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# STATE ENVIRONMENTAL QUALITY REVIEW
# NEGATIVE DECLARATION
# NOTICE OF DETERMINATION AND NON-SIGNIFICANCE

**DATE:** July 20, 2011

**SEQR PROJECT NO.:** 12-001

**LEAD AGENCY:** New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, New York 11101-3045

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law. Pursuant to §1730.2 of the Public Authorities Law, the New York City School Construction Authority (SCA) is SEQR Lead Agency.

The SCA, as Lead Agency, has determined that the proposed action described below will not have a significant effect on the quality of the environment, and a Draft Environmental Impact Statement (DEIS) will not be prepared.

**NAME OF ACTION:** New, Approximately 476-Seat
Primary School Facility

**LOCATION:** 1 Peck Slip, New York, New York
Tax Block 106, Tax Lot 9

**SEQR STATUS:** Type I

## NEGATIVE DECLARATION

**Description of Action:**

On behalf of the New York City Department of Education (DOE), the New York City School Construction Authority (SCA) proposes the site selection, acquisition, acceptance of construction funding and construction of a new, approximately 476- seat primary school facility in Community School District 2. Acquisition, design, and construction of the proposed school facility would be conducted pursuant to DOE's Five-Year Capital Plan for Fiscal Years 2010-2014.

The proposed site is located at 1 Peck Slip (Block 106, Lot 9) between Pearl Street and Water Street in the South Street Seaport neighborhood of Manhattan. The project site is an approximately 18,000-square-foot (0.41-acre) lot that is owned by the United States Postal Service (USPS) and which is developed with a four-story, approximately 70,800-square-foot post office facility that contains

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retail and mail delivery operations. The zoning is C6-2A; community facility uses such as schools are permitted as-of-right.

The proposed project is intended to provide additional permanent public school capacity that would alleviate current overcrowding in CSD 2. According to the DOE school utilization profile for 2009-2010, primary schools in CSD 2 are operating at 91 percent capacity. There are three existing primary school facilities in close proximity to the project site. P.S 1, located at 8 Henry Street, approximately 0.34 mile from the proposed site, is operating at 63 percent capacity. P.S 124, located at 40 Division Street, approximately 0.54 mile from the proposed site, is operating at 98 percent capacity. P.S 126, located at 80 Catherine Street, approximately 0.33 mile from the proposed site, is operating at 84 percent capacity.

Under the proposed project, the SCA would construct a new, approximately 476-seat primary school facility that would accommodate children in pre-kindergarten through grade five. The proposed school facility would be approximately four stories in height. It would consist of general and special education classrooms, science laboratories, administrative and support space, a medical suite, a library, a cafeteria and kitchen facilities, a combined gymnasium and assembly space, an exercise room, common areas, custodial facilities, and storage areas. In addition, the building would include a 2,200-square-foot retail post office space on the ground floor. Construction activities would begin in 2012, with student occupancy of the facility expected to begin in 2015.

**Reasons Supporting This Determination:**

A comprehensive Environmental Assessment Form (EAF) and Supplemental Environmental Studies for this action were completed and issued on July 20, 2011. Based upon those documents (which are appended hereto), the SCA has determined that the proposed project will have no significant adverse impacts on environmental conditions related to the following areas: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; shadows; historic and archeological resources; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; energy; solid waste and sanitation services; transit and pedestrians; air quality; greenhouse gas emissions; noise; public health; neighborhood character; and construction impacts.

The key findings related to the analysis of the following three environmental impact areas in the Environmental Assessment are discussed in greater detail below:

***Historic and Archeological Resources***
As part of the environmental assessment process, the SCA consulted with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP)

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regarding the proposed project's potential impacts to resources listed or eligible for listing on the State and National Registers of Historic Places (S/NR). The existing on-site structure, which was constructed in the 1950s, is not itself an historic resource. However, the site is located within the New York City Landmarks Preservation Commission (LPC)-designated South Street Seaport Historic District and S/NR-designated South Street Seaport Historic District. Accordingly, the SCA shall prepare and submit a Construction Protection Plan (CPP) for OPRHP's review prior to the start of any demolition or construction at the site. The preparation and implementation of the measures identified in the CPP would avoid significant adverse impacts to the adjoining historic resources. In addition, the SCA will submit the design of the proposed school facility to the OPRHP for review of the proposed structure's effects on the S/NR-eligible and S/NR-listed structures in the historic district. Should the construction activities require excavation below the level of the present disturbance created by the existing building, a Phase IB Study would be conducted and submitted to the OPRHP for review. In addition, the SCA will enter into a Memorandum of Agreement (MOA) with OPRHP and USPS outlining specific measures, including future design review and review of project plans with OPRHP to evaluate the potential to affect significant archaeological resources on the project site. With the implementation of these measures, the proposed project would not result in significant adverse impacts related to historic and archeological resources.

***Traffic and Parking***

For the streets in the vicinity of the site, future intersection volumes would generally experience small increases over existing traffic volumes, and those increases could be accommodated by the street capacities for the majority of the locations. However, based on City Environmental Quality Review (CEQR) standards, the proposed project has the potential to result in significant adverse impacts at one (1) local intersection during the analyzed peak periods, which currently operates at low levels of service. The traffic analysis also indicated that while the affected intersection would continue to operate poorly in the future with the proposed project, project-generated impacts could be avoided through relatively simple, low-cost, and conventional traffic engineering methods as described in greater detail below. These improvements are subject to review and approval by the New York City Department of Transportation (NYCDOT):

Peck Slip and Pearl Street

The traffic analysis indicated that the westbound approach of Peck Slip at Pearl Street could experience significant adverse impacts due to project-generated traffic during the AM and PM peak hours. In the future without the proposed project, the westbound approach would operate at Level of Service (LOS) C with 32.6 seconds of delay per vehicle during the AM peak hour. This approach would deteriorate to LOS D in the future with the proposed project with 47.8 seconds of delay per vehicle. During the PM peak hour, the westbound approach would operate at LOS E with 57.5 seconds of delay per vehicle in the future without the proposed project. In the future with the proposed project, the westbound

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approach would deteriorate to LOS F, and the average delay would increase to 146.6 seconds.

The impact at the westbound approach could be avoided by transferring one (1) second of green time from the north-south phase to the east-west phase during the AM peak hour and by transferring seven (7) seconds of green time from the north-south phase to the east-west phase during the PM peak hour. These adjustments would avoid the potential for project-generated impacts to the westbound approach at this intersection.

***Hazardous Materials***

AKRF Engineering, P.C. (AKRF) completed a Phase I Environmental Site Assessment (ESA) and a Phase II Environmental Site Investigation (ESI) between August 2010 and May 2011 to evaluate the environmental conditions of the proposed project site. The Phase I ESA identified several on-site recognized environmental conditions (RECs) including: the potential presence of buried structures, which could contain historic fill material, demolition debris and/or abandoned underground storage tanks (USTs); prior on-site industrial uses associated with a former metals company; and former on-site petroleum storage associated with a closed-in-place 10,000-gallon fuel oil UST. Off-site RECs identified during the Phase I ESA included: two monitoring wells located on the sidewalk in front of nearby properties; various historic petroleum-related uses noted on surrounding properties including garages with buried gasoline tanks and auto repairs, a filling station, and "oils" storage; historic industrial/manufacturing uses on the surrounding properties including a metal/iron works, a shot and lead works, a printer, a machine shop, chemical manufacturers, thermometer manufacturers and a petroleum company; two closed New York State Department of Environmental Conservation (NYSDEC) Spill incidents in close proximity to the site; and a former manufactured gas plant site located east-southeast of the site. Environmental concerns identified during the Phase I ESA included the potential presence of asbestos-containing material (ACM), lead-based paint (LBP), and items containing polychlorinated biphenyls (PCBs) in the on-site building.

The Phase II ESI was completed in May 2011 to assess whether the RECs identified in the Phase I ESA have affected the site for construction of a public school facility. The investigation included a geophysical survey and the completion of seven soil borings, four temporary well points, and seven sub-slab soil vapor sampling points. Seven sub-slab soil vapor samples, one ambient air sample, seven grab soil samples (plus one duplicate), three composite soil samples, and four groundwater samples were collected for laboratory analysis.

The volatile organic compound (VOC) acetone was detected in soil at concentrations above the corresponding State soil cleanup objectives for unrestricted use; however, its presence was attributed to laboratory contamination. Semi-volatile compounds (SVOCs) were detected in grab

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samples from three of the seven soil borings at concentrations above the State soil cleanup objectives for unrestricted use; and metals were detected in grab samples from all seven borings at concentrations above the unrestricted soil cleanup objectives. Pesticides were detected in one composite sample slightly above the unrestricted use soil cleanup objectives. The presence of SVOCs, metals, and pesticides at levels greater than the corresponding state soil cleanup objectives was limited to areas of historic fill on-site and is not attributed to an on-site release or source area.

Groundwater was encountered at depths ranging from approximately 8 to 11 feet below the ground surface with an anticipated groundwater flow direction to the southeast towards the East River. All analyzed parameters were within the state groundwater quality standards except for four metals (copper, lead, manganese, and/or mercury) detected at levels exceeding their water quality standards that were attributable to entrained sediment and/or background conditions. The volatile organic compound tetrachloroethene (PCE) was detected in all seven sub-slab soil vapor samples at concentrations above the anticipated background levels and also exceeded the State Air Guideline Value in four of the samples. Petroleum-related compounds (trimethylbenzenes, ethylbenzene, toluene, and xylenes) were detected in one sub-slab vapor sample at concentrations above the anticipated background levels.

The proposed project would not result in impacts from contaminated media and building materials. Prior to the construction of the project, a pre-design investigation would be conducted to further characterize subsurface conditions in areas that were inaccessible during the Phase II ESI. Any subsurface structures (including known and unknown USTs) and any contaminated soil encountered during construction would be removed in accordance with all applicable regulations. Any dewatering required during construction would be minimized to mitigate potential influx of contaminated water from off-site sources toward the site. Treatment of any dewatering effluent would be conducted as required prior to discharge to the municipal sewer. As a preventative measure, a soil vapor barrier and a sub-slab depressurization system (SSDS) would be installed below the newly constructed school building to prevent potential soil vapor intrusion, or, if the existing building is not demolished, it would be retrofitted with an SSDS. Any suspect ACM, LBP, and PCB-containing materials affected by the preparation of the site for use as a public school would be identified prior to construction and properly managed during construction activities. All soil excavated during building construction would be properly managed in accordance with all applicable local, state, and federal regulations. For areas of the site where exposed soil may exist after building construction (i.e., landscaped areas), a two-foot thick layer of environmentally clean fill would be placed over the soil in these areas. In addition, to minimize the potential for exposure by construction workers and the surrounding public, standard industry practices, including appropriate health and safety measures, would be utilized. With the

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implementation of the measures described above, the proposed project would not result in any significant adverse impacts related to hazardous materials.

The proposed project would have the beneficial effect of providing approximately 476 primary school seats in the Lower Manhattan section of Community School District 2.

For further information contact:

Contact: Ross J. Holden
Executive Vice President & General Counsel

Address: New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, New York 11101-3045

Telephone: (718) 472-8220

Ross J. Holden
Executive Vice President & General Counsel

July 20, 2011
Date

# Proposed New Primary School
# 1 Peck Slip, Manhattan

# SEQR Environmental Assessment Form and Supplemental Environmental Studies

**Lead Agency:**

New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, New York 11101

**Prepared by:**

Parsons Brinckerhoff
One Penn Plaza
New York, NY 10119
(212) 465-5000

*In Association with:*

Historical Perspectives, Inc.
P.O. Box 3037
Westport, CT 06880
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July 20, 2011

# SEQR Environmental Assessment Form

*617.20*
*Appendix A*
*State Environmental Quality Review*
# FULL ENVIRONMENTAL ASSESSMENT FORM

**Purpose:** The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

**Full EAF Components:** The full EAF is comprised of three parts:

**Part 1:** Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.

**Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.

**Part 3:** If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

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## THIS AREA FOR LEAD AGENCY USE ONLY

## DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

**Identify the Portions of EAF completed for this project:** ☑ Part 1 ☑ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

☒ A. The project will not result in any large and important impact(s) and, therefore, is one which **will not** have a significant impact on the environment, therefore **a negative declaration will be prepared.**

☐ B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore **a CONDITIONED negative declaration will be prepared.***

☐ C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore **a positive declaration will be prepared.**

*A Conditioned Negative Declaration is only valid for Unlisted Actions

**New Primary School at 1 Peck Slip, Manhattan**

Name of Action

**New York City School Construction Authority**

Name of Lead Agency

**Ross J. Holden**

Print or Type Name of Responsible Officer in Lead Agency

**Executive VP & General Counsel**

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Esther Schwalb, Parsons Brinckerhoff

Signature of Preparer (If different from responsible officer)

**July 20, 2011**

Date

website

## PART 1--PROJECT INFORMATION
### Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action New Primary School, Manhattan

Location of Action (include Street Address, Municipality and County)

1 Peck Slip, Manhattan, New York

Name of Applicant/Sponsor New York City School Construction Authority

Address 30-30 Thomson Avenue

City / PO Long Island City State New York Zip Code 11101

Business Telephone (718) 472-8000

Name of Owner (if different) Stephen Roth, United States Postal Service

Address 474 L'Enfant Plaza West SW, Room 6670

City / PO Washington State DC Zip Code 20260-1861

Business Telephone (202) 268-5184

Description of Action:

On behalf of the New York City Department of Education (DOE), the New York City School Construction Authority (SCA) proposes to construct a new primary school in the South Street Seaport neighborhood of Manhattan. The new facility would provide approximately 480 seats for Pre-Kindergarten (Pre-K) through Fifth grade students in Community School District (CSD) 2. Construction of the proposed school building would be conducted pursuant to the DOE's Five-Year Capital Plan for Fiscal Years 2010–2014.

The project site is located at 1 Peck Slip (Block 106, Lot 9) in Lower Manhattan and is currently occupied by the Peck Slip Post Office, which is owned and operated by the United States Postal Service (USPS). The proposed project would entail either the renovation and expansion, or the demolition of the current post office building and the construction of the new school facility. The proposed school building would contain space on a portion of the ground floor for continued use by the USPS as a retail post office. Based on the preliminary concepts, the building would be 5 stories and a rooftop play yard.

The proposed project is intended to provide additional public school capacity to meet the needs of the area's current and projected future elementary school students. In particular, the proposed school is expected to acommodate future growth of the student population in the area south of Canal Street. The school is expected to be completed and ready for occupancy for the 2015–16 school year.

## Please Complete Each Question--Indicate N.A. if not applicable

## A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: ☑ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
   ☐ Forest ☐ Agriculture ☐ Other _____

2. Total acreage of project area: 0.41 acres.

| APPROXIMATE ACREAGE | PRESENTLY | AFTER COMPLETION |
|---|---|---|
| Meadow or Brushland (Non-agricultural) | _____ acres | _____ acres |
| Forested | _____ acres | _____ acres |
| Agricultural (Includes orchards, cropland, pasture, etc.) | _____ acres | _____ acres |
| Wetland (Freshwater or tidal as per Articles 24,25 of ECL) | _____ acres | _____ acres |
| Water Surface Area | _____ acres | _____ acres |
| Unvegetated (Rock, earth or fill) | _____ acres | _____ acres |
| Roads, buildings and other paved surfaces | 0.41 acres | 0.41 acres |
| Other (Indicate type) _____ | _____ acres | _____ acres |

3. What is predominant soil type(s) on project site? Urban Land
   a. Soil drainage: ☐ Well drained ____% of site ☐ Moderately well drained 100 % of site.
   ☐ Poorly drained ____% of site
   b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? NA acres (see 1 NYCRR 370).

4. Are there bedrock outcroppings on project site? ☐ Yes ☒ No
   a. What is depth to bedrock ±65 (in feet)

5. Approximate percentage of proposed project site with slopes:
   ☑ 0-10% 100 % ☐ 10- 15%____% ☐ 15% or greater____%

6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or National Registers of Historic Places? ☒ Yes ☐ No

7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? ☐ Yes ☒ No

8. What is the depth of the water table? ±15 (in feet)

9. Is site located over a primary, principal, or sole source aquifer? ☐ Yes ☒ No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? ☐ Yes ☒ No

11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? ☐ Yes ☒ No

According to:

Identify each species:

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations?

☐ Yes ☒ No

Describe:

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?

☐ Yes ☒ No

If yes, explain:

14. Does the present site include scenic views known to be important to the community? ☐ Yes ☒ No

15. Streams within or contiguous to project area:

NA

a. Name of Stream and name of River to which it is tributary

16. Lakes, ponds, wetland areas within or contiguous to project area:

NA

b. Size (in acres):

17. Is the site served by existing public utilities? ☒ Yes ☐ No

a. If **YES,** does sufficient capacity exist to allow connection? ☒ Yes ☐ No

b. If **YES**, will improvements be necessary to allow connection? ☐ Yes ☒ No

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☒ No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? ☐ Yes ☒ No

20. Has the site ever been used for the disposal of solid or hazardous wastes? ☐ Yes ☒ No

**B. Project Description**

1. Physical dimensions and scale of project (fill in dimensions as appropriate).

a. Total contiguous acreage owned or controlled by project sponsor: 0.41 acres.

b. Project acreage to be developed: 0.41 acres initially; 0.41 acres ultimately.

c. Project acreage to remain undeveloped: 0 acres.

d. Length of project, in miles: NA (if appropriate)

e. If the project is an expansion, indicate percent of expansion proposed. NA %

f. Number of off-street parking spaces existing 0 ; proposed 0

g. Maximum vehicular trips generated per hour: 68 (AM) (upon completion of project)?

h. If residential: Number and type of housing units:

| | One Family | Two Family | Multiple Family | Condominium |
|---|---|---|---|---|
| Initially | NA | | | |
| Ultimately | NA | | | |

i. Dimensions (in feet) of largest proposed structure: ±70 ft height; ±100 width; ±210 length.

j. Linear feet of frontage along a public thoroughfare project will occupy is? ±210 ft.

2. How much natural material (i.e. rock, earth, etc.) will be removed from the site? TBD tons/cubic yards.

3. Will disturbed areas be reclaimed ☐ Yes ☐ No ☒ N/A

a. If yes, for what intended purpose is the site being reclaimed?

b. Will topsoil be stockpiled for reclamation? ☐ Yes ☐ No

c. Will upper subsoil be stockpiled for reclamation? ☐ Yes ☐ No

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 0 acres.

5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?

☐ Yes ☒ No

6. If single phase project: Anticipated period of construction: 30 months, (including demolition)

7. If multi-phased:

   a. Total number of phases anticipated _____ (number)

   b. Anticipated date of commencement phase 1: _____ month _____ year, (including demolition)

   c. Approximate completion date of final phase: _____ month _____ year.

   d. Is phase 1 functionally dependent on subsequent phases? ☐ Yes ☐ No

8. Will blasting occur during construction? ☐ Yes ☒ No

9. Number of jobs generated: during construction TBD ; after project is complete ±44

10. Number of jobs eliminated by this project 0 .

11. Will project require relocation of any projects or facilities? ☒ Yes ☐ No

If yes, explain:

Current mail delivery operations on site would likely be relocated to the Church Street Post Office.

12. Is surface liquid waste disposal involved? ☐ Yes ☒ No

   a. If yes, indicate type of waste (sewage, industrial, etc) and amount _____

   b. Name of water body into which effluent will be discharged _____

13. Is subsurface liquid waste disposal involved? ☐ Yes ☒ No Type _____

14. Will surface area of an existing water body increase or decrease by proposal? ☐ Yes ☒ No

If yes, explain:

15. Is project or any portion of project located in a 100 year flood plain? ☒ Yes ☐ No

16. Will the project generate solid waste? ☒ Yes ☐ No

   a. If yes, what is the amount per month? 2.64 tons

   b. If yes, will an existing solid waste facility be used? ☒ Yes ☐ No

   c. If yes, give name DSNY Services ; location New York City

   d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? ☐ Yes ☒ No

e. If yes, explain:

17. Will the project involve the disposal of solid waste? ☐ Yes ■ No

a. If yes, what is the anticipated rate of disposal? _____ tons/month.

b. If yes, what is the anticipated site life? _____ years.

18. Will project use herbicides or pesticides? ☐ Yes ■ No

19. Will project routinely produce odors (more than one hour per day)? ☐ Yes ■ No

20. Will project produce operating noise exceeding the local ambient noise levels? ☐ Yes ■ No

21. Will project result in an increase in energy use? ■ Yes ☐ No

If yes, indicate type(s)

Electric and Gas

22. If water supply is from wells, indicate pumping capacity NA gallons/minute.

23. Total anticipated water usage per day 17,600 gallons/day.

24. Does project involve Local, State or Federal funding? ■ Yes ☐ No

If yes, explain:

Acquisition, design and construction of the proposed school facility would be conducted pursuant to DOE's Five Year Capital Plan for Fiscal Years 2010 - 2014.

**25. Approvals Required:**

| | | | Type | Submittal Date |
|---|---|---|---|---|
| City, Town, Village Board | ☐ Yes | ☒ No | | |
| City, Town, Village Planning Board | ☐ Yes | ☒ No | | |
| City, Town Zoning Board | ☐ Yes | ☒ No | | |
| City, County Health Department | ☐ Yes | ☒ No | | |
| Other Local Agencies | ☐ Yes | ☒ No | | |
| Other Regional Agencies | ☐ Yes | ☒ No | | |
| State Agencies | ☐ Yes | ☒ No | | |
| Federal Agencies | ☐ Yes | ☒ No | | |

**C. Zoning and Planning Information**

1. Does proposed action involve a planning or zoning decision? ☐ Yes ☒ No

If Yes, indicate decision required:

☐ Zoning amendment ☐ Zoning variance ☐ New/revision of master plan ☐ Subdivision

☐ Site plan ☐ Special use permit ☐ Resource management plan ☐ Other

2. What is the zoning classification(s) of the site?

The project site is located in a C6-2A zoning district. It is also within the South Street Seaport Subdistrict of the Lower Manhattan Special District.

3. What is the maximum potential development of the site if developed as permitted by the present zoning?

Approximately 115,628 square feet of floor area could be developed on the site for a community facility use (6.5 FAR).

4. What is the proposed zoning of the site?

No change in zoning is proposed.

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?

NA

6. Is the proposed action consistent with the recommended uses in adopted local land use plans? ■ Yes ☐ No

School uses are permitted as-of-right in C6 districts.

7. What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?

The predominant land uses in the area include a wide mix of commercial, residential, public facilities, institutional, and transportation uses. The 1/4 mile study area is zoned with a mix of C2-8, C5-3, C6-2A, and R8 districts. The Southbridge Towers, west of the project site, are located within the R8 district, which permits mid-rise apartment buildings. The areas south of the site are zoned C6-2A for moderate-density commercial uses. The C5-3 and C2-8 areas to the south and southeast of the site permit mixed-use buildings and residential uses in predominately commercial districts. The entire study area is located within the Lower Manhattan Special District, which is intended to enhance the vitality of Lower Manhattan as both a historic central business district and burgeoning residential community.

8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile? ■ Yes ☐ No

9. If the proposed action is the subdivision of land, how many lots are proposed? NA

   a. What is the minimum lot size proposed? _____

10. Will proposed action require any authorization(s) for the formation of sewer or water districts? ☐ Yes ■ No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection?

☐ Yes ■ No

a. If yes, is existing capacity sufficient to handle projected demand? ☐ Yes ☐ No

12. Will the proposed action result in the generation of traffic significantly above present levels? ☐ Yes ■ No

a. If yes, is the existing road network adequate to handle the additional traffic. ☐ Yes ☐ No

**D. Informational Details**

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

**E. Verification**

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name Esther R. Schwalb Date July 20, 2011

Signature Esther Schwalb

Title Senior Supervising Planner

**If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.**

# PART 2 - PROJECT IMPACTS AND THEIR MAGNITUDE

**Responsibility of Lead Agency**

**General Information** (Read Carefully)

! In completing the form the reviewer should be guided by the question: Have my responses and determinations been **reasonable?** The reviewer is not expected to be an expert environmental analyst.

! The **Examples** provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.

! The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.

! The number of examples per question does not indicate the importance of each question.

! In identifying impacts, consider long term, short term and cumulative effects.

**Instructions** (Read carefully)

a. Answer each of the 20 questions in PART 2. Answer **Yes** if there will be **any** impact.

b. **Maybe** answers should be considered as **Yes** answers.

c. If answering **Yes** to a question then check the appropriate box(column 1 or 2)to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.

d. Identifying that an Impact will be potentially large (column 2) does not mean that it is also necessarily **significant.** Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.

e. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.

f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| **Impact on Land** | | | |
| 1. Will the Proposed Action result in a physical change to the project site?<br>NO ☐ YES ■ | | | |
| **Examples** that would apply to column 2 | | | |
| • Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction on land where the depth to the water table is less than 3 feet. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction of paved parking area for 1,000 or more vehicles. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction that will continue for more than 1 year or involve more than one phase or stage. | ■ | ☐ | ☐ Yes ☐ No |
| • Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Construction or expansion of a santary landfill. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction in a designated floodway. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

2. Will there be an effect to any unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological formations, etc.)
   ☒ NO ☐ YES

| | | | |
|---|---|---|---|
| • Specific land forms: | ☐ | ☐ | ☐ Yes ☐ No |

**Impact on Water**

3. Will Proposed Action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)
   ☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Developable area of site contains a protected water body. | ☐ | ☐ | ☐ Yes ☐ No |
| • Dredging more than 100 cubic yards of material from channel of a protected stream. | ☐ | ☐ | ☐ Yes ☐ No |
| • Extension of utility distribution facilities through a protected water body. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction in a designated freshwater or tidal wetland. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

4. Will Proposed Action affect any non-protected existing or new body of water?
   ☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • A 10% increase or decrease in the surface area of any body of water or more than a 10 acre increase or decrease. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction of a body of water that exceeds 10 acres of surface area. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|

5. Will Proposed Action affect surface or groundwater quality or quantity?

☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action will require a discharge permit. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity. | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction or operation causing any contamination of a water supply system. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will adversely affect groundwater. | ☐ | ☐ | ☐ Yes ☐ No |
| • Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action would use water in excess of 20,000 gallons per day. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will allow residential uses in areas without water and/or sewer services. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

| | 1<br>Small to Moderate Impact | 2<br>Potential Large Impact | 3<br>Can Impact Be Mitigated by Project Change |
|---|---|---|---|

6. Will Proposed Action alter drainage flow or patterns, or surface water runoff?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action would change flood water flows | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action may cause substantial erosion. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action is incompatible with existing drainage patterns. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will allow development in a designated floodway. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON AIR**

7. Will Proposed Action affect air quality?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action will induce 1,000 or more vehicle trips in any given hour. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will result in the incineration of more than 1 ton of refuse per hour. | ☐ | ☐ | ☐ Yes ☐ No |
| • Emission rate of total contaminants will exceed 5 lbs. per hour or a heat source producing more than 10 million BTU's per hour. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will allow an increase in the amount of land committed to industrial use. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will allow an increase in the density of industrial development within existing industrial areas. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON PLANTS AND ANIMALS**

8. Will Proposed Action affect any threatened or endangered species?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Reduction of one or more species listed on the New York or Federal list, using the site, over or near the site, or found on the site. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Removal of any portion of a critical or significant wildlife habitat. | ☐ | ☐ | ☐ Yes ☐ No |
| • Application of pesticide or herbicide more than twice a year, other than for agricultural purposes. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

9. Will Proposed Action substantially affect non-threatened or non-endangered species?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action would substantially interfere with any resident or migratory fish, shellfish or wildlife species. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action requires the removal of more than 10 acres of mature forest (over 100 years of age) or other locally important vegetation. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON AGRICULTURAL LAND RESOURCES**

10. Will Proposed Action affect agricultural land resources?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • The Proposed Action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.) | ☐ | ☐ | ☐ Yes ☐ No |
| • Construction activity would excavate or compact the soil profile of agricultural land. | ☐ | ☐ | ☐ Yes ☐ No |
| • The Proposed Action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural District, more than 2.5 acres of agricultural land. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • The Proposed Action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g. cause a farm field to drain poorly due to increased runoff). | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON AESTHETIC RESOURCES**

11. Will Proposed Action affect aesthetic resources? (If necessary, use the Visual EAF Addendum in Section 617.20, Appendix B.)
☒ NO ☐ YES

| **Examples** that would apply to column 2 | | | |
|---|---|---|---|
| • Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource. | ☐ | ☐ | ☐ Yes ☐ No |
| • Project components that will result in the elimination or significant screening of scenic views known to be important to the area. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES**

12. Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?
☐ NO ☒ YES

| **Examples** that would apply to column 2 | | | |
|---|---|---|---|
| • Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places. | ☒ | ☐ | ☐ Yes ☐ No |
| • Any impact to an archaeological site or fossil bed located within the project site. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory. | ☐ | ☐ | ☐ Yes ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON OPEN SPACE AND RECREATION**

13. Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • The permanent foreclosure of a future recreational opportunity. | ☐ | ☐ | ☐ Yes ☐ No |
| • A major reduction of an open space important to the community. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON CRITICAL ENVIRONMENTAL AREAS**

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?
☒ NO ☐ YES

List the environmental characteristics that caused the designation of the CEA.

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action to locate within the CEA? | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will result in a reduction in the quantity of the resource? | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will result in a reduction in the quality of the resource? | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will impact the use, function or enjoyment of the resource? | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|

**IMPACT ON TRANSPORTATION**

15. Will there be an effect to existing transportation systems?
☐ NO ☒ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Alteration of present patterns of movement of people and/or goods. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will result in major traffic problems. | ☒ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**IMPACT ON ENERGY**

16. Will Proposed Action affect the community's sources of fuel or energy supply?

☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

**NOISE AND ODOR IMPACT**

17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?

☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | |
|---|---|---|---|
| • Blasting within 1,500 feet of a hospital, school or other sensitive facility. | ☐ | ☐ | ☐ Yes ☐ No |
| • Odors will occur routinely (more than one hour per day). | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will remove natural barriers that would act as a noise screen. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|

**IMPACT ON PUBLIC HEALTH**

18. Will Proposed Action affect public health and safety?
☒ NO ☐ YES

| | | | | |
|---|---|---|---|---|
| • Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.) | ☐ | ☐ | ☐ Yes | ☐ No |
| • Storage facilities for one million or more gallons of liquefied natural gas or other flammable liquids. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Proposed Action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes | ☐ No |

**IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD**

19. Will Proposed Action affect the character of the existing community?
☒ NO ☐ YES

**Examples** that would apply to column 2

| | | | | |
|---|---|---|---|---|
| • The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%. | ☐ | ☐ | ☐ Yes | ☐ No |
| • The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Proposed Action will conflict with officially adopted plans or goals. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Proposed Action will cause a change in the density of land use. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community. | ☐ | ☐ | ☐ Yes | ☐ No |
| • Development will create a demand for additional community services (e.g. schools, police and fire, etc.) | ☐ | ☐ | ☐ Yes | ☐ No |

| | 1 Small to Moderate Impact | 2 Potential Large Impact | 3 Can Impact Be Mitigated by Project Change |
|---|---|---|---|
| • Proposed Action will set an important precedent for future projects. | ☐ | ☐ | ☐ Yes ☐ No |
| • Proposed Action will create or eliminate employment. | ☐ | ☐ | ☐ Yes ☐ No |
| • Other impacts: | ☐ | ☐ | ☐ Yes ☐ No |

20. Is there, or is there likely to be, public controversy related to potential adverse environment impacts?
☒ NO ☐ YES

**If Any Action in Part 2 Is Identified as a Potential Large Impact or If you Cannot Determine the Magnitude of Impact, Proceed to Part 3**

## Part 3 - EVALUATION OF THE IMPORTANCE OF IMPACTS

### Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

**Instructions** (If you need more space, attach additional sheets)

Discuss the following for each impact identified in Column 2 of Part 2:

1. Briefly describe the impact.

2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).

3. Based on the information available, decide if it is reasonable to conclude that this impact is **important**.

   To answer the question of importance, consider:

   - The probability of the impact occurring
   - The duration of the impact
   - Its irreversibility, including permanently lost resources of value
   - Whether the impact can or will be controlled
   - The regional consequence of the impact
   - Its potential divergence from local needs and goals
   - Whether known objections to the project relate to this impact.



Reset

# Supplemental Environmental Studies

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# EXECUTIVE SUMMARY

## INTRODUCTION

On behalf of the New York City Department of Education (DOE), the New York City School Construction Authority (SCA) proposes to develop a new primary school in the South Street Seaport neighborhood of Manhattan. The new facility would provide approximately 480 seats for Pre-Kindergarten (Pre-K) through Fifth grade in Community School District (CSD) 2. The project site is located at 1 Peck Slip (Block 106, Lot 9) and is currently occupied by the Peck Slip Post Office, which is owned and operated by the United States Postal Service (USPS). The proposed project has not been finalized; it may entail the demolition of the current post office building and construction of the new school facility on the site or it may consist of renovation of the existing Post Office building with the possible addition of another floor. Under any scenario, the proposed school building would contain space on a portion of the ground floor for continued use by the USPS as a retail post office (i.e., the sale of stamps and receipt of parcels from customers, but no mail delivery operations). Construction of the proposed school building would be conducted pursuant to the DOE's *Five-Year Capital Plan for Fiscal Years 2010–2014*.

The proposed project is intended to provide additional public school capacity to meet the needs of the area's current and projected future elementary school students. In particular, the proposed school is expected to serve students in the area of Manhattan south of Canal Street Several primary schools in this area are currently near or above capacity, and the proposed project would provide an additional approximately 480 seats to accommodate anticipated future growth of the area's student population.

The proposed action could entail either conversion/renovation, expansion, or the demolition of the existing building and the construction of a new school facility. In order to analyze a reasonable word-case scenario in this environmental review, it is assumed that the proposed project would entail the demolition of the current post office building and construction of a new school facility on the site. Demolition is expected to begin in 2012 followed by construction. The school is expected to be completed and ready for occupancy for the 2015–16 school year.

