A. INTRODUCTION

This chapter examines the potential effects of the Proposed Action and associated reasonable worst-case development scenario (RWCDS) on community facilities and services in and around the neighborhood. The *City Environmental Quality Review* (CEQR) *Technical Manual* defines community facilities as public or publicly funded facilities, including schools, health care, child care, libraries, and fire and police protection services. CEQR methodology focuses on direct impacts on community facilities and services and on increased demand for community facilities and services generated by new users such as the population that would occupy a proposed residential development (i.e., indirect impacts).

B. PRINCIPAL CONCLUSIONS

Pursuant to *CEQR Technical Manual* guidelines, detailed analyses of potential impacts on public elementary, intermediate and high schools, publicly funded child care services, and public libraries were conducted for the Proposed Action. Based on the *CEQR Technical Manual* screening methodology, detailed analyses of outpatient health care facilities and police and fire protection services are not warranted. As described in the following analysis and summarized below, the Proposed Action would have a significant adverse impact on publicly funded child care services, as well as a temporary significant adverse impact on elementary schools.

Public Schools

The project site falls within the boundary of New York City Community School District (CSD) 30, Sub-district 3. The RWCDS associated with the Proposed Action would introduce a net increment of 426 elementary school students, 183 intermediate school students, and 213 high school students. The assessment of public schools assesses the potential effects of these additional students on elementary and intermediate schools within Sub-district 3 of CSD 30 and on high schools within the borough of Queens.

In the future with the Proposed Action, elementary schools within Sub-district 3 of CSD 30 would operate at 122.3 percent capacity, with a shortfall of 1,076 seats. Although the collective utilization rate of elementary schools in CSD 30, Sub-district 3 would exceed 100 percent in the With-Action condition, because the proposed project includes a site for a 456-seat elementary school within the project site, the Proposed Action would result in a decrease of approximately three percent in the collective utilization rate between the No-Action and With-Action conditions. However, as the proposed school would be constructed in the final phase of the proposed project's development, the Proposed Action would result in a maximum temporary increase in the elementary school utilization rate of 5.67 percent, and therefore would result in a temporary significant adverse elementary school impact.

Intermediate schools would operate with surplus capacity in Sub-district 3 of CSD 30 in the future with the Proposed Action, and therefore, the Proposed Action would not result in a significant adverse impact on intermediate schools.

According to the *CEQR Technical Manual,* the determination of impact significance for high schools is conducted at the borough level. The additional high school students introduced as a result of the Proposed Action would raise the utilization for high schools in Queens from approximately 133.1 percent to 133.4 percent. Accordingly, the Proposed Action would not have a significant adverse impact on high school.

Child Care Services

Within the study area, which extends approximately 1.5 miles from the project site, there are three publicly funded group child care facilities and Head Start programs. As of June 2013, these facilities were operating at capacity (100 percent utilization). In the future with the Proposed Action, the proposed project would generate up to 295 low- and moderate-income housing units by 2023. Based on *CEQR Technical Manual* Table 6-1b, it is estimated that these 295 units would generate 41 children under the age of 6 eligible for publicly funded child care services. The additional children would increase the utilization rate to 153 percent (an increase of 17 percent from the No-Action condition).

According to the *CEQR Technical Manual*, a significant adverse child care impact may result, warranting consideration of mitigation, if a proposed action would increase the study area's utilization rate by at least five percent and the resulting utilization rate would be 100 percent or more. The Proposed Action would cause a 17 percent increase in demand over the No-Action child care capacity in the study area, over the CEQR threshold of five percent. Therefore, the Proposed Action would result in a significant adverse impact to publicly funded child care centers and Head Start programs in the study area. To avoid exceeding the significant adverse impact threshold, the number of affordable units included in the proposed project would need to be reduced to 89, which would generate only 12 children eligible for publicly funded group child care. Alternately, 21 additional child care slots would need to be provided to reduce the increase in utilization to below the five percentage point threshold. Potential measures to mitigate child care impacts are described in Chapter 20, "Mitigation."

Libraries

The project site is within the catchment area of the Astoria Library. Assuming 2.34 persons per household based on 2010 Census data, the Proposed Action would result in a net increase of 3,564 residents to the area. This would increase the study area population, and therefore the number of residents per branch, by 6.5 percent. However, in the 2023 With-Action condition, the Astoria Library would have a ratio of approximately 0.12 holdings per resident, which is the same as under No-Action conditions.

Although the Astoria Library study area population would increase by approximately 6.5 percent, the increase would not be expected to impair the delivery of library services. Residents of the Astoria Library study area and the proposed project would have access to the entire Queens Public Library system through the interlibrary loan system and could have volumes delivered directly to their nearest library branch. There are also three other Queens Library branches located approximately one mile from the project site. Therefore, as noted above, there are more library resources available to study area residents than are reflected in this quantitative analysis. Residents would also have access to libraries near their places of work. In addition, the recent renovations along with the trend toward increased electronic research and interlibrary loans are expected to free up stack space, providing for increased capacity and programs to serve the future population. As such, the Proposed Action would not result in a significant adverse impact to public libraries. In a letter dated March 24, 2014, the Queens Public Library concurred with the conclusion that the Proposed Action would not result in a significant adverse impact to public libraries (see Appendix C).

C. PRELIMINARY SCREENING

This analysis of community facilities and services has been conducted in accordance with *CEQR Technical Manual* guidelines and the latest data and guidance from agencies such as the New York City Department of Education (DOE), Administration of Children's Services (ACS), Queens Public Library (QPL), and the Department of City Planning (DCP).

The purpose of the preliminary screening is to determine whether a community facilities assessment is required. As recommended by the *CEQR Technical Manual*, a community facilities assessment is warranted if a project has the potential to result in either direct or indirect effects on community facilities. If a project would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the service delivery of the facility and the potential effect that the physical change may have on that service delivery. New population added to an area as a result of a project would use existing services, which may result in potential indirect effects on service delivery. Depending on the size, income characteristics, and age distribution of the new population, there may be effects on public schools, libraries, or child care centers.

Direct Effects

The Proposed Action would not physically alter or directly displace any community facility, and therefore, there would be no direct effects to existing community facilities and services resulting from the Proposed Action.

Indirect Effects

The *CEQR Technical Manual* provides thresholds that provide guidance in making an initial determination of whether a detailed analysis is necessary to determine potential impacts. Table 4-1 lists those *CEQR Technical Manual* thresholds for each community facility analysis area. If a proposal exceeds the threshold for a specific facility, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Action and associated RWCDS would exceed established *CEQR Technical Manual* thresholds warranting further analysis. Based on that screening, a detailed analysis is provided for public elementary, intermediate, and high schools, publicly funded child care services, and public libraries.

Table 4-1: Preliminary Screening Analysis Criteria

Community Facility	Threshold for Detailed Analysis
Public Schools	More than 50 elementary/intermediate school or 150 high school students
Libraries	Greater than 5 percent increase in ratio of residential units to libraries in the borough
Health Care Facilities (outpatient)	Introduction of sizeable new neighborhood
Child Care Centers (publicly funded)	More than 20 eligible children based on number of low-to moderate-income units by the borough
Fire Protection	Introduction of sizeable new neighborhood
Police Protection	Introduction of sizeable new neighborhood

Source: *CEQR Technical Manual*

Public Schools

The *CEQR Technical Manual* recommends conducting a detailed analysis of public schools if a proposed project would generate more than 50 elementary/intermediate school students and/or more than 150 high school students. Based on a maximum net increment of 1,523 residential units and the CEQR student generation rates for Queens (0.28 elementary, 0.12 middle, and 0.14 high school students per housing unit, the Proposed Action would generate approximately 811 total students, with approximately 426

elementary school students, 183 intermediate school students, and 213 high school students. This number of students warrants a detailed analysis of the Proposed Action's effects on elementary, intermediate, and high schools.

Libraries

Potential impacts on libraries can result from an increased user population. According to the *CEQR Technical Manual*, a proposed project in Queens that generates a five percent increase in the average number of residential units served per branch (622 residential units in Queens) may cause significant adverse impacts on library services and require further analysis. The RWCDS associated with the Proposed Action is expected to add a net increase of 1,523 dwelling units over the No-Action condition. Therefore the Proposed Action would exceed this threshold, and a detailed analysis of libraries is warranted.

