

Sealcoating is a true "barrier coat" between asphalt surfaces and destructive elements. The term "sealcoating" means keeping the redeeming properties of asphalt sealed in to prolong the pavement life and preserve its functional properties. Sealcoat is intended as a protective coat; not as crack filler or leveling material. **Sealer is only as good as the asphalt pavement to which it is applied.**

## **BENEFITS OF SEALCOATING**

The primary reason to sealcoat an asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When an asphalt pavement is exposed to sun, wind and water, the asphalt hardens, or oxidizes. This causes the pavement to become more brittle. As a result, the pavement will crack because it is unable to bend and flex when exposed to traffic and temperature changes. A sealcoat combats this situation by providing a waterproof membrane which not only slows down the oxidation process but also helps the pavement to shed water, preventing it from entering the base material.

A secondary benefit of seal coating is an increase in the surface friction it provides. This is accomplished by the additional texture the cover aggregate adds to the pavement. With time, traffic begins to wear the fine material from an asphalt pavement surface. This result in a condition referred to as raveling. When enough of the fine material is worn off the pavement surface, traffic is driving mostly on the coarse aggregate. As these aggregate particles begin to become smooth and polished, the roadway may become slippery, making it difficult to stop quickly. A sealcoat increases the pavement texture and increases the surface friction properties.

## **CONDITIONS CONDUCIVE TO LONG LASTING SEALCOATS**

Sealcoats are affected greatly by weather conditions, especially during construction. The ideal conditions are a warm, sunny day with low humidity. Humidity and cool weather will delay the curing time and cause the seal coat to be tender for a longer period of time making it more susceptible to damage by traffic. Rain can cause major problems when seal coating. If the asphalt binder has not cured, it can become diluted and rise above the top of the cover aggregate. After the water evaporates, asphalt may cover the entire surface causing tires to pick up aggregate or track the binder across the surface. Seal coating should never be done when showers are threatening. Asphalt to be sealcoated should also be in relatively good condition. This means that there should be little, if any, load related distress such as alligator cracking, rutting and potholes. If these conditions exist, the driveway should not be sealed unless it is repaired first.