The action is subject to New York State Environmental Quality Review Act (SEQRA), as mandated in Part 617 6NYCRR, per guidelines established in the CEQR procedures (Executive Order 91 of 1977, amended in 1991). Guidelines described in the 2010 *CEQR Technical Manual* were followed in the impact assessments conducted for this Environmental Assessment (EA).

## ENVIRONMENTAL REVIEW FINDINGS

### Land Use, Zoning, and Public Policy

The proposed new school facility would alter the land use on the site, which is now occupied by the Peck Slip Post Office, but it will be compatible overall with the mix of residential, commercial, open space, and institutional uses that surround it and no land use impacts would occur.

School use is permitted as-of-right under the current zoning (C6-2A). It is assumed that the proposed school building will be designed to comply with applicable use and height regulations. If it does not, the SCA would request a zoning override from the Deputy Mayor for Economic Development to allow the project to be developed despite non-compliance with the applicable zoning requirements. If granted, the zoning override would apply only to the proposed project and there would be no change to the site's or surrounding area's underlying zoning designations.

As it is located within the New York City Coastal Zone, the proposed action was assessed for consistency with the New York City Waterfront Revitalization Program (WRP). The review indicated that the proposed project is consistent with the policies of the WRP.

The project would also comply with the requirements of the South Street Subdistrict of the Lower Manhattan Special District, which was established to protect the scale and character of 18th and 19th century mercantile buildings from non-contextual development in this area.

Therefore, the proposed project would not result in a significant adverse impact to land use, zoning or public policy.

## Socioeconomic Conditions

The proposed new building would better serve neighborhood students and not result in substantial socioeconomic changes in the study area. The proposed project would not directly displace any residents, nor would it introduce a new residential population that could indirectly affect socioeconomic conditions in the study area. It is assumed that some of the current USPS operations would be relocated to another USPS facility as a result of the project. The proposed school building would contain space on a portion of the ground floor for continued use by the USPS as a retail post office. As a result, the project would displace some of the existing postal operations on site and fewer than 10 employees would relocate to another USPS facility. The proposed school building would bring approximately 48 new faculty and staff members to the area (or a net increase of approximately 38 people). These new staff members would potentially support local retail establishments near the school, and thereby have a marginally positive impact on the local economy. The proposed project would therefore result in no significant adverse impacts to socioeconomic conditions in the study area.

## Community Facilities and Services

The proposed project would have a beneficial effect on school services, as it would provide additional capacity to serve Community School District 2's elementary level student population. The proposed project would not add residents or a significant number of employees to the area who could place an additional demand on community services; therefore, the proposed project would have no significant adverse impact on community facilities and services.

## Open Space

The proposed project would not place any additional demand on the area's open space resources, as it would provide outdoor recreation space on the facility's rooftop and indoor space in the gymnatorium to meet the recreational needs of the students. Therefore, the proposed project would

have no effect on the study area's publicly accessible open spaces and would result in no significant adverse impact.

## Shadows

The proposed school building would contain 5 stories and stand approximately 70-75 feet tall (between 10 and 20 feet taller than the existing Peck Slip Post Office building). Due to the potentially slight increase in height over existing conditions and the absence of sunlight-sensitive resources in the immediate vicinity that might be affected, no shadow impact is predicted.

## Historic and Archaeological Resources

*Historic Resources*

The project site is located within the South Street Seaport Historic District Extension (designated by the New York City Landmarks Preservation Commission- NYCLPC), and the South Street Seaport Historic District Extension listed on the State and National Registers of Historic Places. Although the existing building on the site is neither architecturally significant, or a contributing resource to the South Street Seaport Historic District Extension areas, its alteration or replacement could potentially have an adverse effect on the surrounding NYCLPC district or on the National Register-listed district.

The NYCSCA initiated consultation with the New York State Office of Parks, Preservation and Historic Preservation (OPRHP) earlier this year regarding potential impacts to cultural resources. In a letter dated February 11, 2011, OPRHP (aka SHPO) determined that the proposed project would have No Adverse Impact on the existing building as it is a non-contributing building to the historic district, but could potentially have a significant effect on the surrounding historic district. Therefore, OPRHP required that a construction protection plan be developed for nearby historic buildings in the APE. Additionally, OPRHP will review design of the proposed new construction to determine effects on historic structures.

The NYCSCA, SHPO and USPS will enter into an agreement, documented in a Memorandum of Agreement (MOA) that will outline specific measures that will be undertaken by the SCA and USPS in order to avoid significant adverse impacts to the historic district or potential on-site archaeological resources.

Final design of the proposed building would be executed pursuant to the MOA, to ensure that the building is consistent with the built context of the district in terms of its design and materials, thereby ensuring that the project would not have an adverse effect on the historic district. Therefore, the proposed project would not be expected to have a significant adverse impact on historic resources.

*Archaeological Resources*

The Phase 1A archaeological study conducted on December 20, 2010 and submitted to SHPO for review. The study determined the project site to be devoid of archeological remains from the pre-contact period due to heavy disturbance from previous construction activities, rising sea levels, and tidal action.

A Phase IB will be conducted and reviewed by OPRHP, as noted in the February 11, 2011 correspondence, in the event construction activities require excavation below the level of the present disturbance.

## Urban Design and Visual Resources

Based on preliminary conceptual sketches, the proposed building would comply with the site's current C6-2A zoning and no zoning waivers or overrides are anticipated. In addition, since the site is located within the South Street Seaport Historic District Extension, the final design of the building will be developed in consultation with the OPRHP.

Although the proposed action would change the use on the site and alter the site's visual appearance with the introduction of a modern school building, it would be compatible with the varied shapes of the surrounding built environment and not alter street patterns, block shapes, or streetscape elements. Therefore, the new building would not have a significant adverse impact on urban design or aesthetic conditions.

## Natural Resources

The project site is located in a densely developed area of Lower Manhattan, which is substantially devoid of natural resources, and neither the project site nor adjacent area contain any natural resources that could be adversely affected by the proposed project; therefore, the proposed project would result in no significant adverse impact to natural resources.

## Hazardous Materials

A Phase I Environmental Site Assessment (ESA) and a Phase II Environmental Site Investigation (ESI) were completed for the proposed project site between August 2010 and May 2011 in order to evaluate the environmental conditions of the site.

The Phase I ESA was prepared by AKRF Engineering, P.C. (AKRF) for the New York City School Construction Authority (NYCSCA) in August 2010. The Phase I ESA identified several on-site recognized environmental conditions (RECs) including: the potential presence of buried structures, which could contain historic fill material, demolition debris and/or abandoned underground storage tanks (USTs); prior on-site industrial uses associated with a former metals company; and former on-site petroleum storage associated with a closed-in-place 10,000-gallon fuel oil UST. Off-site RECs identified during the Phase I ESA included: two monitoring wells located on the sidewalk in front of nearby properties; various historic petroleum-related uses noted on surrounding properties including garages with buried gasoline tanks and auto repairs, a filling station, and "oils" storage; historic industrial/manufacturing uses on the surrounding properties including a metal/iron works, a shot and lead works, a printer, a machine shop, chemical manufacturers, thermometer manufacturers and a petroleum company; two closed New York State Department of Environmental Conservation (NYSDEC) Spill incidents in close proximity to the site; and a former manufactured gas plant site located east-southeast of the site. Environmental concerns identified during the Phase I ESA included the potential presence of asbestos-containing material (ACM), lead-based paint (LBP), and items containing polychlorinated biphenyls (PCBs) in the on-site building.

A Phase II ESI was completed by AKRF on behalf of the NYCSCA in May 2011 to assess whether the RECs identified in the Phase I ESA have affected the site for construction of a public school facility. The investigation included a geophysical survey and the completion of seven soil borings, four temporary well points, and seven sub-slab soil vapor sampling points. Seven sub-slab soil vapor samples, one ambient air sample, seven grab soil samples (plus one duplicate), three composite soil samples, and four groundwater samples were collected for laboratory analysis.

The volatile organic compound (VOC) acetone was detected in soil at concentrations above the corresponding State soil cleanup objectives for unrestricted use; however, its presence was attributed to laboratory contamination. Semi-volatile compounds (SVOCs) were detected in grab samples from three of the seven soil borings at concentrations above the State soil cleanup objectives for unrestricted use; and metals were detected in grab samples from all seven borings at concentrations above the unrestricted soil cleanup objectives. Pesticides were detected in one composite sample slightly above the unrestricted use soil cleanup objectives. The presence of SVOCs, metals, and pesticides at levels greater than the corresponding state soil cleanup objectives was limited to areas of historic fill on-site and is not attributed to an on-site release or source area.

Groundwater was encountered at depths ranging from approximately 8 to 11 feet below the ground surface with an anticipated groundwater flow direction to the southeast towards the East River. All analyzed parameters were within the state groundwater quality standards except for four metals (copper, lead, manganese, and/or mercury) detected at levels exceeding their water quality standards that were attributable to entrained sediment and/or background conditions. The volatile organic compound tetrachloroethene (PCE) was detected in all seven sub-slab soil vapor samples at concentrations above the anticipated background levels and also exceeded the State Air Guideline Value in four of the samples. Petroleum-related compounds (trimethylbenzenes, ethylbenzene, toluene, and xylenes) were detected in one sub-slab vapor sample at concentrations above the anticipated background levels.

The proposed project would not result in impacts from contaminated media and building materials. Prior to the construction of the project, a pre-design investigation would be conducted to further characterize subsurface conditions in areas that were inaccessible during the Phase II ESI. Any subsurface structures (including known and unknown USTs) and any contaminated soil encountered during construction would be removed in accordance with all applicable regulations. Any dewatering required during construction would be minimized to mitigate potential influx of contaminated water from off-site sources toward the site. Treatment of any dewatering effluent would be conducted as required prior to discharge to the municipal sewer. As a preventative measure, a soil vapor barrier and a sub-slab depressurization system (SSDS) would be installed below the newly constructed school building to prevent potential soil vapor intrusion, or, if the existing building is not demolished, it would be retrofitted with an SSDS. Any suspect ACM, LBP, and PCB-containing materials affected by the preparation of the site for use as a public school would be identified prior to construction and properly managed during construction activities. All soil excavated during building construction would be properly managed in accordance with all applicable local, state and federal regulations. For areas of the site where exposed soil may exist after building construction (i.e., landscaped areas), a two-foot thick layer of environmentally clean fill would be placed over the soil in these areas. In addition, to minimize the potential for exposure by construction workers and the surrounding public, standard industry practices, including appropriate health and safety measures, would be utilized.

### Water and Sewer Infrastructure

The proposed school would contain approximately 75,000 SF of floor area, which is below the CEQR threshold of 1,000 residential units or 250,000 SF of commercial space for requiring an assessment of wastewater and stormwater conveyance and treatment in areas of Manhattan served by a combined sewer system. In addition, based on a capacity of approximately 480 school seats, the project would result in water usage of approximately 17,600 gallons per day. Since the proposed project would not result in significantly large water demands (i.e., over 1 million gallons per day), nor would it generate significant wastewater flows, it would have no significant effects on the city's water supply system or wastewater treatment facilities.

### Energy

According to the *CEQR Technical Manual*, new construction or substantial renovation of buildings would not require a detailed energy assessment, as it is subject to the New York State Energy Conservation Code, which is reflective of State and City energy policy. Additionally, New York City public schools must follow the SCA's *NYC Green Schools Guide* (revised 2009) regarding energy efficiencies. Therefore, the proposed action would not result in adverse energy impacts, and no further evaluation is therefore required.

### Solid Waste and Sanitation Services

The proposed 480-seat school would likely generate 1,,440 pounds per week or 2.88 tons/month of solid waste, based on the rate of 3 pounds per week for each public elementary school pupil. According to the *CEQR Technical Manual*, a generation rate of less than 100,000 pounds per week is not considered large; therefore, the proposed project would not be expected to affect the delivery of sanitation services nor place a significant burden on the city's solid waste management system.

### Transportation

The proposed project would generate, at most, 68 vehicular peak-hour trip ends (in the AM peak hour) which would result in an impact to the westbound Peck Slip approach at the intersection of Pearl Street during both peak hours. To address this, it is proposed that one second of green time be shifted from the north-south phase to the Peck Slip phase during the AM peak hour and 7 seconds of green time from the north-south Pearl Street phase to the Peck Slip phase during the PM peak hour. With the implementation of these measures, all the project-related impacts at this intersection would be fully avoided.

All pedestrian elements would operate at LOS C or better and would not be significantly affected by new demand from the proposed school, according to CEQR criteria. All parking demand from the proposed project would be accommodated by existing on-street parking within a 1/4-mile radius, and there would be no significant parking impacts. Similarly, the project would generate fewer than 200 transit trips during a peak hour; therefore, no significant impact is predicted.

### Air Quality

The number of vehicles generated by the project would not result in significant mobile-source impacts. Stationary-source and air-toxic analyses indicated that the school's heating plant would have no adverse effect on surrounding land uses or the school's proposed rooftop play area and no

other existing emission sources would have adverse impacts on the school; therefore, the project would not directly or indirectly result in exceedances of applicable standards and no significant adverse impacts to air quality would occur.

### Greenhouse Gas Emissions

Since the proposed school project would result in development substantially below the 350,000 SF threshold, it would not contribute significantly to GHG emissions and no further analysis is warranted.

### Noise

The number of vehicles generated by the proposed project would not result in significant mobile-source impacts. The analysis indicated that noise generated from the school's play area would result in an exceedance of the SCA's noise impact threshold at the nearest residence (across Water Street, should the rooftop play area face this street). Since there are no exterior uses at the 5th and 6th floors, with windows closed, noise levels would still remain within the 45 dBA standard for interior spaces and not be perceptible within the apartments. Moreover, elevated noise levels generated from outdoor play activities would be limited to intermittent times of the day and year when the play area is in use. As such, this noise increase would not be considered a significant adverse impact.

### Public Health

The proposed project would not generate any public health concerns provided the measures described in Section B.17 to avoid adverse health and safety impacts from on-site soil contamination would be incorporated into the design and construction of the proposed school building. No impacts related to hazardous materials, air quality or sanitation services are anticipated as a result of the proposed project; therefore, the proposed project would not be expected to result in significant adverse public health impacts.

### Neighborhood Character

The proposed school would be consistent with the neighborhood's historic character, which is defined by 18th and 19th century, 4- to 8-story, former warehouse and commercial buildings. Since the site is located within the South Street Seaport Historic District Extension, final design of the building will be developed in consultation with the OPRHP pursuant to an MOA that is currently being developed between the USPS, OPRHP and SCA. The purpose of this MOA is to avoid significant adverse impacts to the historic district and to potential on-site archaeological resources. Overall, the proposed project would not result in significant adverse impacts to any of the various elements that contribute to neighborhood character, including land use, urban design, visual resources, historic resources, socioeconomic conditions, traffic, and noise levels. Therefore, the proposed project would not result in significant adverse impacts to neighborhood character.

### Construction Impacts

Construction of the proposed school is expected to take approximately three years. Demolition of the existing building is expected to begin in 2012, followed by construction. The school is expected to be completed and ready for student occupancy by the start of the 2015-16 school year.

The project's construction-related effects would be temporary and of a relatively short-term duration given the relatively small size of the project and measures will be undertaken to minimize these effects and maintain public safety during the construction period. Construction of the proposed project would therefore, not result in significant adverse construction impacts.

# A. PROJECT DESCRIPTION

## A.1. INTRODUCTION

On behalf of the New York City Department of Education (DOE), the New York City School Construction Authority (SCA) proposes to construct a new primary school facility in the South Street Seaport neighborhood of Manhattan. The new facility would provide approximately 480 seats for Pre-Kindergarten (Pre-K) through Fifth grade in Community School District (CSD) 2.

The project site is located at 1 Peck Slip (Block 106, Lot 9) in Lower Manhattan, and is currently occupied by the Peck Slip Post Office, which is owned and operated by the United States Postal Service (USPS). The proposed action could entail either conversion/renovation of the existing building into a school facility or demolition of the existing building and new school construction. In order to analyze a reasonable worst-case scenario in this environmental review, it is assumed that the proposed project would entail the demolition of the current post office building and construction of a new school facility on the site. The proposed school building would contain space on a portion of the ground floor for continued use by the USPS as a retail post office (i.e., the sale of stamps and receipt of parcels from customers, but no mail delivery operations). Construction of the proposed school building would be conducted pursuant to the DOE's *Five-Year Capital Plan for Fiscal Years 2010–2014*.

The following sections offer descriptions of project purpose and need, project site, and proposed project. The ensuing chapters present the findings of environmental analyses conducted, using the *New York City Environmental Quality Review (CEQR) Technical Manual* methodologies. These subjects include Land Use, Zoning and Public Policy; Socioeconomic Conditions; Community Facilities and Services; Open Space; Neighborhood Character; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Water and Sewer Infrastructure, Energy; Solid Waste and Sanitation Services; Transportation; Air Quality, Noise; Hazardous Materials; Natural Resources; Construction Impacts; and Public Health.

## A.2. PURPOSE AND NEED

The proposed project is intended to provide additional public school capacity to meet the needs of the area's current and projected future elementary school students. In particular, the proposed school is expected to serve students in the area of Manhattan south of Canal Street. As shown in Table A-1, several primary schools in this area are currently near or above capacity while others have capacity. The proposed project would provide an additional approximately 480 seats to accommodate anticipated future growth of the area's student population.

**TABLE A-1: ENROLLMENT FIGURES FOR PRIMARY SCHOOLS IN CSD 2 SOUTH OF CANAL ST (2009-2010)**

| School | Address | Capacity | Enrollment | Utilization |
|---|---|---|---|---|
| **Zone 1** | | | | |
| PS 1 | 8 Henry Street | 864 | 542 | 63% |
| PS 124 | 40 Division Street | 980 | 962 | 98% |
| PS 126 Jacob August Riis | 80 Catherine Street | 938 | 786 | 84% |
| **Zone 2** | | | | |
| PS/IS 89 | 201 Warren Street | 848 | 843 | 99% |
| PS 150 | 334 Greenwich Street | 242 | 181 | 75% |
| PS 234 Independence School | 292 Greenwich Street | 629 | 667 | 106% |
| PS 234 Annex | | 139 | 153 | 110% |
| PS 397 Spruce Street School[1] | 52 Chambers Street | 72 | 48 | 67% |

Source: New York City Department of Education School Facilities (2009–2010): Enrollment, Capacity & Utilization Report.

## A.3. PROJECT SITE

The project site consists of an approximately 18,000 SF parcel occupying the southern block front of Peck Slip between Pearl and Water Streets (Block 106, Lot 9) in Lower Manhattan (Figure A-1 and Figure A-2). The site is located within the South Street Seaport Historic District extension (both NYCLPC-designated and listed on the State and National Registers of Historic Places), which encompasses the entire project block. The site currently contains the Peck Slip Post Office, a 4-story, approximately 70,800 SF USPS facility constructed in 1950. Currently, only the building's first floor and a portion of the second floor are being used by the post office for retail and mail delivery operations; the remaining portions of the building on the third and fourth floors are vacant. The post office's retail entrance is located on Peck Slip and mail pickup and delivery operations utilize the truck loading docks located along Water Street.

## A.4. PROPOSED PROJECT

It is assumed for this environmental review that the proposed school project would entail demolition of the existing Peck Slip Post Office building and redevelopment of the site with a 480-seat public primary school (Pre-K through Fifth grade) facility that also contains approximately 2,000 SF of space for continued USPS retail operations on the first floor. Based on preliminary conceptual sketches, the building would be 4 stories with a partial fifth floor, including a rooftop play area. The entrance to the school would be located on Peck Slip.

The new school program includes approximately 20 general-instruction classrooms for Pre-K through Fifth grade, as well as specialty instruction classrooms for science, art, and music. It would also include a cafeteria, library, and gymnatorium for physical education and assembly space, and an approximately 6,000 SF outdoor play yard on the fourth floor rooftop.

[1] The Spruce Street School is currently located at 52 Chambers and will move to 8 Spruce Street in the 2011–12 school year.

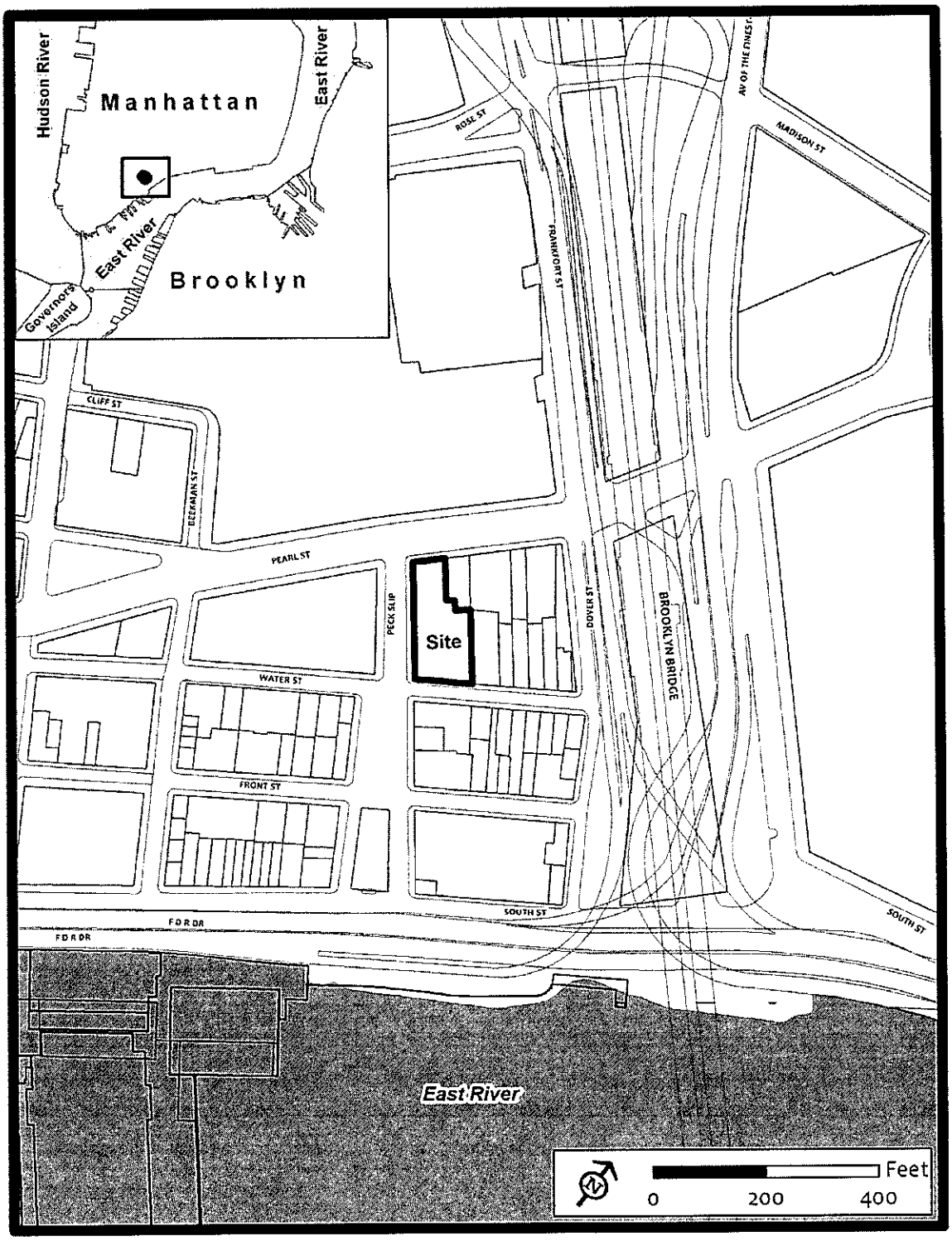
The USPS retail operation would occupy approximately 2,000 SF of space on the ground floor of the building with a customer entrance along Peck Slip. The USPS facility would consist of retail operations only, including the receipt of parcels from customers, but would not include mail delivery, as this function would likely be transferred to the existing Church Street Post Office. The facility would include a truck-loading bay along Water Street for postal trucks to pick up the mail received at the facility.

Demolition is expected to begin in 2012 followed by construction. The school is expected to be completed and ready for occupancy for the 2015–16 school year.

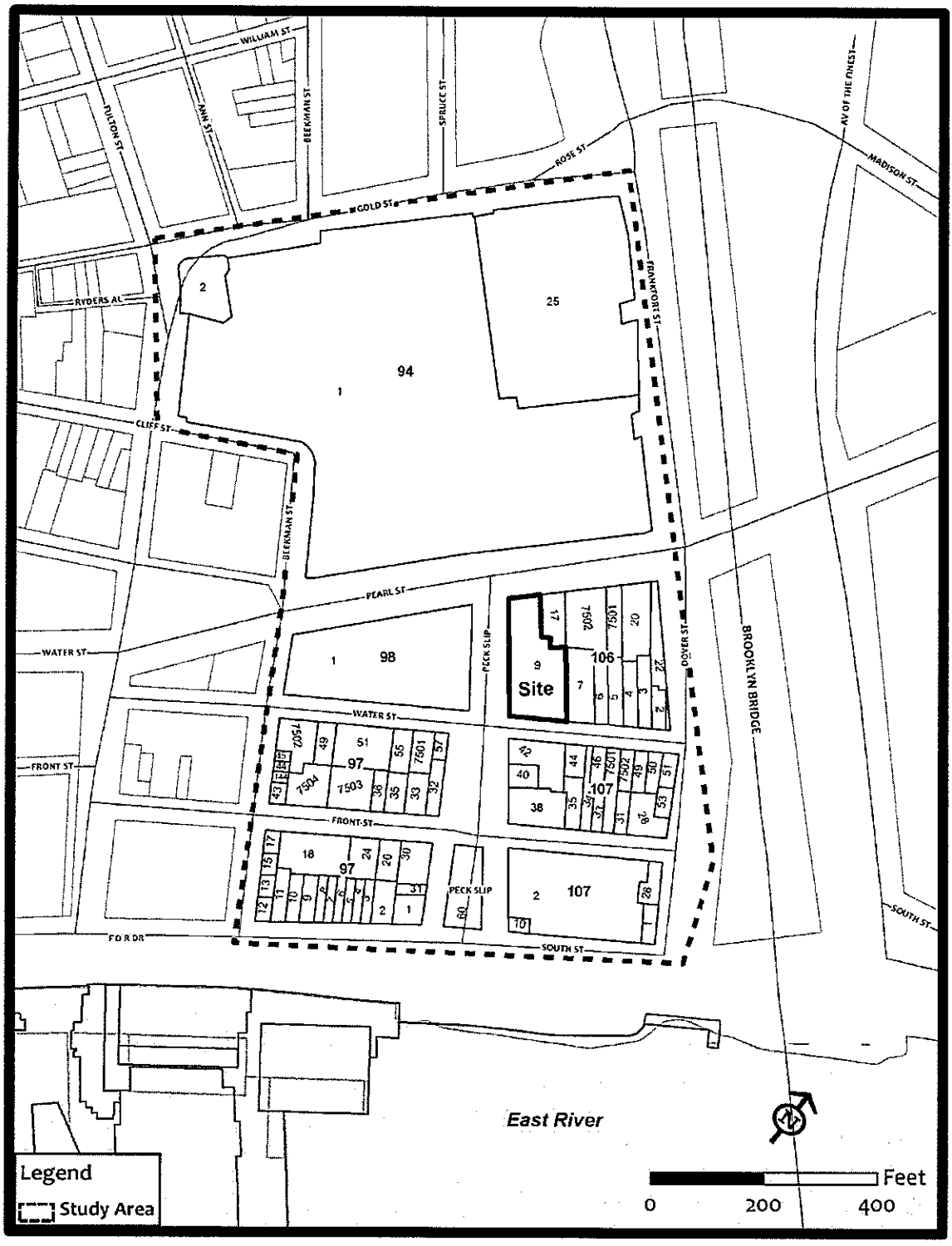
## A.5. PROJECT STATUS

The action is subject to New York State Environmental Quality Review Act (SEQRA), as mandated in Part 617 6NYCRR, per guidelines established in the CEQR procedures (Executive Order 91 of 1977, amended in 1991). Guidelines described in the *CEQR Technical Manual* were followed in the impact assessments conducted for this Environmental Assessment (EA).

## FIGURE A-1: PROJECT LOCATION



# FIGURE A-2: TAX MAP



# B. EXISTING CONDITIONS AND POTENTIAL IMPACTS

## B.1. LAND USE, ZONING AND PUBLIC POLICY

The 2010 *CEQR Technical Manual* requires that a detailed land use and zoning analysis be prepared if actions would include the following conditions:

- Result in significant changes in land use or zoning, or would substantially affect regulations or policies governing land use, or
- If an analysis requiring land use or zoning information is being performed in any other technical area.

### B.1.1. Existing Land Use in the Project Area

*Project Site*

The project site is situated in the historic South Street Seaport neighborhood of Lower Manhattan, in Community District 1, one block south of the Brooklyn Bridge and three blocks west of the FDR East River Drive. The South Street Seaport is a mixed-use area comprised of medium and high density commercial and residential uses, parking facilities, public institutions, and transportation-related uses, set against a redeveloped historic waterfront. There are two significant residential developments in close proximity to the project site including the Southbridge Towers, a Mitchell-Lama housing development just west of the site and St. Margaret's House, a high-rise HUD housing project located one block southwest of the site.

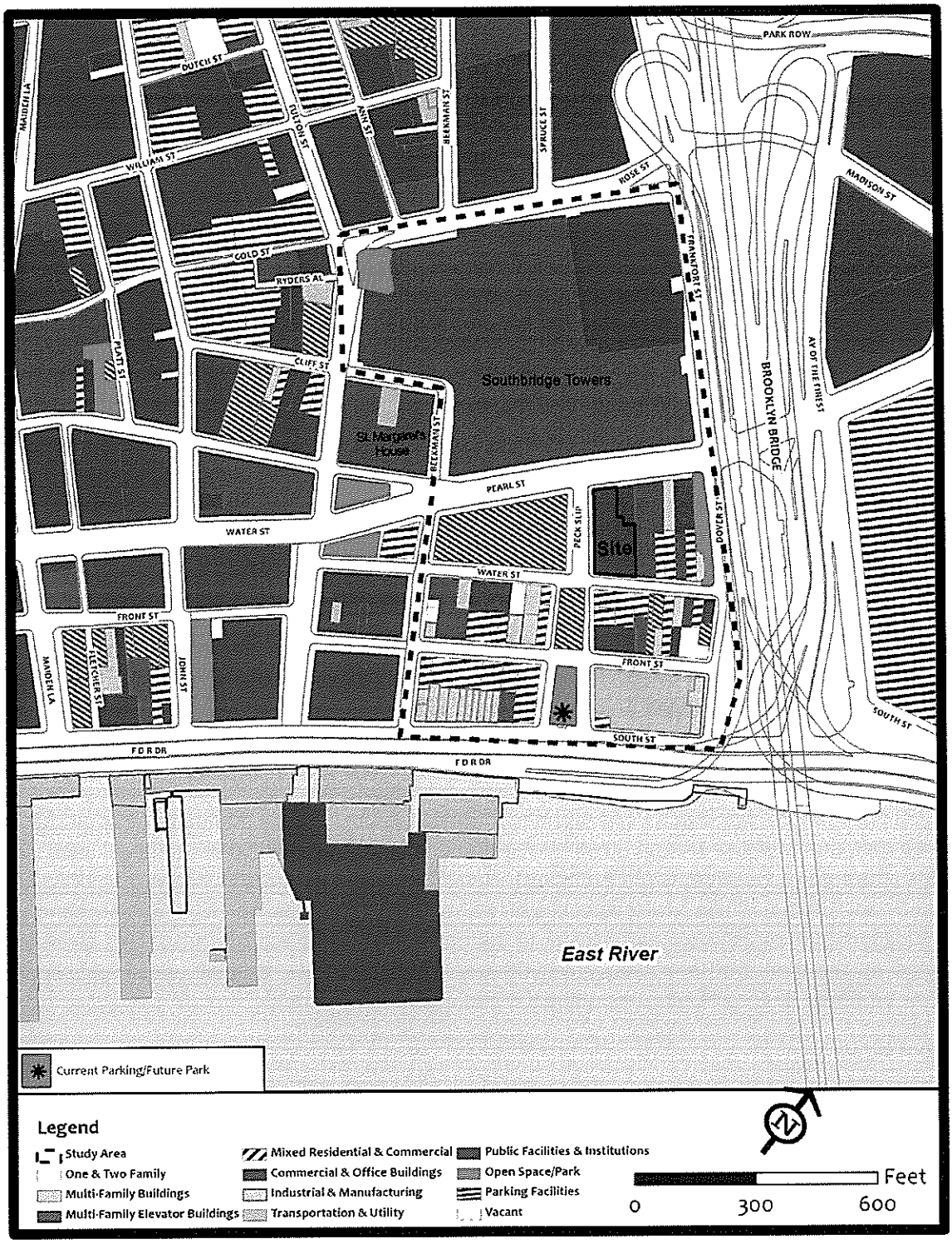
The project site comprises approximately 18,000 SF on the southern portion of Block 106 (Lot 9) and is occupied by the USPS Peck Slip Facility. The existing 4-story commercial building was constructed in 1950 and contains approximately 70,800 SF. The building is owned by the United States Postal Service and is currently being used as a retail post office and distribution center.

The remainder of the project block contains 4- to 8-story commercial and mixed residential-commercial-use buildings along Pearl and Water Streets. Ground-floor commercial uses on the block include restaurants (Mark Joseph Steak House and Bridge Café) and other commercial uses include offices and studios (Michael Glynn Architects, HarryFayt Studio, Fleming & Associates CPA, & High Water Sound Studio). There are several residential buildings there as well as a Hampton Inn Hotel. The Kingdom Hall of Jehovah's Witnesses is the only institutional use on the project block and is situated on the corner of Pearl and Dover Streets. Fishbridge Park, a small public open-space, is located on Dover Street and features a dog run and community garden.

*Study Area*

The primary land use study area was drawn 400 feet around the project site to include the area most likely to be affected by the proposed project. This study area is therefore described in greater detail regarding land use patterns and development activity (Figure B-1). A larger secondary study area (approximately 1/4 mile around the site– mostly to the south since the Brooklyn Bridge functions as a dominant dividing line) is characterized more generally.

