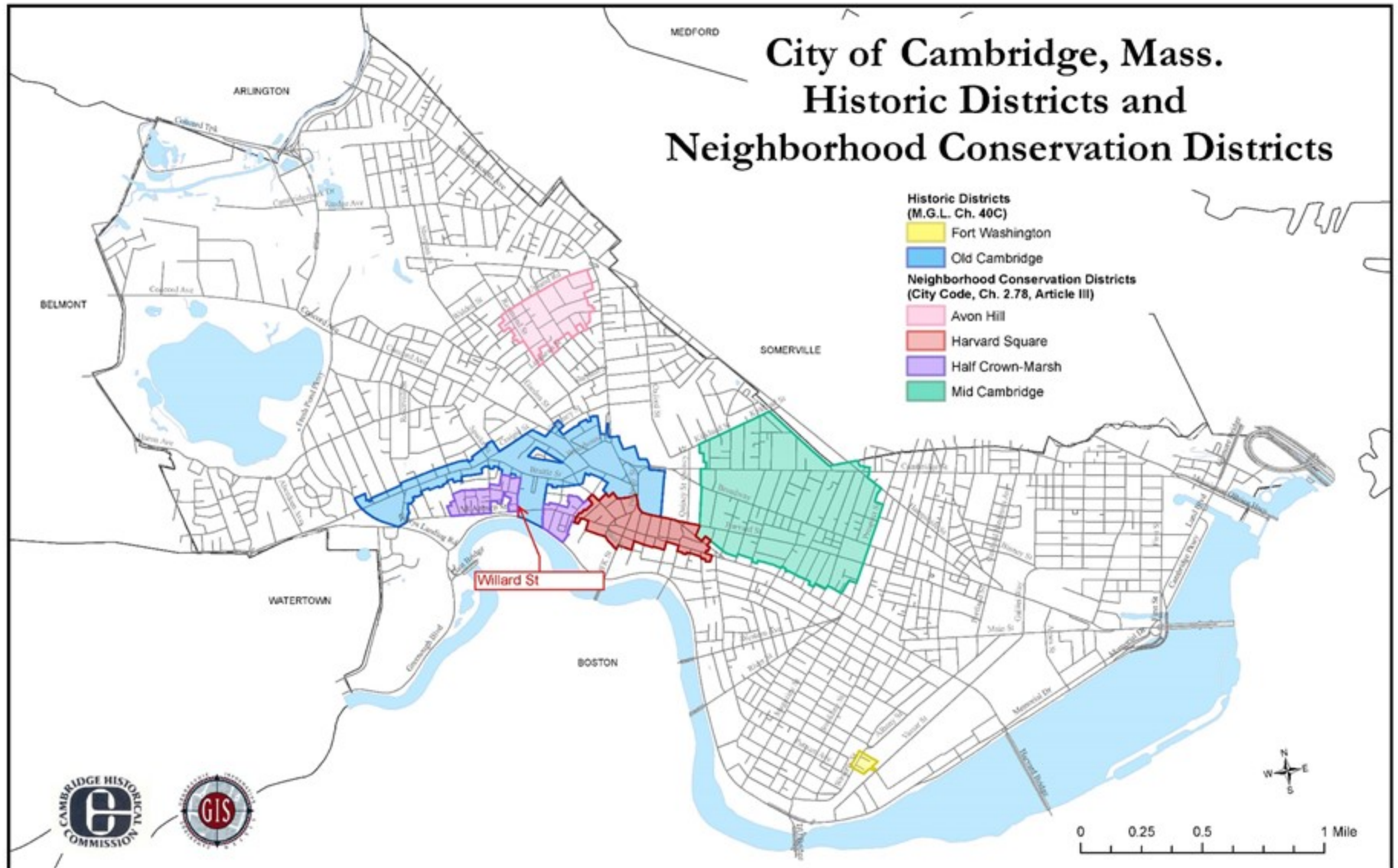


Willard Street Drainage Improvement Project

Cambridge Historic Commission Hearing

July 12, 2018

CAMBRIDGE HISTORIC COMMISSION BOUNDARY MAP



Project Location

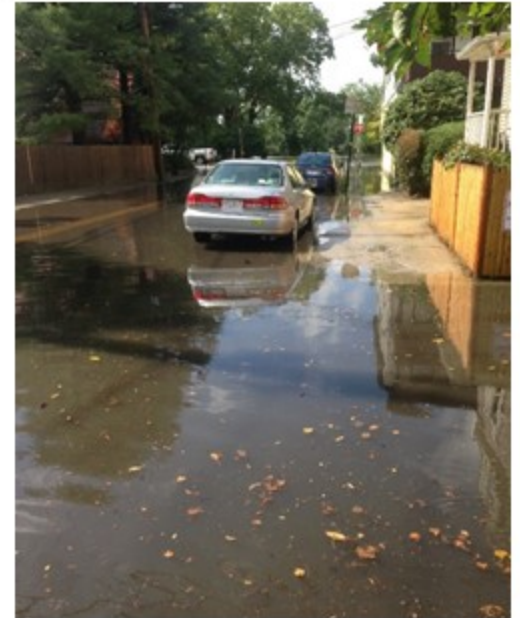


Reasons for Project

1. Stormwater Deficiencies

Reduce periodic flooding in Willard Street neighborhood

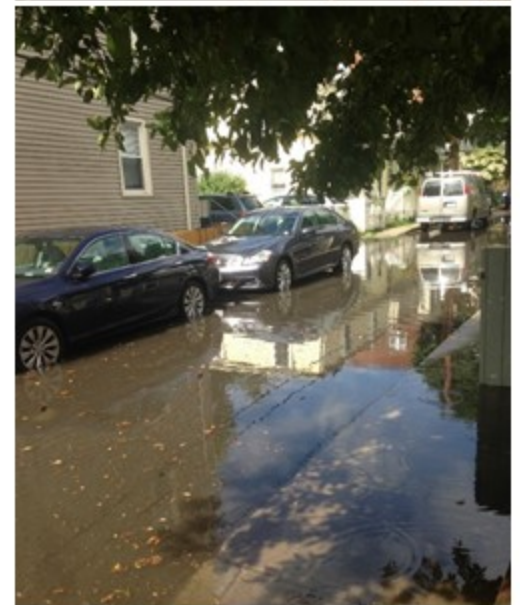
