

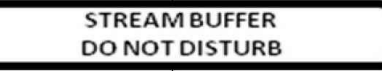
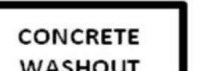


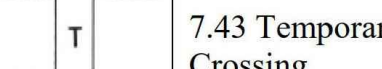

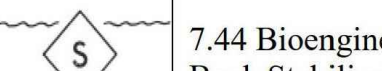
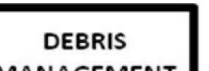
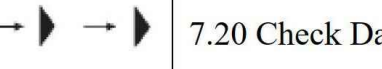

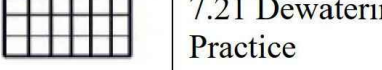

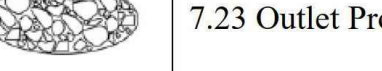

4.0 OVERVIEW OF MANAGEMENT PRACTICES

This section covers each management practice in a manner to help the user understand when each practice can or should be used. It should be the first step towards determining which practices should be incorporated into the Stormwater Pollution Prevention Plan (SWPPP). This section does not contain design information and guidance. Section 7 of this manual should be consulted for that information.

4.1 SYMBOLS

The following table contains standard symbols for structural management practices. Note that Site Preparation management practices (Practices 7.1 through 7.5) are a component of the initial site planning and overall site management and therefore do not have specific symbols. Management practices are grouped by management practice category: Site Preparation, Stabilization, Pollution Prevention, Runoff Control and Management, Sediment Control, and Stream Protection Practices.

Table 4.1 Management Practices Symbols

STREAM PROTECTION PRACTICES		POLLUTION PREVENTION PRACTICES	
 STREAM BUFFER DO NOT DISTURB	7.41 Stream Buffers	 CONCRETE WASHOUT	7.16 Concrete washout
	Stream Diversion Channel	 VEHICLE MAINTENANCE	7.17 Vehicle maintenance
	7.43 Temporary Stream Crossing	 CHEMICAL STORAGE	7.18 Chemical storage
	7.44 Bioengineered Stream Bank Stabilization	 DEBRIS MANAGEMENT	7.19 Trash and debris
RUNOFF CONTROL PRACTICES		STABILIZATION PRACTICES	
	7.20 Check Dam	 MU	7.6 Disturbed Area Stabilization with straw mulch
	7.21 Dewatering Treatment Practice	 MO	7.7 Disturbed area stabilization with other mulches
	7.23 Outlet Protection	 PS	7.8 Disturbed Area Stabilization with Permanent Vegetation

