

A. INTRODUCTION

This chapter analyzes a number of alternatives to the proposed project, including the following: the No Action Alternative, which assumes the project site would remain in its current condition and no zoning actions are approved; the As-of-Right Alternative, which assumes the project site is developed as-of-right with uses under the current M2-1 zoning district; and a Lesser Density Alternative, which considers the development of the project site at 2.7 FAR with market rate housing, and without the inclusion of any affordable housing.

For each of the technical analyses presented in the environmental impact statement (EIS), the anticipated effects of the proposed project are compared to those conditions under each of these alternatives. The purpose of this analysis, as set forth in the *City Environmental Quality Review (CEQR) Technical Manual*, is to provide decision makers and the public with the opportunity to consider practicable alternatives that are consistent with the project's purpose, and that could potentially reduce or eliminate significant adverse environmental impacts identified in the EIS.

B. NO ACTION ALTERNATIVE

Environmental conditions under this alternative are similar to those presented for “the future without the proposed project” condition in each of the technical areas of the EIS (presented in Chapters 2 through 21). In this chapter, these conditions are compared with the conditions with the proposed project. Under the No Action Alternative it is assumed that no discretionary actions would be necessary and that there would not be any changes to the project site.

LAND USE, ZONING, AND PUBLIC POLICY

The No Action Alternative, like the proposed project, would not result in significant adverse impacts related to land use, zoning, and public policy. Under the No Action Alternative, the project site would remain in its current uses, which are limited warehouse and storage operations, truck parking, and vacant underutilized lands. No new residential, open space, community facility, or commercial uses would be introduced on the project site. Unlike the proposed project, this alternative would not create a new waterfront redevelopment on the project site or extend the local residential land uses east across Bond Street to the canal waterfront, opening the canal waterfront to new active uses and waterfront open space.

SOCIOECONOMIC CONDITIONS

The No Action Alternative, like the proposed project, would not result in significant adverse impacts to socioeconomic conditions. Under the No Action Alternative, the project site would remain in its current use, and the effects of the proposed project on socioeconomic conditions would not occur. Unlike the proposed project, this alternative would not result in the direct displacement of any site businesses. The proposed project would displace three on-site

businesses that employ about 20 people, and a truck parking facility. Neither this alternative nor the proposed project would result in any direct or indirect residential displacement, and neither would have any adverse effects on the local business or economic conditions. However, unlike the proposed project, this alternative would not provide new market rate and affordable housing. With this alternative, the proposed 447 project units (of which up to 130 would be affordable for low-income households) would not be developed. In addition, under this alternative, it is assumed that the limited number of jobs at the site (approximately 20) would not need to relocate to other spaces nearby.

COMMUNITY FACILITIES AND SERVICES

Neither the No Action Alternative nor the proposed project would have significant adverse impacts on police and fire protection, health care, day care, or library services. This alternative, however, would not generate any new school-age children, while the proposed project would introduce new elementary, middle, and high school students. Thus, the proposed project would increase the demand for seating at local schools; however, based on a detailed analysis of seating capacity for the local public and elementary school districts, there would be adequate seating capacity at the elementary and middle school levels to handle the number of students generated by the proposed project. Therefore, neither the proposed project nor this No Action Alternative would result in any significant adverse impacts on community facilities and services.

Under this alternative there would not be the 2,000 square feet of community facility space proposed by the project. This space, expected to house a local not-for-profit group would not be provided under this alternative.

OPEN SPACE

Like the proposed project, the No Action Alternative would not result in significant adverse impacts to open space. Unlike the proposed project, the No Action Alternative would neither introduce new residents to the open space study area, nor create 0.7 acres of publicly-accessible open space along the Gowanus Canal waterfront. Under this alternative, the ½-mile study area total open space ratio would remain at 0.50 acres which is below the *CEQR Technical Manual* guideline of 2.5 acres, and also below the average City-wide community district median of 1.5 acres per 1,000 residents. Under the proposed project, the total open space ratio would also remain at 0.50 acres.

Under the No Action Alternative, the active open space ratio in the area would continue to be well below the recommended guidelines, with an active open space ratio of 0.33 acres per 1,000 residents. With the proposed project there would be a 3 percent decrease in this ratio (from 0.33 to 0.32) acres per 1,000 persons. However, with the proposed project's 0.7 acres of waterfront open space, the study area passive open space ratio would increase by 6 percent, from 0.17 to 0.18 acres per 1,000 persons. Under the No Action Alternative, the small improvement in the passive open space ratio attributable to the proposed project would not occur.

SHADOWS

Under the No Action Alternative, the project site would not be redeveloped, and therefore there would be no change with respect to shadows on the project site. Under the proposed project, shadows cast by the proposed project would not adversely affect local open spaces, natural features or sunlight-sensitive historic resources. Thus, neither the proposed project nor this alternative would result in significant, adverse shadow impacts.

HISTORIC RESOURCES

Under the No Action Alternative, the project site would not be redeveloped, and there would be no potential for significant adverse impacts to archaeological resources (the Gowanus Canal bulkhead—a contributing element to the S/NR-eligible Gowanus Canal Historic District), as would occur under the proposed project. However, under the No Action Alternative, in the absence of site redevelopment and stabilization of the existing timber crib bulkhead, there is the potential for the continued deterioration of the timber crib bulkhead and the loss of that resource.

Neither the No Action Alternative nor the proposed project would result in significant adverse impacts to architectural resources.

URBAN DESIGN AND VISUAL RESOURCES

Like the proposed project, the No Action Alternative would not result in significant adverse impacts to urban design and visual resources. Under the No Action Alternative, the project site would remain in its existing underutilized condition. The No Action Alternative would not redevelop the site with new, predominantly residential buildings, nor would the proposed streetscape improvements or waterfront open spaces be provided. Under the No Action Alternative, urban design conditions and views of visual resources would remain the same, and the changes in building type and bulk that would result from the proposed project would not occur.

NEIGHBORHOOD CHARACTER

Under the No Action Alternative, the existing conditions of the project site would remain, and neighborhood character would not be altered.

Under the proposed project, the project site would be transformed from a low-density, low-activity, industrial and vacant site to a moderate-density development with residential buildings and supporting commercial uses and community facility spaces. With the proposed project, there would also be significant streetscape improvements, new publicly-accessible open space along the Gowanus Canal, and increased pedestrian activity. Neither the proposed project nor the No Action Alternative would result in significant, adverse neighborhood character impacts.

NATURAL RESOURCES

Neither the No Action Alternative nor the proposed project would have any adverse impacts on groundwater. The proposed project would have a beneficial impact through the removal of contaminants from the soil that could impact local groundwater and surface waters. Under this alternative, these benefits would be foregone.

With the proposed project, groundwater recovered during any construction dewatering would be treated, as necessary, prior to discharge to the canal or the combined sewer system. In this alternative no such measures would be necessary, but in neither condition would adverse impacts occur. Neither this alternative nor the proposed project would have any adverse impacts on terrestrial resources. Rather, the proposed project would create approximately 0.7 acres of waterfront open space that would provide potential habitat for common songbirds, small mammals, and pollen-dependent species. This habitat would not be created under the No Action Alternative.

Under the No Action Alternative, the project benefits of capturing local street runoff and reducing street flooding through new storm sewers would not occur.

Under this alternative, the installation of a new steel sheet bulkhead and the resulting short-term construction-related impacts to water quality (i.e., temporary increases in suspended sediment) would not occur. However, with the proposed project these impacts would be limited and would not result in long-term adverse impacts to water quality. Under the No Action Alternative, the deterioration of the bulkhead would continue, as would the erosion of sediments into the canal, since the existing bulkhead is an old timber crib style and in need of repair and replacement. There would also not be the implementation of the project's Stormwater Pollution Prevention Plan (SWPPP) that would minimize erosion and deposition of soil into surface waters and littoral zone tidal wetlands of the canal as well as reduce pollutant loadings in the long-term (occupancy) phase of the project. In this alternative, no such measures would be installed and the untreated runoff from existing industrial land uses would continue to flow directly into the canal.

While the proposed bulkhead installation would permanently remove very limited benthic habitat and some benthic macroinvertebrates, these losses would not result in significant adverse natural resources impacts, as the habitats at the site are of limited value. Nor would the project activities significantly impact food supply for foraging fish. Encrusting organisms and benthic macroinvertebrates would be expected to recolonize the new bulkhead shortly after construction is completed. The proposed project would also not impact any endangered, threatened, or special concern wildlife species, nor would it adversely affect any essential fish habitat species. However, under the No Action Alternative, the benefits of the proposed project with respect to local water quality and the implementation of a stormwater pollution prevention system on the site would not occur.

The proposed project would separate all stormwater generated within the project site from the combined sewer system, treat it on site, and discharge it to the canal. Therefore, no net change in combined sewer overflows (CSOs) to the canal is expected. In addition, the proposed project would result in a net reduction (about 5 percent) in impervious surfaces and a decrease in stormwater runoff, as existing paved surfaces and structures would be replaced with landscaped open spaces that would allow for more water quality treatment and attenuation during peak runoff flows. In addition to the planned open space areas, stormwater best management practices (BMPs) implemented as part of the SWPPP prepared for the proposed project would control the quality and rate of discharge of stormwater to the canal. Under the No Action Alternative, no such infrastructure improvements would occur and these benefits would be foregone as the site conditions remain in their current condition.

