A. INTRODUCTION AND SUMMARY OF FINDINGS

This chapter considers the potential for the Proposed Action to have a significant adverse visual, shadow, and/or pedestrian-level wind impact, as well as discusses the potential effects on community character from those impacts. Potential impacts on identified aesthetic resources and vantage points were analyzed in accordance with the adopted DEIS Scoping Outline (**Appendix A-1**), and the New York State Department of Environmental Conservation (NYSDEC)'s Assessing and Mitigating Visual Impacts policy memorandum (DEP-00-2, last revised December 13, 2019) on assessing and mitigating effects on aesthetic resources (the "NYSDEC Guidance").

Based on the analysis, the Proposed Action would not result in significant adverse visual impacts to identified aesthetic resources or sensitive vantage points, though it would result in changes to existing views of the Project Sites. The Proposed Project buildings would create shadows and would have the potential to change the view of the Hudson River, Palisades, Yonkers, and/or New York City skyline from certain locations. However, as discussed below, with one exception, these potential impacts would not be considered a significant adverse impact under the NYSDEC Guidance or relevant New York City Environmental Quality Review (CEQR) guidance.

The Proposed Project would cast new incremental shadows¹ on a number of parks, plazas, sunlight-sensitive historic sites, portions of the daylighted Saw Mill River, and the Hudson River. Generally, these new shadows would be of limited extent and/or duration, and/or would occur at times when usage would typically be light, such as early in the morning, and would not substantially affect the use, character, vegetation, or habitats of the open space and natural resources or, in the case of the historic resources, the ability of the public to appreciate their historic or architectural significance. However, the impact of shadows on Mt. Carmel Baptist Church, a S/NR-eligible complex at 175 Nepperhan Avenue, could potentially be significant, depending on use patterns, as discussed in Section C.5 below. As noted therein, this resource would also receive shadows if the Chicken Island Site were developed under the existing zoning.

The Proposed Project would lead to generally higher pedestrian-level wind speeds around the Project Sites. During the summer, wind speeds along the sidewalks around the Project Sites would generally remain acceptable. During the winter, uncomfortable conditions at several locations on the sidewalks around the Project Sites would be experienced for limited duration. Measures to mitigate potentially uncomfortable wind conditions, such as landscaping, wind screens, or canopies will be explored during final site plan design. Wind gust speeds that have the potential to adversely affect pedestrians are currently experienced at the street level in the downtown proximate to taller structures, such as the residential buildings on Pier Pointe Street, west of the

¹ An incremental shadow is the new shadow that a building or structure resulting from a proposed project would cast on a sunlight-sensitive resource during the year and, therefore, takes into account shadows cast by existing buildings.

Teutonia Site. The buildings of the Proposed Project would be anticipated to result in similar conditions during the most extreme conditions. Given the expected infrequency of these conditions and the context of a densely constructed downtown, the impacts are not considered significant.

As described below, as well as in the other analyses within this DEIS, the Proposed Project would be consistent with the pedestrian-oriented, higher-density urban fabric of downtown Yonkers. The Proposed Project buildings feature active, ground floor uses fronting on well-designed sidewalks and public spaces. The façades of the Proposed Project buildings have been designed to add visual variety to the pedestrian landscape as well as break down the massing of the residential towers. Together with the addition of new pedestrian streets, plazas, and connections at Chicken Island and North Broadway, these architectural design features are consistent with the character of development that is expected given the Project Sites' prominence within downtown.

B. COMMUNITY CHARACTER AND VISUAL RESOURCES

B.1. METHODOLOGY

B. 1.a. Visual and Aesthetic Resources

The thresholds identified in the NYSDEC Guidance are useful in determining whether a change in visibility may result in a significant adverse impact. The NYSDEC Guidance draws a sharp distinction between a "public" impact, which could occur as a result of an impact to a public resource, and an "individual" concern, which results from a belief that a property or neighborhood is within the viewshed of a project. This is an important distinction in that it differentiates mere visibility of a building/structure from a public right-of-way or private lands, from visibility from designated sensitive resources. Once it has been determined that a project is in the viewshed of a designated sensitive resource, the significance of the view is assessed in the overall context of the viewshed.

The NYSDEC Guidance provides that a "visual impact" occurs when "the mitigating effects of perspective do not reduce the visibility of an object to insignificant levels. Beauty plays no role in this concept" (NYSDEC Guidance, p. 10). Atmospheric perspective, which is described in the NYSDEC Guidance as the "reduction in intensity of colors and the contrast between light and dark as the distance of the objects from the observer increases" and which is a product of the natural particles within the atmosphere that scatter light, serves to minimize the significance of the building in the overall viewshed. Visual impact is also affected by the overall character of the surrounding landscape, including the presence (or absence) of similar structures within the viewshed that contribute to the overall character of the landscape. Views of the Project Site must therefore be assessed in the context of visibility of similarly sized structures both on and off the Project Sites.

The NYSDEC Guidance provides that an "aesthetic impact" occurs "when there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility, even startling visibility of a project proposal, should not be a threshold for decision making. Instead, a project, by virtue of its visibility, must clearly interfere with or reduce the public's enjoyment and/or appreciation of the appearance of an inventoried resource. (NYSDEC Guidance, p. 9).

Thus, mere visibility is not a threshold of significance. The significance of the visibility depends on several factors: presence of any designated historic or scenic resources within the viewshed of the project, distance to the resource, general characteristics of the surrounding landscape, and the extent to which the visibility of the project interferes with the public's enjoyment or appreciation of the designated resource. A significant adverse visual impact would only occur when notwithstanding the mitigating effects of design or perspective, including distance and intervening topography and vegetation, the visibility of the Proposed Project significantly detracts from the public's enjoyment of a sensitive resource.

To evaluate the potential visual and aesthetic impacts of the Proposed Project, a vantage point analysis was performed. A three-dimensional computer model of the Proposed Project was created, which was then superimposed on photographs taken from the vantage points identified by the approved Scoping Document. It is important to note that while the architectural details of the buildings have not been finalized, the photosimulations are reflective of the design intent of the buildings.

B.1.b. Community Character

The character of a community "relates not only to the built and natural environments of a community, but also to how people function within and perceive that community." As such, this chapter includes a discussion of "the role that the Project Sites play with respect to the character of the surrounding area and the Project Sites' role as major development sites in the City's downtown core." While the visual character of the Sites is a large, and important, component of this assessment, other characteristics, such as how people interact with the Sites and experience the Sites, are also analyzed. Other potential impacts of the Proposed Project, such as socioeconomic and traffic impacts, may also influence the character of the community and are discussed in subsequent chapters of this DEIS.

B.2. EXISTING CONDITIONS

B.2.a. Project Sites

This section describes the visual character of the Project Sites and their immediate surroundings. Photographs of existing conditions within each of the Project Sites and in the areas immediately surrounding the Project Sites are provided in Figures 3-3 to 3-5, with the locations of each photograph indicated in Figures 3-1 and 3-2. Section B.2.b includes a description of a wider area surrounding the Project Sites.

B.2.a.i Teutonia Site

The Teutonia Site is approximately one-acre in size, and is bounded by Buena Vista Avenue to the east, the Metro-North Railroad ("MNR") right-of-way to the west, a renovated brick loft-style mixed commercial and residential building at 92 Main Street to the north, and the Queens Daughters Daycare facility in a well-maintained brick building at 73

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² SEQR Handbook. NYSDEC, 2020.

³ Approved *DEIS Scoping Document*. Appendix A-1.

Buena Vista Avenue to the south (see Views 1 to 3, **Figures 3-3a to 3-3b**). The Teutonia Site is a rectangular-shaped vacant property, containing young trees and shrubbery. A chain-link fence encloses the property along Buena Vista Avenue. The visual character surrounding the Teutonia Site varies. Several of the two- to three-story residential buildings on the east side of Buena Vista Avenue have boarded up windows, overgrown lawns, and are generally in need of repair. Along the Hudson River, west of the Teutonia Site, are several newer, well maintained multi-family buildings.

Located within 700 feet of the Yonkers Train Station and Larkin Plaza, the Teutonia Site is in the heart of downtown Yonkers. At more than an acre, it represents a relatively large parcel within the downtown that is currently vacant. As described in Chapter 2, "Land Use, Zoning, and Public Policy," the Teutonia Site has been the focus of development projects for over a decade, with the goal of not only adding new residents downtown, but also extending the street life from downtown south along Buena Vista Avenue.

The immediate context of the Teutonia Site is a mix of residential, commercial-retail, and transportation uses and parking facilities (see View 4, **Figure 3-3b** and View 5, **Figure 3-3c**). Buena Vista Avenue is a two-way north-south street with two lanes of traffic and sidewalks on both sides. The east side of Buena Vista Avenue, facing the Teutonia Site, is occupied by a one-story retail building, three-story residential buildings, some of which are derelict, and a vacant lot behind a chain-link fence.

Hudson Street terminates at Buena Vista Avenue, immediately northeast of the Teutonia Site (see View 5, **Figure 3-3c**). Hudson Street is densely developed, with a three- to six-story parking garage at the northeast corner with Buena Vista Avenue, and a one-story retail building at the southeast corner.

B.2.a.ii Chicken Island Site

The Chicken Island Site comprises two irregularly shaped parcels totaling 5.25 acres. The larger parcel, or the "Palisade Avenue Parcel," is bounded by James and Henry Herz Streets to the west, New School Street to the east, Palisade Avenue to the north, and Nepperhan Avenue to the south. The smaller parcel, or "New School Street Parcel," is bordered by John Street to the north, New School Street to the west, Nepperhan Avenue to the south, and an adjacent parcel to the east. The Palisade Avenue Parcel contains a surface parking lot (see View 6, Figure 3-4a). The New School Street Parcel is a vacant lot with mature trees and a grassy area (see View 7, Figure 3-4a). The Saw Mill River runs diagonally through the eastern portion of the New School Street Parcel and continues in a culvert under the southern portion of the Palisade Avenue Parcel.

The Chicken Island Site, until a few years ago, was a City-owned surface parking lot. Acquired by the City in the 1940s, the Chicken Island Site

serves as a physical and visual break from the active, pedestrian-oriented uses of Getty Square one-block to the west and Palisade Avenue across the street to the north. Sitting close to both Getty Square and the City government offices, the Chicken Island Site had been the focus of numerous development plans over the years, the most recent being the River Park Center proposal in the 2000s. In 2019, the City sold the Chicken Island Site to the Applicant with the express goal of redeveloping the Site.

The context of the area immediately surrounding the Chicken Island Site is low-rise commercial buildings along Palisade Avenue and New Main Street (see Views 8 to 11, **Figure 3-4b and Figure 3-4c**). Palisade Avenue is a one-way east-west street with one lane of traffic, located immediately north of the Project Site. The north side of Palisade Avenue is developed with one- to three-story mixed-use buildings that have retail spaces on the ground floor and residential and commercial uses on the upper stories. Most of the buildings are brick pre-war row buildings in fair condition. The ground floor retail façades have been modified over the years to accommodate awnings and security doors. West of the Palisade Avenue Parcel are several City-owned properties, including City Hall, 87 Nepperhan Avenue, and the Government Center Parking Garage.

James Street is a two-way north-south street with two lanes of traffic, located immediately west of the Chicken Island Site. The west side of James Street is developed with a low-rise office building with a brown and metal façade and a one-story painted brick supermarket. To the west of the Chicken Island Site and adjacent to the privately owned extension of Henry Herz Street is a landscaped City park (constructed as Phase III of the City's Saw Mill River daylighting project). Farther west, New Main Street is a commercial corridor with one- to four-story commercial and mixed-use buildings lining both sides of the street.

South of the Chicken Island Site, Nepperhan Avenue has six lanes of traffic and serves as a major east-west corridor through the City. Nepperhan Avenue south of the Chicken Island Site is developed with low-density commercial buildings including restaurants and an auto repair shop. North of the Chicken Island Site, the intersection of New School Street and Palisade Avenue/Elm Street is developed with automobile service shops, a gas station, and a coffee shop. Further east, a surface parking lot is located along Elm Street, and a Baptist church fronts Nepperhan Avenue.

B.2.a.iii North Broadway Site

The North Broadway Site is located east of North Broadway and includes lots fronting on North Broadway, as well as lots fronting on Baldwin Place and Overlook Terrace, which are accessed from Locust Hill Avenue (see View 12, **Figure 3-5a**). The approximately 2.13-acre North Broadway Site includes all or a portion of 14 tax lots: five lots front onto North Broadway, five along Overlook Terrace, three on Baldwin Place, and the interior portion of a lot (Lot 48) fronting on North Broadway.

Eleven of the lots have existing buildings, while four are vacant. As discussed in Chapter 4, "Cultural Resources," of these 14 tax lots, six (6) lots are located in the S/NR-eligible Yonkers Downtown Historic District. As set forth in OPRHP's September 2013 Resource Evaluation, the Yonkers Downtown Historic District is S/NR-eligible under National Register Criterion C as a representative and largely intact urban downtown core containing a variety of commercial, religious, civic, and residential building types and architectural styles built between the mid-1800s and mid-1900s.

North Broadway in the vicinity of the North Broadway Site is a one-way northbound street with sidewalks and parking permitted on both sides of the street. Parcels fronting North Broadway do not have driveways or off-street parking and the buildings are constructed to occupy the entire frontage. The buildings are primarily brick, are in good condition, and have heights ranging from one to five stories. The street is lined with decorative light fixtures. The North Broadway Site lots with frontage along North Broadway are improved with one- to three-story commercial buildings within a block face of similarly scaled buildings (see View 13, **Figure 3-5a**).

The five North Broadway Site lots that front Overlook Terrace are improved with two multi-family residential buildings that are four and five stories tall, and a two-and-a-half story residence along the north side of the street (see View 12, Figure 3-5a). On the south side of Overlook Terrace is a two-and-a-half story residence with a three-story rear addition. Adjacent to the residence is a vacant lot largely overgrown with mature shrubbery and trees. The scale of the existing buildings on the North Broadway Site are generally consistent in scale with those buildings on Overlook Terrace and Locust Hill Avenue that are outside of the Site (see View 12, Figure 3-5a and View 15, Figure 3-5b). The North Broadway Site lots along Baldwin Place include a vacant property largely overgrown with mature shrubbery and trees (Section 2, Block 2018, Lot 71), a vacant two-story residence (Section 2, Block 2018, Lot 75), and a three-story residential house (Section 2, Block 2018, Lot 79) (see View 14, Figure 3-5b). These structures are generally consistent in scale with the proximate buildings that are outside of the North Broadway Site.

As described more completely in Chapter 5, "Geology, Soils and Topography," the North Broadway Site generally slopes westward from Locust Hill Avenue on the east of the Site, to North Broadway on the west side of the Site. The North Broadway Site has two localized high points along Baldwin Place (elevation 120 feet) and Overlook Terrace (elevation 104 feet). The North Broadway Site slopes downward from these points in all directions. The lots south of the high point in Overlook Terrace are lower, at elevation 100 feet and slope down towards the back of the buildings developed along North Broadway. The slopes behind the buildings are steeper than 10 percent and are on top of a 10-foot-high retaining wall. The elevation of North Broadway is approximately 40

feet. As such, the parcels fronting Overlook Terrace and Baldwin Place are accessed from those streets, which in turn are accessed from Locust Hill Avenue given the significant grade difference between the North Broadway street-level and the Overlook/Baldwin street-level. Neither Overlook Terrace or Baldwin Place connect to North Broadway. To access the lots, one has to drive or walk up Locust Hill Avenue from Palisade Avenue.

Surrounding land uses immediately proximate to the North Broadway Site on Overlook Terrace and Baldwin Place are primarily single- and multifamily houses. One block north of the North Broadway Site, located between Locust Hill Avenue and North Broadway, is "Cromwell Towers," a 317-unit, 12-story multifamily structure. Land uses are generally lower-density and more residential to the east of the North Broadway Site; however, there are several mid-rise apartment buildings immediately to the east of the Site along Locust Hill Avenue and Palisade Avenue.

B.2.b. Visual Impact Study Area

The ¼-mile area around the Project Sites (the "Visual Impact Study Area") includes the densely developed urban core of the downtown, characterized by mid- and high-rise apartment and office buildings, mixed-use corridors of street level retail with residences and offices on the upper stories, the historical civic and commercial hub of the City, Getty Square, as well as new redevelopment projects that serve as focal points for the downtown, including the daylighted Saw Mill River and the new Larkin Plaza buildings. Building heights within the downtown core range from one- to twenty-four stories. The tallest buildings in Yonkers are the Seven Pines Tower (278 feet) and St. Casimir Apartments (277 feet), which are located outside of the 1/4 mile study area. The waterfront within the Visual Impact Study Area is separated from the Project Sites by the by the MNR Hudson Line and Yonkers Train Station. Van der Donck Park, located inland, offers views of the Hudson River and Palisades beyond. The periphery of the Visual Impact Study Area is developed with five- to six- story multi-family residences and apartment buildings, as well as streets of two- to three- story rowhouses. The City is characterized by a varied topography. As further described below, several parks and neighborhoods are located on hills that offer long distance views of the Hudson River and Palisades.

The primary street corridors through the Visual Impact Study Area are not laid out in a grid pattern. Rather, streets are curvilinear in response to the area's varied topography. As a result, city blocks vary in size. The Visual Impact Study Area is generally bisected by Nepperhan Avenue/Prospect Street, a six-lane east-west corridor through the center of the Visual Impact Study Area. Broadway is a four lane north-south curvilinear road that intersects with Nepperhan Avenue near the center of the Visual Impact Study Area. The MNR right-of-way passes north-south through the Visual Impact Study Area to the west of the Project Sites. Riverdale/Warburton Avenue is another primary corridor, passing north-south through the Visual Impact Study Area.

Sections B.2.c and B.2.d of this chapter describe and illustrate the inventoried and identified visual and aesthetic resources within the Visual Impact Study Area.

B.2.c. Inventory of Aesthetic Resources

As described above, the NYSDEC Guidance is focused on the visibility and visual character of projects as viewed from sensitive aesthetic resources. Consistent with the NYSDEC Guideline, **Table 3-1** presents an inventory of state- or federally designated aesthetic resources within the Visual Impact Study Area, as well as additional public vantage points identified by the Lead Agency in the Scoping Document as sensitive locations warranting further review, which are not officially designated. Photographs of existing conditions within the Visual Impact Study Area are provided in Figures **3-6a** through **3-6o** and **Figures 3-8a through 3-8c** with the location of each photograph indicated in **Figures 3-1 and 3-2**, and an aerial view of the Visual Impact Study Area shown in **Figure 3-7**.

