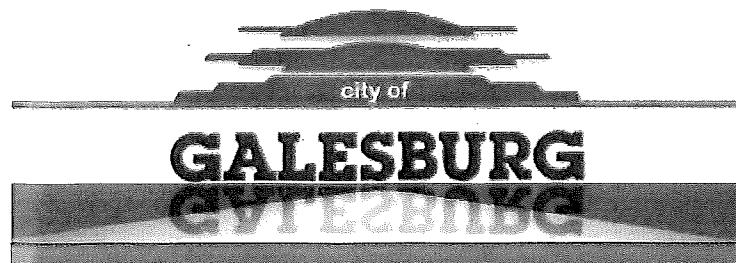


CITY OF GALESBURG

**CAPITAL
IMPROVEMENT
PLAN**

2017 Edition



Prepared by

Prein&Newhof

2130283

Contents

Introduction

Part One: Capital Improvements

- Overview Maps
- Project Lists
- Project Summaries

Part Two: Financial Strategy

- Implementation Timeline
- Sewer Fund Forecast
- Water Fund Forecast (To be created in future edition)
- Street / Storm Fund Forecast (To be created in future edition)

Part Three: Detailed Cost Estimates

Introduction

The City of Galesburg public infrastructure includes drinking water supply and delivery systems, wastewater collection systems, storm drainage systems, and public streets. These systems are aging and certain parts need to be repaired or replaced to keep up with deterioration over time.

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.

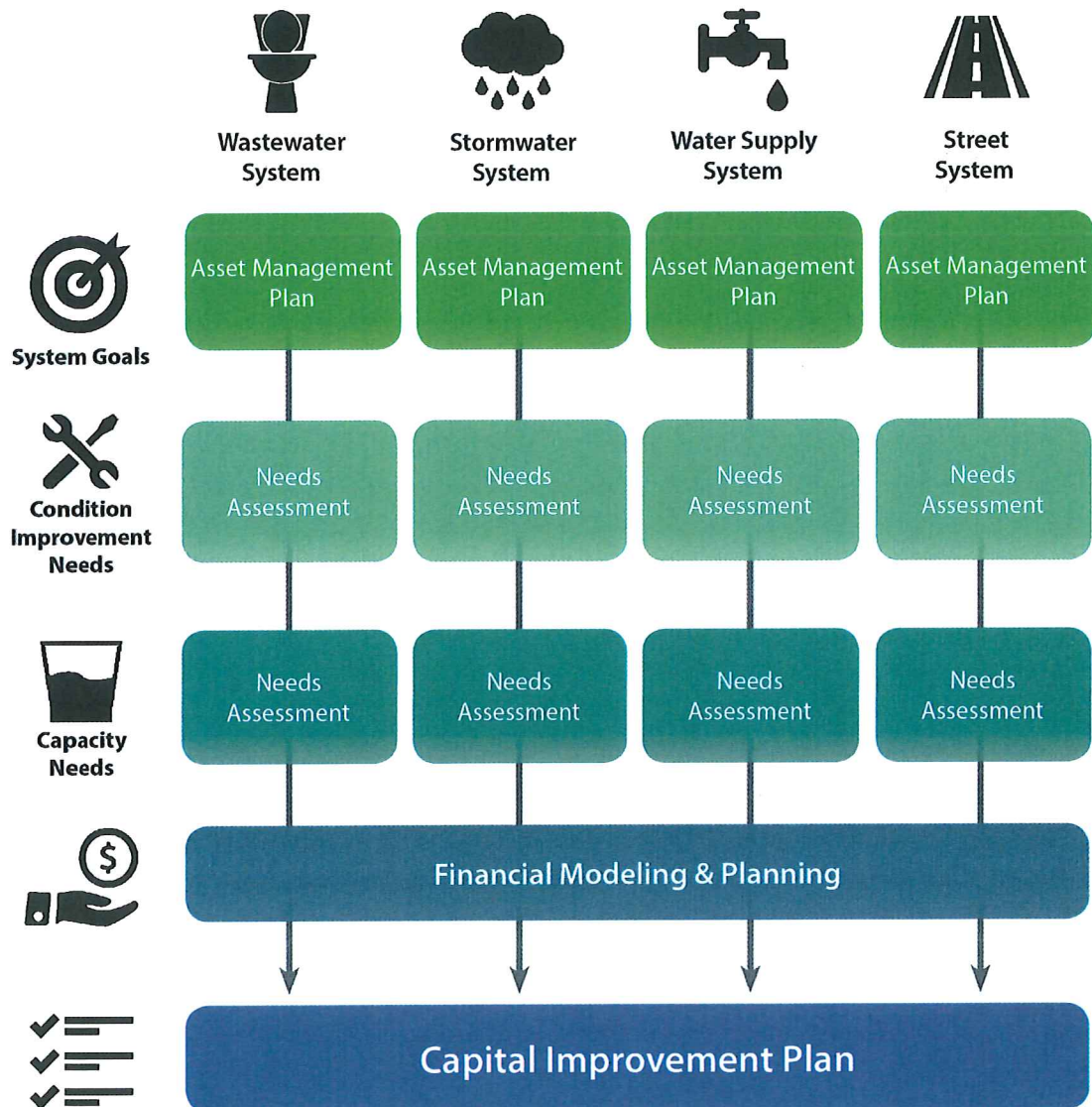
The City of Galesburg is actively managing the needs of these systems. The needs have been evaluated and financial strategies have been considered. This Capital Improvement Plan presents the City of Galesburg's infrastructure priorities that have been established within a 10-year planning period, a timeline for accomplishing the needed improvements, and a financial strategy to implement the plan.

Planning Framework

Asset management is a programmatic way of managing the needs of the infrastructure. The asset management plan for each system guides the program and establishes goals for the system. By implementing the asset management program, the needs of each system are determined and prioritized. Each system has two kinds of needs: condition improvement needs and capacity needs.

Condition improvements may be needed to repair aging and deteriorated parts of the system.

Capacity may be needed to ensure the infrastructure will meet the needs of the people.



Current Needs Assessments

The City of Galesburg has completed the following needs assessments upon which this Capital Improvement plan has been developed:

System	Condition Improvement Needs Assessments	Capacity Improvement Needs Assessments
Wastewater System	2017 Wastewater System Evaluation 2016 Smoke Testing Report	
Stormwater System	2017 Stormwater System Evaluation	2017 Storm Sewer Capacity Study
Water Supply System	2016 Asset Management Inventory	2016 Water System Reliability Study
Street System	2015 PASER Ratings	No Current Traffic Studies (not typical for local streets)

Coordinating the Systems to Minimize Cost

When capital improvements are planned considering both kinds of needs across all infrastructure systems the potential for tearing up good streets to work on underground utilities can be reduced and overall cost can be minimized. This requires financial planning for all infrastructure systems together and a capital improvement plan that is coordinated across all infrastructure systems.

Ongoing Capital Improvement Planning

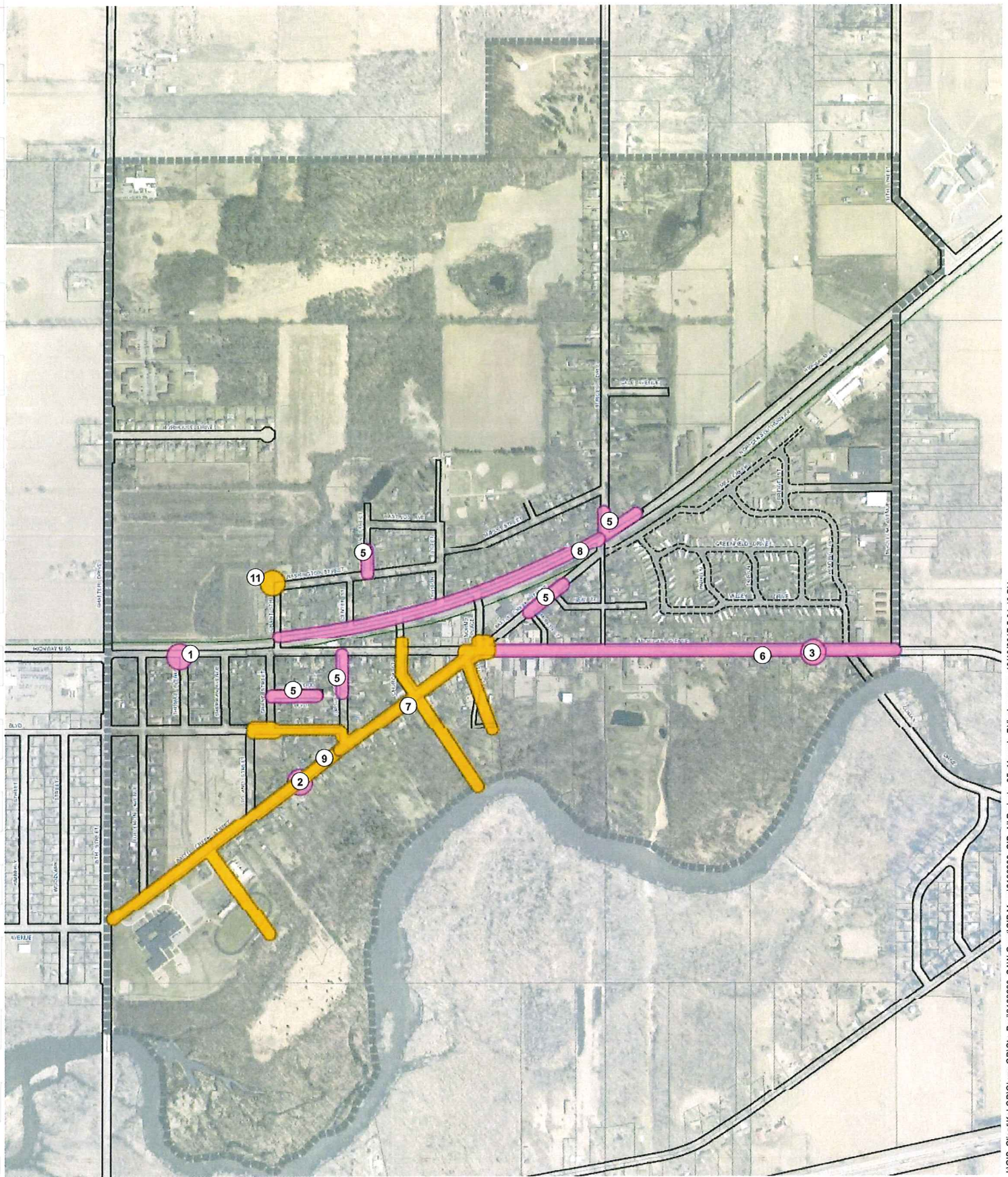
Capital improvement planning is an ongoing process. Plans are expected to change as new information becomes available and economic conditions change. While the various studies to determine the needs may be updated at differing times, this Capital Improvement Plan is intended to be updated annually to always reflect the current plan moving forward.