Under the proposed project, sanitary sewage from the project would be treated at the Red Hook Water Pollution Control Plant (WPCP) and the added sewage would not compromise treatment capacity of the WPCP since there is substantial available capacity at the plant. Thus, neither the proposed project nor this alternative would have any impact on the WPCP or the water quality of New York Harbor (which is the receiving water for the Red Hook WPCP).

HAZARDOUS MATERIALS

Under the No Action Alternative, the existing uses on the project site would remain, and there would be no potential for new, in-ground construction to result in significant adverse impacts with respect to hazardous materials. Under the No Action Alternative, the measures required under the proposed project to avoid significant adverse hazardous materials impacts would not be needed.

In contrast to the proposed project, the No Action Alternative would not create new residential uses on the waterfront that would eliminate manufacturing and vacant urban uses. Moreover, under the No Action Alternative, on-site hazardous materials would not be removed from the site. Unlike the proposed project, the No Action Alternative does not include the removal of any above- and below-ground tanks and drums, chemicals, remaining industrial equipment, demolition of the existing industrial structures and the removal of asbestos and lead paint. The No Action Alternative does not include a Remedial Action Plan (RAP) to address the identification and removal of known contamination and the covering of the site with new structures and clean soils as outlined in the New York State Department of Environmental Conservation (DEC) Recommended Soil Cleanup Objectives (6 NYCRR Subpart 375-6). The No Action Alternative also does not include a construction health and safety plan (HASp) to protect workers and the local community.

WATERFRONT REVITALIZATION PROGRAM

In the No Action Alternative a number of public policy objectives with respect to the City's waterfront revitalization program and coastal zone management initiatives would not be achieved, including: reuse and redevelopment of underutilized sites in the coastal zone; providing water quality improvements; removing hazardous materials from the coastal zone; providing public access to the waterfront and coastal waters with improved waterfront landscapes; and opening new public views along the coastal zone, including views of historic structures.

This alternative would also not have a significant adverse archaeological impact with respect to the historic Gowanus Canal bulkhead. However, the project proposes mitigation for this impact and unlike this alternative also provides the potential for the recovery of information relative to the construction of the historically significant Gowanus Canal bulkhead. Under this alternative, these materials could be lost as the bulkhead continues to deteriorate.

INFRASTRUCTURE

Under the No Action Alternative, unlike the proposed project, there would not be any increased water demands. However, neither condition would result in a significant adverse impact on the city's water supply system. Likewise, under this alternative the added sanitary flow to the Red Hook WPCP would not occur. However, neither the proposed project nor the No Action Alternative would result in a significant adverse impact on the Red Hook WPCP, or its ability to properly treat wastewater.

With respect to stormwater, under the proposed project, in order to protect water quality and reduce stormwater flow contribution to the combined sewer system, new stormwater sewers would be installed beneath 1st and 2nd Streets and no stormwater from the project site would be discharged to the combined sewer system. In addition, with the proposed project, some existing paved surfaces and structures would be replaced with landscaped open space and a publicly-accessible waterfront that would allow for more stormwater runoff attenuation and infiltration along with infiltration water quality treatment. Under the No Action Alternative, none of these benefits would occur. Under the No Action Alternative, stormwater would not be treated prior to its discharge to the canal and there would be no SWPPP to reduce suspended solid pollutants. In addition, under the No Action Alternative, there would be no new separate storm sewers along both 1st and 2nd Streets. Nor would there be reductions in pollutant loadings from stormwater runoff to the Gowanus Canal since no treatment system would be installed.

With respect to combined sewer overflows, as stated above, sanitary flows from the project site would increase with the proposed project, by approximately 140,000 gpd in the worst-case scenario. However, current stormwater runoff contributions to the combined sewer in Bond Street would also be eliminated with the introduction of new storm sewers in 1st and 2nd Streets that would collect and treat stormwater before discharge into the Gowanus Canal. Under this No Action Alternative, these infrastructure improvements would not occur. In addition, there would not be the added stormwater treatment measures of the proposed project and the overall reduction in pollutant loads and the water quality treatment measures of the proposed project.

SOLID WASTE AND SANITATION AND ENERGY

Under the No Action Alternative, increased demands on local utility systems, including solid waste and sanitation systems and energy, would not occur. However, with the proposed project no significant adverse impacts on these systems are expected.

TRAFFIC AND PARKING

Although the No Action Alternative would not generate any new vehicular trips, traffic volumes in the study area would be expected to increase as a result of background growth and planned development in the study area. In general, under the No Action Alternative, all of the study area locations would operate acceptably (in terms of overall intersection delay and LOS) with the exception of 3rd Avenue and Carroll Street which would operate at an overall LOS E and LOS D (delay in excess of 45 seconds) during the AM and PM peak hours, respectively. Taking into account these projected changes in traffic conditions through the 2011 analysis year, and the added vehicular trips of the proposed project, there would be significant adverse impacts at two intersections in the study area, including:

- The eastbound approach of Carroll Street at 3rd Avenue during the AM and PM peak hours; and
- The eastbound approach of Carroll Street and 4th Avenue during the AM and PM peak hours.

However, with the proposed project, these impacts can be mitigated back to the conditions expected under the No Action Alternative. Thus, traffic conditions under the No Action Alternative and with the proposed project are similar. In terms of on-street parking utilization, under the No Action Alternative, the overall on-street parking utilization rate in the study area would be approximately 93 percent compared to the proposed project's on-street parking utilization rate of 97.4 percent.

TRANSIT AND PEDESTRIANS

Under the No Action Alternative, the added subway and bus trips associated with the proposed project would not occur. Therefore, under the No Action Alternative the added pedestrian trips associated with the proposed project would not occur. While pedestrian facilities in the study area would experience an increase in pedestrian volumes as a result of background growth and planned developments, these conditions would not be significantly different from the conditions under this No Action Alternative. Likewise, pedestrian safety conditions under the No Action Alternative are not expected to be significantly different from pedestrian safety conditions with the proposed project.

Under the No Action Alternative, the benefits of the proposed project with respect to improved pedestrian conditions, including streetscapes around the project site, across the project site to the

waterfront, and along the waterfront connecting 2nd Street on the south with Carroll Street on the north, would be foregone.

AIR QUALITY

Under the No Action Alternative, the insignificant increase in carbon monoxide (CO) concentrations resulting from traffic generated by the proposed project and from the proposed parking garage would not occur. However, with the proposed project no violations of National Ambient Air Quality Standards (NAAQS) are predicted with respect to mobile sources. Therefore, air quality conditions attributable to mobile source emissions under either the proposed project or this No Action Alternative would not be significantly different. Under the No Action Alternative, the measures needed under the proposed project to avoid significant adverse stationary source air quality impacts from HVAC systems would not be required (i.e., no (E) designation would be necessary). Under this alternative, the unmitigated unavoidable adverse impact with respect to odors would also not occur.

NOISE

Like with the proposed project, under this alternative, uses at the site would meet the *CEQR Technical Manual* requirements with respect to interior noise levels. In neither condition would there be an impact on interior noise levels or ambient noise levels due to either stationary or mobile sources.

CONSTRUCTION IMPACTS

Under the No Action Alternative, no construction would occur on the project site. Thus, there would not be the short-term impacts of construction with respect to soil disturbance, traffic, air quality, water quality and aquatic resources, noise, and hazardous materials. However, these construction period impacts of the proposed project are short-term and measures such as a stormwater pollution prevention plan during construction would minimize these impacts to the extent feasible. There would also not be the economic and fiscal benefits of construction employment and the economic and fiscal benefits that would be realized during project construction. Thus, under this alternative, these benefits, as well as the long-term benefits of the project, would not be realized.

PUBLIC HEALTH

Neither the No Action Alternative nor the proposed project would result in significant adverse impacts to public health. Neither would result in significant adverse air quality, noise, water quality, or hazardous materials impacts, nor would pathways of exposure for future local residents or open space users result in conditions that would be unhealthy for the public.

C. AS-OF-RIGHT ALTERNATIVE

Under the As-of-Right Alternative, the project site would be redeveloped with an as-of-right use allowed under the current M2-1 zoning. This alternative is intended to identify, for illustrative purposes only, the potential effects of development under the current zoning. It does not imply financial or development feasibility, or reflect what the applicant intends to construct on the project site absent the proposed project. The likely future use of the project site absent the

proposed project is evaluated in the No Action Alternative, under which the project site would remain in its current use.

