City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

Please fill out and submit to the appropriate agency (see instructions)

Part I: GENERAL INFORMATION

PROJECT NAME Staten Island Special Districts Update

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
20DCP130R	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning			NAME OF APPLICANT Department of City Planning, Staten Island Borough Office		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, Deputy Director, Environmental Assessment and Review Division			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Christopher Hadwin, Director, Staten Island Borough Office		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 130 Stuyvesant Place, 6th Floor		
CITY New York	STATE NY	ZIP 10271	CITY Staten Island	STATE NY	ZIP 10301
TELEPHONE 212-720-3493	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 212-720-3265	EMAIL chadwin@planning.nyc.gov	

3. *Action Classification and Type*

SEQRA Classification

☐ UNLISTED ☒ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 617.4(b)3

Action Type (refer to Chapter 2, "Establishing the Analysis Framework" for guidance)

☐ LOCALIZED ACTION, SITE SPECIFIC ☐ LOCALIZED ACTION, SMALL AREA ☒ GENERIC ACTION

4. *Project Description*

The New York City Department of City Planning (DCP) is proposing updates to the Special Natural Area District, Special Hillsides Preservation District, and Special South Richmond Development District to provide a clear and consistent framework for natural resource preservation that balances development and ecological goals within these Special Districts. The proposal would combine two of the existing Special Districts on Staten Island that share similar objectives today (Hillsides and Natural Areas) into one special district called the 'Special Hillsides and Natural Areas District' to create consistent natural resource preservation rules for properties containing steep slopes, and to protect, enhance and connect the most ecologically sensitive resources along the Serpentine Ridge. In addition, the proposal would amend specific regulations of the existing South Richmond district. See EAS Part II for further information.

Project Location

BOROUGH Staten Island	COMMUNITY DISTRICT(S) Staten Island CDs 1, 2, & 3	STREET ADDRESS n/a
TAX BLOCK(S) AND LOT(S) Generic Action		ZIP CODE 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10308, 10309, 10310, 10312, 10314
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS n/a		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY Multiple Underlying Districts; Special Districts: SHPD, NA-1, NA-3, SSRDD, LDGMA		ZONING SECTIONAL MAP NUMBER 20a-d, 21a-d, 26a-d, 27a-d, 32c, 32d, 33a-d, 34a, 35a, 35c

5. *Required Actions or Approvals* (check all that apply)

City Planning Commission: ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION Multiple.

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)

☐ VARIANCE (bulk)

☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:

☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)
☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

6. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☐ ZONING MAP ☐ SANBORN OR OTHER LAND USE MAP
☐ TAX MAP ☒ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☐ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): Generic action; see Draft Scope

Waterbody area (sq. ft.) and type:

Roads, buildings, and other paved surfaces (sq. ft.):

Other, describe (sq. ft.):

7. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): n/a

NUMBER OF BUILDINGS: n/a

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): n/a

HEIGHT OF EACH BUILDING (ft.): n/a

NUMBER OF STORIES OF EACH BUILDING: n/a

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO

If "yes," specify: The total square feet owned or controlled by the applicant: n/a

The total square feet not owned or controlled by the applicant: n/a

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO

If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: TBD sq. ft. (width x length)

VOLUME OF DISTURBANCE: TBD cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: TBD sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2030

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: n/a

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☐ YES ☒ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: n/a

9. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	**Note that this table has not been completed because the Proposed Actions are a generic action with no known development sites projected at this time. In EAS Part II, Technical Analysis and the EIS, prototypical analysis site are used to determine the incremental change between the NoAction and With Action Conditions.**			
If "yes," specify the following:				
Describe type of residential structures				
No. of dwelling units				
No. of low- to moderate-income units				
Gross floor area (sq. ft.)				
Commercial	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)				
Gross floor area (sq. ft.)				
Manufacturing/Industrial	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify:				
Community Facility	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," describe:				
Publicly Accessible Open Space	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):				
Other Land Uses	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," describe:				
PARKING				
Garages	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Attended or non-attended				
Lots	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Other (includes street parking)	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," describe:				
POPULATION				
Residents	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify number:				
Briefly explain how the number of residents was calculated:				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Businesses	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If "yes," specify the following:				
No. and type				
No. and type of workers by business				
No. and type of non-residents who are not workers				
Briefly explain how the number of businesses was calculated:				
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification				
Maximum amount of floor area that can be developed				
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project				
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Full EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. Will provide in EIS		
(e) Is the project a large, publicly sponsored project?	☒	☐
○ If "yes," complete a PlaNYC assessment and attach. Will provide in EIS		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form. Will provide in EIS		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5 **See EAS Part II**		
(a) Would the proposed project:		
○ Generate a net increase of more than 200 residential units *or* 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
○ Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
○ Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
○ Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(v) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answered.		
i. Direct Residential Displacement		
○ If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☐
○ If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?	☐	☐
ii. Indirect Residential Displacement		
○ Would expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
○ If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
○ If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		
○ Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐
○ Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	☐	☐

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
○ Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
○ Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☐
v. Effects on Industry		
○ Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☐
○ Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	☐	☐
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6 **See EAS Part II**		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
i. Child Care Centers		
○ Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project result in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?	☐	☐
○ If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
ii. Libraries		
○ Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
○ If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iii. Public Schools		
○ Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 100 percent?	☐	☐
○ If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iv. Health Care Facilities		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7 **See EAS Part II**		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☒	☐
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?	☐	☐
(d) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☒	☐
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?	☐	☐
(f) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☐
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:		
○ If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 percent?	☐	☐
○ If in an area that is not under-served, would the project result in a decrease in the open space ratio by more than 5	☐	☐

	YES	NO
percent?		
○ If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	☐	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☐	☒
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year. Will provide in EIS		
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☒	☐
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. Will provide in EIS		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☒	☐
(c) If "yes" to either of the above, please provide the information requested in Chapter 10. Will provide in EIS		
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☒	☐
○ If "yes," list the resources and attach supporting information on whether the project would affect any of these resources. Will provide in EIS		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12 **Will provide in EIS**		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☒	☐
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☐	☒
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☐
(i) Based on the Phase I Assessment, is a Phase II Investigation needed?	☐	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of	☐	☒

	YES	NO
commercial space in the Bronx, Brooklyn, Staten Island, or Queens?		
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☒	☐
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation. See EAS Part II		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): See EAS Part II		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
○ If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): See EAS Part II		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16 **See EAS Part II**		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway/rail trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☒	☐
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☒	☐
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. **See EAS Part II for screening; detailed stationary source analyses will be provided in the EIS**		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18 **See EAS Part II**		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒

	YES	NO
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☒
o If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☒	☐
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☒	☐
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See EAS Part II		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. Will provide in EIS		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. Will provide in EIS		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	☐	☒
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☒	☐
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
o The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
o Closure of a community facility or disruption in its services?	☐	☒
o Activities within 400 feet of a historic or cultural resource?	☒	☐
o Disturbance of a site containing or adjacent to a site containing natural resources?	☒	☐
o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☒	☐
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. See EAS Part II		

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	SIGNATURE	DATE
Christopher Hadwin		12/18/2020

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☒	☐
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☒	☐
Historic and Cultural Resources	☒	☐
Urban Design/Visual Resources	☒	☐
Natural Resources	☒	☐
Hazardous Materials	☒	☐
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☒	☐
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☒	☐
Neighborhood Character	☒	☐
Construction	☐	☒

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☒ YES ☐ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

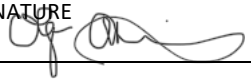
3. Check determination to be issued by the lead agency:

☒ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☐ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	NYC Department of City Planning
NAME: Olga Abinader	DATE: 12/21/20
SIGNATURE: 	

Staten Island Special Districts Update

City Environmental Quality Review

ENVIRONMENTAL ASSESSMENT STATEMENT

New York City Department of City Planning
CEQR No. 20DCP130R
ULURP No. Pending

Prepared by:

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250 West 34th Street
New York, NY 10119
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October 15, 2020

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PROJECT DESCRIPTION

Introduction

The New York City Department of City Planning (DCP) proposes to amend the text and related zoning maps of special districts—specifically the Special Natural Area District (SNAD) (Article X, Chapter 5) and Special Hillsides Preservation District (SHPD) (Article XI, Chapter 9) of the Zoning Resolution (ZR). DCP also proposes a zoning text amendment to the Special South Richmond Development District (SSRDD) (Article X, Chapter 7). The proposed text amendment would also clarify provisions in the Lower Density Growth Management Area (LDGMA). See EAS Appendix A for a detailed Reasonable Worst Case Development Scenario (RWCDS).

Purpose and Need

The purpose of the Proposed Actions is to codify best practices, streamline regulations to reflect the principles of current ecological science, and create clear development standards that would result in better and more predictable outcomes. The purpose of updating LDGMA and cross access regulations applicable within Staten Island is to further the original LDGMA goals of maintaining neighborhood character and to streamline the cross access regulations, making them easier to apply.

Since their establishment, the special districts regulations have helped to guide thousands of developments and have resulted in the tree-lined streets, preserved rock outcrops, old growth trees, wetlands, and forested parks that today exemplify these communities.

The current framework of requiring discretionary review irrespective of the size of a property or the extent of natural features imposes burdensome cost and time delays for small property owners and results in unpredictable outcomes both in terms of development and preservation of natural features. More than 80 percent of these areas are comprised of one- or two-family homes and form the overwhelming majority (approximately 71 percent) of the past applications that have come for City Planning Commission (CPC) approval. To address this challenge, the proposal would codify best practices to create clearly defined parameters which would allow applicants to proceed directly to the Department of Buildings (DOB) for building permits and confirm zoning regulation compliance. This would ease the process for homeowners by eliminating CPC review, where appropriate.

Second, the existing regulatory framework has presented challenges over the last 40 years. First, the special districts lack a clear development framework and broader ecological strategy to protect natural resources. The current rules focus on protecting individual natural features such as steep slopes, trees, and rock outcrops, and don't balance the importance of ecological connectivity with neighboring sites. There are no clear guidelines for preservation of natural features on larger, ecologically sensitive sites that form part of the connected ecosystem. Such preservation is negotiated and decided on a case-by-case basis that can result in unpredictable outcomes, time delays and sometimes destruction of ecological connectivity, undermining the health of these natural ecosystems. To address this, the CPC review process would have clear parameters that

would result in better site plans with more predictable outcomes for the applicant and the community.

Third, under the current rules, multiple discretionary review actions are sometimes required to be able to create a good site plan that balances development with the preservation of natural features on a property. But property owners are often reluctant to apply for optional land use actions that could result in a better project because these actions could trigger additional delays and costs, focusing instead on those land use actions that are essential to moving the project forward, resulting in missed opportunities for good site planning. To address this, the CPC review process would be more integrated, so that optional land use actions would not result in significantly increased costs or delays.

To advance this effort and ensure input from community stakeholders, the DCP has met with local community boards and convened advisory groups of local civic organizations, architects, landscape architects, environmental groups, elected officials, institutions, and city agencies since April 2015. The advisory groups established the following principles, which have been used to guide the updated process:

- Create a homeowner-friendly regulatory environment with robust as-of-right rules for the development of homes on small lots that protect significant natural features.
- Protect and enhance the natural resources and neighborhood character of the districts, with greater predictability of development outcomes.
- Strengthen and clarify regulations so that review by the City Planning Commission focuses on sites that have a greater impact on natural resources and the public realm.

Based on the above principles and to apply the framework, the Proposed Actions would:

- Combine the existing Hillsides and Natural Areas special districts, into one special district, the **Special Hillsides and Natural Areas District (SHNAD)**; establish an Escarpment Area to create consistent natural resource preservation rules to prioritize the protection of topographic and geologic resources along the Serpentine Ridge; allow most small sites, less than 1 acre, an as-of-right framework by codifying CPC best practices; and establish habitat preservation areas on large sites.

Amend the existing SSRDD regulations to allow most small sites, less than 1 acre, an as-of-right framework by codifying CPC best practices; and establish habitat preservation areas on large sites.

The Proposed Actions would determine the appropriate review process based on the size of properties.

Properties less than 1 acre:

In the proposed SHNAD:

With clear rules that would address building footprint, permeability, and tree planting, most small property owners, sites less than 1 acre, would go directly to DOB for project review and permits, skipping the current requirements for CPC review.

In some special cases, CPC review would still be required for sites less than 1 acre, including:

- development with new private roads or that seeks to extend existing private roads; and
- the creation of four or more new zoning lots or buildings, or eight or more dwelling units in areas that are within the Escarpment areas (along the Serpentine Ridge).

In addition, development on a constrained site with unique topography may have the option to seek CPC review to modify the regulations in order to achieve a feasible development scenario that meets the goals of the district.

In the SSRDD:

With streamlined regulations for small sites, most small property owners would go directly to DOB for project review and permits, skipping the current requirements for review by the CPC.

In some special cases, CPC review would still be required for sites less than 1 acre, including

- development with new private roads or that seek to extend existing private roads.

All sites 1 acre or more would require CPC review.

Properties of 1 acre or more:

For larger sites, 1 acre or more, in the proposed SHNAD and SSRDD, the proposed rules would require individual site plan review by the CPC because large sites contribute more to the public realm and neighborhood character and have a greater impact to existing natural habitat.

For sites with existing habitats, portions of habitat would be required to be preserved in perpetuity through CPC discretionary review. The presence of existing habitat would be determined based on a site assessment conducted by an environmental professional. The surrounding natural ecosystem and public realm relies on maintaining larger natural features found on properties 1 acre or more.

The Proposed Actions maintain the primary intent of each special district as guiding development in areas of outstanding natural beauty to protect, maintain, and enhance the natural features.

Description of Proposed Actions

The proposed special district would combine the boundaries of two existing special districts (SNAD and SHPD) into one combined special district, to be referred to as SHNAD. The currently mapped Special Natural Area District (SNAD) NA-1 and NA-3 Shore Acres would be combined with SHNAD. The existing boundaries of SSRDD would remain, but some special areas within that district would be eliminated because the regulations for these areas are outdated and no longer necessary.

For the proposed SHNAD, the proposal would establish a new ecological area designation, Escarpment Area. Modified bulk, parking, and planting rules would apply and vary within the Escarpment Area. The Escarpment Area would include the steep slopes of the Serpentine Ridge of Staten Island, from Historic Richmond Town to Tompkinsville; the proposed regulations for this area are aimed to balance development on private property and protect geologic and topographic

features of the Serpentine Ridge. Areas within SHNAD that are not designated Escarpment would be designated as "Non-Escarpment"; the proposed regulations for this area aim to provide consistent regulations for development and preservation to contribute to the overall ecological importance of the combined special district.

Although the existing special districts require CPC approval based on a variety of factors, including proposed removal of individual trees or modification of slopes even for small properties, the proposed SHNAD would require CPC review for the following types of properties (collectively referred to as Plan Review Sites):

- 1 acre or larger in size where a new building, enlargement, subdivision, or site alteration is proposed; or
- if smaller than 1 acre:
    - where a development requires a new private road or the extension of one; or
    - if located in an Escarpment Area, where four or more buildings, lots, or eight or more dwelling units are proposed.

A small constrained site with steep topography or aquatic features may have the option to seek modifications to the SHNAD rules by CPC authorization.

The proposed regulations for SSRDD would require CPC review for properties that qualify as a Plan Review Site:

- 1 acre or larger in size where a new building, enlargement, subdivision, or site alteration is proposed; or
- if smaller than 1 acre:
    - where a development requires a new private road or the extension of one.

Other SSRDD actions that would be maintained or modified and require CPC review include:

- development within Area SH;
- development within Area M;
- modification to height;
- where more than one curb cut is proposed on a lot with 100 feet or more of frontage;
- for developments on sites where waterfront esplanade regulations are applicable;
- active recreational facilities within designated open space (DOS); or
- to certify sufficient school seats are available.

Minor enlargements, site alterations, or tree removal on Plan Review Sites that meet certain proposed thresholds would not require CPC discretionary review and would require a CPC certification or ministerial review.

All other properties, new buildings, enlargements, subdivisions and site alterations on parcels other than Plan Review Sites would be reviewed by DOB. This ability to apply directly to DOB is known as "as-of-right" development, meaning that, if underlying zoning regulations and proposed special district rules are met, DOB will approve the plans.

The proposal would remove the CPC review for Bluebelt properties managed by New York City Department of Environmental Protection (NYC DEP) that is required in the existing SSRDD or SNAD and the review for NYC Parks properties that is required in the existing SNAD.

The proposed zoning regulations have similar goals for preservation of natural features as described within the three existing special districts. However, the proposed rules would approach the preservation of natural features in a holistic manner to enhance the relationship between the natural features on a property and the larger ecological landscape.

Appendix B contains a complete list of certifications, authorizations, and special permits that would be eliminated or modified under the Proposed Actions.

FRAMEWORK FOR ENVIRONMENTAL REVIEW

Consistent with 2014 *CEQR Technical Manual* guidelines, the Proposed Actions are analyzed in this EAS as a "generic action" because there are no known developments that are projected at this time. According to the *CEQR Technical Manual*, generic actions are programs and plans that have wide application or affect a range of future alternative policies; and for such actions, a site-specific description or analysis is not appropriate. As described in the *CEQR Technical Manual*, generic analyses are conducted using the following methodology:

- *Identify Typical Cases*: provide several descriptions similar to those in a localized action for cases that can reasonably typify the conditions and impacts of the entire proposal.
- *Identify a Range of Conditions*: A discussion of the range of conditions or situations under which the action(s) may take place, so that the full range of impacts can be identified.

Due to the broad applicability of the Proposed Actions, it is difficult to predict the sites where development would be facilitated by the Proposed Actions. In addition, the proposal is not in-and-of-itself expected to induce development where it would not have occurred absent the Proposed Actions. While the proposal may change the proportion of sites proceeding as-of-right, the overall amount, type and location of development within the directly affected area is not anticipated to change. Owing to the generic nature of this action, there are no known or projected as-of-right development sites identified as part of a RWCDS. To produce a reasonable analysis of the likely effect of the Proposed Actions, 15 representative prototypical analysis sites have been identified to demonstrate the range of proposed regulations for sites that would either be able to develop as-of-right or require a Plan Review Certification in the future (see Table 1 and Table 2). These sites will assess the effect of changes to proposed regulations (including elimination of existing discretionary actions), in which the development would proceed as-of-right in the future With Action scenario. In addition, conceptual analysis sites were identified for those sites where

development would require discretionary action in the future With Action scenario. This Conceptual Analysis will serve as a means of disclosing the potential impacts of the proposed discretionary actions for Plan Review Sites, which shall be subject to new or different future environmental review under the Proposed Actions.

Development affected by the proposal is projected based on trends between 2006 and 2015. The development assumptions in the future with and without the Proposed Actions mirror recent historical development patterns. In the 10 years from 2006 to 2015, there were a total of 2,717 new housing units constructed within the three special districts – 375 new units in SHPD and SNAD, and 2,342 new units in SSRDD. This rate of housing development is similar to the rate outside the special districts in Staten Island, which is 4 percent. The Proposed Actions are not expected to change the rate of growth, which is controlled primarily by the supply of developable land and by the local supply of skilled professionals in the construction industry. Future market trends for non-residential uses also are expected to remain similar to current and historical development patterns. The Proposed Actions are not anticipated to introduce a substantial amount of new non-residential uses or to change the current growth rate with respect to non-residential development.

Table 1. Prototypical Analysis Sites – No Action Scenario

Site	Zoning District	Special District	Lot Area (Square Feet)	No Action Scenario	FAR	Building Square Feet	Lot Coverage (%)
1	R3A	SHPD	4,000	2-story 2-family detached home	0.6	2,400	30
2	R2	SHPD	6,325	Existing conditions to remain	0.0	0	0
3	R1-2	SNAD NA-1	6,000	Enlargement, 2-story 1-family detached home	0.5	3,000	25
4	R3X	SSRDD	5,000	2-story, 2-family-detached home	0.6	3,000	30
5	R3X/ C1-1	SSRDD	42,000	1-story, general retail	0.11	4,500	11
6	R5	SHPD	2,500	3-story, 1-family attached	1.25	3,225	52
7	R1-1	SNAD NA-1	39,000	Existing conditions to remain	0.0	0	0
8	R2	SHPD	4,500	2-story, 1-family, detached	0.5	2,250	25
9	R3X	SHPD	6,000	Existing conditions to remain	0.0	0	0
10	R3X/ C1-2	SHPD	25,000	1-story, general retail	0.35	8,700	35

Site	Zoning District	Special District	Lot Area (Square Feet)	No Action Scenario	FAR	Building Square Feet	Lot Coverage (%)
11	R3X	SSRDD	7,088 6,250 5,412	Subdivide into 3 Lots of varying size; 3-story, 2-family detached home per lot	0.79 0.60 0.45	4,253 3,750 3,247	20 19 19
12	R3X	SSRDD	4,000 5,000 6,000	Subdivide into 3 Lots of varying size; 2- to 3-story, 2-family detached home per lot	0.6 0.6 0.6	2,400 3,000 3,600	30 20 20
13	C4-1 or C8 or M	n/a	n/a	Scenario A: Retail and Office Uses (Use Groups 6a and 6b) Scenario B: Retail Uses (Use Group 6a)	n/a	n/a	n/a
14	R1-1	SNAD	360,000	Community Facility expansion	0.21	74,400 (total campus)	n/a
15	R3X	SSRDD	55,000	Subdivide 1 lot into 12 lots of varying size; 2-story, 2-famiy detached home per lot	0.6	Lots 1-2: 4,500 per lot; Lots 3-12: 2,400 per lot	30

Table 2. Prototypical Analysis Sites – With Action Scenario

Site	Zoning District	Special District	Lot Area (Square Feet)	With Action Scenario	FAR	Building Square Feet	Lot Coverage (%)
1	R3A	SHNAD Non-Escarpment	4,000	2-story, 2-family detached home	0.6	2,400	30
2	R2	SHNAD Escarpment	6,325	2-story, 1-family attached home	0.5	2,850	15
3	R1-2	SHNAD Non-Escarpment	6,000	Enlargement, 2-story 1-family detached home	0.5	3,000	25
4	R3X	SSRDD	5,000	2-story, 2-family detached home	0.6	3,000	30
5	R3X/ C1-1	SSRDD	42,000	1-story, general retail	0.25	10,692	25

Site	Zoning District	Special District	Lot Area (Square Feet)	With Action Scenario	FAR	Building Square Feet	Lot Coverage (%)
6	R5	SHNAD Non-Escarpment	2,500	3-story, 1-family attached	1.25	3,225	52
7	R1-1	SHNAD Escarpment	13,000 13,000 13,000	Subdivide into 3 Lots; 3- to 4-story, 1-family detached home per lot	0.50 0.40 0.45	6,500 5,200 5,808	18 20 23
8	R2	SHNAD Non-Escarpment	4,500	2-story, 1-family, detached	0.5	2,250	30
9	R3X	SHNAD Non-Escarpment	6,000	3-story, ground floor community facility with residential above	0.6	3,600	20
10	R3X/ C1-2	SHNAD Non-Escarpment	25,000	2-story, general retail	0.44	11,100	26
11	R3X	SSRDD	5,735 6,415 6,600	Subdivide into 3 Lots of varying size; 2-3-story, 2-family detached home per lot	0.6 0.6 0.6	3,441 3,849 3,960	30 19 19
12	R3X	SSRDD	5,000 10,000	Subdivide into 2 Lots of varying size; total of 3 3-story, 2-family detached homes	0.6 0.6	3,000 6,000	20 19
13	C4-1 or C8 or M	n/a	n/a	Scenario A: Retail and Office Uses (Use Groups 6a and 6b, respectively) Scenario B: Retail Uses (Use Group 6a)	n/a	n/a	n/a
14	R1-1	SHNAD Non-Escarpment	360,000	Community Facility expansion	0.21	74,400 (total campus)	n/a
15	R3X	SSRDD	55,000	Subdivide 1 lot into 12 lots of varying size; 2-story, 2-famiy detached home per lot	0.6	Lots 1-2: 4,500 per lot; Lots 3-12: 2,400 per lot	30

1. Land Use, Zoning, and Public Policy

An assessment of land use, zoning, and public policy is appropriate if a proposed action would result in a significant change in land use or substantially affect regulations or policies governing land use or public policy. Even when there is little potential for an action to be inconsistent or affect land use, zoning, or public policy, a description of these issues helps to establish conditions and provide information for use in other technical areas. A detailed assessment of land use is appropriate if an action would result in a significant change in land use or substantially affect regulations or policies governing land use. CEQR also requires a detailed assessment of land use conditions if a detailed assessment has been deemed appropriate for other technical areas, or for generic or area-wide zoning map amendments.

The Proposed Actions include zoning text and related zoning map amendments that would modify special district zoning regulations applicable to the SNAD, SHPD, and SSRDD in Staten Island. In addition, several public policies are applicable to portions of the directly affected area, including *Housing New York, Vision Zero,* the FRESH Program, and the City's sustainability/*PlaNYC* and *OneNYC* policies. Portions of the directly affected area are also located within the City's coastal zone boundary, requiring an assessment of the Proposed Actions' consistency with the relevant policies of the City's Waterfront Revitalization Program (WRP) and the completion of the updated 2016 WRP Consistency Assessment Form (CAF). Therefore, consistent with the *CEQR Technical Manual* guidance, further analysis is warranted and will be included in the EIS. The EIS will consider the Proposed Actions' potential to adversely affect land use, zoning, and public policy by assessing the prototypical analysis sites, employing a qualitative non-site-specific approach (see *EIS Draft Scope of Work*).

2. Socioeconomic Conditions

The socioeconomic character of an area includes its population, housing, and economic activity. According to the *CEQR Technical Manual*, a socioeconomic assessment should be conducted if an action may reasonably be expected to create substantial socioeconomic changes within the area affected by the action that would not occur without the action. The following circumstances typically require a socioeconomic assessment:

- When an action would directly displace residential population to the extent that the socioeconomic character of the neighborhood would be substantially altered. Displacement of fewer than 500 residents generally would not alter the socioeconomic character of a neighborhood. Assessments of direct and indirect residential displacement, as well as indirect business displacement, are warranted for actions exceeding this threshold.
- When an action would directly displace more than 100 employees, assessments of direct and indirect business displacement are appropriate.
- When an action would directly displace a business that is unusually important because its products or services are uniquely dependent on its location; that, based on its type or location, is the subject of other regulations or publicly adopted plans aimed at its preservation; or that serves a population uniquely dependent on its services in its

present location. Direct and indirect business displacement assessments are typically required under any of these circumstances.

- When an action would result in substantial new development that is markedly different from existing uses and development in the neighborhood, and as such, may lead to indirect displacement. An action that is small to moderate in size would not cause a significant socioeconomic effect unless it is likely to generate socioeconomic conditions substantially different from existing conditions. Residential development of 200 units or less or commercial development of 200,000 square feet or less typically do not result in significant socioeconomic impacts. For actions exceeding these thresholds, assessments of indirect residential and business displacement are typically necessary.
- The action would either create or add to a retail concentration that draws a substantial amount of sales from existing businesses within the study area to the extent that certain business types close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets. An action that introduces less than 200,000 square feet of retail on a single development site generally does not cause significant socioeconomic impacts. If the proposed development is located on multiple sites throughout a project area, a preliminary analysis is likely appropriate. For actions exceeding these thresholds, an assessment of the indirect business displacement owing to market saturation is warranted.
- If the action is expected to affect conditions within a specific industry, an industry assessment is typically needed. For instance, a citywide regulatory change that would adversely affect the economic and operational conditions of certain types of businesses may affect socioeconomic conditions in a neighborhood if: (1) a substantial number of residents or workers depend on the goods or services provided by the affected businesses; or (2) it would result in the loss or substantial diminishment of a particularly important product or service within the city. Because the range of possible types of projects that may require an analysis of specific industries varies, the lead agency, in consultation with the Mayor's Office of Environmental Coordination (MOEC), should provide guidance as to whether an analysis is warranted.

Screening Analysis

In accordance with 2014 *CEQR Technical Manual* guidelines, a preliminary screening analysis was performed to identify whether any prototypical analysis sites would exceed the initial screening thresholds, and thus would warrant detailed studies to determine whether they would be reasonably expected to create socioeconomic changes within the area. The assessment was based on a comparison of the development of the 15 prototypical analysis sites under the No Action scenario against the With Action scenario.

Direct Residential Displacement

The Proposed Actions are not expected to induce development on sites with existing residential uses; thus, the actions are not expected to displace any residents. Eleven of the prototypical analysis sites would include residential uses. The development of five prototypical analysis sites (sites 2, 5, 7, 9, and 10) would result in an increase in floor area and/or would introduce a nominal

number of new residents compared to the No Action scenario. However, no existing residential uses would be displaced on any of the prototypical analysis sites. The Proposed Actions would not displace 500 or more residents and thus do not trigger the need for a detailed analysis. Therefore, because the Proposed Actions are not expected to induce the redevelopment of an existing building, they would not result in the direct displacement of any residential population.

Direct Business Displacement

The Proposed Actions are not expected to induce development on sites that currently provide employment or include institutional uses; as such, they are not expected to displace any businesses, institutions, or employees. The Proposed Actions would not displace 100 or more employees and do not trigger the need for a detailed analysis.

Prototypical analysis sites 5, 9, 10, 13, and 14 would include non-residential uses that generate employment. However, no commercial or institutional uses would be displaced on any of the prototypical analysis sites. Therefore, because the Proposed Actions are not expected to induce the redevelopment of existing buildings, the direct displacement of businesses, institutions, or workers is not anticipated.

Indirect Residential Displacement

The Proposed Actions would not result in the development of more than 200 residential units. Given the broad applicability of the Proposed Actions and the dispersed nature of prototypical analysis sites, new residential development or increase in units introduced by the Proposed Actions would be incremental in nature and would not add a substantial number of units in any given location. The evaluation of the prototypical analysis sites shows that an incremental increase in the number of dwelling units would be limited to prototypical analysis sites 2, 7, and 9; with one incremental dwelling unit anticipated at site 2, three incremental units at site 7, and two incremental units at site 9.

Because the number of vacant or underbuilt sites is limited and zoning is low density, clustering implications are unlikely. Each of the affected existing special districts include limited quantities of vacant lots that typically exhibit limited development potential. For example, much of the vacant land in SNAD NA-1 and SHPD is located on steep slopes and/or is thickly forested. Vacant land in SNAD NA-3 comprises sandy beach areas along the Narrows waterfront and small, thickly forested lots interspersed between developed residential lots. Many of the SSRDD's vacant lots are situated on steep slopes and/or are thickly forested and serve as buffers between adjacent properties, while larger vacant parcels that include submerged land are found along the shoreline.

Based on the limited amount of vacant land, combined with the low-density residential zoning districts mapped throughout the affected areas, the clustering of multiple developments resulting in an incremental increase of more than 200 new residential units is unlikely.

The Proposed Actions would not have a growth-inducing effect and would not introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. Therefore, the Proposed Actions do warrant further analysis with respect to indirect residential displacement.

Indirect Business Displacement

The Proposed Actions would not result in the incremental commercial development of more than 200,000 square feet at any given location. Because of the broad applicability of the Proposed Actions, any new commercial development that they could generate would be incremental in nature. An assessment of the prototypical analysis sites shows that an incremental increase in the size of commercial or institutional development would be limited to sites 5, 9, and 10; with an incremental 6,192 square feet of commercial development at site 5, an incremental 1,200 square feet of community facility development at site 9, and an incremental 2,400 square feet of commercial development at site 10. Thus, the Proposed Actions would not introduce an increment of more than 200,000 square feet of commercial development at any given location.

Because the Proposed Actions would introduce a limited amount of net commercial or institutional development, they would not result in substantial new development that is markedly different from existing uses and development. Similarly, the Proposed Actions would not create or add to a retail concentration that draws a substantial amount of sales from existing businesses to the extent that certain business types close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets.

As discussed in the 2014 *CEQR Technical Manual,* indirect displacement of businesses occurs when a project would markedly increase property values and rents throughout a study area, making it difficult for some categories of businesses to remain in the area. Additionally, indirect displacement of a business may occur if an action directly displaces any type of use that either directly supports businesses in the area or brings a customer base to the area for local businesses, or if it directly or indirectly displaces residents or workers who form the customer base of existing businesses in the area. The Proposed Actions are not expected to result in any of these conditions. The Proposed Actions would not change the overall permitted amount, type, and location of development within the affected areas, and no new land uses would be allowed that are not permitted by underlying zoning or the modifications set forth in the existing special district regulations.

Because the Proposed Actions would not generate more than 200,000 square feet of incremental commercial development at any given site, they would not result in substantial new development that is markedly different from existing uses and development. In addition, the Proposed Actions would not introduce new uses to a zoning district, and the actions would not introduce a new trend or residential population that could alter economic patterns. Therefore, the Proposed Actions do not warrant a detailed analysis for indirect business displacement.

Adverse Effects on Specific Industries

The Proposed Actions would not result in any significant, adverse impacts due to effects on specific industries, such as the housing market or the construction industry. To determine the potential for impacts associated with the housing market or construction industry, the development potential (as-of-right) of the 15 prototypical analysis sites under existing and

proposed zoning regulations was qualitatively assessed.[1] Depending on site characteristics, the Proposed Actions could slightly increase, slightly decrease, or have no effect on the potential for site development. Under the With Action scenario and existing regulations, the development potential would remain the same for most sites (i.e., 10 out of 15); whereas the development potential would slightly increase for five sites.

The Proposed Actions would facilitate new development on three prototypical analysis sites (sites 2, 7, and 9), which would require discretionary approval under the No Action scenario. Compared to No Action scenario, these sites would experience floor area increases ranging from 2,850 to 17,508 square feet. For sites 5 and 10, the With Action scenario would allow for larger commercial buildings and a greater number of parking spaces. Compared to the No Action scenario, the Proposed Actions would permit an additional 8 parking spaces and 2,400 square feet of commercial floor area on site 10, and an additional 42 parking spaces and 6,192 square feet of commercial floor area on site 5. The remaining 10 prototypical sites (sites 1, 3, 4, 6, 8, 11, 12, 13, 14 and 15) would not experience a change in floor area relative to the No Action scenario. Therefore, the Proposed Actions would not have a substantial effect on site development potential.

The development assumptions in the No Action and With Action scenarios mirror recent historical development patterns, based on trends between 2006 and 2015. These assumptions reflect a housing development rate of 5 percent, similar to the 4 percent rate outside the special districts in Staten Island. The Proposed Actions are not expected to change the rate of growth, which is controlled primarily by the supply of developable land and the local supply of skilled professionals in the construction industry. In the No Action scenario, development patterns in the three special districts are expected to continue. By 2030, a 5 percent development growth rate is projected for the new development within the three special districts. New residential development and enlargements are estimated to occur at 2,597 lots within the three special districts, comprising 180 lots in SNAD NA-1, zero lots in SNAD NA-3, 272 lots in SHPD and 2,045 lots in SSRDD.

As discussed above, the Proposed Actions are not expected to have a substantial effect on the development potential of sites nor are they expected to modify the current housing development rate within the affected areas. Therefore, the Proposed Actions would not have a significant effect on business conditions of the housing market or construction industry within or outside the affected areas. Similarly, the Proposed Actions would not indirectly impair the housing market or construction industry or result in a substantial reduction in the number of construction industry or housing market jobs.

Conclusion

Because the Proposed Actions are intended to be development neutral, sites developed with or without the Proposed Actions are likely to be the same. While the Proposed Actions may change the configuration of certain developments, the differences would be minor from a socioeconomic

[1] The development potential of the prototypical analysis sites is based on the as-of-right development size permitted under the No Action and With Action scenarios, as discussed upfront in the *Framework for Environmental Review* and as summarized above in Tables 1 and 2, and as described in detail in Appendix C, *Prototypical Analysis Sites*.

standpoint. Development in the With Action scenario would have a de minimis effect when compared with the No Action scenario.

The preceding screening analyses indicate that the Proposed Actions would not directly displace any residents, businesses, or employees; would not affect real estate market conditions in a way that would result in indirect displacement of residents or businesses; and would not have an adverse effect on a specific industry such as the construction industry or the housing market. Consequently, the Proposed Actions do not warrant further analysis with respect to the potential for direct or indirect residential displacement, direct or indirect business displacement, or adverse effects on a specific industry. The proposed regulations would result in development that has the same general socioeconomic characteristics as exhibited by existing development throughout the affected special districts. Therefore, the Proposed Actions would not result in significant, adverse impacts related to socioeconomic character.

3. Community Facilities

The 2014 *CEQR Technical Manual* defines community facilities as public or publicly funded facilities, including schools, libraries, childcare centers, health care facilities, and fire and police protection services. An action can affect community facilities or services when it either physically displaces or alters them (a direct effect) or causes a change in populations that may affect services delivered (an indirect effect).

Screening Analysis

A screening-level analysis was performed to determine the need for a preliminary or more detailed community facilities and services assessment. As noted in the 2014 *CEQR Technical Manual*, a community facilities analysis is needed if an action has the potential to result in either direct or indirect effects on community facilities. Detailed community facilities analyses are most commonly associated with residential projects because demand for community services generally results from the introduction of new residents to an area. If an action 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 to an area as a result of an action 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 or childcare centers.

The potential for a clustering of effects as a result of the Proposed Actions is also considered to rule out the potential that multiple developments with small incremental increases in the number of dwelling units might occur within a study area, resulting in a new population that exceeds the thresholds outlined in the 2014 *CEQR Technical Manual.*

Direct Effects

The Proposed Actions would not result in direct impacts on community facilities. The Proposed Actions would not displace or otherwise directly affect any public schools, libraries, childcare centers, health care facilities, or police and fire protection services facilities. Therefore, an analysis of direct effects is not warranted.

Indirect Effects

The analysis framework identified above, and the thresholds presented in Table 6-1, *Community Facility Thresholds for Detailed Analysis,* in the *CEQR Technical Manual*, were used to evaluate whether a detailed analysis is necessary to determine potential impacts.

Table 6-1 in the 2014 *CEQR Technical Manual* defines thresholds for detailed analysis as 50 or more elementary/middle school students (public schools), 20 or more children eligible for group childcare and Head Start centers, more than a 5 percent increase in the ratio of residential units to library branches, or the introduction of a sizeable new neighborhood (for police/fire services and health care facilities). As shown in Table 3. Community Facility Thresholds for Detailed Analysis, under the With Action scenario, an incremental increase in residential units would be limited to prototypical analysis sites 2, 7, and 9. However, the increases would not exceed the thresholds for detailed analysis of schools, childcare, or libraries. Because the increase in residential units would be negligible and no new neighborhood would be created, the thresholds for police/fire services and health care facilities also would not be exceeded, and no further analysis is warranted.

Table 3. Community Facility Thresholds for Detailed Analysis

Prototypical Analysis Site	Incremental Number of Residential Units	Geography	Minimum Number of Residential Units that Trigger Detailed Analyses			
			Public Schools		Childcare (Publicly Funded)	Libraries (5% Increase in Units/Branch)
			Elementary/ Intermediate	High School		
2	1	Staten Island, CSD 31	128	1,205	217	652
7	3	Staten Island, CSD 31	128	1,205	217	652
9	2	Staten Island. CSD 31	128	1,205	217	652

Source: Table 6-1, *CEQR Technical Manual*; 2018 Projected Public School Ratio (SCA)

The New York City School Construction Authority (SCA) released new projected public school ratios data as part of the documents used to draft the New York City Department of Education (DOE)/SCA FY 2020–2024 Capital Plan Proposed November 2018. The projected ratios data use the 2012–2016 American Community Survey – Public Use Microdata Sample and are available at the SCA's website under Capital Plan Reports & Data. According to these data, multipliers for primary and intermediate schools have been refined to reflect how many pupils are generated by new housing at the community school district (CSD) level (multipliers for high schools have been maintained at the borough level). As a result, the thresholds for determining when public school analyses are necessary have changed. For elementary and intermediate schools in Staten Island,

CSD 31, an analysis is warranted if a project is anticipated to introduce more than 128 incremental residential units. For high schools in Staten Island, the new threshold is 1,205 incremental residential units. The 2014 *CEQR Technical Manual* has not been updated to reflect these new thresholds. However, DCP as lead agency in consultation with the Mayor's Office of Environmental Coordination (MOEC), has determined that the 2012–2016 American Community Survey – Public Use Microdata Sample data should be used as the basis for determining the need for a public school CEQR analysis to present a reasonable and accurate environmental assessment.

Based on this screening, the Proposed Actions do not warrant a detailed analysis on the indirect effects on public schools, publicly funded childcare centers, libraries, health care facilities or police and fire service. Under the With Action scenario, three prototypical analysis sites would see the development of additional residential units compared to the No Action scenario. This would occur because the Proposed Actions would remove the currently required CPC authorizations for development of lots on steep slopes. (sites 2 and 7), or lots with community facilities in residential districts (site 9). However, the Proposed Actions would not result residential units that exceed the thresholds for detailed analysis.

Potential for Clustering of Effects

Significant clustering of development would have to occur to exceed thresholds that require analysis, and such clustering is unlikely given the small number of development sites in the affected zoning districts. Vacant and underutilized lots are distributed throughout the affected zoning districts, and development is not anticipated to occur in a concentrated location. The proposed zoning text and map amendments are not expected to induce development or cause a significant change in the overall amount, type, or location of development. The Proposed Actions are also unlikely to change which lots are developed in the With Action scenario compared to the No Action scenario.

Conclusion

Because the Proposed Actions do not warrant a detailed analysis for indirect effects on community facilities and would not physically alter a community facility (or facilities), the Proposed Actions do not have the potential to result in significant, adverse impacts on community facilities and services, and no further analysis is warranted.

4. Open Space

Under CEQR, open space is defined as publicly or privately owned land that is publicly accessible and available for passive or active recreation or is set aside for the protection and/or enhancement of the natural environment. The purpose of a CEQR open space analysis is to determine the potential for a proposed action to have a direct impact resulting from the elimination or alteration of open space and/ or an indirect impact resulting from overtaxing available open space. The analysis focuses on officially designated existing or planned public open space.

Direct effects may occur when a proposed action causes a loss of open space, or results in changes to the facilities within an open space to the extent that the resource no longer serves the same user population. Direct effects may also include limitation of public access; changes in the

type and amount of public open space; and the imposition of noise, air pollutant emissions, odors, or shadows that may affect the usability of the open space. In addition, direct effects may not always result in an adverse impact on open space. Park modifications and reprogramming may be beneficial to some resources and may or may not have an adverse effect on others.

Indirect effects may occur when the population generated by a proposed action or project overtaxes the capacity of existing open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished.

Existing Public Open Space Resources

Public open space is a key feature and land use that is mapped throughout the existing SNAD, SSRDD, and SHPD. In general, except for state and national parks, public open space resources in New York City are under NYC Parks jurisdiction. As Figures 1a through 1c show, major open space resources in the project area include:

- Wolfe's Pond Park, a 303-acre community park located on the southeast shore, includes various types of terrain ranging from beaches to freshwater wetlands, ponds, and woodlands/forest. About 207 acres of the park, Wolfe's Pond Park Preserve, is part of the Forever Wild Program, a NYC Parks initiative to protect and preserve the most ecologically valuable lands within the five boroughs. The City's Forever Wild nature preserves include more than 8,700 acres of towering forests, vibrant wetlands, and expansive meadows. These vital open spaces are home to thousands of vegetative and wildlife species, including rare plants, flying squirrels, and bald eagles.
- Conference House Park, a 286-acre nature area, is located along the shoreline of the southern end of the island. In addition to a 105-acre portion of the park that is preserved as a Forever Wild site, this open space includes freshwater wetlands, forests, and four historic landmark houses.
- Clay Pit Ponds State Park Preserve, a 265-acre nature preserve near the southwest shore, comprises a variety of unique habitats, such as wetlands, ponds, sand barrens, spring-fed streams, and woodlands.
- Great Kills Park, a 315-acre waterfront open space, features wetlands and four separate beaches—New Dorp, Cedar Grove, Oakwood, and Fox. Gateway National Recreation Area provides an additional 1,200 acres of federally managed waterfront open space at Great Kills.
- Freshkills Park, a vast, 2,220-acre open space (former landfill), is located on the western shore. This park supports diverse habitats for wildlife, birds, and plant communities and provides natural settings for recreation. Although the interior portions of this resource are currently under development, portions along the exterior, including the William T. Davis Wildlife Refuge, a Forever Wild site, are complete and open to the public.

- LaTourette Park and Golf Course, a 761-acre park, is in central Staten Island. This open space provides a diversity of forest habitat, including woodlands and wetlands, and is part of the Staten Island Greenbelt.[2]
- High Rock Park and Preserve, a 90-acre natural area in the center of the island, contains numerous wetlands and ponds. This resource is a Forever Wild site and part of the Staten Island Greenbelt.
- Clove Lakes Park, a 194-acre open space, is in the north-central part of the island that is also protected as a Forever Wild site. This community park contains valuable ecological assets, including lakes, ponds, and outcroppings of serpentine rocks.

In addition, when the SSRDD was created, it included the establishment of Designated Open Space (DOS) on South Richmond's streams, ponds, freshwater wetlands, shorelines, and woods. The SSRDD was created in 1975 during a period of rapid development, and was intended to manage growth and ensure that the provision of public infrastructure kept pace with new development. The district established DOS along ecological features that would be left in a natural state as part of an open space network that also includes public parks and waterfront esplanades.

DOS was intended to preserve natural areas and to develop an open space network connecting natural and preserved areas. Under existing regulations, DOS must be made publicly accessible where required by CPC, and it can be used for passive recreation provided that any improvements do not involve tree removal, alteration of existing topography, or obstruction of pedestrian movement within public pedestrian ways. DOS can also be used for active recreational facilities, provided that CPC certifies that such uses are compatible with the purposes of the open space network and have minimal impact on tree removal, topographic alterations or drainage conditions. Since the establishment of the SSRDD, many DOS parcels have been acquired by NYC Parks and NYC DEP to help form Staten Island's 103-acre network of City parks and its Bluebelt system.

The DOS maps are provided in the ZR and included as Figures 2a through 2g.

[2] This open space is part of the vast 1,352-acre Staten Island Greenbelt, which is also included in the Forever Wild Program. The Greenbelt contains woodlands, wetlands, and forests that range from red maple-sweetgum swamp forests to upland oak woods. Variations in topography, geology, and native soil types support a diversity of plants, including New York State-listed rare plants.

Figure 1a: Open Space Resources – Existing Special Natural Area District (NA-1)

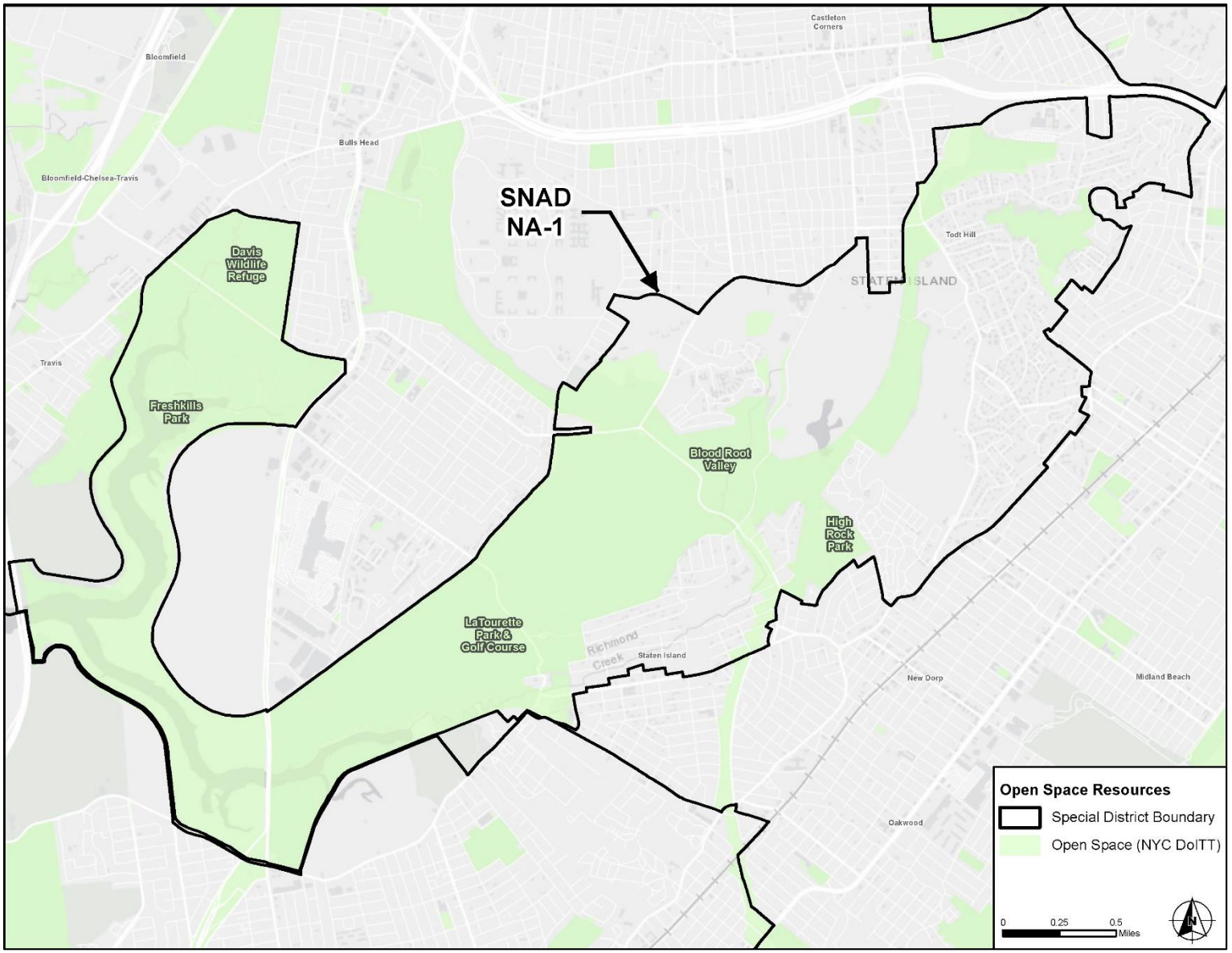


Figure 1b: Open Space Resources – Existing Special Hillsides Preservation District and Special Natural Area District (NA-3)

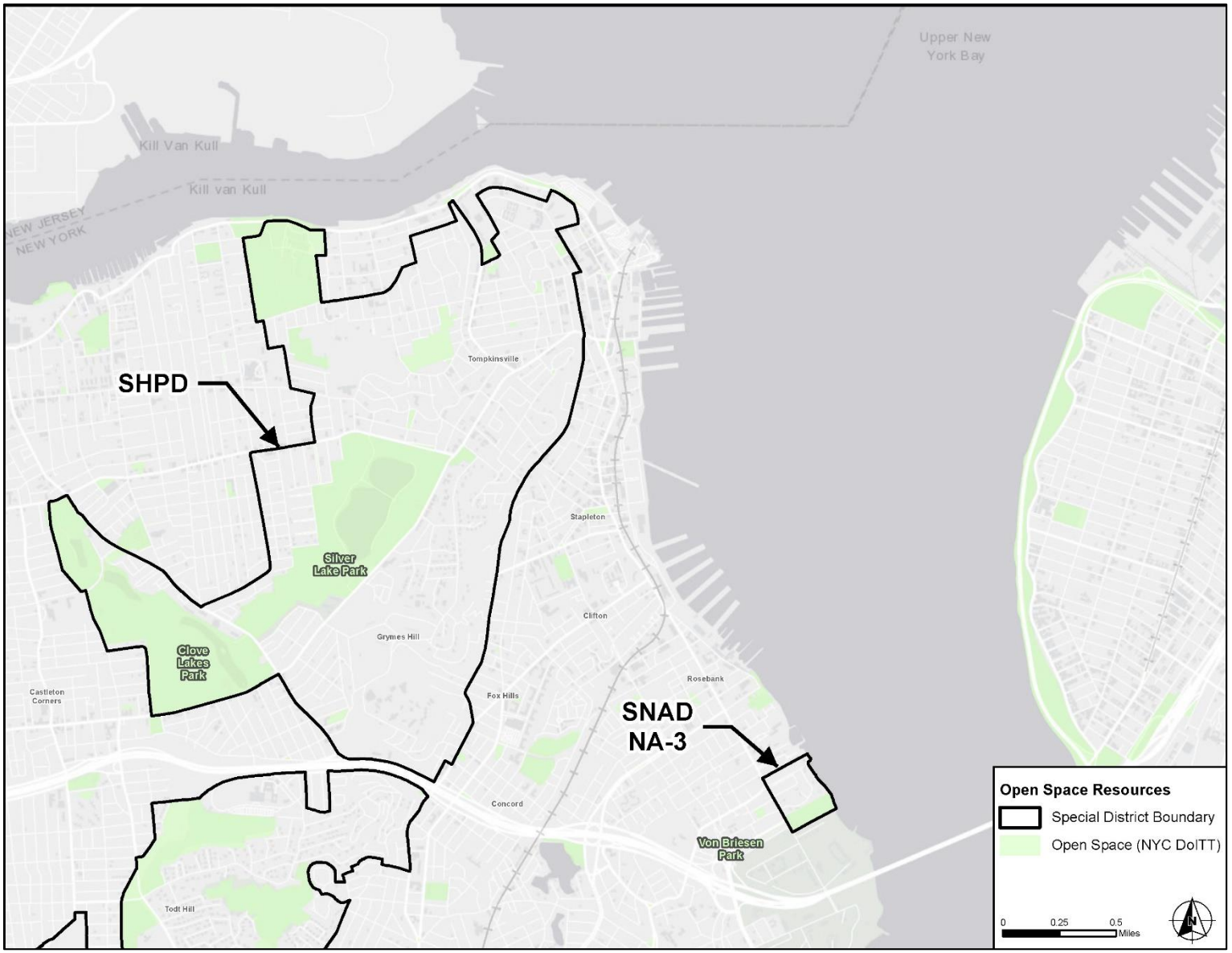
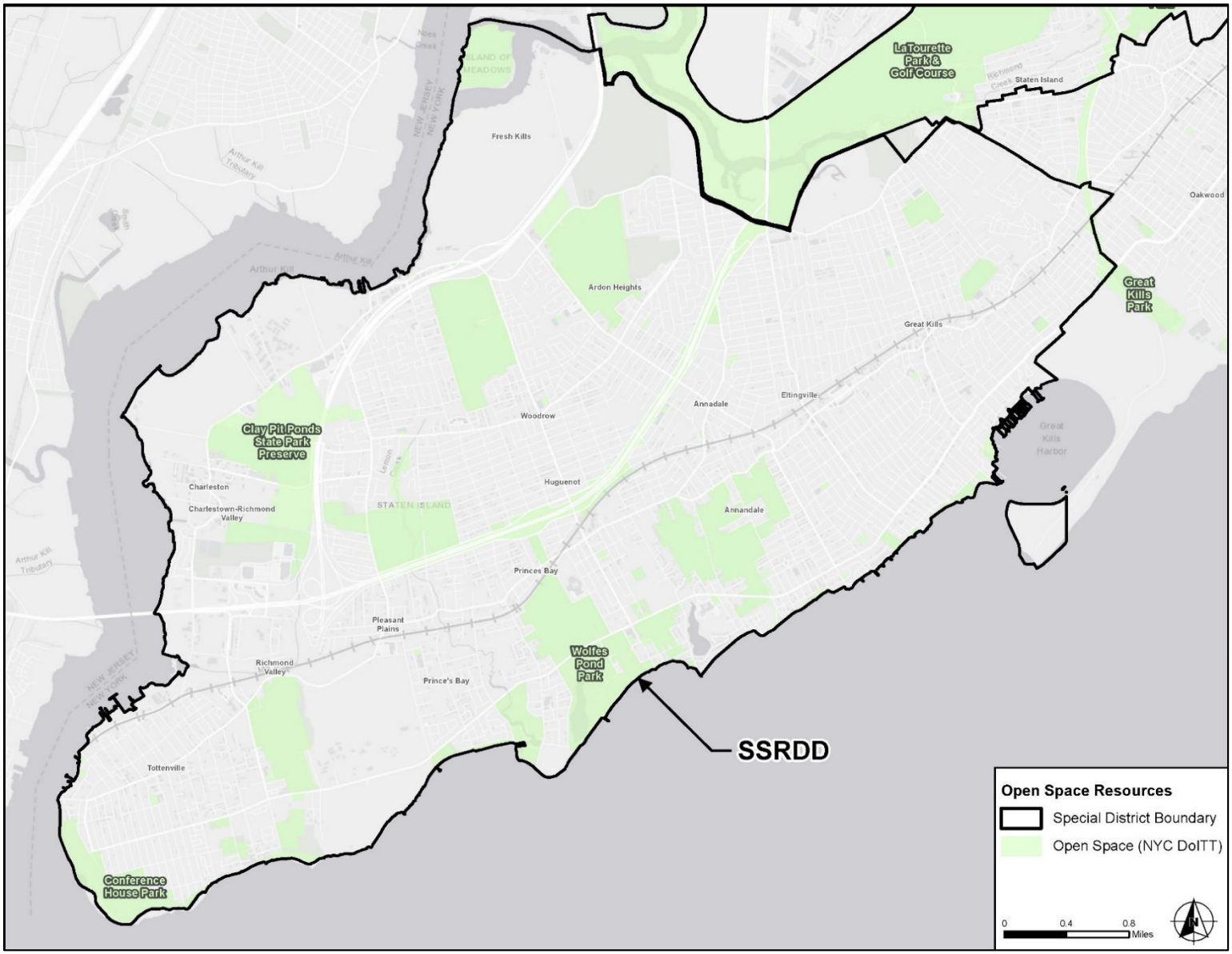


