



PROJECT:

The Grande at Riverdale

LOCATION:

Riverdale, NJ

DEVELOPER:

D.R. Horton

SERVICES:

Geotechnical,
Geo-Structural, and
Land Planning

PROJECT SUMMARY:

Construction of eight 4-story luxury residential buildings. The project utilized a wide variety of SESI's services and was unique in that it required 60' to 70' rock cuts, much of which required varying levels of stabilization ranging from cleaning off loose fragments to installing rock bolts and applying shotcrete.

Due to major topographical variations, significant cuts and fills were required to grade the site. Retaining walls up to 50' high were constructed with roads, buildings, and a pool. In order to level the building and roadway areas, compacted fills up to 60+ feet high were placed in controlled compacted lifts. A total of approximately 350,000 cubic yards of structural fill was placed. It was a very unique project in that the blasted rock fill was used in the structural fills for support of the buildings and roadways and as retaining wall backfill. SESI provided full-time inspection and testing during the placement of the compacted fills in order to provide support for the buildings and roads. Several of the buildings are founded partially on compacted fill and partially on sound bedrock.

SESI provided civil engineering services such as grading, drainage, and site layout. SESI obtained the Major Stream Encroachment Permit from NJDEP.

The project also required the construction of two 54-foot clear-span BEBO Arches to span across sensitive wetland areas and a tributary to the Pequannock River.

