



Metropolitan Water Tunnel Program

Meeting Summary

Contract Number: N/A

Contract Name: N/A

Meeting Title: Working Group Meeting No. 6

Date	September 22, 2022	Revision	RO
Time	1:00-2:00 PM	Revision Date	N/A
Location	WebEx	Recorded By	Meg Langley (CPP)

Attendees:

Name (organization)	Initial	Name (organization)	Initial	Name (organization)	Initial
Sean Navin (MWRA)	SN	Katie Ronan (MWRA)	KR	Lexi Dewey (WSCAC)	LD
Kathy Murtagh (MWRA)	KMM	Rebecca Weidman (MWRA)	RW	Christopher Dzidek (MWRA)	CD
Paul Savard (MWRA)	PS	Rafael Castro (JCK)	RC	Jay Hersey (Brookline)	JH
Colleen Rizzi (MWRA)	CR	Peter Salvatore (Boston)	PSA	Angela Moulton (CDMSmith)	AM
Vivian Chan (MWRA)	VC	Weeraya Orwatthana (PMA)	WO	Gabrielle Marrese (MWRA)	GM
Carmine De Maria (MWRA)	CDM	Lou Taverna (Newton)	LT	Julie Sullivan (MWRA)	JS
Brad Miller (MWRA)	BM	Mike Chiasson (Waltham)	MC	Thomas Cullen (Weston)	TC
David Abt (MWRA)	DA	Martin Pillsbury (MAPC)	MP	Meg Langley (CPP)	ML

Purpose:

The purpose for the sixth meeting of the Massachusetts Water Resources Authority (MWRA), Metropolitan Water Tunnel Program (Program) Working Group was to present the preferred alternative of the alternative shortlist (three tunnel alignments and shaft sites).



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Summary:

The following is a summary of items covered including next steps as applicable:

1. Sean Navin, MWRA Director of Intergovernmental Affairs, opened the meeting, and introduced Paul Savard, MWRA Director Design and Construction, who began the presentation. The meeting agenda included an update to the Metropolitan Water Tunnel Program, Alternative Shortlist (3 Tunnel alignments and shaft sites), Preferred Alternative, Upcoming Meetings, and Thank You/ Questions.
2. PS gave an update to the program schedule with preliminary design thru Jan 2024, begin final design in 2024, and the target for construction to begin in 2027. PS explained the Massachusetts Environmental Policy Act (MEPA) process and the ongoing preliminary design investigations ongoing to inform the Draft Environmental Impact Report (DEIR). The DEIR will be submitted to MEPA in the fall of 2022 and the Final Environmental Impact Report (FEIR) is slated for late summer 2023. Preliminary design investigations are ongoing in geotechnical investigations, tunnel and shaft design, as well as construction contract phasing and packaging. There have been ongoing property acquisition discussions with Massachusetts Department of Transportation (MassDOT), Department of Conservation and Recreation (DCR), Department of Public Health (DPH), Department of Youth Services (DYS) and permit agency discussions with MEPA, Department of Environmental Protection (DEP), Massachusetts Historical Commission (MHC), and ongoing community outreach.
3. The Program started with a large number of alternatives to provide redundancy to the metropolitan tunnel system that were presented in the Environmental Notification Form (ENF). Subsequently, the Program developed ten two-tunnel alternatives and assessed each against factors of constructability/engineering, land availability, environmental, social/community, operations, cost, and schedule impacts. This was described at the previous Working Group meeting. From these, the Program identified three that were evaluated in more detail to arrive at one preferred tunnel alignment and two backup tunnel alignments. The work to come to the preferred and two backups was discussed at this Working Group meeting and will be presented in the DEIR.
4. The shaft sites for the three alternatives were reviewed. Construction shaft sites (where tunnel boring machine (TBM) launching and receiving shafts would be located) are: Fernald Property in Waltham, the Interstate 90/Interstate 95 (I90/I95 Interchange) highway interchange in Weston, Highland Ave-I/95 Interchange in Needham, and the American Legion site in Mattapan. Connection shaft sites (where additional connections along the tunnels will be made to the local water systems) are: Lexington Street Pumping Station in Waltham, Cedarwood Pumping Station in Waltham, Hegarty Pumping Station in Wellesley, St Mary Street Pumping Station in Needham, Newton Street Pumping Station in Brookline, and Southern Spine Mains in Boston. All of the connection shaft sites are common to all three alternatives.



