

Tree Hearing

Somerville Ave Utility and Streetscape Improvements Project

Mayor Joseph A. Curtatone

Presented by

Steve MacEachern, Tree Warden, DPW Highways, City of Somerville,

Jess Fosbrook, PE, ENV SP, Project Manager, Capital Projects & Planning, City of Somerville

Rachel Burckardt, PE, Project Manager, WSP

Jason Bobowski, RLA, LEED AP, Senior Project Manager, Hatch

March 28th, 2018, Albert F. Argenziano School Cafeteria

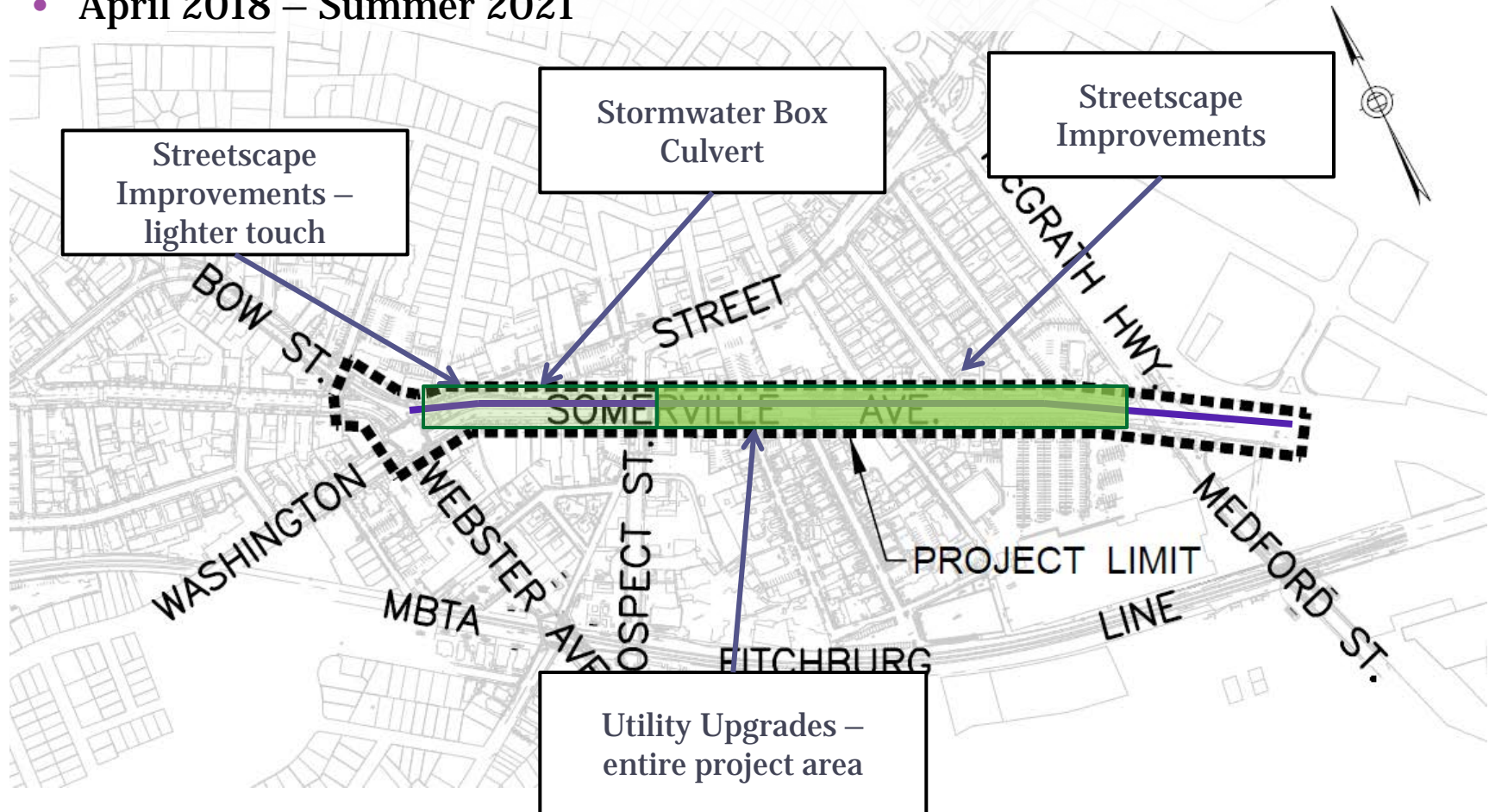
What We're Covering Tonight

- **Project Overview**
- **Trees to be Removed**
- **Estimated Timeline for Removals**
- **Project Tree Plantings**
- **Questions**

