



**van note - harvey**  
Division of Pennoni

## **WOODLAND MANAGEMENT REPORT**

**Princeton Nurseries  
Block 102, Lots 5 & 6  
Block 106, Lot 1**

**Plainsboro Township, Middlesex County, New Jersey**

A handwritten signature in black ink that reads 'Chad Gaulrapp'.

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WRNUL23001  
September 27, 2024  
Last Revised: April 18, 2025

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## **TABLE OF CONTENTS**

		<u>PAGE</u>
1.0	INTRODUCTION.....	1
2.0	PROJECT DESCRIPTION.....	1
3.0	SITE DESCRIPTION .....	1
4.0	PROPOSED TREE REMOVAL .....	4
5.0	REFORESTATION .....	5

## **FIGURES**

FIGURE 1	NEARMAP AERIAL IMAGE
FIGURE 2	LANDSCAPE PROJECT
FIGURE 3	LAND USE MAP

## **APPENDICES**

APPENDIX A	TREE REMOVAL PLAN PREPARED BY VAN NOTE-HARVEY DIVISION OF PENNONI
APPENDIX B	REFORESTATION PLAN, PREPARED BY MELILO BAUER CARMAN



## **1.0 INTRODUCTION**

Van-note Harvey, a division of Pennoni, has prepared this Woodland Management Report for WRV Nurseries Plainsboro Owner, LLC (WRV – the Applicant), in accordance with the Code of the Township of Plainsboro, Section 85-30 (Municipal Code). It is intended to be used in conjunction with the Preliminary and Final Major Subdivision and Site Plan application submitted on behalf of WRV for a proposed mixed-use development located on Block 102, Lots 5 & 6 and Block 106, Lot 1 in Plainsboro Township, Middlesex County, New Jersey (the Site). WRV proposes to build a mixed-use development at the Site in accordance with the requirements of the PMUD – Planned Unit Development Zone (integrated mixed-use neighborhood development).

The site in Plainsboro is approximately 108.8 acres and is part of the former Princeton Nurseries site. The project also includes improvements for stormwater management within South Brunswick consisting of approximately 4.7 acres on lands which were also part of the former Princeton Nurseries.

The site is bounded to the north by the South Brunswick municipal boundary with dense tree cover; to the east by wooded areas and Harry's Brook stream; to the south by Seminary Drive and College Road West with frontage from Princeton Forrestal Village and Carnegie Assisted Living and Acute Care; and to the west by the Barclay Square residential development. The existing site is accessed from College Road and Seminary Drive. An additional access from Seminary Drive is proposed as part of this project.

## **2.0 PROJECT DESCRIPTION**

WRV proposes the construction of 853 dwelling units, and a central mixed-use development consisting of two retail/multifamily buildings, a 125-key hotel, one retail/office building, one retail building, and one grocer, as well as other amenities and recreational components typical of modern residential communities at the Site. The residential dwelling units include a mix of single-family homes, luxury single family units, townhomes, carriage homes, flats, and terrace houses. A total of 200 age-restricted units and 96 affordable units are proposed. Additional improvements include new access into the Site from College Road West, pedestrian circulation paths, multi-level parking, two clubhouses, a stormwater management system, a sanitary sewer pump station, landscaping, and lighting. Please refer to the zoning summary provided in the plans for details. Areas on the Site outside of the development area will generally remain in their existing conditions.

## **3.0 SITE DESCRIPTION**

The site is the location of the former Princeton Nurseries which includes various vegetative covers including former nursery stock, single row arborvitae windrows and native vegetation both within the nursery and along Harry's Brook to the east. The site also contains a paved roadway from Seminary Drive which transitions to a gravel road (known as Nursery Drive). This

road extends into South Brunswick. A stormwater conveyance system extends from the Seminary Drive intersection northerly along Nursery Drive to a previously constructed stormwater basin located within South Brunswick just north of the municipal boundary. The basin has an existing outfall to Heathcote Brook Tributary (aka Harry's Brook). A recent aerial image of the site is included as Figure 1 below.



Figure 1: Aerial Image of the Project Site (Nearmap, June 28, 2024)

As shown in the Nearmap aerial image above, the existing project area is roughly half wooded and half cropland and pastureland. The Site was previously utilized for nursery production. The eastern half of the site is densely wooded and consists of approximately 25 acres of woods. The western half of the site is more sparsely wooded and consists of approximately 4.5 acres of woods. All of the wooded areas include a scrub/shrub understory.



