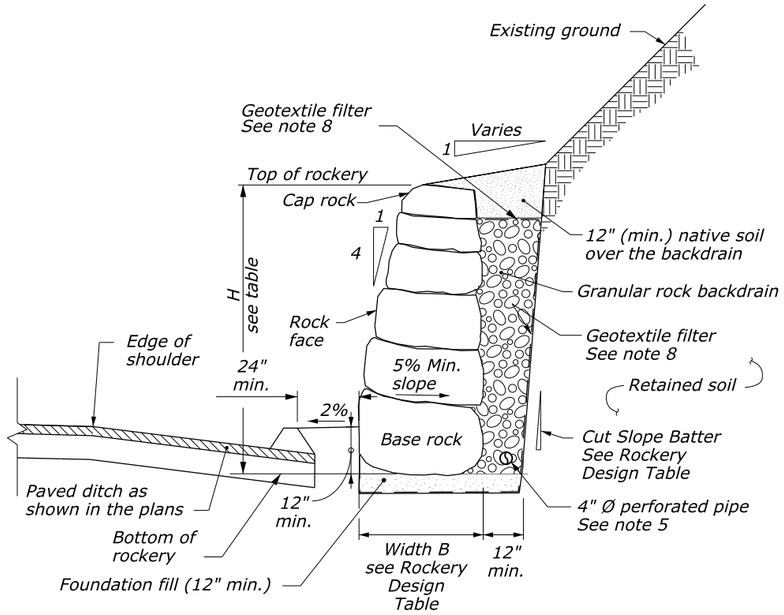
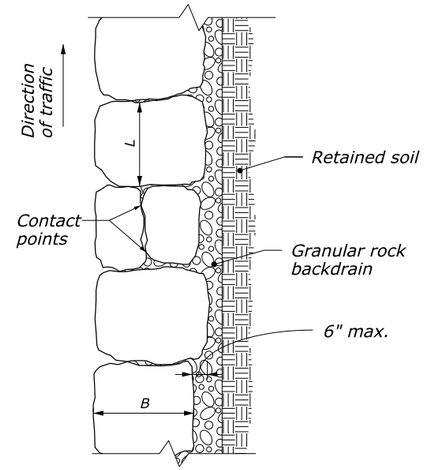
STATE	PROJECT	SHEET NUMBER



ROCKERY WITH PAVED DITCH TYPICAL SECTION

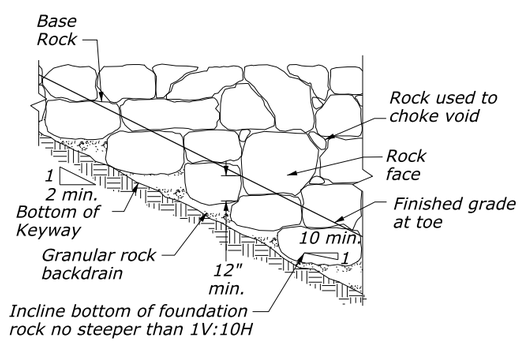


BASE ROCK PLAN VIEW

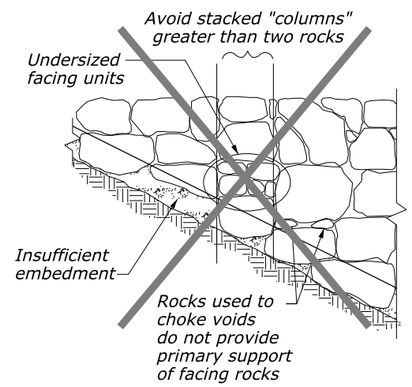
See Note 2

NOTE:

1. Construct rockery and place base, facing, and cap rocks according to Section 252. Place each rock individually by equipment suitable for lifting, manipulating, and placing rocks of the size and shape specified. Ensure that each rock is firmly set and supported by underlying materials and adjacent rocks. Reposition or replace loose rocks.
2. A maximum tolerance of 6 inches may be applied toward the total base rock width. Use rock with minimum L of 5 feet 6 inches. Do not consecutively place base rocks with widths less than B.
3. Place base, facing, and cap rocks so that their height dimension is not greater than their width. The longest dimension of the base, facing, and cap rocks is parallel to face of rockery.
4. Where loose, soft, or otherwise unsuitable foundation soil conditions are encountered, contact the CO for supplemental recommendations.
5. Discharge outlet pipes to a protected outlet or other permanent drainage structure at low points in the rockery and at 100 feet (max.) spacing.
6. Do not construct rockeries or slopes exceeding the heights shown on the Rockery Design Table without prior written approval by the CO.
7. Construct rockeries parallel to curb grade unless otherwise noted.
8. Furnish geotextile filter type conforming to subsection 714.01(a). See summary tables for class and type.

