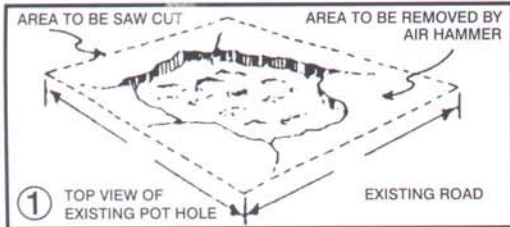


# THE STORY OF INFRARED

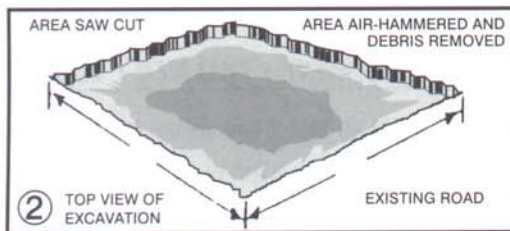
# COLD

# NEW

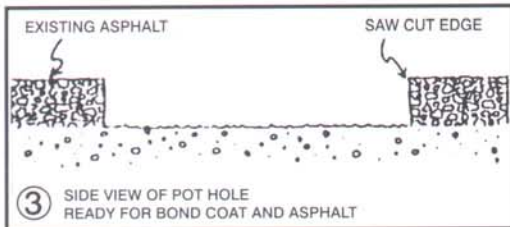
## CONVENTIONAL METHOD



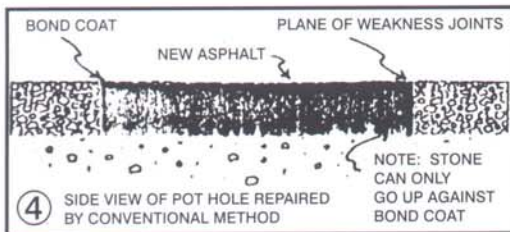
OVERALL VIEW OF POT HOLE



SQUARE CUT EXCAVATED POT HOLE

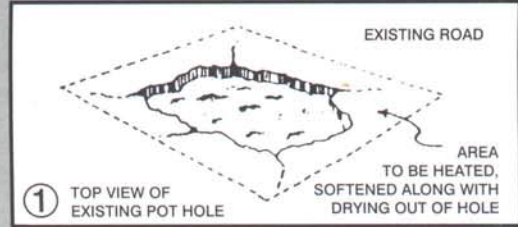


SIDE VIEW OF POT HOLE

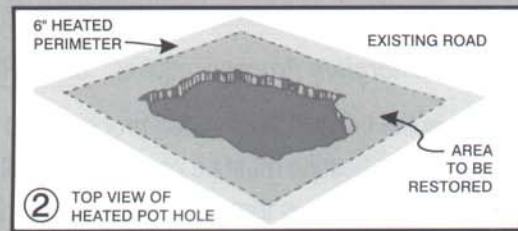


REPAIRED BY CONVENTIONAL METHOD

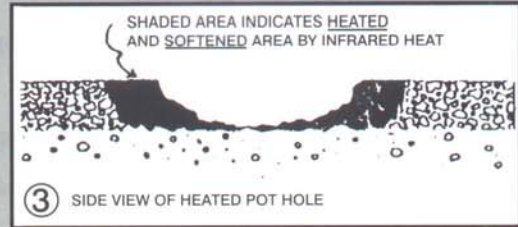
## INFRARED METHOD



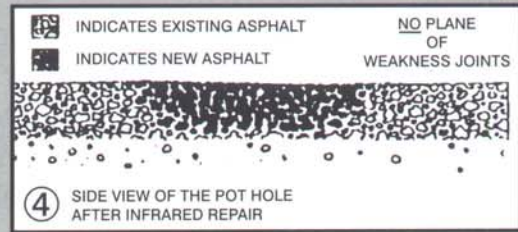
OVERALL VIEW OF POT HOLE



HEATED AND SOFTENED SURFACE



SIDE VIEW OF POT HOLE



REPAIRED BY INFRARED/THERMAL BONDING

## COMPARE INFRARED RESTORATIONS TO CONVENTIONAL REPAIRS

Infrared Restorations are **MORE PERMANENT**

**LESS EXPENSIVE**

**LESS TIME CONSUMING**

**THE IDEAL REPAIR**



The repair is fused to the existing pavement, thereby creating one continuous surface and eliminating any seams.

**MATERIAL** - the existing asphalt is recycled. **LABOR** - crew size is limited to 2 or 3. **EQUIPMENT** - 1 truck operation.

A typical 5' x 5' repair takes less than thirty minutes to complete, including preparation and clean-up.

POT HOLES • UTILITY CUTS • TRENCH REPAIRS • DEPRESSIONS • JOINT REPAIRS

# T H E A L T E R N A T I V E : I N F R A R E D

A *conventional* asphalt repair is a very expensive and time-consuming process. It requires a significant amount of equipment, material and manpower. *The results are very often far from permanent.*

Take a look at what the **Conventional Process** requires:

**Equipment:**

- Pavement saw to scribe a straight edge around the damaged area.
- Jack hammer to break up all the existing pavement.
- Bucket loader to excavate the hole and load material into the truck.
- 2 trucks. One for excavated material and one for fresh asphalt.
- Roller to compact the repair.

**Material:**

- Sufficient asphalt to replace all the excavated material.

**Manpower:**

- Enough labor to operate all the equipment including trucks, plus do all the hand work.

**Time:**

- All the steps involved in this repair can take 2-3 hours to complete.

The **Infrared Restoration Process** requires: **ONE TRUCK • ONE PIECE OF EQUIPMENT • TWO MEN • 20 MINUTES**

The first step in the Infrared Restoration process is to heat the asphalt sufficiently so that it will soften to a depth of at least 3 inches. The heating must be carefully controlled to prevent damage to any of the asphalt. The only practical means to accomplish this is through the use of Infrared Heat. The characteristics of an infrared ray are such that they are absorbed into an opaque solid matter, in this case the asphalt pavement. As the rays are absorbed the asphalt is heated without the surface burning.

Conversely, attempting to heat asphalt with an open flame, hot iron, or heated air (convection heat) will burn the asphalt long before it is adequately softened.

**Kasi INFRARED's** unique infrared converters are extremely efficient generators of infrared energy. They are designed to concentrate the infrared heat directly into the asphalt while venting away excess convection heat.

Here are the simple steps required in the **Infrared Restoration Process**:

1. Upon arrival at the site the area is swept clear of debris and loose asphalt.
2. The infrared heater is positioned over the damaged asphalt for between 7-10 minutes.
3. Once the pavement is sufficiently softened, the heater is removed. A steel rake is used to cut a square around the damage, leaving at least 6" of the heated surface undisturbed. The rake is then used to scarify the asphalt inside of the square area, recycling the existing asphalt.
4. A "asphaltine" rejuvenator is sprayed onto this existing asphalt to replace the light oils which have oxidized out with age.
5. Virgin asphalt is discharged from the asphalt reclaimer and added to the repair to bring the area up to grade.
6. Proper compaction is applied, insuring that the edges of the restoration are heat-seamed to the heated existing pavement.



*For the Ultimate  
Asphalt Repair!*