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5. The north and south tunnel were reviewed. The north tunnel would convey water from the Hultman Aqueduct at the I90/I95 Interchange area to the Fernald Property. Along the way the tunnel would have two intermediate connections to the Cedarwood Pumping Station and the MWRA Lexington St Pumping Station. The south tunnel would convey water from the Hultman Aqueduct at the I90/I95 Interchange to the I95/Highland Avenue Interchange and then to the American Legion site. Along the way the tunnel would have four intermediate connections to the Hegarty Pumping Station, the St Mary St Pumping Station, the Newton St Pumping Station, and the Southern Spine pipelines.
6. The construction shaft sites and their construction function for each of the three alternatives are as follows:
 - a. Fernald Property:
 - i. Receive shaft for all three alternatives - Alternative 3, 4, and 10. This property is owned by the City of Waltham
 - b. I-90/I-95 Interchange:
 - i. All shafts at this site considered in the three alternatives would be within MassDOT or MWRA property. Also, construction at these sites would not start until after the MassDOT Newton-Weston Bridge Replacement and Rehabilitation Project (MassDOT Bridge Project) construction is expected to be complete, which is slated to end in summer of 2027
 - ii. Alternative 3: North Tunnel
 1. Launch shaft at Tandem Trailer site with a connection to the Hultman Aqueduct on the east side of Park Road (Park Road East) site
 - iii. Alternative 3: South Tunnel
 1. Launch shaft and connection to the Hultman Aqueduct at the Bifurcation site.
 - iv. Alternative 4: North Tunnel
 1. Identical to Alternative 3
 - v. Alternative 4: South Tunnel
 1. Receive shaft on the west side of Park Road (Park Road West) site
 - vi. Alternative 10: North and South Tunnel
 1. Large connection shaft to the Hultman Aqueduct at the Park Road East and Park Road West sites allowing the water to flow into each tunnel independently
 - c. I95/Highland Avenue Interchange:
 - i. Alternative 3: South Tunnel
 1. Receive shaft in the northwest cloverleaf
 2. Launch shaft in the northeast cloverleaf
 - ii. Alternative 4 and Alternative 10
 1. Launch shaft in the northwest cloverleaf
 2. Launch shaft in the northeast cloverleaf
 - d. American Legion:
 - i. Receive shaft for all three alternatives



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7. The Program analyzed the environmental impacts as required for the DEIR for all three options. The findings have been shared through outreach meetings to all of the affected communities and coordinated with MEPA, MHC and DCR. The impact analysis led the Program to select Alternative 4 as the preferred alternative. It maintains tunnel segments that are reasonable lengths that are constructable. The tunnel segments are 4.5 miles long for the north tunnel, and two segments for the south tunnel that are 3.4 miles long and 6.8 miles long.
8. All three alternatives and associated impacts would be presented in the DEIR. The tunnels are very similar so they will all be able to meet hydraulics, redundancy, and operational needs. All three alternatives also have a similar environmental impact for the construction period and for the build condition along with similar social/community impacts. The key differences are shaft sites, direction of tunneling, tunnel segment length, and the construction schedule. The differences in impacts have been identified and quantified in the DEIR.
9. The Program has reached out to each impacted community to share what to expect from a construction standpoint. A table outlining what happens at a construction site and what will be in the DEIR was discussed. The Program also reviewed a conceptual construction schedule with the impacted communities. The contractors will sequence the activities. So the schedule durations are estimates.
10. The Program has included Draft Section 61 Findings in the DEIR about impacts and mitigation strategies.
11. As the Program moves forward it will begin the preliminary design on the preferred alternative only. The stakeholder meetings and community outreach that the Program has been doing will continue, including consultations with MEPA, DEP, MHC, MassDOT, DPH, DCR, and DYS.
12. The target submittal of the DEIR to MEPA is October 17, 2022 to be published in the Environmental Monitor on October 24, 2022, with a thirty-day public comment period ending November 23, 2022. The Secretary's Certificate will be issued seven days after close of the public comment period.
13. SN thanked the Working Group members for their ongoing collaboration that helps the Program better communicate with the impacted communities. In the near term, the Working Group will not meet until after the DEIR certificate is released and the Program has time to assess what remaining work is needed for the FEIR. The MWRA will continue having conversations one-on-one within the impacted communities. Two of the community members of the Working Group, Dedham and Watertown, will not be impacted by construction; SN thanked the representatives from these two towns for their help thus far and acknowledged that they may not need to participate in future meetings.
14. SN opened the floor for questions;