Photo 1: Taken at the northernmost location of the densely wooded area at the Plainsboro/ South Brunswick Municipal Boundary. The photo was taken within the sanitary sewer easement looking east. This path will be utilized for a proposed pedestrian connection from Plainsboro across Harry's Brook, into South Brunswick to avoid unnecessary tree removal.



Photo 2: Taken at the northwest corner of the property looking toward the more sparsely wooded areas at the Plainsboro/South Brunswick Municipal Boundary. The photo was taken looking east.



Photo 3: Taken from Seminary Drive looking toward the northeast at the existing fields and arborvitae windrows.

#### **4.0 PROPOSED TREE REMOVAL**

The wooded areas on site are broken into two areas. The approximately 25 acres of woods on the eastern side of Nursery Road are generally densely wooded including some windrows through wooded areas. The 4.5 acres of trees to the west of Nursery Road are more sparsely wooded. A 100-foot by 100-foot sample area in each wooded area type was analyzed within woods where individual tree survey was performed. The survey identified all trees over 6" DBH by the DBH, species and location. Within those sample areas, the following trees were identified:

<b>Step 1: Trees in Sample Study Area</b>		
Category	Tree Removed (DBH)	Sample Quantity
1	6"-12.99"	<b>57</b>
2	13"-22.99"	<b>3</b>
3	23"-32.99"	<b>0</b>
4	>33"	<b>0</b>

Table 1: Measured trees within Sample Area 1

Step 1: Trees in Sample Study Area		
Category	Tree Removed (DBH)	Sample Quantity
1	6"-12.99"	<b>37</b>
2	13"-22.99"	<b>2</b>
3	23"-32.99"	<b>0</b>
4	>33"	<b>0</b>

Table 2: Measured trees within Sample Area 2

Since no category 3 trees were located within the Sample Areas, but were found in other parts of the surveyed woods, a further adjustment was included to supplement the adjusted tree removal:

Step 4: Category 3 Tree Adjustment		
Since Category 3 trees were not in the Sample Area but were found in other parts of the site, an adjustment is needed.		
Category 3 Trees in Dense Area	13	
Surveyed Dense Tree Area	166,370	sqft
Total Dense Tree Area	960,000	sqft
Multiplier	$960,000/166,370 = 5.77$	
Category 3 Adjusted Tree Count	<b><math>13 \times 5.77 = 75.01 = 76</math></b>	

Table 3: Adjustment for Category 3 Trees within the Dense tree area

Step 4: Category 3 Tree Adjustment		
Since Category 3 trees were not in the Sample Area but were found in other parts of the site, an adjustment is needed		
Category 3 Trees in Sparse Area	1	
Surveyed Sparse Tree Area	33,000	sqft
Total Sparse Tree Area	220,000	sqft
Multiplier	$220,000/33,000 = 6.67$	
Category 3 Adjusted Tree Count	<b><math>1 \times 6.67 = 6.67 = 7</math></b>	

Table 4: Adjustment for Category 3 Trees within the Sparse Tree Area

No category four trees were located within the surveyed tree areas. The total estimated adjusted tree removal counts are as follows:

Step 5: Adjusted Tree Count Estimation		
Category	Tree Removed (DBH)	Est. Total Quantity
1	6"-12.99"	<b>5472</b>
2	13"-22.99"	<b>288</b>
3	23"-32.99"	<b>76</b>
4	>33"	<b>0</b>
<b>TOTAL</b>		<b>5836</b>

Table 5: Total Adjusted Estimated Tree Removal Count within the Dense Tree Area.

Step 5: Adjusted Tree Count Estimation		
Category	Tree Removed (DBH)	Est. Total Quantity
1	6"-12.99"	<b>814</b>
2	13"-22.99"	<b>44</b>
3	23"-32.99"	<b>7</b>
4	>33"	<b>0</b>
<b>TOTAL</b>		<b>865</b>

Table 6: Total Adjusted Estimated Tree Removal Count within the Sparse Tree Area.

There are an estimated 7,051 trees which a DBH of 6" and greater that will be removed for the portion of the site within Plainsboro Township from the two wooded areas as part of the proposed project. The Tree Removal Plan where these calculations can be found is included as Appendix A of this report.