Part One: Capital Improvements

Overview Maps

Project List

Project Summaries



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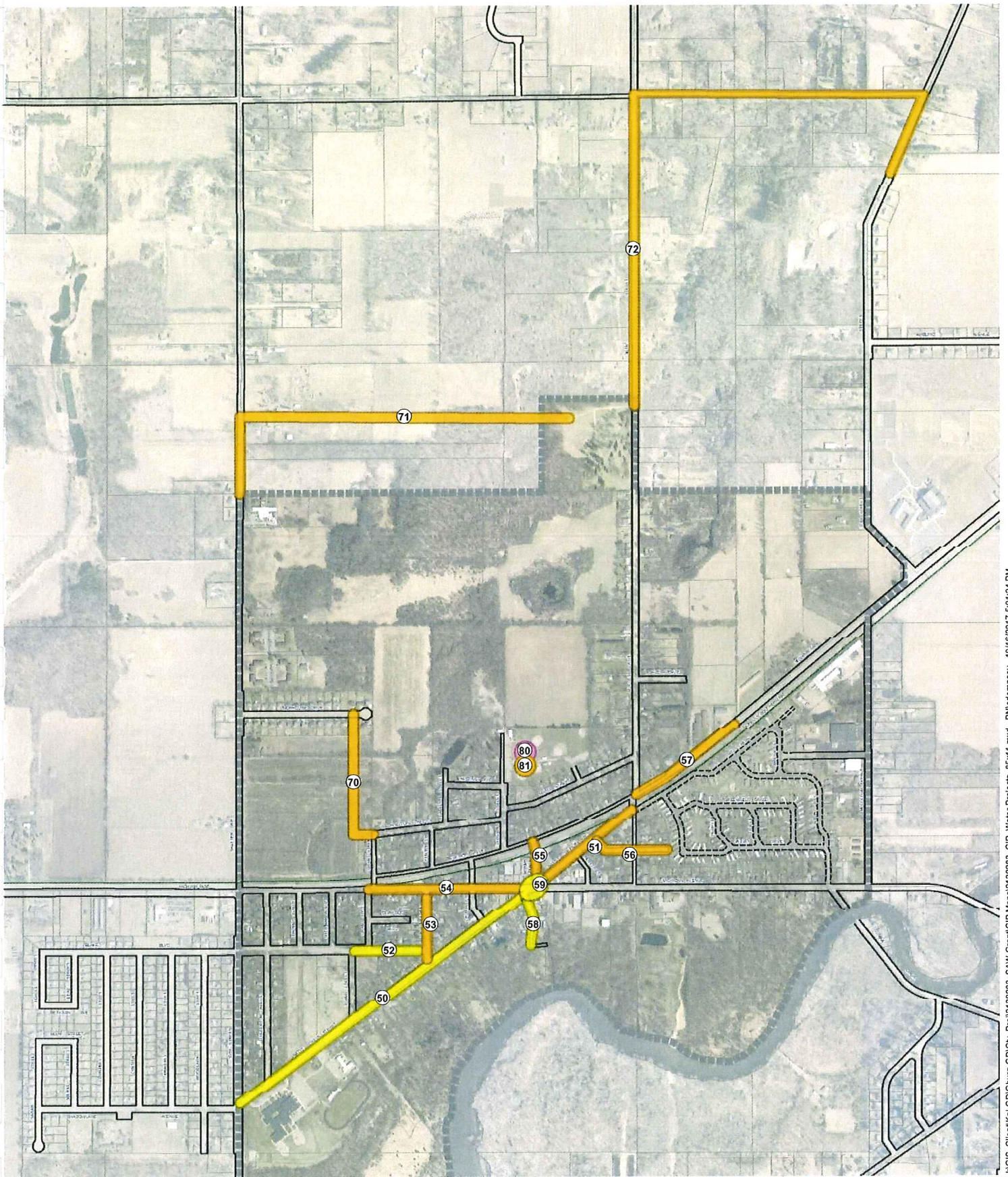


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Feet

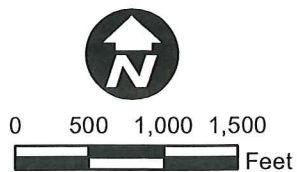
LEGEND

- Short Term Projects (2018 - 2022)
- Long-Term Projects (2023 - 2027)

CITY OF GALESBURG
CAPITAL IMPROVEMENT PLAN
SANITARY/STORM
PROJECTS
AUGUST 2017
Prein&Newhof
2130283



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LEGEND

- Included in Sanitary/Storm Projects
- Short Term Projects (2018 - 2022)
- Long-Term Projects (2023 - 2033)

CITY OF GALESBURG
CAPITAL IMPROVEMENT PLAN
WATER SYSTEM
PROJECTS
 AUGUST 2017
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CITY OF GALESBURG
2017 CAPITAL IMPROVEMENT PLAN

PROJECT LIST

Project ID#	Location	Scope	Purpose	Utility
1	Michigan and Thomas	Point Repair	fix hole in pipe	Sanitary
2	Michigan and Climax	Point Repair	remove utility	Storm
3	Battle Creek and Grove	Point Repair	fix hole in pipe	Storm
5	ROF 4 - Balance sewers (6 pipes)	CIPP Main Line	Remove Roots and structural issues	Sanitary
6	Michigan Avenue	Mill and Resurface	Pavement Restoration	Road
7a	Mill Street	Dig and Replace	Reconstruct Storm, Water and Road	Storm, Road, Water
7b	Battle Creek Street (Grove to 5-way intersection)	Dig and Replace	Reconstruct Storm, Water and Road	Storm, Road, Water
7c	Church Street	Dig and Replace	Reconstruct Storm, Water and Road	Storm, Road, Water
7d	Blake Boulevard (Toland to Grove) & Grove	Dig and Replace	Reconstruct Storm, Water and Road	Storm, Road, Water
7e	5-way intersection and Norms Place	Dig and Replace	Reconstruct Storm, Water and Road	Storm, Road, Water
7f	Storm Outlet treatment Pond	New Pond	Treatment	Storm
8	Beckwith Drive (Grant to Burgess)	Dig and Replace	Reconstruct Storm and Road - Infiltration system	Storm, Road, Sanitary
9	Battle Creek (35th to Grove)	Dig and Replace	Reconstruct Storm, Water and Road, Install outlet pond	Storm, Road
10	Various MH	Repairs	Repairs	Sanitary, Storm
11	Morhouse Lift Station	Misc	Misc	Sanitary
20	Non-Pipe Assets - Printer	Replacement	Replacement	Sanitary
21	Non-Pipe Assets - Generator	Replacement	Replacement	Sanitary
22	Non-Pipe Assets - Computer & Tablet	Replacement	Replacement	Sanitary
23	Non-Pipe Assets - Printer	Replacement	Replacement	Sanitary
50	Replace 6-inch water main in Battle Creek from Shafter/35 th Street to 5-Way Intersection with 12-inch water main	Replacement	Replacement	Water
51	Replace 6-inch water main in Battle Creek from 5-Way Intersection Burgess / 36 th Street with 12-inch water main	Replacement	Replacement	Water
52	Replace 6-inch water main in Blake (Grant to Grove) with 8-inch water main	Replacement	Replacement	Water
53	Replace 6-inch water main in Grove (Battle Creek to M-96) with 8-inch water main	Replacement	Replacement	Water
54	Replace 6-inch water main in M-96 (Grant to Norms Place) with 12-inch water main	Replacement	Replacement	Water
55	Replace 6-inch water main in Norms Place (M-96 to Beckwith) with 12-inch water main	Replacement	Replacement	Water
56	Replace 4-inch water main in New Street (Battle Creek to Gale Valley Estates) with 8-inch water main	Replacement	Replacement	Water
57	Replace 8-inch water main in M-96 (Burgess/36 th Street, east of 12" water main) with 12-inch water main	Replacement	Replacement	Water
58	Replace 4-inch and 6-inch water main in Mill Street (South of Battle Creek Street) with 8-inch water main	Replacement	Replacement	Water
59	Replace WM in 5-way intersection with 12-inch water main using insert-a-valves	Replacement	Replacement	Water
70	Close Loop at Morhouse Drive with 8-inch water main	New	Redundancy	Water
71	Close Loop from 35th Street to 36th Street with 12-inch water main	New	Redundancy	Water
72	Close Loop from 36th Street to 37th Street with 12-inch water main	New	Redundancy	Water
80	Well House Permanent Generator (85 KW)	New	Reliability	Water
81	Additional Well	New	Replacement	Water

Project Summary: Michigan and Thomas Street (Sanitary Point Repair)**Project Number: 1**

Project Description: Repair the hole in a sanitary pipe on Michigan Avenue. Includes open cutting roadway to repair sanitary and necessary road patching. Coordination will be required with MDOT and utility company.

Planned Year⁽¹⁾: 2018

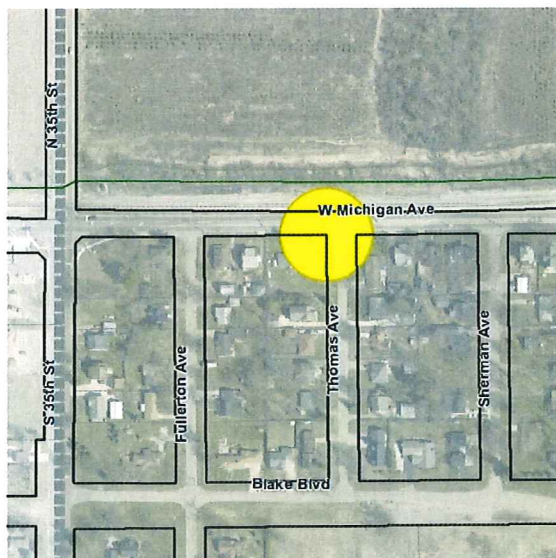
Anticipated Project Costs⁽²⁾:

Wastewater System Improvements	\$23,800
Total Project Cost	\$23,800

See Appendix A for cost details

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.



Project Summary: Michigan and Climax (Storm Point Repair)**Project Number: 2**

Project Description: Removal of the utility penetration from inside the storm pipe. Includes open cutting roadway to repair storm and necessary road patching. Coordination will be required with utility company. This point repair should be coordinated resurfacing project of Michigan Avenue.

Planned Year⁽¹⁾: 2018

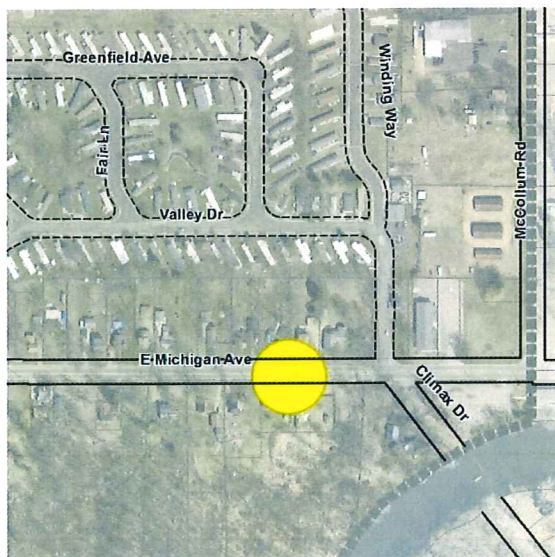
Anticipated Project Costs⁽²⁾:

Street and Sidewalk Improvements	\$21,200
Total Project Cost	\$21,200

See Appendix A for cost details

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.



