

Asphalt Overlays

This surface treatment is for structural reinforcement on arterial and collector roads in both urban and rural areas. The depth of an overlay is between 2 and 3 inches. Surface defects and irregularities are repaired prior to adding a new layer of asphalt. In some instances, a thin lift (a 1 inch layer of asphalt) is applied to subdivision or access roads that have surface irregularities but remain structurally sound. This smoothes the surface and corrects some drainage issues. During the overlay process, there are delays to the traveling public.

Chip Seal

This surface treatment is applied to rural roads to seal the surface and prevent moisture from infiltrating the road's subgrade. These roads are structurally sound and do not need reinforcement. Emulsified oil (.45 gallons per square yard) is applied to the road surface, followed by a covering of approximately 20 pounds of crushed rock per square yard of roadway. The size of the rock, or aggregate, depends on the location of the road and whether a rougher surface is desired for additional traction during inclement weather. The road is closed during treatment, but traffic is usually allowed to return a few minutes after the work is completed.

Slurry Seal

This surface treatment is applied to access and subdivision roads in urban areas to prevent moisture from infiltrating the subgrade. These roads are structurally sound and do not need reinforcement. Emulsified oil, crushed aggregate and a curing compound are premixed on a truck and then applied to the road surface. This treatment requires the road be closed for 2 to 4 hours, depending on weather conditions, to allow curing before it can reopen to traffic.

Cape Seal

This is a surface treatment applied to urban roads. This is a two-step process consisting of a chip seal followed by a slurry seal to tie everything together.

Base Stabilization

A road that requires base stabilization is rough and uneven and needs major structural repair. The existing surface is ground up, and cement is added and mixed to create a new base for the road. The road is then graded, reshaped and rolled, followed by a surface treatment, which can be anything from a chip seal to an asphalt overlay. There are significant motorist delays during this process.