Staten Island & Bronx Special Districts Update

Draft Scope of Work for an Environmental Impact Statement



New York City Department of City Planning CEQR No. 19DCP083Y ULURP No. Pending

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A. INTRODUCTION

The New York City Department of City Planning (DCP) is proposing updates to the Special Natural Area District, Special South Richmond Development District and Special Hillsides Preservation District to provide a clear and consistent framework for natural resource preservation that balances development and ecological goals within these Special Districts. In Staten Island, the Proposed Action also includes targeted zoning text changes to the Lower Density Growth Management Areas (LDGMA) and to cross access requirements to further the original purposes of protecting neighborhood character and making the regulations easier to apply.

The Proposed Action includes zoning text and related zoning map changes that would affect the Special Natural Area District (Article X, Chapter 5), Special South Richmond Development District (Article X, Chapter 7), and Special Hillsides Preservation District (Article XI, Chapter 9) of the Zoning Resolution (ZR). The Proposed Action would affect Staten Island's Special Hillsides Preservation District (SHPD) in Community District 1; Staten Island's Special Natural Area Districts (NA-1 and NA-3) in Community Districts 1 and 2; Staten Island's Special South Richmond Development District (SSRDD) in Community District 3; and the Bronx's Special Natural Area District (NA-2) district in Riverdale and Fieldston, Community District 8. The proposed zoning text amendment to Lower Density Growth Management Area (LDGMA) will affect all three Community Districts in Staten Island; modification of requirements for cross access between non-residential parking lots, which applies in C4-1, C8, M1, M2 and M3 districts in Staten Island would be affected. The Special Natural Area District in Queens (NA-4) would not be affected by the proposed changes.

The Special Districts that are the subject of the Proposed Action were established in the 1970s and 1980s to balance development with environmental protections in areas with significant natural features, such as aquatic, botanic, biologic, geologic and topographic features, having ecological and conservation values. Collectively, these regulations introduced valuable resource protection and oversight mechanisms, resulting in beautiful green neighborhoods. However, current regulations lack a broader approach to the ecological context, focusing on the preservation of natural features on a site-by-site basis. Without considering the relationship of the natural features on a site to the wider ecological context, the current regulations lack clear and consistent parameters to guide the City Planning Commission's (CPC) review when a property owner requests permission to remove or modify natural features, resulting in unpredictable and inconsistent outcomes. Additionally, a one-size fits all approach for properties of all sizes, land uses and types of natural feature subject to CPC review imposes burdensome costs and time delays for homeowners seeking to make modest changes to their properties, while allowing some larger developments in sensitive areas to go without any public oversight.

Moreover, the City's understanding of the natural environment has evolved, revealing a better understanding of the importance of larger natural areas, such as Forever Wild parklands, which are referred to as 'designated natural resources' in the proposed regulations. These larger natural areas are now understood to be key "anchor habitats" that have a high level of biodiversity with more species of plants and animals and form an integral part of the larger ecosystem. Technology has also improved in the last 40 years, allowing these areas to be mapped more accurately. These 'designated natural resources' that are already on publicly protected lands, combined with other larger habitats on private properties, are the most important assets to protect, preserve and enhance.

The Proposed Action seeks to update and refine these regulations to strengthen and rationalize natural resource preservation, to codify best practices learned over 40 years and to create a more homeowner-friendly environment with robust as-of-right rules with clearer outcomes for development on small lots (less

than an acre). Such as-of-right regulations that protect significant natural features and ensure cohesion within neighborhoods with distinct character would allow small properties (less than an acre) to proceed directly to the Department of Buildings (DOB) for approval by showing compliance with the proposed regulations without requiring CPC review.

The Proposed Action would require special review by the CPC for development on large properties (an acre or more), as well as development with new private roads or new buildings or subdivisions of a lot in historic districts. In areas of steep slope or ecological sensitivity (abutting designated natural resources), developments including four or more new lots or buildings will also require CPC review. All these developments have a greater potential of affecting the surrounding ecology, neighborhood character and the public realm.

Because the current regulations require many small properties to go through CPC review, the proposed framework will result in a reduction of over 66 percent in the number of applications requiring CPC review, based on data analysis of applications to the CPC in the three special districts from 2012 to 2017.

The proposed action would set clear parameters for large and sensitive sites such that CPC review would result in predictable outcomes for natural feature preservation and development. Additionally, for sites with existing habitat, portions of habitat would be required to be preserved in perpetuity to maintain ecological connectivity and neighborhood character. These sites, which will be pre-identified, will require ecological assessment of habitat before a development is designed so that the requirement can be met by preservation of the most valuable ecological areas that may also provide connectivity to the larger protected natural areas. There will be an option to cluster buildings on these sites in order to preserve natural habitat on a portion of the site while maintaining roughly the same development potential for the entire site. The proposal would encourage upfront long-term site planning to create a holistic development plan for the public and the property owner, considering natural resource preservation.

The proposal would also remove CPC review for Bluebelt properties managed by NYC Department of Environmental Protection (DEP) and NYC Parks properties that is required in the existing SNAD. Previous CPC reviews have not added significant value to the NYC Parks proposals and have been onerous for both City agencies. Owing to NYC Parks and NYC DEP goals of preserving natural resources as well as their own public review process and the Public Design Commission (PDC) public review process for any publicly owned property, CPC review is redundant and unnecessary.

To achieve these objectives, the proposal would combine the existing three Special Districts (Hillsides, Natural Areas and South Richmond) into one special district called the 'Special Natural Resources District' to create consistent natural resource preservation rules, while retaining the special bulk, parking and open space rules of the Special South Richmond Development District within a new Subdistrict. Within the new Special District, three ecological areas (Escarpment, Resource Adjacent and Base Protection) would be established to create a hierarchy of natural resource preservation based on the proximity of a private property to 'designated natural resources' or those properties having steep slopes, to protect, enhance and connect the most ecologically sensitive resources.

The Proposed Action would also update cross access regulations on Staten Island and LDGMA regulations that established residential development controls regarding parking, yard, open space, private roads and other regulations to preserve neighborhood character.

The Proposed Action, as described in detail below, is not expected to cause a significant change in the overall amount, type, or location of development. On large sites (one acre or more) with existing habitat, where a portion of the site is required to be preserved, in certain cases, the development under proposed

regulations may be slightly reduced to balance with the goals of preservation of habitat on these limited number of sites. This proposal is not expected to induce development where it would not have occurred absent the Proposed Action. However, the land use actions (certifications, authorizations and special permits) necessary to facilitate development on a site may be changed or eliminated by the proposed regulations. The proposed changes to LDGMA regulations in Staten Island are not expected to cause a significant change in the overall amount, type or location of development, though in some cases due to updates in minimum lot area rules along private roads, the amount of development under proposed regulations may be slightly reduced. Updates to cross access regulation are mostly clarifications of rules and changes to review process and would not affect the type or amount of development.

The proposal is a coordinated effort developed over the course of several years with input from residents, elected officials, community boards, and other community stakeholders, and with city and other public agencies. Implementation of the proposed zoning text and map amendment will require review and approval of the discretionary action pursuant to the City's Uniform Land Use Review Procedure (ULURP). DCP is acting as lead agency on behalf of the CPC and is conducting a coordinated environmental review under the City Environmental Quality Review (CEQR) process.

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

CPC, as lead agency in the environmental review, determined that the Proposed Action have the potential to result in significant environmental impacts. Therefore, pursuant to CEQR procedures, CPC issued a positive declaration requiring preparation of an EIS in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act (SEQRA), the City's Executive Order No. 91, and CEQR regulations (August 24, 1977), as well as the relevant guidelines of the 2014 CEQR Technical Manual. This Draft Scope of Work was prepared in accordance with those laws and regulations and the CEQR Technical Manual.

In accordance with CEQR, this *Draft Scope of Work* is being distributed for public review. Two public scoping meetings have been scheduled. The first public scoping meeting will be held on Monday, December 10, 2018 at Wagner College, Spiro Hall, Room 2, 1 Campus Road, Staten Island, NY 10301. The meeting will begin at 4:00PM. The second public scoping meeting will be held on Thursday, December 13, 2018 at Ethical Culture Fieldston School, Student Commons Room, 3901 Fieldston Road, Bronx, NY 10471. The meeting will begin at 4:00PM. Written comments will be accepted by the lead agency until the close of business on Monday, January 14, 2019.

A *Final Scope of Work* will then be prepared, taking into consideration comments received during the public comment period, to direct the content and preparation of the EIS. As the next step in the process, once the lead agency has determined that the EIS is complete, it will be subject to additional public review, in accordance with CEQR and the Uniform Land Use Review Process (ULURP) with a public hearing and a period for public comment. A Final EIS (FEIS) will then be prepared to respond to and, as warranted, incorporate those comments. The lead agency will make CEQR findings based on the FEIS, before deciding on the Proposed Action.

C. BACKGROUND

In November 1964, the opening of Verrazano-Narrows Bridge provided the first direct connection between Staten Island and the rest of New York City via roadway. In the early 1970s, environmental conservation was at the forefront of local and national political debate; the protection of air and water were codified in the Clean Air Act and the Clean Water Act. The protection of natural resources was broadly established through the National Environmental Policy Act (NEPA), which created the environmental assessment

framework. This increased pressure of development in largely undeveloped areas that were recently connected via Verrazano Bridge and the national environmental regulations were the main impetus for creating the Special Districts to guide development that is balanced with natural resource preservation.

In July 1974, DCP published a report entitled <u>Preservation of Natural Features and Scenic Views in New York City</u>, which analyzed strategies that were used to protect substantial natural resources in other areas of the country and local needs and opportunities for natural resource preservation. In accordance with these national trends, New York City began to adopt the principle that its significant natural features could be protected using zoning regulations. New York City's first Special Natural Area District (SNAD) was formed in December 1974 to balance the level of development with preserving natural features.

Staten Island's rapid growth (33 percent population increase in the 1960s and 19 percent in the 1970s), an increase spurred by connecting Staten Island to a large market of first-time homebuyers created a need for an appropriate response through land use planning for the central and southern portions of the island. This was captured in a 1975 report titled 'Towns in South Richmond' prepared by DCP which resulted in the establishment of the Special South Richmond Development District (SSRDD) in 1975.

The Special Hillsides Preservation District (SHPD) was established over a decade later, in 1987, to guide development in the sensitive slopes of the Serpentine ridge in the northern eastern portion of the island. This was based on the DCP's 1983 report titled 'Staten Island: The North Shore Study'.

EXISTING SPECIAL DISTRICTS

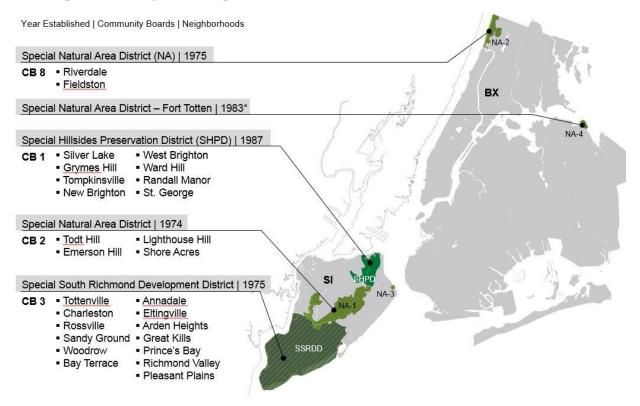
The three existing Special Districts, one in Bronx and Staten Island (SNAD: NA-1, NA-2 & NA-3) and two others in Staten Island (SSRDD and SHPD), as shown in the **Figure 1**, are described in further detail in this section. LDGMA and cross access regulations as pertinent to the Proposed Action are also described after the three Special Districts.

Special Natural Area District

SNAD was established in 1974 as the first special purpose zoning district to protect natural features such as aquatic, biologic, botanic, geologic, and topographic features. The district is mapped in neighborhoods with significant natural features, such as steep slopes, rock outcroppings, forests, wetlands, ponds, and stream corridors. The district includes over 3900 acres comprising the neighborhoods of Emerson Hill, Dongan Hills, Todt Hill, Lighthouse Hill, and an area now known as the Greenbelt of Staten Island (Community District 2). In 1975, SNAD was extended to the communities of Riverdale, Spuyten Duyvil and Fieldston in the Bronx (Community District 8) to include a little under 900 acres of area of ecological and geological significance both in its age and variety. This area is part of the Riverdale Ridge, formed with Fordham Gneiss, the oldest rock formation in New York City and contains numerous ecological resources that provide habitat for birds and other small animals. In 1977, SNAD was expanded to include Shore Acres in Staten Island (Community District 1) adding 50 acres; and in 1983 was expanded again to include Fort Totten Park in Queens (Community District 11), which has separate rules from the rest of the Natural Areas that are not being changed through this proposal.

In 2005, SNAD regulations were updated to include certain recommendations of the Staten Island Special Natural Area District Task Force and the Bronx CB8 197-a plan, to strengthen the preservation of significant natural features, including steep slopes, trees and planting. The changes included lot coverage standards on sloped sites similar to SHPD, elimination of a grandfathering clause that exempted lots less than 40,000 square feet from CPC review in certain situations, introduction of as-of-right regulations for lots under 10,000 square feet with less than 2,500 square feet of development on lots with flat topography

and few trees, introduction of additional tree preservation rules as well as grading controls and tailoring of LDGMA private road regulations to preserve natural features in SNAD.



*The regulations currently applicable to Fort Totten, Queens are independent from the rest of the Special Natural Area District and would remain unchanged in the proposal.

Figure 1: Existing Special Districts

SNAD is mapped primarily in low-density residential zoning districts characterized by detached single- and two-family homes and community facilities on large parcels such as hospitals, senior care, educational and religious institutions, parkland and open space, and small amounts of local commercial use. In the Bronx NA-2, 83 percent of lots contain one or two-family homes, 5 percent are multifamily and 12 percent are institutions, including schools, colleges and nursing facilities. In Staten Island, over 90 percent of lots in NA-1 contain one or two-family homes and over four percent are used by institutions.

SNAD regulations guide development on private properties to preserve natural features, including trees, topography, topsoil, rock outcrops, erratic boulders, natural ground-level vegetation and aquatic features by requiring CPC review of developments, enlargements or site alterations. Permission by the CPC is generally required to allow a minimum amount of disturbance of these natural features. Concurrently, applicants may request certain modifications in use, yard, and height and setback regulations of underlying district by special permit of the CPC to help minimize disturbing natural features.

Special South Richmond Development District

SSRDD was established in 1975 as an overall development plan for 12,000 acres of largely undeveloped land in the southern portion of Staten Island. The purpose of the district was to coordinate development and services, protect and maintain natural features such as trees and topography; avoid destruction of irreplaceable natural and recreational resources and to ensure that new development was compatible with existing communities. The district encompasses all of Community District 3, which includes the

neighborhoods of Annadale, Arden Heights, Bay Terrace, Charleston, Eltingville, Great Kills, Greenridge, Huguenot, New Dorp, Oakwood, Pleasant Plains, Prince's Bay, Richmond Valley, Richmond town, Rossville, Tottenville, and Woodrow. It is bounded by the waters of Arthur Kill to the west and Raritan Bay to the southeast. In SSRDD, 91 percent of lots contain one or two-family homes, less than one percent are multifamily or mixed residential and commercial uses, commercial and manufacturing uses comprise approximately 1.5 percent, and over one percent of lots have institutional or other uses.

SSRDD established 'designated open space (DOS)' on South Richmond's streams, ponds, fresh water wetlands, shorelines and woods, that would be left in a natural state as part of an open space network that also included public parks and waterfront esplanades. The district identified certain streets as 'arterial streets' for enabling through traffic and some others as 'park streets' to prioritize pedestrian and cyclists traffic between portions of an open space network by creating regulations pertaining to access restrictions, building setbacks and landscaping on lots abutting such streets. SSRDD rules applied to developments and site alterations, with rules establishing tree preservation and planting requirements, a limit on topographic modifications, special building height limits, increased lot width and side yard regulations. The district also established requirements for adequate public facilities, including street access, sewers and sewage disposal facilities, and public school seats to serve any proposed development. Since the establishment of the Special District, many DOS parcels have been acquired by the NYC Department of Parks and Recreation and the NYC Department of Environmental Protection to help form Staten Island's 103 acres network of city parks and its Bluebelt system.

Special Hillsides Preservation District

SHPD was established in 1987 for the northeast section of Staten Island to protect a 1,900-acre area surrounding the Serpentine Ridge, a geologic feature formed by glacial shifts over 400 million years ago. The ridge provides unique scenic views of the surrounding area and is itself an important feature of the landscape when viewed from surrounding neighborhoods. The district encompasses the neighborhoods of Ward Hill, Grymes Hill, Stapleton Heights, Fort Hill Circle, Sunset Hill, Pavilion Hill, West Brighton, and Silver Lake. Clove Lake, Silver Lane, and Sailor's Snug Harbor Cultural Center and Botanical Garden are also included within the district boundaries. In SHPD, 80 percent of lots contain one or two-family homes, 6.5 percent are multifamily, three percent are mixed residential and commercial uses, less than one percent comprise of lots with only commercial uses, and over one percent of lots have institutional or other uses.

SHPD was established to preserve the aesthetic value of hillsides, to protect steep slopes, reduce hillside erosion, landslides and excessive storm water runoff by preserving the area's hilly terrain, trees and vegetation. To achieve this, the district is regulated through specific controls on lot coverage, tree removal and construction of driveways and private roads in areas with significant slope. Development on steep slopes is subject to discretionary review by the CPC, while parcels with less steep slopes are not required to go through such oversight.

ECOLOGY

Ecology is a branch of science that deals with the interrelationships of organisms and their surroundings. Habitat is the natural environment in which an organism normally lives. When the special districts were established in the 1970s and 1980s, the importance of habitat size and connections between habitats had not yet been explored. Today, a well-established body of research and practice has shown that larger habitats are much more valuable as they can sustain large variety of species (and therefore rarer species) and larger populations of those species, which allows them to be more resilient. In addition, smaller patches of habitat can serve as stepping stones between natural areas. Furthermore, intact natural habitats of any size perform

valuable ecosystem services, including stormwater absorption, flood mitigation, air and water filtration, and temperature regulation (e.g. reducing urban heat island effect).

The larger size of these natural areas allows an inner portion of the habitat area to function as 'core habitat' for certain species that cannot use the 'edge habitat' that is the outer boundary of such natural area. This width of the edge can vary for different organisms. For instance, pollinators like native bees and butterflies (mason bees and monarch butterflies) can take advantage of a much smaller area of habitat than bird species such as wood thrush which require larger buffers. The shape of an area of habitat also has significant consequences regarding the amount of habitat that could function as core versus edge: a long, thin rectangular area would have much less core habitat than a square or circular area of the same overall size. Disturbance at the edge of these natural areas can greatly reduce the amount of core habitat, hence providing planted buffer or transition areas helps to maintain the size of the core habitat. Maintaining and creating ecological corridors between the large natural areas through small patches of biodiversity, especially in an urban environment, can increase the overall habitat and create resiliency in the ecosystem.

The three principles – the importance of core habitat for certain species, the value of larger habitats for sustaining genetic diversity and a more resilient population, and the value of maintaining connections between habitats, which also supports genetic diversity – are key guiding principles for the framework of proposed regulations. Proposed rules about habitat preservation on large sites, planted buffer at the boundary of protected natural areas, biodiversity gardens throughout the special district, and the variation in rules based on areas of ecological sensitivity are all based on these principles.

LOWER DENSITY GROWTH MANAGEMENT AREA

LDGMA regulations were established in 2004 as a response to Staten Island's development boom in the 1990s identified by the Staten Island Growth Management Task Force. Between 1990 and 2000, Staten Island's population grew by approximately 65,000 and the number of housing units increased by approximately 24,000. By 2000, Staten Island's population had increased to 443,000, a 200 percent increase from its 1960 population. LDGMA regulations were created to maintain and enhance the neighborhood character by reducing the density of residential development and ensuring better quality design by modifying underlying zoning provisions for yards, open space, parking, private road developments, lot area and lot width for residential development and for certain community facility uses.

To ensure adequate development on many large lots in Staten Island, private road standards were created to better align with standards for city streets, including bulk requirements for developments along the private roads. Due to high car ownership and a lack of public transit, parking requirements for one and two-family homes were increased to 1.5 parking spaces per dwelling unit. In 2005, LDGMA commercial regulations were adopted for the Borough of Staten Island to preclude the development of solely residential buildings in commercial districts, requiring ground floor commercial or community facility uses in order to retain the neighborhood character of a local retail street.

LDGMA encompasses most of Staten Island, except for portions of the north and west shore, which are predominantly zoned for manufacturing use or higher-density multifamily residential developments (see **Figure 2**). Many LDGMA regulations overlap with the intent of the Special Districts, including incentivizing better site planning and preserving low-density residential character. The existing Special Districts on Staten Island described above overlap with the designated Lower Density Growth Management Areas, except for areas on the West Shore of the SSRDD.

