



*Metropolitan Redundancy Interim Improvements
Projects Update*

February 16, 2022



Commonwealth Avenue Pumping Station



- Provides redundancy for City of Newton if City Tunnel taken out of service
- Alternate low service supply from WASMS 1 and 2
- New low service pumps



New Low Service Pumps 4 and 5



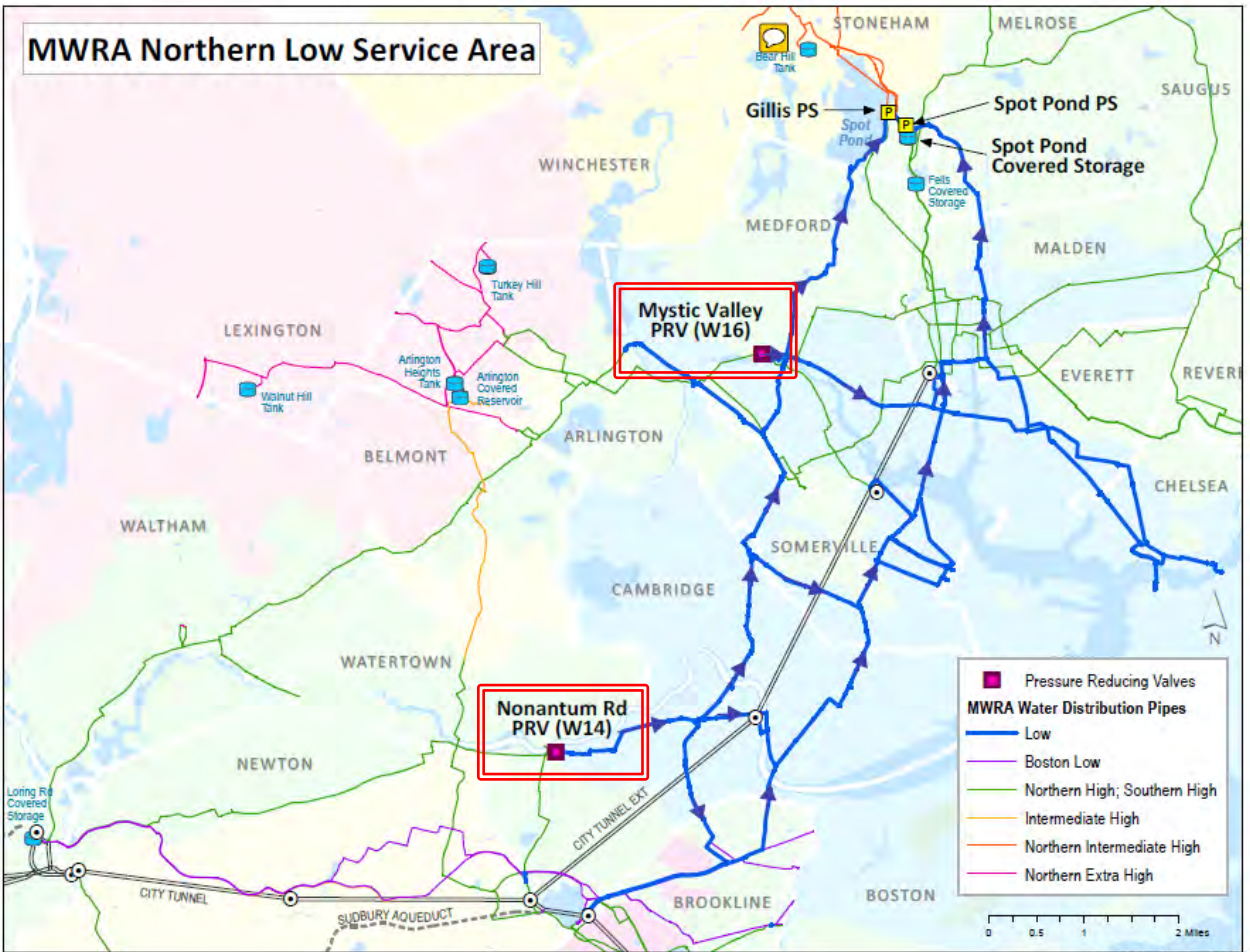


New Service Line Connection to Low Service WASM 1 and 2





Low Service Pressure Reducing Valve Improvements



- Increase capacity of WASM high service supply to Northern Low System
- Low service pump stations can supply Northern High Service in event of a tunnel failure



