

Treatment Types

The table below shows the types of treatments available based on “banding” types

Banding Type	PCI	Process	Desc	Pro's/Con's	Life Expectancy	Used in Rocky Hill
Routine	80-92	Crack Seal	Fills cracks up to 1/8" wide with an asphalt cement reinforced with fibers	Seals cracks in pavement to prevent water from weakening the subbase	2-5 yrs	Yes
Preventive	68-80	Fog Seal - Rejuvenator	A light spray application of asphalt emulsion on existing pavement	Low cost, slows oxidation, seals minor cracks	1-5 yrs	No
	68-80	Chip Seal	Emulsified asphalt is sprayed onto existing pavement and covered with aggregate.	Provide a skid resistant wearing surface, fills micro-cracks, seals and waterproofs the pavement.	4-6 yrs	No
	68-80	Slurry Seal	Homogenous mixture of emulsified asphalt, water, well-graded fine aggregate and mineral filler that has a creamy fluid-like appearance when applied.	Fill existing pavement surface defects as either a preparatory treatment for other maintenance treatments or as a wearing course	5-8 yrs	No
	68-80	Stress Absorbing Membrane (SAM)	Membrane of either fiber or crumb rubber. It is constructed with a one-pass application of a sandwiched matrix of asphalt polymer modified emulsion, chopped fiberglass fibers or crumb rubber and a second layer of emulsion. The strong, adhesive membrane is covered with stone seal aggregates.	Reduces and minimizes reflective cracking. Increases compaction of subsequent asphalt overlay. Controls cracking allowing reduction in thickness of asphalt overlay. Extends overall pavement service life	7-9 yrs	No
	68-80	SAMI	Same as a SAM but covered with a HMA overlay	Same as SAM	7-9 yrs	No
	68-80	Micro Surfacing	Polymer modified asphalt emulsion paving system composed of a water-based polymer-modified asphalt emulsion, 100% crushed fine aggregate, mineral filler, water, and additives.	Developed in Germany for use on the Autobahn. Economical, low impact, improve skid resistance, moisture intrusion and rutting, lesser environmental impact, don't have to adjust structures, preserves curb reveal	6-8 yrs	Yes

	68-80	Cape Seal	A combination of a chip seal followed by a micro surfacing	Long lasting surface treatment with a smooth finish and same benefits as Micro & chip seal	8-10 yrs	Yes
	68-80	Bonded Wearing Course (BWC)	Polymer modified asphalt emulsion spray applied immediately ahead of an overlay of gap-graded hot mix asphalt. The thick polymer asphalt membrane seals and protects the surface and provides superior bonding of the ultrathin mix to the pavement.	Seals existing road surface and provides a new, skid-resistant, ultrathin (5/8") wearing course in one simultaneous operation. maintaining overhead clearances and curb reveal. The one-pass construction process moves quickly, allowing quick construction and traffic return.	8-10 yrs	Yes
Mill & Overlay	40-67	Hot Mix Overlay (HMA)	Traditional method for protecting deteriorating pavements. Place asphalt overlay over existing pavement	Strengthen the pavement structure, reduce roughness and restore skid resistance. There will be reflective cracking and the pavement elevation will be raised.	6-8 yrs	Yes
	40-67	Cold in Place Recycling (CIP)	Uses a recycling train to pulverizes bituminous concrete in place to a precise depth, material mixed with a liquid binder and placed to an accurate grade and profile. Typically overlay the new material with final paving course of either BWC or HMA	Provides new wearing course. Depending on the depth, no or reduced chance of reflective cracking. Must lower all structures as the train can't maneuver around them	6-8 yrs, 12-15 w/ overlay	Yes
	40-68	Hot in Place Recycling (HIP)	Similar to Cold in Place the process uses heat to scarifying the pavement, rejuvenating agent added material mixed, placed and compacted creating the new bituminous pavement.	Provides new wearing course. Depending on the depth, no or reduced chance of reflective cracking. Process burn the abutting vegetation.	2-4 yrs, 8-10 yrs w/ overlay	No
	40-67	Mill - Overlay	Removes the old surface by grinding and place a new wearing course of HMA on the milled surface	Provides a new wearing course. Will get reflective cracking.	12-15 yrs	Yes

Reclamation	0-39	Full Depth Reclamation	Machine pulverizes the existing pavement and base materials and mixes them with a stabilizing chemical designed to strengthen the base. The treated materials are then graded and compacted in a series of steps to prepare the base for a new pavement surface. The stabilized base may be surfaced with a surface treatment for low volume roads, it may be covered with structural lifts of hot mix asphalt	Provides a reconstructed base and new sub and wearing courses. Like having a brand-new road. Time consuming, dusty, excess material needs to be removed. Survey required to establish grades, Disruptive as all asphalt is removed leaving a "dirt" road to drive on during the process. Expensive.	15-20 yrs	Yes
Reconstruction	0-39	Re - construction	Excavate and remove existing pavement and base, install new base and pavement	New base and pavement structure. Provides needed structural repairs. Cons – same as reclamation.		No