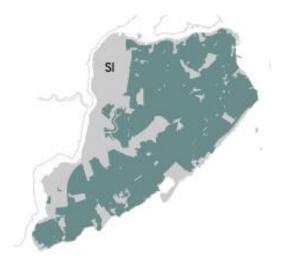


Figure 2: Lower Density Growth Management Areas Affected Areas Map

CROSS ACCESS CONNECTIONS

In order to help alleviate traffic congestion on thoroughfares, requirements for vehicular cross access connections between non-residential parking lots were established for Staten Island in 2008 (see **Figure 3**). Cross access connections are intended between open accessory parking lots on adjacent properties with commercial or community facility uses, so that vehicles driving from one site to another may avoid using public streets, thus allowing smooth traffic flow on thoroughfares. Cross access rules apply to developments, enlargements, or an increase in parking lot capacity involving 36 or more parking spaces, in C4, C8, and M districts. All proposed cross access connections require a Certification by the CPC Chair. The CPC may grant an authorization to waive or modify a cross access connection requirement based on irregular lot shape or site planning constraints. A cross access connection 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.



Figure 3: Cross Access Connections Affected Areas That Include C4-1, C8 and Commercial Uses in M Districts

D. PURPOSE AND NEED

The purpose of the proposed action is to provide a clear and consistent framework for natural resource preservation that balances neighborhood development and ecological goals by combining three special districts, the Special Natural Area District, Special South Richmond Development District and Special Hillsides Preservation District into a single Special Natural Resources District. The update would codify best practices, streamline regulations to reflect the three principles (as stated in the background) of updated ecological science and create clear development standards, resulting 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 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 consider 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.

Second, 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 85percent) of the past applications that have come for CPC approval. To address this challenge, best practices would be codified to create clearly defined parameters which would allow applicants to proceed directly to DOB for building permits and confirm zoning regulation compliance. This would ease the process for homeowners by eliminating CPC review, where appropriate.

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.

Fourth, science and know-how around environmental protection has evolved since the Special District rules were adopted nearly 40 years ago, but the rules have not evolved. Large consolidated natural areas are more ecologically valuable in providing core habitat to a variety of species than smaller areas, but current rules

don't recognize the higher value of these larger areas. Technological advances in the last several decades have helped map these ecological communities more accurately, allowing for habitat on larger private properties to be pre-identified in order to better preserve regional ecological linkages and biodiversity. Current rules are more preservation focused and do not account for the diversity of native landscapes that are recognized today. Individual trees and small plant communities are renewable resources that can be replanted after disturbance to create micro-habitats and provide ecosystem services. Ground level plants and understory vegetation play a critical role in the long-term health of forests, help the nutrient cycle by build-up of organic matter and provide food and shelter to many insects and wildlife that help the larger ecosystem and human health.

Based on research and an assessment of natural resources and natural features provided by the NYC Department of Parks and Recreation, New York State Department of Environmental Conservation and the Natural Areas Conservancy, DCP identified the regional natural assets unique to areas of the Bronx and Staten Island (see Error! Reference source not found. and **Figure 4**), that are critical for ecological connectivity. The proposal would map these natural assets, including City Forever Wild parks and Bluebelts that are protected by public entities, within the Special Natural Resources District as 'designated natural resources,' which would form the basis of a holistic ecological strategy to strengthen and protect these core natural areas while guiding development that is balanced with natural resource preservation across the special district. To achieve this goal, the proposal would map ecological areas (**Figure 5: Ecological areas based on proximity to natural resources**

) based on proximity to such 'designated natural resources' such as large parks, forests, and hillsides.

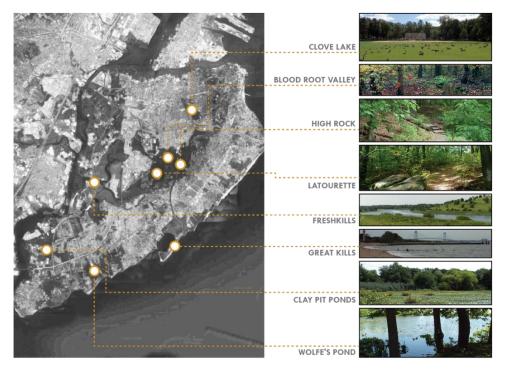


Figure 4: Major Natural Assets in Staten Island

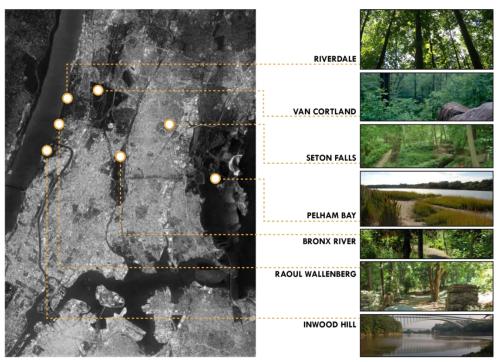


Figure 4: Major Natural Assets in the Bronx and Northern Manhattan

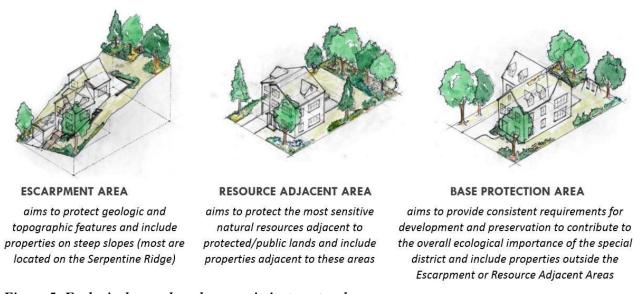


Figure 5: Ecological areas based on proximity to natural resources

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 update process:

- Strengthen and rationalize natural resource preservation.
- 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.
- Ensure consistency of regulations amongst all three special districts.

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

- Establish regulations that create a hierarchy of natural resource protection based on proximity of a development site to 'designated natural resources' and/or topography (Resource Adjacent areas and Escarpment areas) to protect and enhance the most ecologically sensitive resources.
- Combine the three existing special districts (Hillsides, Natural Areas, and South Richmond) into one special district, the **Special Natural Resources District**, to create consistent natural resource preservation rules.

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

<u>Properties less than one acre</u>: With clear rules that would address building footprint, permeability, trees and ground cover, most small property owners will go directly to DOB for project review and permits, skipping the current requirements for review by CPC. In some special cases, CPC review will still be required. This includes:

- development with new private roads, that affect the public realm and neighborhood character;
- new buildings and subdivisions of a lot in historic districts to align and coordinate review with Landmarks Preservation Commission such that both goals of historic and natural resource preservation are met; and
- four or more new lots or buildings in areas that are adjacent to regionally important habitats, or on steep slopes (Resource Adjacent and Escarpment, respectively) as the new as-of-right rules may not predict every outcome that best achieves the goals of balancing development and preservation.

<u>Properties of one acre or more:</u> For larger sites, the proposed rules with clear parameters will require individual site plan review by the CPC because large sites contribute more to the public realm and natural habitat.

- The proposal encourages upfront long-term planning to create a holistic development plan for the public and the property owner, considering natural resource preservation.
- For sites with existing habitats, portions of habitat will be required to be preserved in perpetuity to maintain ecological connectivity and neighborhood character, because the surrounding natural ecosystem & public realm directly relies on intact, larger natural features found on properties that are one acre or more.

The Proposed Action maintains the primary intent of each special district as guiding development in areas of outstanding natural beauty in order to protect, maintain and enhance the natural features and creates a consistent framework in a new 'Special Natural Resources District' to increase predictability and efficiency.

E. REASONABLE WORST CASE DEVELOPMENT SCENARIO

In order to assess the possible effects of the Proposed Action, a Reasonable Worst Case Development Scenario (RWCDS) was developed for the Future Without the Proposed Action (No-Action Condition), and the Future With the Proposed Action (With-Action Condition) for a 10-year period. The incremental difference between the No-Action and With-Action conditions will serve as the basis for assessing the potential environmental impacts of the Proposed Action.

To determine the No-Action and With-Action conditions, 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.

1. EXISTING ZONING

This section describes the existing regulations that will be affected by the Proposed Action. 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 the 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. LDGMA and 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 Boroughs of Bronx, Staten Island and Queens as illustrated in **Figure 1**. The special districts contain approximately 1,003 lots in Bronx and 53,434 lots in Staten Island that would be affected by the updates to the special district rules as described below. Since there would be no substantive changes to the special district in Queens, it is not further described in this document.

The Lower Density Growth Management Area (LDGMA) is located in portions of Community Districts 1, 2, and 3 in Staten Island and Community District 10 in the Bronx as illustrated in **Figure 2**; however, no changes are proposed within LDGMA in the Bronx. The affected LDGMA area comprises approximately 121,190 lots.

The cross-access regulations that would be affected by the Proposed Action are applicable within the Borough of Staten Island in zoning districts M1, M2, M3, C4-1, and C8 districts as illustrated in **Figure 3**. The applicable geographic areas extend beyond the boundaries of the special districts and LDGMA in Staten Island; the area affected by the cross-access regulations comprises approximately 3,544 lots.

These numbers of affected lots described above reflect some double counting because the special district rules, LDGMA rules and cross-access rules can sometimes apply to the same lot due to the fact that the areas that they effect overlap.

The Bronx

The Special Natural Area District (SNAD) within the Bronx is mapped as Special Natural Area-2 along the Riverdale Ridge that is composed of parts of Riverdale, Spuyten Duyvil and Fieldston within Community District 8. The ridge contains steep slopes, rock outcrops, ponds, brooks, marshes and mature trees. In

addition, the western foot of the ridge includes marshes, and the shore line of the Hudson River contains aquatic habitat that supports marine life.

Staten Island

The three existing special districts in Staten Island are the Special Natural Area District (SNAD), Special Hillsides Preservation District (SHPD) and the Special South Richmond Development District (SSRDD). 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, Pavilion Hill, West Brighton, and Silver Lake. Approximately 8,823 lots will be affected by the proposed action in SNAD and SHPD. SSRDD includes nearly all of Community District 3, from Tottenville to Arden Heights. There are six subdistricts 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 action.

REVIEW STRUCTURE

The current review structure by the CPC for the special districts includes certifications, authorizations, and special permits. When no approvals by the CPC are required for a proposed development it is considered to be 'as-of-right': the proposed development can apply directly to the 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 Chair of the CPC or the CPC as a whole are considered to be ministerial in nature, meaning that, as with as-of-right development, the proposal must be approved or denied based on whether or not it meets the conditions of the certification, based on facts. In contrast to these, the authorizations and special permits granted by the CPC are discretionary in nature, as the Commission must weigh and balance various factors in order 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 provides opportunities for public comment on the proposed project, which the CPC considers when making its decision.

In general, most development in SNAD (79 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.

The three special districts do not require CPC review of all larger sites or exempt smaller sites from CPC review, though there are two exceptions. In SNAD, the construction of a building with a footprint of no more than 2,500 square feet on a lot with no more than 10,000 square feet is exempt from a certification requirement, provided additional standards are met, thereby exempting some smaller sites. In SHPD and in SSRDD, an authorization is required for the development of over 30 parking spaces, thereby capturing larger sites, though only in relation to parking and traffic.

All three special districts require a certification from the CPC that any proposed subdivision of a lot complies with the special district rules and preserves natural features to the greatest extent possible. All three special districts also allow for development to be clustered in order to preserve natural features by

allowing the special permit for large scale residential developments to be applied to smaller lots than normally permitted.

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. 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.

SHPD – SHPD divides lots into Tier I and Tier II, with Tier I lots (with average slope less than 10 percent) subject to an authorization for construction on steep slopes and for removing protected trees. Tier II sites are more steeply sloped (average slope greater than 10 percent), 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.

SSRDD – Similar to Tier I sites in SHPD, removal of protected trees requires an authorization in SSRDD. Topography is also protected, requiring an authorization from the CPC for the modification of topography by more than two feet, with the certain exceptions. Generally, topography changes within 8 feet of a building are permitted without requiring a CPC authorization.

SSRDD requires a certification that there are enough school seats available for the new students expected as a result of proposed residential development. There are three certifications required for any development located on a lot that has Designated Open Space (DOS) in SSRDD. 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. Another 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.

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 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.

Special permits that may be sought from the CPC include allowing lots with more than half their area in DOS to calculate bulk regulations using the entire lot area, permitting buildings or other structures higher than the four story/50-foot height limit, permitting community facility buildings or treatment plants in DOS, and permitting building encroachment into DOS. Based on five years data from 2012 to 2017, approximately nine percent of all new building applications 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 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, aquatic features, erratic boulders and rock outcrops. In each of these special districts natural features are protected as separate individual items, without regard to whether or not they are part of a larger ecological area on adjacent lots, and without requiring a higher level of protection for lots adjacent to regionally important ecological areas. The current special district rules allow modification of natural features while providing little guidance regarding 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, the features that are protected as natural features by zoning regulations include: geological features such as rock outcrops and geological deposits, topographical features such as steep slope, existing natural topography and topsoil, aquatic resources, and botanic environments. With just a few exceptions, all of these features cannot be removed or disturbed except through an authorization of the CPC.

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 an authorization of the CPC, and on Tier II sites, an authorization is also required to remove or disturb topography or vegetation other than trees.

SSRDD – In this district, the natural features that are protected by zoning regulations include existing natural topography, trees and open space. Open space is protected through pre-mapped Designated Open Space (DOS). With certain exceptions, natural topography and trees are protected and disturbance or removal requires an authorization by the CPC.

Tree Regulations

TREE REMOVAL

While 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 cannot be removed as-of-right except within the proposed building footprint, or within 15 feet of the proposed building footprint for properties within SNAD and SHPD, or within 8 feet of the proposed building footprint in SSRDD, and except for when they are located in the path of 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, pursuant to Zoning Resolution (ZR) Section 105-425 in SNAD or pursuant to ZR 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, pursuant to ZR 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 3 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 3 inches of caliper.

TREE PLANTING REQUIREMENTS IN OPEN PARKING AREAS

SNAD and SHPD – Special tree planting rules for parking lots do not exist within this district. Underlying rules per ZR 37-90 requiring trees and landscaping in parking lots for non-residential land uses apply.

SSRDD – One tree credit, 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 37-90 requiring trees and landscaping in parking lots for non-residential land uses also apply.

CRITICAL ROOT ZONE

The critical root zone is defined as an area around the tree containing the roots that should be maintained and protected in the SNAD and SHPD. 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.

Biodiversity Regulations

SNAD and SHPD – In SNAD and on Tier II sites in SHPD, no vegetation may be removed except within the proposed building footprint, or within 15 feet of the proposed building footprint, except for driveways, private roads and required accessory parking spaces, and except when granted an authorization by the CPC, pursuant to ZR 105-425 in SNAD and ZR 119-313 in SHPD. 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 – Biodiversity planting rules do not apply within this district.

South Richmond Landscaping Plan

Existing special landscaping rules pursuant to ZR 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 & 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 ZRs 105-421 (Modification of topographic features on Tier I sites) and 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 ZRs 119-311 (Authorization of a development, enlargement or site alteration on a steep slope or steep slope buffer) and 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 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.

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 107-65 (Modifications of existing topography).

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 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 105-423 (Relocation of erratic boulders).

Aquatic Resources

Aquatic resources are regulated inconsistently among the three special districts as described further below. Property owners can apply for an authorization from the CPC to modify these natural features, and the standards for approving or denying these authorizations are not well defined.

SNAD – On sites in this district, aquatic features cannot be altered without an authorization from the CPC. 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 105-426 (Alteration of aquatic features).

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.

SSRDD – The district goals clearly specify the protection of aquatic resources that are irreplaceable and maintain the ecological balance. 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 based not 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 actually 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 which has contributed towards some habitat preservation is Designated Open Space, described below.

Designated Open Space

Designated Open Space (DOS) is a regulatory tool that only exists within SSRDD. On sites in this district, any development or site alteration on a zoning lot which contains DOS requires certifications. 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 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.

USE REGULATIONS

Existing regulations in Special South Richmond Development District 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 the 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 the table below (see **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 sites pursuant to ZRs 105-431 (Modification of Lot Coverage Controls) in SNAD and 119-314 (Modification of lot coverage controls) in SHPD. The authorization will 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.

Impervious Area

Impervious area is any area on a lot covered by paved or other solid surfaces, such as roads, driveways and sidewalks, patios, decks or porches, and the roofs of buildings. Impervious area generally doesn't allow water to penetrate into the ground, and therefore, swimming pools are also considered impervious area, because rainwater can't penetrate into the ground through the bottom of the pool. The opposite of impervious area is area that includes planted areas at ground level, including lawn, gardens, and other areas with natural soil.

Impervious area is not regulated within any of the three special districts. However, during review of proposed development seeking an authorization within SNAD and SHPD, the DCP has established a guideline that lots should generally have no more than 50 percent coverage by impervious surfaces.

Lot Area and Lot Width

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

SHPD – This district requires the standard underlying minimum lot sizes.

SSRDD – There are special minimum lot area and lot width regulations in this district which 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. In all other areas, the following lot area and lot width rules apply throughout the special district (**Table 3**):

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. ft.)	Minimum Lot Width (feet)
R1-1	Detached	1-4	9,500	100
		1-2	5,700	40
R1-2	Detached	3	5,700	50
		4	5,700	60
R2	Detached	1-4	3,800	40
	Detached	1-2	3,800	40
R3-1	Detached	3-4	3,800	45
NJ-1	Semi-Detached	1-2	2,375	24
		3-4	3,800	40
	Detached	1-2	3,800	40
	Detached	3-4	3,800	45
	Semi-Detached	1-2	2,375	24
R3-2	Seill-Detached	3-4	3,800	40
K3-2		1-2	1,700	18
	A tto also d	1-2	2,375	24
	Attached	3-4	2,280	24
		3-4	3,800	40

R3A	Detached	1-3	3,325	35
		1-2	3,800	40
R3X	Detached	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 this district, yards are regulated by underlying zoning regulations. However, the CPC may grant an authorization to modify yard 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 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, pursuant to ZR 119-318 (Authorization for modification of certain bulk regulations).

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 the following table (**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	semi-detached	3-4	2	20	5
		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 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 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 will be granted by the CPC if the proposed buildings will not have adverse effects upon light, air and privacy of adjacent lots.

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 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 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 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, designated open space, or outstanding views.

Arterial and Park Streets

In the 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 another street, the CPC may grant an authorization for additional curb cuts on the arterial or park street pursuant to ZR 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 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 will be granted by the CPC if the proposed buildings will 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 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 in the special district, 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 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 authorization from the CPC. 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 107-68 (Modification of group parking facility and access regulations) if the proposed parking facility results in a minimum of local traffic. The Commission may also permit modifications to parking lot landscaping and maneuverability requirements to preserve vegetation and natural topography.

CERTIFICATIONS

As discussed above, the following certifications by either the Chair of the CPC or the CPC as a whole are required in certain circumstances in the existing special district regulations. Certifications are considered to be ministerial in nature, meaning that, as with as-of-right development, the proposal must be approved or denied based on whether or not it meets the conditions of the certification, based on facts.

SNAD – When it is not necessary for the applicant to apply for an authorization or special permit, the CPC certifies to the DOB pursuant to ZR 105-41 that the proposed development complies with the regulations of the special district. A certification of Restoration Plans pursuant to ZR 105-45 is required for

unauthorized removal of trees or other disturbance of the site. A certification for Future Subdivision pursuant to ZR 105-90 is required for the subdivision of a lot in SNAD.

SHPD – A certification for Future Subdivision pursuant to ZR 119-04 is required for the subdivision of a lot in SHPD. A certification for compliance pursuant to ZR 119-40 is required for trees removed or site alteration without prior CPC approval.

SSRDD – Certifications are required for the subdivision of a lot pursuant to ZR 107-08 (Future Subdivision); for school seats pursuant to ZR 107-121 to certify there is sufficient school seat capacity for proposed residential development; for Designated Open Space pursuant to ZR 107-22 for developments on zoning lots that contain DOS; to modify underlying rear yard regulations pursuant to ZR 107-467 (Modification of Special Yard Regulations); in Areas D, F, or K pursuant to ZR 107-02 for developments within these special areas in SSRDD; pursuant to ZR 107-23 (Waterfront Esplanade) to develop a waterfront esplanade in areas designated per the zoning text maps in the SSRDD; for additional curb cuts on an arterial pursuant to ZR 107-251 for zoning lots with access only to an arterial streets; and to allow for substitution of plants for required tree planting pursuant to ZR 107-323 (Substitution of other plant materials).

AUTHORIZATIONS

As discussed above, the following discretionary approvals are available to modify or waive regulations set forth in each existing special district.

SNAD – Authorizations are available for modification of topographic features on Tier I sites pursuant to ZR 105-421; Authorization of a development, enlargement or site alteration on a Tier II site or portion of a zoning lot having a steep slope or steep slope buffer pursuant to ZR 105-422; Relocation of erratic boulders pursuant to ZR 105-423; Alteration of rock outcrops pursuant to ZR 105-424; Modification of botanic environment and tree preservation and planting requirements pursuant to ZR 105-425; Alteration of aquatic features pursuant to ZR 105-426; Modification of lot coverage controls pursuant to ZR 105-431; Modification of yard, height and setback regulations, and parking location regulations pursuant to ZR 105-432; Modification of grading controls pursuant to ZR 105-433; and Modification of requirements for private roads and driveways pursuant to ZR 105-434.

