

Chip sealing is comparable to other resurfacing methods in durability and effectiveness, but costs far less (15-25% of the cost of pavement overlays). The chip seal process is the best protection for the least amount of money. Including labor, aggregate and seal, the cost of this process is a fraction of the cost of asphalt and overlays.



As the Monroe County Road Commission continues to implement a pavement preservation program, its goal is to prolong the service life of the pavement and very importantly save money over the life of the pavement. Subsequent chip seal treatments can be quickly applied and result in fewer disruptions to the traveling public as compared to rehabilitation or reconstruction.

WE APPRECIATE YOUR PATIENCE

Throughout the Spring, Summer and Fall, the MCRC will be making improvements to state, primary and local roads. PLEASE BE PATIENT. Traveling at posted construction speed limits in construction zones will ensure your safety and the safety of road workers. IT IS ALSO THE LAW. Traffic fines are doubled in construction zones. Obeying warning signs and flagging personnel instructions benefit all those who share the roadway.

Slow Down!

Your life and the lives of MCRC workers depend on it.



MCRC Edition 2.10.2017



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Chip & Seal Capital Preventative Maintenance



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Chip & Seal Preventative Maintenance

As part of the normal road maintenance program, the Monroe County Road Commission (MCRC) performs a process called "chip sealing" as a method designed to protect, prolong and preserve roads in good condition. The MCRC employs two chip seal strategies: single chip seal and double chip seal.

WHY CHIP SEAL?

Asphalt roads are like the new paint on your house. The moment the application process ends the deterioration process begins. Much like paint, asphalt is subject to oxidation, sunlight, rain, freeze and thaw cycles.

Pavement is also subject to a wide array of different traffic loads, use of equipment for snow removal and additional stresses by normal ground movement.

Chip seals can be used on new pavements to increase traction or to prolong the life of a pavement that is structurally sound, but is beginning to age and may have some surface distress.



THE PROCESS:

Chip seal involves spraying an asphalt emulsion (or binder) on the pavement, then a layer of uniformly sized crushed gravel is applied. The crushed gravel must be spread on the emulsion/binder immediately after it is applied to ensure proper seating of the aggregate. Coordination within the construction crew is essential during this process.



Another important part of the process is the rolling procedure. This seats the crushed gravel in the emulsion/binder and enhances good bonding. The crushed gravel is rolled immediately after spreading with a pneumatic tire roller. Even with the high pressure rolling, some crushed gravel will not become embedded in the asphalt.

The new chip seal surface can require several days to cure properly. Hot, dry weather helps speed up this process in which all the remaining water in the emulsion/binder evaporates and the asphalt hardens. Traffic can pass over this surface at reduced speeds during the curing process. After curing, the loose gravel is swept off the surface. This may take several sweepings.



REDUCED SPEEDS:

As with any road/highway capital preventive maintenance project, motorist MUST exercise caution. Reduced speeds ensure your safety and minimize the chance of damaging your vehicle. During the chip seal process, from the moment the gravel is placed on the road to when the excess is swept away, the speed limit is a maximum 25 mph which should reduce the chance of vehicles damaged by flying debris.

Traffic moving at higher speeds create dust, limit visibility and cause an inconvenience to local residents. Increased speeds can also cause gravel to break loose from a fresh chip seal creating the risk of flying rock. Flying rocks from your tires may crack or break a windshield, injure pedestrians, bicycle riders or motorcyclists.



Chip seals:

- ✓ can make surface texture more uniform;
- ✓ waterproof the surface;
- ✓ protect the underlying pavement from oxidation, aging and traffic wear;
- ✓ give new life to dry, weathered surfaces;
- ✓ seal small cracks and imperfections;
- ✓ extends the service life;
- ✓ restores surface friction;
- ✓ are a relatively fast resurfacing method and are cost effective.