

## City of Cambridge Committee on Public Planting

Meeting Minutes – January 8, 2025 - 5:30-7pm

Hybrid Meeting via Zoom & at DPW - 147 Hampshire St.

### **Attendance** (\* indicates virtual attendance)

CPP Members: Cindy Carpenter, Chantal Eide, Gretchen Friesinger, Ray Fahrner, Ruth Loetterle\*, Sophia Emperador, Tracey Orr\*, Archana Venkataraman\*, Robb Johnson, Sara Cohen, Cynthia Smith, Ahron Lehman\*, Sandra Fairbank\*

[Members not in attendance: Angela Zhong, Maggie Booz]

DPW/City of Cambridge: Kevin Beuttell, David Lefcourt, Andrew Putnam, Cortney Kirk (CDD), Kristen Kelleher (DPW), Kara Falise (DPW), John Nardone (DPW), Cathy Watkins (DPW), John Grove (MIT), Jim Wilcox (City Engineer)

Guests & members of the public: Charles Teague\*, Rob Vandenabeele, James Williamson, Ellen Coppinger, Jeb Mays, C L, K O, Liana Greenberg-Nielsen,

Meeting notes submitted by: Ray Fahrner

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The meeting was called to order at 5:31 PM.

### **Agenda Items:**

#### **1. Review agenda**

#### **2. Meeting minutes**

- A. November:  
Reviewed & approved revised November meeting minutes.  
Chantal moved to approve meeting minutes; Cynthia seconded.  
Approved unanimously.
- B. December:  
Revisions as follows:
  - Ruth's comments – clarification of IQHQ.
  - Fix name spelling of Tracey Orr.Moved to approve as amended by Robb, Chantal seconded.  
Approved unanimously.
- C. December special meeting:  
No edits.  
Robb moved to approve, Sara seconded.  
Approved unanimously.

#### **3. Updates from City Arborist**

Kristen:

Newsletter numbers: 926 people on email list, surpassing target of 700 end-of-year.  
148 new Forest Friends  
Draft of new website now online.

Andrew: 1256 trees this year, surpassing goal of 1250 goal.  
560 trees planted this fall, 696 last spring.

#### **4. Project Overview:** Broadway between Ames and Third

5:40 PM

Cathy Watkins (DPW), John Grove (MIT), Jim Wilcox (City Engineer)  
Future of Broadway – people, resilience

## Planning Context

Awareness of other policies, including UFMP  
10-year sewer and drain plan

See attached presentation.

## Projects

1. MIT Volpe Development – Kendall Common  
Residential buildings 1,300 units  
120 private trees down, 214 to be replanted
2. MXD – Boston Properties/800,000 SF commercial
3. Eversource substation – below grade, slurry wall construction
4. Broadway drainage – 72" drain line, constructed by MIT

Questions asked about private trees being removed.

City tree removal – 11 to be removed, DBH127", 19 more for utility work = 30 trees

Four parks in area – trees to be planted there.

Jim – Broadway to Broad Canal Way, Ames St to Third

Utility design

History of design – started with MXD from Galileo Galilei Way to Ames

Involved MITIMCo (real estate), bxp, Eversource, DPW

Viable route for utilities requires removal of trees.

John – "Set new trees up for success."

8' wide tree wells, will be irrigated and aerated.

Wells have cantilevered paths across them.

Planting 23 new trees:

Tulip Poplar,

Pin Oak – questions about this kind of oak

Princeton Elm

Kentucky Coffeetree (60') – some difference of opinion

Swamp White Oak, "a good street tree"

Maybe others: Scarlet Oak

Maybe transplant ginkos

Conversation about type of trees, bike racks, understory possibilities,

## Process

1. 1/8/25 -CPP discussion
2. Public hearing about tree removal
3. Kendall Common – work underway, est completion 2028. Begin replanting
4. Broadway Drain Project – about a year

## 5. Response to letter on Linear Park Redesign

Sophia: Letter sent 12/20. Receipt of letter acknowledged. No reply yet.

Cathy Watkins said a response in the next week can be expected.

CPP was quoted in *Cambridge Day*.

Gretchen: Appropriateness of replacing trees. Has this been wasted time? What have we learned? Push UFMP more? Curb unnecessary loss.

Cindy: Disappointment with communications. Why stone dust paths?

**Public comment**

James Williamson spoke indignantly about article and process. He is against widening path.

Charles Teague spoke re irrigation of Linear Park. Hand-watering not practical. Asked about who runs Broadway irrigation.

**Meeting adjourned at 7:09 PM****Attachment:**

- Presentation by Kathy Watkins: *Broadway (Third to Ames) - Third St (Broadway to Broad Canal)*

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**POSTPONED - 4. Project Overview & Review of Landscape Improvements | Mem Drive Phase III**

- Presentation by Dan Driscoll, Green Transportation Director for the DCR & Hannah Van der Eb from Brown Richardson + Rowe, Inc.
- <https://www.mass.gov/info-details/memorial-drive-greenway-improvements-phase-iii>

**Broadway (Third to Ames)**

**Third St (Broadway to Broad  
Canal)**

**Committee on Public Planting**

**January 8, 2025**

# Agenda

Cambridge is working with MIT, Developers & Utility Providers to plan for the Future of Kendall Sq

**Future of Broadway**

**Planning Context**

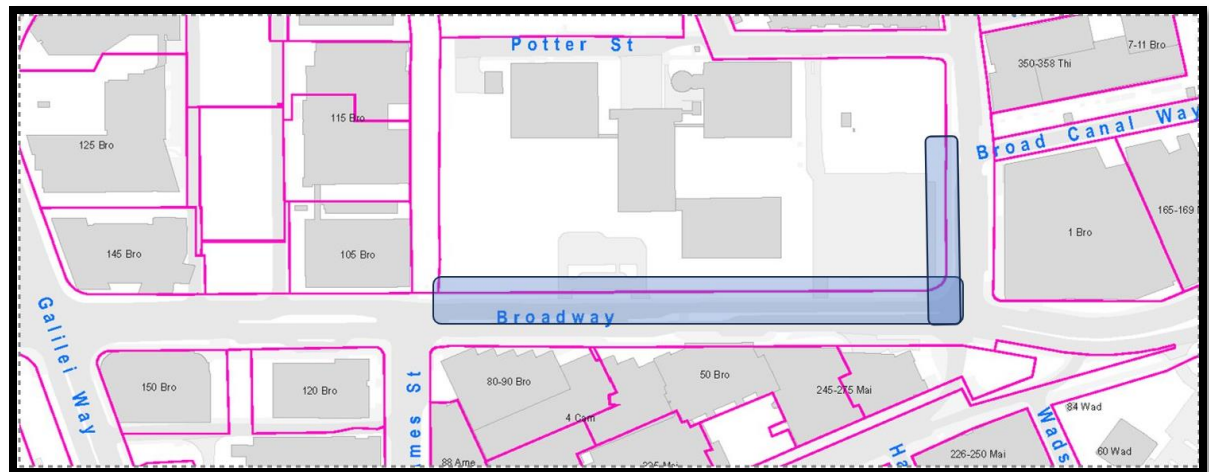
**Broadway Projects \***

**Utility Design \***

**Tree Planting Details**

**Next Steps**

- **Required Removal of Street Trees**



# Future of Broadway



Safe and comfortable environment for **people**

Wide sidewalks, separated bike lanes and a healthy and thriving **tree** canopy

Smaller more people scaled blocks, and **active building frontages**

Commercial and **residential buildings** that are **resilient to climate change**

**New Eversource substation** and transmission / distribution mains to support increased regional electrification and **reduced reliance on fossil fuels**

New **drain line** to increase resiliency to climate change through continued **sewer separation**, reduction of **combined sewer overflows** and a **cleaner Charles River**



