



# Metropolitan Water Tunnel Program

Wellesley School Committee

Geotechnical Investigation at the  
Schofield Elementary School

March 21, 2023

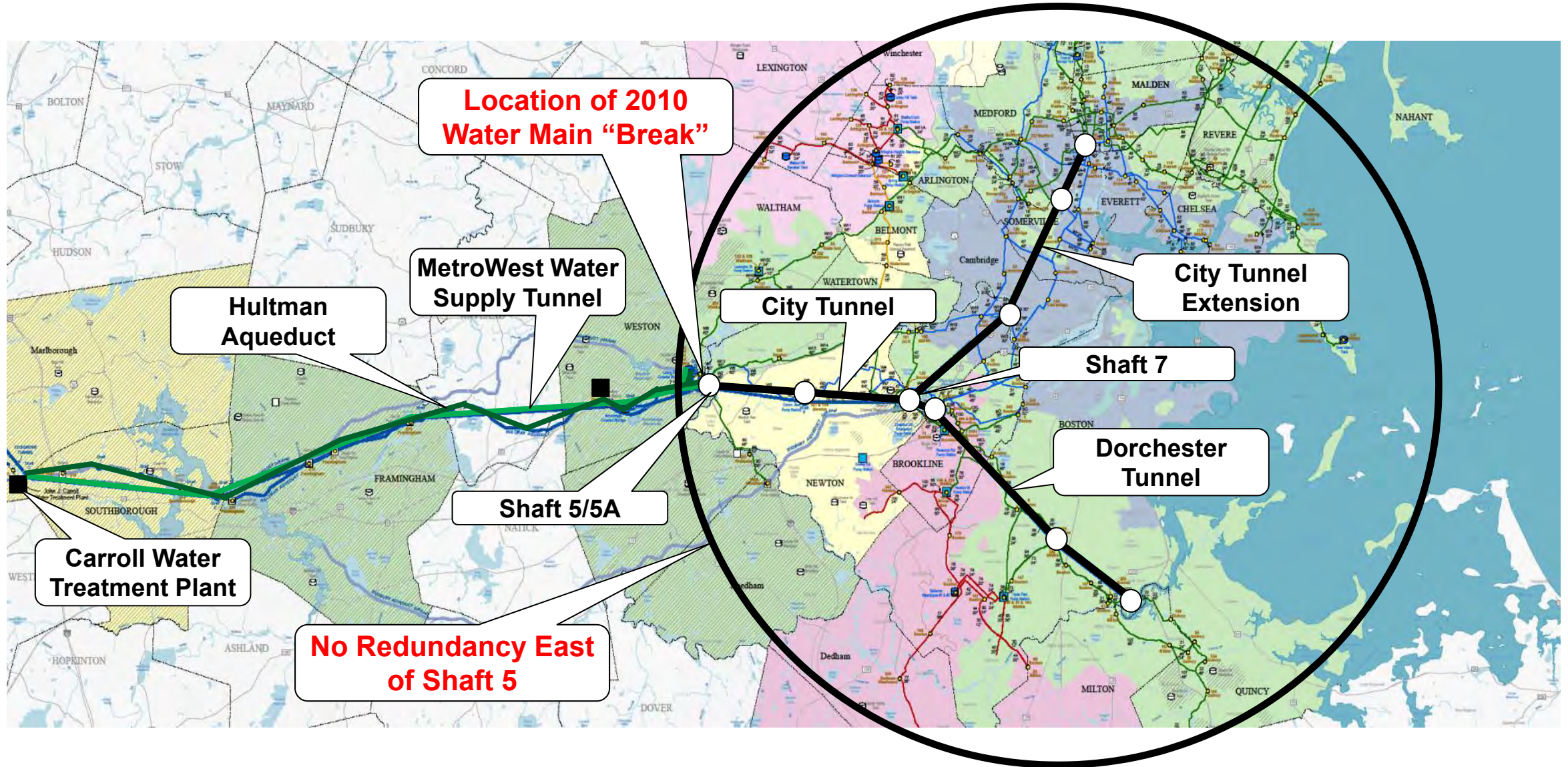


# Topics

- Metropolitan Water Tunnel Program
- Tunnel Program Schedule
- Geotechnical Investigation Program
- Where to Find Information / How to Contact Us
- Questions?



