Application

A total of 350,000 cubic feet of Foam-Control® EPS22 and EPS29 Geofoam was used as a lightweight structural fill on an interchange overpass widening project in Brigham City, Utah.

Project Details

This interchange widening project was undertaken to increase the roadway capacity of SR-91 to two full lanes of traffic in each direction where it crosses over I-15 outside Brigham City, Utah. Building up the needed embankments using traditional soil fill proved to be an unworkable solution when soil-settlement calculations indicated the embankment might have as much as 1.5' to 2' of settlement in 10 years' time, jeopardizing the roadway’s long-term stability.

The engineering team designed a total of four roadway embankments, two on either side of the road and two on either side of the bridge using ACH Foam’s Foam-Control® Geofoam in two different densities, EPS22 and EPS29. Using Geofoam, engineers reduced primary and secondary soil settlements, which eliminated the need for surcharging at the bridge abutments and helped eliminate soft subgrade mitigation for wall stability.

During construction, the pre-cut Geofoam blocks were delivered to the site in the exact quantity and dimensions needed to assemble each embankment section. Foam-Control® Geofoam’s incredible compressive strength now supports the weight of the roadway and traffic above with a construction solution that was quickly and easily erected with minimal labor and no specialized equipment.