M2-1 districts allow medium performance standard uses such as manufacturing of advertising displays, electrical and household appliance repair, art and metal crafts, automobile dead storage, laundries, tires sales, trucking terminals, wholesale storage, and office/personal storage. No residential uses are allowed in M2 districts. For analysis purposes, it is projected that the project site would be redeveloped with a warehouse/storage use under the As-of-Right Alternative (see Figure 23-1). The maximum allowable floor FAR in an M2-1 district is 2.0, which would permit a storage or warehouse use of approximately 115,000 zoning square feet of development on the northern block (Block 452) and approximately 180,000 zoning square feet of development on the southern block (Block 458). It is assumed that one building would be constructed on each block. Each building would have a maximum base height of 60 feet or 4 stories, whichever is less, and then could rise within the sky exposure plane at a ratio of 2.7:1 (the illustrative diagram in Figure 23-1 shows a 45-foot-tall structure fronting on Bond Street). There is no maximum building height. No publicly accessible open space would be required or provided along the canal. No improvements to the bulkhead would be made. Seven accessory parking spaces would be provided, assuming one space for every three employees. A 20-foot rear yard would be required; a 20-foot front yard would be required on Bond Street, and no side yards would be required. Thus, it is assumed that the warehouse buildings would cover substantially all of the sites, with accessory parking located in the rear and front yards.

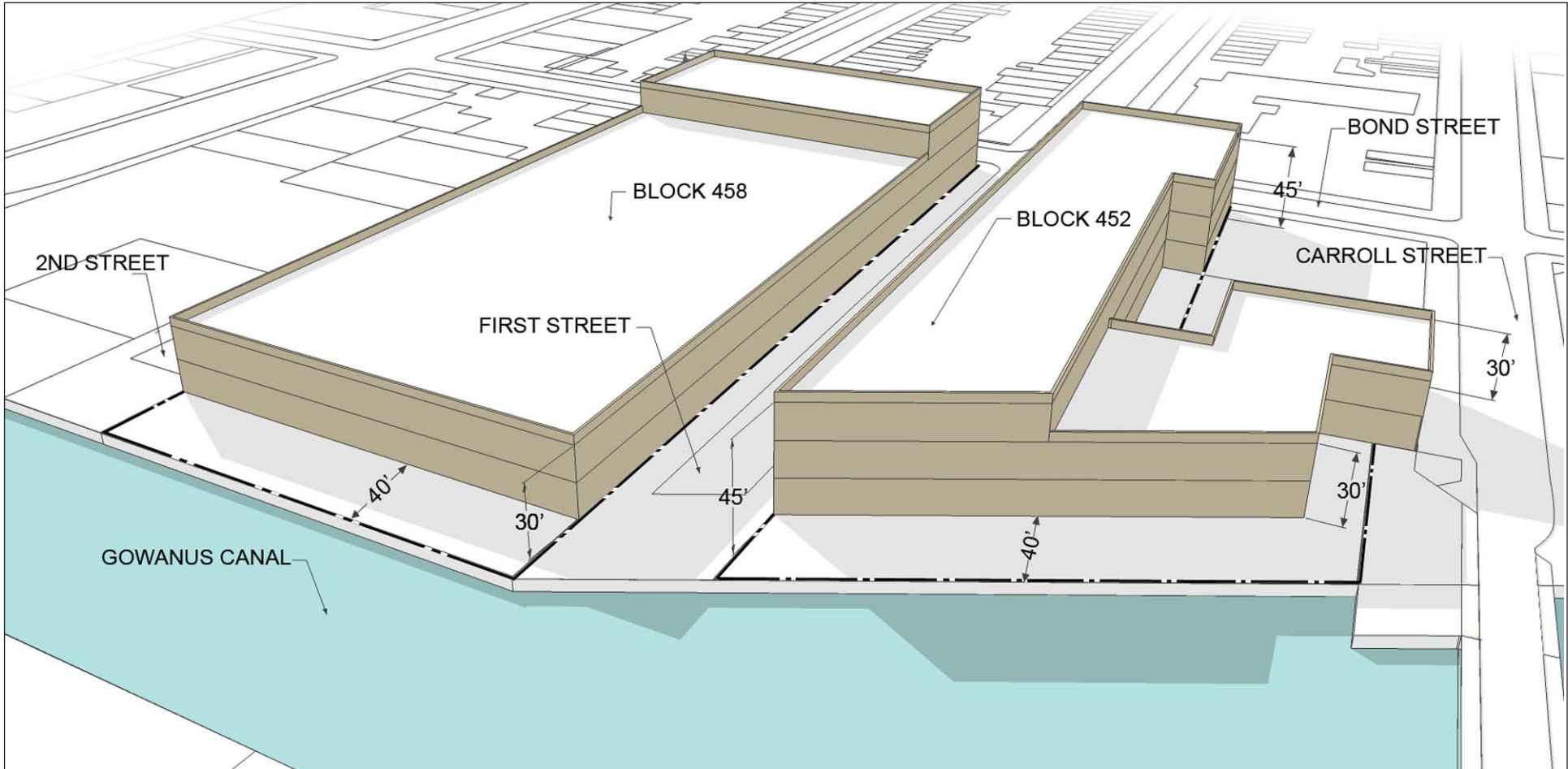
LAND USE, ZONING, AND PUBLIC POLICY

Under the As-of-Right Alternative, the project site would be developed with a warehouse use rather than the proposed predominantly residential development with commercial and community facility uses. The warehouse use would be consistent with the current warehouse/industrial waterfront of the Gowanus Canal. Under the As-of-Right Alternative, none of the land use or zoning changes that would result from the proposed project would occur. Neither the proposed project nor the As-of-Right Alternative would result in significant adverse impacts with respect to land use, zoning, or public policy.

SOCIOECONOMIC CONDITIONS

Like the proposed project, the As-of-Right Alternative would also result in the direct displacement of the on-site businesses, which employ about 20 persons and include warehouse/distribution operations and a trucking facility. Neither this alternative nor the proposed project would result in any direct or indirect residential displacement, and neither would have any adverse effects on local business or economic conditions. However, unlike the proposed project, this alternative would not provide new housing including the proposed 447 units of which up to 130 units would be affordable for low-income households.

Under the As-of-Right Alternative it is assumed that the existing businesses on site would either cease operations or relocate and the site would be redeveloped with a new storage operation on both blocks that would employ about the same number of people. Under this alternative, the site would remain underutilized with respect to socioeconomic conditions and would provide no new local housing or affordable housing, with no net change in on-site employment and a limited increase in fiscal contributions. In addition, the increased on site residential population with the proposed project that could support local neighborhood businesses and services would be foregone.



NOTE: For Illustrative Purposes Only

COMMUNITY FACILITIES AND SERVICES

Neither this As-of-Right Alternative nor the proposed project would have any significant, adverse impacts on police and fire protection, health care, or library services. However, this alternative would not generate any new school-age children, while the proposed project would introduce new elementary, middle, and high school students. Thus, the proposed project would increase the demand for seats in the local school district; however, based on a detailed analysis of seating capacity for the area, there would be adequate seating capacity at the elementary and middle school levels to handle the number of students generated by the proposed project. Therefore, it is concluded that neither the proposed project nor this As-of-Right Alternative would result in any significant adverse impacts on community facilities and services.

Under this alternative there would not be the 2,000 square feet of community facility space proposed by the project, which is expected to house a local not-for-profit group.

OPEN SPACE

Under the As-of-Right Alternative, there would not be an introduction of new residents to the open space study area nor would there be the creation of 0.7 acres of publicly-accessible open space along the waterfront. It is assumed there would be about 20 new on-site employees. Under the proposed project, the number of new employees would also be about 20 including the employees in the commercial and community facility space as well as the maintenance staff for the residential buildings and open space. Under this alternative, the ½-mile study area total open space ratio would remain at 0.50 acres which is below the DCP *CEQR Technical Manual* guideline of 2.5 acres and the average City-wide community district median of 1.5 acres per 1,000 residents. However, the proposed project would not diminish this ratio in the future with the proposed project. In addition, the active open space ratio in the area would continue to be well below the recommended guideline, with an active open space ratio of 0.33 acres per 1,000 residents. With the proposed project the ratio would decrease to 0.32 acres per 1,000 persons (a decrease of about 3 percent). However, this decrease is not considered to be a significant adverse impact of the proposed project. Thus, neither this alternative nor the proposed project would have an adverse impact on open space resources.

In addition, under this alternative it is assumed that the study area passive open space ratio would remain unchanged, at 0.17 acres per thousand residents. With the proposed project's 0.7 acres of waterfront open space, the study area passive open space ratio would increase from 0.17 to 0.18 acres per 1,000 persons (an increase of about 6 percent). Thus, under this As-of-Right Alternative the small improvement in the passive open space ratio attributable to the proposed project would not occur. In sum, neither the As-of-Right Alternative nor the proposed project would result in any significant adverse effects on open spaces.

SHADOWS

Under the As-of-Right Alternative, with two mid-rise storage buildings (potentially up to 60 feet in height) there would be new incremental shadows, since the proposed buildings would be taller than the existing buildings. However, like the proposed project, no significant adverse shadow impacts on local open spaces or sunlight-sensitive historic resources would occur. Thus, neither the proposed project nor this alternative would result in adverse shadow impacts.

HISTORIC RESOURCES

Under the As-of-Right alternative, like the proposed project, the adjacent landmarked Carroll Street Bridge and Operator's House would be afforded protection pursuant to the Department of Building's Technical Policy and Procedure Notice #10/88. Under this alternative, there would not be a new publicly accessible open space that would open new waterfront views of this historic bridge and operator's house.

