Chapter 1: Project Description

A. PROJECT IDENTIFICATION

The Refinery LLC ("the applicant") is requesting discretionary approvals in connection with the redevelopment of the former Domino Sugar site along the East River waterfront in Williamsburg, Brooklyn (the "proposed project"). The proposed project would include residential, retail/commercial, and community facility uses and open space. The project site (see Figure 1-1) is composed of Block 2414, Lot 1, which is located along the East River waterfront between Grand and South 5th Streets ("the waterfront parcel"), and Block 2428, Lot 1, which is located on the east side of Kent Avenue between South 3rd and South 4th Streets ("the upland parcel"). The project site is located entirely within Brooklyn Community District 1. The project site is currently zoned M3-1 for heavy industrial use (see Figure 1-2).

The proposed project would revitalize and reactivate a vacant waterfront industrial site with public open space, a restored and adaptively reused historic building, and new residential buildings with a substantial amount of affordable housing. The proposed project would include up to 2,400 residential units, up to 127,537 gross square feet (gsf) of retail/commercial space, up to 146,451 gsf of community facility space, and up to 98,738 gsf of commercial office space. It is expected that 660 housing units would be allocated to affordable housing, and a majority of these would be for low-income households. The complex of landmarked buildings along the waterfront known as the Refinery would be adaptively reused. The project's approximately four acres of public open space would include an esplanade along the water's edge, linking the project site to Grand Ferry Park, a large open lawn between the esplanade and the Refinery that would highlight this restored historic structure, and new connections that are intended to provide visual and physical access to the waterfront from all streets leading to the project site.

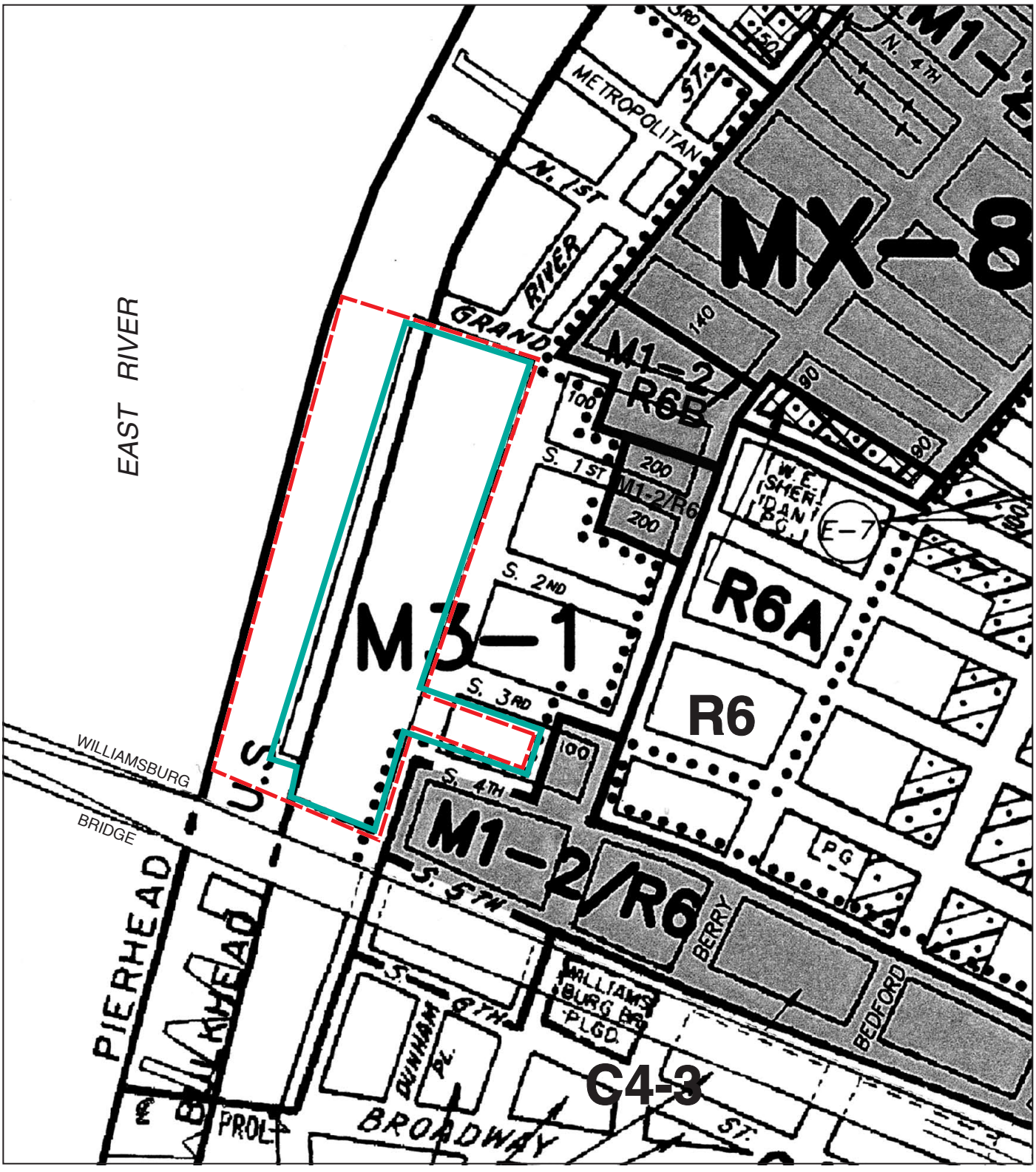
Following is a summary of the discretionary actions that would be required for the proposed project:

- Zoning map amendments (i) from M3-1 to R8 with a C2-4 commercial overlay for a section of the waterfront parcel; (ii) from M3-1 to C6-2 for portions of the waterfront parcel; and (iii) from M3-1 to R6 with a C2-4 commercial overlay on the upland parcel;
- Zoning text amendments to the following sections: (a) Zoning Resolution ("ZR") Section 23-953, ZR Section 62-35, ZR Section 62-352, and Appendix F of the ZR to apply the Inclusionary Housing program to the project site; and (b) ZR Section 52-83 to modify the requirements of non-conforming signs to permit a sign on the Refinery as per the approval from the New York City Landmarks Preservation Commission (LPC);
- Special Permits pursuant to ZR Section 74-74: (a) transfer of floor area development rights across Kent Avenue pursuant to ZR 74-743(a)(1), and (b) modifications of the following pursuant to ZR Section 74-743(a)(2): (i) height and setback per ZR Section 62-341, (ii) required dimensions on an inner court recess of ZR Section 23-852, (iii) required distance between windows in an inner court per ZR Section 23-863, (iv) rear yard regulations of ZR



Project Site Location
Figure 1-1

1.8.09



Project Site Boundary

Area Proposed for Rezoning

Zoning District Boundary

C2-4 Overlay

Special Purpose District

0 400 FEET

SCALE

Existing Zoning

Figure 1-2

Sections 23-533 and 62-332, and (v) distance between buildings regulations of ZR Section 23-711;

- A Special Permit pursuant to ZR Section 74-744(b) to modify the location of use provisions of ZR Section 32-42;
- A Special Permit pursuant to ZR Section 74-53 to permit, within the General Large Scale Development, the northern parking facility on the waterfront parcel to exceed the prescribed maximums for accessory parking spaces in order to accommodate the project's anticipated demand;
- Authorizations pursuant to ZR Section 62-822: (a) ZR Section 62-822(a) to modify certain requirements of ZR Section 62-50 (General Requirements for Waterfront Public Access Areas); (b) ZR Section 62-822(b) to modify certain requirements of ZR Section 62-513 (permitted obstructions in visual corridors) and ZR Section 62-60 (Design Requirements for the Waterfront Public Access Areas), and (c) ZR 62-822(c) to permit the phased implementation of waterfront public access improvements in coordination with phased development of the project site; and (c) an authorization for phased implementation of waterfront access requirements pursuant to ZR 62-822(c) to permit the phased implementation of waterfront public access improvements in coordination with phased development of the site;
- City Planning Commission (CPC) Chair certification pursuant to ZR Section 62-811 for compliance with waterfront public access and visual corridor requirements;
- CPC Chair certification pursuant to ZR 62-812 to permit the subdivision of a waterfront zoning lot; and
- Coastal Zone Consistency determination (because the project site is within the Coastal Zone).

The proposed project will require approval of a Joint Permit Application from the U.S. Army Corps of Engineers (USACE) and the New York State Department of Environmental Conservation (NYSDEC) for reconstruction of the existing waterfront platform and installation of a new sheet pile bulkhead. Approvals will also be required for the two proposed stormwater outfalls to be located at the end of South 2nd and South 3rd Streets. Additionally, a State Pollution Discharge Elimination System (SPDES) permit from NYSDEC will also be required for stormwater discharges during the construction period because construction on the project site involves more than one acre.

The rezoning and land use actions are subject to the Uniform Land Use Review Procedure (ULURP), requiring approvals by CPC and the City Council. CPC is the City Environmental Quality Review (CEQR) lead agency, and several additional agencies are involved or interested agencies in the environmental review, including the New York City Department of Housing Preservation and Development (HPD), the New York City Department of Environmental Protection (DEP), the New York City Department of Transportation (DOT), LPC, the New York City Department of Parks and Recreation (DPR), the New York City School Construction Authority (SCA), the New York City Housing Development Corporation (HDC), NYSDEC, USACE, and the State Historic Preservation Officer (SHPO).

B. PROJECT PURPOSE AND NEED

The Refinery LLC is owned by Refinery Management LLC, which is a joint venture of CPC Resources, Inc. and Katan Group LLC. CPC Resources is the Managing Member of The

Refinery LLC and is the for-profit development arm of the Community Preservation Corporation, a not-for-profit corporation formed in 1974 that specializes in financing affordable housing. CPC Resources was created in 1992. Its mission is to increase the amount and quality of housing affordable to people of low and moderate means by developing housing in communities throughout New York and New Jersey. Since its inception, the Community Preservation Corporation and CPC Resources have financed approximately 137,000 units of affordable housing, including nearly $1.97 billion invested in Brooklyn, and $248 million in the Williamsburg and Greenpoint neighborhoods alone.

In order to achieve the proposed project's goals of providing a substantial amount of affordable housing in the area of Williamsburg known as the Southside community, creating public access to and recreational use of the waterfront, and restoring and adaptively reusing the Refinery complex, a number of discretionary approvals are necessary.

