Appendix B:
New York City Waterfront Revitalization Program (WRP)

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: NYC Educational Construction Fund (ECF) and 240 Nassau Street Holdings, LLC

Name of Applicant Representative: Jennifer Maldonado, CEO, NYC ECF

Address: 25-01 Jackson Avenue; 20 Jay Street, Suite 1003

Telephone: 646.725.7308 Email: Jmaldonado10@schools.nyc.gov

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The co-Applicants, the New York City Educational Construction Fund (ECF) and 240 Nassau Street Holdings, LLC, are seeking zoning changes and other actions to facilitate the redevelopment of the Project Site (Block 110, Lot 25, and Block 111, Lot 1) with a mixed-use project including residential, retail, community center and cultural space, public school facilities, and open space. The Proposed Project would result in the redevelopment of the Project Site with up to 1,502 mixed-income residential units (approximately 1,502,000 gross square feet [gsf]), 34,000 gsf of retail, 30,000 gsf of community facility space, and 15,000 gsf of cultural center space. In addition, approximately 121,000 gsf of public school space would be developed to replace an existing outdated school with a modern facility and approximately 208 seats of additional school capacity would be provided with the proposed actions. The proposed actions would facilitate approximately 1,701,000 gsf in four new buildings.

2. Purpose of activity

The aging school building was built in 1953 and its electrical, ventilation, and acoustical systems are inadequate to serve the needs of the school. A recent DOE survey identified outmoded conditions and noncompliance with ADA accessibility standards in almost all of the building's rooms and spaces. Overall, the building lacks the appropriate facilities to provide a modern learning environment. The Proposed Actions would provide state-of-the-art school facilities for pre-Kindergarten through 8th grade. The improvements would achieve a better learning environment by providing modern educational facilities and additional public school capacity at the primary and intermediate school level in Community School District 13. The Proposed Actions would also facilitate the creation of approximately 1,502 units, of which approximately 301 units would be affordable. The Proposed Project would address the dire need for housing, including affordable and senior housing, in New York City. The Proposed Project would also support economic and cultural growth by introducing cultural and community space for local artists, neighborhood retail space, which would enliven the street and bring amenities to neighborhood residents. The Proposed Project would introduce approximately 0.84 acres of open space, of which 0.32 acres would be publicly accessible. The proposed open space would provide recreational opportunities and visual and physical open space connections between the proposed uses on the Project Site and Golconda Playground to the west and Commodore Barry Park to the east.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 110, Lot 25 and Block 111, Lot 1

Street Address: 240 Nassau Street, Brooklyn, NY 11201

Name of water body (if located on the waterfront): N/A

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

☐ City Map Amendment	☐ Zoning Certification	☐ Concession
☑ Zoning Map Amendment	☐ Zoning Authorizations	☐ UDAAP
☑ Zoning Text Amendment	☐ Acquisition – Real Property	☐ Revocable Consent
☐ Site Selection – Public Facility	☐ Disposition – Real Property	☐ Franchise
☐ Housing Plan & Project	☐ Other, explain: _____	
☑ Special Permit		

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Board of Standards and Appeals ☐ Yes ☑ No

☐ Variance (use)
☐ Variance (bulk)
☐ Special Permit

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

☐ Legislation	☐ Funding for Construction, specify: _____
☐ Rulemaking	☐ Policy or Plan, specify: _____
☐ Construction of Public Facilities	☐ Funding of Program, specify: _____
☐ 384 (b) (4) Approval	☐ Permits, specify: _____
☐ Other, explain: _____	

State Actions/Approvals/Funding

☐ State permit or license, specify Agency: _____ Permit type and number: _____
☐ Funding for Construction, specify: _____
☐ Funding of a Program, specify: _____
☐ Other, explain: _____

Federal Actions/Approvals/Funding

☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
☐ Funding for Construction, specify: _____
☐ Funding of a Program, specify: _____
☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☐ Yes	☑ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☐ Yes	☑ No
3.	Is the project located on publicly owned land or receiving public assistance?	☑ Yes	☐ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
6.	Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☑ Yes	☐ No

- ☑ Significant Maritime and Industrial Area (SMIA) (*2.1*)
- ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
- ☑ Priority Maritime Activity Zone (PMAZ) (*3.5*)
- ☐ Recognized Ecological Complex (REC) (*4.4*)
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☑	☐	☐
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☑	☐	☐
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☑	☐	☐
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☑	☐	☐
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☑	☐	☐
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☑	☐	☐
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☑	☐	☐
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☑	☐	☐
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☑	☐	☐
7.2	Prevent and remediate discharge of petroleum products.	☑	☐	☐
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☑	☐	☐
8	**Provide public access to, from, and along New York City's coastal waters.**	☑	☐	☐
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☑	☐	☐
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☑	☐	☐
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☑	☐	☐
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☑	☐	☐
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Jennifer Maldonado, CEO, NYC ECF

Address: 25-01 Jackson Avenue; 20 Jay Street, Suite 1003

Telephone: 646.725.7308 Email: Jmaldonado10@schools.nyc.gov

Applicant/Agent's Signature: Jennifer Maldonado

Date: May 29, 2024

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

Appendix B NYC Waterfront Revitalization Program

A. INTRODUCTION

The Proposed Project is within the City's designated coastal zone. Therefore, in accordance with the guidelines of the 2025 *City Environmental Quality Review (CEQR) Technical Manual*, an evaluation of the Proposed Project's consistency with the New York City Waterfront Revitalization Program (WRP) policies was undertaken. New York City's WRP comprises 10 principal policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. Assessments of the Proposed Project's consistency with the City's WRP policies are provided below for all policy questions answered "Promote" or "Hinder" on the Coastal Assessment Form.

B. WRP POLICY ASSESSMENT

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal Zone areas.