Table 3-1
Inventory of Aesthetic Resources and Sensitive Vantage Points

Inventory of Aesthetic Resources and Sensitive Vantage Points	
Resource Category ¹	Resources Located within a ¼-mile Radius of the Project Site
Historic Resources	1. Trolley Car Barn, 92 Main Street (S/NR-listed)
listed or eligible for	2. USPS Yonkers Main Post Office, 79 Main Street (S/NR-listed)
inclusion on the State	3. Yonkers Railroad Station, 1 Buena Vista Avenue (S/NR-eligible)
or National Registers of	4. Yonkers Recreation Pier, 99 Main Street (S/NR-eligible)
Historic Places (S/NR) ²	Yonkers Downtown Historic District (S/NR-eligible)
, , ,	 Otis Elevator Factory Complex, 9 Bashford St, 20 Wells Ave, 29 Wells Ave, 45 Woodworth Ave (S/NR-eligible)
	7. North Yonkers Pumping Station, 19 Alexander Street (S/NR-eligible)
	8. Building at 21 Alexander Street (S/NR-eligible)
	9. City Jail Building, 24 Alexander Street (S/NR-eligible)
	10. Building at 153 N. Broadway (S/NR-listed)
	11. Community Baptist Church & Church House, 156-160 North Broadway (S/NR-listed)
	12. Copcutt Mansion, St. Casmirs Church & Rectory, 239 Nepperhan Avenue (S/NR-listed)
	13. Mott Mill, 11-23 St. Casimir Avenue (S/NR-listed)
	14. 2.5-story brick residence, 103 Elm Street (S/NR-eligible)
	15. Mt. Carmel Baptist Church, 175 Nepperhan Avenue (S/NR-eligible)
	16. Polish Community Center, 92 Waverly Street (S/NR-listed)
	17. Yonkers Health Center, 8 Nepperhan Avenue (S/NR-eligible)
	18. Fire Station No. 6, 81 Oak Street (S/NR-eligible)
	19. Yonkers Masonic Temple, 130 South Broadway (S/NR-eligible)
	20. Former Saunders Trades School, 104 South Broadway (S/NR-eligible)
	21. St. Mary's Roman Catholic Church, 95 South Broadway (S/NR-eligible)
	22. YMCA Building, 87 South Broadway (S/NR-eligible)
	23. Yonkers City Hall, 40 South Broadway (S/NR-eligible)
	24. Proctor Theater, 53-57 South Broadway (S/NR-listed)
	25. Philipsburg Building Apartments, 2-8 Hudson Street (S/NR-listed)
	26. St. John's Episcopal Church, 1 Hudson Street (S/NR-listed)
	27. Residential building, 116 Buena Vista Avenue (S/NR-eligible)
	28. Bell Place – Locust Hill Avenue Historic District (S/NR-listed)
	29. Philipse Manor Hall & Caretaker's Cottage, 29 Warburton Avenue (S/NR-
	listed, NHL)
State Parks	N/A
NYS Heritage Areas	Philipse Manor Hall State Historic Site
State Forest Preserve	N/A
National Wildlife	
Refuge	N/A
National Natural	
Landmark	N/A

Table 3-1 (cont'd) Inventory of Aesthetic Resources and Sensitive Vantage Points

Resource Category ¹	Resources Located within a ¼-mile Radius of the Project Site
National Park System	N/A
Rivers Designated as	- "
National, State, Wild,	
Scenic, or Recreational	N/A
Site, area, lake,	
reservoir, or highway	
designated or eligible	
for designation as	
scenic, including NYS	
Scenic Byways	N/A
State or federally	
designated trail	N/A
Adirondack Park	
Scenic Vista	N/A
State Nature and	
Historic Preserve Areas	N/A
Palisades Park	Palisades Interstate Park in New Jersey is located across the Hudson River,
	immediately west of the study area
Bond Act Properties	
purchased under	
Exceptional Scenic	NIA
Beauty category	N/A
National Heritage	Marinia D. Hinghay Hydron Divon Valley National Haritage Area
Areas	Maurice D. Hinchey Hudson River Valley National Heritage Area
Local Resources	4 Jan Daniel Danie 44 Danie Chroat City of Vankara
Public Parks	van der Donck Park, 41 Dock Street, City of Yonkers Washington Park, 40 South Broadway, City of Yonkors
	Washington Park, 40 South Broadway, City of Yonkers Ditkin Park, 03 Legyet Hill Avenue, City of Yonkers
	3. Pitkin Park, 93 Locust Hill Avenue, City of Yonkers
	 War Memorial Park, 287 Nepperhan Avenue, City of Yonkers Esplanade Park, 100 Main Street, City of Yonkers
	·
	 Pride Park, 107 Buena Vista Avenue, City of Yonkers Habirshaw Park, 35 Alexander Street, City of Yonkers
	8. Getty Square
	Getty Square Phase III of the Saw Mill River Daylighting Area, Nepperhan Avenue and
	New Main Street, City of Yonkers
Local Landmarks	Philipse Manor Hall and Caretaker's Cottage, 29 Warburton Avenue, City of
Lucai Landinains	Yonkers (also S/NR-listed)
1	Philipse Manor Historic District, City of Yonkers
	Richard Haas Mural Historic District
Sensitive Vantage	Grant Park, Park Avenue and High Street, City of Yonkers
Points	Fleming Park, Prescott Street, City of Yonkers
1 011110	Dunwoodie Golf Course, 1 Wasylenko Lane, City of Yonkers
	Sutherland Park, Park Hill Heights, City of Yonkers
	JFK Marina, 1 John F Kennedy Memorial Drive, City of Yonkers
	6. Anthony O'Boyle Memorial Park, 169 Hawthorne Avenue, City of Yonkers

Notes: N/A = no resources located within 5 miles of the Project Sites.

¹ Categories as established by the NYSDEC Guidance.

² Twelve properties listed on the State and/or National Registers of Historic Places and 18 properties determined eligible for such listing were identified in the Visual Impact Study Area. These properties are described further in Chapter 4, "Historic and Cultural Resources."

B.2.d. Description of Inventoried Aesthetic Resources and Sensitive Vantage Points

The following section provides a detailed description of the aesthetic resources and sensitive vantage points listed in **Table 3-1**. With the exception of the historic resources listed or eligible for inclusion on the State or National Registers of Historic Places, each resource is described in the context of its neighborhood.

B.2.d.i Downtown Yonkers

This section provides an overview of the visual character of the downtown followed by a discussion of the inventoried resources.

Downtown Yonkers is generally defined as that area between Chicken Island, Getty Square, City Hall (Nepperhan Avenue at South Broadway) and the MNR right-of-way. The Teutonia Site, Chicken Island Site, and the North Broadway Site are located within this densely developed urban core. (See **Figures 3-6a to 3-6g** for photographs of the downtown.)

The downtown block pattern varies in size and is generally oriented in north-south and east-west directions. The order of this pattern is disrupted by Nepperhan Avenue, which curves west-southwest from Elm Street to where it intersects with South Broadway (see View 16, Figure 3-6a). North Broadway also curves, in a north-south direction, from its intersection with Nepperhan Avenue to the north (see View 17, Figure 3-6a). Within the downtown, larger blocks are located along the north side of Nepperhan Avenue. The downtown is a transit hub, with a high concentration of Westchester County BeeLine bus routes located around Getty Square, Washington Park and Larkin Plaza, and multiple bus routes that follow New Main Street, Broadway, Palisade Avenue, and Riverdale/Warburton Avenue.

The downtown is characterized by a dense mix of building types, sizes, and building ages, including government buildings, modern mid-rise (five- to eight-story) and high-rise (eight- to 25-story) apartment buildings, and two- to four-story brick buildings with ground floor retail and upper floor residences and offices (see Views 16 to 27, Figures 3-6a to 3-6f). Recent improvements serve as focal points for the neighborhood; these include the high-rise mixed-use buildings at the corner of Main Street and Warburton Avenue and the landscaped van der Donck Park surrounding the daylighted Saw Mill River (see View 28, Figure 3-6g). Smaller public squares and parks are distributed within this portion of the Visual Impact Study Area. A very few vacant lots are present throughout the downtown. The southwestern periphery of the downtown, along Prospect Street, Buena Vista Avenue and Hawthorne Avenue, is less densely developed, comprising low-rise multi-family residences, vacant lots, surface parking, and parking garages.

Nepperhan Avenue is a six-lane road supporting traffic in both directions. The road includes traffic lights at its intersections with Riverdale Avenue, Broadway, New Main Street, New School Street, and Elm Street within the study area. One-story commercial properties line Nepperhan Avenue, including a fast food restaurant, hardware store, and several four-story

multi-family residential buildings. There are direct views of the Chicken Island Site from Nepperhan Avenue in the Visual Impact Study Area.

Main Street is an east-west, two-lane street that is lined with mixed-use buildings that rise two to six stories (see Views 18 and 19, **Figures 3-6b**). Modern residential buildings are concentrated in the center of the downtown and along Main Street. The 16- and 25-story modern Sawyer Place towers at 49 Main Street are clad in brick and glass, with parking garage entrances and pedestrian entrances facing Main Street. Across the street, 66 Main Street is an eight-story modern mixed-use building with a glass and brick façade. Other major corridors through the downtown include the four-lane north-south Warburton Avenue and Riverdale Avenue. The wide corridor is characterized by two- to six-story masonry buildings with commercial ground floors. Smaller side streets within the downtown, including New Main Street and Hudson Street, which generally have smaller lots developed with mixed-use buildings that typically have ground floor retail and residential and office uses on the upper stories (see View 23, **Figure 3-6d**).

The downtown is anchored by Getty Square, a paved public plaza and landscaped traffic island located at the junction of North Broadway, South Broadway, Main Street, and Palisade Avenue (see Views 24 and 25, Figures 3-6e). The square is surrounded by one- to three-story commercial and mixed-use buildings with ground floor retail, as well as the stone St. John's Episcopal Church located to the south. Mid-rise commercial buildings, including an approximately 12-story office building at 20 South Broadway, are visible to the south along South Broadway. A street clock stands at the center of a landscaped triangle, immediately south of the Belgian block-paved plaza. Along Palisade Avenue, there are limited northeast views of the Chicken Island Site from Getty Square. There are also partial northern views of the North Broadway Site from Getty Square.

Washington Park occupies the southern portion of the block bounded by North Broadway to the west, Nepperhan Avenue to the south, and New Main Street to the east (see View 26, Figure 3-6f). The park is elevated above the streets, with a tall stone retaining wall along Nepperhan Avenue, a staircase and terraced lawn connecting to North Broadway, and the multi-level Government Center Garage forming the eastern boundary with New Main Street. Due to its elevation, there are some views of the Hudson River and Palisades from the park. These views are partially obstructed by existing buildings within the downtown and along the waterfront. Washington Park contains mature trees and lawns, with paved paths. Yonkers City Hall, located near the center of the park and on the top of a hill, is a stone-clad building with a central tower. The brick and stone-clad five-story 87 Nepperhan Avenue building is located in the southeast corner of the park. Due to the Government Center Garage that forms the eastern boundary of the municipal offices and park, views from Washington Park to the Chicken Island Site are limited.

A pedestrian bridge over Nepperhan Avenue connects Washington Park to another superblock that contains the three-story Yonkers Police Headquarters building at 104 South Broadway and adjacent Robert W. Cacace Justice Center at 100 South Broadway, and a large surface parking lot to the north (see View 27, **Figure 3-6f**). The parking lot is bounded to the west, north and east by a dense buffer of mature trees.

Dock Street, in the northwest portion of the Study Area, is an east-west one-way street from Warburton Avenue to Buena Vista Avenue. West of Buena Vista Avenue it becomes a two-way street as it crosses beneath the MNR tracks and dead ends at Peene Ln on the Hudson River. The street is relatively open in comparison to the rest of downtown, with parks and open space on both sides and views west to the Hudson River. Van der Donck Park extends along the south side of the street, containing landscaped walking paths along the recently daylighted Saw Mill River (see Views 28 and 29, Figure 3-6g). The Philipse Manor Hall State Historic Site is on the north side of the street, containing a historic stone house set back from the street behind a grass lawn. To the south, with frontage along Warburton Avenue, Nepperhan Street and Main Street, is a new construction 25-story glass and brick-clad apartment building and a mid-rise apartment tower, connected by a two-story plinth. Near the west end of Von der Donck Park, Yonkers Train Station is located at the southwestern corner of Dock Street and Buena Vista Avenue. The brick train station building features a large round-arched windows and terra cotta ornament. The Yonkers Public Library and Board of Education complex, which includes a modern four-story stone and glass addition to the historic former Otis Elevator factory overlooks the north side of van der Donck Park.

Buena Vista Avenue is a north-south residential street in the southwest portion of the Visual Impact Study Area. Buena Vista Avenue borders the Teutonia Site to the east. Within the Study Area, the east side of the street comprises multi-family residences and vacant lots. The west side of the street comprises a renovated two-story mixed-used building, daycare center, and multi-family residences. The building heights on Buena Vista Avenue range from two to five stories.

van der Donck Park and Larkin Plaza

Van der Donck Park is located at 41 Dock Street, approximately 550 feet north of the Teutonia Site and approximately 300 feet west of the North Broadway Site. The rectangular city park is bounded by Dock Street to the north, Nepperhan Street to the south, Warburton Avenue to the east, and Buena Vista Avenue to the west. Yonkers Train Station is located immediately west of the park. The park is a passive recreation area, with rows of benches facing north and south beside landscaped areas with shrubs and trees, and surrounding the Saw Mill River (see Figure 3-6g). The benches have southern views of the Teutonia Site, and east views of the North Broadway and Chicken Island Sites.

Washington Park and City Hall

Washington Park and City Hall are located on 40 South Broadway, approximately 550 feet west of the Chicken Island Site and approximately 1,100 feet from the Teutonia Site. As described above, the park has frontages along South Broadway, Nepperhan Avenue, and New Main Street; however, it is elevated above the surrounding streets and access is limited to South Broadway. Yonkers City Hall is a S/NR-eligible building located at the center of the site, characterized by its tall clock tower and stone cladding. The park is a passive recreation area, with bench seating around a small landscaped area with mature trees (see **Figure 3-6f**). Benches in the park have views in all directions, including west toward the Teutonia Site.

Getty Square

As described above, Getty Square is a paved public plaza and landscaped traffic island located at the junction of Main Street, North Broadway, South Broadway, and Palisade Avenue. The triangular traffic median is planted with an approximately 1,200 square foot (sf) fenced garden that showcases a clock at the center. Pedestrians walking across Getty Square have views east to the Chicken Island Site and views north to the North Broadway Site (see **Figure 3-6e**).

Saw Mill River Daylighting Area, Nepperhan Avenue and New Main Street, City of Yonkers

Phase 3 of the Saw Mill River Daylighting project occupies a block to the immediate west of the Chicken Island Site bounded by New Main Street, Nepperhan Avenue, the privately owned extension of Henry Herz Street (which is part of the Chicken Island Site), and Ann Street. This park offers passive recreation including walking paths, seating areas, and views of the daylit Saw Mill River. Pedestrians using this park have existing views of the Chicken Island Site to the east and north.

Philipse Manor Hall State Historic Site (Philipse Manor Hall and Caretaker's Cottage)

The Philipse Manor Hall and Caretaker's Cottage is located at 29 Warburton Avenue, approximately 300 feet west of the North Broadway Site and 820 feet northwest of the Chicken Island Site. The historic house is a local landmark, S/NR-listed property, and a National Historic Landmark (NHL) (see **Figure 3-6n**).

The Maurice D. Hinchey Hudson River Valley National Heritage Area The New York State designated Maurice D. Hinchey Hudson River Valley National Heritage Area encompasses the Visual Impact Study Area. The Hudson River Valley National Heritage Area was designated by the federal government in 1996. The National Heritage Area extends from Troy to New York City within New York State and is managed by the Hudson River Valley Greenway. As described in Chapter 2, "Land Use, Zoning, and Public Policy," the Hudson River Valley Greenway Strategic Plan was established in 2014.

Philipse Manor Historic District

Philipse Manor Historic District comprises the east side of Warburton Avenue, between Wells Avenue and Manor House Square. The Philipse Manor Historic District is an unbroken row of mid to late 19th century buildings that front on Warburton Avenue. The buildings that comprise the historic district have western views of the Philipse Manor Hall site, which is directly across the street. Southeast views of the North Broadway and Chicken Island Project Sites may be possible from the roofs and upper floors of the properties within this district.

Richard Haas Mural Historic District

The Yonkers City Council established the Richard Haas Mural Historic District in downtown Yonkers in 2016. When established, the District comprised three buildings at the intersection of Main Street and Riverdale Avenue and included a triptych of multi-story murals. However, one of the three buildings has since been demolished. The murals were painted by world-renowned muralist and Yonkers resident Richard Haas in 1997. The Project Sites are not currently visible from this location.

B.2.d.ii Waterfront

This section provides an overview the visual character of the Hudson River waterfront in the Visual Impact Study Area followed by a discussion of the inventoried waterfront resources

The Hudson River waterfront is located west of the MNR right-of-way. Within the Visual Impact Study Area, Alexander Street and Water Grant Street pass north-south between the railroad tracks and the eight- to fourteen-story buildings that overlook the river. Underpasses beneath the railroad tracks connect these streets to the downtown. These east-west connections are located at Wells Avenue, Dock Street, and Main Street. See **Figures 3-6h** to **3-6i** for views to and from the waterfront.

Within the Visual Impact Study Area, the Hudson River waterfront is characterized by large-footprint mid-rise buildings on large lots separated by streets or piers (see View 30, **Figure 3-6h**). East of the railroad tracks, the topography rises to Buena Vista Avenue (see View 31, **Figure 3-6h**). Along the waterfront, west of the mid-rise buildings, Esplanade Park extends from Main Street south. The 1,000-foot-long waterfront esplanade connects to the City's historic municipal pier, with western views across the Hudson River to the Palisades.

Alexander Street is a two-way north-south street with sidewalks on both sides. The street extends behind the waterfront buildings at a lower grade than the railroad tracks. South of Wells Street, Alexander Street is developed with eight- to fourteen-story apartment buildings on large lots. These apartment buildings are primarily modern structures with brick cladding and simple tower forms. North of Wells Street, Alexander Street is developed with a mix of uses which include the River Club at Hudson Park Apartments, Yonkers Paddling and Rowing Club, the Westchester County operated North Yonkers Pump Station, the Beczak

Environmental Education center, Habirshaw Park at 35 Alexander Street, industrial warehouses, and a 251-unit apartment building at 79 Alexander Street. The former City Jail, located at 24 Alexander Street, is a two-story historic brick building on the east side of the street.

