

Full Depth Reclamation (FDR)

What it is

This treatment is intended for a roadway that has outlived its useful life. It is the most aggressive resurfacing treatment. FDR is the process of pulverizing the full thickness of the asphalt pavement and a predetermined portion of the underlying materials (base, subbase and/or subgrade) with a reclaimer.

If no stabilizing agents are required, a single pass is often sufficient to uniformly pulverize and blend the materials.

If a stabilizing agent is used (chemical or bituminous), it is typically added and mixed during a second pass (mixing) of the reclaimer. Prior to the mixing pass, the pulverized material should be compacted and shaped. Compaction is accomplished by using a smooth drum and/or pneumatic-tired compactors over the pulverized and shaped surface. After the subbase is pulverized, mixed, shaped, and compacted a minimum of 4" of asphalt is installed in multiple layers on top. This is classified as reconstruction.

Process

- A reclaiming machine is used to pulverize the existing asphalt pavement and sub-base material to a depth of 12" to 20".
- The new sub-base is shaped (fine graded) and compacted.
- Once the sub-base is completed, a new layer of asphalt concrete is applied to create the new asphalt binder course.
- Manholes and other utility valve covers are adjusted to final grade.
- Finally, the final layer of asphalt concrete (wearing course) is applied on top of the binder layer.
- Temporary traffic stripes and markings are placed as needed.
- Several weeks later, permanent striping is replaced.

Impact to Residents

During the pulverizing process, full road closures will be in effect. The road might be maintained as a gravel road for several weeks until all other related road work is performed. The contractor will mitigate the impact of dust by applying calcium chloride and water periodically on the gravel surface. During the asphalt overlay process, roads will be closed again until the surface has cured. The typical curing time is 45 to 60 minutes.

sometimes shorter or longer depending on road and atmospheric conditions. Residents will be notified via door hanger notices periodically throughout the process as necessary. Vehicles may not be parked on affected roads on the day of the treatment application; however, they may be parked outside of the construction zone if you plan to use them that day. Coordinate with construction workers to determine an estimate time of when construction will take place across your property if you need to utilize your driveway. Residents with special needs may contact the Town (jcormier@concordma.gov) beforehand to plan accordingly. All work is coordinated with transit and waste providers to minimize impacts to service.

Once again It is the most aggressive resurfacing treatment with the most impact to abutters.
