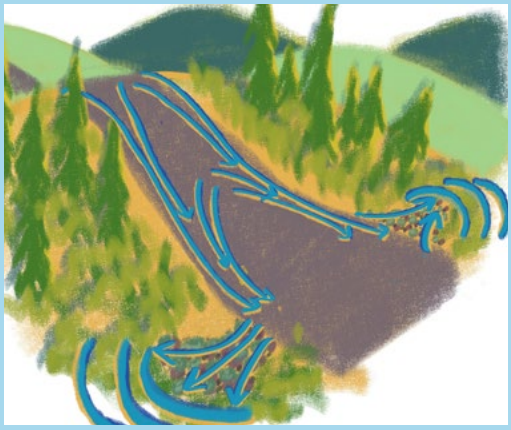
Maine Conservation Fact Sheets for Homeowners Series

Turnouts

Riprap lined ditch turnout into existing vegetation.

Diagram: Carolina Swindel



Utilize the natural contours of the land to site turnouts, sloping the turnout down and away from the road.

Purpose:

Turnouts are designed to get water off of roads and out of ditches in order to make stormwater volumes smaller and more manageable. They can be installed on paved or gravel roads with or without existing ditches. Often turnouts are simply extensions of ditches that redirect water into the woods and disperse runoff before it can cause erosion. Turnouts reduce the speed of runoff, allowing soil particles to settle out instead of being transported to a stream, river, or lake. Water and nutrients can then be filtered and absorbed by the surrounding vegetation.

Materials:

- Shovel, backhoe or excavator
- Conservation seed mix and erosion control mulch or hay/straw mulch for soil stabilization
- 3”-6” rip rap (angular stone)

Installation:

1. Ideally, turnouts should be placed every 50 feet. Utilize natural contours of the land and existing vegetated buffer areas to site turnouts. Turnouts should be placed closer on steeper slopes. However, check with abutting property owners to ensure this water will not adversely impact their property.
2. Using a backhoe bucket, a bulldozer blade, an excavator, or a handheld shovel or similar equipment, dig a trench that intersects the ditch at the same depth, and gently slope down and away from the road. The width of the turnout will vary depending on the amount of flow expected. Generally, the width of a backhoe or excavator bucket is adequate.
3. Stabilize turnouts so as not to create additional soil erosion. The turnout can be seeded and stabilized with hay mulch or erosion control blankets on sites with less than 5% slope. On steeper slopes or areas receiving greater flow, line the turnout with non-woven geotextile fabric and cover with 3”-6” riprap.
4. Create a flared end section that is level and lined with 4”-6” riprap to spread out the flow into existing vegetation.

DO NOT outlet turnouts into existing stream channels or drainage ways!

Maintenance:

- Periodically remove accumulated sediment.
- Check turnouts during and after large storm events for erosion or accumulation of debris.
- Check that water flows evenly into vegetation and does not form an channel. Redistribute stone, as needed, to stop any channelized flow.

Scan here for more information

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Portland Water District

From Sebago Lake to Casco Bay