Palisades Interstate Park

Palisades Interstate Park is located on the west side of the Hudson River, approximately 1.4 miles from the Chicken Island Site, 1.3 miles from the North Broadway Site, and 1 mile from the Teutonia Site. The park has views of the Yonkers waterfront and upland development, including the Project Sites (see View 32, **Figure 3-6i**).

Habirshaw Park

Habirshaw Park, also known as Beczak Park, is a County-owned riverfront park on Alexander Street in the northwestern edge of the Visual Impact Study Area. The approximately two-acre park includes a restored tidal marsh and beach. The Sarah Lawrence College Center for the Urban River at Beczak is also part of the park, providing an outdoor classroom. The park is adjacent to industrial uses, with the North Yonkers Pump Station located to the south, comprising a historic brick building with a tall brick chimney on the east end. Immediately north of the park a former warehouse and surface parking for school buses is being redeveloped with a new residential development. Inland, the adjacent land uses obscure southern and northern viewsheds from the park. However, the shoreline offers expansive views to the north and south. The park has passive recreation uses, with bench seating facing the riverfront (see View 33, Figure 3-6i). The park offers inland views of the downtown, including views toward the Chicken Island and North Broadway Sites.

Esplanade Park and Yonkers Recreation Pier

Esplanade Park is a public park, connecting to the Yonkers Recreation Pier at 99 Main Street, which is a State and National Register of Historic Places eligible resource. The park has bench seating and paths along the riverfront. Similar to Habirshaw Park, the esplanade and pier offer expansive views to the north and south, and of the Hudson River. Inland views are intermittently obstructed by existing buildings and the MNR tracks. The southern end of Esplanade Park has existing views of the Teutonia Site.

B.2.d.iii Residential Neighborhoods south of Nepperhan Avenue

The southern half of the Visual Impact Study Area, south of Prospect Street and Nepperhan Avenue, is predominantly residential. The streets within this portion of the Visual Impact Study Area form an irregular grid. Street trees are sparsely planted, and sidewalks line both sides of the roads. Residential buildings are primarily detached multi-family houses and apartment buildings. South Broadway bisects the eastern and western portions of the study area; rather than residential uses, this road is lined with institutional buildings. See **Figures 3-6j and 3-6k** for photographs of the southern half of the Visual Impact Study Area.

The area's block pattern varies in size and is oriented in generally north-south and east-west directions. Blocks in this part of the Visual Impact Study Area are larger than those downtown, and typically elongated in shape with shorter east-west streets and long north-south avenues. South Broadway curves in a north-south direction through the center of the neighborhood from its intersection with Nepperhan Avenue to the south. Immediately west of South Broadway, the blocks are irregular in shape and very large, containing large lots with apartment buildings and institutional uses.

South of Prospect Street, Buena Vista Avenue and the west side of Hawthorne Avenue are characterized by two-story single- and multifamily houses (see Views 34 and 35, **Figure 3-6j**). The houses are typically set back behind small yards and have side driveways. Utility poles and wires line each street, with some mature street trees. There are several vacant lots on these streets. The east side of Hawthorne Avenue is occupied by mid-rise, approximately 16-story, apartment buildings, a surface parking lot, and a four-story parking garage. Pride Park is a public park located on the west side of Buena Vista Avenue. The park includes playground equipment and mature trees.

Views north and south on Buena Vista and Hawthorne Avenues are long, due to the slope of the street, however these views are limited to the street corridor as views to the east and west are obstructed by existing buildings and tree cover. Views to the north on Buena Vista and Hawthorne Avenues include the taller buildings located downtown and along the waterfront. The Teutonia Site is visible to the north along Buena Vista Avenue.

Riverdale Avenue is a four-lane north-south road with a median strip planted with trees, and parking and sidewalks on both sides of the street. The road is developed with large, mid-rise and high-rise (more than 15-story) apartment buildings on large lots, some of which are set back from the street behind landscaping (see Views 36 and 37, **Figure 3-6k**). Several of the buildings have ground floor retail. Parking garages are also present along the street.

South Broadway is a two-lane road that curves through the area in a south-southeast direction from Nepperhan Avenue to Park Hill Avenue. South Broadway is lined with hospital buildings for Saint Joseph's Medical Center, a church, a senior living home, municipal buildings, as well as a ten-story apartment building at the corner of Court Street and South Broadway. Most buildings are set back behind a yard or paved drive. The municipal parking lot that lines the east side of the street is at a higher grade than the street, obscuring some long views from South Broadway.

The eastern portion of the area, located south and southeast of Nepperhan Avenue and east of New Main Street, is densely developed with predominantly multi-family residential buildings on small lots and brick warehouses and garages. Streets in this portion of the Visual Impact

Study Area are typically a single lane with parking and sidewalks on both sides. Utility poles and wires line each street, with few street trees. East of Waverly Street, the topography of the neighborhood is relatively flat. West of Waverly Street, the topography slopes downward approximately 60 feet in elevation, from approximately 130 feet in elevation at Waverly Street to approximately 70 feet in elevation at School Street. School Street and Morgan Street are narrow streets lined with older brick warehouses and auto repair shops. The buildings meet the sidewalk and abut one another, forming a solid one- to three-story brick streetwall along the sidewalk. To the east, the streets are typically developed with two-to four-story houses set back behind small yards and retaining walls. The houses are generally spaced apart with small yards and driveways between the buildings. The Enrico Fermi School occupies much of the block with frontage along Maple Street to the north, Linden Street to the west, and Poplar Street to the south. The Chicken Island Site is visible to the west and northwest from the boundary of the residential neighborhood, where the residential streets intersect with Nepperhan Avenue.

Residential streets in the eastern portion of the area provide west and northwest views of the Chicken Island Site. At the intersections with Nepperhan Avenue, the residential streets in the eastern portion of the area have west views of the Chicken Island Site. Due to their orientation, the streets in the neighborhood do not have views of the Project Sites east of the intersection with Nepperhan Avenue.

The residential Hawthorne Avenue, located in the southwestern portion of the area, also has northern views of the Project Sites just south of its intersection with Prospect Street (see further discussion below).

Prospect Street, located in the western portion of the area, is a residential street near the intersection with Riverdale Avenue. At the corner of Riverdale Avenue and Prospect Street, the apartment buildings meet the sidewalk. Riverdale Avenue is a wide street with long views to the north.

Buena Vista Pride Park

Buena Vista Pride Park is located mid-block on the west side of Buena Vista Avenue between Prospect Street and St. Mary Street. The park is approximately 500 feet south of the Teutonia Site. This 0.2-acre city park is bounded by the MNR right-of-way to the west, Buena Vista Avenue to the east, and three-story residential buildings to the north and south. The park is improved with a playground and benches. Due to existing deciduous trees and buildings both adjacent to the park and across the railroad tracks, the park has obstructed and seasonal views of the Hudson River and Palisades.

B.2.d.iv Locust Hill and Palisade Avenues

The northeastern portion of the Visual Impact Study Area is primarily residential, comprising large apartment complexes, such as the 317 unit and 12-story tall Cromwell Towers, two- to three-story residential

buildings and parks. Locust Hill Avenue and Palisade Avenue are two-way north-south streets lined with houses and apartment buildings. The neighborhood is characterized by the elevation change, as Locust Hill Avenue ascends approximately 120 feet between the junction with North Broadway and the intersection with Cromwell Place, and Palisade Avenue ascends approximately 100 feet between North Broadway and the intersection with Lafayette Place. Due to the elevation change, few cross streets connect the Avenues and the area is defined by large elongated blocks. Due to their elevation, the residential streets have views of the North Broadway Site and the Chicken Island Site. See **Figures 3-6l to 3-6m** for views of Locust Hill and Palisade Avenues.

Palisade Avenue is a two-lane road with parking on both sides and sidewalks. The southern end of Palisade Avenue forms the northern boundary of the Chicken Island Site. Adjacent to Chicken Island, the northern side of Palisade Avenue is developed with one-to three-story mixed-use buildings with ground floor retail and apartments and offices above. North of the Chicken Island Site, the west side of Palisade Avenue is developed with older, multi-family wood frame houses with small front yards and the east side of the street is dominated by the William A Schlobohm Houses, a large complex of seven, X-plan buildings. The approximately seven-story buildings are set back from the street and at a lower elevation. East of these buildings, and down a steep slope, War Memorial Park (discussed further below) is located in the northeast corner of the study area. The City park includes baseball diamonds and a track. The Saw Mill River follows the northern boundary of the park.

Locust Hill Avenue is a two-lane road with parking on the east side of the street (see View 38, Figure 3-61). The street has mature street trees, and utility poles on both sides of the street. Some properties along the Locust Hill Avenue and Overlook Terrace are occupied by older two- to threestory residences set back from the street with grassy front yards, while other parcels are densely developed with four- to five-story apartment buildings (see Views 38 and 39, Figure 3-61). At the top of the hill, north of Cromwell Place, large apartment buildings are a dominant building type. The Cromwell Towers Apartments occupy a site between Locust Hill Avenue and North Broadway, on the north side of Cromwell Place. The apartment building is an imposing, approximately ten- to twelvestory H-plan brick structure (see View 40, Figure 3-6m). The North Broadway elevation is dominated by the parking garage façade. Pitkin Park, described further below, is located farther north and on the west side of Locust Hill Avenue. The park's west side features a tall stone retaining wall along North Broadway.

Bell Place-Locust Hill Avenue Historic District

The Bell Place-Locust Hill Avenue Historic District contains eight residences with associated carriage houses or garages and is architecturally significant as one of the last relatively intact and cohesive

mid-19th century residential neighborhoods remaining in Yonkers. 4 Most of the buildings in the Historic District are constructed of brick. The National Register of Historic Places Inventory Nomination Form further describes the Historic District as having been "developed in the second half of the 19th century as a residential enclave", which "retains its distinct 19th century ambience while much of the fabric of the surrounding area has witnessed extensive 20th century intrusions and has suffered from urban blight and decay." The National Register of Historic Places Inventory Nomination Form for the Historic District indicates that the district boundaries were drawn to exclude intrusions that are clearly delineated by changes in terrain/topography and by the distinctly different character of the surrounding area, including the "massive" 11story apartment tower to the north on Cromwell Place and the "severely altered mid and late 19th century buildings to the south (see Figure 3-6n). The North Broadway Site is located south of the Historic District and across Baldwin Place from a residence, 1 Bell Place, which is located in the Historic District.

War Memorial Park

War Memorial Park is located at the northeastern corner of the area, approximately 1,000 feet west from the Chicken Island Site. The 13.2-acre city park offers active recreation use, including a basketball court, three baseball diamonds and a track, and comprises a half circle-shape parcel bounded by Copcutt Lane to the south and the Saw Mill River to the west, north and east. Views south and west from the park towards the Project Sites are obscured by the towers of the William A. Schlobohm housing development, as well as the wooded area bordering the Saw Mill River (see **Figure 3-60**).

Pitkin Park

Pitkin Park is located at the northern edge of the area, approximately 1,100 feet north from the Chicken Island Site, approximately 600 feet north of the North Broadway Site, and approximately 1/2-mile northeast of the Teutonia Site. The 1.4-acre City park offers active and passive recreation uses, including basketball courts, playgrounds, and bench seating. The park offers long views of the Hudson River and Palisades to the west and southwest (see **Figure 3-60**). However, views to the south are obstructed by taller buildings adjacent to the park.

B.2.d.v Industrial Neighborhood

Industrial uses are located in the northwestern portion of the Visual Impact Study Area, along the west side of Warburton Avenue and the north side of Wells Avenue near the MNR railroad tracks. A large rail car

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⁴ Ibid, Section 8, "Significance," page 1.

⁵ Ibid, Section 7, "Description," page 2.

⁶ National Register of Historic Places Inventory-Nomination Form, Bell Place-Locust Hill Avenue Historic District, prepared by OPRHP, 1985, Section 7, "Description," page 1.

manufacturing facility is located at 10 Woodworth Avenue, comprising a complex of warehouses between Warburton and Woodworth Avenues. The warehouse is visible from Warburton Avenue but set back behind a fence and at a lower grade. The west side of the property is developed with a surface parking lot. This area is also the location of the Lionsgate Studio, a new film studio being developed that would sit on approximately 2.5 acres.

B.2.e. City Identified Vantage Points

While not state- or federally designated aesthetic resources, the following additional vantage points were identified by the City as locally significant.

Grant Park, Park Avenue and High Street

Grant Park is located approximately 1/4-mile north of the Visual Impact Study Area, bounded by High Street, Park Avenue, St. Joseph's Avenue and Grant Park Drive. The 3.9-acre City park has active and passive recreation uses, including a playground and an open grass area with paths (see View 45 of **Figure 3-8a**). The park has views of downtown, including the Project Sites.

Dunwoodie Golf Course

Dunwoodie Golf Course is located approximately 3/4-mile east of the Visual Impact Study Area. The golf course has forested areas and a varied topography, with distant views of downtown to the west (see View 46 of **Figure 3-8a**).

Fleming Park

Fleming Park is located approximately 1/3-mile east of the Visual Impact Study Area. The 29-acre City park has passive and active recreation uses, including bench seating, baseball diamonds, playgrounds and a soccer field. The flat park is at a lower elevation than the adjacent Prescott Street, which is developed with two- to four-story houses; therefore, western views of the downtown, including the Project Sites, are not available from Fleming Park (see **Figure 3-90**).

Sutherland Park

Sutherland Park is located approximately 1/2-mile south of the Visual Impact Study Area in the Park Hill neighborhood. The 8.5-acre City park is primarily dedicated to passive recreation uses, with bench seating overlooking the scenic vistas to the north and west, which include the Hudson River valley. Walking paths and a wooded nature area are also on site (see View 47 of **Figure 3-8b**).

JFK Marina

JFK Marina is located approximately 1 mile north of the Visual Impact Study Area and along the Hudson River. The City park includes a boat launch and a parking lot. The park has views to the south of the Yonkers waterfront, including the Glenwood Power Plant and the approximately 26-story multifamily building along Ravine Avenue at Glenwood Avenue (see View 48 of **Figure 3-8b**).

Anthony O'Boyle Memorial Park

Anthony O'Boyle Memorial Park is located approximately 900 feet south of the Visual Impact Study Area on Hawthorne Avenue. The 3.4-acre City park has passive and active recreation uses, including basketball courts, a playground, kickball diamond, and bench seating (see View 49 of **Figure 3-8c**).

B.3. FUTURE WITHOUT THE PROPOSED PROJECT

In the Future without the Proposed Project, no immediate changes to the use of the Project Sites are anticipated. The Teutonia Site would remain a vacant lot, while the North Broadway Site would continue to comprise a mixture of commercial and residential buildings, as well as vacant properties. The Chicken Island Site's surface parking lot would remain as is, while the lot on the east side of New School Street would remain vacant. However, as described in Chapter 2, "Land Use, Zoning, and Public Policy," absent approval of the Proposed Zoning, the Project Sites could be developed in conformance with existing zoning. The potential development scenario and its potential impacts, are discussed more fully in Chapter 17, "Alternatives."

As described in Chapter 2 "Land Use, Zoning, and Public Policy," there are 24 projects currently planned or under construction in the Land Use Study Area. These projects would largely revitalize vacant and underperforming sites in the Land Use Study Area. The largest of these include a 1,395-unit apartment complex along the waterfront on Alexander Street, a 550-dwelling unit building at 150 Downing Street, and a 300-dwelling unit building at 44 Hudson Street.

B.4. FUTURE WITH THE PROJECT (BUILD CONDITION)

The Proposed Project would redevelop, reuse, and revitalize the Project Sites and would physically and visually connect the sites to downtown Yonkers. The Proposed Project would include buildings with a variety of types and sizes, including residential towers ranging between 23 and 41 stories (see views of the Proposed Project in **Figures 3-9a to 3-9r**).

B.4.a. The Proposed Projects

B.4.a.i Teutonia Project

The Teutonia Project would include two new residential towers with a maximum height of 435 feet, or approximately 41 stories. As described in Chapter 1 "Project Description," the buildings would include approximately 10,000 sf of active walkable street level commercial and retail space. The lower six stories of the building would comprise a podium, which would serve as a parking facility for residents with approximately 956 parking spaces. Vehicular access to the Teutonia Project would be provided from two, two-way driveways along Buena Vista Avenue. Entrances to the retail spaces and residential lobby would be located along Buena Vista Avenue.

The Teutonia Project would include an active streetfront with approximately 10-foot-wide sidewalks and evenly spaces street trees. Approximately 10,000 sf of retail space would be included, which could

be utilized for restaurant, retail, or other commercial purposes, which are intended to activate the streetfront and support a vibrant downtown area. As part of the Teutonia Project, the Applicant would reconstruct the sidewalk fronting the Teutonia Site and provide new street trees (see Figure 1-13 and Appendix C-1). The building is designed with two towers set atop a six-story podium. The northern tower would be "L" shaped, with the bulk of the tower set back from Buena Vista Avenue. The southern tower would be rectangular and setback 5.5 feet from Buena Vista Avenue. Both towers would be 435 feet tall (see Appendix C-2). Each residential tower would also be serviced by a ground floor lobby with pedestrian access from Buena Vista Avenue. The approximately 350-foot-long podium along Buena Vista Avenue would be broken up through the application of several different façade designs, creating the appearance at ground level of several different buildings (see Figure 3-10). The materials and designs chosen for the façades were drawn from the existing and historical building treatments in the City. In addition, and as described more fully in Chapter 4, "Cultural Resources," the Applicant intends to incorporate elements of the former Teutonia Hall facade into the design of the Teutonia Project. Elements of the Buena Vista Avenue façade of the former Teutonia Hall, which was previously dismantled, were palletized, inventoried, and moved off site to a storage facility. The Applicant intends to incorporate elements of the former Teutonia Hall façade into the design of the Teutonia Project, in coordination with OPRHP and the City and based on the condition of the materials.

The façade of the residential towers would be constructed in a mix of brick and glass. Several design techniques are proposed to break down the massing of the towers (see Figures 3-10, 3-11a, and 3-11b). First, the brick "grid" elements frame every two stories, rather than one story, which visually breaks up the massing of the building. Second, the grid element is reduced in scale as the building gets taller, eventually disappearing from the façade completely for the upper floors. This helps create the illusion of the tower tapering. Finally, the northern tower is proposed in an "L" shape, with a recessed middle component, which further breaks down the perceived horizontal mass.

