

## **3.8 INFRASTRUCTURE AND ENERGY**

### **3.8.1 Introduction**

This Section describes the methodology used to determine potential infrastructure and energy impacts associated with construction of the Shaft 33B and the water mains. Infrastructure impacts may occur when a project would result in an increased demand for water supply or wastewater treatment capacity; the relocation or disruption of utility lines during construction; or increased stormwater runoff, such as for projects that require a great increase in paved areas or extensive clearing, grading, or excavation activities. Energy impacts may occur when a project significantly affects the transmission or generation of energy or generates substantial direct or indirect consumption of energy.

### **3.8.2 Existing Conditions Methodology**

The discussion of existing infrastructure provides a general description of the size and location of utility lines and storm drains adjacent to the potential Shaft 33B Sites that could potentially be impacted during construction activities. As described in Section 5.1, “Project Description” in Chapter 5, “Water Main Connections,” a final water main connection route has not been determined. For this reason, a general description of the types of utilities that could occur along the potential water main routes is provided. Utility information in this document is based on current utility maps obtained from utility suppliers. Sewer and water utility maps were obtained from the New York City Department of Environmental Protection (NYCDEP); electrical, oil-o-static electrical, natural gas, and steam utility maps were obtained from Con Edison; and telecommunication utility maps were obtained from Empire City Subway Company, a wholly-owned subsidiary of Verizon, Inc., which has a franchise from the City of New York to build and maintain conduit and manhole infrastructure in Manhattan and the Bronx.

### **3.8.3 Future Conditions Without the Project Methodology**

This Section of the assessment presents whether there are any foreseeable changes in infrastructure or energy demands in close proximity to the potential Shaft Sites and water main routes.

### **3.8.4 Future Conditions With the Project Methodology**

#### **Construction**

An assessment was performed to determine whether shaft construction could result in potential impacts on infrastructure or energy. The impacts of construction on the local infrastructure, such as relocations of utility lines and utility service disruptions, were identified and evaluated, where applicable. The impacts of providing temporary energy, water or other utility connections during

construction also were evaluated. Stormwater and runoff control measures to be implemented during construction are described. An evaluation of these issues is also presented for water main construction, but in a more qualitative manner because a final route has not been selected. While specific utility information is not available for the selected water main route, utility impacts and measures that will be taken during potential relocations are identified.

### **Operation**

The flushing and disinfection activities during activation of the shaft and water mains would require large amounts of water for a short time period. The effects of these activities on the water and wastewater infrastructure are described.

There would be few infrastructure and energy impacts during operation of the facility, as described in the infrastructure and energy sections for each potential Shaft Site and water main route. To the contrary, the project would result in beneficial effects to the water supply infrastructure in the Midtown and Upper East Side sections of Manhattan.

