

RETAINING STRUCTURES*

REINFORCED SOIL SLOPE (RSS) STANDARD

RSS may be used as an alternative to purchasing additional right of way or the construction of a retaining wall. In general, RSS may be less expensive when a wall or additional right of way would otherwise be necessary.

This standard design is applicable when slopes are designed to be steeper than 2.0H:1.0V but no steeper than 0.5H:1.0V, and when the foundation conditions and backfill meets the criteria in the standard. Aesthetics and maintenance should be considered as part of the decision.

The design engineer may use the RSS standard design when the following conditions are met and approved by the District Materials Engineer:

- New or widening of embankments where sufficient working room may be made available to place the backfill. Review of required reinforcement length as it relates to excavation requirements and potential shoring shall be evaluated.
- Limited right of way where a retaining wall would be considered as a way to avoid encroachment.
- The foundation conditions satisfy Case 1 or Case 2 as described in the standard.
- The fill meets the standard or Type I/II Select Material as specified.

Aesthetics and long-term slope maintenance have been thoroughly considered.

The engineer shall obtain approval from the District Materials Engineer using Form LD-252.

The engineer shall specify on the roadway drawings the following:

- 1) In plan view, the top of slope and toe of slope.
- 2) Slope:
 - 1/2H:1V
 - 1H:1V
 - 1½H:1V
- 3) Backfill Type:
 - A (Select Material)
 - B (On-site or Imported Soils)

* Added 1/17