

Date:	January 10, 2024
Prepared By:	Charles F. Soules, PE - Director of Public Works
Subject:	Project Updates

This memo provides an update on the status of current projects as well as those included in the near future in the capital improvements plan. At the work session, staff will focus discussion on the Commercial Street Sidewalk, Stonebridge Lift Station and 144th Street Lift Station and West Interceptor.

Commercial Street Sidewalk

The project includes a 6-foot pedestrian sidewalk on Commercial Street from Smithville school district property north to Meadow Street in Downtown Smithville. The project will include sidewalk, ADA access, grading, curb and gutter and pavement/pavement repair. From East Woods Street to Meadow Street the east curb line will be reconstructed to the west. Commercial Street is wider and the homes and large trees are located closer to the street. Narrowing Commercial St may necessitate “No Parking” on the east side of the street.

The City received \$500,000 in Federal funding with a City budgeted match of \$250,000. The current estimate is \$1.2 million. Additional funding will be needed. Attached is the layout plan.

Raw Water Pump Station

Bid was awarded to Irvinbuilt Constructors June 15, 2021 with expected completion date of June 2022. Due to material supply and parts /equipment issues the completion date is expected this April 2023. The project pump station is in use and there are just a few very minor items that we are waiting for the contractor to complete to close this project.



SBR Cleaning

At the August 15, 2023 Board of Alderman meeting, staff reported the need for this project. The Plant was not in compliance with our DNR permit as our ammonia levels are running higher than our permitted limits. This is caused by not having enough reaction time in the basins and aeration. We have found the need to repair the motive pumps, clean out the basins, replace influent valves, and clean diffusers. The plant is 20 years old and none of this work has been completed. In the 2024 budget and going forward we are identifying funds annually to take these basins down and clean and provide maintenance.

Following is the progress of the project. We are in compliance with our ammonia levels with Basin 1 and 2 completed. The black cost were provided as the estimated costs and the red is the actual costs.

The following table provides the cost per basin:

SBR#1 – earlier this year the decanter arm was replaced

Basin #1– Work To Do	Cost Estimate By Item
Installation of Influent Valve	\$3558.22 Mid-America Pump \$3558.22
Motive Pump Repair	\$22,005.82 (Mid America Quote) \$26,307.96
Basin Cleaning	\$7436.20 Clean Harbors \$0 City staff cleaned basin
Decant Arm Brace	\$0 (previously completed)
Total	\$33,000.24 \$29,866.18 total

SBR#2 – there has not been any work previously completed on this basin

Basin #2 – Work To Do	Cost Estimate By Item
Installation of Influent Valve	\$3558.22 Mid-America Pump \$3,558.22
Motive Pump Repair	\$27,168 (Mid America Quote), \$35,913 (JCI Quote) \$29,285.25
Basin Cleaning	Not to exceed \$10,000 Clean Harbors \$9,408.18
Decant Arm Brace	Win Clair Sheet Metal Fabrication \$8255 \$8,255.00 Mid America Remove & Install \$7135.01 \$8,178.44 Total \$15,390.01 \$16,433.44
Total	\$56,116.23 \$58,685.09

SBR#3 – earlier the decanter arm was repaired

Basin #3– Work To Do	Cost Estimate By Item
Installation of Influent Valve	\$7,187.14 Mid-America Pump \$7,187.14
Motive Pump Repair	\$23,968.82 (Mid America Quote), Not completed yet.
Basin Cleaning	7436.20 Clean Harbors \$6,454.20

Decant Arm Brace	\$0 (previously completed)
Total	\$38,592.16



BEFORE



AFTER

Stonebridge Lift Station

A long-term goal of the City of Smithville is to serve the community's wastewater collection needs and provide additional capacity to facilitate growth opportunities more efficiently. The Stonebridge and Day Care Lift Stations are at capacity and cannot accept any additional flow. Both lift stations are over 25 years old.

The City conducted a drawdown test on the existing Stonebridge Pump Station on June 29, 2023 to determine existing pumping capacity. Pumping capacity was found to be only at 30%.

There are several undeveloped commercial and residential lots in this service area and the new transit facility that the school is constructing could be served by the Stonebridge lift station. This project would upsize the Stonebridge lift station and force main and eliminate the Daycare lift station and provide the capacity for build out of the area.

The School District is partnering with the City on this project so they can have sewer service to the new bus barn. The project will be bid March 19th with Award April 2.

Staff is recommending that the construction of the Stonebridge Lift Station be included in the COP along with the 144th Street Pump Station and West Bypass.

144th St Lift Station and West Interceptor

This project is in the final design phase. Staff is currently working with property owners to secure easement for the Force Main. The project includes a regional lift station that will accept waste water from Hills of Shannon allowing the decommissioning of that pump station and converting it to gravity, ability to decommission the McDonalds and Platte Valley Bank lift stations, serve the Fairview crossing Development and additional development in South Smithville, and have capacity for Forest Oaks. The west force main will extend from the 144th Street pump station to Cliff Drive. The preliminary hearing in the condemnation process is set for January 19. The project will bid in early Spring.

A Go To Market Resolution for Certificates of Participation is on the agenda this evening for the Boards consideration.