Figure 1c: Open Space Resources – Existing Special South Richmond Development District



Map 1 Open Space Network in South Richmond (date of adoption)

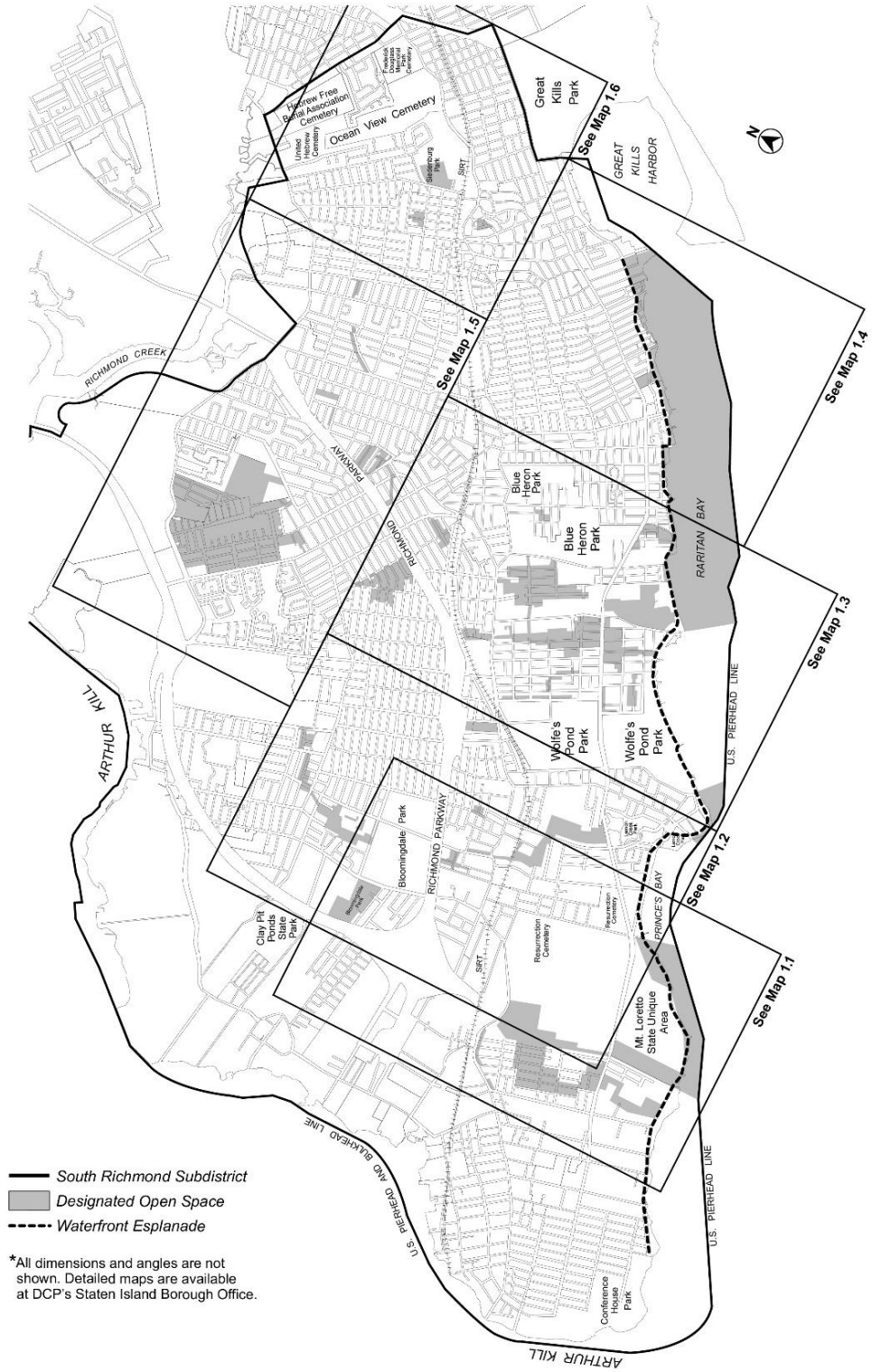


Figure 2a: DOS Network in South Richmond (Map 1 of 7)

Map 1.1 (date of adoption)

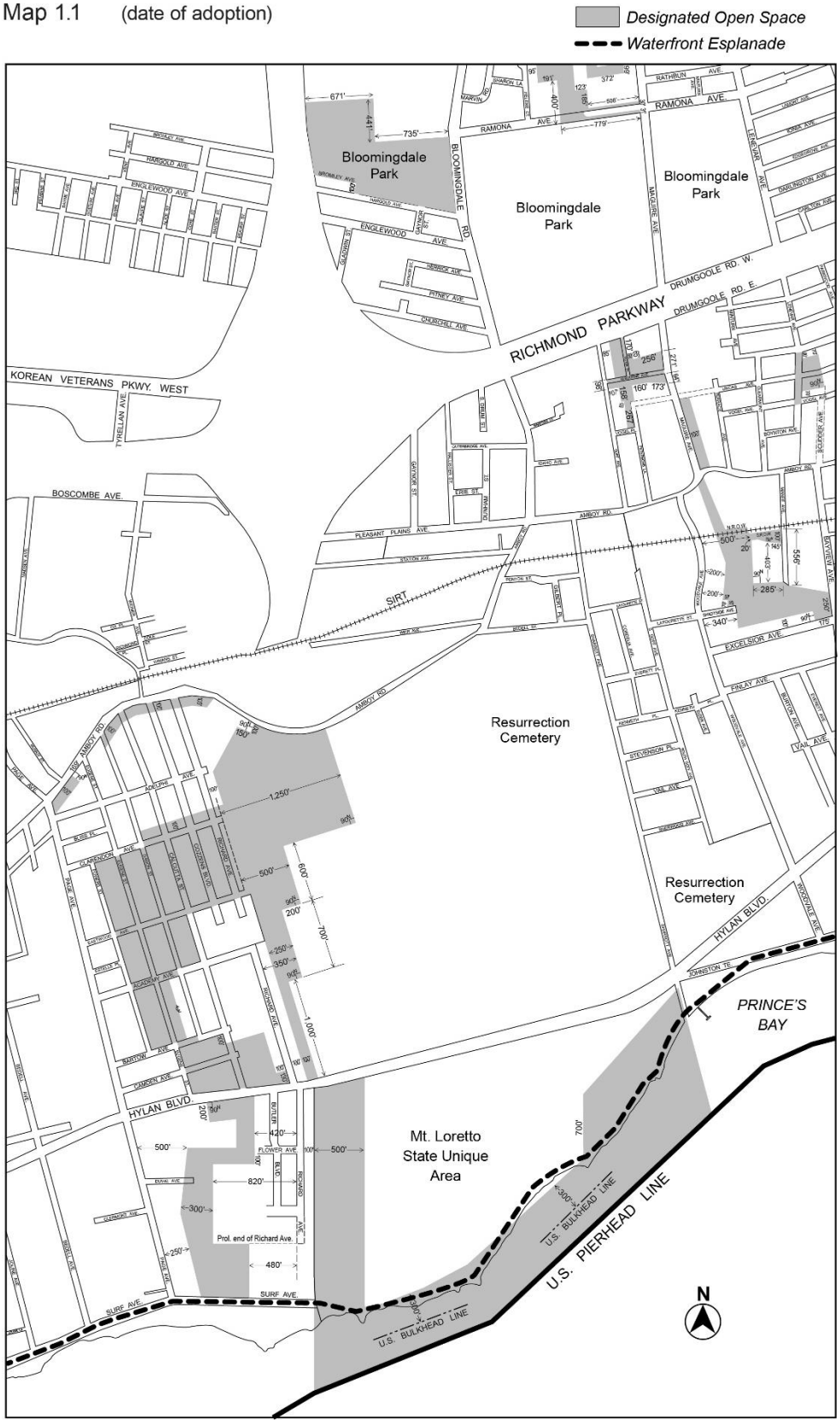


Figure 2b: DOS Network in South Richmond (Map 2 of 7)

Map 1.2 (date of adoption)

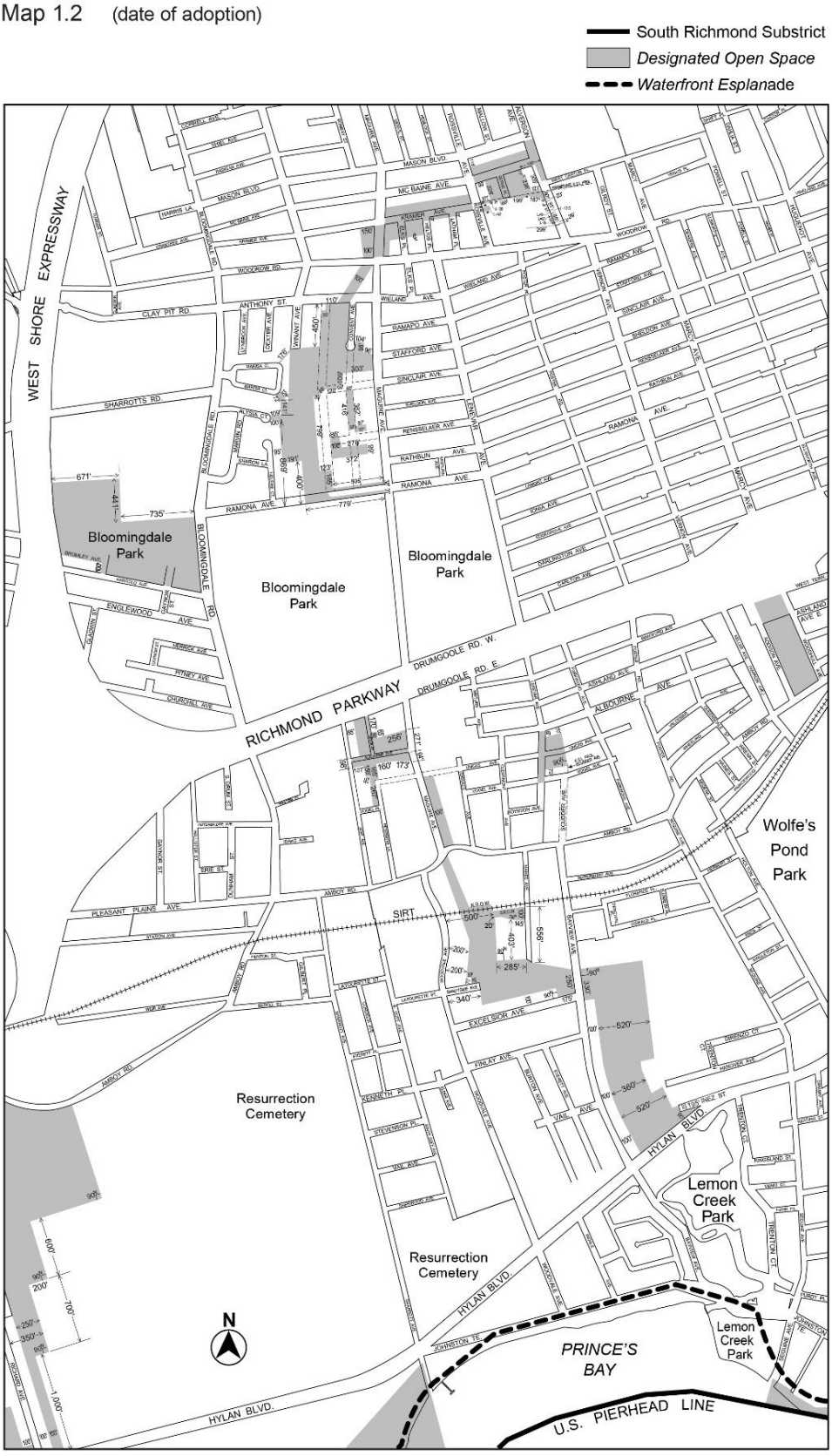


Figure 2c: DOS Network in South Richmond (Map 3 of 7)

Map 1.3 (date of adoption)

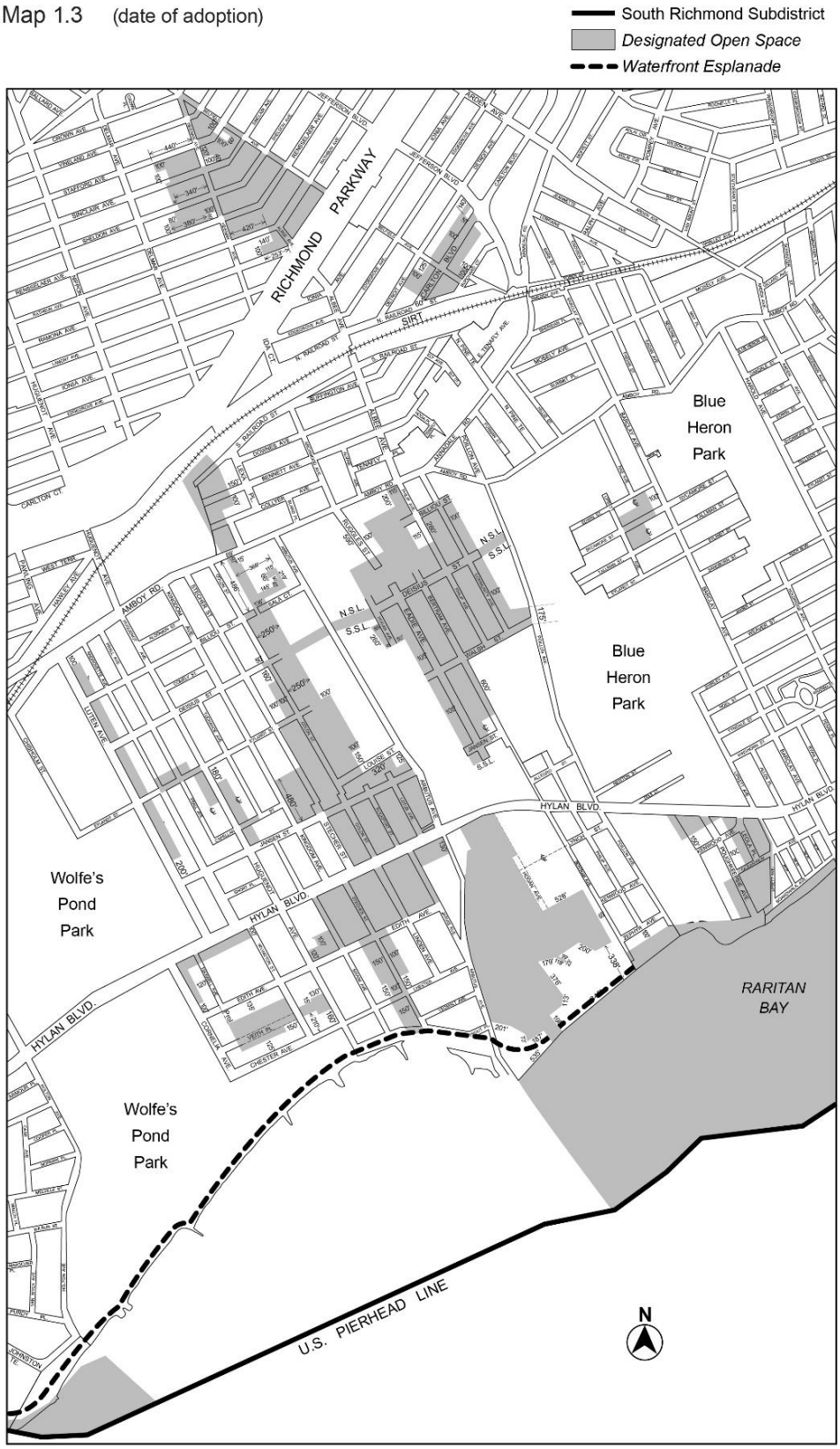


Figure 2d: DOS Network in South Richmond (Map 4 of 7)

Map 1.4 (date of adoption)

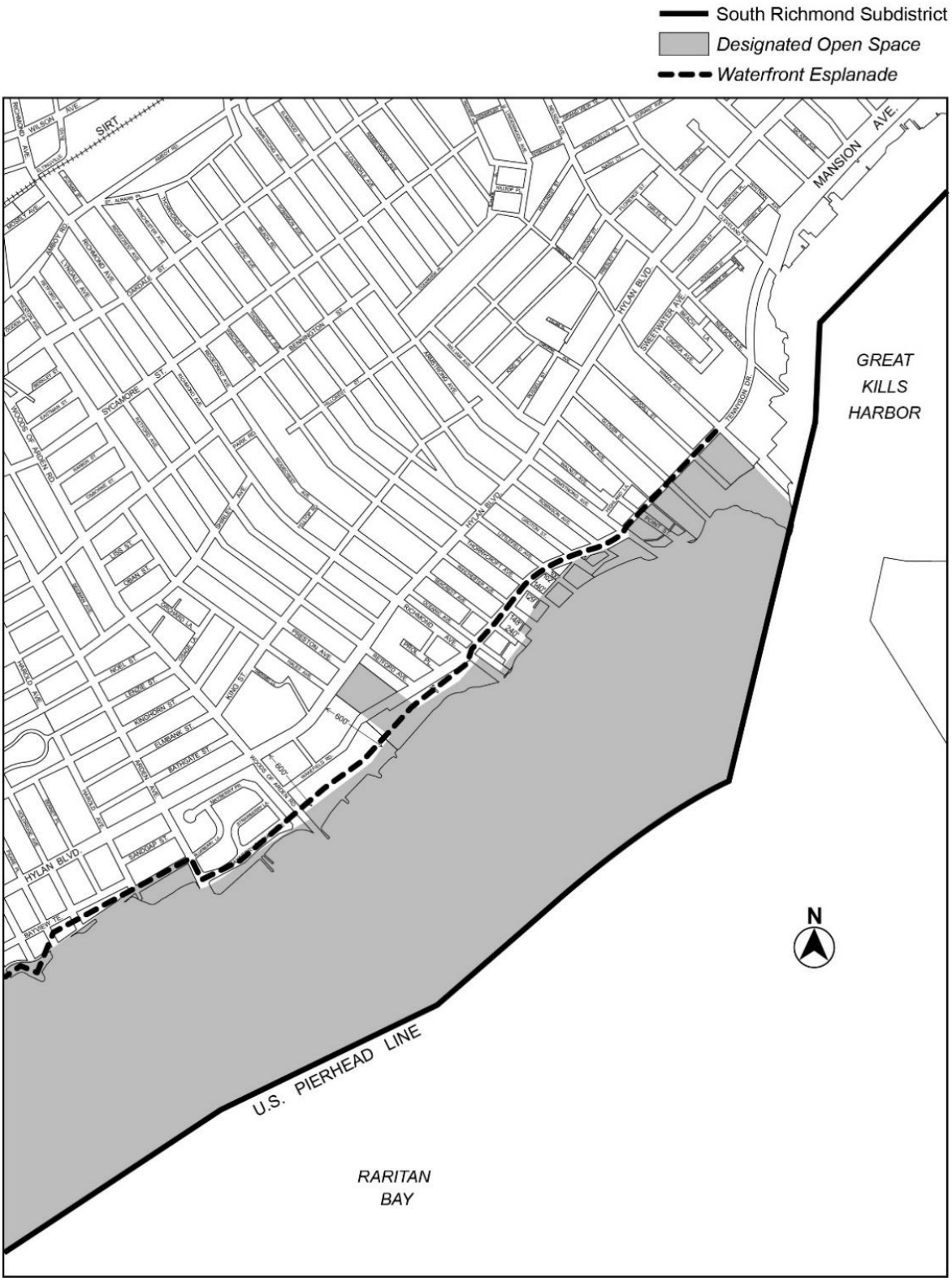


Figure 2e: DOS Network in South Richmond (Map 5 of 7)

Map 1.5 (date of adoption)

South Richmond Subdistrict
Designated Open Space

Figure 2f: DOS Network in South Richmond (Map 6 of 7)

Map 1.6 (date of adoption)

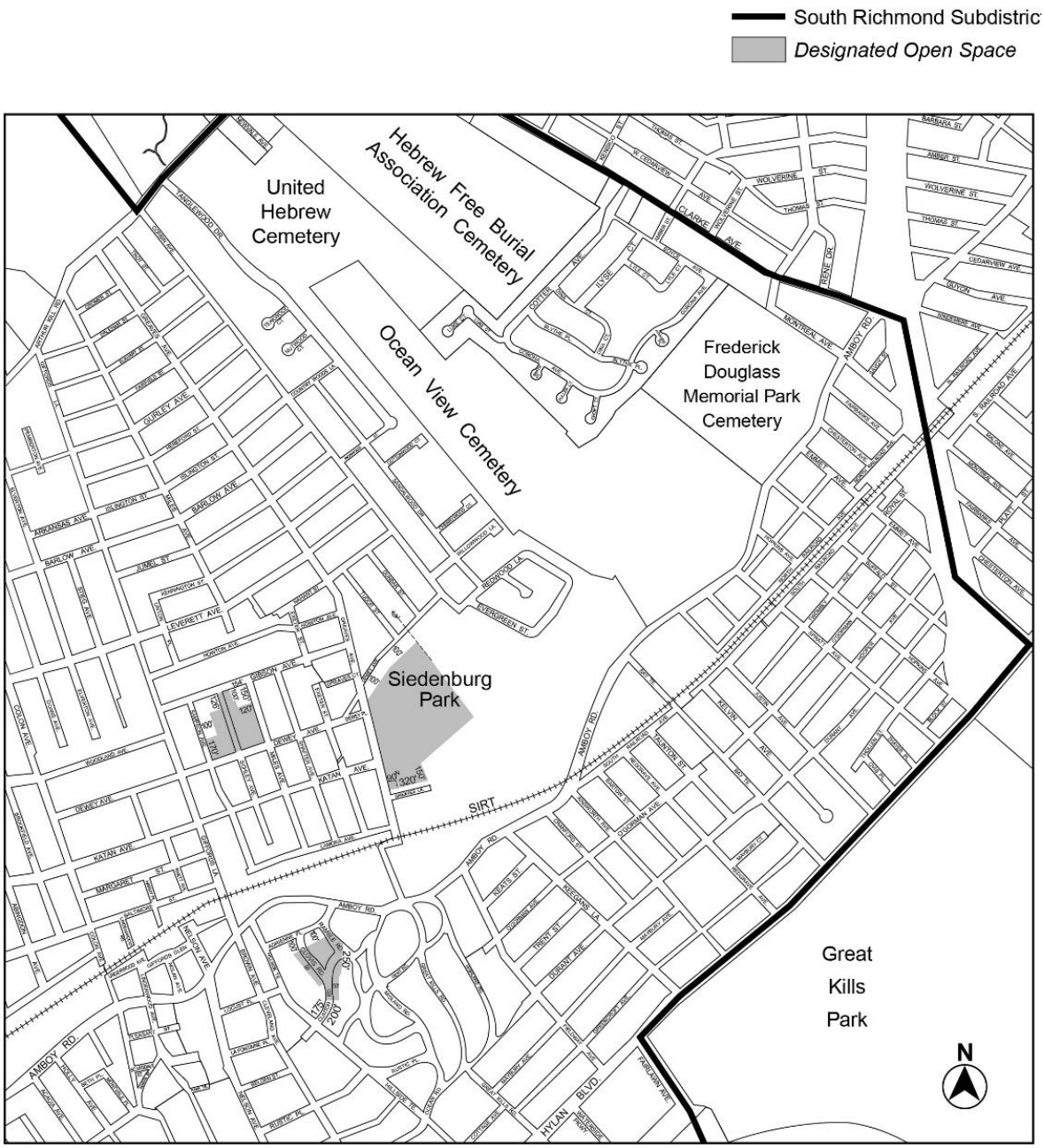


Figure 2g DOS Network in South Richmond (Map 7 of 7)

Screening Analysis

Screening analyses were conducted for the Proposed Actions to rule out the potential for direct or indirect, significant, adverse impacts related to open space resources.

Although the amount of private open space on commercial and institutional (or community facility) development sites could be reduced under the With Action scenario, open space would continue to be regulated and required on such development sites. The Proposed Actions also include adjustments to DOS boundaries and minor changes to DOS regulations, which are not expected to have an adverse effect on the usability or accessibility of open space. Therefore, because the Proposed Actions would require the preservation of an adequate amount of open space needed to protect and enhance the natural environment, no direct, significant, adverse effects are expected.

The proposed regulations are not anticipated to generate development that would not otherwise occur in the future without the Proposed Actions and would not generate substantial demand for open space resources compared to the No Action scenario. In addition, the indirect effects screening analysis results indicate that further analysis of open space is not warranted for the prototypical analysis sites.

Direct Effects

As noted in the 2014 *CEQR Technical Manual*, a proposed action may have a direct effect on open space resources if it would result in a physical loss of public open space; change the use of an open space so that it no longer serves the same user population; limit public access to an open space; or result in increased noise or air pollutant emissions, odors, or shadows that temporarily or permanently affect the usefulness of a public open space.

In addition, a qualitative evaluation has been included to address the proposed modification of existing DOS boundaries. For the purposes of the qualitative assessment of DOS, the proposed study area is coterminous with the project area, which comprises the proposed SHNAD and the existing SSRDD.

Public Open Space

The development of the prototypical analysis sites under the With Action scenario is not anticipated to result in significant, adverse direct effects on public open space. The buildout of some of the prototypical analysis sites under the With Action scenario would increase the overall amount of development (floor area) and/or hard surface area relative to the No Action scenario. For example, six of the prototypical analysis sites (sites 2, 5, 7, 8, 9, and 10) would result in an incremental increase in floor area and/or lot coverage. However, because no public open space has been identified on the prototypical analysis sites, encroachment or loss of public open space would not result from the incremental development.

Furthermore, the development of prototypical analysis sites under the With Action scenario is not expected to result in direct effects on open space resources with due to shadows, air quality or noise. The usefulness of potential adjacent open space resources would not be adversely affected by increased noise or air pollutant emissions, odors, or shadows resulting from the incremental development of prototypical analysis sites.[3]

[3] A shadows analysis and air quality analyses will be provided in the EIS, as noted below in Section 5, *Shadows*, and Section 14, *Air Quality*.

Designated Open Space

The Proposed Actions would adjust DOS boundaries to provide usable outdoor spaces adjacent to residential areas, where appropriate, and generally better align the boundaries to include existing habitat areas. In addition, rules regarding DOS would be modified to clarify or modernize procedures. The boundaries of DOS in the existing SSRDD are proposed to be clarified to indicate dimensions of DOS for predictability and adjusted through a zoning text map amendment to address areas of DOS that no longer serve the goals of the SSRDD Open Space Network. The goals include providing connections to larger DOS sites and parkland and preserving the DOS in its natural state to preserve natural areas.

In some cases, DOS is currently located in small, isolated fragments overlaying improved and unimproved mapped street sections and existing buildings on private property, which do not meet the goals of the Open Space Network. In other instances, DOS is located too close to existing residential buildings, resulting in DOS covering the entire rear yard of a small property. For properties that contain DOS areas but lack sensitive ecological features, DOS boundaries would be altered to provide a 20-foot separation between the building and the DOS to facilitate a usable outdoor space that is less constrained by DOS regulations. In other cases, changes are proposed to DOS boundaries to reflect proposed rules for habitat preservation on large sites generally and to better align DOS boundaries to include existing habitat areas.

The primary rationale behind the proposed DOS boundary adjustments is the City's improved understanding of ecology and the natural environment. Since the establishment of the SNAD, SSRDD, and SHPD in the 1970s and 1980s, the City's understanding of the importance of larger natural areas, such as Forever Wild parklands (referred to as *designated natural resources* in the proposed regulations), has evolved. These larger natural areas are now understood to be key "anchor habitats," characterized by a high level of biodiversity with more species of plants and animals that form an integral part of the larger ecosystem. The designated natural resources that are already located on publicly protected land, in combination with other larger habitats on private properties, are the most important assets to protect, preserve, and enhance.

Under the Proposed Actions, the current rules regarding DOS would be modified slightly to clarify procedures. The CPC certification that allows DOS to be used for active recreational facilities would be clarified to allow such use only when it serves five or more dwelling units and not a single residence. Existing rules that permit the delayed construction of certain improvements if a performance bond is posted would be eliminated and replaced by a requirement that the construction of public improvements be completed prior to issuance of a certificate of occupancy for new buildings. The proposed regulations would also eliminate four existing special permits applicable to sites with DOS that currently permit (1) the adjustment of a DOS boundary, (2) community facility buildings, or treatment plants in DOS, (3) building encroachment into DOS, and (4) bulk modification for lots with more than 50 percent DOS. However, any proposed modifications to DOS would be permitted only through a zoning text amendment.

Although proposed regulations would include minor changes to DOS rules, including the elimination of four special permits regarding the modification of DOS, the zoning text amendment requirement would ensure that any changes to DOS are appropriately evaluated. Any future zoning text amendment to modify DOS would be subject to SEQRA and would undergo

environmental review, if warranted. Mitigation would be required if any significant, adverse impacts on open space are identified. Although the proposed DOS boundary adjustments could reduce the size of DOS areas, such potential direct effects would be negligible and would not adversely affect usability or accessibility of the open space. The proposed DOS boundary changes would not detract from the aesthetic qualities of DOS or impair the operations of DOS.

Indirect Effects

Table 4 displays the estimated number of residents and workers that would be introduced by the development of the prototypical analysis sites in the No Action and With Action scenarios. The residential population estimates are based on an average household size of 2.81 for the borough of Staten Island (2012–2016 ACS Census Data). Worker population estimates are based on industry standard rates used in certified EIS documents (e.g., three employees per 1,000 square feet of retail or community facility use).[4]

Table 4. Residents and Workers by Prototypical Analysis Site

Prototypical Analysis Site*	No Action		With Action		Increment	
	Residents	Workers	Residents	Workers	Residents	Workers
1	6	0	6	0	0	0
2	0	0	3	0	+3	0
3	0	0	0	0	0	0
4	6	0	6	0	0	0
5	0	14	0	32	0	+19
6	3	0	3	0	0	0
7	0	0	9	0	+9	0
8	3	0	3	0	0	0
9	0	0	6	4	+6	+4
10	0	26	0	33	0	+7
11	18	0	18	0	0	0
12	18	0	18	0	0	0
13 [1]	0	N/A	0	N/A	0	0
14	0	223	0	223	0	0
15	72	0	72	0	0	0

Notes: **1** Prototypical analysis site 13 demonstrates how the proposed zoning changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. The applicability of these proposed changes would affect a wide range of lot sizes in various zoning districts (C4-1, C8, M) and would not result in an increase in floor area, change in uses, or change in building bulk regulations.

As demonstrated in the table, nominal increases in the number of residents and/or workers were identified for five prototypical analysis sites. The incremental number of residents and workers that would be introduced at each site under the With Action scenario is well below the most conservative threshold for a preliminary open space analysis (50 residents or 125 workers).

[4] New York City Department of City Planning, *Jerome Avenue Rezoning, Final Environmental Impact Statement*, CEQR No. 17DCP019X, January 5, 2018.

Moreover, the proposed zoning text and map amendments are not expected to induce development or cause a significant change in the overall amount, type, or location of development. Accordingly, the Proposed Actions do not warrant a preliminary open space assessment for indirect effects and would not adversely affect the capacity of open space resources.

Conclusion

The Proposed Actions include adjustments to DOS boundaries, which could reduce the overall amount of DOS. However, any potential loss of DOS would be negligible and would not adversely affect usability or accessibility of the open space. In addition, the proposed minor changes to DOS rules would not result in a direct, adverse effect on open space resources.

Although the Proposed Actions may increase the number of as-of-right development sites, they are not expected to change the overall amount, type, and location of development within the proposed special district. As such, the Proposed Actions would not generate a substantial demand for open space resources relative to the No Action scenario. Furthermore, per the indirect effects screening analysis, the prototypical analysis sites do not exceed the residential or worker thresholds for an open space assessment. Therefore, the Proposed Actions are not anticipated to result in a substantive change in the capacity of existing or proposed open space resources, and further analysis is not needed.

5. Shadows

The *CEQR Technical Manual* requires a shadow assessment for proposed actions that would result in new structures (or additions to existing structures) greater than 50 feet in height and/or adjacent to an existing sunlight-sensitive resource. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sunlight-sensitive features.

Compared to what is allowed under current zoning regulations, the Proposed Actions have the potential to result in taller buildings, in some cases over 50 feet, that may cast shadows over publicly accessible, sunlight-sensitive resources. As such, further evaluation is necessary and will be included in the EIS. Because the specific location of future development projects is unknown, the EIS will include a shadow assessment using prototypical analysis sites to determine how action-generated shadows would potentially affect sunlight-sensitive resources (see *EIS Draft Scope of Work*).

6. Historic and Cultural Resources

Historic and cultural resources include archaeological (buried) resources and architectural (historic standing structure) resources. The *CEQR Technical Manual* identifies historic and cultural resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. Historic and cultural resources include designated New York City Landmarks (NYCLs) and Historic Districts; properties scheduled for consideration as NYCLs by the New York City Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation (NYCL-eligible); properties listed on the State and National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing (S/NR- eligible), or

properties contained within a S/NR listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHLs); and potential historic resources (i.e., properties not identified by one of the programs listed above, but that appear to meet their eligibility requirements). According to the *CEQR Technical Manual*, a historic and cultural resources assessment is warranted if there is the potential to affect either archaeological or architectural resources.

The Proposed Actions would occur in archaeologically sensitive areas. The Proposed Actions could result in ground disturbance, which could affect archaeological resources. In addition, the Proposed Actions could affect the character of historic architectural resources through modifications to bulk regulations, including lot coverage, hard surface area, lot area and lot width, yard, height and setback, and court and open area rules. Thus, in accordance with *CEQR Technical Manual* guidance, additional analysis is necessary and will be provided in the EIS. Although it is not possible to evaluate the impacts of any specific development because the specific location of future development projects is unknown, the EIS will provide the historic and cultural resources assessment as described in the *EIS Draft Scope of Work* and analyze the potential for significant adverse impacts based on prototypical analysis sites.

7. Urban Design and Visual Resources

An area's urban components and visual resources together define the look and character of the neighborhood. The *CEQR Technical Manual* outlines an assessment of urban design when an action may have effects on one or more of the elements that contribute to a pedestrian's experience of public space. These elements include streets, buildings, visual resources, open spaces, natural resources, wind, and sunlight. According to the *CEQR Technical Manual*, a preliminary analysis of urban design and visual resources is considered appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following: (1) actions that permit the modification of yard, height, and setback requirements; and (2) actions that result in an increase in built floor area beyond what would be allowed as-of-right or in the future without the actions. The *CEQR Technical Manual* stipulates a detailed analysis for actions that would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings.

The Proposed Actions are expected to result in physical changes beyond the bulk and form currently permitted as-of-right. These changes could affect a pedestrian's experience of public space, requiring an urban design assessment. Because the specific location of future development projects is unknown, the EIS will provide an assessment of urban design and visual resources using prototypical analysis sites (see *EIS Draft Scope of Work*).

8. Natural Resources

An assessment of natural resources is conducted when a natural resource is present on or near a development site, and the proposed action may involve the direct or indirect disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetlands, including freshwater and tidal wetlands; terrestrial resources, such as grasslands and thickets; shoreline resources, such as beaches, dunes, and bluffs; gardens and other ornamental landscaping; and natural resources that may be

associated with built resources, such as old piers and other waterfront structures. The Proposed Actions would result in zoning text and map amendments specifically intended to address sites containing, or located in proximity, to natural resources. Because the Proposed Actions may affect natural resources, further evaluation is warranted and will be provided in the EIS. It is not possible to evaluate the impacts of any specific development because the specific location of future development projects is unknown. As such, the EIS will include a natural resources assessment based on prototypical analysis sites (see the *EIS Draft Scope of Work*).

9. Hazardous Materials

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: (a) elevated levels of hazardous materials exist on a site, and the action would increase pathways to human or environmental exposures; (b) an action would introduce new activities or processes using hazardous materials, and the risk of human or environmental exposure is increased; or (c) the action would introduce a population to potential human or environmental exposure from offsite sources. The Proposed Actions could result in ground disturbance in areas where hazardous materials may be present, therefore a hazardous materials assessment will be included in the EIS. It is not possible to evaluate the impacts of any specific development because the specific location of future development projects is unknown. Consistent with the *EIS Draft Scope of Work*, the EIS will consider the Proposed Actions' potential to result in adverse impacts related to hazardous materials by assessing prototypical analysis sites.

10. Water and Sewer Infrastructure

New York City's water and sewer network is fundamental to the operation, health, safety, and quality of life of the City and its surrounding environment, and it must be sized to fit the users and surface conditions to function adequately. Ensuring these systems have adequate capacity to accommodate land use or density changes and new development is critical to avoid environmental and health problems, such as sewer back-ups, street flooding, or pressure reductions.

A screening assessment was performed to determine whether the Proposed Actions' potential for adverse impacts with respect to City's water supply, wastewater treatment, and stormwater management infrastructure. As noted in the following 2014 *CEQR Technical Manual*, only actions that increase density or change drainage conditions on a large site require a water and sewer infrastructure analysis.

Screening Analysis

In accordance with 2014 *CEQR Technical Manual* methodology, a screening analysis of the potential for the prototypical analysis sites to affect the adequacy of the City's infrastructure systems was performed. While certain prototypical analysis sites would allow a change in built FAR between the No Action and With Action scenarios, the Proposed Actions would not change the underlying zoning or permitted FAR. Sites that show a change in FAR from the No Action

scenario would likely pursue CPC land use actions to facilitate development under existing regulations. Although this is a discretionary process, nearly all the applications for prototypical analysis site development would be Type II for SEQRA purposes because the sites are one- and two-family homes.

Water Supply

A preliminary water supply assessment would be required if a project results in an exceptionally large demand of more than one million gallons of water per day, including power plants, large cooling systems, or large developments. A preliminary water supply assessment would also be necessary if the project is in an area that experiences low water pressure.

The Proposed Actions are not expected to result in an exceptionally large demand of more than one million gallons of water per day and would not involve the development of a power plant, large cooling system, or other large developments. As previously noted, the Proposed Actions are not expected to induce development on a lot where development would not also be expected to occur as part of the No Action scenario. Although the individual sites to which the Proposed Actions would apply would be located throughout much of Staten Island and may potentially include areas that experience low water pressure, any incremental density is expected to fall well below the threshold. Therefore, the Proposed Actions would not result in significant, adverse impacts on water supply, and a preliminary assessment is not warranted.

Wastewater and Stormwater Conveyance and Treatment

Because the City's sewers are sized and designed based on designated zoning for an area, related population density, and surface coverage characteristics, projects that substantially increase density or hard surface area would require further analysis for potential impacts on the City's wastewater and stormwater infrastructure. Although most projects would not require a preliminary assessment on wastewater and stormwater conveyance and treatment, the 2014 *CEQR Technical Manual* indicates that a preliminary assessment would be needed if a project is located in a combined sewer area and would exceed the following incremental development of residential units or commercial space above the No Action scenario:

- 400 residential units or 150,000 square feet of commercial space or more in the Bronx, Brooklyn, Staten Island, or Queens.

A preliminary assessment would also be needed if a project located in a separately sewered area would exceed the following incremental development of residential units or commercial, public facility, and institution and/or community facility space per site above the No Action scenario:

- 25 residential units or 50,000 square feet of commercial, public and institution/community facility use in the residential R1, R2, or R3 zoning districts;
- 50 residential units or 100,000 square feet of commercial, public and institution/community facility use in residential R4 and R5 zoning districts; or
- 100 residential units or 100,000 square feet of commercial, public and institution/community facility use in all remaining zoning designations, including commercial, manufacturing, and mixed-use districts.

To produce a reasonable analysis of likely effect of the Proposed Actions, the 15 prototypical analysis sites have been identified for analysis. The analysis in Table 5 shows that the development that may occur at any one prototypical analysis site would fall below the thresholds described above.

Table 5. Prototypical Analysis Sites and Thresholds for Preliminary Wastewater/ Stormwater Analysis

Prototypical Analysis Site*	Zoning District	Typology (1F = One Family; 2F = Two Family)	Lot Area (Square Feet)	Threshold	Meets the Threshold to Require Preliminary Assessment?
1	R3A	2F Detached	4,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
2	R2	1F Attached	6,325	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
3	R1-2	1F Detached (enlargement)	6,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
4	R3X	2F Detached	5,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
5	R3X/ C1-1	General Retail	42,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use OR 100 residential units or 100,000 square feet of commercial/public and institution/community facility use	No
6	R5	1F Attached	2,500	50 residential units or 100,000 square feet of commercial/public and institution/community facility use	No

Prototypical Analysis Site*	Zoning District	Typology (1F = One Family; 2F = Two Family)	Lot Area (Square Feet)	Threshold	Meets the Threshold to Require Preliminary Assessment?
7	R1-1	1F Detached (subdivision)	13,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
8	R2	1F Detached	4,500	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
9	R3X	Mixed Use (Community Facility/ Residential)	6,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
10	R3X/ C1-2	General Retail	25,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use OR 100 residential units or 100,000 square feet of commercial/public and institution/community facility use	No
11	R3X	2F Detached (subdivision)	18,750	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
12	R3X	1F Detached (subdivision)	15,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No
13 [1]	C4-1 or C8 or M	N/A	N/A	N/A	No
14	R1-1	Community Facility	360,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No

Prototypical Analysis Site*	Zoning District	Typology (1F = One Family; 2F = Two Family)	Lot Area (Square Feet)	Threshold	Meets the Threshold to Require Preliminary Assessment?
15	R3X	2F Detached (subdivision)	55,000	25 residential units or 50,000 square feet of commercial/public and institution/community facility use	No

Notes: **1** Prototypical analysis site 13 demonstrates how the proposed zoning changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. The applicability of these proposed changes would affect a wide range of lot sizes in various zoning districts (C4-1, C8, M) and would not result in an increase in floor area, change in uses, or change in building bulk regulations**.**

Analysis may also be warranted if a project is partially sewered or currently unsewered; or involves development on a site of 5 acres or larger where the amount of hard surface would increase; or involves development on a site 1 acre or larger where the amount of hard surface would increase, and located in either Jamaica Bay watershed, or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek and Westchester Creek; or involves construction of a new stormwater outfall that requires federal and/or state permits.

None of the prototypical analysis sites involve the construction of a new stormwater outfall, and none are located within the Jamaica Bay watershed or the specific drainage areas of concern noted above. Although prototypical analysis site 14 is larger than 5 acres, the proposed expansion would not result in an increase in hard surface area. Similarly, prototypical analysis site 15 is larger than 1 acre but would not result in an increase in hard surface area.

The Proposed Actions would require most sites larger than 1 acre to go through a discretionary approval process,[5] which would establish guidelines for hard surface area and require a future environmental review. As discussed below in the Plan Review Sites section of this document, and consistent with the *EIS Draft Scope of Work*, such sites will be analyzed as conceptual analysis sites in the EIS. If those environmental analyses indicate the project would increase flows of sanitary and stormwater, overburden the wastewater or stormwater infrastructure, or create the potential to result in additional combined sewer overflow volumes or events, changes to those development plans, the affected sewer system, and/or the preparation of an amended drainage plan to address such modifications may be recommended.

Conclusion

As discussed above, the Proposed Actions do not warrant a preliminary analysis of water supply. The preceding screening analysis also demonstrates that the prototypical analysis sites do not exceed the threshold for a preliminary assessment of wastewater and stormwater conveyance. Therefore, no adverse impacts to water and sewer infrastructure would result from the Proposed Actions and no further analysis is needed.

[5] Proposed developments, minor enlargements, site alterations, or tree removal on Plan Review Sites that meet certain proposed thresholds would not require CPC discretionary review and would require a CPC certification or ministerial review.

11. Solid Waste and Sanitation Services

A solid waste assessment determines whether an action has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City's Solid Waste Management Plan or with state policy related to the City's integrated solid waste management system.

A solid waste and sanitation services screening assessment was performed following 2014 *CEQR Technical Manual* guidelines to determine the potential for adverse impacts with respect to solid waste and sanitation services. Because the specific locations of future development projects are unknown, the assessment was based on a comparison of the development of the 15 prototypical analysis sites under the No Action scenario against the With Action scenario.

Screening Analysis

According to the 2014 *CEQR Technical Manual*, actions with a generation rate of less than 50 tons (100,000 pounds) of solid waste per week would not result in a significant, adverse impact on the City's waste management capacity and do not warrant detailed analysis. CEQR guidelines recommend disclosure of the solid waste and service demand generated by a project. According to the 2014 *CEQR Technical Manual*, approximately 2,500 residential units would generate about 50 tons (100,000 pounds) of solid waste per week. Based on the solid waste generation rates shown in Table 14-1 in the 2014 *CEQR Technical Manual*, none of the prototypical analysis sites would generate 50 tons of solid waste per week. Because the Proposed Actions are not expected to induce development or cause a significant change in the overall amount, type, or location of development, the Proposed Actions would not generate solid waste that would result in any adverse effects.

Based on the analysis, the incremental development that may occur at any one residential prototypical analysis site is up to three residential units, which is not a substantial amount of development to raise the need for a solid waste and sanitation services assessment. The screening assessment found that none of the prototypical analysis sites would result in a net increase of more than 50 tons of solid waste per week. As such, the Proposed Actions would not affect solid waste and sanitation services, and further analysis is not necessary.

12. Energy

The 2014 *CEQR Technical Manual* notes that, while most actions do not warrant a detailed energy analysis, an action's projected energy consumption should be disclosed during the environmental review process. The incremental demand generated by most projects results in incremental supply to meet that demand; consequently, an individual project's energy consumption typically does not have a significant impact on energy supply. Detailed analyses are generally limited to those actions that would have a substantial effect on energy generation and/ or transmission.

As noted in the 2014 *CEQR Technical Manual*, electricity used in New York City is generated both within and outside the City, and Con Edison delivers it to most New York City users. The New York State Independent System Operator and Con Edison forecast projected generation and transmission requirements to ensure that the City's power supply and transmission systems have the capacity to meet expected future demand.

All new structures requiring heating and cooling are subject to the New York City Energy Conservation Code, which reflects state and City energy policy. Accordingly, a detailed energy assessment is not necessary for most actions that entail new construction. Detailed energy analyses are typically limited to actions that may substantially affect the transmission or generation of energy. Therefore, a screening assessment was completed to determine the potential for adverse energy impacts.

Screening Analysis

The screening assessment is based on a comparison of the development of the prototypical analysis sites under the No Action scenario against the With Action scenario, as Table 1 and Table 2 show. Table 6 presents energy usage rates by building type, which is provided in Table 15-1 of the 2014 *CEQR Technical Manual* for the purposes of estimating a project's energy consumption. Annual energy use for each prototypical analysis site was estimated for the No Action and the With Action scenarios by applying the rates in Table 6 to the size (in square feet) of the use type. Table 7 presents the annual energy consumption for each site and incremental energy usage under the No Action and With Action scenarios.

Table 6. Average Annual Whole-Building Energy Use in New York City

Building Type	Source Energy (Thousand BTU (MBTU)/square feet)
Commercial	216.3
Industrial	554.3
Institutional	250.7
Large Residential (>4 Dwelling Units)	126.7
Small Residential (1-4 Dwelling Units)	94

Source: Table 15-1, *CEQR Technical Manual*

Table 7. Annual Energy Use, Prototypical Analysis Sites

Proto-typical Analysis Site*	No Action		With Action		Increment
	Development Size by Use (square feet)	Energy Usage (MBTU)	Development Size by Use (square feet)	Energy Usage (MBTU)	Energy Usage (MBTU)
1	Small Residential: 2,400	225,600	Small Residential: 2,400	225,600	0
2	0	0	Small Residential: 2,850	267,900	+267,900
3	Small Residential: 3,000	282,000	Small Residential: 3,000	282,000	0
4	Small Residential: 3,000	282,000	Small Residential: 3,000	282,000	0

Proto-typical Analysis Site*	No Action		With Action		Increment
	Development Size by Use (square feet)	Energy Usage (MBTU)	Development Size by Use (square feet)	Energy Usage (MBTU)	Energy Usage (MBTU)
5	Commercial: 4,500	973,350	Commercial: 10,692	2,312,680	+1,339,330
6	Small Residential: 3,225	303,150	Small Residential: 3,225	303,150	0
7	0	0	Small Residential: 20,903	1,964,882	+1,964,882
8	Small Residential: 2,250	211,500	Small Residential: 2,250	211,500	0
9	0	0	Community Facility: 1,200 Small Residential: 2,400	526,440	+526,440
10	Commercial: 8,700	1,881,810	Commercial: 11,100	2,400,930	+519,120
11	Small Residential: 11,235	1,056,090	Small Residential: 11,142	1,047,348	-8,742
12	Small Residential: 9,000	846,000	Small Residential: 9,000	846,000	0
13 [1]	N/A	N/A	N/A	N/A	0
14	Community Facility: 74,400	18,652,080	Community Facility: 74,400	18,652,080	0
15	Small Residential: 33,000	3,102,000	Small Residential: 33,000	3,102,000	0

Notes: **1** Prototypical analysis site 13 demonstrates how the proposed zoning changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. The applicability of these proposed changes would affect a wide range of lot sizes in various zoning districts (C4-1, C8, M) and would not result in an increase in floor area, change in uses, or change in building bulk regulations**.**

Conclusion

As shown in Table 7, annual energy usage would not change for six of the prototypical analysis sites. Five sites would generate an increase in demand for energy, with the largest increase in energy consumption projected to occur at site 7. The incremental energy consumption for site 7 would be 1,964,882 MBTU, which is small enough to not trigger the need for further analysis. Under the With Action scenario, the site would be subdivided into three lots with a residence constructed on each lot. However, because a land use action is currently required to develop this

site, the site was assumed to remain undeveloped under the No Action scenario.[6] Therefore, this site represents the greatest increase in development amongst all prototypical analysis sites.

The Proposed Actions would generate a nominal increase in demand for energy under the With Action scenario compared to the No Action scenario when compared to the overall demand within Con Edison's New York City and Westchester County service area. Consequently, the Proposed Actions would not affect energy generation or transmission, and further analysis is not necessary.

13. Transportation

The *CEQR Technical Manual* states that a quantified transportation analysis may be warranted if a proposed action results in 50 or more vehicle-trips and/or 200 or more transit/pedestrian trips during a given peak hour. The objective of a CEQR transportation analysis is to determine whether a proposed action may have a significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety, on- and off-street parking, or goods movement.

As discussed previously, the proposed zoning text and map amendments are not expected to induce development or cause a significant change in the overall amount, type, or location of development. However, as the land use actions necessary to facilitate development on a site (i.e., certifications, authorizations, and special permits) may be changed or eliminated by the proposed zoning text amendments, the Proposed Actions have the potential to increase the proportion of development sites that would proceed as-of-right as compared to the No Action scenario.

According to the 2014 *CEQR Technical Manual*, projects that increase density require a transportation analysis. The Proposed Actions could result in changes to the bulk and parking provided on certain residential and commercial development sites in Staten Island. Therefore, a screening assessment was performed following the 2014 *CEQR Technical Manual* guidance to determine the potential for any adverse transportation impacts. The assessment is based on a comparison of the development of 15 prototypical analysis sites under the No Action scenario with the With Action scenario.

Screening Analysis

Given the regional applicability of the Proposed Actions, the sites where development would be facilitated are difficult to predict. DCP has selected 15 representative prototypical analysis sites to demonstrate how the proposed zoning regulations would apply to sites that would be able to develop as-of-right in the With Action scenario based on existing trends and reasonable projections for the future. These 15 prototypical sites are used to assess the potential for the Proposed Actions (including elimination of existing discretionary actions) to result in significant transportation impacts. The incremental differences between the future No Action and future With Action scenarios are the basis of the transportation analyses of the prototypical sites.

[6] Prototypical analysis site 7 is currently in the SNAD (NA-1) and contains steep slopes. Authorization from the CPC is required for development on steep slopes or steep slope buffers, pursuant to ZR Section 105-42. Thus, it is assumed that no development would occur on this site under the No Action scenario.

Per *CEQR Technical Manual* guidance, transportation analyses may not be needed for projects that would create low- or low-to moderate-density development in particular sections of the City.[7] The development densities cited in Table 16-1 of the *CEQR Technical Manual* generally result in fewer than 50 peak hour vehicle trips, 200 peak hour subway/rail or bus transit rides, and 200 peak hour pedestrian trips and are considered unlikely to result in significant adverse transportation impacts.

The prototypical analysis sites would be distributed throughout Staten Island. While the specific location of each prototypical analysis site is unknown, for conservative analysis purposes, all sites are assumed to be located within the CEQR Traffic Zone having the lowest thresholds that could trigger the potential for significant impacts (i.e., CEQR Traffic Zone 5).

According to the *CEQR Technical Manual,* the density-dependent incremental development thresholds that would require further analysis in Zone 5 are as follows: 100 dwelling units; 40,000 square feet of office space; 10,000 square feet of regional retail, local retail, or restaurant space; or 15,000 square feet of community facility space[8]. If a proposed project results in development densities below the levels shown in Table 16-1 of the *CEQR Technical Manual*, further transportation analyses would not be needed as transportation impacts would be unlikely. If a proposed project surpasses these levels, individually or cumulatively, a preliminary trip generation analysis may be needed.

