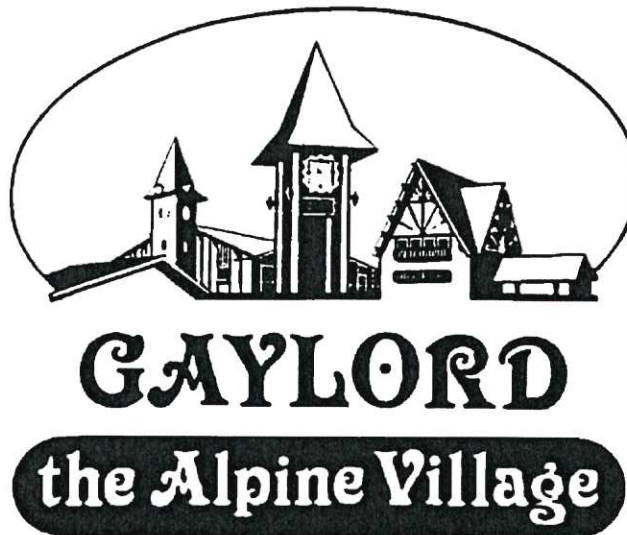


City of Gaylord

Capital Improvements Plan

2021- 2027



Approved: March 8th, 2021

CITY OF GAYLORD
CAPITAL IMPROVEMENTS PLAN
ESTIMATED PROJECT COSTS
2021 – 2027

<u>YEAR(S)</u>	<u>PROJECTS</u>	<u>EST. PROJECT COST</u>
2021	2020 Dickerson Road Reconstruction	\$ 546,748
2021 -2027	Police Vehicle Retirements	\$ 192,500
2022	North Water Tower – Interior Painting /Improvements	\$ 144,000
2022	SCADA Upgrades for WWTP	\$ 163,262
2022	International Plow Truck – Lease to Purchase	\$ 225,000
2022	Patrick Mankowski Elk Park Improvements	\$ 60,000*
2022	North Street – Ohio to Clover, Clover Street – North to Random, Random Lane – Ohio to end	\$ 729,895
2023	Water Work Truck	\$ 60,000
2023	North Elm Street – Mitchell to Petoskey and Sheldon Street – Center to Elm	\$ 614,388
2023	Elkview Park Development (DNR Trust Grant)	\$ 577,584/\$230,000 City Costs
2023	North Street Reconstruction – Clover to Railroad Tracks	\$ 427,796
2024	Landscaping Tractor	\$ 35,000
2024	Business Loop I-75 Roadway Reconstruction and Streetscape (TAP Grant)	\$ 1,194,000
2025	Main Street (M-32) Water and Sewer Improvements – Family Fare to Meecher/Edelweiss Village Parkway	\$ 673,439
2025	Sidewalk Snow Blower (Holder) and Mower	\$ 200,000
2026	First Street Utility Replacement – Court to Center and Alleyway Improvement – behind Phoenix and bank building	\$ 683,542
2026	Wisconsin Avenue and Grandview Utility Improvement-Sanitary from Main to South Otsego Avenue and partial water from 8 th Street to South Otsego Avenue (CDBG, EDA)	\$ 1,782,739
2026	I-75 Crossing for Water and Sewer Improvements – Van Tyle to Wisconsin (CDBG, EDA)	\$ 587,979
2026	South Otsego Avenue Utility Improvements 2 nd Street to Grandview Boulevard (CDBG, EDA, MDOT)	\$ 852,079
	Total Combine Project Costs	\$ 9,829,151

*Non Engineer Estimates

City of Gaylord

Capital Improvements Plan

The City of Gaylord is pleased to present the City of Gaylord's 2021 -2027 Capital Improvements Plan (CIP). This Plan is in accordance with the State of Michigan's Planning Enabling Act No. 33 of Public Acts of 2008; which provides a long term plan for scheduled improvements in the City.

The City has always included its capital improvements in the annual budget. In our planning for the year the capital improvements were always set through discussions with our City Council Committees. During the Committee meetings Department Heads and Staff met with the Council Members to determine what projects were needed and desired for each upcoming year.

This document takes this step to a new level. We have attempted to look into our future and determine what projects are needed for the next six (6) year period. We have used and incorporated some of the information found in capital improvement plans associated with our utility departments, our Recreation Plan, and necessary critical improvements needed. We are looking to address drainage, sidewalks and pathways, major and local streets, underground utilities, and critical plant improvements for the Public Works Department, Water Department, and Wastewater Department. This document is intended to be an evolving document that will include the addition and possible deletion of projects on an annual basis. Its flexibility will allow the City of Gaylord to move forward on some projects and plan for new ones as the opportunities arise and change.

