A. INTRODUCTION

This chapter examines the potential impacts from the Bronx Psychiatric Center (BPC) Redevelopment project (the proposed project) on natural resources and floodplains near the project area in the Bronx. This chapter describes:

- The regulatory programs that protect floodplains, wildlife, threatened or endangered species, or other natural resources within the study area;
- The current condition of the floodplain and natural resources within the project area, including groundwater, terrestrial biota, and threatened or endangered species and species of special concern;
- The floodplain and natural resources conditions in the future without the proposed project (the "No-Action" condition);
- The potential impacts of the proposed project on the floodplain and natural resources (the "With-Action" condition); and
- The measures that would be developed, as necessary, to mitigate and/or reduce any of the proposed project's potential significant adverse effects on natural resources and floodplains.

As described in Chapter 1, "Project Description," the proposed project would redevelop the northern portion of the BPC campus with a mix of commercial and medical office, bio-tech/research, hotel, accessory, college/trade school, community facility, and retail uses along with open space and parking facilities. For the purposes of this Environmental Impact Statement (EIS), it is assumed that in the future without the proposed project (the No-Action condition), the three primary, existing buildings (Bronx Children's Psychiatric, Thompson, and Parker Buildings) would remain vacant. The powerhouse, two metal shelters, and small storage building on the project site would also be vacated and decommissioned, and the ballfields would remain as in the existing condition. The proposed project would be completed in two phases, with 2023 as the analysis year for Phase I completion, and 2028 as the year for Phase II full build-out, or "With-Action" condition.

PRINCIPAL CONCLUSIONS

Construction of the proposed project would result in the disturbance of mowed lawn with trees and urban structure exterior habitat, two ecological communities that provide limited habitat to wildlife other than species common to urban areas. Loss of this habitat area may adversely affect individual wildlife unable to find suitable available habitat in the vicinity of the study area. Loss of individuals of these common species would not result in significant adverse impact to populations of these species within the New York City metropolitan region. Moreover, landscaping and the proposed project's green infrastructure such as the reduction of lawn areas (which provide nominal habitat for native wildlife), the creation of vegetative cover on barren soil areas, and the planting of shade, flowering, and native fruit bearing trees and shrubs for

aesthetics and wildlife would improve conditions within the study area post construction and have the potential to benefit natural resources. Finally, the proposed project would consider design features to minimize bird collisions, and thus impacts to migratory bird populations. Therefore, it was determined that the proposed project would not result in significant adverse impacts on natural resources.

B. EFFECTS ASSESSMENT

METHODOLOGY

The project site consists of approximately 34 acres of parkland (including baseball fields) and institutional buildings surrounded by paved roads. The project site is located in a highly developed urban area with limited natural resources, thus the study area for natural resources was determined to be the project site and the area immediately adjacent to the project site. Terrestrial natural resources and floodplains were evaluated within the study area. Threatened, endangered, and special concern species and significant natural communities were evaluated within a distance of 0.5 miles from the project site. With no waterbodies within the study area and because the proposed project has no potential to adversely affect water resources outside the study area, water quality and aquatic resources were not included in this effects assessment.

Existing conditions for floodplains and natural resources within the study area were summarized from:

- Existing information identified in literature and obtained from governmental and nongovernmental sources, such as the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps and Information, Planning and Consultation (IPaC) system for federally threatened and endangered species (http://ecos.fws.gov/ipac); New York State Breeding Bird Atlas, 2000-2005; New York State Department of Environmental Conservation (NYSDEC) Herp Atlas Project 1990-1999; and Federal Emergency Management Agency (FEMA) preliminary Flood Insurance Rate Maps (FIRMs).
- Responses to requests for information on rare, threatened, or endangered species in the study area from the New York Natural Heritage Program (NYNHP) (see **Appendix C**).
- Observations made on September 18, 2015 during the reconnaissance investigation conducted within the study area.

REGULATORY CONTEXT

The following sections identify the federal and state legislation and regulatory programs that pertain to activities in floodplains and the protection of species of special concern that would apply to the proposed project.

FEDERAL

Endangered Species Act of 1973 (16 USC §§ 1531 to 1544)

The Endangered Species Act of 1973 recognizes that endangered species of wildlife and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people. The Act prohibits the importation, exportation, taking, possession, and other activities involving illegally taken species covered under the Act, and interstate or foreign

commercial activities. The Act also provides for the protection of critical habitats on which endangered or threatened species depend for survival.