Table 8 compares the No Action and With Action scenarios for the 15 prototypical analysis sites. The Proposed Actions would likely result in a total incremental increase of approximately six dwelling units, 1,200 square feet of community facility space, and 8,592 square feet of commercial retail space. The incremental increase between the No Action and With Action scenarios would not exceed the CEQR thresholds for either dwelling units, community facility, and/or commercial uses. Therefore, no further analysis is warranted and there would be no potential for significant adverse impacts on the transportation system.

Table 8. Development Program of Prototypical Analysis Sites

Proto-typical Site	No Action				With Action				Increment			
	DU	Commercial	Community Facility	Parking	DU	Commercial	Community Facility	Parking	DU	Commercial	Community Facility	Parking
1	2	0	0	3	2	0	0	3	**0**	**0**	**0**	**0**
2	0	0	0	0	1	0	0	2	**+1**	**0**	**0**	**+2**
3	1	0	0	2	1	0	0	2	**0**	**0**	**0**	**0**

[7] Refer to Table 16-1 and Map 16-1 (CEQR Traffic Zones) of the 2014 *CEQR Technical Manual* which outline the minimum development densities that potentially warrant transportation analysis.
[8] Although Table 16-1 of the 2014 *CEQR Technical Manual* also includes parking thresholds, these thresholds generally do not apply to accessory parking; trips associated with accessory parking spaces are generally considered to be attributed to the associated land use.

Proto-typical Site	No Action				With Action				Increment			
	DU	Commercial	Community Facility	Parking	DU	Commercial	Community Facility	Parking	DU	Commercial	Community Facility	Parking
4	2	0	0	3	2	0	0	3	**0**	**0**	**0**	**0**
5	0	4,500	0	30	0	10,692	0	72	**0**	**+6,192**	**0**	**+42**
6	1	0	0	2	1	0	0	2	**0**	**0**	**0**	**0**
7	0	0	0	0	3	0	0	6	**+3**	**0**	**0**	**+6**
8	1	0	0	2	1	0	0	2	**0**	**0**	**0**	**0**
9	*0*	*0*	*0*	*0*	*2*	*0*	*1,200*	*6*	***+2***	***0***	***+1,200***	***+6***
10	0	8,700	0	29	0	11,100	0	37	**0**	**+2,400**	**0**	**+8**
11	6	0	0	9	6	0	0	9	**0**	**0**	**0**	**0**
12	6	0	0	9	6	0	0	9	**0**	**0**	**0**	**0**
13 [1]	0	N/A	N/A	N/A	0	N/A	N/A	N/A	**0**	**0**	**0**	**0**
14	0	0	74,400	89	0	0	74,000	89	**0**	**0**	**0**	**0**
15	24	0	0	36	24	0	0	36	**0**	**0**	**0**	**0**
Total	**43**	**13,200**	**74,400**	**212**	**49**	**21,792**	**75,200**	**276**	**+6**	**+8,592**	**+1,200**	**+64**

Notes**:** DU – dwelling unit

1 Prototypical analysis site 13 demonstrates how the proposed zoning changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. The applicability of these proposed changes would affect a wide range of lot sizes in various zoning districts (C4-1, C8, M) and would not result in an increase in floor area, change in uses, or change in building bulk regulations.

Clusters/Cumulative Analysis

Any project induced vehicular, transit, or pedestrian trips would generally be most concentrated adjacent to the project site, and these trips generally disperse quickly into smaller increments as the distance from the project site increases. For traffic or pedestrian volumes associated with more than one development site to superimpose completely with another, any potential development clustering would have to occur on the same block front. As the distance between potential developments increases, the cumulative effects of project generated traffic and pedestrian volumes decreases.

Only five of the 15 prototypical analysis developments affected by the Proposed Actions could result in an increase in density compared to the No Action scenario. These potential development

sites would be distributed across areas throughout Staten Island. Therefore, it is not likely that multiple developments would occur on the same block front and it is unlikely that the potential for development sites to cluster together would alter the conclusions of the transportation screening analysis presented above.

Conclusion

The Proposed Actions would not result in significant adverse impacts on the transportation network. The prototypical analysis sites would be distributed throughout Staten Island. As shown in Table 8, incremental development at the prototypical analysis sites would not exceed the minimum development densities for dwelling units, community facility uses, and/or commercial space provided in Table 16-1 of the 2014 *CEQR Technical Manual.* The Proposed Actions are expected to result in fewer than 50 peak hour vehicle trips, 200 peak hour subway/rail or bus transit riders, and 200 peak hour pedestrian trips. Therefore, further analysis is not warranted, and the Proposed Actions would not result in significant adverse transportation impacts.

14. Air Quality

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as mobile sources; by fixed facilities, such as stack emissions from on-site fuel burned boilers for heating, ventilation, and air conditioning (HVAC) systems, usually referred to as stationary sources; or by a combination of both. An air quality assessment determines both a proposed action's effects on ambient air quality as well as the effects of ambient air quality on a proposed project.

According to the *CEQR Technical Manual*, an air quality analysis determines whether a proposed action would result in stationary or mobile sources of pollutant emissions that could have a significant adverse impact on ambient air quality and considers the potential of existing sources of air pollution to impact a proposed action. Because the Proposed Actions could result in an increase in as-of-right development, further evaluation of the potential for adverse impacts with respect to mobile and stationary sources of air emissions is warranted.

Air quality analyses were conducted to assess the potential effects of the Proposed Actions on air quality conditions, as related to emissions from mobile sources and stationary sources. The air quality screening assessments were generally performed following the methodology outlined in the 2014 *CEQR Technical Manual*, as discussed below. The assessments are based on a comparison of the development of the 15 prototypical analysis sites under the No Action scenario with the With Action scenario.

Mobile Source Screening Analysis

The U.S. Environmental Protection Agency (EPA) has identified six common air pollutants, which are known as criteria pollutants (ozone, particulate matter, CO, lead, sulfur dioxide [SO_2], and nitrogen dioxide [NO_2]), as being of concern nationwide. The criteria pollutants associated with mobile source emissions (vehicular-related) are CO and particulate matter ($PM_{2.5}$ and PM_{10}).

$PM_{2.5}$ refers to particulate matter with an aerodynamic diameter size of 2.5 micrometers or less, and PM_{10} refers to particulate matter with an aerodynamic diameter of 10 micrometers or less.

Increased traffic volumes could be generated at some of the prototypical analysis sites under the With Action scenario, which could result in localized increases in CO and PM levels. Therefore, a qualitative mobile source screening analysis was conducted for the each of the 15 prototypical analysis sites to determine the potential for CO and PM impacts, following 2014 *CEQR Technical Manual* guidelines. The CO screening used the applicable screening threshold of 170 auto trips per hour at an intersection. For the qualitative $PM_{2.5}$ screening, the minimum or most conservative threshold of 12 heavy-duty diesel vehicles for fine particulate matter ($PM_{2.5}$) was used.

Based on the results of the transportation screening analysis presented above in Section 13, none of the prototypical analysis sites required a quantified Level 1 preliminary traffic screening assessment because no sites are expected to generate 50 or more peak hour vehicular trips. Therefore, because the number of incremental vehicular trips generated by each prototypical analysis site would be lower than the 2014 *CEQR Technical Manual* CO-based screening threshold of 170 auto trips per hour at an intersection, all the prototypical analysis sites pass the CO-based mobile source screening analysis.

Similarly, because none of the prototypical analysis sites required quantified traffic screening, it is unlikely that any sites would exceed the most conservative $PM_{2.5}$ screening threshold (i.e., an increment of 12 or more peak hour heavy-duty diesel vehicle trips at one intersection). The Proposed Actions would result in a limited amount of incremental development at only 5 of the 15 sites, as summarized below:

- Site 2 – 1 dwelling unit, 2 parking spaces
- Site 5 – 6,192 square feet of general retail use, 42 parking spaces
- Site 7 – 3 dwelling units, 6 parking spaces
- Site 9 – 2 dwelling units, 1,200 square feet of community facility use, 6 parking spaces
- Site 10 – 2,400 square feet of general retail use, 8 parking spaces

Because none of the prototypical analysis sites are expected to exceed the screening threshold, all sites pass the $PM_{2.5}$-based qualitative screening assessment.

Conclusion

The transportation screening analysis results indicate that the Proposed Actions would generate less than 50 vehicular trips and do not require a detailed traffic analysis. As such, the number of incremental vehicular trips generated by each prototypical analysis site would be below the relevant CO and PM screening thresholds provided in the 2014 *CEQR Technical Manual*. Therefore, the screening analysis demonstrates that the Proposed Actions would not result in significant, adverse air quality impacts as a result of mobile sources and no further analysis is warranted.

Stationary Sources Screening Analysis

HVAC Screening

In accordance with the 2014 *CEQR Technical Manual*, a HVAC screening analysis was completed for the prototypical analysis sites to assess the potential for HVAC to affect nearby existing land uses. Impacts from boiler emissions are a function of fuel type, stack height, minimum distance from source to the nearest building of similar or greater height, and the square footage size of the proposed building.

All prototypical analysis sites were subjected to an initial assessment to determine whether further HVAC screening analysis is warranted. If the prototypical analysis site involves no change in floor area, density, or height between the No Action and the With Action scenarios, there would be no stationary source air quality impacts, and no further analysis is warranted. HVAC screening analyses were performed for prototypes with floor area, density, or height changes, except for those sites where a decrease in floor area would occur with no change in building height.

The screening methodology determined the threshold distance between the HVAC stack and the nearest sensitive receptor of similar or greater height beyond which the Proposed Actions would not have a significant, adverse impact. The screening procedures considered the different types of fuel to be used, the maximum development size, type of development, and the heat and hot water systems exhaust stack height to evaluate whether a significant, adverse impact may occur.[9] The screening distance was assumed to be 400 feet for a prototypical analysis site if there were no buildings of similar or taller height than the With Action scenario prototypical analysis site building (also referred to as "proposed building"), indicating that the Proposed Actions could facilitate the development of the tallest building in the neighborhood.[10] For any prototypical analysis sites that do not pass the screening, a detailed analysis may be necessary.

As Table 8-1 shows, seven of the prototypical analysis sites would result in an incremental change in the size and/or height of the proposed development (sites 2, 5, 7, 9, 10, 11 and 12), and, therefore, warrant additional screening.

[9] For prototypical analysis sites where the With Action total floor area that is less than 11,000 square feet, a maximum development size of 11,000 square feet was assumed to plot in the nomograph as a conservative approach.

[10] The following process was followed to determine whether the prototypical analysis site would result in the development of the tallest building in the neighborhood. Height information from the building footprints GIS data base (maintained by New York City Department of Information Technology & Telecommunications) was used to calculate the average (mean) building height for the prototypical analysis site's existing zoning and special district (i.e., site 5 is zoned R3X and is in the SSRDD, where the average existing building height is approximately 24.4 feet).

Table 9. Prototypical Analysis Sites: Incremental Development

Prototypical Analysis Site		No Action		With Action		Incremental Change	
		Floor Area (square feet)	Number of floors/ Approximate Building Height [a] (feet)	Floor Area (square feet)	Number of floors/ Approximate Building Height [a] (feet)	Floor Area (square feet)	Building Height [a] (feet)
1		2,400	2 / 24 ft	2,400	2 / 24 ft	0	0
2		0	0	2,850	2 / 24 ft	+2,850	+24 ft
3		3,000	2 / 24 ft	3,000	2 / 24 ft	0	0
4		3,000	2 / 24 ft	3,000	2 / 24 ft	0	0
5		4,500	1 / 12 ft	10,692	1 / 12 ft	+6,192	0
6		3,225	3 / 36 ft	3,225	3 / 36	0	0
7	Lot 1	0	0	6,500	4 / 48 ft	+6,500	+48 ft
	Lot 2	0	0	6,900	3 / 36 ft	+6,900	+36 ft
	Lot 3	0	0	7,063	3 / 36 ft	+7,063	+36 ft
7 (cluster)		0	0	20,463	3 / 36 ft	+20,463	+36 ft - +48 ft
8		2,250	2 / 24 ft	2,250	2 / 24 ft	0	0
9		0	0	3,600	3 / 36 ft	+3,600	+36 ft
10		8,700	1 / 12 ft	11,100	2 / 24 ft	+2,400	+12 ft
11	Lot 1	4,253	3 / 36 ft	3,441	2 / 24 ft	-812	-12 ft
	Lot 2	3,750	3 / 36 ft	3,849	3 / 36 ft	+99	0
	Lot 3	3,247	3 / 36 ft	3,960	3 / 36 ft	+713	0
12	Lot 1	2,400	2 / 24 ft	3,000	3 / 36 ft	+600	+12 ft
	Lot 2	3,000	3 / 36 ft	3,000	3 / 36 ft	0	0
	Lot 3	3,600	3 / 36 ft	3,000 [b]	3 / 36 ft [b]	+600	0

Proto-typical Analysis Site	No Action		With Action		Incremental Change	
	Floor Area (square feet)	Number of floors/ Approximate Building Height [a] (feet)	Floor Area (square feet)	Number of floors/ Approximate Building Height [a] (feet)	Floor Area (square feet)	Building Height [a] (feet)
13 [c]	n/a	n/a	n/a	n/a	0	0
14	25,500	3 / 36 ft	25,500	3 / 36 ft	0	0
15	33,000 [d]	2 / 24 ft	33,000 [d]	2 / 24 ft	0	0

Notes: Cell shading indicates that HVAC screening is warranted for the proposed development.

a Assumes floor height of 12 feet.

b The With Action scenario assumes that prototypical analysis site 12 would be divided into two lots (as opposed to three lots in the No Action scenario). Because there would be no Lot 3 in the With Action scenario, this represents the second 3-story building on Lot 2.

c Prototypical analysis site 13 demonstrates how the proposed zoning changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. The applicability of these proposed changes would affect a wide range of lot sizes in various zoning districts (C4-1, C8, M) and would not result in an increase in floor area, change in uses, or change in building bulk regulations.

d Both the With Action and No Action scenarios for prototypical analysis site 15 assume a total of 24 dwelling units and 33,000 sf of development across 12 detached, 2 family buildings.

Based on aforementioned parameters, if the distance between an HVAC stack and its nearest receptor of similar or greater height is less than the threshold distance according to the 2014 CEQR Technical Manual figures, the potential for significant, adverse air quality impacts is identified, and a detailed analysis involving a refined dispersion model is typically necessary. Otherwise, if the distance is greater, then the site passes the screening analysis, and no further analysis is required.

Seven prototypical analysis sites required an HVAC screening analysis. In general, buildings with lower height than the emissions stack of a proposed building would not be adversely affected by the proposed building's HVAC operations. Accordingly, the screening was focused on existing receptors (buildings) of a similar or greater height. If such buildings were closer to the proposed building than the threshold distance, then the proposed building failed the screening and a detailed analysis was conducted to rule out the potential for significant, adverse impacts.

As Table 10 shows, prototypical analysis sites 2, 7, 9 and 10 passed the screening due to the height of the emissions stack for each prototypical analysis site building under the With Action scenario. For these four sites, it is assumed that the prototypical analysis site building(s) under the With Action scenario would be the tallest buildings in the area (based on average existing building height of the zoning and special districts). Thus, a threshold distance of 400 feet was applied to these sites, and they each passed the screening.

Table 10. HVAC Screening Analysis Results

Proto-typical Analysis Site	With Action Development Size (square feet)	Building Height [a] (feet)	Stack Height [b] (feet)	Existing Zoning and Special District	Mean Building Height for Zoning and Special District (feet)	HVAC Screening Results [c]
2	2,850 [d]	24	27	SHPD, R2	25.6 ft	Pass
5	10,692 [d]	12	15	SSRDD, R3X/ C1-1	22.2 ft	**Fail**
7 (cluster, Lots 1, 2 + 3)	Range: 6,500 – 7,063	Range: 36 - 48	Range: 39 - 51	SNAD-1 (NA-1), R1-1	27.0 ft	Pass
9	3,600 [d]	36	39	SHPD, R3X	25.0 ft	Pass
10	11,100	24	27	SHPD, R3X/ C1-2	19.0 ft	Pass

Notes: Prototypical analysis sites 11 and 12 have been excluded from the table and are discussed in the following narrative.
a Assumes floor height of 12 feet.
b Stack height assumed to be 3 feet taller than building height, per 2014 *CEQR Technical Manual* guidance.
c Screening figures (monographs) are provided in Appendix D.
d A maximum development size of 11,000 square feet was assumed to plot in the nomograph as a conservative approach.

A detailed analysis is required for prototypical analysis site 5 because it failed the screening assessment. The proposed commercial development would not be the tallest building in the neighborhood. Compliance with the zoning regulations (R3X/C1-1, SSRDD) would not ensure that a potential adjacent building of similar or greater height is located a minimum of 30 feet away. Therefore, the relevant screening figure from the 2014 *CEQR Technical Manual Appendix* (Appendix Figure 17-5) could not be used, and the site failed the screening. A detailed analysis is warranted for this site, which will be included in the EIS.

The cluster of buildings on prototypical analysis site 7 passed the HVAC screening analysis for nearby buildings of a similar or greater height, because the proposed building heights are greater than the average existing building height for R1-1 zoning districts in SNAD-1. However, because this site is assumed to subdivided in to three lots, where each lot is developed with a building of the same or similar height, additional HVAC screening analyses are needed to rule out the potential for project-on-project impacts. The additional screening analyses (for all 3 lots) will be included in the EIS, along with any detailed analyses that may be warranted for prototypical analysis site 7.

For prototypical analysis sites 11 and 12, the HVAC screening process described above is not appropriate due to the proposed subdivision of lots and potential for resulting project-on-project impacts. For prototypical analysis site 11, an HVAC screening for project-on-project impacts

(Lots 2 and 3) is warranted and will be included in the EIS, as well as any detailed analyses that may be necessary. For prototypical analysis site 12, an HVAC screening for project-on-project impacts is warranted for Lot 1 and will be included in the EIS. For prototypical analysis site 12, Lot 2, detailed HVAC emission impact analyses are needed to evaluate the potential for project-on-project impacts for Buildings A and B, which are assumed to be less than 30 feet apart. The HVAC screening for Lot 1 and detailed analyses for Lot 2 will be included in the EIS, along with any detailed studies that may be needed for Lot 1.

Industrial Sources Screening

Actions that would result in the development of new, significant industrial sources or new uses that may be adversely affected by airborne emissions from existing or planned industrial sources require an assessment of both criteria and non-criteria pollutant emissions. A qualitative screening assessment was performed to determine the need for an industrial source screening assessment taking into consideration the location of industrial land uses relative to the rezoning area. The Proposed Actions would not encourage the development of industrial sources. Relative to the No Action scenario and based on existing land use patterns, the Proposed Actions are not expected to introduce new sensitive receptors in or close to existing industrial uses or manufacturing-zoned areas. For example, although one of the prototypical analysis sites is in a manufacturing zoning district (M1-1), it does not include industrial uses.

Limited portions of the existing SNAD NA-1, SNAD NA-3, SSRDD, and SHPD are zoned for industrial uses, and even smaller portions of these districts include existing industrial uses. A review of MapPluto parcel data indicate that overall, less than 2 percent of the total lots in these areas are zoned for industrial use, while less than 1 percent of all parcels include industrial uses. New residential uses are not permitted as-of-right in manufacturing zoning districts.

Therefore, because the Proposed Actions would not facilitate the development of new industrial sources and are not expected to introduce new sensitive receptors within or adjacent to (i.e., within 400 feet of) existing industrial uses and areas, an industrial source screening analysis is not warranted.

Large and Major Emission Sources Screening

Large and major emissions sources, such as power generating stations, may affect surrounding uses or be affected by new structures nearby.[11] A screening assessment was undertaken to determine whether the Proposed Actions warrant a detailed analysis of large and major emission sources. New York State Department of Environmental Conservation (NYSDEC) permit records were reviewed to identify large/major sources within 1,000 feet of the rezoning area.

The Proposed Actions would not result in major or large emissions sources, nor would they result in large-scale development that would have the potential to be affected by large or major emissions sources. For example, in general the tallest buildings introduced by the prototypical analysis sites in the With Action scenario would be three stories or approximately 36 feet in height.

[11] The 2014 *CEQR Technical Manual* defines major sources as those sources located at Title V facilities that require Prevention of Significant Deterioration permits. Large sources are defined as sources located at facilities that require a state facility permit.

Because large and major emission sources typically have substantially higher stack heights, they are not expected to have an adverse effect on the prototypical analysis site developments.

A review of NYSDEC-issued Title V Permits and State Facility Permits indicates that three permitted facilities are located within the large and major emissions sources study area, which is delineated by a 1,000-foot buffer of relevant special districts/ subdistricts (i.e., SNAD NA-1, SNAD NA-3, SHPD, and SSRDD).

The Richmond University Medical Center at 355 Bard Avenue, Staten Island, is located within 1,000 feet of the SHPD. According to NYSDEC State Facility Permit data, emission points are at heights of 60 feet and 130 feet, substantially taller than buildings that would be developed at the prototypical analysis sites. Therefore, because this large emission source would be unlikely to affect incremental development introduced in the With Action scenario, it passes the screening analysis.

A Title V permitted facility, Kinder Morgan Liquids Terminals LLC, is located at 4101 Arthur Kill Road, Staten Island, along the Arthur Kill in the western portion of the SSRDD. Numerous emission points are affiliated with this facility, at heights that generally range from 45 feet to 51 feet.[12] This waterfront facility is buffered by a forested area, including portions of a protected open space resource (Clay Pit Ponds State Park Preserve), and it is more than 1,000 feet from the nearest residential zoning district (R3X). Accordingly, this Title V permitted facility passes the screening analysis because it is located more than 1,000 feet from residential development that could be introduced by the Proposed Actions.

The Staten Island University Hospital (SIUH) South Campus is located within the SSRDD at 375 Seguine Avenue, near the south shore of Staten Island. NYSDEC State Facility Permit data indicate that the emission points for the emission units range in height from 32 feet to 52 feet. The lowest emission points are similar to the building heights assumed for prototypical analysis sites located in the SSRDD, which range from 24 to 36 feet. A review of MapPluto parcel data indicates that vacant/ undeveloped properties are located within 1,000 feet of the SIUH South Campus. Therefore, a detailed analysis is warranted for this large emission source and will be provided in the EIS.

Conclusion

As demonstrated by the mobile source and stationary source screenings, the Proposed Actions would not have significant adverse effects on air quality due to mobile sources or industrial sources. The HVAC screening results indicate that the majority of prototypical analysis sites (sites 1-4, 6, 8-10, and 13-15) would not have an adverse impact and do not require further study. However, four prototypical analysis sites (sites 5, 7, 11 and 12) require additional screening and/or detailed analyses to rule out the potential for significant adverse HVAC impacts. In addition, a detailed stationary source analysis is warranted for one large emission source, the SIUH South Campus located in the SSRDD. These additional stationary source screenings and/or detailed analyses will be provided in the EIS (see *EIS Draft Scope of Work*).

[12] Two emission points have heights of 16 feet; however, these are for the marine loading facility that is situated along the waterfront roughly 2,000 feet from surrounding development.

15. Greenhouse Gas Emissions

As discussed in the 2014 *CEQR Technical Manual*, increased greenhouse gas (GHG) emissions are changing the global climate, resulting in wide-ranging effects on the environment such as sea-level rise, increased temperature, and changes in precipitation levels. Although climate change is occurring on a global scale, its environmental effects are also likely to be felt locally. New York City's sustainable development policy, starting with *PlaNYC* and continued and enhanced in *OneNYC*, establishes sustainability initiatives and goals for reducing GHG emissions and adapting to climate change. The goal to reduce citywide GHG emissions to 30 percent below 2005 levels by 2030 was developed for the purpose of planning for a population increase of almost one million residents while achieving significant GHG reductions. This goal has been codified by Local Law 22 of 2008, known as the New York City Climate Protection Act (the GHG reduction goal). This goal was expanded in 2014 via the adoption of Local Law 66, which commits the City to reduce citywide GHG emissions by 80 percent by 2050.

Screening Analysis

The screening analysis for GHG emissions and climate change was conducted for the Proposed Actions by comparing the development of prototypical analysis sites in the No Action scenario to the With Action scenario.

The City has established sustainability initiatives and goals for reducing GHG emissions and adapting to climate change in the City. In general, GHG emissions assessments are conducted only for energy-intensive and other larger actions where GHG emissions that may be significantly inconsistent with the City's GHG reduction goal could be produced. More specifically, a GHG consistency assessment is typically warranted for City capital projects subject to environmental review, or projects that propose either power generation (not including emergency backup power, renewable power, or small-scale cogeneration) or regulations and other actions that fundamentally alter the City's solid waste management system by changing solid waste transport mode, distances, or disposal technologies. In addition, a GHG assessment is warranted for actions that would result in the development of 350,000 square feet or more.

The Proposed Actions are not expected to be growth inducing and would not facilitate development greater than 350,000 square feet on a single prototypical analysis site. In addition, the prototypical analysis sites do not include energy-intensive uses or power generation. Therefore, a GHG consistency assessment is not warranted for the Proposed Actions. The Proposed Actions would be consistent with the City's emissions reduction goals and would not fundamentally change the City's solid waste management system. Furthermore, as indicated above in Section 12, *Energy*, the Proposed Actions would not result in significant, adverse impacts on the generation or transmission of energy.

Resilience of Proposed Actions to Climate Change

Standards for analysis of the effects of climate change are still being developed and have not yet been defined in CEQR. However, climate change and sea-level rise are addressed in the City's WRP. The WRP requires consideration of climate change and sea-level rise in the planning and design of development within the defined Coastal Zone Boundary. As detailed in the 2014 *CEQR*

Technical Manual, the provisions of the WRP are applied by DCP and other City agencies when conducting environmental review.

The Proposed Actions would affect portions of Staten Island that are currently located in the coastal zone, as well as areas located in the existing flood zone and/or that are susceptible to sea level rise. As such, the Proposed Actions may affect sites located in current or future flood zones. However, the Proposed Actions would be consistent with applicable WRP policies.[13] Additionally, the public policy assessment finds that the Proposed Actions would be supportive of the OneNYC's sustainability and resiliency goals as part of a broader ecological strategy to protect natural resources.

The Proposed Actions would create a framework for new development in areas with significant natural features to protect and enhance the City's most ecologically sensitive resources. The Proposed Actions are intended to create clear guidelines to preserve and expand large natural areas and to preserve and create smaller patches of habitat that serve as stepping-stones between larger natural areas. Intact natural habitats perform valuable ecosystem services, including stormwater absorption, flood mitigation, air and water filtration, and temperature regulation. The Proposed Actions would conserve natural areas; protect and restore wetlands and ecological habitats; and preserve natural resources such as trees, vegetation, and wetlands. Therefore, the Proposed Actions would increase and strengthen resiliency to climate change.

Conclusion

The screening analysis showed that the Proposed Actions would not affect GHG emissions or climate change and would conserve natural habitats that perform valuable ecosystem services, thereby improving the sustainability and resiliency of the affected areas. As such, the Proposed Actions would be consistent with the City's GHG and climate change adaptation goals, and further analysis is not necessary.

16. Noise

This chapter examines the potential for the Proposed Actions to result in significant, adverse noise impacts. Noise in an urban area comes from many sources. Some of these sources are activities essential to the health, safety, and welfare of a city's inhabitants, such as noise from emergency vehicle sirens, sanitation trucks, and construction and maintenance equipment. Other sources, such as train and traffic noise, are essential by-products of maintaining the viability of a city as a place to live and do business. With respect to noise, the goal of CEQR is to determine both (1) a proposed project's potential effects on sensitive noise receptors, and (2) the effects of ambient noise levels on new sensitive uses introduced by the proposed project.

A noise screening assessment was performed following the 2014 *CEQR Technical Manual* guidelines to determine the potential for the Proposed Actions to result in adverse impacts with respect to noise. The assessment is based on a comparison of the development of the prototypical analysis sites under the No Action scenario with the With Action scenarios.

[13] A WRP consistency assessment will be included in the EIS, as noted in Section 1, *Land Use, Zoning, and Public Policy*.

Screening Analysis

In accordance with 2014 *CEQR Technical Manual* methodology, an initial impact screening was prepared to consider whether the Proposed Actions would: (1) generate any mobile or stationary sources of noise, (e.g., induce large volumes of traffic or develop facilities with high operational noise levels); and/or (2) be located in an area with existing high ambient noise levels, which typically include projects near highly trafficked thoroughfares, airports, rail, or other loud activities.

- For mobile sources, the development densities of each prototypical analysis site were compared to the threshold for mobile source noise analysis in Zone 5.
- For development in an area with existing high ambient levels, the induced development associated with the Proposed Actions was analyzed to determine whether it would induce development where none would have occurred absent the Proposed Actions (i.e., in areas with high existing noise levels).
- For stationary sources, the Proposed Actions were analyzed to determine whether they would result in (1) placement of HVAC equipment that would generate substantial noise, or (2) placement of sensitive uses proximate to existing equipment.

Mobile Sources

Vehicular Noise

As detailed below, the Proposed Actions do not trigger the need for a Level 1 Screening. None of the prototypical analysis sites would exceed the trip generation thresholds listed for Zone 5[14] in Table 16-1 Minimum Development Densities Potentially Requiring Transportation Analysis in the 2014 *CEQR Technical Manual*, as shown in Table 11 and discussed above in Section 13, *Transportation*; therefore, no additional detailed analysis is warranted.

Table 11: Preliminary Nosie Screening Analysis

Prototypical Analysis Site*	No Action # of dwelling units (DU) or development size (sf)	With Action # of dwelling units (DU) or development size (sf)	Increment # DU or sf	*CEQR Technical Manual* Threshold (Zone 5)	Level I Screening Warranted?
1	2 DU	2 DU	0	100 DU	No
2	0	1 DU	+1 DU	100 DU	No
3	1 DU	1 DU	0	100 DU	No
4	2 DU	2 DU	0	100 DU	No
5	4,500 sf	10,692 sf	6,192 sf	10,000 sf	No
6	1 DU	1 DU	0	100 DU	No
7	0	3 DU	+3 DU	100 DU	No
8	1 DU	1 DU	0	100 DU	No

[14] According to the 2014 *CEQR Technical Manual*, in Zone 5, residential developments under 100 dwelling units are not expected to generate sufficient traffic to warrant a noise analysis.

Prototypical Analysis Site*	No Action # of dwelling units (DU) or development size (sf)	With Action # of dwelling units (DU) or development size (sf)	Increment # DU or sf	*CEQR Technical Manual* Threshold (Zone 5)	Level I Screening Warranted?
9	0	3,600 sf	+3,600 sf	10,000 sf	No
10	8,700 sf	10,000 sf	10,000 sf	10,000 sf	No
11	6 DU	6 DU	0	100 DU	No
12	6 DU	6 DU	0	100 DU	No
13 [1]	N/A	N/A	0	N//A	No
14	74,400	74,400	0	10,000 sf	No
15	24 DU	24 DU	0	100 DU	No

Notes: **1** Prototypical analysis site 13 demonstrates how the proposed zoning changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. The applicability of these proposed changes would affect a wide range of lot sizes in various zoning districts (C4-1, C8, M) and would not result in an increase in floor area, change in uses, or change in building bulk regulations**.**

Other Mobile Source Noise

The Proposed Actions would not generate aircraft or train noise. The proposed zoning text and map amendments are not expected to induce development or cause a significant change in the overall amount, type, or location of development. As such, the Proposed Actions would not result in increased placement of sensitive receptors near these mobile sources, and no further analysis is warranted.

Stationary Sources

Rooftop mechanical equipment, including air conditioning compressors, for any potential development would be enclosed and comply with New York City Noise Code requirements, which would limit noise levels generated by such equipment to 65 a-weighted decibels (dBA) during the daytime (7:00 AM to 10:00 PM) and 55 dBA during the nighttime (10:00 PM to 7:00 AM). Therefore, the Proposed Actions would not result in significant, adverse stationary source noise impacts, and no additional analysis is warranted.

Conclusion

As discussed above, significant increases in traffic and other mobile noise sources are not expected as a result of the Proposed Actions. The preliminary screening analysis found that the prototypical analysis sites would not generate traffic increases of 100 percent or more, which is equivalent to an increase of 3 dBA or more. In addition, the Proposed Actions would not result in increased placement of sensitive receptors near trains, airports, or other mobile source generators. Rooftop mechanical equipment for any potential development would be enclosed and would comply with New York City Noise Code requirements. Therefore, as demonstrated by the screening analyses, there would be no significant, adverse impacts related to noise under the With Action scenario, and no additional analysis is warranted.

17. Public Health

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be necessary if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. While screening analyses have ruled out the potential for adverse noise impacts, the other impact areas – air quality, water quality and hazardous materials – will be analyzed in the EIS. Therefore, consistent with the *EIS Draft Scope of Work*, the EIS will consider the Proposed Actions' potential to adversely affect public health by assessing prototypical analysis sites.

18. Neighborhood Character

An assessment of neighborhood character is generally warranted when a proposed action has the potential to result in significant adverse impacts in one of the elements that define a neighborhood's character, or when an action may have moderate effects on several of the elements. Neighborhood character is determined by several factors, such as land use, urban design, visual resources, historic resources, socioeconomic conditions, traffic, and noise. If significant adverse impacts are identified in any one of these technical areas, or if moderate effects are identified in several of these areas, then an assessment is warranted under CEQR. Because the Proposed Actions have the potential to effect one or more of these contributing factors, further analysis is warranted and will be provided in the EIS. An analysis of neighborhood character will be included in the EIS based on the prototypical analysis sites (see *EIS Draft Scope of Work*).

19. Construction

According to the *2014 CEQR Technical Manual*, construction activities, although temporary in nature, can sometimes result in significant adverse impacts. Consideration of several factors—including location and setting of the project in relation to other uses and intensity and duration of construction activities—may indicate that a proposed action's construction activities warrant analysis. Construction impacts may be analyzed for any actions that involve construction or induce construction.

A preliminary screening analysis was conducted following *CEQR Technical Manual* guidelines to determine the potential for adverse impacts with respect to construction activity. According to *CEQR Technical Manual* guidelines, a detailed construction assessment typically is not warranted where the duration of construction is expected to be short-term (less than 2 years).

Screening Analysis

A review of the prototypical analysis sites indicates that the maximum lot size that may occur at any one prototypical analysis site is approximately 360,000 square feet (prototypical analysis site 14), and the maximum total floor area is approximately 74,400 square feet (prototypical analysis site 14). Construction of development that is less than 250,000 gross square feet typically takes less than 2 years to complete in New York City. Based on *CEQR Technical Manual* guidelines, where the duration of construction is expected to be short-term (less than 2 years), detailed construction assessment is not warranted. If the duration of construction is expected to be short-term, potential impacts are considered temporary.

Although it is possible that more than one prototypical analysis site could be developed or redeveloped in proximity to other such sites, the proposed zoning text and map amendments in-and-of-themselves are not expected to induce development or cause a significant change in the overall amount, type, or location of development. In addition, due to the limited number of vacant or underbuilt sites and low-density zoning, as well as the broad geographic area across which prototypical analysis sites would be located, there are unlikely to be clustering implications associated with geographic or temporal overlap of construction activities. Further, all construction activities would be carried out in accordance with applicable building codes and regulations and DOB permits. As such, the Proposed Actions would not result in significant adverse construction impacts.

Note that construction at all prototypical analysis sites would be subject to the government regulations and oversight detailed below in *Construction Regulations and General Practices* and would employ the general construction practices described therein. In addition, any designated NYCL- or S/NR-listed historic buildings located within 90 linear feet of a projected or potential new construction site would be subject to DOB's TPPN #10/88, which would ensure the protection of historic resources.

Construction Regulations and General Practices

Construction Oversight

Governmental oversight of construction in New York City is extensive and involves a number of City, state, and federal agencies, each with specific areas of responsibility, as follows:

1) DOB has primary oversight of construction. DOB oversees compliance with the New York City building code to ensure that buildings are structurally, electrically, and mechanically safe. In addition, DOB enforces safety regulations to protect both workers and the general public during construction. Areas of oversight include installation and operation of equipment such as cranes and lifts, sidewalk sheds, safety netting, and scaffolding.

2) NYC DEP enforces the New York City noise code and reviews and approves any needed remedial action plans and associated construction health and safety plans as well as the removal of fuel tanks and abatement of hazardous materials. NYC DEP also regulates water disposal into the sewer system and reviews and approves any rerouting of wastewater flow.

3) The Fire Department of the City of New York has primary oversight of compliance with the New York City fire code and installation of tanks containing flammable materials.

4) The New York City Department of Transportation (NYC DOT), Office of Construction Mitigation and Coordination, reviews and approves any traffic lane and sidewalk closures.

5) New York City Transit is responsible for bus stop relocations and subsurface construction within 200 feet of a subway, if needed.

6) LPC approves studies and testing to prevent loss of archaeological resources and damage to architectural resources.

7) NYSDEC regulates disposal of hazardous materials and construction, operation, and removal of bulk petroleum and chemical storage tanks. NYSDEC also regulates discharge of water into rivers and streams.

8) The New York State Department of Labor licenses asbestos workers.

9) NYC DOT reviews and approves any traffic lane closures on its roadways, if any are necessary.

10) The U.S. Environmental Protection Agency (EPA) has wide-ranging authority over environmental matters, including air emissions, noise, hazardous materials, and the use of poisons; however, much of its responsibility is delegated to the state level. In New York State, responsibility is delegated to NYSDEC.

11) The Occupational Safety and Health Administration sets standards for work site safety and construction equipment.

Construction Hours

New York City regulates the hours of construction work through the New York City Noise Control Code, as amended in December 2005 and effective July 1, 2007. Construction is limited to weekdays between the hours of 7:00 AM and 6:00 PM, and noise limits are set for specific pieces of construction equipment. The City may permit work outside of these hours to accommodate: (1) emergency conditions; (2) public safety; (3) construction projects by or on behalf of City agencies; (4) construction activities with minimal noise impacts; and (5) undue hardship resulting from unique site characteristics, unforeseen conditions, scheduling conflicts, and/or financial considerations. DOB issues these work permits, and, in some instances, approval of a noise mitigation plan from NYC DEP under the City's noise code is also required.

Lane and Walkway Closures

Temporary curb-lane and sidewalk closures are typical for construction projects in New York City. To manage such closures, a maintenance and protection of traffic plan must be developed consistent with NYC DOT requirements. All closures must be coordinated with NYC DOT, Office of Construction Mitigation and Coordination, which also reviews and approves maintenance and protection of traffic plans. In general, construction managers for major projects on adjacent sites also coordinate their activities to avoid delays and inefficiencies.

Public Safety

A variety of measures are used to ensure public safety during construction at sites within New York City. Examples include the use of sidewalk bridges to provide overhead protection for pedestrians passing by the construction site and the use of flaggers to control trucks entering and exiting the construction site, to provide guidance to pedestrians, and/or to alert or slow down the traffic. Other safety measures include following DOB requirements during the installation and operation of tower cranes to ensure safe operation of the equipment and installation of safety netting on the sides of the project as the superstructure advances upward to prevent debris from falling to the ground.

Conclusion

As demonstrated by the screening analysis, the prototypical analysis sites would be single sites and would not require construction that exceeds 2 years. The duration of construction activities for proximate sites is unlikely to overlap, and all construction activities would be carried out in accordance with applicable building codes and regulations. Therefore, no adverse impacts related to construction are anticipated, and no additional analysis is needed.

PLAN REVIEW SITES (CONCEPTUAL DEVELOPMENT)

Because the Proposed Actions would create new, discretionary actions to be considered by the CPC, an assessment of the potential environmental impacts that could result from these actions is needed. However, because it is not possible to predict whether a discretionary action would be pursued on any one site in the future, the RWCDS for the Proposed Actions does not consider specific developments. Instead, a conceptual analysis evaluates the new, discretionary actions that could be used to generically assess potential environmental impacts. The EIS will include a conceptual analysis of all impact topics (see *EIS Draft Scope of Work*).

ANALYSIS YEAR

The *CEQR Technical Manual* notes that, for some actions where the build-out depends on market conditions and other variables, the build year cannot be determined with precision. In these cases, a 10-year build year is considered reasonable because it captures a typical cycle of market conditions and generally represents the outer timeframe within which predictions of future development may usually be made without speculation. Therefore, an analysis year of 2030 has been identified for this environmental review.

APPENDIX A

REASONABLE WORST CASE DEVELOPMENT SCENARIO

AND ANALYTIC FRAMEWORK

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Reasonable Worst Case Development Scenario

To assess the possible effects of the Proposed Actions, a Reasonable Worst-Case Development Scenario (RWCDS) was developed for the Future Without the Proposed Actions (No Action scenario), and the Future With the Proposed Actions (With Action scenario) for a 10-year period. The incremental difference between the No Action and With Action scenarios is the basis for assessing the potential environmental impacts of the Proposed Actions.

To determine the No Action and With Action scenarios, standard methodologies have been used pursuant to the *CEQR Technical Manual*. These methodologies have been used to identify the amount and location of future development, as discussed below.

Existing Zoning

This section describes the existing regulations that would be affected by the Proposed Actions. This section is organized to describe the geography of the special districts and subdistricts, followed with an overview of how proposed subdivisions, construction or other site work is reviewed by the Department of Buildings (DOB) and City Planning Commission (CPC). Next is a description of the various regulations pertaining to the protection of natural features; various use, bulk, and parking regulations; and any associated discretionary actions to modify these existing provisions. The last section describes the certifications, authorizations, and special permits available in the existing zoning in the special districts. Cross access regulations that are affected by the proposal are described at the end of this section.

Geography

The special districts are located in the Borough of Staten Island as illustrated in Figure 1. The special districts contain approximately 50,843 lots in Staten Island that would be affected by the updates to the special district rules as described below. Since there would be no changes to the special districts in the Bronx or Queens, it is not further described in this document.

The cross-access regulations that would be affected by the Proposed Actions are applicable within the Borough of Staten Island in zoning districts M1, M2, M3, C4-1, and C8 districts as illustrated in Figure 2. The applicable geographic areas extend beyond the boundaries of the special districts and Lower Density Growth Management Area (LDGMA) in Staten Island; the area affected by the cross-access regulations is comprised of approximately 3,544 lots.

These numbers of affected lots reflect some double counting because the geographies described above overlap, and the special district rules and cross-access rules sometimes apply to the same lot.

Staten Island

SNAD is mapped in two areas within Staten Island: Special Natural Area-1 (Emerson Hill, Dongan Hills, Todt Hill, and Lighthouse Hill) in Community District 2 and Special Natural Area-3 (Shore Acres) in Community District 1. SHPD is located in the area of the Serpentine Ridge in Community

District 1, including the neighborhoods of Ward Hill, Grymes Hill, Stapleton Heights, Fort Hill Circle, Sunset Hill, Pavillion Hill, West Brighton, and Silver Lake. Approximately 8,761 lots would be affected by the Proposed Actions in SNAD and SHPD.

SSRDD includes nearly all of Community District 3, from Tottenville to Arden Heights. There are six sub-districts within the special district: Large Lot (LL) area, Senior Housing (SH) area, area D, area F, area K, and area M. There are approximately 44,611 lots in SSRDD that would be affected by the Proposed Actions.

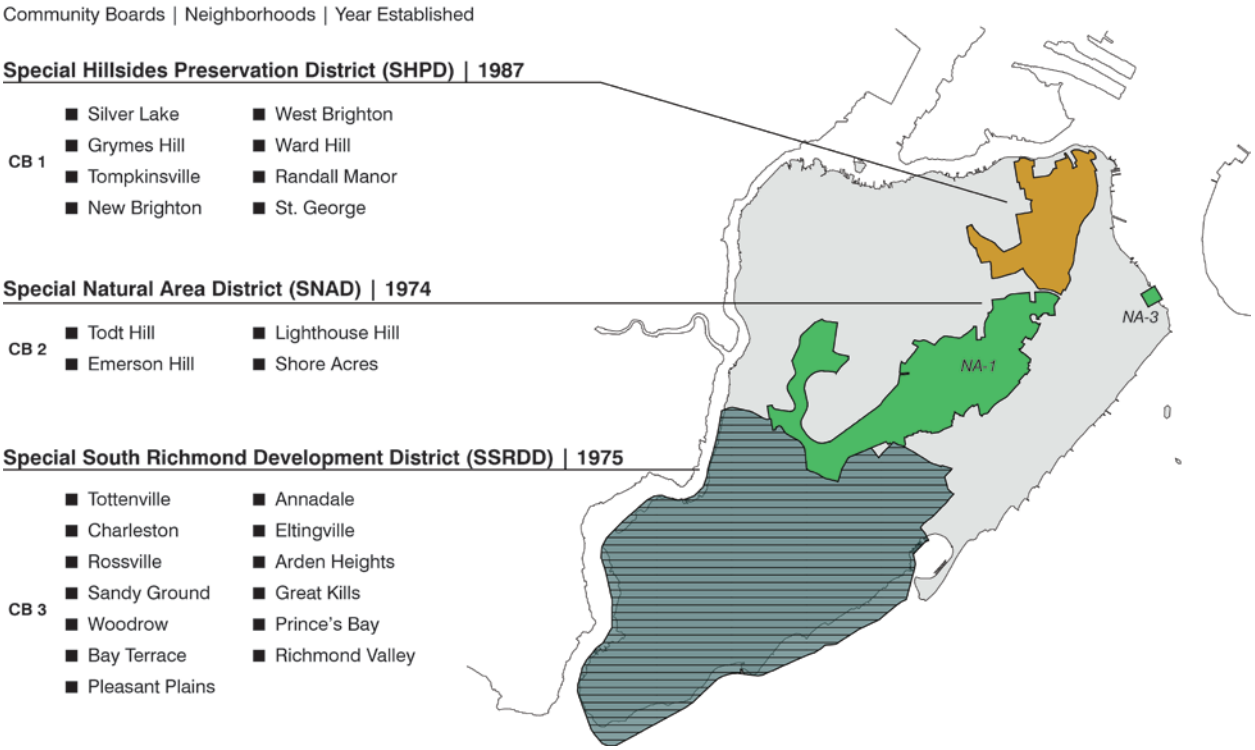


Figure 1: Existing Special Districts Map

Figure 2: Cross Access Connections Affected Areas that include C4-1, C8, and Commercial Uses in M Districts

Review Structure

The current CPC review structure for the special districts includes certifications, authorizations, and special permits. When no CPC approvals are required for a proposed development, it is considered to be 'as-of-right': the proposed development can apply directly to DOB for a building permit, which will be granted if the proposal complies with all zoning requirements as well as all other applicable codes and regulations. The certifications granted by either the CPC Chair or the CPC as a whole are considered ministerial, meaning that the proposal must be approved or denied based on the facts and on whether or not it meets the conditions of the certification. In contrast to these, the authorizations and special permits granted by CPC are discretionary in nature, as the Commission must weigh and balance various factors to arrive at a decision on each of the findings of an authorization or special permit. These discretionary actions may permit encroachment into an area containing natural features, or may modify specified zoning rules relating to use, bulk, or parking regulations. These discretionary actions include a public review process that allows the public to be informed about a proposed project and provide opportunities for public comment on the proposed project, which the CPC considers when making its decision.

In general, most development in SNAD (80 percent) and a third in SHPD (34 percent) require a discretionary action and review by the CPC; most development in SSRDD (90 percent) occurs as-of-right (including certifications), based on data from 2012 to 2017. The three special districts protect certain natural features but provide a route to waive or modify those protections to permit disturbance of those natural features by authorization granted by the CPC. Additional authorizations and special permits are available if an applicant seeks a modification of certain zoning regulations, such as yard regulations.

SNAD – SNAD is the most restrictive of the three special districts, generally requiring at least a certification from the CPC that the proposed development meets the standards of the special district and that it does not require an authorization or special permit from the CPC. SNAD categorizes lots into Tier I and Tier II sites, with authorizations required on Tier I sites (average slope less than 10 percent), with site alteration beyond the construction zone, on Tier II sites (average slope more than 10 percent) with any site alteration in, and for removing protected trees or altering steep slope areas on either type of site. Authorizations from the CPC are required for disturbance of a variety of protected natural features on a lot or to modify bulk regulations. A special permit may be sought to modify permitted residential building types, for instance, to allow an attached residence in an R2 district, where normally only detached homes are permitted, in order to facilitate clustering development to preserve natural features elsewhere on the site. A certification is also required for sites that propose to subdivide and/or reapportion existing zoning lots into proposed zoning lots with a different size and/or boundary.

SHPD – Similar to SNAD, SHPD divides lots into Tier I and Tier II sites, with authorizations required on Tier I sites (with average slope less than 10 percent) with site alteration beyond the construction zone, on Tier II sites (average slope more than 10 percent) with any alteration, and for removing protected trees or altering steep slope areas on either type of site. Tier II sites are more steeply sloped and are subject to additional requirements and therefore may apply for an authorization to modify planting requirements for ground cover vegetation, as well as modifications of lot coverage, height, yards, driveways, private roads and grading regulations.

Similar to SNAD, a special permit may be sought for Tier II sites to modify permitted residential building types, for instance, to allow an attached residence in an R2 district, where normally only detached homes are permitted, in order to facilitate clustering development to preserve natural features elsewhere on the site. In addition, any parking facility with 30 or more parking spaces and any community facility in a residence district are required to seek an authorization from the CPC. A certification is also required for sites that propose to subdivide and/or reapportion existing zoning lots into proposed zoning lots with a different size and/or boundary.

SSRDD – SSRDD allows most development to occur as-of-right (including certifications). For residential development, a certification is required to demonstrate that there are enough school seats available as a result of proposed residential development. A certification is also required for sites that propose to subdivide and/or reapportion existing zoning lots into proposed zoning lots with a different size and/or boundary. There are three certifications required for any development located on a lot that has DOS in SSRDD. First, development within a lot containing DOS triggers the need for a certification that the DOS will be preserved in its natural state or developed for active recreational uses. A second certification establishes whether or not a public pedestrian way would be required on the site. A third certification relates to establishing a waterfront esplanade, where applicable, on the property.

Sites that propose tree removal or modification of topography by more than two feet require an authorization from the CPC. Generally, tree removal within building footprints or required parking area, or topography changes within 8 feet of a building, are permitted without requiring CPC authorization.

An authorization is required for more than 30 non-residential parking spaces. Authorizations may also be sought for modification of distance between buildings, yard, courts, parking, to permit affordable independent residences for seniors (AIRS) in Subarea SH, to permit residential uses in Subarea M, and to permit bulk calculations to include DOS or lands containing significant natural features donated to the City.

A number of special permits may be sought from the CPC in specific instances. These include allowing the amount of DOS to count as lot area for bulk computations to exceed the amount permitted, permitting buildings or other structures higher than the four-story or 50-foot height limit, permitting community facility buildings or treatment plants within DOS, and permitting building encroachment into DOS.

Based on data from 2012 to 2017, approximately 9 percent of all new building applications (NB permits) and major alteration permits (Alt-1 permits) required an authorization or special permit in SSRDD. Further detailed information on zoning regulations associated with certification and discretionary actions is described toward the end of the *Existing Zoning* section.

Protection of Natural Features

Natural features that are protected by all three special districts include trees, aquatic features, and natural topography, including steep slopes. Other natural features that are protected by regulation in some of the special districts include vegetation other than trees, erratic boulders, and rock outcrops. In each of these special districts, natural features are protected individually,

without regard to whether or not they are isolated or part of a contiguous ecological area. Current special district rules allow the modification of natural features while providing little guidance on the relative value of one type of natural feature versus another, how to prioritize protection, and how much encroachment to permit.

SNAD – In this district, natural features protected by zoning regulations include: geological features such as rock outcrops and geological deposits, topographical features such as steep slopes, existing natural topography and topsoil, aquatic resources, and botanic environments. With just a few exceptions, all these features cannot be removed or disturbed except through CPC authorization. Natural features must be preserved to the greatest extent possible when seeking a certification for future subdivision in SNAD.

SHPD – In this district, the natural features that are protected by zoning regulations include steep slopes, topsoil, trees, and other natural vegetation. In general, trees and steep slopes cannot be removed or disturbed except through CPC authorization, and on Tier II sites, an authorization is also required to remove or disturb topography or vegetation other than trees. Natural features must be preserved to the greatest extent possible when seeking a certification for future subdivision in SHPD.

SSRDD – In this district, the natural features that are protected by zoning regulations include existing natural topography, aquatic resources, trees, and open space. Open space is protected through pre-mapped DOS which includes public properties such as New York City Department of Environmental Protection (NYC DEP) Bluebelts and NYC Department of Parks and Recreation (NYC Parks) parkland, as well as DOS on private property to ensure protection of wetlands and open space. With certain exceptions, natural topography and trees are protected and disturbance requires CPC authorization. Natural features must be preserved to the greatest extent possible when seeking a certification for future subdivision in SSRDD.

Tree Regulations

Tree Removal – Although the three special districts often protect natural features such as trees by prohibiting the removal or disturbance of the natural feature within a certain distance of the proposed development, property owners can apply for an authorization from the CPC to remove or disturb these natural features in any way, and the standards for approving or denying these authorizations are not well defined.

All three special districts have very similar tree protection regulations. In all three special districts, trees are protected when they reach six-inch caliper (defined as the diameter of a tree trunk measured four feet, six inches from the ground). Trees can only be removed as-of-right within the proposed building footprint, or within 15 feet of the proposed building footprint for properties within SNAD and SHPD; in SSRDD, the same is true within 8 feet of the proposed building footprint as well as within proposed driveways, private roads, and required accessory parking spaces. Trees can also be removed as-of-right if the continued presence of a tree would create dangers to persons or property or would interfere with the growth or health of another tree of six-inch caliper or more.

SNAD and *SHPD* – the CPC may grant an authorization for tree removal or modifications to planting requirements in SNAD or SHPD, pursuant to ZR Section 105-425 in SNAD or pursuant to ZR Section 119-313 in SHPD. The findings require the proposed development, enlargement or site alteration to demonstrate that it is designed to make the least modification necessary, allows for the survival of newly planted trees or other plant material, and that it is aligned with the purposes of the special district.

SSRDD – the CPC may grant an authorization for tree removal in SSRDD, pursuant to ZR Section 107-64 (Removal of Trees). The findings require the proposed development to demonstrate that the preservation of the tree is infeasible due to potential impairment of open areas on site, or due to proposed topographic modifications, or due to the provision of a waterfront esplanade.

Tree Planting Requirements – The current tree planting requirements in all three special districts come into effect when there is new construction or site work on a property, and requirements are based on a tree credit calculation. Tree credit is the value given to every tree based on the tree caliper inches. The current zoning assigns one credit for the first six inches of caliper and one credit for every additional four inches of caliper.

SNAD and SHPD – The requirement is one tree credit per 1,000 square feet of lot area or a total of 51 percent of tree credits originally on site, whichever is greater. Newly planted trees must be a minimum of three inches of caliper.

SSRDD – The requirement is one tree credit per 1,000 square feet of lot area. Newly planted trees must be a minimum of three inches of caliper.

Tree Planting Requirements in Open Parking Areas

SNAD and SHPD – Underlying rules per ZR Section 37-90 requiring trees and landscaping in parking lots for non-residential land uses apply.

SSRDD – One tree, pre-existing or newly planted, shall be provided for each four parking spaces in the perimeter landscaped area of the parking area or in planting islands within the parking area. Where 30 or more parking spaces are provided, at least 50 percent of the required trees shall be located within planting islands within the parking area. In addition, underlying rules per ZR Section 37-90 requiring trees and landscaping in parking lots for non-residential land uses also apply.