The Project Site is not on the waterfront or within a Special Natural Waterfront Area and is outside the limits of the adjacent Significant Maritime and Industrial Area (SMIA). The co-Applicants, the New York City Educational Construction Fund (ECF) and 240 Nassau Street Holdings, LLC, are seeking zoning changes and other actions to facilitate the redevelopment of the Project Site (Block 110, Lot 25 and Block 111, Lot 1). The Project Site is currently zoned R6 and currently contains a public school, P.S. 287 Dr. Bailey K. Ashford, and Community Roots Charter School on Block 111, Lot 1 and the Madison Square Boys and Girls Club on Block 110, Lot 25. The 1.50-acre Golconda Playground is located between the Project Site to the west and the elevated Brooklyn Queens Expressway (BQE). The Proposed Project would maintain the existing Golconda Playground and would redevelop the lots east of the playground with about 1,502 mixed-income and affordable residential units, retail space, community facility space, and would replace the school building with a new modern and ADA-accessible school building. The proposed residential, commercial, community facility, and open spaces would be consistent with existing and planned developments in downtown Brooklyn, and would support several major City policies aimed at expanding the City's housing supply to meet the needs of current and future residents (e.g., Where We Live NYC Plan, OneNYC, and Housing Our Neighbors). The Proposed Actions would also improve the school facilities to achieve a better learning environment by providing modern educational facilities and additional public school capacity, would support jobs in a neighborhood with strong public transit access, and provide local retail and community amenities for residents and visitors. Therefore, the Proposed Project would promote this policy.

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

The Project Site is in a densely developed neighborhood of Brooklyn in an area with adequate public facilities and infrastructure. It is in close proximity to streets and public transportation. As

noted in Chapter 10, "Water and Sewer Infrastructure," the Newtown Creek Wastewater Resource Recovery Facility (WRRF) has sufficient capacity for the increased wastewater conveyance. The Proposed Project would incorporate low-flow plumbing fixtures to reduce sanitary flow as required by the New York City Plumbing Code. Additionally, the incorporation of best management practices (BMPs) for stormwater management would result in decreased peak stormwater runoff rates compared to existing conditions, such that the Proposed Actions would not contribute to increased combined sewer overflow (CSO) events. Therefore, the Proposed Project would promote this policy.

Policy 1.4: In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.

The Project Site is adjacent to the Brooklyn Navy Yard SMIA. The Project Site is inland and would not be vulnerable to noise, odor, dust, light, vibration, or other effects of maritime or industrial uses within the Brooklyn Navy Yard, which mainly take place on the water. Redevelopment of the Project Site would be consistent with existing uses of the property and surrounding area, including residential, commercial, community facility, institutional, and open space uses. Therefore, the Proposed Project would promote this policy.

Policy 1.5: Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.

As described below under Policy 6.2, the Proposed Project has been designed to minimize the impacts of current and future flooding with sea level rise. Therefore, the Proposed Project would promote this policy.

Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.

Policy 3.5: In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.

The Project Site is adjacent to Priority Marine Activity Zones (PMAZ) associated with the Brooklyn Navy Yard SMIA. Redevelopment of the Project Site would be consistent with existing uses of the property and surrounding area, including residential, commercial, community facility, institutional, and open space uses. The Project Site is inland and does not have the potential to affect waterfront infrastructure or water-dependent uses associated with a PMAZ, nor would it preclude the development of future water-dependent or waterfront uses. Therefore, the Proposed Project would promote this policy.

Policy 4: Protect and restore the quality and function of ecological systems within the New York City coastal area.

Policy 4.6: In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide the environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.

The Proposed Project does not involve wetlands, shorelines, in-water components, or ecosystem restoration. However, the Proposed Project would include about 0.32 acres of new publicly accessible open space, some of which would comprise landscaped areas. The landscaping plan for the Project Site would include vegetation chosen for its seasonal variability, proven reliability in other New York City-based projects, and adaptability in urban environments, such as tolerance for periodic inundation after storm events and local conditions like drainage, soil volume, and shading. Native species would be used where they meet these criteria, with an overall target of at least two-thirds of the chosen plants being native. The plan considers a variety of species,

including but not limited to: American hornbeam (*Carpinus caroliniana*), American holly (*Ilex opaca*), maplelead viburnum (*Viburnum acerifolium*), inkberry (*Ilex glabra*), eastern red columbine (*Aquilegia canadensis*), red bergamot (*Monarda didyma*), and blue wood aster (*Symphyiotrichum cordifolium*). The specific landscaping design would be further developed as the Proposed Project is advanced but would include trees, shrubs, groundcover, and wildflowers, providing a variety of habitat types to the extent possible with the limited amount of open space available for landscaping at the Project Site. Therefore, the Proposed Project would promote this policy.

Policy 5: Protect and improve water quality in the New York City coastal area.

Policy 5.2: Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

The Proposed Project would result in the construction of four new buildings and approximately 0.84 acres of open space. The Proposed Project would incorporate landscaping, where possible, to help manage stormwater at the Project Site. It would also incorporate best management practices (BMPs) in accordance with the Unified Stormwater Rule to meet the City's site connection requirements. The incorporation of stormwater management BMPs would result in decreased peak stormwater runoff rates compared to existing conditions. Specific BMPs for the Proposed Project would be determined in the future in consultation with New York City Department of Environmental Protection (DEP) when specific designs are advanced. During construction, the Proposed Project would also implement erosion and sediment control measures (e.g., straw bales, inlet protection) in accordance with a Stormwater Pollution Prevention Plan (SWPPP) to reduce the potential impacts of stormwater runoff. Therefore, the Proposed Project would promote this policy.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Based on the 2015 FEMA Preliminary FIRMs, a portion of the Project Site is within the 0.2-percent annual chance floodplain and the eastern edge of the Project Site along Navy Street is within the 1-percent annual chance floodplain. The area in the 1-percent floodplain is in Zone AE (an area of high flood risk subject to inundation by the 1-percent annual chance flood event) with a base flood elevation (BFE) of +11 feet NAVD88. Under Policy 6, the primary goal for projects in coastal areas is to reduce risks posed by current and future coastal hazards, particularly major storms that are likely to increase due to climate change and sea level rise. The Proposed Project would redevelop the Project Site with retail, community facility, residential, institutional, and open space uses consistent and compatible with the current uses of the property and surrounding area. The Proposed Project would be constructed in accordance with the Flood Resistant Construction requirements of Appendix G of the New York City Building Code. It is not possible to raise the entire Project Site above the projected floodplain elevations, and Buildings 1, 2, 3, and 4 would be constructed at site grade, which ranges from +13 feet NAVD88 for Buildings 2 and 3 up to +17 feet NAVD88 for Building 1. While the entries to these buildings would be at site grade, the lobbies and critical areas within the buildings would be elevated to at least the design flood elevation (DFE). Additionally, ground floor uses would be limited to non-dwelling spaces such as lobby, retail, and community facility spaces, and mechanical/electrical/plumbing (MEP) equipment within each building would be installed at least three feet above the DFE of +13 feet for the Project Site, likely on a mezzanine level. As described in Policy 6.2, the building designs would also incorporate flood resiliency measures that would minimize the risk of damage or losses from flood impacts,

including the public school that would be in Building 3. Therefore, the Proposed Project would promote this policy.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