The six-story podium would be the visual focus for pedestrians along Buena Vista Avenue. As described above, the uses proposed for the street front, together with the architecture of the podium, were chosen to continue the pedestrian-focused energy of downtown south along Buena Vista Avenue. Reinforcing the centrality of the pedestrian to the downtown experience with strong street-level architecture and active uses is consistent with existing and desired character of downtown.

The sections below analyze other potential impacts to community character that may result from the visibility of the Teutonia Project from vantage points throughout the City, through shadows cast by the proposed buildings, and through the pedestrian-level wind impacts of the Project.

B.4.a.ii Chicken Island Project

The Chicken Island Project would include five mixed-use buildings ranging in height from 250 feet to 400 feet, or approximately 23 to 38 stories constructed over five stages. The buildings would include approximately 70,000 sf of street-level retail/personal service/commercial space. These spaces would have frontages along Palisade Avenue, James and Henry Herz Streets, New School Street, John Street, and the new "Centre Street," passing north-south through the center of the Site. Office and residential spaces would be included in the upper stories of the buildings, with ground floor lobbies. The Chicken Island Project façades are conceptually proposed with brick and glass, as well as individual retail/commercial storefronts.

The Chicken Island Project would transform a privately owned, municipally operated, surface parking lot into a vibrant extension of the downtown urban fabric of the City (see **Figure 3-12**). A new street, provisionally called "Centre Street," would be created through the Chicken Island Site to connect Palisade Avenue to Ann Street and New Main Street. Pedestrian activity would be encouraged within the Chicken Island Project through the installation of wide sidewalks with street trees, well-marked pedestrian crosswalks, and active streetfronts and public plazas. Street trees and furniture would be installed along the Project Site street frontage on Palisade Avenue, where the sidewalk would also be widened to approximately 13 feet. Along public streets, LED street lights would be installed, while the areas within the pedestrian plazas would be lit with a combination of shorter light poles and bollards.

The higher-density and larger-scale development proposed for the Chicken Island Project would be located towards the eastern and southern portions of the Chicken Island Site. The northwestern portion of the Chicken Island Site would contain lower height buildings, which would be more consistent with the existing built character of Getty Square and the surrounding area (see **Figures 3-13 and 3-14**).

As further discussed in Chapter 1, "Project Description," "Building 1" would be constructed between John Street and Palisade Avenue (see Figure 1-17). Building 1 would be a stepped building that, on its James Street frontage (to the west), would have two (2) stories of commercial retail and commercial office uses. Moving east, the building would gradually step up to 10 stories at the new Centre Street, with these upper levels featuring residential and amenity spaces. Finally, a 38-story residential tower would rise from the eastern portion of the building, adjacent to the existing firehouse (see Figure 1-18, Figure 1-19, Figure 1-20, and Figure 1-21).

"Building 1a" would be a one-story, double-height retail pavilion with approximately 8,000 sf of retail/restaurant space. This pavilion would anchor the western side of the Chicken Island Project and transition the scale of the project from the proposed towers to the east to the lower-rise existing buildings and park to the west. The Applicant also proposes to

construct a temporary, approximately 4,000-sf one-story retail building southwest of Building 1a, across Centre Street, as part of Stage 1, to anchor the entry to the Chicken Island Project and announce the Site as a pedestrian and neighborhood destination. The temporary building would be removed in Stage 3.

The Palisade Avenue frontage of the Chicken Island Project would be built out in Stage 1. Set back behind an approximately 13-foot-wide sidewalk would be a three-story podium with active streetfront commercial retail uses. The podium would rise approximately 45 feet above street level at James Street and, due to the changing grade of the Site, would be approximately 35 feet above grade level adjacent to the firehouse. The façade of this podium would be designed to resemble multiple separate storefronts and individual buildings through horizontal and vertical façade articulations (see Figure 1-22 and Figure 3-15). The goal of this architecture is to reinforce the centrality of the streetlife and resemble the organic growth of a street over time (see Figure 3-16 and Figure 3-17).

Set back approximately 15 feet from the podium along Palisade Avenue would be the upper levels of Building 1 (see Figure 1-26). To the west of Centre Street, closer to James Street, the building would rise in a stepped fashion to approximately nine stories. Moving south along James Street, the building would step back down to five stories as the scale of the project transitions down towards the terraced pedestrian plaza south of Building 1 (see Figure 1-15). On the east side of Centre Street, a 38-story residential tower would rise, adjacent to the firehouse (see Figure 1-27).

Stage 2 of the Chicken Island Project would be the development of "Building 2" in the northern portion of the block formed by New School Street on the east, Centre Street on the west, John Street to the north, and Nepperhan Avenue to the south (see Figure 1-31 and Appendix C-5). Stage 2 would include 425 dwelling units in a multi-height building. Building 2 would sit on a six-story podium, with residential units rising above on the north, east, and west sides (see Figure 1-32, Figure 1-33, and Figure 1-34). The highest portion of Building 2 would be in the northeast corner, at the intersection of New School Street and James Street. From this 23-story, approximately 250-foot height, the building would step down to the south and west to 22, 19, 18, and 12 stories. The top floor of the residential building would contain indoor resident amenities and access to two outdoor amenity terraces; one to the south and one to the west. In the center of the building, on top of the podium, would be another, larger, amenity terrace, including an outdoor pool. Building 2 would contain approximately 10,000 sf of ground floor retail/restaurant space, located on Centre Street and New School Street.

The ground floor of Building 2 along Centre Street would be built out with double height commercial retail space that wraps around onto John Street (see Figure 1-35). The John Street frontage would be primarily built out with a double height residential lobby. The northeast corner of

the building at ground level would also feature a double height commercial retail space with access on both John Street and New School Street. This space would be approximately nine feet higher than the Centre Street space, owing to the change in the Site's topography.

Building 2's podium would encompass the width of the block from Centre Street to New School Street. The interior of this podium would be primarily used for vehicular parking, with the exception of the Centre Street frontage and the western portion of the John Street frontage, which would feature residential liner units (see Figure 1-36). Vehicular access to the garage would be from New School Street. The southern face of Building 2 would be developed so as to allow a floor-to-floor connection to Building 3, described below.

Stage 3 of the Chicken Island Project would be the removal of the temporary building constructed in Stage 1 and the development of "Building 3" in the central portion of the block formed by New School Street on the east, Centre Street on the west, John Street to the north, and Nepperhan Avenue to the south (see Figure 1-37 and Appendix C-6). Building 3's northern façade would connect to the southern façade of Building 2, such that the garages in the center of the two buildings' podiums would connect. Building 3 would include 425 residential units and 10,000 sf of ground floor commercial retail space. As with Building 2, Building 3 would include a six-story podium with parking in the middle and residential and retail uses lining the parking on the west and south sides. A 38-story, approximately 400-feet tall residential tower would rise from the southeast portion of the podium. The top floor of the tower would feature an indoor residential amenity space and outdoor amenity terrace. The roof of the podium level would also serve as an amenity terrace, connecting to Building 2's podium-level amenity terrace (see Figure 1-38, Figure 1-39, Figure 1-40, and Figure 1-41). Finally, two wide, publicly accessible pedestrian plazas, totaling approximately 13,869 sf, would be created to the south of Building 3.

The ground floor of Building 3 along Centre Street would include a driveway to the interior parking garage, the main pedestrian entrance to the residential building and lobby, and a large, double height commercial retail space fronting on Centre Street and the 13,850 sf publicly accessible pedestrian courtyard to the south (see Figure 1-42 and Figure 3-18). This courtyard would serve as the central gathering place in the southern end of Chicken Island and may feature outdoor dining and other programmed amenities. The residential tower would be located in the southeast corner of the building and would "overlap" the southeastern corner of the podium (see Figure 1-44). This configuration allows the building to maximize use of the Site, while keeping the foundation outside of the Saw Mill River culvert below.

As with Building 2, the six-story podium of Building 3 would span the width of the block between Centre Street and New School Street (see

Figure 1-45). Residential liner units would screen the garage from the west and south.

Stage 4 of the Chicken Island Project would be the development of "Building 4" in the southern portion of the block, between Nepperhan Avenue, the City's existing daylighted Saw Mill River park, and New School Street (see Figure 1-46 and **Appendix C-7**). Building 4 would have a one-story podium with a 23-story residential tower with 250 residential units and 10,000 sf of commercial retail space. The commercial retail space would be located on the ground floor fronting the pedestrian courtyard to the north and west (see Figure 1-47, Figure 1-48, and Figure 1-49). The residential tower would be located in the southwest corner adjacent to both Nepperhan Avenue and the City's existing daylighted Saw Mill River park (see Figure 1-50). The tower would include several distinct architectural styles to break down the massing of the building and provide visual interest (see Figure 1-51).

Chicken Island Stage 5 would be the development of "Building 5" on the "New School Street Parcel," which is located south of John Street and east of New School Street. The Saw Mill River traverses the eastern edge of this parcel. Building 5 would be constructed in the northwest portion of the parcel and consist of a seven-story, 58-foot-tall podium and a residential tower that extends to 26 stories in height (see Figure 1-52, Figure 1-53, Figure 1-54, and Appendix C-8). The L-shaped tower would have façades parallel to John Street and New School Street and would contain 250 residential units. In addition to the indoor residential amenity space on the top floor of the tower, the eastern roof of the podium would feature an outdoor rooftop terrace, looking out over the Saw Mill River. Wrapping around the New School Street and southern building frontages, the southwest corner of Building 5 would have 5,000 sf of ground floor commercial retail space fronting along the sidewalk planted with street trees (see Figure 1-55). South of Building 5 would be an approximately 3,500 sf publicly accessible open space adjacent to the currently daylighted Saw Mill River. The commercial space would be programmed with cultural events, including art exhibits and small scale music performances to integrate with this publicly accessible open space, creating a dynamic attraction (see Figure 1-56). Building 5 would also visually complement Buildings 2 and 3, as shown in Figure 1-57. The main pedestrian entrance to the residential lobby would be from the west side of the building, along New School Street (see Figure 1-56).

As described above, the Chicken Island Project would change the character of the Project Site by creating a new mixed-use development. The proposed changes would alter the streetscape by creating a pedestrian friendly environment that transforms the public realm and enhances the character surrounding the Chicken Island Site.

B.4.a.iii North Broadway Project

The North Broadway Project would include two new residential and commercial towers. The towers would both be approximately 300 feet in height, or 25 stories tall.

The North Broadway Project would contribute to the existing active pedestrian corridor along North Broadway. With the North Broadway Project, approximately 17,000 sf of commercial and office space would be located along North Broadway, with two 25-story residential towers constructed on the higher portion of the Site along Overlook Terrace and Baldwin Place. The streetfront on North Broadway would be similar in height to the existing buildings along the commercial corridor (see Figures 3-19, 3-20, and 3-21). Fronting North Broadway would be new retail and office spaces, a direct connection to the southern tower's residential lobby, and a grand public-staircase connecting North Broadway to the Locust Hill neighborhood (see Appendix C-9, Appendix C-10, and Appendix C-11).

Within the southernmost two lots of the Project Site fronting North Broadway, the Applicant proposes to build a three-story, multi-use building. The center two parcels fronting North Broadway would be improved with a one-story ground-floor commercial retail building, that would step up to three stories as it steps back from North Broadway. Just north of this building, would be a grand public-staircase that would link the downtown and Getty Square to the Locust Hill neighborhood. This staircase would be privately owned and maintained, but open to the public. The Applicant will work with the City to determine appropriate measures for safety and security. Its entrance would be across the street from the Mill Street portion of the daylighted Saw Mill River. The roofs of the stepped retail building would be publicly accessible terraces that would connect to the public staircase and provide unique and interesting new public gathering places (see Figure 3-22). The northernmost parcel fronting North Broadway would be improved with a three-story building that would connect to the northern residential tower. Within this structure would be a residential lobby and residential amenity spaces fronting North Broadway.

The 25-story northern residential tower at the north end of the North Broadway Site would be set on top of a 20-foot-tall podium along Baldwin Place. To the east of the tower would be an approximately 60-foot-tall parking structure, accessed from Overlook Terrace via Locust Hill Avenue. The parking garage would be partially screened with three-story townhouses to enhance and reinforce the residential character of that street. The southern residential tower, also 25 stories, would be located south of Overlook Terrace and be oriented more in a north/south direction. Both towers include step backs at step backs at 12, 18, and 24 stories.

The architecture of the North Broadway Project draws from the existing styles in the City and uses various techniques to break down the massing of the buildings, would maintain the street wall along North Broadway, and would complement existing buildings within the City (see Figure 3-22, Figure 3-23, Figure 3-24, Figure 3-25, Figure 3-26, and Figure 3-27). As with the Teutonia Project, the façade of the residential towers of the North Broadway Project features several steps and articulations and utilize a brick "grid" element to frame every two stories, rather than one story. The ground floor features strong vertical and horizontal architectural features that help define the centrality of the street level and differentiate the lower portion of the building. The townhouses along Overlook Terrace would be constructed with different façade styles, heights, and window placements to avoid a monolithic appearance and create more visual interest. While the parking garage would be open, large screens and decorative façade elements would evoke the architecture of the surrounding towers.

The proposed residential towers would be taller than the immediately surrounding buildings, which largely consist of two- to four-story houses on Baldwin Place and Overlook Terrace, and two- to four-story mixeduse buildings along North Broadway. However, the new buildings would be in a transitional location between this lower density residential area and the higher density downtown, where mid- and high-rise buildings are interspersed. In addition, other large-scale residential uses currently exist proximate to the North Broadway Site, including "Cromwell Towers" (317 units in a large-footprint 12-story building on Locust Hill Avenue) and "Sawyer Place" (438 units in two buildings 17 and 25 stories tall). The North Broadway Project is, in the Applicant's opinion, an appropriate location for the proposed density and building height and would be consistent with the existing land use trends of the area. The North Broadway Project would also serve to increase activity and investment in the Locust Hill neighborhood, which currently includes vacant and deteriorating structures, and would improve the character of the Project Site and surrounding streetscape.

B.4.b. Aesthetic Resources and Sensitive Vantage Points

The following section analyzes the potential visual impacts of the Proposed Project on the state and federally designated aesthetic resources and the City identified sensitive vantage points. To perform the analysis, photosimulations were prepared from the locations specified in the adopted Scoping Document that show not only the existing and proposed conditions, but that also illustrate the potential "maximum build-out" of the Project Sites that theoretically could be realized if the Proposed Zoning is adopted. The theoretical maximum build-out represents a worst-case scenario as it does not incorporate architectural and design features included in the Proposed Project. As shown on these photosimulations, the Proposed Project's architectural and design features that lessen the potential visual impacts from what could theoretically be developed under the Proposed Zoning.

B.4.b.i Downtown Yonkers

The urban neighborhood at the center of the Visual Impact Study Area would have views of the Proposed Project from the locations described below.

Residential streets in the downtown will have views of the Proposed Project. Locations along Buena Vista Avenue would have direct views of the Teutonia Project from immediately adjacent to the Teutonia Site, as well as from areas farther south, including those south of Prospect Street. As shown in Figure 3-9a, the Teutonia Project would be visible from Buena Vista and Prospect Streets. Hudson Street, a mixed-use corridor with some residential uses, would also have views of the Teutonia Project, including the northern residential tower and the upper stories of the southern tower (Figure 3-9b). The Teutonia Project would be approximately 20 stories taller than nearby buildings along the Yonkers waterfront, and 38 stories taller than buildings along Buena Vista Avenue. However, in the Applicant's opinion, the Teutonia Project would be consistent with other dense residential development in the area, including the tower apartments along nearby Hawthorne Avenue and Riverdale Avenue. Similarly, the Teutonia Project would provide active ground floor commercial uses along Buena Vista Avenue that would activate the street and enhance the pedestrian experience. As described above, the existing one- and two- family homes on Buena Vista Avenue in the vicinity of the Teutonia Site are in fair to poor condition and several have boarded up windows. In the Applicant's opinion, the new development and pedestrian improvements will improve the overall visual character of the street in a manner consistent with other new developments in the downtown and along the waterfront.

The façade of the Teutonia Project's podium would feature varied architectural treatments that would enhance the visual interest of the podium. The podium of the Teutonia Project would obscure a small portion of the Palisades that would otherwise be visible when looking down Hudson Street (see Figure 3-9b). However, the Palisades remain visible over the existing Trolley Barn building. Therefore, in the Applicant's opinion, although the Teutonia Project would introduce changes to the viewsheds of certain downtown residential streets, the changes would not constitute a significant adverse visual impact.

van der Donck Park and Larkin Plaza

Van der Donck Park and Larkin Plaza would have views of the North Broadway Project to the east, the Chicken Island Project to the southeast, and the Teutonia Project to the south. As shown in **Figure 3-9c**, the North Broadway Project residential towers and a small portion of the Chicken Island Project would be visible to the east. The views of the Proposed Project would be in the context of the existing development within the downtown. Given the distance from the park, the towers would be perceived to be similar, or smaller, in scale than the buildings of "Sawyer Place" at the east end of the park. In addition, as shown in the simulations,

the proposed residential towers on the North Broadway Site would feature various step backs and façade articulations that would add visual interest to the buildings and serve to reduce their visual impacts. Farther inland, the middle and upper floors of the North Broadway and Chicken Island Projects will be visible behind the existing buildings that front on Warburton Avenue.

As shown in **Figure 3-9d**, the west end of van der Donck Park would have views of the proposed towers of the Teutonia Project to the south. The proposed towers, at 41 stories, would be significantly taller than the existing three to five-story buildings along Buena Vista Avenue.

Van der Donck Park is an urban park surrounded by buildings ranging in height from one to 25 stories. The eastern edge of the park, which is at a higher elevation than the western edge, has partially obstructed western views of the Hudson River and Palisades beyond. On the western edge of the park, views of the Hudson River and Palisades are fully obstructed by existing buildings and the MNR right-of-way. The views of the Proposed Project, including views of the North Broadway and Teutonia towers would in the Applicant's opinion be compatible with views of similarly sized buildings in the vicinity of van der Donck Park, such as the existing approximately 9 to 12 story buildings along the Hudson River and the 25-story building at the eastern edge of the park, and would not obstruct existing views of the Hudson River or Palisades. Therefore, in the Applicant's opinion, the Proposed Project would not introduce views that are incompatible with the existing condition, and the viewshed would not substantially affect the user's enjoyment and use of the park.

Washington Park and City Hall

Washington Park and City Hall would have views of the Chicken Island Project to the northeast, the Teutonia Project to the west, and the North Broadway Project to the north. Inland views of the Chicken Island Project and North Broadway Project would include the upper stories of the proposed structures.

