

7.4 SOCIOECONOMIC CONDITIONS

7.4.1 Introduction

Following the methodology described in Section 3.4 “Socioeconomic Conditions” of Chapter 3, “Impact Methodologies,” this Section evaluates whether the construction and operation of the E. 61st Street Shaft Site would result in adverse socioeconomic impacts. Potential socioeconomic impacts include direct and indirect displacement. According to the *CEQR Technical Manual*, direct displacement is the involuntary displacement of residents, employees, and businesses from the site of a proposed action, while indirect displacement is the involuntary displacement of residents, employees, or businesses due to changes in living conditions or costs that could potentially result from the project.

The E. 61st Street Shaft Site is located on vacant privately-owned property and, therefore, would not result in the direct displacement of businesses or residents. Therefore, this Section focuses on potential indirect displacement due to, for example, noise, vibration, and traffic and pedestrian circulation impacts resulting from the project. As discussed in the technical Sections of this Chapter, construction of the shaft at the E. 61st Street Shaft Site has the potential to result in potential significant noise impacts on nearby residents and businesses. With the exception of blasting, noise effects would be most noticeable to certain residents and businesses located between the Shaft Site and First Avenue. Blasting effects would not be highly noticeable at receptors located beyond this immediate area, particularly after the first four months of blasting; these effects are considered short term and temporary. Therefore, the assessment focuses on those residents and businesses within the affected area.

In addition to the Shaft Site itself, this alternative could include construction of a water main connection that would travel within E. 61st Street and two blocks within First Avenue to connect with the potential First Avenue or Sutton Place water main routes, or this Shaft Site could directly connect to the E. 59th Street/E. 61st Street route, discussed in Chapter 5, “Water Main Connections.” There would be no direct displacement from these potential water main extensions. In addition, as described in the technical impact assessments of this Chapter, there are no potential significant adverse impacts associated with these water main extensions. Therefore, there would be no indirect displacement effects and no further analysis is warranted.

Another potential socioeconomic effect could result from the cost to construct the project that would be borne by water and sewer ratepayers. This Section evaluates whether these construction costs would have the potential to result in the indirect displacement of residential water and sewer users.

7.4.2 Existing Conditions

Residents and Businesses in the Vicinity of the E. 61st Street Shaft Site

As discussed in the Section 7.2, “Land Use and Community Facilities, Zoning, and Public Policy,” the E. 61st Street Shaft Site is located in a densely populated residential neighborhood with a somewhat high ground floor retail presence. The uses that face the site also face onto a high trafficked corridor that includes the Queensboro Bridge exit ramp and E. 61st Street. The residential buildings across from the Site and along 61st Street include several low-rise (four- to five-story) residential buildings.

The two residential buildings directly across from the Shaft Site do not contain retail shops. Further east along E. 61st Street to First Avenue, are a hair salon, cleaners, doctor’s office, fitness club, a nail salon and two restaurants on the corner of First Avenue. There are two day care centers, one adjacent to the north side of the Site and one on E. 61st Street between the site and First Avenue. In addition, a church-related building faces onto the site.

Water and Sewer Rates

Information on the current water rate structure for City customers of the New York City Water Supply System and available funding mechanisms for capital projects is discussed in Section 4.4, “Socioeconomic Conditions,” of Chapter 4, “Preferred Shaft Site.” This information is used to assess the potential indirect socioeconomic displacement effects from increased water rates due to the construction of the Shaft 33B and the associated water main connection.

The water rate for City customers effective in FY 2006 is \$1.65 per hundred cubic feet (ccf). Charges for sewer service are assessed at 159 percent of water charges. For a typical single family customer using 100,000 gallons per year, this represents a combined annual water and sewer charge of \$571. The actual annual charge for any specific customer will be proportionally more or less depending on actual usage.

