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February 3, 2022

Mr. Daniel White
City of Plainfield Planning Board Secretary
515 Watchung Avenue
Plainfield, NJ 07060

Watchung Pump Station Renovation and Force Main Replacement Capital Project Review
Plainfield Municipal Utilities Authority
Colliers Engineering & Design Project No. PMU035

Dear Mr. White,

On behalf of Plainfield Municipal Utilities Authority (PMUA), please accept this submission to the City of Plainfield Planning Board for a Capital Project Review during their Public Hearing scheduled for 7:00PM, Thursday, February 17, 2022. Per our discussions with William Nierstedt, Director of Planning, and his February 1, 2022 e-mail correspondence, the Adjacent Property Notification Requirement, Planning Board Application Fee, and Escrow Fees have been waived for PMUA. In addition to this cover letter project explanation, we are providing the following documents (electronic PDFs and one (1) hard copy originals) for your consideration:

- City of Plainfield Planning Board Application
- Proposed Watchung Pump Station Renovation and Force Main Replacement Plan Set (11 sheets) dated January 27, 2022 as prepared by Colliers Engineering & Design.
- Aerial exhibits of existing 8-inch force main pipe alignment as based upon Subsurface Underground Exploration (SUE) survey utilizing ground penetrating radar (GPR).
- Aerial photo of Watchung Pump Station site and photos of existing pump station, existing force main alignment, and proposed force main alignment.

According to Authority records, the Watchung Pump Station and 8-inch cast iron force main were constructed in 1930. In 2002, the pump station was renovated with new pumps, emergency generator, and other interior improvements. Currently, only two (2) of the three (3) pumps are operational due to replacement parts being unavailable due to its age. It is our understanding that replacement parts are difficult or unavailable to obtain for several major pieces of equipment including the emergency generator.

The existing 1930 force main is 8-inch diameter cast-iron-pipe (CIP) alignment had been uncertain. As part of this project, CED conducted a Subsurface Utility Engineering (SUE) survey we determined that the force main alignment runs perpendicular to Watchung Avenue, through the yards of four (4) local residents to Inwood Place, then turns northbound within Inwood Place to Leland Avenue, then follows Leland Avenue and discharges in a manhole located near the intersection of Oxford Avenue. The existing force main crosses under the Robinson Branch Tributary three (3) times.

As part of this project, we are proposing to replace the existing sanitary pumps, force main, electrical controls, sewage comminutor, flow meter, emergency generator, HVAC system, wet-well level transmitter, lighting, security fencing, building roofing, interior wall painting, and all associated appurtenances. The existing 8-inch CIP force main is to be replaced with 10-inch PVC C900 force main and will be rerouted within the public right-of-ways of Watchung and Leland Avenues; this alignment only crosses the Robinson Branch Tributary once.

We are anticipating this project to go out to Public Bid in May of 2022 and be completed by November of 2022. Our preliminary opinion of probable cost for the construction of this project is approximately \$800,000. This project requires coordination with City Department of Public Works, numerous utility companies, Union County Bridge Department, Union County soil conservation district, New Jersey Department of Environmental Protection, and others.

Mr. Nierstedt recommended that I, Ron Madison, be added as a "participant" to the Planning Board Zoom Meeting. I will be able to share my computer screen to better present this proposed capital project to the Planning Board. My e-mail is ron.madison@colliersengineering.com.

Sincerely,

Colliers Engineering & Design, Inc.
(DBA Maser Consulting)



Ronald B. Madison, PE
Senior Project Manager – PMUA Sewage Engineer

RBM/TBE/baw

Enclosures

cc: William Nierstedt, City of Plainfield Director of Planning
Carlos V. Fuetes, PE, City of Plainfield Engineer
Beverly Morris-Gill, PMUA Interim Executive Director/CFO
Stephen Dessino, PMUA Sewer Superintendent