



City Administrator Report to Mayor & City Council

2018.11.02, Edition No. 328

WEEKLY UPDATE:

- City Council Goals: Reminder - The City Council goal sessions scheduled for November 8th. The session will be held in the Lower Level Conference Room at 5:30pm. City Staff will be holding their goal setting session this coming week. It was postponed last week following the ransomware attack.
- Council: Just a quick reminder that Council will need to determine whether to move or cancel the July 4th council meeting.
- WPCP: There were 4 bids for the HSW project. The low bid was \$4,288,000 and the engineer's estimate was \$2.6 million. Stanleys and staff are reviewing the bids and will then "re-group" and report back to council.
- Papoose Pumps: per Jon Koch - Attached is a memo I have prepared for the Papoose pumps. While this does not require Council approval, I thought it was good to have something written down as to what occurred and what we are doing going forward. Please see the attached memo.
- Fire: The department received a \$1,900 grant from Muscatine Health Support foundation for Pediatric equipment.
- Housing: Housing received a \$4800 grant from the Muscatine Health Support Program to pilot a senior chair exercise program at Clark and Hershey.
- Library: The Library received a Community Health grant from the Community Foundation. The amount is approximately \$51,000 to cover start-up, training and the first two years costs for LENA Start, an early talk program (Lena.org).

Additional Information

The following are the notes from the Project Management Meeting held on Wednesday, October 31st:

1. Phase IVA - West Hill Sewer Separation:
 - a. Updated work accomplishments:
 - i. Finished pouring sidewalks from Iowa to Spruce
 - ii. Finished backfilling
 - iii. Hydro seeded three blocks
 - iv. Sealed joints (tar)
 - v. Opened traffic from Iowa to the Church
 - vi. Paved 7th St. from Spruce to Locust
 - vii. Paved Spruce from 7th to 8th Streets
 - b. November 1st - Upcoming Work:
 - i. Install Sanitary sewer on Locust St.
 - ii. Finish sidewalks and driveways on Spruce and 7th

2. Mississippi Drive Corridor Project:
 - a. Updated work accomplishments
 - i. Tile and earth work on North lane towards the flood gates
 - ii. Set string lines on North lane
 - iii. Trimmed North lane
 - iv. Paved North lane with access to Family Dollar
 - v. Installed 2" conduit for street lights
 - vi. Built median borders
 - vii. Poured sidewalk on South and North sides of road
 - viii. Paved intakes and box outs
 - b. November 1st - Upcoming Work:
 - i. Finish pouring sidewalks and drives on North side by Family Dollar
 - ii. Finish borders and bath tubes for pavers
 - iii. Flip Traffic Control on 2nd St.
 - iv. Set string lines for rest of the paving
 - v. Pave final 2nd Street area
3. Riverside Park Master Plan:
 - a. Reviewing options for Beer Garden and Truck Vendors
 - i. Potential fundraising opportunity for non-profits
 - b. Reviewing options for an Entertainment area
 - c. Recommended restroom locations: Riverview Center/Papoose Pump Station
 - d. Winter 2018-19 development project
4. Grandview Ave. Reconstruction Project:
 - a. Next Staff/Consultant meeting is November 6th
 - b. Property acquisition/easement process underway
 - c. Revised Schedule:
 - i. November 6th: Check Plans submittal deadline to DOT
 - ii. November 8th: Muscatine City Council Work Session
 - iii. December 18th: Final Plans submittal deadline to DOT
 - iv. January 1st: Contract Plans submittal deadline to DOT
 - v. January 3rd: Resolution Setting Public Hearing
 - vi. January 17th: Public Hearing and Resolution Approving Plans/Specs
 - vii. March 19th: Bid Opening
 - viii. April 4th: Resolution Awarding Contract
 - ix. April 18th: Resolution Approving Contract & Bond
 - x. 2019: Construction from By-Pass to Oregon
 - xi. 2020: Construction from Oregon to Pearl
 - d. Bi-State: additional STP funding \$1.5 million requested
5. 2nd/Mulberry Roundabout Project:
 - a. Property acquisition being finalized
 - b. Possible permanent easements for water and roadway access under consideration
 - c. City Staff/Bolton-Menk reviewing final plans for Winter bid letting
 - d. Process with schedule to follow:
 - i. Acquire Property
 - ii. Raze existing structures

- iii. Bid Project
 - iv. Construction
6. Westside Trail:
 - a. Environmental Phase I Cultural Resources review update
 - i. Concern about archaeological impact on area
 - ii. Impact 7G working with State to resolve issue
 - b. Developer has given assurances for a trail route behind Crossroads
 - c. Soccer Complex Parking Lot/Trail work nearing completion
 7. 2nd Street Improvement Project/Design:
 - a. Revised Scope of Services and Cost Estimate reviewed by City Staff
 - b. Bolton-Menk to submit final Proposal for Design (2019)
 - c. Construction anticipated in 2020
 8. Kent-Stein to Deep Lakes Trail:
 - a. Preparing documentation for final audit
 9. DOT Lake Park Blvd site:
 - a. City Council/DOT agree to purchase price
 - b. Process with schedule to follow:
 - i. Access to facility for review by Police/Fire/PW
 - ii. Draft Site analysis report
 - iii. Design renovations
 - iv. Construction
 10. Old Library Site:
 - a. City to consider development options
 11. 2018 Full Depth Patch Program:
 - a. Stewart Road, Division, Fulliam - completed
 - b. Houser, Logan, Park Ave. West - underway
 - c. 2nd Ave. (Cleveland to Lake Park) - to be completed
 12. Carver Corner Development:
 - a. Initial Goals:
 - i. Highest and Best Use Development
 - ii. Attract more people to live in Muscatine
 - iii. Make it unique from CBD
 - b. Process:
 - i. Seek additional opinions for best use
 - ii. Discuss the need for a financial consultant
 - iii. Finalize a "best use" list
 - iv. Discuss with City Council
 - v. Develop RFP
 13. City Hall Security:
 - a. Quotes needed for doors