SHPD – Authorizations are available for development, enlargement or site alteration on a steep slope or steep slope buffer pursuant to ZR 119-311; Authorization of community facility uses and group parking facilities of 30 spaces or more pursuant to ZR 119-312; Modification of landscaping, tree preservation and tree planting requirements pursuant to ZR 119-313; Modification of lot coverage controls pursuant to ZR 119-314; Modification of height and setback regulations pursuant to ZR 119-315; Modification of grading controls pursuant to ZR 119-316; Modification of requirements for private roads and driveways pursuant to ZR 119-317; Modifications of certain bulk regulations pursuant to ZR 119-318 for Tier II sites or where Tier II regulations apply to modify required yards, distance between buildings and height and setback; and to allow site alterations, the construction of new park-related facilities and improvements to existing park-related facilities within public parks pursuant to ZR 119-319.

SSRDD – Authorizations are available for modifications to Yard, Court and Parking Regulations pursuant to ZR 107-62; Minimum Distance between Buildings pursuant to ZR 107-63; Removal of Trees pursuant to ZR 107-64; Modification of Topography pursuant to ZR 107-65; Developments Partly within Designated Open Space pursuant to ZR 107-661; to modify permitted obstructions, required yards and building setbacks, Use and Bulk Permitted In Certain Areas pursuant to ZR 107-67 for areas F, K, SH; Modification

of Group Parking Facility and Access Regulations pursuant to ZR 107-68; and Residential Use in Area M pursuant to ZR 107-69.

SPECIAL PERMITS

As discussed above, the following discretionary approvals are available to modify or waive regulations set forth in each existing special district.

SNAD – Special Permits are available for Modification of use regulations pursuant to ZR 105-441 and Natural area dedicated for public use pursuant to ZR 105-442.

SHPD – Special Permits are available for Modification of use regulations pursuant to ZR 119-321 and Special Erosion and Sedimentation Prevention Requirements for Certain Authorizations and Special Permits pursuant to ZR 119-33.

SSRDD – Special Permits are available for Qualifications of Designated Open Space as Lot Area pursuant to ZR 107-72; Exceptions to Height Regulations pursuant to ZR 107-73; Modification of Permitted Use Regulations pursuant to ZR 107-74; Modification of Underlying R1-1 District Regulations pursuant to ZR 107-69; Boundary Adjustments in Designated Open Space pursuant to ZR 107-76; Community Facility Buildings or Treatment Plants Permitted in Designated Open Space pursuant to ZR 107-77; and Other Buildings Permitted in Designated Open Space pursuant to ZR 107-78.

LOWER DENSITY GROWTH MANAGEMENT AREA

Within Staten Island, the LDGMA encompasses R1, R2, R3, R4A, R4-1, C3A, C1, C2, and C4 zoning districts. Zoning lots within R4 and R5 districts containing buildings accessed by private roads are also within LDGMA (see **Figure 2**). The paragraphs below summarize the existing regulations that will be affected by the proposed changes and include: requirements for non-residential uses within commercial districts, minimum lot area and lot width requirements, rear yard equivalents on through lots, location of required parking, and landscaping requirements between residential and non-residential uses.

Non-residential Land Uses in Commercial Districts in Staten Island

In 2005, LDGMA rules were updated to address concerns about the type of development occurring in Commercial Districts within Staten Island. Many areas zoned for commercial use were being developed with residential-only projects, resulting in the diminishing viability of existing commercial areas and more and longer auto trips to meet everyday shopping needs for the residents of Staten Island. The 2005 rule required commercial or community facility uses with a minimum depth of 30 feet from the street on the ground floor of new buildings in Commercial Districts (ZR 32-433). Another rule accompanied and reinforced this rule, requiring new residential uses in Commercial districts to always be accompanied by a non-residential use in the same building (ZR 32-11). However, the side streets that intersect a commercial street often don't have enough visibility to sustain commercial uses, and commercial uses don't compliment the character of the residential side streets. In 2016, the rules in ZR 32-433 were updated to only require the ground floor commercial or community use along the primary retail street, and not to require it along side streets that intersect the primary street. But the 2016 update overlooked the need to amend ZR 32-11, and so even on side streets in Commercial districts, non-residential uses are still required to some extent in each new building.

Lot Area

Citywide, including in LDGMA, lot area within the bed of a private road may be included for the purpose of calculating minimum lot area pursuant to underlying zoning rules. These underlying rules are applicable

within SHPD, SNAD, and SSRDD. This may allow more housing density than would be permitted along mapped streets.

Minimum Lot Width

LDGMA rules in Staten Island require that a lot must meet a minimum width, measured on the part of the lot where the residence is located (ZR 23-32, 107-42). This rule prevents triangular-shaped lots that meet the minimum lot width at the street frontage, but are too narrow further back on the lot. However, the rules are not explicit in how this rule applies to corner lots and other lots fronting two intersecting streets.

Location of Rear Yard Equivalent on Through Lots

In LDGMA, the minimum rear yard equivalent for through lots (pursuant to ZR 23-532) may only be provided in the center of the block, whereas in other Districts citywide, such requirement may also be achieved with deeper front or side yards. Existing homes were constructed within these rear yard equivalents prior to LDGMA rules, and this regulation may unintentionally encourage the demolition of such existing buildings because enlargements of such homes are prohibited.

Regulations on Location of Required Parking

In LDGMA, except within SHPD and SNAD, regulations mandate that required parking must not be located between the front of a residence and the front lot line pursuant to ZR 25-622. This rule provides additional driveway space for guest parking. However, these requirements require extensive paving for homes that are set back further from the street than required by zoning. Within SHPD and SNAD, LDGMA rules are modified to allow required parking in the front yard (105-702, 119-05) in order to prevent disturbance to natural features.

Landscaping Requirements between Residential and Non-Residential Uses

Within C1, C2, C4-1 Districts in Staten Island, a five-foot-wide landscaped buffer is required along "side lot lines" abutting residential uses pursuant to ZR 37-21. However, no landscaping is required along rear lot lines. However, rear lot lines of commercial uses often face residential uses. Also, no landscaping is required within C8 Districts, even though more intense land uses are permitted in C8 than in the C1, C2, C4-1 Districts currently specified in this section.

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 3**: Cross Access Connections Affected Areas That Include C4-1, C8 and Commercial Uses in M Districts).

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 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 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;

Constructing the cross access would not result in removal of significant natural features (such as wetlands or trees greater than 6" in caliper). The Chair of the CPC must certify that any proposed connection meets these conditions pursuant to ZR 36-592.

In the event that 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 (36-596) in which case the applicant indicates that no cross access is required on the cross access plan.

In the event that a cross access connection along a lot line greater than 60 feet could meet these rules but is otherwise impossible or feasible, the Commission may still authorize waiving cross access or modifying rules if it finds that it would be blocked by the only feasible location for a new or enlarged building within the development site, or it is not possible to design a parking lot to use the connection due to the irregularity of the subject property.

Cross Access Easement Recordation and Construction Timing

Each potential or complete cross access connection requires recordation of an easement pursuant to ZR 36-594.

Potential connection: Where easements for cross access have not been previously recorded in adjacent properties, an easement for at least one potential location meeting rules for cross access connections must be recorded, but it is not required to be constructed until the adjacent property triggers cross access connection rules.

Complete connection: Where an easement has been previously recorded against an adjacent property, one of the prior easements must be selected for an easement and the connection must be constructed by both property owners.

Number of Cross Access Connections within a Zoning Lot

Each segment of a lot line over 60 feet in length requires at least one potential connection or one complete connection pursuant to ZR 36-594. Such rules are logical for rectangular lots, but technically could require a multitude of potential connections on irregular lots if the boundary has a "zig-zag" shape, which may be impractical in some cases.

CPC Chair Certifications for Cross Access Regulations

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

CPC Authorization for Cross Access Regulations

The CPC may grant an authorization for waivers or modifications of cross access connections pursuant to ZR 36-597 (Authorization for waivers or modifications to cross access connections).

2. DESCRIPTION OF THE PROPOSED ACTION

This section describes the proposed regulations and 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 LDGMA and cross access regulations are described toward the end of this section.

GEOGRAPHY

The proposed special district would combine the boundaries of the three existing special districts (Special Natural Area District, Special South Richmond Development District, and Special Hillsides Preservation District) into one combined special district, to be referred to as the Special Natural Resources District. Areas which currently have unique regulations not shared by other special districts will become sub-districts within the Special Natural Resources District, such as the Special South Richmond Development District would become the South Richmond Subdistrict within the Special Natural Resources District (see **Figure 7**). Within the Special South Richmond Development District, Areas D, F, and K would be eliminated, as the regulations for these areas are outdated and no longer necessary. Special Areas LL, M, and SH would be retained and would become subareas within the proposed subdistrict. The currently mapped Special Natural Area District NA-1 would be combined with the Special Hillsides Preservation District to create a new Hillsides Subdistrict. The existing Special Natural Area District NA-2 in the Bronx would become a new Riverdale-Fieldston Subdistrict. The existing Special Natural Area District NA-3 would become a new Shore Acres Subdistrict. The existing Special Natural Area District NA-4 would become a new Fort Totten Subdistrict. Existing rules for the Fort Totten area are unique and generally unrelated to the rest of the special district, and therefore these rules will be preserved within the proposed regulations.

Separate from the subdistricts described above, the proposal would establish three new ecological area designations that would be applicable in all subdistricts: Escarpment Area, Resource Adjacent Area, and Base Protection Area (see **Figure 8**). Modified bulk, parking, and planting rules would apply and vary within the three ecological area designations. 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. Resource Adjacent Areas would be located within 100 feet of designated natural resource which are publicly protected lands with natural habitat, such as parklands designated by the City as "Forever Wild". The proposed regulations for this area are aimed to balance development on private property and protect and provide a buffer from designated natural resources on protected lands. Areas neither designated Escarpment nor Resource Adjacent would be designated as 'Base Protection Area'; 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.

The Lower Density Growth Management Area would continue to apply within the same geography in Staten Island (see **Figure 2**).

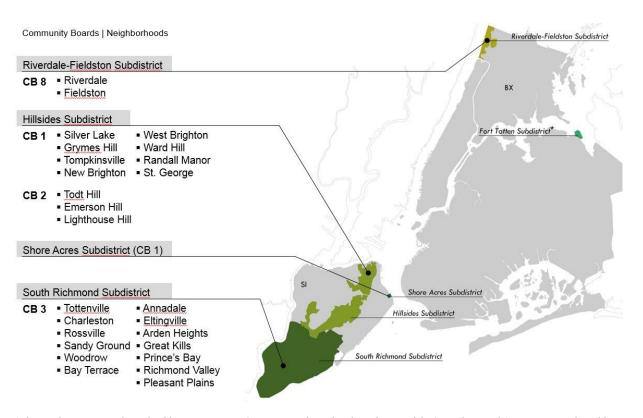
Cross Access connections update will continue to apply within the same geography in Staten Island (see **Figure 3**).

REVIEW STRUCTURE

While the existing special districts require approval by the City Planning Commission (CPC) based on a variety of factors, including proposed removal of individual trees or modification of slopes even for small properties, the proposed Special Natural Resources District would require review by the CPC only for properties that are:

- one acre or larger in size where a new building, enlargement, subdivision or site alteration is proposed, or,
- if smaller than one acre:
 - o where a private road is proposed to be extended or created;

- o if located in a Resource Adjacent or Escarpment Area, where four or more buildings, lots, or dwelling units are proposed; or
- o if located in a Historic District and a new building or subdivision is proposed.



^{*}The regulations currently applicable to Fort Totten, Queens are independent from the rest of the Special Natural Area District and would remain unchanged in the proposal.

Figure 6: Proposed Special District Boundaries and Subdistricts



Figure 7: Proposed Ecological Areas Based on Proximity to Natural Resources

These properties that would be required to be reviewed by the CPC are referred to as "Plan Review Sites." However, minor enlargements and minor site alterations on 'plan review sites' that meet certain proposed thresholds would not require CPC review and would be able to proceed directly to DOB.

All other properties, new buildings, enlargements, subdivisions and site alterations within the Special Natural Resources District would be able to proceed directly through the DOB. This ability to apply directly to the DOB is known as "as-of-right" development, meaning that if underlying zoning regulations and proposed special district rules are met, the plans will be approved by the DOB.

The proposal would remove CPC review for Bluebelt properties managed by NYC Department of Environmental Protection and NYC Parks properties that is required in the existing SNAD.

PROTECTION OF NATURAL FEATURES

The proposed zoning regulations have similar goals for preservation of natural features as described within the three special districts today, 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 and prioritize protection of large anchor habitats or designated natural resources. When new construction or significant changes are proposed within these areas, such as an enlargement with a 20 percent increase in floor area or an increase of impervious 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 planting requirements to better protect and enhance these natural areas of regional importance, as well as more strictly controlled lot coverage and limits on impervious areas such as driveways, walkways, decks and patios. Properties within Escarpment Areas would be subject to similar requirements and limitations. Development within the Base Protection area will be subject to less stringent regulations but will have similar requirements for planting, lot coverage and impervious area thus contributing to the overall ecological importance of the special district.

The narrative below describes proposed regulations under each type of natural feature and spell out the differences between the current regulations wherever necessary. Unless otherwise specified, the regulations as described apply to all three ecological areas.

Tree Regulations

The goal of the proposed tree planting and preservation regulations is to encourage preservation of old growth trees and provide flexibility for development by creating as-of-right requirements for number of trees and tree credits based on the lot area and type of development. The proposed rules for trees would apply whenever trees with trunks more than six inches thick (six caliper inches) are proposed to be removed, when topography is proposed to be modified, or when new impervious areas, such as a driveway, are proposed, as well as when new buildings or significant enlargements are proposed. Tree requirements would continue to be determined through a system of tree credits, but the proposed rules will assign a higher value to larger trees, as opposed to current credit system that increases linearly with the tree caliper inches (see Error! Reference source not found., below for comparative difference in credit system between existing a nd proposed). As specified in the table, the proposed rules would encourage tree preservation by offering more credit for preserved trees than for newly planted trees, and values for the largest old growth trees would be significantly higher than under the current systems. The proposed rules would also offer more credit (see Error! Reference source not found.) for trees that are native to the ecosystem (target species) to incentivize the planting of these trees, and no credit for trees that are designated as invasive species, such as Norway Maple. In addition, based on ecological science that shows that stands of trees have greater

ecological value and resilience than individual trees, existing trees that are in groups would get 50 percent more credit than a single existing tree and new trees planted in a group would receive 25 percent more credit than a single new tree.

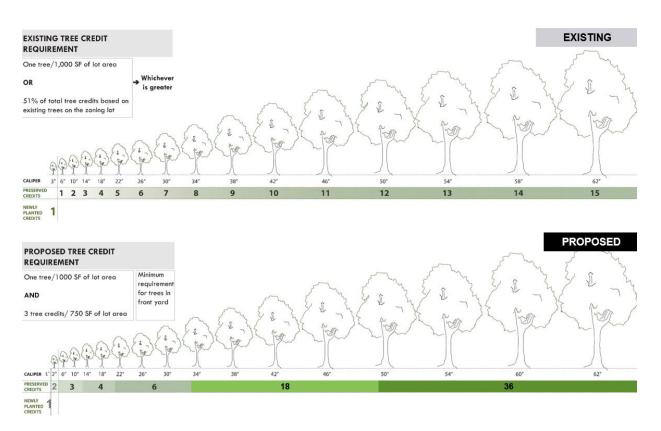


Figure 8: Comparison between Existing and Proposed Tree Credit System

Properties in lower density residential districts would have to achieve higher tree credit scores than in higher density residential districts, commercial districts or manufacturing districts as specified below:

- For residential uses, one tree would be required for every 1000 square feet of lot area. In addition, for R1, R2, R3 three tree credits required for every 750 square feet of lot area; for R4, R5, R6 two tree credits required for every 750 square feet of lot area.
- For community facility, commercial and manufacturing uses, one tree required for every 2000 square feet of lot area and 1.5 tree credits required for every 750 square feet of lot area.

In addition to the above requirements, for lots with at least 40 feet of frontage, the location of some of these trees would have to be within the front of the home. These rules would ensure that trees are more evenly distributed around a property to support the character of tree-lined streets found throughout much of the Special District. Trees in the rear portion of the lot (within 15 feet of the rear lot line) would also need to be preserved, except when they are within 8 feet of an existing or proposed building, or would conflict with a proposed driveway, private road or required parking space, or where too much of the tree's critical root zone (more than 30 percent) would be disturbed by structures permitted near the protected zone.

Table 4: Proposed Tree Credit System

Individual Tree		#Tree Credits#		
Designation	Description	#Target species#	Non-#target species#	
Old Tree	A preserved tree 50 inch #caliper# or greater, or at least 144 years of age*	36	18	
Mature Tree	A preserved tree 34 inch #caliper# or greater, or at least 98 years of age*	18	12	
Large Tree	A preserved tree 22 inch #caliper# or greater, or at least 62 years of age*	6	4	
Medium Tree	A preserved tree 14 inch #caliper# or greater, or at least 38 years of age*	4	3	
Standard Tree	A preserved tree six inch #caliper# or greater, or at least 24 years of age*	3	2	
Young Tree	A newly planted tree, two inch #caliper# or greater	2	1	
Sapling	A newly planted tree between one and two inch #caliper#	1	n/a	

^{*} In cases where #tree credits# are determined by the age of a tree, such determination shall be made by a professional arborist.

Critical Root Zone: The critical root zone is an area around the tree that is critical to the tree's survival. It is 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" caliper tree will require 50 feet of critical root zone in the proposed regulations. Proposed regulations introduce the concept of a structural root zone which is a smaller portion of the critical root zone that should not be disturbed at all. Existing rules don't allow any impact to critical root zones of trees. These rules protect trees, but they may discourage their preservation since no credit accrues if development needs to occur within the area of the tree's critical root zone. Ecological science indicates that trees are able to tolerate a small amount of disturbance within their critical root zones. The proposed rules would allow a portion of the critical root zone of the tree to be disturbed by proposed construction thus encouraging the preservation of existing trees. Under the proposed rules, up to 30 percent of the critical root zone (outside the structural root zone) could be disturbed, provided that if more than 10 percent is disturbed, a tree protection plan would be required.

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

Biodiversity Planting Rules

The purpose of the biodiversity planting regulations is to protect, support and enhance the core habitat of the large natural areas and maintain ecological connectivity between designated natural resources and habitat protected on private properties.

The proposed rules for the planting of ground level plants and shrubs would apply when significant new construction or significant changes, such as an enlargement with a 20 percent increase in floor area or an increase of impervious area (areas of the site covered by a building or hard surfaces) of 400 square feet or greater, are proposed on a lot. The proposed regulations would also limit the square footage of natural vegetation that could be removed on an existing property if the area of remaining vegetation is between 5

to 15 percent of the lot area depending on the ecological area that the property is located in. Resource Adjacent Areas would have the highest planting requirement, including a buffer planting area (with shrubs, ground cover and canopy trees) along the lot line that abuts the designated natural resource to create a transition area between the designated natural resource and the development, which helps protect and enhance the core habitat and its ability to support higher levels of biodiversity across the network of natural areas. This leads to more species diversity, more population diversity, and more genetic diversity across the natural areas of New York City. Escarpment Areas and lower density residential districts in the Base Protection Area would have a moderate planting requirement resulting in approximately 10 percent of the lot being planted (not including lawn). All other areas would have a planting requirement generally resulting in about 5 percent of the lot being planted. The table below (**Table 5**) details the biodiversity planting requirement and various ways to achieve the requirements:

Table 5: Proposed Biodiversity Requirements

Ecological Area	Land Use / Zoning District	Biodiversity Points Required
Resource Adjacent Area	All uses / all districts	6 points
Escarpment Area	All uses / all districts	4 points
Base Protection Area	Residential in R1, R2, R3	4 points
	Non-residential in R1, R2, R3	2 points
	All uses in R4, R5, R6, Commercial and Manufacturing districts	2 points

Landscape Options	Biodiversity Points	Area Required		
Landscape buffer (required for Resource Adjacent Area)	5 points	10' wide or 10% of depth on the rear or 8' wide on the side lot line		
Wildlife garden	1 point	2.5% lot area		
Green roof intensive	1 point	12.5% roof coverage		
Green roof extensive	1 point	15% roof coverage		

For instance, to achieve six points in a Resource Adjacent lot of 100 feet x 100 feet with designated natural resource at the rear of the lot, five points are required to be achieved by planting a 10-foot-wide buffer with shrubs, ground cover and some required trees. The remaining one point can be achieved by planting a 250 square feet area wildlife garden with shrubs and ground cover anywhere on the property. For a 100 feet x 100 feet lot in Base Protection or Escarpment area, four points could be met in various ways – all 4 points can be achieved by planting a wildlife garden of 1000 square feet that can be located anywhere on the lot either as a single garden or multiple gardens as long as they meet minimum dimensional requirements. Such points can be achieved by a combination of wildlife garden and green roofs. Intensive green roofs have deeper soil and can sustain variety of plants including shrubs and grasses. Extensive green roofs have shallower soil depth and can sustain various kinds of grasses, such as sedums.