***C*ritical Root Zone**

SNAD and SHPD - The critical root zone is defined as an area around the tree containing the roots that should be maintained and protected. In the existing rules, it is measured as one radial feet for every caliper inch and ranges from a minimum of four feet to a maximum of 22 feet.

The critical root zones of all preserved trees are protected within an “Area of No Disturbance” and must remain undisturbed except as provided for in a tree protection plan and letter from a certified arborist.

SSRDD – Critical root zone is not defined in SSRDD.

Vegetation and Planting Regulations

SNAD and *SHPD* – In SNAD and on Tier II sites in SHPD, no vegetation may be removed except within the proposed building footprint, driveways, private roads and required accessory parking spaces, or within 15 feet of the proposed building footprint. Authorization by the CPC may be granted, pursuant to ZR Section 105-425 in SNAD and ZR Section 119-313 in SHPD, to seek removal outside of those areas. Ground cover, shrubs, small trees, and large trees are required to be planted to replace any vegetation that is removed, or any topsoil disturbed, each on a basis proportionate to the size of the area disturbed.

SSRDD – Existing special landscaping rules pursuant to ZR Section 107-48 require a buffer of evergreen shrubs between a new commercial or manufacturing building and an adjacent lot in a residence district, or an adjacent residence, even if located outside of a residence district. The rules also require a lower screening hedge of shrubs around the sides and rear of parking areas, and a seven-foot-wide landscaped area between the parking area and the street.

Topographic and Geologic Resources

Slopes and topography are regulated in the three special districts by prohibiting the disturbance of the natural feature within a certain distance of the proposed development in SNAD and SHPD, or beyond a threshold defined in the regulations for SSRDD. However, property owners can apply for an authorization from the CPC to disturb these natural features, and the standards for approving or denying these authorizations are not well defined.

SNAD and SHPD – For Tier II sites, no grading is permitted beyond 15 feet of the building footprint, except for grading to construct private roads and driveways. The grading requirements for Tier II sites limit how steep the final slope can be after cut and fill to a ratio no steeper than 2 horizontal to 1 vertical, along with other technical specifications.

The CPC may grant an authorization for modifications to topographic features in SNAD pursuant to ZR Section 105-421 (Modification of topographic features on Tier I sites) and ZR Section 105-422 (Authorization of a development, enlargement or site alteration on a Tier II site or portion of a zoning lot having a steep slope or steel slope buffer). The CPC may grant an authorization for modifications to topographic features in SHPD pursuant to ZR Section 119-311 (Authorization of a development, enlargement or site alteration on a steep slope or steep slope buffer) and ZR Section 119-316 (Modification of grading controls). The findings require the proposed development, enlargement or site alteration to demonstrate the least modification to existing topography, that the modified topography will not impair character and topography of surrounding area, and that the modified topography will result in minimal impact to drainage patterns and soil conditions.

Erosion control is regulated by zoning in SNAD and for Tier II sites in SHPD that require an authorization, requiring one of a variety sediment control measures to be used.

In SNAD, rock outcrops cannot be altered without an authorization from the CPC. The CPC may grant an authorization for modifications to rock outcrops if it is the minimum modification necessary, pursuant to ZR Section 105-424 (Alteration of rock outcrops).

In SNAD, no erratic boulder with a diameter of six feet or more may be removed from its location without authorization from the CPC. The CPC may grant an authorization for relocation of erratic boulders if the boulder is located in an area to be occupied by buildings, driveways, parking areas, or recreation areas, or its current location would create hazards or dangers, pursuant to ZR Section 105-423 (Relocation of erratic boulders).

SSRDD – On sites in this district, topography cannot be modified more than two feet without authorization from the CPC, with the exception of work done to construct building foundations, driveways, or utilities, or in order to bring the portion of a lot abutting a street to meet the grade of the street.

The CPC may grant an authorization for modifications to topographic features if the proposal results in minimal disturbance of the existing drainage pattern and soil conditions, and the modified topography will not impair the character and topography of the surrounding area, pursuant to ZR Section 107-65 (Modifications of existing topography).

Aquatic Resources

Aquatic resources are regulated inconsistently among the three special districts as described further below. Property owners can apply for a CPC authorization to modify these natural features, and the standards for approving or denying these authorizations are not well defined. The New York State Department of Environmental Conservation's (NYSDEC) 100-foot regulated adjacent area lacks any specific development regulations and are generally guided by NYSDEC best practices on a site by site basis. Applications to the CPC for development or site alteration in the special districts may require areas of no disturbance in SNAD or SHPD, or planted buffers, or offsets from NYSDEC's area of no disturbance on a site by site basis.

SNAD – On sites in this district, aquatic features cannot be altered without CPC authorization. The CPC may grant an authorization for modification to aquatic features if the proposal results in minimal disturbance of the aquatic feature and will not disturb the existing drainage pattern of the area, pursuant to ZR Section 105-426 (Alteration of aquatic features). These features must be considered during the Commission's review of future subdivision.

SHPD – Aquatic resources are not directly regulated in the special district; however, applications for authorizations to modify topography must meet findings that include that the topographical change will not disturb the soil conditions or drainage patterns in the area. These features must be considered during the Commission's review for future subdivisions.

SSRDD – The district goals specify the protection of aquatic resources that are irreplaceable must be considered during the Commission's review for future subdivisions. However, aquatic resources are not directly regulated in the special district, although applications for authorizations to modify topography must meet findings that include that the topographical change will not cause unnecessary disturbance of the drainage patterns in the area, including the soil conditions.

Controls during Construction

SNAD and SHPD Tier II sites – On these sites, no construction equipment can be operated beyond 15 feet of the building footprint, except for the construction of driveways and private roads;

construction fences must be erected around all areas of no disturbance and around vegetation proposed to be preserved; excavating for fill is prohibited unless approved under a specified grading plan; a staging area must be located where it would minimize destruction of natural features; topsoil is to be used to revegetate the area upon completion of construction; and exposed earth shall be seeded during construction.

SHPD Tier I sites – Construction fences must be erected around all areas of no disturbance; a staging area must be located where it would minimize destruction of natural features; topsoil is to be used to revegetate the area upon completion of construction; and exposed earth shall be seeded during construction.

Habitat Preservation

There are no specific regulations in any of the special districts currently to preserve habitat. As noted earlier, there are designated 'Areas of No Disturbance' in SNAD and SHPD that are protected from all types of construction activity. Areas of No Disturbance include steep slopes, steep slope buffers, and the critical root zone of each tree proposed for preservation. Existing zoning rules establishing Areas of No Disturbance are not based on the relative value, size, or location of existing habitat, but protect habitat as a secondary outcome of protecting steep slopes and individual trees. The amount of area preserved as natural habitat through this mechanism is impossible to predict, because the amount of permitted development on a given site is not defined by standards in the zoning regulations. Another zoning mechanism that has contributed towards some habitat preservation is DOS in SSRDD, described below.

Designated Open Space

Designated open space (DOS) is a regulatory tool that exists within SSRDD. On sites in this district, any development or site alteration on a zoning lot that contains DOS requires certifications. As noted earlier, these mapped areas include public parks and NYC DEP Bluebelts, but also include private property to preserve existing natural areas such as forested areas and aquatic features. The CPC may grant a certification for development if the DOS is preserved in its natural state; and where required by the Commission, if public pedestrian ways or a waterfront esplanade are provided pursuant to ZR Section 107-22. If the development includes proposed recreational facilities in the DOS, the CPC also must review and certify that the recreational facilities are compatible with the purposes of the network of open space envisioned for the entire DOS system, and that the proposed construction would have minimal disturbance of trees, topographic features, and natural drainage systems. DOS rules allow yards to be modified as-of-right to buffer development away from DOS and preserve these areas to the greatest extent possible.

Use Regulations

Existing regulations in SSRDD modify underlying zoning to prohibit 'zero lot line buildings' without side yards. SSRDD rules limit the bulk of a particular type of land use, affordable independent residences for seniors, in Subarea SH and require a CPC Chair certification for the development of such residences. SSRDD also has special regulations for residential uses in Subarea M, which is mapped in a manufacturing district where residential uses are normally not permitted.

Bulk Regulations

Floor Area

SNAD – Floor area is governed by underlying regulations.

SHPD – Floor area is governed by underlying regulations, except that, for Tier II sites where a private road is located on a portion of a lot, the area of the private road is excluded for the purposes of calculating the maximum permitted floor area on the lot.

SSRDD – Floor area is governed by the underlying regulations. However, floor area bonuses in the underlying zoning for community facilities with large front or side yards are not permitted in SSRDD. Special floor area regulations apply to residential uses in Subarea M, which is mapped in a Manufacturing District.

Lot Coverage

SNAD and *SHPD* – On Tier I sites with no impact on steep slopes, lot coverage is regulated by the underlying zoning. On Tier II sites with no proposed disturbance of steep slopes, maximum lot coverage is regulated by the average percent of slope on the lot and the applicable zoning district (see Table 1).

Table 1: SNAD Tier II sites Lot Coverage Governed by Average Percent Slope of the Site

Avg % of Slope	R1	R2	R3	R4	R5	R6 (1-2 Family)	R6 (Other)
10 – 14.9	22.5	22.5	22.5	36.0	45.0	48.6	32.4
15 – 19.9	20.0	20.0	20.0	32.0	40.0	43.2	28.8
20 – 24.5	17.5	17.5	17.5	28.0	35.0	37.8	25.2

On Tier II sites or on Tier I sites where steep slope or steep slope buffer areas are being modified through development, enlargement or site alteration, the maximum lot coverage is regulated by the applicable zoning district as noted in Table 2.

Table 2: SNAD Tier II Lot Coverage if Steep Slope is Disturbed

R1	R2	R3	R4	R5	R6 (1-2 Family)	R6 (Other)
12.5	12.5	12.5	20.0	25.0	27.0	18.0

The CPC may authorize the modification of limits to lot coverage on a Tier II site or applicable Tier I site pursuant to ZR Section 105-431 (Modification of Lot Coverage Controls) in SNAD and ZR Section 119-314 (Modification of lot coverage controls) in SHPD. The authorization would be granted by the CPC if the development or enlargement is not feasible without modification, if the shape of the building preserves the aesthetic value of the area, if such modification is the least modification necessary, has minimal impact on existing natural topography, will not disturb the drainage pattern and soil conditions and does not impair the essential character of the area.

In *SSRDD,* lot coverage is governed by the underlying regulations.

Hard Surface Area

Hard surface area is any area on a lot covered by paved or other solid surfaces, such as roads, driveways, sidewalks, patios, decks, porches, and the roofs of buildings. Because hard surface

area generally does not allow water to penetrate into the ground, swimming pools are also considered hard surface area; rainwater cannot penetrate into the ground through the bottom of the pool. The opposite of hard surface area is area that includes planted areas at ground level, including lawn, gardens, and other areas with natural soil.

Hard surface area is not regulated directly within any of the three special districts. However, during review of proposed development seeking an authorization within SNAD and SHPD, the CPC has generally approved applications where no more than 50 percent of a lot is covered by hard surfaces.

Lot Area and Lot Width

SNAD – In this district, the minimum lot area is increased to 12,500 square feet if a lot contains steep slopes covering more than half of the lot.

SHPD – LDGMA rules pursuant to ZR Section 23-32 are modified to exclude private roads and associated planting strips and sidewalks from the calculation of minimum lot area to preserve neighborhood character within SHPD.

SSRDD – Special minimum lot area and lot width regulations in this district require an area and lot width greater than the underlying minimum requirements, based on the proposed building type and the number of stories. In Special Area LL all residences shall have a minimum lot area of 5,700 square feet and a minimum lot width of 50 feet. Table 3 shows the lot area and lot width rules that apply throughout the special district in all other areas.

Table 3: SSRDD Minimum Lot Area, Lot Width and Building Typologies for Residential Zoning Districts

District	Type of Residence	Height (In Stories)	Minimum Lot Area (sq. feet.)	Minimum Lot Width (feet)
R1-1	Detached	1-4	9,500	100
R1-2	Detached	1-2	5,700	40
		3	5,700	50
		4	5,700	60
R2	Detached	1-4	3,800	40
R3-1	Detached	1-2	3,800	40
		3-4	3,800	45
	Semi-Detached	1-2	2,375	24
		3-4	3,800	40
R3-2	Detached	1-2	3,800	40
		3-4	3,800	45
	Semi-Detached	1-2	2,375	24
		3-4	3,800	40
	Attached	1-2	1,700	18
		1-2	2,375	24
		3-4	2,280	24

District	Type of Residence	Height (In Stories)	Minimum Lot Area (sq. feet.)	Minimum Lot Width (feet)
		3-4	3,800	40
R3A	Detached	1-3	3,325	35
R3X	Detached	1-2	3,800	40
		3	4,750	50
		4	5,700	60
R4A	Detached	1-3	3,325	35
R4-1	Semi-Detached	1-3	2,375	24
	Detached	1-3	3,325	35

Yard Regulations

SNAD – In SNAD, yards are regulated by underlying zoning regulations. However, the CPC may grant an authorization to modify yard regulations pursuant to ZR Section 105-432 (Modification of yard, height, and setback regulations, and parking location regulations) if the proposed placement of buildings and arrangement of open space will preserve significant natural features and will not have negative effects on the light, air and privacy of existing adjacent buildings.

SHPD – In this district, yards are regulated by underlying zoning regulations. However, the CPC may grant an authorization for modification of yard regulations pursuant to ZR Section 119-318 (Authorization for modification of certain bulk regulations) for any development or enlargement on a Tier II site if the modification will preserve natural features, is the least modification necessary, and the proposed development will not have negative effects on the light, air, and privacy of properties in adjacent areas.

SSRDD – In this district, the front yard requirements of the underlying districts apply, except in the following districts, where front yards must be 18 feet deep: R2, R3, R4, and R5 districts (excluding contextual districts such as R3A districts). Required side yards increase as the height of the building increases, as shown in Table 4.

Table 4: SSRDD Side Yard Requirements

District	Type of Residence	Height (in stories)	Number of Side Yards Required	Required Total Width	Required Minimum Width of any Side Yard
R2 R3-1	detached	1-2	2	15	5
R3-2		3-4	2	20	5
R3-1 R3-2	semi-detached	1-2	1	9	9
		3-4	1	15	15
R3A R4A	detached	1-4	2	15	5
R3X	detached	1-2	2	15	5
		3	2	20	8
		4	2	25	10
R4-1	detached	1-4	2	15	5
	semi-detached	1-4	1	9	9

The CPC may grant a certification for the modification of yard regulations for single- or two-family residences if certain conditions are met pursuant to ZR Section 107-465 (Modifications of special yard regulations for certain zoning lots). The CPC may also grant an authorization for the modification of yard and court regulations if certain findings are met pursuant to ZR Section 107-62 (Yard, Court and Parking Regulations). The authorization must be for the purpose of allowing proposed development to avoid steep areas and significant trees. The authorization would be granted by the CPC if the proposed buildings will not have adverse effects upon light, air, and privacy of adjacent lots. Most lots that contain DOS can modify yards or distance between buildings as-of-right to avoid development within the DOS pursuant to ZR Section 107-225 (Special bulk regulations for developments containing DOS); however, if the area of DOS claimed as lot area exceeds the lot area outside of DOS, the bulk modifications would require a CPC special permit pursuant to ZR Section 107-72 (Qualification of DOS as lot area for bulk regulations).

Building setback requirements also apply along the Staten Island Railroad and to lots fronting on designated arterials and park streets as described further below.

Height and Setback

SNAD – In this district, height and setback requirements are regulated by underlying residential zoning regulations. The CPC may authorize modification of height and setback regulations pursuant to ZR Section 105-432 (Modification of yard, height, and setback regulations, and parking location regulations) if the modification will preserve significant natural features, and if the proposed buildings will not have adverse effects upon the light, air, and privacy of adjacent buildings.

SHPD – In this district, Tier II sites have special height and setback regulations. In R1, R2, R3, and R4 districts, the maximum height is 36 feet; in R5 districts, the maximum height is 60 feet; and in R6 districts, the maximum height is 70 feet. The CPC may authorize the modification of height and setback regulations pursuant to ZR Section 119-315 (Modification of height and setback regulations) if the development is not feasible without such modification, it is the least modification required, the modification allows the preservation of steep slopes and vegetation, and the proposed buildings will not have adverse effects upon the light, air and privacy of adjacent lots.

SSRDD – In this district, height and setback requirements of the underlying regulations are modified so that buildings are limited to a height of four stories and all other structures are limited to a height of 50 feet, unless modified by a special permit from the CPC pursuant to ZR Section 107-73 (Exceptions to height regulations). In order to grant the special permit, the CPC must find that the proposed building or structure doesn't detract from the character of the area, and that the modification permits the preservation of steep slopes, DOS, or outstanding views.

Arterial and Park Streets

In *SSRDD*, certain streets are designated as either arterial or park streets, and special regulations apply to vehicular access to each lot, setback of buildings, and landscaping. Access limitations are designed to limit traffic and pedestrian conflicts. For lots with frontage only on an arterial or

park street, only one curb cut is permitted, except when additional curb cuts are granted pursuant to CPC certification 107-251 (Special provisions for arterials). For lots with frontage on an arterial or park street as well as another street, the CPC may grant an authorization for additional curb cuts on the arterial or park street pursuant to ZR Section 107-68 (Modification of group parking facility and access regulations) if the proposed development results in a minimum of local traffic, and if traffic flow is better controlled as a result of the proposed access.

Building setbacks of 20 feet are required along arterial streets. If buildings are set back at least 35 feet, then the area in front of the building may be used for parking or loading. For park streets, special street tree rules apply, and the owner of each development abutting a park street is responsible for landscaping and maintenance of that portion of the park street located between the front lot line and the curb. These rules were among the City's first zoning rules to require street trees for new developments; today street tree planting requirements apply Citywide.

Court and Open Space Regulations

Court and open space regulations control the amount of space on the lot not used by buildings, and how that space is shaped by buildings and lot lines.

SNAD and SHPD – In these districts, courts and open spaces are regulated by underlying zoning regulations except that, for Tier II sites in SHPD, where a private road is located on a portion of a lot, the area of the private road is excluded for the purposes of calculating open space requirements on the lot.

SSRDD – In this district, single- and two-family detached residences are exempt from court regulations. For one-story residential buildings that are not exempt, the area of an inner court must be at least 225 square feet and at least 15 feet wide. For taller residences, the area of an inner court must be at least 400 square feet and at least 20 feet wide. The CPC may authorize the modification of yard and court regulations pursuant to ZR Section 107-62 (Yard, court, and parking regulations). The authorization must be for the purpose of allowing proposed development to avoid steep areas and significant trees. The authorization would be granted by the CPC if the proposed buildings would not have adverse effects upon light, air, and privacy of adjacent lots.

Parking and Curb Cut Regulations

Although rules regarding the location of parking spaces can directly affect how much design flexibility exists to preserve natural features, there is no consistency among the three special districts.

SNAD – In this district, accessory parking spaces may be provided as curbside parking on a private road. The CPC may authorize modifications in parking location regulations pursuant to ZR Section 105-432 (Modification of yard, height, and setback regulations, and parking location regulations) if the modification will preserve significant natural features.

SHPD – In this district, locating required parking spaces within a front yard is permitted, which is an exception to LDGMA rules that normally prohibit parking anywhere between the front of a residence and the street. Any parking facility with 30 or more parking spaces is not permitted without an authorization. The CPC may authorize a parking facility with 30 or more parking spaces

pursuant to ZR Section 119-312 (Authorization of certain uses within the Special Hillsides Preservation District) if the proposed construction will not adversely affect natural topography, vegetation, and drainage patterns; if it will not impair the character of the area; and if the proposed parking facility results in a minimum of local traffic.

SSRDD – In this district, parking lots and parking garages for commercial, community facility and manufacturing uses are limited to 30 parking spaces without CPC authorization. Parking areas are required to be screened from adjacent lots by a landscaped strip at least four feet wide, and from adjacent streets by a landscaped strip at least seven feet wide, each densely planted with evergreen shrubs.

The CPC may authorize a parking facility with more than 30 parking spaces pursuant to ZR Section 107-68 (Modification of group parking facility and access regulations) if the proposed parking facility results in a minimum amount of local traffic. The CPC may also permit modifications through this authorization to parking lot landscaping and maneuverability requirements to preserve vegetation and natural topography.

Cross Access Connections

Cross access connections are required for all commercial or community facility uses in C4-1, C8, M1, M2, and M3 districts in Staten Island for developments with greater than 70 percent or more of the floor area comprised of these land uses, or enlargements in floor area or parking if the accessory parking lot has more than 36 spaces or 12,000 square feet of lot area (see Figure 2). In summary, all proposed cross access connections require CPC Chair certification. The CPC may grant an authorization to waive or modify a cross access connection requirement due to irregular lot shape or other site planning constraints. Other cross access connections may be waived by CPC Chair certification due to extreme grade changes, the presence of wetland or trees along the lot line boundaries, or relocation of a previously certified connection.

Site Planning of cross access connections, and related land use actions

Developments or enlargements must provide cross access connections to adjacent properties along any lot line greater than 60 feet in length where the following rules can be met:

- The cross access drive is located a minimum of 23 feet from the nearest street line;
- The cross access drive is an extension of a travel lane on subject site (and aligns with a travel lane on an adjacent site as practicable);
- The grade of the cross access drive is less than 15 percent;
- There is no existing building blocking access within 50 feet of the lot line; and
- Constructing the cross access drive would not result in removal of significant natural features (such as wetlands or trees greater than six-inch caliper).

The CPC Chair must certify that any proposed connection meets these conditions pursuant to ZR Section 36-592. If an access along a lot line greater than 60 feet in length would not meet these rules, the Commission Chair may certify that no cross access is required (ZR Section 36-596).

If a cross access connection along a lot line greater than 60 feet could meet these rules but is otherwise infeasible, the Commission may authorize a waiver for cross access.

Certifications for Cross Access regulations

The CPC Chair may certify compliance with the conditions of cross access connections regulations pursuant to ZR Section 36-592 (Certification of cross access connections), or that no connection is required, and/or relocation of previously certified connections and voluntary connections pursuant to ZR Sections 36-592 or 36-596 (Certification that no connection is required, relocation of previously certified connections and voluntary connections).

Authorization for Cross Access regulations

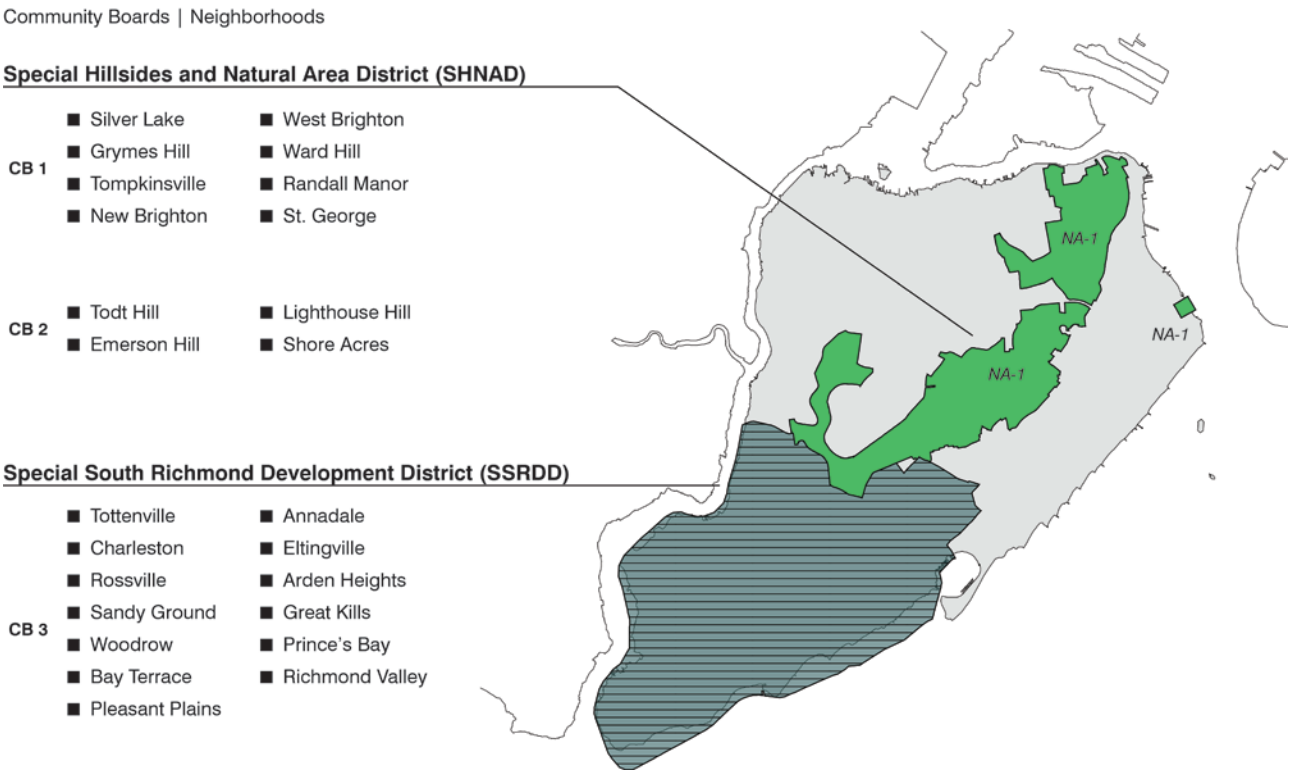
The CPC may grant an authorization for waivers or modifications of cross access connections pursuant to ZR Section 36-597 (Authorization for waivers or modifications to cross access connections) due to an irregular shape of a zoning lot, or due to the design of the parking lot, or the placement of a building that would interfere with the connection.

Proposed Land Use Actions

The following section describes the proposed regulations, provides a comparison with existing regulations, and identifies any anticipated change in outcomes from the current scenario. The section is organized similar to the previous *Existing Zoning* section and includes a description of the location of the combined special district and its relation to existing three special districts, an overview of the proposed review structure, a description of regulations pertaining to protection of natural features and bulk, and describes the details of discretionary review required. Proposed changes to cross access regulations and a clarification to an existing LDGMA zoning regulation are also described.

Geography

As illustrated in Figure 3, the proposed special district would combine the boundaries of two existing special districts (SNAD and SHPD) into one combined special district, to be referred to as SHNAD. The currently mapped SNAD NA-1, SNAD NA-3 Shore Acres, and SHPD would be combined to form the proposed SHNAD.



- *The regulations currently applicable to Fort Totten (Queens) and Riverdale-Fieldston (Bronx) are independent from the rest of the Special Natural Area District and would remain unchanged in the proposal.

Figure 3: Proposed Special District Boundaries

For the proposed SHNAD, the proposal would establish a new ecological area designation, Escarpment Area. Modified bulk, parking, and planting rules would apply and vary within the Escarpment Area. The Escarpment Area would include the steep slopes of the Serpentine Ridge of Staten Island, from Historic Richmond Town to Tompkinsville; the proposed regulations for this area are aimed to balance development on private property and protect geologic and topographic features of the Serpentine Ridge. The proposed regulations for areas outside of the Escarpment Area aim to provide consistent regulations for development and preservation of steep slopes and hillsides to contribute to the overall ecological importance and neighborhood character within the combined special district.

The existing boundaries of SSRDD would remain. Within SSRDD, Areas D, F, and K would be eliminated because the regulations for these areas are outdated and no longer necessary. Special areas LL, M, and SH would be retained and remain as subareas within SSRDD.

Updates to cross access connections would continue to apply within the same geography in Staten Island (see Figure 2).

Review Structure

Although the existing special districts require approval by the CPC based on a variety of factors, including proposed removal of individual trees or modification of slopes even for small properties,

the proposed SHNAD would require CPC review for the following types of properties (collectively referred to as Plan Review Sites):

- 1 acre or larger in size where a new building, enlargement, subdivision or site alteration is proposed; or
- if smaller than 1 acre:
  - where a development requires a new private road or the extension of one;
  - if located in an Escarpment Area, where four or more buildings, lots, or eight or more dwelling units are proposed.

A small constrained site with steep topography or aquatic features may have the option to seek modifications to the SHNAD rules by CPC authorization.

The proposed regulations for SSRDD would require CPC review for properties that qualify as a Plan Review Site:

- 1 acre or larger in size where a new building, enlargement, subdivision or site alteration is proposed, or
- if smaller than 1 acre:
  - where a development requires a new private road or the extension of one.

Other SSRDD actions that would be maintained or modified and require CPC review include:

- development within Area SH;
- development within Area M;
- modification to height;
- where more than one curb cut is proposed on a lot with 100 feet or more of frontage;
- for developments on sites where waterfront esplanade regulations are applicable;
- active recreational facilities within DOS; or
- to certify sufficient school seats are available.

Minor enlargements, site alterations or tree removal on Plan Review Sites that meet certain proposed thresholds would not require CPC discretionary review and would require a CPC certification or ministerial review.

All other properties, new buildings, enlargements, subdivisions and site alterations on parcels other than Plan Review Sites would be reviewed by DOB. This ability to apply directly to DOB is known as “as-of-right” development, meaning that, if underlying zoning regulations and proposed special district rules are met, DOB will approve the plans.

The proposal would remove the CPC review for Bluebelt properties managed by NYC DEP that is required in the existing SSRDD or SNAD, and also the review for NYC Parks properties that is required in the existing SNAD.

The proposed zoning regulations have similar goals for preservation of natural features as described within the three existing special districts. However, the proposed rules would approach the preservation of natural features in a holistic manner to enhance the relationship between the natural features on a property and the larger ecological landscape

Protection of Natural Features

The proposed zoning regulations have similar goals for preservation of natural features as described within the three existing special districts. However, the proposed rules would approach the preservation of natural features in a holistic manner to enhance the relationship between the natural features on a property and the larger ecological landscape.

When new construction or significant changes on a property are proposed within SHNAD, such as an enlargement with a 20 percent increase in floor area or an increase of hard surface area (areas of the site covered by a building or hard surfaces) of 400 square feet or greater, they would be subject to all proposed lot coverage and limits on hard surface areas, which include driveways, walkways, decks, and patios. Properties throughout this proposed district would be subject to a hard surface area and lot coverage maximum depending on the area of slope category altered by the proposed development, enlargement, or site alteration; these restrictions would be stricter within Escarpment Areas. The objective of these restrictions is to limit the amount of disturbance to topography, encourage preservation of the steepest areas of the site, and maintain overall planted areas to contribute to the permeability of the district and enhance the existing neighborhood character.

Within SSRDD, the proposed regulations aim to maintain existing goals and streamline the review process for most smaller sites by codifying best practices used under today's discretionary review process when topography, trees, or aquatic features are proposed to be altered.

The narrative below describes proposed regulations under each type of natural feature and spells out the differences between the current regulations where necessary. Unless otherwise specified, the regulations as described apply to all special district geographies (SHNAD and SSRDD).

Tree Regulations

The goal of the proposed tree planting and preservation regulations is to encourage preservation of mature trees and provide flexibility for development and tree preservation in an as-of-right regulatory framework. Tree requirements would continue to be determined through the existing system of tree credits, but the proposed rules would assign a higher value to all existing larger trees, as opposed to current credit system that increases linearly with the tree caliper inches (see Figure 4 for comparison of credit system between existing and proposed). The proposed rules would encourage tree preservation by offering more credit for preserved trees than for newly planted trees, and values for the most mature trees would be significantly higher than under the

current systems. The proposed rules would also update the tree planting lists to align with New York City's *Native Planting Guide*.[1]

In addition, based on goals for preserving neighborhood character within SHNAD, trees preserved in the front yard would get one additional tree credit compared to a tree of the same caliper elsewhere on the property.

For sites with existing trees within SHNAD that are designated as invasive species, such as Norway Maple, the proposed rules would provide additional incentive for the removal of an invasive tree and encourage the tree to be replaced according to New York City's Native Planting Guide to encourage a healthy and diverse ecosystem.

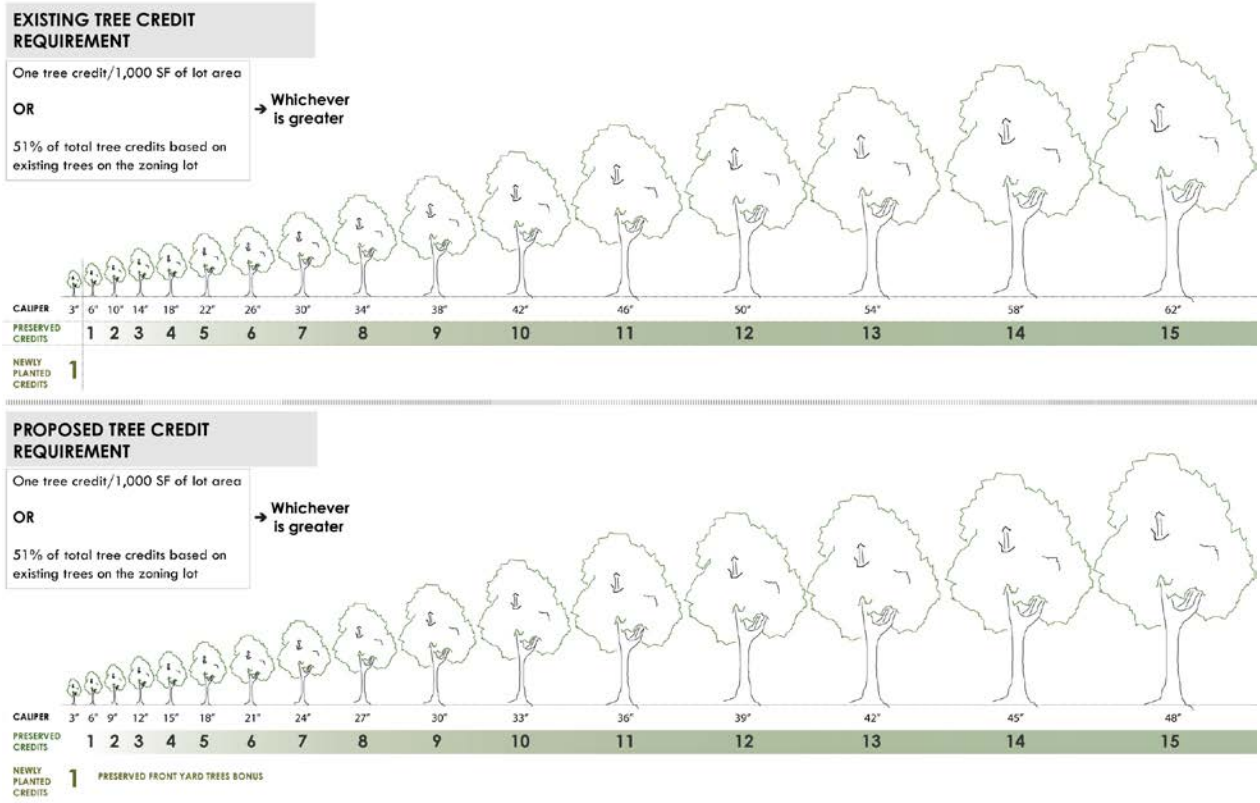


Figure 4: Comparison between Existing and Proposed Tree Value Credit System in the SHNAD

Critical Root Zone

The critical root zone is an area around the tree that is critical to the tree's survival that would be calculated similarly as in existing rules (one-foot radial from the tree trunk for every inch of thickness of the tree trunk), except there would be no upper limit of 22 feet as in the existing rules. For instance, a 50-inch caliper tree would require 50 feet of critical root zone in the proposed regulations. Proposed regulations introduce the concept of a structural root zone which is a

[1] City of New York Parks & Recreation. 2019. Native Species Planting Guide for New York City (3rd Edition). Available online: https://www.nycgovparks.org/pagefiles/142/Native-Plant-Guide-2019-FINAL__5d4c302e1755f.pdf.

smaller portion of the critical root zone that restricts all disturbance for preserved trees. Existing rules do not allow any impact to critical root zones of trees. The proposed rules protect trees, but they may discourage their preservation since no credit is given if development occurs within the critical root zone. Forestry and silvicultural practice indicate that trees can tolerate a small amount of disturbance within their critical root zones.

The proposed rules in both special districts would allow a portion of the critical root zone to be disturbed by proposed construction, and still allow the tree to count as preserved tree credit, thus encouraging the preservation of existing trees. Under the proposed rules, up to 10 percent of the critical root zone (outside of the structural root zone) could be disturbed, and any disturbance to the critical root zone between 10 and 30 percent is permitted to count towards preserved tree credits if a tree protection plan prepared by a registered landscape architect or certified arborist is provided to demonstrate the tree's survival.

Parking lot landscaping rules per ZR Section 37-90 would continue to apply and count toward the proposed regulations.

South Richmond Landscaping Rules

Existing special landscaping rules applicable in the SSRDD, as described in the *Existing Zoning* section, would continue to apply under the proposed regulations because they are unique regulations specific to this area. Special tree planting rules requiring one tree for every four parking spaces would be maintained.

Topographic and Geologic Resources

Special Hillsides and Natural Areas District --In SHNAD, the proposed rules for topographic and geologic resources aim to limit disturbance of steep slopes; reduce hillside erosion, landslides, and excessive stormwater runoff associated with development; incentivize placing new development and other additions to the site on the flatter portion or areas with the least significant geologic resources; preserve neighborhood character; and enhance and protect these natural features by more stringent requirements for lot coverage and limits to hard surface areas on the site.

The lot coverage, further described in Table 5, would be based on the steepness of the slope; for example, if a majority of the proposed building is sited on a steeper portion of the site with a slope of 85 percent of greater, the lot coverage would be limited to 12.5 percent. In addition, the maximum hard surface area allowed would be linked to the amount of permitted lot coverage or category of slope being impacted; for a site limited to 12.5 percent lot coverage, the proposed rules would limit hard surface area to 40 percent. The lot coverage and hard surface regulations would allow for more flexibility when siting the building on the flatter portion of the site.

Proposed rules would permit topographical changes as-of-right on small sites, provided that slopes meet certain grading standards. Cut slopes would be limited to a ratio no steeper than one horizontal to one vertical (versus two horizontal to one vertical under current rules in SNAD and for Tier II sites in SHPD). Fill slopes would be limited to no steeper than three horizontal to one vertical (versus two horizontal to one vertical under current rules in SNAD and for Tier II sites in SHPD).

Table 5: Proposed Maximum Lot Coverage for R1, R2 and R3 Districts in SHNAD

Geography	Zoning District	Impacted Slope Range (%)	Max Lot Coverage (%)
Escarpment and other areas	R1, R2, R3	85 or greater	12.5
		65 – 84.9	15
		45 – 64.9	17.5
		35 – 44.9	20
		25 – 34.9	22.5
Escarpment Areas	R1, R2, R3	10 – 24.9	R1 - 25
			R2, R3 - 30
		Less than 10	Underlying
All other areas	R1	Less than 25	
	R2, R3		

In the existing rules, limitations to the height of retaining walls are determined by grading controls for Tier II sites in SHPD. Under the proposed rules for SHNAD, any retaining walls needed to manage slopes would be limited to an average height determined by the topographic features of the site, location of the retaining wall, and use to preserve neighborhood character. Additional planting and landscaping requirements would also apply. Regulations may be modified for non-residential sites or residential sites by CPC authorization.

Within the Escarpment Area, if steep slopes exceeding 25 percent are altered by a development or site alteration, topographic modifications would not be permitted beyond 20 feet of the development or site alteration, except to permit a driveway or a private road. Erosion controls currently applicable in SNAD and Tier II sites in SHPD would be applicable to all sites in the proposed special district.

In all other areas of SHNAD, topographic modifications would be permitted as-of-right in accordance with the rules for maximum hard surface and lot coverage.

Special South Richmond Development District--In SSRDD, the proposed rules aim to limit disturbance of topographic features, drainage patterns, and excessive stormwater runoff associated with development; preserve neighborhood character; and enhance and protect these natural features on Plan Review Sites greater than 1 acre with habitat or for developments that require the development of private roads. The current rules regulate modification of topography on all sites, regardless of size, scale or intensity of use; the proposal prioritizes the preservation aspect to larger sites that have a greater impact to the topographic resources, drainage patterns, neighborhood character, and the public realm.

Aquatic Resources

The proposed regulations would codify CPC best practices to preserve existing aquatic features and allow the redistribution of bulk to avoid encroachment into NYSDEC delineated Areas of No Land Alteration and accommodate a buildable area, including recreational spaces, outside of those restricted areas. Zoning tools may include requiring larger zoning lot area for sites with significant aquatic resources and allowing as-of-right bulk modifications.

All construction within areas regulated by NYSDEC would continue to be subject to NYSDEC approval, and NYSDEC's ability to review and approve or deny construction within regulated wetland and adjacent areas would not be affected by the proposed regulations.

Controls during Construction

In SHNAD, in addition to proposed rules regarding erosion and sedimentation controls, an overall set of rules similar to those currently existing in SNAD and in SHPD for Tier II sites would apply throughout the entire special district to preserve steep slopes and other significant natural features during the construction process. These rules would require that the way a site is used during the construction process is carefully thought out and contained so that the ecologically sensitive portions of a site are preserved. Construction fencing would be required around the critical root zones of trees to be preserved, and slopes over 25 percent beyond 20 feet of a building. A construction plan, which is currently a required submission material for a CPC authorization in the special districts, including details such as locating equipment access roads, staging areas, construction fences, and preserved areas, would be required per the proposed zoning rules to be submitted to DOB as part of the application requirements.

Habitat Preservation

The special districts contain many of the largest natural areas in New York City, and there are many undeveloped natural areas remaining on private property.

In alignment with the current goals of the districts, the proposed rules aim to prioritize the preservation of significant natural features particularly on sites 1 acre or larger. It is at this scale where natural features could be part of larger habitats or have ecological connectivity with surrounding natural areas; for example, a large grouping of mature trees may be part of an undisturbed forest. Habitat preservation has the benefit of ensuring the survival of a diverse species of plants and animals and provides opportunities to bring communities closer to nature and improve human health.

In SHNAD and SSRDD, proposed rules would require that properties of 1 acre or more in size check an online habitat map on the New York City Department of City Planning (DCP) website to identify potential habitat on a lot; if the online map indicates possible habitat, a site assessment would be completed by an environmental professional to survey existing conditions and confirm the presence of the most valuable habitat and connectivity to larger protected natural areas. During the application process for the Plan Review Site, the CPC would use the site assessment to determine the presence of valuable habitat area and whether a 'habitat preservation area' is required through CPC authorization. These areas could be utilized for passive recreation; however, no development would be permitted within the established area.

Within SSRDD, properties subject to both habitat preservation and waterfront public access regulations per Zoning Resolution (ZR) Section 62-00 would be permitted to modify waterfront public access area requirements by CPC authorization. This would help balance the preservation of habitat while also providing public waterfront access.

Designated Open Space

In SSRDD, the DOS boundaries shown in the appendix text maps are proposed to be updated to indicate dimensions of DOS for predictability. As part of this process, boundaries would be adjusted or removed through a zoning text map amendment to address areas of DOS that no longer serve the goals of the SSRDD Open Space Network. The goals include providing connections to larger DOS sites, NYC DEP Bluebelts, and parkland, as well as preserving DOS in its natural state to preserve natural features such as wetlands. In some cases, DOS was mapped in small, isolated fragments over improved and unimproved mapped street sections and on existing buildings on private property which do not meet the goals of the Open Space Network. In other cases, DOS is located too close to existing residential buildings, which consequently has resulted in DOS covering the entire rear yard of a small property. On properties with existing homes where DOS is mapped and where sensitive ecological features are not present, DOS boundaries would be adjusted to provide a 20-foot separation between buildings and DOS to provide a usable open area for access or recreation that is less constrained by DOS regulations. In other cases, DOS boundaries are proposed to be adjusted to consider proposed rules for the preservation of habitat on large sites to better align DOS boundaries with existing habitat areas.

Rules regarding DOS would be maintained and modified slightly to create as-of-right regulations for most small sites. An existing Chair certification that allows DOS to be used for active recreational facilities would be clarified to align with its original intent of communal use and would allow such use only when it is serving five or more dwelling units. Existing rules allowing for delayed construction of certain improvement if a performance bond is posted would be eliminated, requiring instead that construction of public improvements be completed prior to issuance of a certificate of occupancy for new buildings affected by these rules. The proposal would eliminate four existing special permits applicable for sites with DOS that currently permit adjustment of a DOS boundary, permit community facility buildings or treatment plants in DOS, and permit building encroachment into DOS; instead any proposed modifications to DOS boundaries would be permitted through a zoning text map amendment (which is a process most often sought by applicants). Another special permit (ZR Section 107-72) would be eliminated so that all sites with DOS may utilize bulk modifications and flexible site planning as provided currently within ZR Section 107-225.

Use Regulations

In SSRDD, existing special use regulations would continue to apply. These rules include not permitting “zero lot line buildings,” limiting the bulk of affordable independent residences for seniors in Subarea SH and requiring the development of such residences to apply for a certification, and special regulations for residential uses in Subarea M.

Bulk Regulations

Floor Area

The floor area regulations of the currently existing SSRDD, which limit the floor area ratio for community facilities and provide special rules for residential uses in Subarea M, would continue to apply under the proposed new regulations within the South Richmond Subdistrict. Floor area for all other parts of the special districts is governed by underlying regulations and would not be affected by the proposed regulations.

Lot Coverage

In SHNAD, the proposed lot coverage rules would aim to provide predictable and clear outcomes for future development and would apply more stringent controls based on disturbance to steep slope. Based on the study of existing buildings in various districts and prior CPC approvals, proposed rules would limit lot coverage for residential buildings in R1, R2, and R3 districts based on whether the site is within the Escarpment Area and which category of steep slope is being modified. Buildings located on steep slopes would be subject to tighter lot coverage restrictions in relation to the steepness of the slope.

When the proposed lot coverage results in a constrained condition due to unique topographic features of the site, an authorization would be available to non-Plan Review Sites to seek modification of the special district requirements.

To align SHNAD lot coverage policy with underlying LDGMA floor area regulations, portions of a garage that are not located within the footprint of a building would be removed from the lot coverage calculation.

For all other zoning districts, underlying regulations would continue to apply.

Hard Surface Area

In SHNAD, proposed regulations aim to limit the amount of hard surface area to codify CPC best practices, encourage planted areas that make up the neighborhood character of this district, and facilitate permeability. Hard surface area calculations would include buildings, other structures, driveways, pathways, pools, and other paved surfaces. Proposed rules would limit the amount of hard surface area as a percentage of the lot (Table 6). For residences in R1, R2, and R3 districts, the amount of hard surface area would be linked to the amount of permitted lot coverage or area of slope category being disturbed – the sites with the most restricted lot coverage would also have the most restricted amount of hard surface area. All other residential and non-residential uses of property in the special district would be permitted more hard surface area to accommodate the parking and intensity of use, as well as to maintain consistent requirements for development and permeability in the district. Commercial uses would be permitted to have the highest amount of hard surface area within their respective districts.

In SSRDD, the proposed rules would maintain the existing regulations for sites with DOS pertaining to hard surface area limitations for driveways, private streets, parking spaces, and loading berths per ZR Section 107-45.

Table 6: Maximum Hard Surface Area in SHNAD

Geography	Zoning District	Impacted Slope Range (%)	Max Lot Coverage (%)	Max Hard Surface Area (%)
Escarpment and other areas	R1, R2, R3	85 or greater	12.5	40
		65 – 84.9	15	45
		45 – 64.9	17.5	45
		35 – 44.9	20	50
		25 – 34.9	22.5	50
Escarpment Areas	R1, R2, R3	10 – 24.9	R1 - 25	50
			R2, R3 - 30	
		Less than 10	Underlying	50
All other areas	R1	Less than 25		55
	R2, R3			65

Lot Area and Lot Width

In SHNAD, to provide clear and predictable outcomes for sites with steep slopes and hillsides, the proposed rules would extend the requirement for larger minimum lot areas for sites with steep slope in SNAD to the proposed SHNAD Escarpment Areas to ensure the preservation of these areas. The proposal would require a minimum lot area of 12,500 square feet in R1 districts in the Escarpment Area. This proposed rule will be applicable more widely as compared to current regulations by creating a new minimum lot area requirement of 6,250 square feet in R2 and R3 districts for single-family or two-family detached residences and to 4,000 square feet for all other residences in R3 districts. Lots that have less than half of their area categorized as steep (more than 25 percent slope) would be able to instead use the standard underlying minimum lot sizes.

The SHNAD proposal would exclude private roads and associated planting strips and sidewalks from the calculation of minimum lot area to preserve neighborhood character, as is currently regulated in the existing SHPD. Currently, portions of lots that include private roads are permitted to be included when calculating minimum lot area in the existing SNAD. The proposed change could result in fewer lots thus slightly reducing the density of development. However, maximum floor area would remain the same.

Special minimum lot area and lot width regulations currently applicable in the existing SSRDD would continue to apply.

Yard Regulations

Special minimum yard regulations currently applicable in the existing SSRDD would continue to apply, including 18-foot front yards in non-contextual R2, R3, R4, and R5 districts, and special

side yards depending on the height of the residential building. ZR Sections 107-461, 107-462, 107-463, and 107-464 would continue to apply without any substantive change.

New proposed rules for SHNAD or SSRDD would modify yard regulations for the preservation of natural features as-of-right. If a lot is highly constrained due to either being in an Escarpment Area, or contains steep slopes or nearby aquatic resources, front yards could be reduced; e.g., front yards could be modified in R1 districts to 15 feet, and in R2 through R5 districts to 10 feet.

As-of-right front and rear yard reductions would not be permitted to be used together on the same lot.

The proposed modifications are aimed at providing flexibility of design in an as-of-right scenario to achieve preservation of natural features to the greatest extent possible. The proposal would not affect the amount or type of development.

Height and Setback

The currently existing four-story/50-foot height limit for buildings and other structures in the existing SSRDD would continue to apply. In SSRDD, the proposed zoning would also include a rule that would apply to lots with DOS to allow for an additional five feet in the height of buildings in R1, R2, and R3 districts.

In SHNAD, the proposed zoning would also include a rule that would apply to lots with steep slopes to allow for an additional five feet in the height of buildings in R1, R2, and R3 districts, to help offset for the reduced lot coverage permitted and allow the floor area to be accommodated more vertically.

Arterial, Staten Island Rapid Transit and Park Streets – Setbacks

Rules regarding arterial streets in the existing SSRDD would be modified as follows: within commercial and manufacturing districts, required 20 foot setbacks along arterial streets would become optional (except for heavy manufacturing uses, Use Group 16, 17, and 18), provided at least half of the front building wall is located within 15 feet of the street, is at least 50 percent transparent at the ground floor (pursuant to ZR Section 37-34), and the areas between the building wall and the street are planted except for local retail uses, entrances, and exits. The sidewalk at the front of the lot is required to be at least 10 feet wide. In addition, Arthur Kill Road would be added to the SSRDD arterial text map and would be subject to curb cut and setback restrictions.

Rules requiring buildings to be set back from the Staten Island Rapid Transit right-of-way within SSRDD would continue to apply.

Park street designations would be eliminated from SSRDD. Regulations for park streets that include planting area and curb cuts became outdated when the City required street trees to be installed along the frontage of all new developments.

Court and Open Area Rules

Currently existing special court regulations in the existing SSRDD would continue to apply. In addition, within the SSRDD, the proposed regulations would require an open area between a proposed building and DOS to codify CPC best practice and ensure a usable area for access,

maintenance, or recreation; an open area of at least 20 feet would be required at the rear of any residence and adjacent to DOS, and five feet would be required between the sides of the building and DOS.

Parking and Curb Cut Regulations

In SSRDD, the proposed regulations would allow modification to the LDGMA parking location requirement to allow parking (two spaces for a single-family home or three spaces for a two-family home) between the street wall and the street line, to provide site planning flexibility when preserving DOS. .

The proposed regulations would also modify curb cut and parking location rules for lots with steep slopes in SHNAD to allow more flexible site design and to avoid disturbance to slopes or other sensitive natural features. These modifications would retain existing SHPD rules that allow parking in the front yard for all sites and introduce a new option to place parking parallel to the street on certain sites, both of which could minimize disturbance to steep slopes and other natural features. Within SHNAD, the proposed rules would allow sensitive sites with steep slope (i.e., maximum permitted lot coverage of 20 percent or less) to locate parking spaces in the unimproved portion of a mapped street to reduce encroachment; for the provision of parking within this area, New York City Department of Transportation (NYC DOT) would need to issue a waiver of curb alignment and confirm it has no plans to widen such street to its mapped width.

In SSRDD, the proposed rules would maintain restrictions to additional curb cuts along designated arterial streets. In general, curb cuts would not be permitted for lots with access to a non-arterial street. For lots with access only to an arterial street, only one curb cut would be permitted. However, for lots with access only to an arterial street with more than 100 feet of frontage, additional curb cuts could be approved with the support from another City agency such as NYC DOT or FDNY. For lots with more than 100 feet of frontage and access to a non-arterial street, additional curb cuts could be approved by the CPC Chair with the support from another City agency such as NYC DOT, and if the CPC Chair certifies that there are no practical alternatives providing access to the non-arterial street.

In the existing SSRDD and SHPD, a commercial, community facility, or manufacturing development that provides more than 30 parking spaces requires a CPC authorization. Under the proposed rules, the CPC would review parking circulation and vehicular access and egress in relation to Plan Review Sites over 1 acre in size, and the existing CPC authorization for parking over 30 spaces would be eliminated.

The proposal would continue to maintain the inapplicability of the parking waiver (ZR Section 25-231) in SSRDD.

Special Rules for Plan Review Sites

In SHNAD and SSRDD, Plan Review Sites would be required to seek CPC review for any proposed development, enlargement, site alteration, or subdivision. Plan Review Sites with areas required to be preserved as natural habitat or Area of No Disturbance may apply for authorizations

to modify permitted residential building types or bulk regulations to better preserve natural features.

Developments that require new or extended private roads would be subject to CPC review, and private road standards and requirements may be modified pursuant to CPC authorization to preserve natural features, blend with neighborhood character, and meet special district goals.

Certain Plan Review Sites that are not subject to habitat preservation or Area of No Disturbance requirements, would be exempt from discretionary CPC review where proposed developments, minor enlargements, or site alterations do not exceed certain thresholds.

Certifications

Within SSRDD, the proposal would maintain the existing school seat certification, waterfront esplanade certification, and the certification for affordable independent residences for seniors in Subarea SH. The certification for public pedestrian ways in DOS would be applicable to Plan Review Sites and would be shifted from the full CPC to the CPC Chair. Certifications for lots with active recreational facilities would be shifted from the full CPC to the CPC Chair in conformance with DCP's policy for new certifications. A certification for development on a lot with DOS and a certification to allow fences in DOS are proposed to be eliminated because the certification process can be avoided through clear as-of-right regulations.

Certifications for future subdivisions for any non-Plan Review Sites would be eliminated in SHNAD and SSRDD.

In both SHNAD and SSRDD, a new CPC certification would be created for Plan Review Sites to certify that, on any Plan Review Site, proposed tree removal, site alteration, developments, or enlargements are not in an area that would be considered 'habitat preservation area' or an Area of No Disturbance, and no new private road or group parking facility is proposed. In SHNAD, Plan Review Sites with existing parking areas would be able to seek such Certification for minor enlargements that meet certain thresholds if not altering 'habitat preservation area' or Area of No Disturbance.