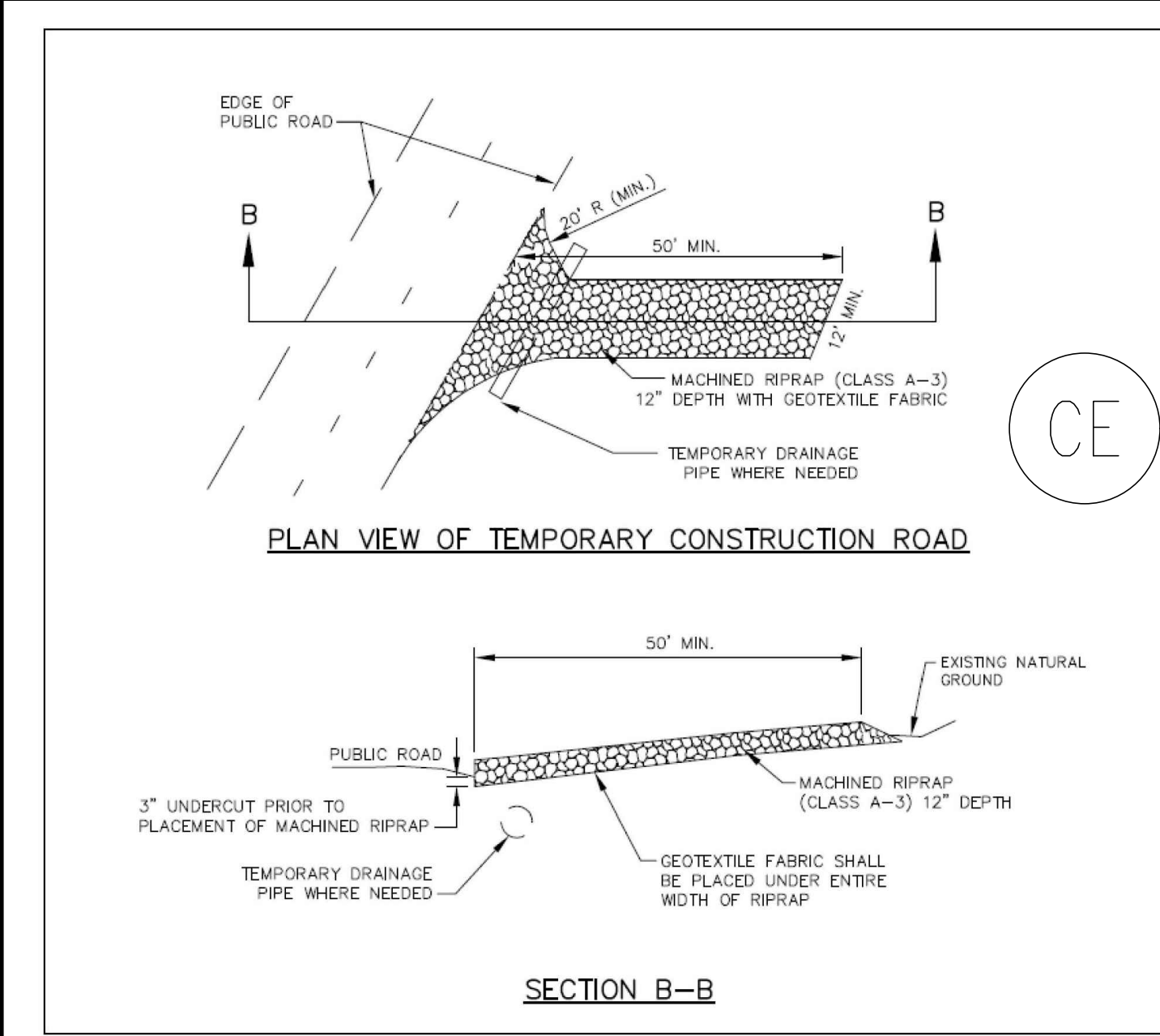


Figure 7.28-2 Construction Exit Detail

Maintenance and Inspection Points

The exit must be maintained in a condition that will prevent tracking or flow of material onto public rights-of-way or into the storm drain system. This may require periodic top dressing with fresh stone or full replacement of stone as conditions demand, and repair and/or cleanout of any related diversions and sediment traps. All materials spilled, dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed by the end of the day.

CONCRETE WASHOUT



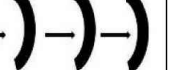



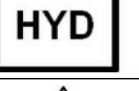















Maintenance and Inspection Points

Ensure contractors avoid mixing excess amounts of fresh concrete and perform washout of concrete trucks offsite or in designated areas only. Do not allow concrete trucks to wash into storm drains, open ditches, streets, or streams. Do not allow excess concrete to be dumped onsite, except in designated areas. Do not wash sweepings from exposed aggregate concrete into the street or storm drains.

Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 inches for above grade facilities and 12 inches for below grade facilities. Inspect plastic linings and sidewalls of site-built washouts to ensure they have not been damaged during construction activities. Inspect all surfaces of prefabricated washouts to ensure the container is not leaking.

Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.

Inspectors should note whether washout facilities are being used and maintained regularly. If inspector finds that concrete trucks are being washed out in locations other than designated washout areas, the inspector should notify the site superintendent immediately and the site superintendent should correct the issue.

	7.24 Slope Drain		7.9 Disturbed Area Stabilization with Sod
	7.25 Tubes and Wattles		7.10 Disturbed Area Stabilization with Temporary Vegetation
	7.26 Rolled Erosion Control Products		
	7.27 Channels		7.12 Hydro Applications
SEDIMENT CONTROL PRACTICES			7.13 Soil binders and tackifiers
	7.28 Construction Exit		7.14 Emergency stabilization with plastic
	7.29 Tire washing facility		7.15 Soil Enhancement
	7.30 Filter Ring	SEDIMENT CONTROL PRACTICES	
	7.31 Sediment Basin		7.36 Construction Road Stabilization
	7.32 Sediment Trap		
	7.33 Baffles		7.38 Filter berm
	7.34 Silt Fence		7.39 Turbidity curtain
	7.35 Inlet Protection		7.40 Flocculants