Under the proposed project, there would be a potential for an adverse impact on portions of the Gowanus Canal bulkhead, which is a historic resource. Therefore, with the proposed project, mitigation is required to address this impact under CEQR. The project's proposed mitigation plan includes a field investigation that would document the extent and significant characteristics of the Gowanus Canal bulkhead. Thus, in the absence of the proposed project, there would not be the potential for an impact on the resource or the potential for data recovery. Under this alternative, since the alternative would not be required to provide waterfront open space, it is assumed that no activities are proposed requiring permits, such as a new bulkhead, since no waterfront open space would be necessary for this alternative. However, construction could occur inboard of the existing bulkhead.

URBAN DESIGN AND VISUAL RESOURCES

Neither the proposed project nor the As-of-Right Alternative would result in significant adverse impacts related to urban design and visual resources. Under the As-of-Right Alternative, the project site would be developed with two storage structures that would be developed to the project lot lines, replacing the current mix of low-rise partially occupied warehouse buildings, truck parking, and vacant land. In terms of height, bulk, and building type, the urban design characteristics of the As-of-Right Alternative would be compatible with the characteristics of the nearby light industrial area to the north, east, and south (e.g., local contactors, warehouses, storage spaces, etc.) and with the residential areas to the west. Development under this alternative would not block significant views of view corridors.

The urban design characteristics of development under the As-of-Right Alternative would be different from those of development under the proposed project. This alternative is assumed to have mid-rise structures that would be about the same height along the Bond Street frontage and would substantially cover the majority of the lots. Unlike the proposed project, the As-of-Right Alternative would not redevelop the site with new residential buildings under a large scale plan, nor would the proposed open spaces be provided or public access to the canal. The project site would not provide improved access or view corridors to the Gowanus Canal or publicly-accessible open space along the canal between 2nd Street on the south and Carroll Street on the north would be provided. Thus, the added views and waterfront and streetscape improvements leading to the waterfront of the proposed project would be foregone.

NEIGHBORHOOD CHARACTER

Neither the As-of-Right Alternative nor the proposed project would result in significant adverse impacts to neighborhood character. Under the As-of-Right Alternative, the project site would be redeveloped with comparable storage/warehouse uses, consistent with the existing zoning of the site and with the light-industrial character of much of the surrounding area, and would not experience new residential development supported by commercial and community facility uses, as under the proposed project. With the proposed project there would be significant streetscape improvements and increased pedestrian activity along both the project bordering streets, such as

Bond and 2nd Streets, as well as the streets leading to the waterfront (1st and 2nd Streets), which would be improved as new corridors leading to the waterfront and the proposed 0.7 acres of project-developed publicly-accessible open space along the canal. These changes would not occur under the As-of-Right Alternative.

The proposed project would expand the residential character of the adjoining Carroll Gardens neighborhood eastward onto the two project blocks where currently there is no residential use. In conjunction with the proposed streetscape improvements, the project site would become a physical and visual extension of the neighborhood to the west, along both 1st and 2nd Streets, and connected, rather than separated, by Bond Street. With the improved east-west streets, the proposed project would provide a physical and aesthetic connection between the project site streets and the local neighborhood grid where today no such connection exists. Under this alternative, none of these improvements would occur and the project site would remain a physical and visual barrier between the neighborhood and its Gowanus Canal waterfront.

Some of the new buildings under the proposed project would be of greater density and taller than the buildings in the existing neighborhoods, but the proposed general large scale plan has been designed to create a transition between the existing low-rise Carroll Gardens neighborhood to the west and the greater massing of the proposed 12-story structures along the canal. Thus, from locations west of Bond Street, the proposed project would be visible, but not intrusive, and no neighborhood views or views from public parks or open spaces are expected to be adversely impacted. However, unlike the As-of-Right Alternative, the proposed project would create new public view corridors along the waterfront that would be opened up to the public with direct and easy access to the project's waterfront open space.

Unlike the proposed project, in this alternative, no new public views of the Carroll Street Bridge would be provided. In addition, there is an on-site historic resource, the Gowanus Canal bulkhead, portions of which would be impacted by the project. However, the proposed project's mitigation for this impact is an archaeological investigation with the potential to yield knowledge as to the historical methods used in developing the canal which could be shared with the local community. Under the As-of-Right Alternative, this impact would occur, but without the benefits that could be derived through the required mitigation.

The proposed project would bring a substantial new population to the area. Under this alternative there would be limited jobs associated with a storage operation but no new residents. However, this new population would be similar in demographic and socioeconomic composition to the existing neighborhood and the area already has a very strong demand for housing that the proposed project's mix of market-rate and affordable housing would serve to relieve. In this alternative, these socioeconomic benefits to the neighborhood would be foregone and, moreover, there would not be the development of up to 130 units of affordable low-income housing.

Neither the proposed project nor this alternative would result in any significant changes in neighborhood transit systems or vehicular congestion.

NATURAL RESOURCES

Neither the As-of-Right Alternative nor the proposed project would have any adverse impacts on groundwater. With this alternative, improvements in soils and groundwater would occur to the extent that City, state, and federal rules outside of CEQR apply. In contrast, the proposed project would need to address the remediation of hazardous materials in accordance with the CEQR and also the proposed residential and open space end uses. Under both this alternative and the

proposed project, groundwater recovered during any construction dewatering would need to be treated, as necessary, prior to discharge to the canal or the combined sewer system. Neither this alternative nor the proposed project would have any adverse impacts on terrestrial resources. Rather, the proposed project would create approximately 0.7 acres of waterfront open space that would provide potential habitat for common song birds, small mammals, and pollen-dependent species. This habitat would not be created under the As-of-Right Alternative.

In both this alternative and the proposed project, there would be the added volume of fill materials in the 100-year floodplain. However, neither the proposed project nor this alternative would have any adverse impacts with respect to floodplains. All buildings would have their first floor elevations at least one foot above the 100-year flood level. Also, the limited amount of fill and new structure at the project site would not affect the tidal floodplain of the Gowanus Canal. However, in this alternative, the added project benefits of capturing local street flooding through new storm sewers would not occur (it is not assumed that this alternative would provide new storm sewers).

In this alternative, the installation of the new steel sheet bulkhead and the resulting short-term construction-related impacts to water quality would not occur. However, with the proposed project, water quality impacts would be limited and would not result in long-term adverse impacts to water quality. Measures to reduce and control increases in suspended sediment (e.g., silt curtains and erosion control) would be implemented consistent with any additional requirements identified by federal and state agencies during the permitting process. In contrast, under this alternative, deterioration of the bulkhead and the erosion of sediments into the canal would continue since the existing bulkhead is an old timber crib style and in need of repair and replacement. Under this alternative and the proposed project, there would be the implementation of an SWPPP that would minimize erosion and deposition of soil into surface waters and littoral zone tidal wetlands of the canal during construction. However, there would not be the stormwater quality control measures of the proposed project and the reduction in pollutant loadings in the long-term (occupancy) phase of this alternative, since no such measures would be installed, and the runoff from the As-of-Right land uses would flow directly into the canal.

With the proposed project, while the proposed bulkhead installation would permanently remove some benthic habitat and impact benthic macroinvertebrates, the impact is very limited and would not cause any adverse impacts to populations of macroinvertebrates, as only limited populations are known to use this reach of the Gowanus Canal. The proposed project also would not significantly impact the food supply for foraging fish. These limited impacts would not occur with the As-of-Right Alternative. In neither the proposed project nor this alternative would there be any impacts on endangered, threatened, or special concern wildlife species or essential fish habitat species. However, the benefits of the project with respect to improvements in the improved quality of site runoff would also not occur.

The proposed project would separate all stormwater generated within the project site from the combined sewer system, treat it on site, and discharge it to the canal. Therefore, a net reduction in combined sewer overflows to the canal would be expected. In addition, the proposed project would result in a net reduction in impervious surfaces and a decrease in stormwater runoff due to a change in land cover where existing industrial paved surfaces and structures would be replaced with landscaped open spaces and residential uses that would generate less runoff and allow for water quality treatment and attenuation. In addition to the planned open space areas, stormwater BMPs implemented as part of the SWPPP prepared for the proposed project would control the quality and rate of discharge of stormwater to the canal. In this alternative, no such infrastructure improvements would occur and these benefits would not be realized.

Under the proposed project, sanitary wastewater generated from the project site would be treated at the Red Hook WPCP and the added wastewater would not compromise the treatment capacity of the WPCP, since there is substantial available capacity at the plant. This alternative would generate very little sanitary wastewater and not impact the WPCP. Thus, neither the proposed project nor this alternative would have any impact on the Red Hook WPCP or the water quality of New York Harbor, which is the receiving water for the WPCP discharges.

HAZARDOUS MATERIALS

Under the proposed project, remediation and construction on the project site would be conducted in accordance with a Remedial Action Plan (RAP)/Construction Health and Safety Plan (CHASP). These measures would be included in a DEP-approved Restrictive Declaration for the project site. Under this alternative, no such requirement would be necessary since the alternative would be as-of-right. However, City, State, and Federal regulation relative to the handling and disposal of hazardous materials would apply. Therefore, under both this alternative and the proposed project, any regulated hazardous materials that need to be removed from the site would be properly handled and removed during construction. However, under the As-of-Right Alternative, there would not be the implementation of a RAP that would address the identification and removal of known contamination and the covering of the site with new structures and clean soils as outlined in the DEC Recommended Soil Cleanup Objectives (6 NYCRR Subpart 375-6). Thus, the proposed project would require a hazardous materials remediation program to meet the requirements of residential uses on site while the As-of-Right Alternative would not have to meet this standard. Also required would be a construction health and safety plan that would not occur under this As-of-Right Alternative.

