

MEMO

To:
Clèce Aurélus, P.E.
Engineering Manager – ECSD
Department of Public Utilities

Copies:
Wilhelmina Montero, P.E., M.S.
Project Manager
Department of Public Utilities -
ECSD

Arcadis U.S., Inc.
8201 Peters Road
Suite 2400
Plantation
Florida 33324
Tel 954 761 3460
Fax 954 761 7939

From:
Chris Barlow, PE, CDT
Principal Water Wastewater Engineer

Florida License Numbers

Date:
December 20, 2018

Arcadis Project No.:
00361336

Engineering
7917

Subject:
RE: Water Treatment Plant High Service Pump Station Upgrades
City Project No.: 14-4233
Change Order for Water Treatment Plant (WTP)
Clearwell Interior Coating – Removal and Recoating

Geology
GB564

Surveying
LB7062

The WTP High Service Pump Station Upgrades (HSPS) project is under construction. The Contractor is R. J. Sullivan Corp. of Pompano Beach, FL. The object of this Project is to completely recondition this pumping station. The HSPS was originally built and placed into service in 1974. The high service pumps provide the flow and pressure necessary to convey the finished water from the WTP to the water distribution system. The HSPS withdraws water directly from the east and west clearwells. These clearwells are reinforced concrete tanks that are an integral part of the HSPS. The clearwell tanks are located on the opposite side of the north wall of the pump room. Access to the inside of the clearwells is limited, during normal operation of the WTP. This access requires half of the HSPS and the corresponding clearwell to be shut down and drained to provide entry necessary for inspections and construction inside the clearwells. Reportedly, access has not been made into either clearwell in many years.

The construction Project includes Work inside the clearwells, necessary to modify the pump suction piping. The construction Project includes the shutdown of each clearwell in order to inspect, then modify the pump suction piping. This inspection revealed that the pipes are in good condition. During this inspection, observations were made that revealed that interior of the concrete tank has a protective coating on the vertical concrete surfaces of this structure. This protective coating is separating from the concrete, resulting in a failure of this coating system that protects the concrete structure.

The existing coating on the vertical walls of the concrete clearwell prevents water from penetrating into the small hairline cracks that are typical of this type of structure. The water that flows through this tank will

MEMO

penetrate these cracks and eventually compromise the reinforcement rebar, integrity of the structure, and seep through the walls, if the coating is not removed and replaced. Our recommendation is to remove the existing coating and replace it with a new coating system that is design for this purpose.

A proposal was requested from and provided by the Contractor for this additional work. The Contractor was responsive and is prepared to provide this additional work. The cost of this additional Work to the Project is \$361,110.50. The time required for this additional work is 5 to 6 weeks for each side of the HSPS, resulting in a 12 weeks duration for this additional coating work. This additional work will be done concurrently in the on-going construction project. The time extension necessary for this concurrent additional work is projected to be 12 weeks, based on an estimated approval date of April 16, 2019 for this Change Order. The Contractor's proposal is included with this memo.

The coordination with the Contractor for this additional Work to provide a complete removal and replacement of the clearwell interior concrete protective coating system results in this Change Order to the Project that will provide an additional 82 days to the schedule of construction for a cost of \$361,110.50.

The additional engineering for this this change will be account for on a time and materials basis for the final overall additional construction admirative service required for this Change Order, if any.

rj Sullivan Corp.

GENERAL CONTRACTOR

2001 N.W. 22nd Street • Pompano Beach, FL 33069

Phone 954-975-0388 • Fax 954-975-3333

PCO #10 - RFP 2 Sandblast and Paint Walls in Clearwells

Contractor

Superintendent	0 MH @	\$100/MH	\$	-
Laborer	0 MH @	\$50/MH	\$	-
Materials				
Equipment				
Subtotal:			\$	-
10% Contractor's Fee:			\$	-
(General Conditions, Article 10.04 D.2.)				
Contractor Total:			\$	-

Subcontractors

Atlantic Painting & Sandblasting	\$	328,500.00
Subtotal:		\$ 328,500 .00
7.5% Contractor's Fee:		\$ 24,637.50
(General Conditions, Article 10.04 D.2.)		
Subcontractor Total:		\$ 353,137.50

Other

Tax on Materials (6.0%)	\$	-
Additional Bond & Insurance (2.427%)	\$	7,973 .00
Subtotal:		\$ 7,973 .00
0% Contractor's Fee:		\$ -
(General Conditions, Article 10.04 D.2.)		
Other Total:		\$ 7,973 .00

Total: \$ 361,110.50