The CIP is not intended to be a strict construction plan. Many of the projects will require additional opportunities for funding, some of which are not yet known or available. Others will be dependent on funding availability in our own internal enterprise and general funds. It is, however, a guide and resource which will continue to serve our community for budgeting and planning for the future.

Kimberly Awrey

City Manager

Introduction

A Capital Improvements Plan (CIP) should provide an opportunity for various members of the City of Gaylord to come together and prepare a plan for capital improvements over the next six (6) years. The City Council has participated through Committee meetings of the Future Planning Committee and Streets Committee. The City Staff have been a part of this process as have the Superintendents and Department Heads. While not all the needs have been addressed in this document it does provide a general overview of where we intend to make improvements over the next six (6) years. Also, it is not intended to be an inclusive depiction of where all the monies of the City will be spent in any particular year. Some items will continue to be addressed in our budget document.

What is a Capital Improvements Plan?

A CIP is a six (6) year plan identifying the capital projects to be funded over that period of time. The plan includes the year in which the capital item/project will be funded, the source of funding, and its impact on the facilities and well-being of the City. All the items/projects are prioritized as explained later in this section. The plan is considered flexible and changeable depending on the City's financial abilities, grant opportunities, and the need for unexpected investments in critical infrastructure.

What is a Capital Improvement Item/Project?

A capital improvement item/project is defined as a major, non-recurring expenditure that incorporates any of the following:

1. The acquisition of land for a public purpose.
2. Any construction or reconstruction of a new or existing facility including design and other preconstruction costs with an estimated cost in excess of \$15,000.
3. A non-reoccurring rehabilitation or major repair of all or part of a building, its grounds, a facility, or its equipment, provided that such costs are more than \$15,000 and the improvement will have a useful life of ten (10) years or more.
4. Purchase of major equipment valued in excess of \$15,000 with a useful life of three or more years.
5. Major studies requiring the employment of professional consultants in excess of \$10,000.
6. All projects funded substantially from the proceeds of a debt obligation.

These factors are used to determine if a project should be considered as part of a CIP. If there is uncertainty as to whether a project or expenditure should be included in the CIP, it has been included.

Why develop a Capital Improvements Plan?

Capital improvements plans help cities plan and prioritize major needs into the future.

What are the benefits of having a Capital Improvements Plan?

A detailed capital improvements plan also helps the City to remain flexible and address needed improvements as opportunities arise. Identifying needs ahead of time allows for proper planning and efficient projects.

Capital Improvements Plan

The following items identify the future project needs through 2027. The list is intended to be a very thorough documentation of the needs throughout the City, however it is not an exhaustive list. A project, need, or opportunity may arise that is not listed in the CIP. Exclusion from this list should not preclude the City from addressing this issue if necessary. The year and costs for each project is an estimate in most cases. In some cases, total costs have yet to be determined. However, this does not preclude planning for these projects.

The City Council will also, each and every year, provide guidance and determine the necessity and ability of the City to move forward on each of the projects listed. Their analysis and review will be paramount and key to all determinations of whether to proceed with a project or defer it for reasons as they see fit and proper.

Each project description lists the following items:

Department or Area of Improvement – The department or area of improvement indicates the portion of the City facility or area of each project most impacted.

Project Description – A description of the capital project or equipment purchased.

Projected Costs – An estimate of the cost of the project and the year which the project may be undertaken.

Long – term project – A category for projects that do not have an estimated cost or time frame. These projects could still be completed in the near future if funding becomes available. Many of these projects are currently being developed through discussions with committees, state agencies, and internally by staff, or through grant applications.

Anticipated Source of Funding – A listing of the projected sources of funding for each project.

Year: 2021

Project Name: Dickerson Road Reconstruction – Small Urban Project

Department and Area of Improvement: Water, Wastewater, Public Works – Roadway and Utility Upgrades

Improvements to the water and wastewater infrastructure, new pedestrian pathway, new three (3) lane roadway, curb and gutter, and storm utilities. Also grinding and resurfacing a portion of existing Dickerson Rd.

Project Description:

This project began in 2020 with the City applying and attaining approval of the MDOT Small Urban fund to allow for these improvements. The City funded the design and bidding in calendar year 2020 utilizing C2AE as its consulting engineers with the permission of MDOT. The construction of this work will begin and be completed in calendar year 2021. The project will consist of a reconstruction and three (3) addition roadway from approximately 1400' north of Milbocker Rd. to approximately 400' south of O'Rourke Blvd. and the mill and resurface between Van Tyle Rd. to M-32, approximately 4,000'. The reconstruction areas will have a pedestrian pathway added, new curb and gutter, new storm main, approximately 1,170' of new cured in-place 10" sanitary sewer liner, approximately 990' of new 12" water main, and all the appropriate new sewer and water leads to properties.