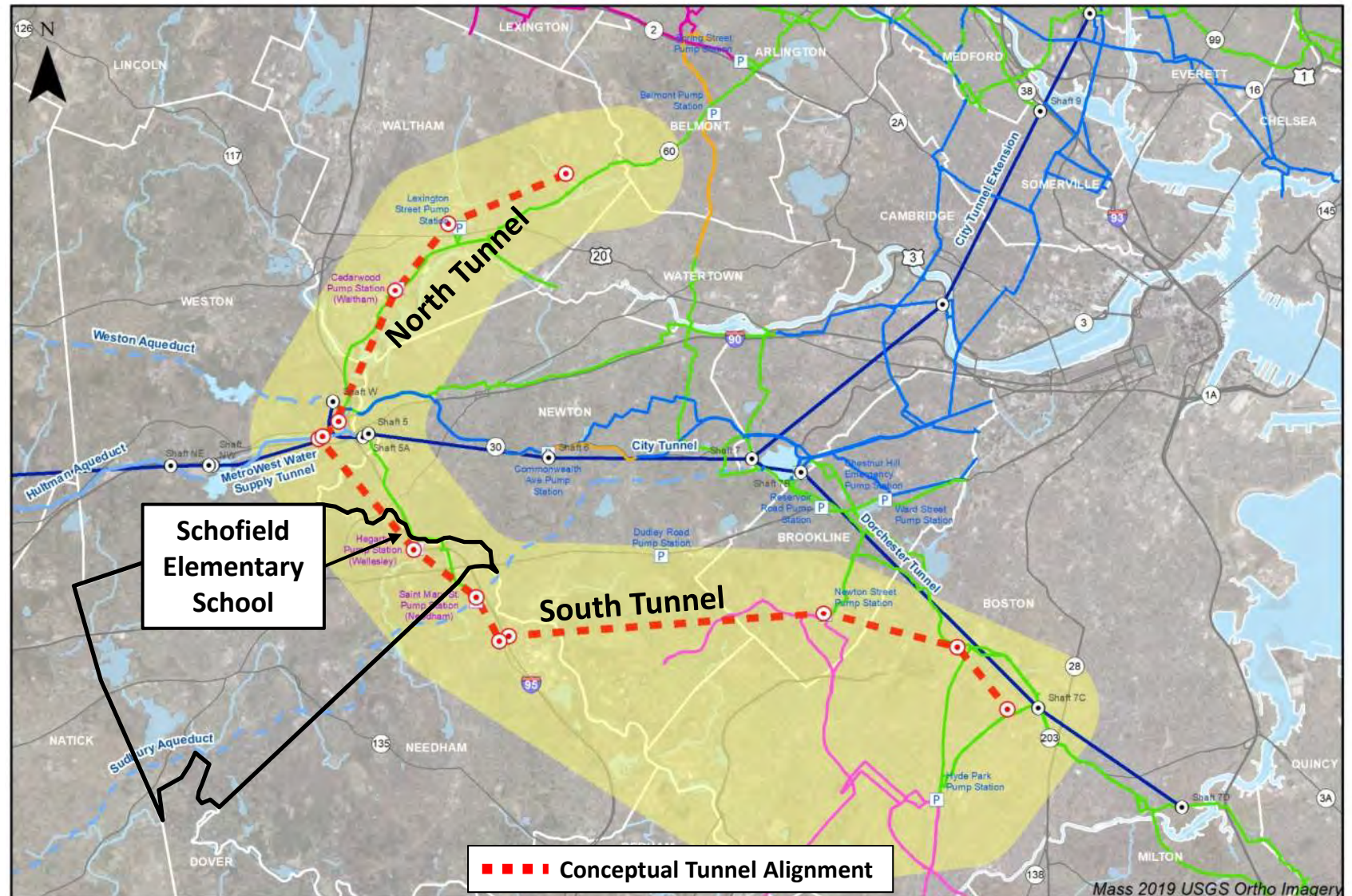
# Metropolitan Tunnel System Serves About 60 Percent of Water Demand in Metropolitan Area