Washington Park has partially obstructed western views of the Hudson River and Palisades. As shown in the visual simulation in **Figure 3-9e**, the proposed towers of the Teutonia Project would be visible behind existing buildings and would partially obstruct portions of the view of the Palisades. The proposed towers would be relatively narrow, in comparison to other buildings in the area, and have been situated to maintain existing view corridors to the sides of, and between, the towers. As such, the Palisades would continue to be visible from Washington Park and City Hall through gaps between intervening buildings, including the towers of the Teutonia Project. Therefore, the Teutonia Project would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on the park.

Getty Square

Getty Square is located in a densely developed urban center. Pedestrians in Getty Square would have views of the North Broadway Project to the north, the Chicken Island Project to the east (see Figure 3-28), and the Teutonia Site to the west. Views from Getty Square would include the upper stories of the proposed North Broadway, Chicken Island, and Teutonia Project towers, which would be visible in the distance and above the existing one- to three-story buildings that surround the square. At the Chicken Island Site, a three-story podium with active streetfront retail and commercial uses would set back behind an approximately 13-footwide sidewalk. The podium would rise approximately 45 feet above street level at James Street and, due to the changing grade of the Chicken Island Site, be approximately 35 feet above grade level adjacent to the existing firehouse. The façade of this active podium would be designed to resemble multiple separate storefronts and individual buildings through horizontal and vertical façade articulations (see Figure 3-28 and Figure **3-15**). The goal of this architecture is to reinforce the centrality of the streetlife and provide an architecture that resembles organic growth of a street over time (see Figure 3-16 and Figure 3-17). In addition to these street-level uses, pedestrian activity would be encouraged within the Chicken Island Project through the installation of wide sidewalks with street trees, well-marked pedestrian crosswalks, and active streetfronts and public plazas. Street trees and furniture would be installed along the Project Site street frontage on Palisade Avenue, where the sidewalk would also be widened to approximately 13 feet.

The upper levels of Building 1 of the Chicken Island Project would be set back approximately 15 feet from the podium along Palisade Avenue. To the west of Centre Street, closer to James Street, the building would rise in a stepped fashion to approximately nine stories. As the building moves south along James Street, the building would step back down to five stories as the scale of the Chicken Island Project transitions down towards the public plaza and stair south of Building 1 (see **Figure 3-14**). On the east side of Centre Street, a 38-story residential tower would rise, adjacent to the firehouse.

Although the Chicken Island Project would introduce buildings that are taller than those within Getty Square, it is the Applicant's opinion that the pedestrian realm improvements, podium level architecture, and varied streetfront design are consistent with the character of Getty Square and will encourage and reinforce the pedestrian and commercial oriented nature of the square. The residential towers will help define the area, including Getty Square, as a center of urban revitalization. Therefore, it is the Applicant's opinion that the views of the Chicken Island Project would not constitute a significant adverse visual impact on Getty Square.

Saw Mill River Daylighting Area, Nepperhan Avenue and New Main Street, City of Yonkers

Phase 3 of the Saw Mill River Daylighting project is directly adjacent to the Chicken Island Site. Pedestrians using this park would have full views of the Chicken Island Project and its associated streetscape improvements. In addition, the upper stories of the North Broadway Project would be visible to the north from this location.

Philipse Manor Hall State Historic Site (Philipse Manor Hall and Caretaker's Cottage)

Philipse Manor Hall and Caretaker's Cottage would have views of the North Broadway Project and Chicken Island Project to the east and southeast, respectively. Views of the Teutonia Project to the southwest would be substantially obstructed by existing buildings, although some limited views may be possible from the southwest corner of the property. As discussed in Chapter 5 "Cultural Resources," Philipse Manor Hall and Caretaker's Cottage are located in an area that includes a variety of new construction, including 25-story buildings at Larkin Plaza, 12-story buildings along the waterfront to the north and west of the Teutonia Site, and 16-story residential buildings south of Prospect Street and east of Hawthorne Avenue. (See **Figure 3-9c** for a view towards Chicken Island and North Broadway from a location two blocks west of this resource.)

The Proposed Project would not obstruct significant views from or of Philipse Manor Hall State Historic Site. Therefore, the Proposed Project would not substantially affect user's enjoyment and use of the resource and would therefore not have a significant adverse impact on this resource.

Philipse Manor Historic District

Philipse Manor Historic District is located across the street from the Philipse Manor Hall State Historic Site. Views from this location would be essentially the same as the views from the Philipse Manor Hall State Historic Site described above. For the same reasons discussed above, the Proposed Project would not result in a significant adverse visual impacts to this resource.

The Maurice D. Hinchey Hudson River Valley National Heritage Area

The Hudson River Valley National Heritage Area encompasses the Visual Impact Study Area and the Project Sites. As described above, the Proposed Project would not result in a significant adverse visual impact to the Philipse Manor Hall State Historic Site. Additional discussion of the potential visual impacts of the Proposed Project on the Palisades Interstate Park is provided below. The Proposed Project would not result in a significant adverse visual impacts to the Hudson River Valley National Heritage Area.

Richard Haas Mural Historic District

The Richard Haas Mural Historic District is located approximately 600 feet southwest of the North Broadway Site, 815 feet west of the Chicken

Island Site, and 1000 feet northwest of the Teutonia Site. The upper stories of the North Broadway Project would be visible to the northeast and behind the existing two- to four-story buildings that front on Riverdale Avenue. Similarly, the upper stories of the Chicken Island Project would be visible in the skyline to the east. Partial views of upper stories of the Teutonia Project to the southeast may be feasible from points within the district, however views in this direction are obstructed by existing four- to 20-story buildings.

B.4.b.ii Waterfront

Palisades Interstate Park

Palisades Interstate Park, located on the west side of the Hudson River, has views of the Yonkers waterfront and upland development, including the Project Sites. Prominent in the existing view from this location are the American Sugar Refining plant, the new residential buildings along the waterfront, the apartments on Hawthorne and Riverdale Avenues, the new development at Larkin Plaza, Cromwell Towers, and other urban development throughout the City. Palisades Interstate Park also has views of the City of New York to the south and, given its significant elevation, of buildings in New Rochelle as well.

As shown in **Figure 3-9f**, the Proposed Project would be visible from Palisades Interstate Park, approximately one mile away. The new buildings would be viewed in the context of the existing urban development pattern of the waterfront and downtown of the City and would not fundamentally change the viewers perception of the urban center of the City. There are several buildings and structures in Yonkers, and New Rochelle in the distance, that pierce the horizon line. The Proposed Project buildings include varied architectural styles that would add visual interest to the view, but in the Applicant's opinion, it would not fundamentally change the urban character of the view. The buildings would be perceived as an evolution of the existing built environment, rather than a change in the character of the waterfront and downtown. As such, the Proposed Project would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on this resource.

Habirshaw Park

The primary views from Habirshaw Park are of the waterfront to the west. The Proposed Project would have no effect on waterfront views from Habirshaw Park.

Habirshaw Park offers inland views of the downtown including views toward the Chicken Island and North Broadway Sites. The upper stories of the North Broadway Project and Chicken Island Project would be visible from Habirshaw Park (see **Figure 3-9g**). To the south, the upper stories of the Teutonia Site may also be visible from Harbirshaw Park above the intervening multifamily buildings, but are not shown in this eastern view. The North Broadway Project's residential buildings would

appear slightly larger than the 25-story Sawyer Place building, visible to the right. The Chicken Island Project buildings, while taller than the North Broadway Project buildings, would appear to be the same scale, or lower, owing to their distance from this vantage point and the lower elevation of the Chicken Island Site. Taken together, the views east from this vantage point of the Proposed Project would be consistent with existing development in the area, which includes 25-story residential towers and other development in the foreground, and would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on this resource.

Esplanade Park and City Pier

Views of the Proposed Project would vary depending on the viewer's location within Esplanade Park. Most views of the Proposed Project would be obscured by the existing multifamily buildings along the waterfront. In certain locations, the top floors of the Teutonia Project may be visible above the existing buildings and in certain locations glimpses of the Chicken Island Project or North Broadway Project may be visible between existing buildings. In the Applicant's opinion, the limited views of the Proposed Project would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on this resource.

B.4.b.iii Residential neighborhoods south of Nepperhan Avenue

Residential neighborhoods south of Nepperhan Avenue would have views of the Proposed Project depending on location. East of the Chicken Island Site, the Chicken Island Project would be visible from Nepperhan Avenue (see Figure 3-9h). The Chicken Island Project would be visible over the one- to four-story buildings fronting Nepperhan Avenue. While the Sawyer Place building is currently visible looking west, the view of this building would be replaced with a view of Building 5 of the Chicken Island Project. Distant views of the Palisades, down the Elm Street corridor, would not be affected by the Chicken Island Project. As shown in Figure 3-9h, the Chicken Island Project uses varied architectural techniques, including stepped building designs, to lessen the visual impact of the Project. In the Applicant's opinion, visibility of the Chicken Island Project from this area would be consistent with current views of the densely developed downtown. From points to the east of this area, visibility of the Chicken Island Project would be obscured by existing development owing to the change in topography and the orientation of the street grid.

From further west, the Chicken Island Project would be visible from areas along Prospect Street. From the intersection of Buena Vista Avenue and Prospect Street, the Chicken Island Project would be slightly visible above the parking structure at the crest of the hill (see **Figure 3-9i**). These distant views would be minimal, and the buildings would appear to be similar in height to City Hall. From the crest of that hill, near the intersection of Riverdale Avenue and Prospect Street, the top floors of

the North Broadway Project buildings would be visible, as would the two tallest residential buildings of the Chicken Island Project (see **Figure 3-9j**). While taller than surrounding structures, the scale, tower design, and façade design are consistent with the densely developed downtown. Given the distance from this area to the buildings, they appear as similar in height to closer buildings of significantly shorter elevation.

As shown in **Figure 3-9k**, the Teutonia Project would be clearly visible at the intersection of Riverdale Avenue and Prospect Street. The buildings would be clearly taller than surrounding structures, including the multifamily building west of the Teutonia Site along the waterfront. The design of the Teutonia Project's towers, however, would preserve views of the Palisades from this vantage point, both through and to the sides of the proposed towers. The materials chosen for the façade would be consistent with the types of materials found in the downtown and the architecture would, as described above, help break down the massing and visual impact of the towers.

Views of the Teutonia Project from these residential neighborhoods would therefore not be a significant adverse visual impact. The Teutonia Site would continue to be viewed in the context of a dense downtown area, which is characterized by its views of large buildings and urban development to which the Teutonia Project would contribute.

Buena Vista Pride Park

Buena Vista Pride Park is located approximately 500 feet south of the Teutonia Site. Due to its elevation and mid-block location, views from the park are primarily of the surrounding buildings. At the entrance to the park, views of the Teutonia Project may be visible to the north, similar to that shown from the intersection of Buena Vista Avenue and Prospect Street. However, these views would be limited and would not obstruct significant views from the park or alter the character of the park. The Teutonia Project would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on the park.

B.4.b.iv Locust Hill and Palisade Avenues

The North Broadway Project and the Chicken Island Project would be visible from residential streets located northeast of the Project Sites. As shown in Figure 3-91, the north Broadway Project towers and Chicken Island Project Building 1 would be plainly visible from Locust Hill Avenue, near its intersection with Cromwell Place. The North Broadway Project towers would be taller than the surrounding residential buildings. However, they would be located one block south of the 12-story, 314-unit Cromwell Towers building. While taller, the North Broadway Project is consistent with urban character of the buildings in the foreground. As described above, the Applicant has designed the Project with materials and architectural features complimentary to the surrounding area, and in particular the prevailing character of the new construction buildings in downtown Yonkers. In the left of the view,

Chicken Island Project Building 1 would be visible. The building, set at a lower elevation, but rising 41 stories, would be clearly visible. However, the view down Locust Hill Avenue, including the view of City Hall, would be unaffected by the Chicken Island Project.

Bell Place-Locust Hill Avenue Historic District

The podium of the North Broadway Project, its north tower and parking structure would occupy the Baldwin Place frontage of the North Broadway Site. The brick clad north tower would sit on a 20-foot-tall podium, with the tower set back from the podium. The brick clad parking structure would be 60 feet tall, with two open parking decks at its upper levels and street level landscaping (see Figure 3-29). The use of brick would be consistent with the characteristics of the Bell Place-Locust Hill Avenue Historic District, which contains residences primarily constructed of brick, including 1 Bell Place. Landscaping would be provided along the Baldwin Street sidewalk, complementing the existing residential characteristics of the surrounding area. Although the North Broadway Project would be greater in scale and height than existing development on the North Broadway Site, it would not adversely affect the characteristics that qualify the Bell Place-Locust Hill Avenue Historic District for listing on the S/NR and would contribute to the mixed setting of the Historic District, which includes brick clad residences in its vicinity and the large apartment tower on Cromwell Place.

War Memorial Park

War Memorial Park is located approximately 1,000 feet west from the Chicken Island Site. Views south and west from the park are obscured by the towers of the William A Schlobohm housing development, as well as the wooded area bordering the Saw Mill River. As such, significant views of the Proposed Project from War Memorial Park are not anticipated.

Pitkin Park

Pitkin Park is located approximately 1,100 feet north of the Chicken Island Site, approximately 600 feet north of the North Broadway Site, and approximately 1/2-mile northeast of the Teutonia Site. This park offers long views of the Hudson River and Palisades to the west, which would not be affected by the Proposed Project. From the western edge of the park, a partially obstructed view of the Teutonia Site may be feasible to the southwest. In addition, there could be some partially obstructed inland views of the upper floors of the Chicken Island Project and North Broadway Project from this location. However, the limited views of the Project Sites would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on the park.

B.4.b.v Industrial Neighborhood

While the upper floors of the Proposed Project, especially the North Broadway Project and Teutonia Project, may be visible in the distance from this location, the Proposed Project is not anticipated to result in a significant adverse visual impact to the industrial neighborhood, which will continue to be understood as existing within and adjacent to a developing residential downtown area.

B.4.b.vi City Identified Vantage Points

Grant Park

Grant Park is located north of the Visual Impact Study Area. The park has primarily recreation uses, with bench seating oriented towards the distant views of the downtown, the top of the Palisades, and portions of the New York City skyline. As shown in **Figure 3-9m**, the Proposed Project would be visible from Grant Park. The new buildings would be distant and low on the horizon. The trees that border the southern side of the property would also continue to mostly obscure views from the park when in foliage. Views of the Palisades, New York City skyline, and other downtown development would remain. The visual change introduced by the Proposed Project would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on the park.

Dunwoodie Golf Course

Dunwoodie Golf Course is located east of the Visual Impact Study Area. The golf course has forested areas and a varied topography that is more than 200 feet higher than the Chicken Island Site, with distant west views of the City. As shown in **Figure 3-9n**, buildings at each Project Site would be marginally visible from Dunwoodie Golf Course during leaf off conditions. The distant view of the Project's buildings would be similar in character to the view of existing multifamily residential buildings. The trees within the golf course would also partially obscure views from the course when trees are in foliage. The Proposed Project would not significantly affect would not substantially affect user's enjoyment and use of the course and would therefore not have a significant adverse impact on this resource.

Fleming Park

Fleming Park is located approximately 1/3-mile east of the Visual Impact Study Area. The 29-acre City park has passive and active recreation uses, including bench seating, baseball diamonds, playgrounds and a soccer field. As described above, the Proposed Project would not be visible from the park or the immediately surrounding streets (see **Figure 3-90**).

Sutherland Park

Sutherland Park is located approximately ½-mile south of the Visual Impact Study Area in the Park Hill neighborhood. The 8.5-acre City park is located on a hillside and offers scenic western views of the Hudson River and Palisades as well as views of the New York City skyline and Hudson River to the south. As shown in **Figure 3-9p**, the Teutonia Project would be visible in northwest views from Park Hill. The towers of the Teutonia Project would be taller than other buildings in view, though this would not change the current context of the view. To the far

right of the view, the Chicken Island Project would be slightly visible through existing vegetation.

Views of the Teutonia Project and Chicken Island Project would be partially, or completely, obscured by foliage. The views northwest of the Palisades, Hudson River, and other downtown buildings would remain. While the Proposed Project would change the view from this location, the view would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on the park.

JFK Marina

As shown in **Figure 3-9q**, the Teutonia Project would be visible to the south from JFK Marina. Given the significant intervening distance, the tower would appear much smaller than the smokestacks at the Glenwood Power Plant or the multifamily building at the corner of Glenwood and Ravine Avenues. The buildings of the North Broadway Project and Chicken Island Project would be obscured by intervening topography and vegetation. These buildings are shown in a red dashed outline on the "Maximum Envelope" image and superimposed in front of the vegetation in order to illustrate the scale of potential views. The views of the Proposed Project would not substantially affect user's enjoyment and use of this resource and would therefore not have a significant adverse impact on this resource.

Anthony O'Boyle Memorial Park

As shown in **Figure 3-9r**, views of the Proposed Project north from O'Boyle Park would be extremely limited. The top floors of the Chicken Island Project would just be visible above the intervening buildings. Given the minimal visibility of the Proposed Project, the views would not substantially affect user's enjoyment and use of the park and would therefore not have a significant adverse impact on the park.

B.4.c. Conclusion

The Proposed Project has been designed to minimize visual impacts from sensitive resources within the Visual Impact Study Area. Although the Proposed Project would be visible from several studied locations, including public parks, the proposed buildings have been designed to maintain view corridors to the Hudson River and Palisades, and would not substantially change the character of the viewsheds, or interfere with or reduce the public's enjoyment and/or appreciation of, the identified resources. While visible, and in some cases appearing taller than proximate existing buildings, it is the Applicant's opinion that the Proposed Project would not change the character of the downtown, which would continue to be perceived as a dense urban core with residential, commercial, and industrial buildings in close proximity. For the reasons discussed above, the Proposed Project would not result in a significant adverse visual impact.

B.5. MITIGATION OF IMPACTS

No mitigation measures are required.

C. SHADOWS

C.1. INTRODUCTION

The Proposed Project would cast new incremental shadows⁷ on certain parks, plazas, sunlight-sensitive historic sites, portions of the daylighted Saw Mill River, and the Hudson River. Generally, these new shadows would be of limited extent and/or duration, and/or would occur at times when usage of an affected resource would typically be limited, such as early in the morning, and would not substantially affect the use, character, vegetation, or habitats of the open space and natural resources or, in the case of the historic resources, significantly alter the public's use of the resource. However, the impact of the new shadows could potentially be significant, depending on use patterns, on Mt. Carmel Baptist Church, a S/NR-eligible facility, as discussed below. As noted below, this resource would also receive shadows if the Chicken Island Site were developed under the existing zoning.