Child Care Services

According to the *CEQR Technical Manual*, if a proposed project would add more than 50 children eligible for child care to the study area's child care facilities, a detailed analysis of its impact on publicly funded child care facilities is warranted. This threshold is based on the number of low-income and low- to moderate-income units within a proposed project (139 residential units in Queens). As described previously, the RWCDS associated with the Proposed Action is expected to add a net increase of 1,523 dwelling units, of which 295 would be affordable units provided through the Inclusionary Housing Program, over the No-Action condition. Therefore, the Proposed Action would yield more than 20 children under age six eligible for public child care, exceeding the CEQR threshold requiring a detailed child analysis.

Health Care Facilities

Health care facilities include public, proprietary, and nonprofit facilities that accept government funds (usually in the form of Medicare and Medicaid reimbursements) and that are available to any member of the community. Examples of these types of facilities include hospitals, nursing homes, clinics, and other facilities providing outpatient health services. According to the *CEQR Technical Manual,* if a proposed project would create a sizeable new neighborhood where none existed before, there may be increased demand on local public health care facilities, which may warrant further analysis of the potential for indirect impacts on outpatient health care facilities. The Proposed Action would not result in the creation of a sizeable new neighborhood, and therefore a detailed analysis of indirect effects on health care facilities is not warranted.

Police and Fire Protection Services

The *CEQR Technical Manual* recommends detailed analyses of impacts on police and fire service in cases where a proposed project would affect the physical operations of, or direct access to and from, a precinct house or fire station, or where a proposed project would create a sizeable new neighborhood where none existed before. The Proposed Action would not result in these direct effects on either police or fire services, nor would it create a sizeable new neighborhood; therefore, no further analysis is warranted.

D. INDIRECT EFFECTS ON PUBLIC SCHOOLS

Methodology

This analysis assesses the potential effects of the Proposed Action on public elementary, intermediate, and high schools serving the project site. According to the guidelines presented in the *CEQR Technical Manual*, CEQR analyzes potential impacts only on public schools operated by the DOE.[1] Therefore, private and parochial schools within the study area are not included in the analysis of schools presented in this chapter.

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the Proposed Action. The analysis of community facilities will consider the potential for significant adverse impacts resulting from the RWCDS. As outlined in Chapter 1, "Project Description," the RWCDS would result in a net increment of 1,523 residential units compared to No-Action conditions. Based on the multipliers presented in Table 6-1a of the *CEQR Technical Manual*, the RWCDS associated with the Proposed Action would result in a net increase of approximately 609 new elementary and middle school students and 213 high school students on the project site, as compared to the No-Action condition. According to *CEQR Technical Manual* guidelines, this level of development would trigger a detailed analysis of elementary and intermediate level schools, as well as high schools.

The project site falls within the boundary of CSD 30. Following methodologies set forth in the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools is the school district's "sub-district" ("region" or "school planning zone") in which the project site is located (see Figure 4-1). The project site is located within the boundary of Sub-district 3 of CSD 30. Children residing within the proposed project would most likely attend the elementary and intermediate schools in the defined study area.

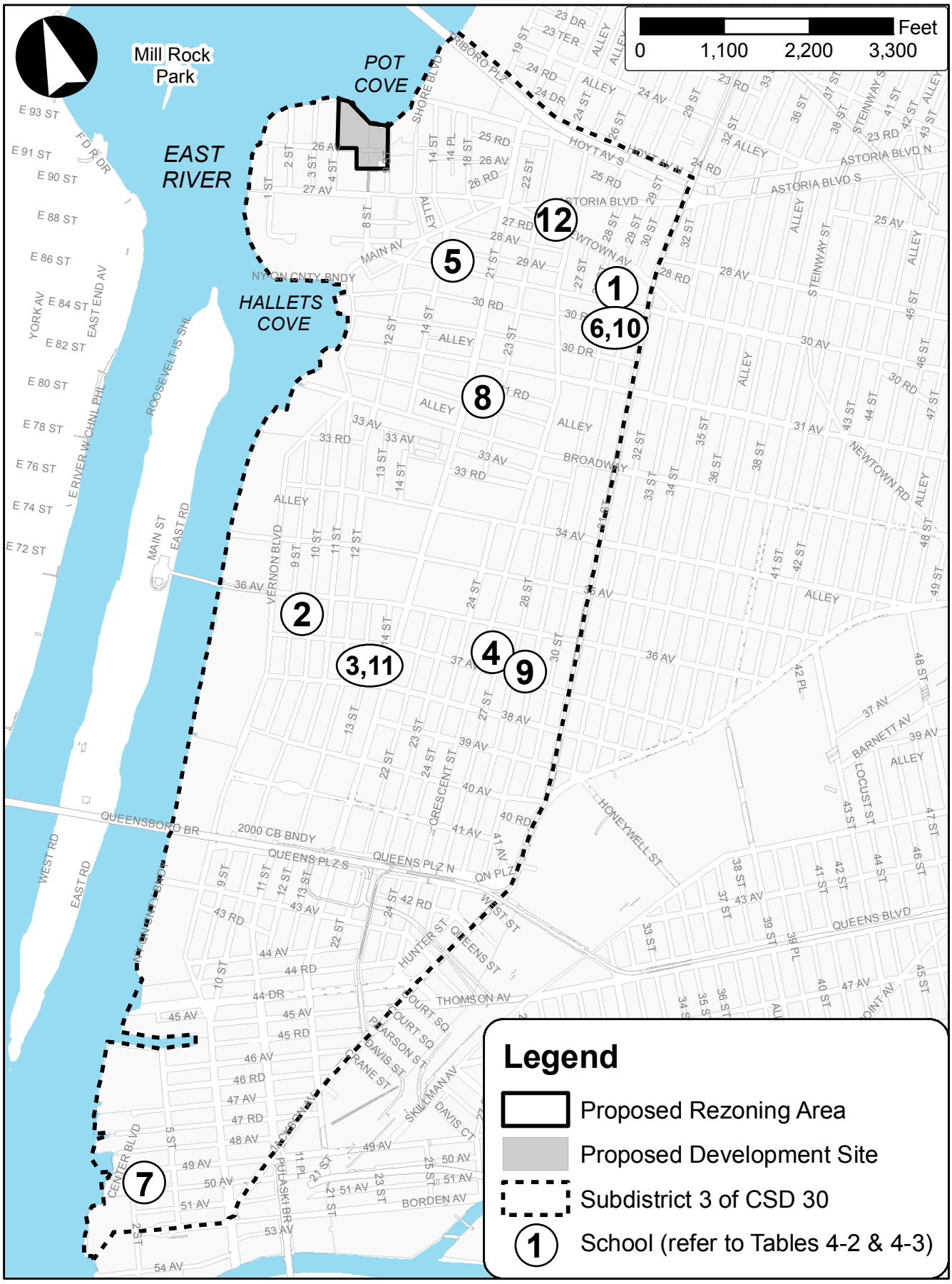
A schools analysis presents the most recent capacity, enrollment, and utilization rates for elementary, intermediate, and high schools in the respective study areas. Future conditions are then predicted based on enrollment projections and proposed development projects—the future utilization rate for school facilities is calculated by adding the estimated enrollment from proposed residential developments in the schools study area to DOE's projected enrollment and then comparing that number with projected school capacity. DOE's enrollment projections for years 2011 through 2021, the most recent data currently available, are posted on the School Construction Authority (SCA) website.[2] These enrollment projections are based on broad demographic trends and do not explicitly account for discrete new residential developments planned for the study area. Therefore, the additional populations from the other new development projects expected to be complete within the study area are added to the projected enrollment to ensure a more conservative prediction of future enrollment and utilization. In addition, any new school projects identified in the DOE Five-Year Capital Plan are included if construction has begun. According to the *CEQR Technical Manual*, some schools may be included in the analysis if they are in the DOE Five-Year Capital Plan but are not yet under construction if the lead agency, in consultation with SCA, concurs that it is appropriate.