This project will be done with a portion of the roadway improvements being a part of a Small Urban Grant from MDOT.

Project Costs: The City has already paid for the design and bidding of the project in calendar year 2020 with approximately \$40,000 being expended. The project was bid out in September of 2020 with a complete construction costs of \$767,748.45 with J & N Construction, LLC of Gaylord being the lowest bidder. The City estimates construction engineering and testing to be approximately \$77,000 for this project.

The City will receive \$375,000 from the Small Urban Fund for this project.

Anticipated costs for the City are expected to be approximately \$469,748. Costs are attached.

Long Term Project: This project will complete an entire rebuild of Dickerson Rd. and conversion into a three (3) lane roadway serving industrial and commercial centers of the City. Work began on this project in 2002. It will also complete a reconstruction of the public utility infrastructure in this corridor as well.

Anticipated Funding: Funding has already been secured through the MDOT Small Urban program for \$375,000. Remaining funding will come from the Municipal Street Fund Millage or from water and sewer capital fund accounts.

- c. Provide and/or coordinate field material density testing services for backfill, subgrade, base course and bituminous courses.
- d. Coordinate laboratory testing services for aggregate, HMA and concrete cylinders.
- e. Review, document and file contractor certified payroll, in accordance with grant requirements. Conduct on site wage rate interviews to verify compliance.

FEE

Design and Construction Phase Services

C2AE proposes to provide engineering services as follows:

2019-2020 Services

Total Design Fee* \$40,000 Lump Sum

2021 Services

Construction Engineering Fee \$68,000 Estimated, Time and Materials
HMA & Concrete Quality testing (Subconsultant) \$9,000 Estimated, Time and Materials

*Note that the design fee has been reduced to reflect work already completed under the SAW project.

The following assumptions are used to form the basis for determination of the engineering fee for the project.

- For the purpose of this proposal, C2AE is basing the required construction hours on an 8 week, 40 working day construction period.
- We estimate that the Contractor's work will require one person, full time for construction observation. We estimate 8 weeks at 50 hours per week for a total of 400 observation and testing hours for an Engineering Technician.
- We estimate that construction surveying and staking will require 40 hours of a one person survey crew.
- We estimate that contract administration will require approximately 12 hours per week of combined time for a Project Manager and Project Engineer, and an additional 40 hours for contract closeout procedures.
- We estimate HMA Quality Assurance Testing will require an engineering technician for approximately 40 hours.
- The hourly estimate provided in this proposal is based on 40 working days (400 observation and testing hours) by the Contractor to complete the work. The Engineer has no control over the Contractor's schedule or ability to complete the work in a timely fashion. Should the Contractor require more than 40 working days (400 observation and testing hours) to complete the work, a prorated budget increase will be necessary.