- Insufficient hydraulic capacity
- Aging stormwater infrastructure
- Nuisance flooding during significant storm events.



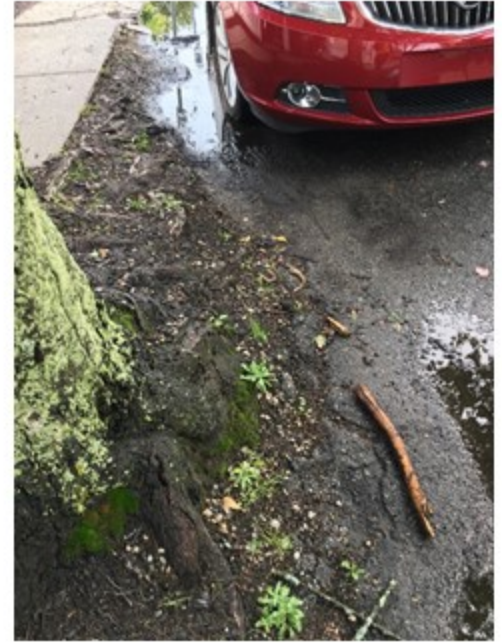
2. Surface Deficiencies

Improve Transportation and Streetscape Conditions

- Narrow, inaccessible sidewalks
- No designated bicycle accommodations
- Cut-through traffic / speed issues
- “Missing” Crosswalks
- Deteriorated Hardscape/landscape