WATERFRONT REVITALIZATION PROGRAM

Under the As-of-Right Alternative a number of public policy objectives with respect to the City's waterfront revitalization program and coastal zone management would not be achieved, including: revitalization of appropriate waterfront sites with residential and commercial uses; water quality improvements; public access to the waterfront and coastal waters and improved waterfront landscapes; and opening new public views along the coastal zone, including views of historic structures. There would be the adverse archaeology impact with respect to the historic Gowanus Canal bulkhead. While the proposed project proposes mitigation for this potential impact, this alternative would impact the structure but not provide the potential for the recovery of information relative to the construction of the historically significant Gowanus Canal bulkhead.

INFRASTRUCTURE

Under the As-of-Right Alternative, there would only be a limited increased water demand, and like the proposed project there would not be any adverse impact the City's water supply system. Likewise, the added sanitary flow to the Red Hook WPCP under both this alternative and the proposed project would not affect the capacity or capability of the Red Hook WPCP to properly treat wastewater.

With respect to stormwater, under the proposed project, in order to protect water quality and reduce stormwater flow contribution to the combined sewer system, new stormwater sewers would be constructed beneath 1st and 2nd Streets to improve local stormwater conditions. As a result, no stormwater from the project site and much of the local streets would be discharged to the combined sewer system. In addition, with the proposed project, some existing paved surfaces and structures would be replaced with landscaped open space that would allow for more

infiltration and water quality treatment than with the As-of-Right Alternative. Under the As-of-Right Alternative, runoff from the proposed building roofs could flow onto the streets or be connected to the local combined sewer in Bond Street and not be collected and conveyed to the Gowanus Canal. In addition, the stormwater flows from the site would not have the change in land cover or the installation of a treatment system that would improve the quality of the stormwater runoff from the project site, as occurs with the proposed project.

Under the proposed project, the proposed storm sewers on both 1st and 2nd Streets would outfall directly into the Gowanus Canal. Unlike a CSO, only treated stormwater would flow to the canal from the proposed stormwater sewers. In addition, under the proposed project stormwater pollutant loads from the project site would be reduced with the conversion of existing paved surfaces to landscaped areas, which would also reduce the amount of total runoff from the project site. These land cover changes with respect to open spaces would not occur under the As-of-Right Alternative and the reductions in pollutant loads would not be as large.

With respect to combined sewer overflows, as stated above, under the proposed project sanitary flows from the project site would increase and be conveyed to the Bond Street sewer. However, to eliminate current stormwater runoff contributions to the combined sewer system, two new storm sewers would be installed in 1st and 2nd Streets, which would then collect and treat stormwater prior to discharge to the Gowanus Canal. With these proposed infrastructure improvements, there would be no net increase in CSO events. Although this separation of sanitary and storm flows and the associated infrastructure improvements would not be necessary to handle the added sanitary flows of the As-of-Right Alternative, there also would not be the added stormwater treatment measures of the proposed project and the overall benefits with respect to providing reduction in water quality pollutant loads.

SOLID WASTE AND SANITATION AND ENERGY

Under this alternative, increased demands on local utility systems, including solid waste and sanitation systems and energy, would not significantly increase. However, with both this As-of-Right Alternative and the proposed project no significant, adverse impacts are expected.

TRAFFIC AND PARKING

The As-of-Right Alternative would generate an estimated 95, 126, and 158 total person trips during the weekday AM, midday, and PM peak hours, respectively, compared with 390, 278, and 489 person trips for the proposed project. The As-of-Right Alternative would generate 67, 91, and 113 total vehicle trips in the weekday AM, midday, and PM peak hours, respectively, compared to 80, 48, and 100 vehicle trips for the proposed project (see Table 23-1). As per the zoning requirements of an M2-1 zone, the As-of-Right Alternative would provide approximately seven on-site parking spaces. As presented in Table 23-2, the As-of-Right Alternative would generate 295, 152, and 331 fewer person trips compared to the proposed project. In terms of vehicle trips, the As-of-Right Alternative would generate 13 fewer vehicle trips in the AM peak hour; however, it would generate 43 and 13 more vehicle trips than the proposed project during the midday and PM peak hours, respectively.

Although the As-of-Right Alternative would generate approximately 43 and 13 more vehicle trips during the midday and PM peak hours, respectively, compared to the proposed project, it is anticipated that the mitigation measures proposed to address the impacts of the proposed project could similarly address any potential impacts of the As-of-Right Alternative. However, under the As-of-Right Alternative no such mitigation measures would be proposed since no CEQR review would be performed.

Table 23-1
As-Of-Right Alternative Storage Facility Trip Generation

Program Size	300,000	sq. ft												
Daily Trip Rate⁽¹⁾														
Person Trip Rate	5.26	Trips per 1,000 sq. ft.												
Temporal Distribution^(1,2)														
Weekday AM Peak Hour	6.0%													
Weekday MD Peak Hour	8.0%													
Weekday PM Peak Hour	10.0%													
Modal Split⁽³⁾														
Auto	70.0%													
Bus	0.0%													
Subway	0.0%													
Walk/Other	0.0%													
Taxi	5.0%													
Total	75.0%													
Truck Trips	25.0%													
Vehicle Occupancies^(1,4)														
Auto	1.60													
Taxi	1.30													
Hourly In and Out Distribution^(1,2)														
	In	Out												
Weekday AM Peak Hour	51%	49%												
Weekday MD Peak Hour	51%	49%												
Weekday PM Peak Hour	51%	49%												
Peak Hour Person Trips by Mode														
	Auto		Bus		Subway		Walk/Other		Taxi		Total		Total	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In+Out	
Weekday AM Peak Hour	34	33	0	0	0	0	0	0	2	2	48	47	95	
Weekday MD Peak Hour	45	44	0	0	0	0	0	0	3	3	64	62	126	
Weekday PM Peak Hour	57	54	0	0	0	0	0	0	4	4	81	77	158	
Taxi Trips														
	Demand		Shared Trips		Inbound Only		Outbound Only		Total Trips					
	In	Out	In	Out	In	Out	In	Out	In	Out				
Weekday AM Peak Hour	2	2	0	0	0	0	0	0	2	2				
Weekday MD Peak Hour	2	2	0	0	0	0	0	0	2	2				
Weekday PM Peak Hour	3	3	0	0	0	0	0	0	3	3				
Peak Hour Vehicle Trips														
	Auto		Taxi		Trucks		Total		Total					
	In	Out	In	Out	In	Out	In	Out	In+Out					
Weekday AM Peak Hour	21	20	1	1	12	12	34	33	67					
Weekday MD Peak Hour	28	28	2	2	16	15	46	45	91					
Weekday PM Peak Hour	36	34	2	2	20	19	58	55	113					
Notes:														
(1) Source: ITE Trip Generation Manual, 7th Edition - Land Use Code 151 (Mini-Warehouse).														
(2) Source: Weekday Midday temporal and directional distribution based on average of AM and PM values.														
(3) Source: AKRF assumption.														
(4) Source: Greenpoint - Williamsburg FEIS (CEQR No. 04DCP003K), May 2005.														

Table 23-2

Trip Generation Comparison—Proposed Project vs. As-of-Right

PROPOSED PROJECT													
Peak Hour Person Trips by Mode													
	Auto		Taxi		Bus		Subway		Walk/Other		Total Trips		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
Weekday AM Peak Hour	20	69	0	3	2	5	40	195	19	37	81	309	390
Weekday MD Peak Hour	23	23	2	2	4	4	67	67	43	43	139	139	278
Weekday PM Peak Hour	68	36	4	3	6	5	193	89	50	35	321	168	489
Peak Hour Vehicle Trips													
	Auto		Taxi		Trucks		Total						
	In	Out	In	Out	In	Out	In	Out	Total				
Weekday AM Peak Hour	15	59	2	2	1	1	18	62	80				
Weekday MD Peak Hour	19	19	4	4	1	1	24	24	48				
Weekday PM Peak Hour	58	28	6	6	1	1	65	35	100				
AS-OF-RIGHT													
Peak Hour Person Trips by Mode													
	Auto		Taxi		Bus		Subway		Walk/Other		Total Trips		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
Weekday AM Peak Hour	34	33	2	2	0	0	0	0	0	0	48	47	95
Weekday MD Peak Hour	45	44	3	3	0	0	0	0	0	0	64	62	126
Weekday PM Peak Hour	57	54	4	4	0	0	0	0	0	0	81	77	158
Peak Hour Vehicle Trips													
	Auto		Taxi		Trucks		Total						
	In	Out	In	Out	In	Out	In	Out	Total				
Weekday AM Peak Hour	21	20	1	1	12	12	34	33	67				
Weekday MD Peak Hour	28	28	2	2	16	15	46	45	91				
Weekday PM Peak Hour	36	34	2	2	20	19	58	55	113				
INCREMENTAL TRIPS													
Peak Hour Person Trips by Mode													
	Auto		Taxi		Bus		Subway		Walk/Other		Total Trips		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
Weekday AM Peak Hour	-14	36	-2	1	2	5	40	195	19	37	33	262	295
Weekday MD Peak Hour	-22	-21	-1	-1	4	4	67	67	43	43	75	77	152
Weekday PM Peak Hour	11	-18	0	-1	6	5	193	89	50	35	240	91	331
Peak Hour Vehicle Trips													
	Auto		Taxi		Trucks		Total						
	In	Out	In	Out	In	Out	In	Out	Total				
Weekday AM Peak Hour	-6	39	1	1	-11	-11	-16	29	13				
Weekday MD Peak Hour	-9	-9	2	2	-15	-14	-22	-21	-43				
Weekday PM Peak Hour	22	-6	4	4	-19	-18	7	-20	-13				

Under the As-of-Right Alternative, the on-street parking utilization rate in the study area is expected to remain similar to the No-Action Alternative conditions at approximately 93 percent.