# FIGURE B-1: LAND USE



The southern and eastern portions of the study area are characterized by mixed land uses ranging from commercial, residential, manufacturing, public facilities & institutional uses to transportation and utility and open parking lots. The western portion of the study area is dominated by the Southbridge Towers—a Mitchell-Lama limited-equity cooperative that consists of 10 buildings ranging in height between 6 and 27 stories—and the 10-story office building occupied by the New York City Department of Housing Preservation and Development (HPD), and St. Margaret's House, a 20-story HUD housing project for elderly and disabled persons with mobility impairments just west of the Southbridge Towers. Directly south of the project block is the Central Public Parking Lot, which covers the entire block between Peck Slip, Pearl, Water, and Beekman Streets. To the north is the Brooklyn Bridge.

Beyond the 400-foot study area, the mixed land-use pattern continues along Fulton and John Streets, where skyscraper office buildings and ground-floor commercial uses are found. The historic South Street Seaport area is located in the southeastern portion of the larger study area and is characterized by 4- and- 5-story commercial buildings that include a variety of retail, cultural and dining establishments. Additionally, Pier 17 (on the East River waterfront) features a shopping mall, tourism center, several docked ships, and hosts a number of civic and cultural events. Forty Gold Street southwest of Southbridge Towers is recently completed 14-story apartment building on Gold Street and Eden's Alley. The building contains 56 units—a mix of studio and two-bedroom apartments. Nearby open spaces and recreational resources include Titanic Park, two blocks south of the site on Water and Fulton Streets, the Pearl Street Playground located two blocks southwest between Pearl and Water Streets, and Imagination Playground located four blocks southeast of the site on John Street. (These open spaces are illustrated later in the document on Figure B-3: Community Facilities.)

Other nearby community facilities include the Seamen's Church Institute of New York, one block southeast from site, and Pace University and New York Downtown Hospital, both located northwest of the site on Gold Street. There are also several schools below Canal Street, as shown on Table A-1.

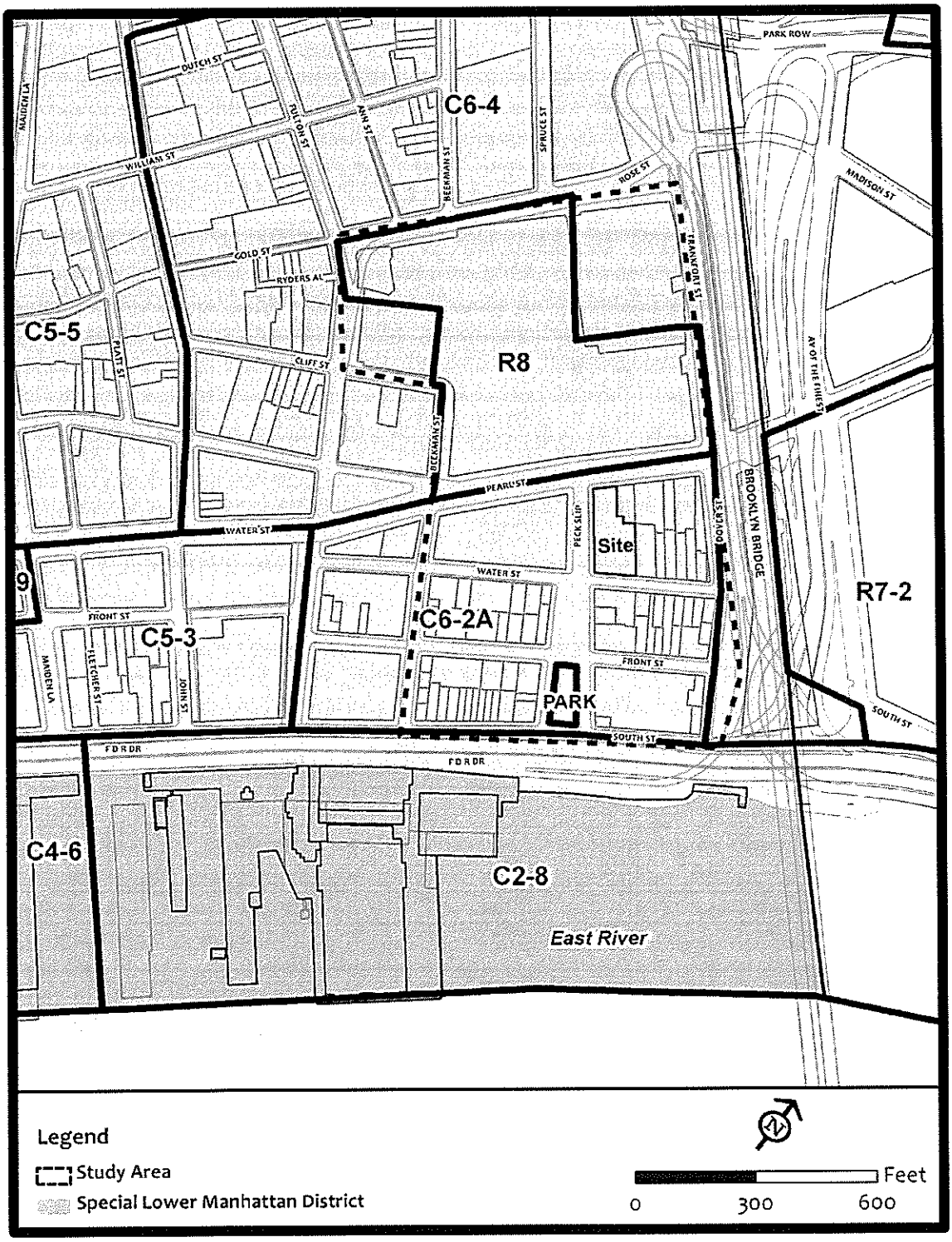
### B.1.2. Existing Zoning and Public Policies in the Project Area

*Project Site*

The project site is located within a C6-2A zoning district, which permits medium density commercial (and residential) uses typical of areas outside of central business districts like the Wall Street Financial District. The project site is also located within the South Street Seaport Subdistrict of the Lower Manhattan Special District, which was established to protect the scale and character of 18th and 19th century mercantile buildings from non-contextual development in Lower Manhattan. The larger Lower Manhattan Special District (LM) was established to enhance the vitality of Lower Manhattan as both a historic central business district and burgeoning residential community (see Figure B-2).

Additionally, the project site is situated within the boundaries of New York City's designated Coastal Zone. Projects located within the Coastal Zone must be assessed for their consistency with the New York City Waterfront Revitalization Program (WRP), which includes 10 policies dealing with (1) residential and commercial redevelopment; (2) water-dependent and industrial uses; (3) commercial and recreational boating; (4) coastal ecological systems; (5) water quality; (6) flooding and erosion; (7) solid waste and hazardous substances; (8) public access; (9) scenic resources; and (10) historical and cultural resources.

## FIGURE B-2: ZONING



*Study Area*

The study area is zoned with a mix of C2-8, C5-3, C6-2A, and R8 districts. The Southbridge Towers complex, west of the project site, is located within the R8 district, which permits mid-rise apartment buildings and areas south of the site are zoned (C6-2A) for moderate-density commercial uses. The C5-3 and C2-8 areas to the south and southeast of the site permit mixed-use buildings and residential uses in predominately commercial districts.

## B.1.3. Future No-Action Conditions

*Project Site*

Since the USPS has decided to sell the Peck Slip property, it is assumed that under Future No-Action Conditions in 2015, the existing post office building would be removed and the project site would be redeveloped. According to the USPS's Request for Proposals (RFP) for the sale of the site, together with prevailing zoning and historic district controls on the site, the site could potentially contain an 8-story, mixed-use residential building that would also contain USPS retail operations on the ground floor.[2] This building could conceivably contain approximately 138 dwelling units with a residential entrance and lobby on the ground floor along Peck Slip.[3] As per the RFP, the postal retail facility would occupy approximately 17,000 SF of space on the building's 1st floor, of which 2,000 SF would be for retail use and 15,000 SF for delivery operations.

*Study Area*

Within the 400-foot primary study area there are two known developments that would be completed under Future No-Action Conditions. A vacant lot at 254 Front Street one block northeast of the site on Dover Street is currently under construction by Apollo Construction and will result in an 8-story 25,000-square-foot mixed-use building with retail/restaurant space on the ground floor and residential units above street level. The project is expected to be completed by 2012. A new park, Peck Slip Park, will be developed one block east of the project site in the Peck Slip street median between Water and South Streets. The park will replace an existing surface parking lot and will feature a boat-shaped plaza and small pool area surrounded by trees and plantings. The park is expected to be completed in late 2012/early 2013.

Within the 1/4-mile secondary study area there are three public infrastructure improvement projects that are expected to be completed in the Future No-Action Conditions, they include the: East River Waterfront Esplanade and Piers Project (ERW), the Fulton Street Reconstruction, and the Brooklyn Bridge Rehabilitation. Just outside the 1/4-mile study area, is the 8 Spruce Street (Beekman Tower) mixed residential and institutional development,

The East River Waterfront Esplanade and Piers Project (ERW) will redevelop the Lower Manhattan waterfront and create a bikeway/walkway connecting to Manhattan Greenway, rehabilitate Piers 15 and 35 for public use, and provide various aesthetic amenities along the waterfront. Portions of Phase I are expected to be completed in 2011. According to the Lower Manhattan Construction

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2 The building height is based on the Hampton Inn motel, which was recently constructed and is the tallest building on the project site block. Although the zoning would permit a taller building, it is assumed that the LPC would not approve a taller building in the historic district.

3 The number of dwelling units assumes an average unit size of 900 SF, which is typical of new construction in Manhattan. Based on 124,523 SF of residential floor area on floors 2 through 8, this would result in approximately138 units.

Command Center, Package 2 work to complete the ERW project is planned through the first quarter of 2012.

The Fulton Street Reconstruction began in July 2007 and is aimed at providing utility and streetscape improvements on the Fulton Street corridor. Phase I improvements were conducted between Church and Gold Streets and are complete. Phase II (began in 2009) extended reconstruction east of Gold Street and is expected to be completed in spring 2012. Phase III (began in 2010) will rebuild Nassau Street and other ancillary streets and is expected to be completed in October 2012. Improvements include the installation of new water mains, catch basins, upgraded utilities, sidewalks, granite curbs, lighting and street furniture.

Rehabilitation of the Brooklyn Bridge, which began in early 2010, is a safety and aesthetic improvement program that will widen the entrance ramps from the FDR Drive (Manhattan) and exit ramps onto Cadman Plaza (Brooklyn) from one to two travel lanes. The project is expected to be completed in 2014.

Slightly beyond the 1/4-mile study area, the 76-story 8 Spruce Street (Beekman Tower) is being developed. It will contain luxury apartments, a 630-seat K-8 school facility (P.S.397), and 25,000-square-feet of hospital offices and hospital-controlled public parking in the building's basement. The school facility is scheduled to open for the 2011-12 school year. The residential tower is expected to be completed by 2012.

### B.1.4. Potential Impacts of the Project

#### *Potential Land Use Impacts of the Project*

The proposed project would result in the development of a community facility use on the site, whose building would contain slightly more square footage than the existing building. The proposed new school would alter the land use on the site that is now occupied by commercial use, but the proposed school use would be compatible with the mix of residential and commercial uses that surround it, and no land use impacts would occur.

#### *Potential Zoning and Public Policy Impacts of the Project*

The proposed school use is permitted as-of-right under the site's current C6-2A zoning. It is assumed that the proposed school building will be designed to comply with the applicable use and height regulations. If it does not, the SCA would request a zoning override from the Deputy Mayor for Economic Development to allow the project to be developed despite non-compliance with the applicable zoning requirements. If granted, the zoning override would apply only to the proposed project and there would be no change to the site's or surrounding area's underlying zoning designations. Therefore, the proposed project would have no significant adverse zoning impact.

As discussed above, the proposed project is located within the New York City Coastal Zone and therefore must be assessed for its consistency with the New York City Waterfront Revitalization Program. A New York City WRP Consistency Assessment Form has been completed and is included in Appendix C. As indicated on the attached WRP Consistency Assessment Form, the proposed project is consistent with the policies of the WRP.

## B.2. SOCIOECONOMIC CONDITIONS

The 2010 *CEQR Technical Manual* indicates that a detailed socioeconomic analysis is appropriate if the proposed action is expected to result in substantial socioeconomic changes within the impact area. Such changes would occur if the action had any one of the following results:

- A direct displacement of residential population changing the socioeconomic profile of a neighborhood (more than 500 residents);
- Directly displace a substantial number of businesses or employees (more than 100 employees);
- Create substantial new development (200 units residential, 200,000 SF commercial space);
- Affect real estate market over a large area; or
- Adversely affect economic conditions of a specific industry.

### B.2.1. Screening Assessment

According to the *CEQR Technical Manual* screening criteria, the proposed project would not result in any conditions that would be expected to result in substantial socioeconomic changes; therefore, no analysis is warranted.

The proposed new school would better serve neighborhood students and not result in substantial socioeconomic changes in the study area. The school would not directly displace any residents nor would it introduce a new residential population that could indirectly affect socioeconomic conditions in the study area. The proposed school would include space for continued retail postal operations to serve the area's residential and worker populations and would not result in direct business displacement. The project would be expected to result in nominal direct displacement of less than 10 postal employees due to the elimination of postal delivery services at the site; however, it is expected that these employees would be transferred to other USPS facilities. The proposed project would also introduce approximately 48 faculty and staff to the area, and these employees would potentially support local retail establishments near the school and thereby have a marginally positive impact on the local economy. The proposed project would therefore result in no significant adverse impacts to socioeconomic conditions in the study area.

## B.3. COMMUNITY FACILITIES AND SERVICES

The *CEQR Technical Manual* requires that an analysis be performed if actions would:

- Increase service demands by adding more than 100 residents; or
- Physically alter a community facility – Community facilities and services are defined as public or publicly funded schools, health care facilities, libraries, child care centers, and police and fire services. A community facilities analysis evaluates a proposed action's effect on the provision of services by those community facilities. Direct effects occur when an action results in the physical alteration or displacement of a community facility; indirect effects result from increases in population, which create additional demand on service delivery.
- Analysis of potential impacts on health care facilities and police and fire protection services is required for actions that would have only a direct effect, such as if it would affect the physical operations of, or access to and from, a police precinct or fire station.

### B.3.1. Existing Conditions

**Police Services.** The site is located within the 1st Police Precinct, whose precinct house is situated at 16 Ericsson Place, approximately 0.85 miles northwest of the site.

**Fire Services.** The unit serving the site is Engine 6, located at 49 Beekman Street, situated approximately 0.2 mile west from the project site. The proposed action would not require an increase in personnel or equipment at the engine or ladder company.

**Health Care Services.** The nearest health-care facility to the site is the New York Downtown Hospital, located at 170 William Street, approximately 0.2 mile west of the project site.

**Public Schools.** Nearby public elementary schools include P.S. 234 (The Independence School) and its annex building, located approximately 3/4 miles from the site and the newly relocated P.S. 397 (The Spruce Street School) temporarily located at 52 Chambers Street, approximately 1/4 mile from the site. P.S.234 operated above capacity in the 2009-10 school year and the new P.S. 397 operated below capacity (see Table A-1 for information on enrollment and utilization in nearby schools).

### B.3.2. Future No-Action Conditions

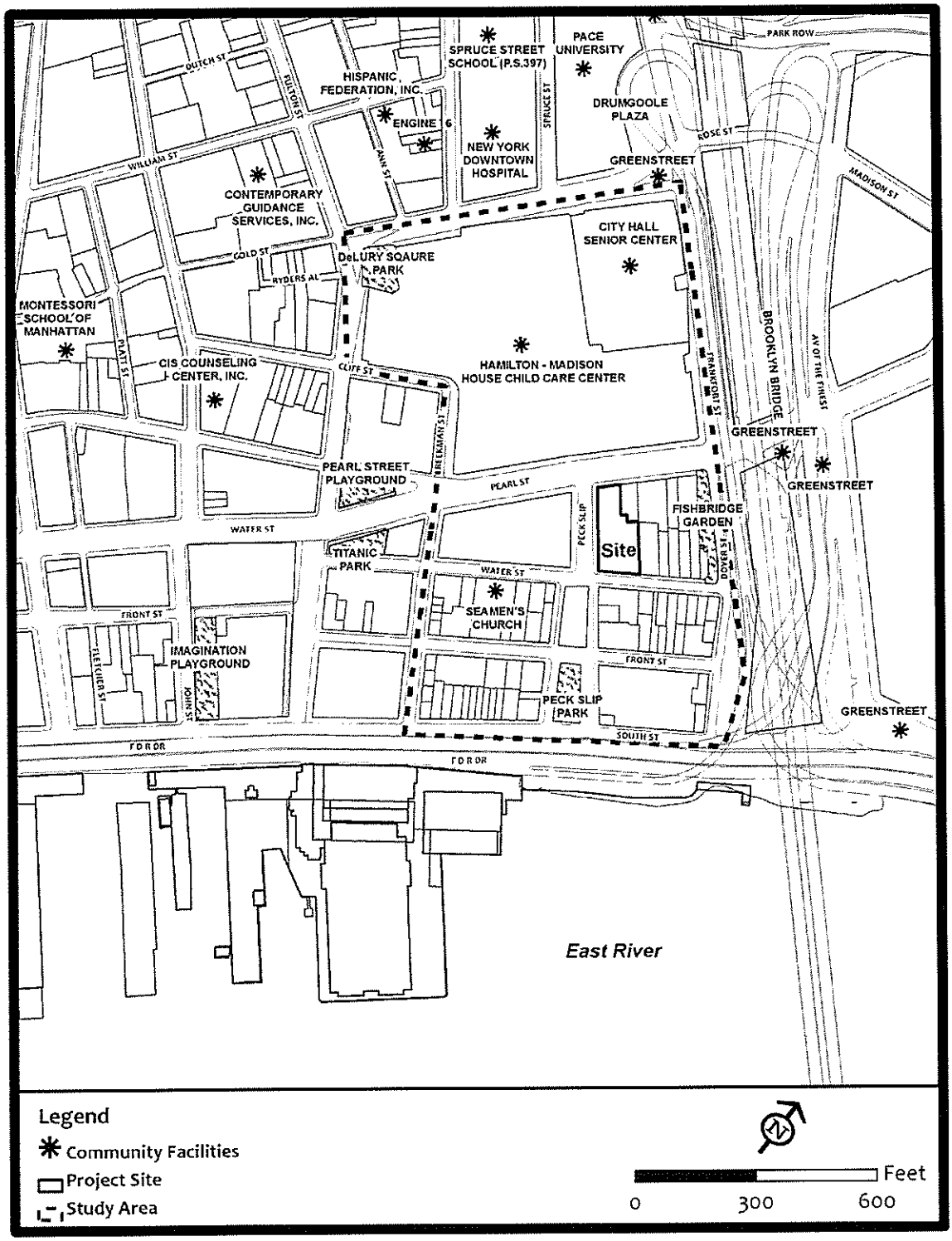
Under Future No-Action Conditions, the existing post office building would be expected to be removed, and the project site would be redeveloped with an 8-story, mixed-use residential building containing retail postal operations on the ground floor. The building's residential component would consist of approximately 138 dwelling units with a residential entrance and lobby on the ground floor along Peck Slip. The postal facility would occupy approximately 17,000 SF of space on the 1st floor of the building, of which 2,000 SF of space would be for retail use and 15,000 SF for delivery operations. The building's residents would place some additional demand on the area's community facilities and services. In the case of schools, there is already a need for additional elementary seats.

The Spruce Street School would have been relocated to its new home in 8 Spruce Street (now under construction) and due to be completed for the 2011-12 school year. It is expected to ultimately accommodate approximately 630 students in a K-8 program.

### B.3.3. Potential Impacts of the Project

The proposed project would have a beneficial effect on school services as it would provide additional capacity to serve the area's elementary level student population. Fewer than 10 employees would be displaced by the proposed action assuming that the sorting/delivery function now housed in the Post Office is moved out. The proposed project would not add residents or a significant number of employees to the area who could place an additional demand on community services; therefore, the proposed project would have no significant adverse impact on community facilities and services.

## FIGURE B-3: COMMUNITY FACILITIES



## B.4. OPEN SPACE

The 2010 *CEQR Technical Manual* requires that an open space analysis be performed if a proposed action would:

- Displace or result in a physical change to a public open space or reduce its utilization or aesthetic value; or
- Increase demands on area open space by adding a new user population sufficiently large to noticeably diminish the ability of an area's open space to serve the future population (more than 50 residents or 125 workers if the project is within an underserved area; more than 350 residents or 750 workers if the project is within a well-served area; or more than 200 residents or 500 workers if the project is not within either an underserved or well-served area.)

### B.4.1. Existing Conditions

A 1/4-mile study area was delineated to identify open space and recreational facilities within the vicinity of the project site that could be affected by the project. Within the 1/4-mile study area, there are five open space resources: Fishbridge Garden, Imagination Playground, Titanic Park, Pearl Street Playground, and James Madison Plaza (see Figure B-3).

Fishbridge Garden is located on the northern portion of the project block on Dover Street between Pearl and Water Streets. The park features a dog run and community garden.

Titanic Park is located two blocks south of the project site on the east side of Pearl Street between Fulton and Water Streets. The park was renovated in 2010 to include new bluestone sidewalks, a seating area with 1939 World's Fair benches, bicycle racks, granite curbs, post and chain fencing, custom light poles, stormwater drainage and irrigation, landscape boulders and new plantings. The park also includes a lighthouse monument at Fulton and Water Streets.

The Pearl Street Playground is a rectangular playground located two blocks south of the project site between Fulton and Beekman Streets. The renovated playground reopened this year with new play equipment, a new safety surface, site furnishings, steel fences, a spray shower, drinking fountain, drainage and water supply, new pavements and plantings. Reconstruction efforts also included the closing of Little Pearl Street and the expansion of the park onto the street bed.

Imagination Playground at Burling Slip is located four blocks southeast of the project site between Front and South Streets. On July 27, 2010, the flagship park opened as a dual collaboration between NYCDPR and the Rockwell Group. Imagination Playground was conceived to encourage child-directed and unstructured free play, and includes loose parts and elements that allow children to reconfigure and design their own play.[4] The Burling Slip Imagination Playground features a ramp, sandpit, slide, cascading water channel, rope climbing structure, masts and pulleys, and a listening forest. Loose parts at this park are inspired by commercial activities that took place at historic Burling Slip, and they include burlap bags, buckets, shovels, brooms, sandbags, and wooden dams.

James Madison Plaza is located three blocks northwest of the project site between St James Place and Pearl and Madison Streets. The 17,500-square-foot triangular plaza is currently under

[4] http://www.imaginationplayground.org/

renovation and upon completion will feature new plantings, two water features, and a variety of new seating. Park improvements are expected to be completed later in 2011.

### B.4.2. Future No-Action Conditions

In the future without the proposed project, one parks within the immediate study area will undergo renovation and two new parks (Peck Slip Park and Delury Square Park) will be created. Overall, there will be an increase in open space resources within the larger study area.

Peck Slip Park will be developed on the site of an existing parking lot located one block east of the proposed project site. The new park will feature a boat-shaped plaza and small pool area surrounded by trees and plantings. The park is expected to be completed in late 2012/early 2013.

Delury Square Park will be located at the northeast corner of Fulton and Gold Streets, five blocks southwest of the proposed project site. The new 10,000 square-foot park will feature a small waterfall and new seating. Construction of the park will include realigning Fulton and Gold Streets into a standard four-way crossing by removing the traffic island and combining NYCDPR pedestrian areas onto the Southbridge Towers block. As a result of the project, two paved paths will be developed, which will lead pedestrians from Fulton Street into the Southbridge Towers complex.[5]

### B.4.3. Potential Impacts of the Project

The proposed project would not place any additional demand on the area's open space resources as it would provide outdoor recreation space on the site's rooftop and indoor space in the gymnatorium to meet the recreational needs of the students. Therefore, the proposed project would have no effect on the study area's publicly accessible open spaces and would result in no significant adverse impact.

5 http://www.lowermanhattan.info/construction/project_updates/delury_square_park_68268.aspx

## B.5. SHADOWS

A shadow assessment is required only if the project would either result in an increase in building height 50 feet or greater between the future no action condition and the future with action condition, or if the project is located adjacent to, or across the street from, a sunlight-sensitive resource. Conversely, if the proposed project would not result in either of these conditions, a shadow assessment is not necessary and no impact is predicted.

### B.5.1. Potential Impacts of the Project

The shadow assessment considers projects that result in new incremental shadows long enough to reach a sunlight-sensitive resource (e.g., a park, historic resource with sunlight-dependent features, or important natural feature). Based on the preliminary design concepts, the proposed school building (either renovated or newly constructed) would contain 5 stories. As such, it would stand approximately 70 to 75 feet tall which is 10 to 20 feet taller than the existing 60-foot building and slightly smaller than the 8-story, mixed-use residential building assumed to be developed on the site in the future without the project. Since the incremental building height increase between the future no action and future with the action condition is less than 50 feet, and the site is not adjacent to, or across the street from, a sunlight-sensitive resource no shadow impact is predicted and no shadow assessment is necessary.

## B.6. HISTORIC AND CULTURAL RESOURCES

Historic resources include historically important buildings, structures, objects, sites, and districts. They also may include bridges, canals, piers, wharves, and railroad transfer bridges that may be wholly or partially visible above ground. Archaeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells, and privies. An assessment of both historic and archaeological resources requires consultation with the appropriate city, state, and federal agencies.

The 2010 *CEQR Technical Manual* requires an evaluation of a project's potential effect on archaeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated. It further requires an assessment of historical resources if a proposed action would result in a direct or indirect adverse effect on historic buildings, structures, objects, sites, or districts.

### B.6.1. Existing Conditions

#### *Historic Resources*

The project site is located within the South Street Seaport Historic District designated by NYCLPC and listed on the State and National Registers. The State and National Register- listed historic district, as extended in 1989, is roughly bounded by Dover Street to the north, Pearl, Water and Front Streets to the west, Maiden Lane and Fletcher Street to the south, and South Street and the East River to the east, while the NYCLPC district is slightly smaller (see Figure B-4). Both historic districts contains the largest concentration of early 19th century commercial buildings in New York City, representing the development of trade and commerce in the seaport area as New York became the nation's economic and financial capital. The district is architecturally significant for its large concentration of Greek Revival countinghouses from the 1830s and is notable for its low-scale buildings, which contrast with the modern high-rise buildings surrounding the district.

The existing post office building on the project site was built in the 1950s and is not architecturally significant nor does it contribute to the historic district.

#### *Archaeological Resources*

The project Area of Potential Effect (APE) straddles the original, predevelopment East River shoreline of Manhattan Island, from the low water mark at Water Street, to the high water line midway between Water and Pearl streets (Graham 1873). Therefore, roughly the northwestern half of the APE was dry land along the beach, and the southwestern half was in the intertidal zone, and possibly continuously submerged. The strong downslope from Pearl to Water is still visible today.

Prior to filling activities in the low-lying parts of the APE (beginning ca. 1701) and later Water Street, the immediate vicinity of the APE was used as a shipyard (1710s), ferry landing (ca. 1661), commercial wharf/landing (by ca. 1647), activities would have left an archaeological footprint on the predevelopment beach and in the intertidal zone. Wharf construction and landfill activities and devices would also have left important cultural remains on the APE extending well below the present water table.

## B.6.2. Future No-Action Conditions

Under Future No-Action Conditions, the existing post office will be removed and the project site will potentially be redeveloped with an 8-story, mixed-use residential building containing a retail postal operation on the ground floor. The building's residential component would consist of approximately 138 dwelling units occupying the 2nd through 8th floors of the building with a residential entrance and lobby on the ground floor along Peck Slip. As described previously under Land Use, this theoretical building is assumed to stand about the same height as the adjacent contemporary 8-story building, also within the South Street Seaport Historic District area. Any new private construction on this site would be required to satisfy NYCLPC historic and archaeological review requirements to minimize adverse effect to cultural resources nearby and potentially on the site.

## B.6.3. Potential Impacts on the Project

### *Historic Resources*

Since the existing USPS building on the site is not architecturally significant, its removal would not have an adverse effect on the South Street Seaport Historic District. Based on preliminary conceptual sketches, the proposed 5-story school building would be consistent with the scale and massing of the surrounding buildings.

In a letter dated February 11, 2011, OPRHP (aka SHPO) determined that the proposed plan would have No Adverse Impact on the existing building as it is a non-contributing building to the historic district, but could potentially have a significant effect on the surrounding historic district. Therefore, OPRHP required that a construction protection plan be developed for nearby historic buildings in the APE. Additionally, OPRHP will review design of the proposed new construction to determine effects on historic structures.

The SCA has initiated consultation with the SHPO and will enter into a Memorandum of Agreement (MOA) along with the USPS that will outline the specific measures that will be undertaken by the SCA and USPS in order to avoid significant adverse impacts to the historic district. Final design of the proposed building would be executed pursuant to the MOA, to ensure that the building is consistent with the built context of the district in terms of its design and materials, thereby ensuring that the project would not have an adverse effect on the historic district. Therefore, the proposed project would not be expected to have a significant adverse impact on historic resources..

### *Archaeological Resources*

In other locations in Lower Manhattan, archaeological resources have been encountered generally below the basements of the existing buildings, approximately 5 to 9 feet below street grade, at or just below mean sea level. Since the 1920s, the intersection of Water Street and Peck Slip has been at an elevation of 5 feet above mean high water, and given a 4-foot tidal fluctuation, the upper part of these resources would be expected to be encountered between 5 and 9 feet below the current surface, with depth increasing toward Water Street (southwest).

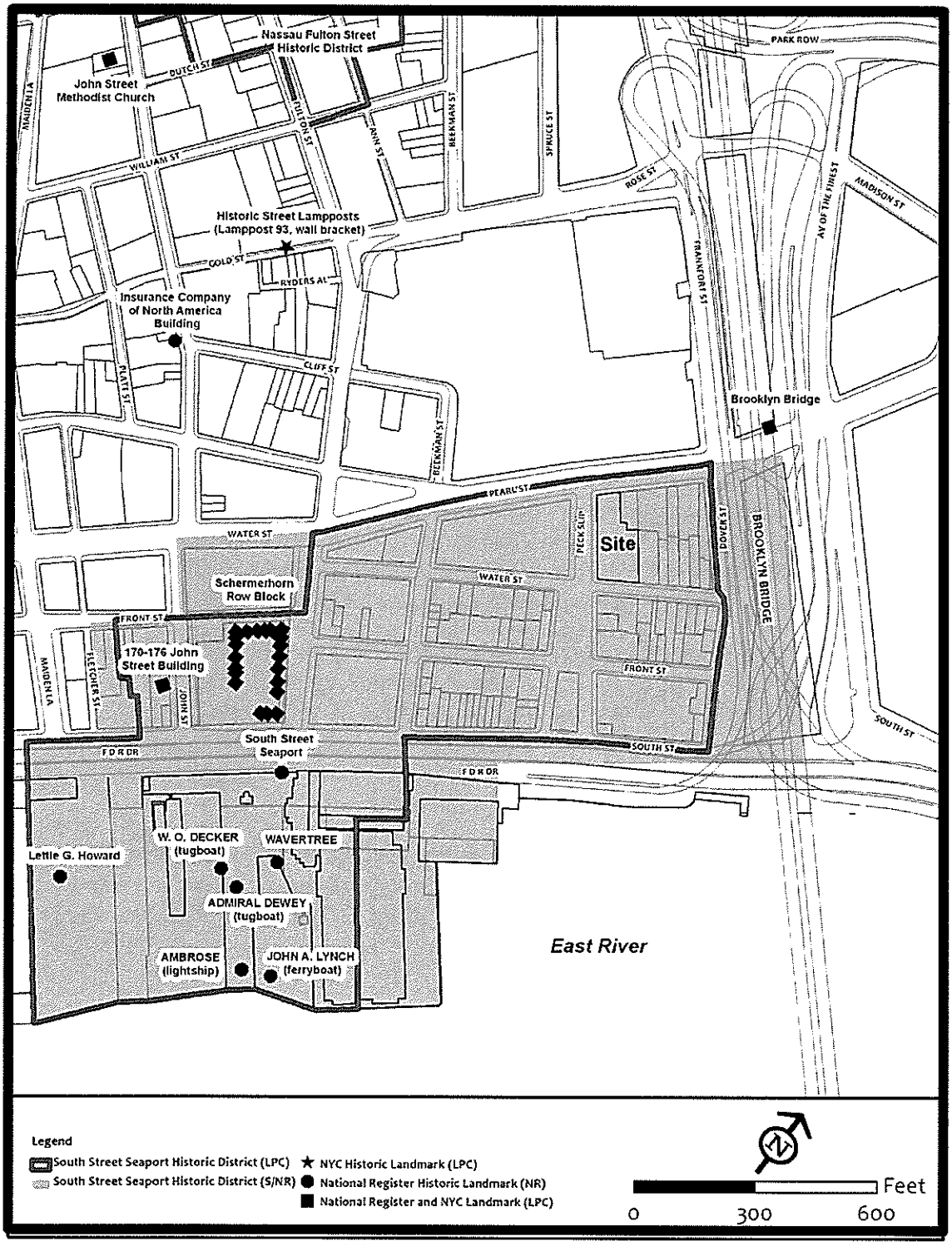
Based on plans for the existing post office building, the pile caps extend only about 5 feet below grade along Water Street, and although depth of disturbance would have increased with greater distance from Water Street, this would have left substantial areas of archaeological potential undisturbed.

A 2007 Phase 1A report on the adjacent streetbed of Peck Slip and Water Street abutting the APE concluded that landfill and landfilling devices, shipyard remains, and warehouse pier remains were to be found 20–35 feet below the surface (Dallal and Meade 2007). In the sidewalk adjacent to the APE at the intersection of Water Street and Peck Slip, fill, which would contain archaeological resources, extends between 22 and 24 feet below the current sidewalk. Since historically the APE was more elevated than adjacent Water Street, resources would not be expected to be as deeply buried as those in the streetbed. Archaeological potential could exist beneath the subsurface disturbance caused by construction of the 1950 post office building.