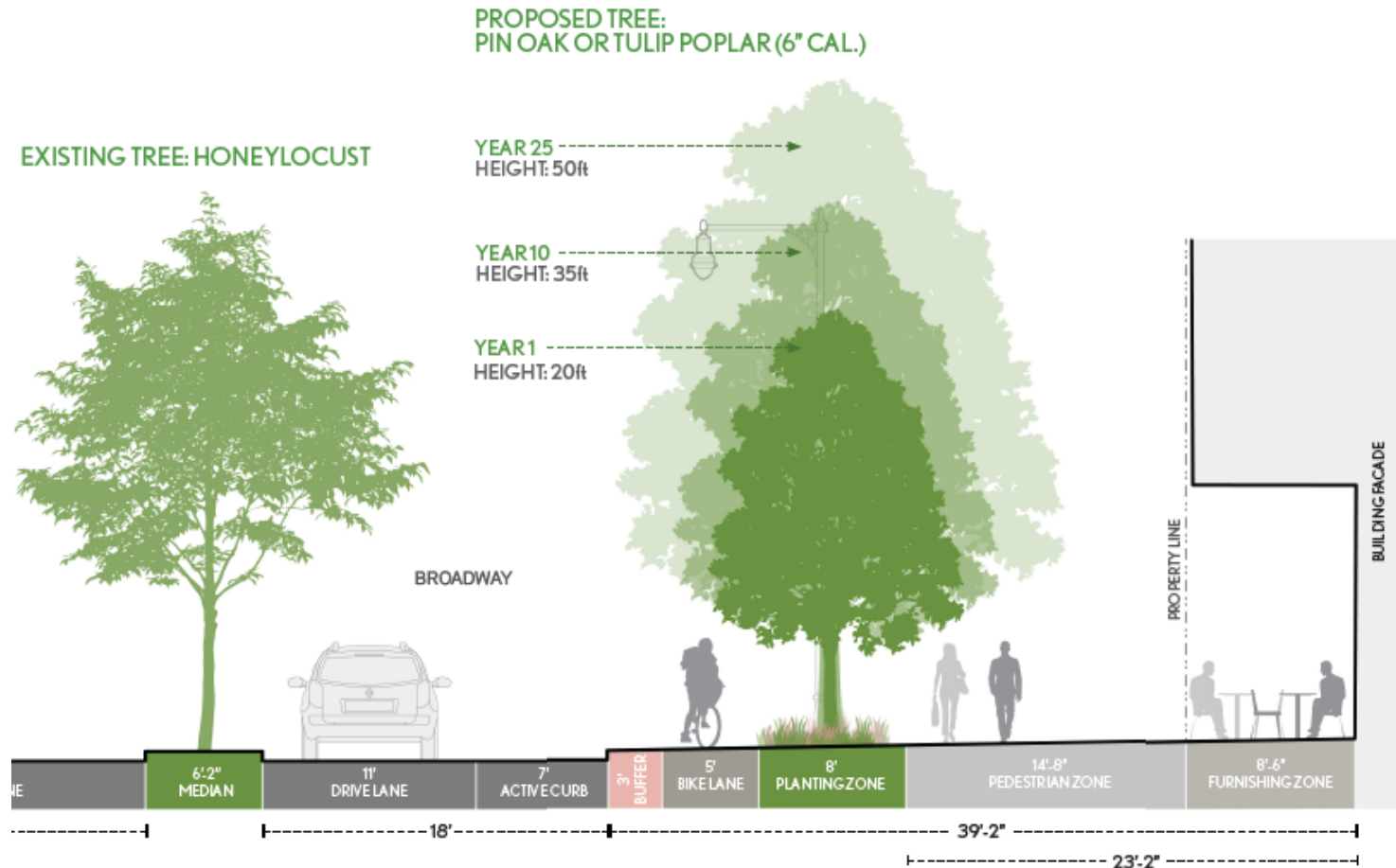
# Future of Broadway

Looking towards Third Street



# Future of Broadway

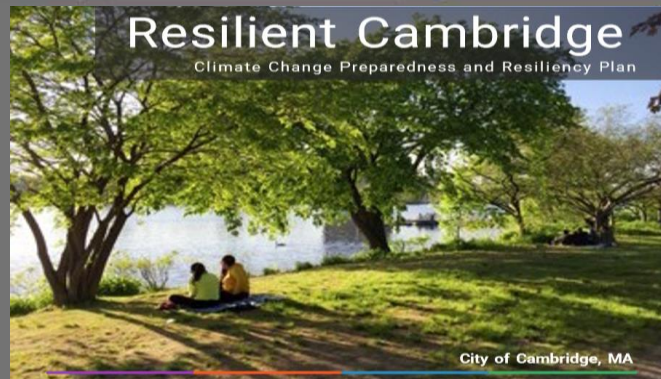
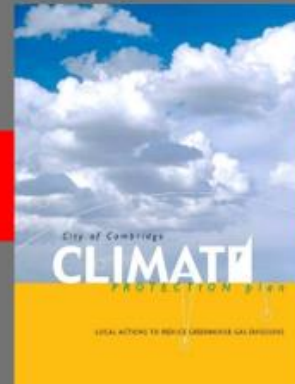
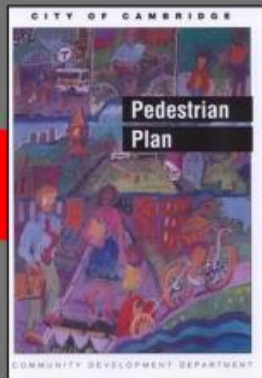
Looking towards Ames Street





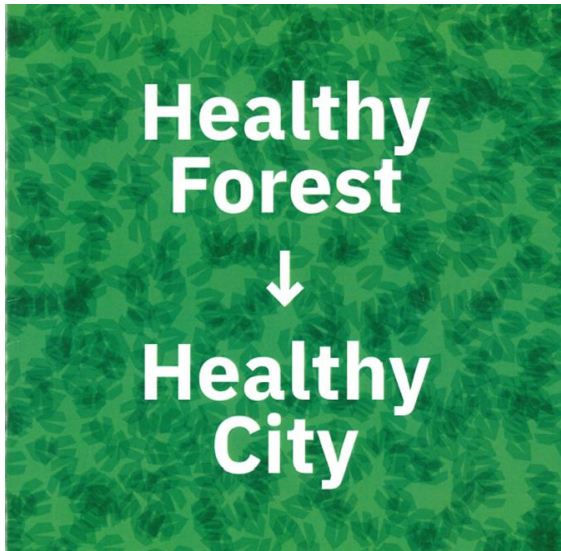
# Planning Context

## Plans and Policies



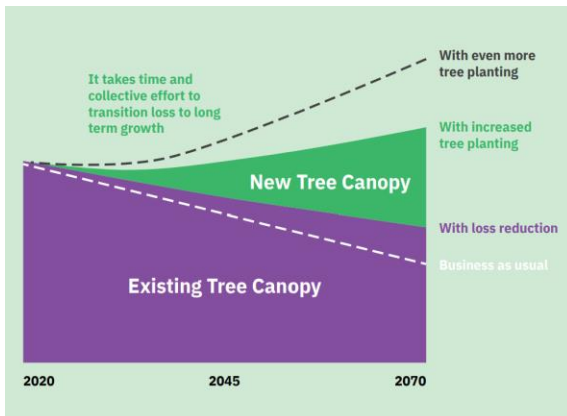
# Planning Context

## Urban Forest Master Plan



Encourage new public parks and open space.

Manage urban soils to grow healthier trees.



Integrate urban forest principles into street and sidewalk reconstruction projects.

Ensure new trees are cared for after construction projects.

# Planning Context

## Existing Broadway Public Shade Trees



Severe wounds/decay on the trunk; leaning.



Significant limb die back; partially dead trees.



Limb die back; large voids in the tree canopy.



Partial loss of canopy branches and leaning



Damaged primary leader; loss of nearly all branches



Tree showing signs of disease and rot on the trunk



NUMBER OF TREES	TOTAL DBH	CONDITION
49	510.5"	GOOD HEALTH
7	67.5"	FAIR HEALTH
7	93"	POOR HEALTH

### LEGEND

● GOOD HEALTH ● FAIR HEALTH ● POOR HEALTH

\*North of Broadway Trees: Bartlett Broadway Tree Report (March 2023)

\*Broadway Median Trees: Tree Specialists Broadway Median Tree Inventory (Nov 2019-2021)

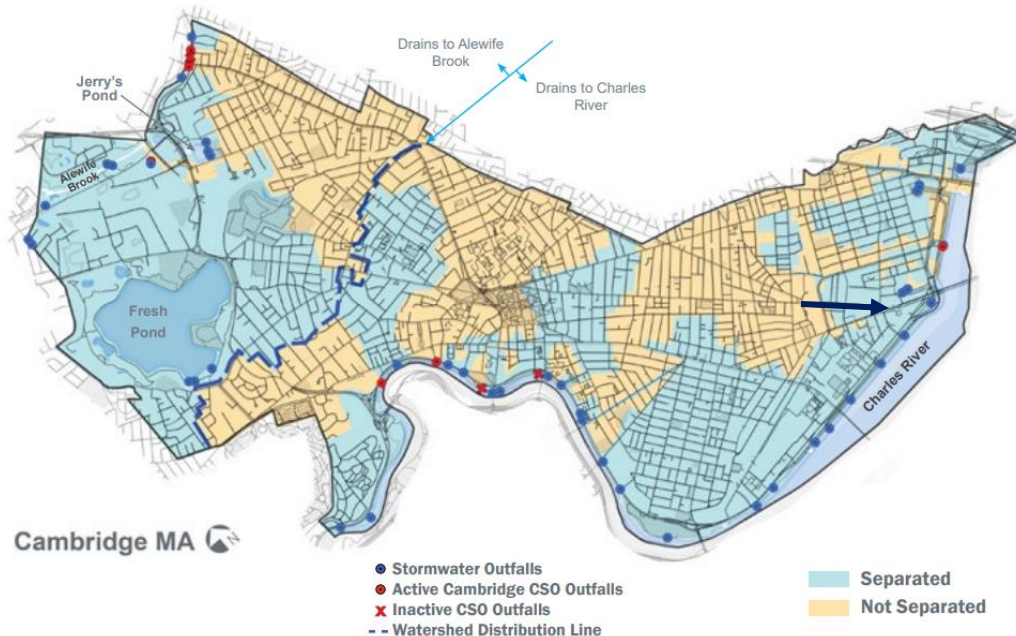


# Planning Context

## 10 Year Sewer and Drain Infrastructure Plan

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### PRIORITIES | SEWER SEPARATION



This map shows the areas of Cambridge's sewer system that are separated and are not separated and the active City-owned outfall locations. The City is 55% separated and 45% not yet separated.

