A. INTRODUCTION

As discussed in Chapter 1, "Project Description," following the guidelines of the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, preliminary screening assessments of the proposed project were conducted in all technical areas to determine if the proposed project exceeds any of the thresholds defined by the *Technical Manual* that warrant a detailed analysis. As discussed in this chapter, the screening assessments conducted in the areas of socioeconomic conditions, community facilities and services, open space, shadows, urban design and visual resources, solid waste and sanitation services, energy, greenhouse gas emissions, and climate change concluded that the proposed project would not exceed the detailed analysis thresholds in the these technical areas, and that detailed analyses are not warranted and are not included in this Environmental Impact Statement (EIS).

B. SCREENING ASSESSMENTS

SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. According to the *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a proposed project would result in significant impacts due to:

- Direct residential displacement (typically displacement of 500 or more residents);
- Direct business displacement (typically displacement of 100 or more employees);
- Indirect residential or business displacement due to substantial new development that is markedly different from existing uses within the surrounding neighborhood (typically development of 200 or more residential units or 200,000 square feet or more of commercial space);
- Indirect business displacement due to retail market saturation, i.e., indirect displacement resulting from the introduction of a substantial new retail concentration (typically 200,000 square feet or more of retail space) that may draw a substantial amount of sales from existing businesses within the surrounding neighborhood; and
- Adverse effects on a specific industry, i.e., changes that affect the economic and operational conditions of certain types of businesses or processes.

The project site is a vacant wooded parcel and does not currently contain any residential or commercial uses; therefore, the proposed project would not result in any direct residential or business displacement. The proposed project would also not contain any residential space and

would not introduce a new residential population; therefore, it would not have the potential to result in indirect residential displacement due to increased rents.

While the proposed project would introduce a new retail development with approximately 226,000 gross square feet (gsf) of space, the proposed development would be approximately 2,000 gsf smaller than the retail development that would be constructed on the project site in the No Action condition. In addition, the proposed project would not result in new uses that are markedly different from existing uses in the surrounding neighborhood, which currently contains retail uses particularly in the area along Forest Avenue (including several large commercial facilities such as the Home Depot hardware store). Therefore, the proposed project would result in a net decrease in retail space and would not introduce new economic activities that would alter existing economic patterns in the area. Overall, the proposed project would not result in any significant adverse impacts to socioeconomic conditions, and no further analysis is necessary.

COMMUNITY FACILITIES AND SERVICES

As defined for CEQR analysis, community facilities are public or publicly funded schools, libraries, childcare centers, health care facilities, and fire and police protection. A project can affect facilities and services directly, when it physically displaces or alters a community facility; or indirectly, when it causes a change in population that may affect the services delivered by a community facility. The proposed project would not have direct effects on community facilities, because it would not physically displace or alter any community facilities. Further, the proposed project would not result in new residential development and would not introduce a new residential population that would generate additional need for school seats or childcare facilities. The project site is located in a developed area where existing health care facilities and fire and police services would serve the proposed project. Therefore, the proposed project would not have a significant adverse impact on community facilities, and no further analysis is necessary.

OPEN SPACE

The *CEQR Technical Manual* recommends performing an open space assessment if a project would have a direct effect on an area open space; such effects include displacement of an existing publicly accessible open space resource, alterations to a resource that limit public access or change in use so that it no longer serves the same user population, or increased disturbances from noise, air pollutant emissions, odors, or shadows that would affect a resource's usefulness. A project would may also have an indirect effect through increased population size: for the project site, which is located in an area that is considered neither well served nor underserved by open space, an assessment would be required if the proposed project's population is greater than 200 residents or 500 employees.

Although the project site contains undeveloped natural areas, it is entirely privately owned and not accessible to the public, and does not contain any recreational amenities; therefore, the proposed project would not result in any direct effects on public open space. The proposed project would introduce an estimated 440 workers to the project site, which would be a reduction in the worker population as compared to the No Action development (which would introduce an estimated 570 workers), therefore the proposed project would not result in a significant increase in the worker population warranting an analysis of indirect effects on open space. Overall, the proposed project would not have a significant adverse impact on open space, and no further analysis is necessary.

