



# **SPECIAL NATURAL AREA DISTRICT UPDATE**

Draft Proposal for The Bronx

November 2018

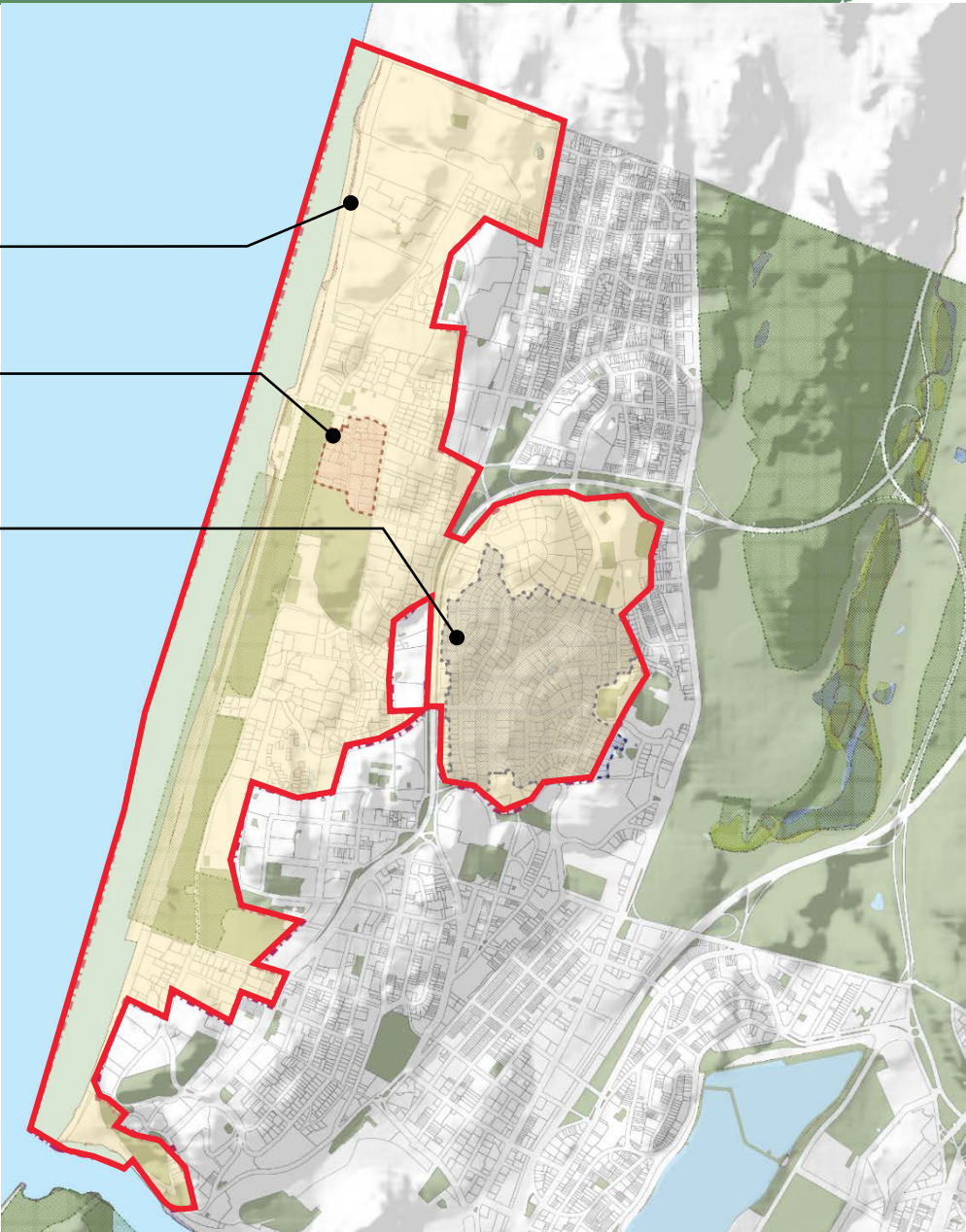
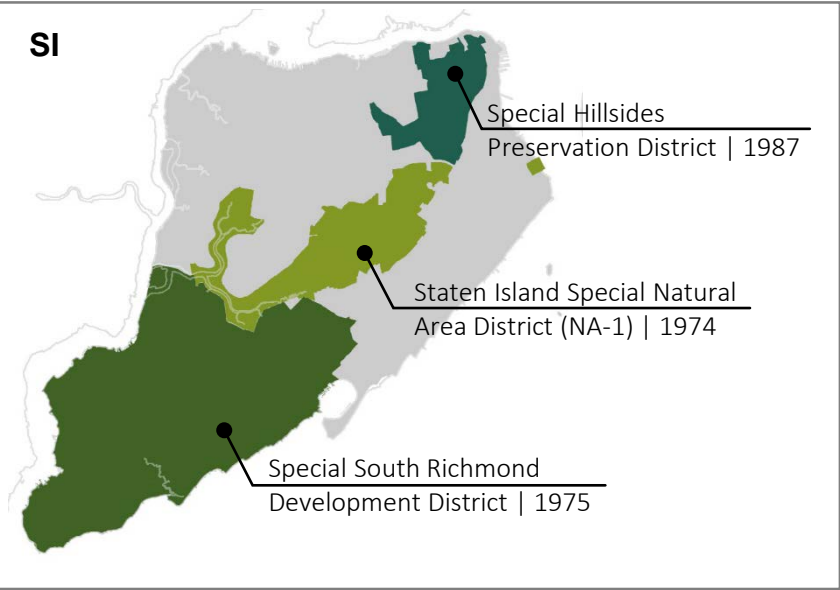


# Bronx Special Natural Area District Boundaries

Special District | 1975

Riverdale Historic District | 1990

Fieldston Historic District | 2006



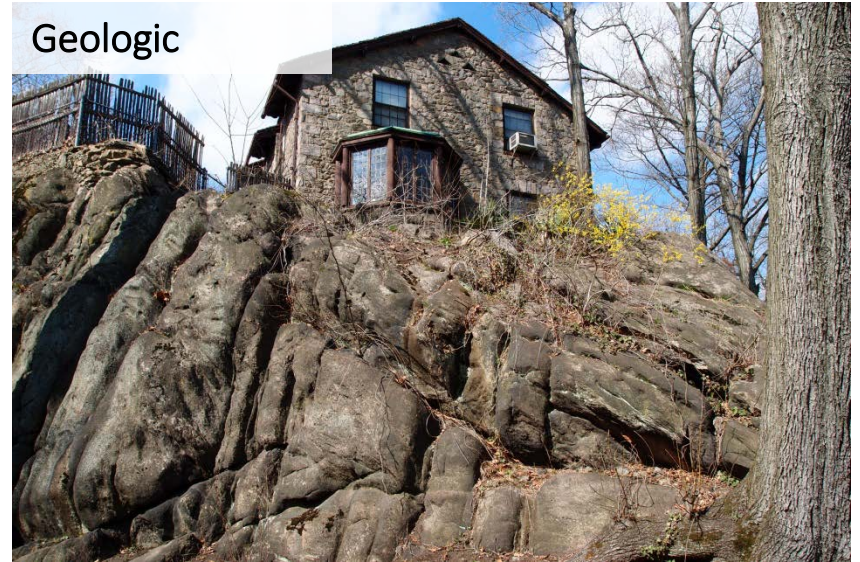
# Special Natural Area District Goals

Protect and enhance important natural habitats and recreational assets by better guiding development in consideration of natural features

