ROCK DITCH CHECK

When and Where to Use It:

A rock ditch check should be installed in steeply sloped swales, or in swales where adequate vegetation cannot be established.

Rock ditch checks should be used only in small open channels. Rock ditch checks should not be placed in waters of the commonwealth (unless approved by state authorities).

Installation:

Excavate keyway (if required).

A geotextile fabric shall be installed over the soil surface where the rock ditch check is to be placed.

Acceptable materials for check dams are as follows:

Stone Check Dam (CD-S): KTC No. 1 or No. 2 (with minimum size of 1.5")

Rock Check Dam (CD-R): KTC Class III Channel Lining

Sand Bag Check Dam (CD-SB): Polypropylene bags filled with KTC No. 57 or approved equal

Rock ditch checks should not exceed a height of 2-feet at the centerline of the channel.

Rock ditch checks should have a minimum top flow length of 2-feet.

Stone should be placed up the channel banks prevent water from cutting around the ditch check.

The rock must be placed by hand or mechanical placement (no dumping of rock to form dam) to achieve complete coverage of the ditch or swale and to ensure that the center of the check is lower than the edges.

The maximum spacing between the dams should be such that the toe of the upstream check is at the same elevation as the top of the downstream check.

Inspection and Maintenance:

Inspect rock ditch checks every seven (7) calendar days and within 24-hours after each rainfall event that produces 1/2-inches or more of precipitation. Inspect for sediment and debris accumulation. Inspect ditch check edges for erosion and repair promptly as required.

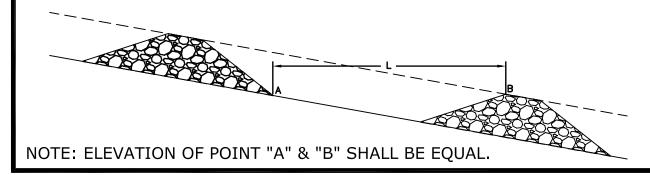
Sediment should be removed when it reaches 1/2 the original check height.

In the case of grass-lined ditches and swales, rock ditch checks should be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4 %.

After construction is complete, all stone should be removed if vegetation will be used for permanent erosion control measures.

The area beneath the rock ditch checks should be seeded and mulched immediately after rock check dam removal.

DETAIL FOR CHECK DAM SPACING



SOURCE: LOUISVILLE MSD & TDEC



CHECK DAM (CD-S, CD-R, CD-SB)

STANDARD DRAWING NO. SMP-01-0

DATE