Fish and Wildlife Coordination Act (PL 85-624; 16 USC 661-667d)

The Fish and Wildlife Coordination Act entrusts the Secretary of the Interior with providing assistance to, and cooperation with, federal, state, and public or private agencies and organizations to ensure that wildlife conservation receives equal consideration and coordination with other water-resource development programs. These programs can include the control (such as a diversion), modification (such as channel deepening), or impoundment (dam) of a body of water.

NEW YORK

Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern (ECL, Sections 11-0535[1]-[2], 11-0536[2], [4], Implementing Regulations 6 NYCRR Part 182)

The Endangered and Threatened Species of Fish and Wildlife, Species of Special Concern Regulations prohibit the taking, import, transport, possession, or selling of any endangered or threatened species of fish or wildlife, or any hide, or other part of these species as listed in 6 NYCRR §182.6.

CITY

New York City Local Law 3 (NYCRR Chapter 5)

Local Law 3 of 2010 amended Section 18-107 of the Administrative Code of the City of New York and codifies the New York City Department of Parks and Recreation's (NYC Parks) ability to regulate the replacement of trees on or within jurisdiction of NYC Parks, which includes all trees growing in the public right-of-way and on land mapped as City parkland. The law requires permits from NYC Parks for the removal of trees within the jurisdiction of NYC Parks and requires replacement of trees that are removed. The law protects against the unauthorized removal, destruction, irreparable damage, and injury to trees under the jurisdiction of NYC Parks.