Aquatic



Geologic



Botanic



Topographic



# Special Natural Area District Goals

Enhance and protect the neighborhood character of the districts

Fieldston Rd



Livingston Ave



Independence Ave



Waldo Ave



# Why This Text Amendment Is Needed



Balancing the protection of New York City's natural habitats with appropriate development is a top priority for the Department of City Planning (DCP). In our experience reviewing applications over the past 40 years, hearing from stakeholders, and understanding the latest environmental science, we see the need to modernize the Special Natural Area District (SNAD) to incorporate new information and codify best practices to ensure thoughtful development that preserves the most important natural resources and contributes to the community's character. Some specific issues are:

- Existing rules don't adequately consider the **broader ecological context** and allow a property owner to modify natural features through **site-by-site review by the CPC**
- Science and best practices around environmental protection have evolved since the Special District rules were adopted ~40 years ago, but **the rules have not been updated**
- Existing rules are unclear on which natural features to preserve and result in **unpredictable outcomes** for homeowners and the community
- Existing review process for development sites impose **significant time and cost burdens for homeowners** and other small property owners

# Bronx Community Input In Developing The Proposal

To create the proposal, DCP worked with stakeholders and conducted significant research since 2015

## Working Groups meetings

- 13 meetings between April 2015 and August 2018
- Including 5 meetings with CB8 working group

## Ongoing coordination with other agencies:

- Department of Buildings
- Department of Parks and Recreation's Natural Resources Group
- Natural Area Conservancy
- Department of Environmental Conservation
- NYC Fire Department
- Department of Environmental Protection

## Bronx Working Group Members:

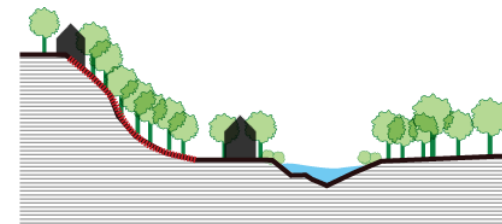
- Riverdale Nature Preservancy
- College of Mount Saint Vincent
- Architect; LPC Commissioner
- Riverdale Sanitation Corporation
- Fieldston Property Owners Association
- Riverdale Country School
- Architect, FAIA; former LPC Commissioner
- Land Use Attorney
- Bronx DOB
- Bronx Borough President's Office
- Councilperson Cohen's Office
- Riverdale Community Coalition; Architect



# Project Principles For The Proposed Update

With community input, DCP has established the following principles to guide the proposal

- 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 (CPC) focuses on sites that have a greater impact on natural resources and the public realm.