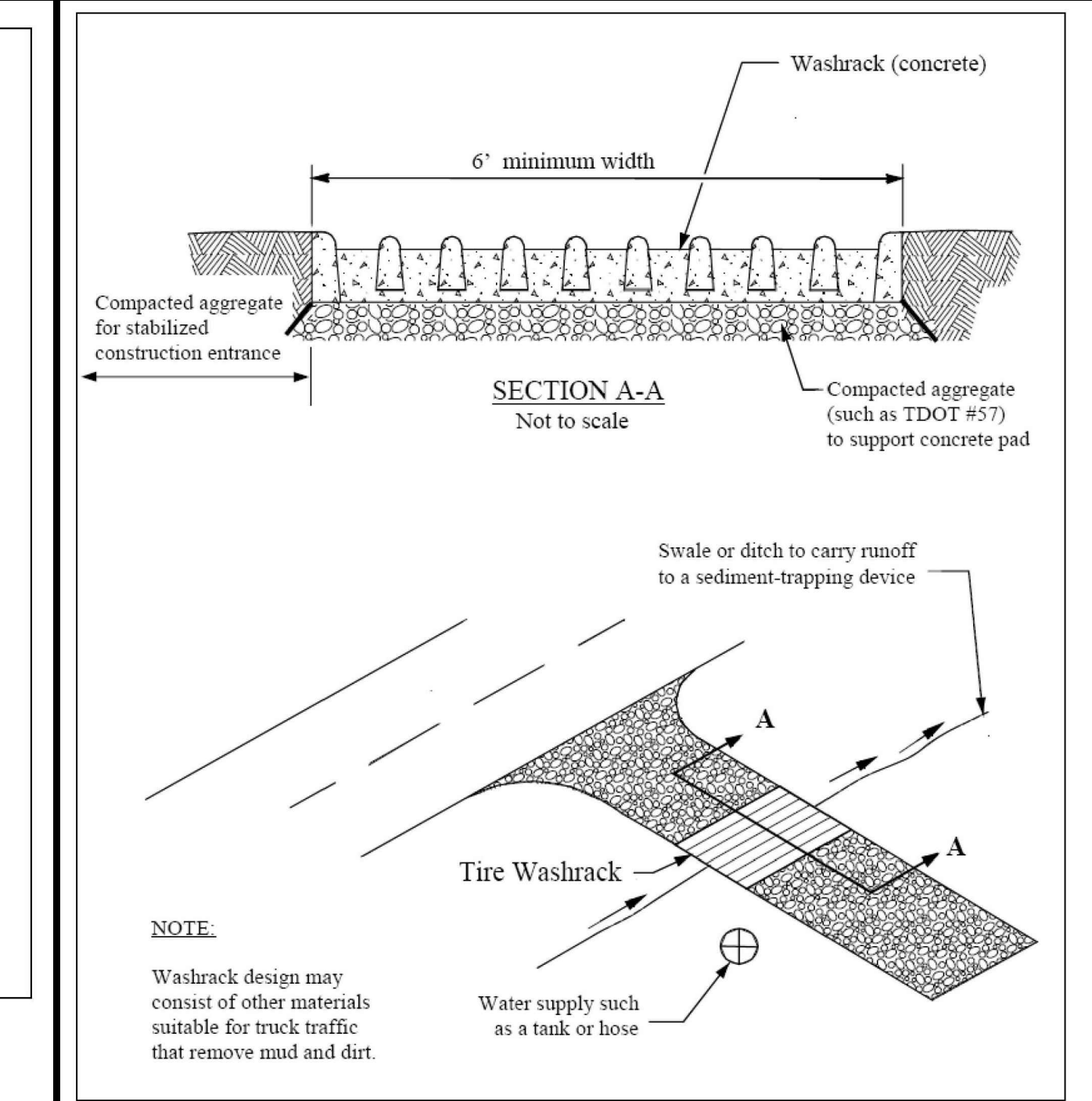


Figure 7.29-1 Tire Wash Rack (Source: City of Knoxville)

Maintenance and Inspection Points

Remove accumulated sediment in tire wash rack and sediment traps as necessary to maintain system performance. Inspect routinely for damage and repair as needed.