Authorizations

Where a certification is inapplicable to a Plan Review Site, any proposed development, enlargement, site alteration, or subdivision would be required to apply for CPC authorization.

Permission to proceed, if granted, would be based on to what extent the project meets standards established under the proposed regulations, including that the site plan demonstrates any significant natural features are preserved as habitat preservation area or Area of No Disturbance; vehicular and pedestrian circulation on the site is well designed and integrated with the surrounding road network; and it preserves the goals of SHNAD or SSRDD and maintains neighborhood character.

To facilitate site design that better protects natural features, the CPC could authorize clustering of development by modifying the permitted residential building types, such as allowing semi-

detached residences where normally only detached residences would be allowed, provided that the project is well integrated into the existing character of the surrounding area. The CPC would also be able to modify bulk regulations to achieve the same purpose of clustering of development to preserve natural features on the site. For projects requiring a private road or open parking areas, the CPC would review parking circulation and vehicular access and egress.

Some authorizations currently applicable in the existing SSRDD would continue to apply, including the authorization for affordable independent residences for seniors in Subarea SH and the authorization for residential uses in Subarea M. For sites in South Richmond where habitat preservation area and waterfront public access regulations overlap, the CPC would have the ability to modify waterfront public access requirements and site planning conflicts to achieve a balance between the goal for preservation and waterfront public access.

Special Permits

The special permit in SSRDD to allow buildings or other structures higher than the four-story/50-foot height limit would continue to apply in this district.

The proposal would eliminate existing special permits applicable for sites with DOS in SSRDD that currently permit adjustment of a DOS boundary, permit community facility buildings or treatment plants in DOS, and permit building encroachment into DOS. Any proposed modifications to DOS would be permitted through a zoning text amendment.

The existing special permit which allows sites with substantial amount of DOS to be counted as lot area for bulk computations would be eliminated, so that all sites with DOS may utilize bulk modifications and flexible site planning as provided within ZR Section 107-225.

LDGMA Ground Floor Use in C1, C2, C4

The proposal would clarify the intent of ZR Section 32-433, which allows for residential uses along secondary or tertiary streets in C1, C2, and C4 commercial districts of Staten Island by amending a provision in ZR Section 32-11.

Cross Access Connections

The proposed rules do not change the zoning districts for which cross access connections are required. The proposed requirements would be clarified and allow cross access to be provided as-of-right. For sites requiring CPC review for other land use actions, the location of proposed cross access connections would also be subject to review.

The current rules require a cross access connection along every lot line. To reduce redundancy of connections and to avoid creating unforeseen travel routes, the proposed rules would require only one connection to each adjacent lot fronting the same street or an intersecting street.

The proposed rules would promote more potential cross access connections where under current rules they may be waived. Considering that impediments to potential cross access connections may not be a concern for adjacent properties if those are redeveloped in the future, the proposed

rules would allow for cross access connections even with the existence of a building on the adjacent property within 50 feet, or if there is an excess of 15 percent grade change. The proposed rules would clarify a threshold for the preservation of existing trees to waive a potential cross access connection, so that a single tree would no longer necessarily impede the creation of a connection.

Because pedestrian cross access connections are more feasible than vehicular connections in some development scenarios, the proposed rules would allow for pedestrian-only connections in certain instances where vehicular connections are not feasible.

To align with the original intent of when cross access rules are applicable, the proposed applicability of the rules would be modified to retail and big-box commercial uses.

Certifications for Cross Access Connections

A CPC Chair certification to certify that a proposed potential or completed cross access connection meets rules would be eliminated, and these projects that follow the requirements could proceed to DOB. Current CPC Chair certifications to voluntarily create a connection or relocate a previous connection would be eliminated because any connection that meets rules could be completed as-of-right.

If no cross access can be created due to physical circumstances such as the existence of wetlands, steep slope, or a significant number and caliper of trees, the applicant would seek a certification from the DOB commissioner that no cross access is required. If the cross access connection is blocked by a building within the subject zoning lot or property, a Chair certification would be needed to certify that a cross access connection is not required.

Authorizations for Cross Access Connections

The existing authorization to waive or modify cross access rules due to an irregular lot or infeasible site plan would remain. Such authorization would be further amended to specifically also allow an alternative cross access connection that does not meet the rules, as long as the Commission finds that the vehicles can maneuver safely between the parking lots, and such cross access connections are adequately located so as not to impair ingress, egress, and circulation.

Analytic Framework

Consistent with *CEQR Technical Manual* guidelines, the Proposed Actions are analyzed in this RWCDS as a "generic action" because there are no known developments that are projected at this time. According to the *CEQR Technical Manual*, generic actions are programs and plans that have wide application or affect a range of future alternative policies; and for such actions, a site-specific description or analysis is not appropriate. As described in the *CEQR Technical Manual*, generic analyses are conducted using the following methodology:

- Identify *Typical Cases*: provide several descriptions similar to those in a localized action for cases that can reasonably typify the conditions and impacts of the entire proposal.

- Identify a *Range of Conditions*: A discussion of the range of conditions or situations under which the action(s) may take place, so that the full range of impacts can be identified.

Due to the broad applicability of the Proposed Actions, it is difficult to predict the sites where development would be facilitated by the Proposed Actions. In addition, the proposal is not in-and-of-itself expected to induce development where it would not have occurred absent the Proposed Actions. Although the proposal may change the proportion of sites proceeding as-of-right, the overall amount, type, and location of development within the affected area is not anticipated to change. Owing to the generic nature of this action, there are no known or projected as-of-right development sites identified as part of a RWCDS. To produce a reasonable analysis of the likely effects of the Proposed Actions, 15 representative prototypical developments have been identified to demonstrate the wide range of proposed regulations for sites that would either be able to develop as-of-right or require a Plan Review Certification in the future. These sites will assess the effect of changes to proposed regulations (including elimination of existing discretionary actions), in which the development would proceed as-of-right in the future With Action scenario. Conceptual analysis sites were identified for those sites where development would require discretionary action in the future With Action scenario. This Conceptual analysis will serve as a means of disclosing the potential impacts of the proposed discretionary actions for Plan Review Sites, which would be subject to new or different future environmental review under the Proposed Actions.

Development affected by the proposal is projected based on trends between 2006 and 2015. The development assumptions in the future with and without the proposed action mirror recent historical development patterns. In the 10 years from 2006 to 2015, there were a total of 2,717 new housing units constructed within the three special districts – 375 new units in SHPD and SNAD and 2,342 new units in SSRDD. This rate of housing development is similar to the rate outside the special districts in Staten Island, which is 4 percent. The Proposed Actions are not expected to change the rate of growth, which is controlled primarily by the supply of developable land and by the local supply of skilled professionals in the construction industry.

Prototypical Analysis Sites

To assess the possible effects of the Proposed Actions, a RWCDS was developed for the Future Without the Proposed Actions (No Action scenario), and the Future With the Proposed Actions (With Action scenario) for a 10-year period. The incremental difference between the No Action and With Action scenarios is the basis for assessing the potential environmental impacts of the Proposed Actions.

To determine the No Action and With Action scenarios, standard methodologies have been used pursuant to the *CEQR Technical Manual*. These methodologies have been used to identify the amount and location of future development, as discussed below.

The Proposed Actions would affect 18 zoning districts located within three existing special districts (SHPD, SNAD, SSRDD). As illustrated below in Table 7, the following sites were selected as prototypes for environmental analysis for No Action and With Action scenarios.

The characteristics listed below were analyzed to determine the combination of zoning district, current special district, and proposed ecological area designations to create hypothetical sites where the effects of the proposed regulations could be assessed (Prototypical Sites). These sites are not necessarily representative of a specific lot, but rather reflect prevalent conditions as a basis for analysis. These prototypical sites were then analyzed for representative recent development trends to determine the development scenario to be assessed. To assess the effect of the Proposed Actions, the characteristics considered in identifying the prototypical sites are described below:

Range of Zoning Districts and Representative Developmental Typologies

- The total number of lots included within each of the zoning districts and their corresponding prevalence within the existing special districts and proposed ecological areas in which they would occur;
- The percentage of unbuilt lots within a given zoning district and corresponding special district was used to approximate the areas where future development is most likely to occur;
- Zoning districts that permit a reasonable range of building typologies and development scenarios were selected; and
- Building permits issued by DOB between 2006 and 2015 were analyzed to estimate development prevalence by zoning district.

Lot Characteristics

- The median lot area, width, and depth of all unbuilt lots within a selected prototype zoning district and ecological area.
- Based on the existing special district and proposed ecological area of the site, characteristics of natural features were established based on a range of criteria, including visual assessment of characteristics of vacant sites within a given geography, site surveys of recent applications before DCP, and aerial and street view imagery; and
- As defined by the proposed zoning framework, lots within the Escarpment subareas are characterized by a greater presence of sensitive natural features. Therefore, the base conditions for prototypical analysis sites within these areas contain a greater number of trees and greater topographic variation.

Typologies and Characteristics

Consideration of the development typology, including size and location of buildings, layout of required parking, and front and rear yard amenity, was determined through:

- The review of recent applications before DCP within the existing special districts;

- Analysis indicating the median lot coverage, floor area, and building height throughout various neighborhoods within the existing special districts; and
- The use of aerial and street view photography.

Table 7: Prototypical Site Selection

ID	Zoning District	Current Special District	Proposed Ecological Area	Typology (1F= one-family; 2F = two family)	Lot Area (square feet)	Width (feet)	Depth (feet)
1	R3A	SHPD	Non-Escarpment	2F Detached	4,000	40	100
2	R2	SHPD	Escarpment	1F Detached	6,325	55	15
3	R1-2	SNAD	Non-Escarpment	1F Detached (enlargement)	6,000	60	100
4	R3X	SSRDD	n/a	2F Detached	5,000	50	100
5	R3X / C1-1	SSRDD	n/a	General Retail	42,000	210	200
6	R5	SHPD	Non-Escarpment	1F Attached	2,500	25	100
7	R1-1	SNAD	Escarpment	1F Detached (subdivision)	39,000	300	130
8	R2	SHPD	Non-Escarpment	1F Detached	4,500	45	100
9	R3X	SHPD	Non-Escarpment	Mixed Use (CF and R)	6,000	60	100
10	R3X/ C1-2	SHPD	Non-Escarpment	General Retail	25,000	200	125
11	R3X	SSRDD	n/a	2F Detached (subdivision)	18,750	150	100 - 150 (irregular)
12	R3X	SSRDD	n/a	2F Detached (subdivision)	15,000	150	100
13	C4-1 or C8 or M	n/a	n/a	Scenario A: Retail and Office Uses (Use Groups 6a and 6b, respectively) Scenario B: Retail Uses (Use Group 6a)	n/a	n/a	n/a
14	R1-1	SNAD	Non-Escarpment	CF (expansion)	360,000	400	800
15	R3X	SSRDD	n/a	2F Detached (subdivision)	55,000	200	400

For the purpose of this analysis, it is assumed that, in the With Action scenario, prototypes would develop to the greatest extent possible by maximizing floor area, lot coverage, and hard surface area on each site. Unless otherwise noted, this includes that the greatest degree of accessory parking and front and rear yard amenity (patios, decks, swimming pools) would be developed on each site that could occur on an as-of-right basis under the Proposed Actions.

Because the proposed special district substantially changes the methods and regulations for trees and development within areas of steep slope, to better encourage the preservation of existing trees and minimize impacts in areas of steep slope, the location of large caliper trees and other natural features is also considered in determining the location and size of the proposed buildings and yard amenities. Within the RWCDS this may result in buildings that do not fully maximize the development potential in some cases because the alteration of additional natural features may lead to a development scenario that is not aligned with development trends in the area.

For the purpose of the No Action scenario, it is assumed that each prototype would develop the largest as-of-right building permitted under the existing zoning. This provides a baseline for analysis of the effect of the Proposed Actions. However, the existing special districts include various discretionary actions that are required for the alteration or modification of natural features outside of the construction zone (15 feet in SHPD and SNAD and 8 feet in SSRDD) for each building. Therefore, amenities located outside of the construction zone which often require CPC authorization are not assumed to be granted in the as-of-right No Action scenario. Additionally, sites within the existing SNAD and SHPD may demonstrate a No Action scenario in which there is no feasible as-of-right development because any development on a lot containing only steep slope requires CPC authorization. The No Action scenario may include Chair or CPC certifications, as these actions are considered ministerial in nature. If the site meets the criteria for the certification, the analysis assumes that the certification would be granted under the No Action scenario.

Conceptual Analysis

Because the Proposed Actions would create new discretionary actions to be considered by CPC, an assessment of the potential environmental impacts that could result from these actions within the proposed special district is warranted. However, because it is not possible to predict whether a discretionary action would be pursued on any one site in the future, the RWCDS for the Proposed Actions does not include consideration of specific development that would seek these actions. Instead, a conceptual analysis will be provided to understand how the new discretionary actions could be utilized and to generically assess the potential environmental impacts that could result. However, all potential significant adverse impacts related to these future discretionary actions would be disclosed through environmental review at the time of application. These scenarios shall include, but are not limited to:

- Development on sites greater than 1 acre in lot area (residential and commercial development) that will be subject to preservation area requirements of the proposed special district if there is existing habitat on site;

- The subdivision of an existing zoning lot that will result in the creation of four or more new zoning lots in the Escarpment Area;
- Modification of bulk requirement and grading controls on a constrained site; and
- The development of a residential private road.

Analysis Year

The *CEQR Technical Manual* notes that, for some actions where the build-out depends on market conditions and other variables, the build year cannot be determined with precision. In these cases, a 10-year build year is generally considered reasonable because it captures a typical cycle of market conditions and generally represents the outer timeframe within which predictions of future development may usually be made without speculation. Therefore, an analysis year of 2030 was identified for this environmental review.

Environmental Impact Statement

The RWCDS associated with the Proposed Actions was found to have the potential for significant adverse impacts in several areas. Therefore, pursuant to the CEQR Environmental Assessment Statement (EAS) and Positive Declaration, a targeted EIS pursuant to CEQR will be prepared for the Proposed Actions. The EIS will analyze the proposed development for all technical areas of concern.

APPENDIX B

LAND USE ACTIONS

LAND USE ACTIONS

All Special Districts Land Use Actions - Existing and Proposed				
Current Special District	**Existing ZR Section**	**ZR Section Name**	**Proposal: Eliminate/ Modify/ Maintain**	**Proposed Applicability**
Special Hillsides Preservation District (SHPD)	**CERTIFICATIONS**			
	119-04	Future Subdivision	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-40	Compliance	Eliminate	
	AUTHORIZATIONS			
	119-311	Authorization of a development, enlargement or site alteration on a zoning lot or portion of a zoning lot having a steep slope or steep slope buffer	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-312	Authorization of certain uses within the SHPD	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-313	Modification of landscaping, tree preservation and tree planting requirements	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-314	Modification of lot coverage controls	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-315	Modification of height and setback regulations	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-316	Modification of grading controls	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-317	Modification of requirements for private roads and driveways	Maintain	New private road will be a Plan Review Site requiring authorization

	Existing ZR Section	ZR Section Name	Proposal: Eliminate/ Modify/ Maintain	Proposed Applicability
Special Hillsides Preservation District (SHPD)	119-318	Modification of certain bulk regulations	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	119-319	Authorization to allow site alterations, the construction of new park-related facilities and improvements to existing park-related facilities within public parks	Eliminate	DPR properties and DEP Bluebelt not subject to Special District regulations
	SPECIAL PERMITS			
	119-321	Modification of Use Regulations	Eliminate for small sites; Modify for all others.	As-of-right provisions, except for Plan Review Sites that will be an authorization
Special Natural Area District (SNAD)	**CERTIFICATIONS**			
	105-41	Certification (that no authorization or special permit is required)	Eliminate	
	105-45	Certification of Restoration Plans	Eliminate	As-of-right provisions
	105-90	Future Subdivision	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	AUTHORIZATIONS			
	105-421	Modification of topographic features on Tier I sites	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-422	Authorization of a development, enlargement or site Alteration on a Tier II zoning lot or portion of a zoning lot having a steep slope or steep slope buffer	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-423	Relocation of erratic boulders	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-424	Alteration of rock outcrops	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization

	Existing ZR Section	ZR Section Name	Proposal: Eliminate/ Modify/ Maintain	Proposed Applicability
Special Natural Area District (SNAD)	105-425	Modification of botanic environment and tree preservation and planting requirements	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-426	Alteration of aquatic features	Modify	As-of-right provisions complement DEC freshwater wetland regulations; Authorization for all aquatic features on Plan Review Sites
	105-431	Modification of lot coverage controls	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-432	Modification of yard, height and setback regulations, and parking location regulations	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-433	Modification of grading controls	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	105-434	Modification of requirements for private roads and driveways	Maintain	New private road will be a Plan Review Site requiring authorization
	105-91	Special District Designation on Public Parks	Eliminate	DPR and DEP Bluebelt not subject to Special District regulations
	SPECIAL PERMITS			
	105-441	Modification of use regulations	Modify	Authorization for Plan Review Sites
	105-442	Natural area dedicated for public use	Maintain	

	Existing ZR Section	ZR Section Name	Proposal: Eliminate/ Modify/ Maintain	Proposed Applicability
Special South Richmond Development District (SSRDD)	**CERTIFICATIONS**			
	107-02	General Provisions Development within areas D, F, or K' As indicated on the District Plan.	Eliminate	
	107-08	Future Subdivision	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	107-121	Public schools	Maintain	
	107-22	Designated Open Space	Maintain	As of right provisions, and minor text amendment to DOS text map
	107-222	Public pedestrian ways	Modify	Applicable for Plan Review Sites
	107-23	Waterfront Esplanade	Maintain	
	107-251	Special provisions for arterials	Modify	Access restrictions being modified
	107-323	Substitution of other plant materials	Maintain	
	107-467	Modifications of special yard regulations for certain zoning lots	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	AUTHORIZATIONS			
	107-62	Modifications of special yard regulations for certain zoning lots	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	107-63	Minimum Distance between Buildings	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	107-64	Removal of Trees	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	107-65	Modifications of Existing Topography	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	107-661	Modifications of permitted obstructions	Eliminate	As-of-right provisions

	Existing ZR Section	*ZR Section Name*	*Proposal: Eliminate/ Modify/ Maintain*	*Proposed Applicability*
Special South Richmond Development District (SSRDD)	107-662	Modifications of required yards of building setbacks	Eliminate	As-of-right provisions
	107-671	Uses and Bulk Permitted in Certain Areas - In Areas F and K	Eliminate	
	107-672	Uses and Bulk Permitted in Certain Areas - In Area SH	Maintain	
	107-68	Modification of Group Parking Facility and Access Regulations	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
	107-69	Residential Uses in Area M	Maintain	
	SPECIAL PERMITS			
	107-72	Qualification of Designated Open Space as Lot Area	Eliminate	As-of-right provisions
	107-73	Exceptions to Height Regulations	Maintain	
	107-74	Modifications of Permitted Use Regulations	Eliminate	Authorization for Plan Review Sites
	107-75	Modification of Underlying R1-1 District Regulations	Eliminate	Authorization for Plan Review Sites
	107-76	Boundary Adjustments in Designated Open Spaces	Eliminate	This action would be sought through a text amendment to the DOS text map
	107-77	Community Facility Buildings or Treatment Plants Permitted in Designated Open Space	Eliminate	This action would be sought through a text amendment to the DOS text map
	107-78	Other Buildings Permitted in Designated Open Space	Eliminate	This action would be sought through a text amendment to the DOS text map

APPENDIX C

PROTOTYPICAL ANALYSIS SITES

TABLE OF CONTENTS

PROTOTYPICAL ANALYSIS SITES

Prototype 1 R3A District, 40-foot x 100-foot Interior Lot
Existing – Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 40-foot x 100-foot interior lot in an R3A zoning district. In the No Action scenario, the site is located within the Special Hillsides Preservation District (SHPD); in the With Action scenario, the site is located within the Special Hillsides and Natural Area District (SHNAD), Non-Escarpment Area. These assumptions were made because they represent typical lot conditions for vacant lots containing limited change in topography and natural features found within R3A districts in the existing SHPD. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the building footprint

Existing Conditions

The existing condition demonstrates a 4,000-square foot (sf) vacant lot that contains six trees. The surface has an elevation change of 4 feet, sloping upward from the street to the rear of the site.

No Action Scenario

The No Action scenario illustrates the development of a two-story, two-family residence. The zoning lot is developed with 2,400 sf of zoning floor area—the maximum permitted within an R3A district when utilizing the permitted 20 percent floor area increase for sites in lower density growth management areas (LDGMAs) (Zoning Resolution (ZR) Section 23-142), which allow a floor area ratio (FAR) of 0.6. The building footprint is 1,200 sf and provides the maximum floor area within two stories of the same area. Additionally, the site accommodates a driveway, walkway, and patio, creating a total of 2,400 sf of hard surface area (60 percent of lot area). This scenario illustrates a residence built to the maximum side yards, providing a zero lot-line on the left-side lot line and eight feet on the right-side lot line. Cut and fill are used for constructing both the building structure and non-building amenities including the walkway and patio.

The scenario provides three off-street parking spaces, as required in the underlying zoning (ZR Section 25-22), one within a garage and two unenclosed parking pads located in the side yard. Modification of topography of more than two feet cut or fill or removal of trees greater than six-inch caliper is not proposed beyond the 15-foot construction buffer; thus, construction is allowed as-of-right.

Prior to development, the site contained 6 trees worth a total of 11 tree credits under current regulations. Current regulations require a minimum of 6 tree credits. This requirement is met through the preservation of 4 existing trees.

The building complies with all other height, yard, and setback regulations pursuant to the underlying zoning district or modifications set forth in the existing special district.

With Action Scenario

The With Action scenario illustrates the development of a two-story, two-family residence. The zoning lot is developed with 2,400 sf of zoning floor area—the maximum permitted within an R3A district when utilizing the permitted 20 percent floor area increase for sites in LDGMAs, which allow an FAR of 0.6.

The building footprint is 1,200 sf, and the site accommodates a driveway, walkway, and swimming pool, creating a total of 2,600 sf of hard surface (65 percent of lot area). Cut and fill are used for constructing both the building structure and non-building amenities including the walkway and swimming pool.

The scenario provides three off-street parking spaces, as required in the underlying zoning, one within a garage and two unenclosed parking pads in the side yard.

Prior to development, the site contained 6 trees worth a total of 13 tree credits under proposed regulations. Proposed regulations require 7 tree credits. To meet the tree planting requirements, 4 trees are preserved (3 at the rear of the site, and 1 in the front yard), taking advantage of the tree credit bonus for front yard tree preservation.

The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

Incremental Change

The incremental change represents the difference between the No Action and With Action scenarios and serves as the basis for assessing the potential environmental impacts of the Proposed Actions. As a result of the With Action scenario, there is no change to the total floor area or building footprint.

The proposed rules allow tree number 1 to be removed as-of-right to accommodate a pool in the With Action scenario. This differs from the existing rules, which require a discretionary authorization to remove any tree equal to or greater than six-inch caliper located beyond the 15-ft construction zone. The proposed rules also increase the flexibility to construct amenities by allowing minimal disturbance of critical root zones. Unlike existing rules, this allows tree number 4 to be kept for credit and produces an increment in hard surface area from 2,400 sf (60 percent) in the No Action scenario to 2,600 sf (65 percent) in the With Action scenario.

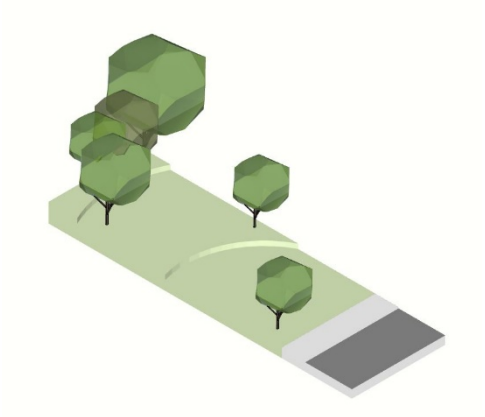
No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

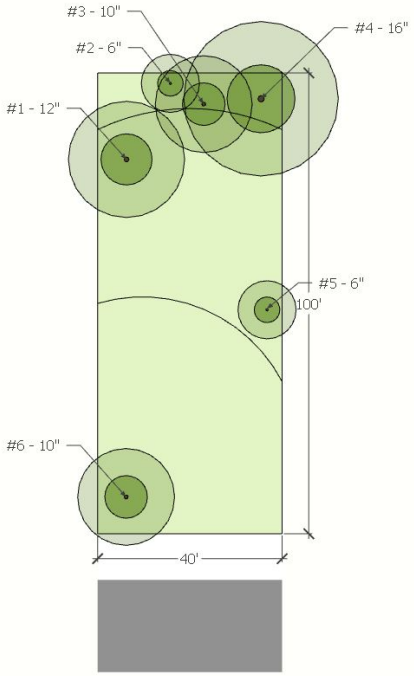
	Existing	No Action	With Action	Increment
Lot Area (square feet)	4,000 sf	4,000 sf	4,000 sf	0
Provided FAR	0.0	0.6	0.6	0
Total Floor Area	0	2,400 sf	2,400 sf	0
Number of Units	0	2 DUs	2 DUs	0
Number of Off-Street Parking Spaces	0	3 Spaces	3 Spaces	0
Lot Coverage	0	1,200 sf (30%)	1,200 sf (30%)	0
Hard Surface Area	0	2,400 sf (60%)	2,600 sf (65%)	+200 sf (+5%)
Ground Disturbance	0	2,400 sf (60%)	2,600 sf (65%)	+200 sf (+5%)
Number of Trees	6 Trees	4 Trees	4 Trees	0

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Prototype 1 *R3A District, 40-foot x 100-foot interior lot*
Existing – Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

Existing





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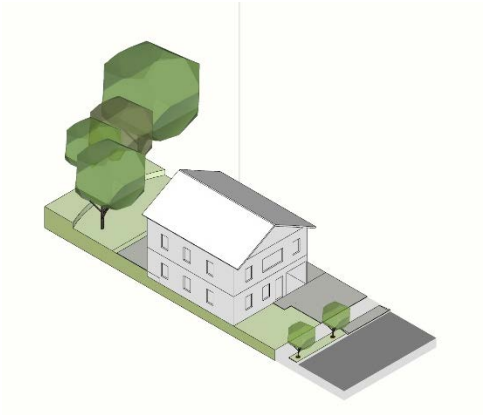

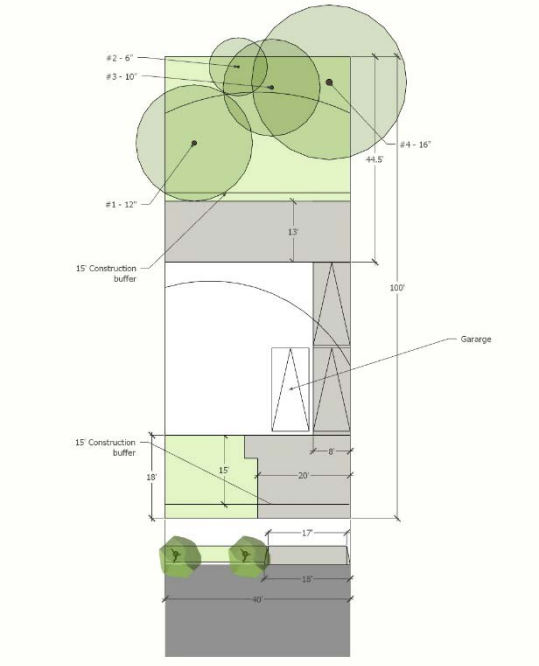

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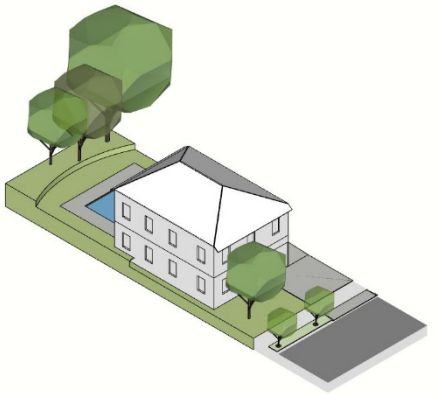
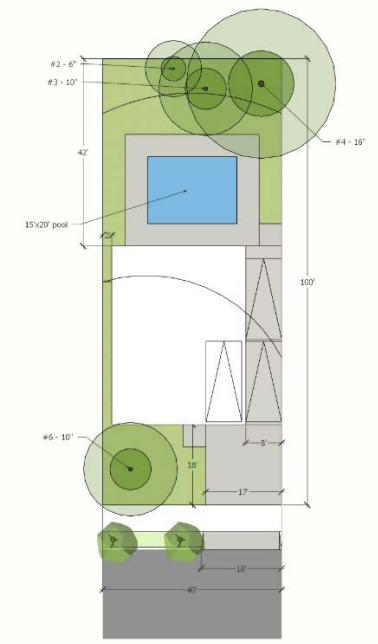




Prototype 2 R2 District, 55-foot X 115-foot Interior Lot
Existing - Special Hillsides Preservation District
Proposed - Special Hillsides and Natural Area District, Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 55-foot x 115-foot interior lot in an R2 zoning district. In the No Action scenario, the site is located within the SHPD, and in the With Action scenario the site is located within the SHNAD, Escarpment Area. These assumptions were made because they represent typical lot conditions found within R2 districts in the existing SHPD. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the building footprint
- Regulations regarding steep slope encroachment

Existing Conditions

The existing condition demonstrates a 6,325-sf vacant lot that contains 10 trees. The surface has an elevation change of 52 feet. The surface slopes downward from the street to the rear of the site, with slope of 10–24.9 percent at the street to greater than 85 percent towards the rear of the site.

No Action Scenario

Pursuant to ZR Section 119-311, development on steep slopes or steep slope buffers requires authorization from the City Planning Commission (CPC), thus no as-of-right development is permitted.

With Action Scenario

The With Action scenario illustrates the development of a two-story, single-family detached residence. The zoning lot is developed with 2,850 sf of zoning floor area—the maximum permitted within an R2 district, which allows an FAR of 0.5. The location of the building is defined by yard requirements and takes advantage of the proposed regulations allowing a front yard reduction to 10 feet in Escarpment Areas. This results in the building encroaching upon areas with a slope category of 65–84.9 percent, which therefore limits the maximum lot coverage allowed on the site to 15 percent. The building footprint is 950 sf, designed to maximize the 15 percent lot coverage. Additionally, the site accommodates a driveway, walkway, two patios, and jacuzzi, creating a total of 2,340 sf of hard surface area (38 percent of lot area) and requiring 1,819 sf of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including patios.

The scenario provides two off-street parking spaces, both in an unenclosed parking pad located in the front yard. This takes advantage of the proposed regulations allowing front yard parking for sites with a lot coverage of 20 percent or less.

Prior to development, the site contained 10 trees worth 21 tree credits under proposed regulations. The developed site contains 6 trees (11 credits): 7 trees were removed (13 credits), 3 were preserved (8 credits), and 3 were newly planted (3 credits). This meets the requirement of 11 tree credits under the proposed regulations.

The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the proposed special district.

Incremental Change

As a result of the With Action scenario, the total floor area, lot coverage, hard surface area, and ground disturbance all increase because a house could not be built on this site in the No Action scenario without a Zoning Authorization from the CPC pursuant to ZR Section 119-311.

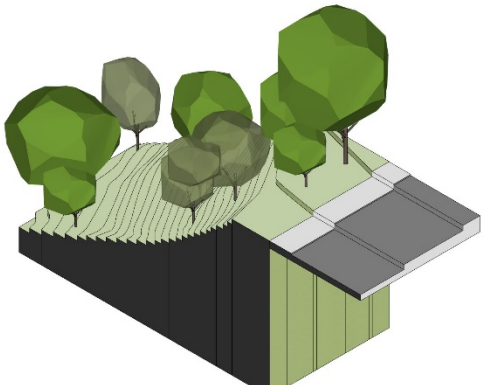
The proposed rules allow tree numbers 6 and 7 to be removed as-of-right to accommodate a patio area in the rear yard. In addition to tree removal, the proposed rules allow as-of-right site alteration within 20 feet of the building footprint. This differs from the existing rules, which require discretionary authorizations for any modification of natural features beyond the 15-foot construction zone.

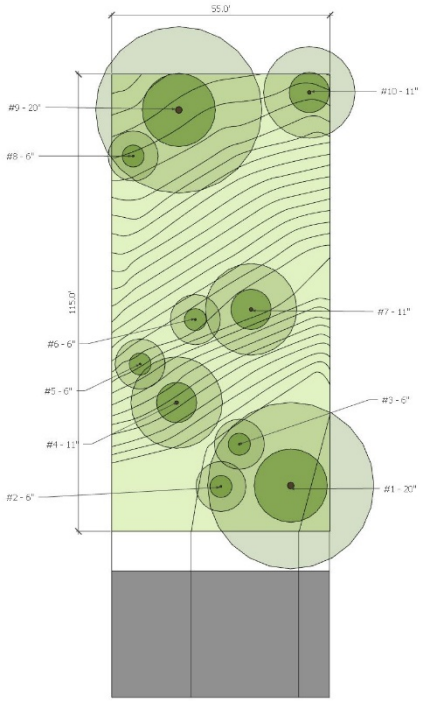
	Existing	**No Action**	**With Action**	**Increment**
Lot Area (square feet)	6,325 sf	6,325 sf	6,325 sf	0
Provided FAR	0.0	0.0	0.5	+0.5
Total Floor Area	0	0	2,850 sf	+2,850 sf
Number of Units	0	0	1 DU	+1 DU
Number of Off-Street Parking Spaces	0	0	2 Spaces	+2 Spaces
Lot Coverage	0	0	950 sf (15%)	+950 sf (+15%)
Hard Surface Area	0	0	2,340 sf (38%)	+2,340 sf (+38%)
Ground Disturbance	0	0	1,819 sf (29%)	+1,819 sf (+29%)
Number of Trees	10 Trees	10 Trees	6 Trees	-4 Trees

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Prototype 2 *R2 District, 55-foot x 115-foot interior lot*
Existing – Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Escarpment Area

Existing and No Action





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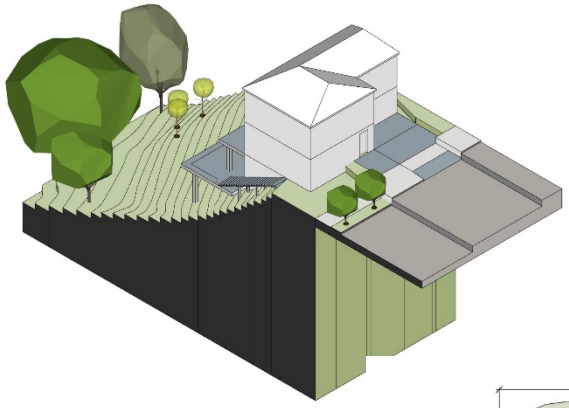

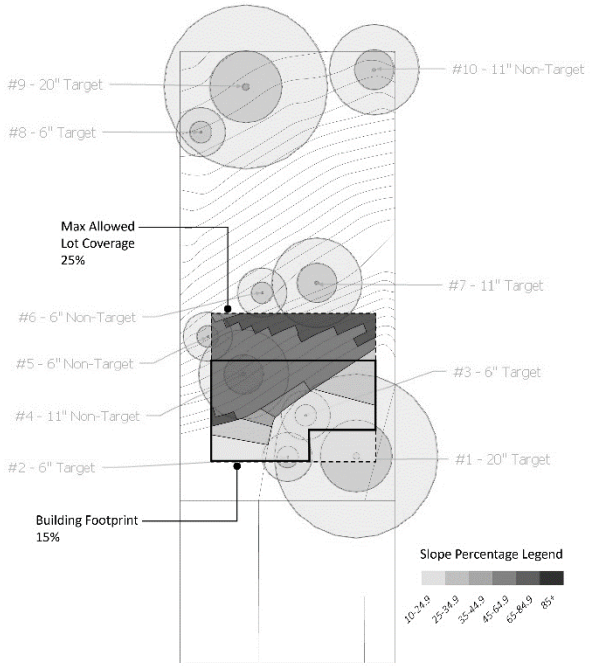

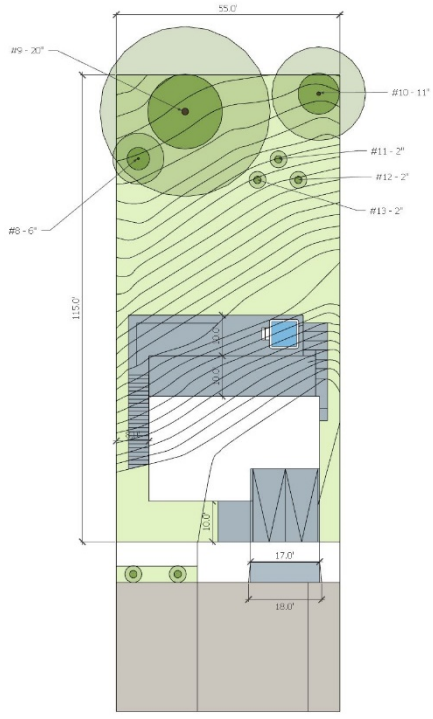

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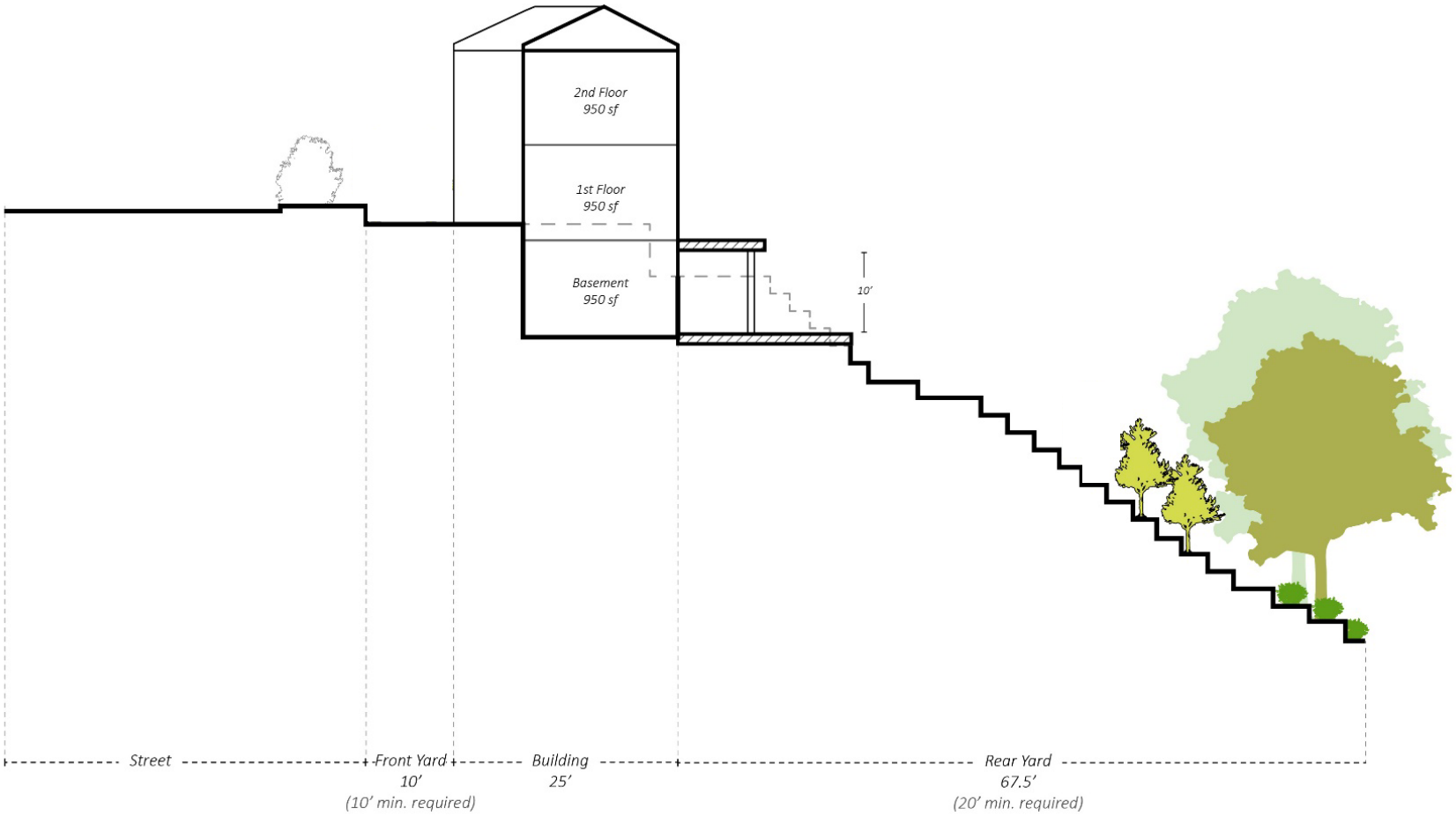

2nd Floor
950 sf
1st Floor
950 sf
Basement
950 sf
10'
Street
Front Yard
10'
(10' min. required)
Building
25'
Rear Yard
67.5'
(20' min. required)

Prototype 3 R1-2 District, 60-foot x 100-foot Interior Lot
Existing – Special Natural Area District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 60-foot x 100-foot interior lot in an R1-2 zoning district. In the No Action scenario, the site is located within the Special Natural Area District (NA-1), and in the With Action scenario the site is located within the SHNAD, Non-Escarpment Area. These assumptions were made because they represent typical lot conditions found within R1-2 districts in the existing Special Natural Area District. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the footprint of the building

Existing Conditions

The existing conditions demonstrate a 6,000-sf lot that contains four trees and a 1,165-sf one-story single-family detached residence with one off-street parking space within a garage. The surface has an elevation change of four feet – sloping downward from the street to the rear of the site.

No Action Scenario

The No Action scenario illustrates the vertical and horizontal enlargement of the existing residence into a two-story, single-family detached residence. The zoning lot is developed with 3,000 sf of zoning floor area—the maximum permitted within an R1-2 district, which allows an FAR of 0.5. The location of the enlargement is defined by yard requirements and the desire to avoid impacting Tree #2. The building footprint is 1,500 sf, which is the maximum allowed while meeting the required open space ratio of 150 percent while maxing out the allowed FAR. The site accommodates a driveway, walkway, and rear patio, creating a total of 3,000 sf of hard surface area (50 percent of lot area) and requiring 3,000 sf of ground disturbance.

The scenario provides an additional unenclosed parking space in the side yard to comply with underlying LDGMA parking requirements (ZR Section 25-22). Since the site is less than 10,000 sf and the enlargement does not exceed the lot coverage beyond 2,500 sf, this enlargement does not require special review pursuant to ZR Section 105-021 and is allowed as-of-right. Additionally, trees greater than six-inch caliper are not removed beyond the 15-ft construction zone buffer.

Prior to the enlargement, the site contained 4 trees worth a total of 7 tree credits under existing regulations. The developed site contains 3 trees (6 credits): 1 tree was removed (1 credit) and 3 were preserved (6 credits). This satisfies the 6 tree credits required under the existing regulations.

The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

With Action Scenario

The With Action scenario illustrates the vertical and horizontal enlargement of the existing residence into a two-story, single-family, detached residence. The zoning lot is developed with 3,000 sf of zoning floor area—the maximum permitted within an R1-2 district, which allows an FAR of 0.5. The size of the enlargement is defined by open space ratio requirements and the desire to avoid impacting the structural root zone of tree number 2 while also leaving enough room for a swimming pool in the backyard. The building footprint is 1,500 sf, designed to maximize the open space ratio of 150. The site accommodates a driveway, walkway, swimming pool, and a patio, creating a total of 3,283 sf of hard surface area (55 percent of lot area). Cut and fill are used for constructing both the building structure and non-building amenities including the swimming pool.

The scenario provides an additional unenclosed parking space in the side yard to comply with underlying LDGMA parking requirements (ZR Section 25-22).

Prior to the enlargement, the site contained 4 trees worth a total of 9 tree credits under proposed regulations. The developed site contains 2 trees (8 credits): 2 trees were removed (2 credits) and 2 were preserved (8 credits), taking advantage of the bonus for the preservation of front yard trees. This meets the 6 tree credits required under the proposed regulations.

The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

Incremental Change

As a result of the With Action scenario, there is no change to the total floor area or lot coverage.

The proposed rules allow minor disturbances to the critical root zone of the tree beyond the structural root zone, unlike the existing rules. This flexibility in the proposed rules favor preservation of trees as compared to existing rules where any disturbance to critical root zone of a tree that is outside the 15-foot construction buffer may necessitate tree removal by seeking an authorization from CPC. Simultaneously, the proposed change facilitates the as-of-right construction of site amenities outside of the 15-foot construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

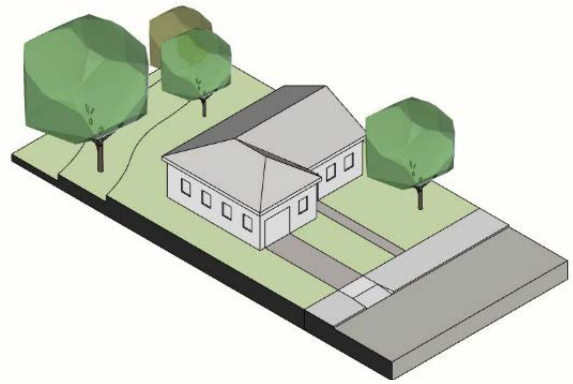
No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

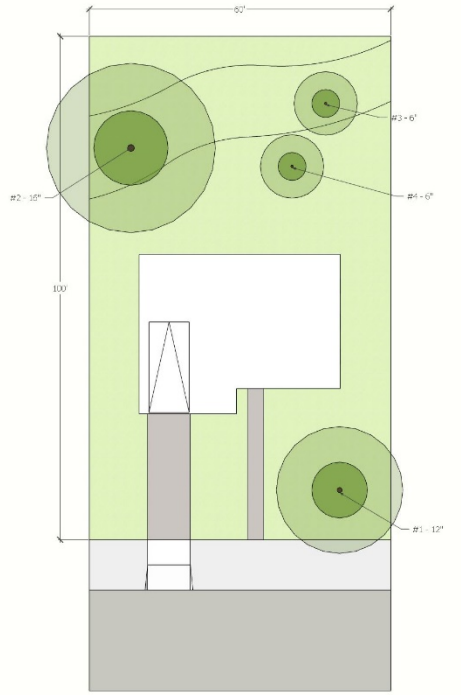
	Existing	No Action	With Action	Increment
Lot Area (square feet)	6,000 sf	6,000 sf	6,000 sf	0
Provided FAR	0.19	0.5	0.5	0
Total Floor Area	1,165 sf	3,000 sf	3,000 sf	0
Number of Units	1 DU	1 DU	1 DU	0
Number of Off-Street Parking Spaces	2 Spaces	2 Spaces	2 Spaces	0
Lot Coverage	1,165 sf (19%)	1,500 sf (25%)	1,500 sf (25%)	0
Hard Surface Area	1,475 sf (25%)	3,000 sf (50%)	3,283 sf (55%)	+283 sf (+5%)
Ground Disturbance	1,475 sf (25%)	3,000 sf (50%)	3,283 sf (55%)	+283 sf (+5%)
Number of Trees	4 Trees	3 Trees	2 Trees	-1 Tree

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Prototype 3 *R1-2 District, 60-foot x 100-foot interior lot*
Existing – Special Natural Area District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

Existing





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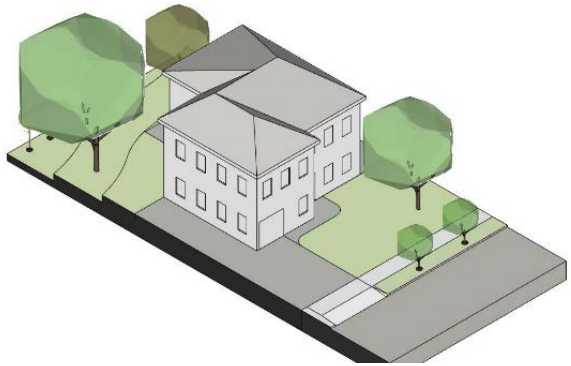

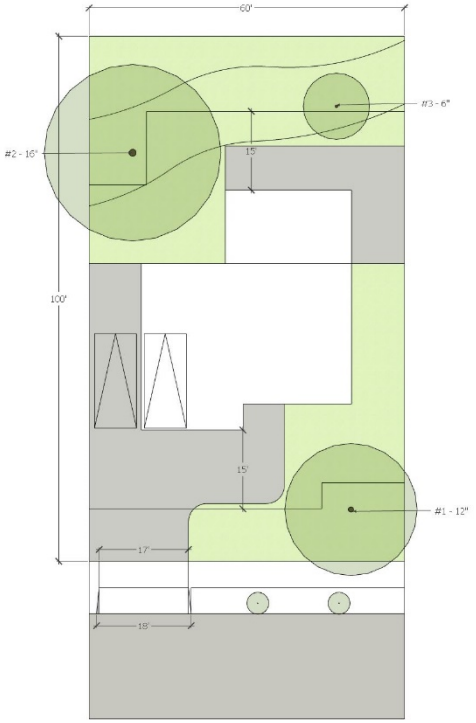

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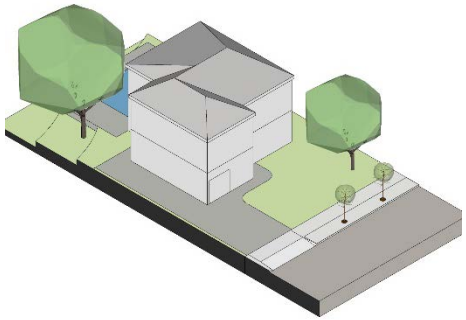

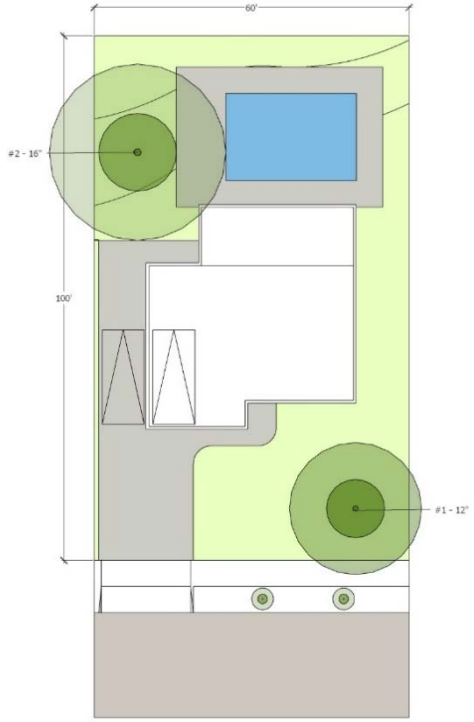

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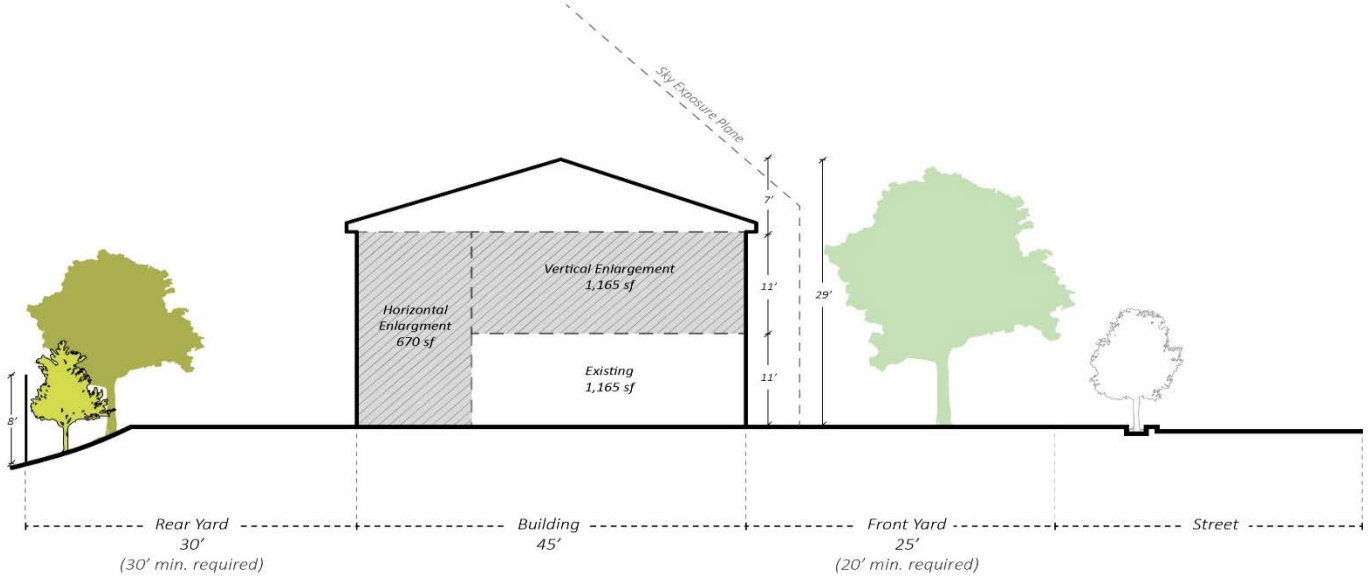

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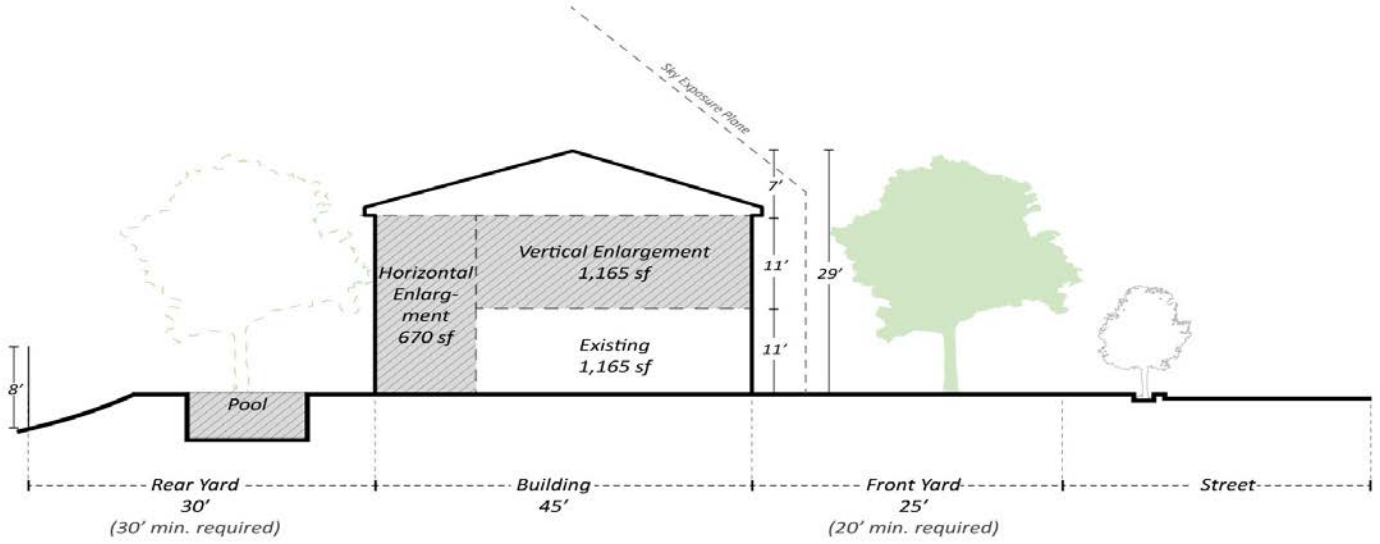


Prototype 4 R3X District, 50-foot x 100-foot Interior Lot
Existing - Special South Richmond Development District
Proposed – Special South Richmond Development District

This prototype, as shown in the illustrations below, uses a generic 50-foot x 100-foot interior lot in an R3X zoning district. These assumptions were made because they represent typical lot conditions found within R3X districts in the existing Special South Richmond Development District. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- As-of-right modification to natural features outside of the footprint of the building

Existing Conditions

The existing condition demonstrates a 5,000 sf vacant lot that contains 6 trees (11 credits). The surface has an elevation change of two feet, sloping upward from the street to the rear of the site.