CURRENT SPECIAL DISTRICT GOALS



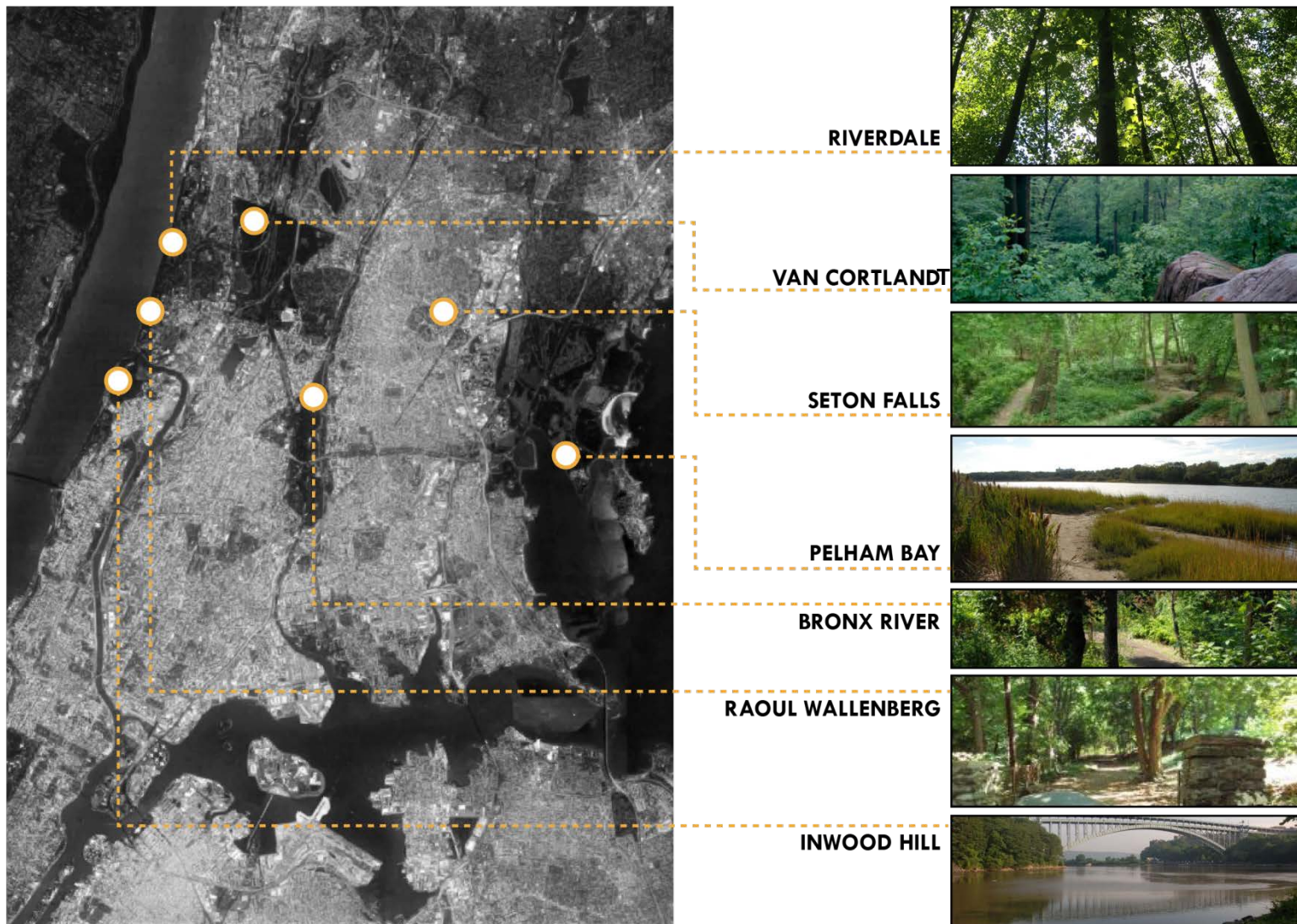
CODIFY & ENHANCE CURRENT PRACTICES



PROPOSAL

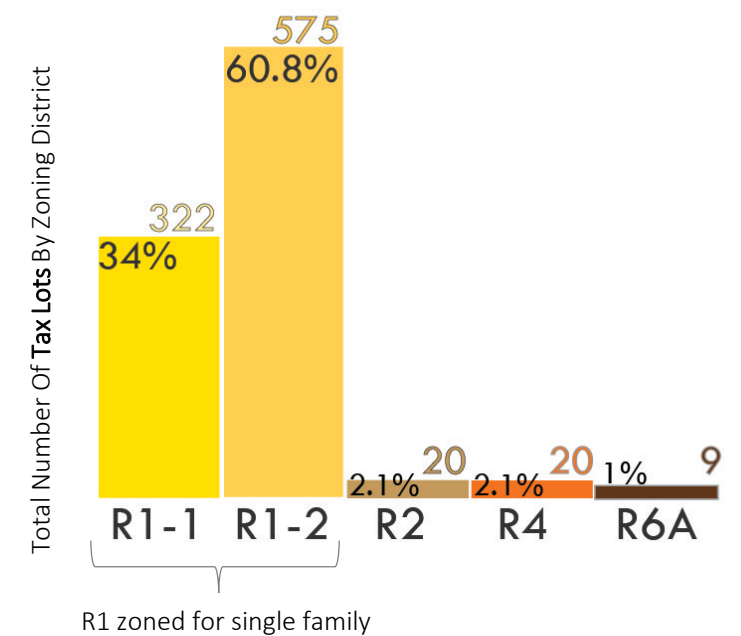
# Major Natural Assets In The Bronx

SNAD is connected to and supports the broader ecological assets across the borough