SHADOWS

The *CEQR Technical Manual* requires a shadow assessment for proposed projects that would result in new structures (or additions to existing structures) greater than 50 feet in height and/or adjacent to (or across the street from) an existing sunlight-sensitive resource. While the proposed project would result in the development of new buildings adjacent to sunlight-sensitive natural resources (the 6.94 acres of preserved mapped wetland areas on the project site), the buildings would be largely similar in footprint and bulk to the buildings that will be constructed on the development site in the No Action scenario. However, to ensure a conservative approach and confirm that no other sunlight-sensitive resources of concern could be reached by project-generated shadow, a preliminary shadows assessment was conducted.

A base map was developed using Geographic Information Systems (GIS)[1] showing the location of the project site and the surrounding street layout (see **Figure 14-1**). Potential sunlight-sensitive resources were identified and shown on the map.

TIER 1 SCREENING ASSESSMENT

For the Tier 1 assessment, the longest shadow that the proposed structure could cast is calculated, and, using this length as the radius, a perimeter is drawn around the project site. Anything outside this perimeter representing the longest possible shadow could never be affected by project-generated shadow, while anything inside the perimeter may require additional assessment.

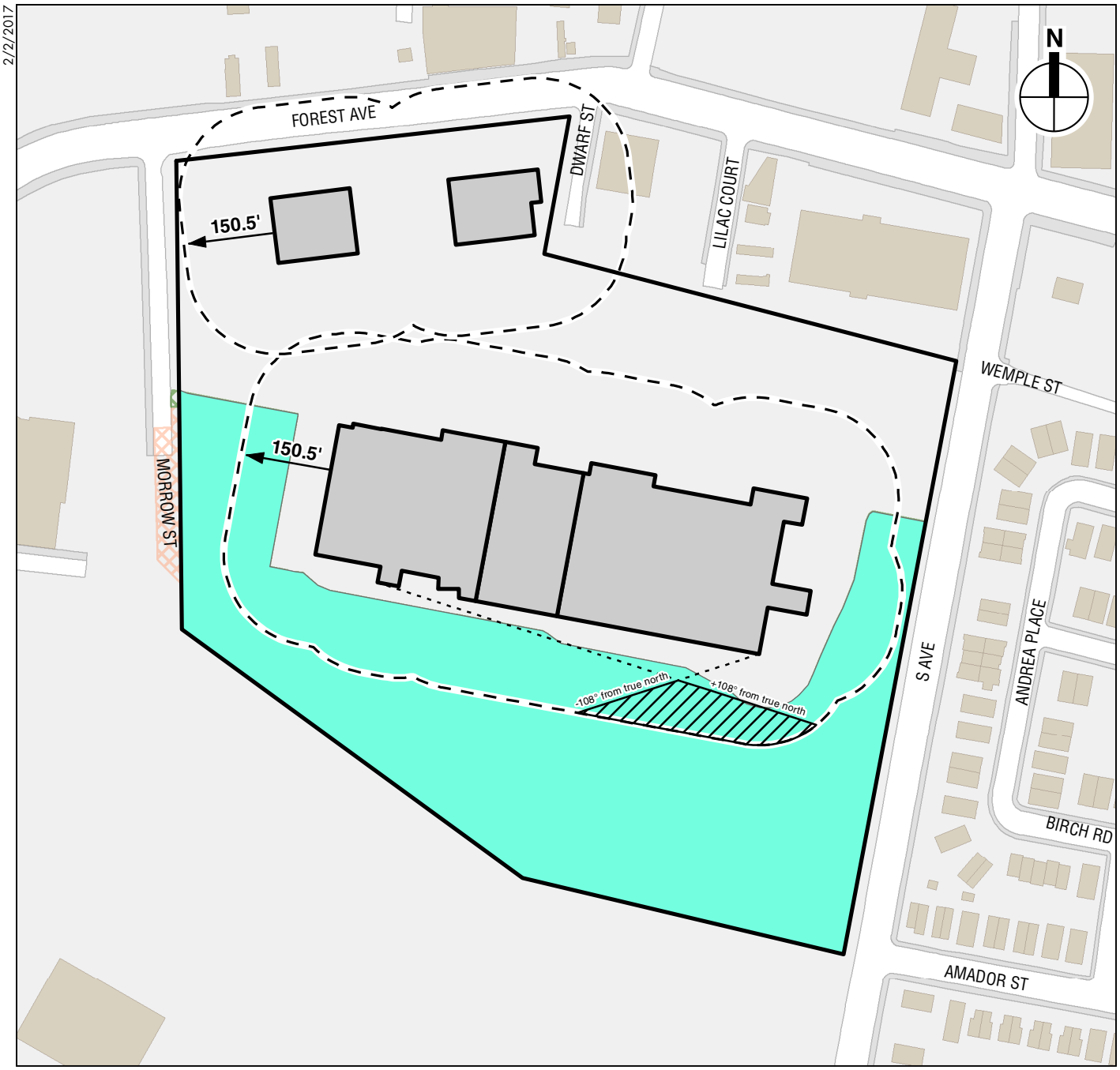
According to the 2014 *CEQR Technical Manual*, the longest shadow that a structure can cast at the latitude of New York City occurs on December 21, the winter solstice, at the start of the analysis day at 8:51 AM, and is equal to 4.3 times the height of the structure.

