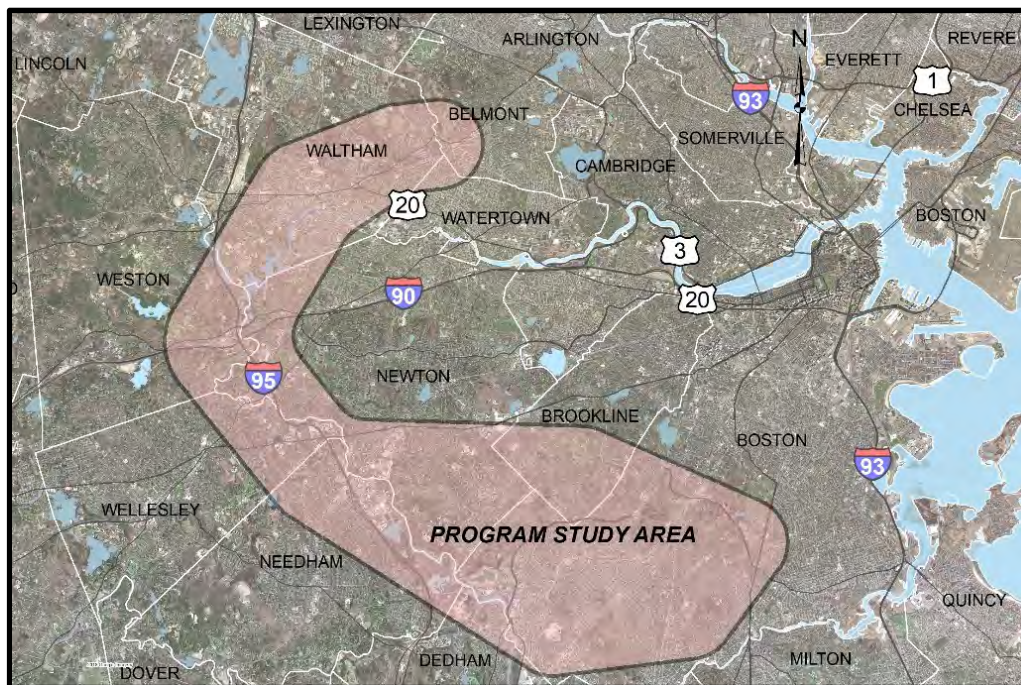




# About MWRA's Metropolitan Water Tunnel Program Geotechnical Field Investigation

The Massachusetts Water Resources Authority (MWRA) will be conducting field work to support a major water supply tunnel Program in the Metropolitan Boston area. The two new water tunnels will improve the reliability of our water infrastructure and allow our aging, existing water tunnel system to be rehabilitated without interrupting service.

The MWRA will be drilling test borings and conducting geophysical surveys in the Metropolitan Boston area. The MWRA will use the data from the field investigations to design and construct solutions that are best suited for the Tunnel Program. The geographical limits of the field investigations are shown in the shaded area below.



## WHAT WILL I SEE?

For geophysical survey work you may see three- to five-person teams with handheld- to stroller-sized equipment, wooden stakes and colored plastic flags located in some areas, lines of wires and sensors temporarily placed on the ground connected to data collecting equipment, and support vehicles in the area of the work.

For test boring drilling, you may see drill rigs and support trucks, testing equipment and water holding tanks, with three- to six person teams at each location. Temporary construction fence will typically be set around the work area for safety and security purpose, with erosion and sedimentation control measures in place and project signage at the perimeter. It is MWRA's intent to select test boring locations that will pose minimal disruptions to the community, but at some locations, it may require temporary changes in pedestrian and vehicular traffic patterns. Instruments to measure groundwater level will be installed upon completion generally with a 12-inch diameter roadbox flush at ground surface. Upon completion of the field work, our crews will restore each work site. We apologize in advance for any inconvenience and thank you for your cooperation as we work to improve our water system.



Final Condition - Roadbox

## HOW LONG WILL IT TAKE?

Geophysical survey typically takes several hours to couple of days at each location depends on the survey length. Work for each deep test boring is anticipated to take about six to ten weeks, including setup and site restoration.

## WHEN WILL IT HAPPEN?

Geotechnical field work typically will be conducted between 7:00 a.m. and 6:00 p.m. Mondays through Fridays.



## WHAT ARE TEST BORINGS?

Test borings are small deep vertical holes drilled into the ground. They are about the diameter of a softball. Soil, rock and groundwater samples will be collected from the test borings to get a better understanding of the local geology and underground conditions. Select locations will be converted into monitoring wells upon completion.

## TEST BORINGS



## WHAT IS GEOPHYSICAL SURVEY?

Geophysical surveys use a series of nonintrusive ground-based sensors (geophones) placed several feet apart and connected together to measure naturally occurring physical and electromagnetic properties and waveforms, and to estimate depths of different materials underground. A sledgehammer or small drop weight is used to generate the signal.

These surveys do not require large vehicles or heavy equipment and do not generate noise above ambient noise levels. There is no excavation or evidence of work after a survey is complete.

## GEOPHYSICAL SURVEYS



For more information about the Metropolitan Water Tunnel Program please visit [www.mwra.com/mwotp.html](http://www.mwra.com/mwotp.html) or contact our Communications Team at [tunnels.info@mwra.com](mailto:tunnels.info@mwra.com).



Massachusetts Water Resources Authority ♦ Deer Island, 33 Tafts Avenue ♦ Boston, MA ♦ 02128  
(617) 242-6000 ♦ [www.mwra.com](http://www.mwra.com)