Continued clean up  
of the **Charles River**

Further resiliency  
work through  
**sewer separation**  
and **stormwater**  
**management –**  
**Wellington**  
**Harrington and**  
**Port**

# Broadway Projects

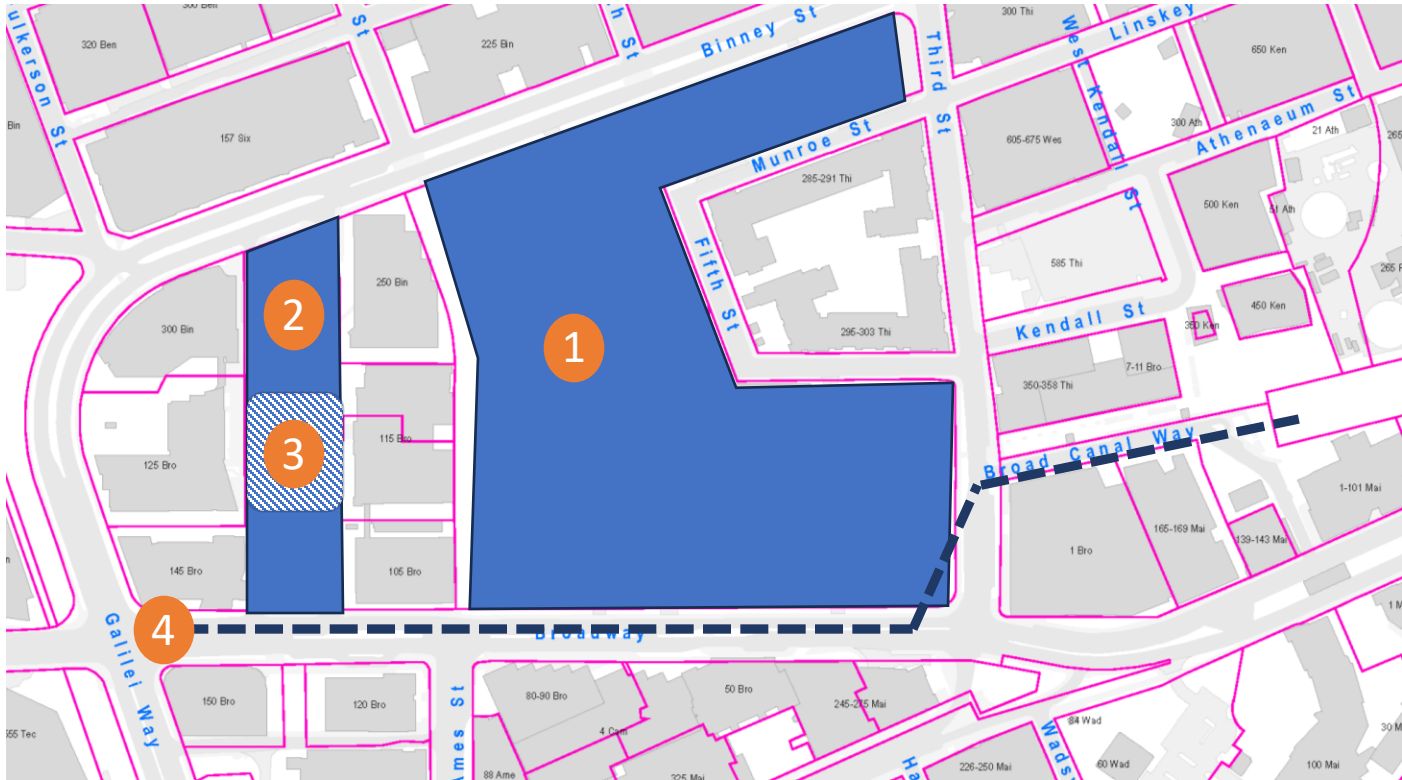
Future Conditions – Looking Towards Ames





# Broadway Projects

## Development Projects



1 Kendall Common  
/ GSA (Former Volpe)

3 Greater Cambridge Energy Project

2 MXD

4 Drainage Work

# Broadway Projects

## 1 Kendall Common (Former Volpe Site)- MITIMCo



### Scope:

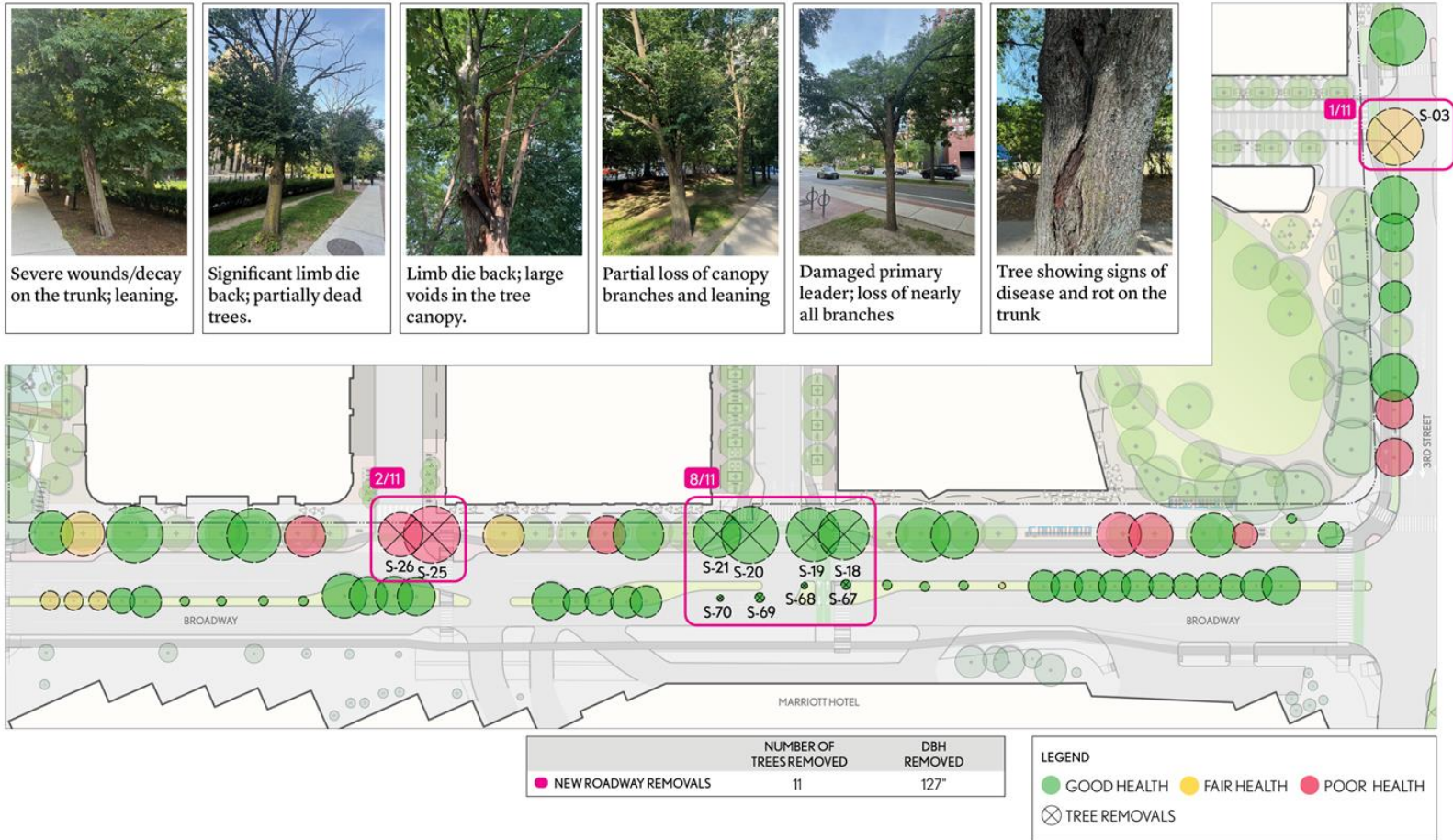
- Redevelopment of former Volpe Transportation Center site
- 4 **Commercial Buildings** with approximately 1.75 million SF
- 4 **Residential Buildings** with approximately 1,300 Units (20% affordable)
- **3.5 acres of open space** located within four parks, together with **ground floor retail** and **Community Center**
- New street grid to **break up the large blocks** and reweave the site back into the existing neighborhoods

### Status:

- New Federal **Volpe Transportation Center** complete
- Enabling **underway for phase 1** of the development including demolition of existing buildings, removal of private trees and installation of infrastructure, as provided in the approved Special Permit
- **C3** – Building foundation permit submitted. Estimated **Completion 2028**

