



Memo

TO: Mayor Manier and City Council
FROM: Ed Andrews, Public Works Director
DATE: November 17th, 2017
SUBJECT: Aerator Repairs Oxidation #1
@ Sewer Treatment Plant #2

EXECUTIVE SUMMARY:

Following the 2013 tornado, clarifier tanks were taken offline and drawn down for inspection and repairs. Oxidation ditch #1 at that time was the primary treatment for plant and could not be taken out of service. With the completion of Oxidation ditch #2 during Phase 2A, staff has off-lined oxidation #1 and drawn it down for inspection and repairs.

It was discovered that the lower assembly of the aerator motor was sheared off. Staff has attempted repairing this inhouse, but due to the large size of the assembly, we have been unsuccessful in drilling out the sheared bolt assembly. Since River City Construction is still working on the improvement to WTP#1 and miscellaneous wrap up at STP#2, we have asked for a time and materials proposal to assist staff with these repairs.



River City Construction (RCC) has prepared an estimate of approximately \$10,500. That includes two laborers @ \$83/hr for a total of 80hrs (40/ea), an operator for 16hrs at \$95/hr and a crane for two days at \$1,200/day.

1. Two (2) laborers would be onsite for a day to setup scaffold and conduct some inspections on the upper part of the aerator to verify alignment and that no serious unrepairable damage has been done to the unit and motor. They don't anticipate this has happened since we are guessing it has ran for almost (4) years since the incident might have occurred.
2. Verified that there are no alignment issues, they would proceed with attempting to remove the bolts. We would anticipate that this could take (2) guys (2) days to complete.
3. With the bolts removed, they would remove the lower turbine portion of the aerator from the tank to be able to clean it off inspect it for damage and any alignment issues. (2) laborers for one (1) day with a crane and an operator.
 - a. Once removed, we will verify the extent of the damage and determine if we believe that we can adequately repair the turbine or if a replacement would be necessary.
 - b. Once we can verify the extent of the damage and necessary repair work, we can let you know what it would take to fix the turbine plate.
4. Upon verification of all of the components and any repair work, we would place the lower turbine back in the tank and position for installation which would require (2) guys with a crane and an operator for a day.

As such, it is recommended to contract with River City Construction on a Time & Materials basis for a not to exceed amount of **\$10,500** for the repairs indicated. It should be noted that since the extent of damage is not yet known, if additional replacements items or repairs are required, a follow up communication and authorization will be presented at that time.

This matter has been placed on the Special City Council meeting agenda of Monday, December 11th, 2017 for review and approval.