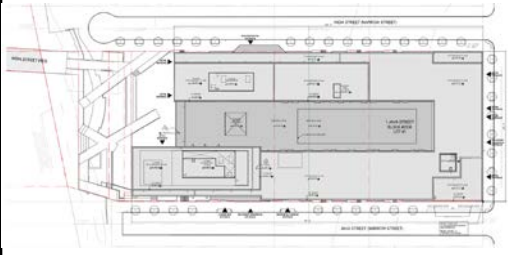


**One Java Street
Category B Design Study
NYSERDA PON 4614**

Kings County

Technical Lead: ZBF
Geothermal

Anticipated completion of
study/availability of final
report: June 2022



The Site & Beneficiaries

This project involves redeveloping 1) an entire New York City waterfront block containing an abandoned warehouse and 2) the India Street Pier for the New York City Ferry in Greenpoint, Brooklyn. The proposed redevelopment site consists of over 772,800 square feet of space, ~840 apartments over 2 high-rise towers, a 36-story and a 20-story tower, 285 parking spots, and low-rise commercial space and townhouses. As part of the project's commitment to sustainability, 30% (~250) of the apartments have been designated as affordable housing, and the project includes a waterfront park and pavilion for community gatherings and entertainment. Following a scoping study, the developer of the site has decided to move forward with the design phase for a community heat pump system.

Potential Thermal Resources

The design will be a community loop field, given space constraints and favorable diversification between the various building spaces. Installing a shared loop field for the two towers, low rise apartments, and commercial spaces allows the loop field to be smaller once the peak load of each building is considered, since they peak at different times. Additionally, the podium will have a swimming pool, which may be utilized as a heat sink and benefit all the buildings on the ground loop. Designing a shared geothermal system also allows for one centralized pump house to be located on the second floor of the project, eliminating the risk of system shutdown during a major flood.

Potential Configuration

Throughout the design process, sustainability and energy efficiency will be evaluated and incorporated into the project, where possible. Third-party ownership and operation of the geothermal system is also being explored, along with providing debt equity investing for the project to monetize the federal investment tax credit.