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- a. Lou Taverna, Newton, asked if a copy of the presentation will be posted and if the DEIR would be available in an electronic copy. Kathy Murtagh explained that the DEIR would be available in electronic form and will be available on the Program website.
- b. LT asked if the soil boring/rock boring was still ongoing, KMM answered that they were wrapping up Phase I. There are still a few locations that were identified under Phase I that the Program would like to execute if they can get the access. There are a few additional locations that have been identified based on the preferred alternative that the Program would like to explore. The field work is essential work for the Program. KMM thanked the members of the Working Group for their help in answering critical questions during the field work.
- c. LT asked about the time frame for the acquisition of the sites needed for the Alternatives. KMM explained that land acquisition is an important process. Many of the properties that will be needed are MassDOT, DCR, and MWRA owned. Conversations about these land uses are ongoing with those agencies. All properties will be acquired/transferred to the MWRA before construction documents are released.
- d. Jay Hersey, Brookline, thanked the Program for their work on the presentation and for the community outreach that the Program has done in Brookline. He asked once the tunnels are operational, how are they going to work hydraulically considering the new tunnels and existing tunnels will split flows? KMM explained that hydraulic modeling has been completed to verify that when the tunnels operate at the same time, there would be no significant change to water age over existing conditions. The modeling looked at low flow periods when water age would be the longest. Water temperature and other critical elements have also been vetted and additional analysis will continue as the Program moves to final design.
- e. KMM wanted to reiterate that the Program is thankful to the Working Group members for their involvement and help thus far. Community members should feel welcome to contact Carmine DeMaria, Community Relations Coordinator, at any point with questions or concerns.

15. The meeting adjourned at 1:55 pm.

Action Items:

MWRA to send out presentation and meeting minutes.

MWRA to post agenda, presentation, handouts, and minutes to the Tunnel Program website:

<https://www.mwra.com/mwtp/resources.html#workinggroups>

Abbreviations:

Department of Conservation and Recreation (DCR)

Department of Environmental Protection (DEP)

Department of Public Health (DPH)

MRTP-MTG-PROG-MINUTES-WORKING-GROUP-09-22-2022-RO



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Department of Youth Services (DYS)
Environmental Notification Form (ENF)
Draft Environmental Impact Report (DEIR).
Final Environmental Impact Report (FEIR)
Interstate 90/Interstate 95 (I90/I95 Interchange)
Massachusetts Department of Transportation (MassDOT)
MassDOT Newton-Weston Bridge Replacement and Rehabilitation Project (MassDOT Bridge Project)
Massachusetts Environmental Policy Act (MEPA)
Massachusetts Historical Commission (MHC)
Massachusetts Water Resources Authority (MWRA)
Metropolitan Water Tunnel Program (Program)
Tunnel Boring Machine (TBM)

Attachments:

None.