Existing PRV Vaults



W16 Mystic Valley Parkway PRV Vault



W14 Nonantum Road PRV Vault



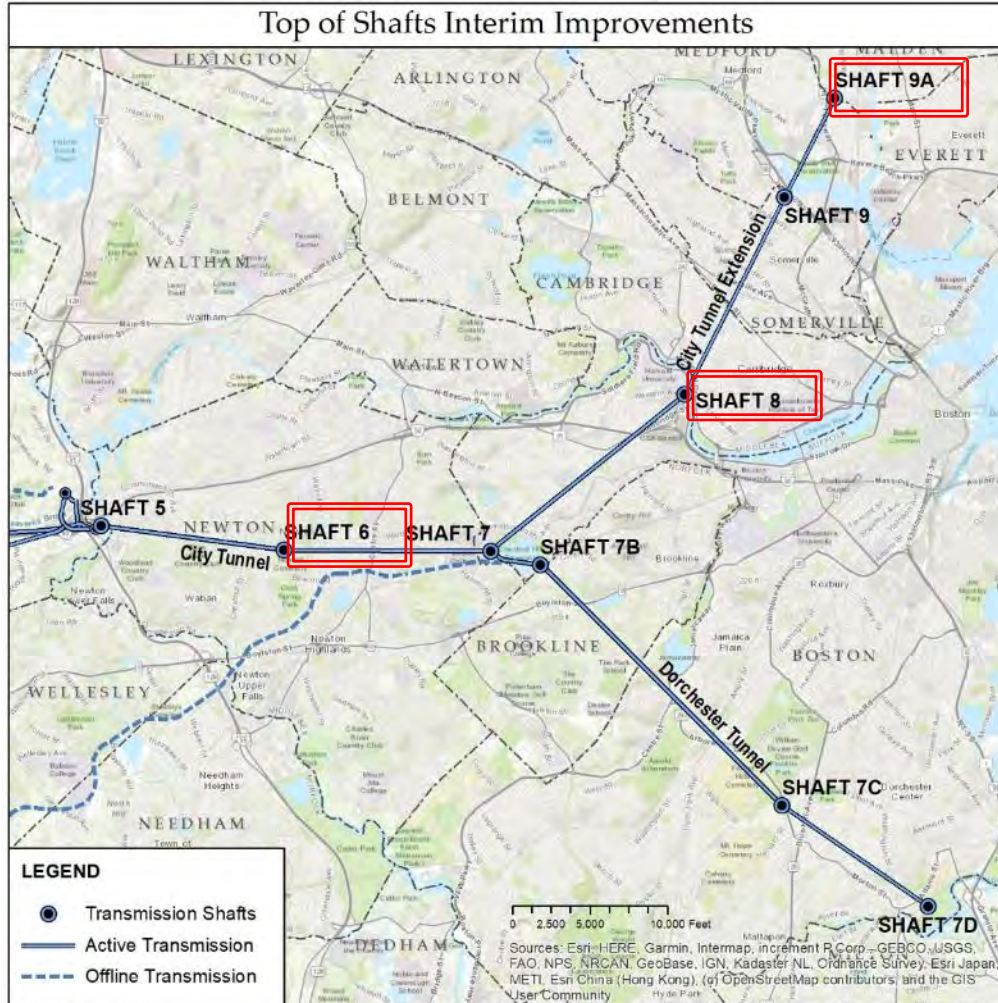
Construction of New Nonantum Road PRV Vault





Top of Shafts 6, 8 and 9A Interim Improvements

Top of Shafts Interim Improvements



Contract 7561 improved and protected critical facilities related to the existing tunnel system at:

- Shaft 6 – Newton
- Shaft 8 – Brighton
- Shaft 9A – Malden

Future work at:

- Shaft 5 – Weston
- Shaft 7 – Boston College
- Shaft 7B – Chestnut Hill
- Shaft 7C – Dorchester
- Shaft 7D – Dorchester
- Shaft 9 – Somerville



Shaft 8 Before and After Epoxy Coating





Shaft 9A Air Valve – Before And After Encapsulating Coupling (installed by MWRA)