14. Phase V - West Hill Sewer Separation Design:
 - a. November (?): Next Meeting with Stanley
 - b. November 1st: Council Approval of Property Research PO - Martin-Whitaker
 - c. November 15th: Council Approval for Televising Agreement (PO)
 - d. Maintenance accessibility part of design

15. Park Ave Three Lane Configuration Project:
 - a. Shive-Hattery
 - i. Need MPW scope of Services
 - ii. Need to submit Cost Estimate to DOT
 - b. Cost to be divided between City/State/DOT
 - c. 2019 Construction Project

16. Fulliam/Houser Roundabout:
 - a. Shive Hattery design
 - b. Cost - 100% State funded
 - c. 2019 Construction Project

2019 Projects:

- a. Grandview Ave.
- b. Westside Trail
- c. Phase IVB West Hill Sewer Separation
- d. Park Ave. three lane configuration
- e. Roundabout at Fulliam/Houser
- f. Riverside park Development
- g. DOT Lake Park Blvd Facility design
- h. 2nd Street Improvement Project design
- i. City Hall HVAC Envelope
- j. Roundabout at 2nd/Mulberry
- k. Carver Corner Development Process
- l. Phase V West Hill Sewer Separation Design
- m. 2019 Sidewalk Program
- n. Old Library site development
- o. 2019 Full Depth Patch Program
- p. Extension of Briar's Ditch design

Our next Project Management Team Meeting will be held on Thursday, November 15th at 8:30 a.m. in the Field Office.



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WATER & RESOURCE RECOVERY FACILITY

MEMORANDUM

To: Gregg Mandsager, City Administrator

CC: Nancy Lueck, Finance Director

From: Jon Koch, WRRF Director

Date: November 1, 2018

Re: Papoose Wet Weather Pumps

INTRODUCTION: The Papoose Lift Station wet weather pumps are being rebuilt by the pump manufacturer to remain functional for their current function of pumping water from the Papoose tunnel during large rain events. These two pumps will be ready and fully functioning for the next wet season in 2019.

BACKGROUND: There are two large wet weather pumps at the Papoose Lift Station that pump large rain event flows to the WRRF. The size of the pumps and size of the receiving pipe only allow for one or the other pump to run at the same time. Full capacity pumping during a rain event consists of the #1 dry weather pump and either the #2 or #3 wet weather pumps.

The #2 pump showed excess leaking late in 2017. These pumps are designed to leak a small amount of water around the shaft to allow for cooling and lubrication. Once the leaking became excessive and new seal packing was ineffective we began pricing for a new pump or critical component replacement of the pump. A new pump is \$128,000.00 while the critical component section was \$109,500.00. Since the pump was still functioning at full capacity it was decided to budget for a critical component rotating assembly in the 19/20 budget. The #3 pump was functioning and not leaking excessively.

On October 6th, 2018, the #2 pump failed due to excessive vibration. This occurs when a bearing has failed in one or several locations. The #3 pump was started and soon after had similar bearing failure. This is an unprecedented simultaneous failure of these components that up until that time were functioning and had been maintained to function for the foreseeable future. The #1 pump motor had been removed for repair due to lightning strikes the week before. A replacement motor was put on the #1 pump and resumed full operation within several hours. The Papoose Station was in CSO (Combined Sewer Overflow) at that time due to heavy rainfall. Due to rare river flooding for that time of year the CSO was not able to relieve pressure to the

**"I remember Muscatine for its sunsets. I have never seen any
on either side of the ocean that equaled them" — Mark Twain**

downtown sewer system and at least two properties reported basement flooding.

By Monday Oct. 8th the #3 pump was running but suffered critical failure again by Tuesday and was no longer repairable. The most significant basement leaking in the Bark property was under control and contained to return to the sewer. Due to heavy rainfall the previous two days the Papoose Station was still in CSO. By Wednesday the #1 dry weather pump had caught up to the rain and the CSO ended while bringing levels down in the Papoose tunnel relieved basement flooding in most properties.

On the morning of October 15th the Papoose Station experienced a critical power failure to the entire station due to a short in the incoming power lines. They were submerged in the flooding waters and it is assumed due to their age and location of being submerged regularly the casings deteriorated and the resulting explosion melted the wires in the conduit. There was another conduit of wires feeding the station which was switched over allowing us to have the #1 pump back up and running within an hour. The melted wires and the functioning wires will be replaced in the coming weeks at a cost of approximately \$14,000.00. Although they are still functioning, the 1980's era VFD's for all three pumps will be updated to current technology levels but a cost is not presently known. These are outdated and have received multiple shocks that gives us low confidence in their continued viability.

RECOMMENDATION/RATIONALE: WRRF staff recommends the immediate emergency rebuild of the #2 wet weather pump at a cost of \$69,020.00 plus freight. This will return the station to full wet weather capacity in the quickest time frame of approximately 4 weeks. It is recommended that the #3 pump then be sent and evaluated for rebuild. Replacement is not recommended as the emergency rebuild will be sufficient to return the pumps to service more quickly. The function of these pumps are uncertain going forward after the sewer separation is completed less than 10 years from now. The pumps were originals from 1965 so they are designed to last a very long time. Staff does not recommend spending nearly twice as much per pump to replace them if they end up not being the appropriate pumps in under 10 years when the station is redesigned.