#### Idea Exchange

continued from page 2

## Culvert pipe end reshaper

When culvert pipe ends are crushed they can cause water backups which deteriorate the road base. An effective reshaping device developed in Oklahoma can be built for less than \$300 in materials. It's easy to use, almost indestructible, and works well.

The device consists of a welded hydraulic cylinder with a scissor-type jack attached to the actuating rod. The collapsed jack is placed in the end of the crushed pipe. When the cylinder is retracted the jack expands, reshaping the pipe end. The process only takes a couple of minutes.

Parts for the jack are "off the shelf." Making it requires a minimum amount of machining and welding.

Contact the T.I.C. for plans for the culvert pipe jack. (Call, FAX, or use the form on page 7.) Idea and plans are courtesy of the Oklahoma Local Roads program.

# Anti-icing research promising

Most winter maintenance involves a de-icing operation: breaking the bond between the ice and the pavement after it has formed. A national research effort begun under the Federal Highway Administration's Strategic Highway Research Program (SHRP) is looking into the costs and effectiveness of *anti-icing* operations: keeping the ice/pavement bond from forming in the first place.

Fifteen states are evaluating the anti-icing strategy on pavements like Interstate highways where a high level of service is expected and provided. They are testing both liquid chemical applications and salt which is pre-wetted with various products.

Preliminary studies during actual storm conditions found that equal or better road conditions can be maintained using fewer chemicals. By cutting chemical and abrasive use, the anti-icing strategy should reduce both costs and environmental impacts. The study continues through the winter of 1994-95.

## Calendar.

### T.I.C. Workshops

Specific details and locations for workshops are in the announcements mailed to all Crossroads recipients. Don't forget the T.I.C.'s "Bring-a-Buddy" enrollment special.

**Drainage Maintenance** Review the importance of drainage maintenance and what poor drainage does to pavement life. Learn the maintenance management approach to caring for drainage facilities and review materials and methods for maintaining drainage facilities in a way that protects the environment. Includes WisDOT's recommended soil erosion and sediment control practices for street and highway construction projects.

December 6 Tomah
December 7 Eau Claire
December 8 Cable
December 9 Rhinelander

December 13 Stevens Point
December 14 Green Bay
December 15 Barneveld

Workzone Traffic Control (teleconference) Focus on new workzone traffic control information. Highlights include changes in the new MUTCD Part VI, new workzone traffic control devices being evaluated in the field by local highway and street departments, and a new interactive compact disc training course you can borrow from the T.I.C. to train your staff in workzone traffic control. This live TV conference will be delivered by satellite to many convenient locations around the state on January 17 from 10:30-11:50 am.

**Traffic Studies** Review the proper procedures and techniques for collecting commonly used traffic data, such as traffic counts, spot speeds, and crash data. Workshop includes examples of how such data is used to solve traffic and safety problems.

February 22 Green Bay March 1 Madison February 23 Brookfield March 2 Eau Claire **Roadway Maintenance** Here is your opportunity to improve your street and road maintenance operations. The workshop includes preventive maintenance techniques and investigating and repairing pavement failures.

March 21 Tomah March 28 Green Bay March 22 Eau Claire March 29 Brookfield March 23 Cable March 30 Barneveld March 24 Rhinelander

#### **UW-Madison Seminars**

Local government officials are eligible for a limited number of scholarships for the following engineering courses in Madison. Use the form on page 7 for details or call 800/442-4615.

Fleet Maintenance Management, Feb. 1-2
Maintaining Asphalt Pavements, Feb. 6-7
Civil Engineering Construction Specification Writing, Feb. 6-8
Sanitary Sewer Maintenance, Feb. 13-15
Improving Public Works Construction Inspection, Feb. 20-22
Improving Quality in Street and Highway Design and Construction,
March 8-10

## Other Training Opportunities

Controlling Erosion During Construction Ideal for local building inspectors, architects, engineers, developers, and building contractors, this workshop features changes to the state building code. In 1995 the code will require erosion control during the construction of apartments, retail, manufacturing and other commercial buildings. Course also includes how to install and maintain erosion controls and how to use new materials. Offered in three convenient locations, registration fee is \$40. For more information or to register call UW-CALS Conference Office at 608/263-1672.

February 7 Eau Claire February 16 Green Bay March 3 Brookfield