

WATER

SUPPLY, DEMAND & DISTRIBUTION

June 11, 2024
Planning Board
Utility Infrastructure Planning

City Water Department ,
Managing Director
Mark Gallagher,
mgallagher@cambridgema.gov

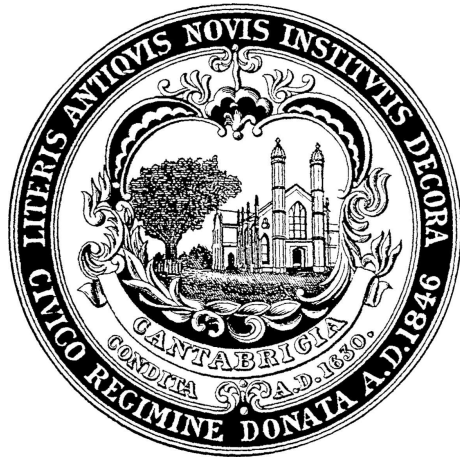


WATER

SUPPLY, DEMAND & DISTRIBUTION

September 10, 2024
Water Board
Managing Directors Update

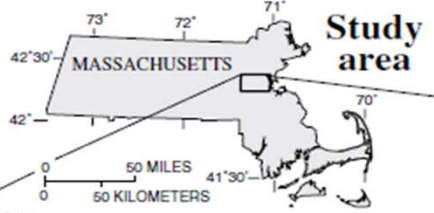




Land Acquisition Opportunity, Cambridge Watershed, Lexington, MA

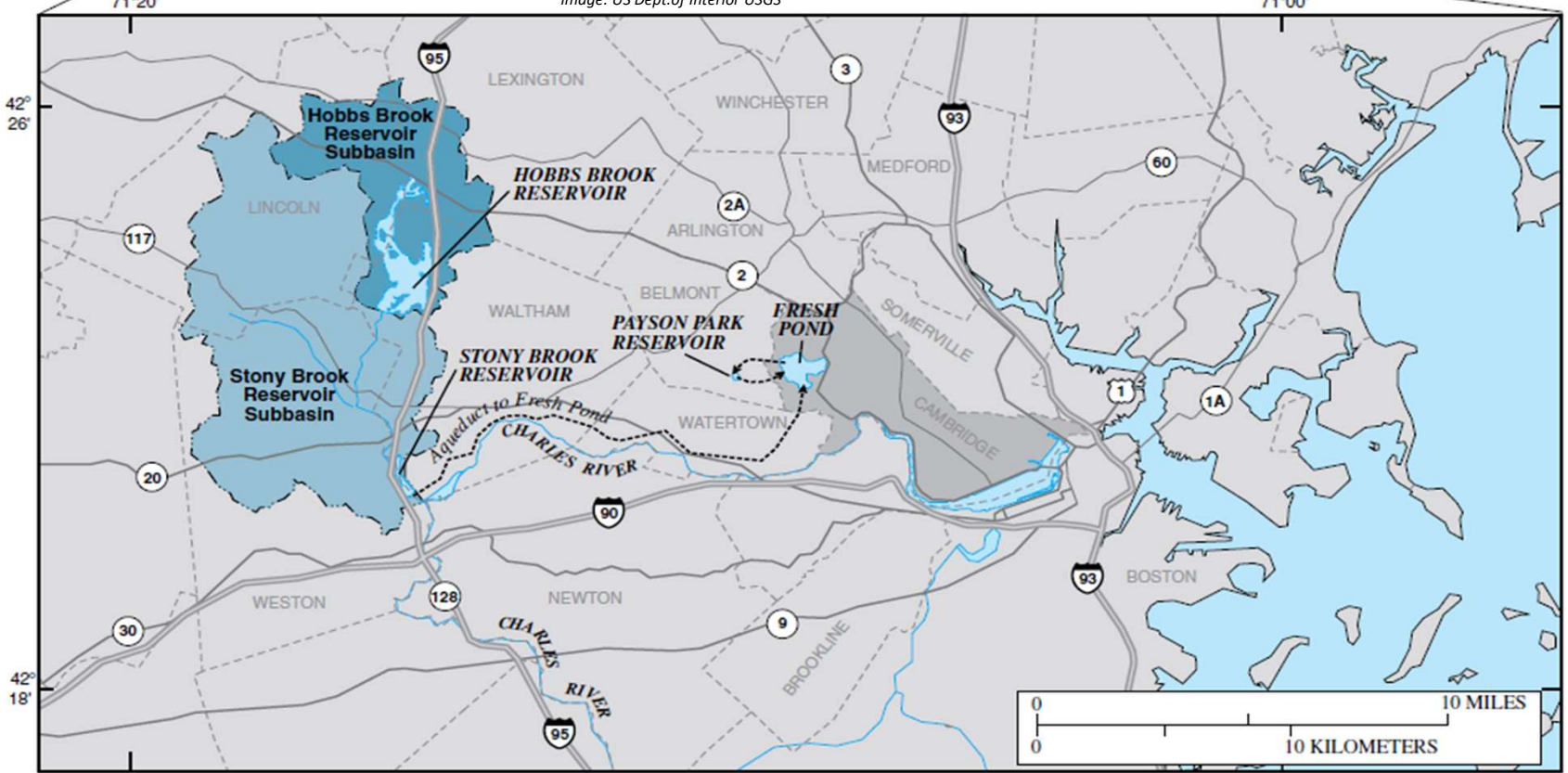
May 13, 2024

Source of Supply



- EXPLANATION**
- HOBBS BROOK RESERVOIR SUBBASIN
 - STONY BROOK RESERVOIR SUBBASIN
 - CITY OF CAMBRIDGE
 - CITY/TOWN BOUNDARIES
 - ROADS
 - DRINKING WATER FLOW PATH