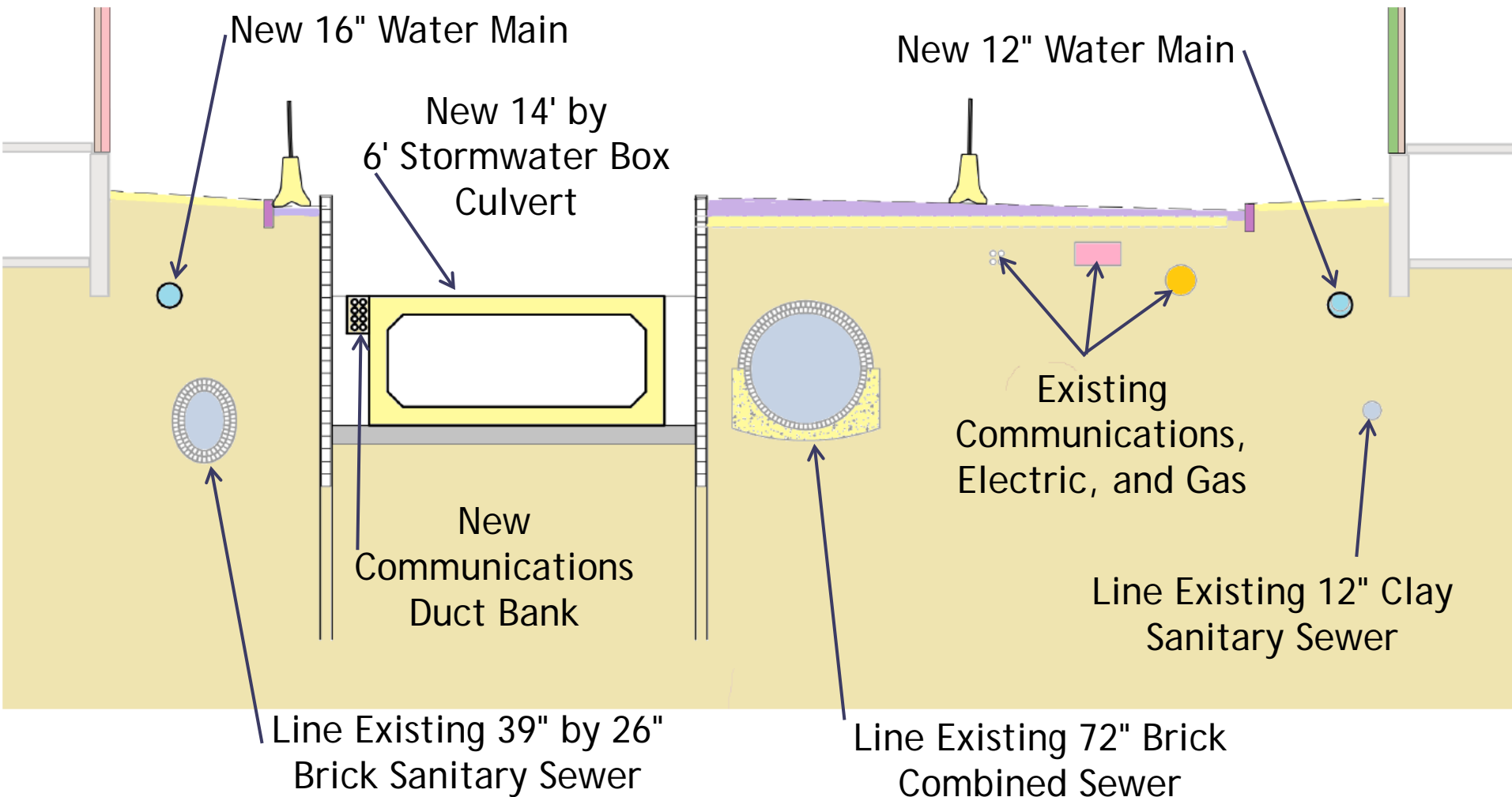
Project Extents

Construction timeframe:

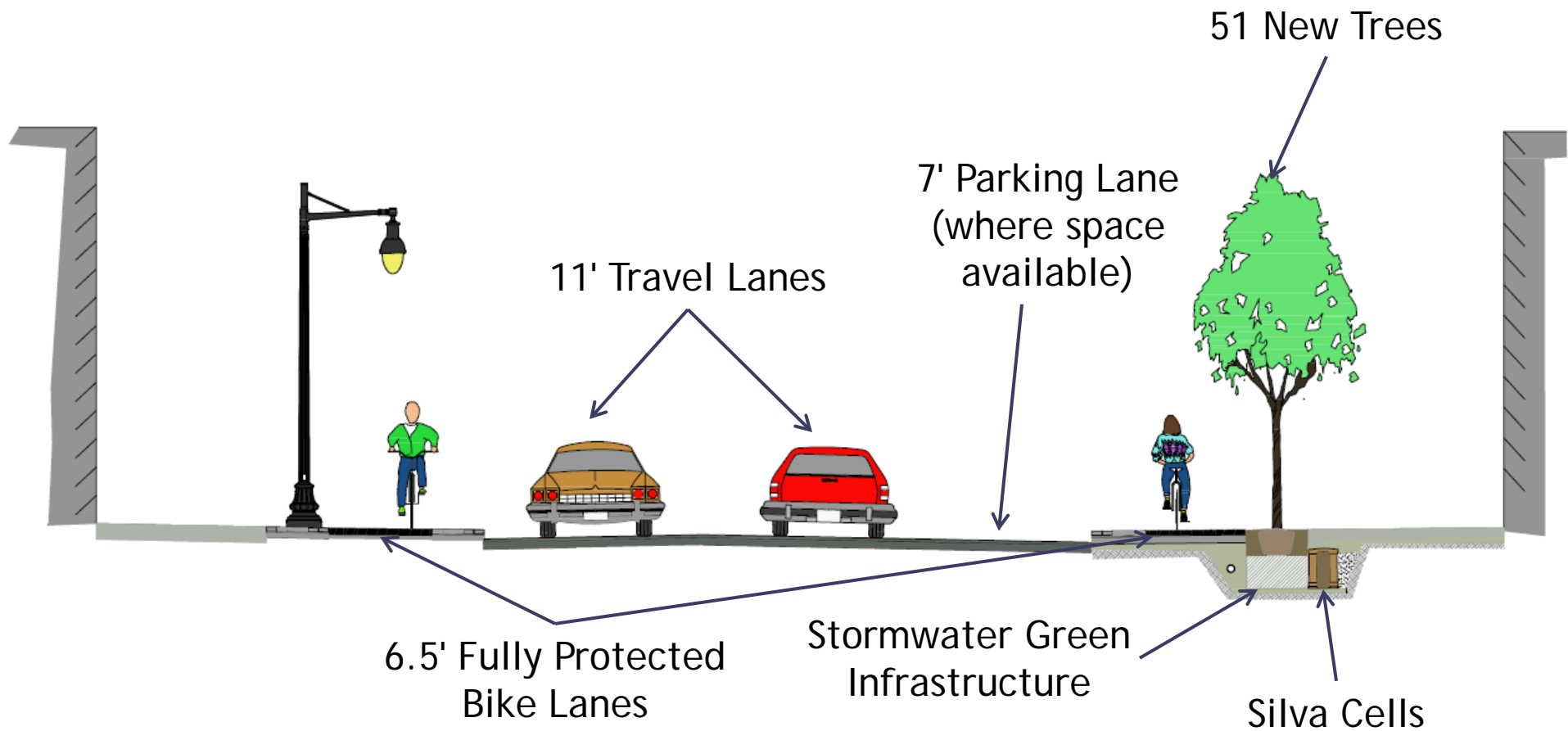
- April 2018 – Summer 2021



Box Culvert and Utilities - Cross-Section



Streetscape - Typical Section





CITY OF SOMERVILLE:
CONTRACT CP-2/CP-3 SEWER SEPARATION AND WATER REDEVELOPMENT
SOMERVILLE AVENUE TREE REMOVAL AND REPLACEMENT