Project Summary: Battle Creek and Grove Street (Storm Point Repair)

Project Number: 3

Project Description: Repair the hole in the storm pipe along Battle Creek. Includes open cutting roadway to repair storm and necessary road patching.

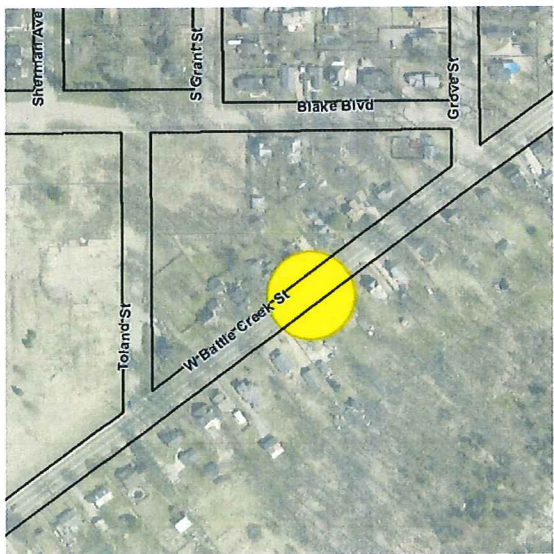
Planned Year⁽¹⁾: 2018

Anticipated Project Costs⁽²⁾:

Street and Sidewalk Improvements	\$19,200
Total Project Cost	\$19,200
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

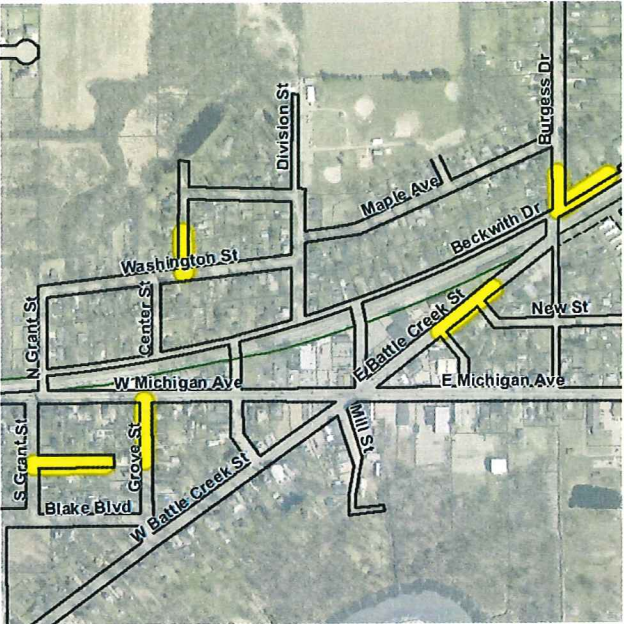
(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.



Project Summary: Various Lining Projects (Cured-In-Place)

Project Number: 5

Project Description: Utilize Cured-In-Place pipe technology to line 6 pipe segments within the City. Locations include Elm, Grove, Hamilton Street, Burgess Drive and 2 segments along M-96.



Planned Year⁽¹⁾: 2022

Anticipated Project Costs⁽²⁾:

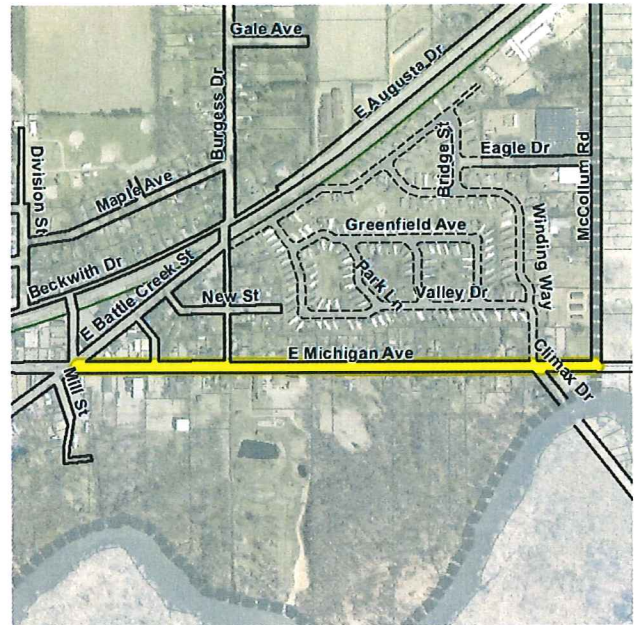
Wastewater System Improvements	\$451,700
Total Project Cost	\$451,700
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Michigan Avenue**Project Number: 6**

Project Description: Street resurfacing of Michigan Avenue from the 5-way intersection to McCollum Street. Includes cold milling existing pavement and overlay with new asphalt pavement.



Planned Year⁽¹⁾: 2018

Anticipated Project Costs⁽²⁾:

Street and Sidewalk Improvements	\$213,700
Total Project Cost	\$213,700
See Appendix A for cost details	

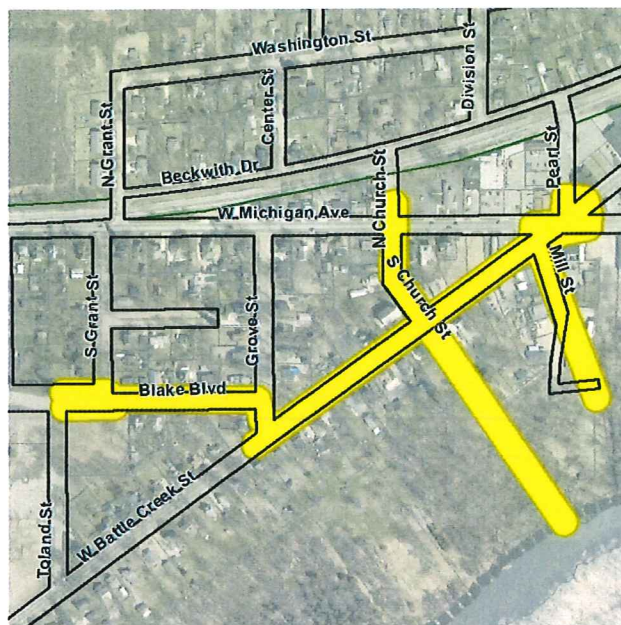
(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Mill Street, Church Street, Battle Creek and Blake Boulevard.

Project Number: 7

Project Description: Street and utility reconstruction of Mill Street, 5-way intersection, Church Street, Battle Creek Street from Mill Street to Grove, Grove Street from Battle Creek to Blake, and Blake Boulevard from Grove to Toland. Utility work includes replacing the storm sewers within the project area and installing a storm treatment pond at the 2 outfalls. Water main upgrades are proposed in the 5-way intersection, Battle Creek, Mill Street and Blake. Surface improvements include sidewalk replacement, new driveway approaches, and street reconstruction.



Planned Year⁽¹⁾: 2025

Anticipated Project Costs⁽²⁾:

Water System Improvements	\$1,183,300
Street and Sidewalk Improvements	\$2,713,200
Total Project Cost	\$3,896,500
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Beckwith Drive (Grant to Burgess)**Project Number: 8**

Project Description: Street and utility reconstruction of Beckwith Drive from Grant Street to Burgess Drive. Utility work includes replacing the sanitary sewers from Division to Burgess Drive and new storm sewers with underground retention system. Surface improvements include sidewalk replacement, new driveway approaches, concrete curb and gutter, and street reconstruction.



Planned Year⁽¹⁾: 2019

Anticipated Project Costs⁽²⁾:

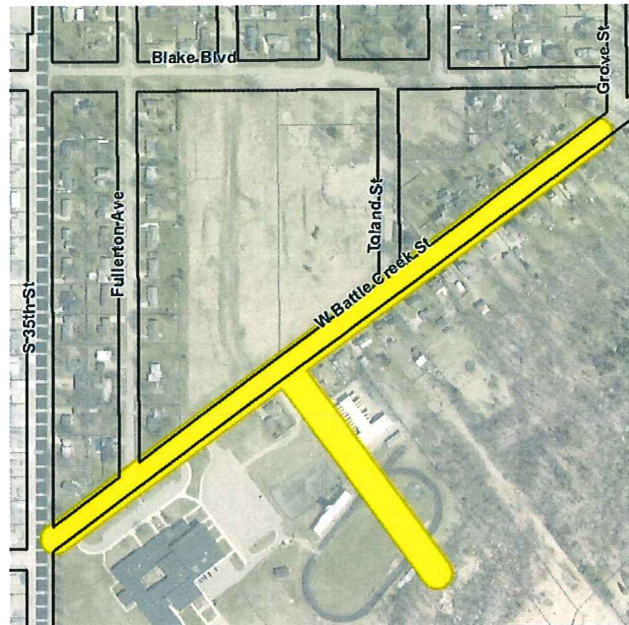
Wastewater System Improvements	\$868,600
Street and Sidewalk Improvements	\$868,600
Total Project Cost	\$1,737,200
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Battle Creek (35th to Grove)**Project Number: 9**

Project Description: Street and utility reconstruction of Battle Creek Street from 35th Street to Grove Street. Utility work includes installing 3 stubs on the sanitary sewer, Upgrading the watermain in the project area to 12-inch, replacing the storm sewers and installing a treatment pond on the outfall. Surface improvements include sidewalk replacement, new driveway approaches, new curb and gutter, and street reconstruction.