C.2. **DEFINITIONS**

The shadow analysis was performed according to the methodology presented in Chapter 8, "Shadows," of the 2020 New York City CEQR Technical Manual.

C.2.a. Definitions

Incremental shadow is the additional, or new, shadow that a structure would cast on a sunlight-sensitive resource.

Sunlight-sensitive resources are those that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Such resources generally include the following:

- *Public open space* such as parks, beaches, playgrounds, plazas, schoolyards (if open to the public during non-school hours), greenways, and landscaped medians with seating.
- Features of architectural resources that depend on sunlight for their enjoyment by the public. Only the sunlight-sensitive features need be considered, as opposed to the entire resource. Such sunlight-sensitive features might include design elements that depend on the contrast between light and dark (e.g., recessed balconies, arcades, deep window reveals); elaborate, highly carved ornamentation; stained glass windows; historic landscapes and scenic landmarks; and features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as a historic landmark.
- Natural resources where the introduction of shadows could alter the resource's condition or microclimate. Such resources could include surface water bodies, wetlands, or designated resources such as coastal fish and wildlife habitats.

Non-sunlight-sensitive resources include the following:

• City streets and sidewalks;

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⁷ An incremental shadow is a new shadow resulting from a proposed project building or structure that would be cast on a sunlight-sensitive resource during the year and, therefore, takes into account shadows cast by existing buildings.

- Private open space (e.g., front and back yards, stoops, vacant lots, and any private, non-publicly accessible open space); and
- Project-generated open space, which cannot experience a significant adverse shadow impact from the project, because without the project the open space would not exist. However, a discussion of how shadows would affect the new space may be warranted.

A significant adverse shadow impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources. Each case must be considered on its own merits based on the extent and duration of new shadow and an analysis of the resource's sensitivity to reduced sunlight, and seasonal conditions.

C.3. METHODOLOGY

Following the guidelines of the CEQR Technical Manual, a preliminary screening assessment must first be conducted to ascertain whether a project's shadow could reach any sunlight-sensitive resources at any time of year. The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the proposed buildings representing the longest shadow that could be cast. If there are sunlight-sensitive resources within this radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project shadow by accounting for the fact that shadows can never be cast between a certain range of angles south of the project site due to the path of the sun through the sky at the latitude of New York City.

If the second tier of analysis does not eliminate the possibility of new shadows on sunlightsensitive resources, a third tier of screening analysis further refines the area that could be reached by project shadow by looking at specific representative days in each season and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow resulting from the project. The detailed analysis provides the data needed to assess the significance of potential shadow impacts. The effects of the new shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The results of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text.

C.4. PRELIMINARY SCREENING ASSESSMENT

A base map was developed using Geographic Information Systems (GIS) software⁸ showing the locations of the Project Sites and the surrounding street layout. In coordination with the open space, historic and cultural resources, and natural resources

⁸ Software: Esri ArcGIS Pro; Data: multiple City, County, and State agencies, including Westchester County GIS, New York State GIS Program Office, New York State Office of Parks, Recreation and Historic Preservation (OPRHP), City of Yonkers Department of Parks and Recreation, Nearmap imagery service, and AKRF site visits.

assessments presented in other chapters of this DEIS, potential sunlight-sensitive resources were identified and shown on the map (see Figure 3-30).

C.4.a. Tier 1 Screening Assessment

For the first tier ("Tier 1") assessment, the longest shadow that the Proposed Project could cast is calculated, and, using this length as the radius, a perimeter is drawn around each of the Project Sites. Anything outside this perimeter representing the longest possible shadow could never be affected by Proposed Project building-generated shadow, while anything inside the perimeter needs additional assessment.

According to the *CEQR Technical Manual*, the longest shadow that a structure can cast occurs on December 21, the winter solstice. In Yonkers, the longest shadow occurs at the start of the analysis day at 8:51 AM,⁹ and is equal to 4.3 times the height of the structure. Therefore, the proposed maximum building height at each Project Site was multiplied by 4.3 to determine the longest shadow that could be cast from that Project Site, as shown in **Table 3-2** below.

However, this calculation assumes that the study area is a flat plane, whereas in reality, there is substantial topographic variation. Shadows cast from a location at a higher elevation toward a location at a lower elevation (i.e., "downhill") are longer in horizontal distance, and vice versa. Therefore, to ensure the most conservative analysis on a two-dimensional map, an expanded Tier 1 longest shadow study area was calculated based on each Project Site's maximum elevation (relative to 0' NAVD88, 10 which is approximately sea level, or the average tidal elevation of the nearby Hudson River). This expanded Tier 1 study area captures the longest shadow from each Project Site as if the surrounding study area was at sea level in all directions. This ensures a highly conservative study area for the preliminary assessment, beyond which no shadows could reach, irrespective of topography. See **Table 3-2** for the elevations and longest shadow for each Project Site. **Figure 3-30** shows the longest shadow study area (the "Shadow Study Area") combined for the three Project Sites.

Table 3-2 Tier 1: Longest Shadow

Project Site	Maximum Building Height (ft)	Longest Shadow (on Flat Base Plane) (ft)	Maximum Elevation (NAVD88) (ft)	Longest Shadow (at Sea Level) (ft)
Teutonia	455	1,957	503	2,163
Chicken Island	420	1,806	485	2,086
North Broadway	320	1,376	398	1,712

Notes:

NAVD88 = North American Vertical Datum of 1988. 0' NAVD88 = approximately sea level. Heights and elevations are given in feet, rounded to nearest foot. Longest shadow distance is calculated using a shadow factor of 4.3 x the height or elevation, rounded up to nearest foot. Maximum height includes rooftop mechanical bulkheads and other structures.

⁹ As explained in more detail below in Section G.4.c, "Tier 3 Screening Assessment," shadows occurring within 90 minutes of sunrise or sunset are not considered significant.

¹⁰ North American Vertical Datum of 1988

The Tier 1 screening (see Figure 3-30) showed that a number of publicly accessible open spaces and historic resources with sun-sensitive features were located in the Shadow Study Area, as well as one natural resource (a portion of the Hudson River). Therefore, the next tier of assessment was required.

C.4.b. 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 site. In the vicinity of New York City, this area lies between -108 and +108 degrees from true north. **Figure 3-30** illustrates this triangular area, identified as Tier 2, south of the Project Sites. The Tier 2 areas are too far south to be shaded by development at *any* of the three Project Sites and were excluded from further analysis. The corresponding portion of the Shadow Study Area north, east, and west of the Project Sites represents the remaining area that could potentially experience new Proposed Project-generated shadow. A total of 27 sunlight-sensitive resources were identified within the adjusted Shadow Study Area, including 15 publicly accessible open spaces (parks, playgrounds, and plazas), 11 historic resources with sunlight-sensitive features, and a portion of the Hudson River, a natural resource.

These 27 resources, requiring a Tier 3 assessment, are listed in **Table 3-3**, along with a summary of the Tier 3 analysis results.

Table 3-3
Tier 3 Assessment

	Tier 3 Assessment								
		Potential Incremental Shadow							
			March 21/						
Мар		December	September	May 6/					
Reference	Name	21	21	August 6	June 21				
Publicly Accessible Open Spaces									
1	Saw Mill River Daylighting Phase III Park	Potential	Potential	Potential	Potential				
2	Washington Park/City Hall	No	No	Potential	Potential				
3	Waring Park	No	No	No	No				
4	Buena Vista Pride Park	No	No	No	No				
5	Buena Vista Community Garden	No	No	No	No				
6	Esplanade Park	Potential	Potential	Potential	Potential				
7	Habirshaw Park on the Hudson	No	No	No	No				
8	Yonkers Train Station Plaza	Potential	Potential	No	No				
9	van der Donck Park (Larkin Plaza)	Potential	Potential	Potential	Potential				
10	Philipse Manor Hall State Historic Site	Potential	Potential	Potential	Potential				
11	Saw Mill River Daylighting at Mill Street	Potential	Potential	Potential	Potential				
12	Pitkin's Park	No	No	No	No				
13	Old Croton Trailway State Park (portion within Shadow Study Area)	No	No	No	No				
14	War Memorial Park	Potential	No	No	No				
15	Cochran Park	No	No	No	No				
	Historic Architectural Resources wi	th Sunlight-S	ensitive Featu	ıres					
Α	St. John's Episcopal Church	No	Potential	Potential	Potential				
В	Yonkers Downtown Historic District Central Methodist Church	No	Potential	Potential	Potential				
С	Yonkers Train Station	Potential	No	No	No				
D	5 Manor House Square 9 Philipse Manor Historic District)	Potential	Potential	Potential	Potential				
E	Yonkers Downtown Historic District Messiah Baptist Church	Potential	No	No	No				
F	Community Baptist Church and Church House	No	No	No	No				
G	Copcutt Mansion, St. Casmirs Church and Rectory	Potential	No	No	No				
Н	St. Thomas Orthodox Church	No	No	No	No				
I	Mt. Carmel Baptist Church	No	No	Potential	Potential				
J	St. Nicholas of Myra Eastern Catholic Church	No	No	No	No				
K	former Church of the Good Shepherd (Presbyterian)	No	No	No	No				
Natural Resources									
N1	Hudson River	Potential	Potential	Potential	Potential				
Notes:									

Notes

See Appendix E-1 for corresponding resource locations and shadow sweeps.

In the columns representing the representative analysis dates, "No" means Proposed Project-generated shadow could not reach the resource, even without accounting for intervening buildings. "Potential" means Proposed Project-generated shadow could potentially reach the resource on this date and requires further assessment.

C.4.a. Tier 3 Screening Assessment

The direction and length of shadows vary throughout the course of the day and also differ depending on the season. In order to determine whether Proposed Project-generated shadow could fall on a sunlight-sensitive resource, three-dimensional computer modeling software is used in the Tier 3 assessment to calculate and display the proposed buildings' shadows on individual representative days of the year. A computer model was developed containing three-dimensional representations of the elements in the base map used in the

preceding assessments, detailed topographic information of the Shadow Study Area, and a three-dimensional representation of the Proposed Project.

C.4.a.i Representative Days for Analysis

Following the guidance of the CEQR Technical Manual, shadows on the summer solstice (June 21), winter solstice (December 21) and spring and fall equinoxes (March 21 and September 21, which are approximately the same in terms of shadow patterns) are modeled, to represent the range of shadows over the course of the year. An additional representative day during the growing season is also modeled, generally the day halfway between the summer solstice and the equinoxes, i.e., May 6 or August 6, which have approximately the same shadow patterns.

C.4.a.ii Timeframe Window of Analysis

The Tier 3 assessment considers shadows occurring between one and a half hours after sunrise and one and a half hours before sunset. At times earlier or later than this timeframe, the sun is down near the horizon and the sun's rays reach the Earth at very tangential angles, diminishing the amount of solar energy and producing shadows that are very long, move fast, and generally blend with shadows from existing structures. Consequently, shadows occurring outside the timeframe window of analysis are not considered significant, and their assessment is not required.

C.4.a.iii Tier 3 Screening Assessment Results

As indicated in **Table 3-3** and shown in **Appendix E-1**, the Tier 3 assessment concluded that of the 15 open spaces analyzed, five of them could potentially be reached by Proposed Project-generated shadow on all four representative analysis days: van der Donck Park (Larkin Plaza), the open space associated with Philipse Manor Hall State Historic Site, the open space associated with the daylighting of the Saw Mill River at Mill Street, the Saw Mill River Phase III daylighting City park, and various portions of the Esplanade Park along the Hudson River waterfront. Three other open spaces could potentially be reached on one or two of the four analysis dates: Washington Park/City Hall, the Yonkers Train Station plaza, and a portion of War Memorial Park (on the winter analysis day only). These eight open space resources therefore required a more detailed analysis. The other seven open spaces analyzed could not be reached by Proposed Project-generated shadow at any time of year, due to being located too far away (in most cases at a higher elevation).

With regard to historic resources with sunlight-sensitive features, seven of the 11 historic resources analyzed could potentially receive incremental shadow on one or more of the representative analysis days, and these resources (indicated in **Table 3-3**) required a detailed analysis. The other four historic resources were too far away and could not receive Proposed Project-generated shadow on any representative day and do not require further assessment.

Portions of the Hudson River could also potentially receive incremental shadow on all four representative dates and required additional analysis.

C.5. DETAILED ANALYSIS

A detailed analysis is warranted when the screening analysis does not rule out the possibility that project-generated shadows would reach sunlight-sensitive resources. The detailed analysis establishes a baseline condition, the Future without the Proposed Project, to illustrate the shadows cast by existing buildings (and other future planned buildings in the Shadow Study Area). This baseline is then compared to the Future with the Proposed Project to distinguish the additional (incremental) shadow cast by the buildings of the Proposed Project. The purpose of the detailed analysis is to determine the extent and duration of new incremental shadow that would be cast on a sunlight-sensitive resource as a result of the Proposed Project. Because existing buildings may already cast shadows on a sunlight-sensitive resource, the Proposed Project may not result in additional, or incremental, shadows on that resource.

In the Future without the Proposed Project, no changes to the uses of the Project Sites are anticipated. Further, with regard to the Future Without the Proposed Project, a number of development projects are planned or underway in the Shadow Study Area, as shown in Table 2-1 of Chapter 2, "Land Use, Zoning, and Public Policy." These future planned developments in the Shadow Study Area were added to the Future without the Proposed Project baseline using best-available information from publicly available filings and other sources.

Shadows are in constant movement. The computer simulation software produces a minute-by-minute animation showing the movement of shadows over the course of each analysis period. The analysis determines the time when incremental shadow would enter each resource, and the time it would exit. Shadow analyses were performed for each of the representative days and analysis periods indicated in the Tier 3 assessment.

C.5.a. Determination of Impact Significance

The determination of significance of shadow impacts on a sunlight-sensitive resource is based on: (1) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and, (2) an analysis of the resource's sensitivity to reduced sunlight. The goal of the assessment is to determine whether the effects of incremental shadows on a sunlight-sensitive resource are significant.

A shadow impact occurs when the incremental shadow falls on a sunlight-sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant, or not, depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs.

A significant shadow impact generally occurs when an incremental shadow of 10 minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

• Vegetation:

- A substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its

survival (when there was sufficient sunlight in the Future without the Proposed Project condition). In the growing season, four to six hours a day of sunlight is a minimum requirement.

 A reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).

• Historic and Cultural Resources:

 A substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of a historic or cultural resource.

• Open Space Utilization:

 A substantial reduction in the usability of open space as a result of increased shadows, accounting for anticipated new users and the open space's utilization rates throughout the affected time periods.

• For Any Sunlight-Sensitive Feature of a Resource:

 Complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

C.5.b. Summary of Analysis Results

All eight of the publicly accessible open spaces and all seven of the historic resources analyzed in the detailed analysis would receive incremental shadow on at least one of the four analysis days, as presented in **Table 3-4** below. Portions of the Hudson River would receive incremental shadow on all four analysis days. Generally, these new shadows would be of limited extent and/or duration, and/or would occur at times when usage of an affected resource would typically be light, such as early in the morning, and would not substantially affect the use, character, vegetation, or habitats of the open space and natural resources or, in the case of the historic resources, significantly alter the public's use of the resource. However, the impact of the new shadows could potentially be significant, depending on use patterns, on Mt. Carmel Baptist Church, a S/NR-eligible facility, as discussed below. As noted below, this resource would also receive shadows if the Chicken Island Site were developed under the existing zoning.

Table 3-4
Incremental Shadow Durations

	Incremental Shadow Durations									
Map Reference	Name	Dec. 21	Mar. 21 / Sept. 21	May 6 / Aug. 6	Jun. 21					
Publicly Accessible Open Spaces										
1	Saw Mill River Daylighting Phase III Park	8:51am to 9:05am Total 14 min	7:36am to 10:00am Total 2 hr 24 min	6:27am to 10:15am Total 3 hr 48 min	5:57am to 10:30am Total 4 hr 33 min					
2	Washington Park/ City Hall	_	_	6:27am to 7:15am Total 48 min	5:57am to 7:50am 5:35pm to 6:01pm Total 1 hr 53 min					
6	Esplanade Park	9:05am to 12:25pm Total 3 hr 20 min	7:36am to 11:55am Total 4 hr 19 min	6:27am to 10:15am Total 3 hr 48 min	5:57am to 10:25am Total 4 hr 28 min					
8	Yonkers Train Station Plaza	12:15pm to 1:50pm Total 1 hr 35 min	12:10pm to 1:25pm Total 1 hr 15 min	_	_					
9	van der Donck Park (Larkin Plaza)	1:05pm to 2:53pm Total 1 hr 48 min	7:36am to 8:30am Total 54 min	6:27am to 7:10am Total 43 min	5:57am to 7:25am Total 1 hr 28 min					
10	Philipse Manor Hall State Historic Site	_	7:36am to 9:00am Total 1 hr 24 min	6:27am to 8:40am Total 2 hr 13 min	6:20am to 8:20am Total 2 hr					
11	Saw Mill River Daylighting at Mill Street	_	7:36am to 9:25am 4:15pm to 4:29pm Total 2 hr 3 min	6:27am to 9:40am Total 3 hr 13 min	6:45am to 9:45am Total 3 hr					
14	War Memorial Park	2:40pm to 2:53pm Total 13 min	_	_	_					
Historic Resources with Sunlight-Sensitive Features										
А	St. John's Episcopal Church	_	7:36am to 7:55am Total 19 min	6:27am to 6:55am 5:00pm to 5:18pm Total 46 min	5:57am to 7:15am Total 1 hr 18 min					
В	Yonkers Downtown Historic District Central Methodist Church	_	3:40pm to 4:29pm Total 49 min	4:05pm to 5:18pm Total 1 hr 13 min	4:15pm to 4:55pm Total 40 min					
С	Yonkers Train Station	12:45pm to 1:30pm Total 45 min			_					
D	5 Manor House Square (Philipse Manor Historic District)	_	8:25am to 9:40am Total 1 hr 15 min	_	_					
E	Yonkers Downtown Historic District Messiah Baptist Church	9:45am to 11:05am Total 1 hr 20 min	_	_	_					
G	Copcutt Mansion, St. Casmirs Church & Rectory	2:50pm to 2:53pm Total 3 min	_	_	_					
I	Mt. Carmel Baptist Church	_	2:50pm to 4:29pm Total 1 hr 39 min	3:00pm to 5:18pm Total 2 hr 18 min	3:15pm to 6:01pm Total 2 hr 46 min					
Natural Resources										
N1	Hudson River	8:51am to 12:20pm Total 3 hr 29 min	7:36am to 10:40am Total 3 hr 4 min	6:27am to 9:50am Total 3 hr 23 min	5:57am to 10:00am Total 4 hr 3 min					

Notes: Table indicates entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine actual clock time.