Existing Conditions



Proposed Improvements

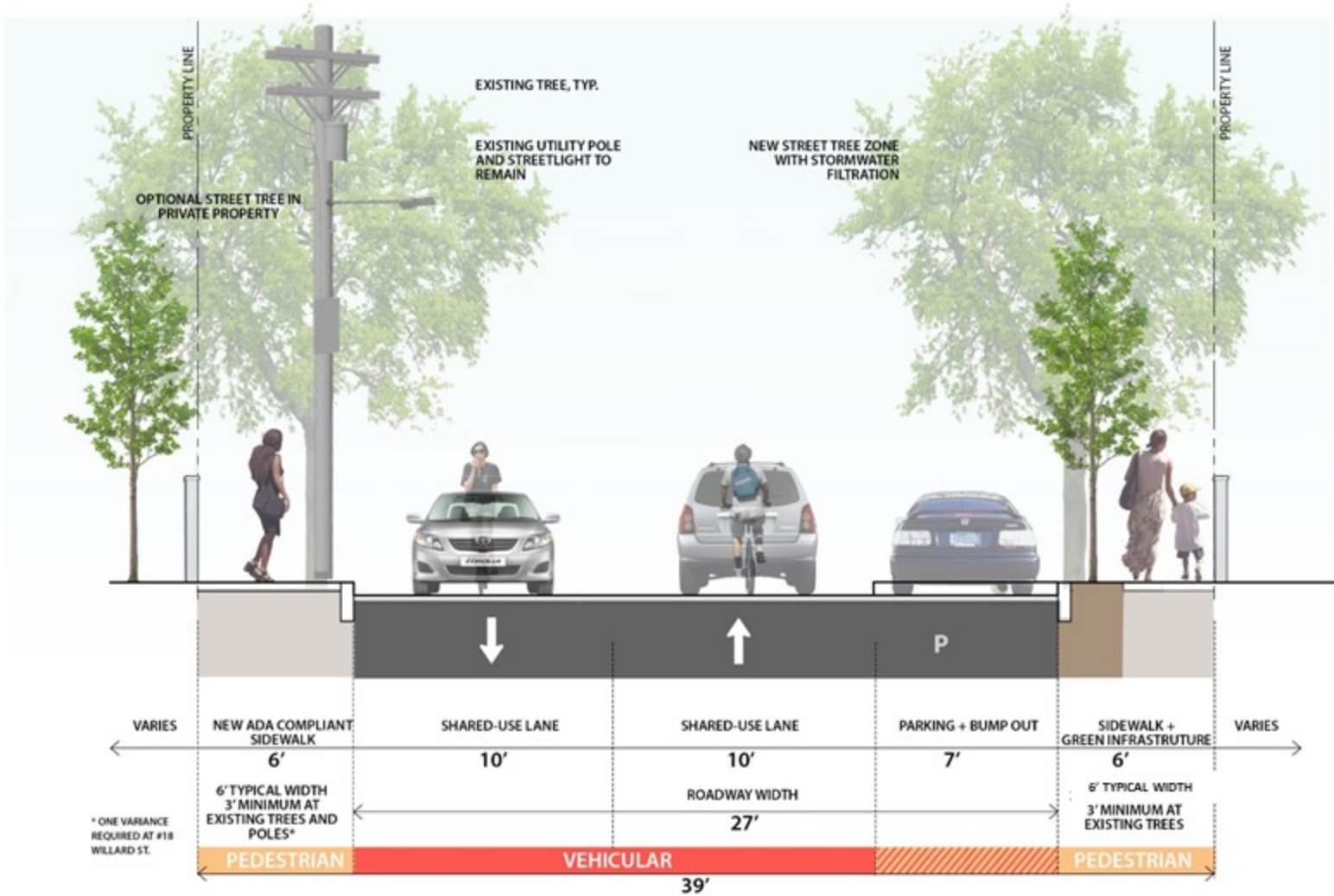
1. Stormwater / Flooding

- Replace aging/undersized sewer and stormwater pipes
- Re-establish direct stormwater outfall to Charles River
- Introduce “Green Infrastructure” to improve stormwater quality