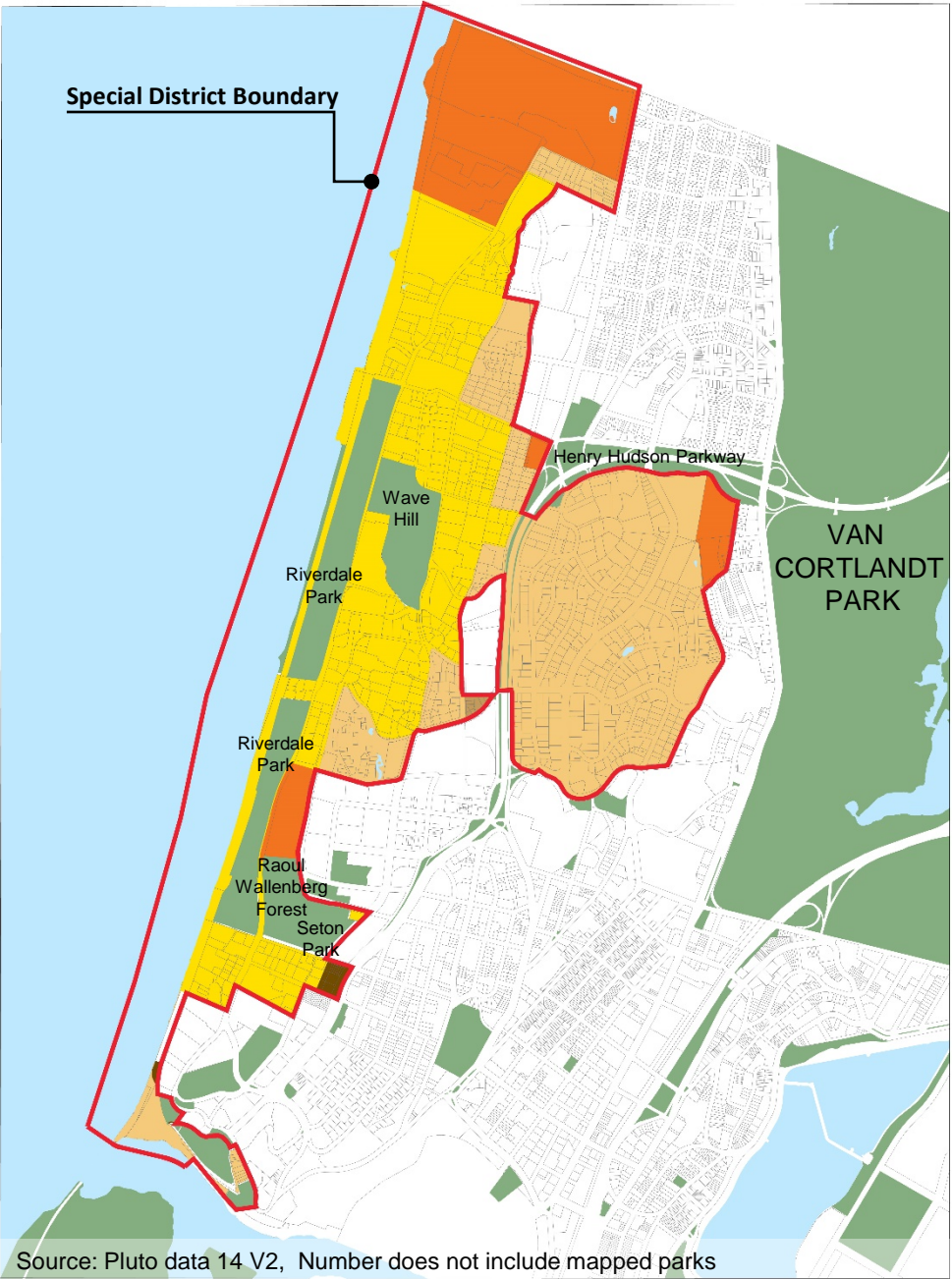
## ZONING and DEVELOPMENT

83 percent of SNAD is single- and two-family homes



### 946 Lots in SNAD: Building Type

- 83% One/Two Family
- 5% Multifamily
- 12% Institutions



Source: Pluto data 14 V2, Number does not include mapped parks

# Neighborhood Character: Best Practices from current rules



Preservation of rock outcrops visible to the public realm

Preservation of trees in the front yard

Minimal impermeable surfaces

# Neighborhood Character: Best Practices from current rules



Preserve old growth trees

Preserve recreational  
open space

# Neighborhood Character: Best Practices from current rules



Low visible retaining walls

Planting in front yard

# Neighborhood Character: Best Practices from current rules



Intact natural habitat in the rear yard

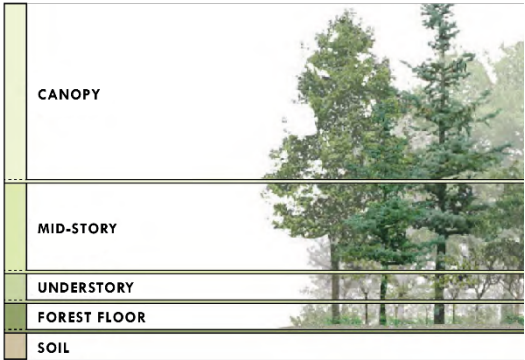
Variety of planting and ground cover in the front yard



- Establish a hierarchy of natural resource protection based on proximity to existing large publicly-owned natural resources
- Consider natural features in their ecological context
- Establish strict and clear rules for small sites (<1 acre)
- Retain discretionary review by CPC for large sites (1 acre+) or sensitive sites
- Preserve existing habitat on portions of large sites to maintain ecological connectivity and neighborhood character
- Encourage long-term planning for campuses and institutions

# Proposed Natural Resources Approach: Three Lenses

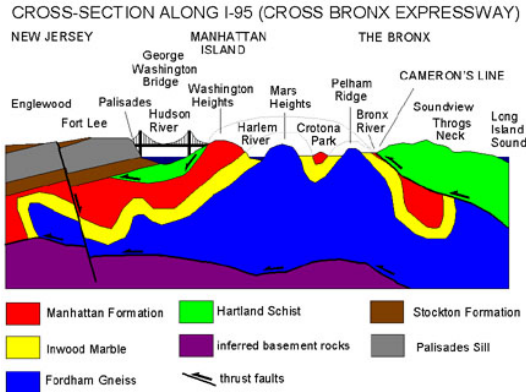
SNAD has three main components: biodiversity, topography, and aquatic features. Each of these three natural features plays an important role on their own, and together, they form the overall natural environment within the community. We will consider these natural features more holistically and the surrounding context as we update the SNAD regulations.



Canopy Requirements  
Biodiversity Requirement



NATURAL COMMUNITIES



Topographic Features  
Geologic Features



SOIL & TOPOGRAPHY



Aquatic Features  
Limit Pollution & Erosion



WATERSHEDS & DRAINAGE

# Natural Resources Approach: Ecological Area Mapping

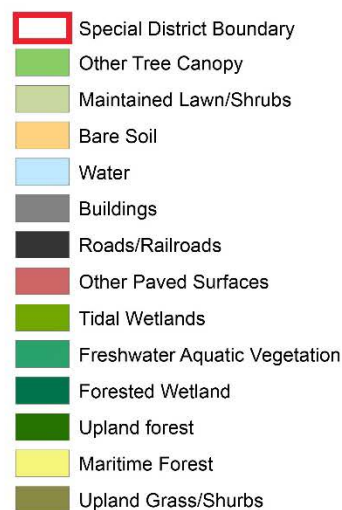
We mapped the natural features (e.g. tree canopy) across the district.

We identified significant natural resources (large parks, upland forests, for example).

We assessed natural features based on geography and proximity of natural resources.

\*\*\*

Our understanding of natural resources and natural features shaped our planning framework for the proposed regulations.



Ecological Covertypes Map (ECM)



Source: Underlying ECM data was compiled by Natural Areas Conservancy as sole proprietors

Based on our assessment of natural resources and natural features, the proposal maps **ecological areas** across the special district.



## RESOURCE ADJACENT AREA

*Resource Adjacent Areas abut natural resources and require a buffer as a transition area*



## BASE PROTECTION AREA

*Base Protection Area maintains consistent requirements for development and preservation that will contribute to the overall ecological importance of SNAD*

*Nearly every site in the Bronx will be within the Base Protection Area*



## EXISTING

### Site by Site

Each site is looked at independently of one another rather than considering the ecological whole of the area

### Feature by Feature

Each individual natural feature is protected independently, with the option to **modify** the rules through CPC review

### Modifications

Most applicants seek to modify the rules, but the regulations don't specify limits to modifications.

## PROPOSED

### Holistic

Natural resources are analyzed by mapping natural features across the community

### Comprehensive

All natural features are protected by emphasizing the preservation of natural features that cannot be replaced and are in the public realm

### Strict

The proposed rules will define limits to modifications



## EXISTING

Natural features are protected separately and owners can ask for **waivers** and encroachment is allowed on individual natural feature

**Large sites and small sites require same review**

### CPC Review

Nearly all work requires CPC review regardless of the impact it has on the natural features

Includes vertical enlargements which have no impact on natural features

## PROPOSED

Establish **thresholds for as-of-right** and **CPC** review based on the size of lot, location within the district, and type of action

Focus on supporting **ecosystems** within a broader geography

### Strict rules for As-of-Right Development

Lots less than 1 acre in size  
(some exceptions\*)

All projects reviewed & signed off on by DOB. Must demonstrate compliance with SNAD regulations

### CPC Review

All lots over 1 acre

\*New buildings or subdivisions in Historic Districts

\*Lots with Private Roads

***Improved outcomes: Homeowner friendly regulations for small properties that have clear standards to protect natural features. Large sites still go through CPC review.***

# How will the Proposal Protect Natural Features?



The proposed regulations consider:

- How the **natural features** work together to contribute to the **larger ecosystem**?
- How **different regulations** work together to allow **good site planning**?

## Overview:

- Lot Coverage
- Impervious Surface
- Trees Requirements
- Biodiversity Requirements
- Rock Outcrops
- Subdivisions
- Large Residential Lots
- Large Community Facilities
- Campus Plans

# How Will The Proposal Protect Natural Features?



## Updated Rules for Lot Coverage

*Lot coverage* is the area of the site covered by a building. Lot coverage affects the amount of site disturbance and natural features, including slopes, plantings, and open space.

### EXISTING

Existing regulations reduce lot coverage only related to **topography** without context (*e.g., is this site part of larger steep slope?*).

