

THE CONCRETE conveyor



King of the Road Testing Facilities

By Bill Davenport, ACPA

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The first of two "Review & Tour of MnROAD" events, co-hosted by Concrete Paving Association of Minnesota, Minnesota Department of Transportation, and the U of M Center for Transportation Studies, was held Wednesday, June 22, at the MnROAD facility near Albertville.

Some 20 Minnesota DOT, city, and county personnel, along with consultants, were on hand to examine the pavement and discuss some of the testing done at this well-established proving ground and test facility.



Inside Track ... State, city, and county officials, as well as consultants, heard and saw first-hand evidence of the value of Minnesota's MnROAD facility.

The Minnesota DOT's Tom Burnham, P.E., Research Project Engineer, presented local experiences in whitetopping, while Tim Clyne, P.E., Research Forensic Engineer, presented details about the overall performance of both concrete and asphalt pavements at MnROAD.

The program also met Minnesota's requirements for continuing education, important to engineers to obtain or retain their professional engineering licenses.

CPAM Executive Director Matt Zeller, P.E., said of the event, "This was a great opportunity for us to see the excellent work done at MnROAD, which is an invaluable research site that many industry and public officials agree holds great potential for research on what has been built and for future research.

Incidentally, Burnham is scheduled to present a paper at the International Society of Concrete Pavements 8th International Conference in August. The paper, "MnROAD—The First Ten Years" will describe the work at MnROAD.

Bob McPartlin Joins CPAM Team !!!

We are pleased to announce that Bob McPartlin, P.E. has accepted a Field Promoter position at CPAM starting July 19.

Bob worked for the Minnesota Dept. of Transportation for the last 12 years, most recently as Project Development Engineer. Prior to Mn/DOT, he worked as County Highway Engineer for both Lyon and Waseca counties

over a span of 16 years, and for the City of St. Paul Public Works Dept. for 6 years.

As Field Promoter, Bob is responsible for a broad range of technical and promotional activities, primarily working to develop and increase the PCC share of the county and city paving markets in Minnesota by focusing time and effort on the decision makers of these markets.



CPAM team is now complete. (left to right) Matt Zeller, Bob McPartlin, Deb LaValle, Brad Skow,

"I'm looking forward to promoting good pavement solutions and to rubbing elbows with my previous peers," said Bob in a recent interview.

We, at CPAM, are looking forward to rubbing elbows with him and are happy to add his extensive experience and expertise to our team.

In Memoriam



Lawrence A. "Bud" Mattson

It is with deep regret that we inform you of the death of Bud Mattson, one of the founders of Shafer Contracting Company.

Bud passed away on July 12 at the age of 90. He was active in the highway construction industry in Minnesota all of his life, and has a host of friends and associates in the construction industry.

We extend our deepest sympathies to the Mattson family and friends during their time of grief. Please join us in remembering them in your thoughts and prayers.

County Road C is for Concrete

By Brad Skow

Ramsey County has begun the reconstruction of County Road C – a five-lane urban roadway between I-35W and Snelling Avenue.

Construction started April 11, 2005, between Cleveland Avenue and Snelling Avenue. The intersections at Long Lake Road, Cleveland, and Fairview Avenue are limited to two lanes of traffic. Eight inch concrete paving began on the north side of County Road C beginning at Snelling Avenue and west to Long Lake Road. Fine grading began around the first of July and actual paving started around July 7. Paving for the

north side was completed in 2 to 3 days. Concrete shoulders, curb and driveways will be added after main roadway pavement is completed. **County Road C and all the businesses along County Road C are open to traffic during construction.**

The project also includes three water treatment ponds to treat highway runoff, a trail along the south side of County Road E and the completion of a frontage road south of County Road C at Prior Avenue.

The project is scheduled for completion in 2006.



Dowel Basket Tie Wires

By Matt Zeller

Many state highway agencies have historically required that the tie wires that keep a dowel bar basket stable be cut, fearing that the wire could inhibit the movement of the concrete pavement and cause cracking near the joints.

By early 2005, three states (Iowa, Wisconsin and Washington) had removed that requirement. In Spring 2005, the Minnesota Department of Transportation followed the lead of those states and also removed their requirement to cut the tie wires.

For the concrete to crack due to the tie wires not being cut, the tie wires must impart a stress back to the concrete.