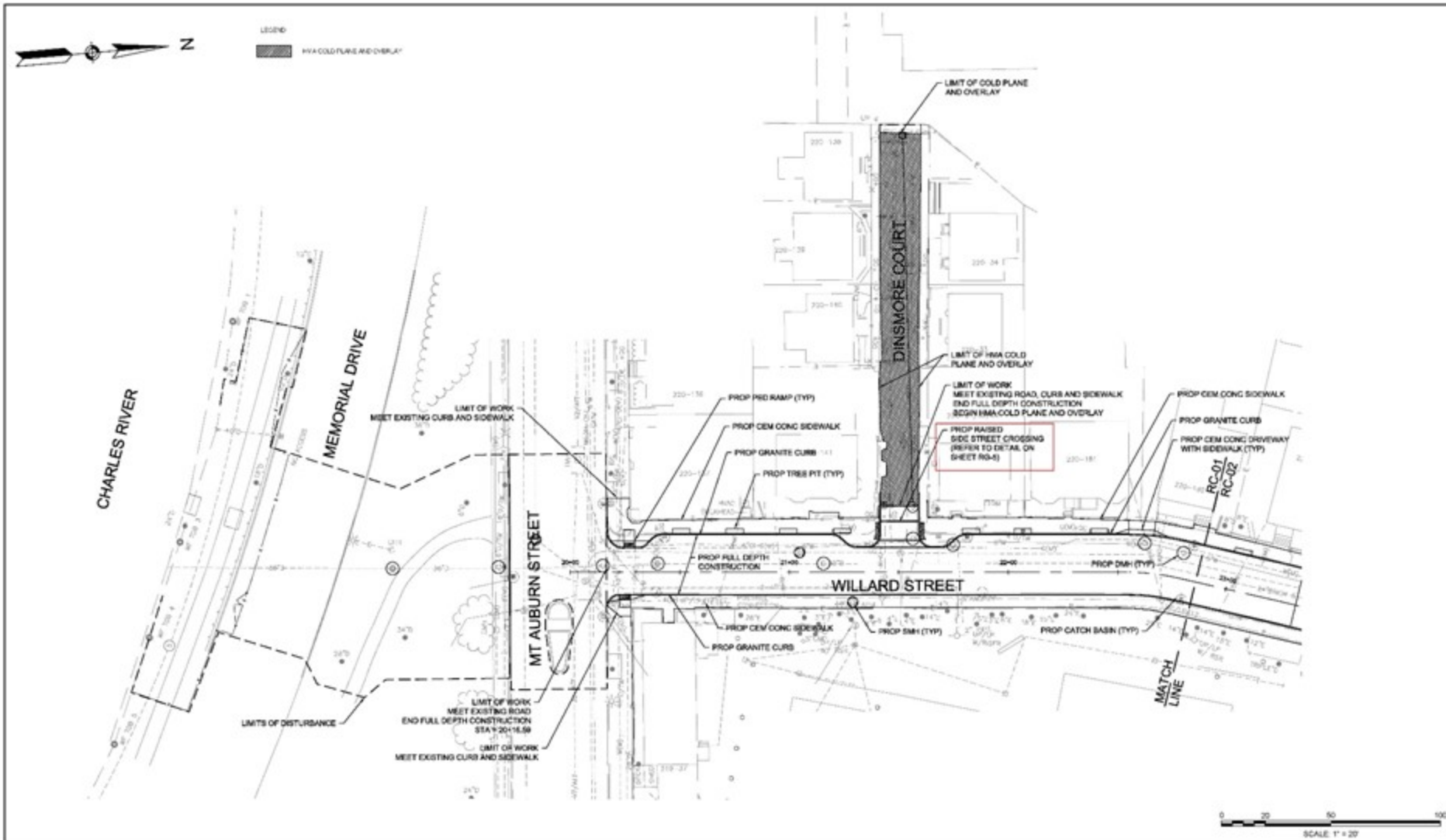
2. Surface Infrastructure

- Rebuild sidewalks and ramps to be ADA-compliant
- Provide traffic calming elements
- Add and enhance crosswalks
- Designate bicycle facilities (shared lane)
- Additional trees and landscaping

