Subsurface Utility Mapping for Site Redevelopment

SITE OVERVIEW & HISTORY
The former Weymouth Naval Air Station is a sprawling 1,400-acre property straddling three municipalities in Massachusetts’ South Shore. Built during World War II, its specific task was the safeguarding of strategic coastline assets, including nearby Department of Defense research laboratories. During WWII, the main fleet based at Weymouth were airships or “blimps,” primarily used for reconnaissance for enemy submarines, and the early development of the station reflected this unique use.

Due to its proximity to Boston’s Logan Airport and the potential for negative impact on commercial airspace, the station never became a strategic airfield. Thus, after World War II, the station was utilized primarily for the storage and decommissioning of military aircraft. In the early 1990s, the Base Realignment and Closure Commission (BRAC) recommended the Naval Air station be closed, and it was decommissioned in 1997.

PROJECT
The first stage of the base’s redevelopment for commercial use has been nearly two decades of site clean-up and environmental remediation. Legacy firms of DGT Associates have been a part of the process at this site since its days as an operating military base, providing related engineering and surveying services.
Today, DGT Associates continues its work as the redevelopment project, UnionPoint, has begun to take shape. UnionPoint is the multi-phase plan to create an entirely new community based on innovative “smart city” ideas of place making and urban technology.

In this stage of redevelopment, DGT Associates has been contracted to perform site-wide locating and mapping of underground infrastructure for design and construction projects. The DGT team is using the latest in subsurface utility mapping and engineering technologies (SUE/SUM), as well as ground-penetrating radar (GPR) and global positioning systems (GPS) to provide our construction and environmental consultant clients with a true picture of the below-ground environment.

The site’s long history of military use and repurposing created a significant challenge of incomplete site records. DGT Associates has further provided exhaustive historical research to complement its high-tech solutions.

OUTCOME
DGT Associates has played a key role in the advancement of a redevelopment project for a vastly underutilized site, long in need of new life and a new purpose. Using our proven expertise in industry-leading subsurface mapping technologies and our insistence on thorough archival research, we have provided our clients a project-wide digital utility atlas.

With an accurate and comprehensive mapping of the site’s complex underground infrastructure, our client now has the tools they need to build safely and efficiently.

ABOUT DGT
DGT Associates is New England’s premier surveying and engineering firm. With clients spanning the cross section of community stakeholders from developers and construction managers to municipalities and homeowners, DGT provides unparalleled experience in the region. DGT is committed to thoughtful innovation in the surveying and engineering industries. We utilize cutting-edge technology, combined with decades of field-work experience, to deliver valued, meaningful results. Our professional crews are trained and perform to the highest standards of precision and safety. And our team is sized for the flexibility required to take on projects of varying scales, timeframes and complexity.