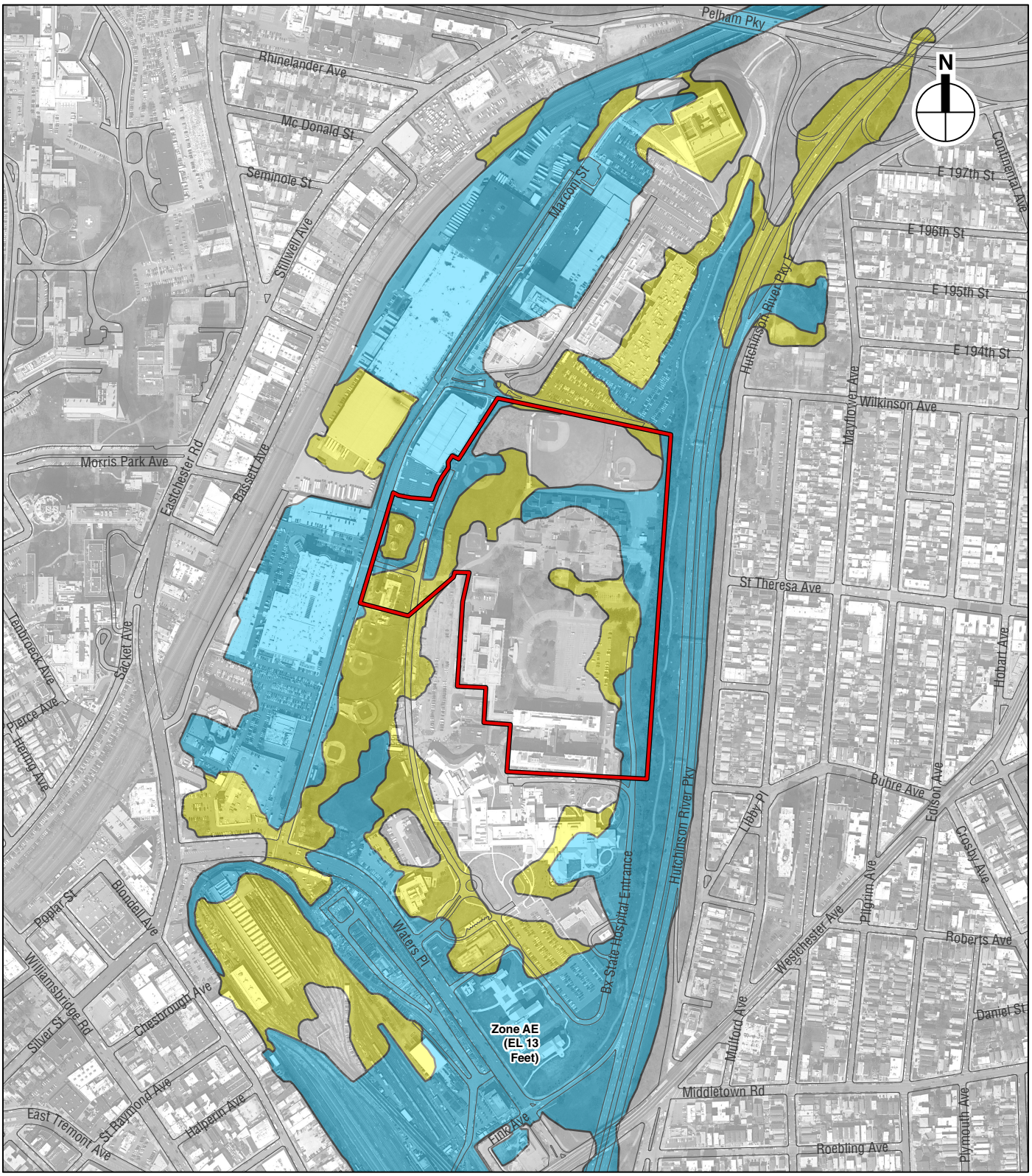
EXISTING CONDITIONS

GROUNDWATER

As discussed in Chapter 10, "Hazardous Materials," groundwater is first encountered at approximately 10 to 15 feet below grade, and flows generally toward the northeast. Groundwater in the Bronx is not used as a source of potable water (the municipal water supply uses upstate reservoirs).

FLOODPLAINS

FEMA released preliminary FIRMs on January 30, 2015 that precede the future publication of new, duly adopted, final FIRMs. The preliminary FIRMs represent the Best Available Flood Hazard Data at this time. FEMA encourages communities to use the preliminary FIRMs when making decisions about floodplain management until final maps are available. As indicated in **Figure 9-1**, approximately half the area of the study area, specifically around the perimeter, is located within the 100-year floodplain (Zone AE; the area with a 1 percent probability of



Project Site

1% Annual Chance of Flooding

0.2% Annual Chance of Flooding

FEMA Preliminary
Flood Hazard Areas

BRONX PSYCHIATRIC CENTER LAND USE IMPROVEMENT PROJECT

Figure 9-1

flooding each year) or 500-year floodplain (Zone X; the area with a 0.2 percent probability of flooding each year). The 100-year flood elevation at the study area is +13 feet North American Vertical Datum of 1988 (NAVD88).

WETLANDS

There are no NWI- or NYSDEC-mapped wetlands within the study area.

TERRESTRIAL RESOURCES

Vegetation and Ecological Communities

The study area is located within the urban landscape of the Bronx. Consequently, the ecological communities consist of roadways, buildings, and maintained lawns that would fall under the "Terrestrial Cultural" communities defined by Edinger et al. (2014), including paved road/path[1], urban structure exterior[2] and mowed lawn with trees[3] (see **Figures 9-2** through **9-5**). The paved road/path and urban structure exterior communities are both unvegetated and represent the surrounding streets and institutional/commercial buildings respectively. The mowed lawn with trees community is found throughout the study area around the edges and within the courtyards of the buildings. The trees most commonly planted within this community are Norway maple (*Acer platanoides*), pin oak (*Quercus palustris*), sweetgum (*Liquidambar styraciflua*), and willow oak (*Quercus phellos*). There are few shrubs planted within this community, including privet (*Ligustrum* sp) and lilac (*Syringa vulgaris*), none of which would be considered dominant species. The herbaceous layer is primarily mowed Kentucky bluegrass (*Poa pratensis*), crabgrass (*Digitaria* sp), English plantain (*Plantago lanceolata*), and common plantain (*Plantago major*). **Appendix C, Table C-1** summarizes the vegetation identified in the study area.

Wildlife

Habitats available to terrestrial wildlife within the study area are limited to overgrown fields and forested edges around the perimeter of the BPC campus; these habitats are of limited value to native wildlife. The remainder of the study area comprises developed areas including buildings, asphalt, and maintained lawns. As such, only the most urban-adapted, generalist species that can tolerate highly degraded environments and high levels of human activity currently have the potential to occur within the study area.

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[1] Edinger et al. (2014) define this community as "a road or pathway that is paved with asphalt, concrete, brick, stone, etc. There may be sparse vegetation rooted in cracks in the paved surface."