TRANSIT AND PEDESTRIANS

With the proposed project, the added subway and bus trips would not result in any significant impacts on local transit systems. The As-of-Right Alternative would generate no transit or walk-only trips. Under the proposed project the added pedestrian trips would not impact local sidewalks, crosswalks or corners. Likewise, pedestrian safety conditions under the proposed project are not expected to be impacted. Similarly, under the As-of-Right Alternative no impact on local pedestrian conditions would occur.

AIR QUALITY

Under both the proposed project and this As-of-Right Alternative there would not be any significant carbon monoxide (CO) concentrations resulting from traffic. It is assumed that this alternative would not have any significant stationary source air quality impacts on local receptors due to HVAC systems since the warehouse structures would be of a common height. With the proposed project these impacts would be avoided through the requirements of an (E) designation that would mandate the fuel source (natural gas) and location of the emission vents for the proposed HVAC systems. Under this alternative, the unmitigated unavoidable adverse impact with respect to odors would not occur.

NOISE

Like with the proposed project, under this alternative, uses at the site would meet the *CEQR Technical Manual* requirements with respect to interior noise levels. In neither condition would there be an impact on interior noise levels or ambient noise levels due to either stationary or mobile sources.

CONSTRUCTION IMPACTS

Under both the proposed project and this alternative site construction would occur. Thus, there would be the short term impacts of construction with respect to demolition of buildings, grading, soil disturbance, traffic, air quality, noise, and hazardous materials. However, these impacts under both the proposed project and this alternative are short term and measures, such as a stormwater pollution prevention plan during construction, would minimize these impacts to the extent feasible. Construction period impacts under this alternative would also be less since the extent of the proposed building program (e.g., square footage of development), is less. There would also not be any construction activities along the waterfront. However, neither the proposed project nor this alternative would have significant impacts during construction on water quality or aquatic resources.

PUBLIC HEALTH

Neither the proposed project nor this As-of-Right Alternative would result in significant adverse impacts to public health. Neither would result in significant adverse air quality, noise, water quality or hazardous materials impacts, nor would pathways of exposure for future local residents or open space users result in conditions that would be unhealthy for the public.

D. LESSER DENSITY ALTERNATIVE

This section compares the Lesser Density Alternative with the proposed project. To that end, the Lesser Density Alternative would be subject to the same discretionary actions of the applicable sections of the New York City Zoning Resolution, including the need to rezone the site from M2-1 to M1-4/R7-2, a zoning district that allows residential and community facility uses up to 2.7 FAR. Under this alternative, it is assumed that the existing uses on the project site would be replaced with a market rate residential project that would provide approximately 320 housing units; no affordable housing would be provided. Thus, with this alternative the total zoning floor area would be about 414,000 zoning square feet (as compared to 520,000 under the proposed project or a decrease of about 106,000 zoning square feet, 20 percent in total zoning floor area). Like the proposed project, it is assumed that this development would occur on the two project blocks and the urban design characteristics would reflect the lesser density of the development

plan. Thus, it is assumed that there would be two 4 to 6-story buildings fronting on Broad Street (containing about 250,000 zoning square feet) and a row to midblock townhouses on each block (containing about 50,000 zoning square feet) and with the program developed along the waterfront (containing about 114,000 zoning square feet) also rising to a height of 8 to 10 stories (the lesser height being a result of the reduced development program) (see Figure 23-2). It is assumed under this that all other setbacks and the footprint of the building would be similar to the proposed project. It is also assumed that the dimensions, size, and design of the waterfront open space and the interior courtyard open spaces would be similar to the proposed project. In addition, the size and uses of the proposed commercial and community facility spaces are assumed to be similar to the proposed project. It is also assumed that a waterfront open space would be provided, as well as commercial and community spaces proposed under the project.

LAND USE, ZONING, AND PUBLIC POLICY

As with the proposed project, the Lesser Density Alternative would not result in significant, adverse impacts to land use, zoning, and public policy. Under the Lesser Density Alternative, the project site would be developed with less residential floor area, and no affordable dwelling units, but with the same land uses. The effects of the proposed project and the lesser density alternative on land use, zoning, and public policy would be generally comparable.

SOCIOECONOMIC CONDITIONS

Neither the proposed project nor the Lesser Density Alternative would result in significant adverse impacts to socioeconomic conditions. Like the proposed project, the Lesser Density Alternative would also result in the direct displacement of the on-site site businesses, which provide limited employment of about 20 persons and include warehouse/distribution operations and a trucking facility as well as vacant land and buildings. Neither this alternative nor the proposed project would result in any direct or indirect residential displacement, and neither would have any adverse effects on local business or economic conditions. However, unlike the proposed project, this alternative would not provide affordable housing for low-income households.

COMMUNITY FACILITIES AND SERVICES


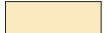




Neither this Lesser Density Alternative nor the proposed project would have any adverse impacts on police and fire protection, health care, or library services. While this alternative would generate fewer new school-age children (about 25 percent fewer) at the elementary, middle, and high school student levels, based on a detailed analysis of seating capacity for the area, there would be adequate seating capacity at all school levels with both the proposed project and this alternative. Therefore, it is concluded that neither proposed project nor this Lesser Density Alternative would result in any significant adverse impacts on community facilities and services.

Like the proposed project, this alternative would include the 2,000 square feet of community facility space. Under the proposed project this space is expected to house a local non-for-profit group, the Gowanus Dredgers, for the purposes of environmental education.

OPEN SPACE

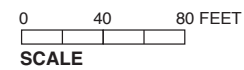
Under the Lesser Density Alternative, there would be the introduction of new residents to the open space study area and the creation of 0.7 acres of publicly-accessible open space along the



-  Rezoning Area Boundary
-  4 Floors
-  6 Floors
-  7-10 Floors
-  Private Court Yard
-  Publicly-Accessible Open Space



NOTE: For Illustrative Purposes Only



waterfront. It is assumed there would be about 750 new residents. While there would be fewer residents in this alternative, the proposed project would not diminish the total open space ratio in the future with the proposed project. In addition, like the proposed project, the active open space ratio under the Lesser Density Alternative would continue to be well below the recommended guideline in the study area, with an active open space ratio of 0.32 acres per 1,000 residents. While with the proposed project there is a slight decline in the ratio of 0.01 acres from 0.32 acres per 1,000 persons, this is not a significant impact of the proposed project given that the decline is very limited. In addition, in both this alternative and the proposed project, it is assumed that the study area passive open space ratio would remain about the same at 0.17 acres per thousand residents and that a significant waterfront open space would be provided. Thus, neither this alternative nor the proposed project would result in any significant, adverse impacts on open space.

SHADOWS

Under the Lesser Density Alternative, like the proposed project, the new incremental shadows would not result in significant adverse shadow impacts on local open spaces or sunlight sensitive historic or natural resources. Thus, neither the proposed project nor this alternative would result in adverse shadow impacts.

HISTORIC RESOURCES

Under this alternative, like the proposed project, no significant adverse contextual impacts on historic architectural resources would occur. Since this alternative would also require a review by LPC under CEQR, it is concluded that a development setback from the Carroll Street Bridge and Operators House would be similar to the proposed project. In addition, like with the proposed project, it is assumed that this Lesser Density Alternative would need to implement a construction protection plan for the Carroll Street Bridge and Operator's House. Under this alternative, there would also be a new publicly-accessible open space that would open new waterfront views of this historic bridge and operator's house.

Under both this alternative and the proposed project, there would be a potential for an adverse impact on portions of the Gowanus Canal bulkhead, which is a historic resource. Therefore, as with the proposed project, mitigation would be required under this alternative to address this impact under CEQR. It is assumed that the mitigation plan would be similar to the proposed project and would include a field investigation that would document the extent and significant characteristics of the portion of the Gowanus Canal bulkhead on the project site.