Guidance provided by DCP[1] recommends a detailed methodology to determine consistency with Policy 6.2 for actions that would facilitate the development of new vulnerable features, like the Proposed Project. A summary of this process is provided below.

1. *Identify vulnerabilities and consequences: assess the project's vulnerabilities to future coastal hazards and identify what the potential consequences may be.*

    a. *Complete the Flood Evaluation Worksheet.*

The information in the following subsections is based on the results of the completed worksheets prepared to represent the buildings' ground floor and lowest residential units (**Attachment 1**) and the MEP equipment (**Attachment 2**).

b. *Identify any project features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any sea level rise scenario.*

The lifespan of buildings is generally considered to be about 80 years, and MEP equipment is assumed to have a lifespan of about 25 years with regular maintenance. Based on these assumed lifespans, the evaluation year for the buildings is 2100 and the evaluation year for the MEP equipment is the 2050s. The Project Site is within the 1-percent annual chance floodplain in Zone AE with a BFE of +11 feet NAVD88. The New York City Panel on Climate Change (NPCC) projects that sea levels are likely to increase by up to 75 inches by 2100 under High Scenario projections. The projected floodplain elevation for the Project Site would be +13.5 feet NAVD88 in the 2050s and up to +17.25 feet NAVD88 by 2100.

The existing site grade is above the current BFE, ranging from +11 feet NAVD88 in the eastern portion of the site up to about +17 feet NAVD88 in the western portion of the site. The ground floor of Building 1 would be at +17 feet, Buildings 2 and 3 would be at +13 feet, and Building 4 would be at +14.7 feet NAVD88, all of which would be above the current floodplain. The ground floor of each building would be within the 1-percent annual chance floodplain within their 80-year lifespan: Buildings 2 and 3 by the 2050s, Building 4 by the 2080s, and Building 1 by 2100. All MEP equipment within the buildings would be installed at least three feet above the +13-foot DFE NAVD88, keeping the equipment above the projected floodplain elevations until at least the 2080s, beyond the design life of the equipment.

c. *Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water (MHHW) over the lifespan of the project under any sea level rise scenario.*

Based on the range of sea level rise predictions described above, MHHW at the U.S. National Oceanic and Atmospheric Administration (NOAA) station closest to the Project Site (Williamsburg Bridge, currently +2.47 feet NAVD88) could range up to +7.30 feet NAVD88 by the 2080s and +8.72 feet NAVD88 by 2100. Given these projections, the Proposed Project would not be within range of MHHW

[1] New York City Department of City Planning. *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance.* November 2018.

d. Describe how any additional coastal hazards are likely to affect the project, both currently and in the future, such as waves, high winds, or debris.

The Project Site is inland and is not located on the shoreline. Wave action hazards (i.e., Zone VE or Coastal A Zone) have not been designated for the Project Site. Therefore, storm impacts due to waves, high winds, or debris would not be expected to affect the Proposed Project.

2. Identify adaptive strategies: assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning.

a. For any features identified in Step 1(b), describe how any flood damage reduction elements incorporated into the project, or any natural elevation on the site, provide any additional protection. Describe how would any planned adaptive measures protect the feature in the future from flooding?

The ground floor of Buildings 2 and 3 would be below the projected floodplain elevation by the 2050s; the ground floor of Building 4 would be below the floodplain elevation by the 2080s; and the ground floor of Building 1 would be below the floodplain elevation by 2100. All of these timeframes are within the 80-year design life of the buildings. Ground floor uses for each building would include lobbies, mailroom services, storage, and/or community facility and retail spaces, none of which are permanently occupied spaces and would not pose a significant risk to life or property. Residential spaces would be constructed starting on the second floor or above in Buildings 1, 3, and 4, at an elevation of about +30 feet in Building 1 and +25 feet in Buildings 3 and 4 (Building 2 would not contain any residential uses). These spaces would remain above the projected floodplain elevations throughout the design life of the structures (refer to **Attachment 1**). The public school that would be constructed as part of Building 2 would be within the projected floodplain by the 2050s, within the 80-year lifespan of the structure. The school would replace an existing school building that is currently operating on the Project Site, and it is not possible to relocate it outside the floodplain. The New York City Public Schools Emergency Operations Plan for Flooding would be followed to ensure students and staff are safe in the event of a flood. Should a storm event occur during school hours, students could be relocated to the second floor or higher.

To account for the projected conditions, the foundation system of the buildings would include CFA, friction, and/or micro piles with a mat slab and spread footing, which are common design measures to distribute structural loads and prevent sinking or uneven settlement. The buildings would use corrosion-resistant finishes and a continuous waterproofing membrane designed to meet hydrostatic pressures and create a barrier against water and moisture associated with flood risks. Dry floodproofing measures would also include fully waterproofed penetrations for incoming services, pile supports, and points of entry, and would fully encase entry points where required (e.g., elevators). Adaptive measures like flood gates or removable barriers could also be installed in the future, if needed. MEP equipment in each building would be installed at least three feet above the +13-foot DFE, likely on a mezzanine level, which would keep it above the projected floodplain elevations throughout its 25-year design life (refer to **Attachment 2**). Equipment associated with water detention tanks and trash termination would likely be located below the DFE but would be elevated off the floor and dry floodproofed to minimize the risk of flood damage. At the end of its design life, the equipment could be replaced, relocated, elevated, or otherwise floodproofed to protect it against future flood risks.

b. For any features identified in Step 1(c), describe how any flood damage reduction elements incorporated into the project, or any natural elevation on the site, provide any additional protection. Describe how would any planned adaptive measures protect the feature in the future from flooding?

