

PREPRUFE[®] Solved \$4 Billion Transport Infrastructure Challenges

Below grade waterproofing brings massive transit project back on track



Project	Transbay Transit Center
Waterproofing Subcontractor	Best Contracting Services, Inc.
GCP Solution	PREPRUFE [®] waterproofing

Project Profile

Transportation infrastructure project draws attention

When the mayor of San Francisco, state legislators, city councilors, and other dignitaries gather together for a building event, you figure it's a high-profile groundbreaking or ribbon-cutting ceremony, not a technical presentation of a below grade waterproofing solution for a transport infrastructure.

Such are the sky-high stakes surrounding the \$4.185 billion "Grand Central Station of the West," the mammoth new Transbay Transit Center now under construction in downtown San Francisco.

"We literally had 20 to 30 people standing over my shoulder as we presented mock-ups of our alternative waterproofing solution, from the mayor on down," explains Dean Edwards, project lead for Best Contracting Services, Inc., the waterproofing subcontractor on the transport business project.

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Waterproofing below grade

The officials had good reason to be concerned. The transport infrastructure project had fallen up to 2.5 months behind schedule. Chief among the challenges: a below grade waterproofing method "... that was taking forever to cure" in the damp, deep immensity of a four block-long excavation. The budget clock was ticking, costly labor waiting, and water extraction pumps thundering 24x7.

At issue was the original asphalt-based fabric solution. It wasn't curing as predicted due to jobsite conditions. In addition, the hydraulic forces compressing the worksite on all sides were incredible. If the pumps stopped even briefly, the walls started to immediately weep. "We were at least 30 feet below the water table," Edwards said.

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Choosing a zero-cure waterproofing solution

"We brought GCP Applied Technologies to the table," Edwards states. "GCP's Preprufe® is a pre-applied, zero-cure waterproofing membrane proven across hundreds of major infrastructure projects over the past 20+ years. And by taking curing off the table, we knew we could expedite the schedule."

Preprufe® waterproofing was designed to deliver exactly what the transport infrastructure needed, with:

- Fast and easy installation
- A robust product design able to withstand the rainy and predictably bad San Francisco weather
- Permanent adhesive bonding of the strong HDPE barrier to the concrete
- A clean, neat, asphalt- and clay-free product that is highly resistant to contaminated and aggressive soils
- Immediately trafficable with same-day rebar setting and tying

After approval to use Preprufe®, the transport business contracting teams set to work, sealing-off the walls and floor. With cure times off the table, installation proceeded swiftly.

Delivery of the first phase of the transport infrastructure project is scheduled for 2017. Today the news is all good: "The jobsite is dry. We've been actually waiting on the general contractor to catch up with us," Edwards is pleased to say.

Blue360SM Product Performance Advantage.

Because every project, large or small, deserves the best level of protection.

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