

DRAINAGE

We have had a lot of phone calls asking about the ditch work that we have been doing on our roads. We are doing this work to correct the drainage problems and to get the water away from the roadways so it does not damage the roads. We are also preparing some roads to be resurfaced this year with asphalt. Ditching the roads are critical for us to maintain the roads. If the road is not draining properly then the water either stands in the ditch or on the roadway. If it stands on the roadway then it eventually will cause damage to the road. I know it is frustrating to the property owners that are used to mowing up to the road edge, and now have a ditch there instead, but please remember it is there for a reason.

Why do roads have ditches?

One of the purposes of a roadway drainage ditch is to prevent unsafe accumulations of rain water on the roadway surface. An open ditch allows water to move fully away from a road surface.

What are ditches used for?

A ditch is used for drainage, to drain water from low-lying areas, alongside roadways or fields, or to channel water to another waterway.

What are the benefits of drainage?

Drainage can prevent water accumulation that can lead to flooding by directing the water away from the road. Drainage systems also prevent the accumulation of stagnant water, which can encourage mosquitoes to breed.

Does the County put Rip-Rap in the ditch after it is cut or sow the ditch down with seed?

No. After ditching a roadway, we do not sow it down so it can be mowed. We want the water to flow freely in the ditch. If the ditch is eroding and causing damage to the roadway then we will look at it and may consider Rip-rapping the ditch at that time.

Problems caused by poor drainage

Poor drainage creates many problems to both road users and road owners. Typically these are:

1) Traffic Safety

Poor drainage is a traffic safety risk. Water may accumulate on the road like ponds. The accumulated water creates a risk of hydroplaning during rain. A wet surface reduces friction which leads to longer braking distances. Surface water can freeze during the night at those times of the year with frost nights, and thaw again when temperatures rise above freezing during the day. Where this happens roads may become very slippery and the change in friction may come as a surprise to those who are driving.

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2) Erosion

Uncontrolled water flows on the road area can cause erosion. Culverts are also risky places for erosion. Small diameter and clogged culverts can cause water to flow towards or over the road and produce erosion. Water exiting from culverts can similarly cause erosion when it discharges.

3) Reduced pavement life time and increased pavement management costs.

The most important factor triggering the need for paving is poor quality drainage. Improving the drainage condition in critical locations, and maintaining it in good condition, increases the pavement lifetime by 1.5 – 2.0 times. This reduces the annual maintenance costs for the paved roads.