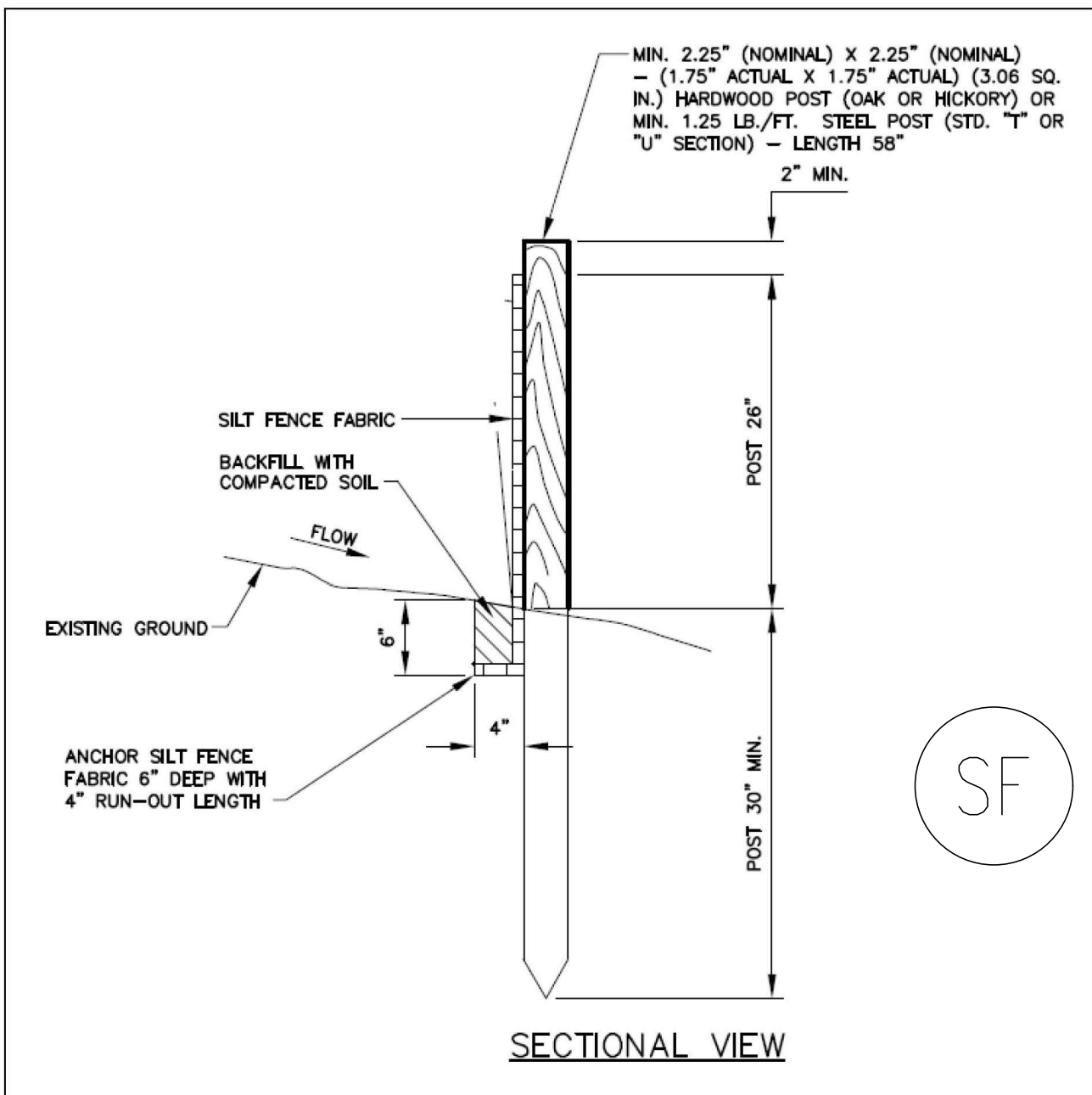
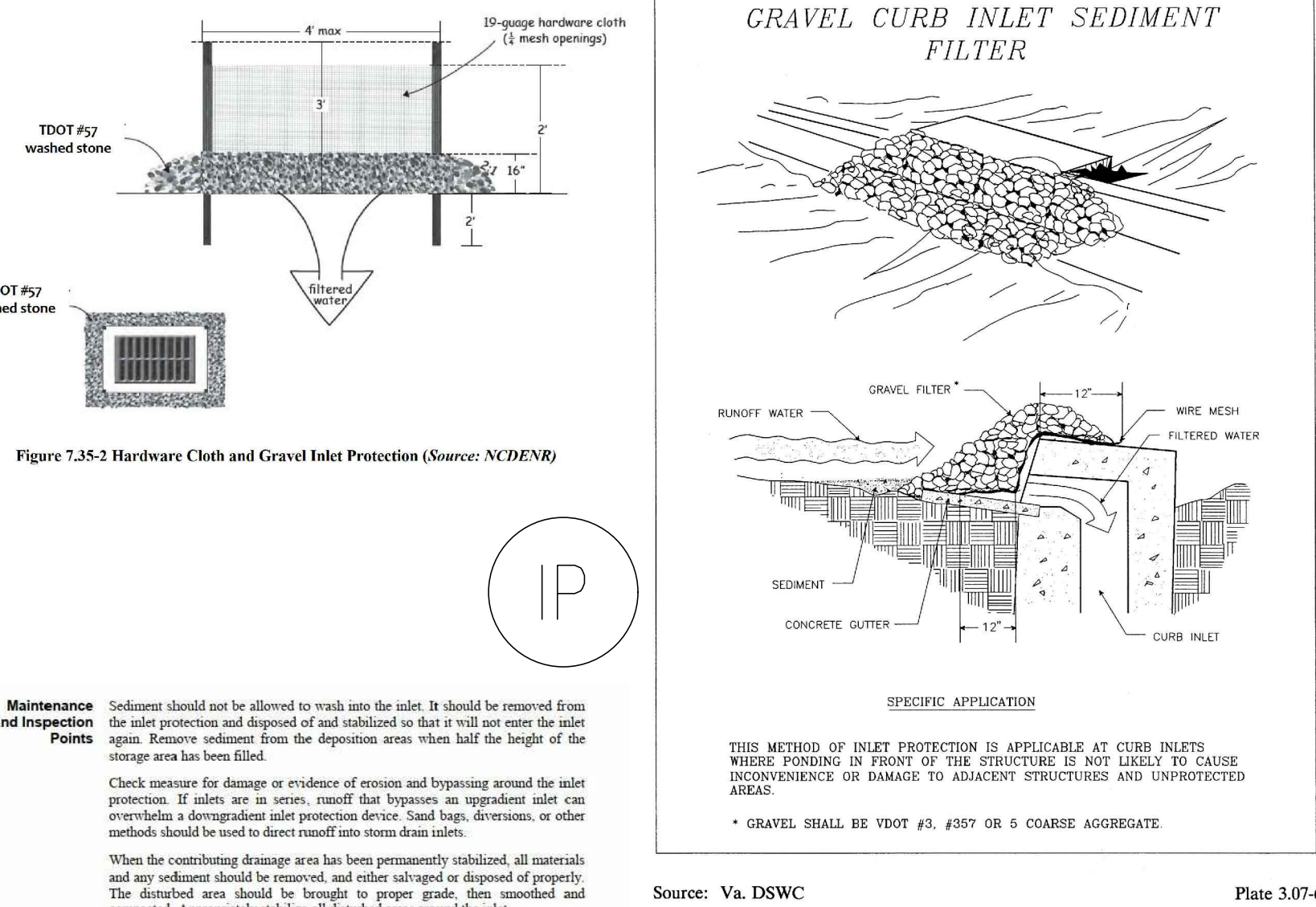