# Metropolitan Water Tunnel Program

- ~14.5 miles of deep, hard rock, pressure tunnel
- Tunnels will begin in the Weston (I-90/I-95 vicinity)
- Northern Tunnel - ~4.5 miles, ends near Waltham/Belmont line
- Southern Tunnel - ~10 miles, ends in Mattapan near American Legion
- Six intermediate connections to existing water infrastructure
- Construction anticipated between 2027 and 2040





# Program Wide Geotechnical Investigation Overview

- The geotechnical investigation started in the spring of 2021 and will last multiple years to support the design and construction of the Program
- The investigation consists of conducting deep test borings and surface geophysical survey along the proposed tunnel alignment
- The purpose of the investigation is to:
  - Build upon the data we have collected in the first phase of geotechnical investigation
  - Advance understanding of area geology with target on areas of challenging geology (faults, river beds, etc.)





# Proposed Geotechnical Investigation Location

- 1 Deep Test Boring
  - Rock coring
  - Borehole testing





# Geotechnical Investigation – Deep Test Borings

## Deep Test Borings

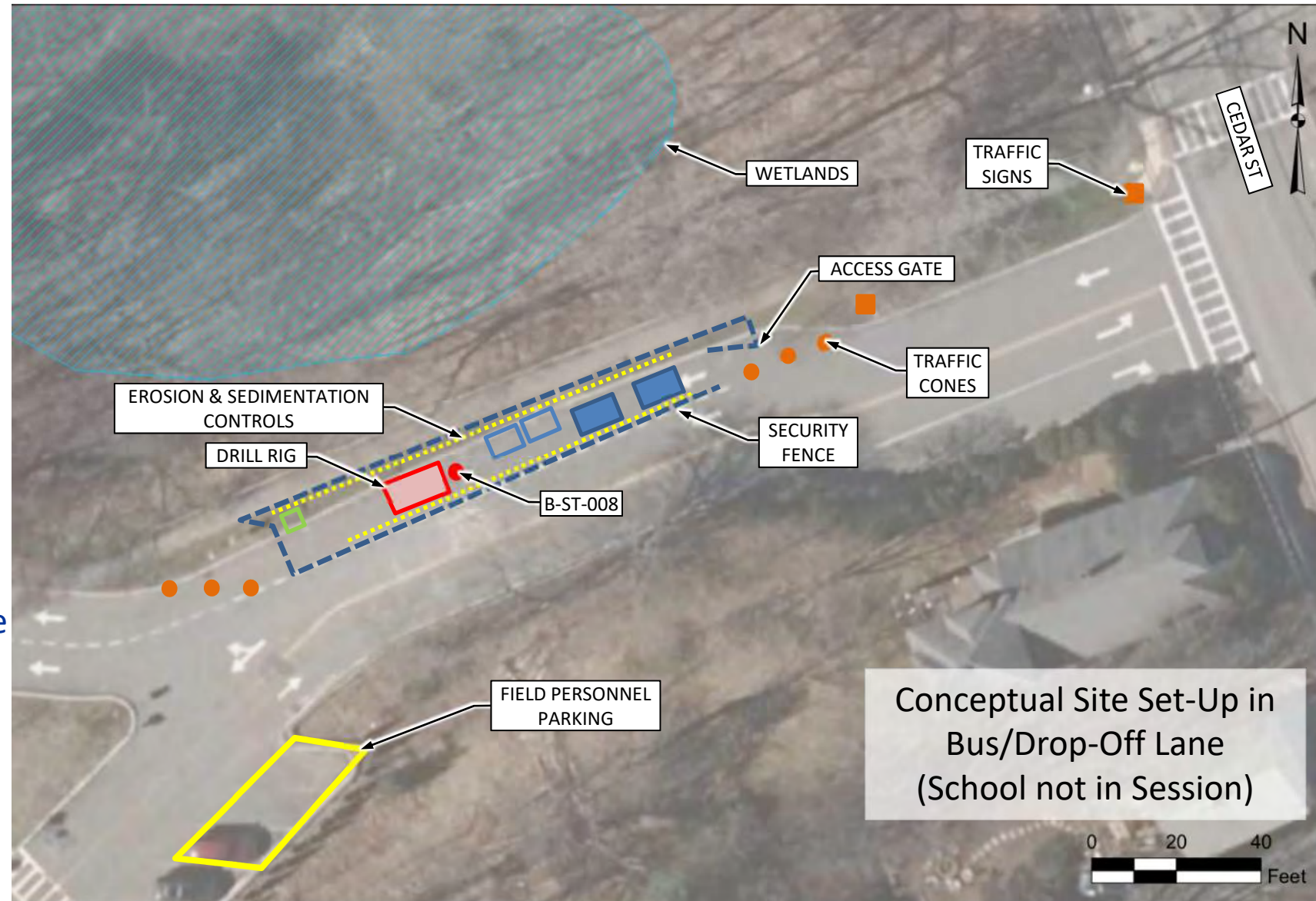
- ~4-inch diameter, ~400 ft deep
- No analytical (chemical) testing of soil/rock/groundwater
- Downhole geophysical logging and permeability testing

