Notes to the Designer

Updated May 2024
Sediment Trap Special

General Information
- All graphics and text will be in the sheet model.

- **Appropriate Applications**
  Sediment traps are temporary containment areas that should be placed before sediment-laden storm water enters a storm drain or water course.
- **Limitations**.
  Requires large surface area. Size may be limited by right-of-way.
  Do not use sediment traps for drainage areas greater than 5 acres
  Cannot install in live streams
- **Layout Guidance**
  Refer to drawing for layout guidance
  Design a sediment trap to maximize the surface area for infiltration and sediment settling.
  In the siting and design phase, take care to situate sediment traps for easy access by maintenance crews. This allows for periodic inspection and maintenance.
  The volume of a natural sediment trap can be approximated using the following equation (Smolen et al., 1988):

$$\text{Volume (ft}^3) = 0.4 \text{ x surface area (ft}^2) \text{ x maximum pool depth (ft)}$$

  The volume of the sediment trap needs to be sufficient to hold the runoff from a 2 year- 24 hour storm for the area being drained. Include the calculations in the SWPPP.

Applicable SCRs
- None

Typical Pay Item Used
- 15706-0400 Soil Erosion Control, Sediment Trap [EA]

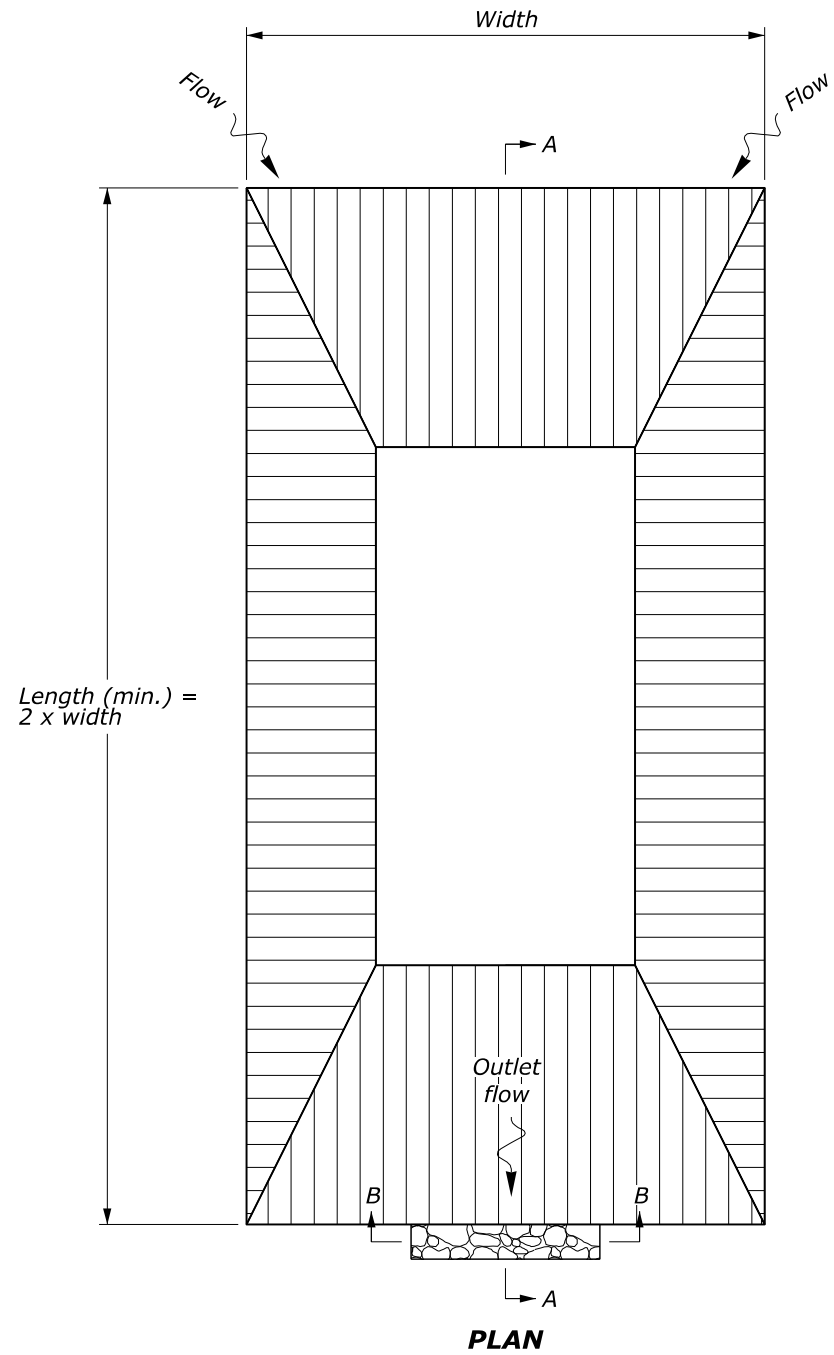**Updates**
- **April 2021**
  - Updated for OpenRoads Designer
- **August 2023**
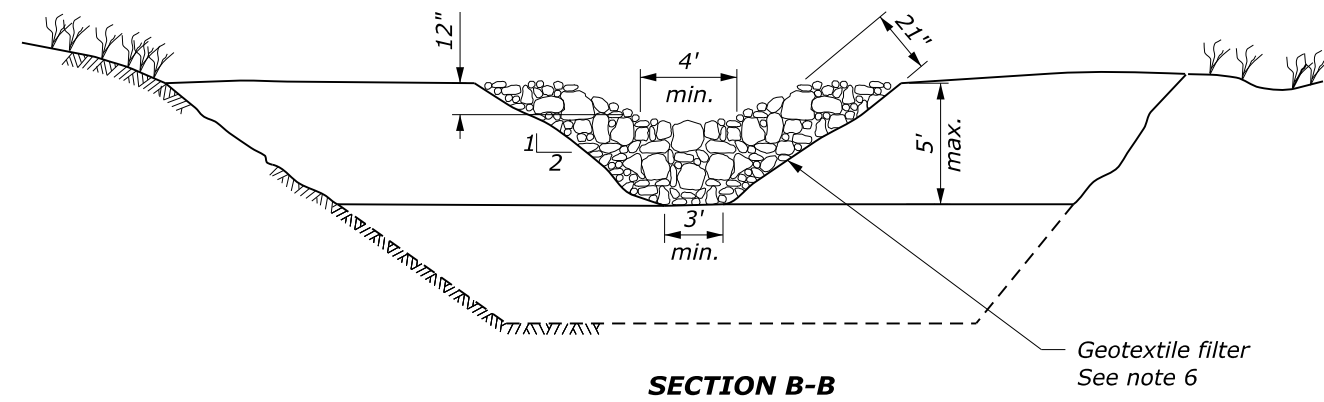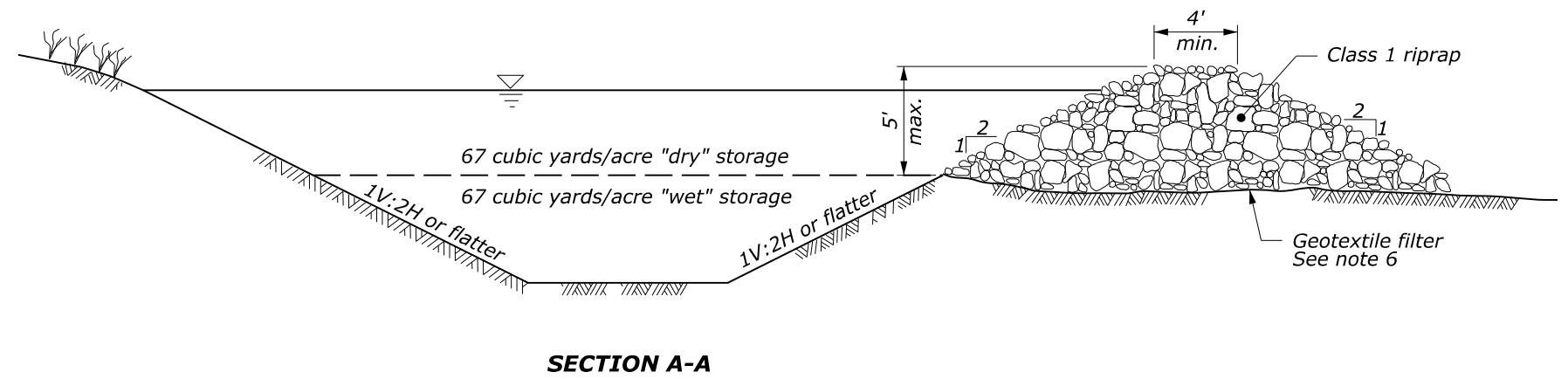 - Updated border; updated to international seed file
- **May 2024**
  - Updated for FP24

NOTE:

1. Clear, grub, and remove all vegetative matter including root mat before constructing sediment trap.

2. Remove sediment from sediment trap as it accumulates.

3. Maintain a properly functioning sediment trap throughout construction or until disturbed areas contributing to the basin have been paved or seeded and mulched.

4. Do not use sediment traps for drainage areas over 5 acres.

5. Adjust shape of sediment trap to fit site-specific conditions.

6. Furnish geotextile filter type conforming to Subsection 714.01(c).

PLAN

Width

Flow — Flow

A

Length (min.) = 2 x width

Outlet flow

B — B

A

SECTION A-A

4' min.

Class 1 riprap

5' max.

67 cubic yards/acre "dry" storage

67 cubic yards/acre "wet" storage

1V:2H or flatter

1V:2H or flatter

Geotextile filter See note 6

SECTION B-B

12"

4' min.

21"

5' max.

1 2

3' min.

Geotextile filter See note 6

SEDIMENT TRAP

SEDIMENT TRAP

NO SCALE

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