PROPOSED CROSS-SECTION (Looking South to Mt. Auburn Street)



CONSTRUCTION PLAN - 1



HOR ENGINEERING, INC.
 99 HIGH STREET, SUITE 2300
 BOSTON, MASSACHUSETTS 02110-2378
 (617) 557-7700

No.	Description	Date	Checked by	Approved by

CITY OF CAMBRIDGE, MA

WILLARD STREET
 DRAINAGE IMPROVEMENTS PROJECT

ROADWAY CONSTRUCTION PLAN - 1

Sheet

RC-01

Total Sheets

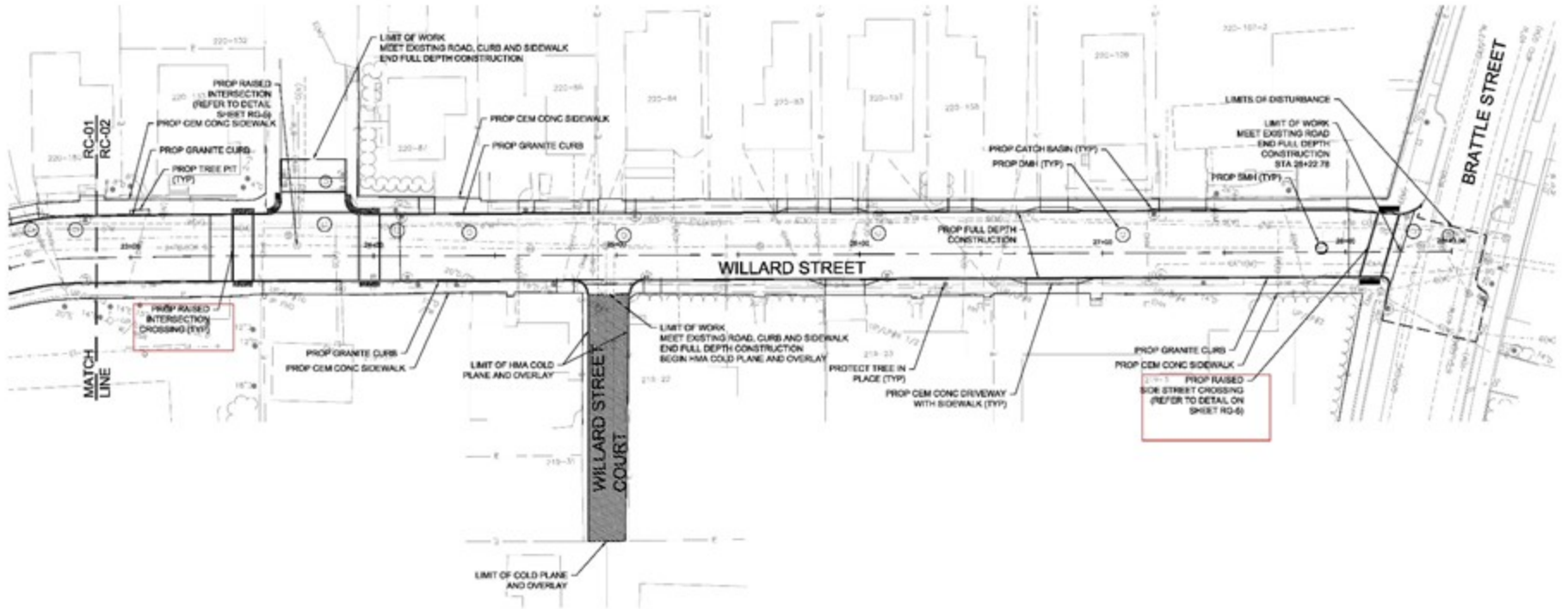
1

File No.