As described in Step 1(c), no vulnerable, critical, or potentially hazardous features would be below MHHW within their design life under projected conditions.

c. Describe any additional measures being taken to protect the project from additional coastal hazards such as waves, high winds, or debris.

As described in Step 1(d), the Project Site is not within a wave impact zone in the City's designated flood hazard area. Therefore, no specific measures are required.

d. Describe how the project would affect the flood protection of adjacent sites, if relevant.

Because the floodplain in New York City is controlled by astronomic tide and meteorological forces (e.g., nor'easters and hurricanes) and not by fluvial flooding, the Proposed Project would not have the potential to adversely affect the floodplain or result in increased coastal flooding at adjacent sites or within the study area. Construction would not alter the existing site elevation or encroach into adjacent properties. The Proposed Project would also incorporate stormwater management measures and vegetated spaces to help facilitate stormwater infiltration and minimize potential effects from runoff.

3. Assess policy consistency: conclude whether the project is consistent with Policy 6.2 of the Waterfront Revitalization Program.

The Project Site is within the 1-percent annual chance floodplain but is not within a wave impact zone in the flood hazard area. Because the Project Site is in the floodplain, all construction would be conducted in accordance with Appendix G, "Flood Resistant Construction" of the New York City Building Code. The proposed buildings would be constructed at site grade and would be within the projected floodplain before the end of their design life. While the entries to these buildings would be at site grade, the lobbies and critical areas within the buildings would be elevated at least to the DFE. Additionally, the ground floor uses would be limited to lobbies, mailroom services, storage, and/or community facility and retail spaces, none of which are permanently occupied spaces and would not pose a significant risk to life or property. The Project Site currently contains a public school that would be reconstructed and modernized. The school cannot be relocated but would incorporate dry floodproofing measures like the rest of the new construction, including design measures to protect the building foundation, external structure, entrances, and penetration points from water and hydrostatic pressure. As noted above, the New York City Public Schools Emergency Operations Plan for Flooding would be followed to ensure students and staff are safe in the event of a flood. The MEP equipment for each building would be installed above the DFE and would remain above the projected floodplain elevations throughout its 25-year design life, at which point additional resiliency measures could be incorporated, or the equipment could be replaced or relocated. The incorporation of vegetated spaces and stormwater management practices at the Project Site would also facilitate stormwater infiltration and help to minimize runoff at the site. Therefore, with these measures in place, the Proposed Project would promote this policy.

Policy 7: Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.

Policy 7.1: Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.

Based on previous assessments conducted at the Project Site, as described in Chapter 9 "Hazardous Materials," there is the potential to encounter contaminated or hazardous materials

related to historic uses of the site and surrounding area, including petroleum storage sites with releases, gasoline filling stations, dry cleaners, metal works, and foundries. The most recent Phase I ESAs conducted for the Proposed Project identified closed petroleum spills, evidence of former underground storage tanks, gasoline tanks, and historic uses that have the potential to have impacted subsurface conditions at the Project Site. Redevelopment would involve site-wide excavation of subsurface materials at the Project Site to allow for construction of the new buildings. To avoid any potential for hazardous materials exposure on the Project Site, institutional controls for hazardous materials would be placed on Block 110, Lot 25 and Block 111, Lot 1 to ensure that sampling and remediation are completed in accordance with New York City Mayor's Office of Environmental Remediation (OER) requirements. Any activities with the potential to disturb asbestos or lead-based paint within the Project Site would be performed in accordance with applicable requirements, and materials would be removed and disposed of prior to demolition in accordance with local, state, and federal regulations. With these measures in place, the Proposed Project would promote this policy.

Policy 7.2: Prevent and remediate discharge of petroleum products.

As noted under Policy 7.1, there is the potential for petroleum products and storage tanks to be present at the Project Site. During any redevelopment activities within the Project Site resulting in soil disturbance activities, any evidence of a petroleum spill would be reported to New York State Department of Environmental Conservation (DEC) and/or other regulatory agencies and addressed in accordance with applicable requirements. If any Underground Storage Tanks (USTs) were encountered, they would be properly assessed, closed, and removed in accordance with state and local regulations. Therefore, the Proposed Project would promote this policy.

Policy 7.3: Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

As stated in Chapter 9, "Hazardous Materials," transportation of material from the Project Site for offsite disposal would be conducted in accordance with federal, state, and local requirements covering the licensing of haulers and trucks, placarding, truck routes, manifesting, etc. All contaminated or hazardous materials would be transported to a licensed facility for disposal, including petroleum products, asbestos, or lead-based paint. Therefore, with these measures in place, the Proposed Project would promote this policy.

Policy 8: Provide public access to, from, and along New York City's coastal waters.

Policy 8.2: Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

As described in Chapter 5, "Open Space," the Proposed Actions would not result in direct effects related to encroachments on or loss of existing open space, changes in open space such that it no longer serves the same user population, or results in impacts due to noise or odor emission. The Project Site is in a densely developed area inland from the waterfront with limited access to the water. While the Proposed Project is not along the water's edge, it would incorporate both public and private open spaces between the buildings and would maintain existing access to Golconda Playground located to the west of Project Site. Therefore, the Proposed Project would promote this policy.

Policy 8.5: Preserve the public interest in and use of lands and waters held in public trust by the State and City.

The Project Site is adjacent to the Golconda Playground and Commodore Barry Park, both of which are owned and operated by New York City Department of Parks and Recreation (NYC Parks). The Proposed Actions would not result in the transfer of public lands to another entity, nor

would it result in adverse effects on surrounding resources. As described in the response to Policy 1.1, the Proposed Project would be consistent with existing and planned developments for the area and would provide local retail and community facility amenities for residents and visitors. Access to Commodore Barry Park would be unaffected by the Proposed Project. Therefore, the Proposed Project would promote this policy.

Policy 10: Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.

Policy 10.1: Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.

