

3.8 INFRASTRUCTURE AND ENERGY

The *CEQR Technical Manual* requires a detailed technical assessment of infrastructure when actions:

- Would have an exceptionally large water requirement or discharges (greater than 1 million gallons/day),
- Are located in a portion of the system known to have limited supply capacity; involve discharges that may adversely affect treatment facilities; or
- Involve construction of separate sewers or the establishment of a storm outfall.

It also requires detailed assessment of energy when actions would affect transmission or generation of energy, or that may generate substantial indirect consumption of energy.

3.8.1 Existing Conditions

The project site is served by existing water, sewer, electrical, and gas line connections. Based on the current enrollment of approximately 264 students at the existing PS 133 elementary school, it is estimated that daily water usage on the site is approximately 11,820 gallons and an equivalent rate of sewage is generated.

3.8.2 Future No-Action Conditions

Under Future No-Action Conditions, the proposed new school facility would not be built and the existing PS 133 elementary school would continue to operate on the site. In the future without the proposed project, student enrollment at PS 133 would be expected to remain at its current level. Therefore, water usage and sewage generation at the site would remain at the existing rates.

3.8.3 Potential Impacts of the Project

The proposed project entails the construction of an approximately 960-seat Pre-K through Fifth grade school facility to replace the existing PS 133 elementary school on the project site. Based on a capacity of approximately 960 students, it is estimated that daily water usage would be approximately 40,924 gallons and an equivalent rate of sewage would be generated. Assuming future No-Action water and sewage generation rates would remain at the existing levels, this would be an incremental increase of approximately 29,104 gallons of water usage and sewage generation per day. An exceptionally large demand is defined as using over one million gallons per day. Therefore, the proposed project would not result in significantly large water demands, nor would the proposed project generate significant wastewater flows. As a result, no significant effects on the City's water supply system or wastewater treatment facilities would occur as a result of the proposed project.

In terms of energy consumption, all new structures requiring heating and cooling systems are subject to the New York State Energy Conservation Code, reflecting State and City energy policies. Additionally, New York City public schools must follow the SCA's *NYC Green Schools Guide* (March 2007) regarding energy efficiencies. Therefore, those actions that would result in new construction or substantial renovation of buildings would not create adverse energy impacts, and would not require a detailed energy assessment. According to the *CEQR Technical Manual*, a detailed assessment of energy impacts would be limited to projects that could significantly affect energy transmission or generation, or that would generate substantial indirect energy consumption. The proposed development of an approximately 121,240 SF school facility would require a relatively small amount of energy consumption in relation to the total amount of energy used by the city as a whole. The proposed project would have no effect on the transmission or generation of energy, nor would it generate substantial indirect energy consumption. Therefore, the proposed project would not create adverse energy impacts and no further analysis is warranted.