PROJECT BACKGROUND

The now vacant project site was purchased by the applicant in June 2004, subsequent to the closure of sugar processing operations. Although sugar refining had taken place on the project site since the 1850s, the oldest existing buildings remaining on the site were built in the 1880s and the most recent in the 1960s. The site operated under the name Domino Sugar until 2001, when the Domino brand was acquired by American Sugar Refining. American Sugar closed its refining operations on the site in early 2004 with the exception of some limited packaging and warehousing operations, which ceased operating in mid-2004.

The project site is adjacent to the area rezoned in May 2005 as part of the Greenpoint-Williamsburg rezoning. The area rezoned under that action had previously been zoned for either heavy industrial use (M3 zoning), as is the project site, or light industrial use (M1 zoning), and also included the Special Northside Mixed Use District. As part of the Greenpoint-Williamsburg rezoning, approximately 184 blocks were rezoned to allow residential and mixed residential/industrial use, making use of a combination of R6 and R8 districts along the waterfront to the north of the project site to facilitate residential redevelopment with public waterfront access and open space. The Greenpoint-Williamsburg rezoning also incorporated an inclusionary zoning mechanism to incentivize the development of affordable housing, with 20 percent of the floor area in a development being affordable to low-income households or 25 percent affordable to a mix of low- and moderate-income households. Because the project site was still being used for sugar refining when the Greenpoint-Williamsburg rezoning proposal was formulated, it was not included in that rezoning. The proposed project would be consistent with that rezoning's objectives. The proposed project's zoning would help to achieve City goals of creating affordable housing and providing public access to the waterfront similar to the residential districts mapped on waterfront sites to the north of the project site from North 3rd Street to Newtown Creek.

On September 25, 2007, LPC designated three buildings on the project site as New York City Landmarks. These buildings are the Filter, Pan, and Finishing Houses at 292-314 Kent Avenue (collectively referred to as the Refinery).

PROJECT GOALS AND OBJECTIVES

Consistent with the above-mentioned recently adopted zoning changes in the area of the Williamsburg waterfront, and in keeping with the mission of CPC Resources, the proposed project seeks to meet the following objectives:

- In accordance with CPC Resources' mission, and to address community concerns that affordable housing is still not achievable for existing working-class residents of Williamsburg, the proposed project would offer 660 housing units as affordable, with a portion of those units affordable to households with income levels reaching as low as 30 percent of Area Median Income (AMI). This goal exceeds the low-income incentive zoning requirements of the Greenpoint-Williamsburg rezoning, and provides affordable units at income levels substantially lower than those required by the Greenpoint-Williamsburg rezoning. The balance of the proposed project's residential units would be market rate and would serve to cross-subsidize the substantial affordable housing component, which cannot be financed solely through existing government subsidy programs;
- Create physical and visual access to the waterfront, including a substantial amount of public open space, and link the site to the existing Grand Ferry Park to the north of the project site and to South 5th Street to the south of the site;
- Redevelop a former waterfront industrial site into an economically integrated mix of residential, retail/commercial, and community facility uses with a high quality design, including massing consistent with the redevelopment of nearby waterfront sites to the north and south and complementary to the existing neighborhood; and
- Adaptively reuse the three buildings that comprise the complex of buildings known as the Refinery.

C. PROJECT DESCRIPTION

DESCRIPTION OF THE PROJECT SITE

The approximately 11-acre project site is composed of two parcels: a waterfront parcel (Block 2414, Lot 1) and an upland parcel (Block 2428, Lot 1) (see Figure 1-3). The waterfront parcel is approximately 9.9 acres (excluding the approximately 6.2 acres of land underwater to the pierhead line), and the upland parcel is approximately 1.3 acres. The waterfront parcel is bounded on the west by the East River, on the north by Grand Street, on the east by Kent Avenue, and on the south by South 5th Street, which separates the site from the Williamsburg Bridge immediately to the south. Grand Street ends at Grand Ferry Park, which is a public park that provides access to the East River. The block on which the upland parcel is located is bounded on the west by Kent Avenue, on the north by South 3rd Street, on the east by Wythe Avenue, and on the south by South 4th Street.

Reflecting the project site's historical use, the entire development site is currently zoned M3-1, a zoning designation that permits heavy industrial and manufacturing uses and limited commercial uses. The waterfront portion of the site, which stretches for approximately 1,300 feet along the East River, is a complex of industrial buildings ranging in height from one to 16 stories. These buildings include warehouses, sugar processing buildings, power-generating facilities, and research and design structures. The buildings on the project site are currently unoccupied. LPC designated the three buildings which comprise the Refinery (individually known as the Filter House, the Pan House, and the Finishing House) as New York City Landmarks on September 25, 2007. The Filter House, located along the riverfront, is 12 stories tall. The Pan and Finishing Houses, located along Kent Avenue, are each eight stories. The interiors of the buildings do not consist of discrete and continuous floor levels, as in a conventional structure. Many large pieces of vertical processing equipment extend through several floors of the buildings, and in many cases what floor structure does exist was built around the various tanks, hoppers, bins, vats,

12.29.09



Project Site Boundary

0 300 FEET
SCALE

DOMINO SUGAR REZONING

Project Site
Figure 1-3

pipes, and diagonal bracing that fill the structures. Internal columns are cast iron, and the floors consist variously of iron plate, catwalks, and terra cotta arch floor slabs.

The upland parcel, now a vacant lot, was formerly used as a parking lot.

All of the East River shoreline along the project site is developed with a platform and bulkhead. The pier/platform, which covers about 1.3 acres over the water, is a pile-supported deck that is in fair-to-moderate structural condition. It was formerly used for the docking of cargo ships and there are cranes and other maritime infrastructure along the water's edge.

PROPOSED DEVELOPMENT PROGRAM

The proposed project would facilitate a proposal by the applicant to develop approximately 2.81 million gsf above-grade, including the reuse of the Refinery complex. Approximately 2.44 million gsf would be dedicated to residential use, up to 127,537 gsf to retail/commercial use, up to 98,738 gsf to commercial office use, and up to 146,451 gsf to community facility use. The applicant currently intends to build 2,200 residential units on the project site, of which 660 would be affordable to low- and moderate-income households. However, it is assumed for analysis purposes in this EIS that the project could include up to 2,400 residential units (based on an average unit size of approximately 1,000 gsf), 30 percent of which would be affordable to low- and moderate-income households. Although in order to realize the full allowable floor area under the proposed rezoning action, the applicant would be required to allocate 20 percent of the residential floor area as affordable housing, the EIS has assumed 30 percent because it is the applicant's stated intention to provide the 30 percent allocation.

There would also be approximately 1,694 accessory parking spaces located on the project site in enclosed courtyards and below-grade parking garages. Table 1-1 below shows the breakdown of floor area and parking spaces by block. As shown on Figure 1-4a, the project site includes five separate blocks or parcels, sites A through E, as well as the Refinery.

Table 1-1
Proposed Development Program

	Site A	Site B	Refinery	Site C	Site D	Site E	TOTAL
Residential							
gsf	203,984	761,727	260,522	576,893	320,742	318,437	2,442,305
Total units	206	740	241	569	317	327	2,400*
Retail							
gsf	30,000	10,769	30,143	10,775	9,850	36,000	127,537
Commercial Office							
gsf	98,738	--	--	--	--	--	98,738
Community Facility							
gsf	42,316	--	104,135	--	--	--	146,451
Total Floor Area							
gsf	375,038	772,496	394,800	587,668	330,592	354,437	2,815,031
Parking Spaces	782	-	127	411	-	374	1,694

Notes: gsf=gross square feet.
*The number of residential units is estimated based on an average unit size of approximately 1,000 gsf.

Under the proposed actions, the project site would include three zoning lots. Sites A through D in Table 1-1 would comprise a single zoning lot (Zoning Lot A), the Refinery would be Zoning Lot B, and Site E would be Zoning Lot C.

12.28.09



Source: Rafael Viñoly Architects

Project Site Boundary

Illustrative Site Plan

Figure 1-4a

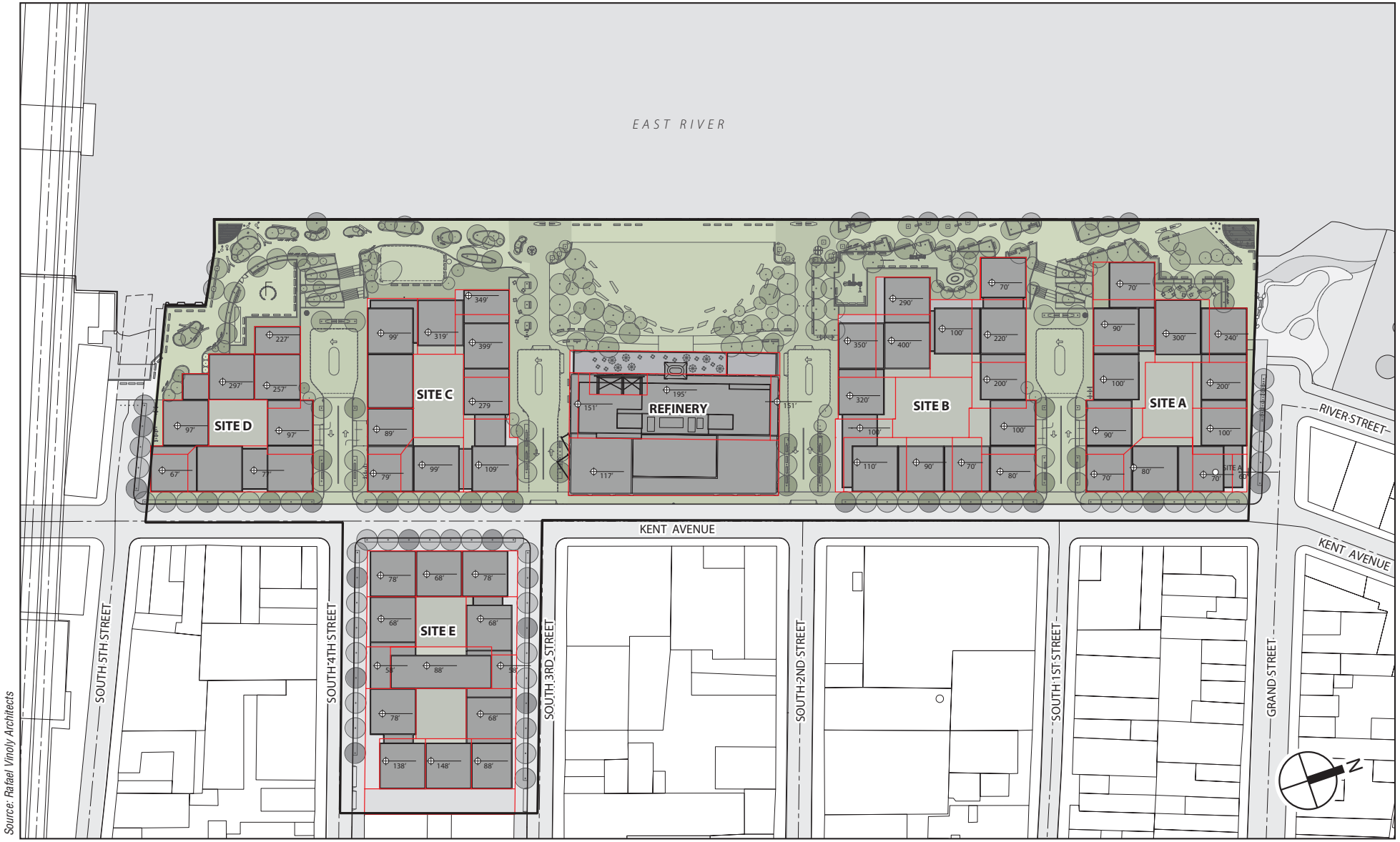
The proposed actions would create a zoning envelope within which the maximum permitted floor area could be developed. The maximum zoning envelope is depicted in plan view in Figure 1-4b and in elevation on the illustrative renderings in Figures 1-5 through 1-7. The renderings of buildings shown in these figures are an illustrative depiction of the proposed project as it could be built within the envelope. The maximum zoning envelopes would regulate the heights, size, and shape of footprints, and location of the proposed buildings, which would be required to fall within the envelopes.