Planned Year⁽¹⁾: 2026

Anticipated Project Costs⁽²⁾:

Water System Improvements	\$430,700
Street and Sidewalk Improvements	\$2,102,600
Total Project Cost	\$2,533,300
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

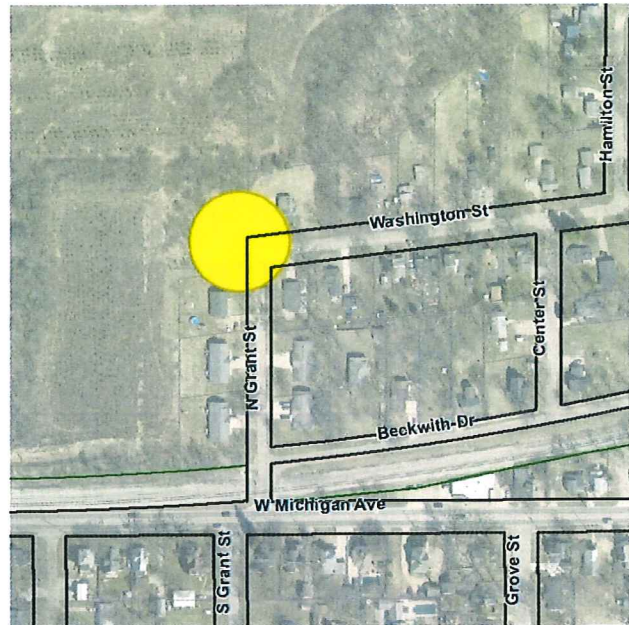
(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Owner: City of Galesburg	
Project Title: Project #10: Various MH Rehabilitation	
Date: 4/12/2017	Project #: 2130283

MH No.	Description	Issue	Action	Year	Completed Y/N
Sanitary MH					
9490	Morhouse Cul-de-sac	mudding at top is gone, bricks are broken, cracked and falling in	DPW to re-mortar structure	2017	
9422	Beckwith, 1st MH west of Burgess	mudding and structure below casting has significant cracking, erosion, and some bricks have fallen in	DPW to re-mortar structure	2017	
9433	Intersection of Washington & Hamilton	brick and mortar at top of structure have significant erosion and a few are missing	DPW to re-mortar structure	2017	
2435	McCollum, 2nd MH south of M96	rim of casting missing pieces	No action	NA	
9471	Washington & Grant - FM discharge	catch basin cover EJ 1060B	DPW to replace lid with solid cover	2017	
9506	Grant, 1st MH south of Washington	catch basin cover EJ 1060B	DPW to replace lid with solid cover	2107	
Storm MH					
100	Norms Place	2" metal conduit thru CB N & S, utility crossing, moderate cracking	No action - abandoned	NA	
312	Blake and Grant	1/2 of casting in curb broken/missing. sump full of dirt to pipes. a few bricks under casting have broken off and fallen in	DPW to reconstruct portion of structure	2017	
104	Mills and Battle Creek	used rock in place of some bricks, some pieces falling in	Beyond scope of DPW, replace with Mills reconstruction project	TBD	
336	Mills, south of BC	no sump, one block missing	DPW to re-mortar structure	2017	
105	Bus Garage Parking Lot, S of BC	1ft diameter area of wall crumbling. Catch basin built on top of existing storm pipe, hole cut in top of pipe	Patch Re-rated to ROF 3 - No action	NA	
161	Washington St	mortar between bricks has eroded away. steps with light surface corrosion	LB - Dry, re-rated to ROF 2 - No action	NA	
269	Gale Avenue	cracked and chipped bricks. casting in curb has sunk 1 inch, concrete surrounding is significantly cracked	cut curb and rebuild, also one across the street	2017	
290	Church and Battle Creek	casting on 4 degree angle, material is 15" concrete pipe, diameter is 15"	DPW to re-mortar structure	2017	
303	Grove St	structure in curb. major cracking and breakage under casting	DPW to re-mortar structure	2017	
171	Battle Creek, East of Fullerton	no sump, casting chipped in corner	Re-rated casting ROF - 2, No action	NA	
301	Grove and Battle Creek	casting in curb broken on north side, piece missing. sump full of dirt to pipes.	True statement, No action	NA	
315	Blake and Grant	medium size piece broken off casting in curb. sump full to pipe	New Casting	2017	
325	Toland and Battle Creek	back of casting broken	True statement, No action	NA	

Project Summary: Morhouse Pump Station**Project Number: 11**

Project Description: The controls and instrumentation for Morhouse Lift Station are currently in working order; however, it is recommended they be replaced with current technology toward the end of the CIP timeframe. A surge protection device should be added to the electrical service and intrinsically safe relay added to the high level float as part of the improvements. At the time the controls replacement it is recommended that the corrosion of the piping be re-evaluated to determine if recoating the pipe is necessary to avoid further corrosion.



Planned Year⁽¹⁾: 2023

Anticipated Project Costs⁽²⁾:

Wastewater System Improvements	\$96,900
Total Project Cost	\$96,900
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Replacement of Printer**Project Number: 20****Project Description:** Replacement of the printer used by the DPW for recording the sanitary and water systems.**Planned Year⁽¹⁾: 2019****Anticipated Project Costs⁽²⁾:**

Water System Improvements	\$300
Wastewater System Improvements	\$300
Total Project Cost	\$600
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Generator (Trailer Mounted)**Project Number: 21**

Project Description: Replacement of the portable Generator used by the DPW for the well systems and the lift station during emergency situation of power outages.

Planned Year⁽¹⁾: 2021**Anticipated Project Costs⁽²⁾:**

Water System Improvements	\$29,000
Wastewater System Improvements	\$29,000
Total Project Cost	\$58,000
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Replacement of Computer and Tablet**Project Number: 22**

Project Description: Replacement of the computer and Tablet used by the DPW for running the sanitary and water systems.

Planned Year⁽¹⁾: 2022**Anticipated Project Costs⁽²⁾:**

Water System Improvements	\$2,400
Wastewater System Improvements	\$2,400
Total Project Cost	\$4,800
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Project Summary: Replacement of Printer**Project Number: 23****Project Description:** Replacement of the printer used by the DPW for recording the sanitary and water systems.**Planned Year⁽¹⁾: 2024****Anticipated Project Costs⁽²⁾:**

Water System Improvements	\$350
Wastewater System Improvements	\$350
Total Project Cost	\$700
See Appendix A for cost details	

(1) Planned Year is subject to change pending annual review of City wide priorities and available funds.

(2) Project cost is estimated in 2017 dollars, with a 2% inflation rate applied annually until the project's planned year.

Part Two: Financial Strategy

Implementation Timeline

Sewer Fund Forecast

Water Fund Forecast (To be created in future edition)

Streets / Storm Fund Forecast (To be created in future edition)

City of Galesburg										
10-Year CIP Implementation Timeline						FUND BREAKDOWN				
						Sanitary	Water	General/Road		
Fiscal Year	Construction Season	Project ID#	Project Name / Location	Work Type	Total Cost	Cost	Cost	Cost		Funding Source
2017/2018	2018	1	Michigan and Thomas	Sanitary	\$23,788	\$23,788	\$0	\$0		Cash
2017/2018	2018	2	Michigan and Climax	Storm	\$21,163	\$0	\$0	\$21,163		Cash
2017/2018	2018	3	Battle Creek and Grove	Storm	\$19,174	\$0	\$0	\$19,174		Cash
2017/2018	2018	6	Michigan Avenue	Road	\$213,685	\$0	\$0	\$213,685		Cash
				TOTAL	\$277,810	\$23,788	\$0	\$254,022		
2018/2019	2019	8	Beckwith Drive (Grant to Burgess)	Storm, Road, Sanitary	\$1,737,089	\$868,544	\$0	\$868,544		Bond
2018/2019	2019	20	Non-Pipe Assets - Printer	Sanitary	\$603	\$302	\$302	\$0		Cash
				TOTAL	\$1,737,692	\$868,846	\$302	\$868,544		
2020/2021	2021	21	Non-Pipe Assets - Generator (Portable Trail Mounted)	Sanitary	\$58,018	\$29,009	\$29,009	\$0		Cash
2020/2021	2021	80	Well House Permanent Generator (85 KW)	Water	\$98,501	\$0	\$98,501	\$0		Cash
				TOTAL	\$156,520	\$29,009	\$127,511	\$0		
2021/2022	2022	5	ROF 4 - Balance sewers (6 pipes)	Sanitary	\$451,631	\$451,631	\$0	\$0		Bond
2021/2022	2022	22	Non-Pipe Assets - Computer & Tablet	Sanitary	\$4,781	\$2,390	\$2,390	\$0		Cash
				TOTAL	\$456,411	\$454,021	\$2,390	\$0		
2022/2023	2023	11	Morhouse Lift Station	Sanitary	\$96,850	\$96,850	\$0	\$0		Cash
				TOTAL	\$96,850	\$96,850	\$0	\$0		
2023/2024	2024	23	Non-Pipe Assets - Printer	Sanitary	\$666	\$333	\$333	\$0		Cash
2023/2024	2024	53	Replace 6-inch water main in Grove (Battle Creek to M-96) with 8-inch water main	Water	\$106,770	\$0	\$106,770	\$0		Bond
2023/2024	2024	54	Replace 6-inch water main in M-96 (Grant to Norms Place) with 12-inch water main	Water	\$358,390	\$0	\$358,390	\$0		Bond
2023/2024	2024	56	Replace 4-inch water main in New Street (Battle Creek to Gale Valley Estates) with 8-inch water main	Water	\$131,410	\$0	\$131,410	\$0		Bond
2023/2024	2024	57	Replace 8-inch water main in M-96 (Burgess/36th Street, east of 12" water main) with 12-inch water main	Water	\$335,991	\$0	\$335,991	\$0		Bond
				TOTAL	\$933,227	\$333	\$932,894	\$0		
2024/2025	2025	7a	Mill Street	Storm, Road, Water	\$362,287	\$0	\$97,817	\$264,469		Bond
2024/2025	2025	7b	Battle Creek Street (Grove to 5-way intersection)	Storm, Road, Water	\$1,267,823	\$0	\$291,599	\$976,224		Bond
2024/2025	2025	7c	Church Street	Storm, Road, Water	\$532,761	\$0	\$0	\$532,761		Bond
2024/2025	2025	7d	Blake Boulevard (Toland to Grove) & Grove	Storm, Road, Water	\$649,352	\$0	\$162,338	\$487,014		Bond
2024/2025	2025	7e	5-way intersection and Norms Place	Storm, Road, Water	\$631,531	\$0	\$631,531	\$0		Bond
2024/2025	2025	7f	Storm Outlet treatment Pond	Storm	\$431,343	\$0	\$0	\$431,343		Bond
				TOTAL	\$3,875,097	\$0	\$1,183,286	\$2,691,811		
2025/2026	2026	9	Battle Creek (35th to Grove)	Storm, Road	\$2,620,973	\$0	\$445,565	\$2,175,408		Bond
				TOTAL	\$2,620,973	\$0	\$445,565	\$2,175,408		

CITY OF GALESBURG (MICHIGAN) SEWER FUND

CASH FLOW ANALYSIS

	2017/18	Increase	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Assumptions									
Base rate units billed	870		870	870	870	870	870	870	870
Base rate charge - quarter	\$17.00	5.50%	\$17.94	\$18.92	\$19.96	\$21.06	\$22.22	\$23.44	\$24.73
Volume sold - annual mgal	36,914		36,914	36,914	36,914	36,914	36,914	36,914	36,914
Commodity charge - mgal	\$3.66	5.50%	\$3.86	\$4.07	\$4.30	\$4.53	\$4.78	\$5.05	\$5.32
<i>Typical homeowner's bill (assumes 13,500 gallons/quarter)</i>	\$66.41		\$70.06	\$73.92	\$77.98	\$82.27	\$86.80	\$91.57	\$96.61
Revenues									
Base charge	\$59,160		\$62,414	\$65,847	\$69,468	\$73,289	\$77,320	\$81,572	\$86,059
Commodity charge	135,104		142,535	150,374	158,645	167,370	176,575	186,287	196,533
Total revenues	194,264		204,948	216,221	228,113	240,659	253,895	267,859	282,592
Total expenditures	167,350		169,974	172,642	175,357	178,119	180,928	183,786	186,694
Net operating revenue	26,914		34,975	43,578	52,756	62,540	72,967	84,073	95,898
Less: Estimated system CCTV, root cutting & cleaning	17,771		17,771	17,771	17,771	17,771	17,771	17,771	17,771
Estimated cash-funded capital improvements			23,788	302	302	29,009	454,021	96,850	333
Estimated Debt Service #1 2019/20 Bonds [1]				11,375	35,000	35,000	35,000	35,000	35,000
Estimated Debt Service #2 2029/30 Bonds [2]									
Estimated Debt Service #3 2033/34 Bonds [3]									
Net cash flow	\$9,143		(\$6,584)	\$14,131	(\$15)	(\$19,240)	(\$433,825)	(\$65,548)	\$42,794
<i>Cash & investments</i>	\$687,216		\$689,775	\$703,906	\$703,891	\$684,651	\$250,826	\$185,279	\$228,072

[1] Estimated debt service payments based on a \$868,544 40-year bond issue at the current USDA intermediate rate (2.625%).

