Aztec Stadium Structure

Geotechnical
Based on soils present our project will need to manage substantial variability within subsurface materials. It was determined that deep foundations were going to be needed for the East stands and shallow foundations for scoreboard.

Construction
The site where the stadium will be located isn’t level, therefore, 3630 square feet are needed for fill material to lift the elevation of the East stands. A conservative takeoff was performed, taking into account the possible use of premium backfill to ensure the best quality for the fill material thus eliminating any uncertainty that may arise from the excavated material not being up to the fill material standard.

Project Background
The Aztec Stadium structure will be located at Mission Valley East, San Diego, California, USA, with a capacity of approximately 35,000 seats. The existing location is occupied with Qualcomm or SDCCU Stadium which will be demolished. The project is focused on the East stands and scoreboard.

Structural
The main structural elements of the football stadium in East direction that are going to be designed consist of a reinforced concrete structure, structural steel and precast concrete. The proposed scheme consists of twelve portions with expansion joints. The building is composed of special moment-resisting framed. Dead loads, live loads, impact loads, wind and seismic loadings data are considered based on ASCE 7-10 & UBC 97 (Uniform Building Code).