That total stress must be greater than the strength of the concrete to cause a crack. Analysis of the mechanics show the tie wires will fail one of two ways before they cause damage to the concrete or lock up the joint:

- The wires themselves will yield, or
- The welds holding the wires to the basket will fail.

By leaving the tie wires intact, the dowel bar basket assembly will remain stable, making it more resistant to movement and deflection during paving. This results in a smoother pavement, as well as dowels that are better aligned.

Keeping the basket stable is even more critical for thicker pavements such as airfield and our Metro interstates.

There are no known projects that have experienced cracking due to the tie wires not being cut. Analysis shows that the stress added to the pavement by leaving the tie wires intact and the benefits of doing so far outweigh the risk.

ACPA issued an "R & T Update" in January 2005 discussing this issue in more depth. You can find this "R & T Update" on ACPA's website www.pavement.com or by contacting CPAM.



Matt Zeller, P.E.
CPAM Executive Director

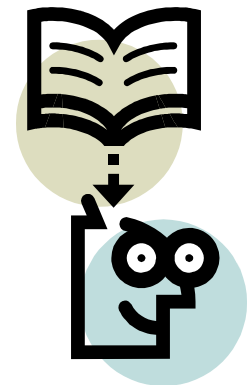
New Literature

Our friends at the PCC Center at Iowa State University have published four new documents to help with the construction and placement of concrete pavements. These tri-fold publications titled "Concrete Paving Workforce Reference No. XX" are part of the PCC Center's on-going goal of providing the latest technical and practical updates relating to concrete paving and its uses.

The four subjects covered are:

- Concrete Materials Storage, Mixing, and Delivery
- Concrete Paving Site Preparation and Construction
- Concrete Pavement Joint Sawing, Cleaning, and Sealing
- English and Spanish Terms for Concrete Paving Workers

These publications are an excellent reference material for training workers that are new to concrete paving or as refresher material for more experienced workers. They are available for a nominal cost from the PCC Center. You may contact them via their website at: www.pcccenter.iastate.edu.



*"You are the same today as you'll be in five years except for two things,
the people you meet and the books you read."*

—Charlie "Tremendous" Jones

Merriam - Webster Online Dictionary

Main Entry: **¹per-ma-nent**
Pronunciation: -n&nt
Function: *adjective*

: continuing or enduring without fundamental or marked change :
STABLE

synonym see LASTING

Main Entry: **per-pet-u-al**
Pronunciation: p&r-'pe-ch&-w&l, -ch&l; -'pech-w&l
Function: *adjective*

2 : occurring continually : indefinitely long-continued

synonym see CONTINUAL



Let's see, what do you think? Permanent or Perpetual?

Permanent

- Done once
- Few future disruptions
- Safer roads
- Safer residents

Perpetual

- Done over and over and over...
- Pay over and over and over...
- Work zones over and over and over...
- Risks over and over and over...
- Crashes over and over and over...

What type of pavement do you really think is worth your investment?

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Lower long-term costs

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Higher quality appearance, higher home resale

Better visibility and skid-resistant for safer neighborhoods



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Mark your calendars for these up and coming events!

Calendar of Events

Local

Aug 19	22nd Annual SE Engineers Scholarship Golf Scramble	Hayfield, MN
Sept 11-14	2005 APWA Int'l Public Works Congress & Expo	Minneapolis, MN
Sept 15-17	MSES Fall Outing @ Madden's on Gull Lake	Brainerd, MN
Dec 7	MN Transportation Alliance Construction Forecast	TBD
Dec 8	CPAM Annual Membership Meeting	St. Paul, MN

2006

Jan 17-20	County Engineer's Conference	Brainerd, MN
Jan 25-27	City Engineer's Conference	Brooklyn Center, MN
March 16-17	CPAM Annual Concrete Paving Workshop	Duluth, MN

National

Aug 13-18	8th Int'l Conference on Concrete Pavements	Colorado Springs, CO
Nov 29-Dec 2	2005 ACPA Annual Convention	Palm Springs, CA