Figure 7.34-2 Silt fence details

Maintenance and Inspection Points

Remove sediment once it has accumulated to 1/2 the original height of the barrier.

Replace filter fabric whenever it is worn or has deteriorated to such an extent so that the effectiveness of the fabric is reduced.

All sediment accumulated at the fence should be removed and properly disposed of before the fence is removed.

Repair sagging silt fence to prevent failure or overtopping.

Monitor the toe for evidence of piping or erosion along the toe. Install J-hooks wherever runoff flows along the toe of the fencing to prevent undermining.

Silt fence should remain in place until disturbed areas have been permanently stabilized.

PROJECT DESCRIPTION:

THE PROJECT IS LOCATED IN THE CITY OF MURFREESBORO, TENNESSEE NEAR THE INTERSECTION OF NEW SALEM HWY AND CASON LN. THE PROJECT INVOLVES THE CONSTRUCTION OF AN AUTOMOTIVE OIL CHANGE BUILDING WITH ASSOCIATED PARKING AND UTILITIES. THERE WILL BE ONE SHARED ACCESS DRIVE ALONG NEW SALEM HWY.

EXISTING SITE CONDITIONS:

THE CURRENT USE IS AN OPEN FIELD ON A VACANT 0.723 ACRE LOT.

ADJACENT AREAS:

NORTH: NEW SALEM HWY
SOUTH: TREE LINE & WETLAND
EAST: VACANT LOT & FLOODPLAIN
WEST: UNDEVELOPED LOT

OFF-SITE AREAS:

THE PROPOSED PROJECT WILL NOT NEGATIVELY IMPACT OFF-SITE AREAS. NO BORROW SITES, WASTE OR SURPLUS AREAS WILL BE LOCATED ON OFF-SITE AREAS. THE PROJECT SHOWS STORMWATER DISCHARGE INTO THE FLOODPLAIN TO THE EAST. THE EXISTING STORM GRATE ALONG NEW SALEM HWY IS TO REMAIN.

SOILS:

PER WEB SOIL SURVEY OF RUTHERFORD COUNTY, TENNESSEE (DATED 06.01.2020), SOILS Bt/B (BRADVILLE SILT - 2-5% SLOPES) AND Ro (ROLEIN SILTY CLAY LOAM - 0-2% SLOPES) ARE LOCATED ONSITE

EROSION AND SEDIMENT CONTROL MEASURES:

ALL STRUCTURAL AND VEGETATIVE EROSION AND SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE TENNESSEE EROSION CONTROL HANDBOOK SPECIFICATION (CHAPTER 7), LATEST EDITION. SEE SHEET C6.00 FOR LOCATIONS AND C6.01 FOR DETAILS.

PROPOSED MEASURES:
- CONSTRUCTION ENTRANCE AT ENTRANCE ON ACCESS ROAD
- SILT FENCE AROUND PERIMETER OF SITE
- INLET PROTECTION ON PROPOSED INLETS
- DUST CONTROL