As discussed in Chapter 7, "Historic and Cultural Resources," the Project Site does not contain any known historic architectural resources. The Brooklyn Queens Expressway (BQE) (S/NR-eligible), building at 194 Concord Street (S/NR-eligible), NYCHA Farragut Houses (S/NR-eligible), and Timber Shed at the Brooklyn Navy Yard (S/NR-listed) are within the 400-foot study area for the Proposed Project. The Proposed Project would not demolish, alter, or otherwise have the potential to result in adverse impacts to these resources. Because the Proposed Project would be constructed within 90 feet of portions of the BQE, the Applicant would prepare and implement a Construction Protection Plan (CPP) in coordination with the New York City Department of Transportation (DOT) prior to construction. With the CPP, the Proposed Project would not result in direct impacts to architectural resources in the study area. While the Proposed Project would change the context of some nearby architectural resources, it would not result in changes to an architectural resource causing the resource to become a different visual entity or isolate the resource from its setting. It also would not obstruct public views to historic architectural resources or introduce incompatible elements within the streetscape. Therefore, with the implementation of the CPP, the Proposed Project would promote this policy.

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

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Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	240 Nassau Street
Location	240 Nassau Street, Brooklyn, NY 11201
Type(s)	☑ Residential, Commercial, Community Facility ☑ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☐ Coastal Protection
Description	Redevelopment of Project Site (Block 110 Lot 25, Block 111 Lot 1) with a mixed-use project including residential, retail, community center and cultural space, public school facilities, and open space. Proposed Project would result in up to 1,502 mixed-income residential units, 34,000 gsf of retail, 30,000 gsf of community facility space, and 15,000 gsf of cultural center space. Public school space would be developed to replace existing outdated school with a 121,000 gsf modern facility in compliance with ADA accessibility standards and approximately 208 seats of additional school capacity.
Planned Completion Date	2033
Expected Project Lifespan	80 years

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Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.47	**2.47**	**NAVD88**	*Williamsburg Bridge NOAA Station, Appendix A*
1% flood height	11.00	**11.00**	**NAVD88**	*NYC Flood Hazard Mapper*
Design flood elevation	13.00	**13.00**	**NAVD88**	*Appendix G of NYC Building Code*
As relevant:				
0.2% flood height	14.00	14.00	**NAVD88**	*2013 NYC Flood Insurance Study, Transect NY-13*

Data will be converted based on the following datums:

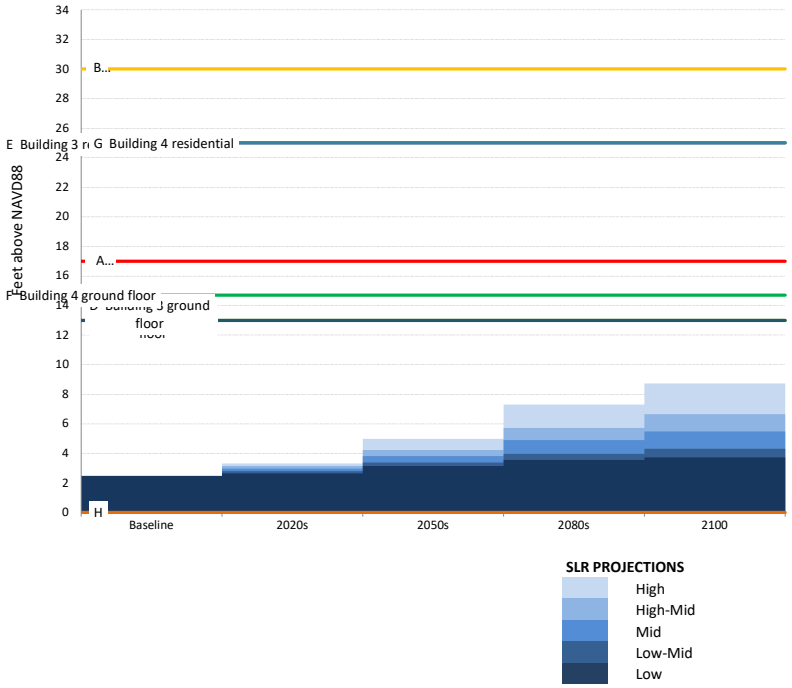
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

Describe key physical features of the project.

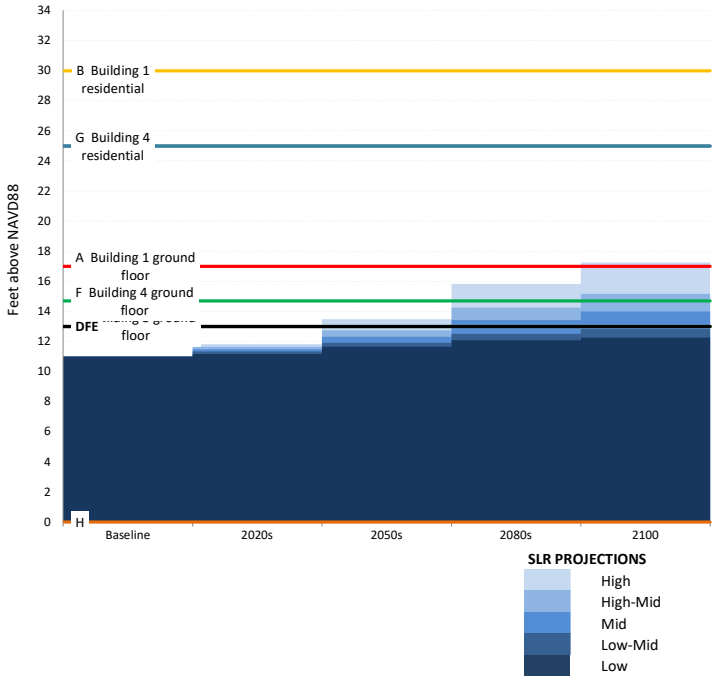
Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
A Building 1 ground floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	17.0	Feet	NAVD88	*17.0*	*17.0*	*14.5*	*3.0*
Building entrances, community facility, and retail spaces at ground floor									
B Building 1 residential	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	30.0	Feet	NAVD88	*30.0*	*30.0*	*27.5*	*16.0*
Lowest possible permanently occupied space (residential units) at 2nd floor or above									
C Building 2 ground floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	13.0	Feet	NAVD88	*13.0*	*13.0*	*10.5*	*-1.0*
Building entrances, retail space, and public school at ground floor. Building 2 does not contain residential units									
D Building 3 ground floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☑ Other	2100	13.0	Feet	NAVD88	*13.0*	*13.0*	*10.5*	*-1.0*
Retail spaces and residential lobby at ground floor									
E Building 3 residential	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	25.0	Feet	NAVD88	*25.0*	*25.0*	*22.5*	*11.0*
Lowest possible permanently occupied space (residential units) at 2nd floor or above									
F Building 4 ground floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	14.7	Feet	NAVD88	*14.7*	*14.7*	*12.2*	*0.7*
Community space and senior affordable housing lobby at ground floor									
G Building 4 residential	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	25.0	Feet	NAVD88	*25.0*	*25.0*	*22.5*	*11.0*
Lowest possible permanently occupied space (residential units) at 2nd floor or above									
H	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				

