

# HIGH FIVES

Major Dallas freeway interchange is truly Texan in scale, aesthetics



Wesley Skains, co-owner and president of S & S Painting, Kerrville, Texas. Below, a scale model shows how the finished High Five Interchange will look.

The Texas Department of Transportation (TxDOT) has identified five top reasons for building the sprawling new Interstate 635 and U.S. Highway 75 “High Five” interchange in Dallas.

The facts that it will be colorful and attractive are not among them. But thanks to a design by TxDOT personnel, the skills and artistry of S & S Painting of Kerrville, Texas, and a waterborne acrylic paint formulation specified by TxDOT and manufactured by Sherwin-Williams, all of the above are true.

“There was a time when everything we painted used to be what we called ‘TxDOT gray,’” says Wesley Skains, the co-owner and president of S & S Painting, which has 12 years of experience working mainly on Texas highway projects. “But in the last 10 years, we’ve been using a lot of color in TxDOT work. The focus has been on aesthetics, and the results have been very positive.”

## LARGE SCALE

A discussion of the Dallas High Five project — which drew its name from the fact that it features five levels, the highest of which is 100 feet above the ground — would be

incomplete without delving into the scale of this truly Texas-sized project. The interchange, through which approximately 500,000 vehicles travel daily, connects the North Central Expressway (U.S. 75) and the LBJ Freeway (I-635) directly north of downtown Dallas.

Once the site of regular rush-hour traffic bottlenecks, the interchange was upgraded primarily to increase traffic capacity and provide greater convenience for travelers. According to TxDOT, the remaining top five reasons for the project include improving air quality by allowing continuous travel at higher speeds; improving safety; improving local access; and establishing flexibility with a design compatible with future highway improvements.

The low bid of \$262 million — which became the largest contract ever let by the state of Texas — was submitted by the H.B. Zachry Construction Corp., a family-owned construction and industrial maintenance service company located in San Antonio. Construction began in 2002 and will be completed in three distinct phases to maximize project efficiency. Completion is scheduled for 2006, and the project is on schedule.





Vertical columns such as these support roadways and feature varying color schemes throughout the High Five Interchange.



Manlifts were used to raise painters to the top levels of the interchange, which reached heights of 100 feet.

### FIVE COLOR SCHEMES

TxDOT personnel are collaborating with H.B. Zachry personnel to manage the complicated tasks of minimizing lane shut-downs while work is under way. Meanwhile, S & S painters, six of whom are on the site full time, have been following up the construction crews since February 2004, applying the two-coat acrylic system in five coordinated color schemes specified by TxDOT.

Color selection was a collaborative effort between TxDOT architect Richard Mason, project manager Dan Peden and Sherwin-Williams, which provided color sample batches for testing on the interchange's vertical columns.

"What we were trying to do was make it distinct from the rest of the Central Expressway," says Peden. "Plus, we wanted to define the heart of the interchange. That's where we used the beige, the green and the terra cotta."

A shade of green was also used to bring identity to the interchange's fifth level, while terra cotta was used on the fourth level. Some colors didn't make the final cut, according to Peden.

"We rejected a lighter green as well as some other colors because of maintenance concerns," says Peden.

### STORAGE NEAR SITE

Roughly 60,000 gallons of the coating, which is produced for TxDOT at Sherwin-Williams' Garland, Texas, production facili-

ty, is being warehoused at a Dallas Sherwin-Williams commercial store near the High Five site, and paint is delivered to the site daily, if necessary.

Most of the paint is being sprayed, and painters stay on the move either with manlifts when painting the towering vertical columns that support the roadways, or with scaffolding that is fixed to the concrete rails being painted along side the roadways.

The waterborne acrylic formulation, along with the fine spray tips used by S & S painters, have minimized overspray concerns, according to Skains, so painters have been able to work without the containment structures that normally accompany bridge painting work. As a result, S & S painters are making progress on the 7 million square feet of concrete they'll ultimately finish as fast as construction allows.

"We're doing 450,000 square feet a month," says Skains. "The large columns go slowly, because there's a lot of up and down on the man lifts. But when we're rolling on the bridge rails, we can really get after it."

Things move much slower when the brush work begins, however. That's when painters carefully cut-in the Lone Star design present on each of the vertical columns as well as the landscape artwork present along the sides of the underpasses throughout the interchanges.

But that alone may be the painters' only major challenge. The acrylic demands ambient temperatures of 45 degrees F or higher and humidity less than 95 percent for proper cure and as a result, days lost to weather in the generally warm and arid Texas climate have been few.

"It's been going well," says Skains. "We're moving right along."

And that's news that some 500,000 travelers per day will be very happy to hear. 🇺🇸



Murals such as this one line the sides of underpasses, depicting local waterways and geography.