Parking lot landscaping rules per ZR 37-90 will continue to apply and will count toward the proposed tree and biodiversity requirements.

South Richmond Landscaping Rules

Existing special landscaping rules applicable in the Special South Richmond Development District, as described in the Existing Zoning section, would continue to apply under the proposed regulations within the South Richmond Subdistrict as they are unique regulations specific to this area. Special tree planting rules of requiring one tree credit for every four parking space will be eliminated as the proposed tree rules would result in similar requirements.

Topographic and Geologic Resources

The proposed rules for topographic and geologic resources aim to limit disturbance of steep slopes, reduce hillside erosion, landslides and excessive storm water 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 planting, lot coverage, and limits to impervious areas on the site.

Proposed rules for sites within the Escarpment Area and Resource Adjacent Area would be allowed less lot coverage and impervious area compared to the Base Protection Areas. The lot coverage, to be further described in Error! Reference source not found., will be based on the steepness of the slope; for example, i f a 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 impervious area allowed would be linked to the amount of permitted lot coverage; for a site limited to 12.5 percent lot coverage, the proposed rules would limit lot coverage to 40 percent. The lot coverage and impervious 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, provided that slopes meet certain grading standards in all areas of the special district. 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).

In the existing rules, there are no limits to the height of retaining walls. Under the proposed rules, any retaining walls needed to manage slopes would be limited to an average height of six feet, with no point exceeding eight feet above adjacent final grade. Within 10 feet of a street, retaining walls need to be lower, with an average height of four feet, with no point above six feet to preserve neighborhood character.

Where slopes exceed 25 percent, topographical change would be permitted only within 20 feet of a building, or in order 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.

Rock outcrops and erratic boulders would be protected through a set of rules that would function on an asof-right basis. In the existing rules, any disturbance to such geologic features is only permitted through a CPC authorization and there are no limits to how much disturbance can be allowed by the CPC. In the proposed rules, rock outcrops within the front yard may not be disturbed, except to permit access to the property via a driveway, private road or walkway. Beyond the required front yard, no more than 50 percent of rock outcrops within the front portion of the lot would be permitted to be disturbed. Erratic boulders may be relocated, if necessary, to the front portion of the lot. These rules would provide robust and predictable protections for these dramatic natural features that are an important aspect of the character of these communities.

Aquatic Resources

In general, the proposed regulations will strengthen the preservation of significant aquatic resources with as-of-right rules for the proposed special district as compared to existing regulations where aquatic resources are not directly or consistently protected in existing SHPD and SSRDD. The proposed zoning rules do not address tidal wetlands as they have robust oversight by the New York State Department of Environmental Conservation (NYSDEC). An analysis of existing freshwater aquatic resources in the special districts found that there are 92 percent of wetlands regulated by the NYSDEC located on lots that are both less than and larger than one acre; these wetlands have a 100 foot adjacent area regulated by DEC where development would require a DEC permit. In addition, there are seven (7) percent of non-DEC wetlands located mostly on lots that are greater than one acre; these wetlands may be under US Army Corps jurisdiction or not currently protected except through the special district rules.

Under the proposed regulations, small properties that are not "Plan Review Sites" would proceed as-of-right but would be subject to special zoning rules that aim to preserve freshwater wetlands regulated by DEC. All construction within areas regulated by DEC would continue to be subject to DEC approval, and DEC's ability to review and approve or deny construction within regulated wetland and adjacent areas would not be affected by the proposed regulations.

The DEC's 100-foot adjacent area lacks any specific development or planting regulations and are generally guided by DEC best practices on a site by site basis. The proposed regulations for all properties, including small properties that are not "Plan Review Sites," would aim to preserve the quality of DEC regulated freshwater wetlands by requiring a planted buffer area within 60 feet of a wetland boundary to be planted with natural vegetation. Outside the planted buffer area and within 100 feet from the wetland boundary, the amount of lot coverage (15 percent) and impervious area (45 percent) would be limited. The lot area within wetlands and planted buffer areas would be excluded from minimum lot area calculations. A minimum 20-foot separation at the rear, and a minimum five-foot separation at the side would need to be provided between planted buffer areas and residences to provide usable areas for access, maintenance and recreation, and to avoid encroachment into buffer areas.

For "Plan Review Sites," all aquatic features, including streams, non-DEC wetlands, DEC freshwater and DEC tidal wetlands would need to be described and assessed as part of the general authorization process by the CPC. Properties that consist of non-DEC regulated wetlands would be subject to special zoning rules that aim to preserve these wetlands. A 30-foot planted buffer would be required for non-DEC wetlands and other aquatic features. Any disturbances to these aquatic features and the associated buffer should be avoided, but if avoidance isn't feasible, as determined by the CPC through the authorization, then disturbance should be minimized, and protection of the aquatic resource should be provided. Similar lot coverage and impervious surface limitations that are described above for DEC regulated wetlands would apply to all aquatic features on Plan Review Sites.

For all sites with aquatic features, a minimum building footprint would be specified to ensure that all existing zoning lots subject to the proposed regulations can be developed, subject to DEC approval where applicable.

Controls during Construction

In addition to proposed rules regarding erosion and sedimentation controls, an overall set of rules similar to those currently existing in SNAD and Tier II sites in SHPD would apply throughout the entire special

district to preserve 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, as well as around any vegetation 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 will 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.

The proposed rules aim to prioritize the preservation of significant natural features that are part of larger anchor habitats or have ecological connectivity with these habitats as they consist of a higher level of biodiversity with more species of plants and animals. Habitat preservation on private properties provides opportunities for ecological connectivity to the larger habitats as well as bringing people closer to the nature thus improving human health.

Proposed rules would require that properties of one acre or more in size preserve existing habitat area on site if the habitat is one-quarter of an acre or greater in size. A habitat comprised of at least one quarter acre of land is more likely to be able to survive self-sufficiently and maintain its higher level of ecological quality when development is proposed adjacent to it. Smaller pockets of habitat would not be required to be preserved. These sites, which will be pre-identified, will require ecological assessment of habitat before a development is designed so that the requirement can be met by preservation of the most valuable ecological areas that may also provide connectivity to the larger protected natural areas. These valuable features may include a large grouping of old-growth and native trees, wetlands and other aquatic features.

Since the area of the special districts is characterized in part by large community facility campuses, such as schools, medical facilities or houses of worship, and these campuses often contain large areas of natural habitat, these properties with existing habitat would be required to preserve 35 percent of the site as natural habitat. These habitat areas on community facility campuses serve a complimentary function of providing passive recreation on site for the users of the facility. For all other properties, the maximum required amount of habitat preservation area would be 25 percent.

To allow for enjoyment of these preserved natural habitat, properties that do not have a community facility would be permitted to substitute up to 5 percent of the required habitat preservation area with various amenities, depending on the use of the property. Residential properties would be permitted to offer a recreational area to help connect residents to the natural features of the preserved area. Commercial properties would be permitted to offer a publicly accessible open area, and industrial properties would be permitted to incorporate landscaping and visual buffers along the perimeter of the property.

In order to balance preservation of habitat and provide public waterfront access, properties one acre or more with existing habitat that are required to provide waterfront public access per ZR Section 62-00 would be permitted to include these areas to substitute up to 5 percent of the required 25 percent habitat preservation area. Certain guidelines would modify waterfront public access area requirements by CPC authorization under the proposed rules.

Designated Open Space

The boundaries of Designated Open Space (DOS) in SSRDD are proposed to be clarified to indicate dimensions of DOS for predictability, and 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, which 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 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 these properties, where sensitive ecological features are not present, DOS boundaries will be adjusted to provide a 20-foot separation between the building and the DOS, in order to provide a usable outdoor space that is less constrained by DOS regulations. In other cases, DOS boundaries are proposed to be adjusted to take into account proposed rules for the preservation of habitat on large sites generally in order to better align DOS boundaries to include existing habitat areas.

Rules regarding DOS would be maintained and modified slightly to clarify procedures. Existing Chair certification that allows DOS to be used for active recreational facilities will be clarified to allow such use only when it is serving five or more dwelling units and not a single residence. 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 will eliminate three 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. Any proposed modifications to DOS would be permitted through a zoning text amendment.

USE REGULATIONS

Existing special use regulations applicable in the SSRDD would continue to apply under the proposed regulations within the South Richmond Subdistrict. 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 is not affected by the proposed regulations.

Lot Coverage

The proposed lot coverage rules would aim to provide predictable and clear outcomes for future development and would apply more stringent controls based on a lot's adjacency to important ecological features (see **Table 6**). The proposed regulations introduce the concept of lot coverage for all R1, R2 and R3 districts, including the districts that are currently governed by yard and open space regulations. Based on the study of existing buildings in various districts, proposed rules would limit lot coverage for residential buildings in R1, R2 and R3 Districts based on which ecological area the proposed development is within. As specified in the table below, sites within Resource Adjacent Areas or within Escarpment Areas would be allowed less lot coverage compared to sites within Base Protection Areas. In addition, buildings located

on steep slopes (except in the South Richmond Subdistrict, which has mostly flat topography) would be subject to tighter lot coverage restrictions in relation to the steepness of the slope. Buildings located within 100 feet of DEC freshwater wetlands and all wetlands on Plan Review Sites would also be subject to lot coverage limits similar to those for Resource Adjacent Areas and these rules may vary by zoning district. Additionally, unlike underlying zoning regulations, which exclude buildings that are permitted obstructions in yards and open space from lot coverage calculations, the proposed rules would include all buildings in lot coverage calculations for R1, R2, and R3 districts. However, in instances, where the property is subject to limited lot coverage of 20 percent or smaller, such as in Escarpment Areas on steeply upward sloping sites (slope 25 percent or greater), garages located close to the front of the lot would be exempt from lot coverage calculations in order to encourage less encroachment within the slope.

Table 1: Proposed Maximum Lot Coverage for R1, R2 and R3

Resource Adjacent Area	Escarpment Area (based on slope)		Base Area	
	85 or greater	12.5%		
	65 - 84.9	15%		
15%	45 - 64.9	17.5%	R1: 25%	
	35 - 44.9	20%	R2, R3: 30%	
	25 - 34.9	22.5%		
	10.0 - 24.9	25%		

When the proposed lot coverage results in a very small house, feasible development footprints are proposed as an exception (see **Table 7**, below), based on the analysis of feasible developments across the low density districts in the special district area.

Table 7: Minimum Residential Footprint

Zoning District	Min lot coverage (SF)
R1-1	1200
R1-2	800
R2, R3-1 or R3-2 (1-2 family)	700
All other zoning lots	600

For "Plan Review Sites" containing community facilities, such as schools, medical facilities or houses of worship, lot coverage would be limited to 25 percent, and would include buildings that are permitted obstructions in yards and open space. However, such properties that are not located in an Escarpment Area or Resource Adjacent Area, and do not contain a preserved habitat area would be permitted to have a lot coverage of 35 percent.

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

Impervious Area

Proposed regulations aim to limit the amount of impervious area to facilitate permeability in the special district to maintain natural ground water levels for the health of the forests and wetlands. Impervious area calculations would include buildings, other structures, driveways, pathways, pools, and other paved surfaces including pervious pavers. Proposed rules would limit the amount of impervious area as a percentage of the lot (see **Table 8**). For residences in R1, R2, and R3 districts, the amount of impervious area would be linked to the amount of permitted lot coverage – the sites with the most restricted lot coverage would also have the most restricted amount of impervious area. The proposed rules would eliminate the

existing regulations for sites with DOS pertaining to impervious limitations for driveways, private streets, parking spaces and loading berths per ZR 107-45; impervious limitations vary by zoning district. The proposed rules would allow for sufficient flexibility with impervious area and apply them equally to all applicable DOS sites. All other uses of property in the special district would be subject to limits on the amount of impervious area as well to maintain consistent requirements for development and permeability that will contribute to the overall ecological health of the natural areas in the district.

Commercial districts designed for local service and sale would be permitted to have the highest amount of impervious coverage of the lot. The proposed rule would not recognize or seek to encourage various types of pervious pavement – all forms of paving or other built structure would be combined into the same category representing "built" or "constructed" portions of the site, versus portions of the site that are natural or planted, including lawn.

Table 8: Maximum Impervious Area

Resource Adjacent Area	Escarpment Area		Base Area	
	Max Lot Coverage	Max Impervious Area		
R1, R2, R3: 45%	12.5%	40%	R1: 50%	
C & M: 85%	15%	45%	R2, R3: 65%	
	17.5%	45%	R4, R5, R6: 75%	
	20%	50%	C4, C8 & M: 85%	
	22.5%	50%	C1 & C2: 90%-95%	
	25%	50%		

Lot Area and Lot Width

To provide clear and predictable outcomes for sites with steep slopes and hillsides, in addition to lot coverage and impervious area rules, the proposed rules would require larger minimum lot areas to ensure the preservation of these areas and reduce encroachment from proposed development within sensitive natural areas.

Within Escarpment Areas the proposed rules would require larger minimum lot sizes. The proposed regulations would expand existing steep slope minimum lot area rules that currently apply only in the SNAD to the Escarpment area (which also includes parts of the existing SHPD). Currently, if a lot contains steep slopes (with grades of 25 percent or more) covering more than half of the lot, the minimum lot area is 12,500 square feet. The proposal would retain a minimum lot area of 12,500 square feet in R1 Districts in the Escarpment Area. This minimum lot area rule will no longer be applicable in the proposed Riverdale-Fieldston subdistrict as it is not covered by 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 4000 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.

As described in the Aquatic Resources section, on properties with these resources and applicable planted buffer areas, these portions of the site would be excluded from minimum lot area calculations.

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

Yard Regulations

Special minimum yard regulations currently applicable in the existing SSRDD would continue to apply in the proposed South Richmond Subdistrict, 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 would modify underlying and existing SSRDD yard regulations for the preservation of natural features. If a lot is highly constrained due to either being in a Resource Adjacent Area, an Escarpment Area, or contains steep slopes or nearby DEC regulated wetlands and adjacent areas, front yards could be reduced in R1 Districts to 15 feet, and in R2 and R3 Districts to 10 feet. In R2 through R5 Districts, front yards could be reduced to 10 feet to protect a significant rock outcrop or one or more large trees of significant value [at least 12 tree credits] in the back portion of the lot.

Similarly, rear yards could be reduced from 30 feet to 20 feet in R2 and R3 Districts if a lot is highly constrained due to either being in a Resource Adjacent Area, an Escarpment Area, or contains steep slopes or nearby DEC wetlands and adjacent areas. In R1 through R6 Districts, rear yards could be reduced to 20 feet if a significant rock outcrop or one or more large trees of significant value [at least 12 tree credits] is protected in the front half of the lot.

Front and rear yard as-of-right reductions would not be permitted to be used together on the same lot. If a site has a restricted lot coverage of 20 percent or less, a garage that is located close to the front of the lot, on steeply upward sloping sites (slope greater than 25 percent), would be a permitted obstruction in the front yard in order to minimize disturbance of steep slope. Such garages will not be counted toward lot coverage. In addition, for lots in R2 and R3 Districts with steep slopes or nearby DEC wetlands and adjacent areas, or for lots in all Districts in Resource Adjacent Areas and Escarpment Areas, the front yard may be measured from the tax lot line in the unimproved portion of a mapped street if the New York City Department of Transportation (DOT) has issued a waiver of curb alignment and has no plans to widen such street to its mapped width. These standards are consistent with the DOB practice, as documented in their Bulletin on Privately Owned Mapped Streets.

Currently, only one option for a "Rear Yard Equivalent" is available in LDGMA per ZR 23-532, which is midway between the fronting streets. This requires two or more homes facing opposite streets on a single zoning lot to be separated by the equivalent of two rear yards. However, deep through-lots that were developed prior to LDGMA rules often have one home located half-way between the streets, with deep setbacks from both street lines. Such homes cannot be enlarged because it would be in the required rear yard equivalent thus increasing the degree of non-compliance. Under the proposed rules in the special district, any of the three rear yard equivalents permitted elsewhere in the city, could be used to bring such existing homes into compliance and allow for their enlargement as-of-right.

The above 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 will not affect the amount or type of development.

Height and Setback

The currently existing four story/50-foot height limit in the existing SSRDD would continue to apply in the proposed South Richmond Subdistrict. The proposed zoning would also include a rule that would apply to Resource Adjacent Areas and to lots with steep slopes or nearby DEC wetlands 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. Under existing zoning rules, steep

slopes can sometimes result in a building that complies with basic height limits appearing to be extremely tall from the rear or the side. Therefore, the proposed zoning would require that buildings in proposed Escarpment Areas and Resource Adjacent Areas (where additional height is permitted under the proposal) calculate the height of all sides of the building, and any side that rises more than 31 feet from ground level to roof must break up that façade by building projections, such as bay windows, or recesses into the outer wall.

Arterial and Park Streets – Setbacks

Rules regarding arterials and park streets in the existing SSRDD would be modified as follows: within commercial and manufacturing districts, required 20 feet 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 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.

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

Park street designations would be eliminated. Regulations for park streets became outdated when the City required street trees to be installed along the frontage of all new developments. Unlike arterials, existing rules for park streets do not include building setback requirements.

Court and Open Area Rules

Currently existing special court regulations in the existing SSRDD would continue to apply in the new South Richmond Subdistrict. In addition, the proposed regulations would require an open area of at least 20 feet at the rear of any residence and adjacent to Designated Open Space or a wetland buffer surrounding a DEC wetland or any other wetland in plan review sites. A five-foot open area would be required between the sides of the building and either of these features.

For "Plan Review Sites" properties containing community facilities, such as schools, colleges or universities, a special type of open area consisting of 15 percent of the lot would be required in order to provide active or passive recreational amenities on site, and to maintain and enhance community character in the special district. This open area would not be permitted to overlap with any required habitat preservation area, nor with any required biodiversity planting area. These open areas would also not be permitted to include buildings, parking areas, driveways, private roads, walkways, or other paved areas. Paved recreation areas would not be counted towards satisfying this open area requirement, except that active recreation areas surfaced with artificial turf may be included, up to 10 percent of the required 15 percent. This requirement would not apply to hospitals, medical offices or houses of worship, which do not typically have large active or passive recreational amenities on site.

Parking and Curb Cut Regulations

The proposed regulations would modify the LDGMA 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, as long as parking is not located within the required front yard or at least 18 feet beyond the street line, whichever is greater, in order to reduce impervious coverage in the special district. In cases where homes on large lots have considerably more setback from the street than the minimum front yard depth, the existing rule requires driveways to be longer than they are elsewhere in the city, and longer driveways result in more impervious surfaces which may increase the volume of storm water runoff. For example, in R1 Districts, the required front yard is 20 feet, measured perpendicular to the front lot line. The two required parking

spaces for a single-family home could be located anywhere on the lot beyond this front yard area – including in front of the home beyond the first 20 feet from the street.

The proposed regulations would also modify curb cut and parking location rules for lots within Resource Adjacent Areas and lots with steep slopes or nearby DEC wetlands to allow more flexible site design to avoid disturbance to slopes or other sensitive natural features. These modifications would allow parking to be located in the front yard, and located parallel to the street, either of which could minimize disturbance to steep slopes and other natural features. In addition, the proposed rules would allow parking spaces to be located on the property in the unimproved portion of a mapped street if the DOT has issued a waiver of curb alignment and has no plans to widen such street to its mapped width.

The proposed rules would restrict curb cuts along designated arterial streets in the South Richmond Subdistrict with rules similar to existing SSRDD regulations. 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 DOT. For lots with more than 100 feet of frontage and having access to a non-arterial street, additional curb cuts could be approved with the support from another city agency such as DOT., and if the Chair of the CPC certifies that there are no practical alternatives providing access to the non-arterial street.

In the existing SSRDD, 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 sites over an acre in size and the existing CPC authorization for parking over 30 spaces will be eliminated.

The proposal would continue to maintain the inapplicability of the parking waiver (ZR 25-231) in the South Richmond Subdistrict.

SPECIAL RULES FOR PLAN REVIEW SITES

Properties that are considered Plan Review Sites, such as lots greater than one acre, and properties less than an acre where a private road is proposed to be extended or created, where four or more buildings, lots, or dwelling units are proposed within the Escarpment Area or Resource Adjacent Area, or where a new building or subdivision is proposed within a Historic District, would be required to seek an authorization by the CPC for any proposed development, enlargement, site alteration or subdivision. Proposed as-of-right regulations with certain modifications apply to such Plan Review Sites, but the CPC authorization would include the opportunity to apply for modifications that are discussed in the following sections with clear standards for Plan Review Sites. Plan Review Sites are also eligible to apply for additional authorizations from the CPC, including approval of a long term development site plan which approaches development in phases. For phased development there would be an associated certification or authorization confirming that later development is consistent with previously approved long term development plans. Plan Review Sites with DOS or areas required to be preserved as natural habitat may apply for modification of the boundaries of habitat preservation area, modification of permitted residential building types, or modification of bulk regulations.