Of the 660 housing units dedicated to affordable housing, approximately 15 percent would be rental housing for households at or below 30 percent of AMI; approximately 50 percent would be rental housing for households at or below 60 percent of AMI; approximately 15 percent would be senior rental housing for senior citizens at or below 50 percent of AMI; and approximately 20 percent would be homeownership units at New York City Housing Partnership Program affordability levels (up to 130 percent of AMI). The affordable units would be located on the waterfront and upland parcels. The market-rate units are expected to be condominium units.

If approved, the proposed project would include the preservation and reuse of the Refinery, the construction of new residential and mixed-use structures along the remaining four waterfront blocks between Grand Street and South 5th Street, and a new residential structure on the upland block east of Kent Avenue between South 3rd and South 4th Streets (see Figures 1-4a through 1-8c). The development on the upland block would be constructed first and approximately half of the residential units built on that site would be allocated as affordable units.

The site plan and proposed buildings are being designed to facilitate public access to the waterfront and the site's public open spaces and it is the applicant's intention to create a varied skyline and streetwall. The proposed new buildings consist of individual components, or modules, that are designed to allow the buildings to meet the neighborhood context at Kent Avenue while stepping up to the towers on the waterfront. The applicant has stated that the buildings would be clad in masonry to reflect Brooklyn's industrial history and the landmarked Refinery, and would become lighter and more transparent at the upper levels of the buildings. The varying heights and façades of the buildings and the modules that would comprise the new buildings would aim to create a diverse streetscape along the project's Kent Avenue frontage, as well as an articulated skyline when viewed from afar. By varying the façades and heights of the buildings, the applicant is intending to break up the massing of each block and create architectural texture that is residential in nature and reflective of the neighborhood. In addition to establishing a zoning envelope, the proposed discretionary actions incorporate design controls relating to building and façade articulation, transparency and glazing, tower floorplate size, and the location of ground floor retail use for all buildings on the site with the exception of the Refinery, which is subject to design controls specified by LPC.

By extending the streets that currently exist to the east of Kent Avenue, the applicant intends for the site plan to integrate the proposed buildings into the existing community and maximize public access to the waterfront. View corridors and public connections to the waterfront would be created at all four streets on the project site, two of which would be created where existing buildings currently block the community from views of the waterfront. Ground-floor retail uses along Kent Avenue would help to activate the streetscape, and the extension of retail uses to the waterfront side of the proposed buildings are intended to draw people onto the project's open space. The retail spaces would be required to have large amounts of glass onto the street to maximize transparency and activate the streetscape.



Source: Rafael Vinoly Architects

Area of General Large Scale Plan

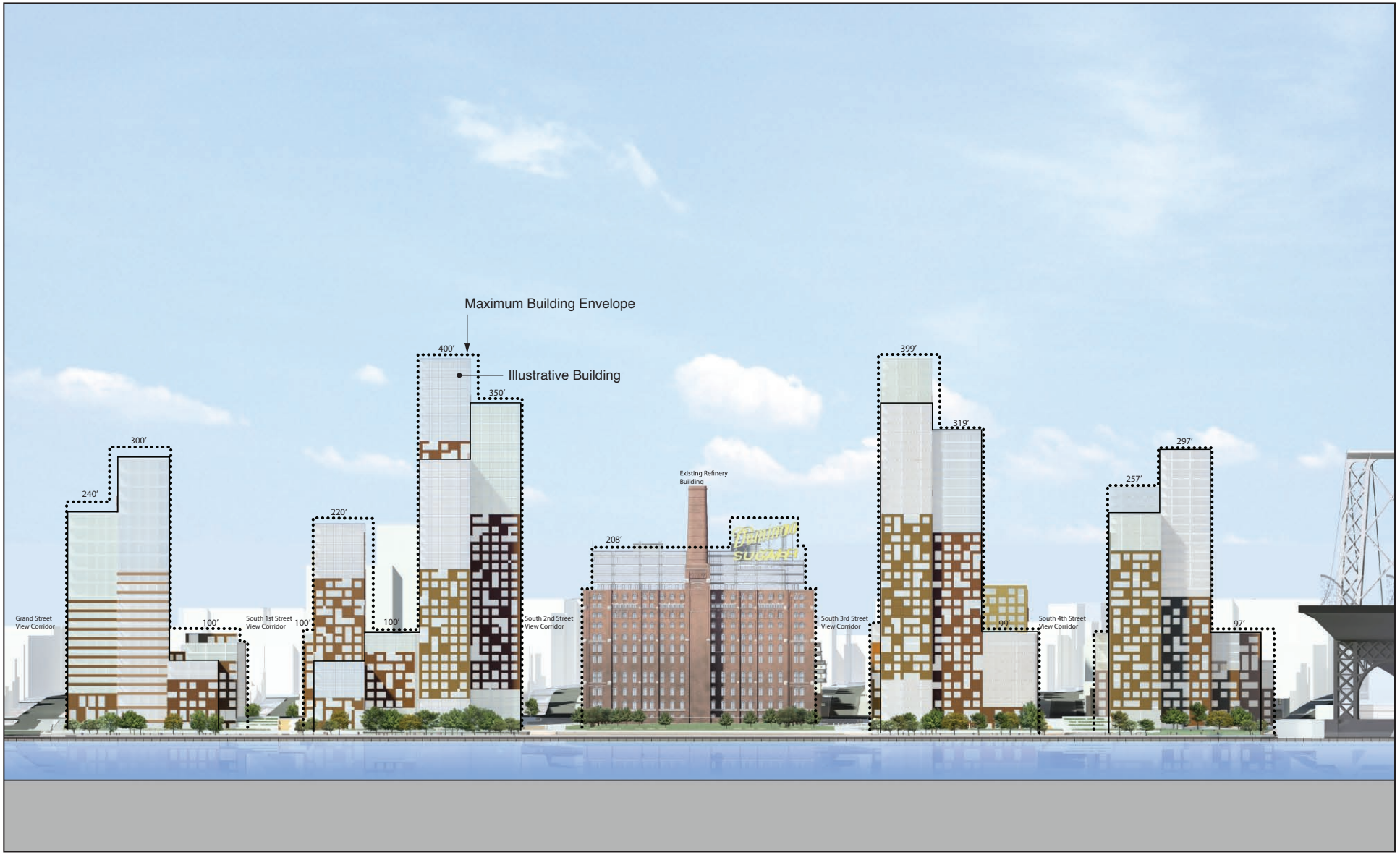
Zoning Envelope

Area of Open Space Plan Approval

NOTE: The proposed buildings are limited to the area within the zoning envelope. However, given the amount of floor area permitted under the proposed zoning, the buildings could not fill out the entire envelope.

Proposed Zoning Envelope

Figure 1-4b



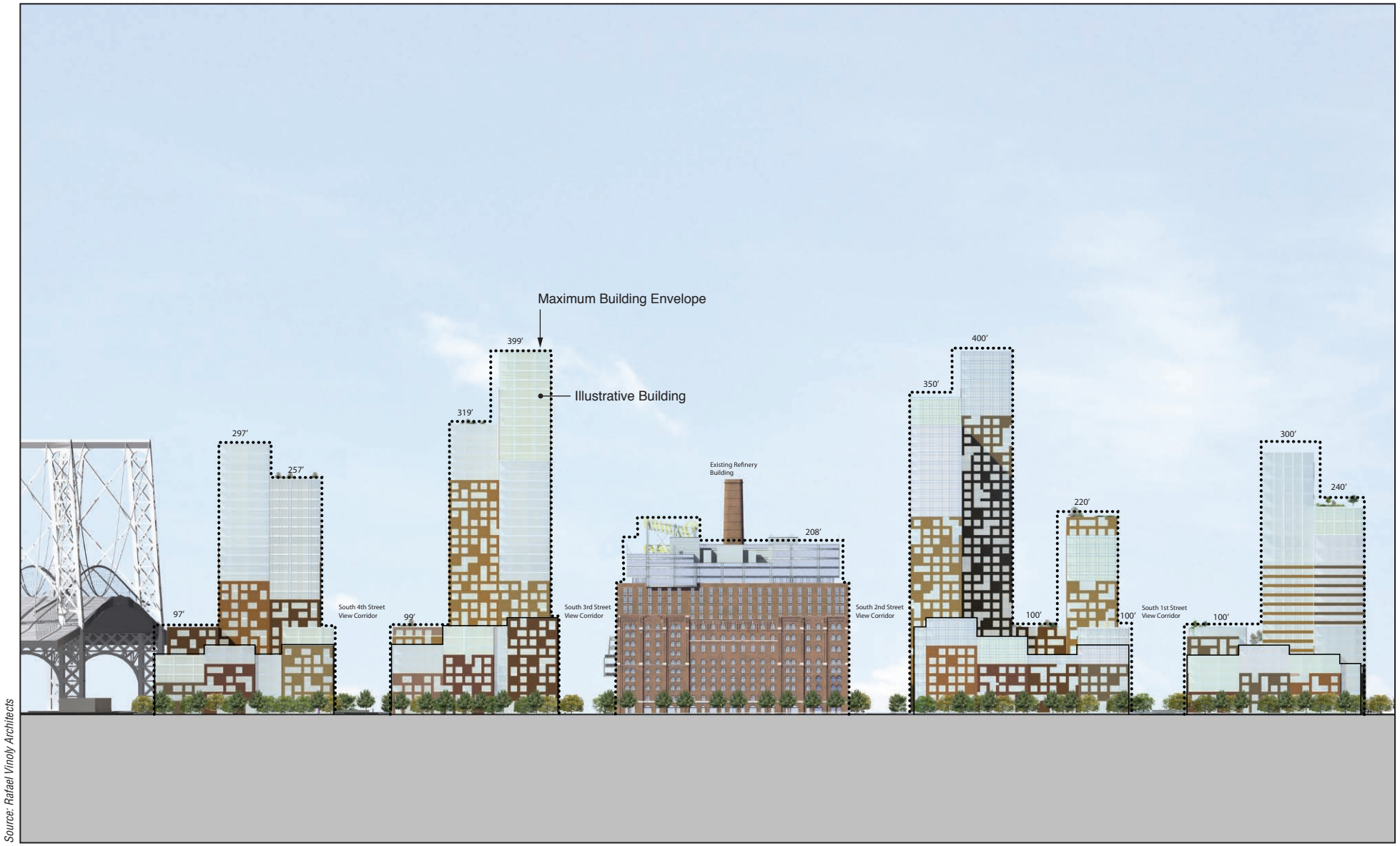
Source: Rafael Viñoly Architects

•••••••••• Maximum Building Envelope

NOTE: The proposed buildings are limited to the area within the zoning envelope. However, given the amount of floor area permitted under the proposed zoning, the buildings could not fill out the entire envelope.