# Broadway Projects

## 1 Kendall Common (Former Volpe Site)- MITIMCo



# Broadway Projects

## 1 Kendall Common (Former Volpe Site)- MITIMCo

TREE NUMBER	TREE SPECIES	DBH	CONDITION
S-03	LITTLELEAF LINDEN	17"	FAIR
S-18	LITTLELEAF LINDEN	16"	GOOD
S-19	LITTLELEAF LINDEN	17"	GOOD
S-20	LITTLELEAF LINDEN	18"	GOOD
S-21	LITTLELEAF LINDEN	15"	GOOD
S-25	LITTLELEAF LINDEN	18"	POOR
S-26	LITTLELEAF LINDEN	14"	POOR
S-67	GINKGO	2.5"	GOOD
S-68	GINKGO	3"	GOOD
S-69	GINKGO	3.5"	GOOD
S-70	GINKGO	3"	GOOD



# Broadway Projects

## 1 Kendall Common (Former Volpe Site)- MITIMCo



**3.5 acres of open space** located within four parks

Park trees will be planted in conditions like the Maya Lin Doppler Park at the New Volpe Building

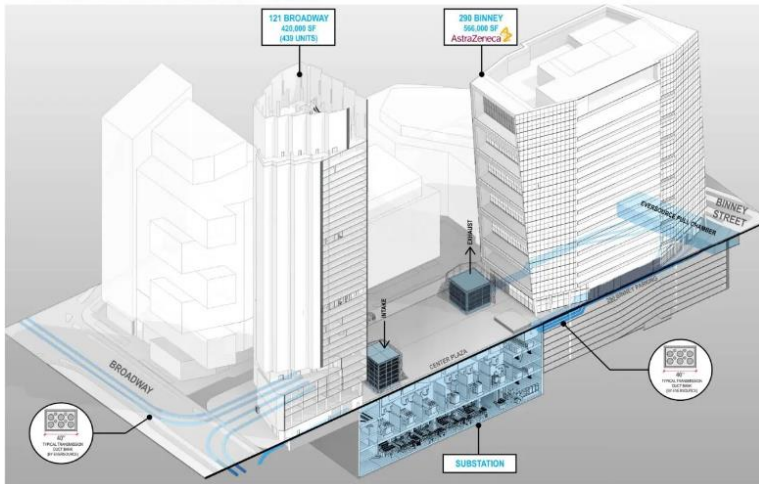




# Broadway Projects

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MXD- Boston Properties



## Scope:

- 800,000 SF of **Commercial Space** in 250 and 290 Binney
- 448-unit **Residential Tower** at 121 Broadway
- **Open space** over Eversource Substation

## Status:

- **290 Binney** in Construction- Estimated Completion Spring 2026
- **121 Broadway** in Construction – Estimated Completion Summer 2027
- **Substation** in Construction – Estimated Completion Early 2027



# Broadway Projects

## 3 Greater Cambridge Energy Project (GCEP)- Eversource

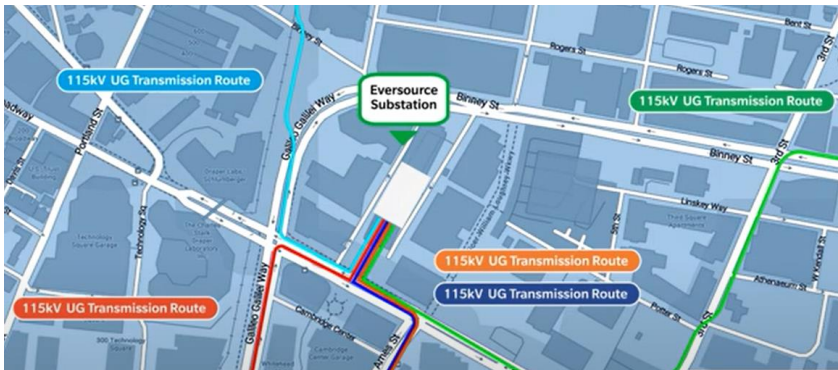


### Scope:

- New **35,000 SF below grade substation** supporting continued electrification and **reduction in fossil fuel use**
- **5 transmission mains** connecting Cambridge, Allston/Brighton and Somerville
- Additional **local distribution lines** to distribute power

### Status:

- Substation Construction on-going – Estimated **Completion – Early 2027**
- Design/enabling on-going for **5 transmission lines** between substation & substations in Cambridge, Allston, Somerville



# Broadway Projects

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## Broadway Drainage - I/I Work to Support Development



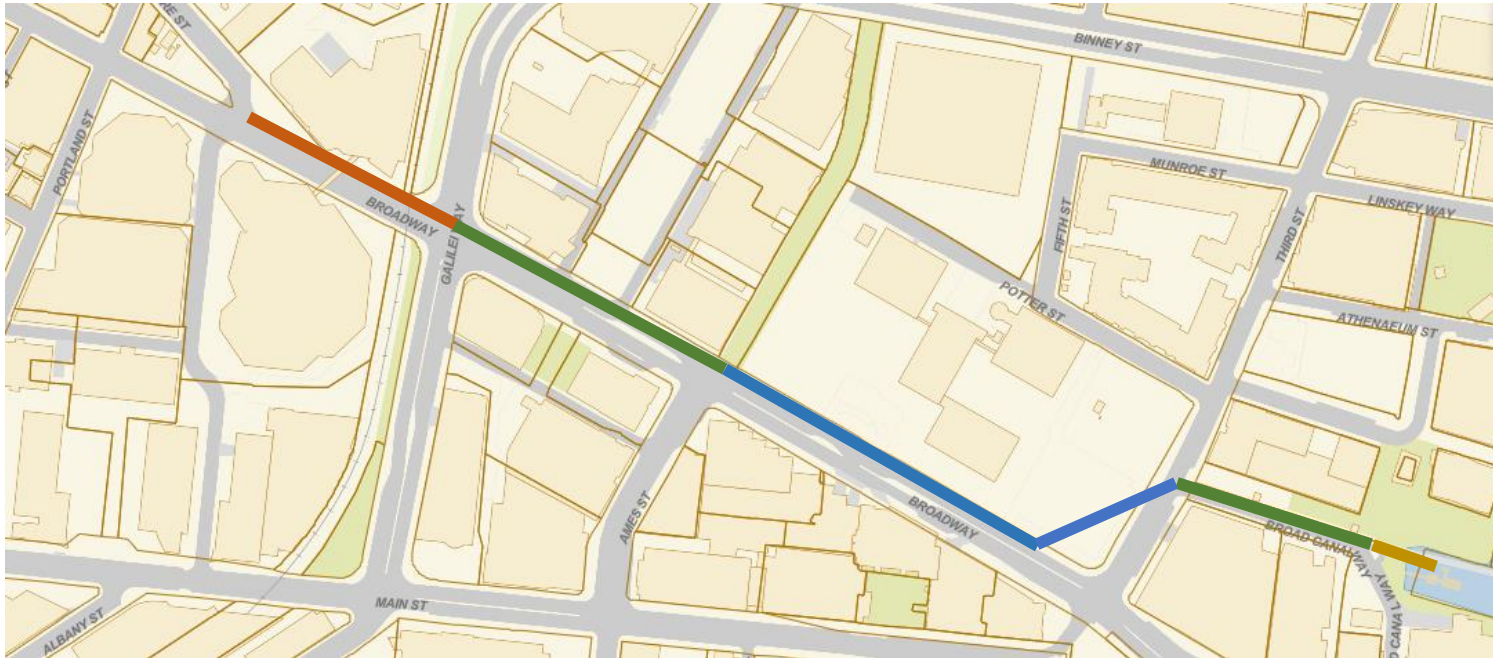
- **Constructed by MITIMCo** to meet 4:1 I/I **Mitigation Requirement**
- 72" drain line to provide additional drainage capacity
- Capacity will improve **water quality in the Charles River** by supporting
  - Future **sewer separation** in the 113-acre Hampshire Street Neighborhood
  - Reduction in approximately 2.5 million gallons of I/I to sewer system, **reducing CSO Volumes** to the Charles River



# Broadway Projects

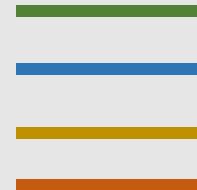
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## Broadway Drainage - I/I Work to Support Development