Existing regulations allow applicants to request modification of reduced lot coverage and ***there are currently no SNAD standards to limit the maximum lot coverage***

SNAD Lot coverage regulations apply only to residential sites

Existing regulations do not apply to institutions or community facility (CF) uses

### PROPOSED

Recognizes both *topographic* features and *botanic environments*

Lot coverage allowance would be defined for **all residential lots** based on proximity to natural resources (ecological areas) **and for large institutions/CF uses**

***Improved outcomes: The new lot coverage controls allow for greater site planning flexibility to preserve natural features and guarantees adequate space for planted areas.***

# How Will The Proposal Protect Natural Features?

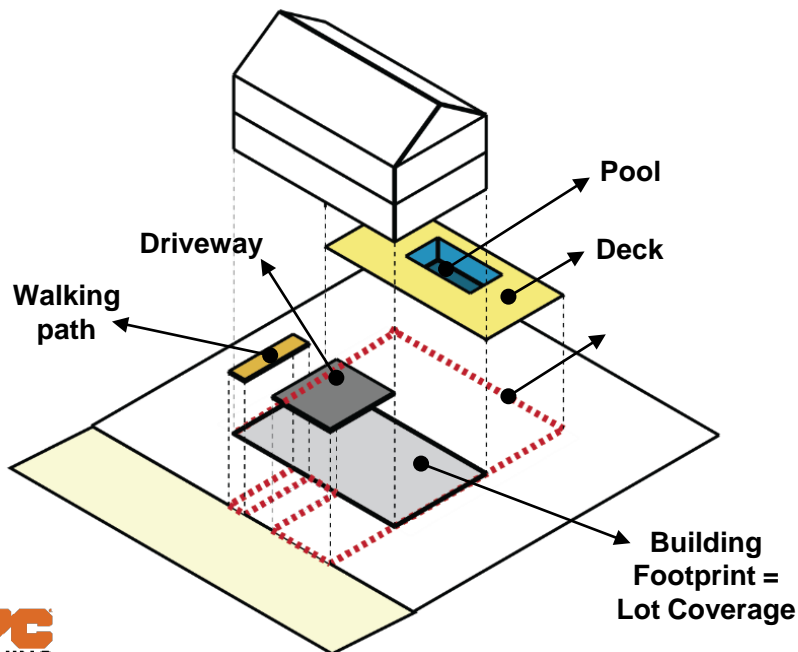
## New Rules for Impervious Areas

*Impervious areas* are all areas of the site covered by a building and any hard surfaces.  
It affects the amount of site disturbance and runoff and affects natural features, including slopes and plantings.

### EXISTING

Impervious areas are *not directly* regulated in the regulations but only through best practices

Existing SNAD regulations only regulate building footprints (lot coverage) in certain circumstances



### PROPOSED

Establish limits to impervious area as a percent of lot area

Impervious area would include building footprints, driveways and other paved areas such as a patio, deck or pool

*Improved outcomes: Provides additional site controls beyond the building footprint, creates open space, supports better storm-water management, and guarantees adequate space for planted areas.*

# How Will The Proposal Protect Natural Features?

## Updated Tree Rules

### EXISTING

Requirements: 1 tree per 1,000 sf **OR**  
51% of existing tree credits (whichever is greater)

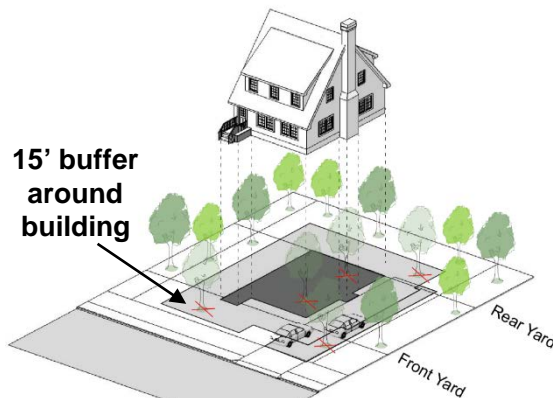
#### How are trees allowed to be removed?

Trees within 15 feet of buildings, or within private roads, driveways, or parking may be removed

Trees beyond these areas may only be removed by CPC review unless the tree is sick/dead/hazard to people or property as certified by a licensed arborist

#### Existing Rules Example:

Would require **5** newly planted trees



**X** Trees to be removed

### PROPOSED

Requirements: 1 tree per 1,000 sf **AND**  
3 tree credits for every 750 sf

The proposed tree credit change will create a **higher value** on “old growth” trees to incentivize their preservation

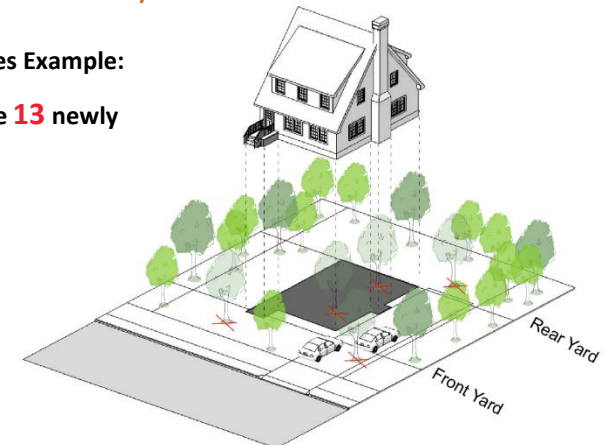
A portion of which will need to be located within the front yard

Trees will be encouraged to be planted in groups

*Improved outcomes: Give greater value to existing trees and encourage native species and trees planted in groups; more trees will be required.*

#### Proposed Rules Example:

Would require **13** newly planted trees



# How Will The Proposal Protect Natural Features?

## New Biodiversity Rules

### EXISTING

No existing vegetation can be removed except within 15' of building and to allow driveways, private roads or required parking

Every square foot of removed vegetation to be replaced by one plant

Very strict requirement that can be modified by CPC



RESOURCE ADJACENT AREA

### PROPOSED

Biodiversity Points will be required for each site and will be determined by which ecological area it is located

Points can be achieved through various options:

- Landscape Buffer – Resource Adjacent Area Requirement
- Wildlife Garden
- Green Roof

Each point translates to certain percentage of the lot area

*Improved outcomes: Clear planting requirements that will enhance the biodiversity and ecological health of the community.*



BASE PROTECTION AREA

# How Will The Proposal Protect Natural Features?

## New rules for Rock Outcrops

*Rock outcrops help create neighborhood character when they are a dominant feature.*

### EXISTING

Existing regulations prohibit disturbance of rock outcrops, but allow disturbance through CPC authorization