7.4.3 Future Conditions Without the Project

Residents and Businesses in the Vicinity of the E. 61st Street Shaft Site

As discussed in the Section 7.2, Land Use and Community Facilities, Zoning and Public Policy,” on the E. 61st Street Shaft Site, the Archdiocese of New York is currently planning to build a residential structure for priests. Based on information provided by a representative of the Archdiocese, the project is still in the planning stages and construction may begin sometime in 2007. In addition, a new, 19-story apartment building containing 45-units is planned for 1,115 First Avenue, between E. 61st and E. 62nd Streets. There are no other proposals or planned residential or commercial projects in the areas between the Shaft Site and First Avenue in the Future Without the Project. Therefore, conditions would be expected to be comparable to those currently existing in the immediate vicinity of the E. 61st Street Shaft Site.

Water and Sewer Rates

Information on the projected water and sewer payments is provided in Section 4.4, “Socioeconomic Conditions,” of Chapter 4, “Preferred Shaft Site.” Water rates per household, assuming a household usage of 100,000 gallons per year (gpy), would increase from \$571 in FY 2006 to \$775 in FY 2010. For the lowest income group in New York City, current water and sewer costs account for 4.5 percent and would increase to 4.8 percent of annual household income in the Future Without the Project.

7.4.4 Future Conditions With the Project

Residents and Businesses in the Vicinity of the E. 61st Street Shaft Site

Construction

Certain residents and businesses facing the Shaft Site would experience significant noise impacts, and at times, noticeable, but intermittent vibration effects during shaft construction. As discussed in Sections 7.12, “Noise,” and 7.13, “Vibration,” NYCDEP will put numerous protective measures in place to minimize and/or prevent both noise and vibration effects.

As described in Section 7.1, depending on the construction schedule for the project at this Site, different construction techniques (either the raise bore or method or the surface excavation method) would need to be utilized for shaft construction. Under the surface excavation method, blasting would occur over a 24 month period (18 months for the shaft and 6 months for the distribution chamber), as compared to the eight month period for the raise bore method. While the time period is longer for the surface excavation method, there would be one, rather than two, blasts per day for the shaft work and two per day for the distribution chamber work (as with the raise bore method). If surface excavation were to be used, the peak hour noise levels during Stage 2 generated by construction equipment would be comparable because similar types of equipment would be used, but the equipment would be used for a greater number of hours and the duration of noise impacts would be longer on a given day. In addition, noise levels would also be expected to be higher due to the higher level of construction activity associated with moving rock at the surface, rather than below ground.

The noise and vibration levels from blasting and other construction activities will be noticeable and, at times, intrusive and annoying to certain residents, business owners, and customers of local businesses in the area between the Shaft Site and First Avenue. However, they would not be expected to prevent the conduct of routine activities. The existing environment surrounding the Shaft Site is very noisy resulting from high traffic volumes associated with the Bridge exit ramp and along E. 61st Street. Therefore, retail and other businesses in the immediate area are accustomed to elevated noise levels and traffic congestion. There are no businesses that face onto the site, however, further east along E. 61st Street to First Avenue, are a hair salon, cleaners, doctor’s office, fitness club, nail salon and two restaurants. The restaurants, on the corner of First Avenue, are a considerable distance from the site. The noise from the construction site may make several of these businesses less attractive to customers, particularly during intense construction

activities. In general, however, the businesses are either not highly dependent on the environment outside their businesses and would be minimally affected or are neighborhood-based destinations and it is unlikely that customers would travel longer distances to do business that could, otherwise, be done in their neighborhoods.

The proposed new residential apartment building located on First Avenue is outside the area that is expected to be impacted by noise or project impacts. If the shaft were to be constructed at the E. 61st Street Shaft Site, the planned residence for priests could not be constructed on the site. For impacts related to the day care and early learning centers, see Section 7.2.

The construction activities would have no affect on pedestrian access to these uses. No other significant environmental impacts on these businesses, residents, or other uses would occur. Although local economic conditions in the immediate vicinity of the Shaft Site could decline somewhat during intense construction periods, the net effect on the area's economy would be negligible. It is very unlikely that businesses or residents would relocate from the area as a result of construction of the project. Overall, the effects of the proposed project are not unlike the effects from other major construction in Manhattan that involves the use of heavy construction in close proximity to residential and commercial uses. Given the Shaft Site's location in a well-established neighborhood of Manhattan, large-scale neighborhood character or socioeconomic changes would not be expected to occur. Therefore, it is not anticipated that construction of Shaft 33B at this site would result in the potential for significant adverse socioeconomic effects during construction.

