

City of Novi
Water & Sewer Fund
Reverse Capital Improvement Plan
FY 2019-20 through FY 2024-25

CATEGORY	PROJECT NAME	PROJECT DESCRIPTION	YR-6 2019-20 ACTIVITY	YR-5 2020-21 ACTIVITY	YR-4 2021-22 ACTIVITY	YR-3 2022-23 ACTIVITY	YR-2 2023-24 ACTIVITY	YR-1 2024-25 ACTIVITY	TOTAL
Sanitary Sewer	WRC Huron Rouge Sewage Disposal System (HRSDS) Retention Facility Construction	The purpose of this project was to address the periodic contract flow exceedances the City had experienced.	\$ 67,250	\$ 4,550,165	\$ 5,450,000				\$ 10,067,415
Sanitary Sewer	Nine Mile Rd Sanitary Relief Sewer	Replacement of approximately 6,400 feet of force main sanitary sewer with gravity sewer from Evergreen Court to Kensington. The main purpose of this project was to provide redundancy to the Park Place pump station, which is 1.6 miles from the closest gravity sewer outlet (near Kensington).	\$ 2,708,306	\$ 2,399,088	\$ 2,520,131	\$ 319,728			\$ 7,947,254
Water Distribution	Asbestos-Cement (AC) Water Main Replacement Phase 1- Meadowbrook Manor subdivision, Meadowbrook Lake subdivision, and along Center Street	This program is a multi-year effort that will likely cost an estimated \$40 million in total. It removes and replaces aging, obsolete, and potentially hazardous water mains primarily in older residential areas of the City. Abatement of asbestos-cement water main as a needed improvement and benefit to the existing system was first identified as a priority in 2017 in the Water System Asset Management Program Report.			\$ 324,684	\$ 6,082,157	\$ 378,366	\$ 10,738	\$ 6,795,945
Sanitary Sewer	WRC Huron Rouge Sewage Disposal System (HRSDS) Interceptor Repairs	HRSDS Interceptor Sewer is owned by Oakland County, but maintenance, repair, and rehabilitation are funded by Novi. Sewer is 50+ years old, and inspection identified significant pipe defect. \$19.3M cost estimate - \$6M WRC Operating Reserves, \$7.3M WRC-issued Bond, \$6M Novi Water & Sewer Fund Reserves						\$ 6,000,000	\$ 6,000,000
Sanitary Sewer	Sanitary Sewer Capacity Upgrades Lanny's Influent & Drakes Bay Effluent	Existing pumps needed to be upgraded. That in turn necessitated a pipe size increase. While it will also assist with capacity in the system for new or future users, this project will reduce the current ongoing surcharging of sanitary sewer in this service area.		\$ 76,488	\$ 36,619	\$ 93,189	\$ 3,970,875	\$ 1,064,145	\$ 5,241,315
Water Distribution	AMI Water Meter Replacements	Replaced aging water meters throughout the water system.	\$ 264,403	\$ 1,073,673	\$ 1,863,431				\$ 3,201,506
Sanitary Sewer	Sanitary Sewer Main & Manhole Rehabilitation	Based on the 2019 SAW grant inspections, these were recommended rehabilitation projects based on the deficiencies identified.	\$ 39,808	\$ 2,244,808	\$ 416,242				\$ 2,700,857
Water Distribution	Howell's Walled Lake Subdivision Water Main Replacement	This project addressed high-frequency water main breaks in this portion of the system. The project was conceived to coincide with other infrastructure improvements that will be combined to achieve economies of scale. These improvements increased reliability for this section of the system.			\$ 159,858	\$ 2,312,165	\$ 106,433	\$ 53,826	\$ 2,632,282
Sanitary Sewer	WRC Novi Trunk Sewer Replacement & Rehabilitation	Replacement and rehabilitation of a failing sanitary sewer in northwest portion of Novi. The purpose of this project was to replace 330 linear feet of sagging sanitary sewer, which had caused several sanitary sewer overflows (SSO) into the adjacent wetlands. Additionally, 2,382 linear feet of the concrete sewer main pipe was lined due to the deterioration observed during inspection.			\$ 2,200,000		\$ 280,000		\$ 2,480,000

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Sanitary Sewer	DPW Facility Upgrades for MS4 Compliance- Vactor dumping station	Upgrades to the DPW Facility for MS4 Compliance. Requirements include a vactor dumping station with two storage areas, associated site paving, utilities, and necessary security measures.	\$ 1,121,701	\$ 338,357					\$ 1,460,058
Water Distribution	Water Main Replacement -Roethel Drive	The segment of 12-inch water main on Roethel Drive south of Nine Mile had experienced three breaks in the recent past, indicating the pipe was experiencing corrosion issues. Replacement of the water main avoided the unexpected cost and delay associated with future breaks and maintenance in this area. This was identified in the 2021 Water System Master Plan.				\$ 73,027	\$ 1,357,091	\$ 28,150	\$ 1,458,268
Water Distribution	PCCP Water Main Inspection & Repairs	This project addressed potential catastrophic failure along 2.5 miles of PCCP water main identified during pipe diver inspection (2019-20). This protects a critical asset for the entire water system.	\$ 316,093	\$ 15,488			\$ 1,415,010	\$ 795	\$ 1,747,385
Sanitary Sewer	I-96 Sanitary Sewer Crossing Project & West Oaks Pump Station Abandonment	This project eliminated an unnecessary pump station with a new gravity main in conjunction with the major I-96 Flex Route road construction. Completion avoids excess maintenance and investment.		\$ 23,544	\$ 39,100	\$ 939,339	\$ 19,785		\$ 1,021,768
Water Distribution	Water Main Replacement- Westminster Subdivision	This rehabilitation was needed to address high-frequency water main breaks to this part of the system. This increased reliability for this section of the water system.				\$ 328,073	\$ 637,823	\$ 2,143	\$ 968,039
Water Distribution	Asbestos-Cement (AC) Water Main Replacement- 10 Mile (Meadowbrook to Haggerty)	This involved the replacement of asbestos-cement water main. It was initiated in 2019 to coincide with a Road Commission of Oakland County (RCOC) road project for improvements to 10 Mile Road (2022-23). Abatement of asbestos-cement water main as a needed improvement and benefit to the existing system was first identified as a priority in 2017 in the Water System Asset Management Program Report.				\$ 725,681	\$ 143,851	\$ 1,730	\$ 871,262
Sanitary Sewer	Sanitary Sewer Force Main Replacement- Hilton Station	This project was needed to address the aging sanitary sewer force main/infrastructure identified in the 2014 Sanitary Sewer Capacity Assessment. The project increased reliability in this area of the city.		\$ 23,760	\$ 141,107	\$ 648,403	\$ 16,037		\$ 829,307
Water Distribution	Asbestos-Cement (AC) Water Main Replacement- Phase 2- Nine Mile Road, Meadowbrook Road, Meadowbrook Lake subdivision	This program is a multi-year effort that will likely cost an estimated \$40 million in total. It removes and replaces aging, obsolete, and potentially hazardous water mains primarily in older residential areas of the City. Abatement of asbestos-cement water main as a needed improvement and benefit to the existing system was first identified as a priority in 2017 in the Water System Asset Management Program Report.				\$ 524,845	\$ 126,100		\$ 650,945