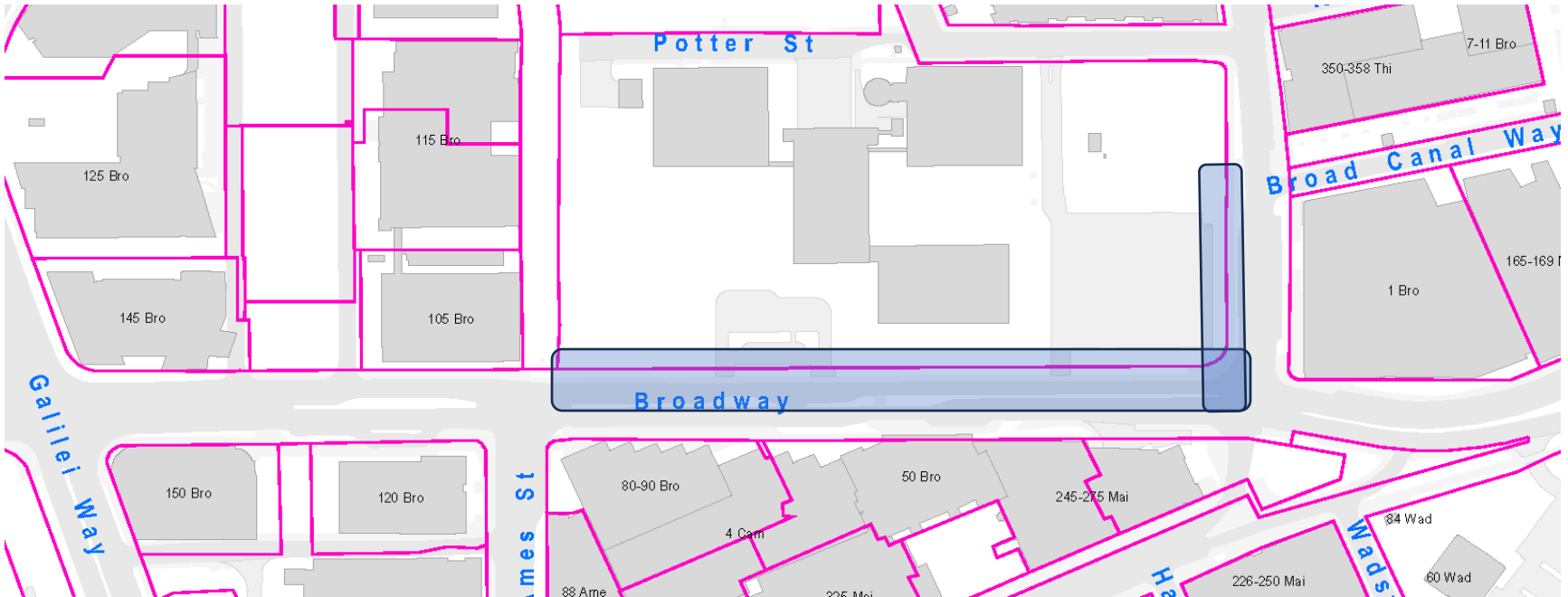
### Status:

- 1200 LF Completed (by MITIMCo and MXD)
- 1200 LF Committed to by MITIMCo
- Reconstructed Outfall Committed to by BioMED Realty
- Future phase



# Utility Design

Existing utilities and new Eversource ductbank and 72" drainline



**Consultants and staff have been evaluating design alternatives to maintain the existing utilities, construct the new utilities, support other street amenities and minimize the impacts to existing shade trees.**



# Utility Design

## Design Progression Over Past Few Years



- **MXD installed similar culvert** on Broadway between Galileo Galilei Way to Ames
- **City advanced design** of 72" drain line
- **Kendall Common** site and utility design progressed
- **Eversource** has advanced plans for transmission lines and distribution lines from the new substation, including **extensive test pits**

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Resulting in **better understanding** of work required and conflicts in the Broadway Corridor

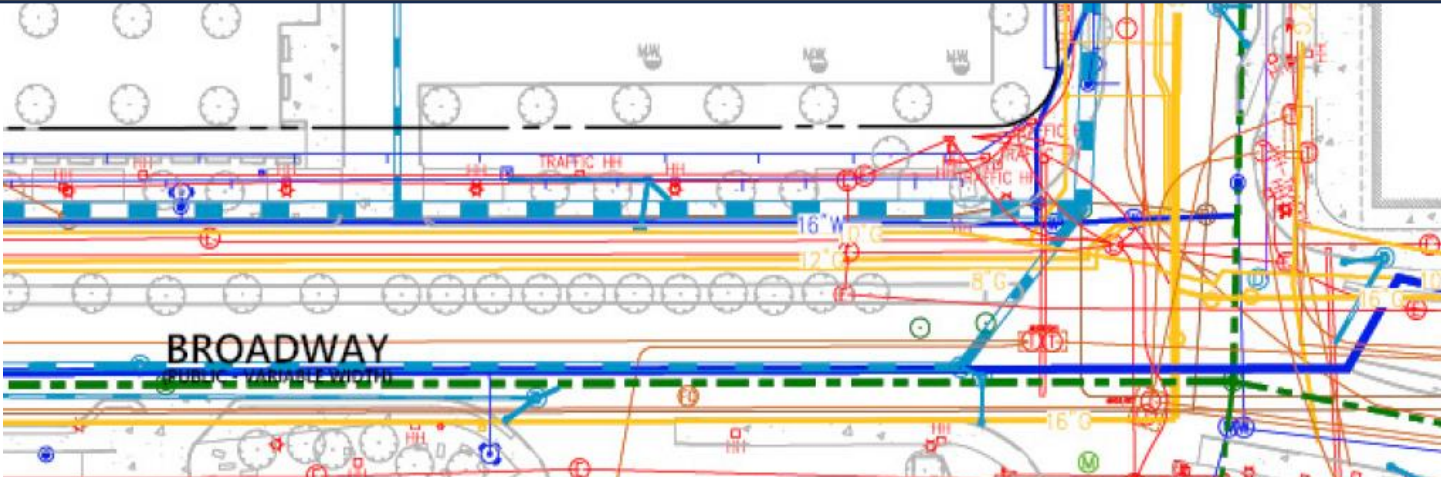
# Utility Design

## Eversource Broadway Test Excavations for Utility Locations



# Utility Design

## Broadway as a Major Utility Corridor



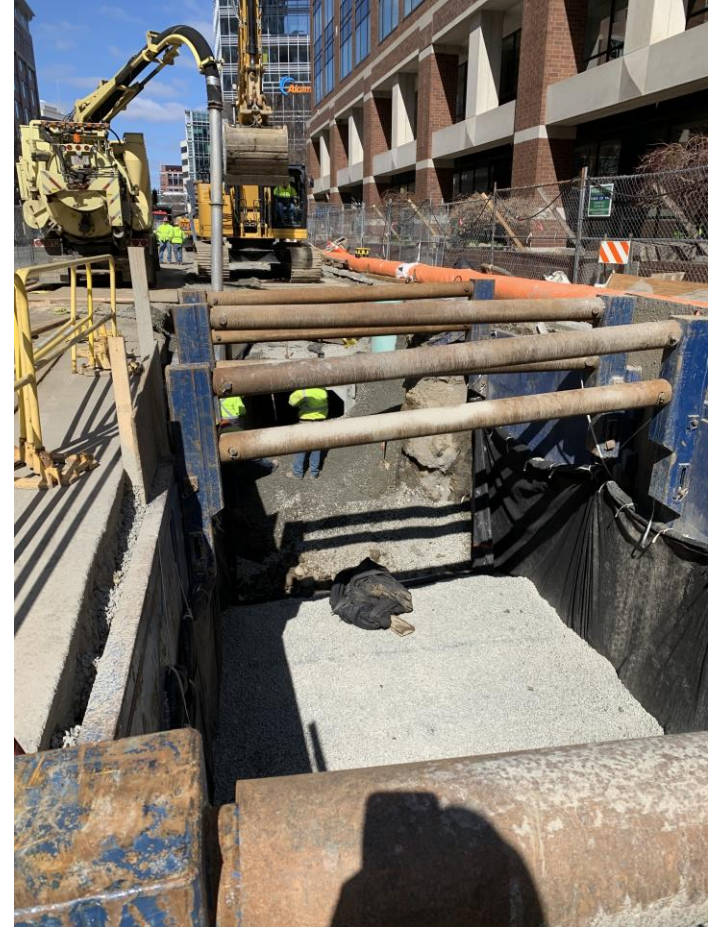
### Broadway Corridor includes:

- Large **regional** utility distribution infrastructure
  - 30" Water Main, 54" Drain Line, 12" and 16" Gas Mains
- Local service size utility infrastructure
  - 16" Water Main, 8" Gas Main, 22" Sewer, 18" Drain
  - Numerous electric and tele/com duct banks
- **Intersection of Third and Broadway is extremely congested** with subsurface Infrastructure



# Utility Design

## 72 " Drain Line Installation at MXD Frontage



# Utility Design

## Drain Line, Water Main and Eversource Ductbank



Severe wounds/decay on the trunk; leaning.



Significant limb die back; partially dead trees.



Limb die back; large voids in the tree canopy.



