



UNITED STATES

Provo Lakeview Parkway Provo, UT



Owner
Utah Department of Transportation

Engineer
Lochner

General contractor
Granite Construction

Dates of work
2019/09 2019/10

Description

As part of Phase 4 of the Provo Lakeview Parkway project, the Utah Department of Transportation proposed the construction of an arterial roadway and a new bridge over Provo River. The project would also include a multi-use trail along the west side of the road that would provide connections to the Provo River Delta Restoration trail network. When complete, Phase 4 would feature a five-lane roadway from Interstate-15 to the North Provo limit. The project would potentially alleviate traffic congestion along Geneva Road by providing an alternative transportation corridor. At full build-out, Phase 4 would also serve as a major improvement for bicyclists and pedestrians.

Main figures

Wick drains
13500 EA.

Ground conditions

The soils consisted of sandy silt and silty gravel with peat, interspersed with clay layers to depth. The fine grained layers were very slow draining, and there were concerns that consolidation would occur following the placement of the embankments.

Solution

Initially, plans for the project did not include ground improvement. However, a final review of the geotechnical report revealed that long-term settlement of the embankments could be an issue. The project's geotechnical engineer recommended the installation of wick drains to expedite settlement and to accelerate completion of the project. Menard was able to mobilize very quickly for the project. In fact, so quickly that the early part of the work was done adjacent to cattle before the animals were able to be transported from the site.

Pre-augering was required to facilitate wick drain installation through haul roads. Menard had enough space in which to be able to efficiently pre-auger out in front of wick drain installation

To minimize the amount of post-construction embankment fills for a new roadway and bridge in Provo, Menard Group USA installed nearly 13,500 wick drains. Menard mobilized quickly after a late request for ground improvement. Work was completed in four weeks and met the client's requirements for quality, safety and schedule.