The effect of the new students introduced by a proposed project on the capacity of schools within the respective study areas is then evaluated. According to the *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in:

[1] Pursuant to CEQR guidelines the schools analysis does not consider charter schools.
[2] Enrollment projections by the Grier Partnership were used: http://www.nycsca.org.

Figure 4-1

Public Elementary and Intermediate Schools Serving the Project Site



1. A utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and
2. An increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions.

The methodology is similar for high schools, but the study area is different. High school students may attend any high school in the City if they meet the admissions criteria, and high schools compete to attract students on the basis of specialized programs and overall reputation. Consequently, school capacity assessments for high schools are not performed for small, localized study areas. The *CEQR Technical Manual* sets the borough in which the project is located (in this case, Queens, which includes CSDs 24 through 30) as the applicable study area. The No-Action RWCDS for a borough high school analysis is obtained from the SCA's *Projected New Housing Starts as Used in 2012-2021 Enrollment Projections.*

Existing Conditions

As described above, elementary and intermediate schools in New York City are located in geographically defined school districts. As shown in Figures 4-1, the project site is located within the boundary of CSD 30, Sub-district 3. Analyzed schools located in CSD 30, Sub-district 3 can be generally defined by one of four categories: elementary, intermediate, secondary, and K-8 schools. Elementary schools (PS) serve pre-kindergarten or kindergarten through 5th grades; intermediate schools (IS) serve 6th through 8th grades; secondary schools serve 6th through 12th grades; and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For utilization analysis purposes, elementary and the PS component of K-8 schools have been combined and the intermediate and IS component of PS/IS and IS/HS schools have been combined.

Capacity and enrollment information for elementary schools in Sub-district 3 of CSD 30 is provided in Table 4-2, and capacity and enrollment information for intermediate schools in the study area are provided in Table 4-3. It should be noted that some of the school buildings in Sub-district 3 of CSD 30 house more than one organization, and in such cases those organizations are listed separately in Tables 4-2 and 4-3.

Table 4-2: Existing Study Area Public Elementary School Enrollment, Capacity, and Utilization Figures for 2012-2013 Academic Year

Map No.[1]	School Name and Address	School District	Sub-District	Grades Served	Enrollment	Target Capacity[2]	Available Seats	Utilization (%)
1	P.S. 17 (28-37 29th Street)	30	3	PK-5	557	816	259	68.3
2	P.S. 76 (36-36 10th Street)	30	3	PK-5	594	887	293	67.0
3	P.S. 111 (37-15 13th Street)[3]	30	3	PK-8	316	417	101	75.8
4	P.S. 112 (25-05 37th Avenue)	30	3	PK-5	489	465	-24	105.2
5	P.S. 171 (14-14 29th Avenue)	30	3	PK-5	594	854	260	69.6
6	P.S. 234 (30-15 29thStreet)	30	3	PK-5	683	653	-30	104.6
7	P.S. 78 (48-09 Center Blvd)	30	3	PK-5	292	287	-5	101.7
Total for Elementary Schools in CSD 30, Sub-district 3					***3,525***	***4,379***	***854***	***80.5***

Source: DOE, *Enrollment – Capacity – Utilization Report, 2012-2013 School Year.*
Notes:
[1] Corresponds to Figure 4-1.
[2] Target Capacity sets a goal of a reduced class size of 20 for grades K-3 and 28 for grades 4-5 and is used by the DOE for capital planning purposes.
[3] PS component of PS/IS schools based on information supplied by SCA.

Table 4-3: Existing Study Area Public Intermediate School Enrollment, Capacity, and Utilization Figures for 2012-2013 Academic Year

Map No.[1]	School Name and Address	School District	Sub-District	Grades Served	Enrollment	Target Capacity[2]	Available Seats	Utilization (%)
8	I.S. 126 (31-51 21st Street)	30	3	6-8	489	966	477	50.6
9	I.S. 204 (36-41 28th Street)	30	3	6-8	702	1,036	334	67.8
10	I.S. 235 (30-14 30th Street)	30	3	6-8	155	197	42	78.7
11	P.S. 111 (37-15 13th Street)[3]	30	3	PK-8	133	175	42	75.8
12	Young Women's Leadership School (23-15 Newtown Avenue)[3]	30	3	6-12	264	266	2	99.1
Total for Intermediate Schools in CSD 30, Sub-district 3					***1,743***	***2,641***	***898***	***66.0***

Source: DOE, *Enrollment – Capacity – Utilization Report, 2012-2013 School Year*.
Notes:
[1] Map No. corresponds to Figure 4-1.
[2] Target Capacity sets a goal of a reduced class-size of 28 for grades 6-8 and is used by the DOE for capital planning purposes.
[3] IS component of PS/IS and IS/HS schools based on information supplied by SCA.

Elementary Schools

As shown in Figure 4-1, there are a total of seven elementary schools within the study area. Table 4-2 shows the existing capacity, enrollment, and utilization figures for elementary schools in the study area. As shown in Table 4-2, the seven elementary schools within Sub-district 3 of CSD 30 had a utilization of approximately 80.5 percent with 854 available seats.

Intermediate Schools

As shown in Figure 4-1, there are a total of four intermediate schools within the study area. Table 4-3 shows the existing capacity, enrollment, and utilization figures for intermediate schools within the study area. As shown in Table 4-3, the four intermediate schools within Sub-district 3 of CSD 30 had a utilization of approximately 66.0 percent with 898 available seats.

High Schools

Table 4-4 provides summary capacity, enrollment, and utilization figures for all high schools in Queens. As shown in Table 4-4, the borough's high schools had a utilization of approximately 110.6 percent with a deficiency of 7,476 seats. Although the one-mile radius is not used for assessment purposes, Figure 4-2 shows the locations of all high schools within an approximate one-mile radius of the project site. As shown in Figure 4-2, there are two high schools within a mile of the project site (see Table 4-5). The closest high school to the project site is the Young Women's Leadership Academy located at 23-15 Newtown Avenue.

Table 4-4: 2012-2013 High School Enrollment, Capacity, and Utilization Data in the Borough of Queens

Area	Enrollment	Target Capacity[2]	Available Seats	Utilization (%)
Queens Total[1]	78,024	70,548	-7,476	110.6

Source: DOE, *Enrollment – Capacity – Utilization Report, 2012-2013 School Year* (includes high schools seats from CSD, Alternative, & Regular HS sections)
Notes:
[1] HS component of IS/HS schools based on information supplied by DCP.
[2] Target Capacity sets a goal of a reduced class size of 30 for grades 9-12 and is used by the DOE for capital planning purposes.

