensure proper performance and effectiveness of a construction entrance/exit pad. It is important to consult with a qualified engineer, contractor, or the product manufacturer to ensure that these criteria are met, and that the construction entrance/exit pad is properly installed to meet the specific needs of the site. It is important to note that the design standards may vary based on the specific site conditions and regulations in the local area.

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11 REFERENCES

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