

GRAVELOCK

Soil Consolidation Aid

» WORLD LEADER IN IONIC SOIL CONSOLIDATION «
Cost Effective. Innovative. Easy To Use.



Water is the number one enemy of roads, as it makes the roads soft.
Keeping water out of the roads improves performance.

GRAVELOCK Technology uses a unique compound which forms protective, oily layers on the surfaces of soil and clay particles. It reduces ion mobility and ion exchange and at the same time makes the clay material hydrophobic by eliminating the adsorption of water.

The result is a soil in the road base that is much less sensitive to moisture, more workable during construction and can be compacted to a better particle-interlock state by equipment and traffic forces.

Technical Support: The expertise of one of the world's oldest manufacturers of soli modifiers, together with some leading Canadian road technology companies combine to bring you this cost saving technology.

Construction of roads using **GRAVELOCK** technology is simple and requires no special construction methods or equipment. The construction method is similar to conventional practices for rehabilitating a road base.

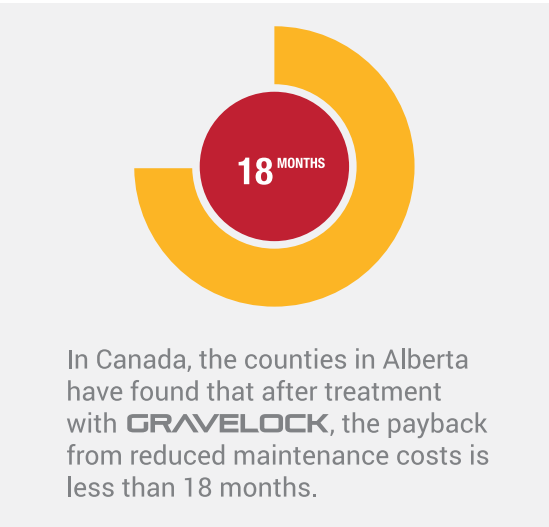
CONSTRUCTION METHOD	
 PREPARE	Prepare the road by clearing the ditches and pulling shoulders, shape the road.
 SCARIFY	Scarify the road to a depth of 20 cm.
 GRAVELOCK	Add the GRAVELOCK to the water in the spray truck and spread evenly over the scarified area. Add more water if necessary to bring the moisture content of the soil to just above OMC.
 MIX	Mix the scarified layer with the grader or other equipment to ensure that the moisture content is even throughout the layer.
 SHAPE	Shape and compact the road.
 ROLLING	Finish rolling the surface with a pneumatic roller.
 SPRAY	Spray a small amount of clean water onto the finished treated surface once a day for three days.

Construction can be integrated with road owner crews and equipment to help
reduce outsourced costs.

GRAVELOCK Technology is designed to increase the osmotic and matric suction of typical clay based soils while reducing moisture susceptibility. It is this behavior that increases the strength and stiffness of typical clay based sub-grade soils. At the same time it locks in the gravel to minimize gravel loss...



GRAVELOCK is designed to improve the performance of local road grade soils to reduce the amount of gravel required during construction and is suitable for a wide spectrum of clayey materials ranging from clays and silty clays to dirty gravel. The soils must display some cohesive properties (i.e. contain clays).



- KEY BENEFITS**
- Saves Money
 - Reduces Gravel Loss
 - Reduces Maintenance
 - Preserves gravel (Non-renewable resource)
 - Increases soil's density, strength and stiffness
 - Sheds Water
 - Mitigates the re-adsorption of water into the road over time
 - Reduces dust
 - Improves the trafficability in wet weather
 - Long term treatment - does not have to be repeated yearly
 - Preserves clay caps

Before and after treatment with **GRAVELOCK**.



REDUCE YOUR MAINTENANCE ON CLAY-BASED, GRAVEL ROADS!

GRAVELOCK technology reduces gravel consumption on gravel surfaced roads.

- › Save gravel
- › Improve strength
- › Reduce maintenance by up to 80%
- › Preserve clay cap
- › Reduced dust - improve safety
- › Reduced spring thaw effects
- › Reduced moisture susceptibility
- › Saves maintenance "budgets" and "money"
- › Reduced clay soil plasticity
- › Environmentally tested and approved

GRAVELOCK technology locks in gravel, into the road base and so reduces gravel loss, or reduces the need for gravel during initial construction by enabling the use of local soils.

GRAVELOCK improves road trafficability in wet weather, reduces gravel loss and helps to reduce dust, provided there is sufficient clay content in the base soil.



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