A Phase 1A archaeological study conducted on December 20, 2010 determined the project site to be devoid of archeological remains from the pre-contact period due to heavy disturbance from previous construction activities, rising sea levels, and tidal action.

A Phase IB will be conducted and reviewed by OPRHP, as noted in the February 11, 2011 correspondence (and documented in the MOA), in the event that construction activities require excavation below the level of the present disturbance to avoid potential on-site archaeological resources.

# FIGURE B-4: HISTORIC RESOURCES



## B.7. URBAN DESIGN AND VISUAL RESOURCES

The 2010 *CEQR Technical Manual* requires an assessment of urban design when a project may have effects on one or more of the elements that contribute to the pedestrian experience, including streets, buildings, visual resources, open spaces, and natural features. There is no need to conduct an urban design analysis if a proposed project would be constructed within existing zoning envelopes, and would not result in physical changes beyond the bulk and form permitted "as-of-right."

### B.7.1. Screening Assessment

According to the *CEQR Technical Manual*, there is no need to conduct an urban design analysis if a proposed project would be constructed within existing zoning envelopes and would not result in physical changes beyond the bulk and form permitted "as-of-right." In the case of actions proposed to be sited within historic districts, a detailed analysis is generally appropriate when substantial changes to the built environment are predicted to occur which is not the case here.

It is assumed that the proposed building would be approximately 70-75 feet tall, likely covering as much of the site as the existing (60-foot building) since the lot is relatively small. It is further assumed that the building would be designed in such a way as to be compatible in massing, design and material with its historic environment. The building would be compatible with its immediate context where buildings range in age, style and size (6-8 stories in height) and historic district since it contains a great variety of built form, even within the project block itself (see Figure B-5).

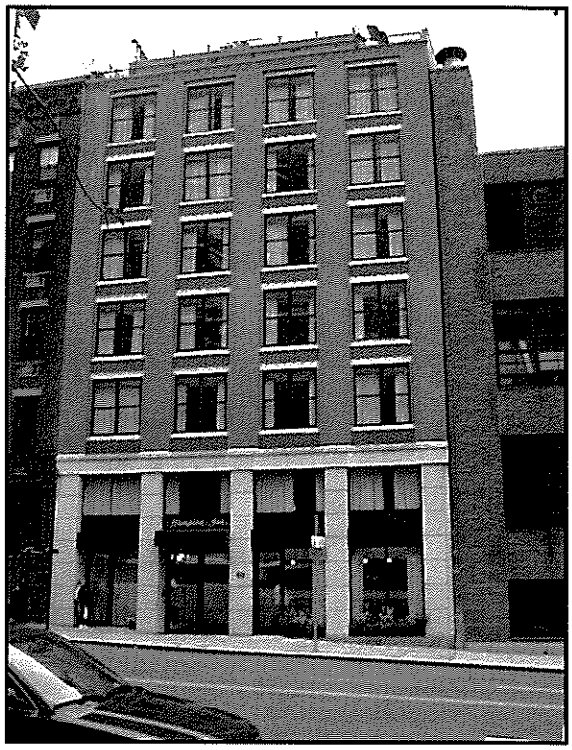
Based on the preliminary concept for a proposed school building on the site, it would comply with the site's current C6-2A zoning and no zoning waivers or overrides are anticipated. In addition, since the site is located within the National Register-listed South Street Seaport Historic District Extension, the final massing and design of the building would be developed in consultation with the SHPO and would not have significant adverse impacts to the nearby historic resources or the surrounding historic district (based on the conditions laid out in the MOA).

The SHPO would review the plans to ensure that the building, in terms of both its massing and façade materials, is compatible with the scale and built character of the historic district, thereby ensuring that the project would not have an adverse effect on the area's urban design and visual resources.

## FIGURE B-5: PHOTOGRAPHS OF THE PROJECT SITE AND VICINITY

View of project site, looking southeast from the corner of Pearl St. & Peck Slip

Streetscape looking northeast at project block, from Peck Slip &Pearl St. Project Site is on right



Hampton Inn on Pearl Street, adjacent to project site

View northwest from South Street and Peck Slip toward project site and Southbridge Towers

## B.8. NATURAL RESOURCES

The 2010 *CEQR Technical Manual* requires a detailed evaluation of natural resources when there is either a direct or indirect disturbance of significant, sensitive, or designated natural resources.

### B.8.1. Screening Assessment

According to the *CEQR Technical Manual*, a natural resources assessment may be appropriate if a natural resource is present on or near the site of the project and the project would cause a disturbance of the resource. If the site of the project and the immediate adjacent area is substantially devoid of natural resources, then no natural resources assessment is necessary.

The project site is located in a densely developed area of Lower Manhattan, which is substantially devoid of natural resources, and neither the project site nor adjacent area contain any natural resources that could be adversely affected by the proposed project; therefore, the proposed project would result in no significant adverse impact to natural resources.

## B.9. HAZARDOUS MATERIALS

The 2010 *CEQR Technical Manual* requires that a detailed hazardous materials assessment be prepared when:
- Hazardous materials exist on site, and a Proposed Action would increase the potential for exposure
- A Proposed Action would introduce new activities or processes that use hazardous materials

This section addresses environmental conditions at the location of the proposed public school, hereafter referred to as the proposed project site. A Phase I Environmental Site Assessment (ESA) of the proposed project site was completed by AKRF Engineering, P.C. (AKRF) on behalf of the New York City School Construction Authority (NYCSCA) in August 2010. The main objective of the Phase I ESA was to identify the presence or likely presence, use, or release of hazardous substances or petroleum products, which are defined in American Society for Testing and Materials (ASTM) Standard Practice E 1527-05 as recognized environmental conditions (RECs). In addition, other environmental issues or conditions such as radon, asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyl (PCB)-containing equipment were evaluated. The Phase I ESA included a site inspection, a review of the existing data on geology and hydrology of the area, and a review of historical maps, federal, state, and local agency records, and other documents to assess past and current uses of the site and adjacent areas.

The Phase I ESA identified several on-site RECs including: the potential presence of buried structures, which could contain historic fill material, demolition debris and/or abandoned underground storage tanks (USTs); prior on-site industrial uses associated with a former metals company, indicated on the 1894 and 1923 Sanborn Maps and 1927 City Directory; and former on-site petroleum storage associated with a closed-in-place 10,000-gallon fuel oil UST. Off-site RECs identified during the Phase I ESA included: two monitoring wells located on the sidewalk in front of nearby properties; various petroleum-related uses noted on surrounding properties on historic Sanborn Maps including garages with buried gasoline tanks and auto repairs, a filling station, and "oils" storage; industrial/manufacturing uses noted on the surrounding properties on historic Sanborn Maps and in the City Directory including a metal/iron works, a shot and lead works, a printer, a machine shop, chemical manufacturers, thermometer manufacturers and a petroleum company; two closed New York State Department of Environmental Conservation (NYSDEC) Spill incidents in close proximity to the site, for which the database listings indicated that the cleanup did not meet the regulatory standards; and a former manufactured gas plant site located east-southeast of the site. Environmental concerns identified during the Phase I ESA included the potential presence of ACM, LBP, and items containing PCBs in the on-site building.

A Phase II Environmental Site Investigation (ESI) was completed by AKRF on behalf of the NYCSCA in May 2011 to assess the RECs identified in the Phase I ESA.

### B.9.1. Existing Conditions

The site is located at One Peck Slip in Manhattan, New York. The legal description for the site is New York City Tax Block 106, Lot 9. The lot is approximately 17,800 square feet in size and contains an approximately 70,800-square-foot, 4-story concrete and brick building currently occupied by USPS

Post Office. The current on-site structure was constructed in 1950 and has been used as a Post Office since its construction.

A Phase II ESI was conducted to determine whether the RECs identified in the Phase I ESA have affected the suitability of the site for construction of a public school facility. The investigation included a geophysical survey and the completion of seven soil borings, four temporary well points, and seven sub-slab soil vapor sampling points. Seven sub-slab soil vapor samples, one ambient air sample, seven grab soil samples (plus one duplicate), three composite soil samples, and four groundwater samples were collected for laboratory analysis.

During the Phase II ESI, fill material, consisting of sand and silt, with fine gravel, brick, coal, and/or wood, was encountered to depths of approximately 8 to 12 feet below ground surface in the soil borings. Groundwater was encountered at approximately 8 to 11 feet below grade in temporary wells installed during the investigation. The anticipated groundwater flow direction at the site is to the southeast toward the East River. The closed-in-place underground storage tank (UST) listed in the Phase I ESA could not be definitively located by the geophysical survey. A geophysical anomaly was detected under the Pearl Street sidewalk, in the area of a fill port and vent pipe; however, due to excessive subsurface utilities in the area, this anomaly could not be positively identified.

Seven grab soil samples (plus one duplicate sample) were analyzed for: combined Target Compound List (TCL) and NYSDEC STARS list volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) by EPA Methods 8260 and 8270, respectively, and select Target Analyte List (TAL) metals by EPA Method 6000/7000 series to investigate for parameters typically associated with petroleum products, industrial solvents, and historic fill material. In addition, three composite soil samples were analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082, pesticides by EPA method 8081, hexavalent chromium by EPA Method 7196, cyanide by EPA Method 9012, and gasoline and diesel range total petroleum hydrocarbons (TPH) by EPA Method 8015-modified. Furthermore, six grab soil samples (plus one duplicate sample) that were found to contain elevated total lead and/or mercury concentrations were additionally analyzed for Toxicity Characteristic Leaching Procedure (TCLP) lead and mercury by EPA Method 1311.

Four groundwater samples were analyzed for TCL VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, and select TAL metals by EPA Method 6000/7000 series. The seven sub-slab soil vapor samples and one ambient air sample were analyzed for 26 select VOCs by EPA Method TO-15.

The VOC acetone was detected in grab soil samples from two borings (GB-3 and SB-6) at concentrations of 0.075 and 0.12 part per million (ppm), respectively, above the corresponding NYSDEC Part 375 soil cleanup objectives (SCO) for unrestricted use (0.05 ppm). Acetone is a common laboratory contaminant is not likely reflective of an adverse environmental condition.

SVOCs [chrysene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo-(k)fluoranthene, dibenzo(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene] were detected in grab soil samples collected from three soil borings (GB-2, GB-4, and GB-7) at concentrations that exceeded their corresponding Unrestricted Use SCOs. Pesticides (4,4-DDD and 4,4-DDT) were detected in the composite sample from boring GB-5 at concentrations exceeding their respective Unrestricted Use SCOs. Metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and/or zinc) were detected in grab soil samples from all seven soil borings at concentrations greater than

the Unrestricted Use SCOs. All of these soil samples were collected from the fill layer observed at the site and did not exhibit other evidence of contamination (e.g., staining, odors, etc.); therefore, the detected SVOCs, pesticides and metals are not indicative of a spill or other release but are attributed to the urban fill at the site. Cyanide was detected in all three of the composite soil samples at concentrations below the Unrestricted Use SCO. PCBs were not detected in any of the composite soil samples analyzed. TCLP lead and mercury concentrations were below levels indicative of a characteristic hazardous waste.

A review of groundwater analytical results indicated that no VOCs or SVOCs were detected at concentrations above the Class GA Water Quality Standards in any of the samples analyzed. Four metals (copper, lead, manganese, and mercury) were detected in the unfiltered groundwater samples from all four temporary wells at concentrations exceeding the Class GA Standards. Manganese was detected in the filtered groundwater samples from TW-5 and TW-7 at concentrations exceeding its Class GA standard. Based on the history of the site, the detected metals concentrations were attributed to entrained sediment in the unfiltered samples and/or naturally occurring or background conditions in groundwater and not to an on-site release or spill.

A review of the sub-slab soil vapor sample analytical results indicate that 9 of the 26 VOCs analyzed were detected in one or more of the samples. The VOCs 1,2,4-trimethylbenzene, 1,3,5-trimethlybenzene, ethylbenzene, tetrachlorethene (PCE), toluene, o-xylene, and m,p-xylenes were detected in one or more of the samples at concentrations above the anticipated background concentrations. The New York State Department of Health (NYSDOH) has established Air Guideline Values (AGVs) for three of the VOCs analyzed: methylene chloride, PCE, and trichloroethene. PCE was detected in four of the seven sub-slab vapor samples (SV-1, SV-2, SV-5, and SV-6) at concentrations ranging from 540 to 3,500 micrograms per cubic meter ($\mu g/m^3$), which are greater than the AGV of 100 $\mu g/m^3$. TCE was detected in one of the samples (SV-7) at a concentration of 2.8 $\mu g/m^3$, which is below the AGV of 5 $\mu g/m^3$. Methylene chloride was not detected in any of the seven sub-slab vapor samples. All VOC concentrations detected in the ambient air sample were below the anticipated background levels and AGVs.

### B.9.2. Future No-Action Conditions

Under Future No-Action Conditions, given USPS's desire to sell the property (as indicated in their RFP), the project site would likely be redeveloped as a residential building by another entity. As such, it is assumed that this new owner would manage the potential demolition and construction in accordance with all applicable local, State and Federal regulations.

### B.9.3. Potential Impacts of the Project

The proposed project would not result in impacts from contaminated media and building materials. Prior to the construction of the project, a pre-design investigation would be conducted to further characterize subsurface conditions in areas that were inaccessible during the Phase II ESI. Any subsurface structures (including potential USTs) and/or contaminated soil encountered during future construction would be removed in accordance with all applicable regulations. Any dewatering required during construction would be minimized to mitigate potential influx of contaminated water from off-site sources toward the site. Treatment of any dewatering effluent would be conducted as required prior to discharge to the municipal sewer. As a preventative measure, a soil vapor barrier

and a sub-slab depressurization system (SSDS) would be installed below the newly constructed school building to prevent potential soil vapor, or, if the existing building is not demolished, it would be retrofitted with an SSDS. Any suspect ACM, LBP, and PCB-containing materials affected by the preparation of the site for use as a public school would be identified prior to construction and properly managed during construction activities. All soil excavated during building construction would be properly managed in accordance with all applicable local, State and Federal regulations. For areas of the site where exposed soil may exist after building construction (i.e., landscaped areas), a two-foot thick layer of environmentally clean fill would be placed over existing the soil in these areas. In addition, to minimize the potential for exposure by construction workers and the surrounding public, standard industry practices, including appropriate health and safety measures, would be utilized

## B.10. WATER AND SEWER INFRASTRUCTURE

The *2010 CEQR Technical Manual* requires an assessment of water supply when actions:

- Would have an exceptionally large demand for water (greater than 1 million gallons/day); or
- Are located in a portion of the system that experiences low water pressure

A preliminary analysis of wastewater and stormwater conveyance and treatment would be needed if the project:

- Is located in a combined sewer area and would exceed the following incremental development of residential units or commercial space above the predicted No-Action scenario: 1,000 residential units or 250,000 sq. ft. of commercial space or more in Manhattan; or 400 residential units or 150,000 sq. ft. of commercial space or more in the Bronx, Brooklyn, Staten Island or Queens.

### B.10.1. Screening Assessment

The proposed school building would contain approximately 75,000 SF of floor area, which is below the CEQR threshold of 1,000 residential units or 250,000 SF of commercial space for requiring an assessment of wastewater and stormwater conveyance and treatment in areas of Manhattan served by a combined sewer system. In addition, based on a capacity of 480 school seats, the project would result in water usage of approximately 17,600 gallons per day. Since the proposed project would not result in significantly large water demands (i.e., over 1 million gallons per day), nor would it generate significant wastewater flows, it would have no significant effects on the city's water supply system or wastewater treatment facilities.

## B.11. ENERGY

The *2010 CEQR Technical Manual* requires an assessment of energy when actions would affect transmission or generation of energy, or that may generate substantial indirect consumption of energy.

### B.11.1. Screening Assessment

According to the *CEQR Technical Manual*, new construction or substantial renovation of buildings would not require a detailed energy assessment, as it is subject to the New York State Energy Conservation Code, which is reflective of State and City energy policy. Additionally, New York City public schools must follow the SCA's *NYC Green Schools Guide* (revised 2009) regarding energy efficiencies; therefore, the proposed action would not result in significant adverse energy impacts, and no further evaluation is required.

## B.12. SOLID WASTE AND SANITATION SERVICES

The *2010 CEQR Technical Manual* requires a detailed evaluation of the effect of the proposed action on solid waste and sanitation services if solid waste generation is unusually large. This is typically greater than 50 tons/week.

### B.12.1. Screening Assessment

The proposed 480-seat school would likely generate 1,440 pounds per week or 2.88 tons/month of solid waste, based on the rate of 3 pounds per week for each public elementary school pupil. According to the *CEQR Technical Manual*, a generation rate of less than 100,000 pounds per week is not considered large; therefore, the proposed project would not be expected to affect the delivery of sanitation services nor place a significant burden on the city's solid waste management system.

## B.13. TRANSPORTATION

The *2010 CEQR Technical Manual* requires detailed assessment of traffic and parking conditions when 50 or more vehicular trips would be generated by the project through one intersection during the peak hour. Similarly, if the project would generate 200 or more transit or pedestrian trips during a peak hour, then a detailed assessment is required because there is a potential for significant impact.

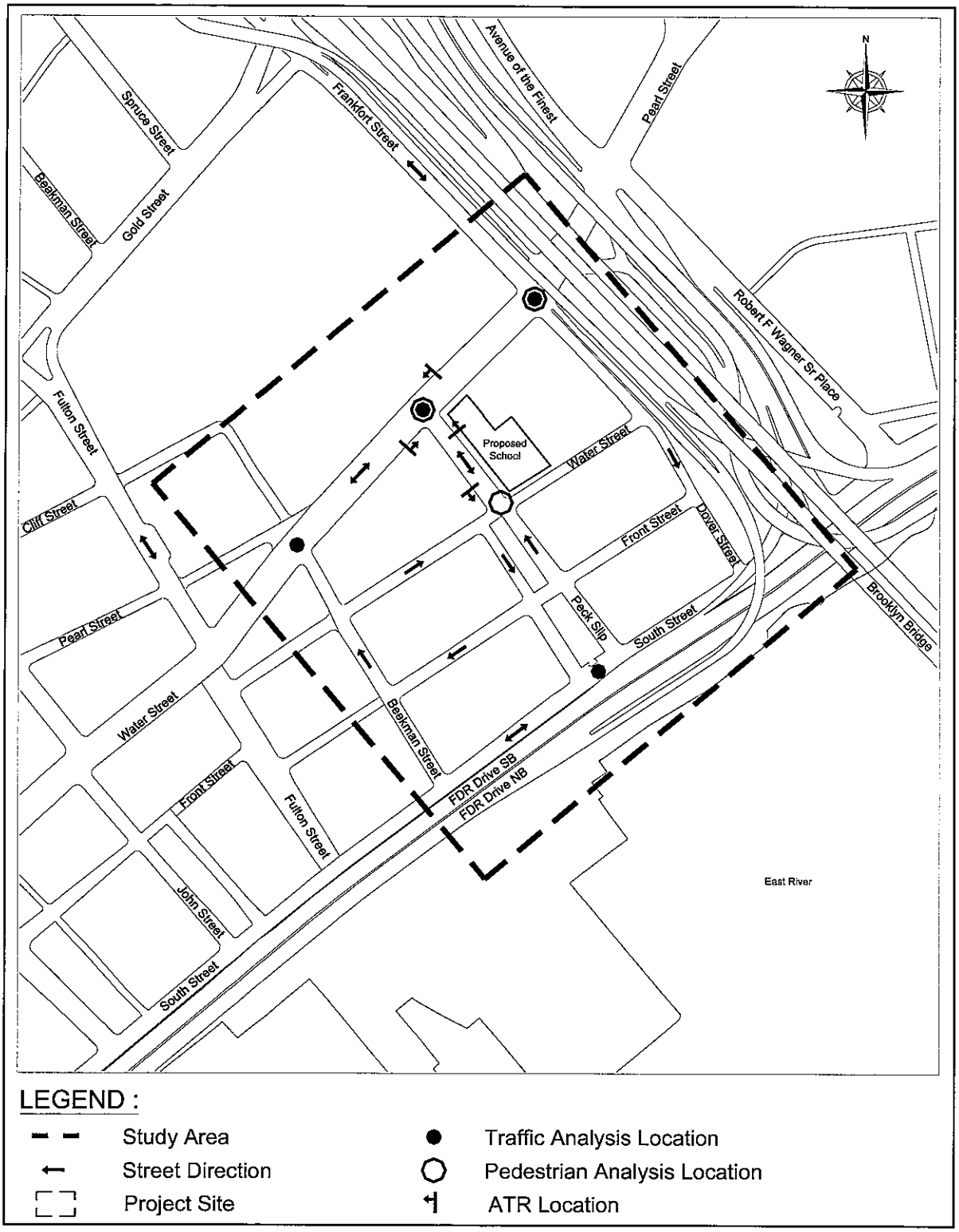
The proposed project will replace the existing Peck Slip Post Office building with a new public primary school (Pre-K through Fifth grade), accommodating 480 students and 48 faculty and staff members. The proposed project will also include approximately 2,000 SF for continued retail post office operation on a portion of the first floor. The transportation analysis study area was selected to include the facilities most likely to be used by the majority of new trips traveling to and from the new school. As shown in Figure B-6, four intersections were analyzed for vehicular traffic during the weekday AM (7:15 AM–8:15 AM) and PM (2:45 PM–3:45 PM) peak hours. These peak hours were selected based on a review of travel demand characteristics of similar schools. As the proposed school would generate negligible traffic during the weekday Midday peak hour, that time period was not analyzed.

The new school would generate new vehicular trips (by faculty/staff and student pickups/drop-offs) and new pedestrian trips (by students and accompanying parents/guardians), both of which are analyzed in detail. In addition, the transportation analysis considers safety at intersections along principal pedestrian paths to and from the proposed school.

New subway trips generated by the proposed project are expected to total 24 and 22 trips during the AM and PM peak hours, respectively. The proposed project is also expected to generate eight new local bus trips in both the AM and PM peak hours. As the level of new transit demand is well below the *CEQR Technical Manual*'s threshold of 200 bus or subway trips per hour to require a detailed transit analysis, it would be unlikely to result in significant adverse impacts; therefore, a detailed quantitative analysis of the project impacts to local transit services has been screened out and a qualitative discussion of study area transit services has been provided for informational purposes.

The following section describes the 2010 Existing conditions for each mode of transportation in the study area. The 2015 Future No Action conditions without the project (the No Build conditions) are then described, including study area background growth and any new development projects in the area that are expected to be completed by 2015 (when the new school is expected to open). Build conditions in 2015 are then discussed, which incorporate the increase in travel demand resulting from the proposed project, and potential significant impacts from project-generated trips are identified.

## FIGURE B-6: TRAFFIC STUDY AREA



## B.13.1. 2010 Existing Conditions

Data on the existing traffic, parking, and pedestrian conditions in the study area were primarily developed based on field data collected in October and November 2010. Traffic counts included manual turning movement and vehicle classification counts conducted at four intersections on Wednesday, October 20, 2010 and automatic traffic recorder (ATR) counts compiled at four locations for the week of October 18–25, 2010 (see Figure B-6).

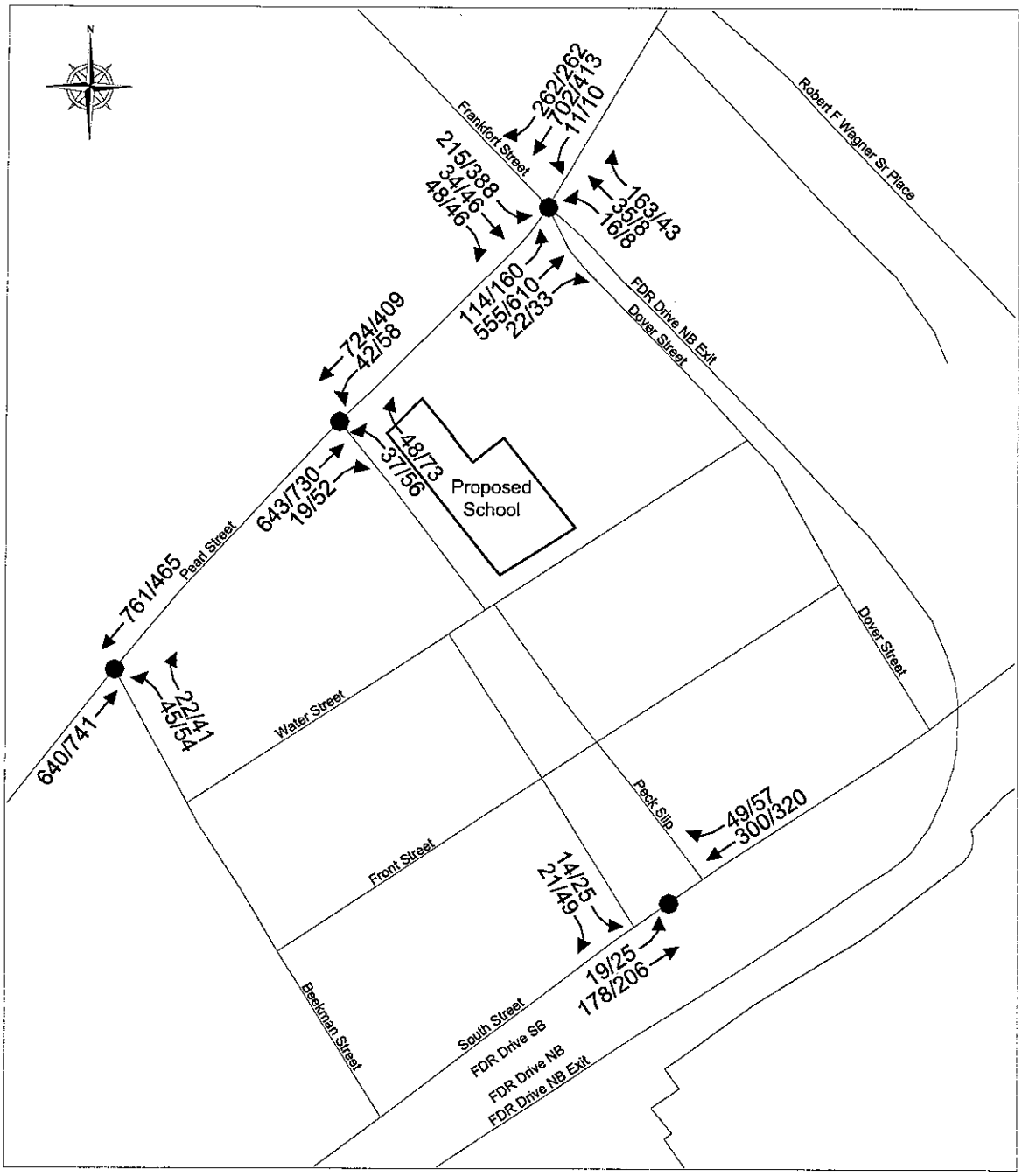
Figure B-7 shows the resultant traffic volumes for existing conditions during the AM and PM peak hours. On-street parking utilization was observed in October and November 2010. Pedestrian counts were conducted at three intersections on Wednesday, October 20, 2010. To address pedestrian safety conditions, accident summary data were obtained from the New York City Department of Transportation (NYCDOT) for eight intersections located along principal pedestrian access paths to and from the proposed school.

### *Vehicular Traffic*

The project site occupies the southern block front of Peck Slip between Pearl and Water Streets. The street network located within the traffic study area is described in detail below. Given the irregular grid in this area of Lower Manhattan, and the resultant complexity in describing actual street orientation, they are characterized more simply for reader ease (e.g., Peck Slip runs east-west and Pearl Street runs north-south).

- Peck Slip is a two-way east-west roadway, approximately 35 feet wide, with one moving lane and parking on both sides of the street. East of Water Street, Peck Slip gradually widens, reaching a width of 125 feet at its intersection with South Street. Between Water and South Streets, a parking facility occupies the space between the two directions of traffic. As shown in Figure B-7, Peck Slip carries relatively low traffic volumes ranging from 35 to 85 vehicles per hour (vph) during the AM peak hour and from 75 to 130 vph during the PM peak hour.
- Pearl Street is a two-way north-south roadway, 60 feet wide, with two moving lanes and parking on both sides of the street. Traffic volumes on Pearl Street within the study area range from 1,420 to 1,910 vph during the AM peak hour and from 1,250 to 1,730 vph during the PM peak hour. The intersections with Beekman Street, Peck Slip and Frankfort Street/Dover Street are all signalized.
- Frankfort Street is a two-way east-west roadway, approximately 30 feet wide, with one moving lane in the westbound direction and two lanes in the eastbound direction. West of Pearl Street, Frankfort Street becomes Dover Street, a one-way eastbound roadway, with one moving lane and parking on both sides of the street. Traffic volumes on Dover Street number 70 vph during the AM peak hour and 90 vph during the PM peak hour. Running parallel to the north of Dover Street is the FDR Drive Exit Ramp, a 20 foot-wide roadway that leads from the northbound FDR Drive to Pearl Street. Traffic volumes on this ramp are approximately 215 vph during the AM peak hour and 60 vph during the PM peak hour.
- Beekman Street is a one-way westbound roadway, 30 feet wide, with one moving lane and parking on both sides of the street. Traffic volumes on Beekman Street number 70 vph in the AM peak hour and 95 vph during the PM peak hour.
- South Street is a two-way north-south roadway, 55 feet wide, with two moving lanes in each direction and parking on the west side of the street. Within the study area, traffic volumes on South Street average 530 vph during the AM peak hour and 605 vph during the PM peak hour. The intersection with Peck Slip is stop-controlled.

## FIGURE B-7: 2010 EXISTING PEAK HOUR TRAFFIC VOLUMES




LEGEND :

xx/xx AM/PM Peak Hour Volumes

● Analyzed Intersection

### *Capacity Analysis*

The capacity analyses performed for study area intersections are based on the methodology presented in the *Highway Capacity Manual (HCM) Software Release 5.4*. Traffic data required for these analyses include volumes on each approach and various physical and operational characteristics. Signal timing plans for each signalized intersection were obtained from the NYCDOT. Field inventories were conducted to document curbside parking regulations, vehicle classifications, and other relevant characteristics needed for the analysis.

The HCM methodology provides a volume-to-capacity (v/c) ratio for each signalized intersection approach or lane group. The v/c ratio represents the ratio of the traffic volume on an approach/lane group to its vehicular carrying capacity. At a v/c ratio of between 0.95 and 1.0, near-capacity conditions are reached and delays can becomes substantial.

The HCM methodology also expresses quality of flow in terms of level of service (LOS). LOS for intersections is based on the average delay that a driver experiences in traveling through an intersection during the analysis period. Intersection LOS is reported using letter designations that range from LOS A (minimal delay of 10 seconds or less per vehicle) to LOS F (long delays of 80 seconds or greater per vehicle).

Table B-1 shows the LOS/delay relationship for signalized and un-signalized intersections using the HCM methodology. Levels of service A, B and C generally represent conditions that range from extremely favorable to fair levels of traffic flow; at LOS D the influence of congestion becomes noticeable; LOS E is considered the limit of acceptable delay; and LOS F is considered unacceptable to most drivers.

**TABLE B-1: INTERSECTION LEVEL OF SERVICE (LOS) CRITERIA**

| Level of Service | Average Delay per Vehicle (seconds) | |
|---|---|---|
| | Signalized Intersections | Un-Signalized Intersections |
| A | ≤ 10 | 0–10 |
| B | > 10–20 | > 10–15 |
| C | > 20–35 | > 15–25 |
| D | > 35–55 | > 25–35 |
| E | > 55–80 | > 35–50 |
| F | > 80 | > 50 |

Source: 2000 Highway Capacity Manual

For this traffic analysis, each intersection was evaluated by overall intersection delay, approach delay and, where appropriate, by lane group or movement delay (e.g., through, left turn, right turn, and de facto turn, if a lane is not exclusively designated for turns). Table B-2 shows the results of the existing conditions capacity analysis at study area intersections for the AM and PM peak hours analyzed. The table identifies intersection approaches, lane groups or movements that operate at LOS E or F or at a v/c ratio of 0.90 or above.

**TABLE B-2: EXISTING (2010) TRAFFIC CONDITIONS**

| Signalized Intersection | Approach[1] | AM Peak Hour | | | | PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS |
| Frankfort Street/Dover Street (E-W) @ Pearl Street (N-S) | EB | DefL | 1.05 | 109.9 | F | DefL | 1.05 | 93.9 | F |
| | | TR | 0.35 | 28.5 | C | TR | 0.37 | 28.7 | C |
| | WB | LTR | 0.61 | 33.7 | C | LTR | 0.21 | 25.4 | C |
| | NB | LTR | 0.61 | 33.7 | C | LTR | 0.79 | 19.3 | B |
| | SB | LTR | 0.82 | 19.3 | B | LTR | 0.54 | 12.1 | B |
| | Intersection | | | 34.2 | C | | | 30.5 | C |
| Peck Slip (E-W) @ Pearl Street (N-S) | WB | LR | 0.50 | 34.3 | C | LR | 0.74 | 46.7 | D |
| | NB | TR | 0.49 | 10.3 | B | TR | 0.55 | 11.1 | B |
| | SB | LT | 0.59 | 12.0 | B | LT | 0.41 | 9.6 | A |
| | Intersection | | | 13.0 | B | | | 15.3 | B |
| Beekman Street (E-W) @ Pearl Street (N-S) | WB | LR | 0.28 | 29.8 | C | LR | 0.42 | 32.5 | C |
| | NB | T | 0.40 | 8.3 | A | T | 0.36 | 7.9 | A |
| | SB | T | 0.41 | 8.3 | A | T | 0.27 | 7.2 | A |
| | Intersection | | | 9.5 | A | | | 10.1 | B |

| Unsignalized Intersection | Approach[1] | AM Peak Hour | | | | PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS |
| Peck Slip (E-W) @ South Street (N-S) | NB | LT | 0.03 | 9.1 | A | LT | 0.04 | 9.2 | A |
| | EB | LR | 0.10 | 13.2 | B | LR | 0.23 | 14.8 | B |
| | Intersection | | | | | Intersection | | | |

Notes:
1. EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound
2. L - Left, T- Through, R - Right, DefL - De Facto Left Turn
Congested movements are designated by shading.