Building Envelopes and Heights: West Elevation

Figure 1-5



Source: Rafael Vinoly Architects

•••••••••• Maximum Building Envelope

NOTE: The proposed buildings are limited to the area within the zoning envelope. However, given the amount of floor area permitted under the proposed zoning, the buildings could not fill out the entire envelope.

Building Envelopes and Heights: East Elevation

Figure 1-6



Source: Rafael Vinoly Architects

•••••••••• Maximum Building Envelope

NOTE: The proposed buildings are limited to the area within the zoning envelope. However, given the amount of floor area permitted under the proposed zoning, the buildings could not fill out the entire envelope.

Building Envelopes and Heights: North Elevation

Figure 1-7

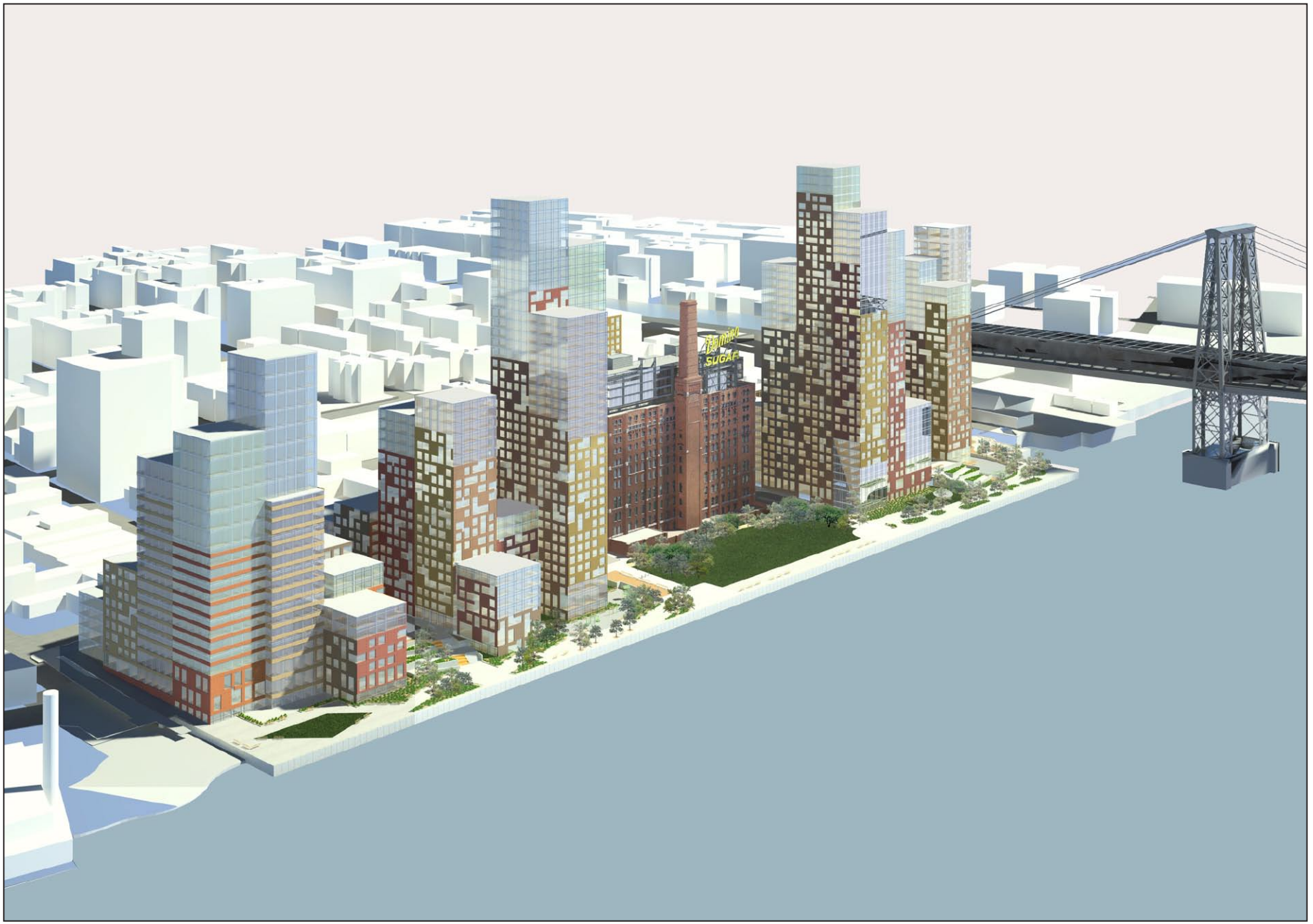


Source: Rafael Vinoly Architects

Illustrative Rendering of Proposed Project from Williamsburg Bridge

Figure 1-8a

12.29.09

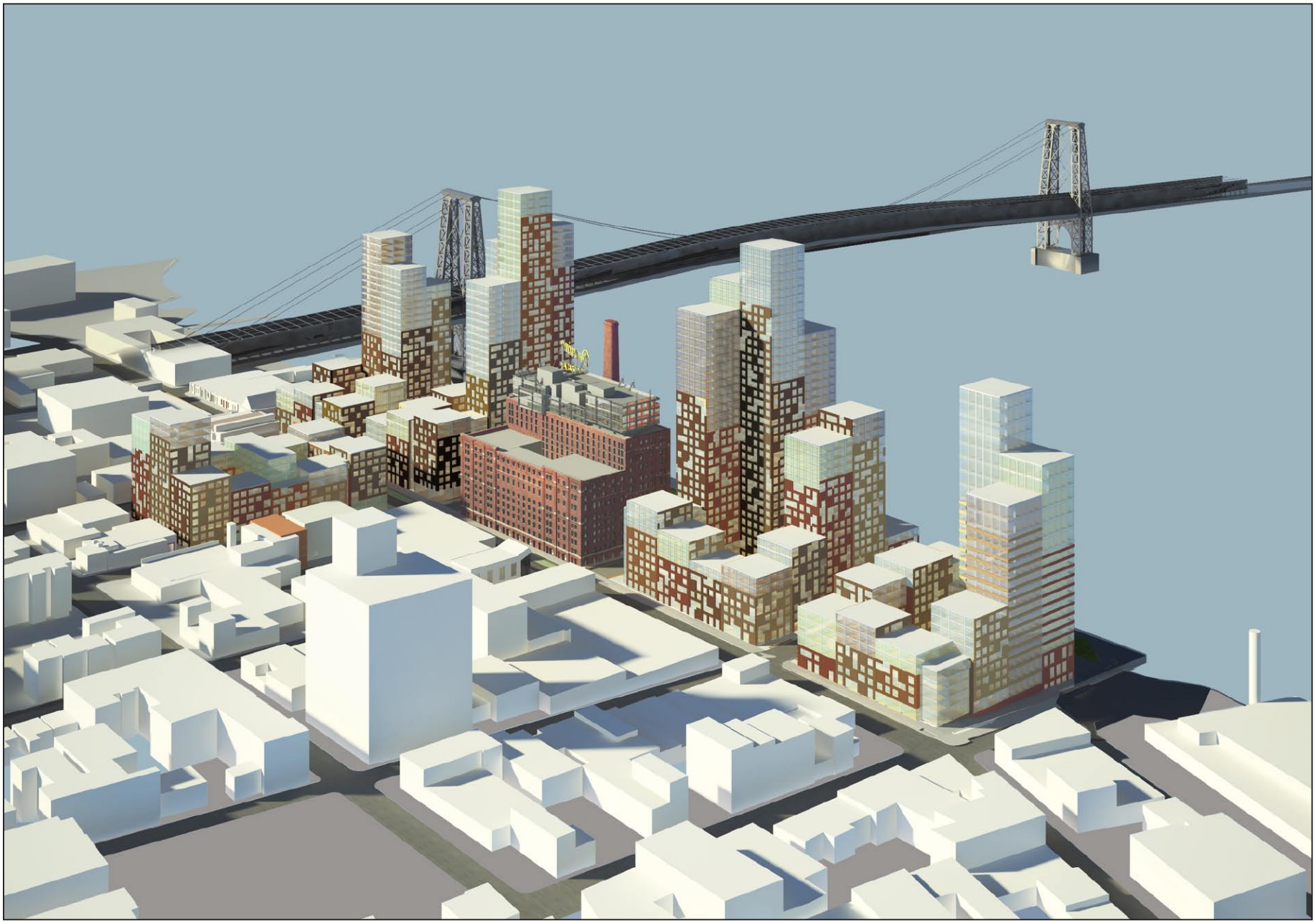


Source: Rafael Vinoly Architects

Illustrative Axonometric View of Proposed Project from the Northwest

Figure 1-8b

12.29.09



Source: Rafael Vinoly Architects

Illustrative Axonometric View of Proposed Project from the Northeast

Figure 1-8c

The applicant's intention is that the design maximize the open space on the site and emphasize the historic Refinery. A public park would be provided at the center of the site on the waterfront in front of the Refinery. Along the entire length of the waterfront would be an esplanade with both passive and active recreation amenities that would be open to the public. Additionally, the site design would create public access ways to the waterfront at each of the four street extensions that enter the site, and an open access to Grand Ferry Park to the north of the site. The proposed project's open space would also connect to South 5th Street at the southern end of the site.