Image: US Dept. of Interior USGS



Land Acquisition Program

Total Watershed Area

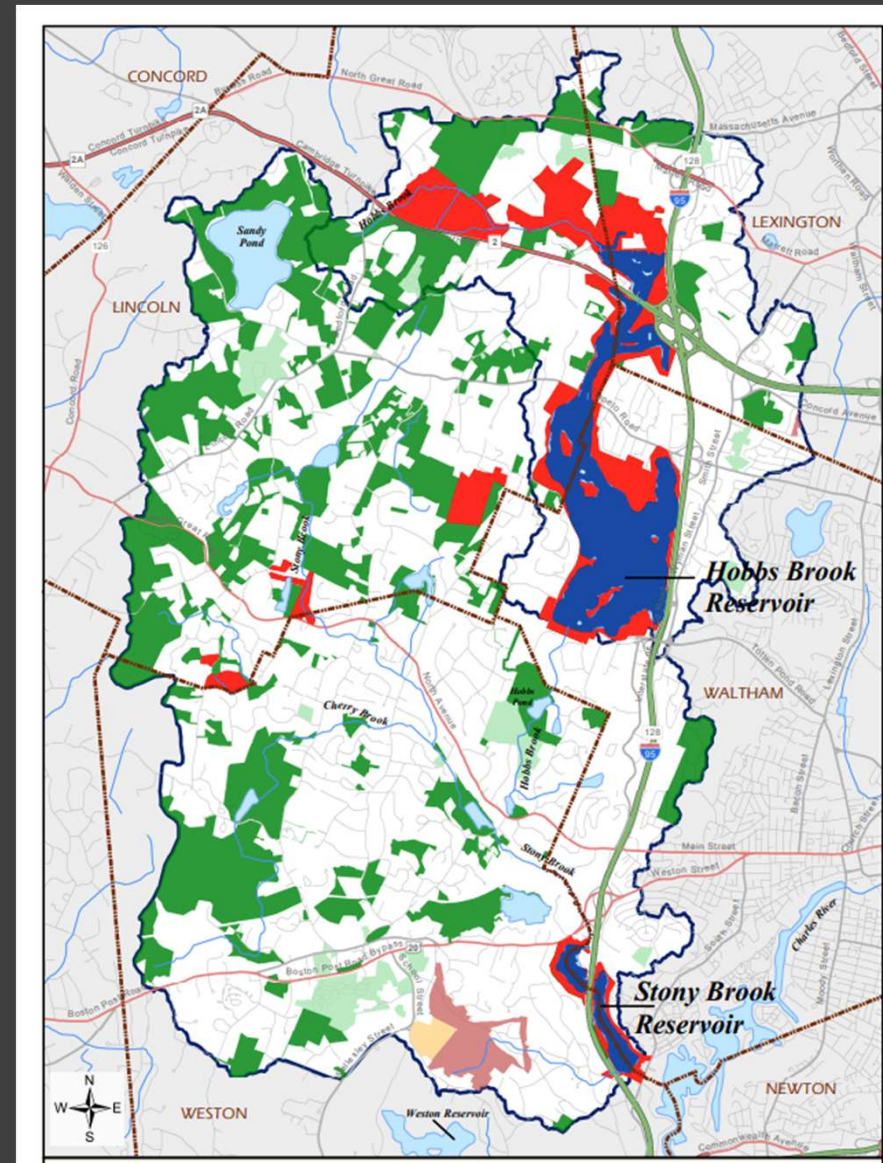
~15,000 Acres = 24 square miles

Total Cambridge Ownership

