



Linn County Road Department

Providing safe and efficient transportation to citizens and visitors of Linn County.

CHIP SEAL F.A.Q.

What is a Chip Seal?

A Chip Seal is the application of a protective wearing surface to an existing pavement. This maintenance work is performed to increase the service life of the existing asphalt pavement.

First, asphalt is emulsified (mixed with water and an emulsifying agent). This emulsion is then applied to the road using a special spray truck. As soon as the emulsion meets the road surface, the water starts to evaporate leaving the soft, sticky asphalt.

Immediately after spraying the emulsion, a layer of rock chips (small, clean, crushed rock) is applied by a chip spreader. These chips are rolled in to provide a better bond with the asphalt emulsion.

Why use a Chip Seal?

Over time asphalt reacts with oxygen in the air to become more brittle. UV radiation from the sun breaks down the binders in asphalts. Water penetrates roads to cause damage to the road base, which leads to failing pavements. Traffic loads can cause surface raveling (loss of rock).

Chip seals provide protection for existing asphalt pavement surfaces to extend the service life of the pavement. They help to mend some of the above damage, and protect against further damage. They do not create a new structure for a road, such as an asphalt overlay would provide. However, they can be performed much more cheaply and more quickly.

What can you expect to see?

The application of the chip seal is pretty fast. We can finish a mile of road in about an hour under normal conditions. It will look like we have made a gravel road. There will be a lot of loose rock.

One to two days later we will come back to sweep the road and apply a fog seal. This will coat the new rock chips with a protective layer of black asphalt.

After another day we will return to replace the stripes, stop bars, and other pavement markings.

How can you help?

- Park vehicles well away from the edge of the road to avoid getting asphalt splashed or sprayed on them.
- Drive slowly on the fresh chip seal / loose rock. The speed limit will be reduced to 35 mph until the stripes have been restored. Be careful of speeders, as they throw rock off their tires which can chip windshields.
- Keep water off the road when we're applying the chip seal and the fog seal. Ensure sprinklers do not get the road wet. Just like you wouldn't want to paint a wet surface, the new asphalt does not stick well to a wet pavement.