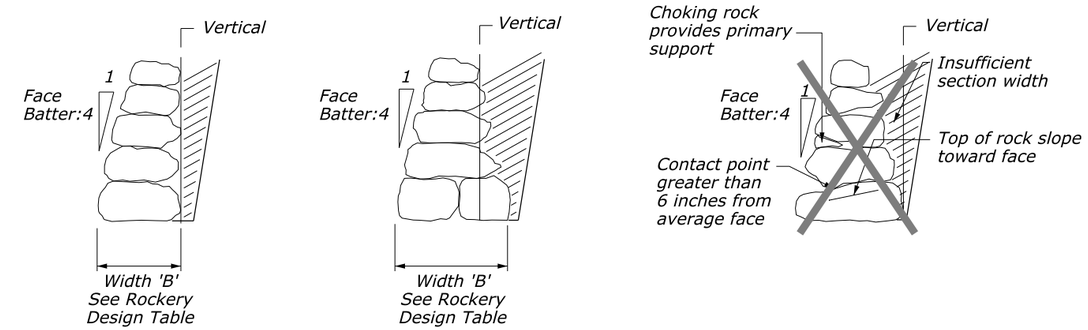


CORRECT



INCORRECT

PARTIAL TYPICAL PROFILE



CORRECT CORRECT INCORRECT

SECTION PROPERTIES

ROCKERY DESIGN TABLE

STATION BEGIN	STATION END	LT/RT TIER	MAX. HEIGHT H (ft)	MIN. BASE ROCK WIDTH B (ft)	MAX. CUT SLOPE BATTER V:H (A.)	MIN. ROCK WEIGHT (lb) CAP ROCK	MIN. ROCK WEIGHT (lb) BASE ROCK

Rockery Design Data:

Friction angle, Ø = ___ °
Cohesion, c = 0
Bulk unit weight, γ_R = 149.7 lbf/ft³
Allowable bearing pressure = ___ lbf/ft²

(A.) Maximum cut slope batter for design purposes only. Actual cut slope batter may be flatter.

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY SPECIAL

ROCKERY

SPECIAL
252-A

User: Angela.Johnson
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Central Federal Lands Highway Division
US Department of Transportation - Federal Highway Administration

NOTES TO THE DESIGNER

Last Updated: July 2020

General Information

1. ***Project-Specific Information.***
    a. The typical section includes a rockery with paved ditch. Typical sections with other ditch types are shown above the drawing – use the typical sections that fit your project.
    b. Coordinate with Geotech to fill in the information in the Rockery Design Table and to select the geotextile type.
2. ***Existing Ground Above the Rockery.*** If the existing ground slope is steeper than 1:1 above the rockery, coordinate with Geotech (may need to include a concrete v-ditch along the top of the rockery).
3. ***Design Guide.*** Rockery Design and Construction Guidelines are available at https://www.fhwa.dot.gov/clas/pdfs/RockeryDesignandConstructionGuidelines013007.pdf
4. ***Rockery Layout Procedures.*** The CFLHD Rockery Layout Procedure Manual is available at http://our.dot.gov/office/fhwa.flh/cfl/branches/PD/d1/Retaining%20Wall/Rockery_layout_manual.pdf
   This guide describes the procedures for using GEOPAK to show the rockery design in the cross sections.

Applicable SCRs

1. Section 252: https://flh.fhwa.dot.gov/resources/specs/fp-14/cfl/documents/S252-14_09112014.docx

Typical Pay Items Used

- 25210-0000 Rockery SQFT
- Other items, including structure excavation, foundation fill, granular rock backdrain, and 4-inch drain pipes, are considered incidental (need to show estimated quantities for information only in the rockery summary table on the B sheets)

Updates

September 2008
- Incorporated comments after SCR Team review

April 2011
- Revised slope above rockery from 1:6 to 1:varies to match GEOPAK criteria

August 2014
- Updated for FP-14, eliminated tiers

July 2020
- Updated geotextile reference