Public High Schools within a Mile Radius of the Project Site

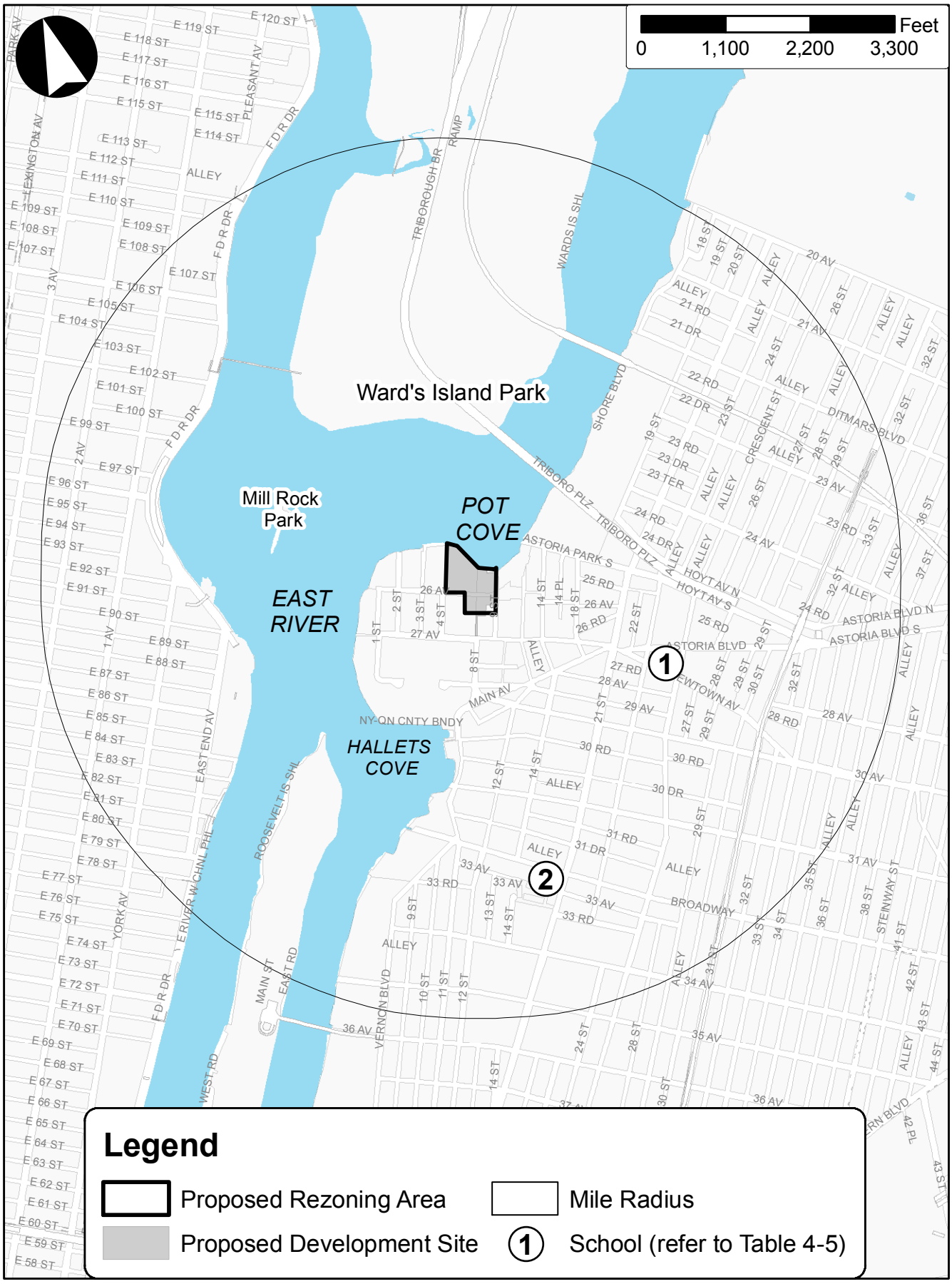


Table 4-5: High Schools within a Mile Radius from the Project Site

Map No.[1]	School Name	Address	Grades Served
1	Young Women's Leadership Academy (Q286)	23-15 Newtown Avenue	6-12
2	Long Island City High School (Q450)	14-30 Broadway	9-12

Notes:
[1] Map No. corresponds to Figure 4-2.

Future without the Proposed Action (No-Action Condition)

Without the Proposed Action, future utilization of public elementary, intermediate, and high schools serving the project site and surrounding study areas would be affected by changes in enrollment mainly due to aging of the existing student body and new arrivals born in the area or moving to it, as well as changes in capacity, or number of available seats, in the study area schools.

Enrollment Projections

As noted above, SCA provides future enrollment projections by district for up to ten years. The latest available enrollment projections to 2021 have been used in this analysis to project student enrollment to 2023.

These enrollment projections focus on the natural growth of the City's student population and other population increases that do not account for new residential developments planned for the area (No-Action projects). SCA has provided data on the number of new elementary and intermediate students expected from new housing in Sub-district 3 of CSD 30 based on their capital planning work. The SCA projects approximately 1,184 elementary and 387 intermediate school students within the study area by the 2023 Build Year for the proposed project.

In addition to the students projected by the SCA, it is assumed that the Halletts Point development project would be completed in the future without the proposed project. The planned project would result in 2,644 dwelling units (DUs) which would generate 740 elementary school students, 317 intermediate school students, and 370 high school students within the study area by 2023. As such, the total number of additional students expected in the study area in the future No-Action condition would be 1,924 elementary students and 704 intermediate school students. Table 4-6 outlines the estimated number of new public elementary and intermediate school students expected to be generated as a result of development in the future without the Proposed Action.

Table 4-6: Estimated Number of Students Introduced in the Study Area: 2023 Future without the Proposed Action

CSD Sub-district	Students	
	Elementary	Intermediate
CSD 30, Sub-district 3	1,924	704

Source: SCA Capital Planning Division, adjusted to include the Halletts Point development project per the 2013 *Halletts Point Rezoning FEIS*

Projected Capacity Changes

There are two public school projects expected to be completed in the future No-Action condition within the study area. The new Q312 building (46-08 5th Street) is anticipated to have a target capacity of 578 seats. DOE relocated P.S. 78 to the new Q312 building in September 2013 and implemented a "grade expansion." With the grade expansion, P.S. 78 (which served grades K-5, as well as offering a pre-kindergarten program in the 2012-2013 academic year) now serves kindergarten through 8th grade and

continue to offer a pre-kindergarten program. Based on the projected Q312 enrollment of 354 to 404 students, it is assumed for this analysis that the relocated P.S. 78 will include 269 elementary seats and 135 intermediate seats, with the remaining capacity comprised of District 75 and as of yet unprogrammed seats.[3]

DOE will engage the community to determine the best way to use the newly vacated facility previously occupied by P.S. 78 to best meet the community's needs. This analysis assumes that by the 2023 Build Year, the former P.S. 78 building would be reserved for elementary level seats with no reduction in capacity from 2012-2013 existing conditions.

The DOE's Division of Portfolio Planning, which develops new school programs, places new school programs in underutilized school buildings. DOE recently approved plans to open and co-locate a new Citywide Gifted and Talented School in building Q017 with P.S. 17 and I.S. 126, as well as an Alternate Learning Center in building Q126 . With the addition of these new citywide school programs, the capacity of P.S. 17 would be reduced by up to 275 elementary school seats and the capacity of I.S. 126 would be reduced by up to 220 seats.

Also, a new intermediate/high school (I.S./H.S. 404) was recently constructed within the study area in September 2013. The school has a target capacity of 1,071 seats which, based on information available from DOE, includes 456 intermediate seats and 615 high school seats.[4]

Elementary Schools

Elementary schools will experience a shortage of seats in CSD 30, Sub-district 3 in the No-Action condition (see Table 4-7). Within Sub-district 3 of CSD 30, elementary schools will operate with a shortfall of 1,106 seats (125.3 percent utilization).

Intermediate Schools

Intermediate schools within CSD 30, Sub-district 3 will operate with surplus capacity. As shown in Table 4-7, Sub-district 3 of CSD 30 will operate with 335 available seats (88.9 percent utilization).

High Schools

The Queens high school enrollment in the future without the Proposed Action was calculated using the ten-year enrollment projections produced for the SCA by the Grier Partnership and the SCA's *Projected New Housing Starts as Used in 2012-2021 Enrollment Projections.* A multiplier of 0.14, per *CEQR Technical Manual* Table 6-1a, was applied to the number of anticipated new housing units (24,262) in the borough by 2023, and the resulting number of students was added to the Grier Partnership forecast. As Table 4-8 shows, future No-Action condition enrollment is expected to be 95,839, resulting in a borough-wide utilization rate of 133.1 percent and a deficiency of 23,818 seats.

[3] DOE's *Educational Impact Statement for the Proposed Re-Siting and Grade Expansion of P.S. 78* (December 3, 2010) and DOE's *FY 2010-2014 Five Year Capital Plan Proposed 2010 Amendment (*April 2011).

[4] DOE's *Educational Impact Statement for the Proposed Re-Siting and Co-Location of Academy for Careers in Television and Film High School (30Q301) to New Building Q404 with New School 30Q291 and 75QTBD Beginning in 2013-2013* (February 1, 2013).