~1,500 Acres = 2.4 square miles

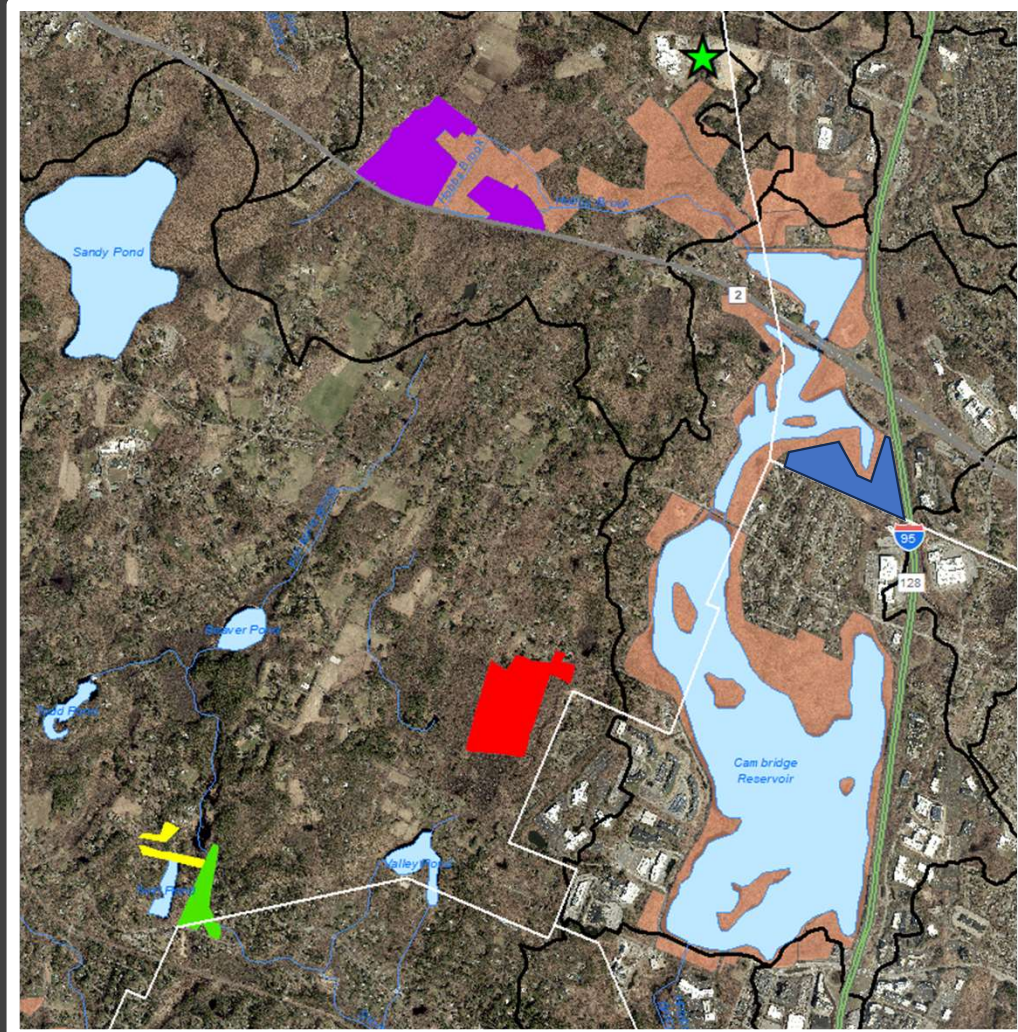
~10% of Land Area Owned/Controlled
by the City

Including Cambridge land, **~25%** of the
watershed is protected open space in
perpetuity