CONSTRUCTION PLAN - 2



LEGEND
 HMA COLD PLANE, PROPOSED LAY



0 20 40 60 80 100
 SCALE: 1" = 20'



HR ENGINEERING, INC.
 99 HIGH STREET, SUITE 2300
 BOSTON, MASSACHUSETTS 02110-2378
 (617) 557-7700

No.	Description	Date	Checked by	Approved by

Client	CITY OF CAMBRIDGE, MA
Project	WILLARD STREET DRAINAGE IMPROVEMENTS PROJECT
Sheet	RC-02
Total Sheets	
File No.	ROADWAY CONSTRUCTION PLAN - 2

OVERALL PLAN



PROPOSED MATERIALS

Concrete sidewalk; curb extension; granite curb; raised side-street treatment



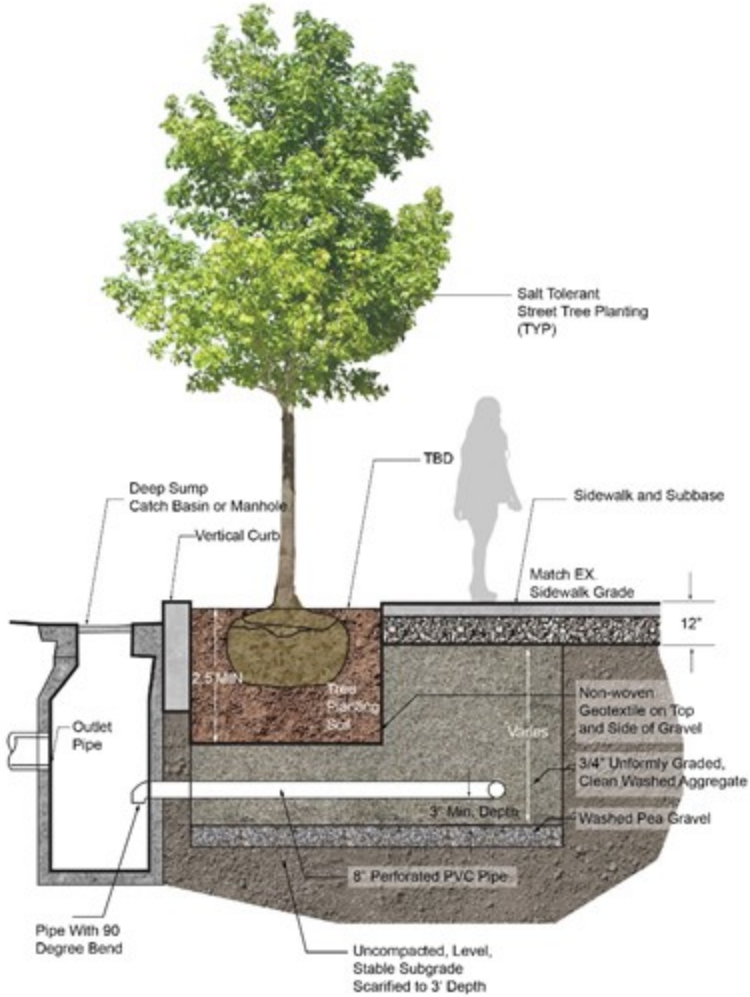
PROPOSED MATERIALS

Raised intersection



PROPOSED MATERIALS

Stormwater Tree Trenches



STORMWATER TREE TRENCH CROSS SECTION
NOT TO SCALE



PROPOSED STREET TREES - OPTIONS



Gleditsia triacanthos
Honey Locust



Liquidambar styraciflua
Sweet Gum



Nyssa sylvatica
Black Gum

Questions and Discussion