[2] Edinger et al. (2014) define this community as "the exterior surfaces of metal, wood, or concrete structures (such as commercial buildings, apartment buildings, houses, bridges) or any structural surface composed of inorganic materials (glass, plastics, etc.) in an urban or densely populated suburban area. These sites may be sparsely vegetated with lichens, mosses, and terrestrial algae; occasionally vascular plants may grow in cracks. Nooks and crannies may provide nesting habitat for birds and insects, and roosting sites for bats."

[3] Edinger et al. (2014) define this community as "residential, recreational, or commercial land in which the groundcover is dominated by clipped grasses and forbs, and is shaded by at least 30 percent of trees. Ornamental and/or native shrubs may be present, usually with less than 50 percent cover. The groundcover is maintained by mowing and broadleaf herbicide application."

8.2.19

Project Site

0 500 FEET

Photograph View Direction and Reference Number

Photograph Key

BRONX PSYCHIATRIC CENTER LAND USE IMPROVEMENT PROJECT

Figure 9-2

View of the main parking lot facing north. **1**

View of a building and willow oaks facing west. **2**

Site Photographs

BRONX PSYCHIATRIC CENTER LAND USE IMPROVEMENT PROJECT

Figure 9-3

View of the Bronx Children's Psychiatric Center and a parking lot facing north. **3**

View of a baseball field facing northwest. **4**

Site Photographs

BRONX PSYCHIATRIC CENTER LAND USE IMPROVEMENT PROJECT

Figure 9-4

View of a parking lot facing south. **5**

View of an unmaintained field facing northwest. **6**

Site Photographs

Figure 9-5

Birds

The Breeding Bird Atlas is a periodic census of the distribution of breeding birds across New York State. The most recent census, conducted from 2000 to 2005, documented 63 species as confirmed or probable/possible breeders in the survey block where the study area is located (Block 5952C) (see **Appendix C**, **Table C-2**). However, although the three-square-mile survey block covers natural areas where there is habitat to support these species, the study area contains habitat that is suitable for only a few of the most urban-adapted birds. The bird species that are considered most likely to breed within the study area are the non-native European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and rock pigeon (*Columbia liva*). These are disturbance-tolerant, generalist species that can thrive in heavily developed, urban environments. Bird species observed during the September 18, 2015 reconnaissance investigation include rock pigeon, house sparrow, and American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), European starling, and mourning dove (*Zenaida macroura*).

Mammals

Habitat for mammals is limited within the project area, and is likely to be used only by urban-adapted mammals. These include the raccoon (*Procyon lotor*), Norway rat (*Rattus norvegicus*), gray squirrel (*Sciurus carolinensis*) and domestic cat (*Felis catus*). The only mammals observed in the study area during the September 18, 2015 reconnaissance investigation were gray squirrel and groundhog (*Marmota monax*).

Reptiles and Amphibians

The NYSDEC Herp Atlas Project identified 16 species as occurring within the atlas block that covers the study area (*Flushing* USGS quadrangle) (see **Appendix C**, **Table C-3**). The atlas block spans a large geographic area that includes parks and other natural areas where there is habitat to support these species, whereas the study area lacks the habitat that would be suitable for most of these species. The study area mainly consists of lots covered by buildings, asphalt, and maintained lawns. Of the 16 species identified in the Herp Atlas Project, Italian wall lizard (*Podarcis sicula*) and northern brown snake (*Storeria dekayi*) are considered to have the potential to occur within the study area, on the basis of their association with the available habitats. No reptile or amphibian species were observed during the September 18, 2015 reconnaissance investigation.

THREATENED, ENDANGERED, AND SPECIAL CONCERN SPECIES AND SIGNIFICANT NATURAL COMMUNITIES

The piping plover (*Charadrius melodus*; threatened) is the only federally listed species indicated by the USFWS IPaC system as occurring within a half mile of the project site. The breeding population of piping plovers in New York City is limited to the Rockaway Peninsula in Queens County (Fowle and Kerlinger 2001, Boretti et al. 2007), and the project area lacks wide, open expanses of unvegetated beach that the piping plover uses for habitat. Therefore, piping plovers are not considered to have the potential to occur within the study area.

A December 24, 2015 response from NYNHP to requests for information on rare, threatened, and endangered species, and significant natural communities within a half mile of the project site indicated no records of rare, state-listed animals or plants, or significant natural communities within the study area.

