

Idea Exchange

Former sign trailer now holds barricades

Sign trailers no longer considered safe on roadsides have been recycled by Iowa County. With a little welding, they now store and transport those giant Type III barricades used for closing roads.



"It's so handy," says Patrol Superin-

tendent Mark James. "Before, we had the barricades leaning against the side of the building. Now they're all on the trailer. When we need them we can just hook up the hitch to a truck and go."

Two stories in *Crossroads* gave him the idea, he says. The first, in Spring 2000, reported that sign trailers then used by counties on state roads, would no longer meet crash test safety requirements in work zones. The second, in Summer

2000, described an emergency trailer to hold Type III barricades and base supports developed by a county in South Dakota.

"We had the old sign trailers parked out in a quarry," James says. "We used the axles and frame, and welded 2x2 inch tube to hold the signs. They slide right in." Not only is it convenient and quick to get barricades to a site, they don't get banged up from loading and unloading, or from leaning against a wall when not in use. The cost was minimal since the county welder did the work using stock materials.

Most of the Iowa County Highway shops now have a trailer. Nearby townships have also borrowed a trailer when they have a road closing emergency.

For more information contact Iowa County Patrol Superintendent Mark James at 608/935-3381.

Notched wedge joints better, safer

Longitudinal joints on asphalt pavement tend to crack and ravel, making them the pavement's weakest element.

The reason is variable density at the centerline joint during paving. In conventionally paved vertical edge joints the "hot" lane, paved second, is more densely compacted than the edge of the previously paved "cold" lane.

Creating a notched, compacted wedge joint along the centerline reduces longitudinal joint cracking so significantly that most Wisconsin paving contractors now use it routinely. Based on a 10-year study completed in 2003, WisDOT has adopted this joint as a supplemental specification and will make it standard this year.

This joint also is safer for traffic. Instead of a vertical step-off between the paved and unpaved lanes, there is a tapered transition between them.

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Iowa makes a better salt shed door

The heavy wooden door would barely open on the Iowa DOT's salt shed in Cedar Rapids, even with two men pulling on it. Meanwhile, the garage's salt dome had no door at all.

First the Iowa DOT folks in Cedar Rapids bought a canvas door for the dome that could be raised and lowered, folding up like a roman blind. Steel rollers on the side of the canvas moved on metal tracks along the door frame.

But the door wasn't quite right. It wouldn't fold all the way to the top, so trucks couldn't fit through the opening.

By then Greg Callanan and Dale Sexton, equipment operators at the facility, had had enough. They replaced the dome door's metal tracks with wooden ones and the steel rollers with pipes running horizontally through the canvas, sliding up and down inside the wooden tracks. Now the door rises easily all the way above the door frame, well out of trucks' way.

The men then decided to replace the shed door, too. They designed a similar door—roman blind style with wooden



tracks. They used materials from the shop: truck tarps, fence top rail, cable, hardware, and a winch. The second door cost about a quarter what the commercial one for the dome had cost.

Now, opening and closing both doors is a snap. They glide smoothly all the way to the top and are much lighter.

For more information about replacing your salt shed door, contact Dale Sexton, 319/364-8189.



Lightweight canvas door folds up to let trucks in.

Using parts from the shop cut door cost 75%.

Do you have an idea that could help other streets or highway agencies? Tell us about it. See page 7 for contact information.

Crossroads

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