Letting of September 04, 2020

Letting Call: 2009 012

Low Bid: \$767,748.45

Project: STUL 69000-209357

Engineer Estimate: \$841,885.00

Local Agreement: 20-5334

Pct Over/Under Estimate: -8.81 %

Start Date: April 26, 2021

Completion Date: June 30, 2021

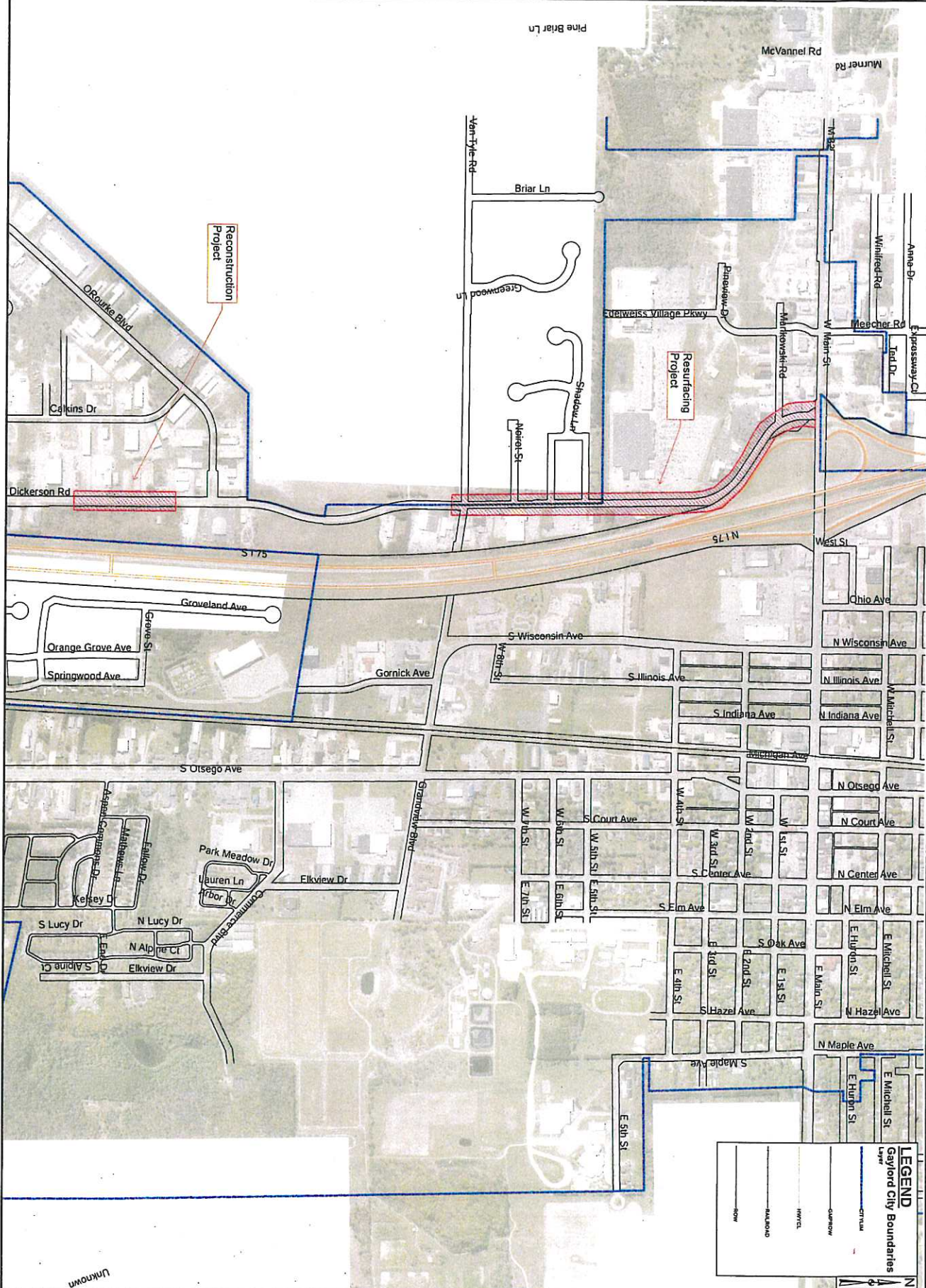
Description:

0.95 mi of hot mix asphalt cold milling, reconstruction and resurfacing, concrete curb, gutter, sidewalk and ramps, storm sewer, water main, and pavement markings on Dickerson Road from north of Millbocker Road to south of O'Rourke Boulevard and from Van Tyle Road to M-32 in the city of Gaylord, Otsego County. This is a Local Agency project.

4.00 % DBE participation required

Bidder	As-Submitted
J & N Construction, LLC	\$767,748.45
Elmer's Crane and Dozer, Inc.	\$820,142.75
M & M Excavating Company	\$821,000.00
Rieth-Riley Construction Co., Inc.	\$881,309.66

Total Number of Bidders: 4



Unknown

PROJECT LOCATION MAP

CITY OF GAYLORD
DICKERSON ROAD
SMALL URBAN 2020 PROJECT
 OTSEGO COUNTY, MICHIGAN



Years: 2021 thru 2027

Project Name: Retirement of Police Vehicles

Department and Area of Improvement: Police Department

The City's fleet of police cruisers is the most dated area of the City's motor pool. New patrol vehicles have only been purchased utilizing USDA grant funds and it has slowed the process of replacing older vehicles down to the point where vehicles are being held much longer than their useful lives. The mileage of the vehicles is considerably higher than we have previously seen; adding to the unreliability and costly maintenance of these vehicles. Our intention is to begin replacing two vehicles every year and; choosing between cruisers and SUV's depending on fleet needs.

Project Description:

2021 - Purchase of 2 Patrol Vehicles

2022 - Purchase of 2 Patrol Vehicles

2023 - Purchase of 2 Patrol Vehicles

2024 - Purchase of 2 Patrol Vehicles

2025 - Purchase of 2 Patrol Vehicles

2026 – Purchase of 2 Patrol Vehicles

2027 – Purchase of 2 Patrol Vehicles

Project Costs: \$50,000 to \$55,000 for SUV and \$35,000 to \$40,000 for Cruisers.

Long Term Project: This project will allow the City to rotate out police vehicles with higher mileage and costly maintenance issues. This will insure that the staff in this department has the equipment necessary to provide our community with the ability to safely and quickly respond to their public safety needs and concerns.