Properties with new or extended private roads would be subject to private road standards that are based on existing regulations for private roads in SNAD and SHPD. For certain commercial uses, new buildings or enlargements on Plan Review Sites would be required to have at least half of their frontages within 20 feet of a street, and loading areas would not be permitted in front of a building. Plan Review Sites would also be exempt from triggering the need for review by the CPC if the proposed enlargement is no more than

5,000 square feet and located within 15 feet of the existing building, and if any proposed site alteration consists of no more than 10,000 square feet.

CERTIFICATIONS

Within the proposed South Richmond Subdistrict, the proposal would maintain the existing school seat certification, certification for developments in DOS and for lots with a required waterfront esplanade, and certification for affordable independent residences for seniors, which are currently applicable in the existing SSRDD. The certifications for developments in DOS and for lots with a required waterfront esplanade would be shifted from the full CPC to the Chair in conformance with the Department's policy for new certifications. A certification regarding fences in DOS is proposed to be eliminated, as the certification process can be avoided through clear as-of-right regulations. Certifications for future subdivisions for any non-"Plan Review Sites" would eliminated, whereas future subdivision for "Plan Review Sites," would require an authorization by the CPC.

Two new certifications would be created as part of the proposal. One would certify that a development complies with a previously approved plan for the long-term development of a large campus. The other would certify that, on a lot over an acre in size containing habitat of one quarter of an acre or more, trees proposed for removal are not in an area that would be considered natural habitat.

See Appendix for a complete list of certifications being eliminated or modified under the proposal.

AUTHORIZATIONS

All Plan Review Sites would be required to apply for an authorization by the CPC for any proposed development, enlargement, site alteration or subdivision.

Permission to proceed, if granted, would be based on to what extent the project meets standards established under the proposed regulations, including that the most significant natural features of the site have been preserved, when feasible; that any required habitat preservation area is located so as to preserve significant natural features and link the preserved habitat to other off-site habitats; and that vehicular and pedestrian circulation on the site is well designed and integrated with the surrounding road network. Optional modifications applicable in the course of this review and as a part of the authorization itself include the ability to modify standards for private roads and parking areas, site planning requirements for Plan Review Sites.

Plan Review Sites would have the option to apply to the CPC for approval of an authorization for a long-term development plan, which would establish areas of the site within which future development is proposed. If the plan is approved by the Commission, development within the parameters of the plan could be constructed subject to a certification or authorization, depending on how specifically the future development parameters are detailed. Schematic development sites would be more thoroughly described in the plan, and would be able to proceed in the future by certification. Long-term development plans that more loosely describe future development in the plan would need to apply for an authorization with findings that are more specifically focused than the general authorization applicable to all Plan Review Sites.

Plan Review Sites with DOS or areas required to be preserved as natural habitat would be able to apply for various authorizations that permit the CPC to modify various zoning rules. The CPC would be empowered to modify the habitat preservation area standards to resolve site design conflicts, such as where habitat area that would normally be required to be preserved is located at the only access point to the property. To facilitate site design that better protects natural features, the CPC would be able to allow 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 residential projects, the authorization to modify bulk rules establishes limits on the extent of bulk modifications, and which types of bulk modifications can be combined. For non-residential projects, bulk modifications would facilitate the distribution of floor area, impervious area and lot coverage throughout a site that may consist of multiple lots. The CPC would also be able to modify the special lot coverage, open area and habitat preservation requirements applicable to large community facility campuses. For all projects, the CPC would review parking circulation and vehicular access and egress.

Some authorizations currently applicable in the existing SSRDD would continue to apply in the proposed South Richmond Subdistrict; including the authorization for affordable independent residences for seniors in Subarea SH, for residential uses in Subarea M, and to permit bulk calculations to include lands containing significant natural features donated to the City.

See Appendix for a complete list of authorizations being eliminated or modified under the proposal.

SPECIAL PERMITS

A special permit would be required for modifying the boundaries of a previously approved and established habitat preservation area. This would be permitted only where unforeseen circumstances require the modification of the boundaries, and the boundary modification has been accommodated by establishment of a new area to be preserved, or enhancement of existing habitat.

Several special permits currently applicable in the existing SSRDD would continue to apply the South Richmond Subdistrict. These include allowing lots with more than half their area in DOS to calculate bulk regulations using the entire lot area, and permitting buildings or other structures higher than the four-story/50-foot height limit. The proposal will eliminate three special permits applicable for sites with DOS that currently permit adjustment of a DOS boundary, permit community facility buildings or treatment plants in Designated Open Space and permit building encroachment into DOS.

See Appendix for a complete list of special permits being eliminated or modified under the proposal.

LOWER-DENSITY GROWTH MANAGEMENT AREA

The proposed action would modify certain sections of the LDGMA which are applicable only in Staten Island to clarify and align the existing rules with the original intent of LDGMA which is to maintain and enhance the neighborhood character.

Minimum Lot Area Proposed to Exclude Private Roads

Throughout the LDGMA, the proposal would update ZR 23-32 to 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 and SSRDD. The proposed change could result in fewer lots thus slightly reducing the density of development. However, maximum floor area would remain the same.

Minimum Lot Width on Lots Fronting Two Streets

A proposed clarification to the Zoning reflects the intent of the original LDGMA rules regarding development on irregular corner lots or other lots fronting two non-parallel streets, and is not meant to change reasonable implementation of the zoning resolution. LDGMA regulations currently require that any new building be located only on a portion of the zoning lot where the minimum lot width requirement

is met, specifically between opposing side lot lines, which is a defined term in zoning. Proposed zoning would clarify that lot width measurements be measured between any side lot line and its opposing lot line in LDGMA.

Permitted Uses on Ground Floor Fronting Side Streets Along Commercial Corridors

To discourage inappropriate residential development, the 2006 Lower Density Commercial Text Amendment (060066 ZRR) requires development within Commercial Districts or overlays to be in mixed-use buildings if any residential use is proposed (ZR 32-11), and similarly, to have commercial or community facility uses on ground floors (ZR 32-433).

However, side streets intersecting with commercial corridors historically have detached residences within the commercial overlay. The original rule required new buildings to include commercial on the GF within the entire width of the overlay which is out of character for developments located on residential side streets. In 2016, the rules in ZR 32-433 were updated to only require the ground floor commercial or community use along the primary retail street, and not to require it along side streets that intersect the primary street. But the 2016 update overlooked the need to amend ZR 32-11, and so even on side streets in Commercial districts, non-residential uses are still required to some extent in each new building.

This proposal removes the requirement for mixed buildings (ZR 32-11) in all commercial overlays, so that ZR Section 32-433 will solely govern commercial uses along primary commercial corridors and residential side streets, in order to preserve the neighborhood characters of both.

Landscaped Buffer Between Commercial and Residential Uses

Within C1, C2, and C4-1 districts within Staten Island, five foot wide landscaped buffers are required along the side lot lines of a lot containing non-residential uses bordering a zoning lot with residential uses. However, the CPC report (N 060066 ZRR) indicated an intent to apply the same landscaped buffer along both side and rear lot lines. The text will be modified to include rear lot lines according to original intent described for LDGMA, and apply to C8 Commercial Districts as well.

In similar regard for residential neighborhood character, the same landscaped buffer would be required along a street line without a street wall building with at least 50 percent window area, typical of a storefront that is across the street from a zoning with a residential use.

These landscaping requirements would only establish new minimum planting or landscaping standards, not be in addition to other landscaping rules. For example, citywide zoning already requires commercial lots along district boundaries between commercial and residential districts to have an 8 or 15 feet wide open area in which storage is prohibited (ZR 33-29). In these open areas, no planting or landscaping is currently required. This rule would simply require landscaping within such open area.

CROSS ACCESS CONNECTIONS

The proposed rules do not change the land uses or zoning districts for which cross access connections are required. Currently, a Chair Certification is required to demonstrate that cross access connections are meeting the rules; the proposed requirements will 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 existing land use action to certify that no connection is required would be modified under the proposal as described below.

The current rules require a cross access connection along every lot line. In order 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 by the Chair. The current rules allow cross access connections to be waived if there is a building within 50 feet of the proposed development or if there is a grade change of 15 percent. 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 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. Under existing rules, cross access may be waived due to the existence of a tree; the proposed rules would clarify a threshold for existing trees that must be on the property in order to waive a potential cross access connection, so that a single tree would no longer necessarily impede the creation of a connection.

Since 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. The proposed rules would also facilitate a wider cross access connection for both pedestrians and vehicles, similar to how a sidewalk flanks a street.

In order to prevent requiring connections that were not originally intended when cross access rules were adopted, rules will be clarified for certain uses.

Commission Chair Certifications

A Commission Chair Certification would no longer be needed to certify that a proposed potential or completed cross access connection meets rules. Current Commission Chair certifications to voluntarily create a connection or relocate a previously connection would be eliminated, as any connection that meets rules could be created as-of-right.

If no cross access could be created due to the existence of wetlands, significant number and caliper of trees or other habitat identified for Plan Review Sites, or would be too steeply sloped, the applicant would need DOB commissioner certification that no cross access is required, instead of requiring Commission Chair Certification in current rules. If the cross access connection is blocked by a building within the subject zoning lot or property, the Commission Chair would still be needed to certify that a cross access connection is not required.

Authorizations

The existing authorization to waive or modify 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 rules, as long as the Commission finds that it that turning diagrams and ground clearance diagrams indicate that vehicles can maneuver safely between the parking lots, and such cross access connections are adequately located so as not to impair adequate ingress, egress and circulation with respect to abutting #streets# or #uses#.

F. ANALYTIC FRAMEWORK

Consistent with CEQR Technical Manual guidelines, the Proposed Action is analyzed in this Draft Scope of Work 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 Action, it is difficult to predict the sites where development would be facilitated by the Proposed Action. In addition, the proposal is not in-and-of-itself expected to induce development where it would not have occurred absent the Proposed Action. While 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 effect of the Proposed Action, 16 representative prototypical developments have been identified to demonstrate the wide range of proposed regulations for sites that will be able to develop asof-right 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 condition. (Seven of these 16 representative protibial developments have been analyzed for this Draft Scope of Work, as shown in the appendix). In addition, Conceptual Analysis sites were identified for those sites where development would require discretionary action in the future With-Action condition. 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 Action.

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 2,737 new housing units constructed within the three special districts, which is about 5% of the total number of lots in the special districts. This rate of housing development is similar to the rate outside the special districts in Staten Island, which is 4%. The Proposed Action is 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

The Proposed Action will affect 18 zoning districts located within three existing Special Districts (HS, SNAD, SSRDD), which under the Proposed Action will be mapped within three future ecological areas (Escarpment, Resource Adjacent and Base Protection) of the proposed special district. Approximately, 1,003 properties in the Bronx and 53,434 properties in Staten Island could be potentially affected through changes in the special districts rules. Approximately, 136,156 properties may be affected by LDGMA changes. These properties would also include the properties affected by the special district rules in Staten Island. The changes in Cross Access regulations will affect approximately 3,544 properties, some of which overlap with both LDGMA and special district changes in Staten Island. As illustrated in **Table 9**, 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 subarea designations to create hypothetical sites where the effects of the proposed regulations could be assessed (Prototypical Sites). As described below, 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.:

Determining the Range of Zoning Districts and range of 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 will 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 which permit a reasonable range of building typologies and development scenarios; and
- Building permits issued by the Department of Buildings between 2006 and 2017 were analyzed to estimate development prevalence by zoning district.

Determining Lot Characteristics

- The median lot area, width and depth of all unbuilt lots within a selected prototype zoning district and ecological area. All lots over one acre were excluded from this analysis as they will be considered "Plan Review Sites" in the With Action scenario and will be analyzed through Conceptual Analysis;
- 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
 the Dept. of City Planning, aerial and street view imagery;
- As defined by the proposed zoning framework, lots within the Escarpment and Resource Adjacent 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.

Development 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 the Dept. of City Planning 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.

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

As the Proposed Special District substantially changes the methods and regulations for planting, trees, and development within areas of steep slope on a site 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,

as the alteration of additional natural features may lead to a development scenario which 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 asof-right building permitted under the existing zoning. This provides a baseline for analysis of the effect of
the Proposed Action. However, the existing Special Districts includes various discretionary actions which
are required for the alteration or modification of natural features outside of the construction zone (15 feet
in HS & SNAD; 8 feet in SSRDD) for each building. Therefore, amenities located outside of the
construction which often require authorization by the City Planning Commission are not assumed to be
granted in the as-of-right No Action scenario. Additionally, sites within the existing Special Natural Area
and Hillsides Preservation Districts may demonstrate a No Action scenario in which there is no feasible asof-right development due to the fact that any development on a lot containing only steep slope requires the
authorization of the City Planning Commission. 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.

Table 9: Prototypical Site Selection

ID	Zoning District	Current Special District	Proposed Ecological Area	Typology (1F= one-family; 2F = two family)	Lot Area (sf)	Width (feet)	Depth (feet)		
Resid	Residential Sites								
1	R3A	HS	Base Protection	2-F Detached	4000	40	100		
2	R5	HS	Base Protection	1-F Attached	2500	25	100		
3	R1-2	SNAD (BX)	Base Protection	1-F Detached (enlarge)	6000	60	100		
4	R3-1	SRD	Base Protection	1-F Semi Detached	2500	25	100		
5	R3X	SRD	Resource Adjacent	1-F Detached	6500	65	100		
6	R1-1	SNAD	Escarpment	1-F Detached Subdivision	39000	300	130		
Non	Non-Residential Sites								
1	C1-1	SRD	Base	General Retail	42000	210	200		

CONCEPTUAL ANALYSIS

As the Proposed Action would create new discretionary actions to be considered by the City Planning Commission, 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 Action 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 zoning lots greater than one acre in lot area (residential and commercial development) that would be subject to preservation area requirements of the proposed special district if there is an existing habitat on site;
- The development of a Campus Plan for large institutional campuses;
- Development on waterfront lots with DEC freshwater wetlands;
- The subdivision of an existing zoning lot that would result in the creation of more than four new zoning lots in a Resource Adjacent or Escarpment Area; 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, as 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 2029 has been identified for this environmental review.

G. DRAFT EIS SCOPE OF WORK

As described in greater detail below, the EIS will contain:

- A description of the Proposed Action and the RWCDS, as well as the environmental setting;
- An analysis of the potential for significant adverse environmental impacts to result from the Proposed Action;
- A description of practicable mitigation measures that could eliminate or minimize any significant adverse environmental impacts disclosed in the EIS;
- An identification of any significant adverse environmental effects that cannot be avoided if the Proposed Action is implemented;
- A discussion of alternatives to the Proposed Action; and
- A discussion of any irreversible and irretrievable commitments of resources that could result from the Proposed Action.

1. DESCRIPTION OF THE PROPOSED ACTION AND ANALYTICAL FRAMEWORK

This chapter will introduce the reader to the Proposed Action and provide the project data that are used to assess impacts. The chapter will contain a brief description of the uses in the Affected Area; the RWCDS; and a discussion of the approvals required, procedures to be followed, and a description of the No Action Condition.

The chapter will include appropriate data from the ULURP application and drawings. The role of the lead agency for CEQR and the environmental review process to aid in decision making also will be described.

The analysis framework will be discussed in the first chapter of the EIS and set the regulatory context for the EIS (i.e., ULURP and CEQR—their timing, public review, hearings, etc.), and then explain the basic approach to the technical chapters—that each chapter will address existing conditions, a future analysis year without the Proposed Action, and that future analysis year with the Proposed Action; that any significant adverse environmental impacts will be identified comparing the With Action Condition to the No Action Condition; that mitigation will be proposed for identified significant adverse environmental impacts; and that practicable alternatives that meet the goals of the Proposed Action but reduce or eliminate identified impacts will be considered. As part of this discussion, the rationale for the future analysis year will be presented. In addition, this chapter will present an analysis year and qualitative construction scenario for the RWCDS.

2. LAND USE, ZONING, AND PUBLIC POLICY

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed action and determines whether a proposed action is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the action's compliance with, and effect on, the area's zoning and other applicable public policies. This chapter will analyze the potential impacts of the Proposed Action on land use, zoning, and public policy, pursuant to the methodologies presented in the *CEQR Technical Manual*. The EIS will include analysis of the City's Waterfront Revitalization Program (WRP) and completion of the 2016 WRP Consistency Assessment Form (CAF). Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect land use, zoning, and public policy by assessing prototypical analysis sites, employing a qualitative non-site-specific approach.

3. SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEOR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. This chapter will assess the Proposed Action's potential effects on socioeconomic conditions. The five principal issues of concern with respect to socioeconomic conditions, pursuant to the CEOR Technical Manual, are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on specific industries. The Proposed Action is not anticipated to result in adverse impacts with respect to direct residential displacement, direct business and institutional displacement, indirect residential displacement, indirect business and institutional displacement, or a specific industry. Nonetheless, to be conservative, the EIS will include analysis of these areas per CEQR Technical Manual guidelines. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect socioeconomic conditions by assessing prototypical sites.

4. COMMUNITY FACILITIES

Community facilities, as defined under CEQR, include public or publicly funded schools, hospitals, libraries, daycare centers, and fire and police protection. Direct effects occur when a proposed action

physically alters or displaces a community facility. Indirect effects result when increases in population create additional demand on service delivery. The demand for community facilities and services is directly related to the type and size of the new population generated by a proposed action. New residential developments tend to affect facilities, such as public schools, daycare centers, libraries, and hospitals. According to the *CEQR Technical Manual*, a detailed community facility analysis is conducted when a proposed action would have a direct or indirect effect on a community facility.

The Proposed Action is not anticipated to result in increased densities affecting community facilities. Nonetheless, for conservative purposes, the EIS will include a preliminary screening assessment of any potential impacts on community facilities and services using prototypical analysis sites.

5. OPEN SPACE

The Proposed Action would adjust Designated Open Space (DOS) boundaries to provide usable outdoor spaces accessory to residences, as well as generally to better align the boundaries to include existing habitat areas. Rules regarding DOS would be modified to clarify or modernize procedures. Therefore, the EIS will include a qualitative assessment of direct effects on open space, and the assessment will include the following tasks:

- Describe and illustrate existing open spaces in the Affected Area.
- Describe any planned changes to open spaces in the No Action Condition.
- Describe alterations to DOS in the With Action Condition.
- Assess the Proposed Action's effects on the user experience within open space resources, including effects from adjusted DOS boundaries and clarified and modernized DOS procedures.

For indirect effects, an open space assessment is typically warranted if an action would directly affect an open space or if it would increase the population by more than:

- 350 residents or 750 workers in areas classified as "well-served areas;"
- 25 residents or 125 workers in areas classified as "underserved areas;"
- 200 residents or 500 workers in areas that are not within "well-served" or "underserved areas."

The Proposed Action could result in development that may have direct or indirect effects on open space. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect open space by assessing prototypical analysis sites.

6. SHADOWS

The CEQR Technical Manual requires a preliminary shadows screening assessment for Proposed Action that would result in new structures or additions to existing structures greater than 50 feet in incremental height or adjacent to sunlight-sensitive resources. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features. It is not possible to evaluate the impacts of any specific development because the specific location of future development projects is unknown. Therefore, the EIS will include a shadow assessment of prototypical development sites to determine how project-generated shadows would affect sunlight-sensitive resources. The shadow assessment would be coordinated with the open space, historic and cultural resources, and natural resources analyses and would be conducted in accordance with CEQR Technical Manual methodologies.

7. 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 calendared 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 Action could result in new in-ground disturbance, and they would affect height and bulk controls in areas where historic architectural resources are present. 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 include a historic and cultural resources assessment to analyze the potential for significant adverse impacts based on prototypical analysis sites.

8. URBAN DESIGN AND VISUAL RESOURCES

An area's urban components and visual resources together define the look and character of the neighborhood. The urban design characteristics of a neighborhood encompass the various components of buildings and streets in the area, which include building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include private residences or places of business.

It is not possible to evaluate the impacts of any specific development, because the specific location of future development projects is unknown. Therefore, consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect urban design and visual resources by assessing prototypical analysis sites using a qualitative, non-site-specific approach.

9. NATURAL RESOURCES

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 Action would result in zoning text and map amendments specifically intended to address sites containing, or located in proximity, to natural resources. The EIS will provide a natural resources assessment. Because the specific location of future development projects is unknown, the natural resources assessment will be based on prototypical analysis sites.

10. 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 project would increase pathways to human or environmental exposures; (b) a project would introduce new activities or processes using hazardous materials, and the risk of human or environmental exposure is increased; or (c) the project would introduce a population to potential human or environmental exposure from offsite sources.

The Proposed Action could result in ground disturbance in areas where hazardous materials may be present. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to result in adverse impacts related to hazardous materials by assessing Prototypical Analysis Sites.

