



# Heart of the Valley

## METROPOLITAN SEWERAGE DISTRICT

### DEBT SERVICE AMORTIZATION - ANNUAL P & I

CWF Loan Year	<i>Current Debt Service Schedule</i>			<i>Projected Future Debt Service</i>		<b>ANNUAL P &amp; I TOTALS</b>
	Marine Manhole & CIPP	Siphon/Subtraction Elimination ICA - Darboy & CL	WWTP Upgrade	Interceptor Rehab	Cloth Media Disk Filters	
2021	\$296,176.85	\$205,888.86	\$2,170,306.95			\$2,672,372.66
2022	\$296,099.60	\$205,835.84	\$2,169,761.19		\$89,100.00	\$2,760,796.63
2023	\$296,020.44	\$205,781.58	\$2,169,202.54	\$326,700.00	\$178,200.00	\$3,175,904.56
2024	\$295,939.33	\$205,726.03	\$2,168,630.68	\$326,700.00	\$760,285.79	\$3,757,281.83
2025	\$295,856.20		\$2,168,045.30	\$1,465,350.43	\$760,221.13	\$4,689,473.06
2026	\$295,771.01			\$1,465,223.94	\$760,155.51	\$2,521,150.46
2027	\$295,683.71			\$1,465,095.57	\$760,088.91	\$2,520,868.19
2028				\$1,464,965.31	\$760,021.32	\$2,224,986.63
2029				\$1,464,833.10	\$759,952.74	\$2,224,785.84
2030				\$1,464,698.93	\$759,883.13	\$2,224,582.06
2031				\$1,464,562.77	\$759,812.49	\$2,224,375.26
2032				\$1,464,424.58	\$759,740.80	\$2,224,165.38
2033				\$1,464,284.34	\$759,668.04	\$2,223,952.38
2034				\$1,464,142.01	\$759,594.20	\$2,223,736.21
2035				\$1,463,997.58	\$759,519.28	\$2,223,516.86
2036				\$1,463,851.01	\$759,443.23	\$2,223,294.24
2037				\$1,463,702.26	\$759,366.05	\$2,223,068.31
2038				\$1,463,551.29	\$759,287.73	\$2,222,839.02
2039				\$1,463,398.09	\$759,208.25	\$2,222,606.34
2040				\$1,463,242.61	\$759,127.60	\$2,222,370.21
2041				\$1,463,084.82	\$759,045.74	\$2,222,130.56
<b>TOTALS:</b>	\$2,071,547.14	\$823,232.31	\$10,845,946.66	\$25,545,808.64	\$13,941,721.94	\$53,228,256.69

**Year:** 2013

**Project:** Interior and exterior protective MIC resistant coatings/H<sub>2</sub>S Venting systems

**Cost:** \$805,665

**Engineer/Contractor:** SMS & Great Lakes TV and Seal

**Funding source:** No Clean Water Fund loan was needed. The project was completed using undesignated reserves of the District. The origin of these reserves is budgeted monies that are budgeted not spent each calendar year.

**Debt service:** N/A

**Discussion:** This project was completed in conjunction with the Fox River SNA to drain the navigation channels where HOVMSD Interceptor manholes are located creating easy access to the structures. This allowed HOVMSD to add protective coating to the exterior and interior of the manhole structures to protect them from MIC. In addition to MIC resistant coatings for the manhole structures, two H<sub>2</sub>S mechanical venting systems were installed to remove, scrub, and purge foul air containing hydrogen sulfide gas.

**Year:** 2007

**Project:** Marine Manhole Protective Jackets / CIPP Lining

**Cost:** \$ 4.493M

Engineer/Contractor: McMahon, Lunda, Spinello

**Funding source:** CWF Bonding @ 20 year payback schedule

**Debt service:** P&I payments are included in the District debt service obligation in the budget. The debt obligation is allocated entirely to the District flow charge parameter.

**Discussion:** The project involved maintenance and major repairs to existing interceptor system infrastructure defects. Manholes located in the river were reinforced and encased in concrete jackets with select manholes (7) receiving an upstream concrete bullnose to deflect and shed ice shoves moving in the river. Unsound concrete was removed and manhole cracks were epoxy injected.

Major CIPP lining effort included: 1057 feet of 30" inch pipe, 1030 feet of 36" pipe, 684 feet of 42" pipe and 4443 feet of 48" concrete interceptor pipe along with spot repairs as needed.

**Year:** 2004

**Project:** Interceptor Improvements / 30" Siphon /Subtraction method elimination

**Cost:** \$3.544M

**Funding source:** CWF Bonding @ 20-year payback schedule

**Debt service:** Split between HOVMSD, Darboy, and Combined Locks per Intermunicipal Cooperation Agreement

**Discussion:** Project incorporated several key issues and improvements into one single project. Residential growth and projected development made the additional river crossing siphon barrel necessary. Historical Subtraction method billing issues were remedied by rerouting Kimberly flows to MS #1 and by metering and sampling Darby/Combined Locks separately in new meter station 4/7.

Debt service for eliminating the subtraction method were allocated to HOVMSD and are collected on the basis of the flow component of the sewer user charge.

Debt service for the siphon and necessary piping modifications were allocated to Darboy and Combined Locks. The percentage each community pays is based off peak flows and the reimbursement appears as ICA Debt Reimbursement in the District's annual budget.

**Year:** 1999/2000

**Project:** Interceptor sewer and manhole rehabilitation / Interceptor sewer relining

**Cost:** \$415,100

**Engineer/Contractor:** Donohue/Crispell Snyder, Great Lakes TV and Seal, Endeavor Diving, Insituform

**Funding source:** No CWF loan was taken to complete this project. Funded by the use of Undesignated HOVMSD reserves.

**Debt service:** N/A

**Discussion:** Project was the first maintenance project for interceptor related work since its install. Work completed was roughly 2/3 sewer and manhole repairs and 1/3 relining of sewer lines. Project eliminated an estimated 367 gpm of continuous infiltration to the HOVMSD interceptor. The defects addressed were numerous and included: manhole cracks, leaks, and H<sub>2</sub>S attack along with manhole castings, adjustments and fracture repair by structural CIPP lining.

**Year:** 1975/6

**Project:** Design and construction of the HOVMSD Interceptor Sewer

**Engineer:** Donohue

**Cost:** \$6.0M est

**Funding source:** CWF Bonding @ 12-year payback schedule

**Debt service:** Reach method debt service allocation

**Discussion:** The interceptor was designed and constructed at the inception of Heart of the Valley Metropolitan Sewerage District. The interceptor was broken down into 7 segments or reaches (A thru G) and the cost of each segment was allocated to the member community that used each reach. The debt service allocation to the member communities was based off year 2025 flow projections and not current flows. At that time Darboy was not yet a member of the HOVMSD.

<b>Community</b>	<b>Reaches utilized</b>	<b>1977 Allocation for P&amp;I</b>
Kimberly	A, B, C, E, F, G	\$82905
Little Chute	C, D, E, F, G	\$63848
Combined Locks	B, C, D, E, F, G	\$35484
Kaukauna	G	\$8053

**Source:** 9/21/76 Letter from Donohue to HOVMSD