2006

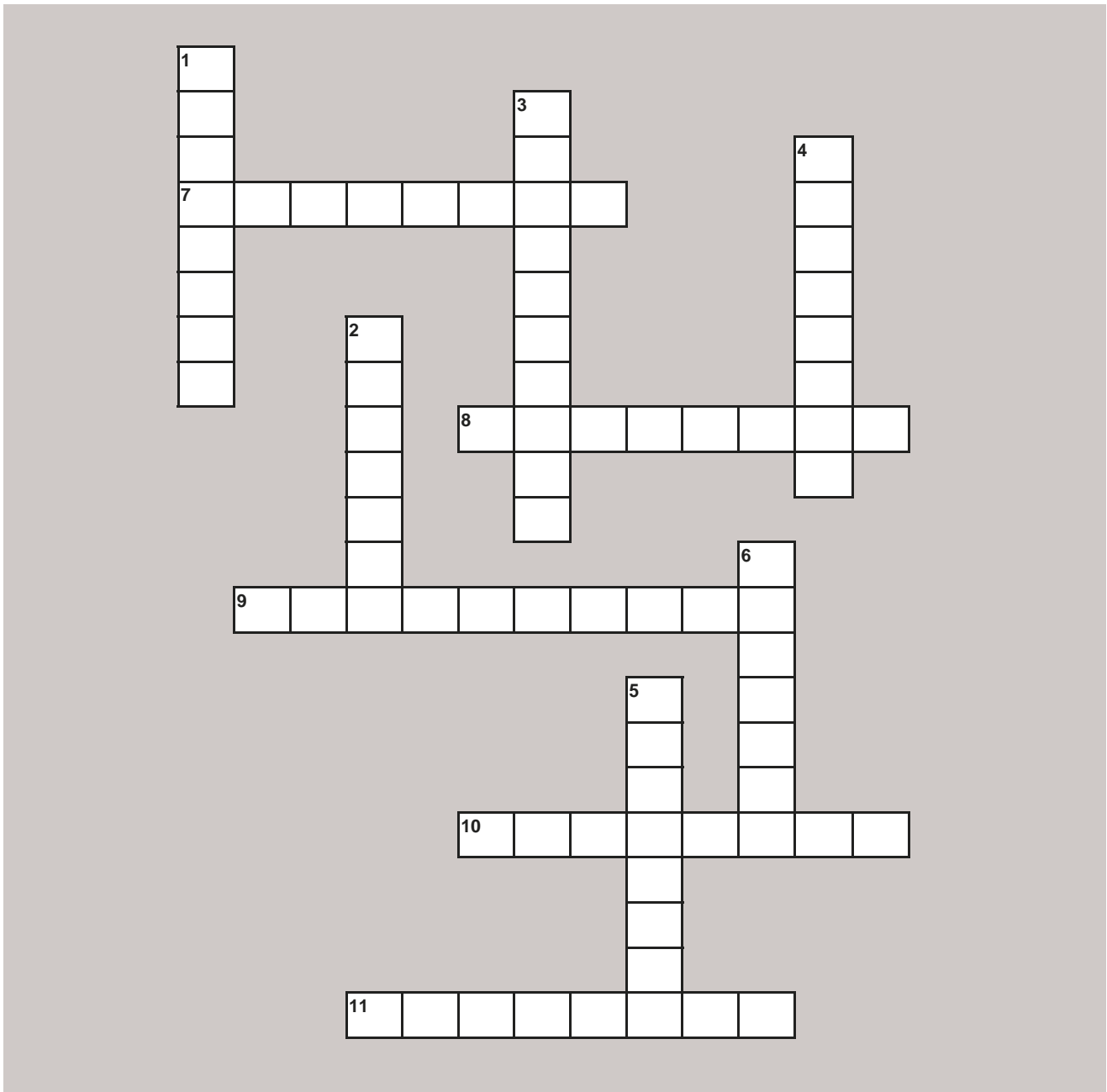
Jan 22-26	85th Annual TRB Meeting	Washington, DC
Jan 17-21	World of Concrete	Las Vegas, NV

If you have items you'd like to add to the calendar, please contact the CPAM office!

The Concrete Conveyor is published by the Concrete Paving Association of Minnesota for anyone involved or interested in concrete paving. It highlights industry activities and provides the latest information regarding concrete pavements and pavement options.