The buildings closest to Kent Avenue on the waterfront parcel would range in height from approximately 60 to 110 feet and would include ground-floor retail/commercial uses along the full length of the project's frontage along Kent Avenue. Closer to the river, the buildings would continue to vary in height; two of the modules would reach heights of up to 300 feet and two would reach up to 400 feet. The buildings on the upland parcel would range generally from 58 to 90 feet, with two modules rising to approximately 138 and 148 feet, respectively. Ground-floor retail/commercial uses would be located along both sides of Kent Avenue throughout the site (see Figure 1-8d).

In addition to 203,984 gsf of residential space and approximately 30,000 gsf of retail space, Site A would include approximately 42,316 gsf of community facility space and 98,738 gsf of commercial office space. The portions of Site A that rise to elevations above the height of the nearby New York Power Authority (NYPA) facility exhaust stack would be limited to commercial office and potentially community facility use, and residential use on Site A would be located on the lower floors only. Commercial and community facility uses, which can operate with sealed windows, are appropriate at elevations above 110 feet in proximity to the NYPA plant (see further discussion in Chapter 19, "Air Quality"). Residential uses will be located at the lower elevations of the buildings on Site A, where there is no need for a sealed-window condition. A sealed-window condition is not required at any site other than Site A.

REUSE OF THE REFINERY COMPLEX

The proposed project would preserve and adaptively reuse the three buildings which together comprise the Refinery complex. The Refinery is located on the central block of the development site between South 2nd and South 3rd Streets. The complex would be restored and converted to some combination of residential, retail/commercial, and community facility uses (see Figure 1-9). The program for the reuse of the Refinery complex has not been finalized but is assumed to include approximately 241 residential units, 30,000 gsf of retail, and 104,135 gsf of community facility uses. The applicant proposes to add three and four floors to a portion of the roof of the Refinery complex to assist in meeting the project's goals and objectives, as discussed above. LPC voted to approve the proposed addition and other minor alterations on June 24, 2008. LPC's findings with respect to the appropriateness of the proposed alterations on the landmarked Refinery are contained in a Status Update Letter issued by LPC on June 26, 2008 but the actual Certificate of Appropriateness has not yet been issued.

The adaptive reuse of the Refinery poses a number of challenges, as it was designed and constructed for the specialized processes of sugar refining. Because the Refinery is a collection of three individual buildings, it does not have uniform and continuous floor levels. Furthermore, the complex of buildings includes large pieces of industrial equipment that extend in some places through several floors. The removal of this equipment would leave very few floors intact and the existing cast-iron columns do not have the load-bearing capacity to support multiple stories. The deep-set and relatively small windows, combined with the deep floor plate of the



Source: Rafael Vinoly Architects

Illustrative Rendering of the Proposed Project along Kent Avenue

Figure 1-8d

10.30.08



Source: Rafael Vinoly Architects

Rendering of the Refinery with Proposed Addition

complex, render the Refinery unsuitable for habitable use without altering the building to allow sufficient light and air as required under the New York City Building Code. Additionally, to reuse the Refinery, the entire interior structure and all the machinery would need to be dismantled and removed, leaving only the massive brick bearing walls and smokestack intact. These masonry walls would need to be braced temporarily while an entirely new structural framework with new floor slabs is built within the existing brick shell.

The 145-foot depth of the Refinery's typical floor is too deep for conventional apartments arranged on either side of a corridor, given that the New York City Building Code requires that habitable living spaces be no more than a 30-foot depth from exterior windows. To make the complex suitable for residential use, a 50- by 100-foot interior courtyard would be created beginning at the roof of the fourth floor of the building. The courtyard would not be visible from the street and therefore would not affect the landmarked exterior of the building. Two of the courtyard walls would consist of the historic masonry bearing walls that currently separate the Filter House, Pan House, and Finishing House sections of the building.

The proposed three- and four-story addition would be located on top of the Filter House at the western portion of the complex. As shown on Figure 1-9, the proposed addition is a steel and glass form evocative of industrial architecture. Floors two through four of the addition would be set back 10 feet from the façades of the Refinery, and the first floor would be further recessed to set the addition apart from the existing structure. The "Domino Sugar" sign would be located on top of the addition, as shown on Figure 1-9.

A one-story basement and terrace addition, 27 feet wide, is proposed along the full length of the river-front west façade of the building. This addition would house a parking access ramp down to the basement parking level and a covered loading dock, as well as retail space and a public comfort station. It would also provide a terrace for the retail space overlooking the riverfront open space. It is proposed to be clad in brick, with a stone coping to match the masonry of the existing building. The addition is intended to provide a buffer between the Refinery and the public open space facing the river, and would allow vehicles to enter the Refinery without creating new large openings in its historic arched façades.

The ground-floor openings at all four façades would be converted into retail storefronts and entrances, with masonry openings extended to sidewalk level and filled with historically appropriate storefronts. It is anticipated that entrances to the residential lobbies and community facility space would be located at the north and south sides of the complex.

PUBLIC OPEN SPACE AND WATERFRONT ACCESS

Approximately four acres on the waterfront parcel would be set aside as publicly accessible open space, including an esplanade along the waterfront and an approximately one-acre open space between the Refinery and the water's edge. Under the Zoning Resolution's waterfront zoning provisions, public open space, including a waterfront esplanade and upland connections, and visual corridors to the waterfront are required for new residential development zoned R6 or higher. As shown on Figures 1-10 and 1-11, the proposed project includes a waterfront esplanade that would connect to Grand Ferry Park to the north and South 5th Street at the southern end of the site. The esplanade would include pedestrian pathways that would extend the length of the site and connect larger gathering spaces and recreational uses. An approximately one-acre lawn in front of the Refinery would gently slope toward the waterfront, accentuating views of the East River and Manhattan, and showcasing the restored historic complex. Adjacent to the Refinery lawn, at the water's edge, the pathway would be straight and would feature a



Open Space Plan
Figure 1-10

12.22.09



View of Refinery lawn **1**



View south along esplanade **2**

Illustrative Rendering of Proposed Open Space

Figure 1-11

series of benches. Along the waterfront to the north and south of the lawn, the pathway would become serpentine. Trees and plantings would be located along the pathway in planters at grade. Shade structures would be provided at the northernmost and southernmost edges of the esplanade. Several active recreation areas would be located along the esplanade, including tot lots, playgrounds, and an active play lawn with a water feature that could function as an ice rink in winter. Industrial artifacts salvaged from the existing buildings on the site would be used within the open space as design elements to retain a sense of the site's industrial history. Throughout the project site, the applicant's stated intention is that the open space connect the neighborhood to the esplanade and enhance the views of the Manhattan skyline, the harbor, and three landmarked bridges.

Connections from the waterfront to Kent Avenue would be provided at South 1st, South 2nd, South 3rd, and South 4th Streets to facilitate public visual and physical access to the waterfront. Along the upland connections at South 1st and South 4th Streets, a series of steps, seating areas, and ramps would bridge the grade change between Kent Avenue and the waterfront esplanade. It is the applicant's intention that these features would create an entrance to the waterfront while also providing gathering spaces from which people can view the water from elevations higher than the esplanade. The esplanade would also create a new connection to Grand Ferry Park at the northern end of the project site and improvements to South 5th Street at the southern end of the site. Bicycle racks would be provided at each entrance to the project site.

It is expected that the esplanade and adjoining passive and active recreation areas as well as the 1-acre lawn adjacent to the Refinery would be owned, maintained, and operated by DPR, with the exception of a buffer of up to 10 feet around the buildings to allow for routine building maintenance activities.

The proposed open space, which comprises approximately 41 percent of the project site's waterfront parcel, would more than double the Zoning Resolution's requirement that at least 20 percent of the waterfront parcel be publicly accessible open space.

PARKING AND CIRCULATION

Approximately 1,694 accessory parking spaces would be provided on the project site in below-grade garages on both the waterfront and upland parcels. The waterfront parcel would have three below-grade parking facilities, including one at the north end of the site with 782 spaces, one in the Refinery with approximately 127 spaces, and one at the south end of the site with approximately 411 spaces. A fourth parking facility with approximately 374 parking spaces would be located on the upland parcel. Access to the garages would be provided along South 1st, South 3rd, and South 4th Streets on the waterfront parcel, and would include driveways with drop-off areas (see Figure 1-4a). Access to the parking garage on the upland parcel would be provided from South 4th Street. The upland parcel would also contain a covered loading dock on the eastern boundary of the site.

Although only 1,042 parking spaces would be required under the proposed zoning, the proposed project includes additional accessory parking spaces to meet the anticipated demand on-site, for a total of 1,694 accessory parking spaces. A maximum of 1,541 accessory spaces are permitted under the Zoning Resolution. As described below under "Required Public Approvals," a proposed Special Permit would include provisions to allow the proposed parking facility at the northern end of the site to exceed the prescribed maximums for parking under the Zoning Resolution in order to accommodate the project's anticipated demand.

It is anticipated that the development could also be served by water taxi service and/or shuttle bus service to transit locations. While the project could accommodate a water taxi service, it would require its own USACE/NYSDEC approval for permitting of dock designs and operations for which the design and location have not been specified at this time. Additionally, other site plan and open space plan approvals by CPC may be required to accommodate the passenger dock. As described in Chapter 23, "Mitigation," the feasibility of these alternative transportation measures will be explored further between the DEIS and the Final EIS (FEIS).

SUSTAINABLE DESIGN

Sustainable design integrates architectural elements and engineering systems to optimize performance of proposed buildings and their interaction with the environment. The proposed project would include a number of sustainable design features, as discussed below.

The applicant would have an independent commissioning agent review the design team's work from the earliest stages of design and implement QA/QC procedures at every stage of the design and construction cycle to ensure that environmentally responsible practices are being followed.

Energy Consumption Reduction and Demand Control

The proposed project is committed to energy efficient design, and would exceed the building energy performance required by the current building code by at least 10 percent. This commitment has been accounted for in the greenhouse gas analysis in Chapter 19, "Air Quality and Greenhouse Gas Emissions." As part of that commitment, individual lighting controls would be provided for 90 percent of the proposed project's occupants, with building lighting and site lighting linked to building management systems to minimize energy consumption when not in use. Operable windows would be provided to all living spaces, allowing inhabitants full control over their fresh air, as well as heating and cooling.