Table 4-7: Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in the Study Area: 2023 Future without the Proposed Action

	Projected Enrollment 2023[1]	No-Action Students[2]	Total No-Action Enrollment	Capacity[3]	Available Seats	Utilization (%)
Elementary Schools						
CSD 30, Sub-district 3	3,555	1,924	5,479	4,373	-1,106	125.3
Intermediate Schools						
CSD 30, Sub-district 3	1,973	704	2,677	3,012	335	88.9

Notes/Sources:
[1] Grier Partnership, *DOE Enrollment Projections (Actual 2011, Projected 2012-2021)*. Projections for 2021, the latest year for which projected enrollment data is available, were assumed to remain the same in 2023 per CEQR.
[2] SCA Capital Division, Housing Pipeline, adjusted to include an additional 740 elementary school students and 317 intermediate school students generated by the planned Halletts Point development per the 2013 *Halletts Point Rezoning FEIS*
[3] Capacity for the study area includes 6 fewer elementary and 371 additional intermediate seats as discussed in the "Projected Capacity Changes" section. The future capacity assumes that the new Q312 building will include 269 elementary and 135 intermediate seats; the former P.S. 78 building will be reserved for elementary seats; the new I.S./H.S. 404 will include 456 intermediate seats; P.S. 17 capacity will be reduced by up to 275 elementary school seats; and I.S. 126 will be reduced by up to 220 intermediate school seats.

Table 4-8: Estimated Public High School Enrollment, Capacity, and Utilization in Queens: 2023 Future without the Proposed Action

SCA Enrollment Projection[1]	Students Generated by Anticipated New Development[2]	Total Future Enrollment	Target Capacity[3]	Available Seats	Utilization (%)
92,072	3,767	95,839	72,021	-23,818	133.1

Notes/Sources:
[1] Grier Partnership, *DOE Enrollment Projections (Actual 2011, Projected 2012 to 2021).*Projections for 2021, the latest year for which projected enrollment data is available, were assumed to remain the same in 2023 per CEQR.
[2] SCA, *Projected New Housing Starts as Used in 2012-2021 Enrollment Projections* (for CSD 24-30) adjusted to include an additional 370 high school students the planned Halletts Point development per the 2013 *Halletts Point Rezoning FEIS.*
[3] High school capacity for the borough of Queens includes 1,473 high school seats in construction or completed in Queens according to the *FY 2010-2014 Capital Plan*, which includes projected high school capacity in I.S./H.S. 404.

Future with the Proposed Action (With-Action Condition)

For analysis purposes, it is conservatively assumed that the RWCDS associated with the Proposed Action could introduce up to 1,523 net residential units to the study area. Based on the CEQR student generation rates, the Proposed Action would generate up to approximately 426 elementary and 183 intermediate school students in the study area by 2023 (see Table 4-9). In addition, based on the CEQR high school student generation rates, the Proposed Action would generate up to approximately 213 high school students by 2023.

As discussed above, the proposed project would include a site for a 456-seat K-5 public elementary school. The proposed elementary school would be located within Building 5 along the south side of 26th Avenue at 9th Street, and would be developed in the fourth (final) phase of construction. Buildings 2, 3, 4, and 5, which have a combined 884 net residential units, would be completed and occupied prior to construction of the proposed elementary school.[5]

The threshold for significance, as outlined in the *CEQR Technical Manual*, is if a proposed action would result in: (1) a collective utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the With-Action Condition; and (2) an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions.

[5] Refer to Chapter 19, "Construction Impacts."

Table 4-9: Estimated Number of Elementary and Intermediate Students Introduced in the Study Area: 2023 Future with the Proposed Action

	Housing Units	Students Introduced by the Projected Project	
		Elementary	Intermediate
CSD 30, Sub-district 3	1,523	426	183

Note: Based on student generation rates in Table 6-1a in the *CEQR Technical Manual.*

Elementary Schools

In the future with the Proposed Action, there would continue to be a shortage of elementary school seats in CSD 30, Sub-district 3 (see Table 4-10). For Sub-district 3 in CSD 30, elementary school enrollment would increase to 5,905 students in the With-Action condition and the schools would operate at 122.3 percent utilization, with a shortfall of 1,076 seats. It should be noted that due to the elementary school seats added to the study area as a result of the proposed project, the utilization and shortfall of seats decreases between the No-Action and With-Action conditions.

Table 4-10: Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in the Study Area: 2023 Future with the Proposed Action

	Projected No-Action Enrollment[1]	Students from Proposed Action	Total Enrollment with the Proposed Action	Capacity[2]	Available Seats	Utilization (%)
Elementary Schools						
CSD 30, Sub-district 3	5,479	426	5,905	4,829	-1,076	122.3
Intermediate Schools						
CSD 30, Sub-district 3	2,677	183	2,860	3,012	152	95.0

Notes:
[1] See Table 4-7.
[2] Capacity based on No-Action capacity presented in Table 4-7 and includes the 456-seat public elementary school as part of the proposed project.

Although the collective utilization rate of elementary schools in CSD 30, Sub-district 3 would exceed 100 percent in the With-Action condition, the Proposed Action would result in a decrease of approximately three percent in the collective utilization rate between the No-Action and With-Action conditions. Therefore, the Proposed Action would not result in a significant adverse impact on elementary schools in CSD 30, Sub-district 3.

Temporary Elementary School Impact Analysis

As discussed in greater detail in Chapter 19, "Construction," per the ULURP Phasing Plan, the proposed school would be constructed in the fourth and final phase of the project's construction, and therefore, while the Proposed Action would improve the elementary school utilization rate in the 2023 Build Year, it is possible that a temporary significant adverse elementary school impact could occur prior to the school's construction. Based on an assessment of the projected enrollment, capacity, and utilization for the building phases that would occur prior to the school's construction, it was determined that a temporary significant adverse elementary school impact could occur upon completion of Building 2. As indicated in Table 4-11, prior to the proposed school's construction, the estimated 248 net elementary students generated by construction of the proposed Buildings 2, 3, 4, and 5 (residential portion) would result in an elementary school utilization rate of 125.4 percent. This would represent an increase of 5.67 percent, and, therefore, would signify a temporary significant adverse elementary school impact. Potential measures to mitigate the temporary elementary school impacts are described in Chapter 20, "Mitigation."

Table 4-11: Temporary Elementary School Impact Analysis

Temporary Elementary School Impact Analysis Scenario[1]	Capacity[1]	Enrollment[2]	Available Slots	Utilization (%)
Future without the Proposed Action	4,373	5,237	864	119.8
Future with the Proposed Action		5,485	1,112	125.4

Notes:
[1] Based on a 2021 analysis year, which reflects the anticipated Astoria Cove construction schedule.
[2] See Table 4-7. All anticipated capacity changes would occur prior to the analyzed temporary elementary school impact year.
[3] Future No-Action elementary school enrollment projections have been adjusted to reflect this second analysis year. Includes the 1,777 Halletts Point residential units that would be completed in 2021.

However, it should be noted that the analysis of public elementary school conditions relies on conservative assumptions regarding both background growth in the student population and the development of new residential units in future conditions. Should this level of background growth in the sub-district and residential development in the study area not occur, the temporary impact on elementary school seats in Sub-district 3 of CSD 30 could be reduced or potentially eliminated. It should also be noted that the above analysis does not account for the 1,057 seat PS/IS school that is expected to be developed on the nearby Halletts Point site to mitigate the school impacts identified in the 2013 *Halletts Point Rezoning FEIS.* This future No-Action school is anticipated to be built and operational by 2018.

Intermediate Schools

There is expected to continue to be a surplus of intermediate school seats in the study area in the future with the Proposed Action (see Table 4-10). For Sub-district 3 in CSD 30, intermediate school enrollment would increase to 2,860 students in the With-Action condition and the schools would operate at 95 percent capacity, with a surplus of 152 seats.

As intermediate schools would operate with surplus capacity in the study area, the Proposed Action would not result in a significant adverse impact on intermediate schools.

High Schools

The addition of 213 action-generated students would increase the projected shortfall of seats in Queens high schools from 23,818 under the future No-Action scenario to 24,031 and would raise the schools' collective utilization rate from 133.1 percent to 133.4 percent (refer to Table 4-12). As the increase in the collective utilization rate would be approximately 0.3 percent, the Proposed Action would not result in a significant adverse impact on high schools.