Anticipated Source of Funding: Primary funding would come through USDA Grants. The lack of grant funding would reduce the rate at which the purchases are being made. Any additional funding would come for the Police Department Budget and through a Special Assessment Millage.

Year: 2022

Project Name: North Water Tower – Interior Painting and Improvements

Department and Area of Improvement: Water and Public Works – Utility Improvements

The City will look to make improvements as detailed in our Maintenance Inspection Report prepared by Dixon Engineering in October of 2019. The improvements will provide a community wide improvement to our water system.

Project Description:

Work will include the repainting of the wet and dry interior of the tank, resealing seams, repainting piping, installing an insulated water cover and seal on the tank. Add a mechanical mixer and prepare the tank for a cathodic protection system to add to the longevity of the tower.

These improvements were recommended to take place in 2021 but have been delayed due to funding.

Project Costs:

The project is expected to cost \$144,000 per the estimate from Dixon Engineering in October of 2019. A copy of the estimate is attached.

Long Term Project:

Should this project be completed it will repair and bring our North Tower up to a very good condition. We completed an exterior repainting of the North Tower in 2011. The exterior of the tower will not be expected to have to be repainted until 2027. The City will continue to have inspections on each of the City's water towers every three to five years based upon the recommendations of EGLE.

Anticipated Source of Funding:

Primary funding for this project would come from the Maintenance accounts of the Water Department or through utilization of the Capital Fees Account. Potential other funding through the State of Michigan could become available as well.

Dixon Engineering, Inc.

Maintenance Inspection

300,000 Gallon Spheroid
(North Tank)

Gaylord, Michigan

Inspection Performed: July 19, 2019
Reviewed by Joseph T. Hoban, P.E.: October 12, 2019

Dixon Engineering Inc.
1104 Third Ave. Lake Odessa, MI 48849

Phone (616) 374-3221
Fax (616) 374-7116
<http://www.dixonengineering.net>
dixon@dixonengineering.net

COST SUMMARY:

Wet interior repaint	\$80,000
Seam seal the roof lap seams	2,000
Cathodic clips and pressure fitting	2,000
Dry interior spot repaint	4,000
Pit piping repaint	4,000
Light fixtures	2,000
Condensate ladder extension	1,000
Access tube gap cover	2,000
Mechanical mixer	20,000
Insulation cover	<u>3,000</u>
Sub Total	\$120,000
Engineering and Contingencies	<u>\$24,000</u>
Total	\$144,000

CONCLUSIONS:

1. The exterior coating is a urethane overcoat system. The coating is in good condition overall. There are a few rock nicks on the basebell and a small area of topcoat delamination on the roof.
2. The dry interior coating an epoxy system. The coating is in good condition overall. Coating deterioration minor rust bleedthrough on the platforms and bowl with a few spot failures and delaminated coating in the lower section of the access tube.
3. The wet interior coating is an epoxy system. The coating is in fair condition overall. Below the high-water level coating deterioration includes spot failures to the substrate on the upper half of the sidewall. Above the high-water level coating is deteriorating at the roof panels, open lap seams, at the crevices between the roof stiffeners and roof plate, and rigging couplings.

RECOMMENDATIONS:

Complete the recommended work in one to two years. The coating work is the greatest cost and largest part of the recommendations. The repairs and upgrades should be completed during the next major tank rehabilitation project when coating repairs are made.

1. Abrasive blast clean the entire wet interior and repaint with an epoxy system. The estimated cost is \$80,000.
2. Caulk the roof the roof lap seams after the wet interior is repainted. The estimated cost is \$2,000.
3. Install clips and a pressure fitting for future installation of a floating type cathodic protection system. The estimated cost is \$2,000.
4. Spot repaint the coating failures in the dry interior. The estimated cost is \$4,000.
5. Abrasive blast clean the pit piping and repaint with an epoxy system. The estimated cost is \$4,000.
6. Replace the damaged light fixtures in the dry interior. The estimated cost is \$2,000.

7. Install a handhold at the wet interior roof hatch, and access tube roof hatch to assist entering and exiting the openings. The cost would be incidental to the next painting project.
8. Install a ladder extension at the condensate platform opening. The estimated cost is \$1,000.
9. Install a rigging lug on the bowl above the top platform opening. The cost would be incidental to the next painting project.
10. Annually inspect the roof vent. The work should be performed by in-house personnel as part of a regular maintenance program.
11. Install a weather tight cover over the access tube air gap. The estimated cost is \$2,000.
12. Install a mechanical mixer in the wet interior. The estimated cost is \$20,000.
13. Install an aluminum cover over the fill/draw pipe insulation above the condensate platform. The estimated cost is \$3,000.

