



Your Road in a Drum





# The RoadPacker Story



**RoadPacker Group have been producing eco-friendly chemical soil stabilisation solutions for nearly thirty years.**

**Formed in 1990, RoadPacker noted that many administrators / governments were spending as much as 50% of their entire budget on roads.**

**Aided by the advances in chemical technology over the years, our research led to the development of a new chemical soil stabiliser called RoadPacker Plus.**

**RoadPacker Plus can cut the costs of road construction by up to 45%.**



# RoadPacker Soil Stabilizer

## Benefits

Cost Savings	Fast Completion
Great Performance	Reduced Maintenance

**RoadPacker** roads are dust free in the dry season and solid as a rock in the rainy season.

**RoadPacker** increases the density, strength and CBR values of roads significantly; it reduces base depths by more than 50%, saving on the quantity of gravel, handling and other associated costs.

**RoadPacker** greatly reduces maintenance by minimizing the damaging effects of water and traffic.

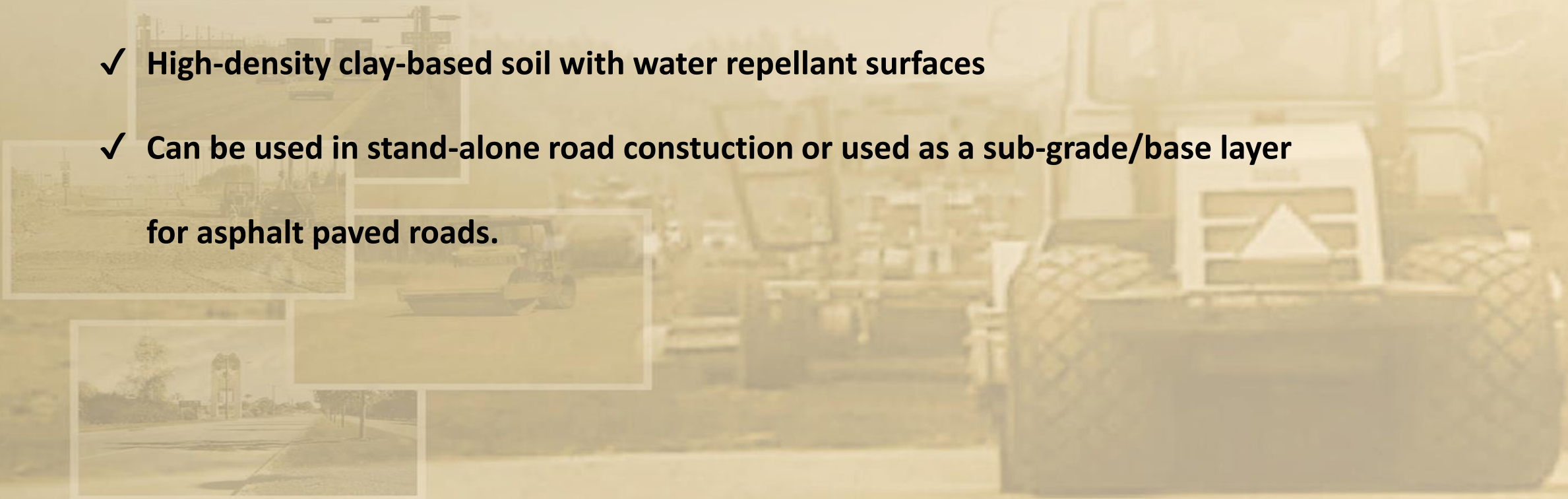
**RoadPacker** is easy to store and transport

# RoadPacker Plus

A horizontal bar with a blue segment on the left and a yellow segment on the right.

RoadPacker Plus is a natural ionic soil stabilizer.

- ✓ Eco-friendly and non-toxic
- ✓ High-density clay-based soil with water repellant surfaces
- ✓ Can be used in stand-alone road constuction or used as a sub-grade/base layer for asphalt paved roads.

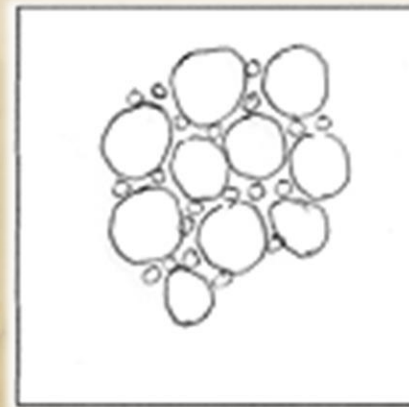


# RoadPacker Plus: How It Works

**RoadPacker Plus** is an ionic soil stabilizer that permanently alter the structure of soil at the molecular level to become rock hard & water repellent.