Therefore, at a maximum height of approximately 35 feet above grade, each of the proposed buildings could cast a shadow up to approximately 150.5 feet in length (35 x 4.3). Using this length as the radius, a perimeter was drawn around the proposed building footprints (see **Figure 14-1**). The assessment showed that limited areas of the preserved and enhanced wetland features adjacent to the proposed building footprints could potentially be affected by shadows from the proposed project (the With Action) scenario and, given the similarity of footprint and bulk, the No Action scenario as well. No other sun-sensitive resources of concern could ever be reached by project-generated shadow.

TIER 2 SCREENING ASSESSMENT

Because of the path that the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. **Figure 14-1** illustrates this small triangular area south of the proposed building footprints. The complementing area to the north, east, and west within the longest shadow study area represents the remaining area that could potentially experience shadows in the With Action scenario and, given the similarity of footprint and bulk, the No Action scenario as well.

[1] Software: Esri ArcGIS 10.2; Data: New York City Department of Information Technology and Telecommunications (DoITT) and other City agencies, and AKRF site visits.



Project Site

Proposed Buildings

Tier 1: Longest Shadow Study Area Boundary

Tier 2: Area South of Project Site that Could Never be Shaded by Proposed Building

Preserved and Enhanced Wetland Features on Project Site

Historic Resources with Sunlight-Sensitive Features (none located in map extent)

Publicly Accessible Parks, Playgrounds, and Plazas (none located in map extent)

0 400 FEET

Tier 1 and Tier 2 Assessments

Figure 14-1

South Avenue Retail Development

In the With Action scenario, the heights of the proposed buildings would be equal to or lower than the heights of the buildings in the No Action scenario (the westernmost building would be only one story in the With Action scenario, rather than two stories in the No Action scenario), and the buildings occupy a similar footprint. Therefore, minimal or no incremental shadow would fall on the adjacent wetland areas in the With Action scenario. In fact it is likely that less shadow would fall on the wetland areas to the west of the proposed buildings in the With Action scenario given the shorter westernmost building, relative to the No Action scenario.

In conclusion, the shadows cast on the wetland areas east- and west-adjacent to the proposed project buildings would be substantially similar in both scenarios. Therefore, the proposed project would potentially result in, at worst, minimal incremental shadow affecting the wetland area, and no further analysis of the proposed project's shadows impact on the wetlands is necessary. In addition, no other nearby sunlight sensitive resources could be affected by project-generated shadow.

URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including (1) projects that permit the modification of yard, height, and setback requirements; and (2) projects that result in an increase in built floor area beyond what would be allowed "as of right" or in the future without the proposed project. The proposed project requires a special permit to allow retail establishments with UG 6 and UG 10A uses in excess of 10,000 zoning square feet (zsf) in an M1-1 district as well as mapping actions to remove mapped but unbuilt streets from mapped wetland areas and realign the intersection of Morrow Street and Forest Avenue. However, the proposed actions would not affect the zoning regulations regarding yard, height, and setback, and allowable bulk, and the proposed project would comply with the applicable zoning regulations in these areas (in particular, the built floor area ratio [FAR] of the proposed project would be 0.18, which is below the maximum permitted FAR of 1.0). Therefore, the proposed actions would not result in a change on the project site beyond what is permitted by existing zoning. Furthermore, as discussed in Chapter 1, "Project Description," absent the proposed actions the applicant would construct a retail center that does not require any discretionary approvals. Both the No Action development and the proposed project would consist of multiple free-standing and attached retail buildings set within a parking lot, and the differences in built form between the No Action development and the proposed project would be limited. In particular, while the overall bulk of the retail center would be similar (the No Action development's built FAR would be 0.19, compared with 0.18 with the proposed project), unlike the No Action development the proposed project would construct a portion of a retail building on a mapped but unbuilt segment of Garrick Street and would not include smaller retail buildings along the project site's South Avenue and Wemple Street frontages. Therefore, as the proposed project would comply with applicable zoning regulations regarding bulk, height and setback, and yards, and would result in limited changes to the built form of the retail center as compared to the No Action development, no further analysis of the proposed project's effects on urban design and visual resources is warranted.