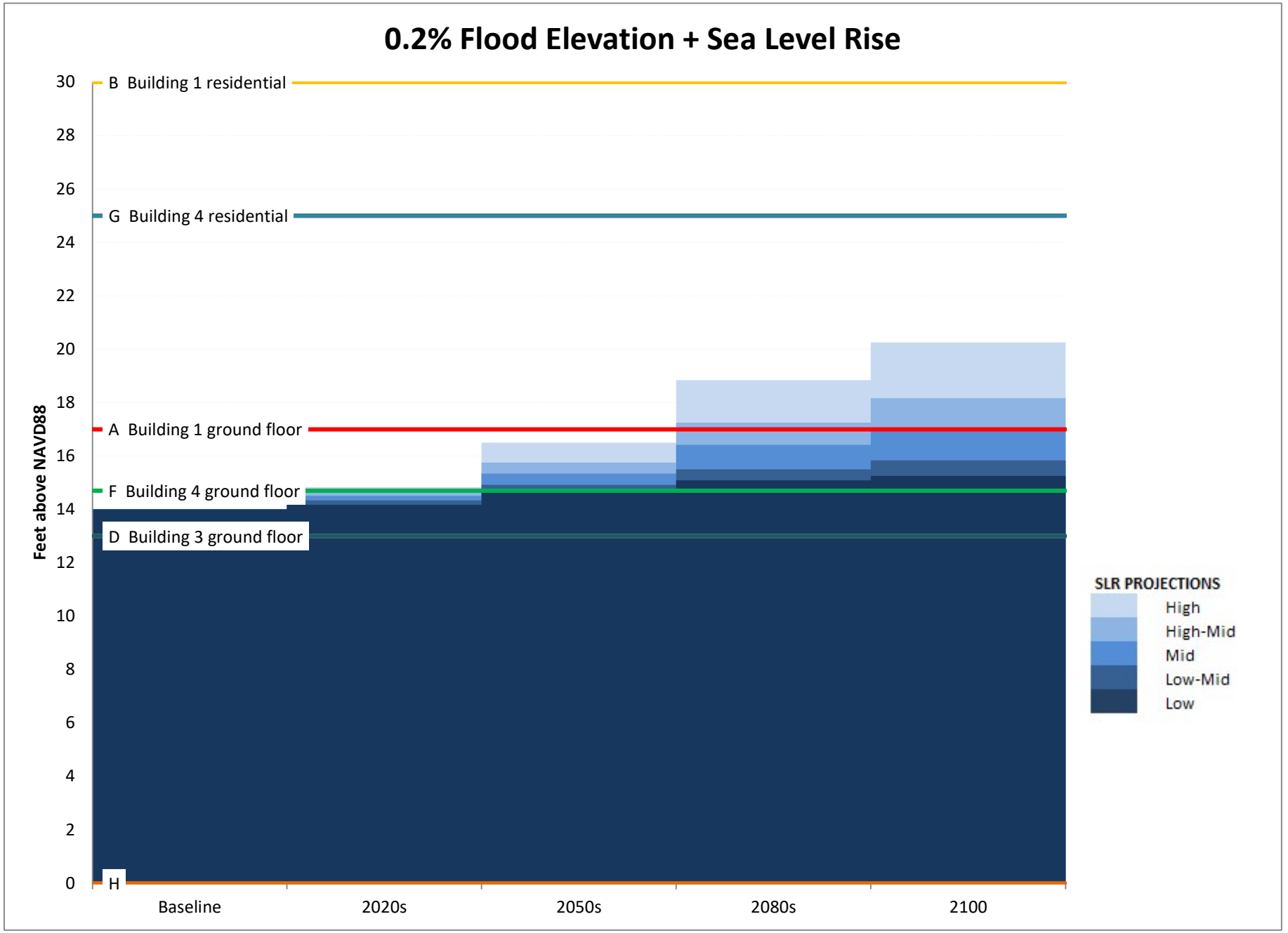
Assess project vulnerability over a range of sea level rise projections.

Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise




0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
B Building 1 residential
G Building 4 residential
A Building 1 ground floor
F Building 4 ground floor
D Building 3 ground floor
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

	SLR (ft)					
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**	
Baseline	0.00	0.00	0.00	0.00	0.00	**2014**
2020s	0.17	0.33	0.50	0.67	0.83	**2020s**
2050s	0.67	0.92	1.33	1.75	2.50	**2050s**
2080s	1.08	1.50	2.42	3.25	4.83	**2080s**
2100	1.25	1.83	3.00	4.17	6.25	**2100**

	MHHW+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.47	2.47	2.47	2.47	2.47
2020s	2.64	2.80	2.97	3.14	3.30
2050s	3.14	3.39	3.80	4.22	4.97
2080s	3.55	3.97	4.89	5.72	7.30
2100	3.72	4.30	5.47	6.64	8.72

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	11.00	11.00	11.00	11.00	11.00
2020s	11.17	11.33	11.50	11.67	11.83
2050s	11.67	11.92	12.33	12.75	13.50
2080s	12.08	12.50	13.42	14.25	15.83
2100	12.25	12.83	14.00	15.17	17.25

	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	14.00	14.00	14.00	14.00	14.00
2020s	14.17	14.33	14.50	14.67	14.83
2050s	14.67	14.92	15.33	15.75	16.50
2080s	15.08	15.50	16.42	17.25	18.83
2100	15.25	15.83	17.00	18.17	20.25

	0	1
A Building 1 ground floor	17	17
B Building 1 residential	30	30
C Building 2 ground floor	13	13
D Building 3 ground floor	13	13
E Building 3 residential	25	25
F Building 4 ground floor	14.7	14.7
G Building 4 residential	25	25
H	0	0
DFE	13.00	13.00

SLR (in)				
Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-200

Source
NOAA Tides and Currents
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NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
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)1 tidal epoch.




Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
CG
9050
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

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Location	240 Nassau Street, Brooklyn, NY 11201
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Description	Redevelopment of Project Site (Block 110 Lot 25, Block 111 Lot 1) with a mixed-use project including residential, retail, community center and cultural space, public school facilities, and open space. Proposed Project would result in up to 1,502 mixed-income residential units, 34,000 gsf of retail, 30,000 gsf of community facility space, and 15,000 gsf of cultural center space. Public school space would be developed to replace existing outdated school with a 121,000 gsf modern facility in compliance with ADA accessibility standards and approximately 208 seats of additional school capacity.
Planned Completion Date	2033
Expected Project Lifespan	80 years

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Last update: Sept. 7, 2018

Establish current tidal and flood heights.

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MHHW	2.47	**2.47**	**NAVD88**	*Williamsburg Bridge NOAA Station, Appendix A*
1% flood height	11.00	**11.00**	**NAVD88**	*NYC Flood Hazard Mapper*
Design flood elevation	13.00	**13.00**	**NAVD88**	*Appendix G of NYC Building Code*
As relevant:				
0.2% flood height	14.00	14.00	**NAVD88**	*2013 NYC Flood Insurance Study, Transect NY-13*

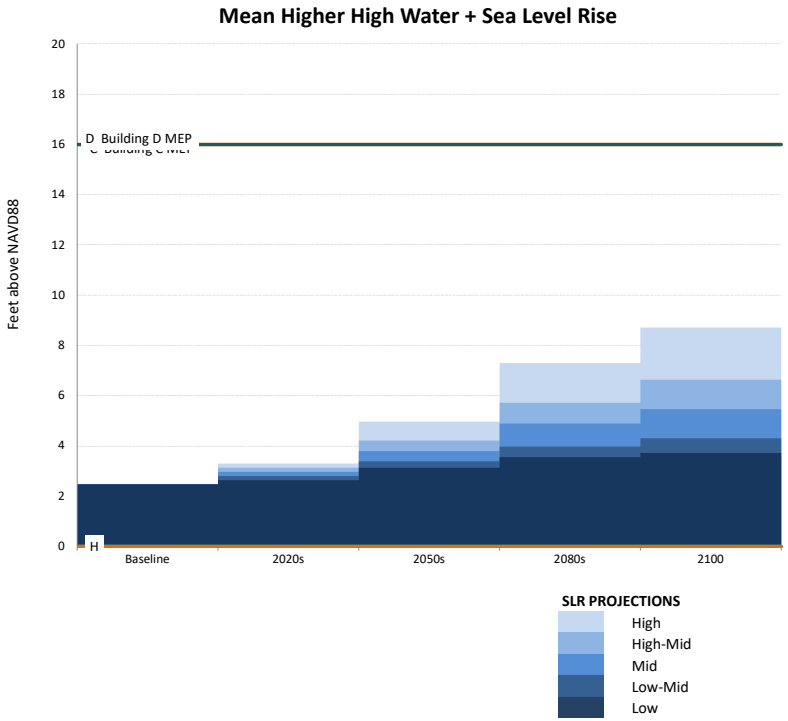
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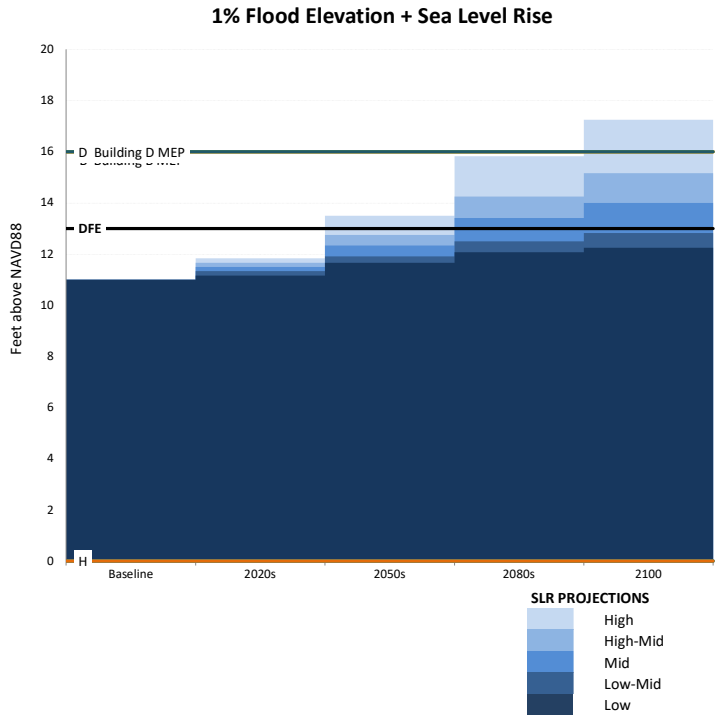
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

