



**CAPITAL
IMPROVEMENT
PLAN
(WATER)**

City of Lowell
Kent County, Michigan

December 2017

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

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Prepared by

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Prein&Newhof

[2170690]

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

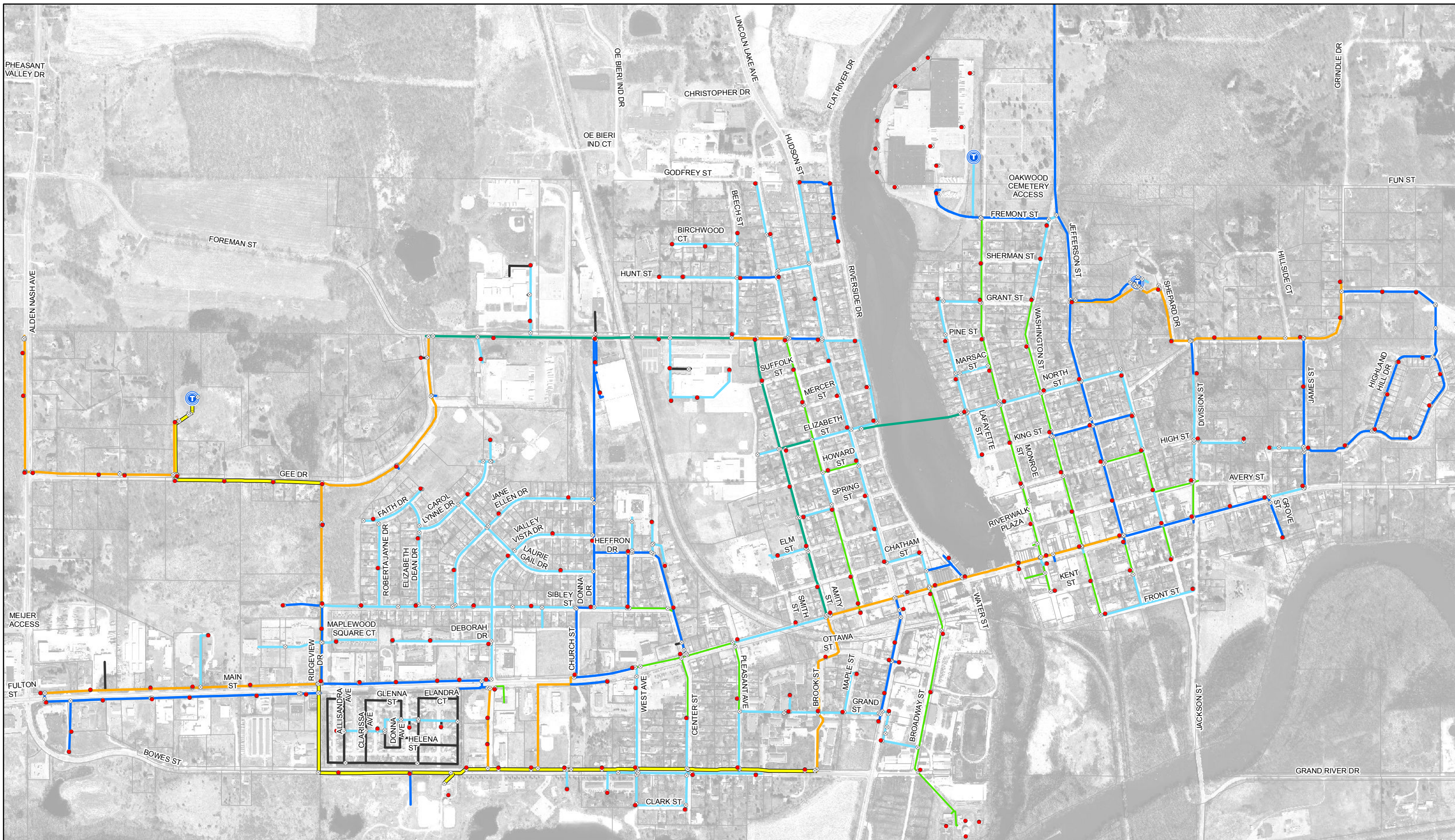
INTRODUCTION

City of Lowell's public infrastructure includes drinking water supply and delivery systems, storm drainage systems, sanitary sewer systems, and public streets. These systems are aging and certain parts need to be repaired or replaced to keep up with deterioration over time. This capital improvement plan focuses on the water supply and delivery system only.

Waiting until something breaks to make emergency repairs is expensive. A more proactive approach can minimize life cycle costs using the following steps:

- Evaluate the condition and capacity of assets to determine the needs.
- Implement a maintenance program for the small needs.
- Implement a Capital Improvement Plan for the big needs.
- Develop financial strategies to fund all planned work before needs become emergencies.

City of Lowell is actively managing the needs of these systems. The needs have been evaluated and financial strategies have been considered. All non-pipe assets above \$2000 were inspected and recorded for financial analysis. Assumptions were made using the best available information to estimate unknown pipe and non-pipe asset data. This Capital Improvement Plan presents the City of Lowell's infrastructure priorities that have been established within a 20-year planning period, a timeline for accomplishing the needed improvements, and a financial strategy to implement the plan.



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FOREMAN ST

MEIJER ACCESS

FULTON ST

BOWES ST

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MAIN ST

RIDGEVIEW DR

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SCALE: 1" = 800'

Diameter	Color
8"	Blue
10"	Green
12"	Orange
16"	Yellow
4" and Less	Light Blue
6"	Light Green

LEGEND

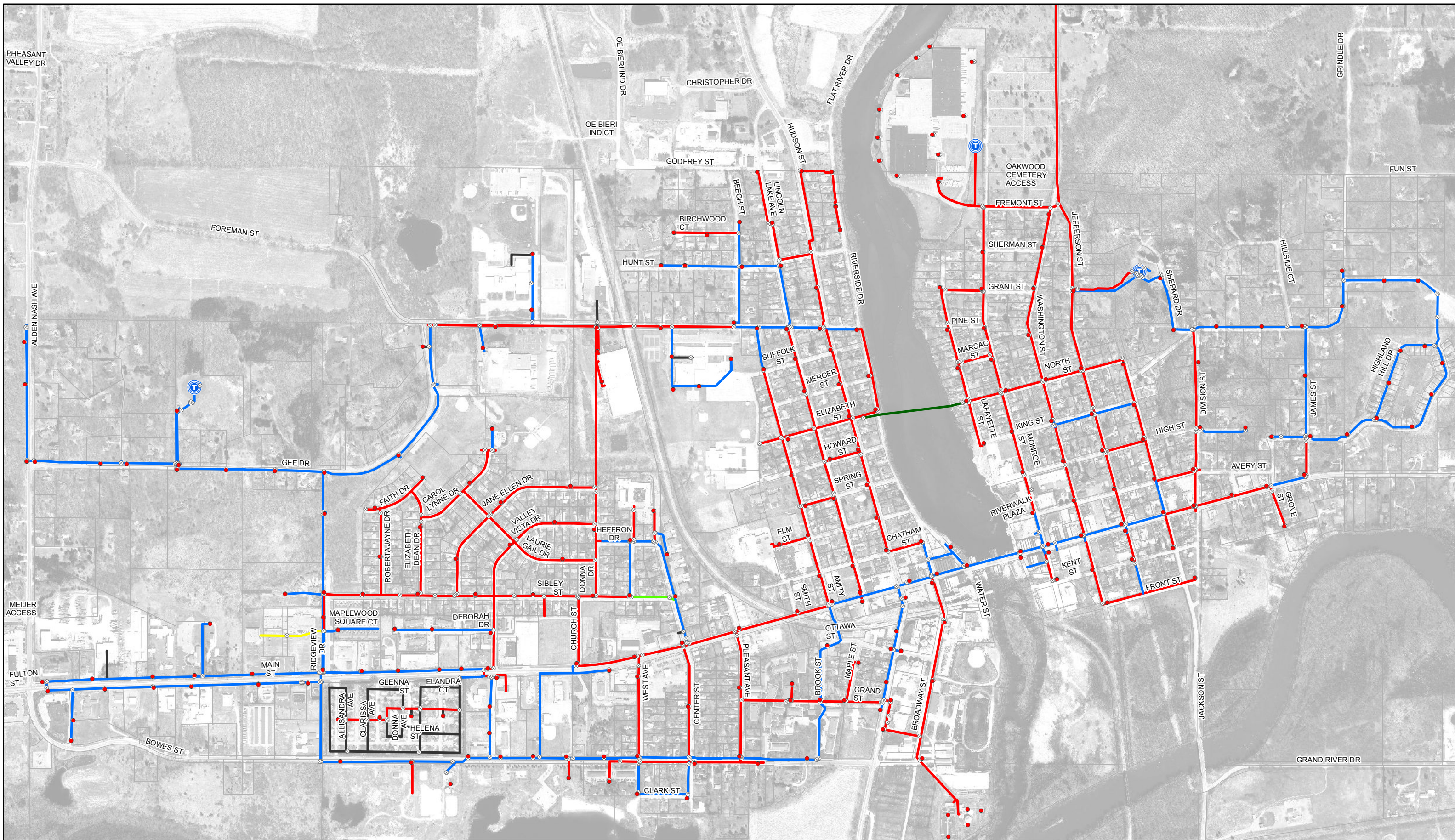
- Fire Hydrants
- ⊗ System Valves
- ⊕ Storage Tanks
- Water Main Owned by Others

