



Geotechnical Conditions

In general, the soils underlying the surface vegetation and topsoil are fill materials. The fills are composed of cinders, building rubble, sand and gravel. These fills range in depth from three to nineteen feet. Groundwater depths range from four feet to more than ten feet below the surface. Due to these conditions, the geotechnical engineer recommends that the soils on site must be densified through deep dynamic compaction in order to make them capable of supporting spread foundations and floors. Any construction in the flood plain would include engineering and construction measures to mitigate any associated risks.

Flood Plain

Based on a review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the City of Rensselaer in Rensselaer County, NY (March, 1980), the project is partially located in the 100-year floodplain of the Hudson River. FEMA issued a letter on September 21, 2011 stating that they had received and reviewed all information and data associated with the previously approved project, and stated that a revision to the Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) would be warranted. The required information was to be submitted after completion of the project.

For more details on the geological conditions of the site, please see Section 3.5 of the FGEIS, as well as Cultural Resource Assessment in Appendix E. For more details on surface water and minimizing the impacts associated with potential flooding, please see Section 3.3 of the FGEIS, as well as the Stormwater Management Report in Appendix C.

Please also refer to the SEQ Review Summary contained in Exhibit VIII.C.1.c.