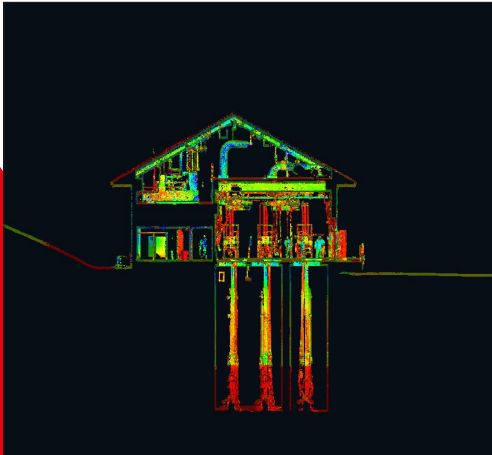


CASE STUDY



Braintree-Weymouth MWRA Pump Station

Location: Weymouth, MA | Services Rendered: 3D Laser Scanning & BIM Modeling



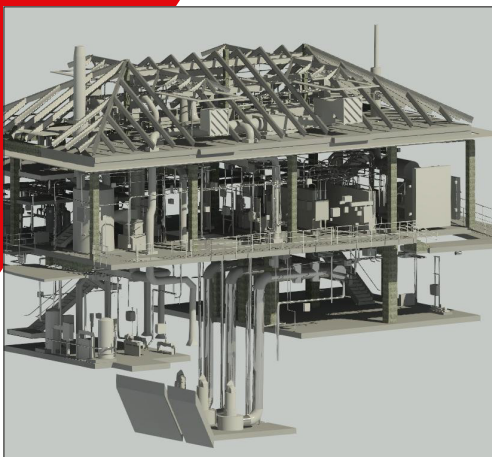
CREATE

The Braintree-Weymouth wastewater pump station was built in 2008 with a peak design capacity of 28 MGD. It transmits wastewater from the Braintree-Weymouth interceptor to the Nut Island Headworks facility. Over the years, several issues have been identified that require modifications and updates to the facility's ventilation systems, pump access, screening operation, and control and instrumentation systems.



INNOVATE

In order to design these upgrades in the most efficient manner, LandTech Consultants was retained to provide full documentation of the existing conditions utilizing terrestrial laser scanners. LandTech then utilized the resultant point cloud to develop a 3D existing conditions BIM model with precise locations of all relevant structures, systems, and equipment, including wet wells below grade. By documenting the existing conditions prior to improvements in design, the team was assured of minimizing potential design conflicts with existing infrastructure that could result in costly change orders during construction.



INTEGRATE

From initial site scanning to delivery of the BIM model, LandTech completed the task in five weeks. LandTech also provided exterior laser scanning site documentation of the facility to produce as-built plans of the parking lot and surrounding area within the same time frame.