CITY OF LOWELL
 KENT COUNTY, MICHIGAN
WATER ASSET MANAGEMENT PLAN
MAP 1: PIPE DIAMETERS

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PHEASANT VALLEY DR









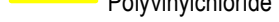
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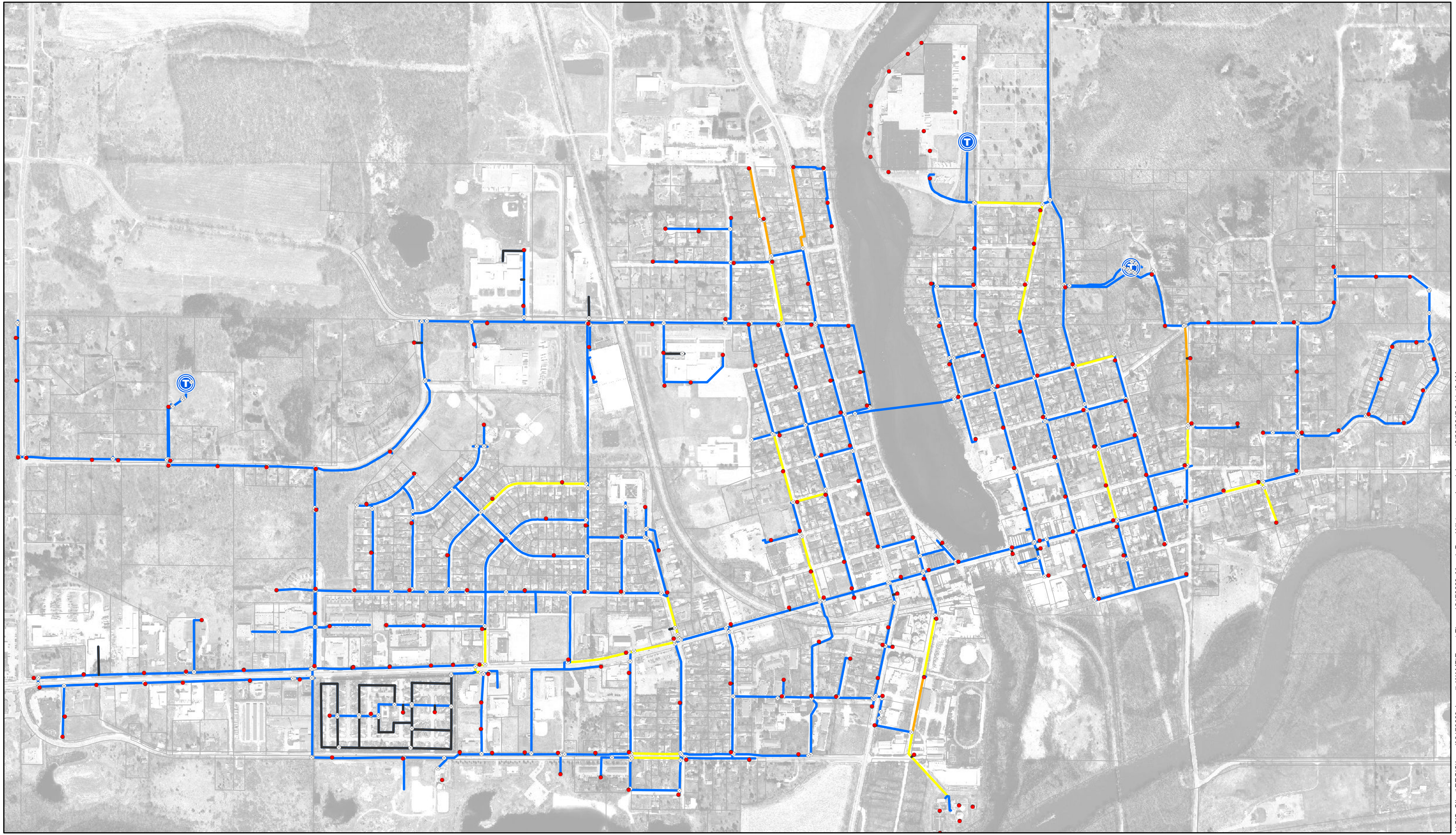

 SCALE: 1" = 800'

LEGEND

Material	 Asbestos Cement	 Fire Hydrants	 Storage Tanks
 Cast Iron	 High-Density Polyethylene	 System Valves	 Water Main Owned by Others
 Ductile Iron	 Polyvinylchloride		

CITY OF LOWELL
 KENT COUNTY, MICHIGAN
WATER ASSET MANAGEMENT PLAN
MAP 3: PIPE MATERIALS
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SCALE: 1" = 800'

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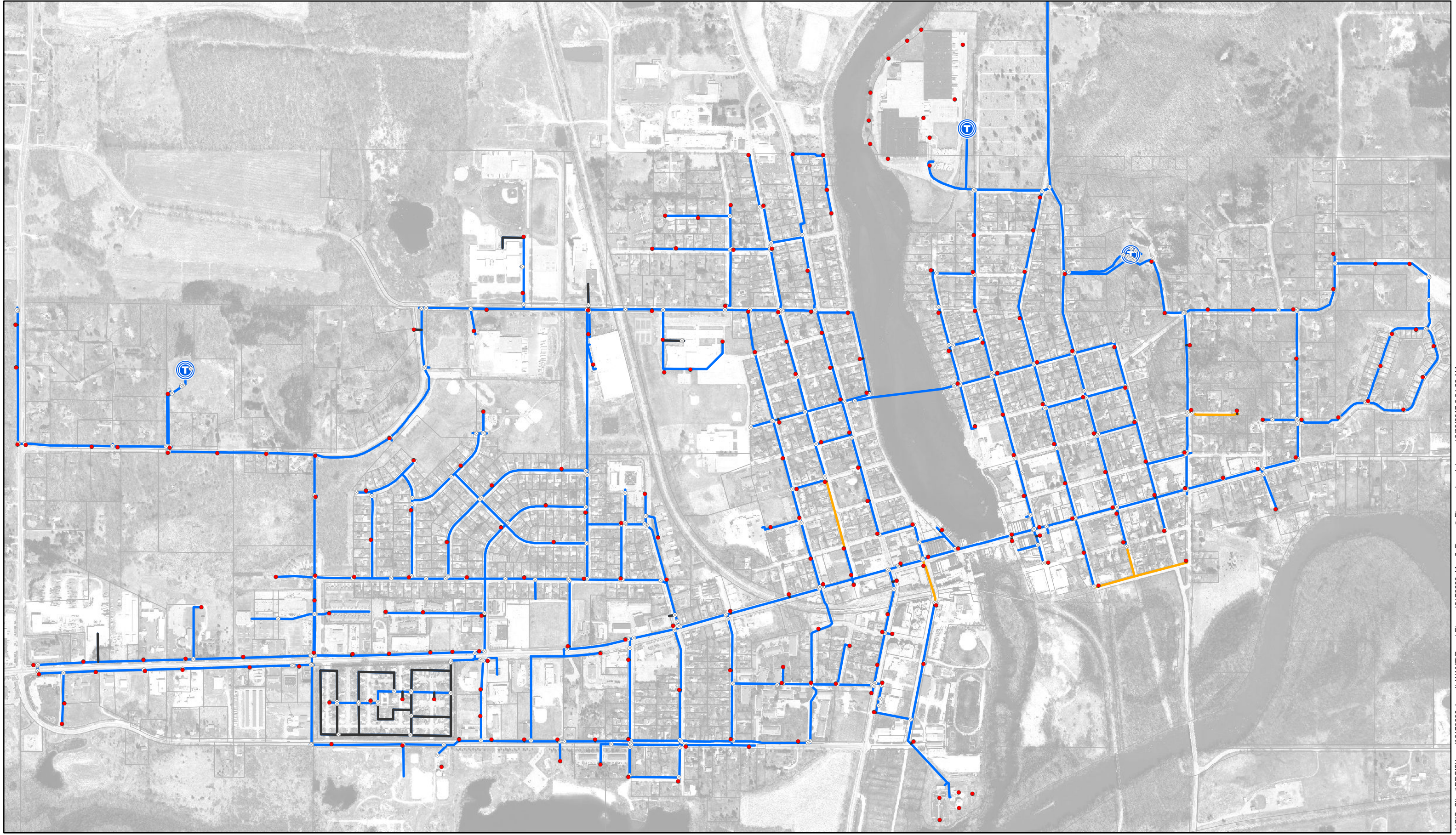
Break History

- 1 - No Leakage or Breaks
- 2 - Leakage
- 3 - Singluar Break
- 4 - Multiple Breaks
- 5 - Imminent Failure

