

OFFICE OF THE
POWESHIEK
COUNTY ENGINEER

County Engineer – Lyle Brehm, P.E.

Asst. to the Engineer – Terry Pickett

P.O. Box 306
102 South 3rd St.
Montezuma, IA 50171
Phone: (641) 623-5435/3446
Fax: (641) 623-5546

Maint. Superintendent – Mark Bair

Office Manager – Laura Durr

March 5, 2014

RE: Spring Rock Hauling

Spring snow melting and thawing ground yields soft rock roads. Soft conditions will exist across the region. We will receive more requests for rock at this time of year than any other. Since we can't make rock fall from the sky, we need to have a plan to deliver it to roads. This letter is intended to share our operations so the public can understand our methods and limitations.

- Currently Poweshiek County has three full-time rock truck drivers. Each operates a tandem-axle truck with a trailer that allows them to haul more rock. Generally they haul from March to November. We need to haul spring, summer and fall in order to get the necessary rock quantity to roads (we wish they hauled all of the rock in the spring, but that isn't possible). Annually these operators are responsible for placing roughly 50% of our rock.
- We also have several other trucks to push snow in the winter, of which there are more single axle (smaller) trucks than tandems. Blade operators use these to haul rock when we can't blade roads and don't have other work to perform. Sometimes the blade operators will place rock in isolated soft spots, which we call "spot rocking". Other times they will work either independently or as a group to haul rock to an entire mile of road. Annually the ten blade operators are responsible for placing roughly 35% of our rock.
- The final 15% of our rock is placed by private haulers. They allow us to quickly place a lot of rock in the spring. Our use of private haulers has proven itself very cost-effective.

In all we place 90,000-100,000 tons of rock annually. We don't generally haul rock from December to February; we are busy with snow and ice, and the material in the quarries is usually frozen. Without these impediments we would still be placing loose rock on frozen roads. A fresh blanket of snow would hide it, making the new rock very susceptible to being plowed off into the ditch.

Loaded trucks cause little damage to frozen roads, so we try to start hauling rock in early March. Snow is likely in March and possible in April. It takes time to switch trucks from plowing snow to hauling rock and back again. We need a reasonable window of good weather forecast before we strip our trucks down.

During March and April we avoid spot rocking and instead haul rock to entire miles of road at a time. We refer to this as “a lot of rock to a few roads instead of a little rock to a lot of roads”. Operators need to adjust snow removal where rock has been placed by slowing down and being more cautious. We lose less rock and disrupt snow removal less if they slow down on a few solid miles of road instead of a multitude of isolated spots.

We recognize there will be many soft spots. Most will make driving messy, but others may be more severe. In the spring we resist spot rocking in areas that appear only sloppy, but will spot rock in areas we identify as a hazard to the traveling public. Our department makes that determination. Rock hauling operations can also be complicated if roads become completely thawed and very sloppy. We need to balance the benefit of hauling rock with the damage caused by loaded trucks. In many such instances we hurt roads more than help them.

We realize how frustrating rock roads can be in the spring. We want to help the public understand our limitations and demonstrate what we are doing to get the most from our precious road dollars.

Summary

We expect to receive many calls for rock in March and April, and would like the public to know how we intend to deal with thawing roads.

When weather allows we will hire private rock haulers to quickly place about 15% of our annual rock. We use our own crews to haul the rest. Roughly 50% of the remaining rock will be placed continuously from May to November, but we will devote more available resources to place 20% of our annual rock in March and April, and the remaining 15% intermittently May to November.

We recognize there will be many soft spots. Most will make driving messy, but others may be more severe. Due to concerns of additional snow in March and April we resist spot rocking in areas that appear only sloppy, but will spot rock in areas we identify as a hazard to the traveling public. Our department makes that determination. Rock hauling operations can also be complicated if roads become completely thawed and very sloppy. We constantly balance the benefit of hauling rock with the damage caused by loaded trucks.