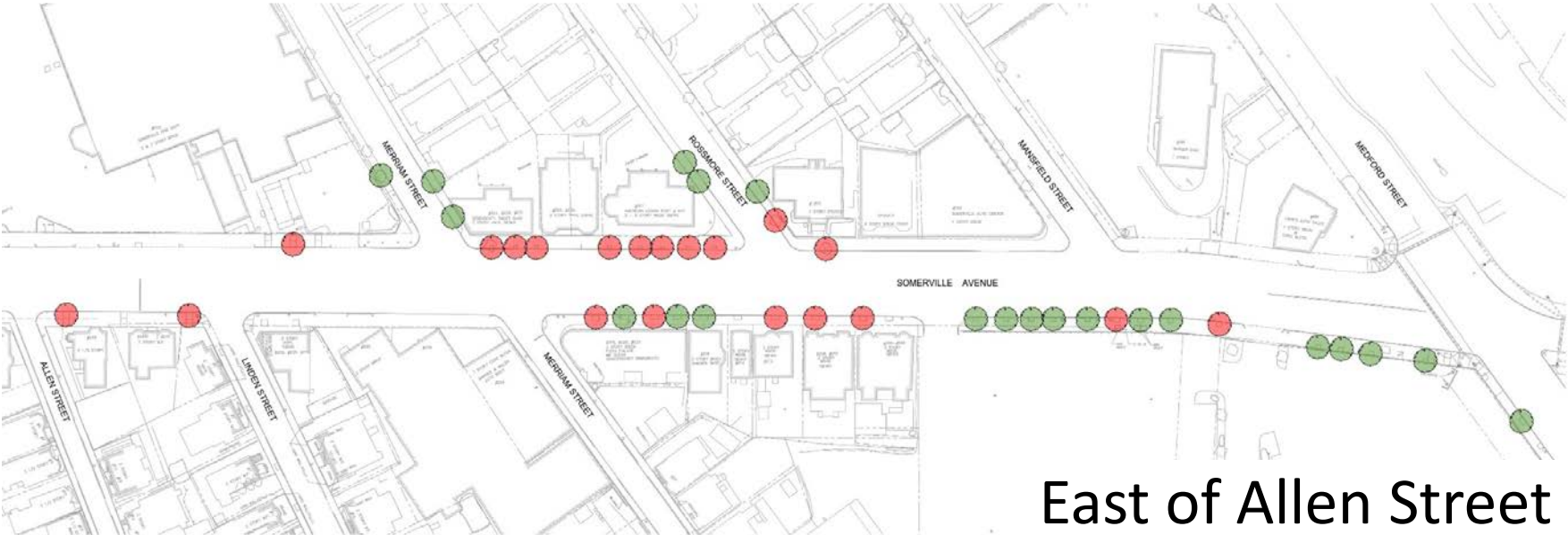
Trees Proposed for Removal (37)

Reasons for Removal

- Poor Health (15)
- Utility Conflicts (23)
 - Box Culvert (14)
 - Water Main (5)
 - Sewer Relocation (4)
- Circulation/ Grading Conflict (8)