- Fire Hydrants
- T Storage Tanks
- X System Valve
- Water Main Owned by Others

CITY OF LOWELL
 KENT COUNTY, MICHIGAN
 WATER ASSET MANAGEMENT PLAN
MAP 4: BREAK HISTORY

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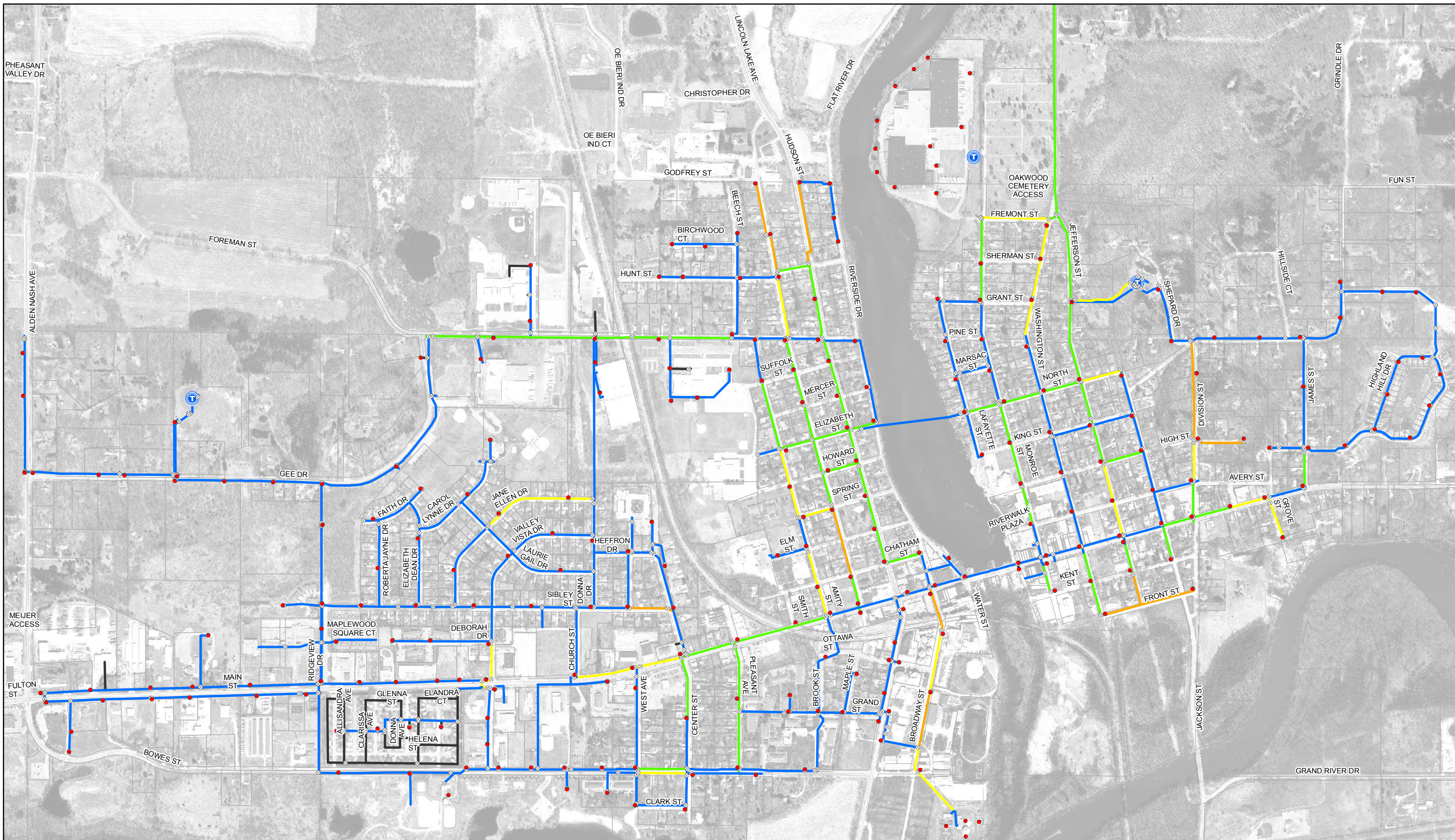


SCALE: 1" = 800'

LEGEND

- | | | | |
|-----------------------------|---------------------------------|---------------|----------------------------|
| Domestic Flow Rating | 3 - Discoloration | Fire Hydrants | Storage Tanks |
| 1 - Adequate | 4 - Inadequate Residential Flow | System Valve | Water Main Owned by Others |
| 2 - Substandard Diameter | 5 - Inadequate Industrial Flow | | |

CITY OF LOWELL
 KENT COUNTY, MICHIGAN
 WATER ASSET MANAGEMENT PLAN
MAP 5: DOMESTIC FLOW RATING
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SCALE: 1" = 800'

Risk of Failure

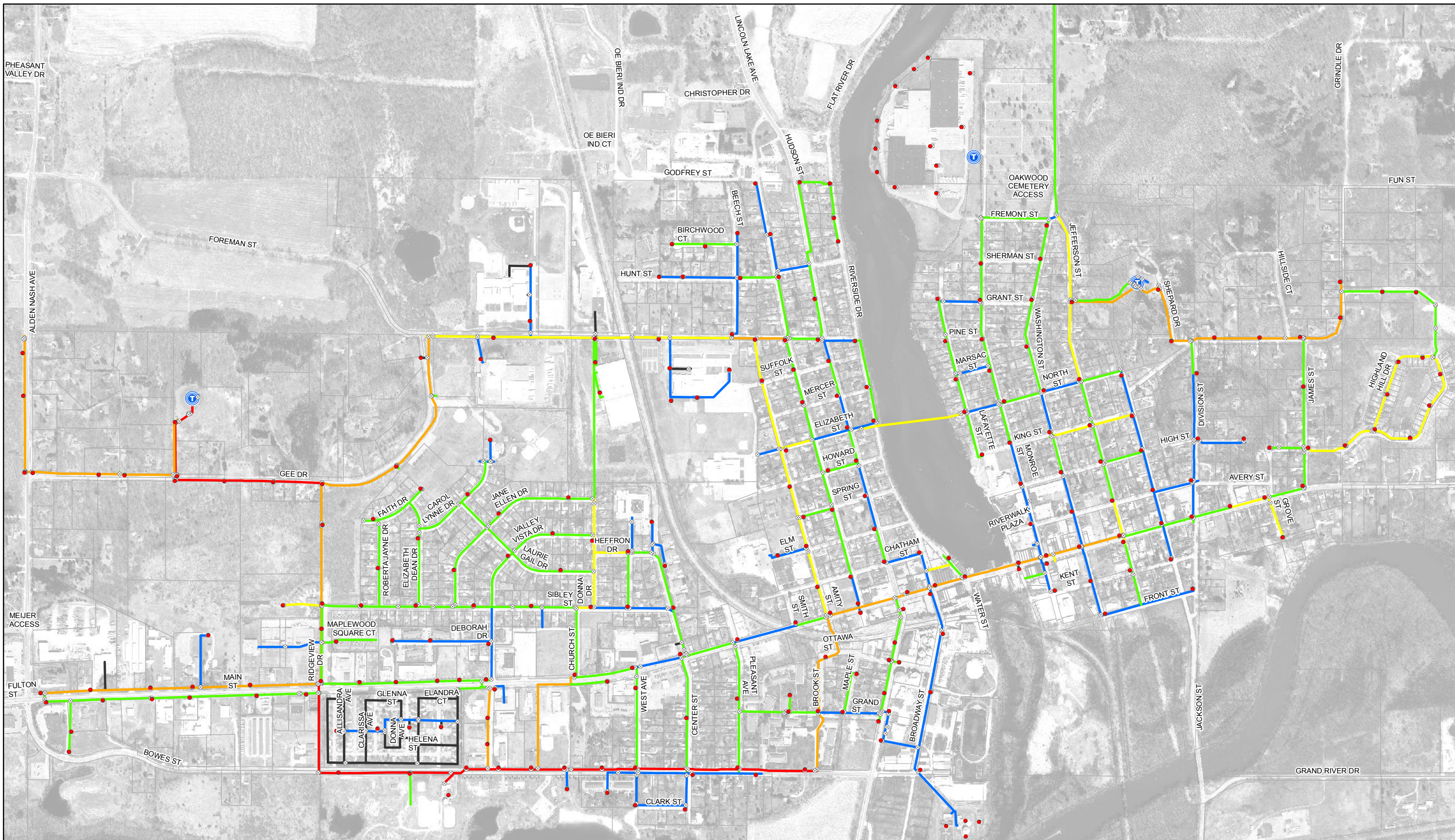
- 1 - Lowest Risk of Failure
- 2
- 3
- 4
- 5 - Highest Risk of Failure