**Before**



**After**



# ROADPACKER PLUS – The Science

---

Clay particles are the only soil type that has a diffused double layer. This layer is a membrane that swells to hold up to 10,000 atmospheres of weight and why clay that becomes moist from rain or flooding will lift a building off its foundation.

**Step 1:** RoadPacker penetrates the diffused double layer with surfactants (surface active agents).

RoadPacker separates a hydrogen atom from a molecule of  $H_2O$  which leaves a positively charged ion.

*(The remaining  $HO$  is a hydroxyl that simply evaporates.)*

**Step 2:** The ionic solution now penetrates the diffused double layer of clay like a Trojan Horse attracting negatively charged soil and clay particles tightly together in a permanent electro-magnetic bond.

Super plasticizers pull each of the particles tightly together displacing all of the water and eliminating the voids creating a water-repellant high density and highly compacted soil. The material continues to harden for six to nine months after initial installation increasing compaction density.

## Base Course (Dirt) Roads vs. RoadPacker

- Roads destroyed by, rain, flooding, frost heave, shrinkage, and traffic.
- Maintenance Expenses—grading necessary every 1– 2 months.
- Wash Boarding, Dust, Potholes, Rutting, Mud.
- Vehicle Wear and Tear.
- Driving Safety and Health Concerns... Dust, Poor Visibility
- Base course only lasts four to six years before it is pulverized, requiring need to start all over again at \$45,000 to \$125,000 per mile.

- ✓ Water Resistant! The product becomes harder with traffic due to increased compaction!
- ✓ *Eliminates wash boarding*
- ✓ *Dramatic reduction in dust*
- ✓ Resistant to frost heave, swelling and shrinkage.
- ✓ Maintenance Free for a Decade or longer eliminating the costs associated with re-grading roads!
- ✓ Fast and easy to apply requiring no specialized equipment.
- ✓ Green, eco-friendly—nontoxic, non leaching.
- ✓ The electro-magnetics that bind the particles of soil together remain permanently in the soil.

# TYPICAL EQUIPMENT NEEDED

**XIP**  
**xTerra Pro**

## Same equipment used for Standard Road Construction

- **Grader or Rotovator** – Ripping, mixing, shaping, and leveling
- **Water Tank** – Spraying RP+ and water solution
- **Vibrating Compactor or Sheep's Foot** – Compacting the treated soil/road





# RoadPacker: Application

RoadPacker works with the top 6 inches of native soil. Most native soils have 15% – 50% clay content (required by both RoadPacker Plus and RoadBond to stabilize soils into a rock-hard surface). Clay is imported only when native soils do not have at least 15% clay content.

**Step 1: Road grader rips up the top 6 inches of the soil.**



**Step 2: Water added to the soil bringing soil to Optimum Moisture Content (OMC).**



# RoadPacker: Application

Each barrel of RoadPacker Plus contains 54 gallons of product. This is mixed into watering trucks and will cover one kilometer or .6 of a mile. It takes 1 and 2/3 barrels to create one mile of road.

**Step 3: Road grader thoroughly mixes the wet soil into rows**



**Step 4: Water truck applies RoadPacker product to the soil**





# RoadPacker: Application

The process requires no specialized equipment. Our company consultant will work with your crew to certify them in the simple application process. The roads are ready to drive on immediately after compaction.

**Step 4: Road grader mixes RoadPacker solution into the soil**



**Step 5: Vibrating compacter/roller (8,000 – 12,000 lb.) compacts the road**



# Estimated 10 Year Cost Savings Analysis



## Base Course: Cost over 10 yrs p/mile

**INITIAL COST: \$45,000 - \$125,000 p/mile**

### PLUS MAINTENANCE:

- Cost to grade and maintain 1 mile of base course road = \$2,000 for each grading  
Grading required 2 to 4 times/year =  
\$4,000 - \$8,000 / year / mile  
**\$40,000 to \$80,000**
- Every Four to Six Years, Need to Reinstall (because Sub-Grade becomes completely pulverized) =  
**\$45,000 x 2 = to \$90,000 (or more)**

**Cost over 10 Years for 1 MILE of BC**

**Road: \$175,000 to \$295,000**

## RoadPacker: Cost over 10yrs p/mile

### PRODUCT COST:

- **\$26,000** (cost per mile for RoadPacker Plus)
- **INSTALLATION:**
- **\$10,000 to \$15,000** per mile for Contractor (*Prices will vary depending on Contractor*)
- No Grading Required = **\$0**

**Cost over 10 Years for 1 MILE of RP**

**Road: \$36,000 - \$41,000**



# Thank You

Dir. Of US Operations  
BJ Crapps  
678.341.0177  
[bj@xterrapro.com](mailto:bj@xterrapro.com)

