Concrete And Asphalt Work Together In Rome

FOCUS:
Concrete In Construction
Concrete and Asphalt Work Together in Rome

Redesigned and concrete-paved intersection important part of Hwy. 13 improvement.

By Mike Larson, Editor. Photos courtesy of David Larson, WisDOT.

The Wisconsin Department of Transportation (WisDOT) is adding turning lanes, medians, a traffic light, and new paving on 3.3 miles of State Hwy. 13 near the city of Rome, in Adams County, Wisconsin.

The improvements will cost about $2.7 million and be complete by early September. They will make traffic flow more smoothly and safely both for the year-round local residents and for the tens of thousands of tourists who flock to the area each summer to play on its lakes and enjoy its natural wooded beauty.

Those tourists arrive with boats, campers, RVs, and trailer loads of ATVs, motorcycles and personal watercraft. Hwy. 13 is the main artery carrying the flow of tourists into the heart of the area. The highway is also a vital route for the logging trucks that feed the area’s paper mills all year long.

Upgrades Improve Flow And Safety

The current project is improving Hwy. 13 from just south of its intersection with County Hwy. O to just north of its intersection with County Hwy. D.

This 3.3-mile stretch of Hwy. 13 has one driving lane in each direction and includes eight intersections. Some of the intersecting roads lead to local lakes, while others lead to residential areas and a planned business park.
The busiest intersection sits at the north end of the project, where Hwy. 13 meets County Hwy. D.

Because of the high volume of summer traffic and the many intersections in this stretch of road, WisDOT decided to add turning lanes at the intersections, put in 6,000 feet of median, add stop lights at two major intersections, and repave or resurface its entire length.

All of the upgraded intersections will feature more turning area to accommodate trailers. The project also includes realigning one intersecting road to provide more efficient flow of cross traffic.

WisDOT designer Fred Oksiuta says the goal is to provide a smooth flow of traffic and safer turning for vehicles entering and leaving the highway.

Combination Of Asphalt And Concrete Meets Needs

In designing the upgrades, WisDOT chose to resurface parts of the road, dig up and replace other areas with brand new asphalt pavement, and to replace the Hwy. 13 - Hwy. D intersection with concrete instead of the existing asphalt.

Says project leader Martin Alekna of MSA Professional Services, “WisDOT selected concrete for that intersection and its approaches because so many heavy trucks and so many vehicles towing trailers turn there.”

WisDOT Regional Supervisor David Larson, P.E., said, “The choice of whether to resurface or replace other portions of the road depended on the pavement’s condition.”

“About 2.2 miles on the south end of the project only needs resurfacing. About eight-tenths of a mile in the middle needs complete excavation and replacement with new base course and asphalt. And about 1,200 feet on the north end, including the intersection with Hwy. D, will be replaced with concrete. We expect to see about 30 years of service life from the new roadway,” says Larson.

Phased Process Accommodates Traffic

Wisconsin’s climate dictates that the upgrade take place during the highway’s busy summer tourist season, so the work has been scheduled in three phases and flagging has been planned to enable traffic to use one lane in each direction while the work goes on.

Larson says, “The work will slow down traffic this summer, but after the reconstruction is complete this fall, traffic will flow more smoothly and safely for decades to come. This road should be good for 18 years before it needs a resurfacing, and for about 30 before it needs more extensive work again.”

Process Varies By Segment

The work done on each section of the project will vary by the condition of the pavement. On the 2.2 miles that needs only resurfacing, the project’s general contractor, American Asphalt of Wisconsin, will first mill off 3 inches of the existing pavement, then pave on 5-1/2 inches of new hot-mix asphalt in three lifts.

Where the pavement needs replacing, the entire roadway will be excavated and 13 inches of new base course laid before the 5-1/2-inch asphalt surface is paved.

American Asphalt has subcontracted the concrete work to Trierweiler Construction & Supply Co.
Concrete And Asphalt

On the section of road that will be made of concrete, Trierweiler is laying 10-1/2 inches of base course, then paving 8 inches of concrete over the top. Trierweiler is also installing 6-inch-high slope-faced curbing for the median islands, as well as curb and gutter at all of the upgraded intersections.

Says MSA’s project leader, Martin Alekna, “This project shows how asphalt and concrete can work together effectively. On many portions of this project, asphalt was the best answer for the requirements. And at the major intersection, concrete was the better choice. Together, they provide a cost-effective and durable roadway that will serve the driving public well for many years.”

Experienced Team Works On Project

The experienced team of contractors working for WisDOT on this job includes: MSA Professional Services, Baraboo (on-site engineering and management); American Asphalt of Wisconsin, Mosinee (general contractor and asphalt supplier); Trierweiler Construction & Supply Co., Marshfield (concrete work); WK Construction Co., Inc., Middleton (asphalt milling and resurfacing); Merrill Gravel & Construction Co., Merrill (excavation, grading, culvert replacement); County Materials Corp., Wisconsin Rapids (concrete supplier); Van Ert Electric Co., Inc., Wausau (traffic signal lights and control sensors); West-Land Restoration, DeForest (signage and landscaping); Brickline, Inc., Madison (pavement marking).

Quantities Used (major items)

- Milling .................................. 35,000 sq. yd.
- Common Excavation ... 28,000 cu. yd.
- Dense Graded Base ............. 55,000 tons
- Hot-Mix Asphalt ................. 27,000 tons
- Concrete Pavement .............. 9,000 sq. yd.
- Curb and Gutter .................. 12,138 ft.
- Beam Guard ......................... 1,250 ft.
- Salvaged Topsoil ................. 53,000 sq. yd.
- Stormwater Pipe ................. 922 ft.

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