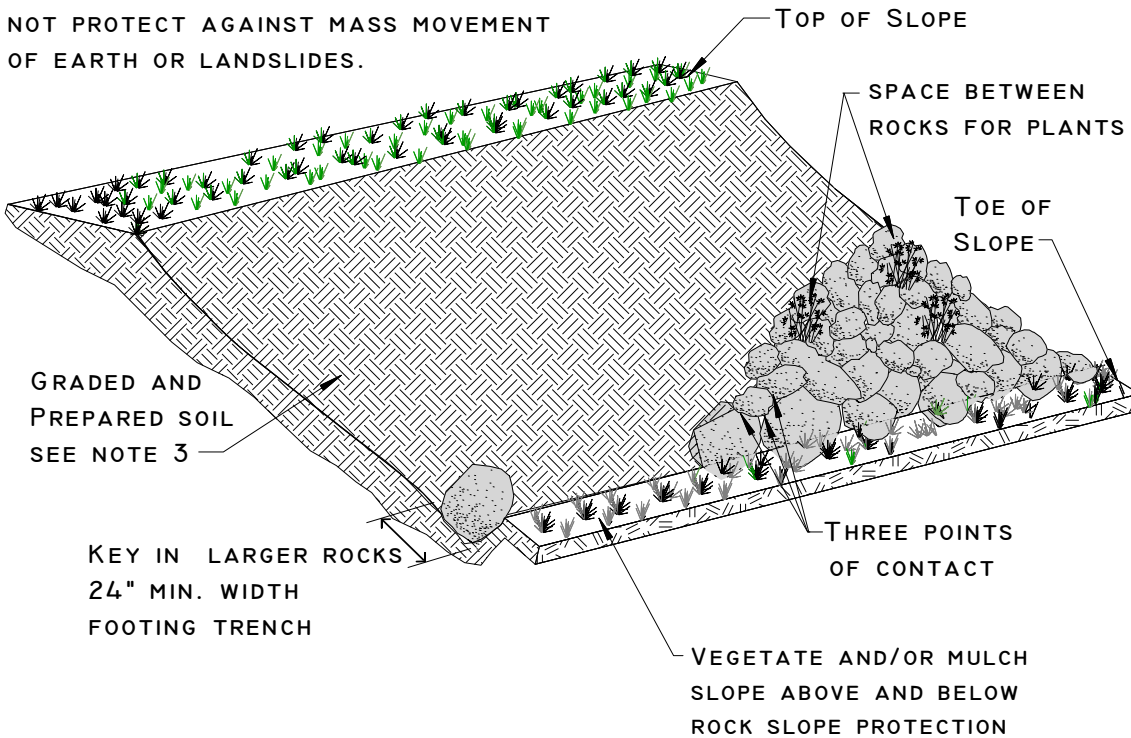


ROCK SLOPE PROTECTION (NO FABRIC)

BMP-040

DATE: 6-9-2011

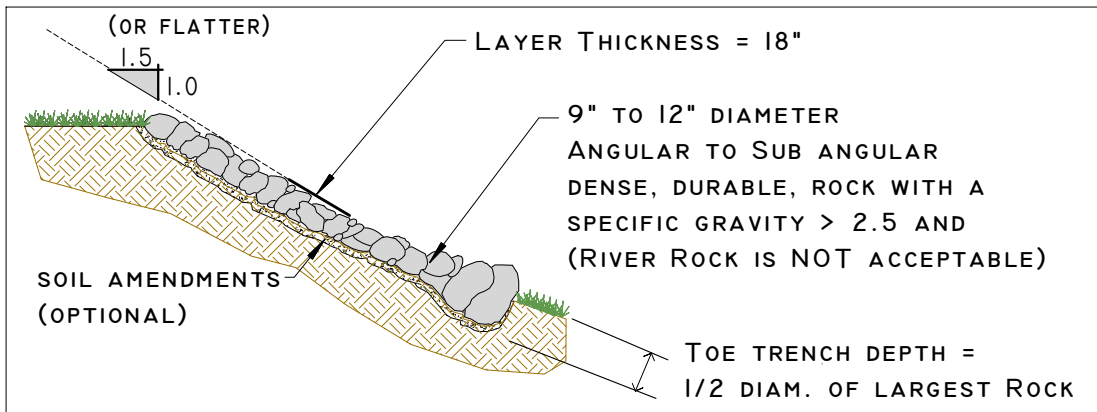
NOTE: ROCK SLOPE PROTECTION DOES NOT PROTECT AGAINST MASS MOVEMENT OF EARTH OR LANDSLIDES.



