

# NASA: Vehicle Assembly Bay 3

## Kennedy Space Center, FL



Project Challenges	Solution	Support	Outcome
<ul style="list-style-type: none"> <li>Existing footings needed to be widened to accommodate additional loads</li> <li>Permeation grout did not work to stop water flow</li> <li>Due to micropiles in place, vibratory sheet piling could not be installed</li> <li>Site had water table just below surface</li> </ul>	<ul style="list-style-type: none"> <li>Proprietary Thin Fin process was used to stabilize soils around perimeter for excavation</li> <li>URETEK Deep Injection process was used to lithify floor to seal against water and hydrostatic pressure</li> <li>Injections were at various depths to a maximum of -13' from grade</li> </ul>	<ul style="list-style-type: none"> <li>Worked with Hensel Phelps, General Contractor, to come up with new plan when DeNeef permeation grout did not work</li> <li>Provided new design using Uretek 486 product</li> <li>Designed injection quantity and necessary depth</li> </ul>	<ul style="list-style-type: none"> <li><b>Minimal intrusion:</b> Work performed during night shift</li> <li><b>Increased bearing capacity:</b> Soil bearing capacity increased around perimeter to allow for excavation</li> <li><b>Cost Savings:</b> Significant cost savings versus other systems.</li> </ul>