

Metropolitan Tunnel Redundancy Program

Owner & Client:

Massachusetts Water Resources Authority

Role:

Program Support Services

Key Characteristics:

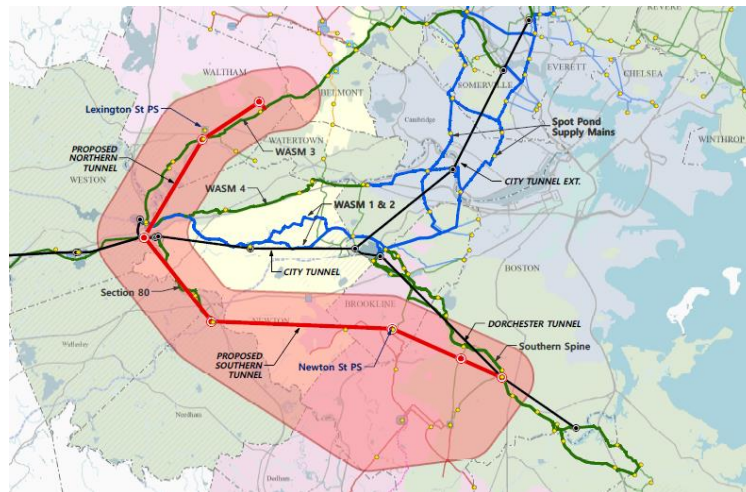
- 14-miles of 10-ft diameter Water Transmission Tunnels in rock, at approximate depths between 200- and 500-ft
- Near Surface Connections and
- Refurbishment and Replacement of Existing Components
- Design-Bid-Build Procurement
- Estimated Program Cost \$1.5B

Professional Services:

From: May 2019
To: Present

The Massachusetts Water Resources Authority (MWRA) is undertaking the Metropolitan Tunnel Redundancy Program (MTRP) to provide redundancy to its existing water transmission and distribution system. The Program envisions a redundant tunnel system proposed to begin in the Town of Weston, Massachusetts near the terminus of the existing Hultman Aqueduct and MetroWest Water Supply Tunnel. A northern tunnel is proposed to extend approximately 4.5 miles to the Waltham/Belmont line and a southern tunnel is proposed to extend approximately 10 miles to Mattapan. Both tunnels are envisioned to have intermediate riser connections to the MWRA distribution system along their alignment.

JCK Underground is the prime consultant providing long term support for the Program. Services include general consulting, design submittal reviews, value engineering reviews, risk management support, constructability reviews, cost estimating, scheduling, evaluation, and staff augmentation. Tasks undertaken to date include: assisting with documents necessary to procure the preliminary designer; identifying program delineation; researching existing boring data and compiling into a geotechnical data report; verifying prior cost estimates; identifying scope for initial geotechnical investigations; assisting with the establishment of program information technology and controls; establishing the risk management process; assisting with the development of strategies for public communications and property acquisition; and establishing an expert review panel.



Conceptual Tunnel Alignments and Study Area