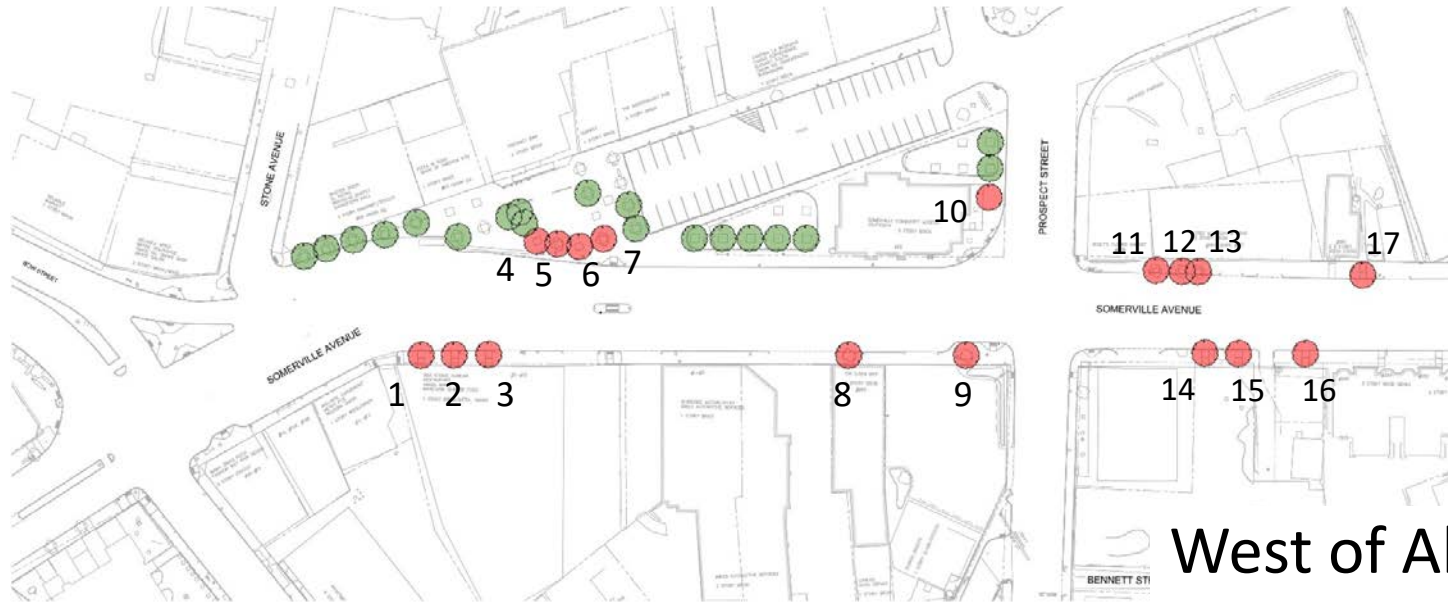
West of Allen Street



East of Allen Street

Trees Proposed for Removal

| # | Street Location | DBH | Type | Tree Health Issue |
|----|-------------------------------------|-----|-------------------|------------------------------------|
| 1 | 9 Union Square, Somerville Ave. (S) | 16" | Callery Pear | Poor condition, circulation |
| 2 | 9 Union Square, Somerville Ave. (S) | 11" | Callery Pear | Poor condition, circulation |
| 3 | 9 Union Square, Somerville Ave. (S) | 12" | Callery Pear | Poor condition, circulation |
| 4 | 66 Union Square Plaza (N) | 3" | Littleleaf Linden | Sewer relocation, severe decline |
| 5 | 66 Union Square Plaza (N) | 3" | Littleleaf Linden | Sewer relocation, poor condition |
| 6 | 66 Union Square Plaza (N) | 4" | Littleleaf Linden | Sewer relocation, severe decline |
| 7 | 66 Union Square Plaza (N) | 10" | Callery Pear | Sewer relocation |
| 8 | 290 Somerville Ave. (N) | 18" | Callery Pear | Circulation/grading |
| 9 | 290 Somerville Ave. (N) | 20" | Callery Pear | Trunk damage, leaning |
| 10 | 90 Union Square | 13" | Linden | Top growth dieback |
| 11 | 267-271 Somerville Ave. (N) | 7" | Red Maple | Box Culvert |
| 12 | 267-271 Somerville Ave. (N) | 5" | Red Maple | Box Culvert, nearly dead |
| 13 | 267-271 Somerville Ave. (N) | 7" | Red Maple | Box Culvert, decline, trunk damage |
| 14 | D2 Parcel (S) | 10" | Honey locust | Water Main |
| 15 | D2 Parcel (S) | 10" | Honey locust | Water Main |
| 16 | 4 Milk Pl. (S) | 12" | Norway Maple | Water Main, severe decline |
| 17 | 261 Somerville Ave. (N) | 11" | Norway Maple | Box Culvert, decline, trunk damage |
| 18 | 248 Somerville Ave. (S) | 13" | Norway Maple | Water Main |
| 19 | 244 Somerville Ave. (S) | 12" | Norway Maple | Water Main, severe decline |
| 20 | 255 Somerville Ave. (N) | 3" | Zelkova | Box Culvert |
| 21 | 227 Somerville Ave. (N) | 12" | London Plane | Box Culvert |
| 22 | 227 Somerville Ave. (N) | 10" | London Plane | Box Culvert |
| 23 | 229 Somerville Ave. (N) | 15" | London Plane | Box Culvert |
| 24 | 218 Somerville Ave. (S) | 6" | Callery Pear | Growth/habit |
| 25 | 218 Somerville Ave. (S) | 4" | Callery Pear | Growth/habit |
| 26 | 217 Somerville Ave. (N) | 13" | London Plane | Box Culvert |
| 27 | 217 Somerville Ave. (N) | 11" | London Plane | Box Culvert |
| 28 | 217 Somerville Ave. (N) | 11" | London Plane | Box Culvert |
| 29 | 217 Somerville Ave. (N) | 9" | London Plane | Box Culvert |
| 30 | 217 Somerville Ave. (N) | 9" | London Plane | Box Culvert |
| 31 | 203 Somerville Ave. (N) | 13" | Linden | Circulation/grading |
| 32 | 203 Somerville Ave. (N) | 4" | Tree Lilac | Box Culvert |
| 33 | 212 Somerville Ave. (S) | 10" | Shingle Oak | Circulation/grading |
| 34 | 210 Somerville Ave. (S) | 10" | Shingle Oak | Circulation/grading |
| 35 | 206 Somerville Ave. (S) | 8" | Callery Pear | Circulation/grading |
| 36 | 174 Somerville Ave. (S) | 6" | Honey locust | Decline |
| 37 | 174 Somerville Ave. (S) | 11" | Honey locust | Decline |