LEGEND

- Fire Hydrants
- Ⓣ Storage Tanks
- ⊗ System Valves
- Water Main Owned by Others

CITY OF LOWELL
 KENT COUNTY, MICHIGAN
WATER ASSET MANAGEMENT PLAN
MAP 6: RISK OF FAILURE
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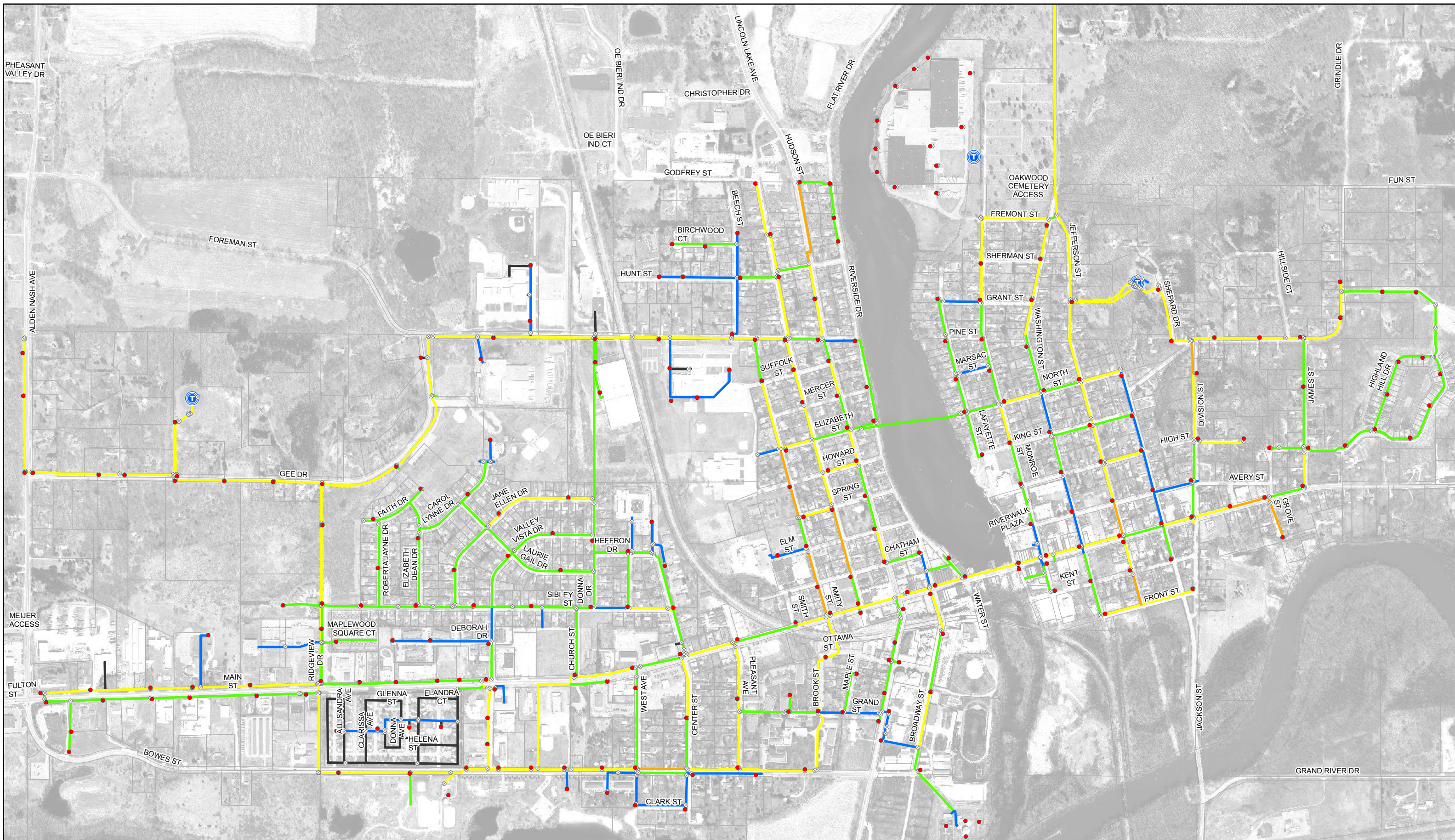
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MAPLE ST

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CHATHAM ST

WATER ST

HUDSON ST

RIVERSIDE DR

FLAT RIVER DR

CHRISTOPHER DR

GODFREY ST

BEECH ST

SUFFOLK ST

MERCER ST

ELIZABETH ST

HOWARD ST

SPRING ST

ELM ST

SMITH ST

ANITY ST

OTTAWA ST

MAPLE ST

GRAND ST

CHATHAM ST

WATER ST

BROADWAY ST

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Table 1: Capital Improvement Priorities

Location & Description	Today's Cost	Estimated Year*	Future Cost**
Overhaul high service pumps	\$60,000.00	2018	\$60,000.00
Overhaul filter pumps	\$30,000.00	2018	\$30,000.00
Upsize 1,200' of 4" to 8" on Washington St from Avery St to North St	\$180,000.00	2019	\$184,000.00
Upsize 900' of 4" to 8" on Washington St from North St to Grant St	\$135,000.00	2020	\$141,000.00
Replace filter influent valves and actuator	\$20,000.00	2020	\$21,000.00
Upsize 1,100' of 4" to 8" on Monroe St from Main St to King St	\$165,000.00	2021	\$176,000.00
Paint pipe galley	\$20,000.00	2021	\$22,000.00
Upsize 1,000' of 4" to 8" on Monroe St from King St to Pine St	\$150,000.00	2022	\$163,000.00
Upsize 1,100' of 4" to 8" on Monroe St from Pine St to Fremont St	\$165,000.00	2023	\$183,000.00
Replace treatment plant roof	\$15,000.00	2023	\$17,000.00
Re-pave treatment plant parking lot	\$50,000.00	2023	\$56,000.00
750' of new 8" on Grindle Dr from Jackson St to Shepard Dr to create new loop	\$112,500.00	2024	\$127,000.00
Repaint clarifier	\$70,000.00	2024	\$79,000.00
Upsize 900' of 4" to 8" on Main St from Pleasant Ave to West Ave	\$135,000.00	2025	\$156,000.00
400' of new 6" on Kent St from Monroe St to Washington St	\$60,000.00	2026	\$71,000.00
350' of new 6" on S Jackson St from Kent St to Front St	\$52,500.00	2027	\$63,000.00
Upsize 350' of 4" to 8" on Jefferson St from Main St to Kent St	\$52,500.00	2028	\$64,000.00
700' of new 8" on King St from Lafayette St to Monroe St	\$105,000.00	2029	\$131,000.00
325' of new 8" to connect Faith Dr and Gee Dr	\$50,000.00	2030	\$64,000.00
Repaint ground tank exterior	\$40,000.00	2030	\$51,000.00
325' of new 6" on Chatham St from Amity St to Lincoln Lake Ave	\$50,000.00	2031	\$65,000.00
325' of new 6" on Elm St from Amity St to Lincoln Lake Ave	\$50,000.00	2032	\$66,000.00
400' of new 6" on Godfrey St from Lincoln Lake Ave to Hudson St	\$60,000.00	2033	\$81,000.00
300' of new 6" between dead end mains on High St at Division St and Grove St	\$45,000.00	2034	\$62,000.00
900' of new 12" on Grindle Dr to proposed storage tank location	\$135,000.00	2035	\$190,000.00

*Actual year subject to change pending available funding and coordination with other infrastructure

** Future costs include annual 2 percent inflation

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Table 2: Non-Pipe Assets

Asset Category	Asset Item	Installation Year	Purchase Price	Life Cycle (Years)
NE Booster Station	Pump #1	2002	\$10,000.00	20
NE Booster Station	Pump #2	1992	\$10,000.00	20
NE Booster Station	Pump #3	1992	\$15,000.00	20
NE Booster Station	Controls	1992	\$8,000.00	20
NW Booster Station	Pump #1	1994	\$10,000.00	90
NW Booster Station	Pump #2	1994	\$10,000.00	90
NW Booster Station	Pump #3	1994	\$10,000.00	90
NW Reservoir	Tank Structure	1994	\$1,200,000.00	50
NE Reservoir	Tank Structure	1928	\$800,000.00	50
NE Booster Hydropneumatic Tank	Tank Structure	1992	\$5,000.00	50
Equipment	Portable 60kW Generator	2000	\$22,000.00	25
Vehicles	Trucks	2018	\$65,000.00	10
Well #1	Casing and Screen	1977	\$12,000.00	50
Well #1	Pump	2015	\$6,000.00	10
Well #1	Motor	2015	\$2,000.00	10
Well House #1	Structure	1976	\$6,000.00	50

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Asset Category	Asset Item	Installation Year	Purchase Price	Life Cycle (Years)
Well House #1	Controls	1976	\$2,000.00	30
Well House #1	Piping	1976	\$2,000.00	50
Well #2	Casing and Screen	1977	\$12,000.00	50
Well #2	Pump	2008	\$6,000.00	10
Well #2	Motor	2008	\$2,000.00	10
Well House #2	Structure	1976	\$4,470.00	50
Well House #2	Controls	1976	\$2,000.00	30
Well House #2	Piping	1976	\$2,000.00	50
Well #3	Casing and Screen	1976	\$12,000.00	50
Well #3	Pump	2012	\$6,000.00	10
Well #3	Motor	2012	\$2,000.00	10
Well House #3	Structure	1976	\$4,470.00	50
Well House #3	Controls	1976	\$2,000.00	30
Well House #3	Piping	1976	\$2,000.00	50
Well #4	Casing and Screen	1990	\$24,000.00	50
Well #4	Pump	1990	\$12,000.00	10
Well #4	Motor	1990	\$4,000.00	10
Well House #4	Structure	1990	\$6,000.00	50