## What will I see?

- Fenced-in work area
- Erosion & sedimentation controls
- Drill rig, support truck, water truck/tanks, testing equipment, area for rock core logging, portable toilet etc.
- ~3 to 6 person crew

## When will it happen?

- Summer of 2023, when school is out of session



Conceptual Site Set-Up in Bus/Drop-Off Lane (School not in Session)



# Geotechnical Investigation – Health and Safety

- The health and safety of the work crew and pedestrians/abutters are the Program's top priority during the geotechnical investigation
- Comprehensive Health and Safety Plan establish for Investigation Program
- Deep test boring sites are enclosed with temporary chain-link fence
  - Fence is locked with a heavy-duty lock at the end of each work day
  - No equipment or materials are left outside of the temporary fence
- The work crew starts each work day with a health and safety briefing



Newton South  
High School



Daily Health &  
Safety Briefing





# Geotechnical Investigation – Deep Test Borings

- Upon completion:
  - All excess materials drummed and removed from site
  - Backfill borehole with clean cement-bentonite grout
  - Work site restored upon completion (before, during, and after photos taken at all locations)

Before

During

After



St Mary St, Needham

For discussion only



# Geotechnical Investigation – Deep Test Borings

- How long will it take?
  - Given the depth and all the testing to be done within each borehole, it is anticipated each boring will take about 6 to 8 weeks to complete
  - Work will be during normal business hours (Monday-Friday, 7am to 4pm)





# Request and Next Steps

- Request School Committee Approval to conduct one deep test boring at the Schofield Elementary School in support of the Metropolitan Water Tunnel Program
- Upon Approval
  - Execute License Agreement
  - Obtain all necessary permits
  - Coordinate start date and logistics with Town and school staff





# Where to Find Information / How to Contact Us

- <https://www.mwra.com/mwtp.html>
  - Program documents (ENF, DEIR)
  - Meeting notices, agendas, presentations, minutes
- Contact Us
  - Carmine DeMaria, Community Relations Coordinator
  - 617-305-5725
  - [Carmine.DeMaria@mwra.com](mailto:Carmine.DeMaria@mwra.com)
  - [Tunnels.info@mwra.com](mailto:Tunnels.info@mwra.com)



# Questions/Comments?



Thank you!