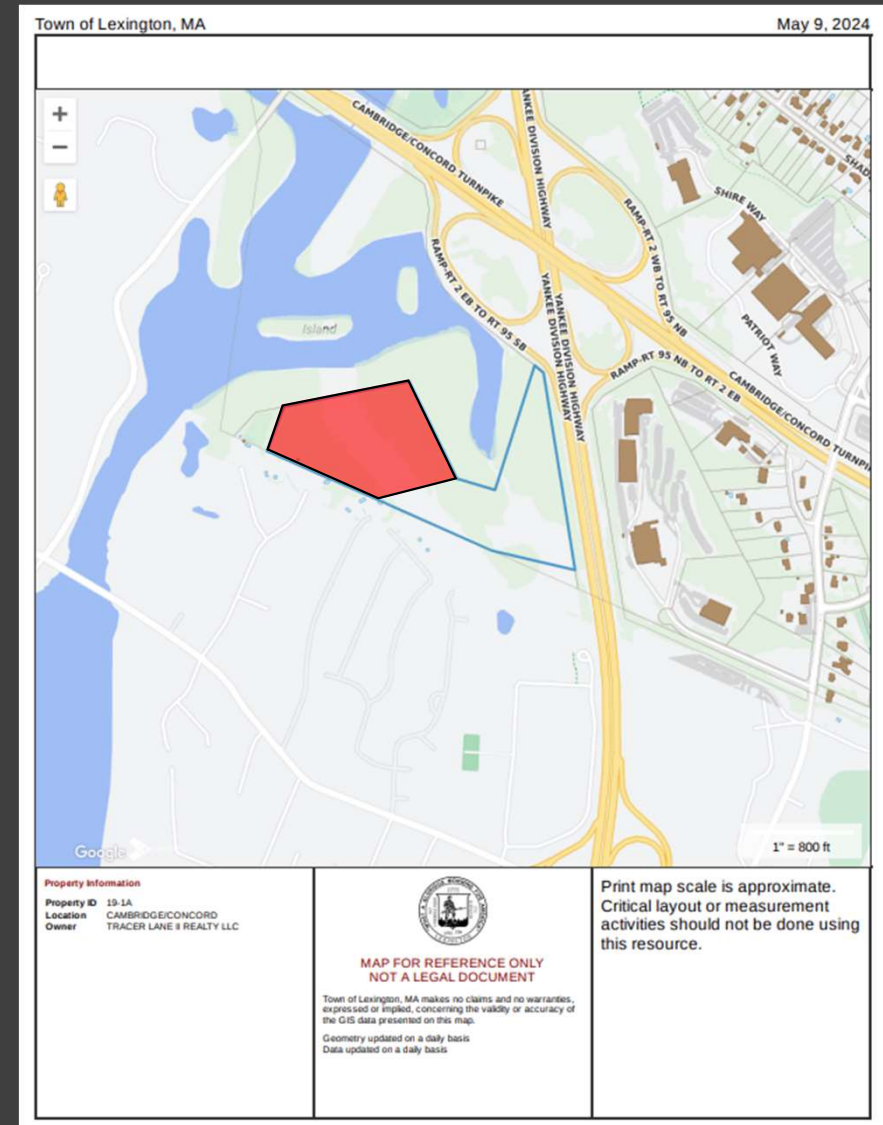
“Recent” Acquisitions

- Harrington Property (2005) ~16 Acres Acquired + Surrounding Conservation Parcels (54 acres total)
- DeNormandie + Flint (2012) ~74 Acres
- Rando/Stankard (Jerodel) Parcel (2015) ~ 54 Acres
- Twin Pond Lane Parcels (2022) ~8 acres