11. WATER AND SEWER INFRASTRUCTURE

The CEQR Technical Manual requires an assessment of the potential effects of a proposed action on the City's water supply, wastewater treatment, and stormwater management infrastructure to ensure that these systems have adequate capacity to accommodate land use or density changes. According to the CEQR Technical Manual, only projects that increase density or change drainage conditions on a large site require such an analysis. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect the City's water and sewer infrastructure by assessing prototypical analysis sites.

12. 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. The EIS will include a preliminary screening assessment of the Proposed Action's potential to affect solid waste and sanitation services. If warranted, a more detailed analysis will be provided. The assessment will be based on prototypical analysis sites because the specific locations of future development projects are unknown.

13. ENERGY

According to the *CEQR Technical Manual*, an EIS must include a discussion of the effects of a proposed action on the use and conservation of energy, if applicable and significant. In most cases, an action does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to actions that may significantly affect the transmission or generation of energy. For other actions, in lieu of a detailed assessment, the estimated amount of energy that would be consumed annually because of the day-to-day operation of the buildings and uses resulting from an action is disclosed, as recommended in the *CEQR Technical Manual*. Although significant adverse energy impacts are not anticipated to result from the Proposed Action, the EIS will include a preliminary screening analysis based on prototypical analysis sites to consider projected operational energy consumption.

14. TRANSPORTATION

The objective of a transportation analysis is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services,

pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists, and vehicles), on- and off-street parking, or goods movement. 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.

TRAFFIC AND PARKING

The objective of traffic and parking analyses is to determine whether a proposed action is expected to have significant impacts on street and roadway conditions or on parking resources. This includes the sufficiency of street and highway elements to adequately process a proposed action's expected traffic flow and operating condition changes, and the effect of the proposed action on parking resources in the area. According to the *CEQR Technical Manual*, a preliminary trip generation analysis for a project will generally be appropriate to determine the volume of vehicular trips expected during the peak hours. In most areas of the City, if a proposed action is projected to result in 50 or more peak hour vehicular trip ends, a detailed traffic analysis may be warranted. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect traffic and parking conditions by assessing prototypical analysis sites.

TRANSIT AND PEDESTRIANS

The objective of transit and pedestrian analyses is to determine whether a proposed action would have a significant impact on public transit facilities and services and on pedestrian flows. According to the general thresholds used by the Metropolitan Transportation Authority and specified in the *CEQR Technical Manual*, if a proposed development would result in pedestrian elements with 200 or more pedestrian trips, 50 or more bus trips in a single direction on a single route, or 200 or more passengers at a subway station or on a subway line during any analysis peak hour, further detailed analysis may be needed for a particular technical area. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect transit and pedestrian conditions by assessing prototypical analysis sites.

15. 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, usually referenced as "stationary sources;" or by a combination of both. Under CEQR, 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 the proposed uses. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect air quality by assessing prototypical analysis sites.

16. GREENHOUSE GAS EMISSIONS

As noted in the *CEQR Technical Manual*, increased concentrations of greenhouse gases (GHGs) are changing the global climate, resulting in wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. Through *PlaNYC*, New York City's long-term sustainability program, the City advances sustainability initiatives and goals to both greatly reduce GHG emissions and increase the City's resilience to climate change. The New York City Climate Protection Act, enacted as Local Law 22 of 2008, established the goal to reduce citywide GHG emissions to 30 percent below 2005 levels by 2030 (the "GHG reduction goal"). This goal

was developed for planning for an increase in population of almost one million residents while achieving significant GHG reductions. The EIS for the Proposed Action will include a preliminary screening assessment of GHG emissions, and, if warranted, a more detailed analysis will be provided. Prototypical analysis sites will guide this assessment, because specific locations of future development projects are unknown.

17. NOISE

The CEQR Technical Manual requires an assessment of the proposed action's potential effects on sensitive noise receptors (including residences, healthcare facilities, schools, open space, etc.) and the potential noise exposure at any new sensitive receptors introduced by the Proposed Action. Based on the projected likely effects of the Proposed Action, the EIS will include a noise assessment in accordance with the CEQR Technical Manual. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect noise by assessing prototypical analysis sites.

18. PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. A public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise.

Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect public health by assessing prototypical analysis sites.

19. NEIGHBORHOOD CHARACTER

The CEQR Technical Manual defines neighborhood character as an amalgam of the various elements that give neighborhoods their distinct personality. These elements can include land use, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation and noise, but not all these elements contribute to neighborhood character in all cases. For neighborhood character, CEQR considers how those elements combine to create the context and feeling of a neighborhood, and how an action would affect that context.

According to the *CEQR Technical Manual*, an assessment of neighborhood character may be appropriate if a proposed action impacts any of those individual elements within a neighborhood. It is also possible that several moderate changes in the elements that contribute to a neighborhood's character could lead to a significant impact on neighborhood character. Generally, neighborhood character impacts are rare, and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects to the neighborhood would result in an impact to neighborhood character. Moreover, a significant impact identified in one of the technical areas that contribute to a neighborhood's character is not automatically equivalent to a significant impact on neighborhood character, but rather serves as an indication that neighborhood character should be examined.

Methodologies outlined in the *CEQR Technical Manual* will be used to provide an assessment of neighborhood character of the Proposed Action. Consistent with the analytical framework described above, the EIS will consider the Proposed Action's potential to adversely affect neighborhood character by assessing prototypical analysis sites using a qualitative non-site-specific approach.

20. CONSTRUCTION

Construction impacts, although temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources and the integrity of historic resources, community noise patterns, air quality conditions, and mitigation of hazardous materials. This chapter of the EIS will provide a preliminary impact assessment following the guidelines in the *CEQR Technical Manual*. Although not anticipated, if additional analysis is required, a detailed assessment will be conducted. The assessment will be guided by a prototypical site analysis.

21. MITIGATION

Where significant adverse impacts have been identified in the analyses discussed above, measures will be described to mitigate those impacts. Where impacts cannot be mitigated, they will be identified as unavoidable adverse impacts.

22. ALTERNATIVES

CEQR requires an analysis of a No-Action Alternative (without the Proposed Action), which in this case assumes that the zoning text and map amendments are not implemented. Additional alternatives and variations of the Proposed Action will be identified based on any significant adverse impacts identified in the EIS. Other alternatives to be analyzed would include an alternative or alternatives to reduce or avoid any significant adverse impacts of the proposed project. The analysis of each alternative will be qualitative, except where quantitative impacts of the project have been identified.

23. CONCEPTUAL DEVELOPMENT

Because the Proposed Action would create new, discretionary actions to be considered by the CPC, an assessment of the potential environmental impacts that could result from these actions within the Proposed Special District 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 Action does not consider specific developments. Instead, a conceptual analysis will evaluate the new, discretionary actions that could be used to generically assess the potential environmental impacts.

24. SUMMARY CHAPTERS

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the regulations and the *CEQR Technical Manual*. Chapters are as follows:

- Executive Summary. Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will incorporate relevant material from the body of the EIS to describe the Proposed Action, its environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Action.
- Unavoidable Adverse Impacts. Those impacts, if any, that could not be avoided and could not be practicably mitigated, will be listed in this chapter.
- Growth-Inducing Aspects of the Proposed Project. This chapter will focus on whether the Proposed Action have the potential to induce new development within the surrounding area.
- Irreversible and Irretrievable Commitments of Resources. This chapter will focus on those resources, such as energy and construction materials, that would be irretrievably committed through implementation of the Proposed Action.

APPENDIX: PROTOTYPICAL ANALYSIS SITES

AND

LAND USE ACTIONS



RESIDENTIAL PROTOTYPICAL ANALYSIS

<u>Prototype 1</u> R3A District, 40 feet x 100 feet interior lot, Existing – Special Hillsides Preservation District Proposed – Hillsides Subdistrict, Base Protection Area

The following prototype, as shown in the illustrations below, utilizes a generic 40 feet x 100 feet interior lot in an R3A zoning district. In the No-Action scenario, the site is located within the Special Hillsides Preservation District, and in the With-Action scenario the site is located within the Hillsides Subdistrict, Base Protection 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 Special Hillsides District. The prototype illustrates the opportunity to understand the effects of the following portions of the Proposed Action on development:

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

Existing Conditions

The existing condition demonstrates a 4,000 square feet vacant lot which contains six trees. The site illustrates a grade 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 two-family residence. The zoning lot is developed with 2,400 square feet 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 (ZR 23-142), which allows an FAR of 0.6. The building footprint is 1,200 square feet 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 2,444 square feet of impervious area (61 percent of lot area) and requiring 2,444 square feet of ground disturbance. This scenario is illustrating 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 25-62), 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 feet construction buffer, thus construction is allowed as-of-right.

Prior to development, the site contained six trees worth a total of 18 tree credits under existing regulations. Current regulations require four trees and six tree credits. The development contains five trees – five of which are preserved with only one tree removed. 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 residence. The zoning lot is developed with 2,400 square feet 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, which allows an FAR of 0.6.

The building footprint is 1,200 square feet and provides the maximum floor area and lot coverage at 30 percent. Additionally, the site accommodates a driveway, walkway, and swimming pool, creating a total of 2,600 square feet of impervious area (65 percent of lot area) and requiring of 2,600 square feet of ground disturbance. 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, within a garage and two unenclosed parking pads in the side yard.

Prior to development, the site contained six trees worth a total of 18 tree credits under existing regulations. Proposed regulations require four trees and 16 tree credits. In this scenario, the site contains five trees – one tree was preserved in the front yard, three trees are preserved at the rear of the site with the addition of one new tree planted proximate to the existing trees to form a tree cluster, making them eligible to receive bonus tree credits.

Additionally, 400 square feet (10 percent of the lot area) of a wildlife garden is provided to satisfy the proposed biodiversity planting area regulations that require four biodiversity points. 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, impervious area, or ground disturbance.

The proposed rules allow minor disturbances to the critical root zone of the tree beyond the structural root zone, unlike the existing rules, allowing the developer to build a pool in the With-Action scenario. 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 feet construction buffer may necessitate tree removal by seeking an authorization outside of the 15 feet construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

In total, the With-Action condition has increased biodiversity planting areas by 400 square feet. No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

Prototype 1

R3A District, 40 ft x 100 ft interior lot, 4,000 sf lot area, Two-story Two-family detached No Action- Existing Special Hillsides District With Action- Hillsides Subdistrict, Base Protection Area

Legend







Newly Planted

2"-3" caliper



Street Tree



Biodiversity

Garden





Surface

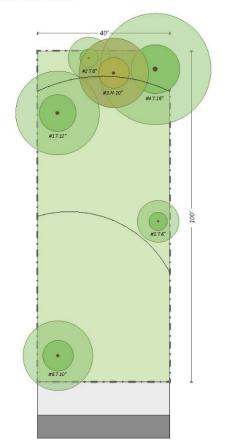


ng Topography e (2 ft incremen

Existing

FAR: 0 Existing Trees: 6
Total Floor area: 0 Biodiversity Garden: N/A

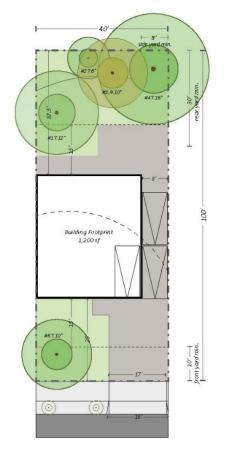
Lot Coverage: 0 Impervious Area: 0 Ground Disturbance: 0



No Action

FAR: 0.6 Removed Trees: 1
Total Floor area: 2,400 sf
Lot Coverage: 30% New Trees: 0
Impervious Area: 61% Total Trees: 5

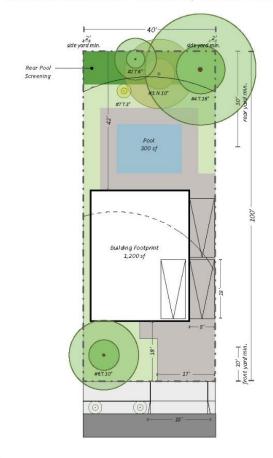
Ground Disturbance: 61% Biodiversity Garden: N/A



With Action

FAR: 0.6 Removed Trees: 2
Total Floor area: 2,400 sf Lot Coverage: 30% New Trees: 1
Impervious Area: 65% Total Trees: 5

Ground Disturbance: 65% Biodiversity Garden: 400 sf (4 pts)



Prototype 1

R3A District, 40 ft x 100 ft interior lot, 4,000 sf lot area, Two-story Two-family detached No Action- Existing Special Hillsides District With Action-Hillsides Subdistrict, Base Protection Area

Legend

Existing Target 6" or greater













Biodiversity Existing Non-Target 6" or greater 2"-3" caliper

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0 Impervious Area: 0 Ground Disturbance: 0 **Existing Trees: 6** Biodiversity Garden: N/A

No Action

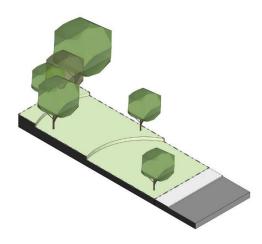
FAR: 0.6 Removed Trees: 1 Total Floor area: 2,400 sf Preserved Trees: 5 Lot Coverage: 30% New Trees: 0 Total Trees: 5 Impervious Area: 61%

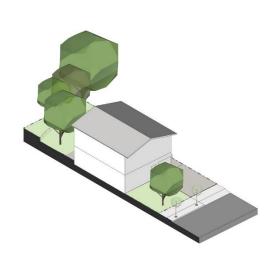
Ground Disturbance: 61% Biodiversity Garden: N/A

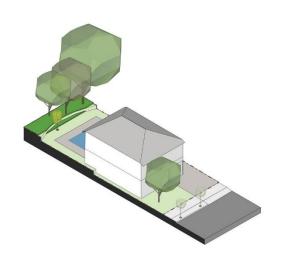
With Action

FAR: 0.6 Removed Trees: 2 Total Floor area: 2,400 sf Preserved Trees: 4 Lot Coverage: 30% New Trees: 1 Impervious Area: 65% Total Trees: 5

Ground Disturbance: 65% Biodiversity Garden: 400 sf (4 pts)







Prototype 2 R5 District, 25 feet x 100 feet interior lot, Existing - Special Hillsides Preservation District, Proposed - Hillsides Subdistrict, Base Protection Area

The following prototype, as shown in the illustrations below, utilizes a generic 25 feet x 100 feet interior lot in an R5 zoning district. In the No-Action scenario, the site is located within the Special Hillsides Preservation District, and in the With-Action scenario the site is located within the Hillsides Subdistrict, Base Protection Area. These assumptions were made because they represent typical lot conditions found within R5 districts in the existing Special Hillsides Preservation District. The prototype illustrates the opportunity to understand the effects of the following portions of the Proposed Action on development:

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

Existing Conditions

The existing condition demonstrates a 2,500 square feet vacant lot which contains four trees. The site illustrates a grade 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 attached residence. The zoning lot is developed with 3,125 square feet of zoning floor area - the maximum permitted within an R5 district which allows an FAR of 1.25. The location of the building is defined by yard requirements and the underlying regulations (ZR 23-45) requiring off-street parking be 18 feet from the street line. The building footprint is 1,375 square feet, designed to maximize the lot coverage of 55 percent. Additionally, the site accommodates a driveway, walkway, and rear patio, creating a total of 2,072 square feet of impervious area (83 percent of lot area) and requiring of 2,072 square feet of ground disturbance. 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 feet construction buffer, thus construction is allowed as-of-right.

Prior to development, the site contained four trees worth a total of seven tree credits under existing regulations. Proposed regulations require three trees and four tree credits. The site now contains four trees - four trees were removed and four are newly planted. 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 attached residence. The zoning lot is developed with 3,125 square feet of zoning floor area - the maximum permitted within an R5 district which allows an FAR of 1.25. The location of the building is defined by yard requirements and the underlying regulations requiring off-street parking be 18 feet from the street line. The building footprint is 1,375 square feet, designed to maximize the 55 percent lot coverage. Additionally, the site accommodates a driveway, walkway, and a patio, creating a total of 1,872 square feet of impervious area (75 percent of lot area) and requiring of 1,872 square feet 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, as required by the underlying zoning, both in a garage within the building.

Prior to development, the site contained four trees worth 11 tree credits under proposed regulations. Proposed regulations require three trees and 10 tree credits. In this scenario, the site now contains four trees - three trees were removed, one preserved and three newly planted. Due to the proposed tree clustering regulations, new trees are planted proximate to each other to form a tree cluster, making them eligible to receive bonus tree credits.

Additionally, 146 square feet (six percent of the lot area) of wildlife garden is provided to satisfy the proposed biodiversity planting area regulations that require two biodiversity points. 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. Impervious area decreased from 83 percent to 75 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 feet 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 feet construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

In total, the With-Action condition increased biodiversity planting areas by 146 square feet. No additional number of trees, stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

Staten Island and Bronx Special Districts Update

Prototype 2

R5 District, 25 ft x 100 ft interior lot, 2,500 sf lot area, Three-story Single-family attached No Action- Existing Special Hillsides District With Action-Hillsides Subdistrict, Base Protection Area

Legend















6" or greater

2"-3" caliper

Street Tree

Garden

Surface

Space (2 ft increments)

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0 Impervious Area: 0 Ground Disturbance: 0 Existing Trees: 4 Biodiversity Garden: N/A

Total Floor area: 3,125 sf Lot Coverage: 48%

No Action

FAR: 1.25

New Trees: 4 Impervious Area: 82%

Total Trees: 4 Ground Disturbance: 82% Biodiversity Garden: N/A

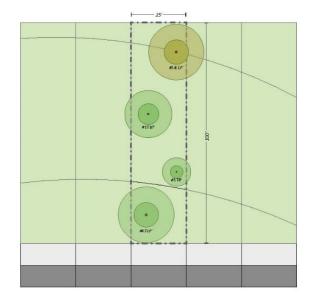
Removed Trees: 4

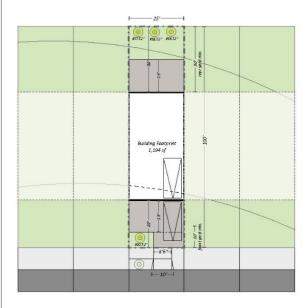
Preserved Trees: 0

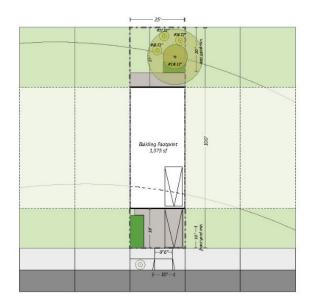
With Action

FAR: 1.25 Removed Trees: 3 Total Floor area: 3,125 sf Preserved Trees: 1 Lot Coverage: 55% New Trees: 3 Impervious Area: 75% Total Trees: 4

Ground Disturbance: 75% Biodiversity Garden: 146 sf (2 pts)







Prototype 2

R5 District, 25 ft x 100 ft interior lot, 2,500 sf lot area, Three-story Single-family attached No Action- Existing Special Hillsides District With Action- Hillsides Subdistrict, Base Protection Area

Legend

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0 Impervious Area: 0 Ground Disturbance: 0 **Existing Trees: 4**

Biodiversity Garden: N/A

No Action

FAR: 1.25 Removed Trees: 4 Total Floor area: 3,125 sf Preserved Trees: 0 Lot Coverage: 48% New Trees: 4 Impervious Area: 82% Total Trees: 4 Ground Disturbance: 82% Biodiversity Garden: N/A

Existing Target

With Action

Existing Non-Target

6" or greater

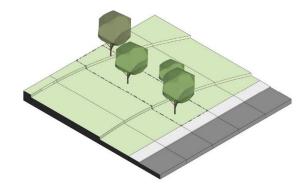
FAR: 1.25 Removed Trees: 3 Total Floor area: 3,125 sf Preserved Trees: 1 Lot Coverage: 55% New Trees: 3 Impervious Area: 75% Total Trees: 4

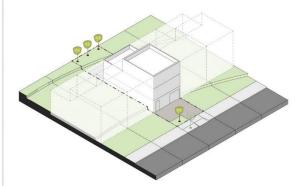
Ground Disturbance: 75% Biodiversity Garden: 146 sf (2 pts)

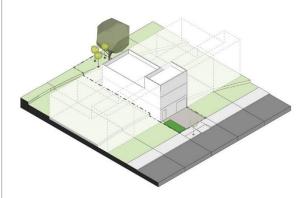
Biodiversity

Garden

Surface







Prototype 3 R1-2 District, 60 feet x 100 feet interior lot,
Existing - Special Natural Area District,
Proposed - Special Natural Area District, Base Protection Area

The following prototype, as shown in the illustrations below, utilizes a generic 60 feet x 100 feet interior lot in an R1-2 zoning district. In the No-Action scenario the site is located within the Special Natural Area District (NA-2), and in the With-Action scenario the site is located within the Special Natural Area District, Base Protection 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 opportunity to understand the effects of the following portions of the Proposed Action on development:

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

Existing Conditions

The existing condition demonstrates a 6,000 square feet lot which contains four trees and a 1,165 square feet one-story single-family detached residence with one off-street parking space within an enclosed garage. The site illustrates a grade 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 square feet 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 square feet, the maximum allowed while meeting the required open space ratio of 150.0. The site accommodates a driveway, walkway, and rear patio, creating a total of 3,089 square feet of impervious area (51 percent of lot area) and requiring 3,089 square feet of ground disturbance.

