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Formwork

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Expanded Polystyrene Geofoam Formwork

Precut foam inserts allow use of conventional wall forms to create fluted bridge piers

by Sean O'Keefe

General contractors WW Clyde of Springville, UT, recently completed the Cheyenne South Valley Connector in Pocatello, ID. The project comprised a new two-lane roadway connecting the east and west sides of Pocatello. The roadway's main feature is a 430 ft (131 m) long bridge that traverses the Portneuf River, six sets of active railroad tracks, the town's South 2nd Avenue, and several bike and pedestrian paths.

ACH Foam Technologies' Foam-Control EPS Geofoam, a high-strength expanded polystyrene (EPS) foam product frequently used as a lightweight structural fill on geotechnical projects, was used to create the formwork required to shape the bridge's concrete piers. The WW Clyde team worked closely with ACH Foam Technologies' engineering staff to develop drawings for the formwork.

Once those drawings were approved by the Idaho Transportation Department, foam blocks were cut and shaped to form the flared columns for the piers, and curved fillets were attached to the cut blocks to add a smooth, aesthetic flair to the final surfaces. The finished blocks were delivered to the site, ready to be clamped into conventional wall formwork.



Cut foam blocks and fillets were delivered to the site, ready to be clamped into conventional wall formwork to form the three columns for a bridge pier. Here, the foam blocks have been exposed in preparation for installation of the pier cap formwork

Concrete was placed from the top of each form.

"Using ACH Foam Technologies' Foam-Control EPS Geofoam not only saved money, but it also saved a lot of time," stated Bryson Clyde, Project Manager. "We shaved more than a week off of a very tight construction schedule by using EPS Geofoam to make the concrete forms. Truthfully, most of the formwork itself was done by ACH Foam Technologies in shaping the product to our specifications. When it arrived on site, putting it in place was quite easy and things were very efficient."

When asked to name the greatest benefit of using Geofoam as a concrete form material, Clyde said that beyond the benefits directly related to the project budget and schedule, it was the ease of use, smooth finish, and ACH Foam Technologies' customer service. Construction challenges come in all shapes and sizes, and that's why Foam-Control EPS Geofoam is now a solid addition to the WW Clyde toolkit.

—ACH Foam Technologies, www.achfoam.com



A completed pier, with three flared columns and pier cap, for the main bridge for the Cheyenne South Valley Connector in Pocatello, ID

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