There is **no limit on the amount of disturbance**

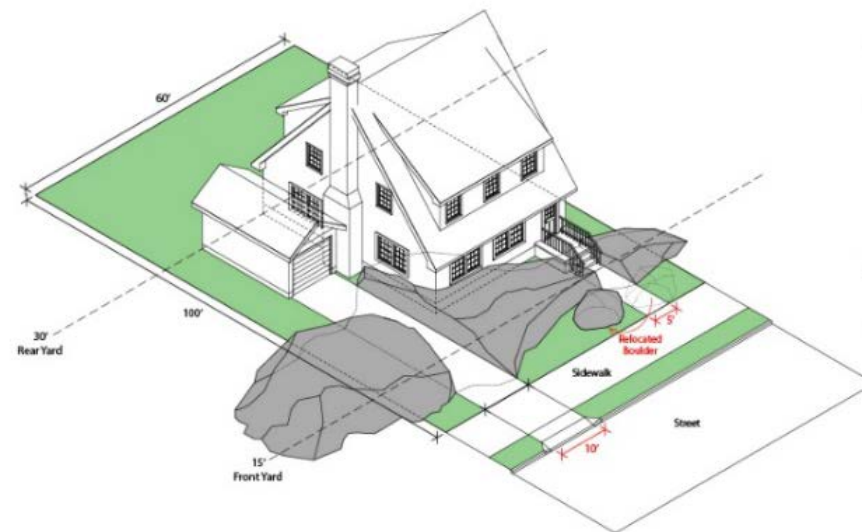


### PROPOSED

*Stipulate the maximum amount of disturbance*

Strict limits on disturbance of outcrops that are visible to public realm (i.e. the street) – no disturbance to rock outcrops within front yards, except as necessary for access

*Improved outcomes: Less disturbance of visible outcrops; preservation of neighborhood character*



# How Will The Proposal Protect Natural Features?



## Update rules for Zoning Lot Subdivisions

### EXISTING

Zoning lot subdivisions do not require public review

CPC has **no discretion** to negotiate block and lot layouts or the circulation system to protect natural resources even on very large sites

### PROPOSED

Zoning lot subdivisions will be as-of-right, except as listed below:

- Sites larger than an acre
- Any subdivision within a Historic District
- Sites with private roads

Findings would require that the **design protects the most significant natural features** of the site and that any new proposed roads are well designed

**Will create a standard** for proposed lot lines that better protect natural features.

***Improved outcomes: Sites requiring CPC review must demonstrate natural features will be protected***

# How Will The Proposal Protect Natural Features?



## New preservation requirement for sites (One Acre or Greater) with existing habitats

RESIDENTIAL

### EXISTING

DCP has few opportunities to require contiguous preservation of natural features as part of the CPC review process

Preservation of open space, in addition to preservation of natural features, is not required beyond underlying zoning regulations.

### PROPOSED

25% of lot must be preserved in its natural state with an emphasis on contiguous preservation

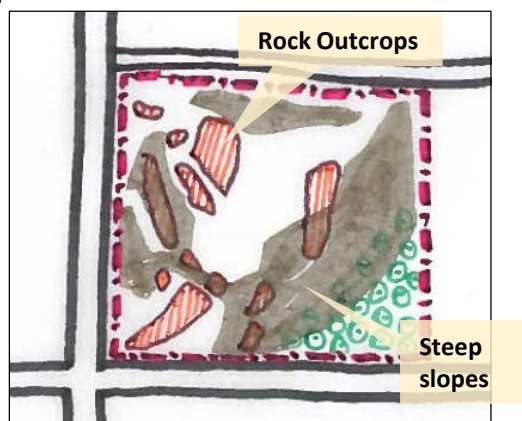
Encourages clustering of development to maintain development rights of the entire zoning lot

Establishes initial expectations for applicants

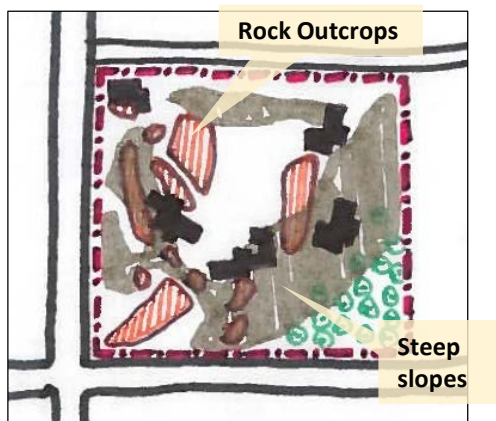
*Improved outcomes: Strengthen and clarify the process for developments on large residential lots with specific rules that require preservation and increases predictability on large sites*

### Example:

Existing Conditions



Applicant Proposal (Existing Rules)



Preservation Requirement



# How Will The Proposal Protect Natural Features?

## New preservation requirement for sites (One Acre or Greater) with existing habitats

## COMMUNITY FACILITY

### EXISTING

DCP has few opportunities to require contiguous preservation of natural features as part of the CPC review process

Preservation of open space, in addition to preservation of natural features, is not required beyond underlying zoning regulations.

Community facility uses can apply for multiple actions over time to modify their site plan

### PROPOSED

50% preservation requirement = 35% of lot must be preserved in its natural state with an emphasis on contiguous preservation + 15% must be open/recreational space

Lot coverage limit of 25%

Establishes initial expectations for applicants

*An optional "Campus Plan" to pre-define areas for future growth*

*Improved outcomes: Reduce incremental encroachment and provide predictable plan; Strengthen and clarify the process for developments on large community facility lots with specific rules that enhance preservation and increases predictability on sites*

### Example:

#### Existing coverage areas

- 50% natural habitat
- 24% other open space
- 9% buildings
- 17% parking/ paved areas

#### Proposed minimum requirements:

- Natural habitat = 35%
- 35% Natural habitat + 15% Open Space = 50%



# How Will The Proposal Protect Natural Features?

## New Campus Plan option

### EXISTING

Nothing today

Every minor change requires an institution to go through a new application process

Can be very costly for each environmental review

Community has wanted more oversight on future development at institutions, but institutions not compelled to share long-term plans

### Example for proposed campus plan rules:

Institution seeking an initial approval could seek approvals of future development sites at the same time.

Proposal would go through public review and could be modified throughout process.

If the future development site received a **general approval**, a future **authorization** (CPC review) would be needed to **verify no additional impacts** on natural features.

If the future development site received a **specific approval** by CPC, a future **certification** by the Chairperson would be required to **verify no changes** to previous approvals.