Water Use and Stormwater Management

The project site is currently comprised entirely of impervious surfaces. The proposed project would substantially increase the amount of pervious surface in the form of landscaped open space, which would help to decrease stormwater runoff. By using local plant species, the project's open space would require minimal water for irrigation. Additionally, the planting of trees on the site would contribute to the City's goals of adding one million new trees citywide.

The stormwater system would be designed so that runoff would flow directly into the East River rather than into the combined sewer system, thereby minimizing the project's potential contribution to combined sewer overflow events (see Chapter 14, "Infrastructure"). Stormceptor units would be provided to treat stormwater before releasing it into the East River. A stormwater detention facility would be incorporated onto the upland portion of the project site. The developer would construct and install the stormwater system and new sewer lines. The analyses presented in Chapter 14, "Infrastructure," account for the increased pervious surface on the project site.

Sustainable Construction and Materials

The proposed project would reuse much of the existing materials on the site. The façade of the Refinery would be entirely preserved, and debris from other parts of the site would be used for site fill or recycled. During construction of the proposed project, it is expected that 75 percent of construction waste would be diverted from landfills, much of it for recycled content.

The applicant would strive to use recycled materials, especially recycled steel, and to use fly ash in concrete. Locally purchased materials would be used to the extent practical, reducing carbon dioxide emissions associated with transport, as well as sustaining regional economies. The applicant intends to specify low-emitting materials for all adhesives and sealants, paints and coatings, and interior floor finishes. The project would not use any HCFC and CFC-based refrigerants in the heating and cooling system, as those chemicals contribute to ozone depletion and global warming.

A number of measures would be implemented during construction to reduce air emissions. The measures are outlined in Chapter 21, "Construction Impacts," and are incorporated into the construction analysis.

Accommodating Non-Motorized Vehicles

Bicycle storage and changing rooms would be provided for 5 percent of the occupants, encouraging the use of alternate transit, thereby reducing exhaust and sound pollution. Increased bicycle usage is a major part of Mayor Bloomberg's sustainability goals for a Green New York.

Other Possible Measures Under Consideration

The applicant is also considering a variety of additional sustainable design features to optimize the performance of the proposed buildings and their relationship to the environment. These could include high-performance building materials, additional water conservation measures such as gray water reuse, high-efficiency lighting design and HVAC (heating, ventilating, and air conditioning) systems, and Energy Star appliances. Green roofs may also be implemented to decrease stormwater runoff, reduce the heat-island effect, and contribute increased insulation to the buildings.

A portion of the proposed project's accessory parking may be dedicated as preferred parking for clean fuel vehicles. Parking spaces may also be reserved for vehicles belonging to a car-sharing service.

CONSTRUCTION SCHEDULE AND PHASING

Construction would begin with the upland parcel and subsequently proceed from south to north along the waterfront for the new buildings, as set forth in the Restrictive Declaration. Construction would begin in 2011, and the project would be fully built in 2020. It is currently anticipated that the renovation of the Refinery would begin concurrent with the construction of the buildings on Sites C and D immediately to the south. The construction phasing is described in more detail in Chapter 21, "Construction Impacts." As described in Chapter 8, "Historic Resources," a Construction Protection Plan would be prepared to protect the Refinery during the rehabilitation of the Refinery itself and during the construction of the adjacent new buildings.

While the existing pilings and platform are currently functional, the platform would be demolished and a new deck would be built over the same footprint. Reconstruction of the platform would be beneficial for the long-term maintenance of the esplanade by minimizing ongoing future repairs. The existing decking of the platform along the water's edge would be removed and a new concrete platform slab would be constructed on new concrete piles.

As each of the five sites along the waterfront is built out, the public open space required under the Zoning Resolution would be completed at the time the buildings on any particular site are completed.

D. REQUIRED PUBLIC APPROVALS

Development of the proposed project would require a number of discretionary actions (collectively, "the proposed actions"), as follows:

- Zoning map change from M3-1 to R8 with a C2-4 commercial overlay for a section of the waterfront parcel; from M3-1 to C6-2 for portions of the waterfront parcel; and from M3-1 to R6 with a C2-4 commercial overlay on the upland parcel. The proposed zoning is shown in Figure 1-12. The waterfront parcel would consist of Zoning Lots A and B (Zoning Lot B being the proposed C6-2 district located on the Refinery), while the upland parcel would consist of Zoning Lot C. (ULURP No. 100185ZMK)
- Zoning text amendments to the following ZR sections (ULURP No. 100186ZRK):
    - ZR 23-953, ZR 62-35, ZR 62-352, and Appendix F of the ZR to apply the Inclusionary Housing Program to the project site. The regulations currently only apply to certain areas of Greenpoint-Williamsburg and in R7-3 zoning districts in Brooklyn Community District 1. The Inclusionary Housing program permits a floor area bonus from 2.43 to 2.75 for R6 districts and from 4.88 to 6.5 for R8 districts.
    - ZR Section 52-83 to modify the requirements of non-conforming signs to permit a sign on the Refinery Building as per the approval from LPC. The applicant is requesting an amendment to ZR Section 52-83, which deals with non-conforming advertising signs. The text amendment would permit a non-conforming sign to be structurally altered, reconstructed, replaced or relocated on the same zoning lot in Community District 1 or within a General Large Scale Development containing such zoning lot, pursuant to approval of a Certificate of Appropriateness from LPC. Additionally, the text amendment would make the discontinuance provisions of ZR Section 52-61 inapplicable, provided that the sign is reconstructed on the landmark building before it receives a temporary certificate of occupancy for its reuse. This would permit a sign on the Refinery as per what was shown in the approval received from LPC for the addition and minor building modifications for the adaptive reuse of the Refinery on June 24, 2008.
- Special Permits for a General Large Scale Development pursuant to ZR 74-74: transfer of floor area development rights across Kent Avenue pursuant to ZR 74-743(a)(1), modification of waterfront height and bulk regulations pursuant to ZR 74-743(a)(2), and modification of location of use requirements pursuant to ZR 74-744(b). Figures 1-13 and 1-14a and b illustrate the required height, setback, inner court, and rear yard waivers required for the proposed project and described below. (ULURP No. 100187ZSK)
    - Zoning Floor Area: the Special Permit would allow for the transfer of approximately 187,187 square feet (sf) of floor area development rights across Kent Avenue to the upland parcel (Zoning Lot C) from the waterfront parcel (Zoning Lot A). Pursuant to the proposed C6-2 and R8/C2-4 Inclusionary district, Zoning Lot A would be permitted a floor area ratio (FAR) of 6.5 (including bonus) and would generate approximately 2,305,141 sf of floor area. Pursuant to the proposed R6/C2-4 Inclusionary district, Zoning Lot C would be permitted an FAR of 2.75 (including bonus) and would generate approximately 158,389 sf of floor area. After the transfer of approximately 187,187 sf of floor area, Zoning Lot A would be left with approximately 2,117,954 sf of floor area (of which approximately 2,018,155 sf will be utilized, at an FAR of approximately 5.69) and Zoning Lot C would have

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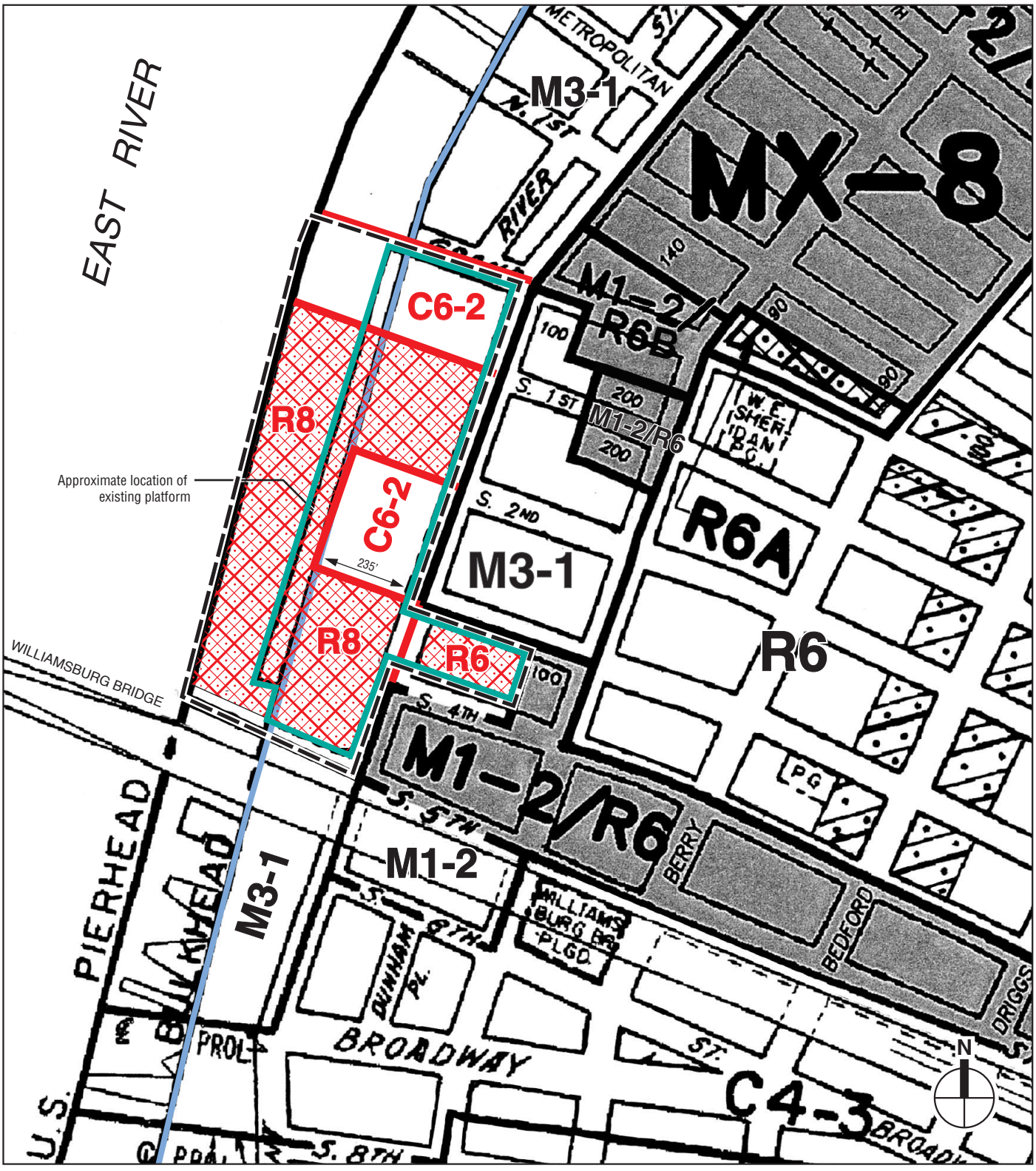