The federally or state-listed species of birds, reptiles, or amphibians documented by the 2000–2005 Breeding Bird Atlas and Herp Atlas Projects in the respective census blocks in which the proposed project would be located is the eastern box turtle (*Terrapene carolina*; special concern)

However, as discussed under "Reptiles and Amphibians," due to lack of appropriate habitat in the project area, the eastern box turtle is not considered to have the potential to occur within the study area.

The only federally or state-listed species observed within study area during the September 18, 2015 reconnaissance investigation was willow oak (*Quercus phellos*; endangered), which was planted on the BPC campus. The willow oak is ranked as "S1" by NYNHP, indicating that it is critically imperiled in the state because of extreme rarity (i.e., five or fewer sites or very few remaining individuals) (NYNHP 2013). Habitat for this species is mostly on the coastal plain in moist soils or swamps (Gleason and Cronquist 1963). There are 10 willow oaks planted within the study area north of the central parking lot and adjacent to the Bronx Children's Psychiatric Center building. These willow oaks range in size from approximately 12 inches diameter at breast height (dbh) to 24 inches dbh. According to the *New York City, New York Municipal Forest Resource Analysis* (Peper et al. 2007), willow oak is a commonly planted tree in New York City, and these trees do not constitute one of the five or fewer sites or very few remaining individuals of this species in New York State as is intended by the NYNHP "S1" rank. Otherwise, due to the urbanized nature and absence of moist soils, this species would not be likely to occur elsewhere within the study area.

THE FUTURE WITHOUT THE PROPOSED PROJECT—2023

In the 2023 No-Action condition, no substantial changes are expected to the study area. It is anticipated that the Bronx Children's Psychiatric, Thompson, and Parker buildings would remain vacated, as would the powerhouse, two metal shelters, and a small storage building. Therefore, floodplains and natural resources under the No-Action condition are expected to remain similar to the existing conditions within the study area. The reduced level of human disturbance as a result of the vacated buildings could result in a small shift in the wildlife assemblage composition toward a less human disturbance-tolerant assemblage. It is assumed that some ongoing maintenance and mowing would occur, particularly related to the athletic fields within the study area.

THE FUTURE WITH THE PROPOSED PROJECT—2023

Construction of the proposed project is expected to occur in two phases over a period of approximately nine years. Phase I is expected to be completed in 2023, with a full build out of Phase II expected in 2028. Phase I of the proposed project would comprise the redevelopment of the Thompson and Parker Buildings; as well as construction of Buildings 3 and 4, a little league field support building, a retail building, the repurposing of the powerhouse building, Building 3/4 Garage, and Parking Garages 3, 4, and 5. Construction of Phase I would occupy approximately three quarters of the project site.

GROUNDWATER

As discussed above under "Existing Conditions," groundwater within the Bronx is not used as a source of potable water. In addition, the proposed project would not require significant subsurface disturbance. Therefore, construction and operation of Phase I of the proposed project would not result in significant adverse impacts to groundwater.

FLOODPLAINS

As discussed above under "Existing Conditions," approximately half the area of the study area, specifically around the perimeter, is within either the 100-year or 500-year floodplain. The little league field, Building 3, the retail building and powerhouse building, and Parking Garage 5 are the primary project elements of Phase I that are proposed within 100-year and 500-year floodplains. New York City is affected by local flooding (e.g., flooding of inland portions of the City from short-term, high-intensity rain events in areas with poor drainage), fluvial flooding (rivers and streams overflowing their banks), and coastal flooding (e.g., long and short wave surges that affect the City's shorelines along the Atlantic Ocean and tidally influenced rivers such as the Hudson River and East River). Because the floodplain within and adjacent to the study area is controlled by astronomic tide and meteorological forces (e.g., nor'easters and hurricanes) and not by fluvial flooding, floodplains would not be affected by grading or other construction for the proposed project.

The New York City Panel on Climate Change has projected a rise in sea level of 11 to 24 inches by the middle of the century (2050s middle range, 25th to 75th percentile), which would increase the 100-year flood elevations of the site to +14 to +15 feet NAVD88. Phase I of the proposed project would comply with applicable New York City Building Codes and FEMA requirements regarding non-residential structures within the 100-year and 500-year floodplains and would incorporate sea level rise resilience measures into the design of building and parking garage structures.