West of Allen Street



East of Allen Street

Estimated Timeline for Removals

2018 Construction Season

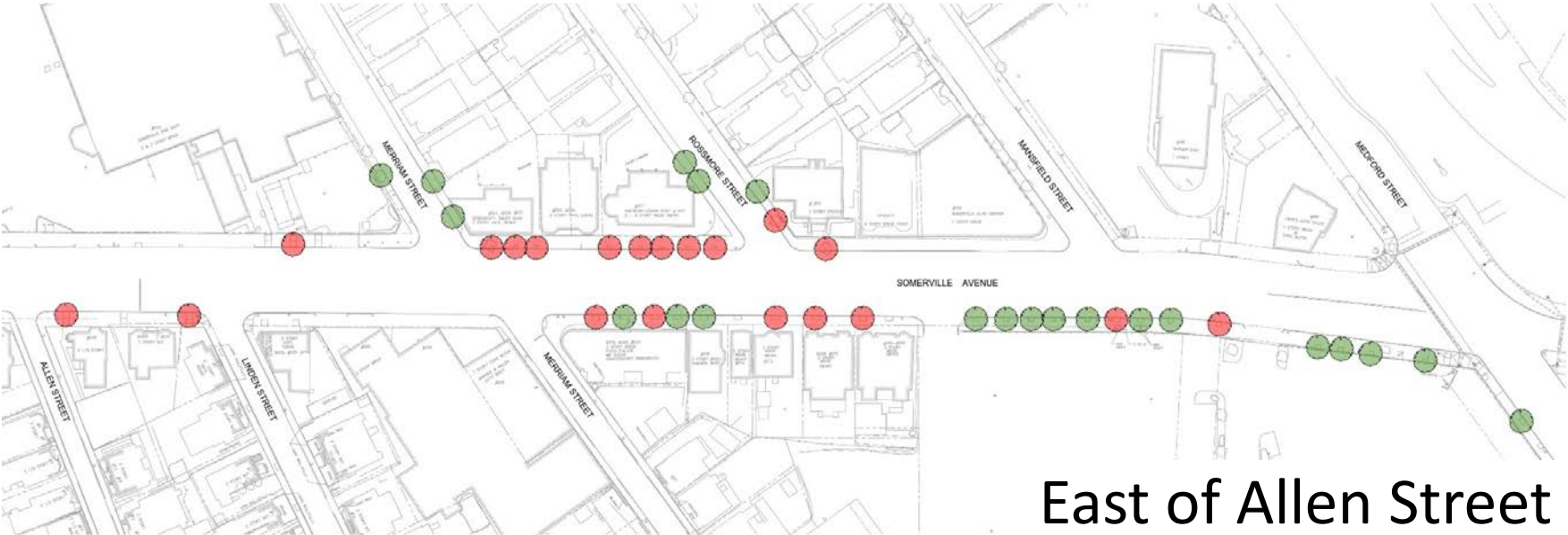
- 17 trees west of Allen Street



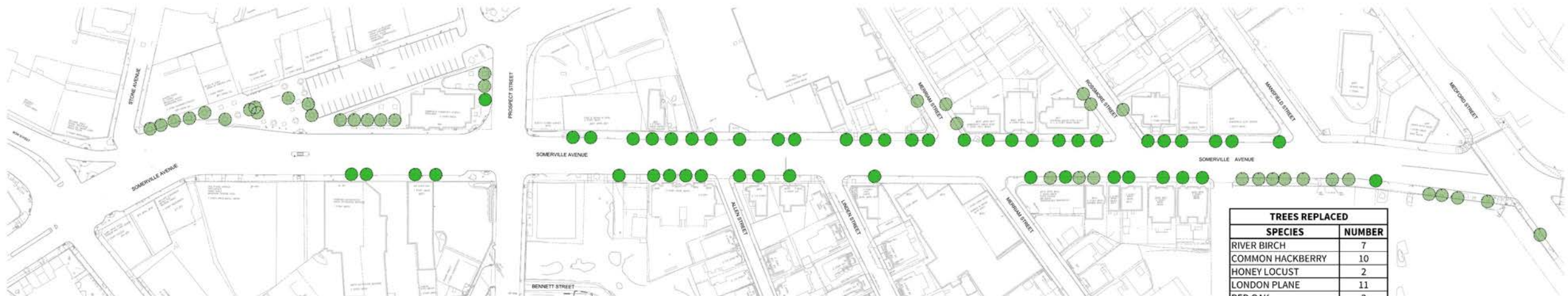
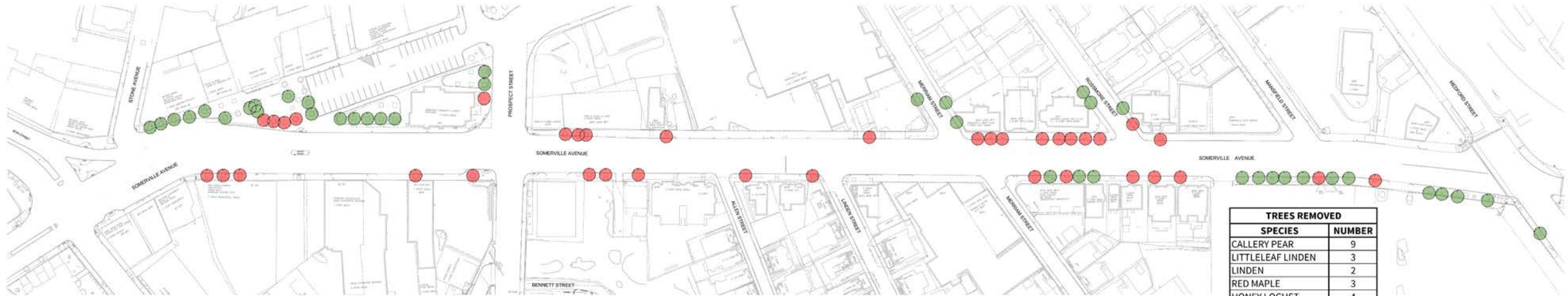
West of Allen Street

2019 Construction Season

- 20 trees east of Allen Street

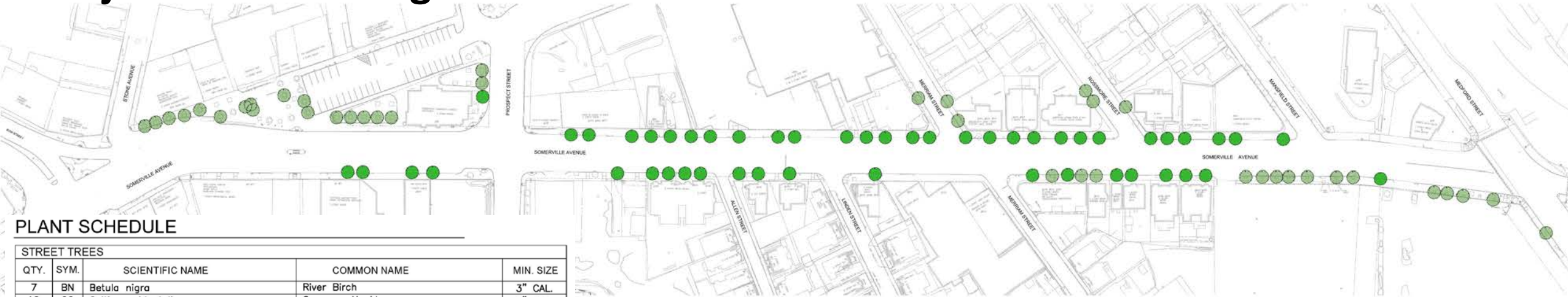


East of Allen Street





Project Tree Plantings



PLANT SCHEDULE

| STREET TREES | | | | |
|--------------|-------|---|------------------------------|-----------|
| QTY. | SYM. | SCIENTIFIC NAME | COMMON NAME | MIN. SIZE |
| 7 | BN | <i>Betula nigra</i> | River Birch | 3" CAL. |
| 10 | CO | <i>Celtis occidentalis</i> | Common Hackberry | 3" CAL. |
| 2 | GT | <i>Gleditsia tricanthos</i> var. <i>inermis</i> | Thornless Honeylocust | 3" CAL. |
| 11 | PA | <i>Platanus x acerifolia</i> 'Bloodgood' | 'Bloodgood' London Planetree | 3" CAL. |
| 3 | QA | <i>Quercus rubra</i> | Red Oak | 3" CAL. |
| 4 | QB | <i>Quercus bicolor</i> | Swamp White Oak | 3" CAL. |
| 5 | TA | <i>Tilia americana</i> | American Linden | 3" CAL. |
| 9 | UA | <i>Ulmus americana</i> 'Princeton' | 'Princeton' American Elm | 3" CAL. |
| 51 | TOTAL | | | |