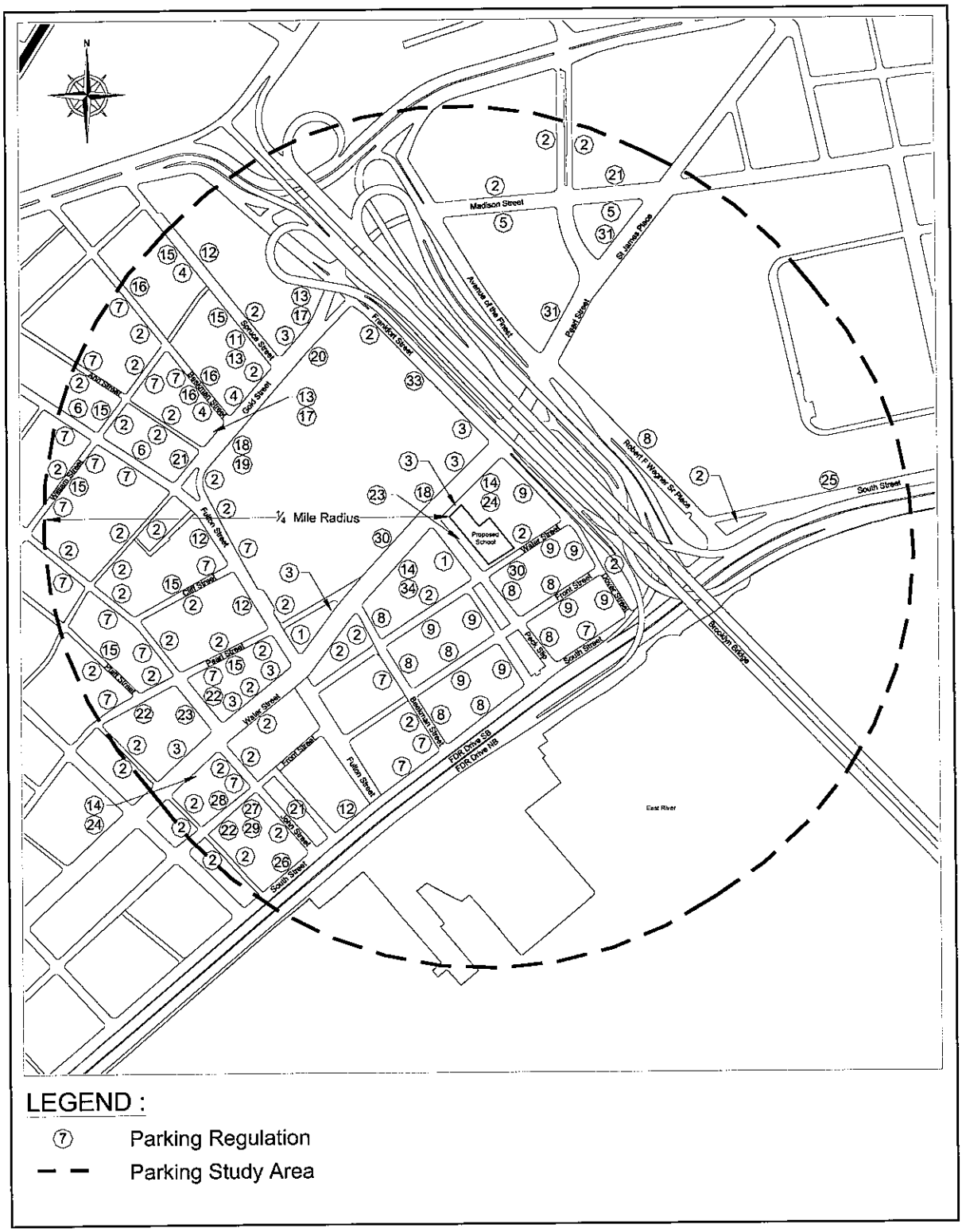
As shown in Table B-2, there is one intersection with an approach that exhibits a poor level of service. At the intersection of Frankfort Street/Dover Street and Pearl Street, the eastbound de facto left turn movement operates with a v/c ratio of 1.05 and a delay of 109.9 seconds (LOS F) during the AM peak hour. During the PM peak hour, the eastbound de facto left turn movement operates with a v/c ratio of 1.05 and a delay of 93.9 seconds (LOS F). All other analyzed intersection movements operate with a v/c ratio of less than 0.90 and LOS D or better during the peak hours analyzed.

### *Parking*

As shown in Figure B-8, alternate side of the street parking regulations apply on a few streets around the project site. As much of the area encompasses a commercial district with narrow street widths, parking is prohibited in most areas. Limited metered parking is provided on Pearl Street and Gold Street near the project site. Between Pearl Street and Water Street, parking on the north side of Peck Slip is reserved for authorized vehicles only.

The existing on-street parking supply provides approximately 205 and 64 parking spaces during the AM and midday periods, respectively. Overall, the average weekday utilization rates are very high, approximating 98 percent with four available spaces during both the AM and midday peak periods.

## FIGURE B-8: ON-STREET PARKING REGULATIONS



## FIGURE B-7: ON-STREET PARKING REGULATIONS (CONTINUED)

LEGEND:

① No Parking Anytime
② No Standing Anytime
③ No Standing - Bus Stop
④ No Standing Except Authorized Vehicles (Ambulette)
⑤ No Standing Anytime Except Vehicles With NYP License Plates
⑥ No Standing 7 AM - 7 PM Mon - Fri
⑦ No Standing Except Trucks Loading & Unloading 7 AM - 7 PM Mon - Fri
⑧ No Parking 11:30 AM - 1 PM Mon & Thu
⑨ No Parking 11:30 AM - 1 PM Tue & Fri
⑩ 1 Hour Parking 9 AM - 7 PM Except Sun
⑪ 2 Hour Parking 9 AM - 7 PM Except Sun
⑫ No Standing Anytime (Temporary Construction Regulation)
⑬ No Parking 7:30 AM - 8:00 AM Except Sun
⑭ 2 Hour Parking 9 AM - 10 PM Except Sun
⑮ No Standing 7 AM - 7 PM Mon - Fri Except Authorized Vehicles
⑯ No Standing Fire Zone
⑰ 1 Hour Parking 8 AM - 7 PM Except Sun
⑱ No Parking 8:00 AM - 8:30 AM Except Sun
⑲ 1 Hour Parking 8:30 AM - 7 PM Except Sun
⑳ No Standing Except City Owned Vehicles 7 AM - 7 PM Mon - Fri
㉑ No Standing Except Trucks Loading & Unloading 8 AM - 6 PM Mon - Fri
㉒ No Standing 7 AM - 6 PM Mon - Fri Except Authorized Vehicles
㉓ No Standing Anytime Except Authorized Vehicles
㉔ No Parking 8:30 AM - 9:00 AM Mon - Fri
㉕ No Parking 11:00 AM - 12:30 PM Mon & Thu
㉖ No Parking 8 AM - 9 PM Mon - Fri
㉗ No Standing 8 AM - 6 PM Mon - Fri Except Authorized Vehicles
㉘ No Standing Except Trucks Loading and Unloading 7 AM - 6 PM Mon - Fri
㉙ 3 Hour Parking 6 PM - 10 PM Mon - Fri, 10 AM - 10 PM Sat
㉚ No Standing 3 AM - 8 PM Except Sunday
㉛ No Parking 7 AM - 7 PM Except Vehicles With NYP License Plates
㉜ 2 Hour Parking 8:30 AM - 7 PM Except Sun
㉝ No Standing Except Trucks Loading and Unloading 10 am - 4 pm
㉞ No Parking 8 AM - 9 AM Except Sun

As shown in Figure B-9, there are numerous off-street public parking facilities within the study area, which provide a total of 2,872 parking spaces. Overall, the average weekday utilization rate during the AM period is 63 percent with 1,051 available spaces. During the midday, overall off-street parking utilization increases to 75 percent, with 711 available spaces. The off-street parking utilization rates are provided in Table B-3.

### *Public Transportation*

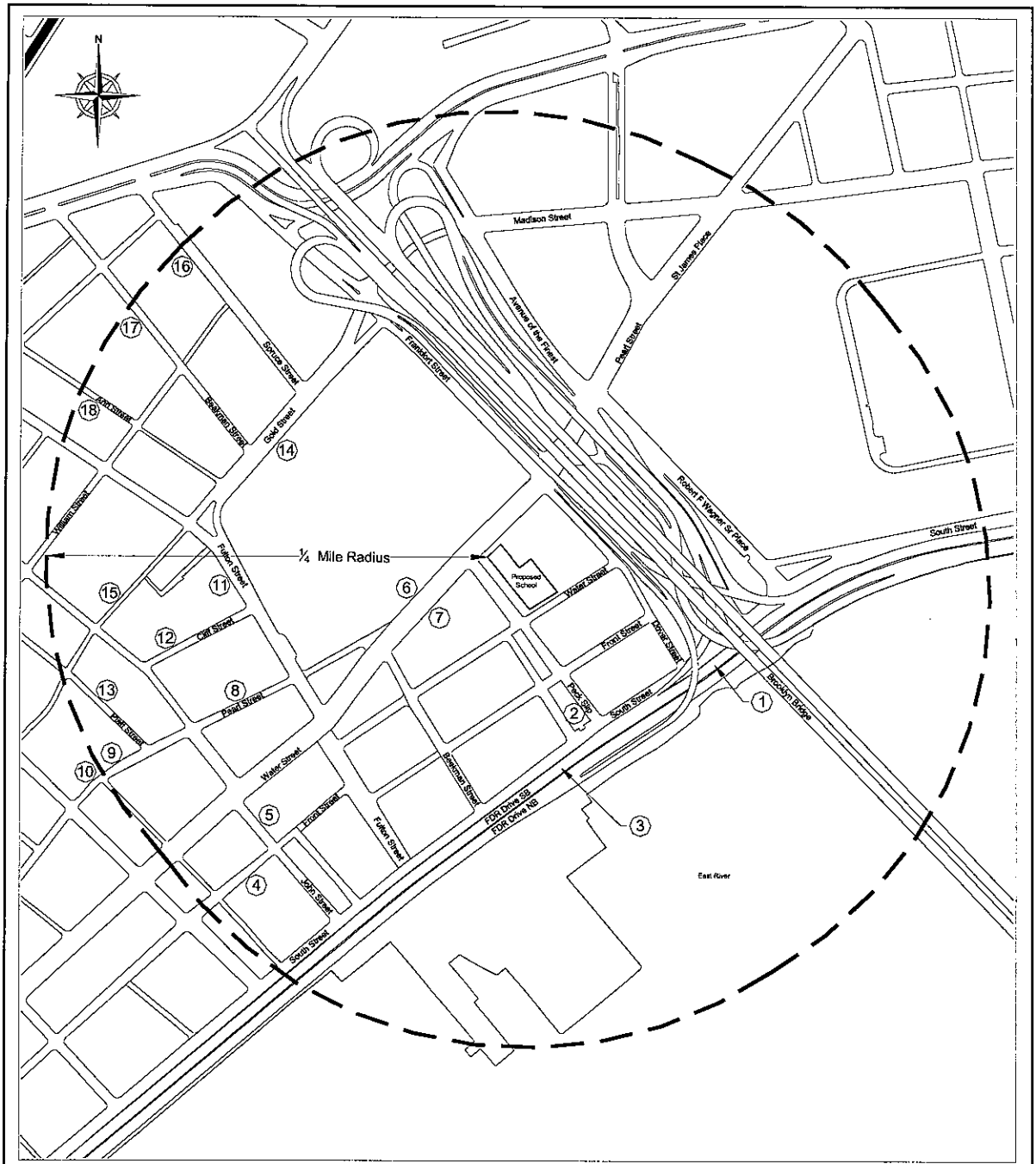
Public transportation services are illustrated in Figure B-10. The project area is well served by public transportation; three subway stations are within walking distance to the site and five bus routes provide service to the area.

The nearest subway station, located less than a ¼ mile from the project site, is the Fulton Street Station on the IRT Broadway/Seventh Avenue Line (No. 2 and 3 trains). The next two closest stations, both located less than a ½ mile away, are the Chambers Street Station on the BMT Jamaica Line (J and Z trains) and the Brooklyn Bridge-City Hall Station on the IRT Lexington Avenue Line (No. 4, 5 and 6 trains). The No. 2 subway line provides express service between Wakefield-241st Street/White Plains Road in the Bronx and Brooklyn College-Flatbush Avenue in Brooklyn. The No. 3 subway line provides express service between Harlem-148th Street in Manhattan and New Lots Avenue in Brooklyn. The J and Z subway lines provide service between Jamaica Center (Parsons/Archer) in Queens, and Broad Street in Manhattan (skip-stop service is provided during weekday rush hours). The No. 4 subway line provides express service between Woodlawn/Jerome Avenue in the Bronx and Crown Heights-Utica Avenue/Eastern Parkway in Brooklyn. During the daytime on weekdays, the No. 5 subway line provides express service between either Dyre Avenue or 238 Street-Nereid Avenue in the Bronx and Flatbush Avenue-Brooklyn College in Brooklyn. The No. 6 subway line operates between Pelham Bay Park/Bruckner Expressway in the Bronx and Brooklyn Bridge/City Hall in Manhattan, making all local stops.

There are five bus lines providing service within a ½-mile radius of the project site; all of which are operated by New York City Transit (NYCT). The following provides a brief description of the two routes within the study area which are most likely to attract demand from the proposed project:

- M15 This route operates along Pearl Street and provides service between Second Avenue/East 126th Street and South Ferry in Manhattan at all times. Weekday service on this route is provided every six to seven minutes during the AM and PM peak hours.
- M22 Operating along Frankfort Street near the study area, the M22 provides service between Battery Park City and Grand Street/FDR Drive in Manhattan. Weekday service frequencies for buses on this route are every seven minutes during the AM peak hour and every eleven minutes during the PM peak hour.

## FIGURE B-9: OFF-STREET PARKING FACILITY LOCATIONS




LEGEND :

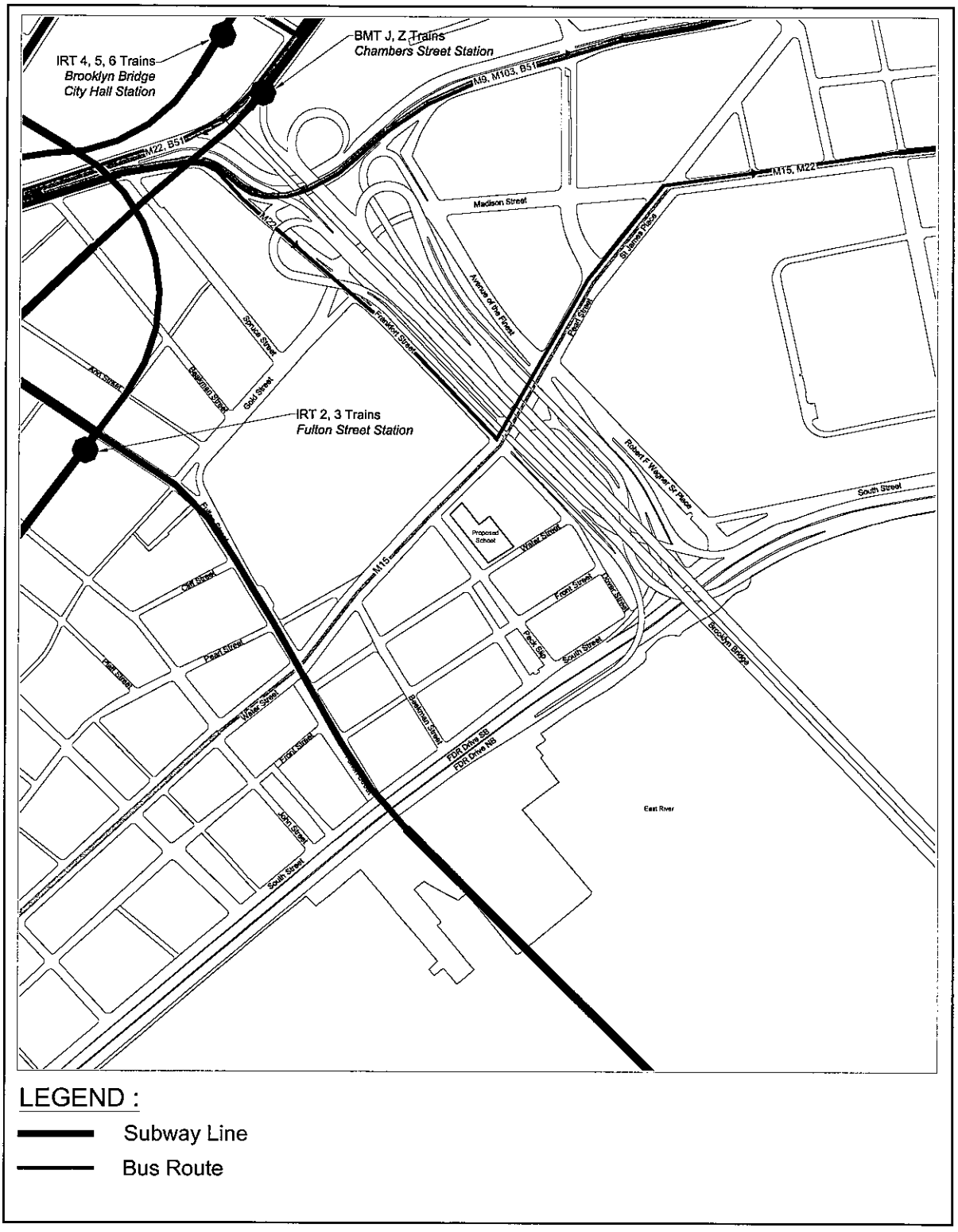
⑦ Off-Street Parking Facility

— — Parking Study Area

## TABLE B-3: OFF-STREET PARKING FACILITY LOCATIONS

| No. | Address | License Number | Licensed Capacity | Weekday AM | | | Weekday Midday | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Utilization Rate | Demand | Available Capacity | Utilization Rate | Demand | Available Capacity |
| 1 | 179 South Street | (Closed) | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| 2 | 70 Peck Slip | 1213660 | 58 | 29% | 17 | 41 | 57% | 33 | 25 |
| 3 | 105 South Street | 1213663 | 242 | 30% | 73 | 169 | 70% | 169 | 73 |
| 4 | 167-175 Front Street | 926763 | 72 | 70% | 50 | 22 | 80% | 58 | 14 |
| 5 | 153 John Street | 1099611 | 99 | 80% | 79 | 20 | 100% | 99 | 0 |
| 6 | 299 Pearl Street | 1343881 | 661 | 60% | 397 | 264 | 60% | 397 | 264 |
| 7 | 288-302 Pearl Street | 1202411 | 286 | 85% | 243 | 43 | 90% | 257 | 29 |
| 8 | 243 Pearl Street | 1068100 | 92 | 75% | 69 | 23 | 85% | 78 | 14 |
| 9 | 217 Pearl Street | 1310483 | 17 | 65% | 11 | 6 | 85% | 14 | 3 |
| 10 | 201 Pearl Street | 1198215 | 98 | 80% | 78 | 20 | 100% | 98 | 0 |
| 11 | 56 Fulton Street | 1098937 | 280 | 70% | 196 | 84 | 85% | 238 | 42 |
| 12 | 19 Cliff Street | 1078641 | 87 | 70% | 61 | 26 | 80% | 70 | 17 |
| 13 | 15 Platt Street | 1306379 | 47 | 80% | 38 | 9 | 90% | 42 | 5 |
| 14 | 80 Gold Street | - | 351 | 70% | 246 | 105 | 80% | 281 | 70 |
| 15 | 35 Gold Street | 1192299 | 32 | 100% | 32 | 0 | 100% | 32 | 0 |
| 16 | 2 Spruce Street | 1182276 | 25 | 75% | 19 | 6 | 100% | 25 | 0 |
| 17 | 25-27 Beekman Street | 367147 | 149 | 50% | 75 | 75 | 70% | 104 | 45 |
| 18 | 57 Ann Street | 1154973 | 276 | 50% | 138 | 138 | 60% | 166 | 110 |
| | | Total | 2872 | 63% | 1822 | 1051 | 75% | 2161 | 711 |

## FIGURE B-10: TRANSIT SERVICES



### *Pedestrians*

For a school site, the *CEQR Technical Manual* indicates that the pedestrian study area should include all pedestrian facilities that are expected to absorb 200 or more new trips in the peak hour. The analysis of pedestrian flow conditions therefore focuses on those sidewalks in the immediate vicinity of the site, which are expected to be used by concentrations of students, parents, and staff as they enter and exit the proposed school and are most likely to approach or exceed the *CEQR Technical Manual* threshold criteria. The primary pedestrian facilities most affected by project demand would be the sidewalks and crosswalks immediately adjacent to the site. In addition, an assessment of pedestrian safety conditions on principal pedestrian access paths to and from the project site is also required for a new or expanded school.

Pedestrian flow conditions were analyzed using the *Highway Capacity Manual (HCM)* methodology, and consider conditions during the peak 15-minute period of the AM and PM peak hours. For sidewalks, conditions are measured in terms of pedestrian flow rate per foot of width per minute (PFM) for that portion of the sidewalk that can be effectively used for pedestrian flow. The sidewalk analyses determine both the average flow rate LOS as well as the platoon-adjusted LOS, which more accurately estimates the dynamics of walking. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where traffic conditions required them to wait. Table B-4 shows the flow rate/LOS relationships using the HCM methodology for sidewalks.

**TABLE B-4: SIDEWALK LEVEL OF SERVICE (LOS) CRITERIA**

| Level of Service | Pedestrians/Foot/Minutes (PFM) | | Comments |
|---|---|---|---|
| | Average Flow | Platoon-Adjusted | |
| A | ≤ 5 | ≤ 0.5 | Unrestricted flow |
| B | > 5–7 | > 0.5–3 | Slightly restricted flow |
| C | > 7–10 | > 3–6 | Restricted, but fluid flow |
| D | > 10–15 | > 6–11 | Restricted flow that requires continuous alteration of walking stride and direction |
| E | > 15–23 | > 11–18 | Severely restricted flow |
| F | variable | > 18 | Flows that exceed capacity where shuffling and queuing are evident, no reverse movement is possible |

Source: 2000 Highway Capacity Manual

The evaluation of crosswalks is more complicated than sidewalks. Crosswalks cannot be treated as sidewalks because they involve pedestrians crossing the street and others queued waiting for the signal to change. To effectively evaluate crosswalks, the analysis compares available time and space with pedestrian demand, measured in terms of square feet of circulation space per pedestrian, with LOS A equating to 60 or more square feet per pedestrian (SF/ped), LOS B ranging from 40-60 SF/ped, LOS C from 24 to 40 SF/ped, LOS D from 15 to 24 SF/ped, LOS E from 8 to 15 SF/ped and LOS F less than 8 SF/ped. Similar to the methodology used for sidewalks with the representation of "platooning," the evaluation of crosswalks also considers the effect of maximum surge conditions. This is the point in which the maximum number of pedestrians is in the crosswalk and usually occurs when the lead pedestrians reach the opposite corner of the street.

The main entrance to the proposed school is assumed to be located on Peck Slip and school bus drop-offs and pick-ups of students are assumed to occur there. Pedestrian demand for the school would therefore be expected to distribute from the north sidewalk of Peck Slip to the areas served by the school. The analysis of pedestrian conditions was limited to the sidewalks and crosswalks adjacent to the project site where new project-generated pedestrian trips would be most concentrated. Figure B-11 shows existing peak 15-minute pedestrian volumes in these areas during the AM and PM peak hours and Table B-5 shows existing levels of service at sidewalks and crosswalks. All of the analyzed pedestrian elements currently operate under good conditions (LOS A and LOS B).

The most recent available accident summary data within the study area were obtained from NYCDOT for the three-year period spanning 2007 to 2009. Figure B-12 shows the eight intersections along pedestrian access paths to and from the project site for which accident data were examined to identify potential safety problems. Table B-6 provides a summary of the accidents reported at these locations. Accidents involving pedestrians/bicyclists occurred at six of these intersections.

According to the *CEQR Technical Manual*, a high accident location is one where there were five or more pedestrian accidents in any year in the most recent three-year period. Of the eight intersections analyzed, none experienced five or more pedestrian/bicycle-related accidents in any one year. For this reason, none of the study area intersections are considered to be high accident locations.

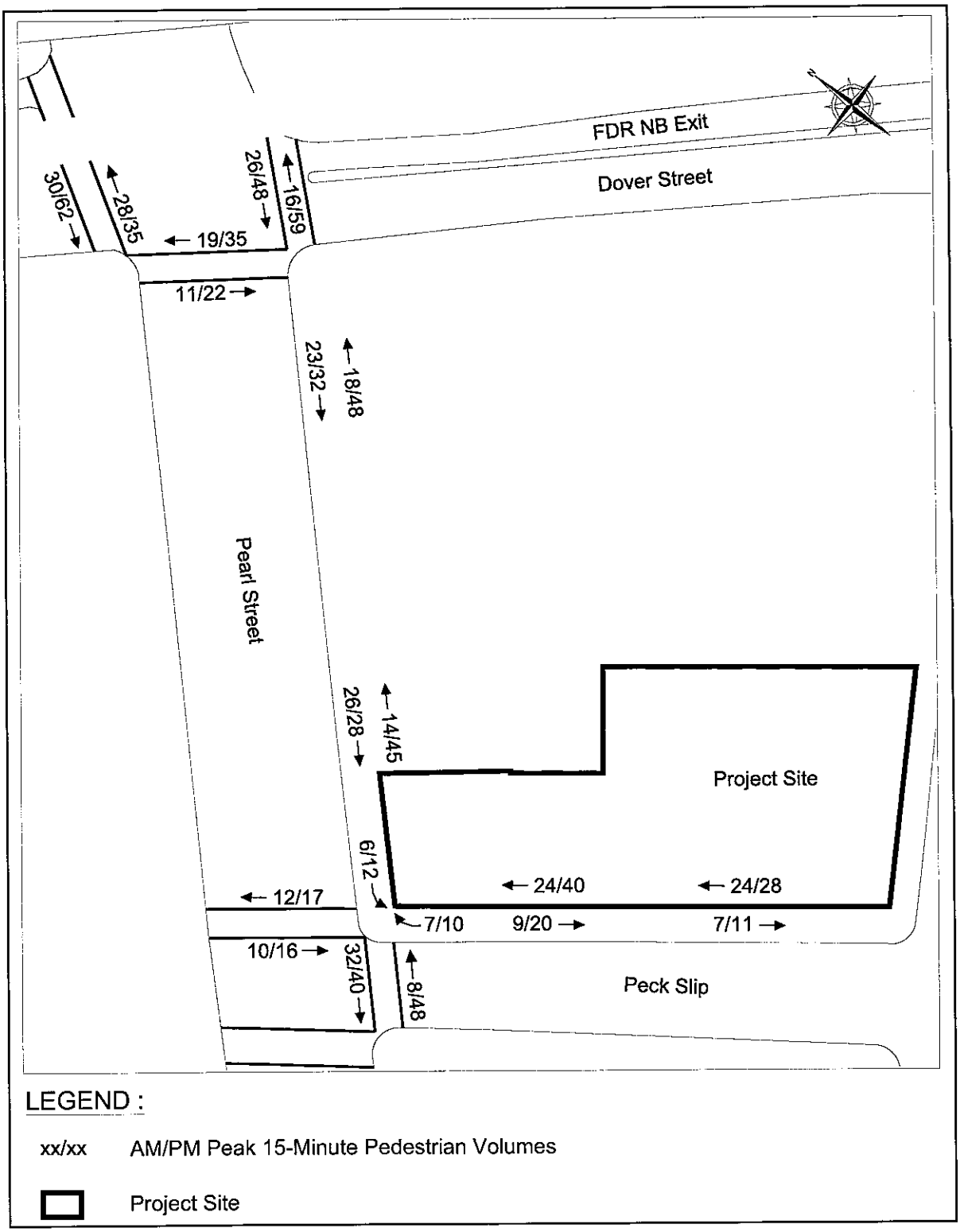
### B.13.2. 2015 Future No Action Conditions

Under Future No-Action Conditions, the existing post office would be removed and it is assumed that the project site would be redeveloped with an 8-story, mixed-use residential building containing a USPS facility on the ground floor. As this scale of operation would be similar to existing conditions, no change in USPS-related transportation demand is expected to occur under No Action conditions. The building's residential component would consist of approximately 138 dwelling units occupying the 2nd through 8th floors of the building with a residential entrance and lobby on the ground floor along Peck Slip. The majority of trips generated by this development would not occur during the peak hours described for the school, and therefore are not included in the 2015 No Action analysis.

Between 2010 and 2015, transportation demands in the study area are anticipated to increase due to known development projects in the area and background growth. Over this period, it is expected that background growth would increase traffic, parking, and pedestrian volumes by approximately 0.5 percent per year (or approximately 2 percent over the four-year period). Discussions with the Manhattan office of the New York City Department of City Planning indicate that there are four developments anticipated to be built in the surrounding area by 2015. Three of these are not anticipated to generate considerable vehicle traffic and were assumed to be included as part of the background growth rate. They include an 8-story, 25,000-square-foot mixed-use development at 254 Front Street, a 56-unit residential development at 40 Gold Street, and Peck Slip Park at the site of the existing parking facility on Peck Slip between Water and South Streets. However, traffic volumes associated with one development project described below were added to develop 2015 No Action traffic volumes:

- The NYCEDC East River Waterfront Esplanade and Piers Project will redevelop the Lower Manhattan waterfront and create a bikeway/walkway connecting to the Manhattan Greenway, rehabilitate Piers 15 and 35 for public use, and provide various aesthetic amenities along the waterfront. Phase I of the project is expected to be completed in 2011.

## FIGURE B-11: 2010 EXISTING PEDESTRIAN VOLUMES



## TABLE B-5: 2010 EXISTING PEDESTRIAN CONDITIONS

**SIDEWALK ANALYSIS**

| Blockface | Side of Street | Effective Sidewalk Width[1] | Peak 15 Minute Volume AM | Peak 15 Minute Volume PM | Persons per Foot per Minute (PFM) AM | Persons per Foot per Minute (PFM) PM | Average Level of Service AM | Average Level of Service PM | Platoon Conditions Level of Service AM | Platoon Conditions Level of Service PM |
|---|---|---|---|---|---|---|---|---|---|---|
| Pearl Street (south of Dover Street) | East | 4.3 | 41 | 80 | 0.6 | 1.2 | A | A | B | B |
| Peck Slip (east of Pearl Street) | North | 8.5 | 33 | 60 | 0.3 | 0.5 | A | A | A | A |
| Pearl Street (north of Peck Slip) | East | 4.3 | 40 | 74 | 0.6 | 1.1 | A | A | B | B |
| Peck Slip (west of Water Street) | North | 8.6 | 31 | 39 | 0.2 | 0.3 | A | A | A | A |
| Water Street (north of Peck Slip) | West | 3.2 | 13 | 21 | 0.3 | 0.4 | A | A | A | A |

**STREET CORNER ANALYSIS**

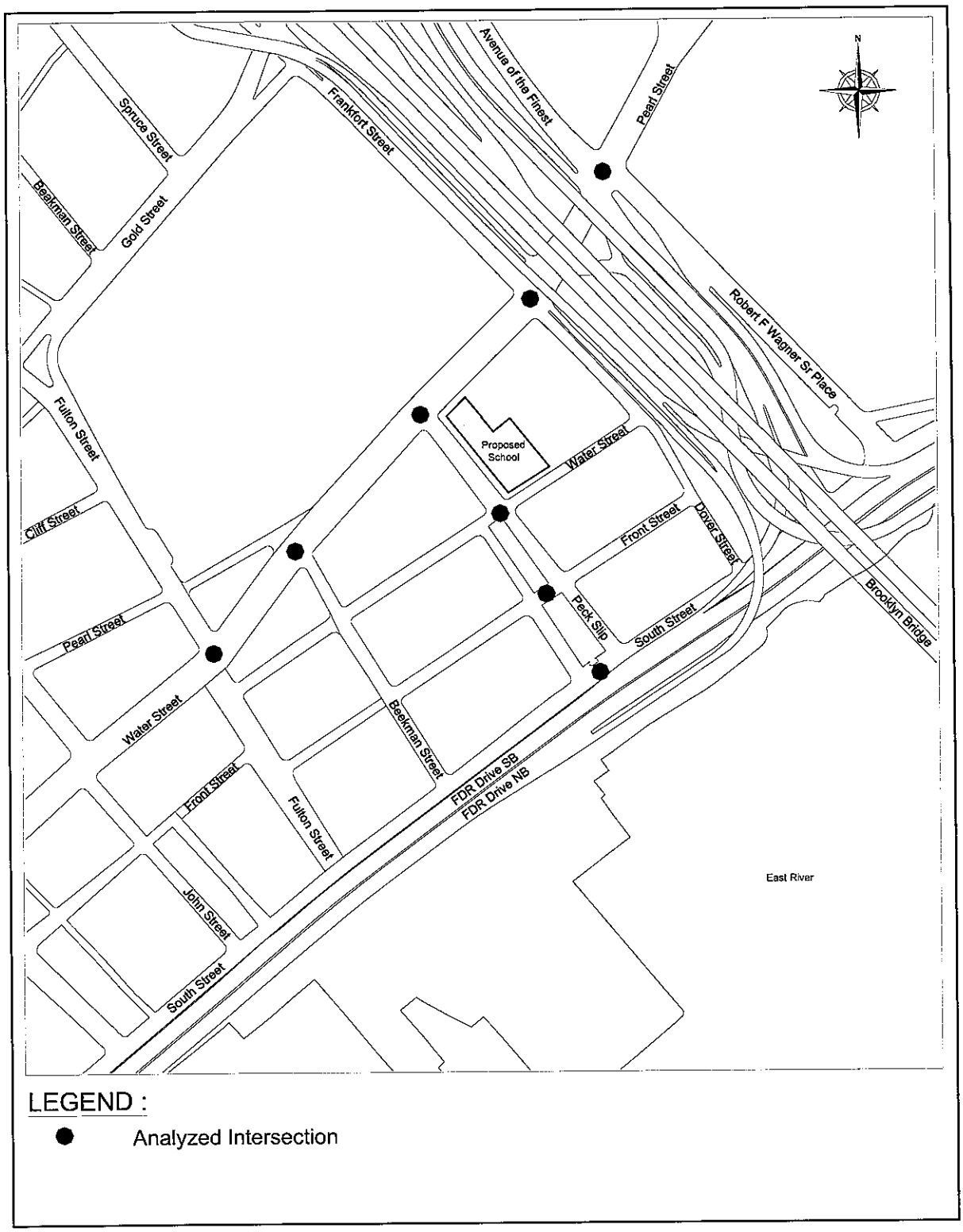
| Intersection | Corner | Sidewalk Dimensions. (ft) | Curb Radii (ft) | Average Pedestrian Space (SF/ped) AM | Average Pedestrian Space (SF/ped) PM | Level of Service AM | Level of Service PM |
|---|---|---|---|---|---|---|---|
| Peck Slip (E-W) @ Pearl Street (N-S) | NE | 14.9 x 12.5 | 9 | 498 | 259 | A | A |

**CROSSWALK ANALYSIS**

| Intersection | Crosswalk | Length (ft) | Width (ft) | Average Pedestrian Space (SF/ped) AM | Average Pedestrian Space (SF/ped) PM | Level of Service AM | Level of Service PM | Maximum Surge Pedestrian Space (SF/ped) AM | Maximum Surge Pedestrian Space (SF/ped) PM | Maximum Surge Level of Service AM | Maximum Surge Level of Service PM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dover Street (E-W) @ | East | 48 | 11.5 | 308 | 119 | A | A | 213 | 83 | A | A |
| Pearl Street (N-S) | West | 48 | 11.5 | 198 | 117 | A | A | 154 | 92 | A | A |
| | South | 60 | 14.2 | 185 | 97 | A | A | 292 | 154 | A | A |
| Peck Slip (E-W) @ | East | 35 | 11.4 | 327 | 145 | A | A | 184 | 83 | A | A |
| Pearl Street (N-S) | North | 58 | 11.9 | 186 | 120 | A | A | 320 | 213 | A | A |

Note:
1. Total sidewalk width minus the sum of widths and shy distances from obstructions.