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

Prior to the enlargement, the site contained four trees worth a total of seven tree credits under existing regulations. The developed site contains six trees – one tree was removed, three were preserved and three were newly planted. This meets the six trees and four tree credit requirement 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 square feet 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 while also leaving enough room for a swimming pool in the backyard. The building footprint is 1,500 square feet, designed to maximize the 25 percent lot coverage. The site accommodates a driveway, walkway, swimming pool, and a patio, creating a total of 3,000 square feet of impervious area (50 percent of lot area) and requiring of 3,000 square feet of ground disturbance. 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 to the side yard to become compliant with underlying LDGMA parking requirements (ZR 25-22).

Prior to the enlargement, the site contained four trees worth a total of 12 tree credits under proposed regulations. The developed site contains 12 trees – two trees were removed, two were preserved and eight were newly planted. This meets the six trees and 24 tree credit requirement under the proposed regulations. Due to the proposed tree clustering regulations, new trees are planted proximate to preserved trees to form tree clusters, making them eligible to receive bonus tree credits. One front yard tree was preserved; additionally, three trees were newly planted in the front yard to satisfy the proposed regulations, which require six front yard tree credits.

Additionally, 604 square feet (10 percent of the lot area) of wildlife garden is provided to satisfy the proposed biodiversity planting area regulations that require four biodiversity points. 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, or impervious area.

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 feet construction buffer may necessitate tree removal by seeking an authorization from CPC. Simultaneously, the proposed change facilitates the asof-right construction of site amenities outside of the 15 feet construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

In total, the With-Action condition has four more trees than the No-Action scenario and also increased biodiversity planting areas by 604 square feet. No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

Prototype 3

R1-2 District, 60 ft x 100 ft interior lot, 6,000 sf lot area, Two-story Single-family detached No Action- Existing Special Natural Area District With Action- New Special Natural Area District, Base Protection Area

Legend





6" or greater



2"-3" caliper



Garden





Surface

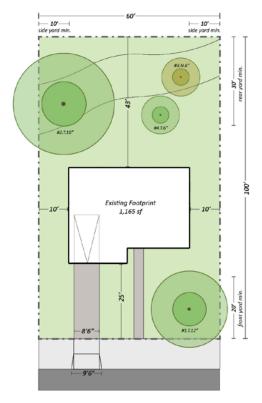


Space (2 ft increments)

Existing

FAR: .19 Existing Trees: 4 Total Floor area: 1,165 sf Biodiversity Garden: N/A

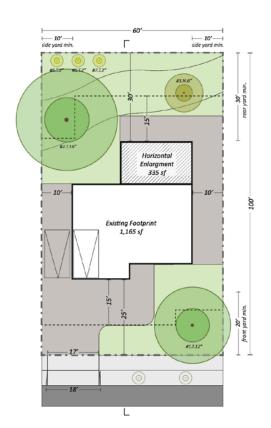
Lot Coverage: 19% Impervious Area: 25% Ground Disturbance: 25%



No Action

FAR: 0.5 Removed Trees: 1 Total Floor area: 3,000 sf Preserved Trees: 3 Lot Coverage: 25% New Trees: 3 Impervious Area: 57% Total Trees: 6

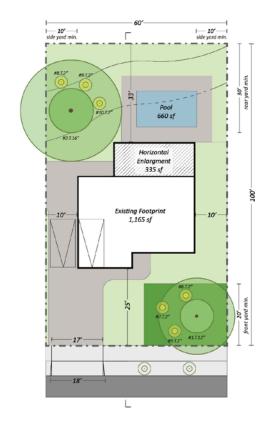
Ground Disturbance: 57% Biodiversity Garden: N/A



With Action

FAR: 0.5 Removed Trees: 2 Total Floor area: 3,000 sf Preserved Trees: 2 Lot Coverage: 25% New Trees: 6 Impervious Area: 50% Total Trees: 8

Ground Disturbance: 50% Biodiversity Garden: 604 sf (4pts)



Prototype 3

R1-2 District, 60 ft x 100 ft interior lot, 6,000 sf lot area, Two-story Single-family detached No Action- Existing Special Natural Area District With Action- New Special Natural Area District, Base Protection Area

Existing Target 6° or greater 6° or greater

Existing

FAR: .19 Existing Trees: 4
Total Floor area: 1,165 sf Biodiversity Garden: N/A

Lot Coverage: 19% Impervious Area: 25% Ground Disturbance: 25%

No Action

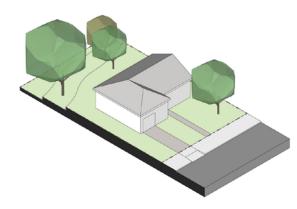
FAR: 0.5 Removed Trees: 1
Total Floor area: 3,000 sf
Lot Coverage: 25% New Trees: 3
Impervious Area: 57% Total Trees: 6

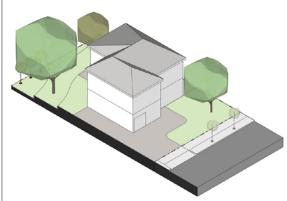
Ground Disturbance: 57% Biodiversity Garden: N/A

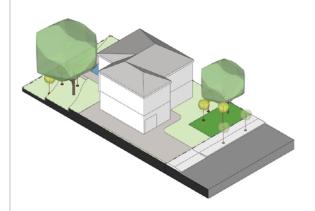
With Action

FAR: 0.5 Removed Trees: 2
Total Floor area: 3,000 sf
Lot Coverage: 25% New Trees: 6
Impervious Area: 50% Total Trees: 8

Ground Disturbance: 50% Biodiversity Garden: 604 sf (4pts)







Prototype 3

R1-2 District, 60 ft x 100 ft interior lot, 6,000 sf lot area, Two-story Single-family detached No Action- Existing Special Natural Area District With Action- New Special Natural Area District, Base Protection Area

Legend



6" or greater



6" or greater



2"-3" caliper



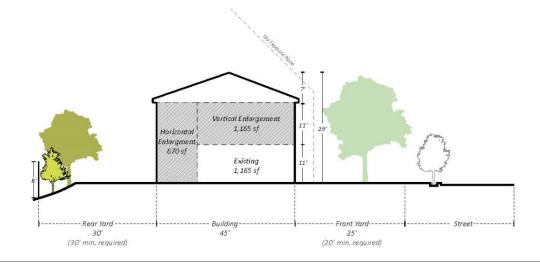


Biodiversity Garden

No Action

FAR: 0.5 Removed Trees: 1 Total Floor area: 3,000 sf Preserved Trees: 3 Lot Coverage: 25% New Trees: 3 Impervious Area: 51% Total Trees: 6

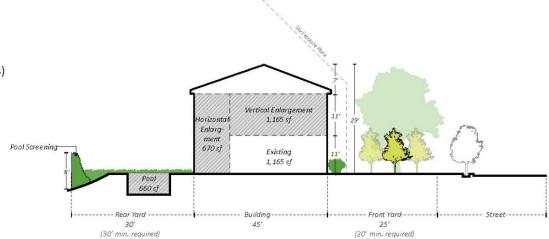
Ground Disturbance: 51% Biodiversity Garden: N/A



With Action

FAR: 0.5 Removed Trees: 2 Total Floor area: 3,000 sf Preserved Trees: 2 Lot Coverage: 25% New Trees: 6 Impervious Area: 50% Total Trees: 8

Ground Disturbance: 50% Biodiversity Garden: 604 sf (4pts)



Prototype 4 R3-1 District, 50 feet. x 100 feet. interior lot, (2) 25 feet. x 100 feet. adjacent lots Existing - Special South Richmond Development District Proposed – South Richmond Subdistrict, Base Protection Area

The following prototype, as shown in the illustrations below, utilizes a generic 50 feet. x 100 feet. interior lot in an R3-1 zoning district. In the No-Action scenario, the site is located within the Special South Richmond Development District, and in the With-Action scenario the site is located within the Special South Richmond Development Subdistrict, Base Protection Area. These assumptions were made because they represent typical lot conditions found within R3-1 districts in the existing South Richmond Development District. The prototype illustrates the opportunity to understand the effects of the following portions of the Proposed Action on development:

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

Existing Conditions

The existing condition demonstrates a 5,000 square feet vacant lot which contains 10 trees. The site illustrates a grade change of four feet – sloping upward from the street to the rear of the site. The analysis assumes that neighboring buildings are located nine feet or more from the lot line of the subject site. The lot will be subdivided into two separate lots equivalent in size and assumed to be identical in design; the left lot has six trees while the right lot has four trees. The site is not located within Designated Open Space. To avoid repetitiveness, only the left side will be portrayed and described below.

No-Action Scenario

The No-Action Scenario illustrates the development of a two-story single-family semi-detached residence. The zoning lot is developed with 1,504 square feet of zoning floor area – the maximum permitted within an R3-1 district when utilizing the permitted 20 percent floor area increase for sites in lower density growth management areas (23-142), which allows an FAR of 0.6. The building footprint is 752 square feet and provides the maximum floor area within two stories of the same footprint. Additionally, the site accommodates a driveway, walkway, and patio, creating a total of 1,802 square feet of impervious area (72 percent of lot area) and requiring 1,802 square feet of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the walkway and backyard patio.

The scenario provides two off-street parking spaces, as required in the underlying zoning (ZR 25-62), within two unenclosed parking pads located in the side yard ribbon. 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 eight-foot construction buffer, thus construction is allowed as-of-right.

Prior to development, the site contained six trees worth a total of eight tree credits under existing regulations. The developed site contains four trees – five trees were removed, one was preserved and three were newly planted. This meets the three trees and four tree credit requirement 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 single family semi-detached residence. The zoning lot is developed with 1,504 square feet of zoning floor area - the maximum permitted within an R3-1 district when utilizing the permitted 20 percent floor area increase for sites in lower density growth management areas. The building footprint is 752 square feet, designed to maximize the 30 percent lot coverage. Additionally, the site accommodates a driveway, walkway, and patio, creating a total of 1,614.5 square feet of impervious area (65 percent of lot area) and requiring 1,614.5 square feet of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the walkway and backyard patio. The scenario provides two off-street parking spaces as required by the underlying zoning, within two unenclosed parking pads on the side yard ribbon.

Prior to development, the site contained six trees worth 17 tree credits under the proposed regulations. Proposed regulations require three trees and 10 tree credits. In this scenario, the site contains four trees – five trees were removed, one was preserved and three were newly planted. Due to the proposed tree clustering regulations, new trees are planted proximate to the existing tree to form a tree cluster, making them eligible to receive bonus tree credits.

Additionally, 252.5 square feet (10 percent of the lot area) of a wildlife garden is provided to satisfy the proposed biodiversity planting area regulations that require four biodiversity points. 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. Impervious area decreased from 72 percent (With-Action) to 65 percent (No-Action), while maintaining a consistent lot coverage of 30 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 eight-foot construction buffer may necessitate tree removal by seeking an authorization outside of the eight-foot construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

In total, the With-Action condition has increased biodiversity planting areas by 252.5 square feet. No additional number of stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

Prototype 4

R3-1 District, 25 ft x 100 ft interior lot, 2,500 sf lot area, Two-story Single-family semi-detached No Action- Existing South Richmond District With Action- South Richmond Subdistrict, Base Protection Area

Legend



Existing Target

6" or greater





Newly Planted

2"-3" caliper



Biodiversity

Garden

Street Tree





Impervious

Surface



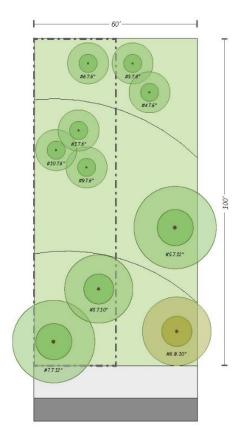
ing Topography

Parking Topography Space (2 ft increments)

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0 Existing Trees: 6 Biodiversity Garden: N/A

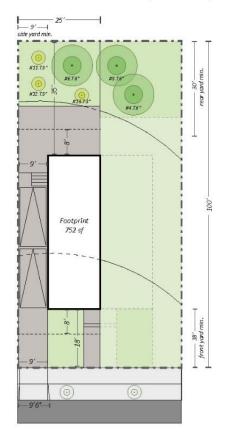
Impervious Area: 0 Ground Disturbance: 0



No Action

FAR: 0.6 Removed Trees: 5
Total Floor area: 1,504 sf Preserved Trees: 1
Lot Coverage: 30% New Trees: 3
Impervious Area: 72% Total Trees: 4

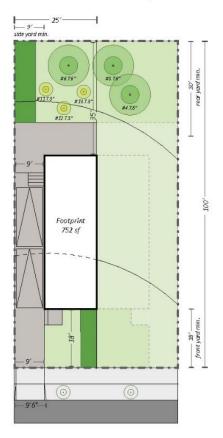
Ground Disturbance: 72% Biodiversity Garden: N/A



With Action

FAR: 0.6 Removed Trees: 5
Total Floor area: 1,504 sf Preserved Trees: 1
Lot Coverage: 30% New Trees: 3
Impervious Area: 65% Total Trees: 4

Ground Disturbance: 65% Biodiversity Garden: 252sf (4 pts)



Prototype 4

R3-1 District, 25 ft x 100 ft interior lot, 2,500 sf lot area, Two-story Single-family semi-detached No Action- Existing South Richmond District With Action- South Richmond Subdistrict, Base Protection Area

Existing Target 6° or greater 6° or greater 6° or greater 5° or greater 6° or greater

Existing

FAR: 0 Existing Trees: 6
Total Floor area: 0 Biodiversity Garden: N/A

Lot Coverage: 0 Impervious Area: 0 Ground Disturbance: 0

No Action

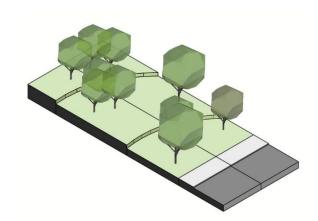
FAR: 0.6 Removed Trees: 5
Total Floor area: 1,504 sf Preserved Trees: 1
Lot Coverage: 30% New Trees: 3
Impervious Area: 72% Total Trees: 4

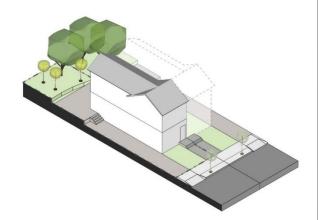
Ground Disturbance: 72% Biodiversity Garden: N/A

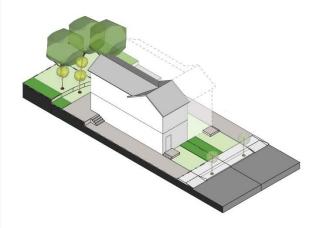
With Action

FAR: 0.6 Removed Trees: 5
Total Floor area: 1,504 sf Preserved Trees: 1
Lot Coverage: 30% New Trees: 3
Impervious Area: 65% Total Trees: 4

Ground Disturbance: 65% Biodiversity Garden: 252sf (4 pts)







Prototype 5 R3X District, 65 feet x 120 feet interior lot,
Existing - Special South Richmond District,
Proposed - South Richmond Subdistrict, Resource Adjacent Area

The following prototype, as shown in the illustrations below, utilizes a generic 65 feet x 120 feet interior lot in an R3X zoning district. In the No-Action scenario, the site is located within the Special South Richmond District, and in the With-Action scenario the site is located within the South Richmond Subdistrict, Resource Adjacent Area. These assumptions were made because they represent typical lot conditions found within R3X districts in the existing Special South Richmond District. The prototype illustrates the opportunity to understand the effects of the following portions of the Proposed Action on development:

- Proposed tree planting and biodiversity area requirements
- Lot coverage and impervious area regulations
- As-of-right modification to natural features outside of the footprint of the building
- Lot coverage and impervious area requirements designed for the preservation of ecologically sensitive areas.

Existing Conditions

The existing condition demonstrates a 7,800 square feet vacant lot which contains eight trees. The site illustrates a grade change of four feet – sloping upward from the street to the rear of the site. The ecologically sensitive area in this prototype is a wetland that is adjacent to the rear lot line. The site is not located within designated open space.

No-Action Scenario

The No-Action Scenario illustrates the development of a two-story single-family detached residence. The zoning lot is developed with 3,900 square feet of zoning floor area - the maximum permitted within an R3X district which allows an FAR of 0.5. The location of the building is defined by yard requirements. The building footprint is 1,950 square feet, designed to maximize the yard and FAR regulations. Additionally, the site accommodates a building, driveway, walkway, and rear patio, creating a total of 4,012 square feet of impervious area (51 percent of lot area) and requiring 4,012 square feet of ground disturbance. 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 eight feet construction buffer, thus construction is allowed as-of-right.

Prior to development, the site contained eight trees worth a total of 13 tree credits under existing regulations. Existing regulations require eight trees and seven tree credits. The site now contains 8 trees – Four trees were removed, four are preserved and four are newly planted. 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. The site development does not take the adjacency of a natural resource (wetland) into consideration.

With-Action Scenario

The With-Action Scenario illustrates the development of a three-story single-family detached residence. The zoning lot is developed with 3,900 square feet of zoning floor area - the maximum permitted within an R3X district which allows an FAR of 0.5. The location of the building is defined by yard requirements and the desire to preserve Tree#6 and Tree#8. The proposed development would be subject to a maximum 15 percent lot coverage and 45 percent impervious area within 100 feet of the rear lot line and a maximum 30 percent lot coverage and 65 percent impervious area beyond 100 feet of the rear lot line. The development provides 975 square feet of lot coverage (15 percent) and 2,950 square feet of impervious area (45 percent) within 100 feet of the rear lot line and 390 square feet of lot coverage (30 percent) and 1,046 square feet of impervious area (38 percent) beyond 100 feet of the rear lot line. The site accommodates a building, driveway, walkway, patio, and swimming pool creating a total of 1,365 square feet of lot coverage (18 percent) and 3,892 square feet of impervious area (50 percent) and requires 3,892 square feet (50 percent) 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, as required by the underlying zoning, both in an unenclosed side yard parking pad.

Prior to development, the site contained eight trees worth 24 tree credits under proposed regulations. Proposed regulations require eight trees and 31 tree credits. In this scenario, the site now contains 13 trees – Two trees were removed, six preserved and seven newly planted. Due to the proposed tree clustering regulations, new trees are planted proximate to existing trees to form a tree cluster, making them eligible to receive bonus tree credits. One front yard tree was preserved; additionally, two trees were newly planted in the front yard to satisfy the proposed regulations, which require seven front yard tree credits.

Additionally, 975 square feet (13 percent of the lot area) of wildlife garden and a 12 feet x 65 feet landscape buffer along the rear lot line is provided to satisfy the proposed biodiversity planting area regulations that require six biodiversity points. 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 decreased from 25 percent to 18 percent and impervious area decreased from 51 percent to 50 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 8 feet 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 eight feet construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

In total, the With-Action condition increased the number of trees by five trees and biodiversity planting areas by 975 square feet. No additional number of trees, stories, residential units, or floor area are accommodated on the lot through the Proposed Actions.