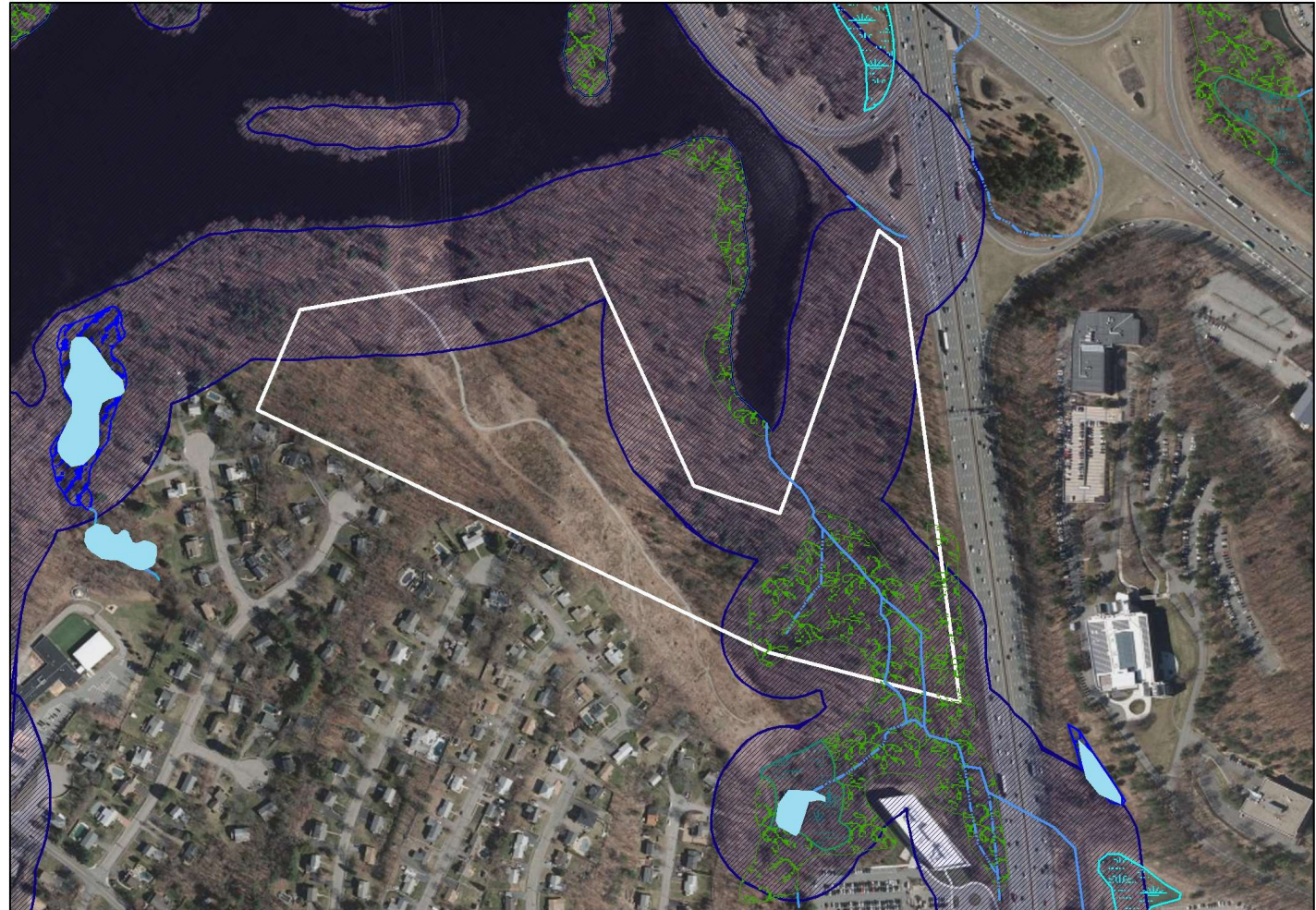
Solar Farm Development Proposal

- ~31 Acre Parcel
- 1 MW ground-mounted solar on 5.5 acres of the parcel
- Removal of ~1,040 trees > 6" DBH on moderate to steep slopes
- Requires a stormwater management system and perpetual maintenance to ensure its success



Water Supply Resources

- ~18.5 Acres Zone A
- ~5 Acres (Outstanding Resource) Wetlands
- ~1,500 Linear Feet of Class-A Water Supply Streams



Source Data: MassGIS (Bureau of Geographic Information), Commonwealth of Massachusetts EOTSS

Date: 5/9/2024

Tracer Lane Solar Farm - Water Resources

0 125 250 500 Feet



Benefits of Acquisition

- Zone A – 60% of the parcel is within 200' of a tributary and 400' from the Reservoir
- Maintain wooded area
 - Stabilize steep slopes
 - Intercept and slow down runoff
- Expands the buffer to Hobbs Brook Reservoir
- Low cost of ownership
- Additional benefits
 - Climate change resiliency
 - Carbon sequestration
 - Maintain critical ecosystem services