Table 4-12: 2023 Future With-Action High School Enrollment, Capacity, and Utilization Data in Queens

Projected No-Action Enrollment[1]	Students from Proposed Action	Total Future Enrollment	Target Capacity[1]	Available Seats	Utilization (%)
95,839	213	96,052	72,021	-24,031	133.4

Notes:
[1] See Table 4-8.

E. INDIRECT EFFECTS ON PUBLICLY FUNDED CHILD CARE

Methodology

Publicly financed child care services are available for income-eligible children up through the age of 12. The CEQR analysis focuses on services for children under age 6 because eligible children aged 6 to 12 are expected to be in school for most of the day.

Families eligible for subsidized child care must meet financial and social eligibility criteria established by ACS. In general, children in families that have incomes at or below 200 percent of the federal poverty level, depending on family size, are financially eligible, although in some cases eligibility can go up to 275 percent. The family must also have an approved "reason for care," such as involvement in a child welfare case or participation in a "welfare-to-work" program.

The City's affordable housing market is pegged to the Area Median Income (AMI) rather than the federal poverty level. Since family incomes at or below 200 percent of the federal poverty level fall under 80 percent of AMI, for the purposes of CEQR analysis, the number of housing units expected to be subsidized and targeted for incomes of 80 percent AMI or below is used as a proxy for eligibility. This provides a conservative assessment of demand, since eligibility for subsidized child care is not defined strictly by income, but also takes into account family size and other reasons for care (e.g., low-income parent(s) in school; low-income parent(s) training for work; or low-income parent(s) who are ill or disabled).

Since there are no locational requirements for enrollment in child care centers, and some parents or guardians choose a child care center close to their place of employment rather than their residence, the service areas of these facilities can be quite large and are not subject to strict delineation on a map. For the purposes of a child care analysis, the *CEQR Technical Manual* suggests a 1.5-mile study area, the area in which there is most likely to experience an increased demand.

ACS provided information regarding publicly funded group child care and Head Start program facilities within the study area, including their current capacity, enrollment, and number of available slots. The appropriate multiplier from Table 6-1b of the *CEQR Technical Manual* is applied to the number of low- to moderate-income housing units that would be built as a result of the Proposed Action to calculate the expected number of children eligible for publicly funded child care services. This number is compared with the number of available slots in the study area to determine whether the number of additional children could be accommodated without causing a significant adverse impact.

As described above, the *CEQR Technical Manual* requires a detailed analysis of child care centers when a proposed action would produce substantial numbers of subsidized, low- to moderate-income family housing units, which may therefore generate a sufficient number of eligible children to affect the availability of slots at publicly funded child care centers. Typically, proposed actions that generate 20 or more eligible children under age six require further analysis. Table 6-1b of the *CEQR Technical Manual* calculates by borough the estimated number of affordable (low- or low- to moderate-income) housing units that could yield at least 20 children under age six eligible for publicly financed child care. According to the table, 139 affordable housing units in Queens would yield more than 20 children under age six eligible for publicly funded child care. Impacts are identified if a proposed action would result in demand for slots in publicly funded child care centers greater than remaining capacity, and the increase in demand would be five percent or more over the collective capacity of the child care centers in the future without the proposed action.

The following is a conservative analysis of publicly funded child care facilities, which assumes that the projected residential buildings within the proposed R7-3 zoning district would be developed pursuant to the Inclusionary Housing Program with approximately 295 affordable to low- to moderate-income families. As described above, with a net increment of 1,523 units, of which 295 units are assumed to be affordable and built pursuant to the Inclusionary Housing Program, the Proposed Action would generate up to approximately 41 children under the age of six (i.e. potentially eligible for publicly subsidized child care). As this value exceeds the *CEQR* threshold, a detailed assessment is provided below.

Existing Conditions

Figure 4-3 shows publicly funded child care and Head Start facilities within an approximate 1.5-mile radius of the project site, and Table 4-13 indicates the capacity and enrollment for each facility, as well as the available slots where applicable. As shown in Table 4-13 and Figure 4-3, there are presently three publicly funded or partially publicly funded group child care facilities and Head Start facilities within an approximate 1.5-mile radius of the project site. The three day care and Head Start facilities within the study area have a combined total capacity of approximately 244 slots, and operate at capacity (current enrollment of 244 and 100 percent utilization).

Table 4-13: Publicly Funded Child Care and Head Start Facilities within the 1.5-Mile Study Area

Map No.[1]	Program Name and Address	Enrollment	Capacity	Available Slots	Utilization (%)
Head Start Programs					
1	St. Margaret Mary ECDC (9-16 27th Ave)	90	90	0	100.0
	Total for Head Start Programs	*90*	*90*	*0*	*100.0*
Child Care Centers					
2	All My Children Daycare 8 (36-49 11th Street)	98	98	0	100.0
3	PAL Woodside Early Learn Center (50-37 Broadway)	56	56	0	100.0
	Total for Child Care Centers	*154*	*154*	*0*	*100.0*
	Overall Total	***244***	***244***	***0***	***100.0***

Source: ACS, June 2013.
Note:
[1] Corresponds to Figure 4-3.

As noted above, in addition to attending group child care centers, eligible children may also be cared for in the homes of family child care providers, also registered with the New York City Department of Health (DOH). A family child care provider is a professional who provides care for three to seven children in his or her residence. A group family child care provider is a professional who cares for seven to twelve children with the help of an assistant in his or her home. The majority of family and group family child care providers in New York City are registered with a child care network that provides access in training and support services. According to the ACS, these home-based facilities tend to absorb unmet demand at group child care centers, and host households are added to the system as demand increases.

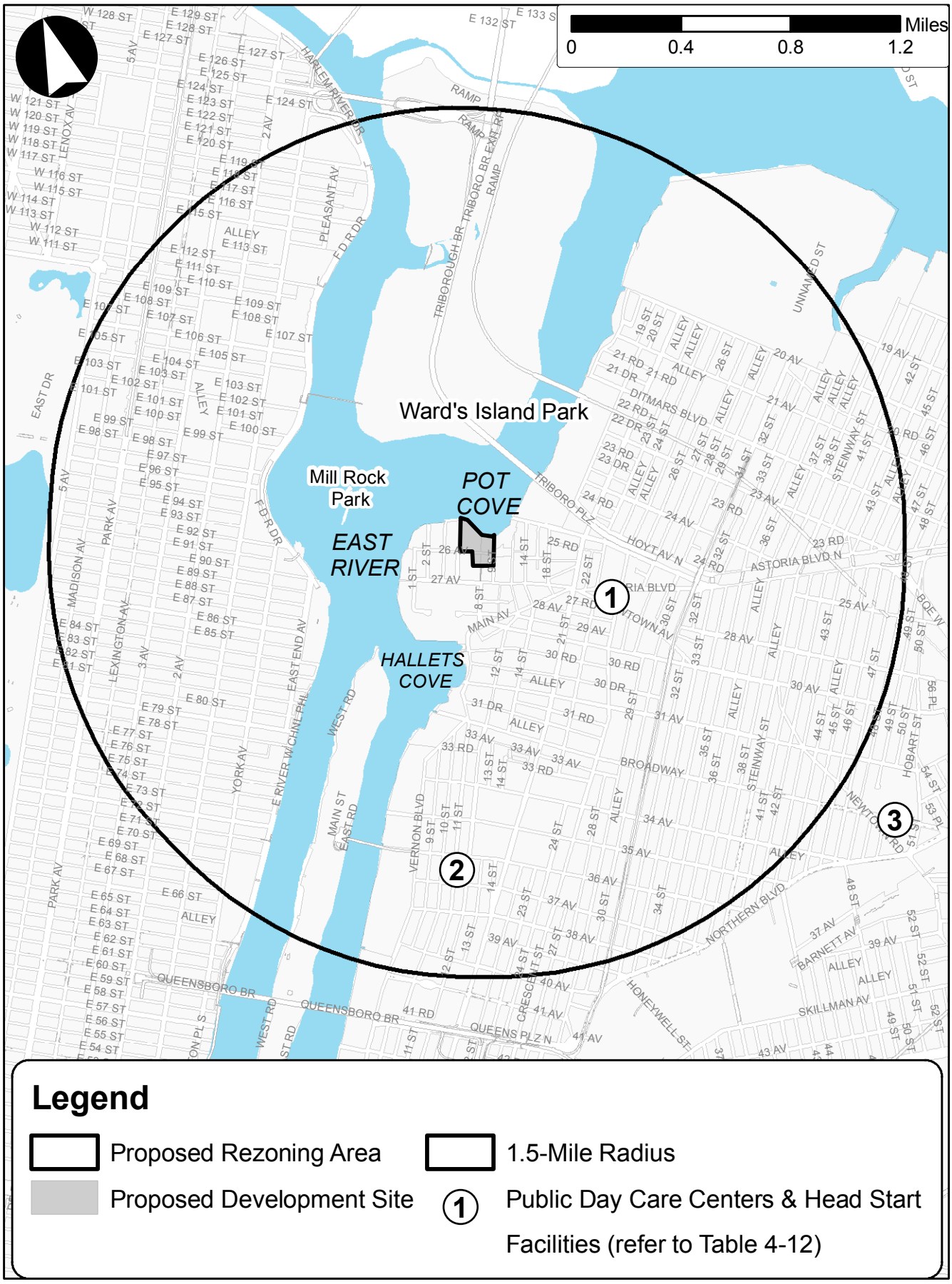
Future without the Proposed Action (No-Action Condition)