[2] Estimated debt service payments based on a \$1,176,496 40-year bond issue at the current USDA intermediate rate (2.625%).

[3] Estimated debt service payments based on a \$3,298,523 40-year bond issue at the current USDA intermediate rate (2.625%).

CITY OF GALESBURG (MICHIGAN) SEWER FUND

(Continued)

CASH FLOW ANALYSIS

<u>2025/26</u>	<u>Increase</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>
870		870	870	870	870	870	870	870	870	870	870	870	870
\$26,09	2.50%	\$26,74	\$27,41	\$28,10	\$28,80	\$29,52	\$30,26	\$31,01	\$31,79	\$32,58	\$33,40	\$34,23	\$35,09
36,914		36,914	36,914	36,914	36,914	36,914	36,914	36,914	36,914	36,914	36,914	36,914	36,914
\$5,62	2.50%	\$5,76	\$5,90	\$6,05	\$6,20	\$6,36	\$6,51	\$6,68	\$6,84	\$7,01	\$7,19	\$7,37	\$7,55
\$90,792		\$93,062	\$95,388	\$97,773	\$100,217	\$102,723	\$105,291	\$107,923	\$110,621	\$113,387	\$116,222	\$119,127	\$122,105
207,342		212,526	217,839	223,285	228,867	234,589	240,453	246,465	252,626	258,942	265,416	272,051	278,852
298,134		305,588	313,227	321,058	329,084	337,312	345,744	354,388	363,248	372,329	381,637	391,178	400,957
189,652		192,662	195,724	198,839	202,009	205,234	208,515	211,854	215,251	218,707	222,225	225,804	229,446
108,482		112,926	117,503	122,219	127,076	132,078	137,229	142,534	147,997	153,622	159,412	165,374	171,512
17,771		17,771	17,771	17,771	17,771	17,771	17,771	17,771	17,771	17,771	17,771	17,771	17,771
35,000		35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
			10,684		15,500	47,500	61,638	47,500	47,500	47,500	47,500	47,500	47,500
			35,000				47,500		43,250	133,125	133,125	133,125	133,125
\$55,711		\$60,155	\$54,049	\$69,448	\$58,805	\$31,807	(\$24,679)	\$42,264	\$4,476	(\$79,774)	(\$121,651)	(\$68,022)	(\$71,691)
\$283,784		\$343,938	\$397,987	\$467,435	\$526,240	\$558,047	\$533,368	\$575,631	\$580,107	\$500,333	\$378,682	\$310,660	\$238,969

Part Three: Detailed Cost Estimates

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #1: Michigan Ave @ Thomas - Sanitary Sewer Point Repair

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
1	Mobilization	1	LF	\$1,000.00	\$1,000.00
2	MDOT Coordination	1	LS	\$700.00	\$700.00
3	Remove pavement	55	SY	\$20.00	\$1,100.00
4	Remove curb and gutter	40	LF	\$10.00	\$400.00
5	Remove and Replace Concrete Sidewalk	160	SF	\$8.00	\$1,280.00
6	Milling 10' - 2" depth outside disturbed limits	30	SY	\$10.00	\$300.00
7	Excavate and repair 8" sanitary sewer	1	LS	\$3,500.00	\$3,500.00
8	Replace curb and gutter	40	LF	\$40.00	\$1,600.00
9	HMA road patch - top course (2")	85	SY	\$20.00	\$1,700.00
10	HMA road patch - base course (4")	55	SY	\$40.00	\$2,200.00
11	Gravel road patch, 8"	55	SY	\$12.00	\$660.00
12	Traffic Control	1	LS	\$3,000.00	\$3,000.00
13	Restoration	1	LS	\$500.00	\$500.00
Subtotal					\$17,940.00
Engineering, Administration & Legal (20%)					\$3,588.00
Contingencies (10%)					\$1,794.00
Project Total					\$23,322.00

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #2: Michigan Ave @ Climax - Storm Sewer Point Repair

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
1	Mobilization	1	LF	\$1,000.00	\$1,000.00
2	Utility Coordination	1	LS	\$500.00	\$500.00
3	Remove pavement	55	SY	\$20.00	\$1,100.00
4	Remove curb and gutter	40	LF	\$10.00	\$400.00
5	Milling 10' - 2" depth outside disturbed limits	30	SY	\$10.00	\$300.00
6	Excavate and repair 15" storm sewer	1	LS	\$3,500.00	\$3,500.00
7	Replace curb and gutter	40	LF	\$40.00	\$1,600.00
8	HMA road patch - top course (2")	85	SY	\$20.00	\$1,700.00
9	HMA road patch - base course (4")	55	SY	\$40.00	\$2,200.00
10	Gravel road patch, 8"	55	SY	\$12.00	\$660.00
11	Traffic Control	1	LS	\$2,500.00	\$2,500.00
12	Restoration	1	LS	\$500.00	\$500.00
Subtotal					\$15,960.00
Engineering, Administration & Legal (20%)					\$3,192.00
Contingencies (10%)					\$1,596.00
Project Total					\$20,748.00

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #3: Battle Creek @ Grove - Storm Sewer Point Repair

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
1	Mobilization	1	LF	\$1,000.00	\$1,000.00
2	Remove pavement	80	SY	\$20.00	\$1,600.00
3	Milling 10' - 2" depth outside disturbed limits	40	SY	\$10.00	\$400.00
4	Excavate and repair 12" storm sewer	1	LS	\$3,500.00	\$3,500.00
5	HMA road patch - top course (2")	120	SY	\$20.00	\$2,400.00
6	HMA road patch - base course (2")	80	SY	\$20.00	\$1,600.00
7	Gravel road patch, 8"	80	SY	\$12.00	\$960.00
8	Traffic Control	1	LS	\$2,500.00	\$2,500.00
9	Restoration	1	LS	\$500.00	\$500.00
Subtotal					\$14,460.00
Engineering, Administration & Legal (20%)					\$2,892.00
Contingencies (10%)					\$1,446.00
Project Total					\$18,798.00

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #5: Sanitary Sewer Cured In Place Pipe (CIPP) - Balance of CIP

Date:

8/14/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
Mainline CIPP					
1	Pre and Post Insertion Video Inspection	1,684	lf	\$1.00	\$1,684.00
2	8" Sanitary Sewer, CIPP (Cleaning, Disposal and Lining)	199	lf	\$35.00	\$6,965.00
3	10" Sanitary Sewer, CIPP (Cleaning, Disposal and Lining)	1,303	lf	\$40.00	\$52,120.00
4	12" Sanitary Sewer, CIPP (Cleaning, Disposal and Lining)	182	lf	\$45.00	\$8,190.00
5	Service Connection By Remote Cut (Lateral Reinstatement)	30	ea	\$150.00	\$4,500.00
6	Remove Protruding Tap	0	ea	\$300.00	\$0.00
7	Pre and Post Insertion Video Inspection - Lateral Rehabilitation	30	ea	\$400.00	\$12,000.00
8	4"-6" Lateral Rehabilitation (Cleaning, Disposal, and Lining), up to 10' in length	30	ea	\$3,800.00	\$114,000.00
9	4"-6" Lateral Rehabilitation (Cleaning, Disposal, and Lining), over 10' in length	690	lf	\$25.00	\$17,250.00
10	5 Year Full Warranty for Sanitary Sewer Lining - CIPP	1	lsum	\$10,000.00	\$10,000.00
11	Construction Bypass Operation	1,684	lf	\$20.00	\$33,680.00
12	Soil Erosion & Sedimentation Control	1,684	lf	\$0.10	\$168.40
13	Restoration	1,684	lf	\$0.25	\$421.00
14	Traffic Control	1,684	lf	\$20.00	\$33,680.00
15	Project Mobilization	1	lsum	\$20,000.00	\$20,000.00
Subtotal Mainline CIPP					\$314,658.40
Additional Lateral Lining					
16	Pre and Post Insertion Video Inspection - Lateral Rehabilitation	0	ea	\$400.00	\$0.00
17	4"-6" Lateral Rehabilitation (Cleaning, Disposal, and Lining), up to 10' in length	0	ea	\$3,800.00	\$0.00
18	4"-6" Lateral Rehabilitation (Cleaning, Disposal, and Lining), over 10' in length	0	lf	\$25.00	\$0.00
19	5 Year Full Warranty for Lateral Rehabilitation - CIPP	0	lsum	\$5,000.00	\$0.00
Subtotal Lateral Lining					\$0.00
Subtotal					\$314,658.40
Engineering, Administration & Legal (20%)					\$62,931.68
Contingencies (10%)					\$31,465.84
Project Total					\$409,055.92

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #6: Michigan Avenue Resurfacing

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
	<u>Michigan Avenue (M-96 to McCollum)</u>				
1	Mill (2-inch)	14,900	SY	\$1.50	\$22,350.00
2	Mill around sanitary/storm castings	22	EA	\$150.00	\$3,300.00
3	Mill around water main/section corner castings	10	EA	\$150.00	\$1,500.00
4	HMA Pavement (MDOT 36A, 2-inch)	1,800	TON	\$65.00	\$117,000.00
5	Pavement Striping (Thermo Plastic)	1	LS	\$10,000.00	\$10,000.00
6	Pavement Markings (Cold Plastic)	1	LS	\$2,000.00	\$2,000.00
7	SESC	1	LS	\$500.00	\$500.00
8	Traffic Control	1	LS	\$4,500.00	\$4,500.00
Subtotal					\$161,150.00
Engineering, Administration & Legal (20%)					\$32,230.00
Contingencies (10%)					\$16,115.00
Project Total					\$209,495.00

All work quantities and costs are estimated for preliminary planning purposes only.
Costs estimated in 2017 Dollars

Owner:

City of Galesburg

Project Title:

Project #7: Mill Street, Battle Creek, Church Street, Blake Street Reconstruction