Therefore, flooding conditions in the surrounding area would not be altered from their present state, and construction and operation of Phase I of the proposed project would not result in significant adverse impacts to floodplains.

WETLANDS

There are no NWI-mapped wetlands or NYSDEC-mapped wetlands located within the study area. Therefore, construction and operation of Phase I of the proposed project would not result in significant adverse impacts to wetlands.

TERRESTRIAL RESOURCES

Vegetation and Ecological Communities

Ecological communities within the study area are limited to mowed lawn with trees, urban structure exterior, and paved road/path communities. These ecological communities, in addition to being common throughout the region, are defined by human disturbance. These ecological communities provide limited habitat value to wildlife in the area. Project elements that are part of Phase I construction are located primarily within currently developed areas. The proposed project would comply with Local Law 3 of 2010 and NYC Park's Tree Protection Protocol to minimize potential adverse impacts related to construction work within 50 feet of trees under City jurisdiction. If any trees under City jurisdiction are removed, replacement and/or restitution for removed trees would be provided in compliance with Local Law 3 and Chapter 5 of Title 56 of the Rules of the City of New York.

Post-construction landscaping and green infrastructure, including the protection of existing vegetation to remain within the project site and proposed planted roadway medians, plaza plantings, parking area plantings, perimeter buffer plantings, creation of vegetative in-fill park-like areas between existing and proposed buildings, and building foundation plantings including

trees, shrubs and lawn areas, would improve the condition of vegetation and ecological communities within the study area. The proposed use of green infrastructure for Phase I including the use of bio-swales, raingardens, and bioretention basins within the project site would mitigate the potential adverse effects of the proposed project. These practices would collect and treat stormwater prior to or in lieu of release into a typical storm sewer. The installation of temporary and permanent sediment and erosion control measures would protect the adjacent properties from runoff contamination and provide a safe work environment.

Therefore, the construction and operation of Phase I of the proposed project would not result in significant adverse impacts to vegetation and ecological communities.

Wildlife

Construction of Phase I of the proposed project would not have significant adverse impacts to wildlife at either the individual or population level. Terrestrial wildlife habitat within the study area is presently limited to a mowed lawn with trees, urban structure exterior, and paved road/path communities in a highly urbanized setting. Therefore, Phase I construction activities would not eliminate any high-quality or valuable habitat for wildlife, and would not adversely affect wildlife within the area. As disturbance from construction activities would be temporary, any wildlife individuals that may be displaced from the site during project construction would be expected to easily move to alternative habitat.

Buildings proposed as part of Phase I would not be expected to present a collision hazard to resident or migratory birds. The overwhelming majority of bird-building collisions, including in New York City (Gelb and Delacretaz 2006, 2009; Klem et al. 2009) occur during the daytime and near ground level when lower-story windows reflect images of nearby trees and other vegetation (Loss et al. 2014). The proposed Phase I buildings would be clad in glass, potentially causing a collision hazard to birds. The proposed project would consider implementing measures such as those recommended by NYC Audubon (NYCA 2007), the American Bird Conservancy (Sheppard and Phillips 2011), and several others (e.g., Klem et al. 2009, Audubon Minnesota 2010, SFPD 2011) for effectively reducing the likelihood of daytime collisions of birds with windows. These measures include (1) reduced usage of glass relative to other building materials on the building's façade, (2) usage of low reflectivity glass, (3) fritting of glass surfaces, and (4) not placing shrubs and trees in close proximity to reflective surfaces.

Nighttime collisions of birds with buildings and other artificial structures, when they do occur, are often strongly related to structure height (Kerlinger 2000, Longcore et al. 2008), with most North American landbirds migrating between altitudes of approximately 650 and 2,500 feet (Able 1970, Mabee and Cooper 2004, Mabee et al. 2006). The proposed buildings of Phase I, which would have a maximum height of 210 feet, would not extend into the range of air space commonly used by migrating birds. Nighttime collisions of birds with the proposed buildings would likely be an extremely rare occurrence. Overall, with the recommended design features in place to reduce daytime collisions the proposed project would not be expected to significantly change the likelihood of nighttime or daytime bird collisions relative to the existing condition, and would not have significant adverse impacts to migratory bird populations.

Overall, construction and operation of Phase I of the proposed project would not have significant adverse impacts to wildlife at the individual or population level.