| SHRUBS | | | | |
|--------|-------|--|--------------------------|-----------|
| QTY. | SYM. | SCIENTIFIC NAME | COMMON NAME | MIN. SIZE |
| 63 | JH | <i>Juniperus horizontalis</i> 'Bar Harbor' | 'Bar Harbor' Juniper | 18" HT. |
| 100 | RA | <i>Rhus aromatica</i> 'Gro-low' | 'Gro-low' Fragrant Sumac | 18" HT. |
| 179 | TOTAL | | | |

| PERENNIALS | | | | | |
|------------|-------|---|---------------------------|----------|-----------|
| QTY. | SYM. | SCIENTIFIC NAME | COMMON NAME | SPACING | MIN. SIZE |
| 80 | AT | <i>Asclepias tuberosa</i> | Butterfly Milkweed | 12" O.C. | #2 |
| 80 | IV | <i>Iris versicolor</i> | Blue Flag Iris | 12" O.C. | #2 |
| 20 | MF | <i>Monarda fistulosa</i> | Wild Bergamot | 12" O.C. | #2 |
| 91 | OF | <i>Oenothera fruticosa</i> | Sundrops | 12" O.C. | #2 |
| 67 | PD | <i>Penstemon digitalis</i> | Beardtongue | 12" O.C. | #2 |
| 16 | PT | <i>Porteranthus trifolatus</i> | Bowman's Root | 24" O.C. | #2 |
| 157 | RH | <i>Rudbeckia hirta</i> | Black-eyed Susan | 12" O.C. | #2 |
| 939 | SE | <i>Symphotrichum ericoides</i> 'Snow Flurry' | 'Snow Flurry' Heath Aster | 12" O.C. | #2 |
| 162 | SN | <i>Symphotrichum novae-angliae</i> | New England Aster | 12" O.C. | #2 |
| 26 | VL | <i>Veronica lettermannii</i> 'Iron Butterfly' | 'Iron Butterfly' Ironweed | 24" O.C. | #2 |
| 49 | ZA | <i>Zizia aurea</i> | Golden Alexanders | 12" O.C. | #2 |
| 1687 | TOTAL | | | | |

| GRASSES & FERNS | | | | | |
|-----------------|-------|--------------------------------------|--------------------------|-------------------|-----------|
| QTY. | SYM. | SCIENTIFIC NAME | COMMON NAME | ON CENTER SPACING | MIN. SIZE |
| 289 | AV | <i>Andropogon virginicus</i> | Broomsedge | 12" O.C. | QUART |
| 2522 | ES | <i>Eragrostis spectabilis</i> | Purple Love Grass | 12" O.C. | QUART |
| 103 | JE | <i>Juncus effusus</i> | Soft Rush | 12" O.C. | QUART |
| 74 | PV | <i>Panicum virgatum</i> 'Shenandoah' | 'Shenandoah' Switchgrass | 18" O.C. | QUART |
| 291 | SS | <i>Schizachyrium scoparium</i> | Little Bluestem | 12" O.C. | QUART |
| 3279 | TOTAL | | | | |

New Tree Plantings

- 51 trees (including 41 native species) planted in expanded tree pits
- Soil volume maximized through structural Silva Cells
- Porous and permeable pavements over expanded soil areas for water/air exchange
- Subsurface drip irrigation for tree support during droughts
- Installation timeline: Spring/Fall 2020



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Questions?

Contact Info:

Jessica Fosbrook, Project Manager – Utilities

jfosbrook@somervillema.gov

617-625-6600 ext. 5124

Jackie Rossetti, Deputy Director of Communications

jrossetti@somervillema.gov

617-625-6600 ext 2614

Steve MacEachern, Tree Warden

SMacEachern@somervillema.gov

617-625-6600 ext 5510

Website:

<http://www.somervillema.gov/somervilleave>

Tree Inventory

<https://somervillema.treekeepersoftware.com/index.cfm>