C.5.c. Assessment of Shadow Impacts by Resource

The following section briefly describes each affected resource that would receive more than 10 minutes of incremental shadow¹¹; its sunlight sensitivity; and the extent, duration, and potential effects of incremental shadow. Map reference numbers are included with the name, for convenience.

Times are given in Eastern Standard Time (EST) in all seasons, but Eastern Daylight Time (EDT) is in effect for all representative analysis days except for December 21, and times are also provided parenthetically in EDT when relevant, for informational purposes.

C.5.c.i Open Space Resources

Saw Mill River Daylighting Phase III Park (Resource #1)

Opened in 2018, this 1.25-acre park features the third unearthed portion of the Saw Mill River in the downtown, surrounded by plantings, paths, a seating area in the southwest part, and a water wheel.

The Chicken Island Site is adjacent to the north and east, with proposed Building 4 abutting the east side of the park. The Chicken Island Project, primarily Building 4, would cast new shadows on the park in all seasons. In winter, the incremental shadow would be minimal in size and limited to 14 minutes in the morning, while the rest of the park would be in sun during this period.

In the spring, summer, and fall, incremental shadows would fall on the park for two and a half to four and a half hours, depending on the season. The new shadows would fall across a large portion of the park beginning early in the morning, and gradually move clockwise and eastward over the course of the morning, generally decreasing in size after mid-morning as it begins exiting the park, and exiting the park completely in the late morning.

On the March 21/September 21 analysis day, the incremental shadow would cover half the space at 7:36 AM (8:36 AM EDT), about a third at 8:30 AM (9:30 AM EDT), less than a quarter by 9:00 AM (10:00 AM EDT), and would exit at 10:00 AM (11:00 AM EDT). On the May 6/August 6 analysis day the incremental shadow would cover about half the park up until about 8:30 AM (9:30 AM EDT), less than a quarter of the park by 9:30 AM (10:30 AM EDT), and would exit completely at 10:15 AM (11:15 AM EDT). On the June 21 analysis day incremental shadow would cover much of the park until about 8:00 AM (9:00 AM EDT), a little less than half at 9:00 AM (10:00 AM EDT), and only a small area in the northeast corner by 10:00 AM (11:00 AM EDT), exiting completely at 10:30 AM (11:30 AM EDT). See **Figures 3-31 to 3-39**.

¹¹ Per *CEQR Technical Manual* guidelines, incremental shadow is not considered significant when its duration is no more than 10 minutes and the resource otherwise continues to receive substantial sunlight. *CEQR Technical Manual*, 2020 edition, page 8-27.

Throughout the mornings when incremental shadow would fall on portions of the park, other portions of the park would be in sun, available for users seeking sunlight. In particular, the seating areas in the southwest part of the park would be partially or completely in sun throughout the affected period. The park would be completely in sun from late morning until mid-afternoon, and remain partially in sun into the late afternoon. Given the continued availability of sunlight, and the early occurrence of the incremental shadow when usage would likely be lighter than at other times of day, the new incremental shadow would not significantly affect the use of the park. With regard to the park's plantings and landscaping, all areas of the park affected by incremental shadow would receive a minimum of six hours of direct sunlight over the course of the day throughout the growing season months, ample even for species requiring full sun. With regard to the riverine habitat, the current would move phytoplankton, whose light requirements are low in any case, through the shaded areas, and the reduction of direct sun within the shadow footprint would have a negligible impact on the microorganisms. Fish and other mobile organisms would be expected to move through the areas of incremental shadow and would not be significantly affected. When considered with the abundance of foraging habitat available nearby in other parts of the river, any temporary reduction of suitable foraging habitat within the creek due to the incremental shadows would not substantially affect the fish species. Therefore, the new shadows would not be expected to significantly affect the river's fish, microorganisms, or other species.

Washington Park/City Hall (Resource #2)

Washington Park surrounds City Hall. The City Hall steps provide access from South Broadway, ascending up through the western part of the park to the building's front entrance. The park contains paths, landscaping, mature trees, and benches.

Incremental shadows from the Chicken Island Site would reach portions of the east side of the park early on late spring and summer mornings, ranging in duration from 48 minutes to nearly two hours, depending on the month. Further, on the June 21 analysis day, incremental shadow from the Teutonia Site would reach a portion of the west side of the park late in the afternoon for approximately 30 minutes. No Proposed Project-generated incremental shadow would fall on the park in the fall, winter, or early spring months. See **Figures 3-31 to 3-39**.

At the start of the May 6/August 6 analysis day at 6:27 AM (7:27 AM EDT) incremental shadow would fall across the Government Center Parking Garage that abuts the park on the north and east side and onto a portion of the park north of City Hall. However, the incremental shadow would move east and exit the park 30 minutes later, moving onto an area with lawn and plantings south-adjacent to the parking garage. It would exit that area 15 minutes later. At the start of the June 21 analysis day at 5:57 AM (6:57 AM EDT) incremental shadow would reach a portion of

the raised plaza area behind (east of) City Hall, as well as the area south of the parking garage containing lawn and plantings. The incremental shadow would move east and exit the plaza area 30 minutes later but would continue to fall on a small area next to the parking garage until about 7:50 AM (8:50 AM EDT).

The late spring and summer morning incremental shadow that would fall on the plaza area around City Hall, or the landscaped area with paths north of the City Hall building, would be brief (30 minutes) and would occur before 7:30 AM (8:30 AM EDT). Further, other areas of the park would be in sun during these affected periods. Given these factors, this incremental shadow would not significantly affect the use of the park. With regard to the incremental shadow that would fall on the east side of the park next to the Government Center Parking Garage, despite the longer duration (between 15 minutes and nearly two hours depending on the date), this area contains no amenities such as seating or paths, only lawn and some herbaceous plants near the sidewalk along New Main Street. This portion of the park would receive a minimum of six hours of sun over the course of the May 6/August 6 and June 21 analysis days even with the incremental shadow and consequently the vegetation would not be adversely affected.

Incremental shadow would reach the western part of the park, between South Broadway and the City Hall building, during the last half-hour of the June 21 analysis day, 5:35 PM to 6:01 PM (6:35 PM to 7:01 PM). The area around the City Hall steps and other areas of the park would remain in sun, and therefore the limited incremental shadow would not significantly impact the park at this time on June 21.

Esplanade Park (Resource #6)

Esplanade Park extends along the Hudson River waterfront. It provides users with walking/running paths, seating and picnic areas, and views of the river and Palisades. Incremental shadow from the Teutonia Site would fall on different portions of the park in different seasons and would generally not affect large areas at any given time, due to the linear nature of the park.

On the winter analysis day the park would be largely in shadow in the morning and incremental shadow would fall among the existing shadows eliminating small patches of sunlight, mostly in the section around Main Street, up until around 10:00 AM. Beginning at 10:00 AM incremental shadow would fall on a larger area of the park near Dock Street and would shade part or all of the Science Barge from 10:00 AM to 11:00 AM, and would also continue to eliminate a small patch of sun at Main Street during this time. After 11:00 AM more and more of the park would be in sun, and after 11:30 AM most of the park would be in sun and incremental shadow would be very small and would finally exit completely at 12:25 PM. See **Figures 3-40 to 3-47**.

On the morning of the March 21/September 21 analysis day incremental shadow would fall west between existing shadows onto a section of the

park where the 9/11 Blue Star Memorial is located, and just to its north, from 7:36 AM to about 10:00 AM (8:36 AM to 11:00 AM EDT). During this time, nearby sections of the park would be in sun for users seeking sunlight (Main Street and Dock Street to the north and, after 8:00 AM [9:00 AM EDT] Prospect Street to the south). From approximately 9:30 AM to nearly noon (10:30 AM to nearly 1:00 PM EDT) incremental shadow would pass across the portion of the park around Main Street, but larger areas of the park to the north and south would remain in sun.

In the late spring and summer months, represented by May 6/August 6 and June 21, incremental shadow would be limited to the area directly west of the Teutonia Site, generally where the 9/11 Blue Star Memorial is located, from the start of the analysis day until approximately 10:20 AM (11:20 AM EDT) except for briefly very early in the morning on June 21 when it would reach a small area at Prospect Street. Throughout the morning in these months, when shadows are shorter than in other months, the area receiving incremental shadow would be small and other portions of the park would be in sun.

Despite long (three to four and one-half hour) durations of incremental shadow throughout the mornings in each season, the linear nature of the park would result in limited areas of incremental shadow while other areas to the north and south of the affected area remaining in sun. The only exception would be early winter mornings, but usage levels would likely be lower due to cold weather, and the incremental shadow would generally be limited to small patches among existing shadows. The Science Barge would receive about an hour of incremental shadow, but this would occur in winter only, outside of the growing season. Throughout the mornings in each season, when incremental shadow would occur, the open vistas to the west would provide a great deal of ambient skylight. Consequently, given all these factors, the incremental shadows would not significantly affect the use or the character of Esplanade Park.

Yonkers Train Station Plaza (Resource #8)

This public plaza is bounded by the Yonkers Train Station on its north side, Main Street on its south side, the rail bridge on its west side, and Buena Vista Avenue in its east side. Van der Donck Park is across Buena Vista Avenue, and Esplanade Park is on the other side of the rail bridge. The plaza contains benches, plantings, and a statue of Ella Fitzgerald. Incremental shadow would reach the park from the Teutonia Site in the fall, winter, and early spring, but not the late spring or summer.

Incremental shadow would pass across the plaza on December 21 from 12:15 PM to 1:50 PM, covering the whole plaza for about 30 minutes in the middle of that period. During this time most of van der Donck Park as well as Esplanade Park would be in sun for users seeking sunlight. On the March 21/September 21 analysis day incremental shadow would pass across the southern half of the plaza from 12:10 PM to 1:25 PM (1:10 PM

to 2:25 PM EDT), with the northern half remaining in sun during this period (see Figures 3-48 to 3-63).

Given the limited seasonal occurrence of incremental shadow, and the continued availability of sunlit open space either in the plaza itself or in adjacent/nearby parks during the times when incremental shadow would occur, the new shadow would not significantly impact this park or users seeking sunlight.

van der Donck Park (Resource #9)

This park, located in Larkin Plaza and bounded by Dock Street, Riverdale Avenue, and Warburton Avenue, was created by removing a parking lot, exposing the Saw Mill River beneath, and surrounding it with paths, benches, natural landscaping, a pedestrian bridge, and a waterfall overlook.

Incremental shadow from the Teutonia Site would pass across the park on winter afternoons, for the final hour and 48 minutes of the analysis day but would not be long enough to reach the park in other seasons. Portions of the park would remain in sun throughout the affected period, for users seeking sunlight. Incremental shadow from the North Broadway Site would fall on portions of the park early in the mornings of the spring and fall and late summer, for about 45 minutes to one-hour, and in the early summer for up to an hour and a half. However, these new shadows would be gone before 8:30 AM (9:30 AM EDT) in fall and early spring, and before 7:30 AM (8:30 AM EDT) in late spring and summer, and sunlit portions of the park would remain available to users throughout these affected early morning periods. With regard to the park's plantings and other vegetation, all areas of the park would receive a minimum of 5 to 6 hours of direct sunlight in March and September, and over 6 hours throughout the May to August heart of the growing season. Consequently, the incremental shadows would not harm the viability of the various plant species, nor by extension the animal wildlife that depend on the vegetation. With regard to the riverine habitat, as noted above in the discussion of the Saw Mill River Daylighting Phase III, microorganisms as well as fish and other mobile organisms would move through the areas of incremental shadow, during the relatively brief times they would occur in van der Donck Park, and primary productivity would not be significantly affected. See Figures 3-48 to 3-63.

Philipse Manor Hall State Historic Site (Resource #10)

The Philipse Manor Hall State Historic Site serves as a museum of history, art, and architecture, as well as host to community organizations, meetings, educational programs and special events. The grounds surrounding the building comprise lawns and landscaping, and a garden is located on the north side. The museum is typically open from noon to 3:30 PM (November to March) or 4:30 PM (April to October) and is otherwise accessible to schools or other group tours via appointment.

Incremental shadow from the North Broadway Site would fall on portions of the grounds in the mornings of the spring, summer, and fall. The new shadows would be small or completely gone by 9:00 AM (10:00 AM EDT) or earlier, and areas of sun would remain on the property throughout the affected period in all months. Given that the incremental shadow would be small or gone before the museum is open or before tours or other special events are usually held, the incremental shadow would not significantly impact the use of this space. With regard to the garden, incremental shadow would fall on it for approximately 30 minutes or less on the March 21/September 21 and May 6/August 6 analysis days and not at all on the June 21 analysis day. It, and other areas of the grounds, would receive ample direct sun over the course of each day in the growing season and consequently the incremental shadows would not significantly impact this property. See **Figures 3-48 to 3-63**.

Saw Mill River Daylighting at Mill Street (Resource #11)

The interior of this city block was transformed into a series of elevated walkways over a section of newly unearthed Saw Mill River, with small plazas, benches, and a river overlook.

Incremental shadow from the North Broadway Site, located a block to the east across North Broadway, would pass across this space in the mornings of the spring, summer, and fall. The new morning shadows would exit at or before 9:45 AM (10:45 AM EDT). New shadow from the Teutonia Site would also reach the space for 15 minutes late in the afternoon of the March 21/September 21 analysis day only. See **Figures 3-48 to 3-63**.

On the March 21/September 21 analysis day, this space is mostly shady in the mornings, from existing buildings, and the incremental shadow would fall among the existing shadows eliminating small patches of remaining sunlight, for a total of about two hours, 7:36 AM to 9:25 AM (8:36 AM to 10:25 AM EDT). In the first hour of this period, the incremental shadow would eliminate the remaining sunlight, and in the second hour some sunlit areas would become available. From 9:30 AM to 4:15 AM (10:30 AM to 5:30 PM EDT) large sunlit areas would be available in the space for users seeking sunlight.

On the May 6/August 6 analysis day, the space is shady early in the morning and partially shady in mid-morning due to existing buildings. Incremental shadow would fall on the space beginning at the start of the analysis day, eliminating remaining small patches of sunlight, then eliminating a fairly large area of sunlight from approximately 7:30 AM to 9:00 AM (8:30 AM to 10:00 AM EDT), representing most of the remaining sunlight during much of that period. After that time period, the incremental shadow would become smaller and limited to the area adjacent to the North Broadway entrance until it would exit complete at 9:40 AM (10:40 AM EDT).

On the June 21 analysis day, incremental shadow would pass across the space from 6:45 AM to 9:45 AM (7:45 AM to 10:45 AM). The new shadow would be quite small for the first hour of this period, and some

sunlit areas of the space would continue to be available. The incremental shadow would cover a larger area from about 8:00 AM to 8:30 AM (9:00 AM to 9:30 AM EDT) eliminating much of the sun, but then become smaller after that, limited to the area adjacent to the North Broadway entrance and leaving much of the space in sun, until it would exit completely at 9:45 AM (10:45 AM EDT).

The incremental shadow would potentially reduce some of the attractiveness of this space for users before 9:30 AM or 10:00 AM EDT. However, given that usage would likely be lighter compared to later in the morning and in the afternoon, and given the continued availability of sunlit areas even for portions of the affected periods, the incremental shadow would not significantly affect the usability of this space for those enjoying the daylighted river and surrounding plazas. With regard to the trees and plantings, the space would receive a minimum of 5 to 6 hours or more of direct sunlight throughout the May to August heart of the growing season. With regard to the aquatic habitat of the daylighted river, the incremental shadow would be transient and further, as explained in detail above in reference to the Saw Mill River Daylighting Phase III park, fish and other mobile species would be expected to move through the areas of incremental shadow, and would in any case have abundant foraging habitat available in other nearby areas of the Saw Mill and Hudson Rivers. Phytoplankton, which have low light requirements in general, and other microorganisms would be carried through the shaded areas in the river currents and would not be substantially affected by the temporary incremental shadow.

War Memorial Park (Resource #14)

A portion of this park would receive incremental shadow for the final 13 minutes of the winter analysis day (see **Figure 3-64**). Much of the park would remain in sun during this time and this limited extent and duration of new shadow occurring in a season when usage is likely to be lighter than in other seasons would not significantly affect the use or the vegetation of the park.

C.5.c.ii Historic Resources

St. John's Episcopal Church (Resource #A)

St. John's Episcopal church, located at 1 Hudson Street, is listed on the S/NR and has stained glass windows on all its façades.

The church's front (east) façade would receive incremental shadow from the Chicken Island Site early on spring, summer, and fall mornings. The north façade would also briefly receive incremental shadow very early at the start of the June 21 morning. The incremental shadow would be gone before 8:00 AM (9:00 AM EDT) on March 21/September 21, by 7:15 AM (8:15 AM) on June 21, and before 7:00 AM (8:00 AM EDT) on May 6 and August 6. Further, not all of the windows would be in incremental shadow except for a brief 5 minutes on May 6/August 6 around 6:45 AM (7:45 AM EDT), and on June 21 up until 6:50 AM (7:50 AM EDT).

Given the early hour of its occurrence, mostly before visitors or congregation members are present, the incremental shadows would not significantly affect the opportunity for the public to enjoy the stained glass windows and interior of the church. In addition, incremental shadow from the Teutonia Site would fall on a portion of the rear (west) façade for the church for the final 18 minutes of the May 6/August 6 analysis day only. This limited incremental shadow would not be significant (see **Figures 3-65 to 3-68**).

Yonkers Downtown Historic District - Central Methodist Church (Resource #B)

Formerly the Congregation Agudas Achim Synagogue, then Hudson Street Synagogue, and currently the Yonkers Church of God, this building is in the Yonkers Downtown Historic District. It has stained glass windows on the front (south), east, and west façades, although the east façade is obscured by the adjacent buildings.

Incremental shadow from the Teutonia Site would fall on this building in the late afternoons of the spring, summer, and fall, ranging in duration from 40 minutes to an hour and a quarter (see **Figures 3-69 to 3-71**).

On the March 21/September 21 analysis day, incremental shadow would move onto the rear of the west façade at about 3:50 PM (4:50 PM EDT) and continue spreading eastward to cover the entire west façade by 4:05 PM (5:05 PM EDT) and then the entire front façade as well by 4:20 PM (5:20 PM EDT). Incremental shadow would cover the entire west and south façades for 5 to 10 minutes, and the analysis period ends at 4:29 PM (5:29 PM EDT) as the incremental shadow would begin to exit the west façade, continuing to move eastward.

