

UTAH DOT BRIDGES GAPS IN SALT LAKE CITY I-80 BRIDGE APPROACHES WITH CRAFCO MASTIC



Sounding and digging often uncover deep deterioration that the eyes couldn't see. When that happens, a patch project that was supposed to span just a few square feet suddenly triples or quadruples. It also can wind up taking a lot longer than expected, backing up traffic and racking up overtime.

That could have been the case at one I-80 westbound bridge approach in Salt Lake City. But it wasn't, and the reasons why highlight the importance of choosing a mastic and melter that are up to the task.

One evening in June 2022, the Utah Department of Transportation (UDOT) closed two of the bridge collector's three lanes around 9:30 p.m. and got to work.

"We started jackhammering out with the expectation of doing probably a 2-foot by 3-foot section," says Bob Giolas, supervisor at Salt Lake Station. "By the time we were done sounding, we actually went 5 feet wide by about 11 feet long. And then on lane two, we did a [section] 3 feet wide by 6 feet long, all tied into the same area."

UDOT patched everything up with [Crafco's Mastic One](#), which is designed for pavement cracks over 1.5 inches wide and other distressed surface areas that are too small to justify repaving. Mastic One is a hot-applied, pourable, self-adhesive, flexible asphalt binder that includes selected aggregate to ensure excellent load-bearing characteristics. It's designed to bond to asphalt cement concrete and Portland cement



UDOT removing multiple existing patch repair materials and demolishing unsound concrete to ensure Mastic One material adheres to sound pavement.

concrete, making it ideal for interstate applications.

“We purchased a full pallet and went through most of that,” Giolas says. “We had to do two lifts because everything in the No. 1 lane was a lot deeper than we expected. The No. 2 lane was pretty shallow; only maybe 2 inches deep, so that was part of our second lift.”

UDOT also used a [Crafco Patcher II melter](#), which is [specifically designed for mastic](#). The unit’s digital controls maintain proper material application temperature and mixture to make it easy for the crew and ensure a successful repair.

“Once we start placing product, it actually wasn’t too bad,” Giolas says. “We were worried about having the lanes shut down for too long. But it was just cold enough to where the temperatures gave us the applicability to where we could do two lifts. It hardened up really good and really quick. We were very pleased with the outcome and were able to open up three hours early.”

HOW UDOT CHOSE A MASTIC SEALANT FOR THE LONG HAUL

Giolas and his team chose Mastic One based partly on other UDOT stations’ experiences both with it and with other brands.

“Our neighboring shed, 230, tried the competitor’s product,” Giolas says. “We watched it for quite a while. It kind of deteriorated and it didn’t seem to hold up quite as well. The Crafco product by far held up a lot longer and a lot better. That’s going to save me so much time and labor on going out and fixing potholes.

“We have used this product on a couple of ramps up on our north end. That was there for almost a full year before they came through with a project and re-asphalted the whole ramp.”

Before Giolas and his team could use Mastic One on the I-80 bridge approach, UDOT’s structures department had to assess the product.

“We have to get permission from structures to be able to use any kind of product around the joints or on the bridge deck,” Giolas says. “They’ve done their



The first lift of Mastic One has been placed and is cooling before next and final lift to be installed. UDOT installed the Mastic One on all edges during the first lift to ensure a waterproof bond on all surface area of the repair.



Second and final lift of Mastic One was installed added structure and stability back into the distress. The flowable characteristics provide smooth transition and improved safe driving experience.

own study on it. They just wanted to make sure it wasn't too much weight, whether it was too slick for cars or motorcycles, how long it was going to last, and whether it would be applicable quickly enough. They were excited to try it out."

Roughly six months after it was applied, Mastic One is still providing I-80 drivers with a safe, smooth surface.

"It's holding up tremendously," Giolas says. "It's very smooth. We haven't had any complaints since then. I'm confident we can go all winter long and not have to worry about it. That's going to save so much time and labor on going out and fixing potholes. We got 11 pallets, and we plan on doing probably about 13 more bridge joints in our area."



Photo taken 6 months after application of Mastic One.

And once they're fixed, UDOT won't have to return anytime soon, freeing up budget for other projects.

"This product has helped us so much just for the sole fact that we don't have to go back and fill potholes two or three times a week," Giolas says.

ON-SITE, HANDS-ON GUIDANCE SPEEDS INSTALLATION

Another reason why the I-80 bridge approach repairs went so quickly is that Crafcro Territory Manager James Clark was on hand to answer questions about Mastic One and Patcher II.

"I have a fairly new crew," Giolas says. "He was able to come out and instruct about the process, what to look for, what temperatures to keep the product at. His knowledge was very helpful.

"Any questions they had, they were able to ask him: 'Are we doing this right? How clean do you want it?' He was able to provide all that information. My guys just jumped right in, and they caught on real quick."

Clark also provided hands-on guidance.

"A couple of my guys were struggling with how to use the tools," Giolas says. "Once James saw that he jumped in and showed them. That really helped out a lot."

Although Giolas previously used Mastic One on a couple of ramps elsewhere, Clark's expertise also was helpful because the bridge was a different environment.

"We did it on asphalt on the ramp, and this was all concrete," Giolas says. "We wondered if it was going to bond, but it's bonded and held up really good."