THREATENED, ENDANGERED, AND SPECIAL CONCERN SPECIES AND SIGNIFICANT NATURAL COMMUNITIES

The federal- or state-listed endangered, threatened, and special concern species, or significant natural communities that is considered to have the potential to occur or is known to occur within the project area or study area is the state-endangered willow oak.

There are 10 willow oaks planted within the study area north of the central parking lot and adjacent to the Bronx Children's Psychiatric Center building, in the area where Building 4 would be constructed during Phase I. These trees would have the potential to be removed as a result of the project. The willow oak is ranked as "S1" by NYNHP, indicating that it is critically imperiled in the state because of extreme rarity (i.e., five or fewer sites or very few remaining individuals) (NYNHP 2013). All 10 willow oaks located within the project area were planted and do not represent natural populations. Willow oak is a commonly planted tree in New York City (Peper et al. 2007), these trees do not constitute one of the "five or fewer sites or very few remaining individuals" of this species in New York State as is intended by the NYNHP "S1" rank because they are not considered part of native or naturalized populations. Therefore the removal of these trees would not be considered significant adverse impacts to protected willow oak populations. Willow oaks will be considered in the landscaping plans to the extent that the construction schedule allows based on the required planting seasons. Native plantings would be favored due to their environmental adaptability, drought tolerance and wildlife habitat for birds and animals. Selection and installation of the proposed plantings shall meet the NYC Parks Street Tree Planting Standards for New York City dated 2016.

Therefore, construction and operation of Phase I of the proposed project would not have significant adverse impacts to threatened, endangered, and special concern species and significant natural communities.

THE FUTURE WITHOUT THE PROPOSED PROJECT—2028

In the 2028 analysis year, modified and new connections to the southbound Hutchinson River Parkway (HRP) adjacent to the study area would result in loss of habitat and would have the potential to result in the relocation of some wildlife in the study area. Aside from these connections to the HRP, conditions in the study area are expected to remain substantially the same in the 2028 No-Action condition as in the 2023 No-Action condition.

THE FUTURE WITH THE PROPOSED PROJECT —2028

Construction of Phase II would be complete in 2028. Phase II of the proposed project would comprise construction of Buildings 5, 6, and 7, Building 5/7 Garage, and Parking Garage 2. Phase II project elements occupy approximately one quarter of the project site and are located in the northeast quadrant of the project site.

GROUNDWATER, FLOODPLAINS, AND WETLANDS

Conditions regarding groundwater, floodplains, and wetlands under the 2028 analysis year are expected to be similar to those under the 2023 analysis year. Therefore, as was concluded for the 2023 analysis year, the construction and operation of the proposed project in the 2028 analysis year would not result in significant adverse impacts to groundwater, floodplains, and wetlands.

TERRESTRIAL RESOURCES

Vegetation and Ecological Communities

Ecological communities disturbed by construction activities during Phase II of the proposed project would be similar in composition to those disturbed during Phase I. With the completion of Phase II in 2028, the proposed project would result in approximately 17 acres of disturbance to vegetated ecological communities and the removal of approximately 70 trees from the project site. The proposed project would replace the removed trees with a greater number of trees as part of the proposed project's landscaping. All Phase II construction would occur with the same tree protections in place as under Phase I. In addition, similar post-construction landscaping and green infrastructure used under Phase I would be implemented under Phase II.

Therefore, as concluded for Phase I in the 2023 analysis year, the construction and operation of the proposed project in the 2028 analysis year would not result in significant adverse impacts to vegetation and ecological communities.

Wildlife

Wildlife within the study area would be subjected to similar disturbance and temporary displacement during Phase II of the proposed project, but to a lesser degree due to the smaller area of disturbance compared to Phase I. Buildings 5, 6, and 7, with a maximum height of approximately 258 feet, would also consider implementing the same recommended design features to reduce potential bird collisions.

Therefore, construction and operation of the proposed project in the 2028 analysis year would not have significant adverse impacts to wildlife at the individual or population level.

THREATENED, ENDANGERED, AND SPECIAL CONCERN SPECIES AND SIGNIFICANT NATURAL COMMUNITIES

Phase II construction is limited to the northern portion of the study area, where no willow oaks or other federal- or state-listed endangered, threatened, and special concern species, or significant natural communities occur.

Therefore, construction and operation of the proposed project in the 2028 analysis year would not have significant adverse impacts to threatened, endangered, and special concern species and significant natural communities.

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