## FIGURE B-12: PEDESTRIAN ACCIDENT STUDY LOCATIONS



## TABLE B-6: SUMMARY OF ACCIDENT DATA

| Intersection | Signalized | Total Accidents | Pedestrian Fatalities | Involving Pedestrians/ Bicyclists | | |
|---|---|---|---|---|---|---|
| | | | | 2007 | 2008 | 2009 |
| Pearl Street @ Avenue of the Finest/Robert F. Wagner Sr. Place | Yes | 16 | - | 1 | - | - |
| Pearl Street @ Dover Street/Frankfort Street | Yes | 24 | - | - | 3 | 1 |
| Pearl Street @ Peck Slip | Yes | 4 | - | - | - | - |
| Pearl Street @ Beekman Street | Yes | 2 | - | - | 1 | - |
| Pearl Street @ Fulton Street | Yes | 7 | - | 2 | 1 | 2 |
| Water Street @ Peck Slip | No | 2 | - | - | 2 | - |
| Front Street @ Peck Slip | No | 2 | - | - | - | - |
| South Street @ Peck Slip | No | 4 | - | 1 | - | - |

Source: NYCDOT for the three-year period spanning 2007 to 2009.

### *Vehicular Traffic*

Figure B-13 shows the projected 2015 No Action traffic volumes during the AM and PM peak hours within the study area. Table B-7 shows the results of the No Action conditions capacity analysis at the study area intersections. As shown in the table, one additional intersection is expected to have a congested movement under No Action conditions. Intersection movements identified as congested under existing traffic conditions will worsen due to increased traffic. At the intersection of Frankfort Street/Dover Street and Pearl Street, the eastbound de facto left turn movement will operate with a v/c ratio of 1.08 and a delay of 117.4 seconds (LOS F) during the AM peak hour. During the PM peak hour, the eastbound de facto left turn movement will operate with a v/c ratio of 1.08 and a delay of 102.5 seconds (LOS F). In addition during the PM peak hour, the westbound approach of the Peck Slip at Pearl Street intersection will operate with a delay of 57.5 seconds (LOS E).

### *Parking*

In 2015 No Action conditions, four new developments are anticipated, two of which are expected to provide parking on-site. The other two projects, Peck Slip Park and the NYCEDC East River Waterfront Esplanade and Piers Project, would include the removal of two public parking lots located within the parking study area. As part of the No Action parking analysis, the displaced demand for these parking lots would be expected to use off-street facilities elsewhere within the study area. In addition, a background growth factor of 0.5 percent per year was applied to account for general background growth in on-street parking demand within the study area.

Consequently, on-street parking utilization levels within the study area would increase under future 2015 conditions without the proposed project. Overall, the utilization levels within a ¼-mile radius of the site are expected to reach 100 percent in both the AM and midday periods with no available spaces. Utilization levels for off-street parking facilities are expected to reach 72 percent in the AM peak period with 713 available spaces, and 86 percent in the midday with 370 available spaces.

### *Pedestrians*

In the future without the proposed project, pedestrian volumes are assumed to increase by the 0.5 percent annual background growth factor, accounting for general growth within the study area. Figure B-14 shows the 2015 No Action pedestrian volumes at the analyzed locations and Table B-8 shows the 2015 No Action levels of service at the analyzed sidewalks and crosswalks. All pedestrian elements would continue to operate at LOS A or LOS B.

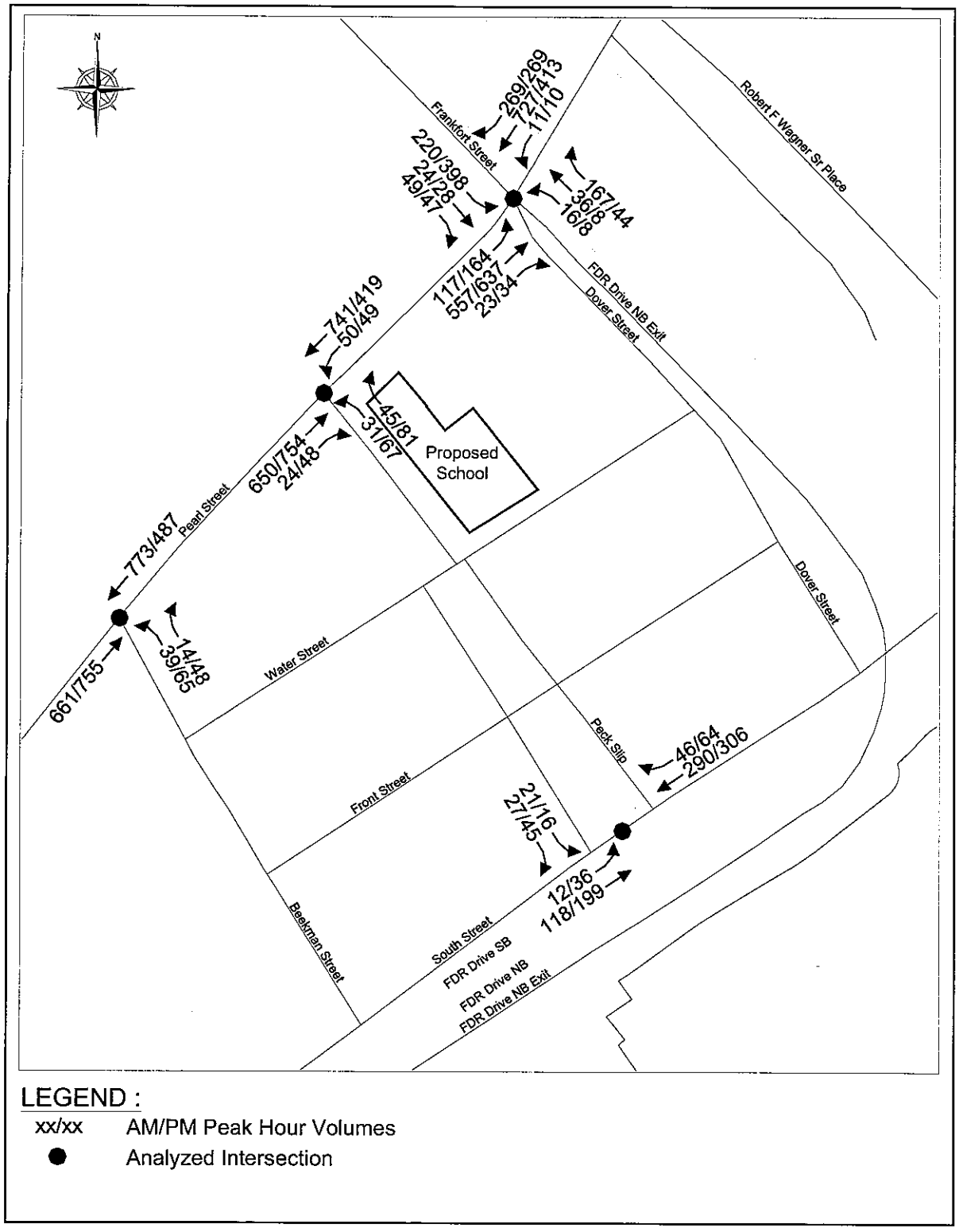
## B.13.3. 2015 Future with the Proposed Action Conditions

The proposed new school is projected to accommodate approximately 480 students as well as 48 faculty and staff. The new school would be expected to primarily attract students in Community School District (CSD) 2 in the area surrounding the project site.

### *Trip Generation*

As a worst-case trip generation scenario, it was assumed that all 480 students would be present during the school day and that all of the students would arrive and leave during the AM and PM peak hours, respectively. It was also assumed that 70 percent of the faculty and staff would arrive during the AM peak hour and 90 percent would leave during the PM peak hour.

## FIGURE B-13: 2015 NO ACTION PEAK HOUR TRAFFIC VOLUMES



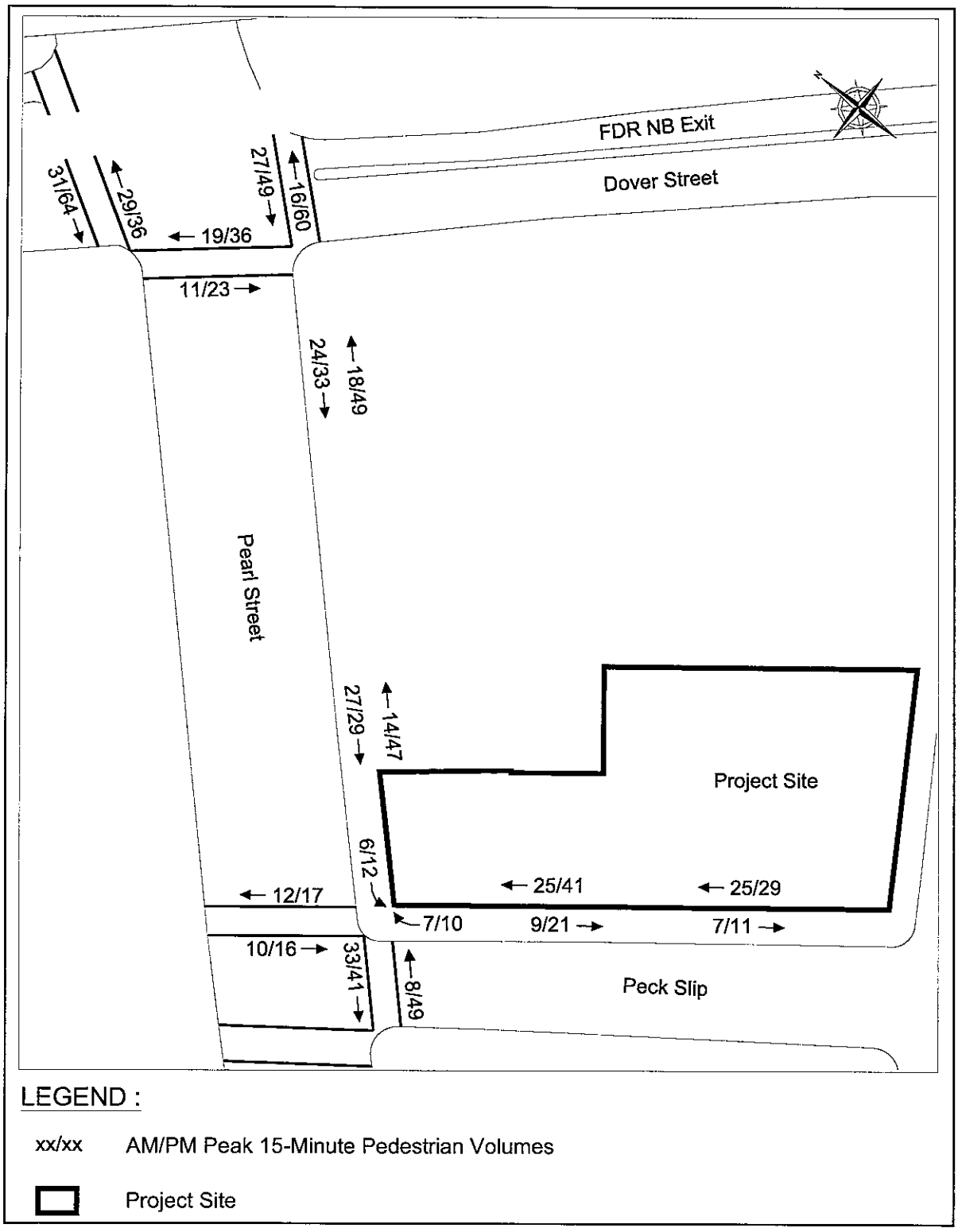
## TABLE B-7: 2015 NO ACTION TRAFFIC CONDITIONS

| Signalized Intersection | Approach[1] | AM Peak Hour | | | | PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS |
| Frankfort Street/Dover Street (E-W) @ Pearl Street (N-S) | EB | DefL | 1.08 | 117.4 | F | DefL | 1.08 | 102.5 | F |
| | | TR | 0.32 | 28.1 | C | TR | 0.32 | 27.9 | C |
| | WB | LTR | 0.63 | 34.2 | C | LTR | 0.22 | 25.4 | C |
| | NB | LTR | 0.87 | 26.0 | C | LTR | 0.82 | 21.0 | C |
| | SB | LTR | 0.85 | 20.8 | C | LTR | 0.55 | 12.3 | B |
| | Intersection | | | 32.1 | C | | | 32.7 | C |
| Peck Slip (E-W) @ Pearl Street (N-S) | WB | LR | 0.45 | 32.6 | C | LR | 0.85 | 57.5 | E |
| | NB | TR | 0.50 | 10.5 | B | TR | 0.56 | 11.3 | B |
| | SB | LT | 0.63 | 12.7 | B | LT | 0.40 | 9.5 | A |
| | Intersection | | | 13.1 | B | | | 17.5 | B |
| Beekman Street (E-W) @ Pearl Street (N-S) | WB | LR | 0.22 | 28.7 | C | LR | 0.50 | 34.6 | C |
| | NB | T | 0.42 | 8.5 | A | T | 0.37 | 8.0 | A |
| | SB | T | 0.41 | 8.4 | A | T | 0.28 | 7.3 | A |
| | Intersection | | | 9.3 | A | | | 10.7 | B |

| Unsignalized Intersection | Approach[1] | AM Peak Hour | | | | PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS |
| Peck Slip (E-W) @ South Street (N-S) | NB | LT | 0.02 | 9.0 | A | LT | 0.05 | 9.3 | A |
| | EB | LR | 0.14 | 13.2 | B | LR | 0.18 | 13.8 | B |
| | Intersection | | | | | Intersection | | | |

Notes:
1. EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound
2. L - Left, T- Through, R - Right, DefL - De Facto Left Turn
Congested movements are designated by shading

## FIGURE B-14: 2015 NO ACTION PEDESTRIAN VOLUMES



## TABLE B-8: 2015 NO ACTION PEDESTRIAN CONDITIONS

**SIDEWALK ANALYSIS**

| Blockface | Side of Street | Effective Sidewalk Width[1] | Peak 15 Minute Volume | | Persons per Foot per Minute (PFM) | | Average Level of Service | | Platoon Conditions Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM | PM | AM | PM | AM | PM | AM | PM |
| Pearl Street (south of Dover Street) | East | 4.3 | 42 | 82 | 0.7 | 1.3 | A | A | B | B |
| Peck Slip (east of Pearl Street) | North | 8.5 | 34 | 62 | 0.3 | 0.5 | A | A | A | A |
| Pearl Street (north of Peck Slip) | East | 4.3 | 41 | 76 | 0.6 | 1.2 | A | A | B | B |
| Peck Slip (west of Water Street) | North | 8.6 | 32 | 40 | 0.2 | 0.3 | A | A | A | A |
| Water Street (north of Peck Slip) | West | 3.2 | 13 | 22 | 0.3 | 0.4 | A | A | A | A |

**STREET CORNER ANALYSIS**

| Intersection | Corner | Sidewalk Dimensions (ft) | Curb Radii (ft) | Average Pedestrian Space (SF/ped) | | Level of Service | |
|---|---|---|---|---|---|---|---|
| | | | | AM | PM | AM | PM |
| Peck Slip (E-W) @ Pearl Street (N-S) | NE | 14.9 x 12.5 | 9 | 485 | 253 | A | A |

**CROSSWALK ANALYSIS**

| Intersection | Crosswalk | Length (ft) | Width (ft) | Average Pedestrian Space (SF/ped) | | Level of Service | | Maximum Surge Pedestrian Space (SF/ped) | | Maximum Surge Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AM | PM | AM | PM | AM | PM | AM | PM |
| Dover Street (E-W) @ Pearl Street (N-S) | East | 48 | 11.5 | 300 | 116 | A | A | 208 | 81 | A | A |
| | West | 48 | 11.5 | 192 | 113 | A | A | 150 | 89 | A | A |
| | South | 60 | 14.2 | 180 | 94 | A | A | 285 | 150 | A | A |
| Peck Slip (E-W) @ Pearl Street (N-S) | East | 35 | 11.4 | 318 | 142 | A | A | 179 | 81 | A | A |
| | North | 58 | 11.9 | 182 | 115 | A | A | 312 | 208 | A | A |

Notes:
1. Total sidewalk width minus the sum of widths and shy distances from obstructions.

Due to the dense level of residential development in the surrounding areas, it was assumed that the principal travel mode by new students would be walking. During the AM and PM peak hours, it was estimated that 88 percent of the students would walk to school, eight percent would be dropped off and picked up in private autos, and four percent would take school buses or vans. During both peak hours, it was assumed that half of the elementary students walking to school would be accompanied by parents/guardians and that these adults would walk with an average of two students each.

Based on data from the 2000 US Census, it was estimated that the majority of trips (approximately 49 percent) generated by the faculty and staff would be by subway. It is expected that 20 percent would travel by private auto, 17 percent would use NYCT buses, 13 percent would walk, and one percent would be dropped off and picked up during the AM and PM peak hours. Transportation planning assumptions for the proposed project are presented in Table B-9.

Based on these assumptions, trip generation characteristics were developed. Table B-10 presents the weekday peak hour person-trip and vehicle-trip forecasts for the proposed project. As shown in Table B-10, the project is expected to generate a total of approximately 68 and 64 vehicle trips in the AM and PM peak hours, respectively.

### *Trip Assignment*

Automobile trips to the new school were assigned to major corridors leading to and from the site. Teachers and staff at the school would be expected to reside in various parts of New York City and were primarily assigned to approach the site using the FDR Drive and the Brooklyn Bridge. Teachers and staff would seek parking on their way to the site. Drop-offs and pick-ups by auto and school bus generate the most vehicle trips since they involve both inbound and outbound trips. These trips were assigned to the site from the local area, with student drop-offs and pick-ups utilizing the north curbface on Peck Slip adjoining the proposed main entrance of the school.

### *Vehicular Traffic*

Figure B-7 shows the incremental traffic generated by the proposed project at the study intersections during the AM and PM peak hours. Figure B-16 shows the Build condition traffic network during these peak hours, which is a combination of the incremental project-generated traffic and future traffic volumes without the project.

Based on the thresholds established for signalized intersections in the *CEQR Technical Manual*, a traffic impact would occur if a No Build LOS A, B or C deteriorates to unacceptable mid-LOS D, or a LOS E or F in the future Build condition. The *CEQR Technical Manual* further states that for a No Build mid-LOS D, an increase of five or more seconds of delay in a lane group in the Build condition should be considered significant. For No Build LOS E, an increase in delay of four seconds should be considered significant. For No Build LOS F, three seconds of delay should be considered significant.

Table B-11 presents the resulting the traffic analysis under the Build condition and compares this to No Build conditions. The table highlights any significant traffic impacts as compared to No Action conditions based on the impact criteria described above. In the future with the proposed project, there would be one intersection with significant impacts during the AM and PM peak hours. The "Improvements" section below provides a discussion of recommended traffic improvement measures that would eliminate the predicted impacts.

## TABLE B-9: TRANSPORTATION PLANNING ASSUMPTIONS

| | (Grades K-5) Students | | Faculty/Staff | |
|---|---|---|---|---|
| **Project Components:** | 480 | | 48 | |
| | (1) | | | |
| **Attendance Rate:** | 100% | | - | |
| **Daily Trip Generation:** | 2.0 per student | | 2.0 per employee | |
| **Temporal Distribution:** | (2) | | (2) | |
| AM | 50% | | 50% | |
| PM | 48% | | 48% | |
| **In/Out Splits:** | **In** | **Out** | **In** | **Out** |
| AM | 100% | 0% | 100% | 0% |
| PM | 0% | 100% | 0% | 100% |
| | (2) | | (3) | |
| **Modal Splits:** | **AM** | **PM** | **AM/PM** | |
| Auto | 0% | 0% | 20% | |
| Dropoff/Pickup | 8% | 8% | 1% | |
| Walk | 88% | 88% | 13% | |
| Subway | 0% | 0% | 49% | |
| Bus (Transit) | 0% | 0% | 17% | |
| School Bus/Van | 4% | 4% | 0% | |
| | 100% | 100% | 100% | |
| **Vehicle Occupancy:** | (2) | | (3) | |
| Auto | 1.7 | | 1.16 | |
| Dropoff/Pickup | 1.4 | | - | |
| School Bus/Van | 15 | | - | |
| **Daily Truck Trip Generation:** | | | | |
| | (2) | | | |
| | 0.06 per student | | | |
| | (2) | | | |
| AM | 9.6% | | | |
| PM | 1.0% | | | |
| | **In** | **Out** | | |
| | 50% | 50% | | |

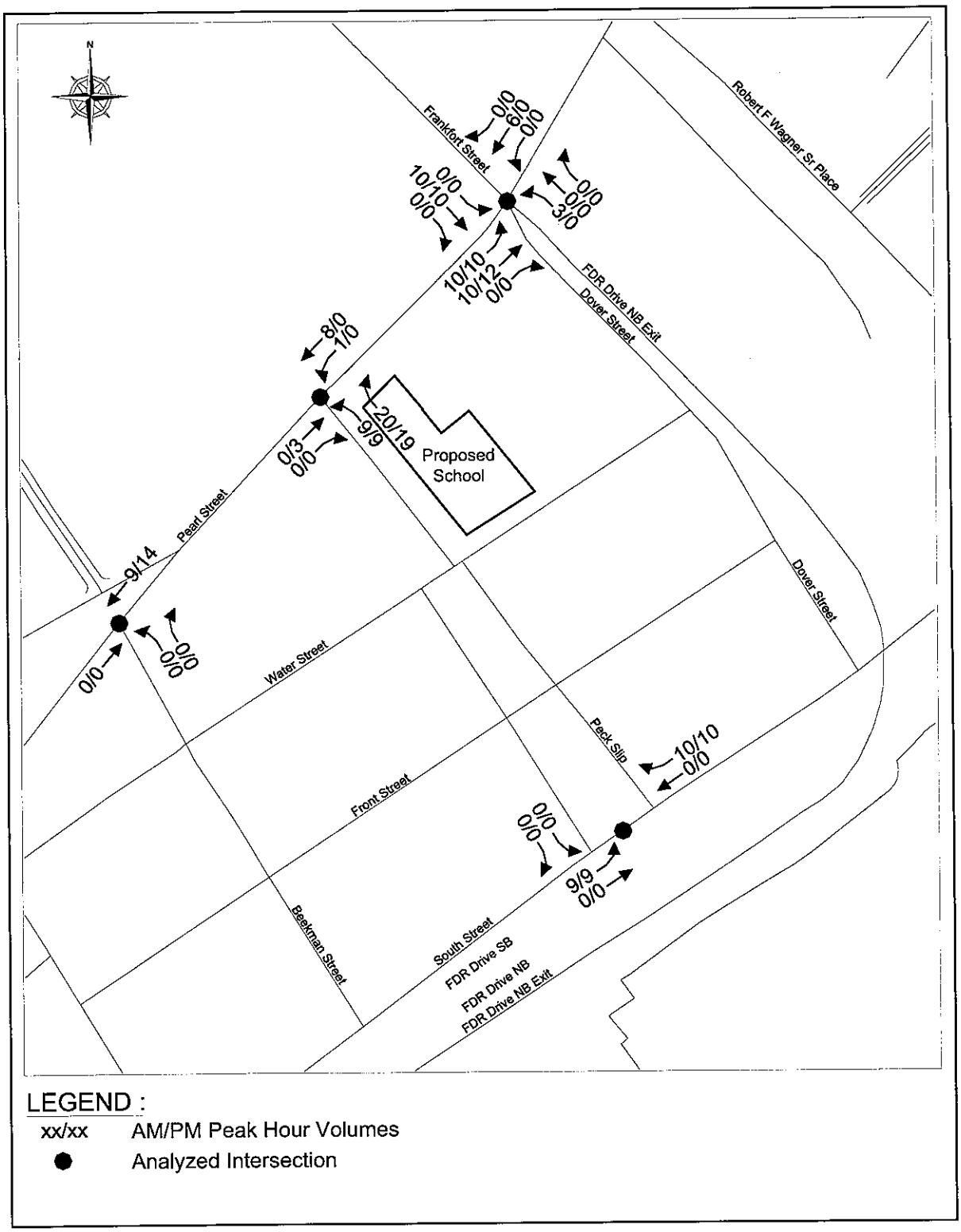
Sources/Notes:
1. The worst-case scenario for trip generation does not consider absentees.
2. Western Rail Yard FEIS, 2009.
3. Assumption based on 2000 US Census data for Manhattan, Census Tracts 15.01 and 15.02.

## TABLE B-10: 2015 TRIP GENERATION- PROPOSED SCHOOL

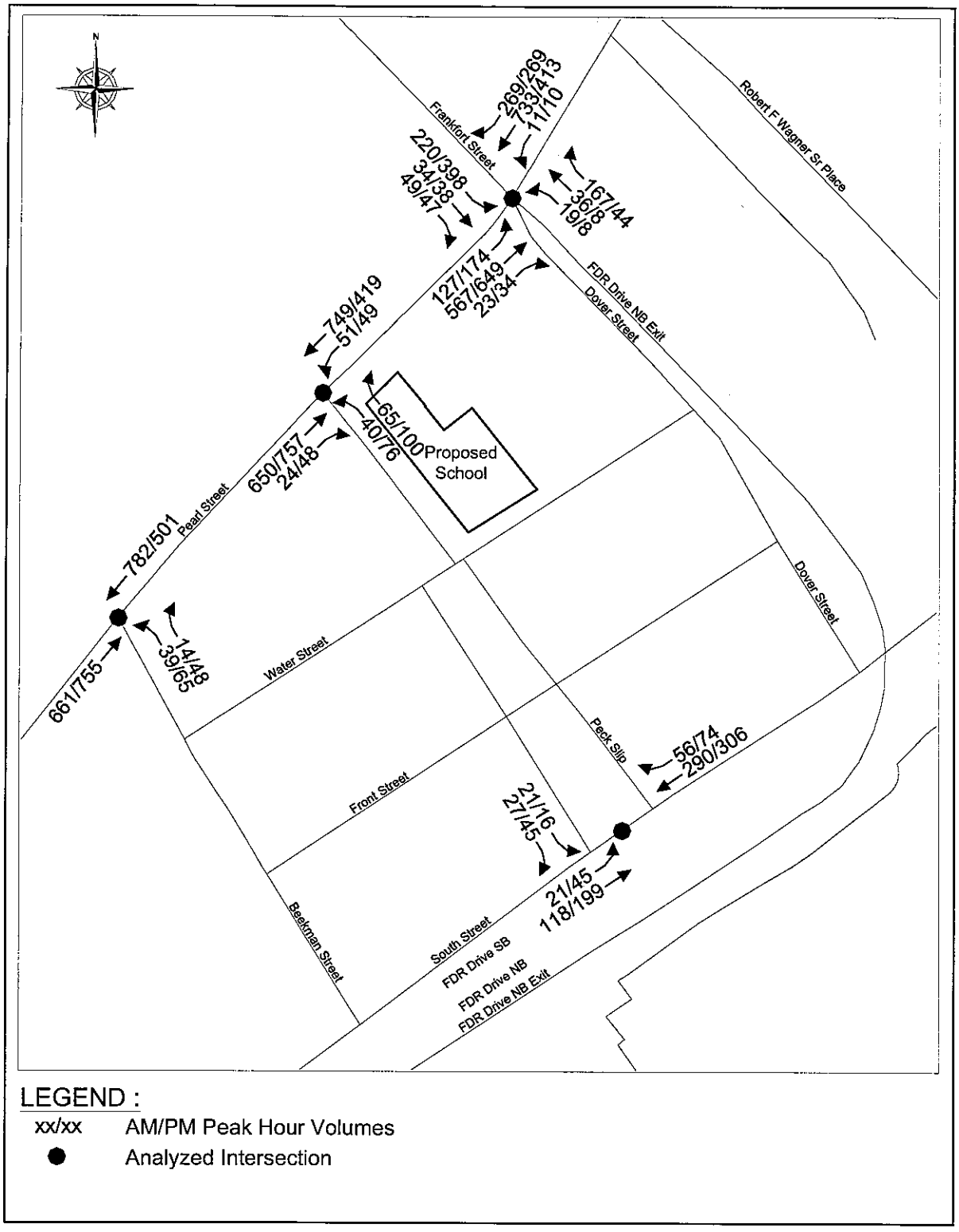
| | | | (Grades K-5) Students | | (1) Parents/Guardians | | Faculty/Staff | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Project Components:** | | | 480 | | - | | 48 | | | |
| **Peak Hour Trips:** | | | | | | | | | | |
| Weekday AM | | | 480 | | 212 | | 48 | | | |
| Weekday PM | | | 456 | | 201 | | 46 | | | |
| **In/Out Splits:** | | | **In** | **Out** | **In** | **Out** | **In** | **Out** | | |
| Weekday AM | | | 480 | 0 | 106 | 106 | 48 | 0 | | |
| Weekday PM | | | 0 | 456 | 101 | 101 | 0 | 46 | | |
| **Peak Hour Person Trips:** | | | **In** | **Out** | **In** | **Out** | **In** | **Out** | **Net In** | **Net Out** |
| AM | Auto | | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 |
| | Dropoff/Pickup | | 38 | 0 | 0 | 0 | 0 | 0 | 38 | 0 |
| | Walk | | 423 | 0 | 106 | 106 | 6 | 0 | 535 | 106 |
| | Subway | | 0 | 0 | 0 | 0 | 24 | 0 | 24 | 0 |
| | Bus (Transit) | | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 0 |
| | School Bus/Van | | 19 | 0 | 0 | 0 | 0 | 0 | 19 | 0 |
| | Total | | 480 | 0 | 106 | 106 | 48 | 0 | 634 | 106 |
| PM | Auto | | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 |
| | Dropoff/Pickup | | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 36 |
| | Walk | | 0 | 402 | 101 | 101 | 0 | 6 | 101 | 509 |
| | Subway | | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 |
| | Bus (Transit) | | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| | School Bus/Van | | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 18 |
| | Total | | 0 | 456 | 101 | 101 | 0 | 46 | 101 | 602 |
| **Peak Hour Vehicle Trips:** | | | **In** | **Out** | **In** | **Out** | **In** | **Out** | **Net In** | **Net Out** |
| AM | Auto | | 0 | 0 | - | - | 8 | 0 | 8 | 0 |
| | Dropoff/Pickup | | 27 | 27 | - | - | - | - | 27 | 27 |
| | School Bus/Van | | 2 | 2 | - | - | - | - | 2 | 2 |
| | Truck | | 1 | 1 | - | - | - | - | 1 | 1 |
| | | | | | | | | | 38 | 30 |
| PM | Auto | | 0 | 0 | - | - | 0 | 8 | 0 | 8 |
| | Dropoff/Pickup | | 26 | 26 | - | - | - | - | 26 | 26 |
| | School Bus/Van | | 2 | 2 | - | - | - | - | 2 | 2 |
| | Truck | | 0 | 0 | - | - | - | - | 0 | 0 |
| | | | | | | | | | 28 | 36 |
| **Peak 15-Minute Person Trips:** | | | **In** | **Out** | **In** | **Out** | **In** | **Out** | **Net In** | **Net Out** |
| AM | Auto | | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| | Dropoff | | 15 | 0 | - | - | - | - | 15 | 0 |
| | Walk | | 169 | 0 | 42 | 42 | 0 | 0 | 211 | 42 |
| | Subway | | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| | Bus (Transit) | | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| | School Bus/Van | | 7 | 0 | - | - | - | - | 7 | 0 |
| | Total | | 192 | 0 | 42 | 42 | 0 | 0 | 233 | 42 |
| PM | Auto | | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| | Dropoff | | 0 | 29 | - | - | - | - | 0 | 29 |
| | Walk | | 0 | 322 | 80 | 80 | 0 | 0 | 80 | 402 |
| | Subway | | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| | Bus (Transit) | | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| | School Bus/Van | | 0 | 14 | - | - | - | - | 0 | 14 |
| | Total | | 0 | 365 | 80 | 80 | 0 | 0 | 80 | 445 |

Note:
1. Represents parents/guardians accompanying students on their walk to/from school.