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
	Removals - Mill (From BC Street, South to End)				\$16,672.50
	Removals - Battle Creek (From Grove to Mills)				\$61,590.00
	Removals - Blake / Grove (From BC Street to Toland)				\$32,080.00
	Removals - Church Street (From M96 to River)				\$23,915.00
	Removals - 5-way Intersection				\$31,145.00
	Total				\$165,402.50
	Sanitary Sewer - Mill (From BC Street, South to End)				\$1,000.00
	Sanitary Sewer - Battle Creek (From Grove to Mills)				\$2,000.00
	Sanitary Sewer - Blake / Grove (From BC Street to Toland)				\$1,000.00
	Sanitary Sewer - Church Street (From M96 to River)				\$1,000.00
	Sanitary Sewer - 5-way Intersection				\$500.00
	Total				\$5,500.00
	Water Main - Mill (From BC Street, South to End)				\$63,600.00
	Water Main - Battle Creek (From Grove to Mills)				\$189,100.00
	Water Main - Blake / Grove (From BC Street to Toland)				\$106,600.00
	Water Main - Church Street (From M96 to River)				\$0.00
	Water Main - 5-way Intersection				\$168,200.00
	Total				\$527,500.00
	Storm - Mill (From BC Street, South to End)				\$64,980.00
	Storm - Battle Creek (From Grove to Mills)				\$212,675.00
	Storm - Blake / Grove (From BC Street to Toland)				\$124,090.00
	Storm - Church Street (From M96 to River)				\$219,870.00
	Storm - 5-way Intersection				\$49,500.00
	Total				\$671,115.00
	Storm Treatment / Pond				\$297,265.00
	Road and Restoration - Mill (From BC Street, South to End)				\$91,600.00
	Road and Restoration - Battle Creek (From Grove to Mills)				\$367,000.00
	Road and Restoration - Blake / Grove (From BC Street to Toland)				\$162,550.00
	Road and Restoration - Church Street (From M96 to River)				\$104,989.00
	Road and Restoration - 5-way Intersection				\$165,275.00
	Total				\$891,414.00
	Subtotal				\$2,558,196.50
	Engineering, Administration & Legal (20%)				\$511,639.30
	Contingencies (10%)				\$255,819.65
	Project Total				\$3,325,655.45

All work quantities and costs are estimated for preliminary planning purposes only.
Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7a: Mill Street (From BC Street, South to End)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
<u>Removals</u>					
1	Remove concrete sidewalk	1,520	SF	\$1.00	\$1,520.00
2	Remove HMA pavement	1,165	SY	\$1.50	\$1,747.50
3	Remove HMA pavement	610	SY	\$1.50	\$915.00
4	Remove Concrete Curb	550	LF	\$2.50	\$1,375.00
5	Remove driveways	6	EA	\$200.00	\$1,200.00
6	Remove existing storm structures	9	EA	\$500.00	\$4,500.00
7	Remove / Abandon existing storm pipe	683	LF	\$5.00	\$3,415.00
8	Tree Removal	1	LSUM	\$2,000.00	\$2,000.00
	Total				\$16,672.50
<u>Sanitary Sewer</u>					
9	Adjust Sanitary Manhole	2	EA	\$500.00	\$1,000.00
	Total				\$1,000.00
<u>Water Main</u>					
10	Remove Hydrants	2	EA	\$300.00	\$600.00
11	Abandon Water Main	1	LS	\$2,000.00	\$2,000.00
12	8-Inch DI Water Main	525	LF	\$60.00	\$31,500.00
13	Connection to existing WM	1	EA	\$5,000.00	\$5,000.00
14	Hydrants	2	EA	\$3,500.00	\$7,000.00
15	Water Services	7	EA	\$2,500.00	\$17,500.00
	Total				\$63,600.00
<u>Storm</u>					
16	4' Dia. Storm Sewer Manhole	8	EA	\$3,000.00	\$24,000.00
17	15" Storm Sewer	683	LF	\$60.00	\$40,980.00
	Total				\$64,980.00
<u>Road and Restoration</u>					
18	Subgrade Undercutting	430	CY	\$10.00	\$4,300.00
19	Subgrade Undercutting	240	CY	\$5.00	\$1,200.00
20	Machine Grading Modified	5.25	STA	\$1,500.00	\$7,875.00
21	HMA - Leveling course, 2-inch	140	TON	\$65.00	\$9,100.00
22	HMA - Top Course, 2-inch	140	TON	\$65.00	\$9,100.00
23	8" Stabilized Gravel (MDOT 22A)	600	TON	\$12.00	\$7,200.00
24	HMA - Leveling course, 2-inch	75	TON	\$65.00	\$4,875.00
25	HMA - Top Course, 2-inch	75	TON	\$65.00	\$4,875.00
26	8" Stabilized Gravel (MDOT 22A)	340	TON	\$12.00	\$4,080.00
27	Concrete Curb and Gutter	1,050	LF	\$15.00	\$15,750.00
28	Concrete Sidewalk	1,520	SF	\$6.00	\$9,120.00
29	ADA Plates	10	SF	\$40.00	\$400.00
30	Driveway Reconstruction	6	EA	\$1,000.00	\$6,000.00

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7a: Mill Street (From BC Street, South to End)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
31	Restoration	5.25	STA	\$500.00	\$2,625.00
32	Trees/Shrubs	7	EA	\$300.00	\$2,100.00
33	Soil Erosion Control	1	LS	\$1,000.00	\$1,000.00
34	Traffic Control	1	LS	\$2,000.00	\$2,000.00
	Total				\$91,600.00
Subtotal					\$237,852.50
Engineering, Administration & Legal (20%)					\$47,570.50
Contingencies (10%)					\$23,785.25
Project Total					\$309,208.25

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Owner:

City of Galesburg

Project Title:

Project #7b: Battle Creek (From Grove to Mills)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
	<u>Removals</u>				
1	Remove concrete sidewalk	12,500	SF	\$1.00	\$12,500.00
2	Remove HMA pavement	5,200	SY	\$1.50	\$7,800.00
3	Remove Concrete Curb	2,600	LF	\$2.50	\$6,500.00
4	Remove driveways	21	EA	\$200.00	\$4,200.00
5	Remove existing storm structures	25	EA	\$500.00	\$12,500.00
6	Remove / Abandon existing storm pipe	1,618	LF	\$5.00	\$8,090.00
7	Tree Removal	1	LSUM	\$10,000.00	\$10,000.00
	Total				\$61,590.00
	<u>Sanitary Sewer</u>				
8	Adjust Sanitary Manhole	4	EA	\$500.00	\$2,000.00
	Total				\$2,000.00
	<u>Water Main</u>				
9	Remove Hydrants	2	EA	\$300.00	\$600.00
10	Abandon Water Main	1	LS	\$2,000.00	\$2,000.00
11	8-Inch DI Water Main	100	LF	\$60.00	\$6,000.00
12	12-Inch DI Water Main	1,250	LF	\$70.00	\$87,500.00
13	Connection to existing WM	3	EA	\$5,000.00	\$15,000.00
14	Hydrants	3	EA	\$3,500.00	\$10,500.00
15	Water Services	27	EA	\$2,500.00	\$67,500.00
	Total				\$189,100.00
	<u>Storm</u>				
16	4' Dia. Storm Sewer Manhole	17	EA	\$3,000.00	\$51,000.00
17	5' Dia. Storm Sewer Manhole	4	EA	\$4,000.00	\$16,000.00
18	6' Dia. Storm Sewer Manhole	2	EA	\$5,000.00	\$10,000.00
19	8' Dia. Storm Sewer Manhole	1	EA	\$6,500.00	\$6,500.00
20	15" Storm Sewer	438	LF	\$60.00	\$26,280.00
21	18" Storm Sewer	355	LF	\$65.00	\$23,075.00
22	21" Storm Sewer	167	LF	\$80.00	\$13,360.00
23	24" Storm Sewer	330	LF	\$80.00	\$26,400.00
24	27" Storm Sewer	274	LF	\$90.00	\$24,660.00
25	36" Storm Sewer	54	LF	\$100.00	\$5,400.00
26	Dewatering	1	LS	\$10,000.00	\$10,000.00
	Total				\$212,675.00
	<u>Road and Restoration</u>				
27	Subgrade Undercutting	1,925	CY	\$10.00	\$19,250.00
28	Machine Grading Modified	13.00	STA	\$1,500.00	\$19,500.00
29	HMA - Base course, 2-inch	630	TON	\$65.00	\$40,950.00
30	HMA - Leveling course, 2-inch	630	TON	\$65.00	\$40,950.00

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7b: Battle Creek (From Grove to Mills)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
31	HMA - Top Course, 2-inch	630	TON	\$65.00	\$40,950.00
32	8" Stabilized Gravel (MDOT 22A)	2,700	TON	\$12.00	\$32,400.00
33	Pavement Striping (Thermo Plastic)	1	LS	\$5,000.00	\$5,000.00
34	Pavement Markings (Cold Plastic)	1	LS	\$2,000.00	\$2,000.00
35	Concrete Curb and Gutter	2,600	LF	\$15.00	\$39,000.00
36	Concrete Sidewalk	12,500	SF	\$6.00	\$75,000.00
37	ADA Plates	110	SF	\$40.00	\$4,400.00
38	Driveway Reconstruction	21	EA	\$1,000.00	\$21,000.00
39	Restoration	13.00	STA	\$500.00	\$6,500.00
40	Trees/Shrubs	27	EA	\$300.00	\$8,100.00
41	Soil Erosion Control	1	LS	\$2,000.00	\$2,000.00
42	Traffic Control	1	LS	\$10,000.00	\$10,000.00
	Total				\$367,000.00
Subtotal					\$832,365.00
Engineering, Administration & Legal (20%)					\$166,473.00
Contingencies (10%)					\$83,236.50
Project Total					\$1,082,074.50

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Owner:

City of Galesburg

Project Title:

Project #7c: Church Street (From M96 to River)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
	<u>Removals</u>				
1	Remove concrete sidewalk	1,400	SF	\$1.00	\$1,400.00
2	Remove HMA pavement (Church)	1,340	SY	\$1.50	\$2,010.00
3	Remove HMA pavement (M-96)	90	SY	\$1.50	\$135.00
4	Remove HMA pavement (Parking Lot)	570	SY	\$1.50	\$855.00
5	Mill (2-inch) - M96	450	SY	\$2.00	\$900.00
6	Remove Concrete Curb	800	LF	\$2.50	\$2,000.00
7	Remove driveways	6	EA	\$200.00	\$1,200.00
8	Remove existing storm structures	7	EA	\$500.00	\$3,500.00
9	Remove / Abandon existing storm pipe	1,383	LF	\$5.00	\$6,915.00
10	Tree Removal	1	LSUM	\$5,000.00	\$5,000.00
	Total				\$23,915.00
	<u>Sanitary Sewer</u>				
11	Adjust Sanitary Manhole	2	EA	\$500.00	\$1,000.00
	Total				\$1,000.00
	<u>Water Main</u>				
	Total				\$0.00
	<u>Storm</u>				
12	4' Dia. Storm Sewer Manhole	3	EA	\$3,000.00	\$9,000.00
13	6' Dia. Storm Sewer Manhole	3	EA	\$5,000.00	\$15,000.00
14	15" Storm Sewer	117	LF	\$60.00	\$7,020.00
15	36" Storm Sewer	421	LF	\$100.00	\$42,100.00
16	42" Storm Sewer	845	LF	\$150.00	\$126,750.00
17	Dewatering	1	LS	\$20,000.00	\$20,000.00
	Total				\$219,870.00
	<u>Road and Restoration</u>				
18	Subgrade Undercutting	500	CY	\$10.00	\$5,000.00
19	Machine Grading Modified	4.00	STA	\$1,500.00	\$6,000.00
20	HMA - Base course, 5-inch (M-96)	30	TON	\$65.00	\$1,950.00
21	HMA - Leveling course, 3-inch (M-96)	20	TON	\$65.00	\$1,300.00
22	HMA - Top Course, 2-inch (M-96)	55	TON	\$65.00	\$3,575.00
23	8" Stabilized Gravel (MDOT 22A) - M-96	42	TON	\$12.00	\$504.00
24	HMA - Leveling course, 2-inch (Church St.)	160	TON	\$65.00	\$10,400.00
25	HMA - Top Course, 2-inch (Church St.)	160	TON	\$65.00	\$10,400.00
26	8" Stabilized Gravel (MDOT 22A) - (Church St.)	700	TON	\$12.00	\$8,400.00
27	HMA - Leveling course, 1.5-inch (Parking Lot)	52	TON	\$65.00	\$3,380.00
28	HMA - Top Course, 1.5-inch (Parking Lot)	52	TON	\$65.00	\$3,380.00
29	6" Stabilized Gravel (MDOT 22A) - (Parking Lot)	200	TON	\$12.00	\$2,400.00
30	Concrete Curb and Gutter	800	LF	\$15.00	\$12,000.00