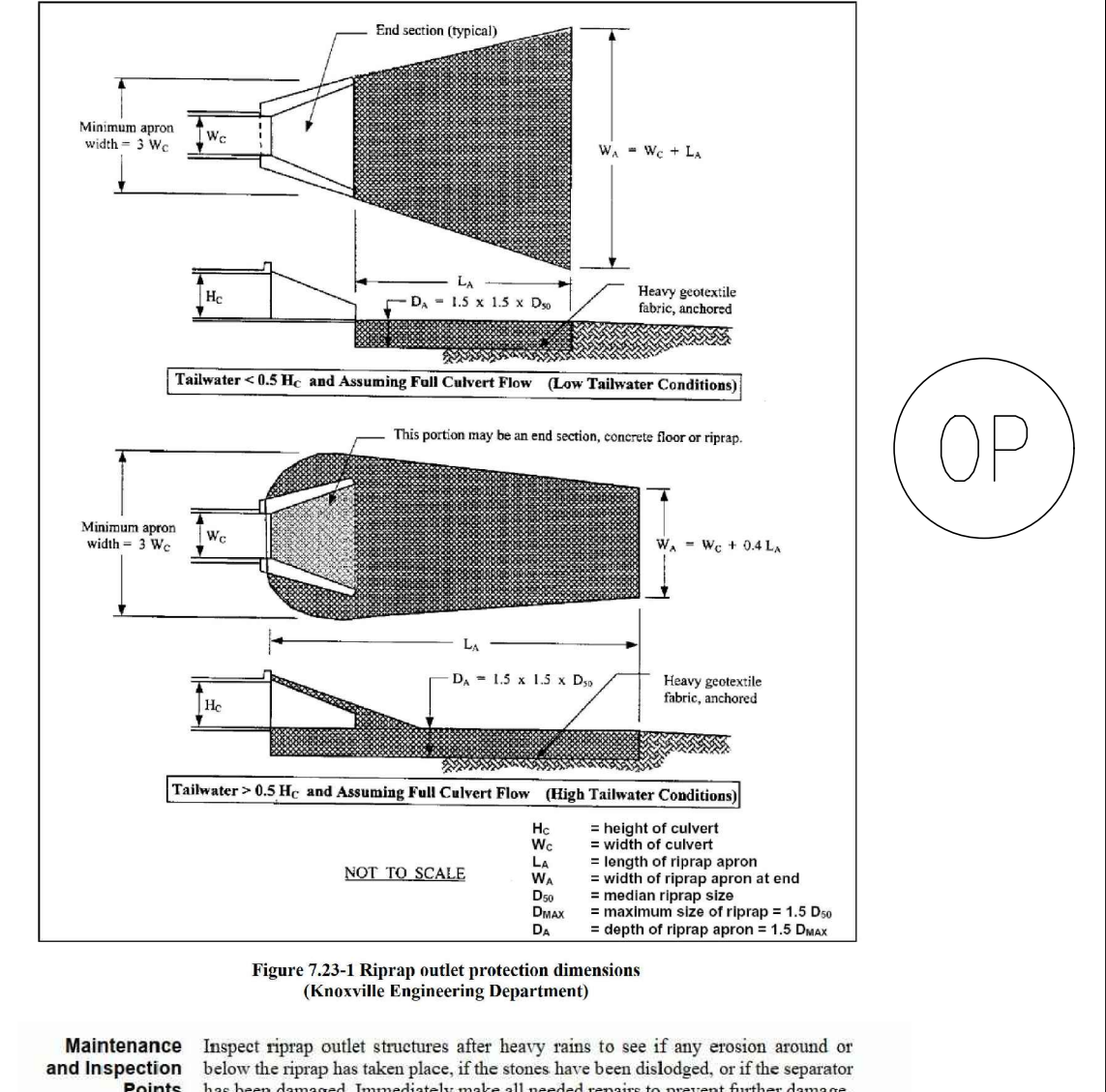


Figure 7.23-1 Riprap outlet protection dimensions (Knoxville Engineering Department)

Maintenance and Inspection Points

Inspect riprap outlet structures after heavy rains to see if any erosion around or below the riprap has taken place, if the stones have been dislodged, or if the separator has been damaged. Immediately make all needed repairs to prevent further damage.

Table 7.9-1 Preferred seed mixes using natives or naturalized plants and planting dates. *Non-native but do not spread.

Zone	Best	Marginal	Preferred Rate/Mix (lb/ac PLS)
Region I	Poorly drained soils Feb 1 – Mar 20 Sept 1 – Sept 30	Mar 20 – Apr 30 Sept 30 – Oct 31	15 Browntop millet* (nurse crop) 2 switch grass 4 little bluestem 4 Virginia wild rye 4 purpletop 2 partridge pea 2 black-eyed susan
	Well drained soils Apr 1 – July 15		15 Browntop millet* (nurse crop) 4 little blue stem 4 purpletop 2 sidecoats gramma 2 partridge pea 2 black-eyed susan
	High maintenance Apr 1 – July 15		15 Browntop millet* (nurse crop) 2 partridge pea 45 Red fescue* 45 hard fescue* 25 chewing fescue*
Region II	Low maintenance; Slopes and Poor, shallow soils Aug 25 – Sept 15 Feb 15 – May 30	Sept 15 – Oct 25 Mar 21 – Apr 15	15 Browntop millet* (nurse crop) 5 little bluestem 2 switch grass 2 tall dropseed 5 sidecoats gramma 2 black-eyed susan 2 partridge pea 1 greyheaded coneflower
	Low maintenance; Moderate slopes; soils >6 in. depth Aug 25 – Sept 15 Feb 15 – May 30	Sept 15 – Oct 25 Mar 21 – Apr 15	15 Browntop millet* (nurse crop) 5 purpletop 5 little bluestem 5 Virginia wild rye 2 black-eyed susan 2 partridge pea 1 greyheaded coneflower