Based on a review of NJ-GeoWeb, no Rank 3 or 5 Species exist on the Site or in the immediate vicinity. The Site and surrounding area are mapped as Bald Eagle Nest (Rank 4). In the proposed conditions, the existing wetlands to the east associated with Harry's Brook will be protected and maintained.

Although the total tree removal count is high, the site is the former location of Princeton Nurseries which contains a vast cover of former nurseries stock which was not sold. The Princeton Nurseries Proposed Mixed Use Development Plan dated June 4, 2024, provides a comprehensive layout of the different uses on the site in question. This plan, which we understand has been accepted by the Township, requires a significant area of clearing and disturbance to achieve the overall balance of uses planned in collaboration with the Township. Woodlands within the environmentally sensitive areas associated with Harry's Brook will not be disturbed, and certain tree stands along the site perimeter, and the two main arborvitae windrows at the southwest quadrant of the site will be maintained to the limits shown on the Tree Removal Plan.

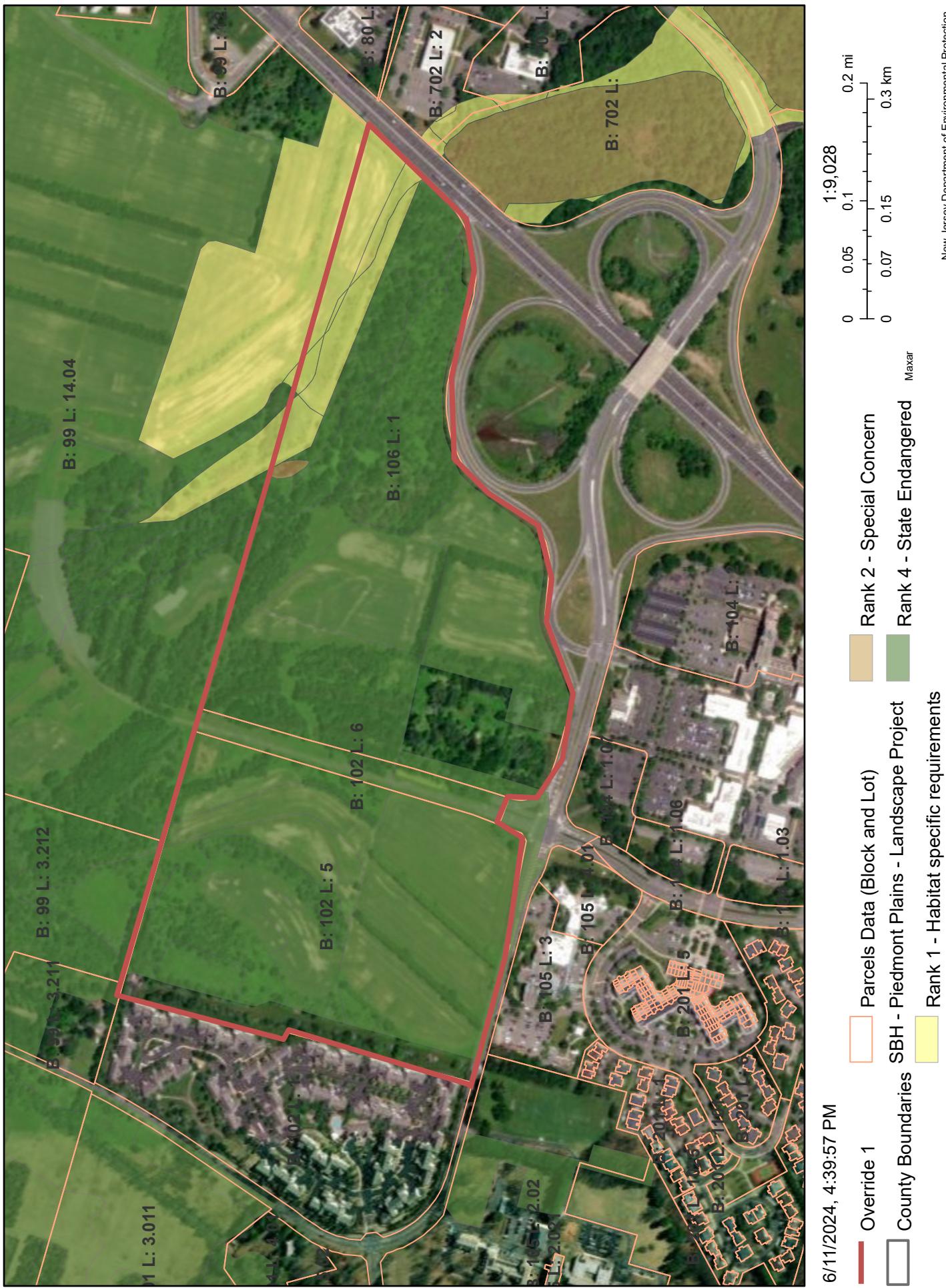
## **5.0 Reforestation**

A Reforestation Plan has been prepared by Melillo Bauer Carman to document the proposed tree replacement design. This design is based on the area of "Mature Woodland" to be removed within the site as defined in Plainsboro Ordinance 85-30 and is not based in the number of trees over 6" DBH being removed. The Tree Removal Plan depicts the areas interpreted as mature woodland which does not include all areas of the site with tree cover. The area of mature woodland proposed for removal is 9.73 acres.

