

AquaBlok® Installation Profile



Site Location: *US EPA Region 2*
Genesee River, Wellsville, NY

Project Status: Completed September 2010

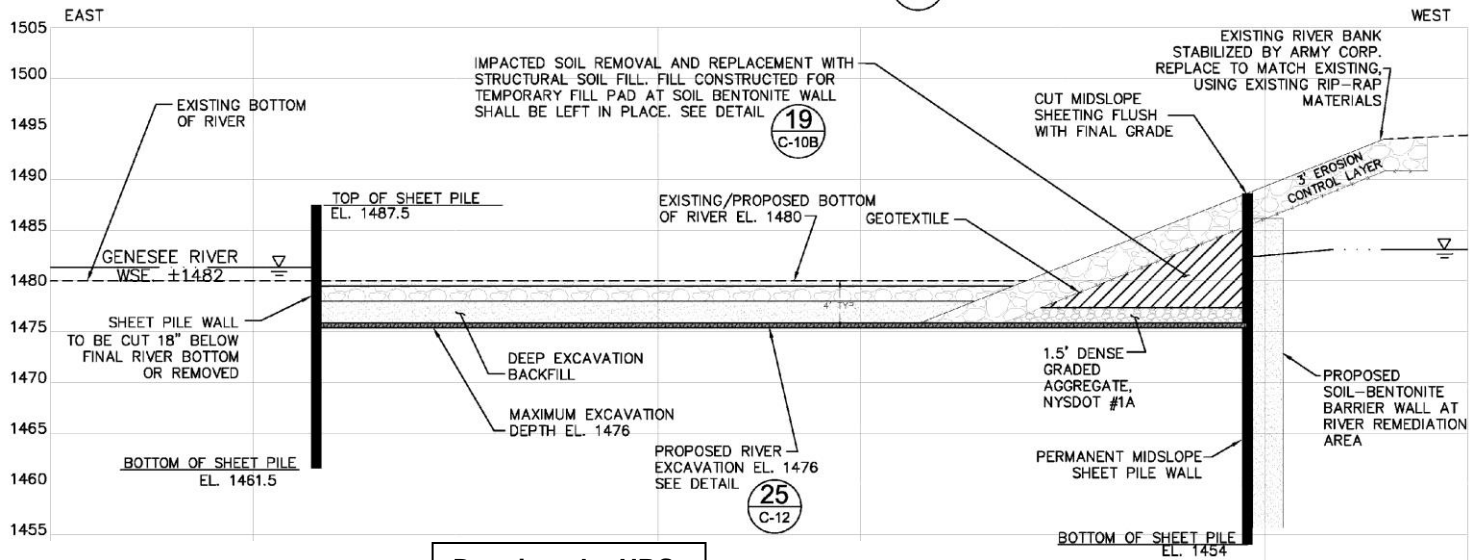
Setting / Purpose: Historic refinery site (Sinclair Refinery) along the Genesee River. Provide isolation of residual hydrocarbon contamination in sediments. AquaBlok was used as a low permeability base layer in the excavated area to minimize the potential for residual contaminant seep to the clean backfill and habitat restoration layers.



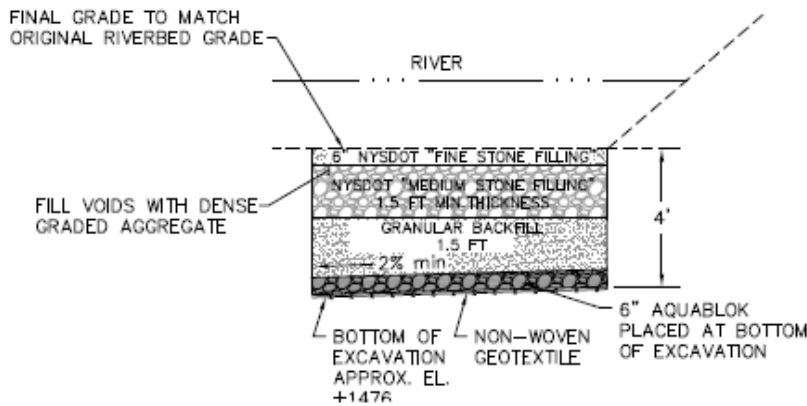
Contaminant(s) of Concern: Sediments in the river impacted by petroleum hydrocarbon contaminants and DNAPL (dense non-aqueous phase liquid).



AquaBlok Cap Design / Site Area: The cap area was excavated in the dry using sheet pile isolation of the river from the removal area. As shown in the drawing below, a multi-layer backfill was placed using AquaBlok 2080FW #8 material as the base low permeability layer. A six-inch thick layer was placed over an approximate total area of 60,000 square feet. Additional excavated areas were capped with sand where lower residual contamination levels were lower.



Drawings by URS



25 C-12 TYPICAL BACKFILL DETAIL - DEEP SEDIMENT REMOVAL AREA SCALE: 1" = 3'



Placement: AquaBlok material was delivered to the project site in approximately 2,500lb bulk bags (supersacks) and stored prior to installation. The bags were lowered into the excavation area where material was placed directly from the bulk bags by a skid steer unit. The same equipment then used a small bucket to evenly spread the layer over the geotextile underlayment. Site quality control was performed by simple direct measurement of the layer thickness. A primary benefit was the ability of the material to conform to the irregular shape of the steel sheet pile. This was particularly important since the geotextile was not anchored or connected to the sheet pile in any manner – the AquaBlok material, placed in bulk along the edge of the wall provided this seal without additional work by the installation crew.

Customer: BP Contractor: Envirocon Engineering Firm: URS