CONSTRUCTION NOTES

1. ROCK SLOPE PROTECTION WITHOUT FABRIC APPLIES TO SLOPES TOO UNSTABLE FOR REVEGETATION PRACTICES ALONE. IF CONCENTRATED FLOW IS EXPECTED OR SEEPAGE WILL OCCUR, USE STANDARD DRAWING BMP-041 TO PROTECT AGAINST EROSION BENEATH THE ROCK ARMOR AND ALLOWS GROUNDWATER TO DRAIN THROUGH THE STRUCTURE.
2. MAXIMUM SLOPE 1.5:1 (HORIZ:VERT, 67% OR 34°) OR FLATTER, AND IS LIMITED TO SLOPES < 30' OF UNINTERRUPTED LENGTH.
3. PREPARE SLOPE BY REMOVING INVASIVE SPECIES, FALLEN OR HAZARDOUS TREES, ROCKS OR OTHER DEBRIS. FLATTEN SLOPE AS NEEDED TO PROVIDE A SUITABLE GRADE. BEGIN INSTALLATION BY TRENCHING ALONG THE TOE OF THE SLOPE AND HAND PLACING THE LARGEST ROCKS IN THE TRENCH TO FORM THE FIRST ROW AS THE FOUNDATION.
4. SECURELY BED THE LARGER ROCKS IN CONTACT WITH ONE ANOTHER WITHOUT BRIDGING. EACH ROCK SHOULD HAVE A MINIMUM OF 3 CONTACT POINTS TO ENSURE STABILITY ESPECIALLY ADJACENT TO STRUCTURES.
5. DISTRIBUTE LARGE ROCKS UNIFORMLY WITH SMALLER ROCKS FILLING THE VOIDS. SMALLER ROCKS SHOULD NOT BE GROUPED AS A SUBSTITUTE FOR LARGER ROCK.
6. ROCK SLOPE PROTECTION IS MOST EFFECTIVE WHEN USED IN COMBINATION WITH LONG-TERM VEGETATIVE PRACTICES. PROVIDE SPACES BETWEEN ROCKS FOR CONTAINERIZED PLANTS IF DESIRED AND OVER-SEED TO ENCOURAGE VEGETATION IN ROCK INTER-SPACES. REFER TO NRCS "SLOPE STABILIZATION USING VEGETATION" TIP SHEET FOR MORE INFORMATION.

INSTALLATION GUIDELINES



U.S. DEPARTMENT OF AGRICULTURE	
NATURAL RESOURCES CONSERVATION SERVICE	
IN COOPERATION WITH	
TAHOE RESOURCE CONSERVATION DISTRICT, AND NEVADA TAHOE CONSERVATION DISTRICT	
DRAWN BY: DMGG/CLT	APPROVED BY: _____ DATE _____

THIS SPECIFICATION IS BASED ON A REFERENCE TO THE NRCS CONSTRUCTION SPECIFICATION 907 - ROCK RIPRAP AND NRCS STANDARD PRACTICE 342 - CRITICAL AREA PLANTING. THIS DRAWING IS INTENDED TO ASSIST THE DESIGNER IN PREPARATION OF A COMPLETE SITE SPECIFIC DESIGN, AND IT IS NOT TO REPLACE THE INDEPENDENT JUDGMENT AND ANALYSIS BY A QUALIFIED DESIGNER.