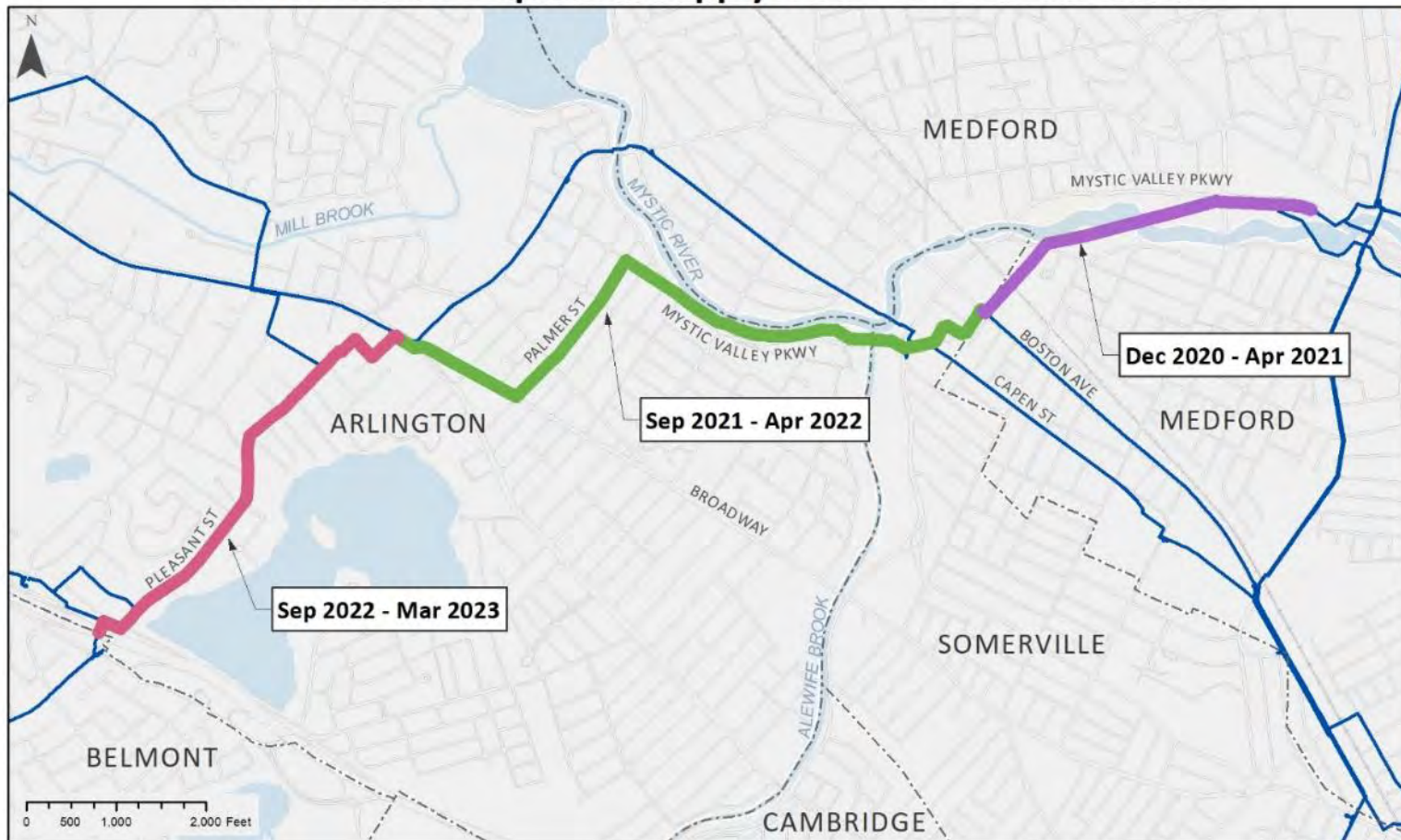
Carbon Fiber and Wax Tape Wrap Complete





Rehabilitation of WASM 3 (Medford, Somerville and Arlington)

MWRA Weston Aqueduct Supply Main - CP1 Rehabilitation





WASM3 - Existing Pipe, Cleaned Pipe, New Cement Lining





WASM 3 - Cement Lining Machine and Conveying Machine





WASM 3 – New Air Valve Structure





WASM 3- Access Pits Over 60-inch Pipeline





Chestnut Hill Pump Station Design



- New connection to provide isolation of pumping station in the event of failure of the City or Dorchester Tunnels
- Allows pumping from Chestnut Hill Reservoir to Southern High and Southern Extra High service areas in emergency