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Asset Category	Asset Item	Installation Year	Purchase Price	Life Cycle (Years)
Well House #4	Controls	1990	\$2,000.00	30
Well House #4	Piping	1990	\$3,000.00	50
Plant Tank	Tank Structure	1977	\$300,000.00	50
Plant Tank	Interior Coating	2017	\$67,000.00	20
Plant Tank	Exterior Coating	2010	\$62,000.00	20
Water Plant	Filter Pump #1 - 550 gpm	1977	\$10,000.00	50
Water Plant	Filter Pump #2 - 550 gpm	1977	\$10,000.00	50
Water Plant	High Service Pump #1 - 650 gpm	1977	\$14,000.00	50
Water Plant	High Service Pump #2 - 650 gpm	1977	\$14,000.00	50
Water Plant	High Service Pump #3 - 650 gpm	1977	\$14,000.00	50
Water Plant	Clarifier	1977	\$100,000.00	80
Water Plant	Filter #1	1977	\$20,000.00	20
Water Plant	Filter #2	1977	\$20,000.00	20
Water Plant	Lime Silo	1977	\$80,000.00	40
Water Plant	Slaker	2010	\$36,000.00	20
Water Plant	Roof	2003	\$15,000.00	30
Water Plant	Air Compressor	2005	\$8,000.00	30
Water Plant	Video Surveillance	2017	\$7,000.00	20

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Asset Category	Asset Item	Installation Year	Purchase Price	Life Cycle (Years)
Water Plant Lab	Autoclave	1994	\$2,000.00	40
Water Plant Lab	Distiller	1985	\$3,000.00	40
Water Plant Lab	Lab scale	1977	\$3,000.00	50
Water Plant Lab	Turbidimeter	2014	\$2,200.00	20

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Table 3: Recurring Cost Schedule

Item Description	Recurrence Interval	Next Occurrence	Today's Cost
Repaint Lime Silo	every 15 years	2018	\$20,000.00
Well #4 Pump Overhaul	every 15 years	2019	\$20,000.00
Well #4 Motor Overhaul	every 15 years	2019	\$5,000.00
Excavate Lime Pond	every 10 years	2022	\$80,000.00
Well #2 Pump Overhaul	every 15 years	2023	\$20,000.00
Well #2 Motor Overhaul	every 15 years	2023	\$5,000.00
Well #3 Pump Overhaul	every 15 years	2026	\$20,000.00
Well #3 Motor Overhaul	every 15 years	2026	\$5,000.00
Filter Media Replacement	every 15 years	2029	\$20,000.00
Well #1 Pump Overhaul	every 15 years	2030	\$20,000.00
Well #1 Motor Overhaul	every 15 years	2030	\$5,000.00
Repaint Ground Tank Interior	every 15 years	2032	\$35,000.00
Replace Raw Water Meter	every 15 years	2032	\$6,000.00

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Table 4: Future Costs

Year	Recurring Costs	Non-Pipe Assets Capital Improvements	Watermain Capital Improvements	Description of Major Items	Total
2018	\$20,000.00	\$90,000.00	-	CIP #1, CIP #2, overhaul high service and filter pumps	\$110,000.00
2019	\$26,000.00	-	\$184,000.00	CIP #3	\$210,000.00
2020	-	\$21,000.00	\$141,000.00	CIP #4, CIP #5, replace filter valves and actuator	\$162,000.00
2021	-	\$22,000.00	\$176,000.00	CIP #6, CIP #7, paint pipe galley	\$198,000.00
2022	\$87,000.00	-	\$163,000.00	CIP #8, excavate lime pond	\$250,000.00
2023	\$28,000.00	\$72,000.00	\$183,000.00	CIP #9, CIP #10, CIP #11, replace plant roof and re-pave parking lot	\$283,000.00
2024	-	\$79,000.00	\$127,000.00	CIP #12, CIP #13, repaint clarifier	\$206,000.00
2025	-	-	\$156,000.00	CIP #14	\$156,000.00
2026	\$30,000.00	-	\$71,000.00	CIP #15, overhaul well #3 pump and motor	\$101,000.00
2027	-	\$0.00	\$63,000.00	CIP #16	\$63,000.00
2018	-	-	\$64,000.00	CIP #1, CIP #2, overhaul high service and filter pumps	\$64,000.00
2028	\$20,000.00	\$90,000.00	-	CIP #17	\$110,000.00
2029	\$25,000.00	-	\$131,000.00	CIP #18, replace filter media	\$156,000.00
2030	\$32,000.00	\$51,000.00	\$64,000.00	CIP #19, CIP #20, repaint ground tank exterior	\$147,000.00
2031	-	-	\$65,000.00	CIP #21	\$65,000.00

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

Year	Recurring Costs	Non-Pipe Assets Capital Improvements	Watermain Capital Improvements	Description of Major Items	Total
2032	\$160,000.00	-	\$66,000.00	CIP #22, excavate lime pond	\$226,000.00
2033	\$27,000.00	-	\$81,000.00	CIP #23, repaint lime silo	\$108,000.00
2034	\$35,000.00	-	\$62,000.00	CIP #24, overhaul well #4 pump and motor	\$97,000.00
2035	-	-	\$190,000.00	CIP #25	\$190,000.00
2036	-	-	-		-
2037	-	-	-		-
2038	\$38,000.00	-	-		\$38,000.00

This table does not include costs of annual operations and maintenance

FINANCIAL FORECAST

UMBAUGH

H. J. Umbaugh & Associates
Certified Public Accountants, LLP
2150 Association Drive
Suite 100
Okemos, MI 48864
Phone: 517-321-0110
Fax: 517-321-8866
www.umbaugh.com

December 27, 2017

City of Lowell
301 East Main Street
Lowell, MI 49331

Re: City of Lowell (Michigan) Water Asset Management Program – Abbreviated Rate Study

Dear City of Lowell:

The attached schedules (listed below) present unaudited and limited information for the purpose of discussion and consideration in the preliminary planning stage of an abbreviated rate study by the appropriate officers, officials and advisors of the City of Lowell. The use of these schedules should be restricted to this purpose, for internal use only, as the information is subject to future revision.

<u>Page</u>	
2	Comparative Statement of Net Position
3	Comparative Statement of Revenues, Expenses, and Changes in Net Position
4-5	Comparative Detail of Operating Expenses
6	Schedule of Amortization of \$210,000 Principal Amount Outstanding of 2012 Water System Revenue Refunding Bonds
7	Schedule of Amortization of \$984,000 Principal Amount Outstanding of General Obligation Limited Tax Capital Improvement Bonds, Series 2016
8	Schedule of Combined Debt Service
9-10	Cash Flow Analysis

We would appreciate your questions or comments on this information and would provide additional information upon request.

Sincerely,

UMBAUGH

Tom Traciak

CITY OF LOWELL (MICHIGAN) WATER FUND

COMPARATIVE STATEMENT OF NET POSITION

	As of		
	<u>6/30/2015</u>	<u>6/30/2016</u>	<u>6/30/2017</u>
	(-----Per Audit-----)		
Assets			
Current assets:			
Cash and pooled investments	\$975,133	\$865,824	\$2,095,857
Accounts receivable	146,171	174,101	171,666
Prepaid and other assets	-	3,202	670
Inventory	<u>112,537</u>	<u>98,386</u>	<u>77,048</u>
Total current assets	<u>1,233,841</u>	<u>1,141,513</u>	<u>2,345,241</u>
Noncurrent assets:			
Special assessments long-term	300	-	-
Capital assets:			
Land	109,908	109,908	109,908
Capital assets, net	<u>2,861,942</u>	<u>3,025,834</u>	<u>3,022,844</u>
Total noncurrent assets	<u>2,972,150</u>	<u>3,135,742</u>	<u>3,132,752</u>
Total Assets	<u><u>\$4,205,991</u></u>	<u><u>\$4,277,255</u></u>	<u><u>\$5,477,993</u></u>
Deferred Outflows of Resources			
Pension related	<u>37,250</u>	<u>221,155</u>	<u>120,869</u>
Liabilities			
Current liabilities:			
Accounts payable	\$26,134	\$30,700	\$19,764
Accrued liabilities	8,423	11,126	17,050
Customer deposits	7,325	7,485	6,685
Current portion of long-term debt	<u>140,000</u>	<u>125,000</u>	<u>141,480</u>
Total current liabilities	<u>181,882</u>	<u>174,311</u>	<u>184,979</u>
Noncurrent liabilities			
Premium on bonds	-	-	66,555
Net pension liability	481,867	753,156	703,322
Net OPEB obligation	33,672	41,027	49,096
Compensated absences	7,457	8,666	9,937
Bonds payable, net of current portion	<u>335,000</u>	<u>210,000</u>	<u>1,101,087</u>
Total noncurrent liabilities	<u>857,996</u>	<u>1,012,849</u>	<u>1,929,997</u>
Total Liabilities	<u>1,039,878</u>	<u>1,187,160</u>	<u>2,114,976</u>
Net Position			
Net investment in capital assets	2,496,850	2,800,742	2,728,502
Unrestricted	<u>706,513</u>	<u>510,508</u>	<u>755,384</u>
Total Net Position	<u>3,203,363</u>	<u>3,311,250</u>	<u>3,483,886</u>
Total Liabilities and Net Position	<u><u>\$4,243,241</u></u>	<u><u>\$4,498,410</u></u>	<u><u>\$5,598,862</u></u>