URBAN DESIGN AND VISUAL RESOURCES

Under the Lesser Density Alternative, the project site would be developed with two primarily residential structures in a footprint similar to the proposed project, similarly sized and dimensioned with waterfront open space and interior courtyard space (see the description above). Therefore, like the proposed project it is assumed that there would be improved access and view corridors to and along the Gowanus Canal and publicly-accessible open space along the canal between 2nd Street on the south and Carroll Street on the north. Both the proposed project and this alternative would introduce new residential buildings on the project site, with these taller elements (the 11- to 12-story structures under the proposed project and 8- to 10-story structures under this alternative) covering only a small percentage of the project footprint (comprising only about 9 percent of the site), and sited as far away from the existing residential

buildings as possible, closer to the canal and away from the Bond Street frontage. Thus, the new buildings under both the proposed project and this alternative would not have urban design or visual character impacts. In addition, the taller elements of the design under this proposal would be of a lesser height (by about 4 to 6 stories). The view corridor along the Bond Street corridor would be expected to be similar under both this alternative and the proposed project, with an enlivened streetscape created between the project site and the residential neighborhood to the west.

NEIGHBORHOOD CHARACTER

Under this Lesser Density Alternative, like the proposed project, the project site would experience new residential development supported by commercial and community facility uses. Under both the proposed project and this alternative, the project site would be transformed from the low-density, low-activity, industrial, and vacant sites to a moderate-density development of residential buildings with supporting commercial uses. Under both the proposed project and this alternative, there would also be significant streetscape improvements and increased pedestrian activity along both the project bordering streets, such as Bond and 2nd Streets, as well as the streets leading to the waterfront (1st and 2nd Streets), which would be improved as new corridors leading to the waterfront and the waterfront open space. These benefits occur under both the Lesser Density Alternative and the proposed project.

In conjunction with the streetscape improvements, the project site would become part of the local residential, neighborhood, and connected, rather than separated, by Bond Street. With the improved east-west streets, the proposed project and this alternative would provide a physical and aesthetic connection between the project site streets and the local neighborhood street grid where today no such connection exists.

The proposed general large scale plan has been designed to create a transition between the existing low-rise Carroll Gardens neighborhood to the west and concentrates the proposed 12-story project elements along the canal. Thus, from locations west of Bond Street, the proposed project would be visible, but not intrusive, and no neighborhood views or views from public parks or open spaces would be adversely impacted. Thus, neither this Lesser Density Alternative nor the proposed project would have a contextual impact on local historic architectural resources of the neighborhood, and both would provide new public views of the Carroll Street Bridge and Operator's House.

In addition, under both the proposed project and this alternative there is an on-site historic resource, the Gowanus Canal bulkhead, portions of which would be adversely impacted. However, as with the proposed project, mitigation for this impact under this alternative could be an archaeological investigation with the potential to yield knowledge as to the historical methods used in developing the Gowanus Canal bulkhead that could be shared with the local community. Neither the proposed project nor this alternative would result in any significant changes in neighborhood transit systems or vehicular congestion, and both would increase local pedestrian activity.

Like the proposed project, this alternative would bring a substantial new population to the area, although about 25 percent less than with the proposed project. With both the proposed project and this alternative, this new population would be consistent in its demographic and socioeconomic characteristic with the current neighborhood. Thus, neither would result in any secondary displacement impacts. There is already has a very strong demand for housing in this community and this alternative would meet a portion of the existing demand for new housing.

However, the significant difference between this alternative and the proposed project is that the affordable housing would not be provided, thereby eliminating up to 130 units of affordable housing under this alternative.

NATURAL RESOURCES

The effects of this alternative would be identical to those of the proposed project. Neither the Lesser Density Alternative nor the proposed project would have any adverse impacts on groundwater. With this alternative, it is expected that improvements in soil and groundwater conditions at the site would occur in a manner similar to the proposed project. Both the proposed project and this alternative would need to address the remediation of hazardous materials in accordance with CEQR guidelines. Under both this alternative and the proposed project, groundwater recovered during any construction dewatering would need to be treated, as necessary, prior to discharge to the canal or the combined sewer system. Neither this alternative nor the proposed project would have any adverse impacts on terrestrial resources, and both would create approximately 0.7 acres of waterfront open space that would provide potential habitat for common songbirds.

In both this alternative and the proposed project, there would be the added volume of fill materials in the 100-year floodplain. However, neither the proposed project nor this alternative would have any adverse impacts with respect to floodplains. All buildings would have their first floor elevations at least one foot above the 100-year flood level. Also, the limited amount of fill and new structure at the project site would not affect the tidal floodplain of the Gowanus Canal.

This alternative, as with the proposed project, includes the installation of a new steel sheet bulkhead. As with the proposed project, in-water construction impacts are not significant and would not result in any long-term adverse impacts to the water quality of the Gowanus Canal. Measures to reduce and control increases in suspended sediment (e.g., silt curtains and erosion control) would be implemented consistent with any requirements identified by federal and state agencies during the permitting process. Under both this alternative and the proposed project there would be the implementation of an SWPPP that would minimize erosion and deposition of soil into surface waters and littoral zone tidal wetlands of the canal during construction. Along with the stormwater quality control measures of the proposed project, pollutant loadings in the long-term (occupancy) phase of this alternative would be reduced since the runoff areas under both the proposed project and this alternative would be similar.

This alternative as with the proposed project includes the removal of limited benthic habitat due to the construction of the proposed bulkhead. This impact is not significant and would not cause any adverse impacts to populations of macroinvertebrates, as only limited numbers are known to use this reach of the Gowanus Canal and can recolonize the new bulkhead rapidly. Neither the proposed project nor this alternative would result in any impact to endangered, threatened, or special concern wildlife species or essential fish habitat species.

Like the proposed project, it is expected that this alternative would separate all stormwater generated within the project site from the combined sewer system, treat it on site, and discharge it to the canal. In addition, both the proposed project and this alternative would result in a net reduction in impervious surfaces and a decrease in stormwater runoff due to a change in land cover where existing industrial paved surfaces and structures would be replaced with landscaped open spaces along the waterfront. In addition to the planned waterfront open space, stormwater BMPs implemented as part of the SWPPP prepared for both the proposed project and this alternative would control the quality and rate of discharge of stormwater to the canal.

Under the proposed project and this alternative, sanitary wastewater generated from the project site would be treated at the Red Hook WPCP but would not compromise treatment capacity of the plan, since there is substantial available capacity there. Thus, neither the proposed project nor this alternative would have any impact on the Red Hook WPCP or on the water quality of New York Harbor, which is the receiving water for the Red Hook WPCP discharges.

HAZARDOUS MATERIALS

The effects of the Lesser Density Alternative with respect to hazardous materials would be identical to those of the proposed project. In both the proposed project and this alternative, there would be new development and residential uses on the waterfront that would replace manufacturing and vacant urban uses. Under both this alternative and the proposed project, any regulated hazardous materials that need to be removed from the site would be properly handled and removed during construction in accordance with a Remedial Action Plan (RAP) that would address the identification and removal of known contamination and the covering of the site with new structures and clean soils as outlined in the DEC Recommended Soil Cleanup Objectives (6 NYCRR Subpart 375-6).

WATERFRONT REVITALIZATION PROGRAM

The effects of this alternative would be identical to those of the proposed project. Under both the Lesser Density Alternative and the proposed project a number of public policy objectives with respect to the City's waterfront revitalization program and coastal zone management would be achieved. These include revitalization of appropriate waterfront sites with these include: residential and commercial uses; water quality improvements; public access to the waterfront and coastal waters and improved waterfront landscapes; and opening new public views along the coastal zone, including views of historic structures. There would be an adverse historic resources impact with respect to the historic Gowanus Canal bulkhead with both the proposed project and this alternative. However, mitigation for this could potentially provide the recovery of information relative to the construction of the historically significant Gowanus Canal bulkhead.

INFRASTRUCTURE

Under both the Lesser Density Alternative and the proposed project there would be only a limited increase in water demand and like the proposed project there would not be any adverse impact to the City's water supply system. Likewise, the added sanitary flow to the Red Hook WPCP under both this alternative and the proposed project would not affect the capacity or capability of the Red Hook WPCP to properly treat wastewater.

With respect to stormwater, under both this alternative and the proposed project, in order to protect water quality and reduce stormwater flow contribution to the combined sewer system, new stormwater sewers would be constructed beneath 1st and 2nd Streets to improve local stormwater conditions. As a result, no stormwater from the project site or from many of the local streets would be discharged to the combined sewer system. In addition, as with the proposed project, some existing paved surfaces and structures would be replaced with landscaped open space that would reduce stormwater runoff volumes.

Under both the proposed project and this alternative, the proposed storm sewers on both 1st and 2nd Streets would flow directly into the Gowanus Canal. Unlike a combined sewer overflow, only treated stormwater would be discharged from the project site into the canal. In addition, under both the proposed project and this alternative, stormwater pollutant loads from the project

site would be reduced with the conversion of existing paved surfaces to landscaped areas, which would also reduce the amount of total runoff from the project site.

With respect to combined sewer overflows, as stated above, under the proposed project sanitary flows from the project site would increase and be conveyed to the Bond Street sewer. However, to eliminate current stormwater runoff contributions to the combined sewer system, two new storm sewers would be constructed under the proposed project. The new storm sewers in 1st and 2nd Streets would then collect and treat stormwater prior to discharge to the Gowanus Canal. It would be expected that similar improvements would occur under this alternative.