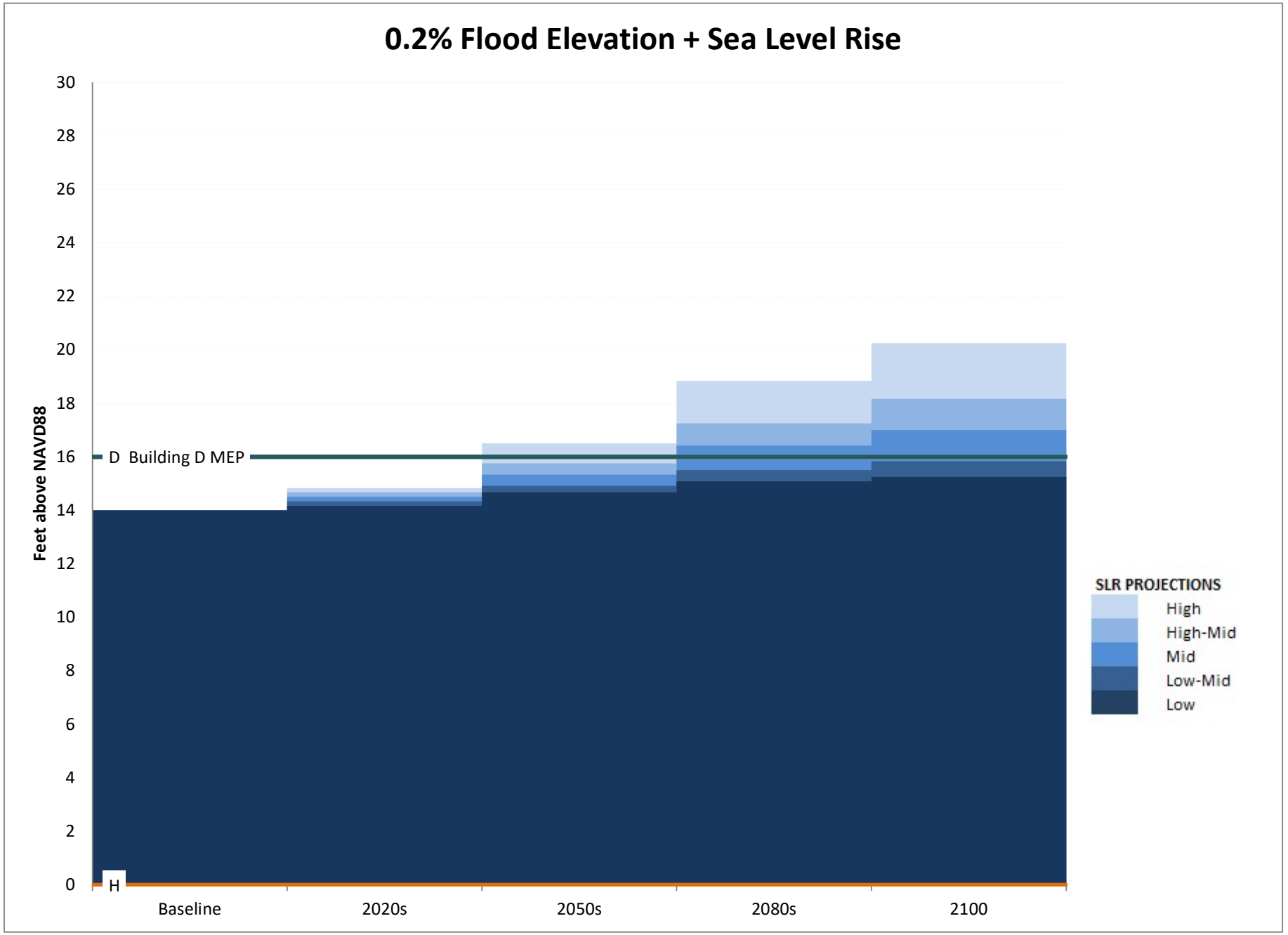
Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
A Building A MEP	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2050	16.0	Feet	NAVD88	*16.0*	*16.0*	*13.5*	*2.0*
Mechanical, electrical, and plumbing equipment for Building 1. Likely installed on mezzanine level between ground floor and first floor. Includes 3 feet of freeboard above DFE									
B Building B MEP	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2050	16.0	Feet	NAVD88	*16.0*	*16.0*	*13.5*	*2.0*
Mechanical, electrical, and plumbing equipment for Building 2. Likely installed on mezzanine level between ground floor and first floor. Includes 3 feet of freeboard above DFE									
C Building C MEP	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2050	16.0	Feet	NAVD88	*16.0*	*16.0*	*13.5*	*2.0*
Mechanical, electrical, and plumbing equipment for Building 3. Likely installed on mezzanine level between ground floor and first floor. Includes 3 feet of freeboard above DFE									
D Building D MEP	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2050	16.0	Feet	NAVD88	*16.0*	*16.0*	*13.5*	*2.0*
Mechanical, electrical, and plumbing equipment for Building 4. Likely installed on mezzanine level between ground floor and first floor. Includes 3 feet of freeboard above DFE									
E	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
F	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
H	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				

Assess project vulnerability over a range of sea level rise projections.






0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
D Building D MEP
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

	SLR (ft)					
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**	
Baseline	0.00	0.00	0.00	0.00	0.00	**2014**
2020s	0.17	0.33	0.50	0.67	0.83	**2020s**
2050s	0.67	0.92	1.33	1.75	2.50	**2050s**
2080s	1.08	1.50	2.42	3.25	4.83	**2080s**
2100	1.25	1.83	3.00	4.17	6.25	**2100**

	MHHW+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.47	2.47	2.47	2.47	2.47
2020s	2.64	2.80	2.97	3.14	3.30
2050s	3.14	3.39	3.80	4.22	4.97
2080s	3.55	3.97	4.89	5.72	7.30
2100	3.72	4.30	5.47	6.64	8.72

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	11.00	11.00	11.00	11.00	11.00
2020s	11.17	11.33	11.50	11.67	11.83
2050s	11.67	11.92	12.33	12.75	13.50
2080s	12.08	12.50	13.42	14.25	15.83
2100	12.25	12.83	14.00	15.17	17.25

	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	14.00	14.00	14.00	14.00	14.00
2020s	14.17	14.33	14.50	14.67	14.83
2050s	14.67	14.92	15.33	15.75	16.50
2080s	15.08	15.50	16.42	17.25	18.83
2100	15.25	15.83	17.00	18.17	20.25

	0	1
A Building A MEP	16	16
B Building B MEP	16	16
C Building C MEP	16	16
D Building D MEP	16	16
E	0	0
F	0	0
G	0	0
H	0	0
DFE	13.00	13.00

SLR (in)				
Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-200

Source
NOAA Tides and Currents
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NOAA Tides and Currents
NOAA Tides and Currents
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NOAA Tides and Currents

)1 tidal epoch.




Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
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Bridge
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Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
CG
9050
Beach
Channel
8517137
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Sandy Hook
8531680