	High maintenance Aug 30 – Oct 15	Feb 15 – Apr 15	15 Browntop millet* (nurse crop) 2 partridge pea 45 Red fescue* 45 hard fescue* 25 chewing fescue*
Region III	>2500 ft elevation; steep slopes Mar 20 – Apr 30	Aug 15 – Aug 30 Mar 5 – Mar 20 Apr 20 – June 15	15 Browntop millet* (nurse crop) 4 purpletop 10 little bluestem 10 broomsedge 2 partridge pea 2 black-eyed susan 0.5 monarda (bergamot)
	<2500 ft elevation; steep slopes Aug 15 – Sept 1 Mar 1 – Apr 1	Sept 1 – Sept 15 Apr 1 – June 10	15 Browntop millet* (nurse crop) 4 purpletop 10 little bluestem 10 Indian grass 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland sunnys
	>2500 ft elev.; Moderate slopes Mar 20 – Apr 20	Aug 15 – Aug 30 Mar 5 – Mar 20 Apr 20 – June 15	15 Browntop millet* (nurse crop) 4 purpletop 10 little bluestem 10 Indian grass 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland sunnys
Region III cont'd	<2500 ft elev.; Moderate slopes Aug 15 – Sept 1 Mar 1 – Apr 1	Sept 1 – Sept 15 Apr 1 – June 10	15 Browntop millet* (nurse crop) 4 purpletop 10 little bluestem 10 Indian grass 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland sunnys
	>2500 ft elev.; High maintenance Mar 20 – Apr 20	Aug 15 – Aug 30 Mar 5 – Mar 20 Apr 20 – June 15	15 Browntop millet* (nurse crop) 4 purpletop 10 little bluestem 10 Indian grass 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland sunnys
	<2500 ft elev.; High maintenance Aug 15 – Sept 1 Mar 1 – Apr 1	Sept 1 – Sept 15 Apr 1 – June 10	15 Browntop millet* (nurse crop) 4 purpletop 10 little bluestem 10 Indian grass 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland sunnys