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7c: Church Street (From M96 to River)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
31	Concrete Sidewalk	1,400	SF	\$6.00	\$8,400.00
32	ADA Plates	60	SF	\$40.00	\$2,400.00
33	Driveway Reconstruction	6	EA	\$1,000.00	\$6,000.00
34	Restoration	13.00	STA	\$500.00	\$6,500.00
35	Trees/Shrubs	10	EA	\$300.00	\$3,000.00
36	Soil Erosion Control	1	LS	\$5,000.00	\$5,000.00
37	Traffic Control	1	LS	\$5,000.00	\$5,000.00
	Total				\$104,989.00
Subtotal					\$349,774.00
Engineering, Administration & Legal (20%)					\$69,954.80
Contingencies (10%)					\$34,977.40
Project Total					\$454,706.20

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7d: Blake / Grove (From BC Street to Toland)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
	<u>Removals</u>				
1	Remove concrete sidewalk	800	SF	\$1.00	\$800.00
2	Remove HMA pavement (Grove)	760	SY	\$1.50	\$1,140.00
3	Remove HMA pavement (Blake)	2,670	SY	\$1.50	\$4,005.00
4	Remove Concrete Curb	1,900	LF	\$2.50	\$4,750.00
5	Remove driveways	12	EA	\$200.00	\$2,400.00
6	Remove existing storm structures	16	EA	\$500.00	\$8,000.00
7	Remove / Abandon existing storm pipe	1,197	LF	\$5.00	\$5,985.00
8	Tree Removal	1	LSUM	\$5,000.00	\$5,000.00
	Total				\$32,080.00
	<u>Sanitary Sewer</u>				
9	Adjust Sanitary Manhole	2	EA	\$500.00	\$1,000.00
	Total				\$1,000.00
	<u>Water Main</u>				
10	Remove Hydrants	2	EA	\$300.00	\$600.00
11	Abandon Water Main	1	LS	\$2,000.00	\$2,000.00
12	8-Inch DI Water Main	950	LF	\$60.00	\$57,000.00
13	Connection to existing WM	2	EA	\$5,000.00	\$10,000.00
14	Hydrants	2	EA	\$3,500.00	\$7,000.00
15	Water Services	12	EA	\$2,500.00	\$30,000.00
	Total				\$106,600.00
	<u>Storm</u>				
16	4' Dia. Storm Sewer Manhole	14	EA	\$3,000.00	\$42,000.00
17	5' Dia. Storm Sewer Manhole	1	EA	\$4,000.00	\$4,000.00
18	15" Storm Sewer	492	LF	\$60.00	\$29,520.00
19	18" Storm Sewer	522	LF	\$65.00	\$33,930.00
20	21" Storm Sewer	183	LF	\$80.00	\$14,640.00
	Total				\$124,090.00
	<u>Road and Restoration</u>				
21	Subgrade Undercutting (Grove)	280	CY	\$10.00	\$2,800.00
22	Subgrade Undercutting (Blake)	945	CY	\$10.00	\$9,450.00
23	Machine Grading Modified (Grove)	2.00	STA	\$1,500.00	\$3,000.00
24	Machine Grading Modified (Blake)	7.50	STA	\$1,500.00	\$11,250.00
25	HMA - Leveling course, 2-inch (Grove)	95	TON	\$65.00	\$6,175.00
26	HMA - Top Course, 2-inch (Grove)	95	TON	\$65.00	\$6,175.00
27	8" Stabilized Gravel (MDOT 22A) (Grove)	400	TON	\$12.00	\$4,800.00
28	HMA - Leveling course, 2-inch (Blake)	325	TON	\$65.00	\$21,125.00
29	HMA - Top Course, 2-inch (Blake)	325	TON	\$65.00	\$21,125.00
30	8" Stabilized Gravel (MDOT 22A) (Blake)	1,400	TON	\$12.00	\$16,800.00

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7d: Blake / Grove (From BC Street to Toland)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
31	Concrete Curb and Gutter	1,900	LF	\$15.00	\$28,500.00
32	Concrete Sidewalk	800	SF	\$6.00	\$4,800.00
33	ADA Plates	80	SF	\$40.00	\$3,200.00
34	Driveway Reconstruction	12	EA	\$1,000.00	\$12,000.00
35	Restoration	9.50	STA	\$500.00	\$4,750.00
36	Trees/Shrubs	12	EA	\$300.00	\$3,600.00
37	Soil Erosion Control	1	LS	\$1,000.00	\$1,000.00
38	Traffic Control	1	LS	\$2,000.00	\$2,000.00
	Total				\$162,550.00
Subtotal					\$426,320.00
Engineering, Administration & Legal (20%)					\$85,264.00
Contingencies (10%)					\$42,632.00
Project Total					\$554,216.00

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7e: 5-way Intersection

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
	<u>Removals</u>				
1	Remove concrete sidewalk	1,600	SF	\$1.00	\$1,600.00
2	Remove HMA overlaid concrete roadway (M-96)	2,150	SY	\$10.00	\$21,500.00
3	Remove HMA pavement (Norms Place)	680	SY	\$1.50	\$1,020.00
4	Remove Concrete Curb	340	LF	\$2.50	\$850.00
5	Remove existing storm structures	8	EA	\$500.00	\$4,000.00
6	Remove / Abandon existing storm pipe	435	LF	\$5.00	\$2,175.00
	Total				\$31,145.00
	<u>Sanitary Sewer</u>				
7	Adjust Sanitary Manhole	1	EA	\$500.00	\$500.00
	Total				\$500.00
	<u>Water Main</u>				
8	Remove Hydrants	1	EA	\$300.00	\$300.00
9	Abandon Water Main	1	LS	\$2,000.00	\$2,000.00
10	12-Inch DI Water Main	645	LF	\$120.00	\$77,400.00
11	12" Butterfly Valves	13	EA	2,000.00	\$26,000.00
12	Insert-a-valve	6	EA	9,000.00	\$54,000.00
13	Hydrants	1	EA	\$3,500.00	\$3,500.00
14	Water Services	2	EA	\$2,500.00	\$5,000.00
	Total				\$168,200.00
	<u>Storm</u>				
15	4' Dia. Storm Sewer Manhole	8	EA	\$3,000.00	\$24,000.00
16	15" Storm Sewer	425	LF	\$60.00	\$25,500.00
	Total				\$49,500.00
	<u>Road and Restoration</u>				
17	Subgrade Undercutting	710	CY	\$10.00	\$7,100.00
18	HMA - Base course, 5-inch (M-96)	650	TON	\$65.00	\$42,250.00
19	HMA - Leveling course, 3-inch (M-96)	390	TON	\$65.00	\$25,350.00
20	HMA - Top Course, 2-inch (M-96)	260	TON	\$65.00	\$16,900.00
21	8" Stabilized Gravel (MDOT 22A) - M-96	1,000	TON	\$12.00	\$12,000.00
22	HMA - Base course, 2-inch (Norms Place)	85	TON	\$65.00	\$5,525.00
23	HMA - Leveling course, 2-inch (Norms Place)	85	TON	\$65.00	\$5,525.00
24	HMA - Top Course, 2-inch (Norms Place)	85	TON	\$65.00	\$5,525.00
25	8" Stabilized Gravel (MDOT 22A) - (Norms Place)	350	TON	\$12.00	\$4,200.00
26	Concrete Curb & Gutter	340	LF	15.00	\$5,100.00
27	ADA Plates	80	SF	\$40.00	\$3,200.00
28	Pavement Striping	1	LS	2,000.00	\$2,000.00
29	Concrete Sidewalk & ADA plates	1,600	SF	6.00	\$9,600.00
30	Soil Erosion Control	1	LS	1,000.00	\$1,000.00

Owner:

City of Galesburg

Project Title:

Project #7e: 5-way Intersection

Date:

7/05/2017

Project #:

2130283

Item

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
31	Traffic Control	1	LS	20,000.00	\$20,000.00
	Total				\$165,275.00
	Subtotal				\$414,620.00
	Engineering, Administration & Legal (20%)				\$82,924.00
	Contingencies (10%)				\$41,462.00
	Project Total				\$539,006.00

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #7f: Storm Pond and Treatment

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
<u>Storm Treatment / Pond</u>					
1	Mobilization	1	LSUM	\$10,000.00	\$10,000.00
2	Site Clearing & Grubbing/Trees and Brush	180,000	SF	\$0.20	\$36,000.00
3	Strip and stockpile topsoil (6" deep)	3,350	CY	\$4.50	\$15,075.00
4	Soil excavation and grading	6,700	CY	\$13.00	\$87,100.00
5	Storm sewer	124	LF	\$60.00	\$7,440.00
6	Storm structures	2	EA	\$3,500.00	\$7,000.00
7	Erosion control blanket	2.7	ACRE	\$5,000.00	\$13,500.00
8	Native Seeding	2.7	ACRE	\$4,500.00	\$12,150.00
9	Trees/Shrubs	30	EA	\$300.00	\$9,000.00
10	Easement / Property Purchase	1	LS	\$100,000.00	\$100,000.00
Subtotal					\$297,265.00
Engineering, Administration & Legal (20%)					\$59,453.00
Contingencies (10%)					\$29,726.50
Project Total					\$386,444.50

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #8: Beckwith Drive Reconstruction

Date:

8/14/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
<u>Removals</u>					
1	Remove concrete sidewalk	11,200	SF	\$1.00	\$11,200.00
2	Remove asphalt pavement	7,000	SY	\$1.50	\$10,500.00
3	Remove driveways	23	EA	\$200.00	\$4,600.00
4	Remove existing storm structures	30	EA	\$500.00	\$15,000.00
5	Remove / Abandon existing storm pipe	3,127	LF	\$5.00	\$15,635.00
<u>Sanitary Sewer</u>					
6	Remove existing sanitary structures	5	EA	\$500.00	\$2,500.00
7	Remove / Abandon existing sanitary pipe	1,446	LF	\$5.00	\$7,230.00
8	Adjust Sanitary Manhole	10	EA	\$500.00	\$5,000.00
9	Sanitary Manhole	5	EA	\$4,000.00	\$20,000.00
10	Sanitary Sewer, 12-inch	1,900	LF	\$50.00	\$95,000.00
11	Sanitary Lateral	15	EA	\$3,000.00	\$45,000.00
12	Connect Sanitary Mainline Pipes	2	EA	\$1,000.00	\$2,000.00
13	Bypass Pumping	1,446	LF	\$20.00	\$28,920.00
14	Dewatering	1,446	LF	\$25.00	\$36,150.00
<u>Water Main</u>					
15	Adjust Water Valve	10	EA	\$300.00	\$3,000.00
16	Relocate Hydrant	6	EA	\$2,000.00	\$12,000.00
<u>Storm</u>					
17	2' Dia. Storm Sewer Inlet	21	EA	\$1,500.00	\$31,500.00
18	5' Dia. Storm Sewer Manhole	18	EA	\$2,000.00	\$36,000.00
19	12" Perforated Storm Sewer	700	LF	\$20.00	\$14,000.00
20	24" Perforated Storm Sewer	2,800	LF	\$60.00	\$168,000.00
21	Stone Trench	5,200	CY	\$20.00	\$104,000.00
22	Connection to Ex. Storm county Drain (overflow pipe)	1	EA	\$5,000.00	\$5,000.00
<u>Road and Restoration</u>					
23	Subgrade Undercutting	17,500	CY	\$10.00	\$175,000.00
24	Machine Grading Modified	28.00	STA	\$1,500.00	\$42,000.00
25	HMA - Base course, 2-inch	910	TON	\$65.00	\$59,150.00
26	HMA - Top Course, 2-inch	910	TON	\$65.00	\$59,150.00
27	8" Stabilized Gravel (MDOT 22A)	4,050	TON	\$12.00	\$48,600.00
28	Concrete Curb and Gutter	5,600	LF	\$15.00	\$84,000.00
29	Concrete Sidewalk	14,000	SF	\$6.00	\$84,000.00
30	ADA Plates	80	SF	\$40.00	\$3,200.00
31	Driveway Reconstruction	23	EA	\$1,000.00	\$23,000.00
32	Restoration	28.00	STA	\$500.00	\$14,000.00

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #8: Beckwith Drive Reconstruction

Date:

8/14/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
33	Soil Erosion Control	1	LS	\$10,000.00	\$10,000.00
34	Traffic Control	1	LS	\$10,000.00	\$10,000.00
Subtotal					\$1,284,335.00
Engineering, Administration & Legal (20%)					\$256,867.00
Contingencies (10%)					\$128,433.50
Project Total					\$1,669,635.50

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Owner:

City of Galesburg

Project Title:

Project #9: Battle Creek Reconstruction (35th Street to Grove)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
<u>Removals</u>					
1	Remove concrete sidewalk	11,500	SF	\$1.00	\$11,500.00
2	Remove HMA pavement	9,600	SY	\$1.50	\$14,400.00
3	Remove Concrete Curb	4,600	LF	\$2.50	\$11,500.00
4	Remove driveways	27	EA	\$200.00	\$5,400.00
5	Remove existing storm structures	23	EA	\$500.00	\$11,500.00
6	Remove / Abandon existing storm pipe	3,008	LF	\$5.00	\$15,040.00
7	Tree Removal	1	LSUM	\$20,000.00	\$20,000.00
<u>Sanitary Sewer</u>					
8	Adjust Sanitary Manhole	8	EA	\$500.00	\$4,000.00
9	Install 8" Stub	3	EA	\$5,000.00	\$15,000.00
10	Dewatering for Stubs	3	EA	\$10,000.00	\$30,000.00
<u>Water Main</u>					
11	Remove Hydrants	3	EA	\$300.00	\$900.00
12	Abandon Water Main	1	LS	\$2,000.00	\$2,000.00
13	8-Inch DI Water Main	100	LF	\$60.00	\$6,000.00
14	12-Inch DI Water Main	2,300	LF	\$70.00	\$161,000.00
15	Connection to existing WM	3	EA	\$5,000.00	\$15,000.00
16	Hydrants	6	EA	\$3,500.00	\$21,000.00
17	Water Services	29	EA	\$2,500.00	\$72,500.00
<u>Storm</u>					
18	4' Dia. Storm Sewer Manhole	13	EA	\$3,000.00	\$39,000.00
19	5' Dia. Storm Sewer Manhole	9	EA	\$4,000.00	\$36,000.00
20	6' Dia. Storm Sewer Manhole	1	EA	\$5,000.00	\$5,000.00
21	15" Storm Sewer	229	LF	\$60.00	\$13,740.00
22	18" Storm Sewer	286	LF	\$65.00	\$18,590.00
23	24" Storm Sewer	899	LF	\$80.00	\$71,920.00
24	27" Storm Sewer	753	LF	\$90.00	\$67,770.00
25	36" Storm Sewer	841	LF	\$100.00	\$84,100.00
26	Storm Sewer Relocation	500	LF	\$100.00	\$50,000.00
27	Dewatering	1	LS	\$20,000.00	\$20,000.00
<u>Storm Treatment / Pond</u>					
28	Mobilization	1	LSUM	\$10,000.00	\$10,000.00
29	Site Clearing & Grubbing/Trees and Brush	95,000	SF	\$0.20	\$19,000.00
30	Strip and stockpile topsoil (6" deep)	1,750	CY	\$4.50	\$7,875.00
31	Soil excavation and grading	3,500	CY	\$13.00	\$45,500.00
32	Storm sewer	520	LF	\$50.00	\$26,000.00
33	Storm structures	2	EA	\$3,500.00	\$7,000.00

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #9: Battle Creek Reconstruction (35th Street to Grove)

Date:

7/05/2017

Project #:

2130283

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
34	Erosion control blanket	2.2	ACRE	\$5,000.00	\$11,000.00
35	Native Seeding	2.2	ACRE	\$4,500.00	\$9,900.00
36	Trees/Shrubs	30	EA	\$300.00	\$9,000.00
37	Easement / Property Purchase	1	LS	\$100,000.00	\$100,000.00
<u>Road and Restoration</u>					
38	Subgrade Undercutting	3,400	CY	\$10.00	\$34,000.00
39	Machine Grading Modified	23.00	STA	\$1,500.00	\$34,500.00
40	HMA - Base course, 2-inch	1,120	TON	\$65.00	\$72,800.00
41	HMA - Leveling course, 2-inch	1,120	TON	\$65.00	\$72,800.00
42	HMA - Top Course, 2-inch	1,120	TON	\$65.00	\$72,800.00
43	8" Stabilized Gravel (MDOT 22A)	4,800	TON	\$12.00	\$57,600.00
44	Pavement Striping (Thermo Plastic)	1	LS	\$7,500.00	\$7,500.00
45	Pavement Markings (Cold Plastic)	1	LS	\$2,000.00	\$2,000.00
46	Concrete Curb and Gutter	4,600	LF	\$15.00	\$69,000.00
47	Concrete Sidewalk	11,500	SF	\$6.00	\$69,000.00
48	ADA Plates	80	SF	\$40.00	\$3,200.00
49	Driveway Reconstruction	27	EA	\$1,000.00	\$27,000.00
50	Restoration	23.00	STA	\$500.00	\$11,500.00
51	Trees/Shrubs	29	EA	\$300.00	\$8,700.00
52	Soil Erosion Control	1	LS	\$10,000.00	\$10,000.00
53	Traffic Control	1	LS	\$10,000.00	\$10,000.00
Subtotal					\$1,630,535.00
Engineering, Administration & Legal (20%)					\$326,107.00
Contingencies (10%)					\$163,053.50
Project Total					\$2,119,695.50

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Project #11: Morhouse Lift Station

Date:

August 15, 2017

Project #:

2130283

Item No.	Description	Amount
1	Demolition	\$1,000
2	Bypass Pumping	\$5,000
3	Coat Wet Well Piping	\$2,500
4	Add Surge Protection Device and IS Relay	\$3,500
5	Replace Instrumentation and Controls	\$45,000
6	General Conditions	\$9,000
Total Construction Estimate		\$66,000

Estimate of Probable Cost

Owner:

City of Galesburg

Project Title:

Non-Pipe Assets

Date:

August 15, 2017

Project #:

2130283

Item No.	Description	Amount
20	Printer	\$580
21	Generator (Trailer Mounted) - 85 KW	\$53,600
22	Computer & Tablet	\$4,330
Total Cost:		\$58,510

All work quantities and costs are estimated for preliminary planning purposes only.

Costs estimated in 2017 Dollars

City of Galesburg				current year	2017
2017 Water System CIP Plan				inflation rate	0.02
Project Code	Description	Proposed Year	Part of Joint Project	Today's Est. Cost	Projected Future Cost
50	Replace 6-inch water main in Battle Creek from Shafter/35 th Street to 5-Way Intersection with 12-inch water main	0	Battle Creek	Included in Underground Utility Project	Included in Underground Utility Project
51	Replace 6-inch water main in Battle Creek from 5-Way Intersection Burgess / 36 th Street with 12-inch water main	2030		\$255,000	\$329,870
52	Replace 6-inch water main in Blake (Grant to Grove) with 8-inch water main	0	Battle Creek	Included in Underground Utility Project	Included in Underground Utility Project
53	Replace 6-inch water main in Grove (Battle Creek to M-96) with 8-inch water main	2024		\$92,950	\$106,770
54	Replace 6-inch water main in M-96 (Grant to Norms Place) with 12-inch water main	2024		\$312,000	\$358,390
55	Replace 6-inch water main in Norms Place (M-96 to Beckwith) with 12-inch water main	2030		\$97,500	\$126,127
56	Replace 4-inch water main in New Street (Battle Creek to Gale Valley Estates) with 8-inch water main	2024		\$114,400	\$131,410
57	Replace 8-inch water main in M-96 (Burgess/36 th Street, east of 12" water main) with 12-inch water main	2024		\$292,500	\$335,991
58	Replace 4-inch and 6-inch water main in Mill Street (South of Battle Creek Street) with 8-inch water main	0	Mills	Included in Underground Utility Project	Included in Underground Utility Project
59	Replace WM in 5-way intersection with 12-inch water main using insert-a-valves	0	5-Way	Included in Underground Utility Project	Included in Underground Utility Project
70	Close Loop at Morhouse Drive with 8-inch water main	2027		\$207,350	\$252,758
71	Close Loop from 35th Street to 36th Street with 12-inch water main	2030		\$586,300	\$758,442
72	Close Loop from 36th Street to 37th Street with 12-inch water main	2032		\$1,261,650	\$1,698,015
80	Well House Permanent Generator (85 KW)	2021		\$91,000	\$98,501
81	Additional Well	2030		\$500,000	\$646,803
	Total			\$3,810,650	\$4,843,076