Planned or proposed development projects in the child care study area would introduce approximately 629 affordable dwelling units by the 2023 Build Year. This includes approximately 483 affordable dwelling units that would be constructed as a result of the proposed Halletts Point development, which is anticipated to be completed by 2022.

Based on *CEQR Technical Manual* Table 6-1b, these affordable units would generate 88 children under the age of 6 eligible for publicly funded child care services (see Table 4-14). As such, demand for publicly financed child care and Head Start slots in the study area would increase in the future without the

Astoria Cove **Figure 4-3**

Publicly Funded Child Care Centers and Head Start Facilities within a 1.5-Mile Radius



Proposed Action, resulting in a shortfall of 88 available slots and increasing the collective utilization rate of the child care centers and Head Start programs to 136.1 percent (refer to Table 4-16).

Table 4-14: Projected Number of Publicly Funded Child Care Pupils Generated by New Development in the 2023 Future Without the Proposed Action

	Affordable Units	Generation Ratio Per Unit (Children ≤ Age 6)	Number of Children ≤ Age 6 Generated
Study Area Total	629	0.14	88

Source: *CEQR Technical Manual*, Table 6-1b.

Future with the Proposed Action (With-Action Condition)

As discussed above, the *CEQR Technical Manual* requires a detailed analysis of child care centers when a proposed action would produce substantial numbers of subsidized, low- to moderate-income family housing units that may therefore generate a sufficient number of eligible children to affect the availability of slots at area publicly funded child care centers. By 2023, as a result of the Proposed Action, up to 295 affordable housing units are assumed to be added to the project site, many of which would be potentially eligible for subsidized child care. Residents with household incomes no greater than approximately 80 percent AMI, as determined by the U.S. Department of Housing and Urban Development (HUD), could occupy these affordable units.

Based on *CEQR Technical Manual* Table 6-1b, these 295 affordable units would generate 41 children under the age of 6 eligible for publicly funded child care services (see Table 4-15). The additional 41 children potentially eligible for publicly funded child care would reduce the number of available slots described above in the future without the Proposed Action and result in a shortfall of 129 slots in the study area. The collective utilization rate of the child care centers and Head Start programs would increase to 152.9 percent (see Table 4-16), an increase of 17 percent over the utilization rate in the future without the Proposed Action.

Table 4-15: Projected Number of Public Child Care Pupils Generated by the Proposed Project in the Future With the Proposed Action

	Affordable Units	Generation Ratio Per Unit (Children ≤ Age 6)	Number of Children ≤ Age 6 Generated
Study Area Total	295	0.140	41

Source: *CEQR Technical Manual*, Table 6-1b.

Table 4-16: Comparison of Budget Capacity, Enrollment, Available Slots and Percent Utilized for the 2023 Future With and Without the Proposed Action

	Budget Capacity	Enrollment	Available Slots	Utilization (%)
2023 Future Without the Proposed Action	244	332	-88	136.1
With-Action Increment	0	41		
2023 Future With the Proposed Action	244	373	-129	152.9

According to the *CEQR Technical Manual*, a significant adverse impact could result if a proposed action results in: (1) a demand for slots greater than remaining capacity of child care centers; and (2) that demand constitutes an increase of five percent or more of the collective capacity of the child care centers serving the study area over the No-Action condition.

Several factors may limit the number of children in need of publicly funded child care slots in ACS-contracted child care facilities. Families in the study area could make use of alternatives. There are slots

at homes licensed to provide family child care that families of eligible children could elect to use instead of a publicly funded group child care centers. Parents of eligible children may also use ACS vouchers to finance care at private child care centers in the study area. The voucher system could spur the development of new private child care facilities to meet the need of eligible children that would result from the increase in the low-income and low- to moderate-income housing units in the area in the future with the Proposed Action. Lastly, parents of eligible children are not restricted to enrolling their children in child care facilities in a specific geographical area. They could use the ACS voucher system to make use of public and private child care providers beyond the study area.

The Proposed Action would add approximately 41children potentially eligible for subsidized child care to the study area and would cause a 17 percent increase in demand over the No-Action utilization rate of publicly funded group child care facilities in the study area, over the CEQR threshold of five percent. Therefore, the Proposed Action would result in a significant adverse impact to publicly funded child care centers and Head Start programs in the study area. To avoid exceeding the significant adverse impact threshold, the number of affordable units included in the proposed project would need to be reduced to 89, which would generate only 12 children eligible for publicly funded group child care. Alternately, 21 additional child care slots would need to be provided to reduce the increase in utilization to below the 5 percentage point threshold. Potential measures to mitigate child care impacts are described in Chapter 20, "Mitigation."

F. INDIRECT EFFECTS ON LIBRARIES

Methodology

According to the *CEQR Technical Manual*, service areas for neighborhood branch libraries are based on the distance that residents would travel to use library services, typically not more than ¾ mile; this is referred to as the library's "catchment area." This libraries analysis compares the population generated by the Proposed Action with the catchment area population of libraries available within an approximately ¾-mile area around the project site and employs a 2023 Build Year. To determine the existing population of the library's catchment area, 2010 U.S. Census data were assembled for all census tracts that fall primarily within ¾ miles of the project site. The catchment area population in the future without the Proposed Action and the future with the Proposed Action was estimated by multiplying the number of new housing units by an average household size of 2.34 persons.[6] New population in the future without and the future with the Proposed Action was added to the existing catchment area population.

The number of library holdings, including books, CDs, DVDs, videotapes, etc., available in study area libraries is also identified and used to calculate a holdings-per-resident ratio. This ratio is compared with the system-wide ratio for the New York Public Library (NYPL) system. The analysis also considers the percentage increase in the study area population and compares it to impact threshold identified in the *CEQR Technical Manual*. According to the *CEQR Technical Manual*, if a proposed project would increase the libraries' catchment area population by 5 percent or more, and this increase would impair the delivery of library services in the study area, a significant impact could occur.

Existing Conditions

Libraries provide books, information services, written documents, audio/visual references, and educational services to their surrounding communities. The project site is served by the Queens Public Library. The Queens Public Library system serves a population of 2.2 million and includes 62

[6] The average household size of 2.34 within Queens Community District 1 (2010 Census).

neighborhood branches plus seven Adult Learning Centers and two Family Literacy Centers. Libraries within the Queens Public Library system provide free and open access to books, periodicals, electronic resources, and non-print materials. Reference, career services, Internet access, and educational, cultural and recreational programming for adults, young adults, and children are also provided.

Library Facilities

There are no libraries located on the project site. As shown in Figure 4-4, there is one public library within the library analysis study area, an approximate ¾-mile radius from the project site. As shown in Figure 4-4, the Astoria Library is located to the southeast of the project site at the intersection of Astoria Boulevard and 14th Street. Several other Queens Library branches are located within 2,000 feet of the study area boundary including Steinway Library to the east on 31st Street (near Ditmars Boulevard), Broadway Library to the southeast on Broadway (near Steinway Street), and the Long Island City Library to the south on 21st Street (near 38th Avenue). It should be noted that residents can go to any NYPL branch and order books from any of the other branches in the NYPL system. However, for conservative analysis purposes, only the Astoria Library was included, as it serves the local neighborhood.