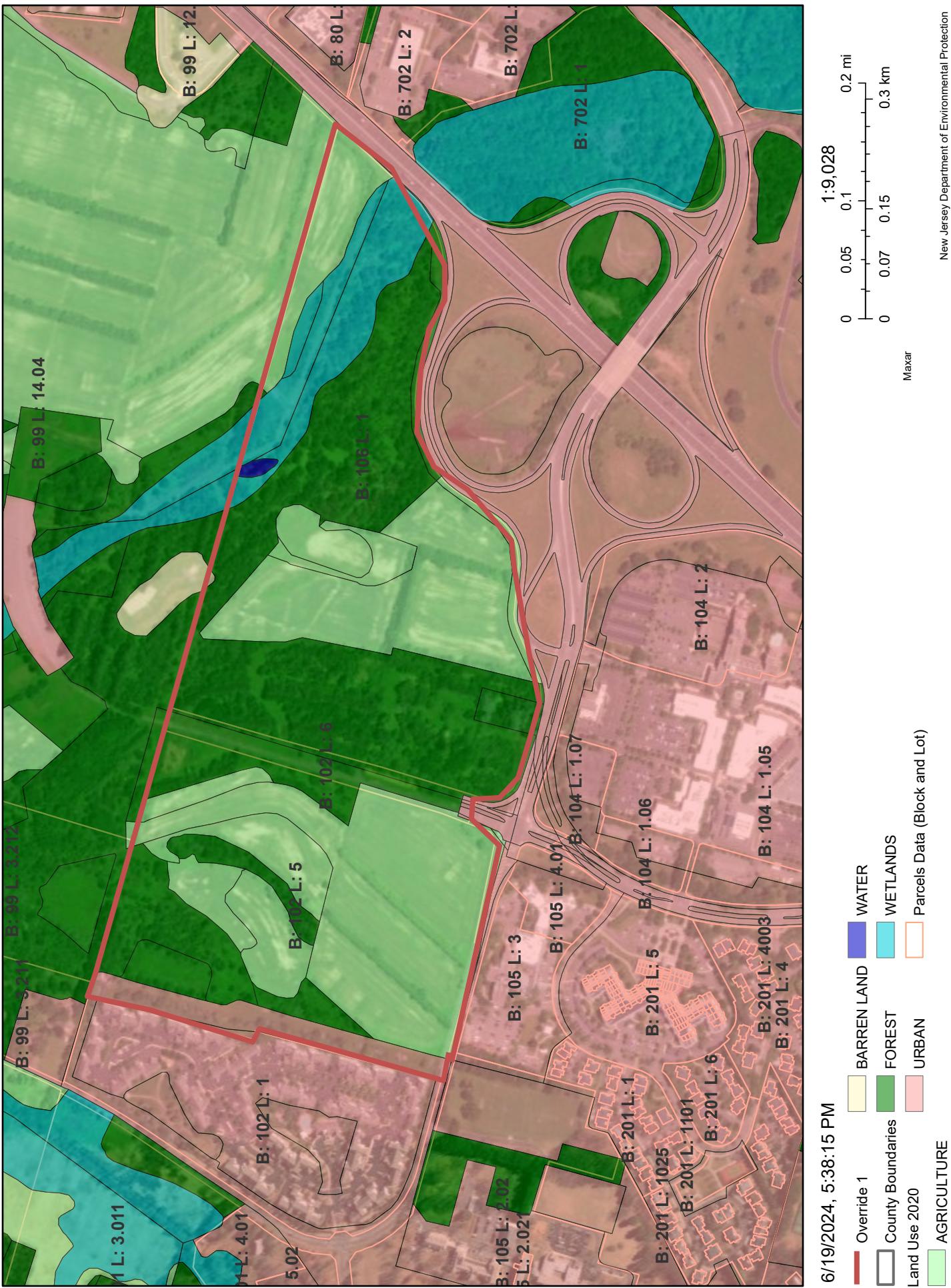
## Exhibits



Landscape Project




## Land Use



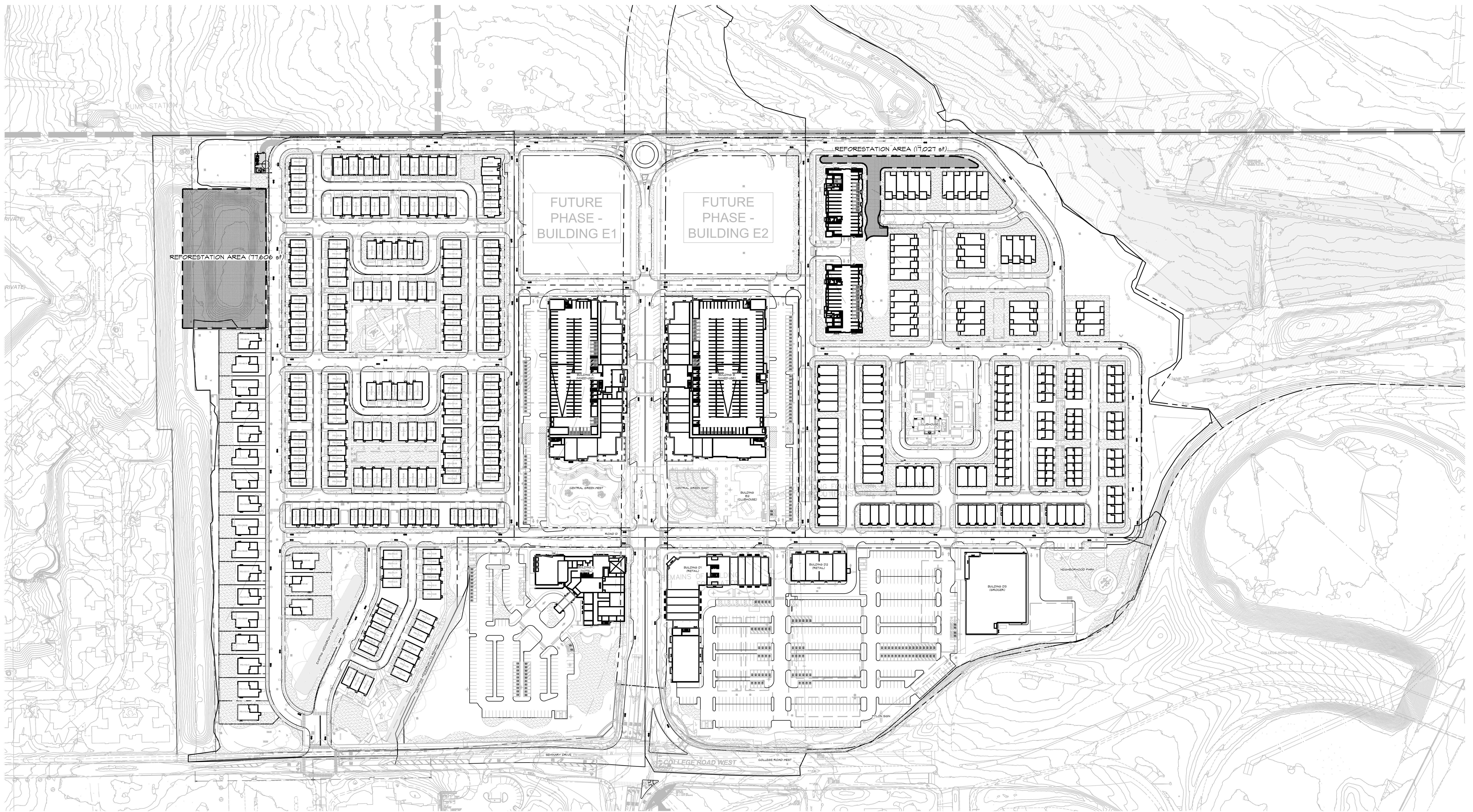
## Appendix A





## Appendix B





Streetscape  
Reforestation Plan

Princeton Nurseries  
Plainsboro, New Jersey

**REFORESTATION REQUIREMENTS**

9.73 ACRES OF MATURE WOODLAND REMOVED (423,839 SF)

**TREES REQUIRED FOR Reforestation:**

1 TREE/ 400 SF (20' X 20' GRID) = 1,040 TREES

**REFORESTATION AREA REQUIRED:**

1,040 TREES PLANTED AT AN AVERAGE OF 10'-0" ON CENTER (100 SF/ TREE) = 106,000 SF = 2.43 ACRES OF REFORESTED AREA REQUIRED

**REFORESTATION AREA PROVIDED ON SITE:**

**REFORESTATION AREA** 94,633 sf  
MIX OF NATIVE SHADE TREES, (2.17 ACRES)  
EVERGREEN TREES AND ORNAMENTAL  
TREES PLANTED IN NATURAL GROVES  
AND SPACED FIVE FEET TO 15 FEET ON  
CENTER.

GROUND PLANE SHALL BE SEEDED  