## FIGURE B-15: 2015 PROJECT GENERATED PEAK HOUR TRAFFIC VOLUMES



## FIGURE B-16: 2015 BUILD PEAK HOUR TRAFFIC VOLUMES



## TABLE B-11: 2015 BUILD TRAFFIC CONDITIONS

| Signalized Intersection | Approach [1] | AM Peak Hour | | | | | | | | PM Peak Hour | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO BUILD | | | BUILD | | | | | NO BUILD | | | BUILD | | | |
| | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | |
| Frankfort Street/Dover Street (E-W) @ Pearl Street (N-S) | EB | DefL | 1.08 | 117.4 | F | 1.08 | 117.4 | F | | DefL | 1.08 | 102.5 | F | 1.08 | 102.5 | F | |
| | | TR | 0.32 | 28.1 | C | 0.41 | 30.6 | C | | TR | 0.32 | 27.9 | C | 0.39 | 29.7 | C | |
| | WB | LTR | 0.63 | 34.2 | C | 0.65 | 35.2 | D | | LTR | 0.22 | 25.4 | C | 0.22 | 25.5 | C | |
| | NB | LTR | 0.87 | 26.0 | C | 0.93 | 33.3 | C | | LTR | 0.82 | 21.0 | C | 0.86 | 23.9 | C | |
| | SB | LTR | 0.85 | 20.8 | C | 0.92 | 27.8 | C | | LTR | 0.55 | 12.3 | B | 0.60 | 13.3 | B | |
| | Intersection | | | 32.1 | C | | 37.7 | D | | | | 32.7 | C | | 34.2 | C | |
| Peck Slip (E-W) @ Pearl Street (N-S) | WB | LR | 0.45 | 32.6 | C | 0.72 | 47.8 | D | * | LR | 0.85 | 57.5 | E | 1.17 | 146.6 | F | * |
| | NB | TR | 0.50 | 10.5 | B | 0.50 | 10.5 | B | | TR | 0.56 | 11.3 | B | 0.56 | 11.4 | B | |
| | SB | LT | 0.63 | 12.7 | B | 0.64 | 13.0 | B | | LT | 0.40 | 9.5 | A | 0.40 | 9.5 | A | |
| | Intersection | | | 13.1 | B | | 15.0 | B | | | | 17.5 | B | | 33.5 | C | |
| Beekman Street (E-W) @ Pearl Street (N-S) | WB | LR | 0.22 | 28.7 | C | 0.22 | 28.7 | C | | LR | 0.50 | 34.6 | C | 0.50 | 34.6 | C | |
| | NB | T | 0.42 | 8.5 | A | 0.42 | 8.5 | A | | T | 0.37 | 8.0 | A | 0.37 | 8.0 | A | |
| | SB | T | 0.41 | 8.4 | A | 0.42 | 8.5 | A | | T | 0.28 | 7.3 | A | 0.29 | 7.4 | A | |
| | Intersection | | | 9.3 | A | | 9.3 | A | | | | 10.7 | B | | 10.7 | B | |

| Unsignalized Intersection | Approach [1] | AM Peak Hour | | | | | | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO BUILD | | | BUILD | | | | NO BUILD | | | BUILD | | |
| | | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | Lane Group[2] | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS |
| Peck Slip (E-W) @ South Street (N-S) | NB | LT | 0.02 | 9.0 | A | 0.03 | 9.1 | A | LT | 0.05 | 9.3 | A | 0.06 | 9.4 | A |
| | EB | LR | 0.14 | 13.2 | B | 0.14 | 13.5 | B | LR | 0.18 | 13.8 | B | 0.18 | 14.2 | B |
| | Intersection | | | | | | | | Intersection | | | | | | |

**Notes:**
1. EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound
2. L - Left, T- Through, R - Right, DefL - De Facto Left Turn

Congested movements are designated by shading
*Significant Impact

### *Parking*

Teachers and staff from the proposed school would generate a new parking demand of approximately eight spaces. As no parking supply would be provided on site and on-street parking utilization would remain at capacity, this parking demand would be accommodated by off-street parking spaces nearby.

According to the *CEQR Technical Manual*, for residential areas inside the Manhattan Central Business District (CBD), the inability of the proposed project or the surrounding area to accommodate a project's future parking demand is considered a parking shortfall, but is generally not considered significant due to the magnitude of available alternative modes of transportation.

### *Public Transportation*

As shown in Table B-10, new subway trips generated by the new school facility are expected to total 24 and 22 trips during the AM and PM peak hours, respectively. The proposed project is also expected to generate eight new local bus trips totaling in both the AM and PM peak hours. This level of demand is below the CEQR threshold of 200 local bus or subway trips for a detailed transit impact analysis. Therefore, no transit impacts are anticipated.

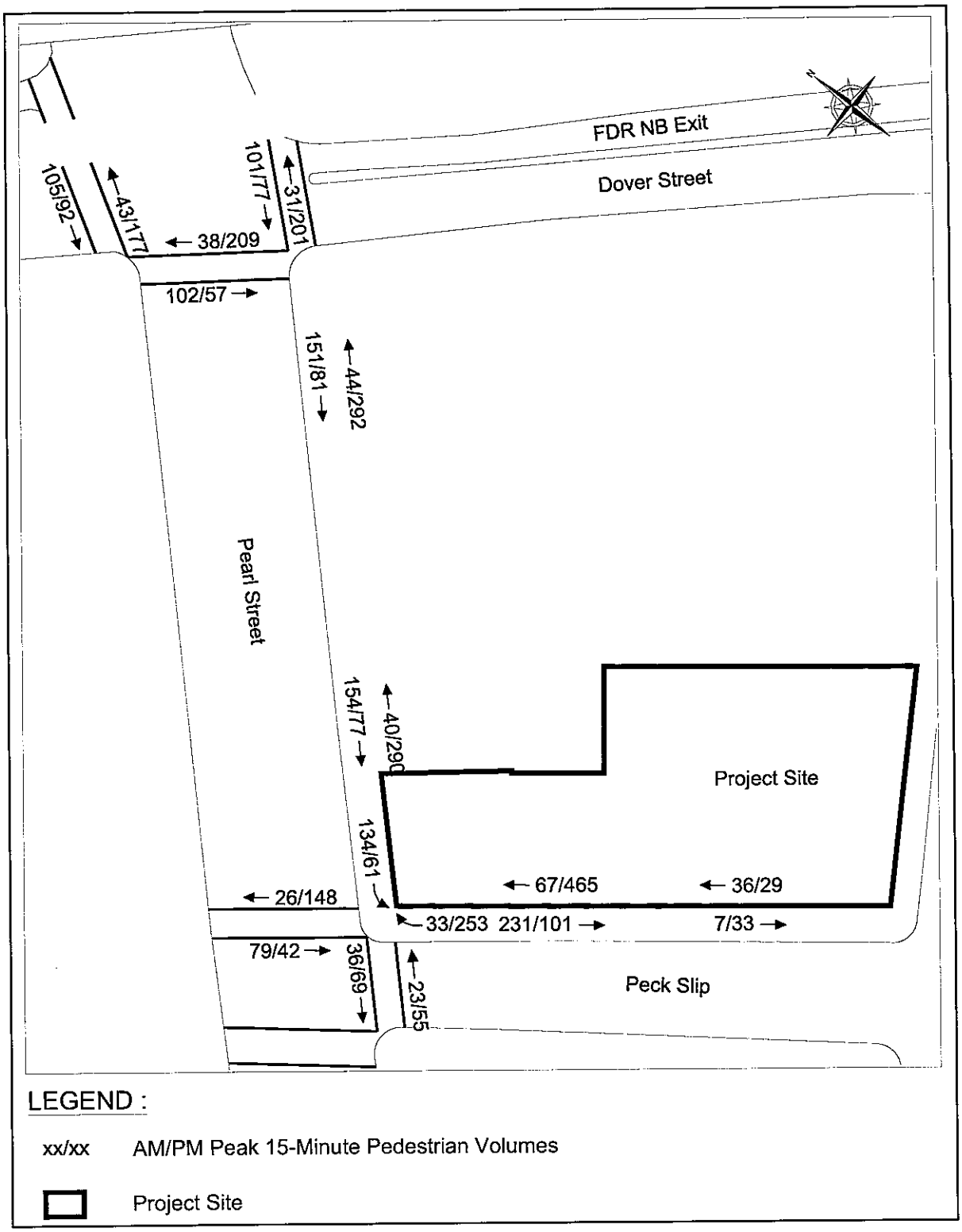
### *Pedestrians*

The proposed project would add a total of 260 and 496 peak 15-minute pedestrian trips during the AM and PM peak hours, respectively. This includes walk-only trips as well as trips to or from subway stations, NYCT bus stops, and parking locations. Figure B-17 shows the pedestrian volumes in the future with the proposed project and Table B-12 shows the levels of service at the analyzed sidewalks, corners, and crosswalks also with the project.

The determination of significant pedestrian impacts in central business districts (CBDs) is generally based on comfort and convenience characteristics of pedestrian flow and safety considerations. According to the *CEQR Technical Manual*, a significant impact to a sidewalk occurs when the average pedestrian flow rate under the No-Action condition is less than 6.3 pfm and the average flow rate under the With-Action condition is greater than 8.5 pfm (mid-LOS D or worse), under platoon conditions. For corners and crosswalks, CEQR criteria define a significant impact as a decrease in pedestrian space to 19.5 SF/ped (mid-LOS D) or worse when the No Action condition has an average occupancy of greater than 21.6 SF/ped. The *CEQR Technical Manual* also indicates that if a No Action corner or crosswalk operating at LOS A, B or C deteriorates to LOS D, such a change may be perceptible, but not necessarily considered to be a significant impact.

As shown in Table B-12, two crosswalks would operate at LOS D during the PM peak period with the project in place. According to the *CEQR Technical Manual*, this would not be considered a significant impact since the pedestrian space under the With-Action condition is greater than 19.5 SF/ped (better than mid-LOS D). All other pedestrian elements would operate at LOS C or better and would not be considered significantly affected by new demand from the proposed school under CEQR criteria.

## FIGURE B-17: 2015 BUILD PEDESTRIAN VOLUMES



## TABLE B-12: 2015 BUILD PEDESTRIAN CONDITIONS

**SIDEWALK ANALYSIS**

| Blockface | Side of Street | Effective Sidewalk Width[1] | Peak 15 Minute Volume AM | Peak 15 Minute Volume PM | Persons per Foot per Minute (PFM) AM | Persons per Foot per Minute (PFM) PM | Average Level of Service AM | Average Level of Service PM | Platoon Conditions Level of Service AM | Platoon Conditions Level of Service PM |
|---|---|---|---|---|---|---|---|---|---|---|
| **Pearl Street** (south of Dover Street) | East | 4.3 | 195 | 374 | 3.0 | 5.8 | A | B | B | C |
| **Peck Slip** (east of Pearl Street) | North | 8.5 | 298 | 565 | 2.3 | 4.4 | A | A | B | C |
| **Pearl Street** (north of Peck Slip) | East | 4.3 | 194 | 367 | 3.0 | 5.7 | A | B | B | C |
| **Peck Slip** (west of Water Street) | North | 8.6 | 43 | 61 | 0.3 | 0.5 | A | A | A | A |
| **Water Street** (north of Peck Slip) | West | 3.2 | 13 | 22 | 0.3 | 0.4 | A | A | A | A |

**STREET CORNER ANALYSIS**

| Intersection | Corner | Sidewalk Dimen-sions. (ft) | Curb Radii (ft) | Average Pedestrian Space (SF/ped) AM | Average Pedestrian Space (SF/ped) PM | Level of Service AM | Level of Service PM |
|---|---|---|---|---|---|---|---|
| Peck Slip (E-W) @ Pearl Street (N-S) | NE | 14.9 x 12.5 | 9 | 107 | 57 | A | B |

**CROSSWALK ANALYSIS**

| Intersection | Crosswalk | Length (ft) | Width (ft) | Average Pedestrian Space (SF/ped) AM | Average Pedestrian Space (SF/ped) PM | Level of Service AM | Level of Service PM | Maximum Surge Pedestrian Space (SF/ped) AM | Maximum Surge Pedestrian Space (SF/ped) PM | Maximum Surge Level of Service AM | Maximum Surge Level of Service PM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dover Street (E-W) @ | East | 48 | 11.5 | 95 | 45 | A | B | 67 | 32 | A | C |
| Pearl Street (N-S) | West | 48 | 11.5 | 75 | 41 | A | B | 60 | 33 | B | C |
| | South | 60 | 14.2 | 38 | 20 | C | D | 62 | 33 | A | C |
| Peck Slip (E-W) @ | East | 35 | 11.4 | 222 | 102 | A | A | 125 | 59 | A | B |
| Pearl Street (N-S) | North | 58 | 11.9 | 36 | 20 | C | D | 66 | 37 | A | C |

**Note:**
1. Total sidewalk width minus the sum of widths and shy distances from obstructions.

## B.13.4. Improvements

As described above, with the project in place there would be one intersection with significant impacts during the AM and PM peak hours. At the intersection of Pearl Street and Peck Slip, the proposed action would result in an impact to the westbound Peck Slip approach during both peak hours. To address this, it is proposed that one second of green time be shifted from the north-south phase to the Peck Slip phase during the AM peak hour. As shown in Table B-13, with this signal timing and phasing adjustment, the westbound Peck Slip approach would operate with a delay of 44.0 seconds (LOS D) in the AM peak hour compared to 32.6 seconds (LOS C) in the No-Action. During the PM peak hour, it is proposed to shift seven seconds of green time from the north-south Pearl Street phase to the Peck Slip phase. As shown in Table B-13, with these signal timing and phasing adjustments, the westbound Peck Slip approach would operate with a delay of 54.8 seconds (LOS E) in the PM peak hour compared to 57.5 seconds (LOS E) in the No-Action. Implementation of these adjustments would reduce the project's traffic impacts below the thresholds of significance.

**TABLE B-13: 2015 TRAFFIC CONDITIONS WITH IMPROVEMENTS**

| Signalized Intersection | Approach [1] | AM Peak Hour | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO BUILD | | | BUILD | | | IMPROVEMENTS | | | |
| | | Lane Group [2] | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | |
| Peck Slip (E-W) @ Pearl Street (N-S) | WB | LR | 0.45 | 32.6 | C | 0.72 | 47.8 | D | 0.69 | 44.0 | D | |
| | NB | TR | 0.50 | 10.5 | B | 0.50 | 10.5 | B | 0.51 | 11.1 | B | |
| | SB | LT | 0.63 | 12.7 | B | 0.64 | 13.0 | B | 0.65 | 13.8 | B | |
| | Intersection | | | 13.1 | B | | 15.0 | B | | 15.4 | B | |

| Signalized Intersection | Approach [1] | PM Peak Hour | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NO BUILD | | | BUILD | | | IMPROVEMENTS | | | |
| | | Lane Group [2] | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | V/C Ratio | Delay (sec.) | LOS | |
| Peck Slip (E-W) @ Pearl Street (N-S) | WB | LR | 0.85 | 57.5 | E | 1.17 | 146.6 | F | 0.88 | 54.8 | D | |
| | NB | TR | 0.56 | 11.3 | B | 0.56 | 11.4 | B | 0.65 | 16.8 | B | |
| | SB | LT | 0.40 | 9.5 | A | 0.40 | 9.5 | A | 0.46 | 13.8 | B | |
| | Intersection | | | 17.5 | B | | 33.5 | C | | 22.3 | C | |

Notes:
1. EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound
2. L - Left, T- Through, R - Right, DefL - De Facto Left Turn
Congested movements are designated by shading

## B.14. AIR QUALITY

The 2010 *CEQR Technical Manual* requires an assessment of air quality for actions that would increase traffic volumes or emit noxious fumes, especially where they affect residential or other sensitive uses (such as a school). In this area of the City, a detailed mobile source analysis is required if 170 or more project-generated vehicles pass through a signalized intersection in any given peak period. In addition, the DEP has established a similar screening threshold limit for particulate matter, where detailed analysis is required if more than 23 project-generated diesel trucks or buses pass through a signalized intersection in any given peak period. Analyses are also required if new sensitive land are to be permitted within 400 feet of existing industrial facilities and if a project's heating plant may affect nearby sensitive land uses (or the heating system of nearby buildings may affect a new sensitive land use).

### B.14.1. Introduction

Air quality issues associated with the proposed school development relate to the potential for:

- Changes in vehicular travel associated with school activities to result in significant mobile source (vehicular related) air quality impacts;
- Emissions from the heating, ventilation and air conditioning (HVAC) system of the proposed school building to significantly affect existing nearby land uses and/or school playground receptors;
- HVAC emissions of "major' nearby emissions sources to significantly impact the school; and
- Air toxic emissions generated by existing nearby industrial sources to significantly affect the school.

For the purpose of this analysis, it was assumed that the proposed building will be 5 stories (60 feet) in height and have a play area located on the roof.

Air quality analyses were conducted, following the procedures provided in the *CEQR Technical Manual*, to determine whether the Proposed Action would result in exceedances of applicable ambient air quality standards and guidelines. The methodologies and procedures utilized in these analyses are described below.

### B.14.2. Air Quality Standards and Pollutants of Concern

The following air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) as being of concern nationwide: carbon monoxide (CO), nitrogen dioxide ($NO_2$), ozone, particulate matter ($PM_{10}$ and $PM_{2.5}$), sulfur dioxide, and lead. National ambient air quality standards (NAAQS) have been established for these pollutants, which are known as criteria pollutants, to protect human health and welfare. Pollutants associated with mobile sources are primarily CO, ozone, and particulate matter; pollutants associated with the combustion of fuel oil are primarily $SO_2$, $NO_2$, and particulate matter.

In addition to criteria pollutants, small quantities of a wide range of the non-criteria air pollutants, known as toxic air pollutants, which are emitted from industrial and commercial facilities, are also of

concern. These pollutants can be grouped into two categories: carcinogenic air pollutants and non-carcinogenic air pollutants.

### B.14.3. Mobile Sources

Localized increases in pollutant levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed school. According to *CEQR Technical Manual* screening threshold criteria, if 170 or more project-generated vehicles pass through a signalized intersection in any given peak period in this area of the city there is a potential for significant mobile air quality impacts and a detailed analysis is required.

The travel demand forecast and vehicle trip assignments analysis conducted for the proposed school indicates that, even with the introduction of additional school buses and other vehicles, the number of vehicles generated by the project will be below the *CEQR* screening threshold value during both the AM and PM peak periods at any potentially affected intersection. Therefore, no detailed air quality analysis is required and no significant mobile source air quality impacts are predicted with the Proposed Action.

In addition, emissions from the truck traffic associated with post office operations may affect air quality levels at the proposed school. However, the number of peak hour trucks associated with the post office is below the number of project-generated trucks shown in the *CEQR Technical Manual* that is considered to be significant. As such, the potential impact of these trucks on the school is not considered to be significant and no additional analyses are required.

### B.14.4. Stationary Sources

Stationary source analyses were conducted to estimate the potential impacts of:

- The school building's HVAC emissions on existing nearby buildings;
- The school building's HVAC emissions on the play area that may be located on the roof of the school;
- HVAC emissions of "major" nearby existing sources (i.e., HVAC systems with 20 or more million Btu/hr heat input) on the proposed school, and
- Air toxic emissions generated by nearby industrial sources on the proposed school.

#### *Existing Land Uses*

A survey of existing land uses within approximately 400 feet of the school was conducted using the 2010 New York City OASIS mapping network system to identify residential land uses and other sensitive receptor sites that may be impacted by the HVAC emissions from the proposed school building. The survey identified the following multi-story residential and/or mixed-use buildings containing residential uses that are taller than the proposed school building and therefore potentially affected by the school's HVAC emissions.

- 7- and 9-story buildings on Block 106, Lots 7 and 17, which are adjacent to the proposed school building. These buildings were subject to detailed analyses, following *CEQR Technical Manual* guidance, because they are located less than 30 feet from the proposed school building;

- 6- and 8-story buildings on Block 107, Lots 42 and 44, located 39 feet from the school building. Following *CEQR Technical Manual* guidance, they were subject to screening-level analyses;
- 27-story residential building, within "Southbridge Towers," on Block 94, Lot 1, located 85 feet from the school. Following *CEQR Technical Manual* guidance, this building was subject to a screening-level analysis.

In addition, the "Southbridge Towers" building also meets the definition of a "major" emission source, having more than 45 MMBtu/hr boiler heat input, and the potential impact of the HVAC emissions of this building on the school was considered using a detailed analysis.

### *Screening Analysis of the School's HVAC Emissions on Existing Buildings*

The potential impacts of the school's HVAC emissions are a function of fuel type, stack height, and location of the stack relative to nearby buildings. For the purpose of estimating the potential impacts of the HVAC system of the proposed school building on existing land uses, it was assumed that the 5-story school building, with approximately 75,000 square feet of gross floor area, would be heated by natural gas (with the critical pollutant being $NO_2$). In order to minimize impacts on the roof-top play area, the HVAC exhaust stack was assumed to be 10 feet tall.

According to *CEQR Technical Manual* guidance, a screening-level analysis, as a first step of evaluation, is to be performed to determine whether significant potential air quality impacts of the school's heating system on existing land uses would occur. The *CEQR Technical Manual also* provides a nomographic method that is used to determine the minimum distance between buildings, based on the square footage and height of a building, below which an action would not likely have a significant impact. The screening nomographic method is applicable if a building is at least 30 feet from the nearest building of similar or greater height.

The maximum floor area of the proposed school building was used as input for the screening analysis. A nomograph depicted on the Figure 17-7 of the CEQR Air Quality Appendix, applicable for $NO_2$ boiler screenings, was utilized. Buildings that were considered for this screening analysis are the 6- and 8-story buildings on Block 107, Lots 42 and 44, and the 27-story "Southbridge Tower" building on Block 94, Lot 1.

The results of the screening analysis are as following:

- Because the actual distance between school building and the 6- and 8-story buildings on Block 107 (39 feet) is less than the CEQR threshold distance (estimated to be 65 feet), the school did not pass the screening analysis for impacts on these buildings. Therefore, detailed analyses are required for the estimating the impact these buildings.
- The actual distance between school and 27-story "Southbridge Tower" building on Block 94, Lot 1 (85 feet) is greater than the CEQR threshold distance. As such, the school passed the analysis and no further analysis is required for estimating the impact on this building.

### *Methodology and Assumptions for the Detailed Analysis*

Dispersion Model

AERMOD, which is a steady-state dispersion model developed by the U.S. EPA that is applicable in rural and urban areas, in flat and complex terrain, for surface and elevated releases, and for multiple emission sources (including point, area, and volume sources), was used for all detailed analysis. Regulatory default options of the AERMOD model were used and *CEQR Technical Manual* guidelines were followed. AERMOD runs were conducted with and without downwash effect on plume dispersion and the highest results are reported.

Pollutants

Two pollutants associated with the burning of natural gas and fuel oil in the HVAC systems were considered along with the critical averaging time periods corresponding to the NAAQS for these pollutants—annual $NO_2$ levels for natural gas and 24-hour $SO_2$ levels for fuel oil. It was assumed that the school will use natural gas for their heating needs, and that the existing "major" emission sources will utilize fuel oil with a sulfur content of 0.2 percent. It was conservatively assumed that 100 percent of nitrogen oxides released from the school's HVAC stack would be converted to the $NO_2$ at the receptor sites.

Emission Rates

Pollutant emission rates were estimated using fuel factors provided in the *CEQR Air Quality Appendix* and the emission factors from EPA's AP-42 (i.e., EPA's Compilation of Air Pollutant Emission Factors, Table 1.3-1 and 1.4-1) for fuel oil and natural gas combustion.

Stack Location

It is conceivable that more than one boiler and one exhaust stack would be needed to accommodate heating needs of the proposed school building. However, because the school has not been designed, it was conservatively assumed for this analysis that all of the HVAC emissions from school building would be released through a single stack located on the roof. For the analysis of the impacts of the school's emissions on existing land uses, the exhaust stack of the school was placed at the edge of the roof closest to each taller building for each analysis; for the analysis of the impacts of the school's emissions on the roof-top play area, the HVAC stack was placed in the center of the roof.

Receptors

Source-receptor relationships (heights and stack proximities to receptors) as well as plume rises and dispersion effects were considered in selecting receptor sites, as follows:

- For the analysis of the school's HVAC impacts on existing land uses, receptors were placed (in 10 foot increments) on the façades of the 7- and 9-story buildings on Block 106, Lots 7 and 17, and on the 6- and 8- story buildings on Block 107, Lots 42 and 44. These receptors were placed on the upper floors, at heights where the maximum impacts are expected to occur.
- For estimating the potential impacts of the HVAC emissions of the nearby "major" sources on the school, receptors were placed on the perimeter of the school building on the upper floors, at heights where the maximum impacts are expected to occur.
- For the analysis of the school's impacts on the roof-top play area, receptors were placed at breathing height around the perimeter of the play area.

Stack Height and Parameters

The stack height of the school's HVAC system exhaust was assumed to be 10 feet above the roof (i.e., 80 feet above ground level). Other stack parameters (diameters, exit velocities, temperatures, etc.) for the all of the HVAC systems were developed using the New York City Department of Environmental Protection (NYCDEP) "CA Permit" database and boiler rated heat inputs (in million Btu [MMBtu] per hour).

Meteorological Data

Detailed dispersion analyses were conducted using the latest five consecutive years of representative meteorological data (2004-2008). Surface data were obtained from La Guardia Airport and upper air data were obtained from Brookhaven station, New York. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Data were developed using the USEPA AERMET processor. The land use around the site was classified using defined categories to determine surface parameters used by the AERMET program.

Background Concentrations

In estimating the total impact of the Proposed Action, it is necessary to include the background pollutant concentrations. Applicable background concentrations were therefore added to the modeling results to obtain total pollutant concentrations. Monitoring data for 2009 from the NYSDEC PS59 monitoring station in Manhattan was used as follows:

- The annual background $NO_2$ concentration of 68 $\mu g/m^3$ obtained from the monitoring station was used as the background value for estimating the impacts of the school's HVAC emissions. This value was added to the maximum annual AERMOD-predicted $NO_2$ impacts, and the total maximum $NO_2$ concentrations were compared to the annual $NO_2$ NAAQS of 100 $\mu g/m^3$.
- The highest 24-hour $SO_2$ concentration of 110 $\mu g/m^3$ obtained from the monitoring station was used at the background value for estimating the HVAC impacts of the "major" emission sources. This value was added to the highest AERMOD-predicted $SO_2$ impacts, and resulting total 24-hr $SO_2$ concentrations were compared with the appropriate 24-hour $SO_2$ NAAQS of 365 $\mu g/m^3$.

Detailed Analysis of the School's HVAC Emissions on Existing Land Uses

The New York City Building Code requires that a rooftop stack should be at least 10 feet away from a taller building (highest obstacle). As such, the HVAC stack on the roof of the school was initially placed 10 feet from the lot line of the taller building for this analysis, and potential worst case impacts were estimated. If exceedances of the NAAQS were predicted, setback distances would be increased, if needed, in 1-foot increments until the distance at which the school HVAC would pass analysis was found.

The results of the detailed analysis with 10-foot stack setback are as follows:

- The maximum annual impacts of the school's HVAC emissions on the 7- and 9-story buildings on Block 106, Lots 7 and 17 are estimated to be 0.5 $\mu g/m^3$ $NO_2$, with a the total $NO_2$ concentration of 69 $\mu g/m^3$.
- The maximum annual impacts of the school's HVAC emissions on the 6- and 8-story buildings on Block 107, Lots 42 and 44 are estimated to be 1.5 $\mu g/m^3$ $NO_2$, with a the total $NO_2$ concentration of 70 $\mu g/m^3$;

The results indicate that there would be no exceedances of the annual $NO_2$ NAAQS of 100 µg/m³; therefore, emissions of the school HVAC system do not have the potential to significantly impact existing nearby land uses, and no additional setbacks are required.

Impacts of the School's HVAC Emissions on the Roof-Top Play Area

Detailed dispersion analyses were conducted, using the AERMOD model and procedures described above, to determine whether the school building's HVAC emissions have the potential to significantly impact roof-top play area receptors.

The result of this analysis (with a 10-foot stack setback) is that the maximum annual $NO_2$ impacts (estimated to be 2.2 µg/m³) with added annual $NO_2$ background concentrations is below the annual $NO_2$ NAAQS standard of 100 µg/m³. Therefore, no potential significant impacts of the school building's HVAC emissions on the play area are predicted.

Impacts from "Major" Existing Emission Sources

Following *CEQR Technical Manual* guidance, a survey of land uses and development site heights was conducted to determine whether there are any existing "major" sources of boiler emissions (i.e., emissions from boiler facilities with heat inputs of 20 million Btu per hour or greater) located within 400 feet of the school. As a result of this survey, one "major" HVAC emission source—the 27-story "Southbridge Towers" building at 80 Gold Street (Block 94, Lot 1) with total floor area of 2,075,590 square feet—was identified.

Detailed dispersion analyses were conducted, using the AERMOD model and procedures described above, to determine whether the emissions from this "major" source have the potential to significantly impact the proposed school. The exhaust stack of the 27-story building was placed in the center of the roof of this building. The result of this analysis is that the maximum 24-hour $SO_2$ impacts (estimated to be less than 1 µg/m³) with added 24-hour $SO_2$ background concentrations is below the 24-hour $SO_2$ standard of 365 µg/m³. Therefore, no exceedances of the NAAQS are predicted as a result of the "major" existing emission source impacts.

An additional examination was conducted to determine if there is any "large" combustion emission source (e.g., power plant, co-generation facility, etc) located within 1,000 feet of any of the development sites. The result of this survey is that no large boiler emission sources are located within 1,000 feet of the proposed school and, therefore, no further analysis is required.

## B.14.5. Air Toxic Emissions of Existing Industrial Sources

### *Introduction*

Emissions of toxic pollutants from the operation of existing nearby industrial emission sources could affect the proposed school. An analysis was therefore conducted to determine whether the impacts of these emissions would be significant.

### *Data Sources*

Information regarding emissions of toxic air pollutants from existing industrial sources was developed as follows:

- An analysis area was developed that included land uses within 400 feet of the proposed school building;
- Air permits and/or permit applications for active permitted industrial facilities located within the analysis area that are included in the NYCDEP Clean Air Tracking System database were acquired and reviewed to obtain the necessary information to conduct this toxic air analysis. The data on these permits or permit applications, which include facility source types and locations, stack parameters, pollutants and emission rates, etc., are considered the most current and served as the primary basis of data for this analysis.
- Field observations were conducted within the analysis area to identify and validate the existence of the permitted facilities and determine if there are any non-permitted facilities currently operating within this area.

## B.14.6. Assessment Methodology

Toxic air pollutants can be grouped into two categories: carcinogenic air pollutants, and non-carcinogenic air pollutants. While no federal standards have been promulgated for toxic air pollutants, the EPA and NYSDEC have issued guidelines that establish acceptable ambient levels for these pollutants based on human exposure criteria.

The EPA developed short-term acute (1-hour) and long-term (annual) inhalation exposure thresholds for toxic pollutants that are defined as AIECs (acute inhalation exposure concentrations) and reference dose concentrations (RfCs) for the non-carcinogenic pollutants, and cancer risk thresholds based on compound-specific inhalation unit risk factors (URFs) for carcinogenic pollutants. These data are contained in the EPA IRIS (Integrated Risk Information System) database.

In order to evaluate short-term and annual impacts of non-carcinogenic and carcinogenic toxic air pollutants, the NYSDEC, following EPA guidelines, has also established short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) for exposure limits. AGCs for the carcinogenic pollutants are based on cancer risk threshold of one per million. These are maximum allowable guideline concentrations that are considered acceptable concentrations below which there should be no adverse effects on the health of the public. AGCs for non-carcinogens, as defined by the NYSDEC, are equivalent to the RfCs established by EPA.

Once the hazard index of each non-carcinogenic compound is established, they are summed together. If the total hazard index of all compounds combined is less than or equal to one, then the non-carcinogenic risk is considered to be insignificant.

Once the incremental risk of each carcinogenic compound is established, they are summed together. If the total risk of all compounds combined is less than or equal to one in one million (1.0 E-06), the carcinogenic risk is considered to be insignificant.

### *Dispersion Analysis*

An analysis of toxic pollutants from existing industrial sources that may affect proposed school was conducted using the approach provided in the *CEQR Technical Manual* (Air Quality Chapter 17, Section 322.1, "Industrial Source Screen.") This conservative screening analysis is designed to determine the potential for significant impacts from industrial sources using pre-determined short-

term (1-hr, 8-hr, or 24-hr) and annual concentrations from look-up tables. The values are based on a generic emission rate of 1 gram per second of a pollutant from point source, and were developed using AERMOD dispersion modeling for stack and receptor heights of 20 feet for distances from 30 to 400 feet. To determine the potential impact from an actual emission source, the value in the table corresponding to the minimum distance between the emission source and receptor (e.g., school) is multiplied by the actual pollutant emission rate. Values are provided for 1-hour, 8-hour, 24-hour, and annual average time periods to enable the comparison of estimated pollutants concentrations to SGCs (1-hour) or AGCs (annual).

The estimated pollutant concentrations were then used to estimate inhalation cancer risk and non-cancer hazard indexes for each pollutant utilizing guideline values, and then for all pollutants combined.

### *Industrial Facilities and Air Toxic Emissions Evaluated*

Ten (10) permits were identified from the NYCDEP database for facilities located within 400 feet of the school. Of these, 8 permits were cancelled and a field survey did not find any non-permitted emission sources currently operating in this area. As a result, an analysis was conducted for the remaining two permitted emission sources (Permits PA PA046389 and PA 046489). The only emission sources at these facilities are emergency generators.