Algonquin Meter Site Location Lincoln MA



Meter Skid Location

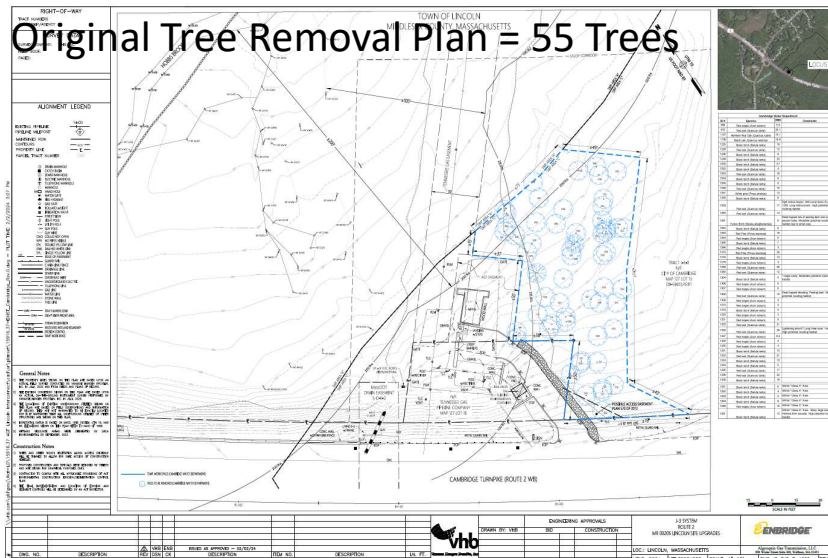
City of
Cambridge
Property

Town of Lincoln
Assessors

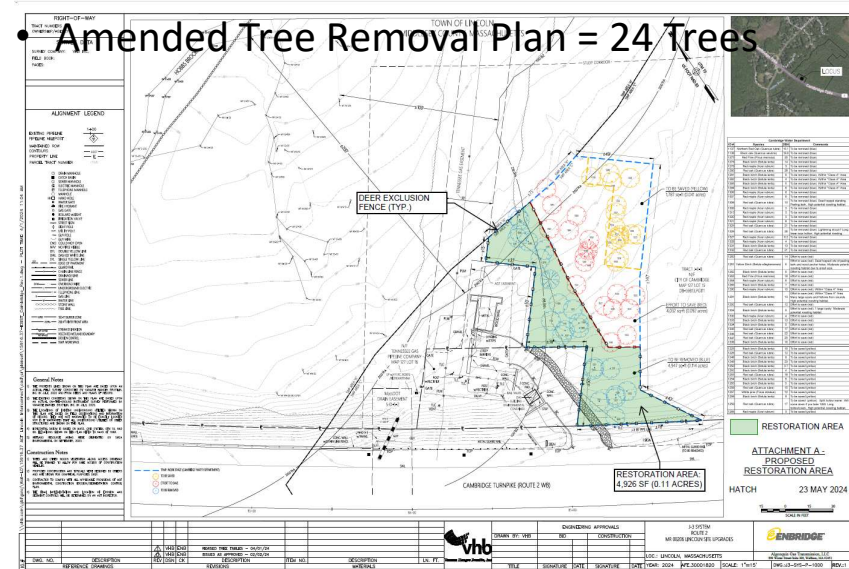
Map 127 Lot 15

Algonquin Proposed and Amended Tree Removal on Cambridge Property

- Original Tree Removal Plan = 55 Trees



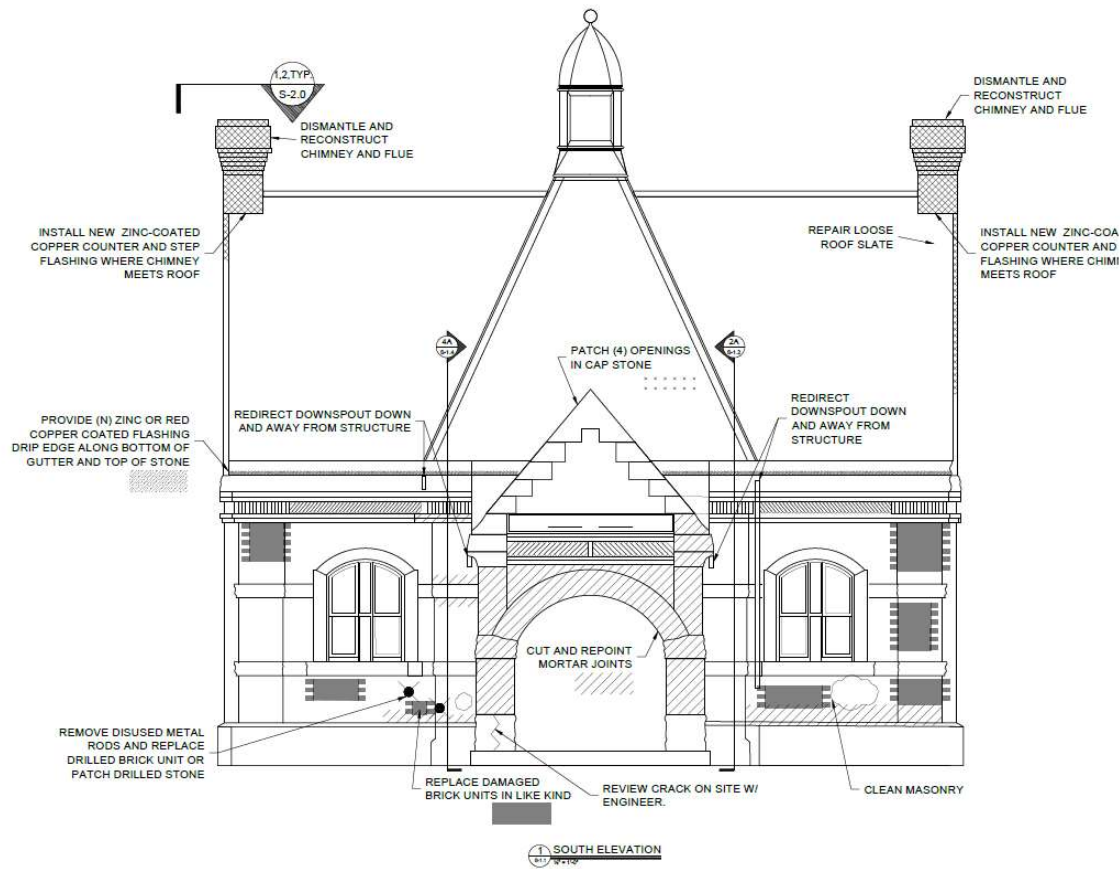