CITY OF LOWELL (MICHIGAN) WATER FUND

COMPARATIVE STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	Fiscal Year Ended		
	6/30/2015	6/30/2016	6/30/2017
	(-----Per Audit-----)		
Operating Revenues			
Charges for services	\$1,010,192	\$1,090,393	\$1,130,149
Other	9,009	20,223	32,426
	<hr/>	<hr/>	<hr/>
Total operating revenues	1,019,201	1,110,616	1,162,575
	<hr/>	<hr/>	<hr/>
Operating Expenses			
Treatment	342,770	403,366	413,137
Transmission and distribution	263,081	205,922	224,105
Customer accounts	90,429	89,842	82,296
Administrative and general	130,162	172,011	131,451
Subtotal	826,442	871,141	850,989
Depreciation expense	130,294	122,407	130,685
	<hr/>	<hr/>	<hr/>
Total operating expenses	956,736	993,548	981,674
	<hr/>	<hr/>	<hr/>
Net operating income (loss)	62,465	117,068	180,901
	<hr/>	<hr/>	<hr/>
Non-Operating Revenues (Expenses)			
Investment earnings	1,233	424	3,542
Interest expense	(12,773)	(9,605)	(11,807)
Total non-operating revenues (expenses)	(11,540)	(9,181)	(8,265)
	<hr/>	<hr/>	<hr/>
Change in net position	50,925	107,887	172,636
	<hr/>	<hr/>	<hr/>
Net position, beginning of year	3,152,438	3,203,363	3,311,250
	<hr/>	<hr/>	<hr/>
Net position, end of year	<u>\$3,203,363</u>	<u>\$3,311,250</u>	<u>\$3,483,886</u>

CITY OF LOWELL (MICHIGAN) WATER FUND

COMPARATIVE DETAIL OF OPERATING EXPENSES

	<u>Fiscal Year Ended</u>	
	<u>6/30/2018</u>	<u>Test Year</u>
	(Per Client)	
Operating Expenses		
Dept 552 - Customer Accounts		
591-552-725.000 Disability Insurance	-	-
Dept 570 - Treatment		
591-570-702.000 Salaries-Permanent	\$105,000	\$105,000
591-570-707.000 Salaries-Temporary	-	-
591-570-709.000 Salaries-Overtime	25,000	25,000
591-570-715.000 Social Security	10,000	10,000
591-570-716.000 Health Insurance	24,000	24,000
591-570-717.000 Life Insurance	300	300
591-570-718.000 Pension	25,000	25,000
591-570-719.000 Accrued Vacation/Sick Leave	-	-
591-570-721.000 Longevity	1,000	1,000
591-570-722.000 Workers Compensation	3,400	3,400
591-570-723.000 Dental Insurance	1,200	1,200
591-570-724.000 Eyecare	600	600
591-570-725.000 Disability Insurance	1,000	1,000
591-570-726.000 Accrued Wages	-	-
591-570-727.000 Office Supplies	200	200
591-570-740.000 Operating Supplies	9,460	9,460
591-570-741.000 Fuel	400	400
591-570-743.000 Chemicals	44,500	44,500
591-570-744.000 Uniforms	800	800
591-570-801.000 Professional Services	5,250	5,250
591-570-802.000 Contractual	8,450	8,450
591-570-850.000 Communications	4,800	4,800
591-570-860.000 Travel Expenses	200	200
591-570-864.000 Conferences & Conventions	2,800	2,800
591-570-920.000 Public Utilities	62,000	62,000
591-570-930.000 Repair & Maintenance	14,000	14,000
591-570-940.000 Rentals	2,000	2,000
591-570-955.000 Miscellaneous Expense	3,300	3,300
591-570-970.000 Capital Outlay	-	-
	- [1]	-
Total Dept 570 - Treatment Expenses	<u>354,660</u>	<u>354,660</u>
Dept 571 - Distribution		
591-571-702.000 Salaries-Permanent	55,000	55,000
591-571-707.000 Salaries-Temporary	945	945
591-571-708.000 Standby	-	-
591-571-709.000 Salaries-Overtime	3,000	3,000
591-571-715.000 Social Security	5,000	5,000
591-571-716.000 Health Insurance	13,500	13,500
591-571-717.000 Life Insurance	200	200
591-571-718.000 Pension	13,500	13,500
591-571-719.000 Accrued Vacation/Sick Leave	-	-
591-571-721.000 Longevity	400	400
591-571-722.000 Workers Compensation	1,200	1,200
591-571-723.000 Dental Insurance	700	700
591-571-724.000 Eyecare	300	300
591-571-725.000 Disability Insurance	600	600
591-571-726.000 Accrued Wages	-	-
591-571-727.000 Office Supplies	200	200
591-571-740.000 Operating Supplies	750	750
591-571-744.000 Uniforms	850	850
591-571-800.000 Customer Installation Expense	15,000	15,000
591-571-801.000 Cross Connections	22,600	22,600
591-571-802.000 Contractual	15,000	15,000
591-571-850.000 Communications	1,000	1,000
591-571-864.000 Conferences & Conventions	3,400	3,400
591-571-920.000 Public Utilities	21,000	21,000
591-571-930.000 Repair & Maintenance	38,000	38,000
591-571-940.000 Rentals	8,000	8,000
591-571-955.000 Miscellaneous Expense	2,350	2,350
591-571-970.000 Capital Outlay	-	-
591-571-991.000 Principal	-	-
591-571-995.000 Interest	-	-
	- [2]	-
	- [2]	-
Total Dept 571 - Distribution Expenses	<u>222,495</u>	<u>222,495</u>

CITY OF LOWELL (MICHIGAN) WATER FUND

(Continued)

COMPARATIVE DETAIL OF OPERATING EXPENSES

	<u>Fiscal Year Ended</u>	<u>Test Year</u>
	<u>6/30/2018</u>	
	(Per Client)	
Operating Expenses (Continued)		
Dept 572 - Customer Accounts		
591-572-702.000 Salaries - Permanent	28,000	28,000
591-572-703.000 Salaries - Meter Reads	4,500	4,500
591-572-707.000 Salaries - Temporary	-	-
591-572-709.000 Salaries - Overtime	-	-
591-572-715.000 Social Security	3,000	3,000
591-572-716.000 Health Insurance	10,000	10,000
591-572-717.000 Life Insurance	200	200
591-572-718.000 Pension	7,000	7,000
591-572-719.000 Accrued Vacation/Sick Leave	-	-
591-572-721.000 Longevity	500	500
591-572-722.000 Workers Compensation	400	400
591-572-723.000 Dental Insurance	400	400
591-572-724.000 Eyecare	200	200
591-572-725.000 Disability	300	300
591-572-726.000 Accrued Wages	-	-
591-572-727.000 Office Supplies	1,500	1,500
591-572-730.000 Postage	3,000	3,000
591-572-740.000 Operating Supplies	1,000	1,000
591-572-860.000 Travel Expenses	500	500
591-572-864.000 Conferences & Conventions	-	-
591-572-940.000 Rentals	-	-
591-572-941.000 Data Processing	23,000	23,000
591-572-955.000 Miscellaneous Expense	-	-
591-572-969.000 Bad Debts	-	-
	<hr/>	<hr/>
Total Dept 572 - Customer Accounts	83,500	83,500
	<hr/>	<hr/>
Dept 573 - Administration		
591-573-702.000 Salaries - Permanent	-	-
591-573-715.000 Social Security	-	-
591-573-716.000 Health Insurance	-	-
591-573-717.000 Life Insurance	-	-
591-573-718.000 Pension	-	-
591-573-719.000 Accrued Vacation/Sick Leave	-	-
591-573-721.000 Longevity	-	-
591-573-722.000 Workers Compensation	-	-
591-573-723.000 Dental Insurance	-	-
591-573-724.000 Eyecare	-	-
591-573-725.000 Disability	-	-
591-573-726.000 Accrued Wages	-	-
591-573-727.000 Office Supplies	-	-
591-573-740.000 Operating Supplies	-	-
591-573-801.000 Professional Services	-	-
591-573-830.000 Administrative Services	112,300	112,300
591-573-864.000 Conferences & Conventions	-	-
591-573-906.997 Cost Of Issuance	-	-
591-573-910.000 Insurance	10,000	10,000
591-573-940.000 Rentals	-	-
591-573-941.000 Data Processing	-	-
591-573-955.000 Miscellaneous Expense	2,000	2,000
591-573-967.000 Amortization	- [3]	-
591-573-968.000 Depreciation	- [3]	-
591-573-969.000 Depreciation - Contributed Capital	- [3]	-
591-573-970.000 Capital Outlay	- [1]	-
591-573-977.000 Contingency - Equipment Replacement	-	-
591-573-991.000 Principal - Bonds	- [2]	-
591-573-995.000 Interest - Bonds	- [2]	-
591-573-996.000 Paying Agent Fees	-	-
	<hr/>	<hr/>
Total Dept 573 - Administration	124,300	124,300
	<hr/>	<hr/>
Dept 906 - Debt Service		
591-906-995.000 Interest	-	-
	<hr/>	<hr/>
Dept 965 - Transfers Out		
591-965-999.101 Transfer To General Fund	-	-
591-965-999.203 Transfer To Local Street Fund	-	-
	<hr/>	<hr/>
Total Dept 965 - Transfers Out Expenses	-	-
	<hr/>	<hr/>
Dept 999 - Transfers In		
591-999-999.990 Current Fund Contra Change	-	-
	<hr/>	<hr/>
Total Operating Expenses	<u>\$784,955</u>	<u>\$784,955</u>