Year: 2022

Project Name: SCADA System Upgrades – WWTP

Department and Area of Improvement: Wastewater – Utility Improvements

The City will be looking to make upgrades to our SCADA system at the WWTP facility. The system is coming to its end life and needs to be upgraded accordingly. Upgrades for the Water department will be completed in 2020/21.

Project Description:

The City last upgraded its SCADA system in 2010 when some facility improvements and upgrades were completed to the WWTP. The improvements will include an upgrade of the obsolete Opto PLC hardware to a new Allen Bradley PLC hardware, incorporate the new PC's into the existing Gaylord ICI/Cloud service, monitoring, trending, historization, and alarming package. The update will include redundant backup and redundant fail over server support. It will include advanced secure remote access over portable devices and PC's requiring web browser and proper credentials.

Project Costs:

The project is expected to cost \$163,262 based on the estimate provided by Integrated Control Systems, Inc. A copy of the estimate is attached.

Long Term Project:

The project's useful life is expected to be 15 years based on the average life cycle for these improvements. We will need to revisit and review and plan for new upgrades around 2035 planning for upgrades and replacements occurring in 2037. SCADA systems allow process plant and machinery to interface and allow monitoring and the issuance of commands to increase the efficiencies of the systems. It also will alarm and let us know when items are not operating efficiently and effectively.

Anticipated Source of Funding:

Primary funding for this project will come from the Maintenance or Capital Fees accounts of the Wastewater. Potential other funding through the State of Michigan could become available as well.



Integrated Controls Inc.

QUOTATION

930 Duell Road
Traverse City MI 49686
Ph 231-941-1030
Fx 231-941-5380

Municipal & Industrial Automation Design Build Services

Date 7/26/2020

QUOTE # GAYWWTP-52220-A.1

Att: Matt Jarvi PE / C2AE

Re: Provide professional design services to: upgrade existing Gaylord WWTP obsolete Opto PLC hardware to new Allen Bradley PLC hardware and incorporate the new PLC's into the existing Gaylord ICI / Cloud service, monitoring, Trending, Historization and alarming package. Update to include redundant backup and redundant fail over server support. To include advanced secure remote access over portable devices and PCs. requiring only a web browser and proper credentials.

ITEM	REF	Quant	Description	Unit	Ext
1	T HARDWARE	1	WWTP PLC UPGRADE FROM OUT DATED OPTO TO ALLEN BRADLEY ROCKWELL PLC / CONTROL LOGIX PLATFORM PARTS ONLY: <ul style="list-style-type: none"> • UPDATE OPTO PLC'S TO NEW AB PLC'S 5730 SERIES; RIO ON EACH PANEL (7) • UPGRADE OPTO I.O. CARDS TO AB I.O. CARDS • UPGRADE HOME USE E-NET SWITCHES TO INDUSTRIAL 2 POINT FIBER 10-100-1000 / 6 POINT Cu (EACH SITE) X7 • UPGRADE MAIN SWITCHES AT CPU-1 LOCATION TO FIBER / CU LAYER 3 MANAGED SWITCHES. • ADD SECURE VPN APPLIANCE • ONE TIME SOFTWARE LICENSING FEE FOR ADDITIONAL TAGS & CLIENTS • 1) ON SITE FAIL OVER HMI INTERFACE TO ALL WWTP SYSTEMS TO INCLUDE REDUNDANT ALARMING ON "0" WAIT TIME CRITICAL EVENTS 	\$66,383.97	\$ 66,383.97
2	T PROF-SERV PROGRAMMING	1	REVERSE ENGINEER EXISTING PLANT PLC LOGIC FOR EACH SYSTEM <ul style="list-style-type: none"> • ON SITE REVERSE ENGINEER ACTUAL HOOKUP AND I.O. • DEVELOP A BASIC SCOPE OF OPERATION FROM EXISTING LOGIC • DEFINE UPDATED SCOPE OF OPERATIONAL LOGIC TO INCORPORATE INTO NEW RE-WRITE, MANAGE SCOPE DEFINITIONS WITH OPERATIONS MANAGEMENT AND C2AE • DEVELOP SCOPE TO GRAPHICAL SCREENS BASED ON EXISTING AND REQUESTS FOR ADJUSTMENTS. • OFF-SITE CODING BASED ON REVISED SCOPE FOR NEW PLCS • DEVELOP A CHANGE OVER STRATEGY AND COORDINATE WITH PLANT OPERATIONS. • ON GOING DE-BUG AFTER COMMISSIONING 	\$88,476.95	\$ 88,476.95
3	T COMMISSIONING	1	ON SITE COMMISSIONING OF NEW PLC SYSTEM <ul style="list-style-type: none"> • REPLACE EXISTING PLC HARDWARE WITH NEW HARDWARE • TERMINATE EXISTING I.O. POINTS INTO NEW PLC I.O. CARDS • PLACE EACH PANEL / PLANT SYSTEM ON LINE, ONE AT A TIME • DEBUG AND PROCEED TO NEXT 	\$ 8,401.37	\$ 8,401.37
4	T SERVICE	1	Monthly all inclusive service fee after the 1st year for water and waste water: \$ 275.00 / Month 1st year after commissioning included with initial upgrade.	\$ -	0
5	SHIPPING	1	Shipping To Job Site in: Gaylord Mi / WWTP	\$ -	-
6	WARRANTY	1	12 Month Warranty		
7	DOCS	1	SUBMITTALS & O&M PROVIDED PER BID SPEC Additional copies of electronic files at no additional cost		
8	BY OTHERS	1	TO BE SUPPLIED BY OTHERS NOT INCLUDED IN THIS QUOTE: • All Inclusive		
9	ADDENDUM	1	RECEIVED: ADDENDUM n/a		



