

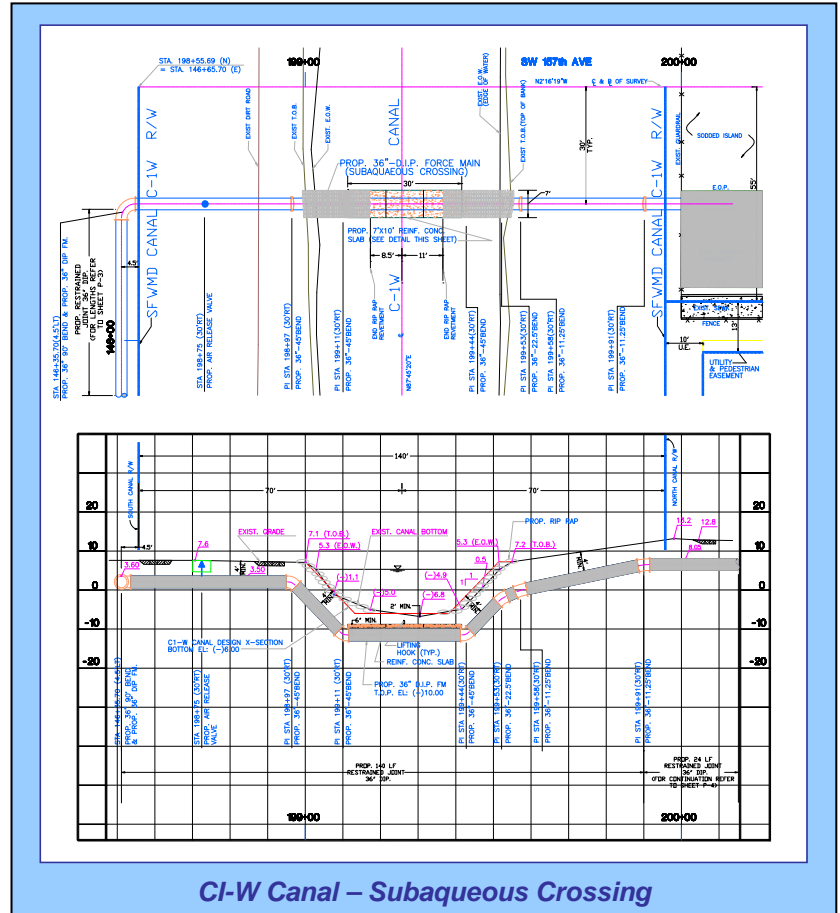
MIAMI-DADE WATER AND SEWER DEPARTMENT - 36-INCH SEWAGE FORCE MAIN EXTENSION – SW 157TH AVENUE & SW 152ND STREET

Client Name: Miami-Dade Water and Sewer Department/Parsons Engineering Science, Inc. (Prime)
Type of Service: 36" Sewage Force Main – Civil Environmental Engineering Services

Milian, Swain and Associates, Inc. (MSA) designed a new 36-inch polylined ductile iron sewage force main for Miami-Dade Water and Sewer Department (MDWASD) along the following routes:

Connected to an existing 36-inch force main at the intersection of Hammocks Boulevard and SW 104 Street, proceeded west within SW 104 Street Right-of-Way to the intersection with SW 157 Avenue, continued south within SW 157 Avenue to the C-1W Canal, including the north/south subaqueous crossing of the C-1W Canal. Approximate length: 10,000 LF (±500 feet).

Proceeded south within SW 157 Avenue Right-of-Way and connected to an existing 16-inch force main at the intersection with SW 152 Street (State Road 922). Approximate length: 8,000 feet (±500 feet).



MSA’s services included joint restraint analysis, design of a subaqueous crossing of the C1-W Canal, Jack and Bore Crossing of the S.A.L. Railroad, and preparation of an Engineer’s Opinion of Probable Construction Costs. Design of the proposed 36-inch force main was in conformance with MDWASD Standards and Specifications for Sanitary Force Main Construction, Miami-Dade County Department of Environmental Resources Management - Wastewater Section, Florida Department of Environmental Protection (Subaqueous Canal Crossing), S.A.L. Railroad (Jack and Bore), Florida Department of Transportation - District 6, and South Florida Water Management District requirements.