[1] Capital Outlay is removed from this section of the report. This item is discussed later in the report.

[2] Principal and Interest on debt are removed from this section of the report. These items are discussed later in the report.

[3] Depreciation and Amortization Expense are removed from this report as it is performed on the cash basis.

CITY OF LOWELL (MICHIGAN) WATER FUND

**SCHEDULE OF AMORTIZATION OF \$210,000 PRINCIPAL AMOUNT OUTSTANDING
OF 2012 WATER SYSTEM REVENUE REFUNDING BONDS**

Payment Date	Principal Balance (In Dollars)	Interest Rate (%)	Debt Service			Fiscal Year Total
			Principal	Interest	Total	
			(-----In Dollars-----)			
12/31/2017	\$210,000			\$2,079.00	\$2,079.00	
6/30/2018	210,000	1.98	\$110,000	2,079.00	112,079.00	\$114,158.00
12/31/2018	100,000			990.00	990.00	
6/30/2019	100,000	1.98	100,000	990.00	100,990.00	100,990.00
	Totals		<u>\$210,000</u>	<u>\$6,138.00</u>	<u>\$216,138.00</u>	<u>\$215,148.00</u>

CITY OF LOWELL (MICHIGAN) WATER FUND

**SCHEDULE OF AMORTIZATION OF \$984,000 PRINCIPAL AMOUNT OUTSTANDING
OF GENERAL OBLIGATION LIMITED TAX CAPITAL IMPROVEMENT BONDS, SERIES 2016**

Payment Date	Principal Balance (In Dollars)	Interest Rate (%)	Debt Service			Fiscal Year Total
			Principal	Interest	Total	
-----In Dollars-----						
11/1/2017	\$984,000	2.00	\$30,000	\$18,596.25	\$48,596.25	
5/1/2018	954,000			18,296.25	18,296.25	\$66,892.50
11/1/2018	954,000	2.00	30,000	18,296.25	48,296.25	
5/1/2019	924,000			17,996.25	17,996.25	66,292.50
11/1/2019	924,000	2.00	30,000	17,996.25	47,996.25	
5/1/2020	894,000			17,696.25	17,696.25	65,692.50
11/1/2020	894,000	2.00	30,000	17,696.25	47,696.25	
5/1/2021	864,000			17,396.25	17,396.25	65,092.50
11/1/2021	864,000	3.00	30,000	17,396.25	47,396.25	
5/1/2022	834,000			16,946.25	16,946.25	64,342.50
11/1/2022	834,000	3.00	30,000	16,946.25	46,946.25	
5/1/2023	804,000			16,496.25	16,496.25	63,442.50
11/1/2023	804,000	3.00	30,000	16,496.25	46,496.25	
5/1/2024	774,000			16,046.25	16,046.25	62,542.50
11/1/2024	774,000	4.00	30,000	16,046.25	46,046.25	
5/1/2025	744,000			15,446.25	15,446.25	61,492.50
11/1/2025	744,000	4.00	31,500	15,446.25	46,946.25	
5/1/2026	712,500			14,816.25	14,816.25	61,762.50
11/1/2026	712,500	4.00	31,500	14,816.25	46,316.25	
5/1/2027	681,000			14,186.25	14,186.25	60,502.50
11/1/2027	681,000	4.00	33,000	14,186.25	47,186.25	
5/1/2028	648,000			13,526.25	13,526.25	60,712.50
11/1/2028	648,000	4.00	34,500	13,526.25	48,026.25	
5/1/2029	613,500			12,836.25	12,836.25	60,862.50
11/1/2029	613,500	4.00	36,000	12,836.25	48,836.25	
5/1/2030	577,500			12,116.25	12,116.25	60,952.50
11/1/2030	577,500	4.00	37,500	12,116.25	49,616.25	
5/1/2031	540,000			11,366.25	11,366.25	60,982.50
11/1/2031	540,000	4.00	39,000	11,366.25	50,366.25	
5/1/2032	501,000			10,586.25	10,586.25	60,952.50
11/1/2032	501,000	4.00	40,500	10,586.25	51,086.25	
5/1/2033	460,500			9,776.25	9,776.25	60,862.50
11/1/2033	460,500	4.00	43,500	9,776.25	53,276.25	
5/1/2034	417,000			8,906.25	8,906.25	62,182.50
11/1/2034	417,000	4.00	45,000	8,906.25	53,906.25	
5/1/2035	372,000			8,006.25	8,006.25	61,912.50
11/1/2035	372,000	4.00	46,500	8,006.25	54,506.25	
5/1/2036	325,500			7,076.25	7,076.25	61,582.50
11/1/2036	325,500	4.00	48,000	7,076.25	55,076.25	
5/1/2037	277,500			6,116.25	6,116.25	61,192.50
11/1/2037	277,500	4.00	51,000	6,116.25	57,116.25	
5/1/2038	226,500			5,096.25	5,096.25	62,212.50
11/1/2038	226,500	4.50	52,500	5,096.25	57,596.25	
5/1/2039	174,000			3,915.00	3,915.00	61,511.25
11/1/2039	174,000	4.50	55,500	3,915.00	59,415.00	
5/1/2040	118,500			2,666.25	2,666.25	62,081.25
11/1/2040	118,500	4.50	58,500	2,666.25	61,166.25	
5/1/2041	60,000			1,350.00	1,350.00	62,516.25
11/1/2041	60,000	4.50	60,000	1,350.00	61,350.00	61,350.00
Totals			<u>\$984,000</u>	<u>\$575,921.25</u>	<u>\$1,559,921.25</u>	<u>\$1,559,921.25</u>

CITY OF LOWELL (MICHIGAN) WATER FUND

SCHEDULE OF COMBINED DEBT SERVICE

Fiscal Year	2012 Refunding Bonds	2016 Capital Improvement Bonds	Total
2017/18	\$114,158.00	\$66,892.50	\$181,050.50 *
2018/19	100,990.00	66,292.50	167,282.50
2019/20		65,692.50	65,692.50
2020/21		65,092.50	65,092.50
2021/22		64,342.50	64,342.50
2022/23		63,442.50	63,442.50
2023/24		62,542.50	62,542.50
2024/25		61,492.50	61,492.50
2025/26		61,762.50	61,762.50
2026/27		60,502.50	60,502.50
2027/28		60,712.50	60,712.50
2028/29		60,862.50	60,862.50
2029/30		60,952.50	60,952.50
2030/31		60,982.50	60,982.50
2031/32		60,952.50	60,952.50
2032/33		60,862.50	60,862.50
2033/34		62,182.50	62,182.50
2034/35		61,912.50	61,912.50
2035/36		61,582.50	61,582.50
2036/37		61,192.50	61,192.50
2037/38		62,212.50	62,212.50
2038/39		61,511.25	61,511.25
2039/40		62,081.25	62,081.25
2040/41		62,516.25	62,516.25
2041/42		61,350.00	61,350.00
Totals	\$215,148.00	\$1,559,921.25	\$1,775,069.25

