

Bridge near Meers to look like cobblestones

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A bridge under construction on the scenic highway north of Meers is something old, something new, a marriage of modern construction techniques and century-old architecture prevalent in the Wichita Mountains.

The bridge, just north of the Meers Store on Oklahoma 115, is taking shape. The bridge arch is in place and crews are installing prefabricated panels that will serve as a retaining wall and add a local aesthetic touch to the project.

The entire bridge is made of pre-cast concrete panels, which are being fitted into place. Bob Rose, division engineer for the state Department of Transportation, said it's a technique that's been used previously on three bridges in Cotton County to expedite construction and "save a bunch of money."

In this case there's an extra dimension. Because the bridge is on a scenic route, transportation officials and local residents wanted something that would fit the character of the landscape and local history. So the concrete panels used atop the bridge and along the retaining wall are textured to look like the cobblestones — balls of granite smoothed by running water — that are a prominent feature in buildings in the Wichita Mountains, with a large concentration on display in Medicine Park.

Jeremy Hall, project manager for the Transportation Department, said natural cobblestones were gathered up and sent to a company in California, which created the mold for the concrete.

"That was the only way we could really illustrate to them what we wanted there," Rose said.

"We had a tough time getting the design that we wanted to be on that prefabricated structure perfect," he said.

The forms were sent to a company in Michigan, which created the concrete panels. More than 40 panels began arriving within the last couple of weeks, and now they're being lowered into place by a crane and secured.

When all the panels are in place, they'll be stained a reddish brown, Hall said, and then a grout will be applied to give the impression of genuine cobblestone architecture.

Most of the panels are not for the bridge itself but for the retaining wall that will keep the new roadway from washing into the creek. Hall said the panels will extend 157 feet south of the bridge on the east side and 40 feet on the west side.

While the cobblestone panels are the most obvious feature of the bridge, the project has faced many other challenges.

Hall said months were spent hammering into the granite to provide a foundation for the structure; the bridge sits on a 3-foot foundation atop the concrete.

Also complicating the project was concern for the black-capped vireo, an endangered bird that nests in the Wichitas. On the first round of bidding, Rose said, the department received only one bid, and it was above the engineering estimate, which Rose attributes to the restrictions placed on work to avoid disturbing the birds during nesting season, which constricted the work schedule. A second round of bidding, with a different completion scheduled, provided a construction period that brought more bids and allowed the project to proceed.

Even after the panels are in place there will be plenty of work to do. Huge amounts of fill will be put in place to support the new roadway, and the new surface will be laid to connect to the already-completed work north of the bridge and then to Meers. Rose expects the project to be complete in November, eliminating a dangerous low-water crossing and providing an interesting piece of architecture.

"It's been a learning experience .. it's been a gratifying experience," Rose said.

"I think the community's going to be tickled to death with it."