Prototype 5

R3X District, 65 ft x 120 ft interior lot, 7,800 sf lot area, Three-story Single-family detached No Action- Existing South Richmond District With Action-South Richmond Subdistrict, Resource Adjacent Area

Legend



6" or greater





2"-3" caliper



Garden

Street Tree





Surface





Space (2 ft increments)

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0

Existing Trees: 8

Biodiversity Garden: N/A

Impervious Area: 0 Ground Disturbance: 0

No Action

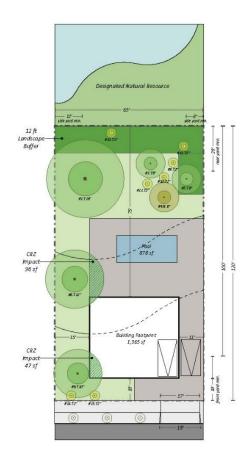
FAR: 0.5 Removed Trees: 4 Total Floor area: 3,900 sf Preserved Trees: 4 Lot Coverage: 25% New Trees: 4 Impervious Area: 51% Total Trees: 8

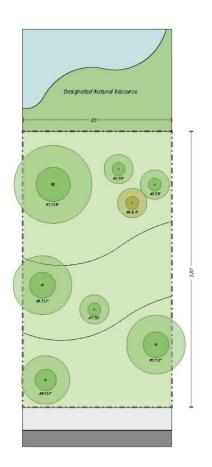
Ground Disturbance: 51% Biodiversity Garden: N/A

With Action

FAR: 0.5 Removed Trees: 2 Total Floor area: 3,900 sf Preserved Trees: 6 Lot Coverage: 18% New Trees: 7 Total Trees: 13 Impervious Area: 48%

Ground Disturbance: 48% Biodiversity Garden: 975 sf (6pts)





Prototype 5

R3X District, 65 ft x 120 ft interior lot, 7,800 sf lot area, Three-story Single-family detached No Action- Existing South Richmond District With Action- South Richmond Subdistrict, Resource Adjacent Area

Existing Trees: 8

Legend Biodiversity Existing Target Existing Non-Target Newly Planted Street Tree Surface Garden 6" or greater 6" or greater 2"-3" caliper

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0

Ground Disturbance: 0

Biodiversity Garden: N/A Impervious Area: 0

No Action

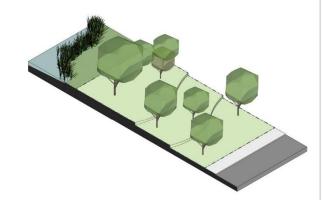
FAR: 0.5 Removed Trees: 4 Total Floor area: 3,900 sf Preserved Trees: 4 Lot Coverage: 25% New Trees: 4 Impervious Area: 51% **Total Trees: 8**

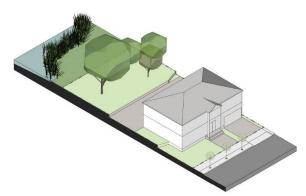
Ground Disturbance: 51% Biodiversity Garden: N/A

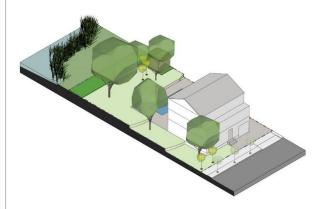
With Action

FAR: 0.5 Removed Trees: 2 Total Floor area: 3,900 sf Preserved Trees: 6 Lot Coverage: 18% New Trees: 7 Impervious Area: 48% Total Trees: 13

Ground Disturbance: 48% Biodiversity Garden: 975 sf (6pts)







Prototype 6

R1-1 District, 300 feet x 130 feet interior lot subdivided into three 100 feet x 130 feet lots Existing – Special Natural Area District

Proposed - Special Natural Area District, Escarpment Area

The following prototype, as shown in the illustrations below, utilizes a generic 300 feet x 130 feet 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), and in the With-Action scenario the site is located within the Special Natural Area Subdistrict, Escarpment Area. This prototype represents typical lot conditions found in R1-1 districts that fall within the proposed Special Natural Area District 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 feet x 130 feet lots and developed separately. The prototype illustrates the opportunity to understand the effects of the following portions of the Proposed Action on development:

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

Existing Conditions

The existing condition demonstrates a 39,000 square feet vacant lot which contains 47 trees. The site illustrates a grade change of 34 feet – sloping steeply upward from the street to the rear of the site. The slopes range from under 25 percent to over 65 percent.

No-Action Scenario

Pursuant to 105-42, development on steep slopes or steep slope buffers require authorization from the City Planning Commission, 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 feet x 130 feet lots.

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 square feet of zoning floor area - the maximum permitted within an R1-1 district which allows an FAR of 0.5. The location of the building is defined by yard requirements and the need to preserve tree #7 (worth 18 credits). This resulted in the building encroaching upon areas with a slope category of 45-65 percent, which subsequently limited 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, walkway, swimming pool, and a wooden deck, creating a total of 5,770 square feet of impervious area (44.4 percent of lot area) and requiring 5,770 square feet of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the driveway and pool. Encroachments within areas over 35 percent slope are not proposed outside 20 feet from the building by anything other than the driveway and walkway.

The scenario provides two off-street parking spaces, as required by the underlying zoning (ZR 25-22), one within an enclosed garage on the first floor and the other in an unenclosed parking pad located in the front yard. The latter 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 17 trees worth 68 tree credits under proposed regulations. The developed site contains 13 trees – seven trees were removed, 10 were preserved and three were newly planted. This meets the 13 trees and 52 tree credit requirement under the proposed regulations. Tree preservation was considered in determining the location and width of yard amenities, driveways, and walkways. Due to the proposed tree clustering regulations, new trees are planted proximate to the existing tree to form a tree cluster, making them eligible to receive bonus tree credits. Additionally, 2,120 square feet of biodiversity planting area (native planting) is provided to satisfy the proposed biodiversity planting area requirements. Native planting is selected to capitalize on the three existing target species trees in the front yard. 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 four-story single-family detached residence. The zoning lot is developed with 6,500 square feet of zoning floor area - the maximum permitted within an R1-1 district which allows an FAR of 0.5. The location of the building is defined by yard requirements, the need to preserve tree #20 (worth 18 credits), and by the need to avoid areas in the 45-65 percent slope category and above. The steepest slope category encroached upon by the building is 35-45 percent, which subsequently limited the maximum lot coverage allowed on site to 20 percent. The bulk is designed to maximize the lot coverage and is further governed by the sky exposure plane.

Additionally, the site accommodates a driveway, walkway, swimming pool, and a wooden deck, creating a total of 6,466 square feet of impervious area (49.7 percent of lot area) and requiring of 6,466 square feet of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the driveway and swimming pool. Encroachments within areas over 25 percent slope are not proposed outside 20 feet from the building by anything other than the driveway and walkway.

The scenario provides two off-street parking spaces, as required by the underlying zoning, one within an enclosed garage on the first floor and the other in an unenclosed parking pad

located in the front yard. The latter 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 15 trees worth 54 tree credits under proposed regulations. The developed site contains 13 trees – seven trees were removed, eight were preserved and five were newly planted. This meets the 13 trees and 52 tree credit requirement under the proposed regulations. Tree preservation was considered in determining the location and width of yard amenities, driveways, and walkways. Due to the proposed tree clustering regulations, new trees are planted proximate to the existing tree to form a tree cluster, making them eligible to receive bonus tree credits. Additionally, 1,300 square feet of biodiversity planting area (native planting) is provided to satisfy the proposed biodiversity planting area requirements. Native planting is selected to capitalize on the three existing target species trees in the front yard. 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 four-story single-family detached residence. The zoning lot is developed with 6,500 square feet of zoning floor area - the maximum permitted within an R1-1 district which allows an FAR of 0.5. The location of the building is defined by the need to preserve tree #42 (worth 18 credits) and by avoiding areas in the 35-45 percent slope category and above. The rear yard is reduced to 20 feet for this purpose. The steepest slope category encroached upon by the building is 25-35 percent, which subsequently limited 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, swimming pool, and a wooden deck, creating a total of 6,219 square feet of impervious area (47.8 percent of lot area) and requiring of 6,219 square feet of ground disturbance. Cut and fill are used for constructing both the building structure and non-building amenities including the driveway and pool. Encroachments within areas over 25 percent slope are not proposed outside 20 feet from the building by anything other than the driveway and walkway.

The scenario provides two off-street parking spaces, as required by the underlying zoning, both within an enclosed garage on the first floor. The driveway is designed to avoid the structural root zones of tree #42 while fulfilling driveway slope and retaining wall regulations.

Prior to development, the site contained 15 trees worth 58 tree credits under proposed regulations. The developed site contains 13 trees – five trees were removed, 10 were preserved and four were newly planted. This meets the 13 trees and 52 tree credit requirement under the proposed regulations. Tree preservation was considered in determining the location and width of yard amenities, driveways, and walkways. While the

area of direct encroachment by the driveway upon the critical root zone of Tree #42 is kept below 30 percent, it is predicted that construction will sever the roots and harm portions of the roots beyond the encroachment. Although no regulatory intervention is proposed to remedy this, the required tree protection plan should assess the health of the tree. Due to the proposed tree clustering regulations, new trees are planted proximate to the existing tree to form a tree cluster, making them eligible to receive bonus tree credits. Additionally, 1,300 square feet of biodiversity planting area (wilderness garden) is provided to satisfy the proposed biodiversity planting area requirements. 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, impervious area, and ground disturbance all increased because development on this site in the No-Action scenario requires a Zoning Authorization pursuant to ZR 105-42 and is not permitted as-of-right.

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' 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' construction buffer through the increased flexibility to locate amenities where they minimally disturb tree critical root zones.

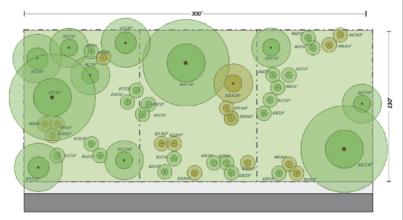
Prototype 6

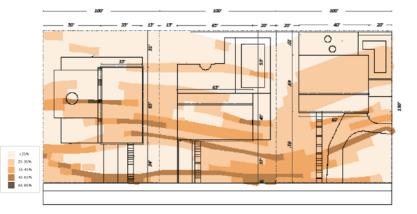
R1-1 District, 100 ft x 130 ft interior lot, 13,000 sf lot area, Three-story Single-family detached, 3 subdivided lots No Action- Existing Special Natural Areas District With Action- Special Natural Areas Subdistrict, Escarpment Area

Existing & No Action

FAR: 0 Existing Trees: 15
Total Floor area:0 Biodiversity Garden: N/A

Lot Coverage:0 Impervious Area: 0 Ground Disturbance: 0





Legend

















With Action

	Lot 1	Lot 2	Lot 3
FAR	0.5	0.5	0.5
Total Floor area	6,500 sf	6,500 sf	6,498 sf
Lot Coverage	17.5%	20%	22.5%
Impervious Area	45%	49%	48%
Ground Disturbance	45%	49%	48%
Removed Trees	7	7	5
Preserved Trees	10	8	10
New Trees	3	5	4
Total Trees	13	13	14
Biodiversity Garden	2,120 (4 points)	1,300 sf (4 points)	1,300 sf (4 points)

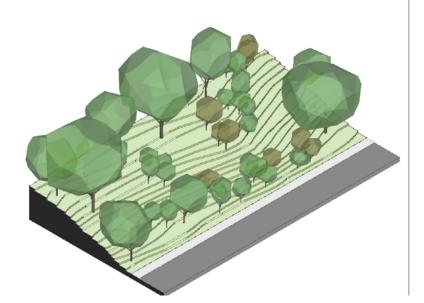


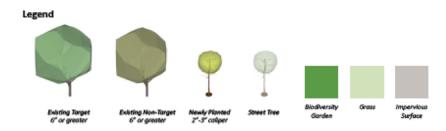
Prototype 6

R1-1 District, 100 ft x 130 ft interior lot, 13,000 sf lot area, Three-story Single-family detached, 3 subdivided lots No Action- Existing Special Natural Areas District With Action- Special Natural Areas Subdistrict, Escarpment Area

Existing & No Action

FAR: 0 Total Floor area:0 Lot Coverage:0 Impervious Area: 0 Ground Disturbance: 0 Existing Trees: 15 Biodiversity Garden: N/A





With Action

	Lot 1	Lot 2	Lot 3
FAR	0.5	0.5	0.5
Total Floor area	6,500 sf	6,500 sf	6,498 sf
Lot Coverage	17.5%	20%	22.5%
Impervious Area	45%	49%	48%
Ground Disturbance	45%	49%	48%
Removed Trees	7	7	5
Preserved Trees	10	8	10
New Trees	3	5	4
Total Trees	13	13	14
Biodiversity Garden	2,120 (4 points)	1,300 sf (4 points)	1,300 sf (4 points)



NON-RESIDENTIAL PROTOTYPICAL ANALYSIS

<u>Prototype 1</u> R3X District with C1-1 overlay, 210 feet x 200 feet corner lot, Existing - Special South Richmond Development District, Proposed – South Richmond Subdistrict, Base Protection Area

The following prototype, as shown in the illustrations below, utilizes a generic 210 feet x 200 feet corner lot in an R3X zoning district with a C1-1 overlay (200 feet wide) along an arterial. In the No-Action scenario, the site is located within the Special South Richmond Development District (SSRDD), and in the With-Action scenario the site is located within the South Richmond Subdistrict, Base Protection Area. 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 opportunity to understand the effects of the following portions of the Proposed Action on development:

- Proposed tree planting and biodiversity area requirements
- Lot coverage and impervious area regulations
- 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 square feet vacant lot which contains 17 trees. The site illustrates a grade 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 road.

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 square feet of retail space, the buildable floor area is limited to 4,500 square feet without requiring any authorization by the CPC. The building is kept to one story and placed in the corner of the lot to preserve the cluster of existing trees located on one portion of the lot to avoid requiring planting of too many new trees as well as allow for future expansion of the use. The site accommodates a driveway and 30 parking spaces, creating a total of 11,370 square feet of impervious area (27 percent of lot area) including the building and requiring 11,370 square feet of ground disturbance. A cut of less than two feet is used to construct the building, driveway, and parking spaces. A single curb cut is located over 50 feet away from the street intersection, fronting the non-arterial road, in compliance with existing regulations governing curb cut location. 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 eight feet construction buffer, thus this development is allowed as-of-right.

Prior to development, the site contained 17 trees. The developed site contains 42 trees – 6 existing trees were removed and 31 were newly planted, as per the tree planting requirements (one required for every 1,000 square feet of lot area) under existing regulations. A portion of the new trees were planted in planting islands at the ends of parking rows in order to comply with special landscaping and buffering provisions required in the existing SSRDD. 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, 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 under an acre. The zoning lot is developed with 11,185 square feet of floor area - the result of maximizing floor area while providing the required number of parking spaces on site. The site accommodates a driveway and 77 parking spaces, creating a total of 35,148 square feet of impervious area (84 percent of lot area) and requiring 35,148 square feet of ground disturbance. This meets the maximum proposed impervious area of 90 percent allowed on the site.

Prior to development, the site contained 17 trees worth 50 tree credits under proposed regulations. The developed site contains 36 trees – 15 trees were removed, two were preserved and 34 were newly planted. This meets the 21 trees (one tree required per 2000 square feet of lot area) and 84 tree credit (1.5 tree credits per every 750 square feet of lot area) requirement under the proposed regulations. Due to the proposed tree clustering regulations, new trees are planted proximate to the existing tree to form a tree cluster, making them eligible to receive bonus tree credits.

Since the site fronts both on an arterial and a non-arterial road, the curb cut was provided on the latter in order 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 the proposed biodiversity requirements for ground planting are met by the landscaping required around planting islands.

Incremental Change

As a result of the With-Action scenario the total floor area increased by 6,685 square feet (16 percent of lot area) and the total number of parking spaces increased by 47. Total lot coverage increased from 11 percent to 27 percent of the lot area, while impervious area increased from 27 percent to 84 percent. In total, the With-Action condition has 6 less trees than the No-Action scenario.

Prototype 1: Non-Residential

R3X/C1-1 District, 210 ft x 200 ft corner lot, 42,000 sf lot area, Single-story commercial building, fronting an arterial road No Action- Existing South Richmond Development District With Action- South Richmond Subdistrict, Base Protection Area

Legend















6" or greater

Existing Non-Targe 6" or areater

Newly Planted 2"-3" caliper

Street Tree E

Biodiversity Garden

ss Imper

Impervious Surface

Parking Topography Space (2 ft increments)

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0 Impervious Area: 0

Ground Disturbance: 0

Existing Trees: 17

Biodiversity Garden: N/A

No Action

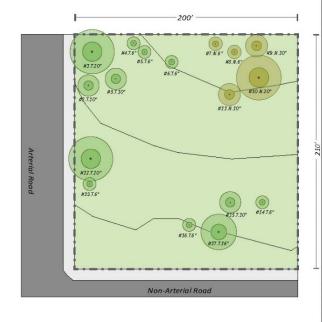
FAR: 0.1 Removed Trees: 6
Total Floor area: 4,500 sf
Lot Coverage: 11% New Trees: 31
Impervious Area: 27% Total Trees: 42

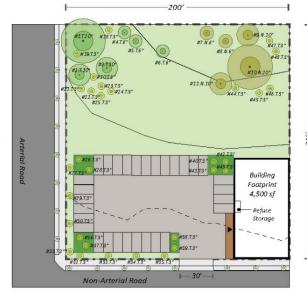
Ground Disturbance: 27% Biodiversity Garden: N/A

With Action

FAR: 0.27 Removed Trees: 15
Total Floor area: 11,185 sf Preserved Trees: 2
Lot Coverage: 27% New Trees: 34
Impervious Area: 84% Total Trees: 36

Ground Disturbance: 84% Biodiversity Garden: N/A







Prototype 1: Non-Residential

R3X/C1-1 District, 210 ft x 200 ft corner lot, 42,000 sf lot area, Single-story commercial building, fronting an arterial road No Action- Existing South Richmond Development District With Action- South Richmond Subdistrict, Base Protection Area

Legend Existing Target Street Tree 6" or greater 6" or greater 2"-3" caliper







Garden



Surface

Existing

FAR: 0 Total Floor area: 0 Lot Coverage: 0 Impervious Area: 0 **Existing Trees: 17** Biodiversity Garden: N/A

Ground Disturbance: 0

No Action

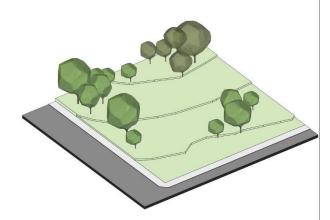
FAR: 0.1 Removed Trees: 6 Total Floor area: 4,500 sf Preserved Trees: 11 Lot Coverage: 11% New Trees: 31 Impervious Area: 27% Total Trees: 42

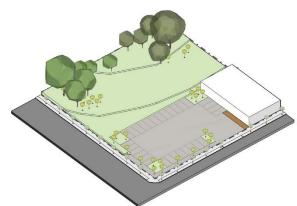
Ground Disturbance: 27% Biodiversity Garden: N/A

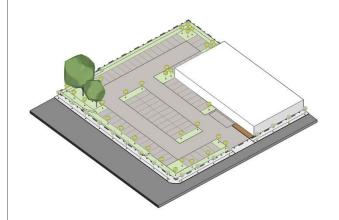
With Action

FAR: 0.27 Removed Trees: 15 Total Floor area: 11,185 sf Preserved Trees: 2 Lot Coverage: 27% New Trees: 34 Impervious Area: 84% Total Trees: 36

Ground Disturbance: 84% Biodiversity Garden: N/A







	All Special Districts Land Use Actions - Existing and Proposed				
Current Special District	Existing ZR Section	ZR Section Name	Proposal: Eliminate/ Modify/ Maintain	Proposed Applicability	
	CERTIFICATIONS				
	119-04	Future Subdivision	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization	
	119-40	Compliance	Eliminate		
		AU	JTHORIZATIO	ONS	
PD)	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	
Special Hillsides Preservation District (SHPD)	119-312	Authorization of certain uses within the Special Hillsides Preservation District	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization	
rvation l	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	
les Prese	119-314	Modification of lot coverage controls	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization	
al Hillsic	119-315	Modification of height and setback regulations	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization	
Speci	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	
	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	Eliminate	DPR properties and DEP blue-belt not subject to Special District regulations	

		to existing park-related facilities within public parks		
		SI	L PECIAL PERM	ITS
	119-321	Modification of Use Regulations	Eliminate for small sites, Modify	As-of-right provisions, except for Plan Review Sites that will be an authorization
		С	ERTIFICATIO	NS
	105-41	Certification (that no authorization or special permit is required)	Eliminate	
	105-45	Certification of Restoration Plans	Eliminate	As-of-right planting requirements
	105-90	Future Subdivision	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
		AU	JTHORIZATIO	!
	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
al Natural Area District (SNAD)	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
tural Are	105-423	Relocation of erratic boulders	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
Special Nat	105-424	Alteration of rock outcrops	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
Sp	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,	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization

		and parking location regulations		
	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 blue-belt not subject to Special District regulations
		SI	PECIAL PERM	ITS
	105-441	Modification of use regulations	Modify	Available only for Plan Review Sites
	105-442	Natural area dedicated for public use	Maintain	
		С	ERTIFICATIO	NS
	107-02	General Provisions Development within areas D, F, or K' As indicated on the District Plan.	Eliminate	
SSRDD)	107-08	Future Subdivision	Eliminate	As-of-right provisions, except for Plan Review Sites that will be an authorization
;) t	107-121	Public schools	Maintain	
stri	107-22	Designated Open Space	Maintain	Minor mapping updates
t Di	107-222	Public pedestrian ways	Maintain	
nen	107-23	Waterfront Esplanade	Maintain	
velopr	107-251	Special provisions for arterials	Modify	Access restrictions being modified
nd De	107-323	Substitution of other plant materials	Eliminate	
Richmo	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
uth	AUTHORIZATIONS			ONS
Special South Richmond Development District (SSRDD)	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
Ś	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
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	
	S	PECIAL PERM	ITS
107-72	Qualification of Designated Open Space as Lot Area	Maintain	
107-73	Exceptions to Height Regulations	Maintain	
107-74	Modifications of Permitted Use Regulations	Modify	Authorization for Plan Review Sites
107-75	Modification of Underlying R1-1 District Regulations	Eliminate	
107-76	Boundary Adjustments in Designated Open Spaces	Eliminate	Established through text map
107-77	Community Facility Buildings or Treatment Plants Permitted in Designated Open Space	Eliminate	
107-78	Other Buildings Permitted in Designated Open Space	Eliminate	