SOLID WASTE AND SANITATION SERVICES

According to the *CEQR Technical Manual*, a solid waste assessment is appropriate if a project generates 50 tons of solid waste per week or more. Based on employment density ratios of one

worker per 400 gsf of general retail space and one worker per 875 gsf of warehouse retail space, the proposed project is expected to introduce an estimated 440 new workers. Utilizing the solid waste generation rates provided in the *CEQR Technical Manual* for general retail (79 pounds per employee per week) and wholesale retail space (66 pounds per employee per week), the proposed project would generate approximately 33,404 pounds (approximately 16.7 tons) per week. As the development site would be redeveloped with a larger retail facility absent the proposed actions, the proposed project would result in a reduction in solid waste generation as compared to the No Action condition. Specifically, No Action development would introduce an estimated 571 workers (based on the ratio of one worker per 400 gsf of general retail space); utilizing the *CEQR Technical Manual* generation rate for general retail space, the No Action development would generate approximately 45,109 pounds of solid waste per week (approximately 11,705 pounds per week more than the proposed project). Therefore, the incremental increase in solid waste generation would be well below the 50 tons per week requiring a detailed analysis. The solid waste generated by the proposed project would not significantly increase the demand for solid waste and sanitation services and, therefore, would not result in any significant impacts on solid waste, and no further analysis is necessary.

ENERGY

As described in *the CEQR Technical Manual*, all new structures requiring heating and cooling are subject to the New York City Energy Conservation Code. Therefore, the need for a detailed assessment of energy impacts is limited to projects that may significantly affect the transmission or generation of energy. The proposed project would not significantly affect the transmission or generation of energy. Although significant adverse energy impacts are not anticipated for the majority of projects analyzed under CEQR, the *CEQR Technical Manual* recommends that the projected amount of energy consumption during long-term operation of a project be disclosed. With a total of approximately 226,000 gsf of retail space, the proposed project would be expected to require approximately 48,884 million BTUs per year based on the energy demand rates provided in the *CEQR Technical Manual* (216.3 thousand British thermal units [BTUs] per square foot of commercial space). Compared with the approximately 347 trillion BTUs of energy consumed within Con Edison's New York City and Westchester County service area, the increase that would result from the proposed project would be considered a negligible increment. Therefore, the proposed project would not be expected to result in any significant impacts to energy generation or transmission, and no further analysis is necessary.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

According to the *CEQR Technical Manual*, a greenhouse gas (GHG) emissions analysis is appropriate for: City capital projects subject to environmental review; projects that involve power generation; regulations and other actions that fundamentally change the City's solid waste management system by changing solid waste transport mode, distances, or disposal technologies; and projects conducting an EIS that would result in development of 350,000 square feet or greater. The proposed project would result in a commercial development with approximately 226,000 gsf of retail space, approximately 2,000 gsf smaller than the retail development that will be constructed on the project site in the No Action condition, and would therefore not exceed the development threshold warranting a GHG analysis. The proposed project would also not include any City capital improvements, power generation, or changes to the City's solid waste management system. Therefore, the proposed project would not be

expected to result in any significant impacts related to GHG emissions, and no further analysis is necessary.

PUBLIC HEALTH

Public health is the effort of society to protect and improve the health and well-being of its population. The goal of CEQR with respect to public health is "to determine whether adverse impacts on public health may occur as a result of a proposed project, and if so, to identify measures to mitigate such effects." According to the *CEQR Technical Manual*, for most proposed projects, a public health analysis is not necessary. Where no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, no public health analysis is warranted. As described in the relevant analyses of this EIS, the proposed project would not result in unmitigated significant adverse impacts in any of the technical areas related to public health. Therefore, a public health analysis is not necessary, and the proposed project would not result in a significant adverse public health impact. ✷