No Action Scenario

The No Action scenario illustrates the development of a two-story, two-family, detached residence. The zoning lot is developed with 3,000 sf of floor area—the maximum permitted within an R3X district when utilizing the permitted 20 percent floor area increase for sites in LDGMAs. The building footprint is 1,500 sf and is designed to maximize lot coverage.

Additionally, the site accommodates a driveway, walkway, patio area, and swimming pool. With the exception of the swimming pool foundation, neither modification of topography more than two feet, nor removal of trees greater than six-inch caliper, is proposed beyond the 8-foot construction buffer. Thus, this development is allowed as-of-right.

The scenario provides three off-street parking spaces, one in a garage within the building and two in unenclosed parking pads located in the side lot ribbon.

Prior to development, the site contained 6 trees worth a total of 11 tree credits under existing regulations. The developed site contains 3 trees (5 credits): 5 trees were removed (8 credits), 1 was preserved in the rear of the site (3 credits), and 2 were newly planted (2 credits). This meets the requirement of 5 tree credits under the existing regulations. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

With Action Scenario

The With Action scenario illustrates the development of a two-story, two-family, detached residence. The zoning lot is developed with 3,000 sf of floor area—the maximum permitted within an R3X district when utilizing the permitted 20 percent floor area increase for sites in lower density growth management areas. The building footprint is 1,500 sf. Additionally, the site accommodates a driveway, walkway, swimming pool, and patio area.

The scenario provides three off-street parking spaces, as required by the underlying zoning, one within a garage and two in unenclosed parking pads located in the side yard ribbon.

Prior to development, the site contained 6 trees worth 14 tree credits under proposed regulations. The developed site contains 2 trees (5 credits): 5 trees were removed (10 credits), 1 was preserved (4 credits), and 1 was newly planted (1 credit). This meets the requirement of 5 tree credits under the proposed regulations. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

Incremental Change

As a result of the With Action scenario, there is no change to the total floor area.

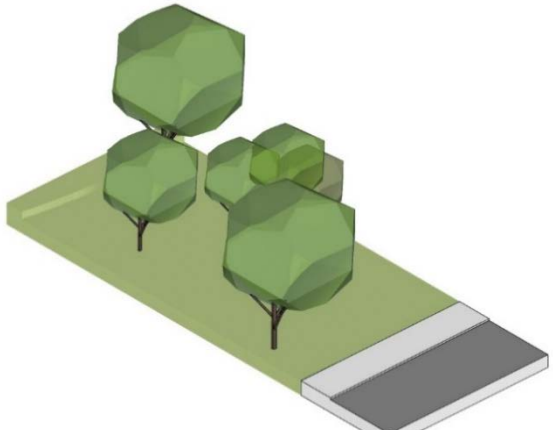
In total, the With Action scenario has one less tree than the No Action scenario; this is due to the new tree credit system that values old growth trees more in the proposed regulations. No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

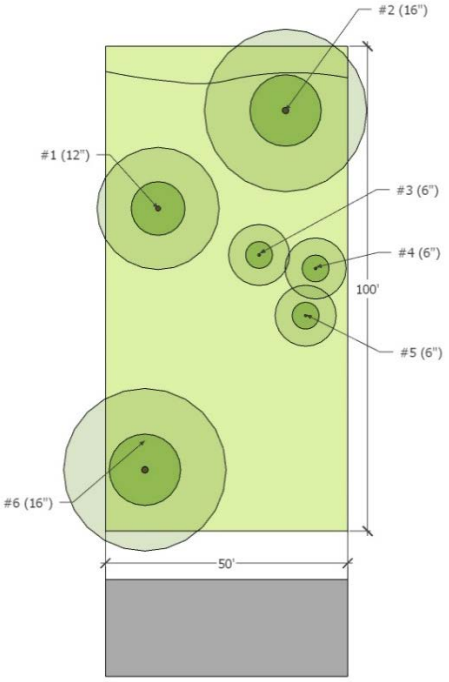
	Existing	No Action	With Action	Increment
Lot Area (square feet)	5,000 sf	5,000 sf	5,000 sf	0
Provided FAR	0	0.6	0.6	0
Building Area	0	3,000 sf	3,000 sf	0
Number of Units	0	2 DU	2 DU	0
Number of Off-Street Parking Spaces	0	3 Spaces	3 Spaces	0
Lot Coverage	0	1,500 sf (30%)	1,500 sf (30%)	0
Ground Disturbance	0	3,733 sf (76%)	3,733 sf (75%)	+64 sf (+0.5%)
Number of Trees	6 Trees	3 Trees	2 Trees	-1 Tree

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit
Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

Prototype 4 *R3X District, 50-foot x 100-foot interior lot*
Existing – Special South Richmond Development District
Proposed – Special South Richmond Development District

Existing





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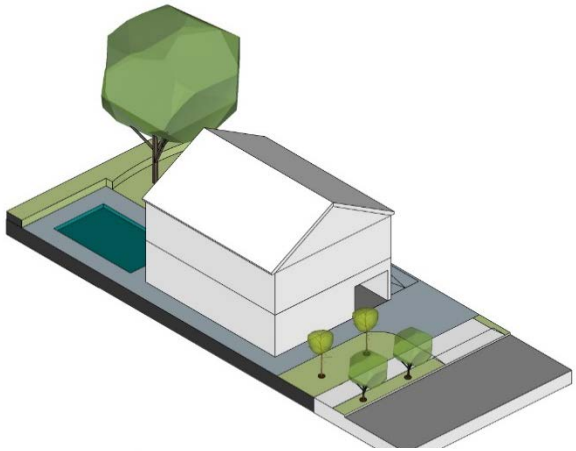
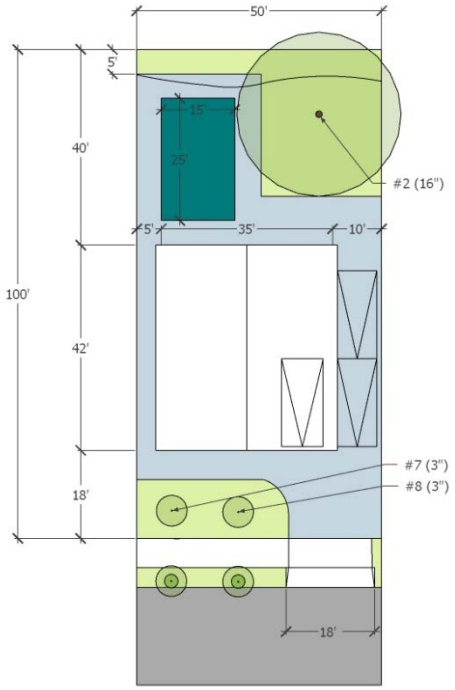
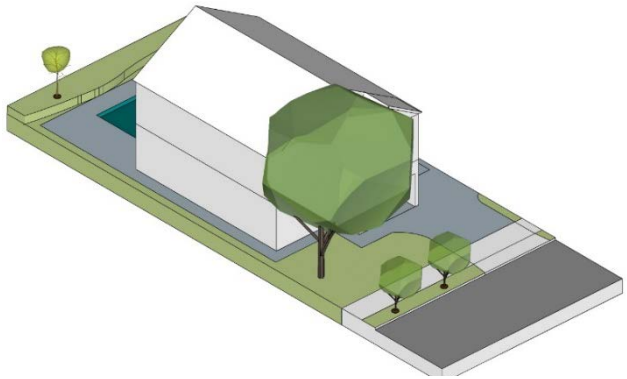
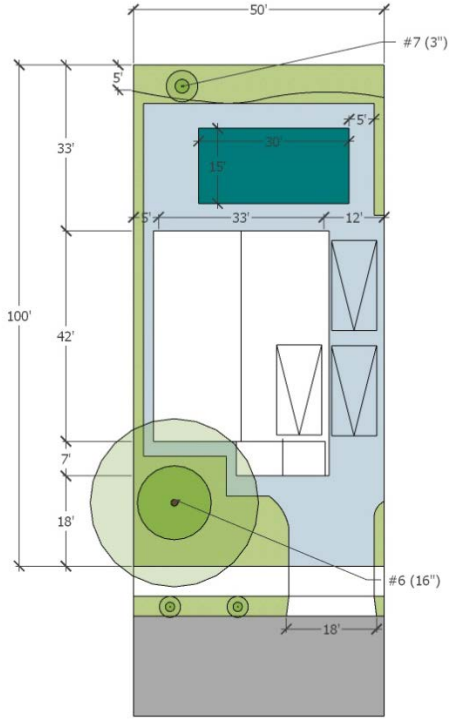




With Action





Prototype 5 R3X District with C1-1 Overlay, 210-foot x 200-foot Corner Lot
Existing – Special South Richmond Development District
Proposed – Special South Richmond Development District

This prototype, as shown in the illustrations below, uses a generic 210-foot x 200-foot corner lot in an R3X zoning district with a C1-1 overlay along both an arterial and a non-arterial street. These assumptions were made because they represent typical lot conditions found within R3X districts with commercial overlays in the existing Special South Richmond Development District. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- As-of-right modification to natural features outside of the footprint of the building
- Proposed removal of parking authorization over 30 spaces

Existing Conditions

The existing condition demonstrates a 42,000 sf vacant lot that contains 17 trees (33 credits). The surface has an elevation change of six feet, sloping upward from the street intersection to the opposite corner of the site. The site fronts two roads, one of which is an arterial.

No Action Scenario

The No Action scenario illustrates the development of a one-story commercial building with general retail. As the maximum number of parking spaces allowed as-of-right is 30, and one parking space is required for every 150 sf of retail space, the buildable floor area is limited to 4,500 sf without requiring authorization by the CPC. The building is one story and located in the southern portion of the site to preserve the cluster of existing trees located in the northern portion of the lot. This avoids the required planting of new trees and allows for the potential future expansion of the commercial use. The site accommodates a parking area with 30 spaces, a pedestrian apron along the storefront façade, and an area behind the building for loading and refuse. A single 24-foot curb cut is located more than 50 feet away from the street intersection, fronting the non-arterial road, in compliance with existing regulations governing curb cut location. Neither modification of topography more than two feet, nor removal of trees greater than six-inch caliper, is proposed beyond the 8-foot construction buffer or beyond the required parking area. Thus, this development is allowed as-of-right.

Prior to development, the site contained 17 trees (33 credits), 11 of which were preserved (23 credits) and 6 of which were removed (14 credits). The developed site adds 4 newly planted trees (4 credits), which produces a total of 21 trees (27 credits). This complies with existing planting regulations that require 1 tree per every 4 parking spaces and also requires that 50 percent of required trees be located in planting islands. Under existing regulations, the 30 proposed parking spaces require 8 trees, with at least 4 trees located in planting islands. Although the 11 preserved trees satisfied the minimum planting requirement of 1 tree per 4 parking spaces, 4 newly planting trees are required within planting islands to comply with the 50 percent planting island provision of ZR Section 107-483. The building complies with all other height, yard and screening regulations pursuant to the underlying district or modifications set forth in the existing special district. The

scenario meets parking and landscaping requirements pursuant to ZR Sections 37-90 and 107-48, as well as access requirements under the Fire Code.

With Action Scenario

The With Action scenario illustrates the development of a single-story commercial building allowed as-of-right on a lot smaller than an acre. The zoning lot is developed with 10,692 sf of floor area, which is the result of maximizing floor area while providing the required number of parking spaces on site. The site accommodates a parking area for 72 parking spaces and an area along the side of the building for loading and refuse.

Prior to development, the site contained 17 trees (37 credits) under proposed regulations. The developed site contains 18 trees (22 credits): 16 trees were removed (32 credits), one was preserved (5 credits), and 17 were newly planted (17 credits). This meets the requirement of 18 trees (1 tree per every 4 parking spaces) under the proposed regulations.

Since the site fronts both an arterial and a non-arterial road, the curb cut was provided on the latter to make construction as-of-right under the proposed regulations. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district as well as access requirements under the Fire Code. The scenario meets parking and landscaping requirements pursuant to ZR Sections 37-90 and 107-48.

Incremental Change

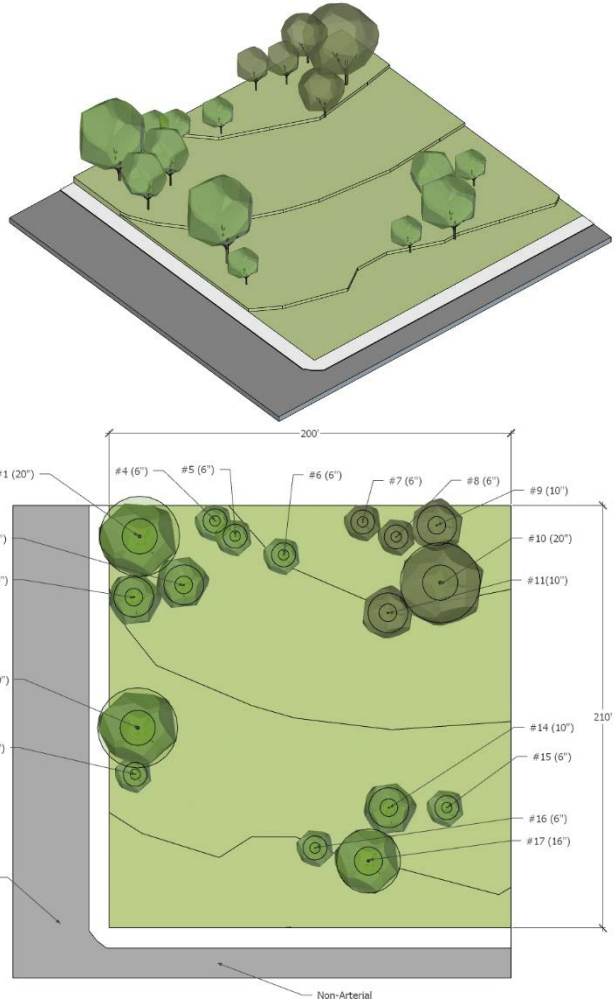
As a result of the With Action scenario the total floor area increases by 6,192 sf (less than 15 percent of lot area) and the total number of parking spaces increases by 42. The With Action scenario has 3 more trees than the No Action scenario.

	Existing	No Action	With Action	Increment
Lot Area (square feet)	42,000 sf	42,000 sf	42,000 sf	0
Provided FAR	0	0.11	0.25	+0.14
Building Area	0	4,500 sf	10,692 sf	+6,192 sf
Number of Off-Street Parking Spaces	0	30 Spaces	72 Spaces	+42 Spaces
Lot Coverage	0	4,500 sf (11%)	10,692 (25%)	+6,192 sf (+15%)
Ground Disturbance	0	15,654 sf (37%)	37,346 sf (89%)	+21,692 sf (+52%)
Number of Trees	17 Trees	15 Trees	18 Trees	+3 Trees

Notes: FAR = floor area ratio; sf = square feet
Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

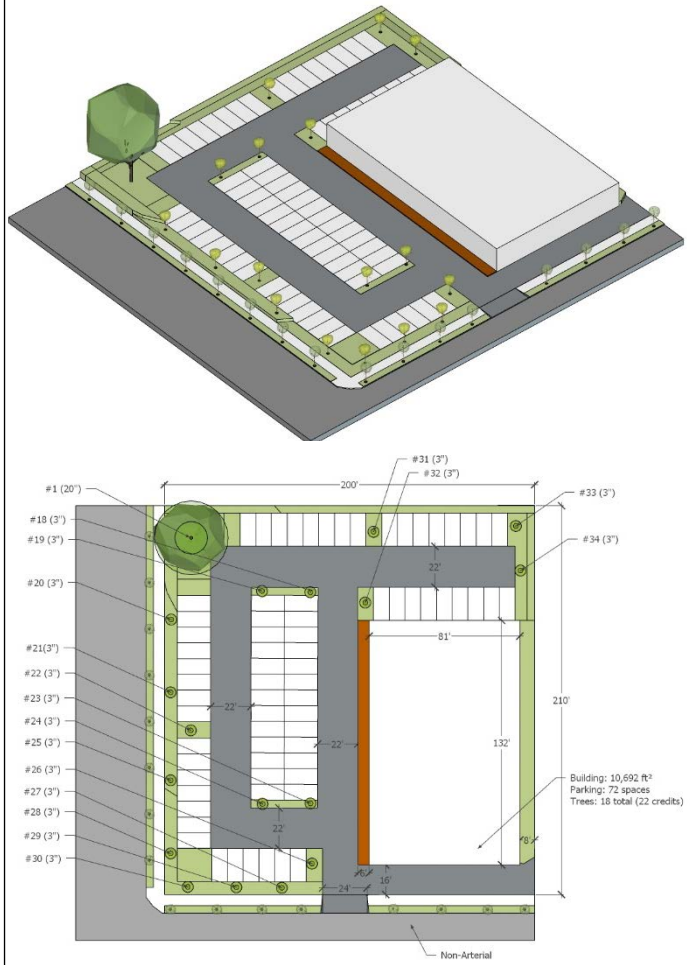
Prototype 5 *R3X District with C1-1 overlay, 210-foot x 200-foot corner lot*
Existing – Special South Richmond Development District
Proposed – Special South Richmond Development District

Existing



No Action

With Action



Prototype 6 R5 District, 25-foot X 100-foot interior lot
Existing – Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 25-foot x 100-foot interior lot in an R5 zoning district. In the No Action scenario, the site is located within SHPD, and in the With Action scenario the site is located within SHNAD outside of the Escarpment Area. These assumptions were made because they represent typical lot conditions found within R5 districts in the existing SHPD. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations

Existing Conditions

The existing condition demonstrates a 2,500 sf vacant lot that contains four trees. The surface has an elevation change of 4 feet, sloping upward from the street to the rear of the site.

No Action Scenario

The No Action scenario illustrates the development of a three-story, single-family, attached residence. The zoning lot is developed with 3,225 sf of gross floor area and 3,125 sf of zoning floor area—the maximum permitted within an R5 district, which allows an FAR of 1.25 (100 sf of the parking area is exempt from FAR calculations per ZR Section 12-10). The location of the building is defined by yard requirements and the underlying regulations (ZR Section 23-45) requiring that off-street parking be 18 feet from the street line. The building footprint is governed by yards and totals 1,300 sf (52 percent). Additionally, the site accommodates a driveway, walkway, and rear patio, creating a total of 1,990 sf of hard surface area (80 percent of lot area). Cut and fill are used for constructing both the building structure and non-building amenities including the patio.

The scenario provides two off-street parking spaces, both in a garage within the building. Modification of topography of more than two feet cut or fill or removal of trees greater than six-inch caliper is not proposed beyond the 15-foot construction buffer. Thus, construction is allowed as-of-right.

Prior to development, the site contained 4 trees worth a total of 7 tree credits under existing regulations. The developed site contains 4 trees (4 credits): 4 trees were removed (7 credits) and 4 trees were newly planted (4 credits). This meets the requirement of 4 tree credits under the existing regulations. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

With Action Scenario

The With Action scenario illustrates the development of a three-story, single-family, attached residence. The zoning lot is developed with 3,225 sf of gross floor area and 3,125 sf of zoning floor area—the maximum permitted within an R5 district, which allows an FAR of 1.25 (100 sf of the parking area is exempt from FAR calculations per ZR Section 12-10). The location of the building is defined by yard requirements and the underlying regulations requiring that off-street parking be 18 feet from the street line. The building footprint is governed by yards and totals 1,300 sf (52 percent). Additionally, the site accommodates a driveway, walkway, and a patio, creating a total of 1,875 sf of hard surface area (75 percent of lot area), which is the maximum amount permitted for this site in the proposed text. Cut and fill are used for constructing both the building structure and non-building amenities including patios.

The scenario provides two off-street parking spaces, as required by the underlying zoning, both in a garage within the building.

Prior to development, the site contained 4 trees worth 9 tree credits in the proposed tree credit system. The developed site contains 4 trees (5 credits): 3 trees were removed (6 credits), 1 tree was preserved (3 credits), and 2 trees were newly planted (2 credits). This meets the requirement of 5 tree credits under proposed regulations. The building complies with all other height, yard, and setback regulations pursuant to the underlying district or modifications set forth in the existing special district. Thus, construction is allowed as-of-right.

Incremental Change

As a result of the With Action scenario, there is no change to the total floor area or lot coverage. Hard surface area decreases from 80 to 75 percent.

The proposed rules allow minor disturbances to the critical root zone of an existing tree as long as the structural root zone is not disturbed. This flexibility in the proposed rules favor preservation of trees compared to existing rules that do not allow credit for disturbance to the critical root zone of a tree.

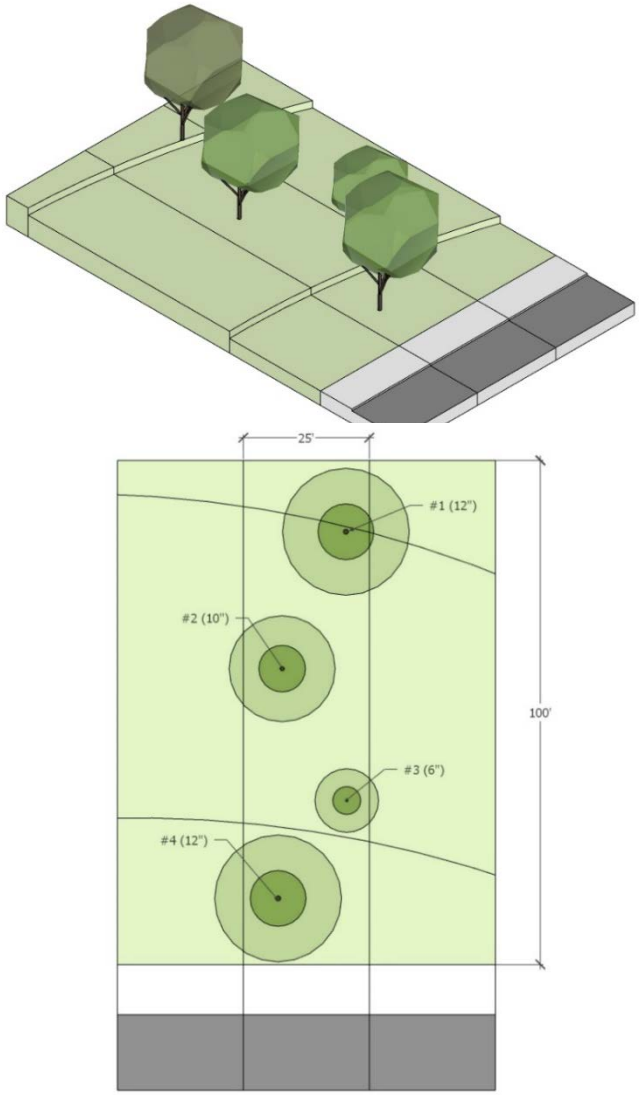
No additional number of trees, stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

	Existing	No Action	With Action	Increment
Lot Area (square feet)	2,500 sf	2,500 sf	2,500 sf	0
Provided FAR	0.0	1.25	1.25	0
Gross Floor Area	0	3,225 sf	3,225 sf	0
Zoning Floor Area	0	3,125 sf	3,125 sf	0
Number of Units	0	1 DU	1 DU	0
Number of Off-Street Parking Spaces	0	2 Spaces	2 Spaces	0
Lot Coverage	0	1,300 sf (52%)	1,300 sf (52%)	0
Hard Surface Area	0	1,990 sf (80%)	1,875 sf (75%)	-115 sf (-5%)
Ground Disturbance	0	1,990 sf (80%)	1,875 (75%)	-115 sf (-5%)
Number of Trees	4 Trees	4 Trees	3 Trees	-1 Tree

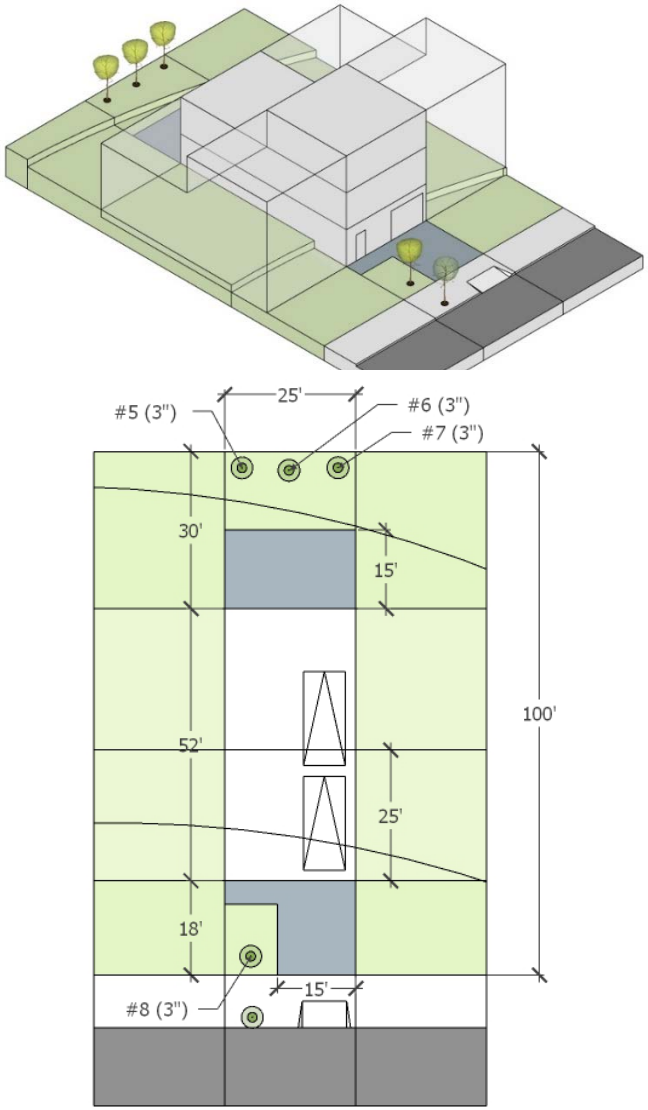
Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Prototype 6 *R5 District, 25-foot x 10-foot interior lot*
Existing - Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

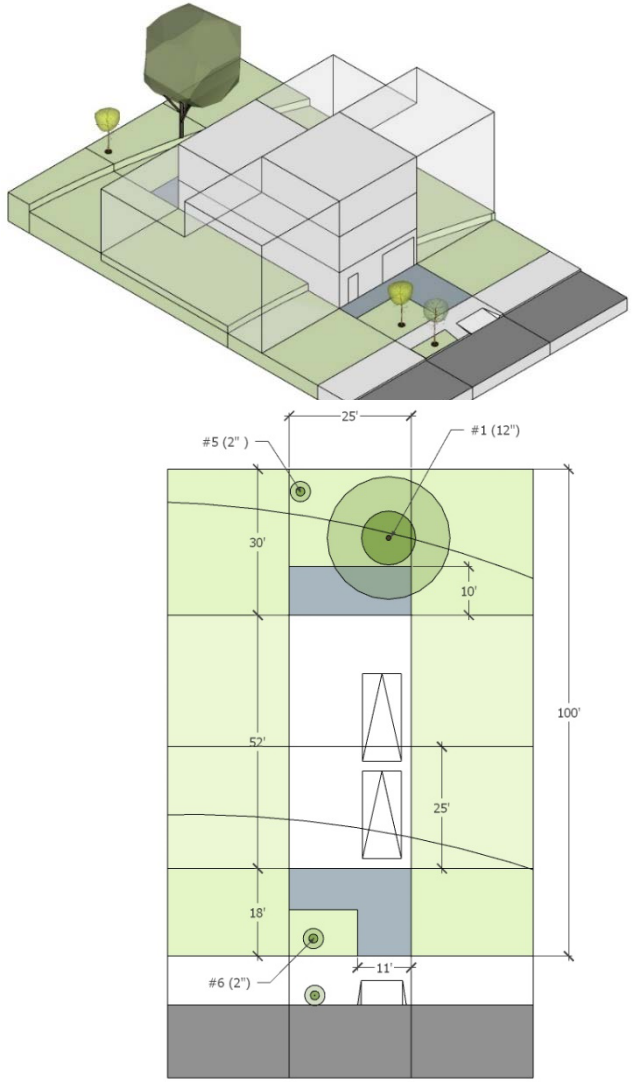
Existing



No Action



With Action



Prototype 7 R1-1 District, 300-foot X 130-foot Interior Lot
Existing – Special Natural Area District
Proposed – Special Hillsides and Natural Area District, Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 300-foot x 130-foot interior lot in an R1-1 zoning district. In the No Action scenario, the site is located within the Special Natural Area District (NA-1); in the With Action scenario, the site is located within the Escarpment Area subdistrict of SHNAD. This prototype represents typical lot conditions found in R1-1 districts that fall within the proposed SHNAD that are rich in natural features, including steep slopes and botanic resources. The illustration depicts a scenario in which the lot is subdivided into three 100-foot x 130-foot lots and developed separately. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the footprint of the building
- Regulations regarding steep slope encroachment
- Lot coverage exemptions for certain garages to preserve natural features

Existing Conditions

The existing condition demonstrates a 39,000 sf vacant lot that contains 47 trees. The surface has an elevation change of 34 feet, sloping steeply upward from the street to the rear of the site. The slopes range from under 25 to more than 65 percent.

No Action Scenario

Pursuant to ZR Section 105-42, development on steep slopes or within steep slope buffers require authorization from CPC, thus no as-of-right development is permitted in the No Action scenario.

With Action Scenario

This scenario illustrates a subdivision of the site into three 100-foot x 130-foot lots that each measure 13,000 sf and satisfy the minimum lot area requirement of 12,500 for proposed zoning lots within the Escarpment Area.

Lot 1

The With Action scenario illustrates the development of a four-story, single-family detached residence. The zoning lot is developed with 6,500 sf of both gross and zoning floor area—the maximum permitted zoning floor area allowed within an R1-1 district, which allows an FAR of 0.5. The location of the building is regulated by yard requirements and designed to minimize disturbance of natural features. This results in the building encroaching upon areas with a slope category of 45 to 65 percent, which limits the maximum lot coverage allowed on site to 17.5 percent. The bulk is designed to maximize this lot coverage and is further governed by the sky exposure plane.

Additionally, the site accommodates a driveway, walkways, and series of tiered wooden decks, creating a total of 5,132 sf of hard surface area (39 percent of lot area) and requiring 5,132 sf of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the driveway and walkways. Encroachments are not proposed more than 20 feet from the building by anything other than the driveway and walkway because such area is designated as an area of no disturbance.

The scenario provides two off-street parking spaces, as required by the underlying zoning (ZR Section 25-22), both of which are within a garage on the ground floor.

Prior to development, the site contained 17 trees worth 48 tree credits under proposed regulations. The developed site contains 7 trees (25 credits), which satisfies the 51 percent requirement of previously existing trees: 10 trees were removed (26 credits), 7 were preserved (25 credits) and none were newly planted. This meets the requirement of 25 trees credits under the proposed regulations. Trees #38, 39, and 40 were each given one bonus credit utilizing proposed rules that incentivize tree preservation within proposed front yards. A portion of the rear wood deck was reduced to avoid the structural root zone of tree #1. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the proposed special district.

Lot 2

The With Action scenario illustrates the development of a three-story, single-family, detached residence. The development uses a ground floor exemption for R1-1 lots to develop 6,900 sf of gross floor area and 5,200 sf of zoning floor area; this results in 0.4 FAR within an R1-1 district, which allows a maximum FAR of 0.5. The location of the building is defined by yard requirements and the need to avoid areas greater than 45 percent slope. The steepest slope category encroached upon by the building is 35 to 45 percent, which limits the maximum lot coverage allowed on site to 20 percent; however, the development includes 23.1 percent lot coverage because it is able to use a lot coverage exemption further explained below. The bulk is designed to maximize the lot coverage and is further governed by the sky exposure plane.

Additionally, the site accommodates a driveway, attached garage, walkway, and rear patio with retaining walls, creating a total of 4,921 sf of hard surface area (38 percent of lot area) and requiring of 4,921 sf of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the driveway, walkway, and rear patio with retaining walls. The retaining walls comply with proposed rules that allow an average height of six feet and a maximum overall height of eight feet for retaining walls beyond 10 feet of the street line. The walls also comply with planting regulations that require 4 feet of planting in between walls that have a combined height greater than 6 feet. Encroachments are not proposed more than 20 feet from the building by anything other than the driveway and walkway because such area is designated as an area of no disturbance.

The scenario provides two off-street parking spaces, as required by the underlying zoning, both of which are within a garage on the ground floor. The garage takes advantage of proposed regulations that exempt such area from lot coverage calculations on qualifying lots as long as such space is less than 10 feet in height and located entirely within 25 feet of the street line. A qualifying lot is a zoning lot where the maximum permitted lot coverage has been limited to 20 percent or less.

Prior to development, the site contained 15 trees worth 28 tree credits under proposed regulations. The developed site contains 4 trees (16 credits), which satisfies the 51 percent requirement of previously existing trees: 11 trees were removed (14 credits), 4 were preserved (16 credits) and none were newly planted. This meets the requirement of 15 tree credits under the proposed regulations. Trees #27 and 67 were each given one bonus credit utilizing proposed rules that incentive tree preservation within proposed front yards. The depth of the building footprint and rear patio with retaining walls were considered to avoid disturbing the structural root zone of tree #8. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the proposed special district.

Lot 3

The With Action scenario illustrates the development of a three-story, single-family, detached residence. The development uses a ground floor exemption to develop 7,063 sf of gross floor area and 5,808 sf of zoning floor area; this results in 0.45 FAR within an R1-1 district, which allows a maximum FAR of 0.5. The location of the building is defined by yard requirements, the need to preserve tree #23 (11 credits), and the need to avoid areas in the 35 to 45 percent slope category and above. The steepest slope category encroached upon by the building is 25 to 35 percent, which limits the maximum lot coverage allowed on site to 22.5 percent. The bulk is designed to maximize the lot coverage and is further governed by the sky exposure plane.

The site accommodates a driveway, walkway, a rear patio with retaining walls, and a wooden deck, creating a total of 5,697 sf of hard surface area (44 percent of lot area) and requiring of 5,697 sf of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the driveway, walkway, rear patio with retaining walls, and wooden deck. Encroachments not proposed more than 20 feet from the building by anything other than the driveway and walkway because such area is designated as an area of no disturbance.

The scenario provides two off-street parking spaces, as required by the underlying zoning, both within a garage on the ground floor. The driveway avoids the structural root zone of tree #32 and fulfils underlying driveway slope (11 percent) and proposed retaining wall regulations.

Prior to development, the site contained 15 trees worth 31 tree credits under proposed regulations. The developed site contains 3 trees (16 credits), which satisfies the 51 percent requirement of previously existing trees: 12 trees were removed (15 credits), 3 were preserved (16 credits) and none were newly planted. This meets the requirement of 16 tree credits under the proposed regulations. The preservation of tree #23 was considered in determining the location and size of yard the driveway and wooden deck. Since the building footprint, driveway, and wooden deck disturb more than 10 percent of the critical root zone of Tree #23, it is possible that construction could harm portions of the roots and jeopardize the health of the tree. Under proposed rules, any tree with a critical root zone disturbed between 10 to 30 percent may only be preserved for credit if a tree protection plan is submitted to ensure the health of said tree. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the proposed special district.

Incremental Change

As a result of the With Action scenario, the total floor area, lot coverage, hard surface area, and ground disturbance all increase because development on this site in the No Action scenario requires a Zoning Authorization pursuant to ZR Section 105-42 and is not permitted as-of-right.

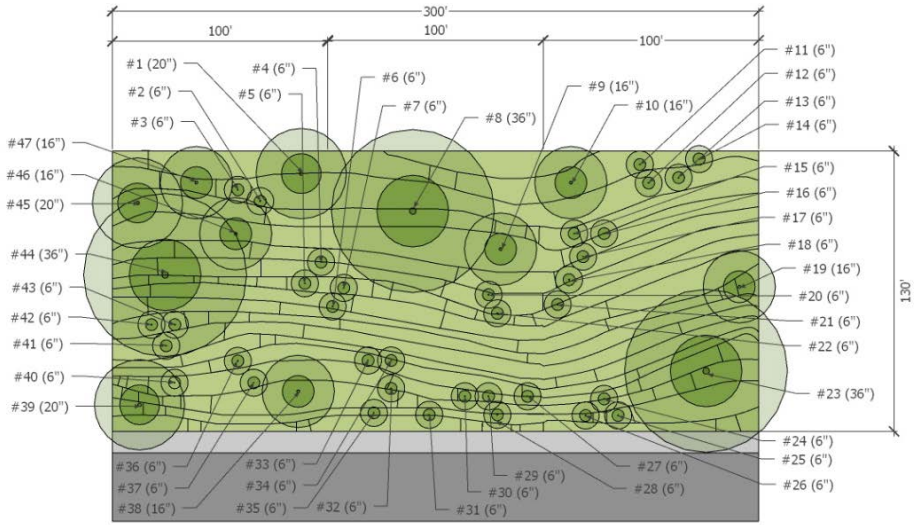
Unlike existing rules, the proposed rules allow for the removal of trees beyond the construction buffer as well as minor disturbances to critical root zones within the construction buffer. This flexibility favors tree preservation as compared to existing rules where any disturbance to the critical root zone of a tree that is within the construction buffer may necessitate tree removal by seeking a CPC authorization. Simultaneously, the proposed change facilitates the preservation of steep slope areas and limits the extent of site disturbance by allowing garages to be located closer to the street line.

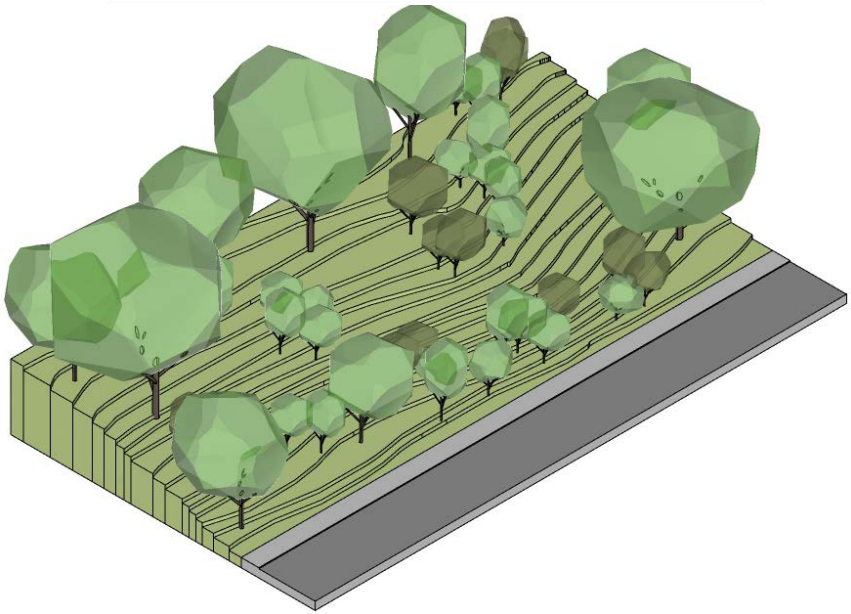
	Existing	No Action	With Action			Increment
			Lot 1	Lot 2	Lot 3	
Lot Area (square feet)	39,000 sf	39,000 sf	13,000 sf	13,000 sf	13,000 sf	0
Provided FAR	0.0	0.0	0.50	0.40	0.45	+0.45
Gross Floor Area	0	0	6,500 sf	6,900 sf	7,063 sf	+20,463 sf
Zoning Floor Area	0	0	6,500 sf	5,200 sf	5,808 sf	+17,508 sf
Number of Units	0	0	1 DU	1 DU	1 DU	+3 DUs
Number of Parking Spaces	0	0	2 Spaces	2 Spaces	2 Spaces	+6 Spaces
Lot Coverage	0	0	2,275 sf (18%)	2,600 sf (20%)	2,905 sf (23%)	+7,780 sf (+20%)
Hard Surface Area	0		5,132 sf (39%)	4,921 sf (38%)	5,697 sf (44%)	+15,750 sf (+40%)
Ground Disturbance	0	0	3,359 sf (26%)	5,257 sf (40%)	5,627 sf (43%)	+14,243 sf (+37%)
Number of Trees	47 trees	47 trees	7 trees	4 trees	3 trees	-33 Trees

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Prototype 7 *R1-1 District, 300-*foot *x 130-*foot *interior lot subdivided into 3 100-foot x 130-foot lots*
Existing – Special Natural Area District
Proposed – Special Hillsides and Natural Area District, Escarpment Area

Existing and No Action





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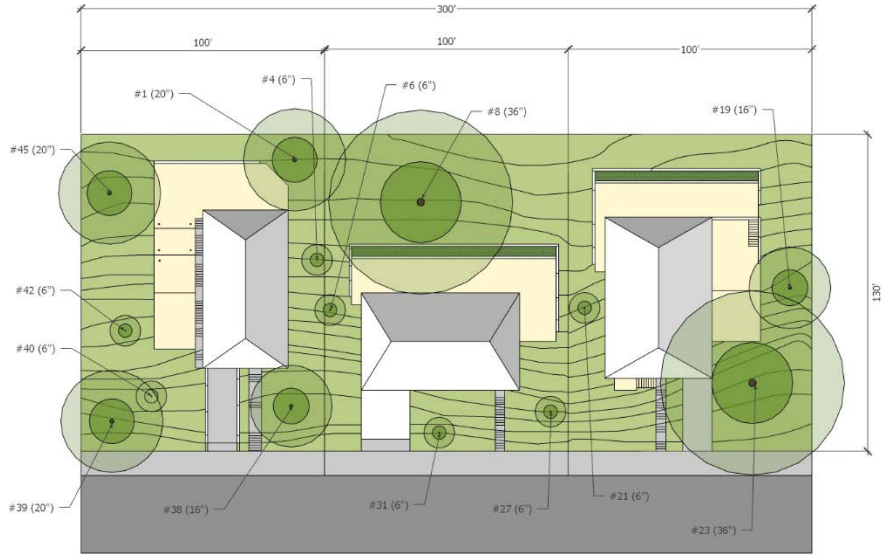
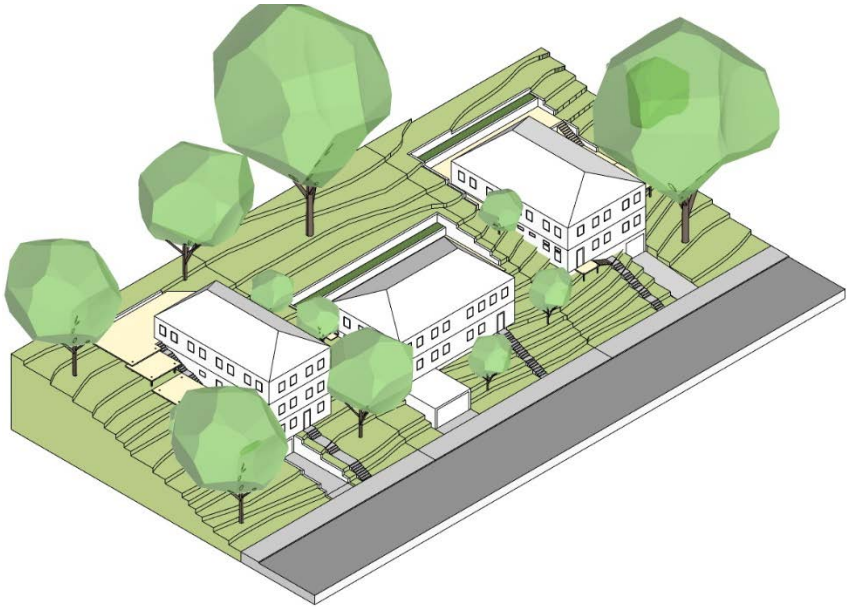
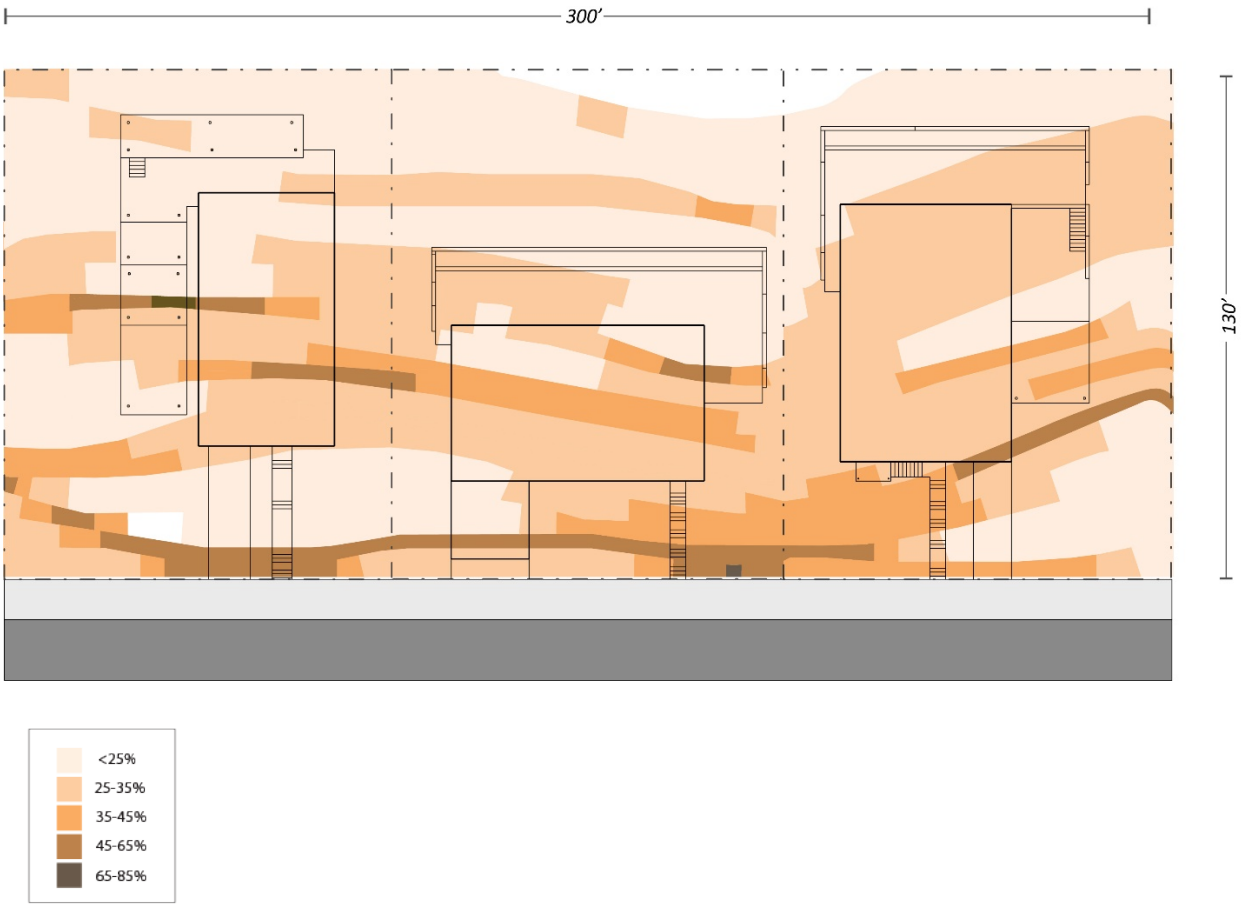




Slope Categories



Prototype 8 R3X District, 45-foot x 100-foot Interior Lot
Existing - Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 45-foot x 100-foot interior lot in an R2 zoning district. In the No Action scenario, the site is located within SHPD. In the With Action scenario, the site is located within the Non-Escarpment area of the proposed SHNAD. These assumptions were made because they represent typical lot conditions found within R2 districts in the existing SHPD. The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the footprint of the building

Existing Conditions

The existing condition demonstrates a 4,500 sf vacant lot that contains nine trees. The surface has an elevation change of four feet, sloping upward from the street to the rear of the site.

No Action Scenario

The No Action scenario illustrates the development of a two-story, single-family, detached residence. The zoning lot is developed with 2,250 sf of zoning floor area—the maximum permitted within an R2 district, which allows 0.5 of FAR. The building footprint is 1,125 sf, designed to maximize floor area while meeting the required open space ratio of 150.

Additionally, the site accommodates a driveway, walkway, and a patio area, creating a total of 3,065 sf of hard surface area (68 percent of lot area) and requiring of 3,065 sf of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities. Modification of topography or removal of trees greater than six-inch caliper is not proposed beyond the 15-foot construction buffer. Thus, construction is allowed as-of-right.

The scenario provides two off-street parking spaces; one is a garage within the building and the other within an unenclosed parking pad located in the front yard, taking advantage of the underlying Special Purpose District regulations permitting front yard parking.

Prior to development, the site contained nine trees worth a total of 14 tree credits under existing regulations. The developed site contains 8 trees (8 credits): 4 trees were removed (8 credits), 3 were preserved at the rear of the site (4 credits), 2 were preserved in the front yard (1 credit), and 3 were newly planted (3 credits). This meets the 8 tree credit requirement under existing regulations. Of the 2 preserved front yard trees, one is located within the 15-foot construction buffer and thus receives no credit since the critical root zone of the tree may be highly impacted by construction. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

With Action Scenario

The With Action scenario illustrates the development of a two-story, single-family, residence. The zoning lot is developed with 2,250 sf of zoning floor area—the maximum permitted within an R2 district, which allows an FAR of 0.5. The building footprint is 1,350 sf, designed to maximize the 30 percent lot coverage. Additionally, the site accommodates a driveway, walkway, and a swimming pool, creating a total of 2,912 sf of hard surface area (65 percent of lot area) and requiring of 2,912 sf of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the walkway and pool.

The scenario provides two off-street parking spaces, as required by the underlying zoning, one within a garage and the other in an unenclosed parking pad located in the side lot ribbon.

Prior to the development, the site contained 9 trees worth 16 tree credits under proposed regulations. The developed site contains 6 trees (9 credits): 5 trees were removed (11 credits), 4 were preserved (5 credits), and 2 were newly planted (2 credits). This meets the requirement of 9 tree credits under the proposed regulations. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district.

Incremental Change

As a result of the With Action scenario, there is no change to the total floor area. Lot coverage increases from 25 to 30 percent of the lot area, while hard surface area decreases from 68 to 65 percent.

The proposed rules allow minor disturbances to the critical root zone of the tree beyond the structural root zone, unlike the existing rules. This flexibility in the proposed rules favor preservation of trees as compared to existing rules where any disturbance to critical root zone of a tree that is outside the 15-foot construction buffer may necessitate tree removal by seeking an authorization from CPC. Simultaneously, the proposed change facilitates the as-of-right construction of site amenities outside of the 15-foot construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

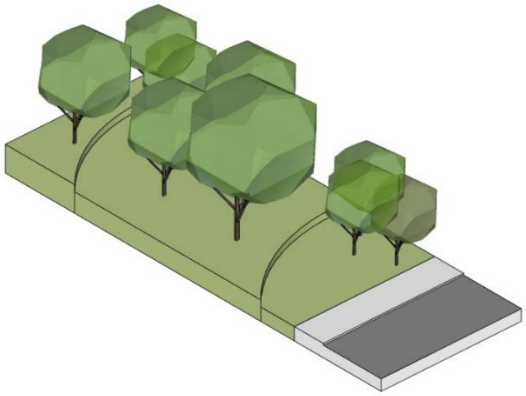
In total, the With Action scenario has two less trees than the No Action scenario; this is due to the front yard tree bonus that enables any existing tree within the front yard to receive one additional credit. No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

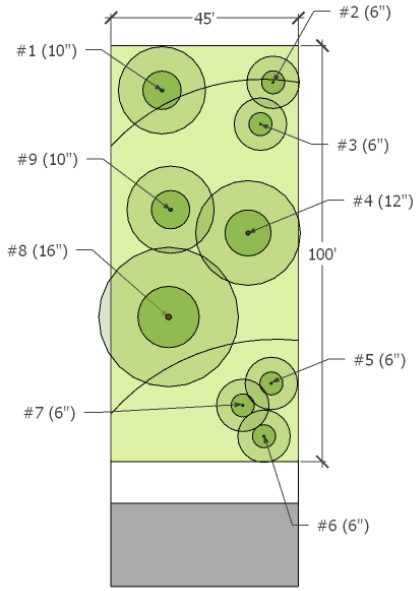
	Existing	No Action	With Action	Increment
Lot Area (square feet)	4,500 sf	4,500 sf	4,500 sf	0
Provided FAR	0	0.5	0.5	0
Building Area	0	2,250 sf	2,250 sf	0
Number of Units	0	1 DU	1 DU	0
Number of Off-Street Parking Spaces	0	2 Spaces	2 Spaces	0
Lot Coverage	0	1,125 sf (25%)	1,350 sf (30%)	+225 sf (+5%)
Hard Surface Area	0	3,065 sf (68%)	2,912 sf (65%)	-153 sf (-3%)
Ground Disturbance	0	3,065 sf (68%)	2,912 sf (65%)	-153 sf (-3%)
Number of Trees	9 Trees	8 Trees	6 Trees	-2 Trees

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

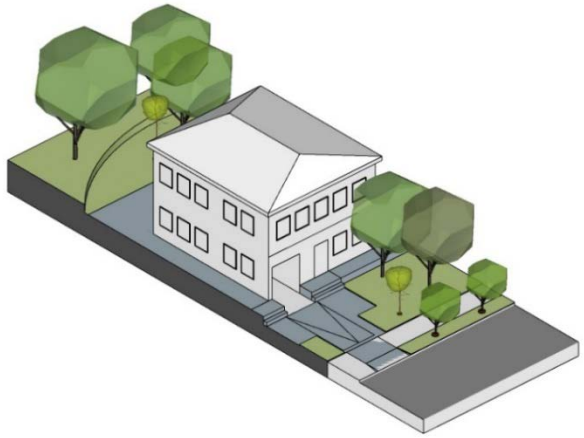
Prototype 8 *R2 District – 45-foot x 100-foot interior lot*
Existing – Special Hillsides District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

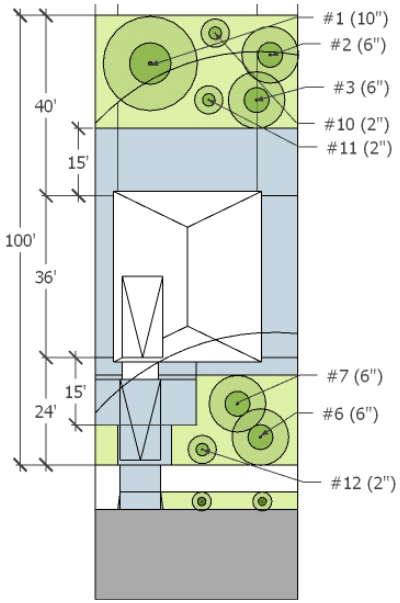
Existing



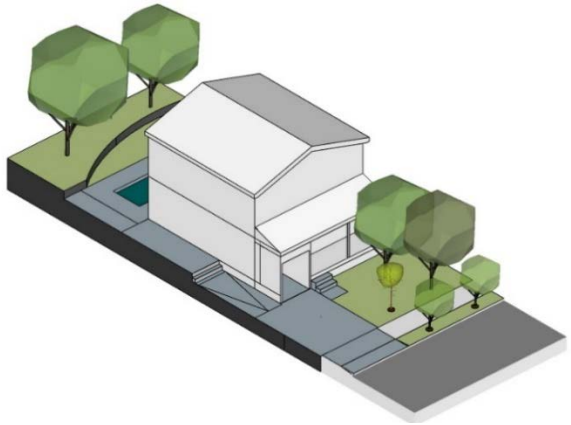


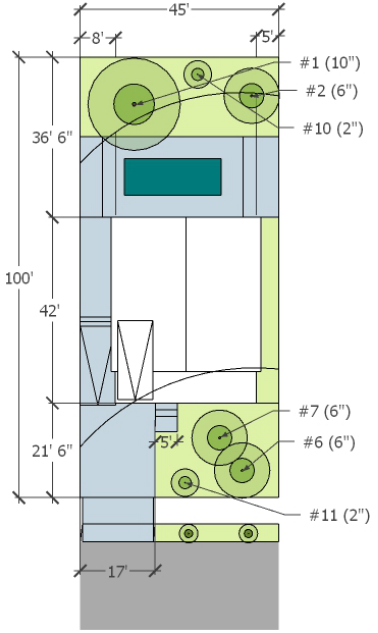
No Action





With Action





Prototype 9 R3X District, 60-foot x 100-foot Interior Lot
Existing - Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 60-foot x 100-foot interior lot in an R3X zoning district with a three-story, detached building with two residential units and a community facility (doctor's office). In the No Action scenario, the site is located within SHPD, and in the With Action scenario the site is located within SHNAD outside of the Escarpment Area. These assumptions were made because they represent typical lot conditions found within R3X districts with community facility uses in the existing SHPD.

