

# Oliver Township – Cemetery Hill Road



**Problem:** Road banks were eroding into the existing cross pipe inlets. There were roadside springs. There was erosion at the outlets of cross pipes and steep banks. Water was running from springs, coming out of the nearby hillside, flowing along the Township road. This caused the flow in the existing ditch to begin undercutting the road.

**Solution:** Additional cross pipes were added to collect the roadside springs. Bank supports were installed at inlets of the cross pipes. Headwalls and endwalls were installed. Stone outlets were installed to filter and slow the water down. The road ditch was lined with R5 stone to stabilize the ditch and to protect the road. Material was added where needed to improve the road profile to encourage sheet flow. Additional turn outs were installed.