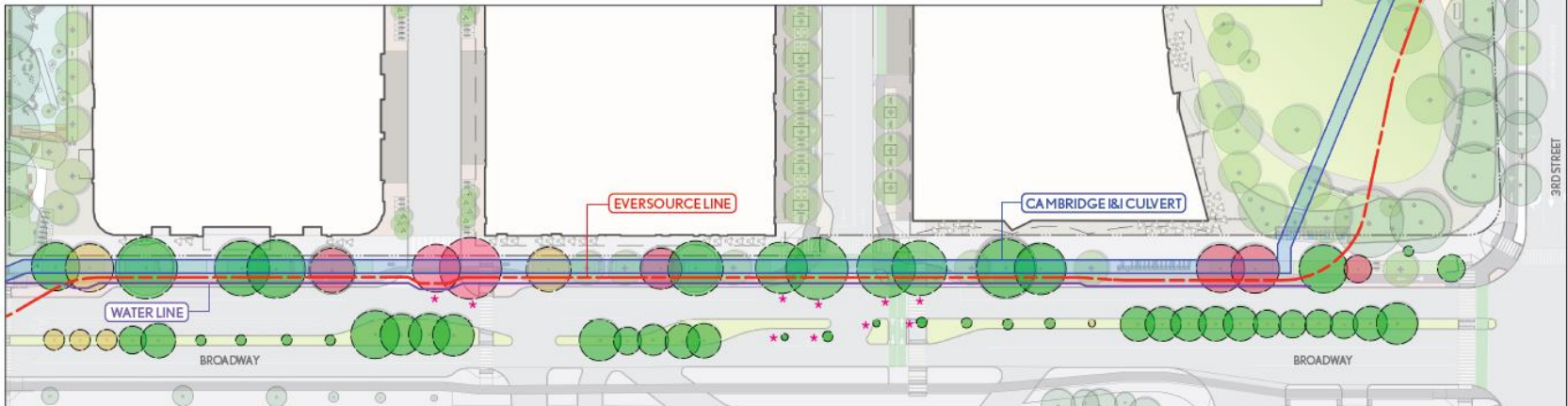
Partial loss of canopy branches and leaning



Damaged primary leader; loss of nearly all branches



Tree showing signs of disease and rot on the trunk

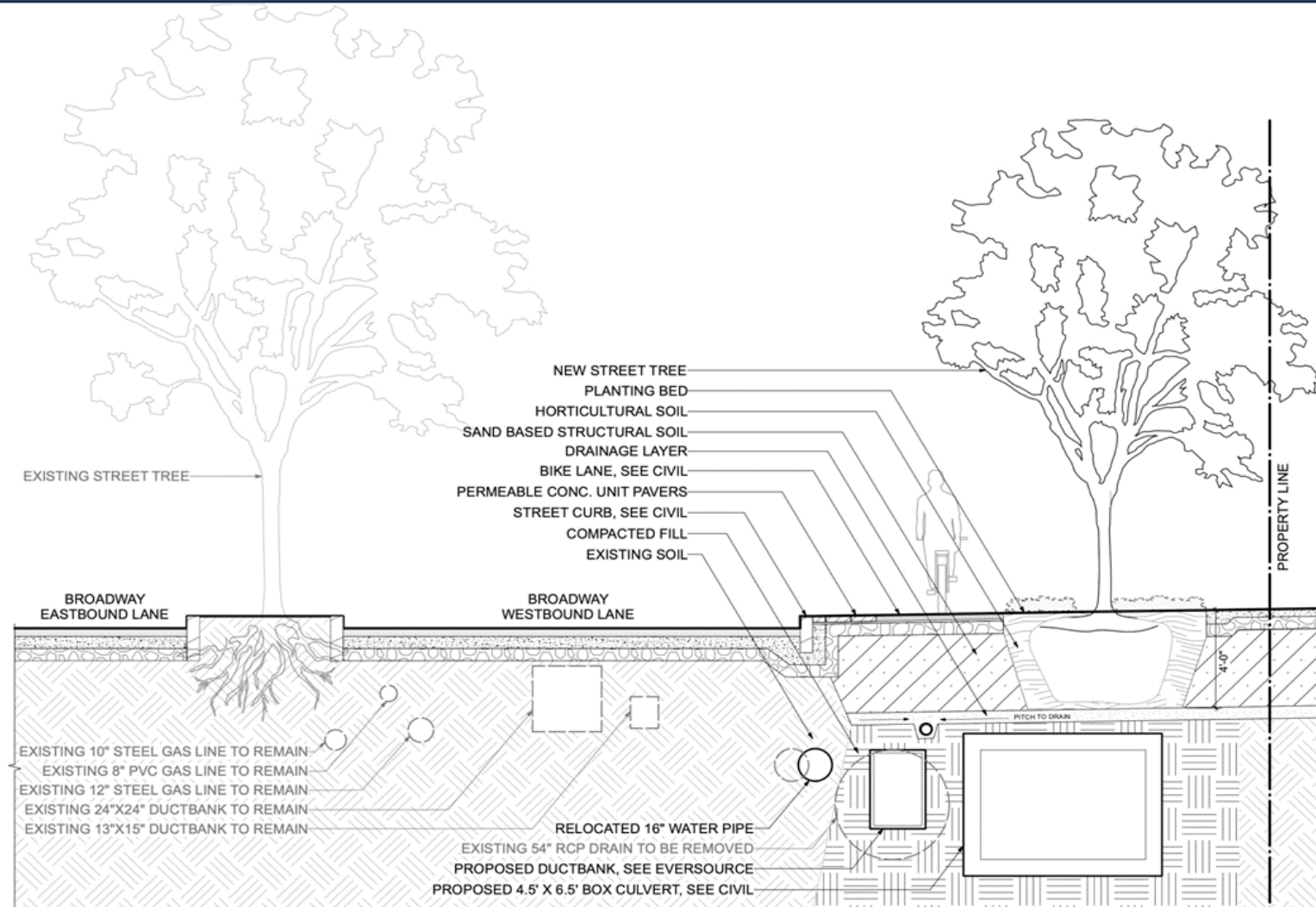


With the info from the test pits and the recently completed construction, the **north side of Broadway** most feasible corridor for the new utilities. **Maintains the existing utilities & median trees, avoids the Third St intersection** and provides **improved growing conditions for new trees**, but **requires the removal of the trees on the north side of Broadway**.



# Utility Design

## Co-location Utility Corridor



# Utility Design

## Additional Public Shade Tree Removals for Utilities



Severe wounds/decay on the trunk; leaning.



Significant limb die back; partially dead trees.



Limb die back; large voids in the tree canopy.



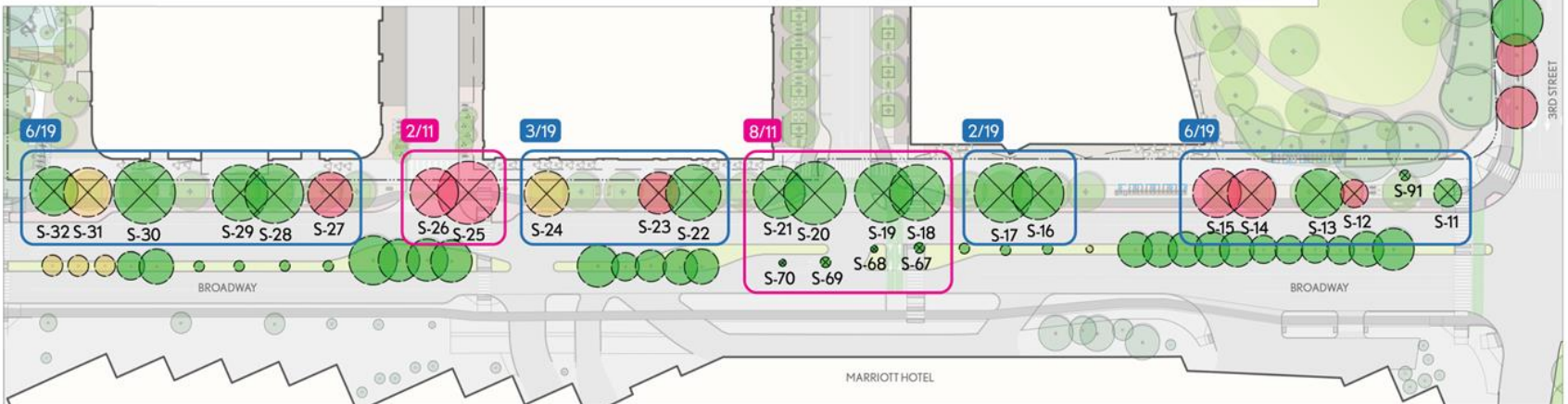
Partial loss of canopy branches and leaning



Damaged primary leader; loss of nearly all branches



Tree showing signs of disease and rot on the trunk



	NUMBER OF TREES REMOVED	DBH REMOVED
NEW ROADWAY REMOVALS	11	127"
UTILITY REMOVALS	19	250.5"

LEGEND		
<span style="color: green;">●</span>	GOOD HEALTH	<span style="color: yellow;">●</span> FAIR HEALTH
<span style="color: red;">●</span>	POOR HEALTH	
<span style="color: green;">⊗</span>	TREE REMOVALS	