Population Served

The project site is located within western Astoria on the western edge of Queens Community District (CD) 1. To determine the population of the library service area, 2010 U.S. Census data were assembled for all census tracts that fall primarily within the ¾-mile library study area. Based on census data for those census tracts falling entirely or mostly within the ¾-mile study area, the study area had a residential population of 44,807 in 2010.

Holdings per Resident

As shown in Table 4-17, the Astoria Library has combined holdings of 6,802 items. With an existing 2010 population of 44,807 residents, the study area has approximately 0.15 holdings per resident.

Table 4-17: Public Libraries in the ¾-Mile Study Area

Map. No.[1]	Library Name	Address	Holdings	Circulation
1	Astoria Library	14-01 Astoria Blvd	6,802	98,731

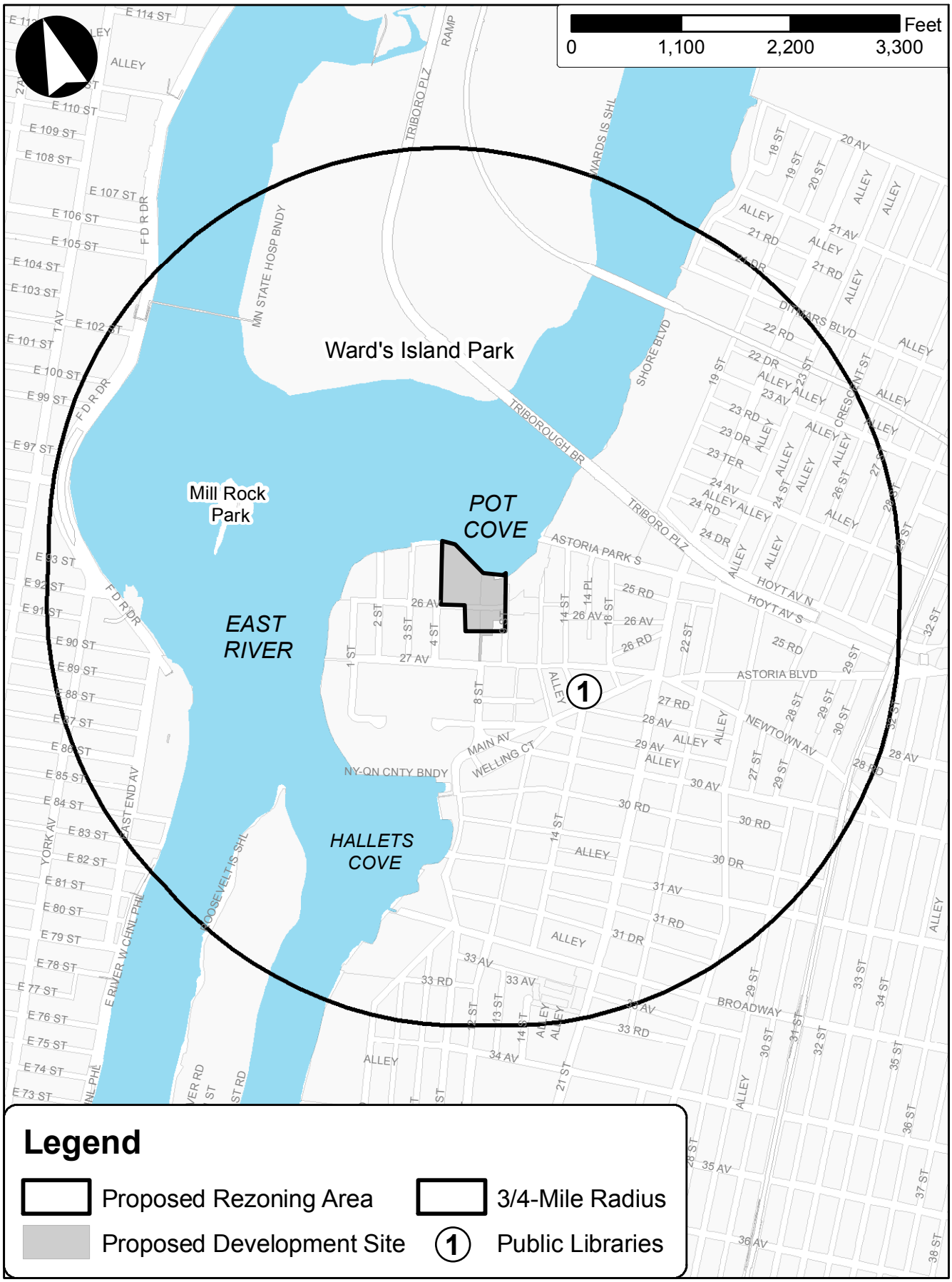
Sources: Queens Public Library, September 2013 (data is from Fiscal Year 2013).
Notes:
[1] Corresponds to Figure 4-4.

Future without the Proposed Action (No-Action Condition)

The Queens Library recently renovated all of its 62 libraries, including the Astoria Library. The renovations freed up space formerly used for back-office operations and transformed them into expanded community space. Volumes are also being moved to storage, reflecting a shift towards increased internet usage and e-readers.

As previously noted in this chapter, there is a number of new residential development expected to occur by 2023 that would change the population within the library study area. This would include 4,222 dwelling units (including the 166 units anticipated on the project site) and 98 supportive housing beds resulting from projects recently completed and anticipated to be completed by 2023. As a result of these No-Action developments, the residential population in the study area is expected to increase by approximately 9,977 new residents. All of these new residents would be located within the ¾-mile library

Public Libraries in the 3/4-Mile Study Area



study area. The 9,977 new residents would represent an increase in population of approximately 21 percent over the existing population of 44,807 in the library study area, raising the study area population to 54,784 under 2023 No-Action conditions.

Holdings per Resident

For analysis purposes, the number of holdings in the study area branch library is assumed to remain the same in 2023, with 6,802 holdings. With a 2023 No-Action population of 54,784 residents, the study area holdings-per-resident ratio is expected to decrease from 0.15 holdings per resident to 0.12 holdings per resident.

Future with the Proposed Action (With-Action Condition)

According to the *CEQR Technical Manual*, if a proposed project increases the study area population by five percent or more as compared to the No-Action condition, this increase may impair the delivery of library services in the study area, and a significant impact could occur.

As previously noted, the Proposed Action would result in a net increase of 1,523 residential units to the study area, including 1,228 market rate and 295 low/moderate/middle income units built pursuant to the Inclusionary Housing Program. These 1,523 units are expected to generate an estimated 3,564 new residents to the study area by 2023 as a result of the Proposed Action. This estimate of new residents is calculated by multiplying the number of residential units by 2.34 persons, which is the average household size in Queens CD 1.

The approximately 3,564 new residents expected to be generated by the Proposed Action would represent an increase of approximately 6.5 percent to the study area population by 2023 over the No-Action condition.

With the proposed project, the Astoria Library would have a ratio of approximately 0.12 holdings per resident, which is the same as under 2023 No-Action conditions.

Although the Astoria Library study area population would increase by approximately 6.5 percent, the increase would not be expected to impair the delivery of library services. Residents of the Astoria Library study area and the proposed project would have access to the entire Queens Public Library system through the interlibrary loan system and could have volumes delivered directly to their nearest library branch. There are also three other Queens Library branches located approximately one mile from the project site. Therefore, as noted above, there are more library resources available to study area residents than are reflected in this quantitative analysis. Residents would also have access to libraries near their places of work. In addition, the recent renovations along with the trend toward increased electronic research and interlibrary loans are expected to free up stack space, providing for increased capacity and programs to serve the future population. For these reasons, the Proposed Action would not result in a significant adverse impact on library services. In a letter dated March 24, 2014, the Queens Library concurred with the conclusion that the Proposed Action would not result in a significant adverse impact to public libraries (see Appendix C).