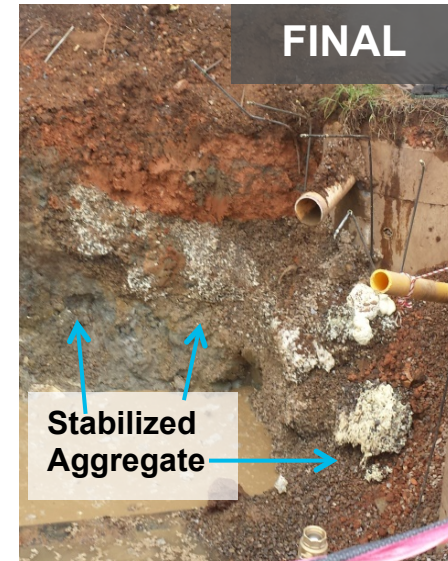
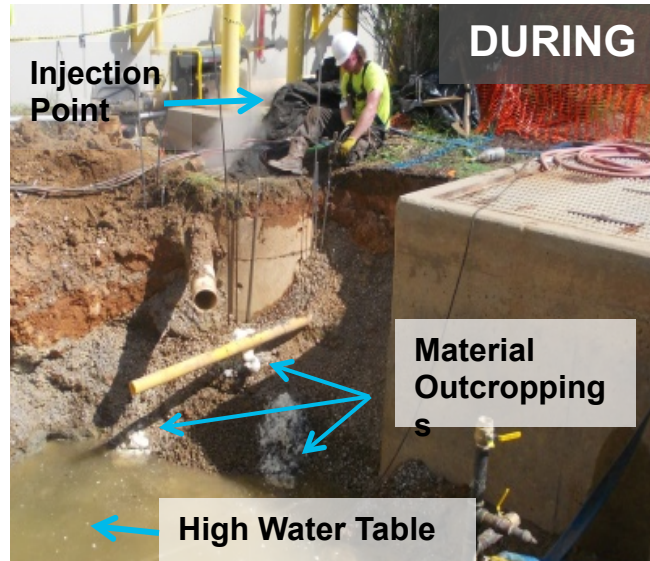
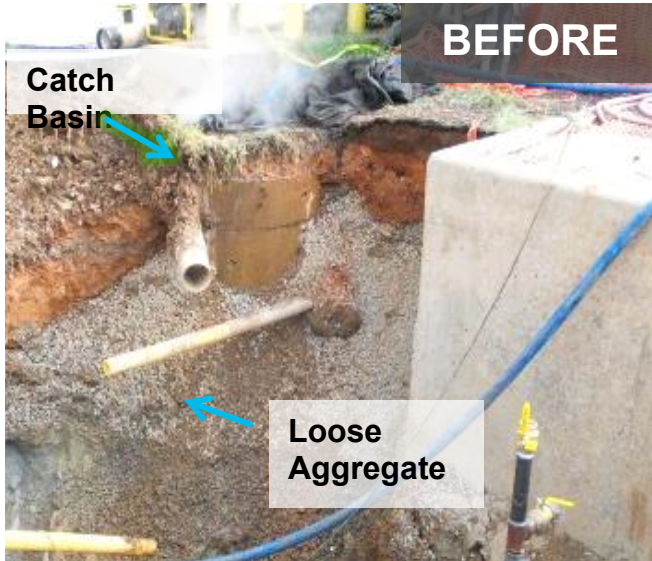


ORNL Pre-Excavation Stabilization

Oak Ridge, TN



Stabilization to support minimal-layback excavation and shore catch basin



Project Challenges	Solution	Support	Outcome
<ul style="list-style-type: none"> Multiple utilities in the area: water, storm, sanitary, gas, steam, and irrigation. Stabilizations performed in three separate tie-in areas. Sidewalk had to be stabilized as possible emergency vehicle access route. Differing subsurface materials. 	<ul style="list-style-type: none"> Inject URETEK polyurethane at multiple depths and rows to lock together materials and allow for excavation to proceed without undermining adjacent structures. 	<ul style="list-style-type: none"> Pre-estimate meeting with utility contractors, geotechnical engineers, and owner. Designed injection quantity and depths. Second round of meetings and estimates when excavation requirements changed. On-site installation and adjustments to injection plan. 	<ul style="list-style-type: none"> Minimal impact: Excavation work was able to begin the day after URETEK's work was completed. Soils stabilized: Soils were stabilized and the structures adjacent to the excavation area were protected.