SOLID WASTE AND SANITATION AND ENERGY

Under both this alternative and the proposed project there would be no significant increased demands on local utility systems, including solid waste and sanitation systems and energy. Therefore, with both this Lesser Density Alternative and the proposed project, no adverse impacts are expected.

TRAFFIC AND PARKING

Trip generation estimates for the Lesser Density Alternative were performed using the same rates used for the proposed project (see Chapter 16, "Traffic and Parking"). The Lesser Density Alternative would generate an estimated 298, 228, and 381 total person trips during the weekday AM, midday, and PM peak hours, respectively, compared with 390, 278, and 489 person trips for the proposed project. The Lesser Density Alternative would also generate 62, 32, and 74 total vehicle trips in the weekday AM, midday, and PM peak hours, respectively, compared to 80, 48, and 100 total vehicle trips for the proposed project (see Table 23-3). As presented in Table 23-4, in comparison with the proposed project, the Lesser Density Alternative would generate 92, 50 and 108 fewer person trips, and 18, 16, and 26 fewer vehicle trips in the AM, midday, and PM peak hours, respectively.

It is expected that the Lesser Density Alternative would result in significant adverse traffic impacts at the same locations as with the proposed project, and that mitigation measures similar to those recommended for the proposed project would be required to mitigate such impacts. In terms of parking demand, the Lesser Density Alternative would generate a peak parking demand of approximately 48 fewer spaces as compared to the proposed project (a total demand of 283 spaces versus a total demand of 331 spaces generated by the proposed project). As with the proposed project, it is expected that the Lesser Density Alternative would generate demand for on-street parking. However, like the proposed project, it would not be expected to adversely impact the supply-and-demand of on-street parking in the study area.

TRANSIT AND PEDESTRIANS

With both the proposed project and this Lesser Density Alternative, the added subway and bus trips are not expected to result in any significant impacts on local transit systems. The Lesser Density Alternative would generate fewer transit and walk-only trips (see Table 23-4). The proposed project's pedestrian trips on local sidewalks, crosswalks and corners and pedestrian safety conditions are not expected to cause significant impacts. Thus, like the proposed project, under the Lesser Density Alternative, no impacts on local pedestrian conditions would occur. Like the proposed project there would be the benefits of improved streetscapes around the project site, across the project site to the waterfront, and along the waterfront open space, connecting Second Street on the south with Carroll Street on the north.

**Table 23-3
Total Project-Generated Trips
Person Trips by Mode**

Analysis Period and Use	Auto		Taxi		Bus		Subway		Walk/Other		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM PEAK PERIOD													
Residential	8	44	0	2	0	2	24	136	3	16	35	200	235
Commercial	0	0	0	0	0	0	1	1	5	5	6	6	12
Daycare	9	8	0	0	2	2	5	4	7	7	23	22	45
Waterfront Open Space	0	0	0	0	0	0	0	0	3	3	3	3	6
TOTAL	17	52	0	2	2	4	30	141	18	31	67	231	298
MIDDAY PEAK PERIOD													
Residential	13	13	1	1	1	1	41	41	5	5	61	61	122
Commercial	1	1	1	1	2	2	8	8	27	27	39	39	78
Daycare	3	3	0	0	1	1	1	1	2	2	7	7	14
Waterfront Open Space	0	0	0	0	0	0	0	0	7	7	7	7	14
TOTAL	17	17	2	2	4	4	50	50	41	41	114	114	228
PM PEAK PERIOD													
Residential	43	18	2	1	2	1	132	56	15	7	194	83	277
Commercial	0	0	1	1	1	1	4	4	14	14	20	20	40
Daycare	9	11	0	1	2	3	5	6	9	7	26	28	54
Waterfront Open Space	0	0	0	0	0	0	0	0	5	5	5	5	10
TOTAL	52	29	3	3	5	5	141	66	43	33	245	136	381

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Delivery		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM PEAK PERIOD									
Residential	7	39	1	1	1	1	9	41	50
Commercial	0	0	0	0	0	0	0	0	0
Daycare	5	5	1	1	0	0	6	6	12
Waterfront Open Space	0	0	0	0	0	0	0	0	0
TOTAL	12	44	2	2	1	1	15	47	62
MIDDAY PEAK PERIOD									
Residential	11	11	1	1	1	1	13	13	26
Commercial	0	0	1	1	0	0	1	1	2
Daycare	2	2	0	0	0	0	2	2	4
Waterfront Open Space	0	0	0	0	0	0	0	0	0
TOTAL	13	13	2	2	1	1	16	16	32
PM PEAK PERIOD									
Residential	38	16	2	2	0	0	40	18	58
Commercial	0	0	1	1	0	0	1	1	2
Daycare	6	6	1	1	0	0	7	7	14
Waterfront Open Space	0	0	0	0	0	0	0	0	0
TOTAL	44	22	4	4	0	0	48	26	74

**Table 23-4
Trip Generation Comparison—Proposed Project vs. Lesser Density
Alternative**

PROPOSED PROJECT													
Peak Hour Person Trips by Mode													
	Auto		Taxi		Bus		Subway		Walk/Other		Total Trips		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
Weekday AM Peak Hour	20	69	0	3	2	5	40	195	19	37	81	309	390
Weekday MD Peak Hour	23	23	2	2	4	4	67	67	43	43	139	139	278
Weekday PM Peak Hour	68	36	4	3	6	5	193	89	50	35	321	168	489
Peak Hour Vehicle Trips													
	Auto		Taxi		Trucks		Total						
	In	Out	In	Out	In	Out	In	Out	Total				
Weekday AM Peak Hour	15	59	2	2	1	1	18	62	80				
Weekday MD Peak Hour	19	19	4	4	1	1	24	24	48				
Weekday PM Peak Hour	58	28	6	6	1	1	65	35	100				
LESSER DENSITY ALTERNATIVE													
Peak Hour Person Trips by Mode													
	Auto		Taxi		Bus		Subway		Walk/Other		Total Trips		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
Weekday AM Peak Hour	17	52	0	2	2	4	30	141	18	31	67	231	298
Weekday MD Peak Hour	17	17	2	2	4	4	50	50	41	41	114	114	228
Weekday PM Peak Hour	52	29	3	3	5	5	141	66	43	33	245	136	381
Peak Hour Vehicle Trips													
	Auto		Taxi		Trucks		Total						
	In	Out	In	Out	In	Out	In	Out	Total				
Weekday AM Peak Hour	12	44	2	2	1	1	15	47	62				
Weekday MD Peak Hour	13	13	2	2	1	1	16	16	32				
Weekday PM Peak Hour	44	22	4	4	0	0	48	26	74				
INCREMENTAL TRIPS													
Peak Hour Person Trips by Mode													
	Auto		Taxi		Bus		Subway		Walk/Other		Total Trips		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
Weekday AM Peak Hour	3	17	0	1	0	1	10	54	1	6	14	78	92
Weekday MD Peak Hour	6	6	0	0	0	0	17	17	2	2	25	25	50
Weekday PM Peak Hour	16	7	1	0	1	0	52	23	7	2	76	32	108
Peak Hour Vehicle Trips													
	Auto		Taxi		Trucks		Total						
	In	Out	In	Out	In	Out	In	Out	Total				
Weekday AM Peak Hour	3	15	0	0	0	0	3	15	18				
Weekday MD Peak Hour	6	6	2	2	20	0	8	8	16				
Weekday PM Peak Hour	14	6	2	2	1	1	17	9	26				

AIR QUALITY

Under both the proposed project and this Lesser Density Alternative there would not be any significant carbon monoxide (CO) concentrations resulting from traffic, or any violations of NAAQS. In addition, like the proposed project, this alternative would not have any significant stationary source air quality impacts from HVAC systems. It is assumed that under this alternative, like the proposed project, similar restrictions on fuel type (natural gas) and location of emission points (highest tier) would be necessary through an (E) designation to avoid air quality impacts from HVAC systems. However, similar to the proposed project, the unmitigated unavoidable adverse impact with respect to odors would occur under this alternative.

NOISE

As with the proposed project, under this alternative, uses at the site would meet the *CEQR Technical Manual* requirements with respect to interior noise levels. In neither condition would there be an impact on interior noise levels or ambient noise levels due to either stationary or mobile sources.

CONSTRUCTION IMPACTS

Under both the proposed project and this alternative, site construction would occur. Thus, there would be the short-term impacts of construction with respect to demolition of buildings, grading, soil disturbance, traffic, air quality, noise, and hazardous materials. However, these impacts under both the proposed project and this alternative are short-term, and measures such as an SWPPP during construction would minimize these impacts to the extent feasible. Construction period impacts under this alternative would also be less since the extent of the proposed building program (e.g., square footage of development), is less. In addition, there would also not be any construction activities along the waterfront. However, neither the proposed project nor this alternative would have significant construction impacts on water quality or aquatic resources.

PUBLIC HEALTH

Neither the proposed project nor this Lesser Density Alternative would result in significant adverse impacts to public health. Neither would result in significant adverse air quality, noise, water quality or hazardous materials impacts, nor would pathways of exposure for future local residents or open space users result in conditions that would be unhealthy for the public. *