



Fore River Siphon

WEYMOUTH, MASSACHUSETTS

The Fore River Siphons are two 36" sewer pipes constructed under the Fore River as part of the Braintree-Weymouth Relief Facilities Project utilizing a technology called horizontal directional drilling (HDD). They were designed to be connected to the already constructed North Weymouth Relief Interceptor (NWRI) and Intermediate Pump Station (IPS).

PROJECT HIGHLIGHTS

- Cashman installed two, side-by-side, 42" siphon structures ~4000 feet long each, under the Fore River using HDD.
- Installed a sheet pile wall along the water's edge in order to relocate and bypass the existing sewer system, to make room for the new siphons.
- Installed deep sheet piling support of excavation cofferdams for construction of the new twin siphon receiving structures and to facilitate final connections to the new pump station system.
- Installed over 2000 LF of new sewer system varying from 6'-60' pipe and paved adjacent streets upon completion.
- Reconstructed and plastic-lined 2 large existing sewer structures to fully contain odors, gasses, etc.
- Constructed a new park for neighborhood use including new plants, sod lawn, retaining walls, benches and a concrete paved meeting area.
- Constructed a new concrete boat ramp and multiple abutter enhancements including a new aluminum gangway/pier/dock, concrete retaining walls, riprap slopes, fences, etc.
- Existing salt marsh areas were mapped prior to construction and were then restored upon project completion.

Location: Weymouth, MA

Contractor: Jay Cashman, Inc.

Contract Dates: Aug. 2003 – Jul. 2006

Dollar Value: \$16.2 Million

Awarding Authority / Owner: Massachusetts Water Resources Authority