DOMINO SUGAR REZONING

Proposed Zoning
Figure 1-12

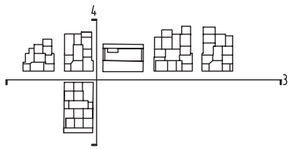


Project Site Boundary

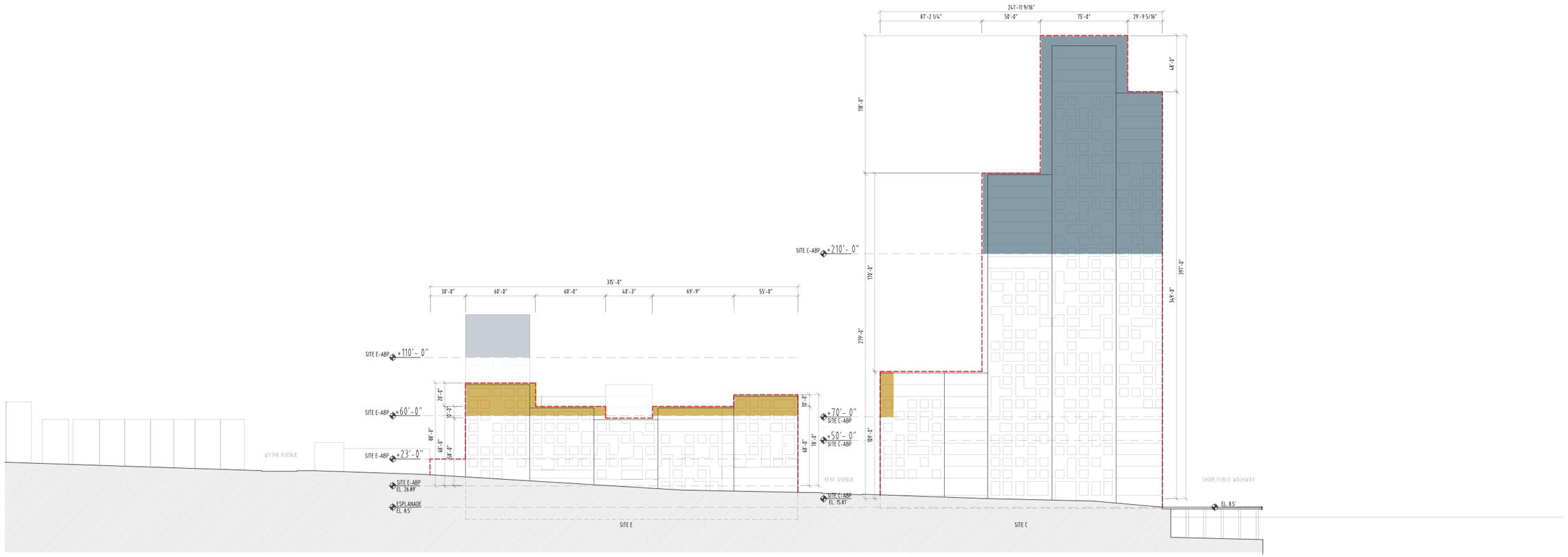
Height Waiver

Setback Waiver

Proposed Waivers: Site Plan
Figure 1-13



3. KENT AVENUE ELEVATION



4. SOUTH THIRD STREET ELEVATION

Height Waiver

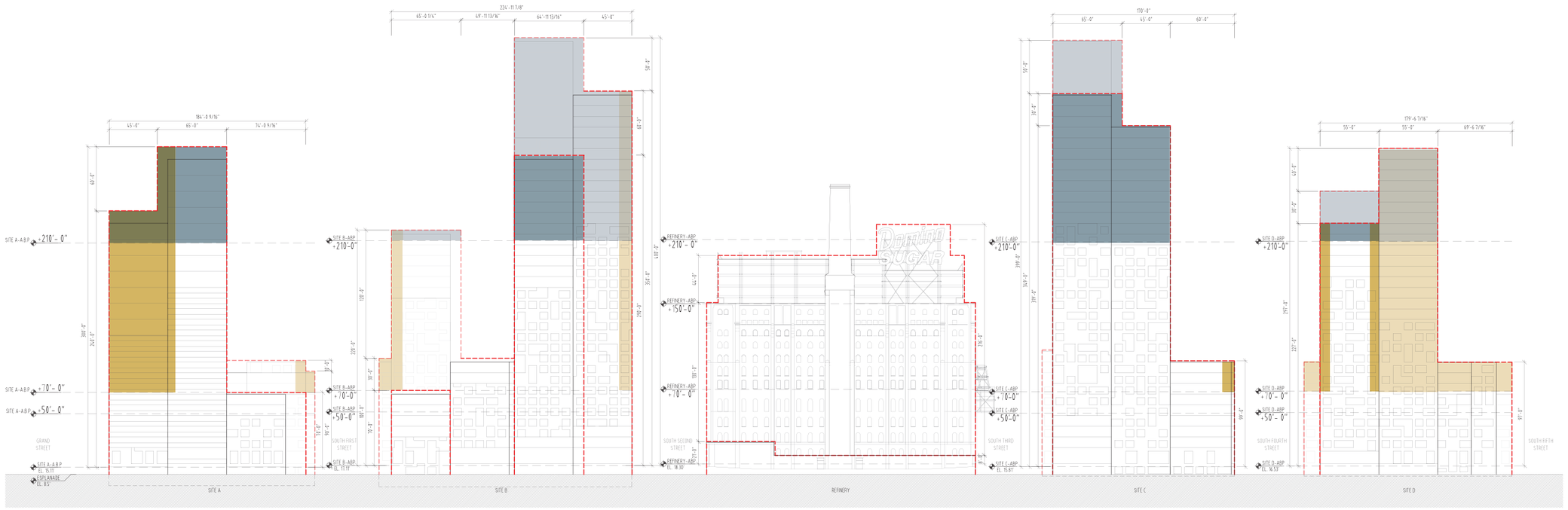
Setback Waiver

Maximum Zoning Envelope

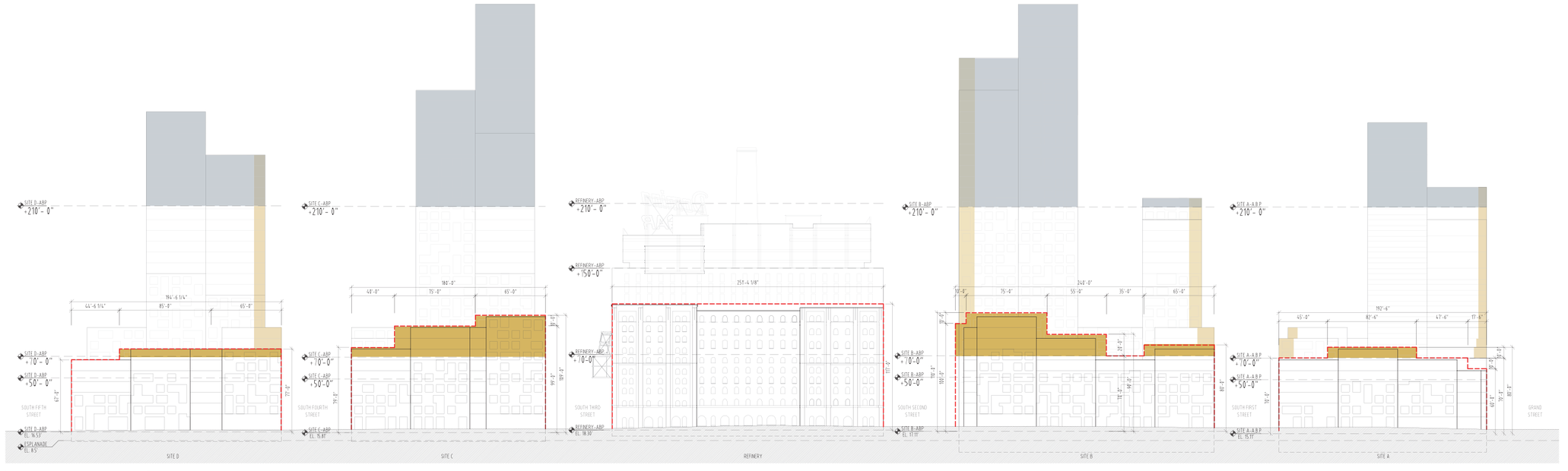
Illustrative Building Elevation

Proposed Waivers: Sectional View, Site E

Figure 1-14a



1. ESPLANADE ELEVATION



2. KENT AVENUE ELEVATION

Height Waiver

Setback Waiver

Maximum Zoning Envelope

Illustrative Building Elevation

Proposed Waivers: Sectional View, Sites A, B, C, D, and Refinery

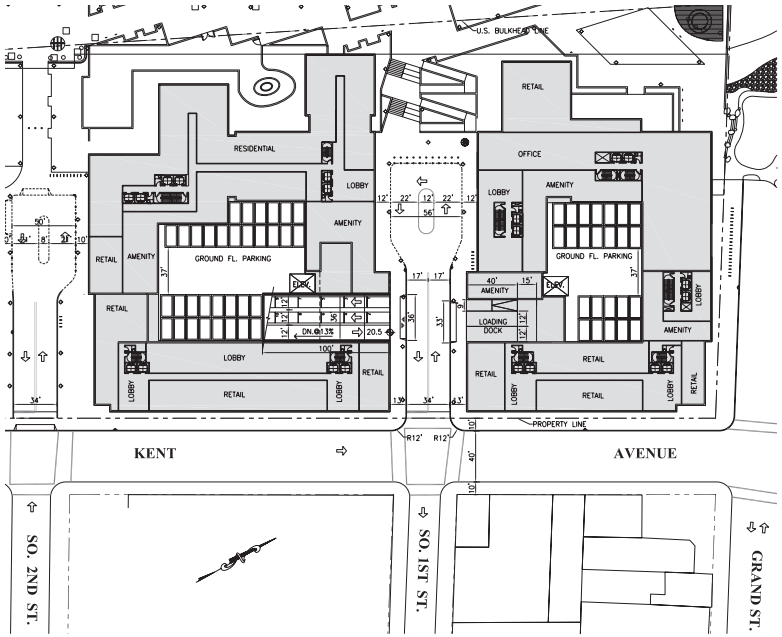
Figure 1-14b

approximately 345,576 sf of floor area and an FAR of approximately 6.0. Taken together, Zoning Lot A and the Refinery Building on Zoning Lot B would not exceed an FAR of 5.6.