Emergency generators emit small amounts of a number of high-toxicity carcinogenic compounds, such as benzene, propylene, or acetaldehyde, and/or non-carcinogenic compounds, such as toluene or acrolein and, depending on the number and duration of operations of the generators, the potential impacts of these emissions are usually considered to be minimal. However, for the purpose of this analysis, it was conservatively assumed that generators would emit benzene as a representative carcinogenic pollutant.

Emission rates of benzene from the generators were estimated based on heat inputs provided in the permit applications for these facilities and AP-42 emission factors for uncontrolled stationary diesel-fueled engines (AP-42, Table 3.3-2). These calculations are provided in the project's technical backup.

### *Results of the Cancer Risk and Hazard Index Evaluation*

Table B-14 provide permit information for the existing permitted industrial sources considered in the analysis, including type and location of each facility, permit number, and estimated hourly and annual benzene emission rates. Table AQ-2 provides estimated annual benzene concentrations, non-cancer chronic hazard index, and cancer risks for benzene. As also shown in

Table B-15, the total cancer risk is estimated to be 1.62E-09, which is below the value of one per million that is considered to be significant; the maximum total non-cancer chronic hazard index caused by the benzene emitted from all of sources combined is estimated to be 6.92E-06. This value is also below the level (1) that is considered by the EPA to be significant.

**TABLE B-14: EXISTING ACTIVE INDUSTRIAL SOURCE PERMIT INFORMATION**

| | Facility Location | | | Permit No. | Estimated Benzene Emission Rates (g/sec) | |
|---|---|---|---|---|---|---|
| | Block | Lot | Address | | 1-hr | Annual |
| Prudential Bache Inc. | 94 | 25 | 100 Gold Street | PA046389 | 7.02E-04 | 2.08E-06 |
| | | | | PA046489 | 7.02E-04 | 1.76E-06 |

**TABLE B-15: CANCER RISK AND NON-CANCER CHRONIC HAZARD INDEXES OF THE TOXIC POLLUTANTS**

| | Chemical Name | Estimated Annual Concentration (C)(1) | URF $(\mu g/m^3)^{-1}$ (2) | Estimated Cancer Risk (3) | RfC $(\mu g/m^3)$ (4) | Annual Hazard Index (5) |
|---|---|---|---|---|---|---|
| PA046389 | Benzene | 1.12E-04 | 7.8E-06 | 8.77E-10 | 30 | 3.75E-06 |
| PA046489 | Benzene | 9.52E-05 | 7.8E-06 | 7.42E-10 | 30 | 3.17E-06 |
| | | | **Incremental Cancer Risk** | **1.62E-09** | | |
| | | | | | **Total Non-Cancer Hazard Index** | **6.92E-06** |

Notes:
1. C = annual average ambient air concentration of the benzene in $\mu g/m^3$
2. URF = compound-specific inhalation unit risk factor for benzene in $(\mu g/m^3)^{-1}$
3. Incremental Cancer Risk for benzene = C x URF
4. RfC or AGC= reference dose concentration for benzene, $\mu g/m^3$
5. Hazard Index = C/RfC (AGCs)

Table B-16 provides estimated 1-hour benzene concentrations and acute non-cancer hazard index. As shown in this table, the total non-cancer acute hazard index caused by the benzene emitted from all of sources combined is estimated to be 1.41E-03. This value is below the level (1) that is considered by the EPA to be significant.

The result of the air toxics analysis is that no exceedances of EPA/NYSDEC guideline thresholds values for both carcinogenic and non-carcinogenic pollutants are predicted, and that the potential impact on the proposed school is not considered significant.

**TABLE B-16: ACUTE NON-CANCER HAZARD INDEXES OF THE TOXIC POLLUTANTS**

| | Chemical Name | Estimated 1-hr Concentration (1) | AIEC $(\mu g/m^3)$ (2) | Acute Hazard Indexes |
|---|---|---|---|---|
| PA046389 | Benzene | 0.918 | 1,300 | 7.06E-04 |
| PA046489 | Benzene | 0.918 | 1,300 | 7.06E-04 |
| | | | **Total Acute Hazard Index** | **1.41E-03** |

Notes:
1. C = 1-hour average ambient air concentration of the benzene in $\mu g/m^3$
2. AIEC = Acute 1-hr Inhalation Exposure value for benzene, $\mu g/m^3$

## B.15. GREENHOUSE GAS EMISSIONS

Although the contribution of a proposed project's GHG emissions to global GHG emissions is likely to be considered insignificant when measured against the scale and magnitude of global climate it should still be analyzed to determine consistency with the City's citywide GHG reduction goal " ... of reducing citywide GHG emissions by 30% below 2005 levels by 2030." This is currently the most appropriate standard by which to analyze a project under CEQR. Currently, the GHG consistency assessment focuses on those projects being reviewed in an EIS that would result in development of 350,000 square feet or greater.

Since the proposed school project would result in development substantially below the 350,000 SF threshold, it would not contribute significantly to GHG emissions and no further analysis is warranted.

## B.16. NOISE

The 2010 *CEQR Technical Manual* requires a detailed assessment of potential mobile-source noise impacts if a proposed action would double traffic volumes at any location, and a stationary-source noise assessment is required if a substantial generator of noise such as from a playground is proposed to be located near a sensitive receptor. If stationary noise levels increase less than 5 dBA, below the SCA noise impact threshold, no impact is predicted.

The *CEQR Technical Manual* requires a detailed technical assessment of potential mobile noise impacts if a proposed action would double traffic volumes at any location, or if a substantial generator of noise (which includes a play area) is proposed to be located near a sensitive receptor. If stationary noise levels increase less than 5 dBA, below the SCA noise impact threshold, no impact is predicted.

The noise assessment considered the following three factors: 1) existing noise levels in the area; 2) the project's noise generation characteristics (principally from the proposed outdoor recreation space and project-induced traffic) and their effects on adjacent sensitive receptors; and 3) the inherent sensitivity of the proposed school site to existing and future noise sources in the vicinity.

### B.16.1. Noise Descriptors

The A-weighted sound level (dBA) was used in the measurements and analysis of the noise effects in the project area as it correlates well with the human perception of noise. The one-hour equivalent continuous noise level ($L_{eq}$ in dBA), and the noise level exceeded 10 percent of the time ($L_{10}$ in dBA) were selected as the noise descriptors. The $L_{eq}$ is the equivalent steady state noise level that contains the same amount of acoustic energy as the fluctuating noise during the period of measurement. The $L_{10}$ descriptor provides an indication of existing average maximum noise levels and permits direct comparison with the CEQR External Noise Exposure Standards provided in Table B-17, set by NYCDEP, Division of Noise Abatement.

As indicated in Table B-17, external noise exposure at sensitive receptor sites is classified into four main categories: "acceptable", "marginally acceptable", "marginally unacceptable", and "clearly unacceptable".

### B.16.2. Criteria

The *CEQR Technical Manual* provides guidance for determining applicable noise levels used to determine noise exposure in outdoor areas near noise-sensitive uses such as schools, residences etc. Indoor noise levels in schools are required to be 45 dBA or less. Therefore, for schools located in areas with "marginally unacceptable" noise levels (70–80 dBA), a minimum 30–35 dBA reduction of outdoor noise would be specified.

## TABLE B-17: NOISE EXPOSURE STANDARDS FOR USE IN CITY ENVIRONMENTAL IMPACT REVIEWS[1]

| Receptor Type | Time Period | Acceptable General External Exposure | Airport[3] Exposure | Marginally Acceptable General External Exposure | Airport[3] Exposure | Marginally Unacceptable General External Exposure | Airport[3] Exposure | Clearly Unacceptable General External Exposure | Airport[3] Exposure |
|---|---|---|---|---|---|---|---|---|---|
| 1. Outdoor area requiring serenity and quiet[2] | | $L_{10} \leq 55$ dBA | | | | | | | |
| 2. Hospital, Nursing Home | | $L_{10} \leq 55$ dBA | $L_{dn} \leq 60$ dBA | $55 < L_{10} \leq 65$ dBA | $L_{dn} \leq 65$ dBA | $65 < L_{10} \leq 80$ dBA | (i) $L_{dn} \leq 70$ dBA (ii) $L_{dn} \leq 75$ dBA | $L_{10} > 80$ dBA | $L_{dn} > 75$ dBA |
| 3. Residence, residential hotel or motel | 7 AM–10 PM | $L_{10} \leq 65$ dBA | | $65 < L_{10} \leq 70$ dBA | | $70 < L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| | 10 PM–7 AM | $L_{10} \leq 55$ dBA | | $55 < L_{10} \leq 70$ dBA | | $70 < L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| 4. School, museum, library, court, house of worship or transient hotel or motel, public meeting room, auditorium, out- patient public health facility | | Same as Residential Day (7 AM–10 PM) | | Same as Residential Day (7 AM–10 PM) | | Same as Residential Day (7 AM–10 PM) | | Same as Residential Day (7 AM–10 PM) | |
| 5. Commercial or office | | Same as Residential Day (7 AM–10 PM) | | Same as Residential Day (7 AM–10 PM) | | Same as Residential Day (7 AM–10 PM) | | Same as Residential Day (7 AM–10 PM) | |
| 6. Industrial, public areas only[4] | Note[4] | Note[4] | | Note[4] | | Note[4] | | Note[4] | |

Source: New York Department of Environmental Protection (adopted policy 1983).

**Notes:**

(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;

1 Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.

3 One may use the FAA-approved $L_{dn}$ contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using data supplied by the Port Authority of New York and New Jersey.

4 External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

## B.16.3. Existing Noise Measurements

### *Noise Monitoring Locations*

Four representative noise-monitoring sites were selected based on preliminary conceptual sketches for the proposed school building and rooftop play area. All four monitoring sites are located at sensitive receptors near the proposed new school building. The selected noise monitoring sites are depicted in Figure B-18. Site 1 is a 6-story multi-family mixed use apartment building (restaurant on ground floor) located on the east side of Water Street, across the street from the existing post office building; Site 2 is a 6-story multi-family mixed use apartment building (vacant shop on ground floor) located on the west side of Water Street adjacent to the existing post office truck loading dock; Site 3 is the front entrance to the 6-story Hampton Inn Hotel located on the east side of Pearl Street adjacent to the project site; and Site 4 is adjacent to the Southbridge Towers Complex (6-story smaller building) located on the west side of Pearl Street. The noise monitoring sites are depicted in Figure B-18.

Existing noise levels were collected at the four monitoring sites on November 10, 2010 during school hours for duration of 20 minutes per reading. The noise measurement were collected between the time periods of 8:00 AM to 9:30 AM, 11:30 AM to 1:30 PM, and 2:00 to 3:30 PM. Measured noise levels were used to evaluate future noise impacts at nearby receptors, potential noise generated from other noise sources on the proposed new school facility, noise impacts from the operation of the proposed school building itself (e.g., generated in the outdoor play area), and impacts of project-related traffic on nearby sensitive land uses. Noise sources near the school site included automobiles, trucks, commuter buses, school buses, distant aircraft, playground noise, and other intermittent noise sources in the area generated by human activities. Of all these sources, the dominant noise source was road traffic.

### *Equipment Used in Noise Monitoring*

Two sets of calibrated sound level meters with calibrated condenser microphones and wind shields were used in noise monitoring. The measurement microphones were mounted on tripods, at approximately 5.5 feet above the ground. At the end of the preset 20 minutes, the $L_{10}$ and the $L_{eq}$ noise levels were read and recorded from the digital display of the sound level meters. Noise measurements were collected during weekdays with favorable weather conditions consisting of precipitation free time periods with dry road surface conditions and wind speeds of 12 mph or less.

### *Existing Noise Levels*

As shown in Table B-18, measured noise levels ranged from a Leq (1-hr) level of 64 dBA to 73 dBA, which is considered typical of ambient noise conditions near busy urban roadways. The wide range in noise levels was largely due to varying distance and visual exposure to street traffic at each representative site. Of the four monitoring locations, Site 3 registered the highest measured Leq (1-hr) with peak noise levels at 73 dBA during the AM peak hour time period. This was attributable to relatively high traffic volumes and MTA buses, which stop and pick up travelers on Pearl Street. The lowest measured noise level of 64 dBA occurred at Sites 1 and 2 along Water Street. According to the CEQR external noise exposure standards (presented in Table B-17), $L_{10}$ levels recorded at Sites 1 and 2 along Water Street are within "marginally acceptable" range and existing $L_{10}$ levels along Pearl Street (Sites 3 & 4) are in the "marginally unacceptable" range.

## FIGURE B-18: SHORT-TERM NOISE MONITORING LOCATIONS

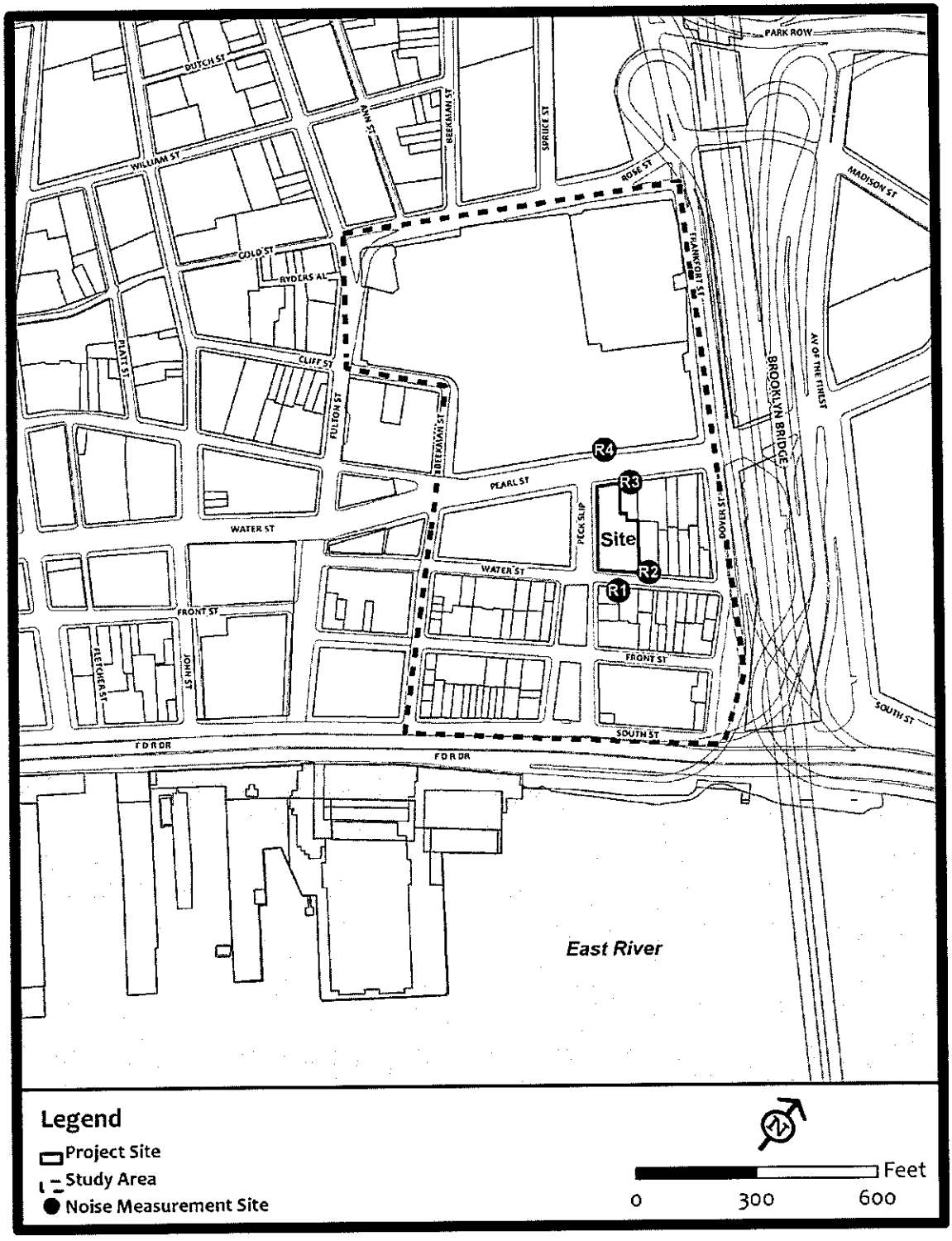


**TABLE B-18: SHORT-TERM NOISE MONITORING SITE RESULTS***

| Site Number | Monitoring Site Location | Hourly Leq (dBA) | | | Hourly $L_{10}$ (dBA) | | |
|---|---|---|---|---|---|---|---|
| | | AM | Midday | PM | AM | Midday | PM |
| 1 | 257-259 Water Street | 67 | 66 | 64 | 69 | 68 | 66 |
| 2 | 264 Water Street | 65 | 65 | 64 | 67 | 67 | 66 |
| 3 | 320 Pearl Street | 73 | 72 | 71 | 75 | 75 | 74 |
| 4 | 299 Pearl Street (back door area) | 72 | 69 | 69 | 74 | 72 | 71 |

* Baseline noise monitoring was completed on November 10, 2010 during the time periods 8:00 AM to 9:30 AM, 11:30 AM to 1:30 PM and 2:00 PM to 3:30 PM.

## B.16.4. Potential Impacts of the Project

### *Mobile Sources*

Mobile noise sources near the school site include automobiles, trucks, school buses, and airplanes. Of all these sources, the dominant noise source is road traffic. The proposed school is not expected to increase traffic volumes to any measurable degree. The effect of the proposed school on surrounding noise sensitive land uses is considered minimal and is projected to cause an imperceptible increase in noise levels on the adjacent streets; therefore, no mobile noise impact is expected due to school operations.

### *Stationary Source: Play Area Noise*

The screening level analysis of future noise levels from the proposed play area is based on the results of an SCA playground noise study that was conducted during October 1992. The results of the referenced study indicate that the highest hourly playground noise level from school playgrounds occurs during the midday time period with playground generated noise reaching a $L_{eq}$ noise level of 71 dBA. According to the SCA study, a $L_{eq}$ of 71 dBA would roughly correspond to an $L_{10}$ of 74 dBA at the playground boundary. Noise levels resulting from play area at the proposed school were estimated using the SCA approved methodology.

For this analysis, it was conservatively assumed that a rooftop play area would face Water Street where residential buildings are located on a narrow street that experiences low background noise levels and any additional noise would potentially be perceptible. Based on the 1992 study, noise levels generated by a rooftop play area at this location would be expected to approach the SCA's 5 dBA impact threshold at Site 1 at the exterior of the fifth and sixth floors. Since there are no exterior uses at the 5th and 6th floors, with windows closed, noise levels would still remain within the 45 dBA standard for interior spaces and not be perceptible within the apartments. Moreover, noise generated from school-only outdoor play activities would be limited to intermittent times of the day and year when the weather would be favorable. As such, this noise increase would not be considered a significant adverse impact.

## B.16.5. Interior Noise Levels

The existing postal building or the new proposed school building built on the site would be designed to provide sufficient window-wall attenuation as shown on Table B-19 to ensure that the future interior noise levels in the school classrooms would be 45 dBA or less. Future noise levels would not

create a significant impact on the operations of the school. For this study, the acceptability evaluation only considers noise generated from vehicular traffic movements. The greatest noise exposure for the proposed school building is expected to occur along Pearl Street where peak $L_{10}$ levels are projected to peak at 75 dBA. In order to maintain an acceptable interior noise environment inside school buildings where classroom learning and speech intelligibility is critical, interior noise levels should not exceed 45 dBA. To satisfy this requirement, it would be necessary to provide a minimum of 30 dBA window-wall attenuation for the exterior walls of the new school facility. The building will be designed with double-glazed windows (per SCA design standards) and would provide the necessary attenuation through window-wall construction and mechanical ventilation. Furthermore, it is anticipated that all noise sensitive properties located within reasonable distance of the play area would be within the CEQR "Marginally Acceptable External Exposure" range, as indicated in Table B-19, requiring no additional window-wall noise reduction to maintain a 45 dBA interior noise level.

**TABLE B-19: REQUIRED ATTENUATION VALUES TO ACHIEVE ACCEPTABLE INTERIOR NOISE LEVELS**

| Noise Category | Marginally Acceptable | Marginally Unacceptable | | Clearly Unacceptable | | |
|---|---|---|---|---|---|---|
| Noise level with proposed action | $65 < L_{10} \leq 70$ | $70 < L_{10} \leq 75$ | $75 < L_{10} \leq 80$ | $80 < L_{10} \leq 85$ | $85 < L_{10} \leq 90$ | $90 < L_{10} \leq 95$ |
| Required Attenuation | 25 dB(A) | (I) 30 dB(A) | (II) 35 dB(A) | (I) 40 dB(A) | (II) 45 dB(A) | (III) 50 dB(A) |

Source: New York City Department of Environmental Protection (DEP)

Note: The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternative means of ventilation.

## B.17. PUBLIC HEALTH

Public Health includes the activities that society undertakes to create and maintain conditions in which people can be healthy. An assessment of public health examines potential impacts on health citywide, or in the case of the proposed project, on the health of a community or certain groups of individuals that may be affected.

According to the *CEQR Technical Manual*, a public health analysis is not necessary for most projects. Where no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, no public health analysis is warranted. No impacts related to hazardous materials, air quality, water quality, or noise are anticipated as a result of the proposed project; therefore, the proposed project would not be expected to result in significant adverse impacts on public health.

## B.18. NEIGHBORHOOD CHARACTER

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct personality such as the existing—land uses, urban design, visual resources, historic resources, socioeconomic conditions, traffic, and noise levels found there. The 2010 *CEQR Technical Manual* requires an assessment of neighborhood character when a project has the potential to result in significant adverse impacts in any of these other technical areas.

### B.18.1. Screening Assessment

The main defining feature of the neighborhood is its historic character, which is defined by 18th and 19th century, 4- to 8-story, former warehouse and commercial buildings. As discussed in the Urban Design and Historic Resource sections, since the site is located within the South Street Seaport Historic District Extension, the final design of the building would be developed in consultation with the SHPO. The SHPO would review the plans to ensure that the building is compatible with the scale and built character of the historic district, in terms of both its massing and façade materials, thus it is assumed given this review and MOA conditions, the project would not have an adverse effect on the neighborhood's urban design and historic character. In addition, as discussed in each respective section, the proposed school project would not result in significant adverse impacts to any of the other various elements that contribute to neighborhood character, including land use, socioeconomic conditions, traffic (with implementation of proposed improvements), and noise levels. Therefore, the proposed project would not result in significant adverse impacts to neighborhood character.

## B.19. CONSTRUCTION IMPACTS

Pursuant to CEQR guidance, a detailed analysis of construction impacts is not required if the construction period is short-term and the intensity of activity is not significant.

Construction of the proposed school is expected to take approximately three years. Demolition of the existing building is expected to begin in 2011, followed by construction. The school is expected to be completed and ready for student occupancy by the start of the 2015–16 school year. Construction activities would normally take place Monday through Friday, although the delivery or installation of certain critical equipment could occur on weekends. Construction activity would generally be conducted between 8:00 AM and 4:00 PM. Occasionally, overtime may be required to complete some time-sensitive tasks.

Construction activities on the project site and construction-related traffic on nearby streets would likely cause temporary disruptive effects on the site and immediate environs. However, the project's construction-related effects would be temporary and of a relatively short-term duration, and while the construction period would exceed two years, approximately one year of the construction period would entail interior construction of the school, which would have a minimally disruptive effect on the surrounding area. Therefore, construction of the proposed project would not result in significant adverse construction impacts.

The disruptive effects of the project's construction activities are described below. Measures will be undertaken to minimize these effects and maintain public safety during the construction period.

### B.19.1. Potential Traffic Impacts During Construction

The added construction workers and truck trip generation associated with construction of the new school facility would be expected to temporarily affect street conditions in the immediate area. On-street parking may be partly displaced by construction employee vehicles. Like other construction-related effects, these effects on traffic and parking conditions would be short-term.

### B.19.2. Potential Noise Impacts During Construction

Construction activities generally have short-term noise effects on sensitive sites in the immediate vicinity of the construction site. Effects on community noise levels during construction include noise from construction equipment and noise from construction vehicles and delivery vehicles traveling to and from the site. The level of effect of these noise sources depends upon the noise characteristics of the equipment and activities involved, the construction schedule, and the distance from sensitive receptors. At a typical receptor, noise levels would be highest during the early phases of construction when excavation and heavy daily truck traffic would occur. Scheduling the noisiest activities at the least-sensitive times of the day would limit their effect on any sensitive uses nearby.

In addition, short-term noise from school construction activities must comply with the DEP's rules regarding city-wide construction noise mitigation (Chapter 28 of amended Title 15 of the Rules of the City of New York). In accordance with Section 24-219 of the New York City Noise Code, every construction site where construction activities take place shall have, conspicuously posted, a

complete and accurate Construction Noise Mitigation Plan to minimize excessive short-term construction noise throughout the city.

### B.19.3. Potential Air Quality Impacts During Construction

Construction-related effects of the project on air quality would primarily result from:

- Emissions of on-site operations of heavy-duty diesel-fueled equipment (e.g., cranes, bull dozers, etc.);
- Fugitive dust (particulate matter) that is "kicked up" by haul trucks, concrete trucks, delivery trucks, and other earth-moving vehicles operating around the construction site; and
- Emissions generated by construction-related vehicles traveling to and from the construction site.

The project's construction-related effects would be typical of construction activities in New York City in terms of their duration and magnitude. In addition, the construction process in New York City is highly regulated to ensure that construction period impacts are minimized. The construction process requires consultation and coordination with a number of city agencies, including the DOT, the NYCDOB and the DEP, and appropriate construction methods would be employed to minimize the project's construction impacts. Construction activities will comply with Local Law 77, which requires that ultra-low sulfur vehicles be used and best available control technologies be implemented to reduce tailpipe emissions. Also, mitigation measures to contain the dust (including wetting tires before trucks leave the construction site and covering haul trucks to prevent material from blowing off) will be implemented.

With the mandated control measures, the proposed project is not anticipated to cause significant construction-related impacts.

# APPENDIX A

## Works Cited and Personal Contacts

Grace Han, New York City Department of City Planning, Community District 1 Community Liaison, phone communication on October 1, 2010

Elizabeth Baptiste, Lower Manhattan Construction Command Center, Fulton Street Phase 2 Community Liaison, phone communication on October 8, 2010

Employee, Lower Manhattan Construction Command Center, Fulton Street Phase 3 Community Liaison ,phone communication on October 8, 2010

Lawrence Mauro, New York City Department of Parks and Recreation, phone communication on October 8, 2010.

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AKRF Engineering, P.C. *Phase I Environmental Site Assessment (ESA)*, August 11, 2010.

Lower Manhattan Construction Command Center website, http://www.lowermanhattan.info/

New York City Department of Parks and Recreation website, http://www.nycgovparks.org/

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New York City School Construction Authority. *Test Fit/Sketch Study: 1 Peck Slip, Manhattan, NY*. July 14, 2010.

# APPENDIX B

# Agency Correspondence

**New York State Office of Parks, Recreation and Historic Preservation**

Historic Preservation Field Services • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

Andrew M. Cuomo
Governor

Andy Beers
Acting Commissioner

February 11, 2011

Adam Lynn
Operations Manager, Real Estate Services
New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, New York 11101

Re: NYCSCA
New Construction – PS School
One Peck Slip
Manhattan, New York County
11PR00200

Dear Mr. Lynn:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic preservation regarding the proposed construction of a new school at Peck Slip in Lower Manhattan. Our office is reviewing the project under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law and the Letter of Resolution between the New York City School Construction Authority and OPRHP dated April 2007.

Based on the information provided, it is our understanding that the 1950s Peck Slip Post Office, while a nicely designed post war building, is a non-contributing building in the South Street Seaport Historic District Expansion area. The proposed plan will have No Adverse Impact on the building in question, but could have a significant affect on the surrounding district. Therefore, the determination is based on the following conditions:

1. A construction protection plan is developed for the nearby buildings in the APE, which could potentially be at risk during the construction period, and submitted for OPRHP review.
2. OPRHP will review the design of the proposed new construction to determine its effects on the NR-eligible and NR-listed structures in the historic district.
3. Should the construction activities require excavation below the level of the present disturbance created by the existing building, a Phase IB Study should be conducted and reviewed by our office.

We look forward to continued consultation with you as the project progresses. Should you have any questions or not be able to fulfill the condition, please feel free to contact me at (518)237-8643, ext. 3287. When corresponding with the OPRHP regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above. The number has changed for the new project.

Sincerely,

Elizabeth Martin
Historic Sites Restoration Coordinator

Via email only

# APPENDIX C

## New York City Waterfront Revitalization Program: Consistency Assessment Form

# APPENDIX C
# New York City Waterfront Revitalization Program: Consistency Assessment Form

The project site is located within New York City's coastal zone boundary; therefore, the proposed project requires a certification consistent with the New York City's Local Waterfront Revitalization Program (WRP). This attachment includes a New York City Waterfront Revitalization Program Consistency Assessment Form, and the following discussion provides an assessment of the project's consistency with each applicable WRP policy for which a "yes" response was provided on the form.

## Policy 1.1: Encourage commercial and residential development in appropriate coastal zone areas.

The proposed project involves the redevelopment of the project site with a new primary school facility. Most of the elementary schools in the area are currently near or above capacity, and the proposed project would provide an additional approximately 480 seats to relieve current overcrowding and accommodate anticipated future growth of the area's student population. The proposed use of the site for a school is permitted as-of-right by the site's C6-2A zoning and would be compatible with the mixed-use residential and commercial character of the area. In addition, the proposed project would retain the existing USPS retail operations on the site, thereby continuing to serve the area's residents and employees. Therefore, the proposed development of a new school on the project site is appropriate for this area of the coastal zone and would be consistent with this policy.

## Policy 6: Minimize loss of life, structures and natural resources caused by flooding and erosion.

Since the project site is located in the 100-year floodplain, the portions of the building below the Design Flood Elevation would incorporate "Dry Floodproofing" to avoid flooding within the building. In addition, the project site is currently developed with a 4-story USPS building, and the proposed project would not change the grade or amount of impervious surface area on the site such that there would be an effect on the floodplain or flooding conditions at surrounding properties. Therefore, the proposed project is consistent with this policy.

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

*10.1 Retain and preserve designated historic resources and enhance resources significant of the coastal culture of New York City*

The project site is located in the South Street Seaport Historic District, which is bounded roughly by Dover Street to the north, Pearl and Front Streets to the west, Maiden Lane and Fletcher Street to the south, and South Street and the East River to the east. The historic district is designated by the NYCLPC and listed on the State and National Registers of Historic Places. The district contains the largest concentration of early 19th century commercial buildings in New York City, and is

representative of the development of trade and commerce in the seaport area as New York became the nation's economic and financial capital. The district is architecturally significant for its large concentration of Greek Revival countinghouses from the 1830's and is notable for its low-scale which contrast with the modern high-rise buildings surrounding the district.

The existing post office building on the project site was built in the 1950s and is not architecturally significant nor does it contribute to the historic districts. The area contains a mix of residential, commercial, institutional and other land uses, such that the introduction of a school would not affect the overall character of the historic district.

While the existing building on the site is not architecturally significant, its alteration or replacement could potentially have an adverse effect on the South Street Seaport Historic District. Given preliminary conceptual sketches, however, the proposed 5-story school building would be consistent with the scale and massing of the surrounding historic buildings. In addition, since the project is located within the National Register South Street Seaport Historic District, the final design of the building would require OPRHP's approval. As stated in their letter of February 11, 2011 (and reiterated in the Memorandum of Agreement between the SCA, USPS and SHPO), OPRHP would review the plans to ensure that the building is consistent with the built context of the district in terms of its design and materials, thereby ensuring that the project would not have an adverse effect on the historic district. Therefore, the proposed project would be compatible in terms of height, design, and use with the surrounding and nearby historic districts.

*10.2 Protect and preserve archaeological resources and artifacts*

The project Area of Potential Effect (APE) straddles the original, predevelopment East River shoreline of Manhattan Island, from the low water mark at Water Street, to the high water line midway between Water and Pearl Streets. Therefore, roughly the northwestern half of the APE was dry land along the beach, and the southwestern half was in the intertidal zone, and possibly continuously submerged. The strong downslope from Pearl to Water is still visible today.

Prior to filling activities in the low-lying parts of the APE (beginning ca. 1701) and later Water Street, the immediate vicinity of the APE was used as a shipyard (1710s), ferry landing (ca. 1661), commercial wharf/landing (by ca. 1647), activities would have left an archaeological footprint on the predevelopment beach and in the intertidal zone. Wharf construction and landfill activities and devices would also have left important cultural remains on the APE extending well below the present water table.

In other locations in Lower Manhattan, archaeological resources were generally encountered below the basements of the existing buildings, approximately 5 to 9 feet below street grade, at or just below mean sea level. Since the 1920s, the intersection of Water Street and Peck Slip has been at an elevation of 5 feet above mean high water, and given a 4-foot tidal fluctuation, the upper part of these resources would be expected to be encountered between 5 and 9 feet below the current surface, with depth increasing toward Water Street (southwest).

Based on plans for the existing post office building, the pile caps extend only about 5 feet below grade along Water Street, and although depth of disturbance would have increased with greater distance from Water Street, this would have left substantial areas of archaeological potential undisturbed.

A 2007 Phase 1A on the adjacent streetbed of Peck Slip and Water Street abutting the APE concluded that landfill and landfilling devices, shipyard remains, warehouse pier remains were to be found 20–35 feet below the surface. In the sidewalk adjacent to the APE at the intersection of Water Street and Peck Slip, fill, which would contain archaeological resources, extends between 22 and 24 feet below the current sidewalk. Since historically the APE was more elevated than adjacent Water Street, resources would not be expected to be as deeply buried as those in the streetbed. Archaeological potential could exist beneath the subsurface disturbance caused by construction of the 1950 post office building.

A Phase 1A archaeological study prepared for the proposed action and submitted to the OPRHP. In a letter dated February 11, 2011, OPRHP commented that should the construction activities require excavation below the level of the present disturbance created by the existing building, a Phase IB study should be conducted and reviewed by the agency.