- Amended Tree Removal Plan = 24 Trees



STONY BROOK GATEHOUSE
MASONRY REPAIRS

1 GATE HOUSE LANE, WESTON MA





Structures North
 CONSULTING ENGINEERS, INC.
 45 Washington St., Suite 401
 Salem, MA 01970-2577
 1-253-162-8217 | 1-800-162-8297
 www.structures-north.com

**STONY BROOK GATEHOUSE
 MASONRY REPAIRS**
 1 GATEHOUSE LANE, WESTON, MA

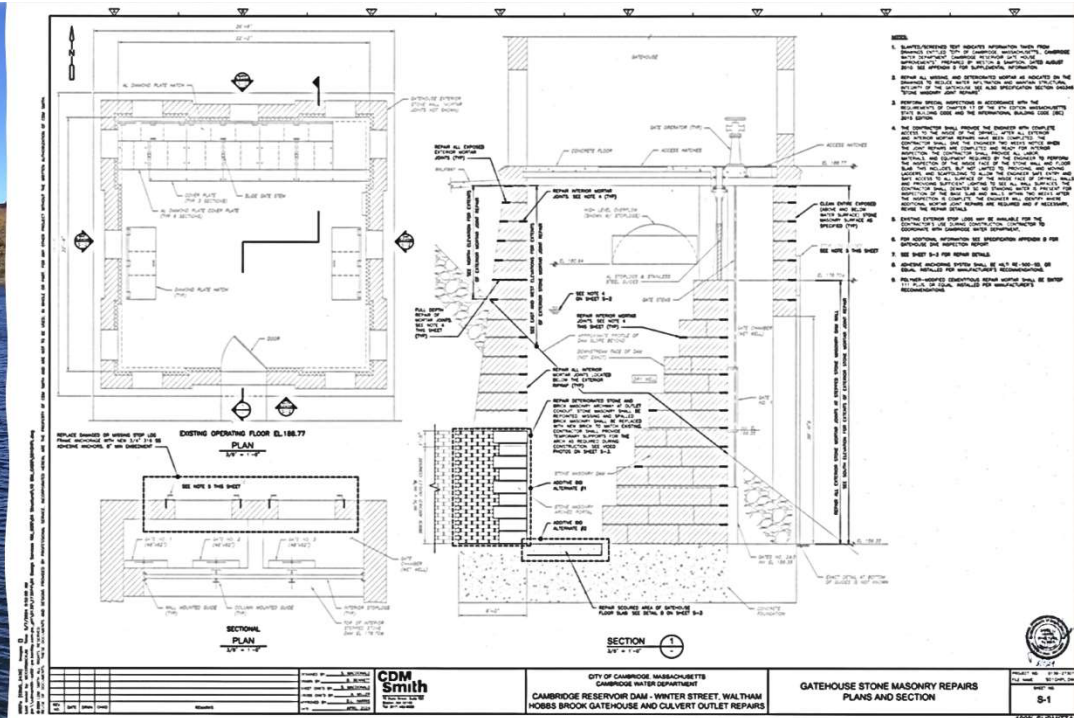
CLIENT NAME:

DATE: 01-18-2024
 SCALE: AS SHOWN
 DRAWN BY: JBB
 CHECKED BY: AMW

SOUTH EXTERIOR ELEVATION

Drawing No:

S-1.1



WATER – SUPPLY

Hobbs Brook Reservoir

If I had a Million Dollar\$

- In 2023 CWD was awarded a \$1Million State grant for the Hobbs Brook Gate House and Dam Repair project which is scheduled to go out to bid in 2024

WATER – SUPPLY

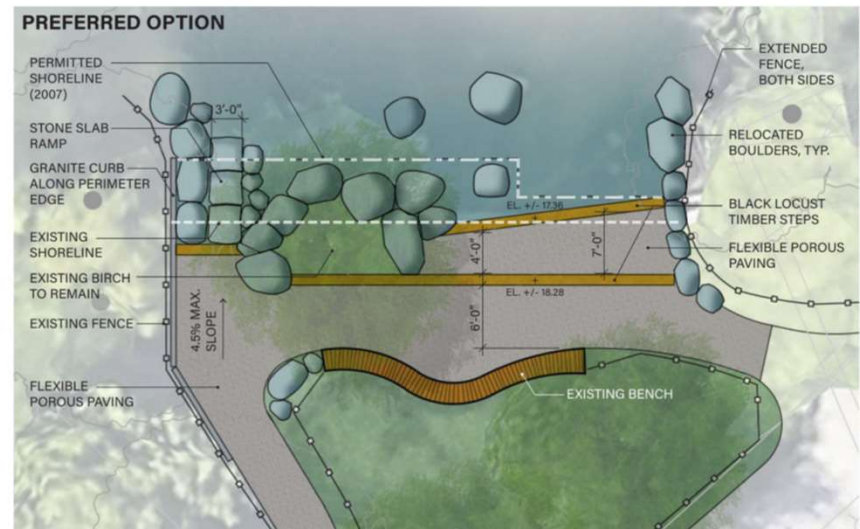
Fresh Pond Reservoir

Little Fresh Pond Shoreline Restoration Project

Existing Conditions Site Analysis



Proposed Restoration Detail



WATER – SUPPLY

Fresh Pond Reservoir

Little Fresh Pond Shoreline Restoration Project

Contract was awarded and the project started in Spring of 2024



Construction is progressing with completion anticipated in Summer 2024



WATER – SUPPLY

Fresh Pond Reservation

EV CHARGING STATIONS AT FRESH POND

- Construction for the installation of 16 new Electrical Vehicle (EV) charging stations in the Fresh Pond Parking Lot began during the first week of June 2024
- 10 EV stations will be designated for CWD city fleet vehicles
- 6 EV stations will be designated for public use





WATER DISTRIBUTION

2024 Proposed Water Main Replacements By Location

STREET	FROM	TO	SIZE	FT OF MAIN
Elm St	Hampshire St	Somerville	8	1516
Dana St	Broadway	Cambridge St	12	908
Dana St	Broadway	Mass Ave	12	1298
Sciarappa St	Charles St	Winter St	8	1780
Chetwynd Rd	Newell St	End	8	218
Gray St	Martin St	Linnaean St	8	490
Haskell St	Rindge Ave	Mass Ave	8	697
RIVER (Multiple Streets)			8-12	4000
			2023 TOTAL FT	10907
			MILES	2.07