- Height and Setback: The Special Permit proposes to modify the following:
  - ZR Section 62-341(a)(2), to permit portions of buildings to encroach upon the initial setback distance of 10 feet from a wide street, 15 feet from a narrow street, and 30 feet from the boundary of a shore public walkway.
  - ZR Section 62-341(c)(1), to permit portions of buildings to exceed the maximum base heights of 60 feet in the R6 district and 70 feet in the R8 district.
  - ZR Section 62-341(c)(2), to permit portions of buildings to exceed the maximum building heights of 110 feet in the R6 district and 210 feet in the R8 district.
  - ZR Section 62-341(c)(4), to permit portions of the residential towers on the waterfront parcel to exceed 8,100 sf at elevations above the maximum base height and to permit portions of the residential tower on the upland parcel to exceed 7,000 square feet at elevations above the maximum base height.
  - ZR Section 62-341(c)(5), to permit portions of the walls of certain buildings facing the shoreline to exceed 100 feet above the maximum base height.
- Inner Court: ZR Section 23-863 requires that a minimum distance of at least 60 feet be maintained between two legally required windows in an inner court when a wall above the required window is at a height of at least 120 feet. The zoning envelope for Site A would provide a north to south distance of 56 feet 6 inches within a portion of the inner court, the zoning envelope for Site B would provide a distance of 50 feet between a portion of an inner court, and the zoning envelope for Site D would provide a distance of 55 feet within the inner court. Therefore, the Applicant is seeking to waive the 60 foot requirement by between 3 feet 6 inches and 10 feet.
- Inner Court Recess: ZR Section 23-852 requires that the width of an inner court recess be at least twice the depth of the recess, unless the recess opening is 60 feet or more in width. A portion of the proposed building on Site B may violate this requirement, depending on how the building is constructed within the envelope.
- Rear Yard: ZR Section 23-533 requires that for through-lots, a rear yard equivalent of one of the following be provided: an open area with a minimum depth of 60 feet between the two street lines on which such through-lot fronts, two open areas, each adjoining and extending along the full length of the street line and each with a minimum depth of 30 feet, or an open area adjoining and extending along the full length of each side lot line with a minimum width of 30 feet. A portion of the building on Zoning Lot C would constitute a through-lot and although it would provide an open area with a depth of 60 feet along portions of the lot, it would not do this continuously and requires a waiver from this requirement.
- Rear Yard: ZR Section 62-332 requires a 40-foot rear yard for waterfront lots. Zoning Lot A provides a waterfront yard equal to and greater than 40 feet along the majority of the width of the Site, with the exception of small portion at the Site's northern and southern ends, where the yard narrows to approximately 36 feet (at both ends).

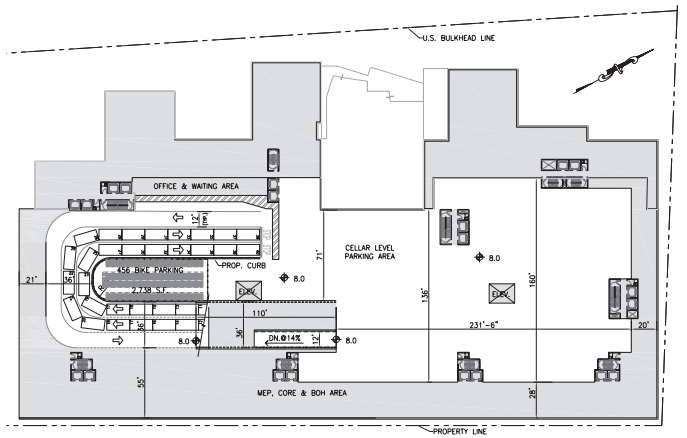
  - Minimum distance between building segments: Section 23-711 requires a minimum distance of 60 feet between two legally required windows in building segments. A distance of less than 60 feet is provided between two segments on Site B.
  - Location of Use: ZR Section 32-422 requires that in any building or portion of a building occupied by residential uses, commercial uses be located only on a story below the lowest story occupied in whole or in part by such residential uses. Site A contains building segments with both residential and commercial uses. Although these uses are in separate building segments with no access between them, the uses are located at the same levels and therefore require a waiver from this requirement. (ULURP No. 100188ZSK)

- A special permit pursuant to ZR Section 74-53 to permit within the General Large Scale Development the north parking facility to exceed the prescribed maximum of ZR Sections 25-12 and 36-12 by up to 316 spaces. Figure 1-15 shows the special permit parking plan for the north parking facility. (ULURP No. 100189ZSK)
- Authorizations pursuant to ZR Section 62-822 (ULURP No. 100190ZAK):
  - Authorization pursuant to ZR Section 62-822(a) to modify the requirements of Section 62-50 (General Requirements for Visual Corridors and Waterfront Public Access Areas). Although the proposed project provides a shore public walkway with a width of 40 feet along the majority of the waterfront parcel, this shore public walkway narrows to a width of 25 feet 7 inches at South 5th Street. The narrowing of the shore public walkway results from a narrowing of the site itself at its southern end. In addition, although the proposed project provides all of the required visual corridors, the visual corridors at South 1st and South 4th Streets do not meet the grade level requirements established by the ZR because of the presence of the proposed below-grade parking garages. It should be noted that clear, unobstructed views to the waterfront will still be provided at these locations.
  - CPC authorization pursuant to ZR Section 62-822(b) to modify the requirements of Section 62-513 (Permitted obstructions in visual corridors) and Section 62-60 (Design Requirements for Waterfront Public Access Areas). Although the proposed project complies with the majority of the waterfront public access and visual corridor requirements, the applicant is proposing modifications to the shore public walkway, the upland connections, the supplemental access areas, and the permitted obstructions in order to achieve a superior open space design.
  - An authorization for phased implementation of waterfront access requirements pursuant to ZR 62-822(c) to permit the phased implementation of waterfront public access improvements in coordination with phased development of the site.
- CPC Chair certification pursuant to ZR Section 62-811 for compliance with waterfront public access and visual corridor requirements. (ULURP No. 100191ZCK)
- CPC Chair Certification pursuant to ZR Section 62-812 to permit the subdivision of the waterfront parcel zoning lot. As described above, the waterfront parcel would be divided into Zoning Lot A, the "Non-Refinery Parcel" and Zoning Lot B, the "Refinery Parcel." (ULURP No. 100192ZCK)
- Because the project site is within the Coastal Zone, a Coastal Zone Consistency determination by CPC is also necessary.



GROUND FLOOR LEVEL

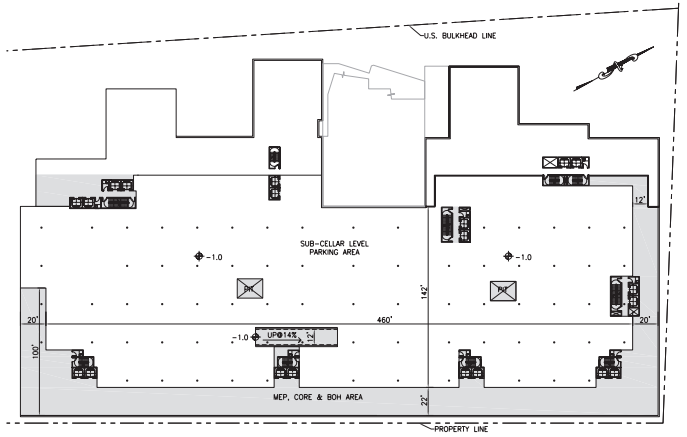
SCALE: 1"=30'



CELLAR LEVEL

SCALE: 1"=30'

GARAGE AREA CAPACITY CALCULATIONS				
	GROUND FL.	CELLAR	SUB-CELLAR	TOTAL
GARAGE FLOOR AREA (S.F.)	21,712	56,090	67,288	145,090
NUMBER OF 2-CAR STACKERS	57	0	0	57
NUMBER OF BIKE PARKING PROVIDED	0	456	0	456
NUMBER OF ATTENDANT-PARKING SPACES REQUESTED				782
NUMBER OF RESERVOIR SPACES REQUIRED				39



SUB-CELLAR LEVEL

SCALE: 1"=30'

Site A Special Permit Parking Plan

Figure 1-15

In addition, the proposed project will require approval of a Joint Permit Application from NYSDEC and USACE for reconstruction of the existing waterfront platform and installation of a new sheet pile bulkhead. Approvals will also be required for the two proposed stormwater outfalls to be located at the end of South 2nd and South 3rd Streets. This draft Joint Permit Application is expected to be submitted to USACE and DEC for their review shortly after the public issuance by CPC of the Draft Environmental Impact Statement (DEIS) and its Notice of Completion. A State Pollution Discharge Elimination System (SPDES) permit from NYSDEC will also be required for stormwater discharges during the construction period because construction on the project site involves more than one acre.

These actions are subject to environmental review and will be conducted through a coordinated review with the CPC, the lead agency. The proposed project would also require a permit from NYSDEC for work during construction. Approvals may also be necessary from City and state agencies (such as HDC and HPD) for the allocation of funds for affordable housing. Consultation with SHPO will also be necessary in relation to USACE and NYSDEC review of permits for in-water work.

RESTRICTIVE DECLARATION

To ensure that the proposed project, if approved, is constructed consistent with the drawings shown on the site plan approved by CPC and the City Council pursuant to ULURP, that access to the project is at the locations analyzed in the EIS, and that the mix of uses in the project is substantially consistent with the proposed project as described above and as analyzed in the EIS, the applicant will execute and record a Restrictive Declaration at the time all land use related actions required to authorize the project's development are approved. The Restrictive Declaration would:

- Provide design standards and requirements, and an envelope within which the project's bulk and heights would be arranged, including a limitation on the FAR for the waterfront portion of the site to 5.6 and the upland portion of the site to 6.0.
- Require that the project be developed substantially in accordance with the development program studied in the EIS.
- Provide for the implementation of Project Components Related to the Environment and mitigation measures, consistent with the EIS.
- Require use of the Inclusionary Housing Program under Section 23-90 of the Zoning Resolution to gain the full height and setback waivers and requested FAR.
- Provide requirements for the completion of portions of the waterfront public access areas as a condition of issuance of Certificates of Occupancy, as well as for the transfer of title and conveyance of public access easements.
- Provide that height and setback waivers under the General Large Scale Development Special Permit will be utilized in connection with use of the Inclusionary Housing Program under Section 23-90 of the Zoning Resolution.

In addition, measures related to the remediation of hazardous materials on the site would be implemented in accordance with a separate DEP-approved Restrictive Declaration for the project site. With these measures in place, significant adverse impacts related to hazardous materials would be avoided during and after construction. ✷