WITH A MIX OF NATIVE AND  
WILDFLOWER GRASS SEED MFG BY  
ERNST SEED (SEE DETAIL 91-L-3 FOR  
ADDITIONAL INFORMATION)

**TOTAL TREES PROVIDED:** 284  
105 @ 2'-2 1/2" CAL B&B 99  
205 @ 1-3/4"-2" CAL B&B 196  
305 @ 1-1/4"-1 1/2" CAL, BARE ROOT 295  
40% @ 6'-8" HEIGHT WHIPS, BARE ROOT 394

REFORESTATION AREA TO BE PROVIDED OFF SITE: 0.26 ACRES

**RESTORATION PALETTE**

**SHADE TREE**

*Acer rubrum / Red Maple*  
*Aesculus hippocastanum / Horsechestnut*  
*Betula nigra / River Birch*  
*Carya ovata / Shagbark Hickory*  
*Fagus grandifolia / American Beech*  
*Gleditsia triacanthos inermis / Thornless Honey Locust*  
*Liquidambar styraciflua / American Sweet Gum*  
*Ulmus americana / American Elm*  
*Nyssa sylvatica / Black Gum*  
*Quercus palustris / Pin Oak*  
*Quercus rubra / Red Oak*  
33% OF TOTAL

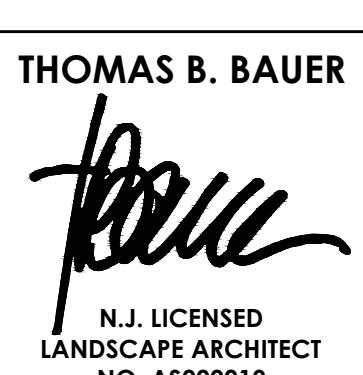
**EVERGREEN TREE**

*Ilex opaca / American Holly*  
*Juniperus virginiana / Eastern Red Cedar*  
*Picea abies / Norway Spruce*  
*Pinus strobus / White Pine*  
33% OF TOTAL

**ORNAMENTAL TREE**

*American Hornbeam / Serviceberry*  
*Betula nigra / River Birch*  
*Cercis canadensis / Eastern Redbud*  
*Comus floridana / Flowering Dogwood*  
*Magnolia virginiana / Sweetbay Magnolia*  
33% OF TOTAL

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LANDSCAPE ARCHITECT  
NO. AS000019

6 04/18/23 REV. PER TWP. COMMENTS  
5 01/27/23 REV. PER TWP. COMMENTS  
4 01/15/23 REV. PER TWP. COMMENTS  
3 11/07/22 REV. PER TWP. COMMENTS LETTER  
2 11/07/22 REV. 2  
1 9/27/22 REV. 1  
NO. DATE REVISION  
SCALE: 1"=100'  
DATE: 07/18/2024 JOB NO.: 22-166

DRAWING NO. L-2  
0 50' 100' 200' 400'