# Utility Design

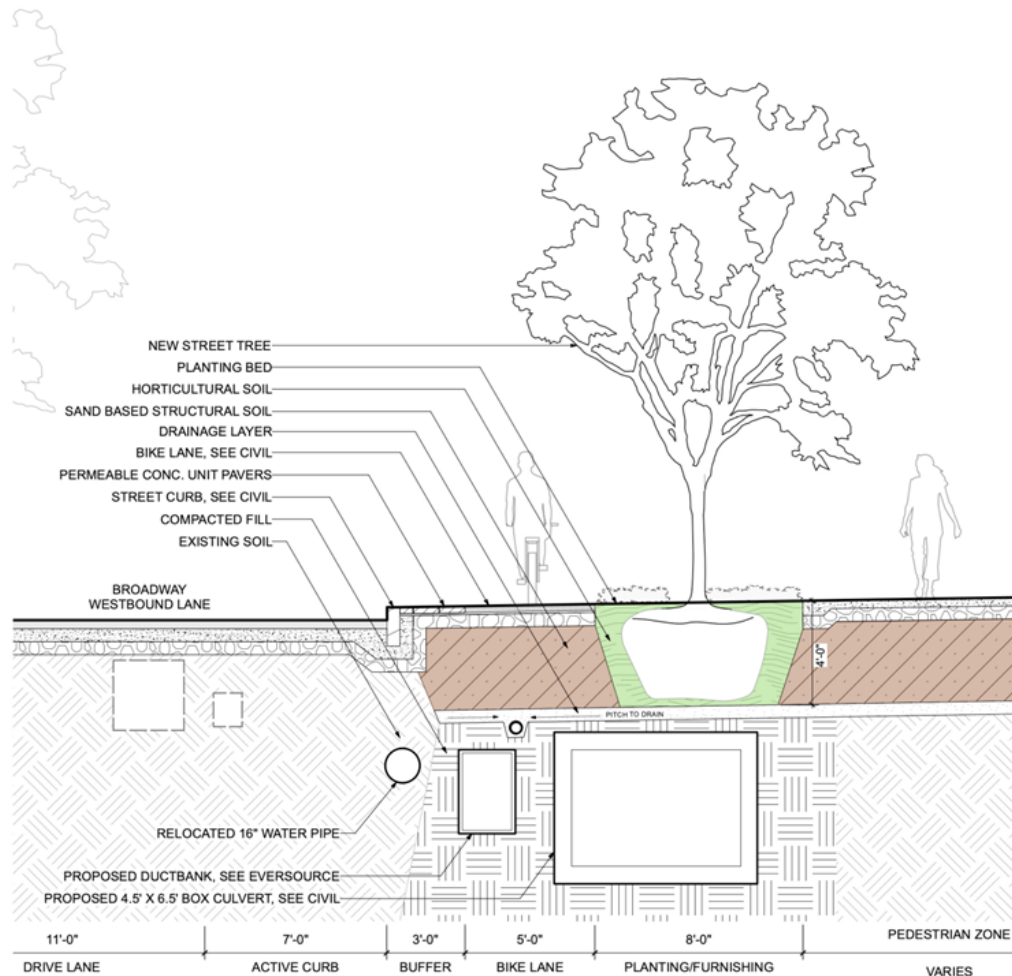
## Additional Public Shade Tree Removals For Utilities

Tree Number	Tree Species	DBH	Condition
S-02	Littleleaf Linden	19	Good
S-04	Littleleaf Linden	16	Good
S-11	Littleleaf Linden	8	Good
S-12	Littleleaf Linden	8	Fair
S-13	Littleleaf Linden	14	Good
S-14	Littleleaf Linden	14	Fair
S-15	Littleleaf Linden	14	Fair
S-16	Littleleaf Linden	15	Good
S-17	Littleleaf Linden	17	Good
S-22	Littleleaf Linden	16	Good
S-23	Littleleaf Linden	12	Poor
S-24	Littleleaf Linden	13	Fair
S-27	Littleleaf Linden	13	Poor
S-28	Littleleaf Linden	7	Good
S-29	Littleleaf Linden	16	Good
S-30	Littleleaf Linden	18	Good
S-31	Littleleaf Linden	14	Fair
S-32	Littleleaf Linden	14	Good
S-91	Crabapple	2.5	Good

**Add'l Tree Removals for Utilities (19 Trees / 250.5")**

# Tree Planting Details

## Proposed Tree Plantings

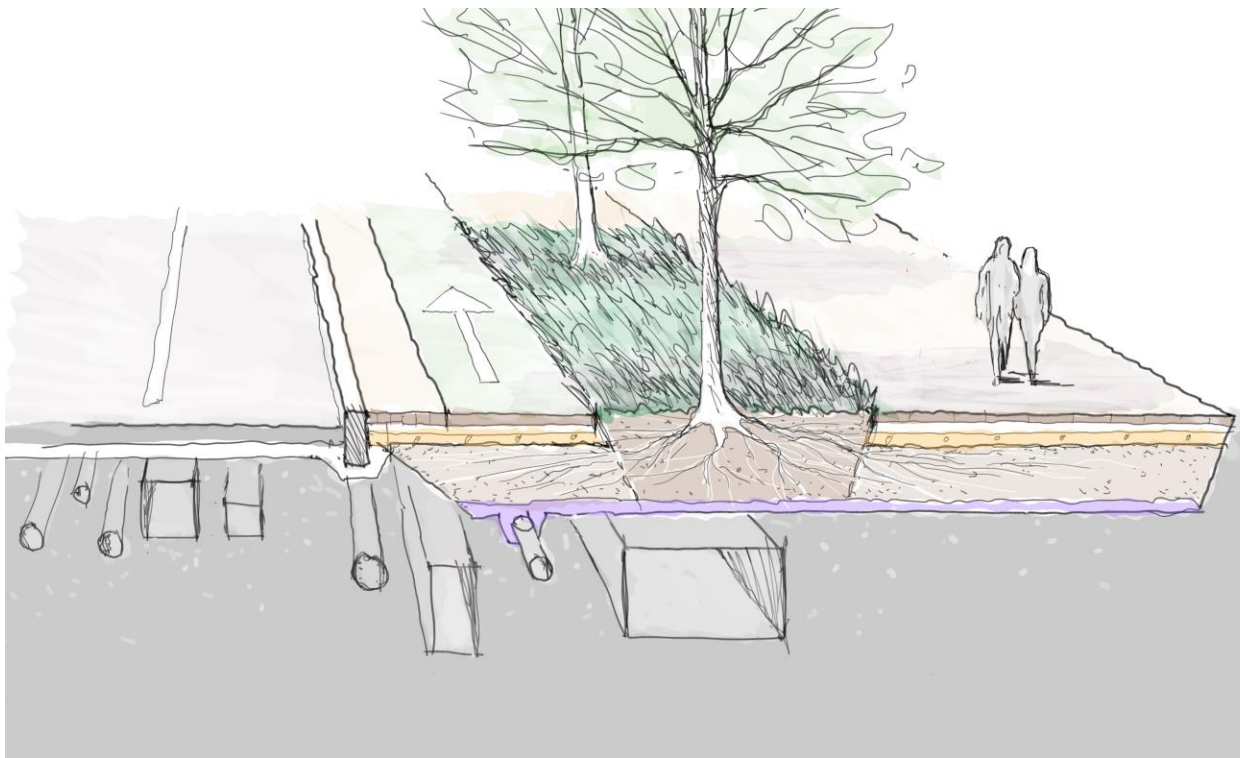


- Maintains existing **median trees**
- Maintains **existing utilities**
- Supports **new infrastructure**
- Provides **high quality planting detail for new tree plantings**



# Tree Planting Details

## Proposed Tree Plantings



- **Cultural soils** and expanded sand based structural soil
- Large contiguous **tree wells** for adjacent trees
- Large starting caliper size (6")
- Sidewalk and furniture zone being established on the private property to allow for **larger tree zone**
- Trees to be planted after adjacent construction

# Tree Planting Details

## Federal Volpe Building



REED-HILDERBRAND



# Tree Planting Details

## Federal Volpe Building



REED+HILDERBRAND

# Tree Planting Details

## Similar Detail Fifth Street

### VOLPE USDOT TREE ASSESSMENT

Fifth Street

**SPECIES:** *Quercus palustris*, Pin Oak

**NURSERY LOCATION:** New Jersey, in air pots for 1 season

**PLANTED LOCATION:** west of Fifth Street along sidewalk

**PLANTING CONDITIONS:** under permeable pavers, sand based structural soil, drip irrigation and aeration

**PLANTED SIZE:** 6-6.5" caliper

**CURRENT SIZE:** 7.5-8" caliper, 22' + height

**PERFORMANCE:** 100% success, 18/18 trees in good health

**NOTES:** all trees have established very well and are increasing in caliper and canopy size quickly



At nursery during tagging (2020)



On site during construction (2022)



On site 2 years after completion (2024)



# Tree Planting Details

## Similar Detail Potter Street Green

### VOLPE USDOT TREE ASSESSMENT

Potter Street Green

**SPECIES:** mixed canopy trees - *Quercus rubra*, Red Oak; *Quercus macrocarpa*, Bur Oak; *Nyssa sylvatica*, Black Tupelo; *Quercus bicolor*, Swamp White Oak; *Acer saccharum*, Sugar Maple; *Liriodendron tulipifera*, Tulip Poplar; *Gymnocladus dioica*, Kentucky Coffee Tree; *Prunus subhirtella* var 'Autumnalis', Autumn Flowering Cherry  
(does not include all planted tree species)

**NURSERY LOCATION:** New Jersey and New York

**PLANTED LOCATION:** lawn area north of Potter Street sidewalk

**PLANTING CONDITIONS:** lawn/planting area - horticultural soil, drip irrigation; terrace - sand based structural soil, drip irrigation

**PLANTED SIZES:** canopy trees - 7-12" caliper; understory trees - 2-4" caliper

**PERFORMANCE:** 100% success, 58/60 trees in good health, 2/60 in fair condition

**NOTES:** high diversity in tree canopy, most species are establishing quickly and have grown 1-2+'' since planting



*Quercus rubra*, Red Oak & *Quercus macrocarpa*, Bur Oak  
After construction, 9-9.5" caliper (2024)