In Table 7.9-1, the bold dates are the preferred dates for seeding. Also, high maintenance areas include lawns and other grassed areas that will be maintained for aesthetics.

Maintenance and Inspection Points

Any areas that have washed out due to high stormwater flows, areas that have been disturbed by blowing wind, and areas that do not show good germination should be retreated.

Inspect seeded areas for failure and make necessary repairs and reseeds within the same season, if possible.

Reseeding: If a stand has inadequate cover, re-evaluate choice of plant materials and quantities of lime and fertilizer. Re-establish the stand after seeded preparation or over-seed the stand. Consider seeding temporary, annual species if the time of year is not appropriate for permanent seeding.

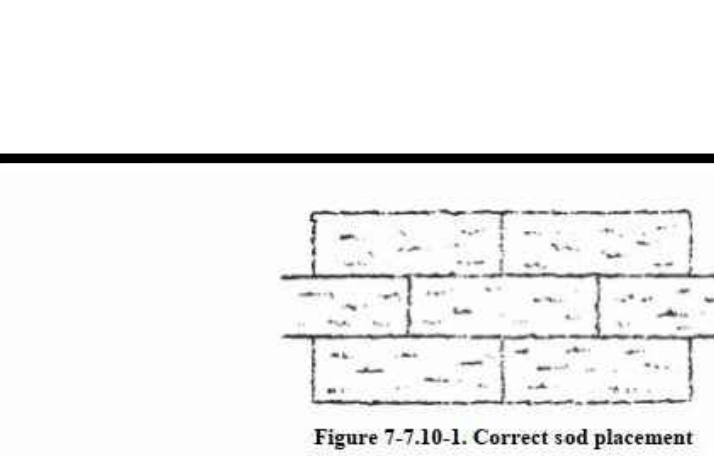


Figure 7.7.10-1. Correct sod placement

Maintenance and Inspection Points

After the first week, water as necessary to maintain adequate moisture in the root zone and prevent the sod from going dormant. Grass height should not be cut to less than 2\"/>


McADAMS
The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713
phone 919. 361. 5000
fax 919. 361. 2269
TN license number: 8829
www.mcadamsco.com

CLIENT

N3 REAL ESTATE
1240 N KIMBALL AVE
SOUTHLAKE, TX, 76092
PHONE: 817.348.8748



**STRICKLAND BROTHERS OIL
CHANGE - MURFREESBORO**
SITE PLAN SUBMITTAL
2375 NEW SALEM HWY
MURFREESBORO, TN 37128



REVISIONS

NO.	DATE	REVISION DESCRIPTION
1	10. 27. 2021	RESPONSE TO 1ST CITY COMMENTS
2	12. XX. 2021	RESPONSE TO 2ND CITY COMMENTS
3	-	-
4	-	-
5	-	-
6	-	-

PLAN INFORMATION

PROJECT NO.	2021110738
FILENAME	2021110738-EC2
CHECKED BY	NRW
DRAWN BY	RM8
SCALE	N/A
DATE	10. 14. 2021
SHEET	

EROSION CONTROL
DETAILS

C6.01