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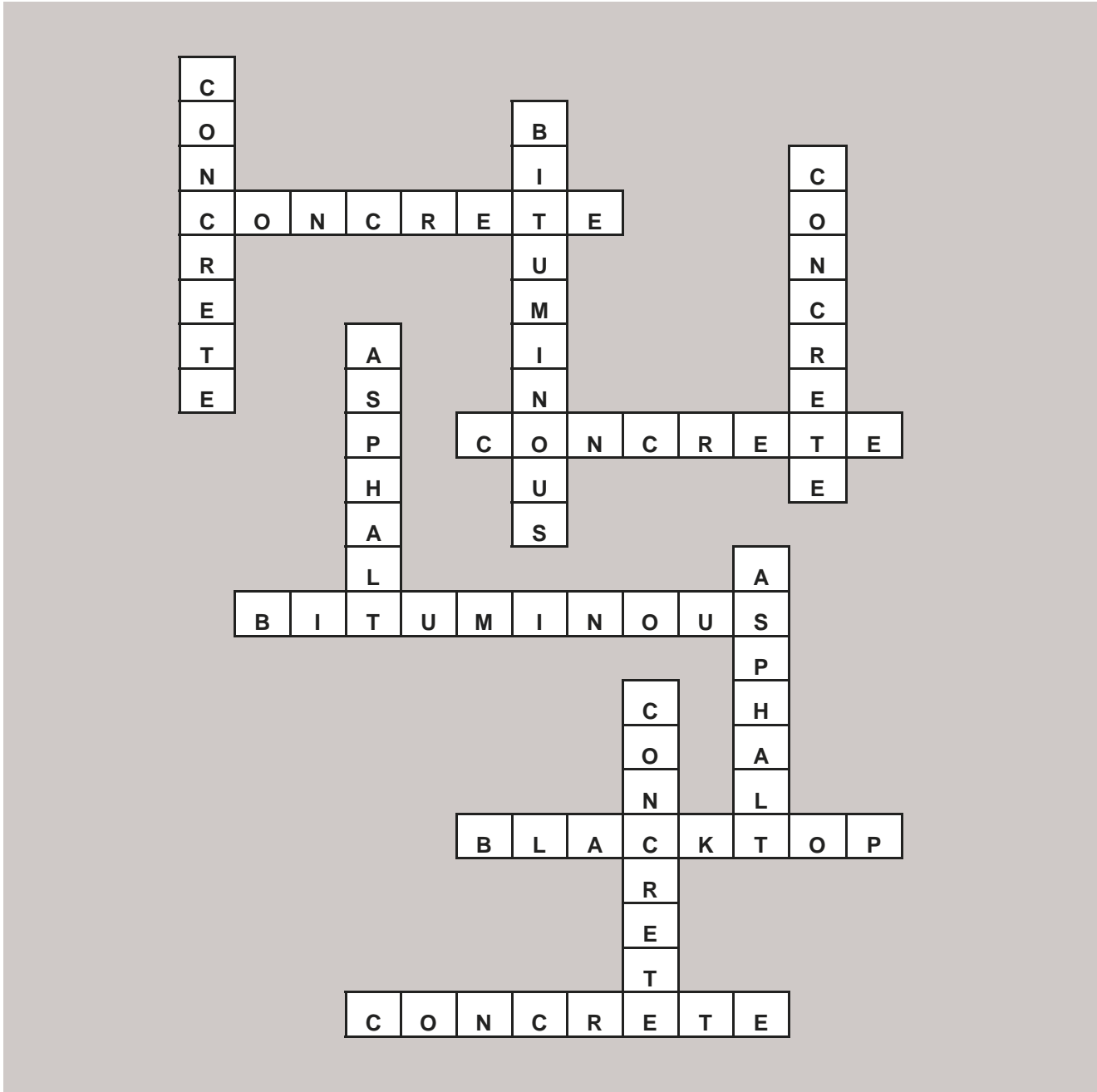


Down

- 1 Part of the cool communities program
- 2 Notorious for rutting and shoving
- 3 Adds to heat island effect
- 4 100% recyclable material
- 5 Long term, cost effective overlays for failing roadways
- 6 Perpetual overlays and costs

Across

- 7 Longest lasting most durable pavement
- 8 Stays smooth longer
- 9 Related to potholes
- 10 Increases annoying maintenance cycles
- 11 Hands down, the safest pavement choice



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