Stonebridge Storm sewer Improvements

The Stonebridge Addition has seen some recent flooding due to significant rain events. The school district did complete a preliminary hydraulic review and the storm sewer under Stonebridge Lane is not sufficient to carry the drainage / runoff. The school does have some storm water detention however during certain storm events there has been some localized flooding. Last fall the pipe that drains to the pond in the Stonebridge Addition failed / collapsed, we made temporary repairs but this line needs to be replaced.

GBA will look at the drainage and size the system and develop the plans to improve the system and replace the collapsed line. Presented this evening is the engineering contract with GBA for the Boards consideration.

River Crossing

Our current distribution system has restricted capacity to supply water to the North Water Tower. In order to stabilize pressures between the North and South towers and prevent the South tower from overtopping the water master plan recommends that the City install a continuous 12-inch supply line from the water treatment plant to the North tower. The River Crossing Project is the first phase to accomplish this goal. The project will tie onto the 12-inch main installed on Main Street heading north through Heritage Park, under the river and tie into Maple just south of Third Street. This project is under design and will be bid in the Spring.

The Smith Fork Lift Station is complete and running. HDR is working on the plans to lay a new force main line from Smiths Fork across the river tying in at 4th Street Terrace and Spellman. This project will bid in late Spring



The City has received additional funding of \$1 million for a total Federal grant of \$1.488 million.

The project will be rebid March for award in April.

The watermain replacement on Bridge Street, originally included with the Streetscape project but not eligible for Federal funding, will be bid separately in February.



Existing



Proposed



Other Projects

- **Winner and Woods** - MARC bid this project being funded from Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (CRRSAA) funds to support preventive maintenance activities on local roadways to address deferred maintenance needs for area cities and counties located within the Kansas City metropolitan planning area in Missouri. Superior Bowen will be the contractor and this work is expected to be completed this summer.

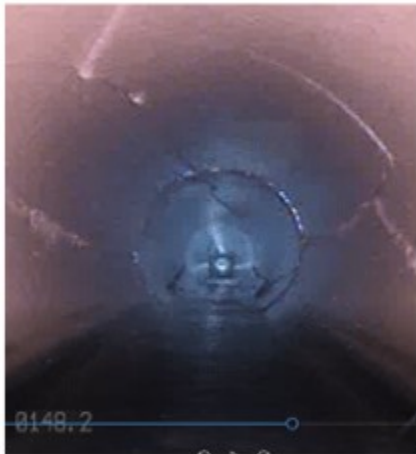
- **4th Street and 4th Terrace** – Water, sewer and storm sewer are completed. Concrete pavement was completed on 4th Street and covered to allow the concrete to cure.

4th Street Terrace – final lift of asphalt will be completed in the spring. Residents have access.

Final grading and cleanup/ yard restoration will be completed in the spring.



- **Quincy Avenue** –This project includes watermain, storm sewer, street and sidewalk improvements from Hawthorne to Maple Lane. Amino Brothers is the contractor and have completed the water main and 95% of the storm sewer improvements. Sidewalk is formed from Maple Lane to Highland. Street and sidewalk improvements will be completed in the spring of 2024.
- **CIPP program** – Bids were received Wednesday January 10th. A Resolution awarding the Bid is on the agenda this evening.



BEFORE



AFTER

- **Bar screen** – Included the 2024 budget is \$350,000 to replace the bar screen at the waste water treatment plant. Bids will be received January 23 with consideration for award by the Board on February 6. A gear that runs between the motor and the screen has failed and the repair quote from Huber Technologies is \$7300. Staff is proceeding with the repairs. Contractors bidding on the Bar Screen are telling us the new equipment may be up to 11 months delivery.
- **OK Trail –** The OK Railroad Trail Phase I includes the rehabilitation of 2,230 ft, 10 feet wide concrete trail along with a 4 feet wide lime screen running trail adjacent. Amenities include 2 benches, water bottle filling station, pedestrian counter, signage, landscaping, & 2 butterfly gardens. The City received \$185,000 in Federal funds from the Recreational Trails Program from DNR. Staff is working to see if we can develop the plans for this project in house. Funds need to be expended by 2026.
- **Sidewalk maintenance program-** Sidewalks in Harborview will be completed this year along with the Street Maintenance Program. Due to limited funding the scope will primarily consist of sidewalks that the City is responsible for around utilities, storm sewer boxes and ADA ramps. Project will be bid in March.



- **Water Treatment Plant Residuals** – Bids were opened December 5, 2023. Richards Construction was the low bid at \$188,000. Bid Award is on the agenda January 16th. Project was originally scheduled to begin in fall but contractor has expressed wanting to begin in next couple months.
- **Water Plant improvements** – Scope includes filter rehab, valve replacement and additional rehabilitation items. The project schedule includes:
 - January 3, 2023 – Issued for Bid
 - January 23, 2024 (11:00am) – Mandatory Pre-Bid Meeting at the WTP
 - February 6, 2024 (2:00pm) – Bid Open
 - March 5, 2024 – Award Contract
- **2023 Street Maintenance Program** – The 2023 budget includes \$300,000 for the Street Maintenance Program. Staff recommends streets in Harborview including some curb and gutter repair and mill and overlay.