May 25, 2020

REF: Gaylord WWTP / 2020

ITEM: WWTP SCADA UPGRADE GENERAL OVERVIEW

Attn: Matt Jarvi PE / C2AE

Matt;

I reviewed both on site hardware in combination with the original C2AE provided SCADA I&C drawings. As you know, the initial plant was installed with a PLC based system utilizing the OPTO-22 brand and model of PLC controllers.

Each of 7 control panels were fitted with a PLC controller with limited I.O. per controller. Because of this, several panels are equipped with more than one I.O. controller. The existing Opto controllers are out dated and at end of life.

The solution requested is to integrate the Gaylord WWTP into the city's existing SCADA platform allowing operations the capability's that the fresh water system has giving WWTP operators remote access to plant operations, trending, reports, advanced alarming, all hosted in a solid redundant fail over environment. This eliminates the need for high-end on-site server hardware or resident SCADA software. The only hardware needed to access the SCADA system is a PC or smart device with a web interface.

The Fresh water and Waste Water will continue to be separated as they are now, with limited controls based on credentials at login.

CONCERNS:

During our site visit we noted that the panel mounted on-site fiber and Cu E-Net back bone was being managed by residential quality desktop e-net switches not suited for industrial applications.

We also noted the existing Opto-22 hardware is out of date and at end of life. It appears to be working OK for what we can see, but to make a major investment into SCADA, we would recommend an upgrade to the main control system along with the networking hardware. The fiber infrastructure appears to be in good condition.



REASON TO CONSIDER AN ALTERNATE TO OPTO:

The upfront cost of the Opto solution is a bit lower capital investment per panel vs. other options and the quality is acceptable, but the Opto solution comes with the following concerns and restrictions:

1. The PLC logic is not resident in the PLC. If a service tech does not have access to the actual project files on a PC, the PLC logic cannot be edited. It is not stored in the PLC itself.
2. Opto is very proprietary. Most SCADA and HMI software companies do not make SCADA drivers to interface directly with Opto controllers. This forces one to use Opto's software and hardware exclusively or find a work around. The down side of this dilemma is that if you need an option that Opto does not offer, you are in some cases out of luck or forced into complex work arounds.
3. Opto has a limited support and parts distribution in the USA. This is a critical concern when it is the main component in mission critical system such as a WWTP.

I am not trying to minimize the Opto solution, as it is a good quality product. Our concern is for both quality and serviceability for the customer on the short and long term.

SELECTION CRITERIA:

We recommend the following criteria when selecting a PLC brand and type for mission critical systems:

1. Quality of product and life cycle: at least 15 years with a 25 year support cycle with a low failure rate.
2. Availability: Parts availability from local vendors and factory supply (USA based)
3. Support: Factory and field support 24/7 for parts and service.
4. Cost: the solution should be cost effective to purchase, implement and support.
5. Market compatibility: Most major automation industry-based software and hardware members should have drivers and solutions that interface with the selected PLC brand.



SOLUTION RECOMMENDATION:

ICI feels strongly that Allen Bradley is at the top of the list when it comes to the "Solutions" criteria, and that is why we provided an upgrade quote that included an Allen Bradley PLC based solution. The cost of the AB solution is in line with an Opto upgrade, and if budget is an issue, we can place remote I.O. points in the remote panels and use only on master PLC (should be evaluated on a location by location bases) but would reduce cost.

We can provide a quote to upgrade the existing Opto-22 to the up to date Opto-22 hardware, but have not perused that direction.

QUOTATIONS:

We provided two quotes:

Quote (A) was for SCADA and a complete PLC upgrade using AB compact logic controller at each panel to replicate the OPTO topology. It also included upgrading the networking hardware.