Operation

Once constructed, the shaft would not be very visible. Short-term maintenance and repair activities would routinely occur at the site, as discussed in Section 7.1, "Project Description." As discussed in the technical impact analyses in this chapter, these activities would not result in long term adverse noise or other environmental impacts. Therefore, it is not anticipated that operation of the shaft would result in potential significant adverse socioeconomic impacts on residents and businesses.

Water and Sewer Rates

Costs

Construction of Shaft 33B at the E. 61st Street Shaft Site would occur in four stages over a 52 month period (2007-2011) with an estimated cost of approximately \$103 million (all amounts are in 2005 dollars, assuming a 4 percent escalation in costs to the mid-point of construction). The water main connection along First Avenue from this Shaft Site (including the water main additional 2½ blocks to First Avenue) would cost approximately \$11.5 million, with a combined shaft and water main cost of \$114.5 million, while the Sutton Place route would cost approximately \$16 million, with a combined shaft and water main cost of \$119 million. The cost to construct the water main connection along the E. 59th Street/E. 61st Street route would be lower.

The higher costs for construction at this shaft are due to the costs to acquire the land. There is also the potential that at this site, the shaft would need to be constructed from the surface downward (the surface excavation method). Under this scenario, costs would be \$15 million higher, for a total cost of up to \$134 million. The cost estimates include construction costs, land acquisition costs, fees for engineering, and construction management. Operation and maintenance (O&M) costs would be approximately \$2 million per year beginning in the year 2012 when the shaft would be operational.

Probable Impacts on Residential Users

Financing the proposed project through Authority bonds would result in a repayment (or amortization) period of 30 years. For purposes of analysis, we have assumed an interest rate of 6.34 percent. Repayment begins in the first year of the bond issue.

The probable impacts of the project are assessed for residential users on the basis of an average annual water usage of 100,000 gallons per year (gpy) per household. The years 2008 to 2015 were used as the basis for the assessment since these are the years when the costs would be fully reflected in the debt service on the bonds issued to finance the capital costs and the largest rate increases due to the project would be incurred. The average monthly payment per household unit required to amortize the bonds (or portions of bonds) issued to fund the shaft and pay for O&M costs would begin at a low of roughly \$0.07 in 2008, increase to a high of \$0.34 in 2014, and then decrease to \$0.23 in 2015 and each year thereafter for 20 years. The water main connection would add another approximately 16 percent to these costs, while the surface excavation method would add approximately 15 percent, or less than \$0.05 in the peak years for each.

To assess the impact this cost would have on New York City water consumers, three indicators are typically reviewed—median monthly gross rent of renter occupied units, median monthly costs of owner-occupied units and annual income of low income residents. These indicators are as follows:

- The median monthly gross rent of renter occupied units in the five boroughs in 2000 ranged from \$620 in the Bronx to \$796 in Manhattan, with a City-wide average of \$705.
- The median monthly costs of owner-occupied units in the five boroughs in 2000 (including mortgages, equity loans, real estate taxes, insurance, utilities (including water, electricity, and gas), heating fuel, condominium fees, mobile home fees, and other miscellaneous fees) were highest in Manhattan, \$3,615, and lowest in Staten Island, \$1,431, with a citywide average of \$1,562.
- The average household income for City customers in the lowest income block in New York City (Tract 271.01) is estimated to have been \$12,664 in 2004.

The additional monthly rate charge of approximately \$0.34 related to implementation of the project would be negligible to renters, home owners and low-income residents. Based on these costs, it is unlikely that renters or owners of residential units would relocate from the City as a result of the proposed project. Therefore, the project is not expected to result in potential significant adverse socioeconomic impacts on New York City residential water consumers.

