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 firm 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 CD 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 CD.

7. Construct rockeries parallel to curb grade unless otherwise noted.

---

**ROCKERY WITH PAVED DITCH TYPICAL SECTION**

**PARTIAL TYPICAL PROFILE**

**ROCKERY DESIGN TABLE**

<table>
<thead>
<tr>
<th>STATION</th>
<th>LT/RT TIER</th>
<th>MAX. HEIGHT (ft)</th>
<th>MIN. BASE ROCK WIDTH (ft)</th>
<th>MAX. CUT/ADD SLOPE BATTER (V/H)</th>
<th>MIN. ROCK WEIGHT (lb)</th>
<th>CAP ROCK</th>
<th>BASE ROCK</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEGIN</td>
<td>END</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rockery Design Data:

- Friction angle, $\phi = \ldots^\circ$
- Cohesion, $c = \ldots$
- Bulk unit weight, $\gamma_b = 149.7 \text{ lb/ft}^3$
- Allowable bearing pressure = $\ldots \text{lb/in}^2$

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

---

**SECTION PROPERTIES**

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

U.S. CUSTOMARY SPECIAL

ROCKERY
NOTES TO THE DESIGNER
Last Updated: August 2014

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).


   This guide describes the procedures for using GEOPAK to show the rockery design in the cross sections.

Applicable SCRs

1. Section 252:
   http://www.cflhd.gov/resources/design/constructspecs/scr/fp14/documents/S252-14.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