



Geofoam SP™

Case Study



Project: Citi Field, Queens, New York
Contractor: Coast to Coast Pressure Grouting

Cellular Concrete LLC's **GEOFOAM SP™** is a synthetic foaming agent which, when added to engineered cement slurry, enables the production of pervious cellular lightweight concrete – permeable, open-celled, low-density concrete able to stabilize soil without disturbing or redirecting natural water flow.

Pervious cellular lightweight concrete is an appropriate geotechnical solution wherever low-density, free-draining material is needed. The highest profile project we are aware of is the future home of the New York Mets, where 17,500 cubic yards of Geofoam SP™ pervious cellular lightweight concrete was installed in 2006.

The new baseball venue, which will be called Citi Field, is being built in the parking lot beyond Shea Stadium's left field wall. Design calls for the playing surface of the new field to be elevated five-to-six feet above the grade of the old parking lot.

Traditional fill to accommodate this design would add an estimated 700 pounds per square foot to the area, which would cause substantial settlement to the area's weak native soils and require lengthy and expensive soil surcharging until the settlement subsided and construction could continue.

Many options for reducing the load on the underlying soils were explored, including using lightweight aggregate as fill, which would have yielded a density of about 55 pounds per cubic foot after compaction. But Geofoam SP™ pervious cellular lightweight concrete, designed to achieve an average density of 29 pounds per cubic foot and average strength of 80 psi, proved to provide the best solution for the design, resulting in direct savings of more than \$500,000 and considerable contraction of the project's construction schedule.

Links:

Coast to Coast Pressure Grouting: <http://www.ccpg.com>

Cellular Concrete LLC: <http://www.cellular-concrete.com>