City of Pflugerville

Legislation Details (With Text)

File #:	2020-8243	**Version:**	1	**Name:**	
Type:	Agenda Item			**Status:**	Approved
File created:	2/13/2020			**In control:**	Engineering Dept
On agenda:	2/25/2020			**Final action:**	2/25/2020
Title:	Approving a Work Authorization Number 2020-3 as a supplement to the professional services agreement for the Water Treatment Plant Engineering Services with DCS Engineering, LLC. in the amount of $55,000 for professional services associated with the Raw Water Strainer Installation Project.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	1. 2020-3 Work Auth Raw Water Strainer, 2. Draft Presentation - DCS Raw Water Line Work Auth				

Date	Ver.	Action By	Action	Result
2/25/2020	1	City Council	Approved	Pass

Approving a Work Authorization Number 2020-3 as a supplement to the professional services agreement for the Water Treatment Plant Engineering Services with DCS Engineering, LLC. in the amount of $55,000 for professional services associated with the Raw Water Strainer Installation Project.

City Staff approved and executed a five year professional services agreement with the option to extend with DCS Engineering, LLC. on January 20, 2015 for consulting engineering services for the Water Treatment Plant. The agreement included a process for Work Authorization requests from staff to be approved by the City Council when exceeding $50,000.

The City discovered Zebra mussels have infested the 36" Raw Waterline to the plant. The full extent of this infestation is not known or readily obtainable due to the absence of inspection/pigging ports. Zebra mussel shells were found inside of the membrane basins in the Surface Water Treatment Plant last year and the sharp shells have been damaging the membranes since that time . This Work Authorization will provide professional engineering services to evaluate available alternatives to prevent zebra mussel shell fragments from further damaging the membranes, evaluate implementation schedules of each option to complete prior to approximately April 1st (i.e. flows start increasing and result in shell fragments dislodging from pipe interior), evaluate expedited construction of each option based on material availability and total construction cost, provide recommendations, generate construction plans, obtain TCEQ approval of plans, and oversee construction modifications. Preventing future additional damage to the membranes is of critical importance to the Surface Water Treatment Plant's ability to maintain its cryptosporidium removal rating and/or prevent train replacement at $500,000 per train. The system is currently operating with low winter flows at about 5 million gallons per day (MGD) which should minimize the shell fragment dislocation from inside of the pipe.

City staff and DCS have been coordinating to select an alternative relocation of the three existing Automatic Backwash Boll Filter strainers from the City's Lake Intake Pump Station building to the 36" Raw Waterline at the existing 36"x36" tee located just before the line enters the membrane building. Upon completion of design, bidding, oversight of field modifications, and oversight of

SCADA programming modifications, water quality will be monitored as the odor/taste/color chemical control system is activated (i.e. sodium permanganate system). Modifications in this project will include physical or programming changes required to allow all the flow through the strainers and allow automatic cleaning of the filters with their existing control panels.

Prior City Council Action

None.

Deadline for City Council Action
Action is requested on February 25, 2020.

Funding Expected: Revenue __ Expenditure _X_ N/A __
Budgeted Item: Yes X No __ N/A __
Amount: _$55,000.00_____
1295 Form Required? Yes _X_ No __
Legal Review Required: N/A __ Required _X_ Date Completed: _02/18/2020___

Supporting documents attached:
Work Authorization 2020-3

Recommended Action
Approve Work Authorization Number 2020-3 as a supplement to the professional services agreement for the Water Treatment Plant Engineering Services with DCS Engineering, LLC. in the amount of $55,000 for professional services associated with the Raw Water Strainer Installation Project.