* Maximum annual combined debt service

CITY OF LOWELL (MICHIGAN) WATER FUND

CASH FLOW ANALYSIS

		<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>	<u>2021/22</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>
Rate revenue increase assumption over previous year			2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
Rate revenues		\$1,005,700	\$1,028,328	\$1,051,466	\$1,075,124	\$1,099,314	\$1,124,048	\$1,149,340	\$1,175,200
Other revenues		<u>31,540</u>	<u>31,540</u>	<u>31,540</u>	<u>31,540</u>	<u>31,540</u>	<u>31,540</u>	<u>31,540</u>	<u>31,540</u>
Total revenues		<u>1,037,240</u>	<u>1,059,868</u>	<u>1,083,006</u>	<u>1,106,664</u>	<u>1,130,854</u>	<u>1,155,588</u>	<u>1,180,880</u>	<u>1,206,740</u>
Total operating expenditures	<u>Increase</u> 2.00%	<u>784,955</u>	<u>800,654</u>	<u>816,667</u>	<u>833,001</u>	<u>849,661</u>	<u>866,654</u>	<u>883,987</u>	<u>901,667</u>
Net operating revenue		252,285	259,214	266,338	273,663	281,193	288,935	296,893	305,073
Less: Current debt service payments		181,051	167,283	65,693	65,093	64,343	63,443	62,543	61,493
Estimated cash-funded capital improvements		<u>1,364,609</u>	<u>110,000</u>	<u>210,000</u>	<u>162,000</u>	<u>198,000</u>	<u>250,000</u>	<u>283,000</u>	<u>206,000</u>
Net cash flow		<u>(\$1,293,375)</u>	<u>(\$18,068)</u>	<u>(\$9,354)</u>	<u>\$46,571</u>	<u>\$18,851</u>	<u>(\$24,508)</u>	<u>(\$48,650)</u>	<u>\$37,581</u>
Cash & investments	\$2,095,857	\$802,483	\$784,414	\$775,060	\$821,631	\$840,482	\$815,974	\$767,324	\$804,905

CITY OF LOWELL (MICHIGAN) WATER FUND

(Continued)

CASH FLOW ANALYSIS

<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>	<u>2028/29</u>	<u>2029/30</u>	<u>2030/31</u>	<u>2031/32</u>	<u>2032/33</u>	<u>2033/34</u>	<u>2034/35</u>	<u>2035/36</u>	<u>2036/37</u>	<u>2037/38</u>
0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
\$1,178,138	\$1,181,083	\$1,184,036	\$1,186,996	\$1,189,963	\$1,192,938	\$1,195,921	\$1,198,910	\$1,201,908	\$1,204,912	\$1,207,925	\$1,210,945	\$1,213,972
31,540	31,540	31,540	31,540	31,540	31,540	31,540	31,540	31,540	31,540	31,540	31,540	31,540
1,209,678	1,212,623	1,215,576	1,218,536	1,221,503	1,224,478	1,227,461	1,230,450	1,233,448	1,236,452	1,239,465	1,242,485	1,245,512
919,700	938,094	956,856	975,993	995,513	1,015,423	1,035,731	1,056,446	1,077,575	1,099,127	1,121,109	1,143,531	1,166,402
289,978	274,529	258,720	242,543	225,991	209,055	191,729	174,004	155,873	137,326	118,356	98,953	79,110
61,763	60,503	60,713	60,863	60,953	60,983	60,953	60,863	62,183	61,913	61,583	61,193	62,213
156,000	101,000	63,000	64,000	156,000	147,000	65,000	226,000	108,000	97,000	190,000	-	-
<u>\$72,215</u>	<u>\$113,027</u>	<u>\$135,007</u>	<u>\$117,680</u>	<u>\$9,038</u>	<u>\$1,073</u>	<u>\$65,777</u>	<u>(\$112,858)</u>	<u>(\$14,310)</u>	<u>(\$21,587)</u>	<u>(\$133,227)</u>	<u>\$37,761</u>	<u>\$16,898</u>
\$877,120	\$990,147	\$1,125,154	\$1,242,834	\$1,251,873	\$1,252,945	\$1,318,722	\$1,205,864	\$1,191,554	\$1,169,967	\$1,036,740	\$1,074,501	\$1,091,399

CITY OF LOWELL
CAPITAL IMPROVEMENT PROJECTS (WATER)

WATER RATES & MUNICIPAL APPROVAL

**CITY OF LOWELL
KENT COUNTY, MICHIGAN**

RESOLUTION NO. 14-17

**RESOLUTION ADOPTING CITY OF LOWELL ANNUAL
BUDGET FOR FISCAL YEAR 2017-18, APPROVING
MILLAGE LEVIES, APPROVING SCHEDULE OF RATES
AND FEES AND OTHER MATTERS RELATED THERETO**

Councilmember Hodges, supported by Councilmember Canfield, moved the adoption of the following resolution:

WHEREAS, the City Manager has prepared and presented to the City Council at its meeting on April 17, 2017, a proposed complete itemized annual budget for the 2017-18 fiscal year of the City (the "FY17-18 Budget") in accordance with the City Charter, applicable State of Michigan law and applicable federal law and regulations, if any; and

WHEREAS, after the FY 17-18 Budget was presented to the City Council, a copy has been available for public inspection at City Hall at the office of the City Clerk; and

WHEREAS, the City Charter requires that before the FY 17-18 Budget may be considered for adoption by the City Council, the City Council shall hold a public meeting; and

WHEREAS, public hearings on the FY 17-18 Budget, properly noticed as referenced by Section 8.4 of Chapter 8 of the City Charter and Section 2 of Act 43 of the Public Acts of Michigan (2nd Ex. Sess.), were held at 7:00 p.m. on May 15, 2017, in the City Council Chambers in City Hall at which times all interested persons were given an opportunity to be heard; and

WHEREAS, the City Charter requires that the City Council adopt a budget for the City for the 2017-18 fiscal year of the City not later than the first Monday in June, including the amount to be levied in such fiscal year on taxable real and personal property in the City to meet the requirements of the FY 16-17 Budget; and

WHEREAS, in connection with the approval of the FY 17-18 Budget, the City Council desires to approve a schedule of rates and fees to be applicable in the City commencing at the beginning of the City's 2017-18 fiscal year.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. That the FY 17-18 Budget as presented at this meeting, including modifications, if any, made at the time of public hearing and noted in the FY 17-18 Budget document, is hereby adopted.

2. That for the 2017-18 fiscal year of the City there shall be levied on all taxable real and personal property in the City (a) a general *ad valorem* tax rate of 15.70 mills for general purposes (i.e., administration, fire, police, parks and recreation, etc.), and (b) a general *ad valorem* tax rate of 0.2424 mills for improvements to, and operation of, the public museum. The total 2017-18

fiscal year City general *ad valorem* tax levy on all taxable real and personal property in the City is 15.9424 mills.

3. That in accordance with the FY 17-18 Budget which is adopted at the fund level, the following are the estimated City revenues and expenses for the 2017-18 fiscal year of the City:

REVENUES

General Fund, \$2,984,894.52
Major Street Fund, \$208,400.00
Local Street Fund, \$260,000.00
Historic District Fund, \$50,100.00
Downtown Development Authority Fund, \$420,400.00
Designated Contributions Fund, \$5,700.00
Airport Fund, \$59,266.00
Wastewater Fund, \$1,069,000.00
Water Fund, \$2,063,899.00
Cable Fund, \$133,000.00
Light & Power Fund, \$8,652,614.00
Data Processing Fund, \$78,700.00
Equipment Fund, \$208,442.00
Lee Fund, \$4,000.00
Look Fund, \$18,000.00

APPROPRIATIONS

General Fund, \$2,955,085.00
Major Street Fund, \$246,790.00
Local Street Fund, \$246,455.00
Historic District Fund, \$50,000.00
Downtown Development Authority Fund, \$446,814.00
Designated Contributions Fund, \$5,700.00
Airport Fund, \$78,500.00
Wastewater Fund, \$1,450,368.00
Water Fund, \$2,461,109.50
Cable Fund, \$133,000.00
Light & Power Fund, \$9,156,837.45
Data Processing Fund, \$73,000.00
Equipment Fund, \$264,070.94
Lee Fund, \$4,000.00
Look Fund, \$18,000.00

4. That in a Fund where total appropriations exceed estimated revenue the City has determined that there is sufficient surplus, or undesignated fund balance, in the Fund to meet the requirements of the Uniform Budgeting and Accounting Act, Act 2 of the Public Acts of Michigan of 1968, as amended (“Act 2”).

5. That pursuant to the provisions of Act 2, the City Manager is hereby authorized to make budgetary transfers within the identified fund in the FY 17-18 Budget or between identified

activities within a fund. All other budgetary transfers in the FY 17-18 Budget shall be in accordance with Act 2 when City Council approval is required.

6. That the City Manager or his designee(s) is authorized to make expenditures budgeted in the FY 17-18 Budget in accordance with applicable law, ordinances, rules, regulations and policies.

7. That the Schedule of Rates and Fees presented at this meeting is approved to be effective July 1, 2017.

8. That all resolutions or parts of resolutions to the extent of any conflict herewith are rescinded.

YEAS: Councilmembers Mayor DeVore, Councilmembers Hodges, Teelander and Canfield

NAYS: Councilmembers None

ABSTAIN: Councilmembers None

ABSENT: Councilmembers Phillips

RESOLUTION DECLARED ADOPTED.

Dated: May 15, 2017


Susan Ullery, City Clerk

CERTIFICATION

I, the undersigned Clerk of the City of Lowell, Michigan (the "City") do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council, at a meeting held on May 15, 2017, and that public notice of said meeting was given pursuant to and in compliance with Act 267 of the Public Acts of Michigan of 1976, as amended.

Dated: May 15, 2017


Susan Ullery, City Clerk