The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the footprint of the building
- Proposed elimination of authorization pursuant to ZR Section 119-312

Existing Conditions

The existing condition demonstrates a 6,000 square foot vacant lot that contains 7 trees. The surface has an elevation change of four feet, sloping upward from the street to the rear of the site.

No Action Scenario

Pursuant to ZR Section 119-312, development of any community facility use in a residential district within SHPD requires CPC authorization. Thus, no as-of-right development is permitted.

With Action Scenario

The With Action scenario illustrates the development of a three-story, detached building with a community facility (doctor's office) on the ground floor and residential uses on the second and third floors. It contains 3,600 square feet of floor area (with 1,200 square feet of community facility and 2,400 square feet of residential).

The accessory parking requirements were important in determining the building footprint of the development because the footprint was limited to provide enough space for parking and required screening for community facility use under ZR Section 25-66. The building is placed close to the street to allow enough space for parking lot maneuverability and to make the driveway as short as possible to stay below the proposed hard surface area maximum of 65 percent.

The site accommodates a driveway and 6 parking spaces: 3 for the two residential units at the rate of 1.5 space per dwelling unit, and 3 for the community facility use at the rate of 1 space required for every 400 square feet, as required by underlying zoning regulations (ZR Section 25-31). This creates a total of 3,759 sf of hard surface area (63 percent of lot area), including the building, and requiring 3,679 sf of ground disturbance. This complies with the maximum proposed hard surface area requirement of 75 percent for the site.

Prior to development, the site contained 7 trees worth 20 tree credits under proposed regulations. The developed site contains 7 trees (11 credits): 6 trees were removed (15 credits), 1 tree was preserved (5 credits), and 6 trees were planted (6 credits). This meets the requirement of 11 tree credits under the proposed regulations.

The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district as well as access requirements under the Fire Code. The scenario meets parking and parking lot landscaping and screening requirements pursuant to ZR Sections 25-66 and 25-67. The front yard planting requirement (ZR Section 23-451) is fulfilled with 480 sf of planted area.

Incremental Change

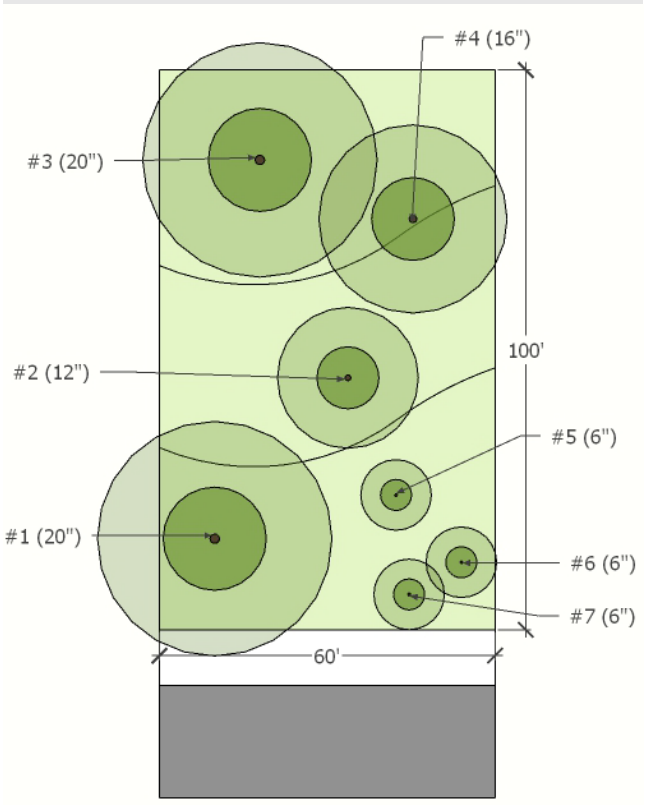
As a result of the With Action scenario, the total floor area, lot coverage, hard surface area, and ground disturbance all increase because a community facility could not be built on this site in the No Action scenario without an authorization pursuant to ZR Section 119-312.

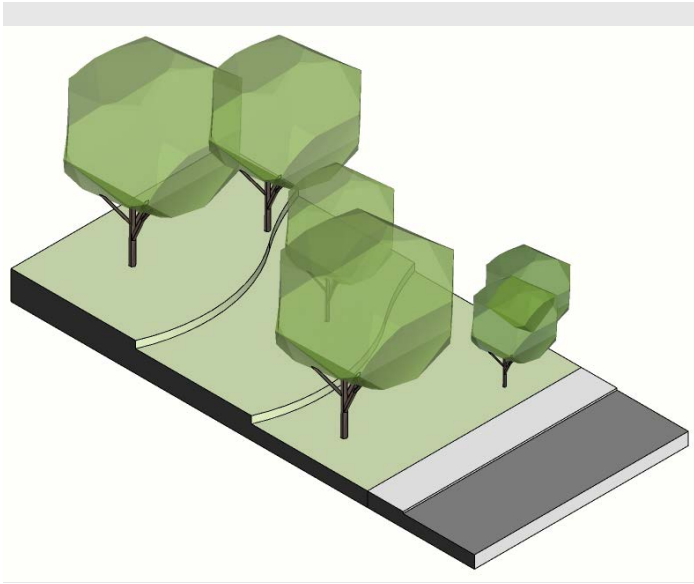
	Existing	No Action	With Action	
Lot Area (square feet)	6,000 sf	6,000 sf	6,000 sf	0
Provided FAR	0	0	0.60	+0.60
Residential Floor Area	0	0	2,400 sf	+2,400 sf
Community Facility Floor Area	0	0	1,200 sf	+1,200 sf
Total Floor Area	0	0	3,600 sf	+3,600 sf
Number of Units	0	0	2 DU	+2 DU
Number of Off-Street Parking Spaces	0	0	6 Spaces	+6 Spaces
Lot Coverage	0	0	1,200 sf (20%)	+1,200 sf (+20%)
Hard Surface Area	0	0	3,759 sf (63%)	+3,759 sf (+63%)
Ground Disturbance	0	0	3,759 sf (63%)	+3,759 sf (+63%)
Number of Trees	7 trees	7 trees	7 trees	0

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

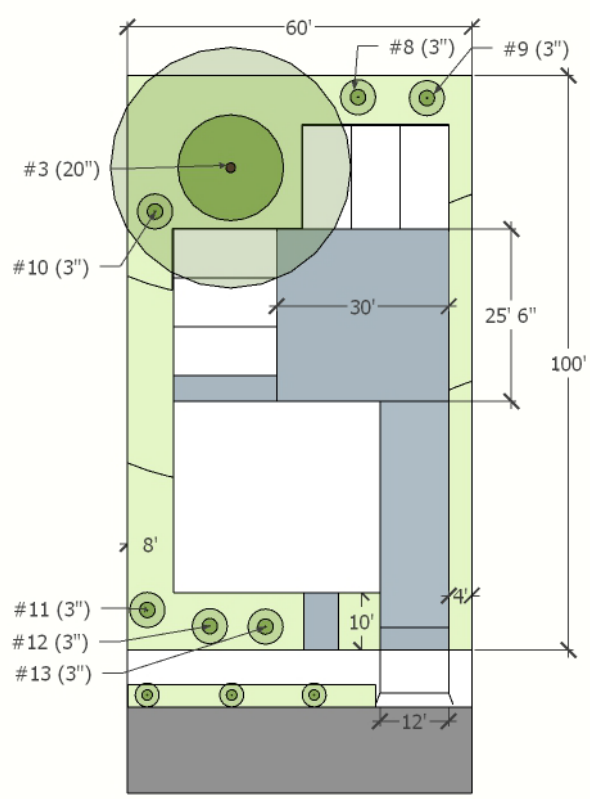
Prototype 9 *R3X District, 60-foot x 100-foot interior lot*
Existing – Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

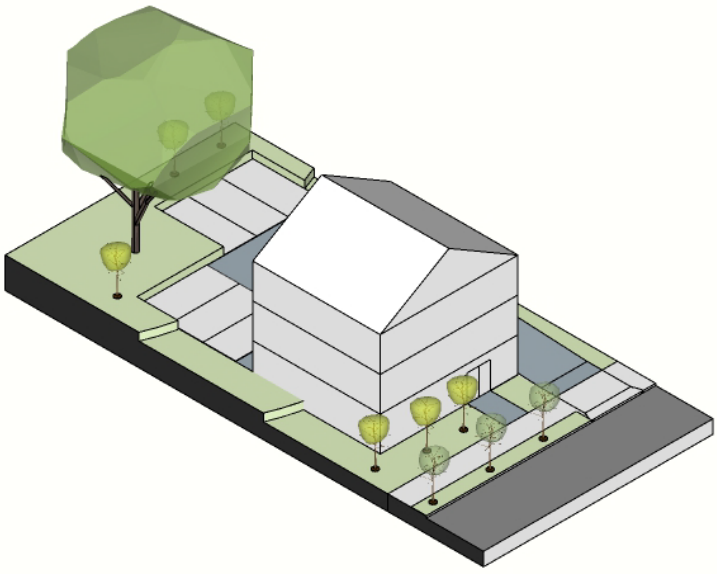
Existing and No Action





With Action





Prototype 10 R3X District with C1-2 Overlay, 200-foot x 125-foot Interior Lot
Existing - Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a generic 200-foot x 125-foot interior lot in an R3X zoning district with a C1-2 overlay. These assumptions were made because they represent typical lot conditions found on sites within commercial overlays that have previously sought parking authorizations in the existing SHPD.

The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- Proposed tree planting requirements
- Lot coverage and hard surface area regulations
- As-of-right modification to natural features outside of the footprint of the building
- Proposed removal of parking authorization 30 spaces or more
- Proposed retaining wall regulations for commercial sites

Existing Conditions

The existing condition demonstrates a 25,000 sf vacant interior lot that contains 13 trees (26 credits). The surface has an elevation change of 14 feet, sloping upward from the street to the northeast corner of the site.

No Action Scenario

The No Action scenario illustrates the development of a one-story commercial building with general retail. Since the maximum number of parking spaces allowed as-of-right is 29 and one parking space is required for every 300 sf of retail space, the buildable floor area is limited to 8,700 sf without requiring any authorization by the CPC. The building is kept to one story and consolidated in the western portion of the site to allow space for the parking lot. The site accommodates a parking area with 29 spaces (the maximum allowed as-of-right), a pedestrian apron along the storefront façade, and an area at the northern end of the building for loading and refuse storage. There are two 24-foot curb cuts provided. There is modification of topography up to 14 feet above street level and there is a retaining wall provided along the rear of the site.

Prior to development, the site contained 13 trees (26 credits), all of which were removed. The developed site adds 25 newly planted trees (25 credits), which meets the tree credit requirement for the site. The building complies with all other height, yard and screening regulations pursuant to the underlying district or modifications set forth in the existing special district. The scenario meets parking and landscaping requirements pursuant to ZR Sections 37-90 and 107-48, as well as access requirements under the Fire Code.

With Action Scenario

The With Action scenario illustrates the development of a two-story commercial building allowed as-of-right. The zoning lot is developed with 11,100 sf of floor area, which is the result of providing

the maximum allowable floor area for the number of parking spaces provided on site. The site accommodates a parking area for 37 spaces, and area along the side of the building for a pedestrian apron and loading berth with refuse storage.

Prior to development, the site contained 13 trees (26 credits). The developed site contains 25 trees (25 credits): 13 trees were removed (26 credits) and 25 were newly planted (25 credits). This meets the requirement of 25 trees based on the lot area of the site.

There is a retaining wall at the rear of the site that complies with the proposed retaining wall standards—a set back after 10-foot height and planting strips at the setback and at the foot of the retaining wall. The building complies with all other height, yard and setback regulations pursuant to the underlying district or modifications set forth in the existing special district as well as access requirements under the Fire Code. The scenario meets parking and landscaping requirements pursuant to ZR Sections 37-90 and 107-48.

Incremental Change

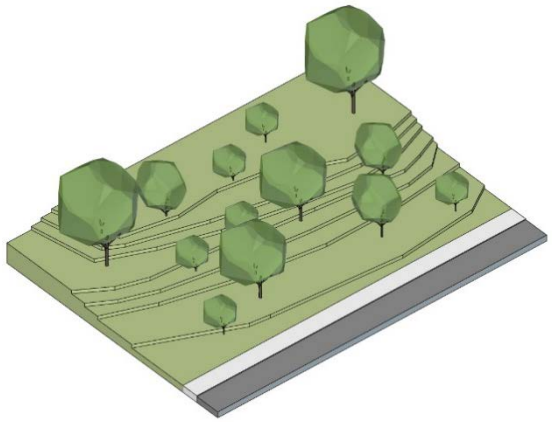
As a result of the With Action scenario the total floor area increases by 2,400 sf (less than 10 percent of lot area) and the total number of parking spaces increases by 8. Both scenarios provide the same number of trees.

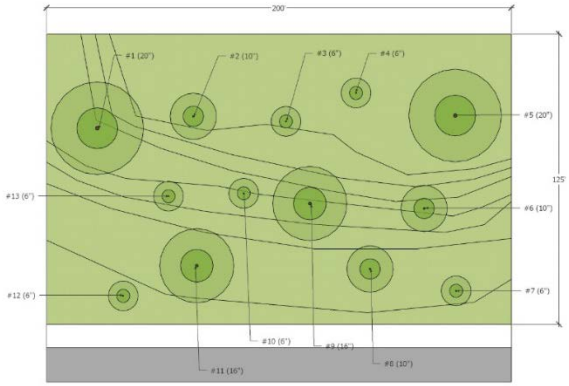
	Existing	No Action	With Action	Increment
Lot Area (square feet)	25,000 sf	25,000 sf	25,000 sf	0
Provided FAR	0	0.35	0.44	+0.09
Building Area	0	8,700 sf	11,100 sf	+2,400 sf
Number of Off-Street Parking Spaces	0	29 Spaces	37 Spaces	+8 Spaces
Lot Coverage	0	8,700 sf (35%)	6,600 sf (26%)	-2,100 sf (-9%)
Hard Surface Area	0	20,749 sf (83%)	19,696 sf (79%)	-1,053 sf (-4%)
Ground Disturbance	0	23,800 sf (95%)	23,800 sf (95%)	0
Number of Trees	13 Trees	25 Trees	25 Trees	0

Notes: FAR = floor area ratio; sf = square feet

Prototype 10 *R3X District with C1-2 overlay, 200-foot x 125-foot interior lot*
Existing – Special Hillsides Preservation District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

Existing





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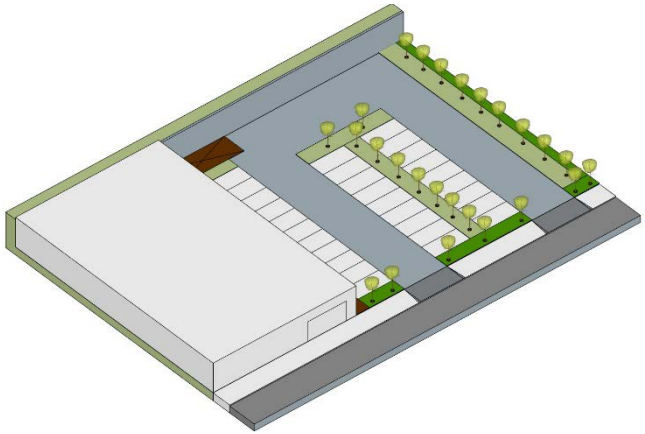
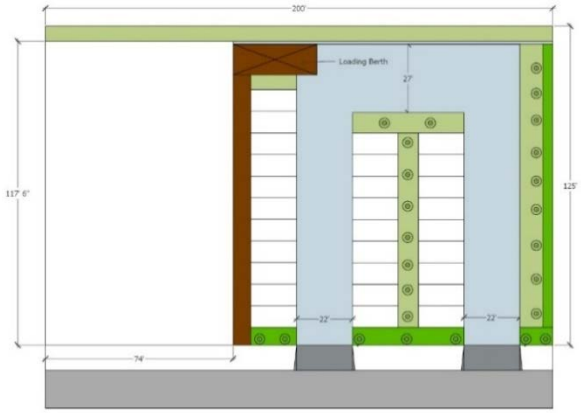
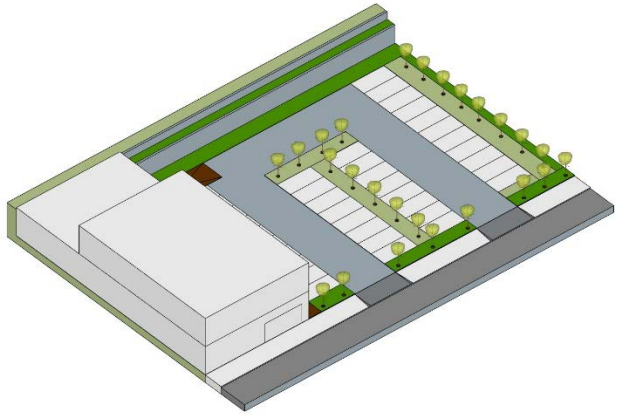
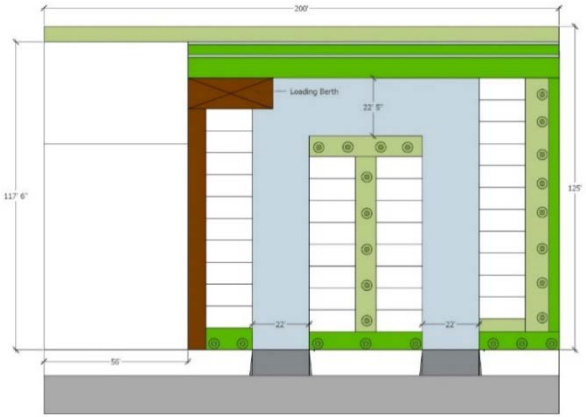




With Action





Prototype 11 R3X District, 150-foot x 100-foot Interior Lot
Existing – Special South Richmond Development District
Proposed – Special South Richmond Development District

This prototype, as shown in the illustrations below, demonstrates a typical lot containing Designated Open Space (DOS) within an R3X zoning district of the Special South Richmond Development District (SSRDD). DOS is mapped throughout SSRDD with the intent of preserving open space in its natural state. These assumptions were made because they represent typical lot conditions for sites that have DOS within R3X districts of the existing SSRDD. The prototype illustrates the effects of the following portions of the Proposed Actions on developments that contain DOS:

- Tree planting requirements
- Minimum open area requirements within rear yards
- As-of-right building clustering rules to modify distance between buildings, minimum required yards, and maximum height for each building
- As-of-right modification to natural features outside of the footprint
- As-of-right modification to location of required parking

Existing Conditions

The existing condition demonstrates an 18,750 sf vacant interior lot with 150 feet of frontage with an irregular depth—one lot line is 100 feet deep while the other is 150 feet deep. The site contains 10 trees greater than six-inch caliper and the surface has an elevation change of 6 feet, sloping gradually from the street to the rear of the site. DOS, which totals 6,000 sf, is mapped at a 40-foot depth along the rear lot line and occupies 32 percent of the lot.

No Action Scenario

The No Action scenario illustrates the lot subdivided into three lots of varying size. The lots are identified as 1, 2, 3 from left to right. Lot 1 is 50 feet wide by an average of 141.75 feet deep, which creates a lot area of 7,088 sf; Lot 2 is 50 feet wide by an average of 125 feet deep, which creates a lot area of 6,250 sf; and Lot 3 is 50 feet wide by an average of 108.25 feet deep, which creates a lot area of 5,412 sf. Each lot is developed with a detached, three-story, two-family home. Neither modification of topography of more than two feet cut or fill, nor removal of trees greater than six-inch caliper, is proposed beyond the 8-foot construction buffer. Thus, construction is allowed as-of-right. There is no modification to the DOS proposed. The number of permitted stories for each building is dependent on width of each lot as per the existing SSRDD regulations.

Lot 1 – Building, Parking, and Planting requirements

Since the lot width of Lot 1 is 50 feet, the regulations allow for construction of a three-story building. This results in 4,252.5 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,417.5 sf, designed to maximize FAR within the three stories. Cut and fill

greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations; non-building amenities, including the patio area, require cut and fill less than two feet. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and as-of-right bulk modifications for site with DOS in the existing special district.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building.

Prior to development, the site contained 3 trees worth 9 credits under the existing tree credit system. The developed site proposes 4 trees (8 credits), which satisfies the minimum requirement of 1 tree credit per 1,000 sf of lot area (8 credits): 1 tree that was located within the footprint of the proposed building was removed as-of-right was removed (3 credits), 2 trees were preserved (6 credits), and 2 trees were newly planted (2 credits).

Lot 2 – Building, Parking, and Planting requirements

Since the lot width of Lot 2 is 50 feet, the regulations allow for construction of a three-story building. This results in 3,750 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,180 sf, and the second and third stories each have 1,285 sf to maximize FAR within the three stories. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations; non-building amenities, including the patio area, require cut and fill less than two feet. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and as-of-right bulk modifications for site with DOS in the existing special district.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building. The development uses existing yard modifications to provide a 10-foot front yard to locate the building footprint farther from the DOS located in the rear yard. Although the front yard is 10 feet, parking within streetwalls requires a minimum open area between the streetwall and street line—thus, the garage opening is setback 8 feet and creates a cantilever on the corner of the building. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and existing special district.

Prior to development, the site contained 4 trees worth 8 credits under the existing tree credit system. The developed site proposes a total of 4 trees (8 credits), which satisfies the minimum requirement of 1 tree credit per 1,000 sf of lot area (8 credits): all 4 trees were preserved (8 credits) since they could not be removed as-of-right, and no newly planted trees were required.

Lot 3 – Building, Parking, and Planting requirements

Since the lot width of Lot 3 is 50 feet, the development allows for construction of a three-story building. This results in 3,247 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,015 sf, with the second and third story having 1,116 sf to maximize FAR within the three stories. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations; non-building amenities

including the patio area require cut and fill less than two feet. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and as-of-right bulk modifications for site with DOS in the existing special district.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building. The development uses existing yard modifications to provide a 10-foot front yard to locate the building footprint farther from the DOS located in the rear yard. Although the front yard is 10 feet, parking within streetwalls requires a minimum open area between the streetwall and street line—thus, the garage opening is setback 8 feet and creates a cantilever on the corner of the building. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and existing special district.

Prior to development, the site contained 3 trees worth 5 credits under the existing tree credit system. The developed site proposes a total of 6 trees (6 credits), which satisfies the minimum requirement of 1 tree credit per 1,000 sf of lot area (6 credits): 2 trees located within the footprint of the building and areas used for required parking were removed as-of-right (4 credits), 1 tree was preserved (1 credit), and 5 trees were newly planted (5 credits).

With Action Scenario

The With Action scenario illustrates the lot being subdivided into three lots of varying size as-of-right. The lots are identified as 1, 2, 3 from left to right. Lot 1 is 40 feet wide by an average of 143.37 feet deep, which creates a lot area of 5,735 sf; Lot 2 is 50 feet wide by an average of 128.3 feet deep, which creates a lot area of 6,415 sf; and Lot 3 is 60 feet wide by an average of 110 feet deep, which creates a lot area of 6,600 sf.

Lot 1 – Building, Parking, and Planting requirements

Since the lot width of Lot 1 is 40 feet, the development allows for construction of a two-story building. This results in 3,441 sf across two floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,720.5 sf, designed to maximize FAR within the two stories. The rear façade is slightly angled to provide the required 20-foot usable rear yard as per the proposed regulations. Cut and fill are used for constructing both the building structure, parking area, and non-building amenities. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and proposed special district.

The scenario provides three off-street parking spaces: two tandem garage spaces within the building footprint and one unenclosed space between the streetwall and street line. The development uses the proposed modification of parking spaces to locate one space at the required 10-foot front yard setback to concentrate disturbance away from the DOS in the rear yard; existing regulations would require setting the parking space at 18 feet from the street line. The location of parking complies with existing underlying regulations that restrict tandem parking to no more than two unenclosed spaces; the proposal only provides one tandem space that is unenclosed.

Prior to development, the site contained 3 trees worth 11 credits under the proposed tree credit system; the minimum tree credit requirement is 6 credits based on 1 tree credit per 1,000 sf of lot

area. The developed site proposes a total of 2 trees (6 credits), which satisfies the requirement of 1 tree credit per 1,000 sf of lot area: 2 trees located within the footprint of the building and rear patio area were removed as-of-right (6 credits), 1 tree was preserved (5 credits), and 1 tree was newly planted (1 credit).

Lot 2 – Building, Parking, and Planting requirements

Since the lot width of Lot 2 is 50 feet, the development allows for construction of a three-story building. This results in 3,849 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,215 sf, and the second and third stories each have 1,317 sf to maximize FAR within the three stories. Cut and fill are used for constructing both the building structure, parking area, and non-building amenities including the pool and patio.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building. The development uses proposed yard modifications to provide a 10-foot front yard to locate the building footprint farther from the DOS located in the rear yard. Although the front yard is 10 feet, parking within streetwalls requires a minimum open area between the streetwall and street line—thus, the garage opening is setback 8 feet and creates a cantilever on the corner of the building. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and proposed special district.

Prior to development, the site contained 3 trees worth 4 credits under the proposed tree credit system. The developed site contains 6 trees (7 credits), which satisfies the requirement of 1 tree credit per 1,000 sf of lot area: 1 tree within the rear yard patio and pool area was removed as-of-right (1 credit), 2 trees were preserved (3 credits), and 4 trees were newly planted (4 credits).

Lot 3 – Building, Parking, and Planting requirements

Since the lot width of Lot 3 is 60 feet, the development allows for construction of a three-story building. This results in 3,960 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,250 sf, and the second and third stories each have 1,350 sf to maximize FAR within the three stories. Cut and fill are used for constructing both the building structure, parking area, and non-building amenities including the pool and patio.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard accessed by one curb cut, and one garage space within the building accessed by another curb cut. The curb cuts comply with underlying regulations for width and distance between curb cuts. The development uses proposed yard modifications to provide a 10-foot front yard to locate the building footprint farther from the DOS located in the rear yard. Although the front yard is 10 feet, parking within streetwalls requires a minimum open area between the streetwall and street line—thus, the garage opening is setback 8 feet and creates a cantilever on the corner of the building. The building complies with all other height, yard, and setback regulations pursuant to the underlying district, and proposed special district.

Prior to development, the site contained 4 trees worth 10 credits under the proposed tree credit system. The developed site contains 7 trees (7 credits), which satisfies the requirement of 1 tree

credit per 1,000 sf of lot area: 3 trees within the footprint of the building, areas for required parking and rear yard patio area were removed as-of-right (9 credits), 1 tree was preserved (1 credits), and 6 trees were newly planted (6 credits).

Incremental Change

As a result of the With Action scenario, there is no change to the number of dwelling units nor total amount of floor area. Both the No Action and With Action scenarios produce 6 dwelling units and 11,250 sf of development across three detached buildings; however, each of the 3 buildings produced have minor differences in floor area due to the shift in zoning lot boundaries needed to accommodate usable rear yards and maximize floor area.

The Proposed Actions result in a minor change to the number of trees between the No Action (14 trees) and With Action (15 trees) scenarios due to the proposed tree credit system that has greater value for mature trees as well as the as-of-right removal of trees located outside of the building footprint and parking areas.

The proposed as-of-right clustering regulations allow for the same amount of development in the No Action and With Action scenario. No additional dwelling units or floor area are accommodated on the lot through the Proposed Actions.

	Existing	No Action	With Action	Increment
Lot Area (square feet)	18,750 sf	18,750 sf	18,750 sf	0
Provided FAR	0	0.6	0.6	0
Building Area	0	11,250 sf	11,250 sf	0
Number of Units	0	6 DU	6 DU	0
Number of Off-Street Parking Spaces	0	9 Spaces	9 Spaces	0
Lot Coverage	0	3,613 sf (19%)	4,186 sf (22%)	+573 sf (+3%)
Ground Disturbance	0	8,388 sf (45%)	8,044 sf (43%)	-344 (-2%)
Number of Trees	10 Trees	14 Trees	15 Trees	+1 Tree

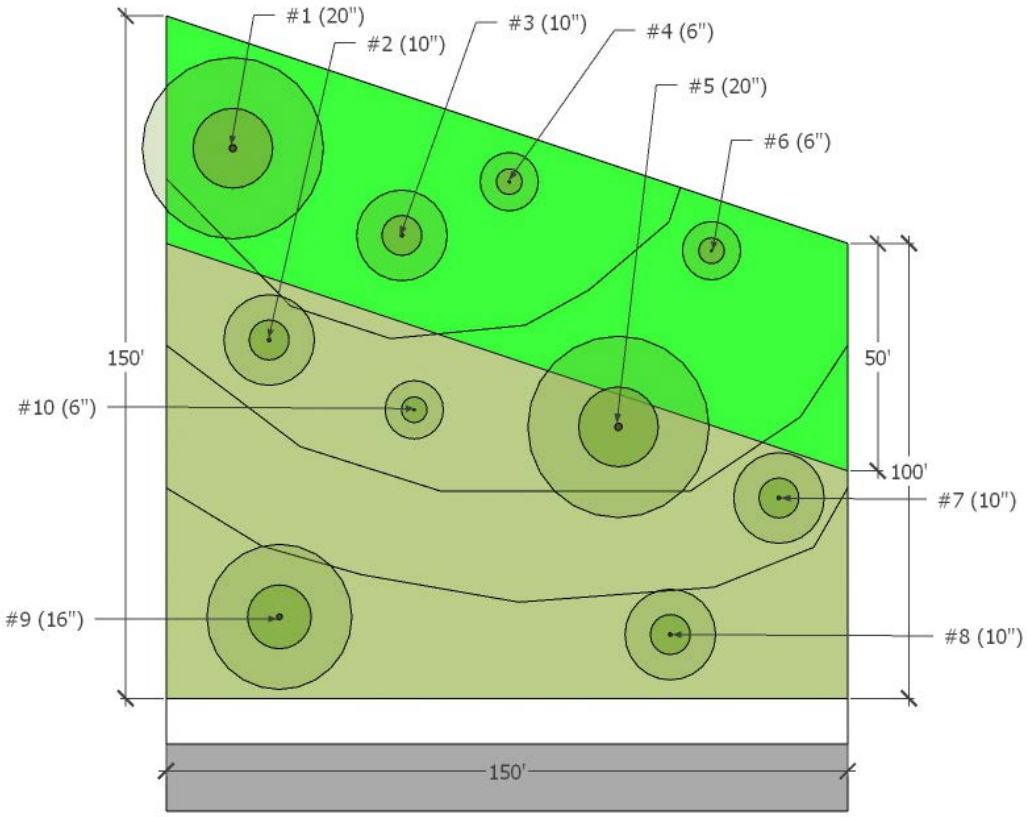
Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit
Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

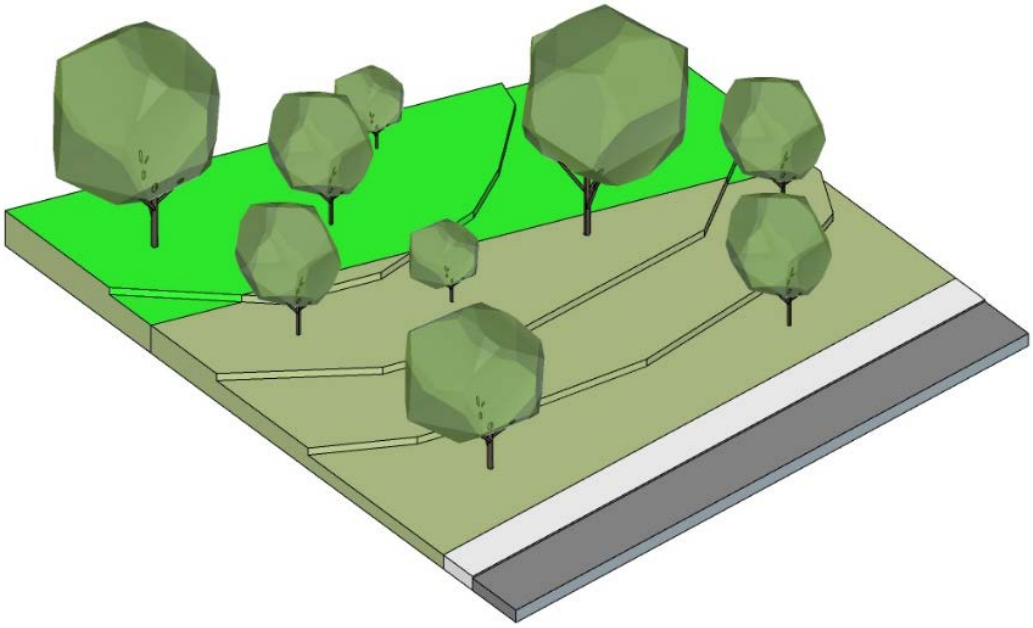
	No Action			With Action			Increment		
	Lot 1	**Lot 2**	**Lot 3**	**Lot 1**	**Lot 2**	**Lot 3**	**Lot 1**	**Lot 2**	**Lot 3**
Lot Area (square feet)	7,088 sf	6,250 sf	5,412sf	5,735 sf	6,415 sf	6,000 sf	-1,353 sf	+165 sf	+1,188 sf
Provided FAR	0.6	0.6	0.6	0.6	0.6	0.6	0	0	0
Building Area	4,253 sf	3,750 sf	3,247 sf	3,441 sf	3,849 sf	3,960 sf	-812 sf	+99 sf	+713 sf
Number of Units	2 DU	2 DU	2 DU	2 DU	2 DU	2 DU	0	0	0
Number of Off-Street Parking Spaces	3 Spaces	3 Spaces	3 Spaces	3 Spaces	3 Spaces	3 Spaces	0	0	0
Lot Coverage	1,418 sf (20%)	1,180 sf (19%)	1,015 sf (19%)	1,721 sf (30%)	1,215 sf (19%)	1,250 sf (19%)	+303 sf (+10%)	+35 sf (+0.1%)	+235 sf (+0.2%)
Ground Disturbance	3,040 sf (43%)	2,922 sf (47%)	2,426 sf (45%)	2,112 sf (37%)	3,027 sf (47%)	2,905 sf (48%)	-928 sf (-6%)	+105 sf (+0.5%)	+479 sf (+4%)
Number of Trees	4 Trees	4 Trees	6 Trees	2 Trees	6 Trees	7 Trees	-2 Trees	+2 Trees	+1 Tree

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

Existing





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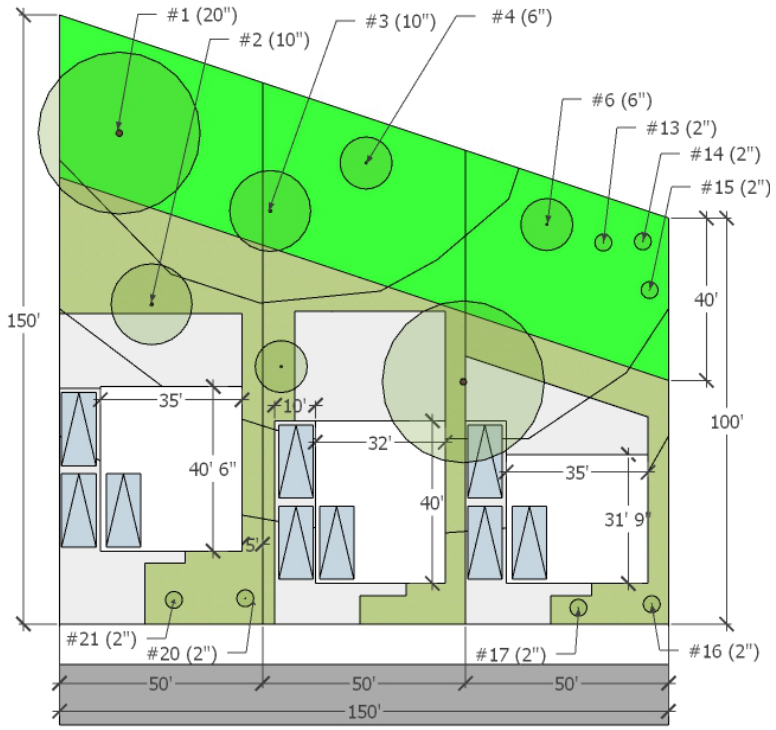
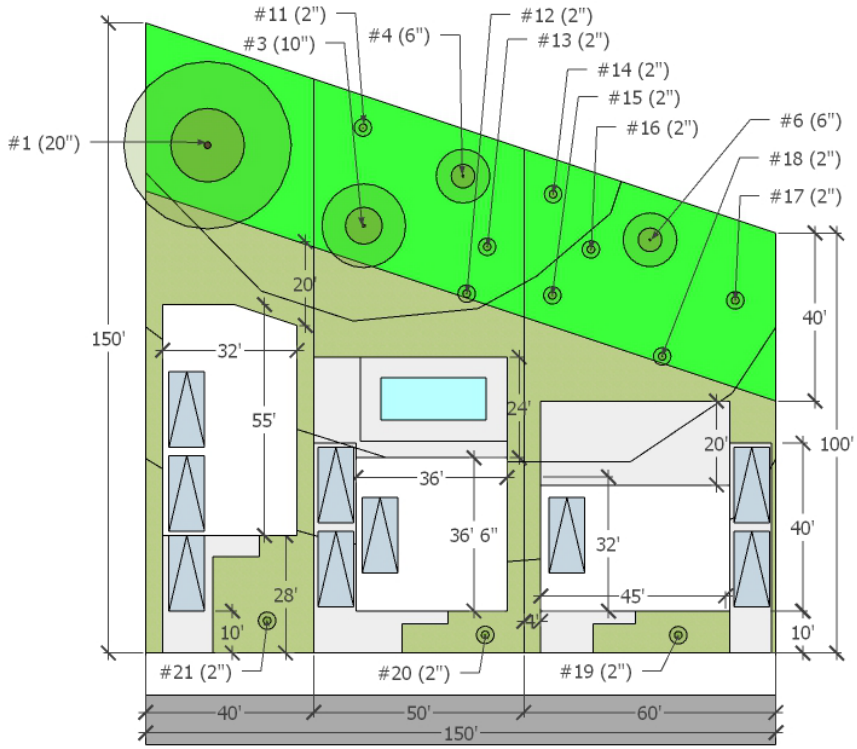


With Action



Prototype 12 R3X District, 150-foot x 100-foot Interior Lot
Existing - Special South Richmond Development District
Proposed - Special South Richmond Development District

This prototype, as shown in the illustrations below, uses a generic 150-foot wide x 100-foot deep interior lot in an R3X zoning district. The site is located adjacent to New York State Department of Environmental Conservation (NYSDEC) freshwater wetlands and thus would require a review by NYSDEC. These assumptions were made because they represent typical lot conditions for subdividable lots within R3X districts of the existing SSRDD. The prototype illustrates the effects of the following portions of the Proposed Actions on development adjacent to designated aquatic resources:

- Minimum lot area requirements for subdivisions to preserve aquatic resources
- Minimum open are requirements within rear yards
- As-of-right building clustering rules to modify distance between buildings, minimum required yards, and maximum height for each building
- Tree planting requirements
- As-of-right modification to location of required parking

Existing Conditions

The existing condition demonstrates a 15,000 sf vacant lot with flat topography and no trees that are six inches caliper or more. A NYSDEC freshwater wetland is located near the northwest corner of the site. Approximately 6,635 sf (44 percent) of the site is within the 100-foot NYSDEC wetland adjacent area that is regulated by NYSDEC.

No Action Scenario

The No Action scenario illustrates the lot being subdivided into three lots of varying size. The lots are identified as 1, 2, 3 from left to right. Lot 1 is 40 feet wide by 100 feet deep with a lot area of 4,000 sf; Lot 2 is 50 feet wide by 100 feet deep with a lot area of 5,000 sf; and Lot 3 is 60 feet wide by 100 feet deep with a lot area of 6,000 sf. Lot 2 and 3 lie within the 100-foot NYSDEC wetland adjacent area and thus would be subject to NYSDEC approvals for building footprint, amenities, and planted buffer area. Each lot is developed with a detached two-family home, and the number of stories for each building is determined by lot width per SSRDD bulk requirements in ZR Section 107-42. Thus, Lot 1 has a two-story home and Lots 2 and 3 each have a three-story home. Neither modification of topography of more than two feet cut or fill, nor removal of trees greater than six-inch caliper, is proposed beyond the 8-foot construction buffer. Thus, construction is allowed as-of-right.

<u>Lot 1 – Building, Parking, and Planting requirements</u>

Since the lot width of Lot 1 is 40 feet, the regulations allow for construction of a two-story building. This results in 2,400 sf across two floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building

footprint is 1,200 sf, designed to maximize FAR within the two stories. Cut and fill greater than two feet is limited to the building foundation, parking area, and pool basin, which is allowed as-of-right per SSRDD regulations; non-building amenities including the patio area require cut and fill less than two feet. The building complies with all other height, yard, and setback regulations pursuant to the underlying district.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building.

Existing regulations require four tree credits, and thus, four newly planted trees of 3-inch caliper satisfy these requirements.

Lot 2 – Building, Parking, and Planting requirements

Since the lot width of Lot 2 is 50 feet, the regulations allow for construction of a three-story building. This results in 3,000 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,000 sf, designed to maximize FAR within the three stories. Cut and fill greater than two feet is limited to the building foundation, parking area, and pool basin, which is allowed as-of-right per SSRDD regulations; non-building amenities including the patio area require cut and fill less than two feet. The building complies with all other height, yard, and setback regulations pursuant to the underlying district.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building.

Existing regulations require five tree credits, and thus, five newly planted trees of 3-inch caliper satisfy these requirements.

Lot 3 – Building, Parking, and Planting requirements

Lot 3 would require a planted buffer, Area of No Land Alteration, which is determined by NYSDEC and is typically established with a 60-foot Area of No Land Alteration from the freshwater wetland per NYSDEC best practices. Since the lot width of Lot 3 is 60 feet, the regulations allow for construction of a three-story building. This results in 3,600 sf across three floors, which equals 0.6 FAR and is the maximum permitted for certain buildings with sloping roofs within an R3X district in LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements as well as the planted buffer requirements determined by NYSDEC. The building is designed with a trapezoidal 1,200 sf footprint to minimize ground disturbance within the NYSDEC wetland adjacent area yet still maximize FAR within the three stories. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations; non-building amenities including the patio area require cut and fill less than two feet. The building complies with all other height, yard, and setback regulations pursuant to the underlying district.

Existing regulations require six tree credits; thus, six newly planted trees of 3-inch caliper satisfy these requirements.

With Action Scenario

The With Action scenario illustrates a similar development as the No Action scenario with three buildings, each being a two-family, detached residence. The proposed rules require that a portion of the Area of No Land Alteration, up to 90 percent, should be excluded from the minimum lot area calculations, thus the site can only be divided into two lots under the Proposed Actions. The subdivision creates one minimum size lot and another lot that can accommodate two detached buildings. The left lot (Lot 1) has a width of 50 feet and an area of 5,000 sf, which can accommodate a three-story building per R3X regulations in SSRDD. The right lot (Lot 2) is 100 feet wide and has 10,000 sf of area, which can accommodate two two-story buildings pursuant to R3X regulations in SSRDD. However, the proposed rules allow building height to be modified to minimize ground disturbance adjacent to natural resources. Thus, the 60-foot NYSDEC Area of No Land Alteration can be included for calculating floor area and allow an additional story per ZR Section 107-42 (see below for numerical details). The proposed as-of-right clustering regulations modify the underlying rules for distance between buildings, as well as minimum yards requirements, to generate a similar amount of floor area as the No Action scenario.

Lot 1 – Building, Parking, and Planting requirements

The With Action scenario of Lot 1 illustrates a development of a three-story, two-family, detached residence. The zoning lot is developed with 3,000 sf of zoning floor area—the maximum permitted within an R3X district, which allows 0.6 FAR for certain buildings with sloping roofs within LDGMA. There is no maximum lot coverage because the location of the building is defined by yard requirements. The building footprint is 1,000 sf, designed to maximize the FAR within the three stories. Cut and fill are used for constructing both the building structure and non-building amenities including the pool and patio. The building complies with all other height, yard, and setback regulations pursuant to the existing underlying district and proposed special district.

The scenario provides three off-street parking spaces: two tandem spaces in the side yard and one garage space within the building.

Proposed regulations require five trees (one tree for every 1,000 square feet of lot area). In this scenario, the site now contains five newly planted trees of two-inch caliper each.

Lot 2 – Building, Parking, and Planting requirements

The With Action scenario of Lot 2 illustrates the development of two, three-story, two-family, detached buildings: Building A farther from the wetland area and Building B closer to the wetland area. The Area of No Land Alteration required by NYSDEC totals 2,216 sf. The lot area excluding a portion of this 60-foot Area of No Land Alteration totals 7,784 sf and satisfies the minimum requirement of 7,600 sf for two, two-story buildings in an R3X zone in SSRDD. However, the aforementioned modification of building height allows the Area of No Land Alteration to be used for the purposes of increasing building height and accommodating floor area. Thus, the total area satisfies the minimum requirement of 9,500 sf for two, three-story buildings.

The zoning lot is developed with 6,000 sf of zoning floor area—the maximum permitted within an R3X district, which allows 0.6 FAR for certain buildings with sloping roofs within LDGMA. Thus, both buildings have 3,000 sf of zoning floor area distributed across three stories with slightly different building footprints as described below. The proposed modification in perimeter wall

height from 26 feet to 31 feet allows the proposed three-story building to have a larger floor-to-ceiling height in the With Action compared to the No Action scenario.

The locations of the proposed buildings are defined by yard requirements as well as their proximity to the adjacent NYSDEC wetland. The proposed modification of minimum yard requirements allows both buildings to cluster development farther from the wetland and wetland buffer. Building A has a 4-foot side yard and an 18-foot front yard to allow for parking within the streetwall. Building A is 11 feet from Building B to allow for two-tandem spaces between the buildings. Building B has a 35-foot side yard due to the Area of No Land Alteration and uses proposed yard modifications to provide a 10-foot front yard, which creates more distance between development and the wetland. Although the front yard is 10 feet, parking within streetwalls requires a minimum open area between the streetwall and street line—a thus, the garage opening is setback 8 feet and creates a cantilever on the corner of Building B. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations; non-building amenities including the pool and patio area require cut and fill less than two feet.

The scenario provides three off-street parking spaces for each building: two tandem spaces in the side yard and one garage space within each building. This satisfies the minimum requirement of six spaces for two, two-family homes.

Proposed regulations require 10 trees (one tree for every 1,000 sf of lot area). In this With Action scenario, the site now contains 10 newly planted trees of two-inch caliper each, which satisfies the proposed tree requirements.

Incremental Change

As a result of the With Action scenario, there is no change to the number of dwelling units nor total amount of floor area. Both the No Action and With Action produce 6 dwelling units and 9,000 sf of development across three detached buildings.

Changes between the No Action and With Action scenario are limited to yards, setbacks, and lot area requirements. The building height of Building B increases from 35 feet to 37 feet, and the minimum front yard of Building B decreases from 18 feet to 10 feet. The total number of trees across all lots is 15 for both scenarios. In the proposed scenario, a portion of the 60-foot Area of No Land Alteration is excluded from minimum lot area calculations. This reduces the number of proposed zoning lots from three lots to two zoning lots.

The proposed as-of-right clustering regulations change the location and size of proposed building footprints but allow for the same amount of development in the No Action and With Action scenario. No additional dwelling units, or floor area are accommodated on the lot through the Proposed Actions.