### PROPOSED

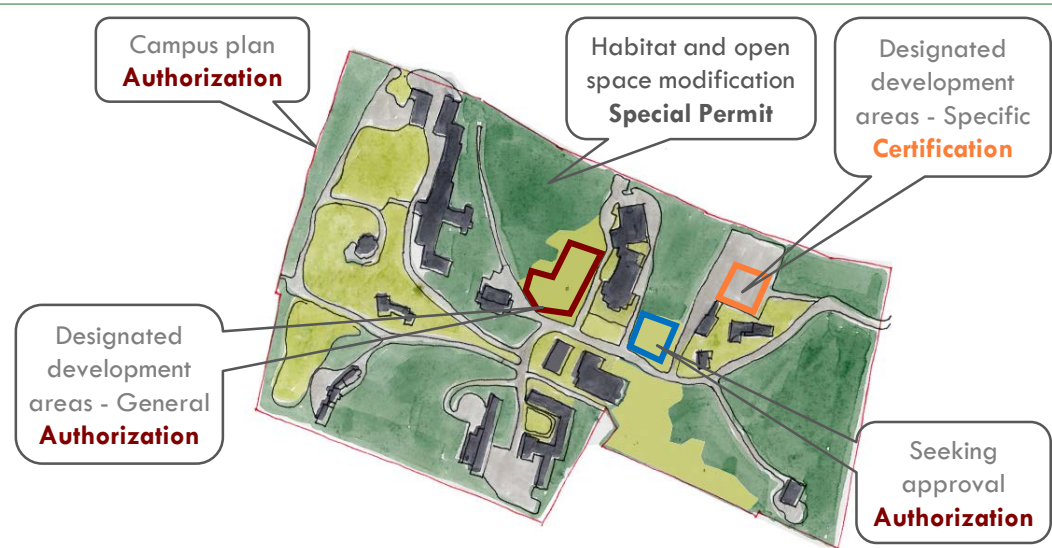
A Campus Plan application would include future development needs while meeting Community Facility preservation requirements:

- 35% preservation required; 15% open/recreation space required; max 25% lot coverage

The level of future review (certification, authorization, special permit) would be determined by the level of detail presented in the original campus plan approval.

- More detailed plans today allows easier review in the future.

***Improved outcomes:** Campus Plans allow for better long-term planning. Institutions and community both benefit: The community benefits from providing input in the long-term planning process while the institution benefits from single environmental review, streamlined approvals and public input*



# How will the new rules be enforced?

## Department of Buildings (DOB) provides enforcement for all zoning regulations

### EXISTING

Enforcement occurs the same way across all NYC zoning regulations

- Complaint driven – dependent on neighbors raising issues
- At time of permit

### PROPOSED

Clearer as-of-right regulations and process means DOB plan examiners will be more knowledgeable and involved throughout the approval process

Still allows neighbors to raise issues within their community

---

### DOB enforcement:

DOB is strengthening the enforcement and construction safety supervision

DOB has created an online portal to track all active construction sites

### Additional tools and information DCP will create to support community and professionals:

Homeowner Guide

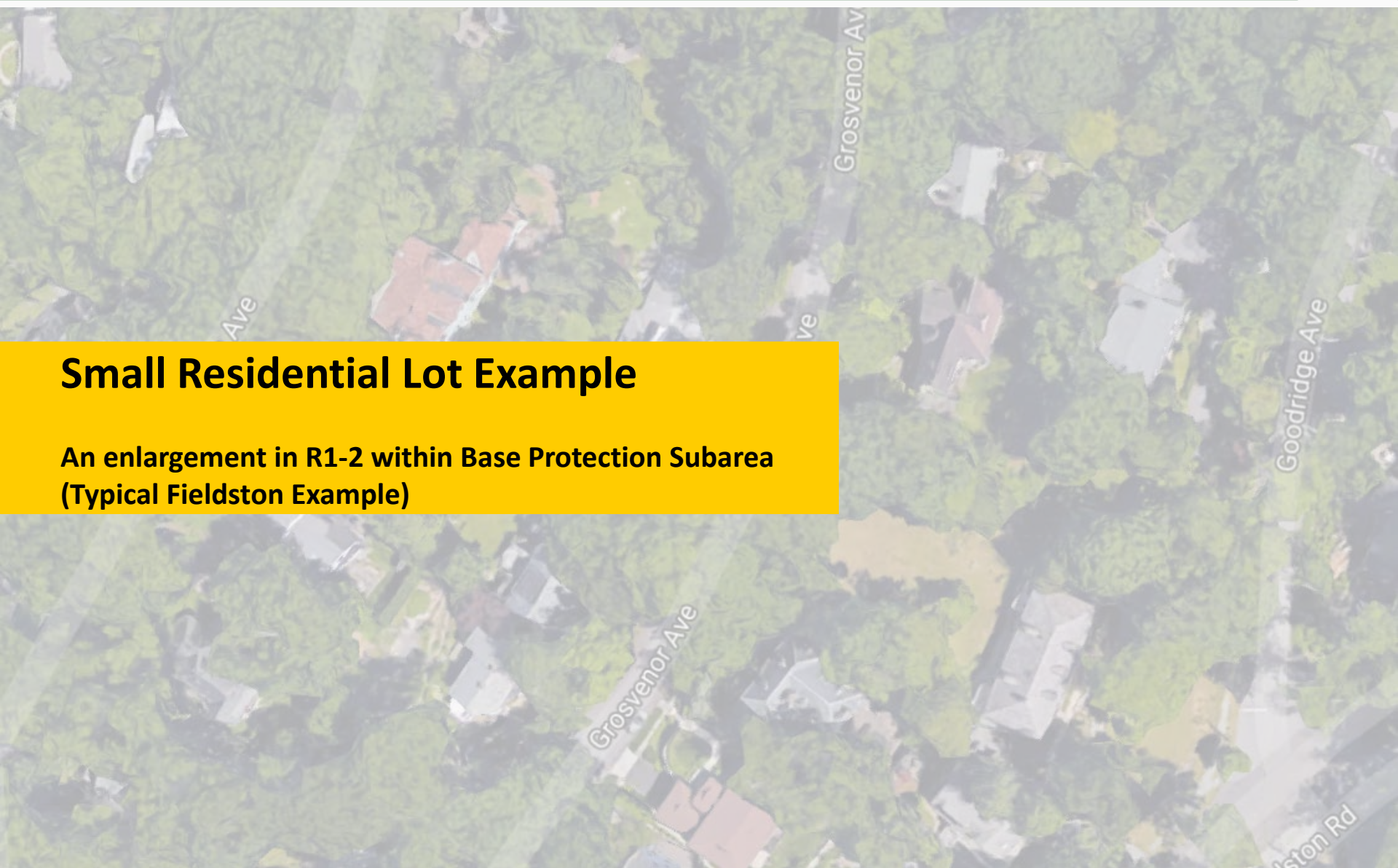
DOB Tools and Checklists

DCP support to DOB through transition



## Small Residential Lot Example

An enlargement in R1-2 within Base Protection Subarea  
(Typical Fieldston Example)