On the May 6/August 6 analysis day, following a similar pattern, incremental shadow would move onto the rear of the west façade at 4:05 PM (5:05 PM EDT), would spread eastward to cover the whole west façade by 4:15 PM (5:15 PM EDT), and then the whole south façade as well by 4:30 PM (5:30 PM EDT). Fifteen minutes later it would begin to exit the west façade, and by the end of the analysis day at 5:18 PM (6:18 PM EDT) it would be mostly off the west façade but would still be covering the entire south façade.

On the June 21 analysis day, when shadows are shortest, the incremental shadow would similarly move across first the west and then the south façade, never covering the entire west façade, but covering the entire south façade for 10 minutes 4:40 PM to 4:50 PM (5:40 PM to 5:50 PM EDT).

Incremental shadow would eliminate all the sunlight from the church windows for five to ten minutes on the March 21/September 21 day and for 15 minutes on the May 6/August 6 day. While the new shadow could therefore potentially adversely impact the appreciation of the stained-glass windows for a limited time in the late afternoons, the duration of total coverage would be 15 minutes or less, and the overall duration of at

least partial coverage would be limited to between 40 minutes and an hour and a quarter. The south façade windows would continue to receive direct sun from mid-morning through late afternoon, and the west façade windows from early afternoon to late afternoon. Given all these factors, the incremental shadow would not significantly impact this historic church.

Yonkers Train Station (Resource #C)

This S/NR-eligible building has a large arched window above the entry pavilion, and smaller arched windows on the ground floor including one on the south façade facing the plaza space. Incremental shadow from the Teutonia Site would pass across this south façade window on the December 21 analysis day for 45 minutes, 12:45 PM to 1:30 PM, covering all of it for most of this period (see **Figure 3-72**). Given that the affected feature is one window, and not the primary, large window above the entry pavilion, and the incremental shadow would only occur in winter and would be relatively brief, the Proposed Project would not significantly affect this historic building.

5 Manor House Square (Philipse Manor Historic District) (Resource #D) The two-story building at 5 Manor House Square, currently occupied by the Christian Love Tabernacle, is a non-contributing building to the Philipse Manor Historic District with two small stained-glass windows on the first-floor front (south) façade. Incremental shadow would not affect this building on the winter analysis day or on the late spring and summer analysis days. However, on the March 21/September 21 analysis day incremental shadow from the North Broadway Site would pass across the building's front façade over the course of one hour and 15 minutes, eliminating the sun from both windows for most of that period, or approximately 8:30 AM to 9:30 AM (9:30 AM to 10:30 AM EDT) (see Figure 3-73). While the appreciation of these windows by the public would be adversely affected during this hour, this would only occur during a limited portion of the year, and after 9:40 AM (10:40 AM EDT) the south façade windows would be in sun until late afternoon. Therefore, the adverse impact would not be significant.

Yonkers Downtown Historic District – Messiah Baptist Church (Resource #E)

Formerly the Westminster Presbyterian Church, located at 76 Warburton Avenue, this building is State and National Register of Historic Places eligible and features a large stained-glass window on its west, Warburton Avenue façade, and stained-glass windows on its side façades, including its south façade, although they appear to be somewhat obscured by tree canopy as well as the adjacent building to the south.

On the winter analysis day, incremental shadow from the North Broadway Site would be long enough to pass across the portions of the church's south façade that would not already be covered in existing shadows from the adjacent buildings and trees, from 9:45 AM to 11:05 AM (see **Figure 3-74**). Most of the affected façade area would appear to

be masonry rather than stained glass window, and whatever incremental shadow could reach the windows would likely be a small addition to the existing shadows already there, and consequently would not be significant to an observer in the church sanctuary. Incremental shadows would not reach the church in any other season.

Mt. Carmel Baptist Church (Resource #I)

This S/NR-eligible church complex has stained glass windows on its front (east) façades, which face away from the Project Sites, and also two stained glass windows on the stone church's south façade (but no stained-glass windows on the south façade of the red-brick chapel, south-adjacent to the church), and two stained glass windows on the rear (west) façade of the church. The northern of the two windows on the rear façade appears obscured by the dense thicket of trees abutting the rear of the complex, while the southern of the two windows is somewhat less obscured.

Incremental shadow from the Chicken Island Site would fall onto the church complex in the late afternoons of the spring, summer, and fall, eliminating any remaining sunlight on stained glass windows for approximately an hour to an hour and a quarter depending on the season. Total durations of incremental shadow (where either some or all the stained-glass windows are affected) would range from an hour 40 minutes up to two hours 46 minutes depending on the month.

With regard to the stained-glass window on the southern side of the rear façade, which is less obscured by trees, it is not clear without a more highly detailed model of the rear of the building whether it would be partially or fully in existing shadow from the abutting chapel building or intervening vegetation during the time when incremental shadow would fall on it, particularly on the March 21/September 21 date when shadows are longer. If the window would be partially in existing shadow, then the incremental shadow would eliminate any remaining sunlight on it during this time (see **Figures 3-75 to 3-77**).

The incremental shadow would occur beginning at approximately 4:00 PM EDT or later and would last until the end of the analysis day. If church services are typically held in the morning, these new shadows would not impact the stained-glass windows during that time. However, for any events open to the public occurring from 4:00 PM EDT and after in the spring, summer, or fall, the adverse impact of the incremental shadows on the stained-glass windows would be significant due to their duration and coverage. As discussed in more detail in Chapter 17, "Alternatives," this resource would also be impacted by shadows if the Chicken Island Site were developed under the current zoning with residential towers up to 250-feet tall.

C.5.c.iii Natural Resources

Hudson River (Resource #N1)

The tidally influenced waters of the Hudson River support a diverse and productive aquatic community of primary producers (phytoplankton,

zooplankton, submerged aquatic vegetation, benthic algae and invertebrates) and fish. Incremental shadow from the Teutonia Site would move across portions of the river in the mornings throughout the year, affecting areas northeast of the Teutonia Site in winter, areas to the east in spring and fall, and areas to the southeast in summer. Different areas would be affected over the course of each morning as the shadow would move, with total durations on the river ranging from 3 to 4 hours (see **Figures 3-40 to 3-47**).

All areas of the river that would receive incremental shadow, even those adjacent to the waterfront, would continue to receive several hours of direct sun at minimum even in winter, six or more hours in fall and early spring, and eight or more hours in the late spring and summer.

The current flows swiftly in the Hudson River and would move phytoplankton and other natural elements quickly through the shaded areas. Therefore, Proposed Project-generated shadows would not be expected to affect primary productivity. The areas that receive new shadow would continue to receive many hours of direct sunlight throughout the day. Incremental shadows would therefore not be likely to significantly affect aquatic resources (plankton or fish) in these areas of the river. Consequently, Proposed Project-generated shadows would not cause significant adverse impacts to the Hudson River.

C.6. CONCLUSIONS

The detailed shadow analysis described above showed that the Proposed Project would cast new incremental shadows on certain parks, plazas, sunlight-sensitive historic sites, portions of the daylighted Saw Mill River, and the Hudson River. Generally, these new shadows would be of limited extent and/or duration, and/or would occur at times when usage of an affected resource would typically be light, such as early in the morning, and would not substantially affect the use, character, vegetation, or habitats of the open space and natural resources or, in the case of the historic resources, significantly alter the public's use of the resource.

However, in one case, the impact of the new shadows could potentially be significant, depending on use patterns: the stained-glass windows of the Mt. Carmel Baptist Church, a S/NR-eligible complex at 175 Nepperhan Avenue, could be completely obscured by incremental shadow in the late afternoons of the spring summer and fall for up to an hour and 15 minutes, and partially obscured for over two hours in some months. As discussed in more detail in Chapter 17, "Alternatives," this resource would also be impacted by shadows if the Chicken Island Site were developed under the current zoning with residential towers up to 250-feet tall.

Other resources that experience incremental shadows of moderate, but not significant, effect include the Saw Mill River daylighting plaza at Mill Street and the Saw Mill River Daylighting Phase III park, Esplanade Park, and the Central Methodist Church and 5 Manor House Square buildings. Other open space and historic resources would receive brief, small, or otherwise insignificant incremental shadows including van der Donck Park, the Philipse Manor Hall State Historic Site grounds, the St. John's Episcopal Church and Yonkers Train Station buildings, and the Yonkers Train Station plaza.

C.7. MITIGATION

No mitigation measures are required.

D. WIND

D.1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was retained to conduct a pedestrian wind assessment for the Teutonia Project (see **Appendix E-2**) and for the Chicken Island Project and North Broadway Project (see **Appendix E-3**). The following presents the findings of the analyses performed by RWDI. A quantitative assessment was prepared based on scale models of the Proposed Project¹² and its surroundings in a boundary-layer wind tunnel. Local wind records were used to determine existing and proposed conditions for wind comfort and wind safety in pedestrian areas, focusing on building entrances, sidewalks, and terraces.

The following pedestrian wind magnitudes and comfort categories are used to establish acceptable conditions. ¹³

- Sitting (\leq 6 mph): Calm or light breezes desired for outdoor seating areas where one can read a paper without having it blown away.
- Standing (≤ 8 mph): Gentle breezes suitable for main building entrances and bus stops.
- Strolling (\leq 10 mph): Moderate winds that would be appropriate for window shopping and strolling along a downtown street, plaza, or park.
- Walking (\leq 12 mph): Relatively high speeds that can be tolerated if one's objective is to walk, run, or cycle without lingering.

Wind conditions are considered suitable for sitting, standing, strolling, or walking if the associated mean wind speeds are expected for at least four out of five days (80 percent of the time). An uncomfortable designation means that the criterion for walking is not satisfied. Wind conditions comfortable for walking or strolling are appropriate for sidewalks and walkways as pedestrians will be active and less likely to remain in one area for prolonged periods of time. Lower wind speeds conducive to sitting or standing are preferred at main entrances where pedestrians are apt to linger. Wind speeds comfortable for sitting are preferred for areas intended for passive activities, such as terraces.

Safety is also considered by the criteria and is associated with excessive gust wind speeds that can adversely affect a pedestrian's balance and footing. If winds sufficient to affect a person's balance (>56 mph) occur more than 0.1 percent of the time, or 9 hours per year, the wind conditions are considered severe.

¹² The 50 North Broadway parcel was added to the North Broadway Site after completion of the scale model wind studies. However, given the relatively low height of the building proposed for the 50 North Broadway parcel and the fact that buildings of similar sizes are located on either side of the proposed North Broadway Project building, significant changes in the results are not anticipated.

¹³ These criteria have been developed by RWDI through research and consulting practice since 1974. They have also been widely accepted by municipal authorities as well as by the building design and city planning community.

Wind control measures are typically required at locations where winds are rated as uncomfortable or where they exceed the wind safety criterion. These criteria for wind forces represent average wind tolerance. They are sometimes subjective and regional differences in wind climate and thermal conditions as well as variations in age, health, clothing, etc. can also affect people's perception of the wind climate. Note that these wind speeds are assessed at the pedestrian height (i.e., 5 feet above-grade), which are typically lower than those recorded in the airport (30 feet and open terrain).

Predicting wind speeds and occurrence frequencies involves the assessment of building geometry, orientation, position and height of surrounding buildings, upstream terrain and the local wind climate. Tall buildings tend to intercept the stronger winds at higher elevations and redirect them to the ground level. Such a downwashing flow is the main cause for increased wind activity around tall buildings at the pedestrian level (see **Figure 3-78**). When two buildings are situated side by side, wind flows tend to accelerate through the space between the buildings due to the channeling effect. Oblique winds also cause wind accelerations around the downwind building corner. If these building/wind combinations occur for prevailing winds, there is a greater potential for increased wind activity and uncomfortable conditions. Podium structures under towers are beneficial for wind control, as they reduce the direct impact of downwashing winds from the towers to the grade. Other design details, such as deep canopies close to ground level, wind screens, and tall trees with dense landscaping, etc. can also help reduce wind speeds (see **Figure 3-78**).

D.2. EXISTING CONDITIONS

Wind statistics recorded at LaGuardia International Airport between 1988 and 2018, inclusive, were analyzed for the summer (May through October) and winter (November through April) seasons. Throughout the year, predominant winds approach the Project Sites from the northeast, northwest, and south (see **Figure 3-79**). In the winter, predominant winds also approach from the west. Strong winds (i.e., a mean speed of 20 miles per hour [mph] or greater) occur for 3.7 percent and 11.4 percent of the time during the summer and winter seasons, respectively (**Figure 3-79**).

Existing wind speeds in the vicinity of the Teutonia Site are generally comfortable during the summer for sitting and standing, with a few locations comfortable for strolling (see **Figure 3-80** and **Appendix E-2**). During the winter, it is generally comfortable for strolling or walking; however, some locations near the Hudson River are uncomfortable (see **Figure 3-81**). Wind speeds that exceed the safety criterion within the vicinity of the Teutonia Site are anticipated at two locations along the sidewalks of Pierpointe Street (see **Figure 3-82**). These locations are at a lower elevation than the Teutonia Site and occur on either side of an existing multifamily building.

Existing wind speeds in the vicinity of the Chicken Island Site and North Broadway Site are generally suitable for sitting or standing during the summer (see Figure 3-83 and Appendix E-3) and for walking or better during the winter (see Figure 3-84). Existing wind speeds on and around these two sites meet the safety criterion (Figure 3-85).

D.3. FUTURE WITHOUT THE PROPOSED PROJECT

In the Future without the Proposed Project, existing wind conditions on and immediately surrounding the Project Sites would be expected to continue. Potential or planned

developments that were considered to have a significant impact on the analyses were included in the Future without the Proposed Project model.

It is important to note that both the Teutonia Site and Chicken Island Site are currently vacant. Construction of any structure on these sites, including buildings that could be constructed under the existing zoning, would affect pedestrian level wind.

D.4. FUTURE WITH THE PROJECT (BUILD CONDITION)

The Teutonia Project would lead to generally higher wind speeds around the Teutonia Site throughout the year (see **Appendix E-2**). Wind speeds along the sidewalks within the vicinity of the Teutonia Project would continue to remain comfortable for walking during the summer (see **Figure 3-86**). During the winter, some locations along the sidewalks around the Teutonia Project would be uncomfortable, particularly north and south of the Teutonia Project (see **Figure 3-87**). Reduced wind speeds that meet the safety criterion are found at the two locations along Pierpointe Street where exceedances were observed in the existing conditions (see **Figures 3-82 and 3-88**). However, the Teutonia Project results in wind speeds that exceed the safety criterion at other locations to the northeast, south, and southeast (see **Figure 3-88**). This is a direct result of developing the Teutonia Site, which is currently vacant. In essence, the existing safety exceedances "moved" further east as a result of construction on what is now a vacant parcel.

Wind conditions suitable for standing are anticipated at the Teutonia Project's south residential entrance throughout the year (Location 7 in **Figures 3-86 and 3-87**). However, higher-than-desired wind speeds for strolling during the summer and walking during the winter are anticipated at the Teutonia Project's north residential entrance (Location 2 in **Figures 3-86 and 3-87**). Wind speeds comfortable for standing during the summer and standing or strolling during the winter are anticipated at the Teutonia Project retail entrances (Locations 4 and 6 in **Figures 3-86 and 3-87**).

Wind conditions on the Teutonia Project's Level 7 and Level 41 terraces during the summer, when they are anticipated to be used the most, are expected to be suitable for standing at all locations except the south side of the Level 7 terrace, where wind speeds suitable for strolling are anticipated (see **Figure 3-86**). Wind speeds that meet the safety criterion are anticipated at all tested locations on the Teutonia Project terraces (see **Figure 3-88**).

Wind speeds along the sidewalks within the vicinity of the Chicken Island Project and North Broadway Project would generally remain suitable for the intended usage during the summer except at one location along Palisade Avenue for the Chicken Island Project (Location 192 in **Figure 3-89**) and one location along Overlook Terrace for the North Broadway Project (Location 63 in **Figure 3-89**) (**Appendix E-3**). During the winter, wind speeds along sidewalks rated uncomfortable are anticipated at several locations within the vicinity of the Chicken Island Project and North Broadway Project (see **Figure 3-90**). However, wind speeds along sidewalks farther away from the proposed buildings would generally remain suitable for the intended use (see **Figure 3-90**). Wind speeds that exceed the safety criterion are anticipated at one location on the Chicken Island Site and three locations on the North Broadway Site (see **Figure 3-91**).

The main entrance of the North Broadway Project located along North Broadway (Location 36 in Figures 3-89 and 3-90) is anticipated to have wind speeds suitable for

sitting throughout the year. However, higher-than-desired wind speeds are anticipated at all entrances either only during the winter (Location 8 on the North Broadway Site and Locations 133 and 189 on the Chicken Island Site in **Figure 3-90**) or throughout the year (Location 1 on the North Broadway Site and Locations 93 and 129 on the Chicken Island Site in **Figures 3-89 and 3-90**).

Regarding the terraces associated with the Chicken Island Project and North Broadway Project, during the summer, generally calm wind speeds that are suitable for the intended usage are anticipated on the sheltered areas of the terraces. However, higher-than-desired wind speeds are anticipated at other areas of these terraces (see **Figure 3-89**). Wind speeds that exceed the safety criterion are also anticipated at several locations on these terraces (see **Figure 3-91**). However, these exceedances are anticipated to occur primarily during the winter when limited use of these terraces is expected.

D.5. MITIGATION

Landscaping elements, wind screens, or canopies could be used as mitigation strategies to reduce wind speeds within the vicinity of the buildings for the Chicken Island Project and North Broadway Project. These measures will be incorporated into the final building design, where feasible and demonstrated to be effective.

Recessing the Teutonia Project's north residential entrance and the affected entrances for the Chicken Island Project and North Broadway Project by at least five feet would result in wind speeds comfortable for the intended use. Alternatively, the incorporation of wind control measures, such as wind screens or landscaping to the north of the affected Teutonia Project entrance, or to either side of the affected Chicken Island Project and North Broadway Project entrances, would result in wind speeds comfortable for the intended use. These measures will be incorporated into the final building design, where feasible and demonstrated to be effective.

Mitigation options to achieve lower wind speeds at localized areas on the Teutonia Project terraces include the addition of trellises, wind screens, or landscaping. General strategies to achieve lower wind speeds on the Chicken Island Project and North Broadway Project terraces include tall guardrails along the exposed terrace edges, trellises at the base of upper building elements, and wind screens and landscaping around designated seating areas. These measures will be incorporated into the final building design, where feasible and demonstrated to be effective.