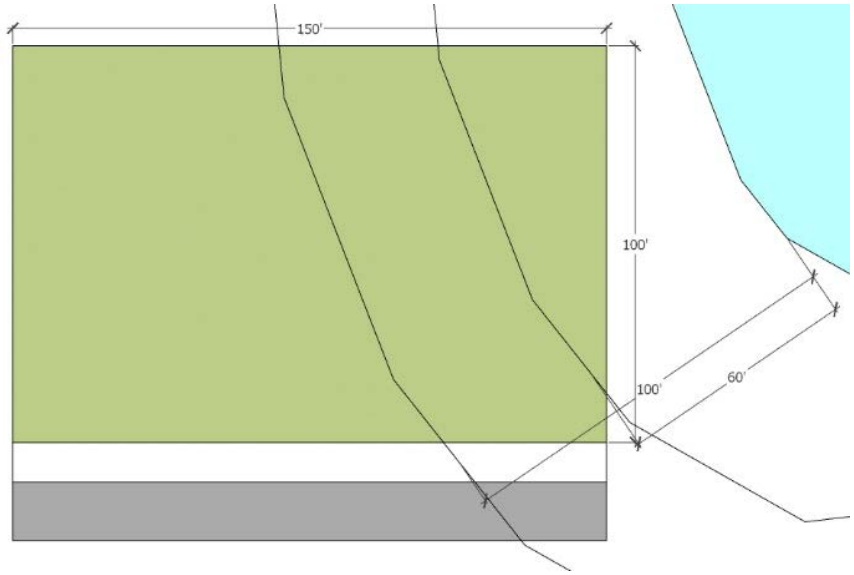
	Existing	No Action	With Action	Increment
Lot Area (square feet)	15,000 sf	15,000 sf	15,000 sf	0
Provided FAR	0	0.6	0.6	0
Building Area	0	9,000 sf	9,000 sf	0
Number of Units	0	6 DU	6 DU	0
Number of Off-Street Parking Spaces	0	9 Spaces	9 Spaces	0
Lot Coverage	0	3,400 sf (23%)	2,925 sf (20%)	-478 sf (-3%)
Ground Disturbance	0	8,990 sf (60%)	8,727 sf (58%)	-263 sf (-2%)
Number of Trees	0 Trees	15 Trees	15 Trees	0

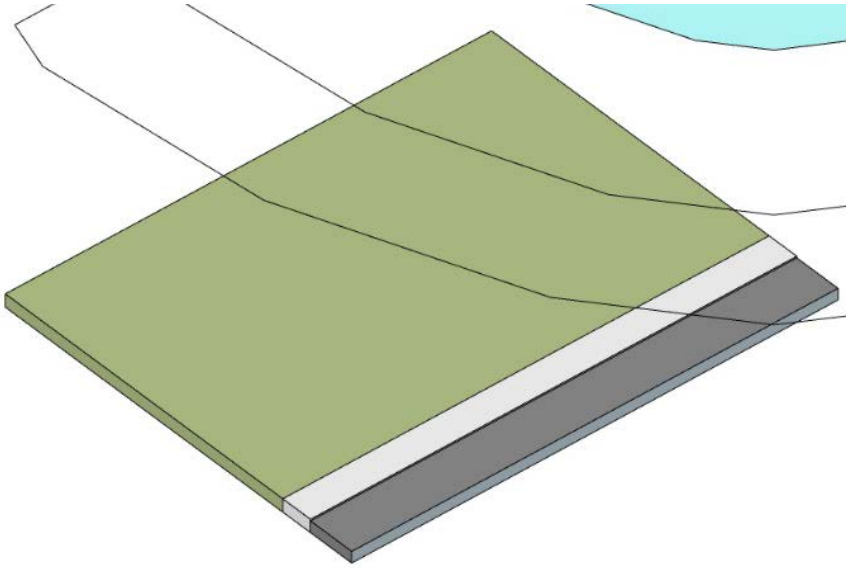
Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit
Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

	No Action			With Action		Increment	
	Lot 1	Lot 2	Lot 3	Lot 1	Lot 2	Lot 1	Lots 2 and 3
Lot Area (square feet)	4,000 sf	5,000 sf	6,000 sf	5,000 sf	10,000 sf	+1,000 sf	-1,000 sf
Provided FAR	0.6	0.6	0.6	0.6	0.6	0	0
Building Area	2,400 sf	3,000 sf	3,600 sf	3,000 sf	6,000 sf	+600 sf	-600 sf
Number of Units	2 DU	2 DU	2 DU	2 DU	4DU	0	0
Number of Off-Street Parking Spaces	3 Spaces	3 Spaces	3 Spaces	3 Spaces	6 Spaces	0	0
Lot Coverage	1,200 sf (30%)	1,000 sf (20%)	1,200 sf (20%)	1,000 sf (20%)	1,925 sf (19%)	-200 sf	+1,200 sf
Ground Disturbance	3,265 sf (82%)	3,018 sf (60%)	2,707 sf (45%)	3,142 sf (63%)	5,585 sf (56%)	-123 sf	-140 sf
Number of Trees	4 Trees	5 Trees	6 Trees	5 Trees	10 Trees	+1 Tree	-1 Tree

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit
Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

Existing





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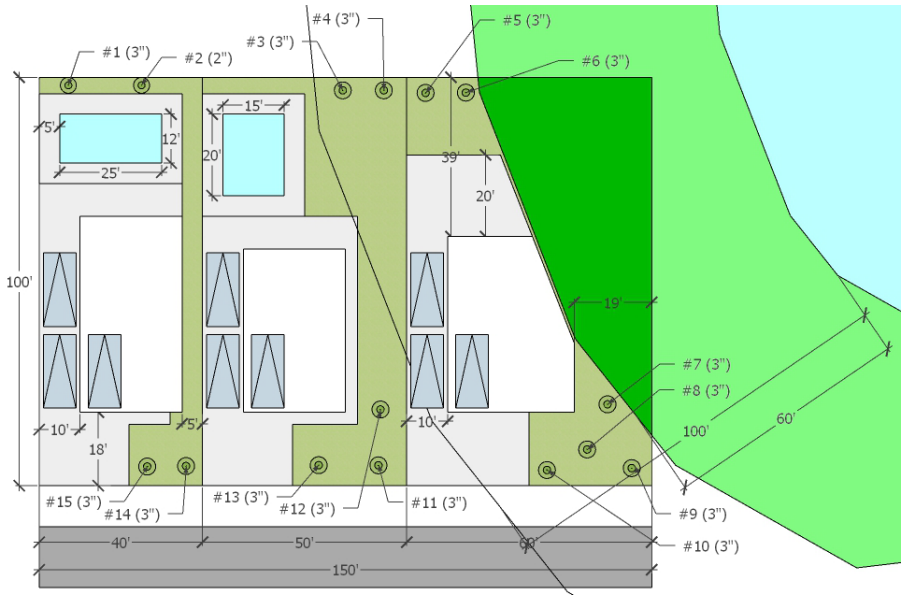
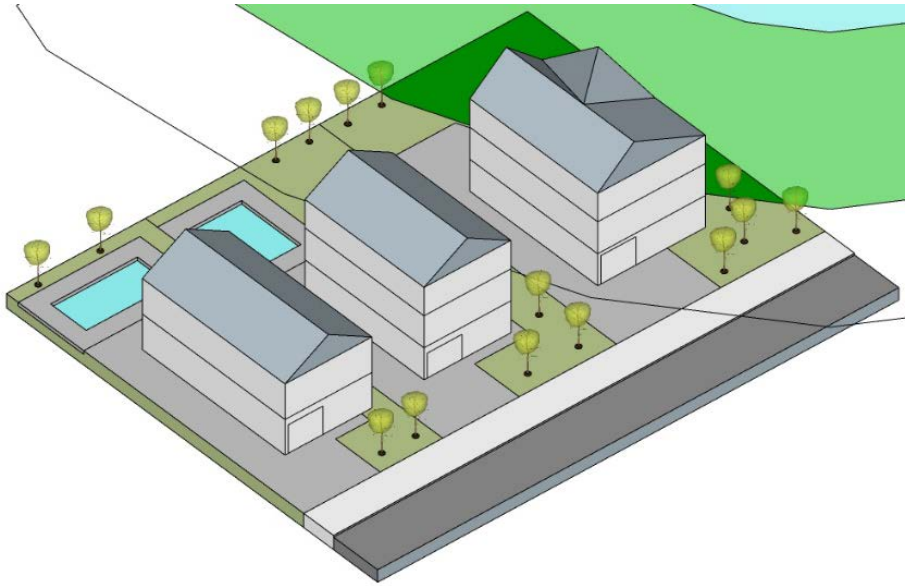
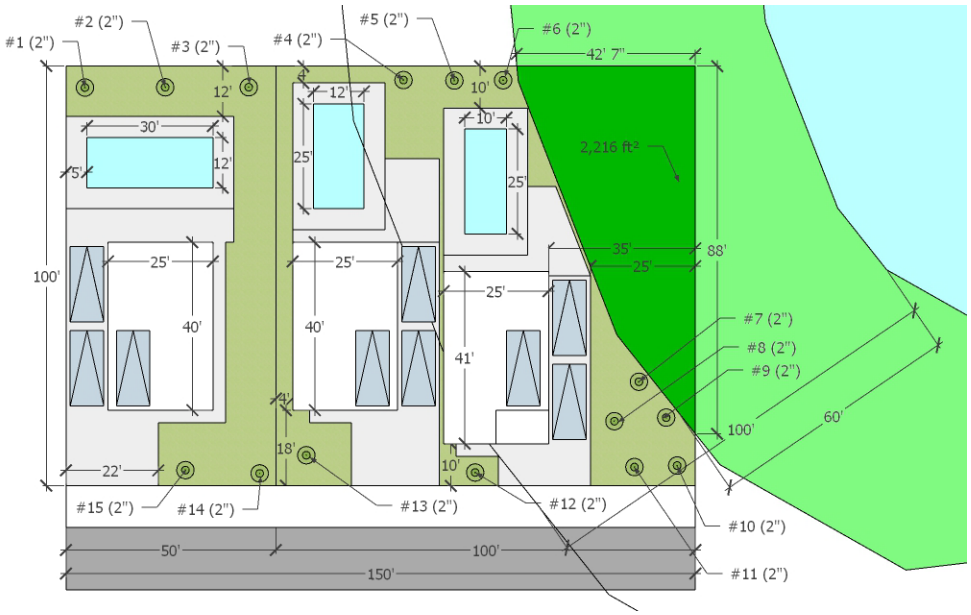
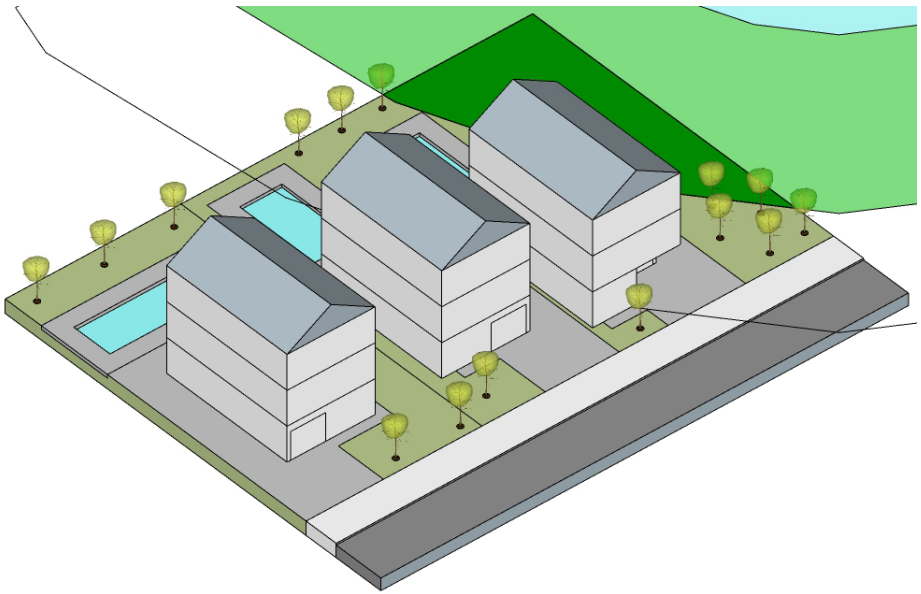




With Action





Prototype 13 C4-1, C8, or M Districts, Borough of Staten Island

This prototype, as shown in the illustrations below, demonstrates how proposed changes to cross access connection regulations may be applicable to different uses and abutting lot conditions. Since these changes are applicable to a wide range of lot sizes in various districts and the proposed changes do not result in an increase in floor area or change in building bulk regulations, the conditions were chosen to demonstrate a range of abutting lot conditions. The prototype illustrates the following effects of the Proposed Actions on site access:

- Applicability of cross access connection regulations between certain uses
- Applicability of cross access connections along certain lot lines

Scenario A – Applicability of Cross Access Connections between certain uses:

The Proposed Actions would continue to apply to commercial and community facility development; however, specific use groups would be exempt from the mandatory cross access requirement. The initial intent of the cross access connection text amendment sought to provide connections between parking lots serving retail uses. Given the broad use group categories for commercial and community facility uses, the regulations are applicable to several commercial and community facility uses that do not directly benefit from vehicular connectivity between parking areas.

Existing Conditions

Lot A is developed with a commercial retail use and includes a previously recorded cross access easement agreement that establishes a connection along the side lot line shared with Lot B. Lot B is a vacant lot with a wholly commercial office building and accessory parking.

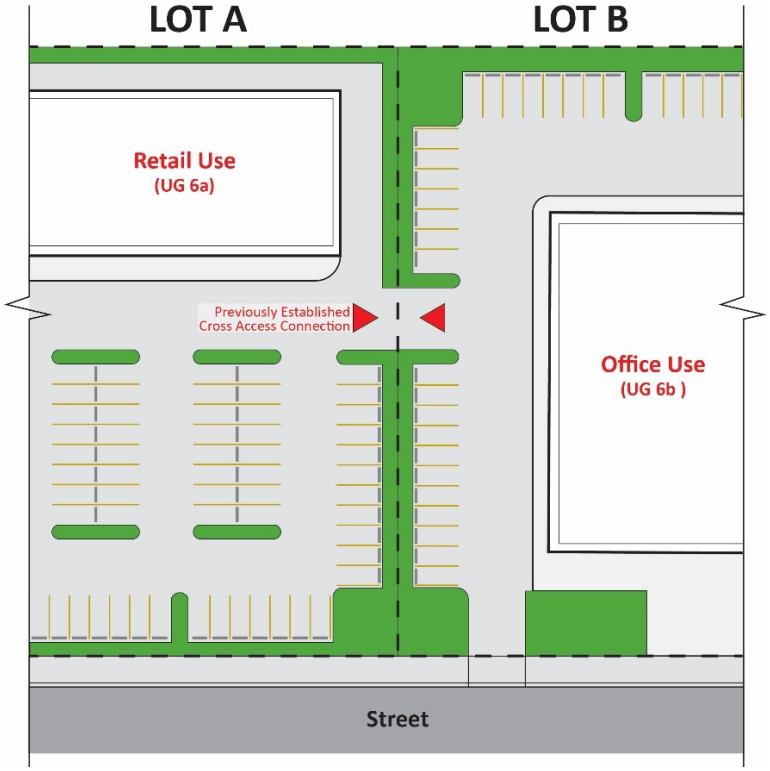
No Action Scenario

Prior to the issuance of building permits, the owner of Lot B is required to seek a CPC certification to establish and open the previously recorded cross access easement. Upon approval of the CPC certification, the commercial office building is developed, and cross access connection is provided between the adjacent lots to provide vehicular connections.

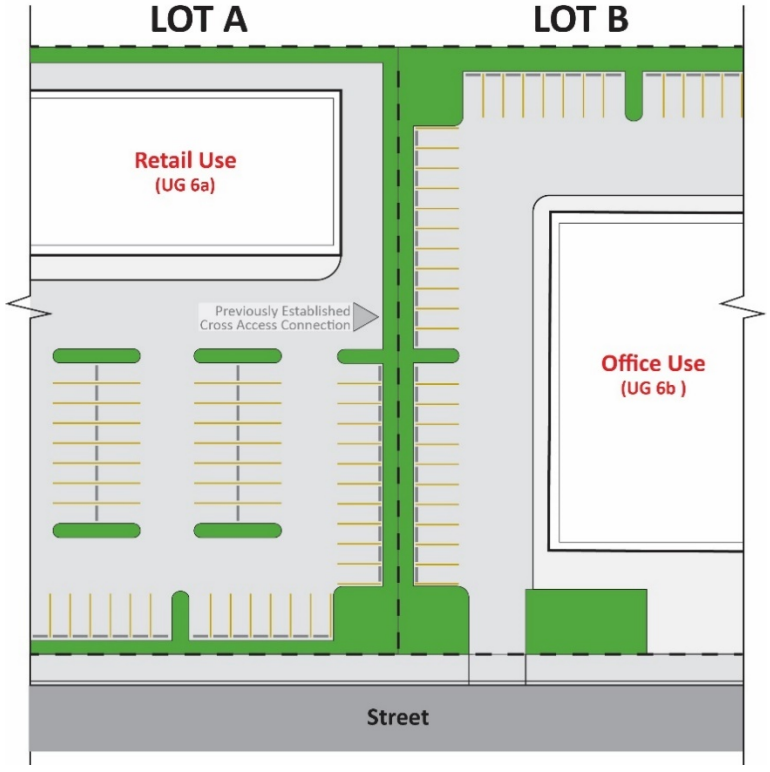
With Action Scenario

The Proposed Actions seek to make the establishment or waiver of cross access connections as-of-right and modify the applicable use groups. Since the owner of Lot B is proposing to develop a wholly commercial office building, a vehicular cross access connection is not required between the Lots A and B as there are few vehicular trips anticipated between the two uses.

Scenario A – No Action



Scenario A – With Action



Scenario B – Applicability of Cross Access Connections along certain lot lines

A cross access easement is required to be recorded along each abutting lot line greater than 60 feet in length within a C4-1, C8, or M where a commercial or community facility use is proposed regardless of if the adjacent zoning lots contain frontage on the same street. To reduce redundancy of connections and to avoid creating unforeseen travel routes, the proposed rules would require only one connection to each adjacent lot fronting the same street or an intersecting street.

Existing Conditions

Lot A is corner lot developed with a commercial retail use with previously established cross access connections. The owner of Lot A established Connections 1, 2 & 3 between Lot A and Lot C, and connection 4 between Lot A and Lot B. Lot B and Lot C are both vacant lots and the proposed development includes retail uses.

No Action

To develop, the owner of Lot C is required to construct Connections 1, 2, and 3 to abutting Lot A if they intend to provide open parking areas adjacent to the previously establish connections. Similarly, the owner of Lot B will be required to provide Connection 4 between Lot B and Lot A. As development on Lots B and C are occurring concurrently, Connection 5 can be planned and constructed between these lots. The resulting connections impose limitations to where the building on Lot C can be constructed to provide the previously established connections and provide multiple points of vehicular access to Lot A. Additionally, Connection 5 between Lots B and C create a condition where cross access connections may serve the function of providing access between primary and secondary streets. All provided connections are a minimum of 22 feet wide to provide access for vehicles between each open parking area.

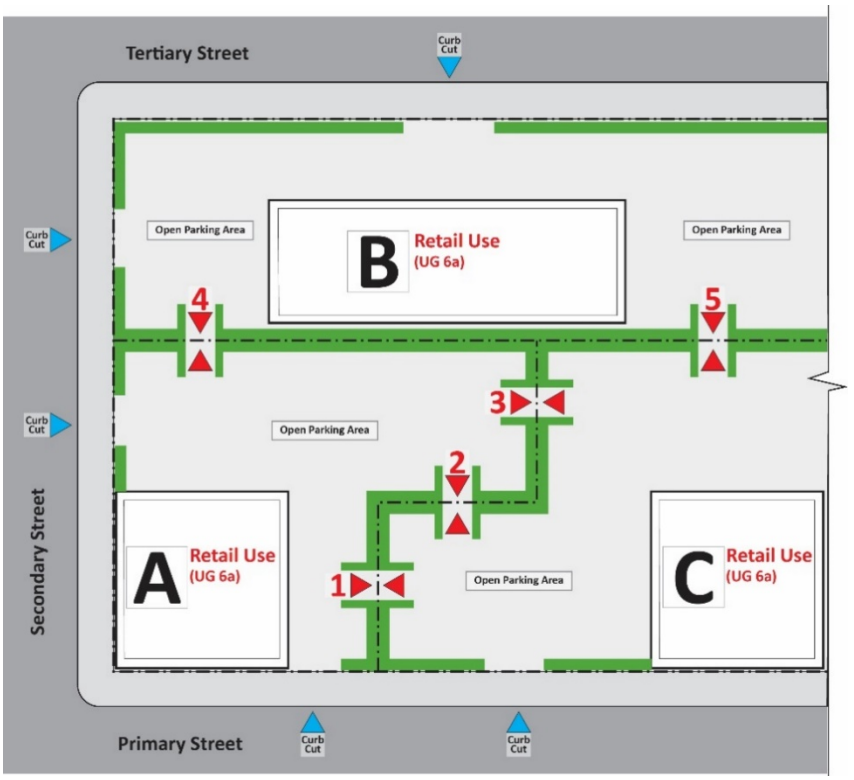
With Action

The Proposed Actions still recognize the previously recorded easements between Lots A, B, and C; however, the proposed regulations alter the applicability in the following ways:

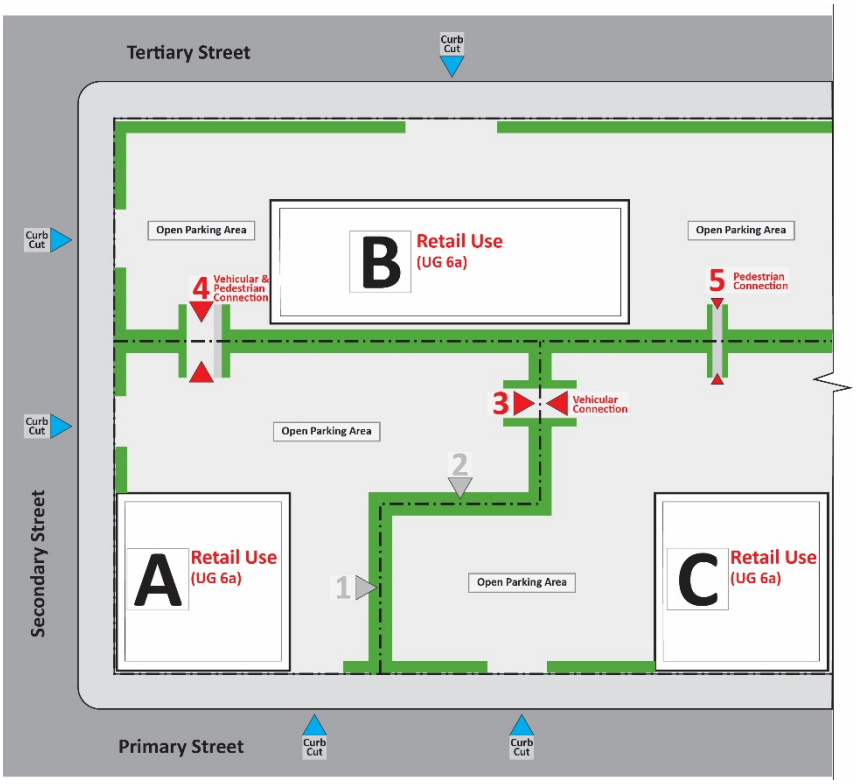
- Connections between Lots A and C – The Proposed Actions allow for greater flexibility between Lots A and C by requiring that only one (of the three originally recorded) cross access connection be provided between the abutting lots. This removes site planning restrictions for the developer of Lot C and reduces the number of parking spaces that may be removed on Lot A. While the diagram illustrates the opening of Connection 3, the developer of Lot C could choose to open any previously established connection or coordinate with the owner of Lot A to relocate the previously established connections to an agreed upon location as-of-right.
- Connections between Lots B and C - As Lots B and C do not front on the same street, vehicular cross access connections are no longer required. In lieu of vehicular connections, a landscaped pedestrian connection is provided (Connection 5).
- Connections between Lots A and B - The cross access connection between Lots A and B is provided. Due to the distance between the existing and proposed buildings, and the location of the cross access connection, the vehicular cross access connections is required to provide a buffered pedestrian access point that is six feet wide in addition to a

vehicular means of access that is a minimum 22 feet wide, for a total of 28 feet in width (Connection 4).

Scenario B – No Action



Scenario B – With Action



Summary

The cross access connection requirements are not intended to induce or discourage commercial development; nor would the text amendment affect the size or bulk of new commercial development or alter development patterns in a substantive way from existing development in the applicable areas. The Proposed Actions aim to provide greater flexibility to and ease of implementation of cross access connection regulations by allowing connections as-of-right and modifying the provisions to more accurately reflect the intent of the initial text amendment. Modifications to include pedestrian connectivity between parking areas will create a safer connection by reducing the need for pedestrians to utilize curb cuts and drive isles when traveling between neighboring commercial uses and minimize the potential for pedestrian/vehicular conflict.

The Proposed Actions will continue to be applicable only within C4-1, C8, and M districts within the Borough of Staten Island; however, the amendment of which commercial and community facility uses must provide a connection will provide greater clarity in the regulations by allowing flexibility for uses where a vehicular connection may negatively affect site planning, and ensure that the regulations correctly reflect the initial intention of providing vehicular connections between retail and commercial shopping centers as stated in the report issued by CPC (N090185ZRR) and the 2009 EAS (09DCP021R).

Additionally, further clarifying the applicable location of cross access connections will continue to meet the intent of the original zoning text by minimizing the need for vehicles to enter the street to travel between commercial shopping centers while minimizing the possibility that a cross access connection may be used as an unforeseen travel route through a block.

If the cross access regulations cannot be met, the existing authorization to waive or modify cross access rules due to an irregular lot or infeasible site plan will remain. It will be further amended to specifically also allow an alternative cross access connection that does not meet the rules, as long as the Commission finds that the vehicles can maneuver safely between the parking lots, and such cross access connections are adequately located so as not to impair ingress, egress, and circulation. Additionally, the Department of Buildings (DOB) may also waive these provisions if it finds that the proposed use is not open to the general public.

Prototype 14 R1-1 District, 400-foot x 800-foot Irregular Interior Lot
Existing – Special Natural Area District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

This prototype, as shown in the illustrations below, uses a typical community facility site in an R1-1 zoning district in the Special Natural Area District. These assumptions were made because they represent typical lot conditions of a plan review site, or site greater than one acre in size, without significant natural features. The development scenario was derived from prior land use approvals of similar facilities within the existing Special Natural Area District. The Proposed Actions include a CPC certification for plan review sites to allow minor enlargements, site alterations, or tree removal that meet certain thresholds to not require CPC discretionary review. To meet these thresholds, the prototype demonstrates a limited increase in floor area and minor enlargement of an existing parking area that do not require the creation or extensions of private roads or alteration of habitat.

The prototype illustrates the effects of the following portions of the Proposed Actions on development:

- As-of-right modification to natural features outside of the footprint of the building and 15-foot construction zone;
- Proposed Certification for Plan Review Sites not containing habitat or areas of no disturbance

Existing Conditions

The existing condition demonstrates a 360,000 sf school campus that contains 10 separate buildings totaling 48,900 sf (0.14 FAR). The buildings include a mixture of classrooms, administrative buildings, a gymnasium, theater, and an athletic field with storage structures requiring 72 parking spaces. There are two existing open parking areas—one parking area with 44 spaces near the front lot line, and another parking area with 28 spaces near the athletic field in the middle of the site accessed by an internal roadway.

The site contains several trees, and the surface has a maximum elevation change of 18 ft—the lowest elevation is in the middle of the site, with a 12 ft elevation at the front lot line and an 18 ft elevation at the rear lot line. The site does not comply with parking lot landscaping requirements as the site was developed prior to underlying regulations per ZR Section 37-90. The site does not contain potential habitat or areas of no disturbance.

No Action Scenario

The No Action scenario illustrates the development of a three-story community facility structure containing classrooms as part of a campus expansion. The building totals 25,500 sf with a building footprint of 8,500 sf. The development requires 17 parking spaces that are accommodated through the enlargement of existing parking areas. The additional development results in 74,400 sf of floor area (0.21 FAR) across the entire site with 89 parking spaces.

Two existing trees located in the proposed building footprint may be removed as-of-right , and 10 additional trees are required to be planted to comply with parking lot landscaping standards pursuant to ZR Section 37-90. The additional parking spaces and required parking lot landscaping

requires 5,980 sf of ground disturbance. The proposed development complies with all other height, yard, and screening regulations pursuant to the underlying district and existing special district.

With Action Scenario

The With Action scenario illustrates the development of a three-story community facility structure containing classrooms as part of a campus expansion. The building totals 25,500 sf with a building footprint of 8,500 sf. The development requires 17 parking spaces that are accommodated through the enlargement of existing parking areas. The additional development results in 74,400 sf of floor area (0.21 FAR) across the entire site with 89 parking spaces.

The scenario demonstrates the as-of-right removal of five existing trees to provide a new landscaped area and pedestrian pathway around the building. This results in the planting of three new trees and the pathway results in 1,015 sf of ground disturbance. The proposed development also requires the planting of 10 additional trees to comply with parking lot landscaping standards pursuant to ZR Section 37-90. The additional parking spaces and required parking lot landscaping requires 5,980 sf of ground disturbance. The proposed development complies with all other height, yard, and screening regulations pursuant to the underlying district and proposed special district.

Incremental Change

As a result of the With Action scenario, there is no change in floor area, building bulk, or number of parking spaces. The total ground disturbance increases by 1,015 sf and three additional trees are removed as-of-right to accommodate site features such as walkways through the site. Both scenarios provide an equal amount of parking spaces and an equal number of trees due to parking lot landscaping requirements and the proposed landscaping in the With Action scenario.

	Existing	**No Action**	**With Action**	**Increment**
Lot Area (square feet)	360,000 sf	360,000 sf	360,000 sf	0
Provided FAR	0.14	0.21	0.21	0
Building Area	48,900 sf	74,400 sf	74,400 sf	0
Number of Off-Street Parking Spaces	72 Spaces	89 Spaces	89 Spaces	0
Lot Coverage	25,100 sf (7%)	33,600 sf (9%)	33,600 sf (9%)	0
Hard Surface	53,642 sf (15%)	66,781 sf (18.6%)	67,796 sf (18.8%)	+1,015 sf (-0.3%)
Ground Disturbance	0	14,480 sf	15,495 sf	+1,015 sf
Number of Trees	60 Trees	67 Trees	67 Trees	0

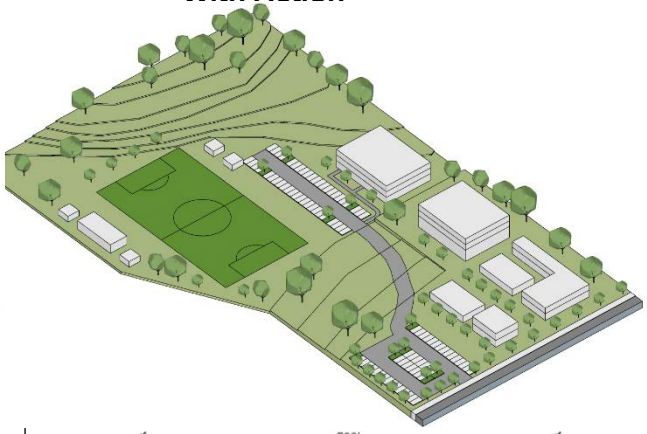
Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit

Prototype 14 *R1-1 District, 400 ft x 800 ft irregular interior lot*
Existing – Special Natural Area District
Proposed – Special Hillsides and Natural Area District, Non-Escarpment Area

Existing

No Action

With Action



Prototype 15 R3X District, 200-foot x 400-foot Corner Lot
Existing – Special South Richmond Development District
Proposed – Special South Richmond Development District

This prototype, as shown in the illustrations below, demonstrates the redevelopment of a 55,000 sf zoning lot containing a zoning lot with four tax lots and four homes. The Proposed Actions include CPC certification for plan review sites to permit development, site alterations and subdivision of a plan review site that meet certain thresholds (and CPC discretionary review would no longer be required). To meet these thresholds, the prototype demonstrates a residential development on a plan review site that does not contain habitat, group parking areas, or private roads. Due to the limited number of vacant plan review sites in SSRDD that do not contain habitat, would not require a group parking facility, and have adequate street frontage to not rely on private roads, the prototypical condition would most likely be applicable to the redevelopment of lots containing community facilities or the consolidation of multiple residential lots to create a zoning lot greater than 1 acre as an existing condition.

The prototype illustrates the following aspects of the Proposed Actions:

- As-of-right modification to natural features outside of the footprint of the building, 8-foot construction zone, required parking areas, and driveway;
- Proposed Certification for Plan Review Sites not containing habitat, new group parking, or new private roads

Existing Conditions

The existing condition demonstrates a 55,000 sf corner lot with 600 feet of frontage – 200 feet along one street and 400 feet along a secondary street. The site contains four detached, two-story, single-family homes located on four separate tax lots and on a single zoning lot. Building 1 is 4,000 sf, Building 2 is 4,000 sf with a 625 sf garage, Building 3 is 3,800 sf, and Building 4 is 4,000 sf with a 625 sf garage. Thus, the total floor area for the site is 17,050 sf (0.31 FAR).

The site contains 11 parking spaces located within driveways and garages. The site also contains a mixture of pools, sheds, and gazebos for some homes. The surface is flat, and the site contains 25 trees greater than six-inch caliper.

No Action Scenario

The No Action scenario illustrates the zoning lot being subdivided into 12 lots – two 7,500-sf lots, and ten 4,000-sf lots. Lots 1 and 2 are 50 feet wide by 150 feet deep, which creates a lot area of 7,500 sf; and Lots 3 through 12 are 40 feet wide by 100 feet deep, which creates a lot area of 4,000 sf. Each lot is developed with a detached, two-story, two-family home resulting in 24 dwelling units. The subdivision or reapportionment of the zoning lots would require ministerial CPC certification to demonstrate compliance. Neither modification of topography of more than two feet cut or fill, nor removal of trees greater than six-inch caliper, is proposed beyond the 8-foot construction buffer; thus construction is allowed as-of-right.

<u>Lot 1 and 2 – Building and Parking</u>

The dimensions of Lots 1 and 2 are 50 feet wide by 150 feet deep, resulting in two 7,500 sf zoning lots. Each lot contains a two-story, two-family building with 4,500 sf of floor area, which equals 0.6 FAR and is the maximum permitted, including attic allowances, within an R3X district in

LDGMA. There is no maximum lot coverage as the footprint and location of the building is defined by yard requirements. Each building footprint is 2,250 sf, designed to maximize FAR within the two stories. Each building complies with all other height, yard, and setback regulations pursuant to the underlying district and existing special district.

Each lot contains two dwelling units and provides three off-street parking spaces - one space in the side yard and two space within the building garage. Both driveways comply with underlying regulations related to width and location between adjacent curb cuts. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations. Non-building amenities include a pool in the rear yard and walkways.

Lot 3 through 12 – Building and Parking

The dimensions of Lots 3 through 12 are 40 feet wide by 100 feet deep, resulting in ten 4,000 sf zoning lots. The two-story, two-family building on each lot contains 2,400 sf of floor area, which equals 0.6 FAR and is the maximum permitted, including attic allowances, within an R3X district in LDGMA. There is no maximum lot coverage as the footprint and location of the building is defined by yard requirements. Each building footprint is 1,200 sf, designed to maximize FAR within the two stories. The building complies with all other height, yard, and setback regulations pursuant to the underlying district and existing special district.

Each lot contains two dwelling units and provides three off-street parking spaces – two tandem spaces in the side yard and one space within the building garage. Each driveway complies with underlying regulations related to width and location between adjacent curb cuts. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations. Non-building amenities include a pool in the rear yard and walkways.

Lots 1 through 12 – Planting

Prior to development, the site contained 25 trees worth 55 credits under the current tree credit system; the minimum tree credit requirement is 55 credits based on 1 tree credit per 1,000 sf of lot area. The entire development contains 38 trees (58 credits) and each individual zoning lot satisfies the requirement of 1 tree credit per 1,000 sf of lot area as demonstrated in the following table.

Lot	Existing # of trees	Existing Tree Credits	Removed (credits)	Preserved (credits)	Newly planted (credits)	Total # of Trees	Total Tree Credits
Lot 1	3	10	6	4	4	**5**	**8**
Lot 2	1	3	-	3	5	**6**	**8**
Lot 3	3	6	3	3	1	**2**	**4**
Lot 4	1	1	-	1	3	**4**	**4**
Lot 5	1	1	-	1	3	**4**	**4**
Lot 6	4	6	5	1	3	**4**	**4**
Lot 7	2	6	-	4	-	**1**	**4**
Lot 8	1	4	-	4	-	**1**	**4**
Lot 9	4	7	4	2	2	**3**	**4**
Lot 10	2	6	-	6	-	**2**	**6**
Lot 11	1	3	-	3	1	**2**	**4**
Lot 12	2	3	3	-	4	**4**	**4**

With Action Scenario

The With Action scenario illustrates the zoning lot being subdivided into 12 lots – two 7,500-sf lots and ten 4,000-sf lots. Lots 1 and 2 are 50 feet wide by 150 feet deep, which creates a lot area of 7,500 sf; and Lots 3 through 12 are 40 feet wide by 100 feet deep, which creates a lot area of 4,000 sf. Each lot is developed with a detached, two-story, two-family home resulting in 24 dwelling units. The subdivision of a plan review site not containing habitat areas, group parking facilities, or a private road would require ministerial CPC certification to demonstrate compliance. Like the No Action scenario, construction would be allowed as-of-right because neither modification of topography of more than two feet cut or fill, nor removal of trees greater than six-inch caliper, is proposed beyond the 8-foot construction buffer.

Lot 1 and 2 – Building and Parking

The dimensions of Lots 1 and 2 are 50 feet wide by 150 feet deep, resulting in two 7,500-sf zoning lots. Each building contains 4,500 sf of floor area, which equals 0.6 FAR and is the maximum permitted, including attic allowances, within an R3X district in LDGMA. There is no maximum lot coverage as the footprint and location of the building is defined by yard requirements. Each building footprint is 2,250 sf, designed to maximize FAR within the two stories. Each building complies with all other height, yard, and setback regulations pursuant to the underlying district and existing special district.

Each lot contains two dwelling units and provides three off-street parking spaces – one space in the side yard and two spaces within the building garage. Each driveway complies with underlying regulations related to width and location between adjacent curb cuts. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations. Non-building amenities include a pool in the rear yard and walkways.

Lot 3 through 12 – Building and Parking

The dimensions of Lots 3 through 12 are 40 feet wide by 100 feet deep, resulting in ten 4,000-sf zoning lots. Each building contains 2,400 sf of floor area, which equals 0.6 FAR and is the maximum permitted, including attic allowances, within an R3X district in LDGMA. There is no maximum lot coverage as the footprint and location of the building is defined by yard requirements. Each building footprint is 1,200 sf, designed to maximize FAR within the two stories. Each building complies with all other height, yard, and setback regulations pursuant to the underlying district and existing special district.

Each lot contains two dwelling units and provides three off-street parking spaces – two tandem spaces in the side yard and one space within each building's garage. Each driveway complies with underlying regulations related to width and location between adjacent curb cuts. Cut and fill greater than two feet is limited to the building foundation and parking area, which is allowed as-of-right per SSRDD regulations. Non-building amenities include a pool in the rear yard and walkways.

Lots 1 through 12 – Planting

Prior to development, the site contained 25 trees worth 64 credits under the proposed tree credit system; the minimum tree credit requirement is 55 credits based on 1 tree credit per 1,000 sf of lot area. The entire development contains 34 trees (61 credits) and each individual zoning lot satisfies the requirement of 1 tree credit per 1,000 sf of lot area as demonstrated in the following table.

Lot	Existing # of trees	Existing Tree Credits	Removed (credits)	Preserved (credits)	Newly planted (credits)	Total # of Trees	Total Tree Credits
Lot 1	3	12	7	5	3	**4**	**8**
Lot 2	1	4	-	4	4	**5**	**8**
Lot 3	3	7	3	4	-	**1**	**4**
Lot 4	1	1	-	1	3	**4**	**4**
Lot 5	1	1	-	1	3	**4**	**4**
Lot 6	4	7	6	1	3	**4**	**4**
Lot 7	2	7	2	5	-	**1**	**5**
Lot 8	1	5	-	5	-	**1**	**5**
Lot 9	4	7	4	2	2	**3**	**4**
Lot 10	2	7	-	7	-	**2**	**7**
Lot 11	1	4	-	4	-	**1**	**4**
Lot 12	2	3	3	-	4	**4**	**4**

Incremental Change

As a result of the With Action scenario, there is no change to the number of dwelling units nor total amount of floor area. Both the No Action and With Action produce 24 dwelling units and 33,000 sf of development across 12 detached buildings.

The Proposed Actions result in a minor change to the number of trees between the No Action (38 trees) and With Action (34 trees) scenarios due to the proposed tree credit system that has greater value for mature trees.

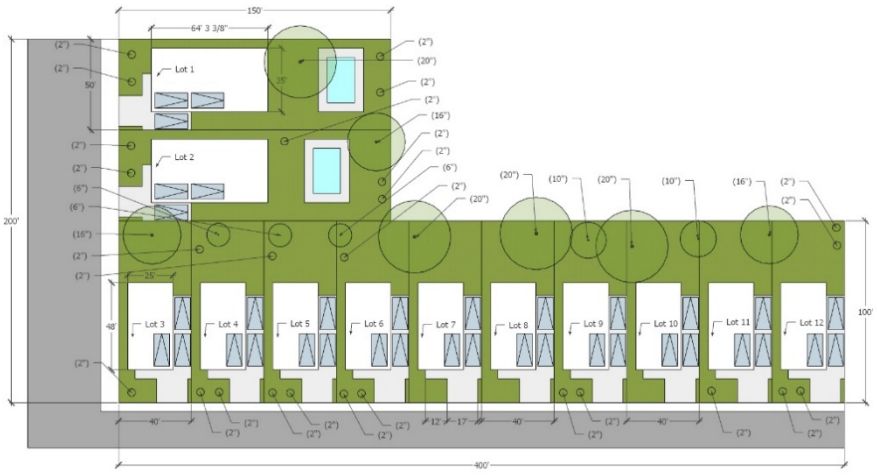
	Existing	No Action	With Action	Increment
Lot Area (square feet)	55,000 sf	55,000 sf	55,000 sf	0
Provided FAR	0.31	0.6	0.6	0
Building Area	17,050 sf	33,000 sf	33,000 sf	0
Number of Units	4 DU	24 DU	24 DU	0
Number of Off-Street Parking Spaces	11 Spaces	36 Spaces	36 Spaces	0
Lot Coverage	9,150 (17%)	16,500 (30%)	16,500 (30%)	0
Ground Disturbance	15,450 sf (28%)	28,494 sf (52%)	28,494 sf (52%)	0
Number of Trees	25 Trees	38 Trees	34 Trees	+4 Trees

Notes: FAR = floor area ratio; sf = square feet; DU = dwelling unit
Hard Surface Area is not included for this prototype because the Proposed Actions would not introduce hard surface area regulations in SSRDD.

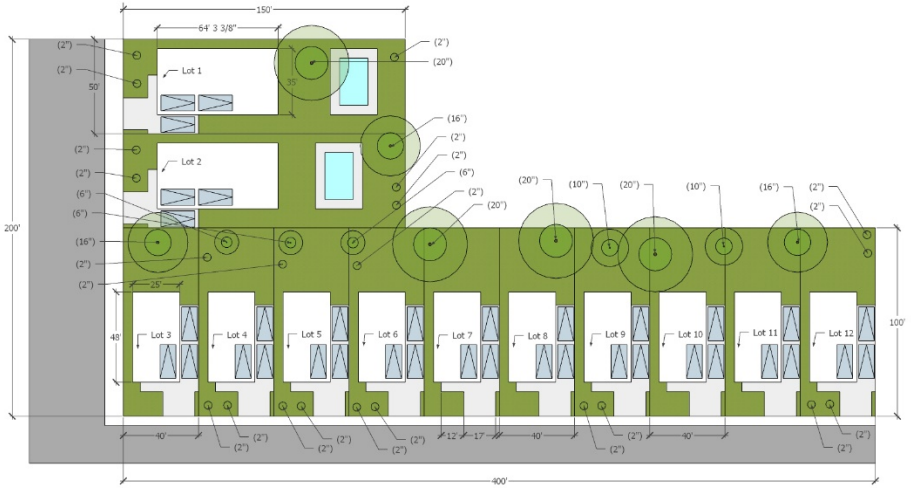
Existing


150'
200'
400'
100'
4,000 sqft
625 sqft
3,800 sqft
4,000 sqft
625 sqft

No Action



With Action



APPENDIX D

AIR QUALITY STATIONARY SOURCE SCREENING

FIG App 17-5
SO_2 BOILER SCREEN
RESIDENTIAL DEVELOPMENT - FUEL OIL #2

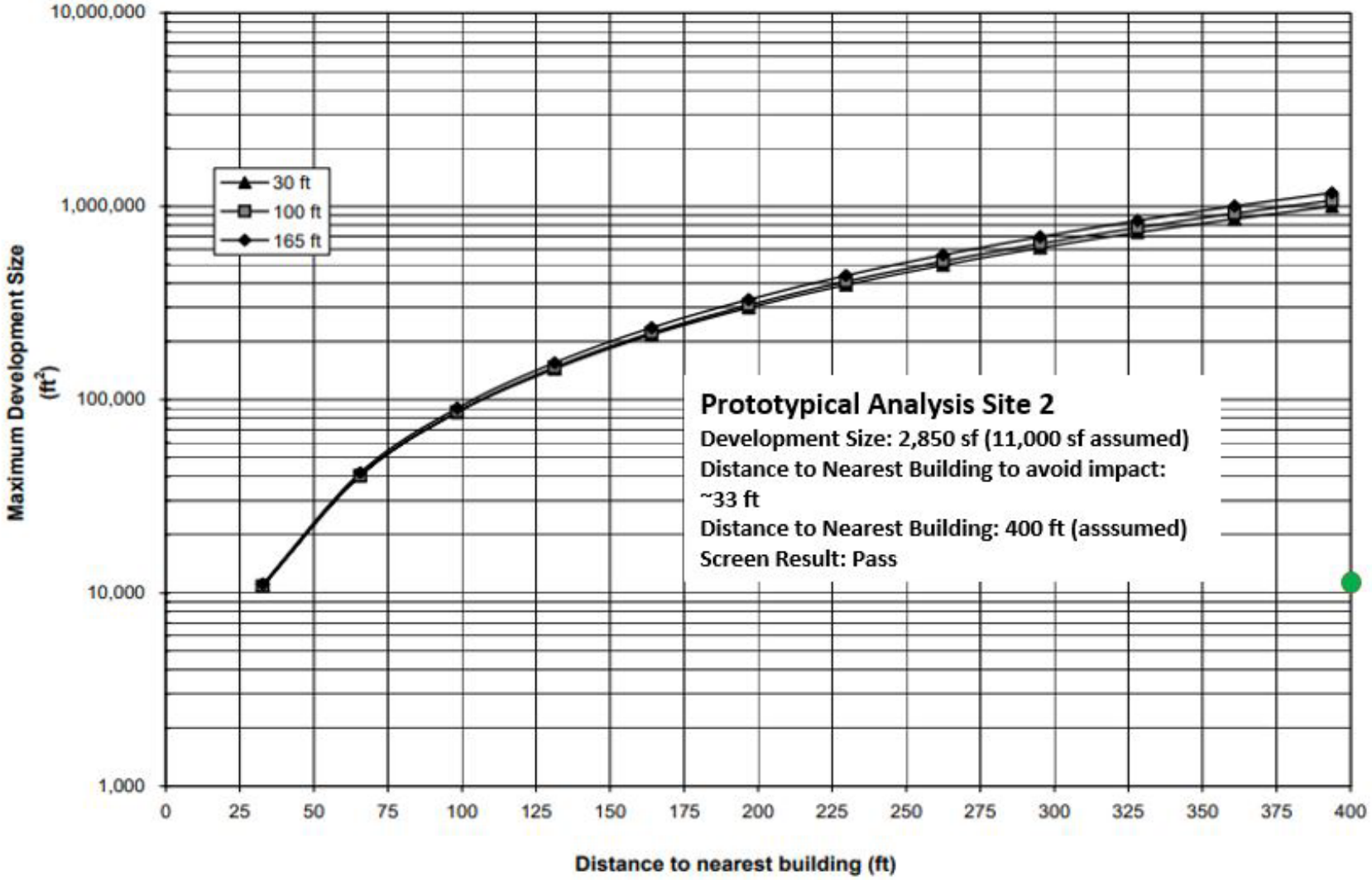


FIG App 17-6
SO_2 BOILER SCREEN
COMMERCIAL AND OTHER NON-RESIDENTIAL DEVELOPMENT - FUEL OIL #2

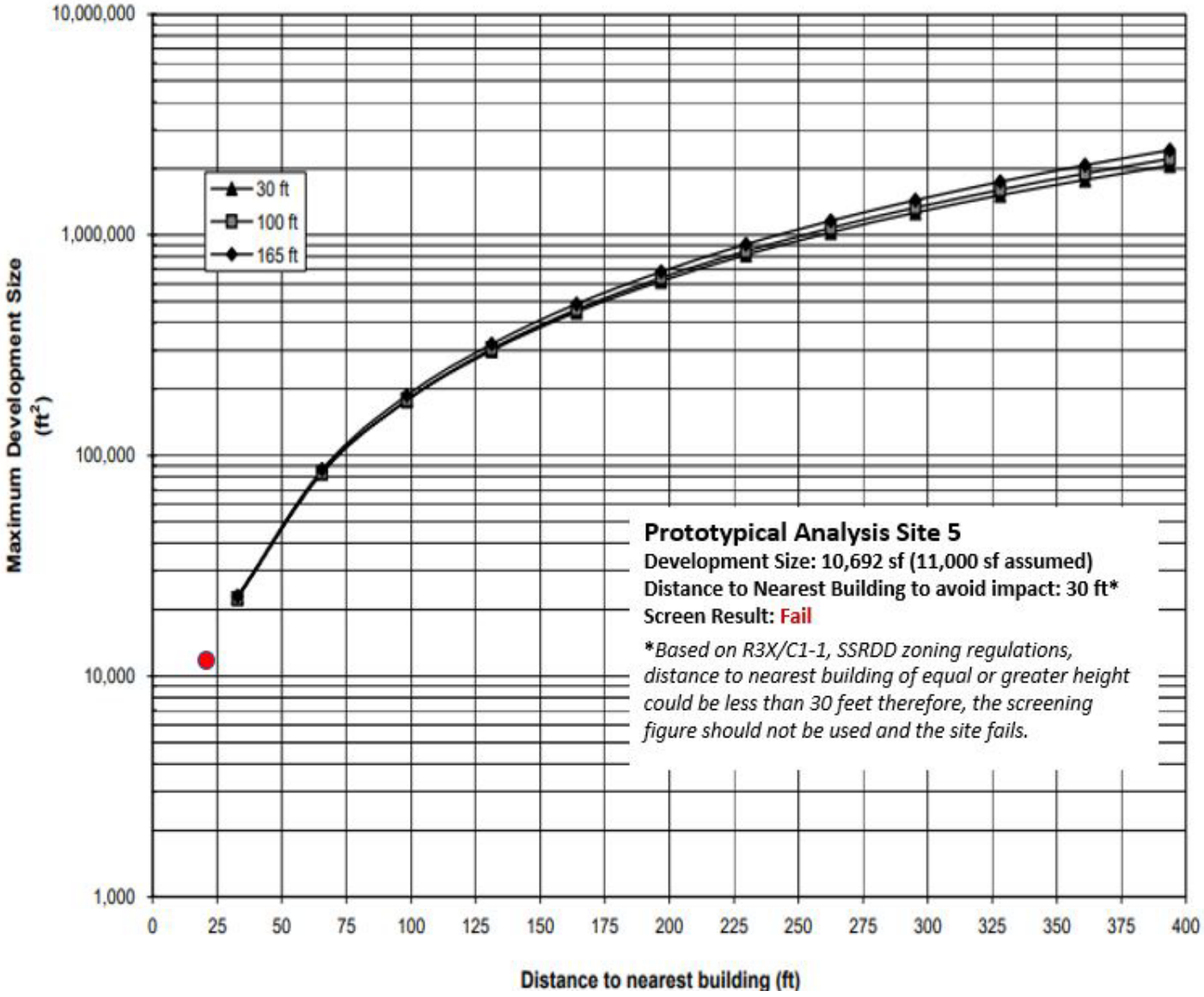
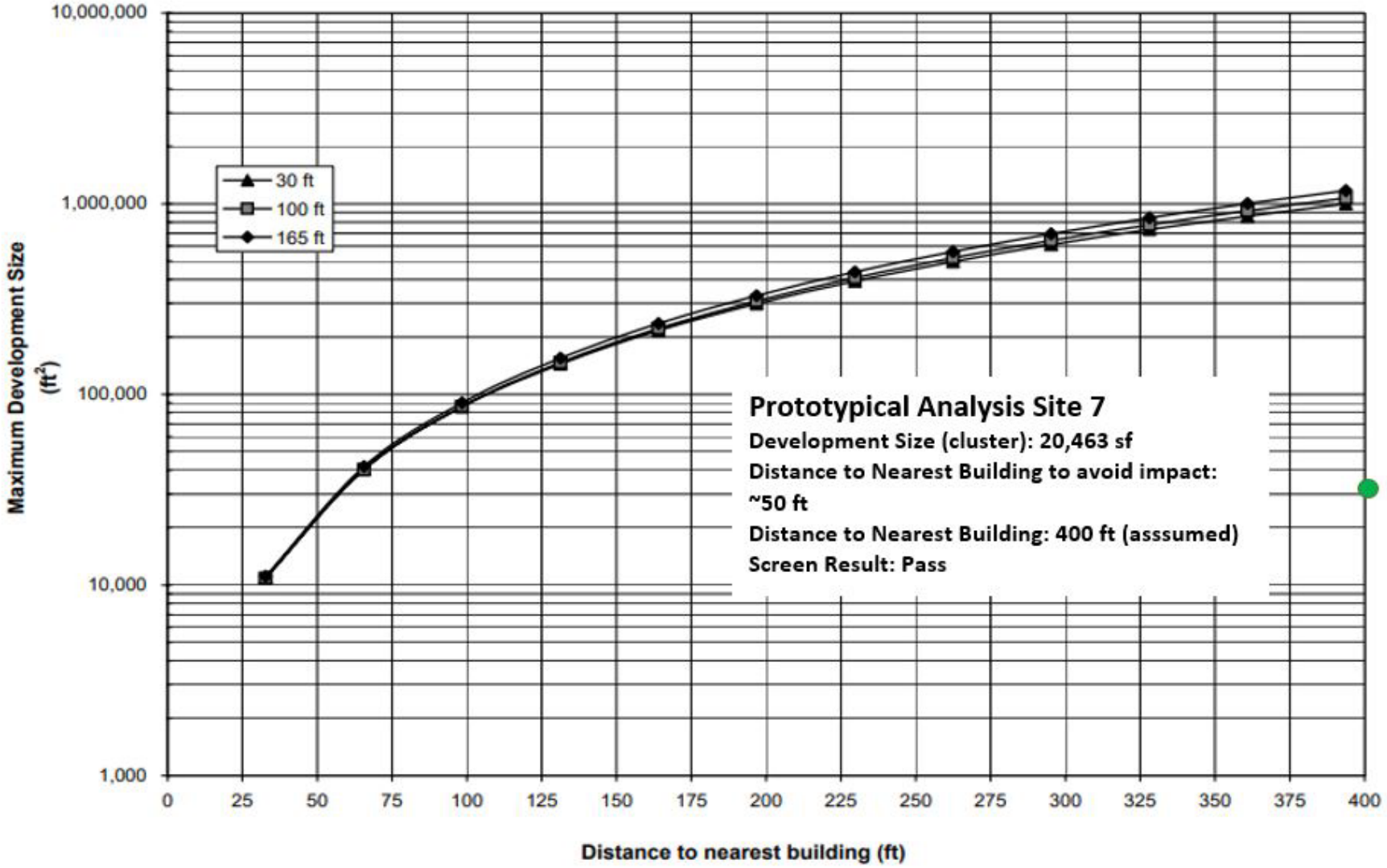


FIG App 17-5
SO_2 BOILER SCREEN
RESIDENTIAL DEVELOPMENT - FUEL OIL #2



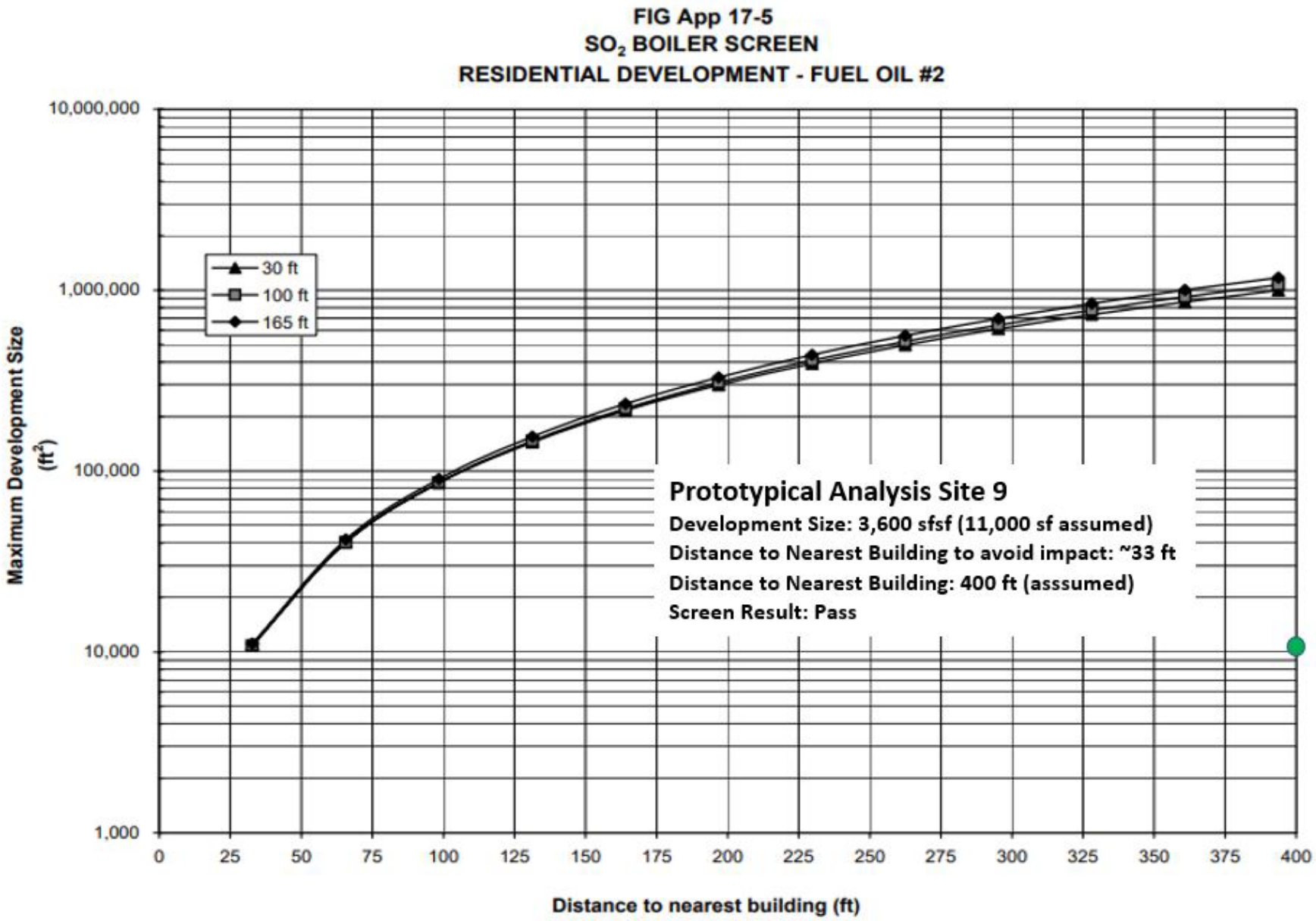


FIG App 17-5
SO2 BOILER SCREEN
RESIDENTIAL DEVELOPMENT - FUEL OIL #2
Maximum Development Size (ft2)
10,000,000
1,000,000
100,000
10,000
1,000
30 ft
100 ft
165 ft
Prototypical Analysis Site 9
Development Size: 3,600 sfsf (11,000 sf assumed)
Distance to Nearest Building to avoid impact: ~33 ft
Distance to Nearest Building: 400 ft (asssumed)
Screen Result: Pass
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
400
Distance to nearest building (ft)

FIG App 17-6
SO_2 BOILER SCREEN
COMMERCIAL AND OTHER NON-RESIDENTIAL DEVELOPMENT - FUEL OIL #2