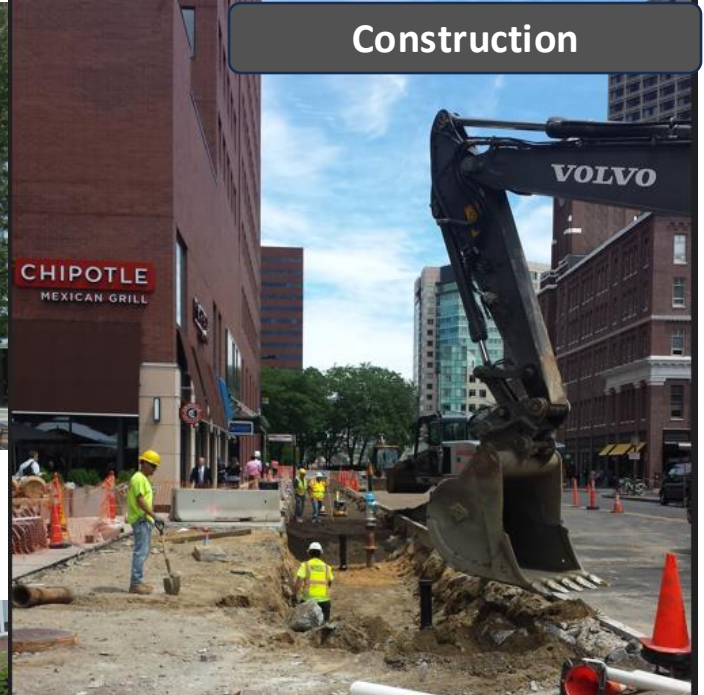
*Nyssa sylvatica*, Black Tupelo  
After construction, 8-8.5" caliper (2024)



*Prunus subhirtella* var 'Autumnalis', Autumn Flowering Cherry  
(Above) during construction, 4-4.5" caliper (2022)  
(Below) after construction, 5-5.5" caliper (2024)

# Tree Planting Details

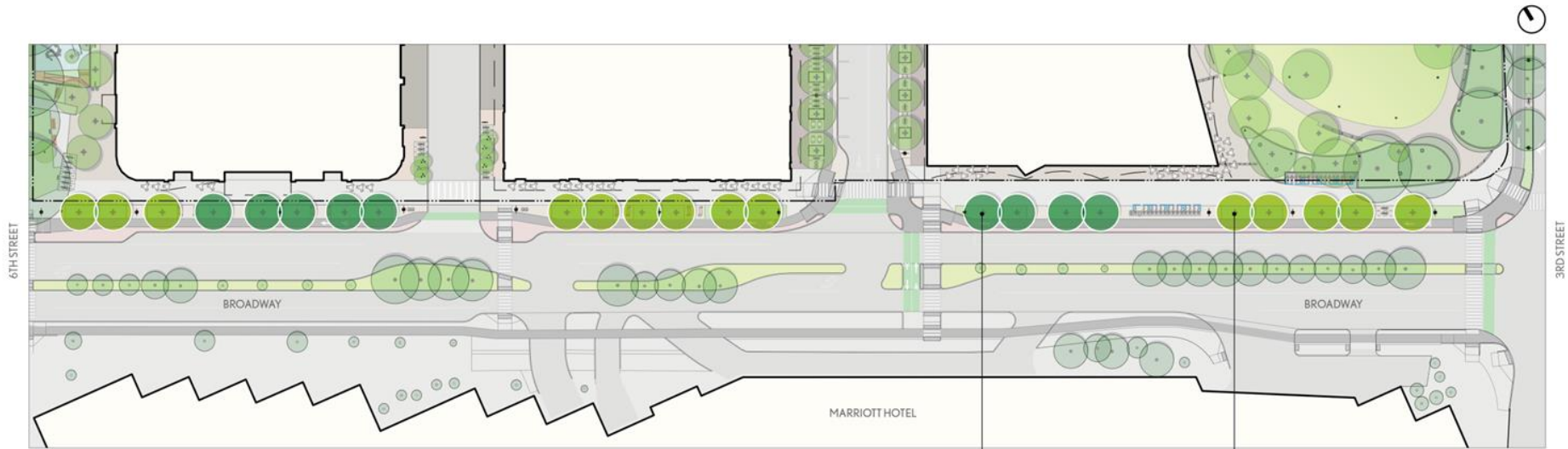
Similar Detail and Approach on Main Street – 2014 to 2024





# Tree Planting Details

## Proposed Tree Plantings



TULIP POPLAR



PIN OAK

### Alternate Species:

SWAMP WHITE OAK  
*QUERCUS BICOLOR*  
PRINCETON ELM  
*ULMUS AMERICANA 'PRINCETON'*  
KENTUCKY COFFEETREE  
*GYMNOCLADUS DIOICUS*

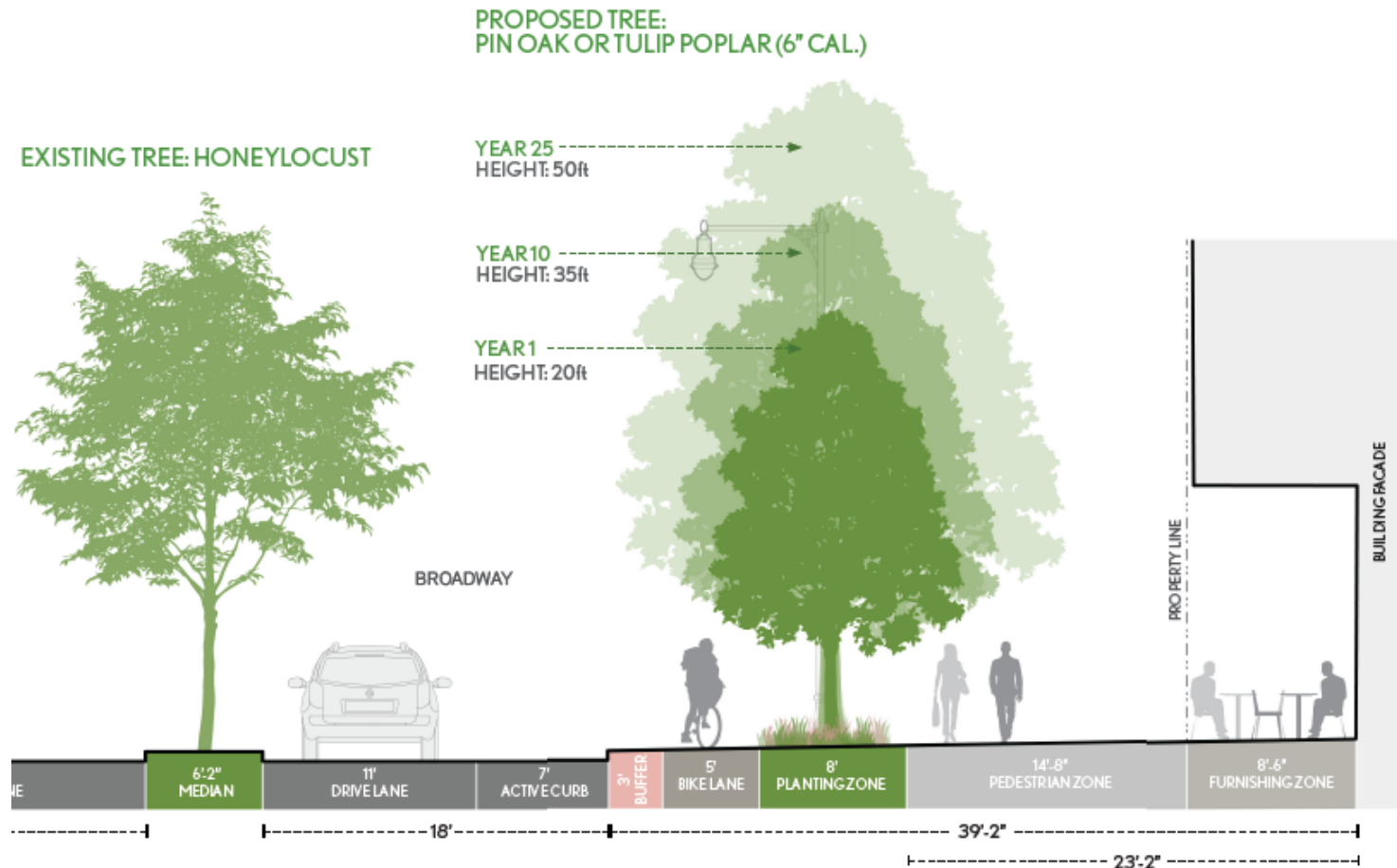
PIN OAK  
*QUERCUS PALUSTRIS*

TULIP POPLAR  
*LIRIODENDRON TULIPIFERA*

	TOTAL NUMBER OF TREES	TOTAL CALIPER INCHES
TULIP POPLAR	14	84"
PIN OAK	9	54"
TOTAL	23	138"

\*PROPOSED TREES TO BE PLANTED AT 6" CALIPER WITH 20' SPACING MINIMUM

# Tree Planting Details





# Next Steps

## Schedule

- 1. Committee on Public Planting Discussion – January 8, 2025**
- 2. Public Hearing on Removal of Public Shade Trees – Late January**
- 3. Kendall Common – Enabling work underway with C3 estimated for completion 2028. Begin Broadway replanting.**
- 4. Broadway Drain Line – Broadway construction 12 months to complete.**