# Case Study: How Would A Typical Single-Family Home Be Affected?

## Enlargement in R1-2, Base Protection Subarea

### ASSESS EXISTING CONDITIONS

- Zoning Lot Area: 11,000 sf
- FAR: 0.18 (0.5 Max)
- Lot Coverage: 998 sf - 9%
- Garage = 400 sf (will be counted toward lot coverage)

- Over 1 acre? No
- Private Road? No
- New Building in Historic District? No

✓ Site meets criteria for As-of-Right development

**You can submit drawings directly to DOB as part of their application requirements rather than filing through DCP and then DOB**



# Case Study: How Would A Typical Single-Family Home Be Affected?

## Enlargement in R1-2, Base Protection Subarea

### ASSESS PROPOSAL

Lot Coverage permitted = 25%

Lot Coverage proposed = 17.3%

✅ *Within permitted lot coverage allowance*

Hardscape areas include pathway, driveway, decks, patio and building footprint = ~ 30%

✅ *Within permitted impervious area*

Rock outcrop – limited disturbance allowed for the enlargement

✅ *Within allowance*

*Follows rules for lot coverage, impervious surface, and disturbance of rock outcroppings*



# Case Study: How Would A Typical Single-Family Home Be Affected?

## Enlargement in R1-2, Base Protection Subarea

### ASSESS TREES and TREE CREDITS

How many trees are on site?

12 trees on site - 1 proposed to be removed = 11 trees

41 tree credits on site (after tree removed)

How many trees are required?

1 tree per 1,000 sf of lot area:

11,000 sf / 1,000 sf = **11 trees min.**

AND (NEW)

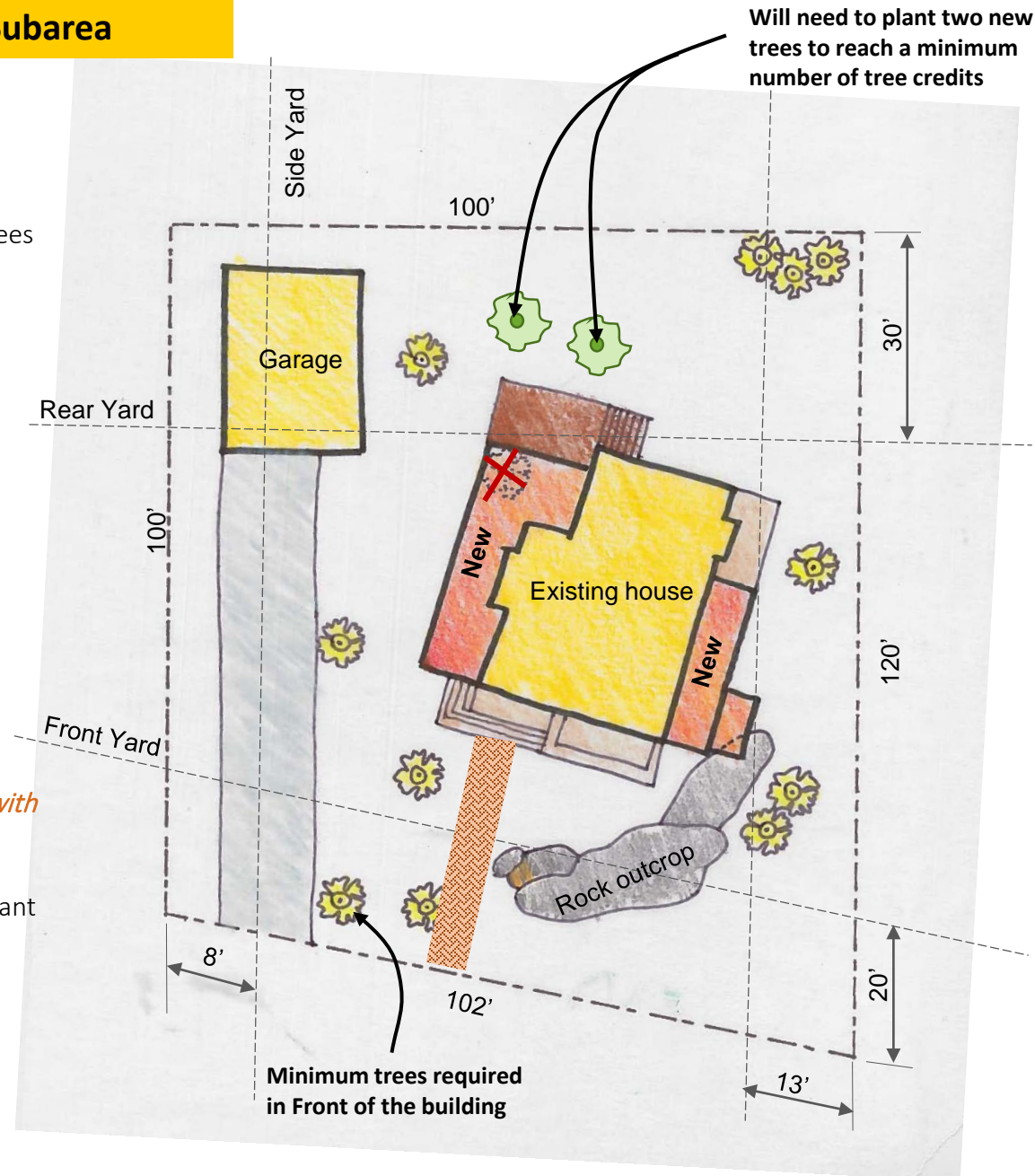
3 tree credits per 750 sf of lot area:

(11,000 sf / 750) x 3 = **44 tree credits min.**

❌ 41 tree credits on site < 44 tree credits required

✅ Owner would need to plant two new trees with enlargement

[Under current rules: Owner would not need to plant any trees]



# Case Study: How Would A Typical Single-Family Home Be Affected?

## Enlargement in R1-2, Base Protection Subarea

### ASSESS PLANTING REQUIREMENTS *(NEW)*

Four (4) biodiversity points will be required

Planting options are available to meet point requirements

✅ *Owners opts to expand existing garden to 1,100 square feet to achieve 4 biodiversity points*





For further information on the proposal you can email us at:

[SpecialDistrictsUpdate@planning.nyc.gov](mailto:SpecialDistrictsUpdate@planning.nyc.gov)