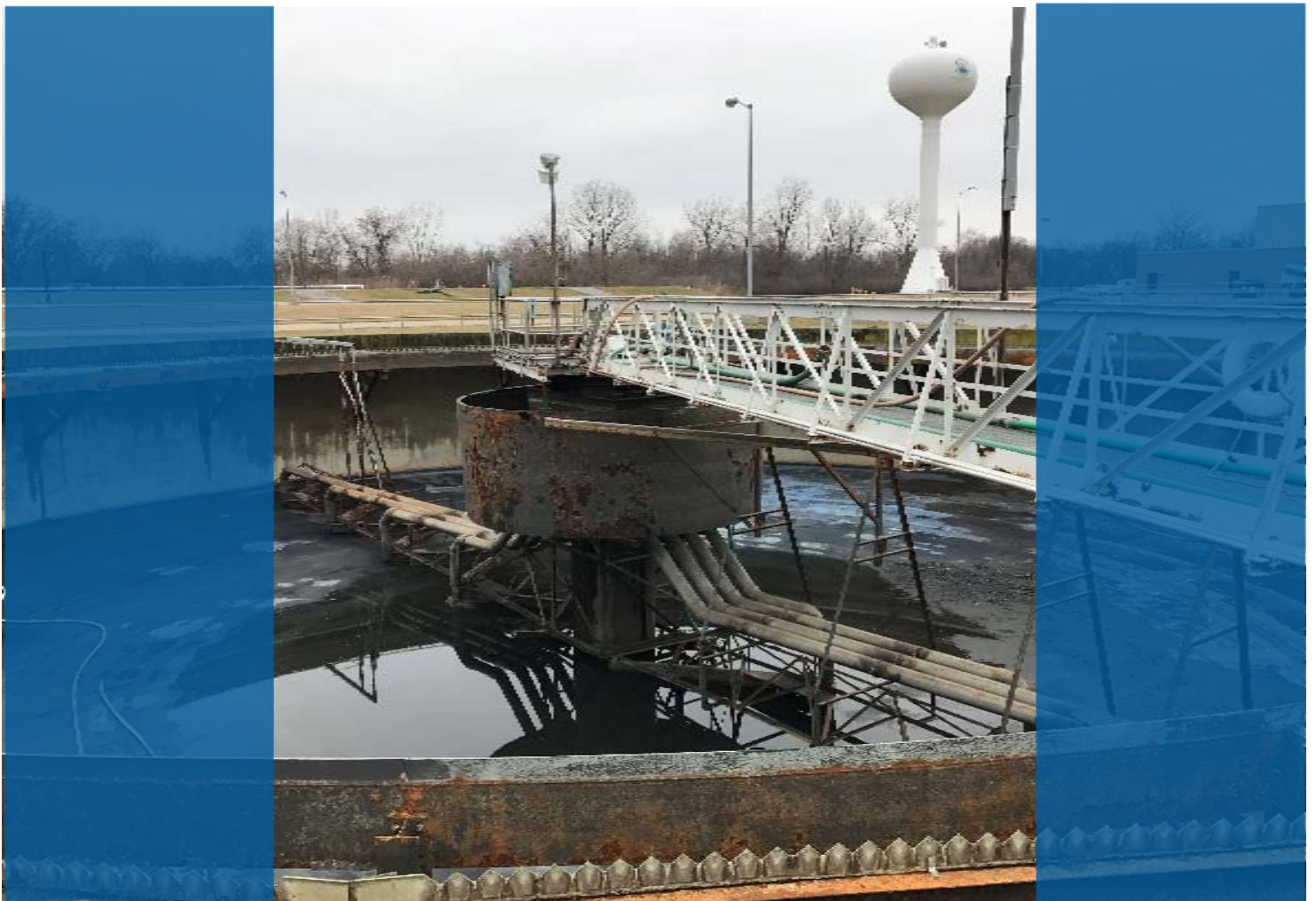


2019 20-YEAR CAPITAL IMPROVEMENTS PLAN

SOUTH HURON VALLEY
UTILITY AUTHORITY



FINAL: March 15, 2018
HRC Job No. 20160586



Prepared By:



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EXECUTIVE SUMMARY

BACKGROUND

The South Huron Valley Wastewater System is located in southern Wayne County and serves the Communities of Brownstown Township, Huron Township, Van Buren Township, Flat Rock, Gibraltar, South Rockwood (Monroe County), and Woodhaven. The system was originally operated by the Wayne County Department of Public Works. However, at the time (2000) the latest treatment plant expansion construction work started, the ownership and operation were transferred to the South Huron Valley Utility Authority. The Authority consists of one appointed representative from each of the seven communities.

The South Huron Valley (SHV) Wastewater Treatment Plant (WWTP) was originally constructed in 1986 as a 12 MGD A/O biological phosphorus removal (BPR) treatment plant. The plant was expanded in 2000 to 24 MGD, doubling the secondary treatment capacity. Other facilities and improvements were added, as detailed herein.

ASSESSMENT OF FACILITIES AND ANALYSIS OF ALTERNATIVES

The SHV facilities consist of the WWTP, collection system and Trenton Arm and Odette Pump Stations. The WWTP was inspected by a multi-discipline team of engineers/architects. The Trenton Arm and Odette Pump Stations are scheduled for inspection, and the collection system is inspected yearly by Suez-NA and their recommendations were used for this report.

RECOMMENDATIONS

The capital improvement recommendations for the 20 year planning period, were grouped into one of four, five-year planning periods.

- Priority 1 improvements are proposed to be implemented within the first five-year period (2019-2023),
- Priority 2 improvements in the second five-year period (2024-2028),
- Priority 3 in the third five-year period (2029-2033), and
- Priority 4 in the last five-year planning period (2034-2038).

Detailed costs are presented for all Priority 1 improvements. Less detailed costs are presented for Priority 2 Improvements. Since this is a planning document, all costs have conservative contingencies added. Note that significant work that was originally recommended as Priority 1 improvements in the draft version of this capital improvements plan (CIP) was deferred herein to Priority 2 to help balance capital expenditures.

The Priority 1 Improvements are separated into the suggested Projects based on the type of work required.

Table 0-1: Cost Summary for Recommended Priority 1 Projects

Priority 1 Projects (FY 2019 to 2023)	Capital Cost
Headworks and Plant-Wide Repairs and Improvements: Priority 1	\$6,127,000
Architectural Roof and Masonry Renovations	\$762,000
Electrical and I&C/SCADA Equipment Replacement	\$5,731,000
Collection System Renovations – Flow Meter Replacement: Priority 1	\$1,287,000
Total Priority 1 Projects	\$13,907,000

Table 0-2: Cost Summary for Recommended Priority 2 Projects

Priority 2 Work (FY 2024-2029)	Capital Cost
Civil	\$1,532,000
Structural Renovations	\$870,000
Architectural	\$763,000
Process/Mechanical	\$4,209,000
Electrical	\$3,552,000
I&C/SCADA	\$1,992,000
Total Priority 2 Projects	\$12,918,000