Second Quote (B) was for SCADA and networking hardware only. This would utilize existing Opto hardware and implement a protocol translation solution to host in the SCADA system.

Please feel free to call with any questions or concerns.

Thank you

Jay Norris
President

Year: 2022

Project Name: International Plow Truck - Lease to Purchase

Department and Area of Improvement: Public Works New Equipment

The City will be replacing a 20 year old plow truck with a dump box.

Project Description:

The new truck will be added to our fleet and replace an aged vehicle. We will strive to purchase a new International chassis in order to keep consistency with our fleet of trucks. This enables the City to insure that equipment purchases and repair parts, in most cases, become interchangeable and allow the ability for more efficiency in maintenance of the vehicles. The vehicle will also be equipped with a new box and will add an underbody for plowing purposes.

Project Costs:

We estimate the cost of a new truck, box, and underbelly at about \$225,000. There are two vendors which will be associated in this project. The first will be the purchase of the truck and the second will be the equipping of the truck for the intended use with the addition of the dump box, underbelly, and hydraulics package necessary.

Long Term Project:

The average use of a plow truck for the City of Gaylord is anywhere from 15 to 20 years. The vehicle which this one will replace is over 20 years old.

Anticipated Funding:

The lease on the 2016 plow truck is expected to complete in 2022 which will allow the City to finance a large portion of the cost of this new truck. A portion of the cost will be funded by monies in the Motor Vehicle Pool fund.

Year: 2022

Project Name: Patrick Mankowski Elk Park Improvements

Department and Area of Improvement: Recreation and DPW

The City will look to develop improvements at the Grandview Boulevard street end to enhance viewers experience at the Patrick Mankowski Elk Park.

Project Description:

The City will work with the City's consulting engineers to develop an improvement project to seek to provide an easier and more user friendly area to view the elk at this location. Consideration must be taken to insure ADA compliance with the improvements and also attempt to accommodate the need for snow storage in the winter. The ground at the end of the street end is rolling and uneven at best. The improvements could take into account this and attempt to possibly build a deck or platform to hold visitors and viewers in the limited amount of property owned by the City in this location. Also the City would desire to place a minimum of three interpretive displays at the site to provide more information on the elk herd both in the park and in the forest surrounding the City of Gaylord and Pigeon River Country State Forest area.

The City will also work to reach out to the neighboring and adjacent property owners to see if possible easements could be attained to allow some flexibility in the design and improvement area to better suit visitors.

Project Costs:

There is no cost estimate developed as of yet on the improvement project. The City staff will work with City Council and early stakeholders to formulate an acceptable design and then work to secure pricing and easements, if necessary, to accommodate the improvements. A suggested price would be \$60,000 without a firm design yet completed.

Long Term Project:

This project is something that has been discussed for a long time and is desperately needed. The Gaylord Area Convention and Tourism Bureau has indicated that the Patrick Mankowski Elk Park is one of the primary points of interest for visitors to our community.

Anticipated Source of Funding:

The Patrick Mankowski Fund through the Otsego County Community Foundation could be an eager contributor. The Fund, however, is just in its infancy so large amounts may not yet be available. The Gaylord Area Convention and Tourism Bureau has expressed interest in the past to assist with improvements. The Gaylord Area Chamber of Commerce may also desire to assist as well. The City could also look to seek funding from area wide foundations and community donors such as the Owls, the Rotarians, and other likeminded outdoor enthusiasts and individuals who may wish to contribute.

The City's funding would come through the City's General Fund and would need to be budgeted for at the time of the improvements.

Year: 2022

Project Name: North Street (Ohio to Clover), Clover Lane (North to Random), and Random Lane (Ohio to end) Reconstruction

Department and Area of Improvement: Water, Wastewater, Public Works – Roadway and Utility Upgrades

Water, wastewater, infrastructure improvements, new sidewalks, curb and gutter, new roadway, and storm sewer improvements.

Project Description:

This project will be scheduled for the 2022 Streets Project. The project will include a complete reconstruction of failing sanitary sewer collection main. This sanitary sewer is primarily flat and very shallow in most areas. This has caused freezing in the winter and many service calls often resulting in thousands of dollars of sewer backup claims against the City. The sanitary sewer and storm sewer would need to be extended from North Ohio to service this area. Therefore, portions of North Street would need to be reconstructed as well with the utility extensions needed to accommodate this improvement project. The water main should be replaced as well and new service leads checked for compliance with new EGLE standards. New sidewalks would be added and street trees to accommodate the project site. The sidewalk on Random Lane should be suitable and not require replacement except in some areas of transition to accommodate the improvements.

Project Costs:

The City estimates the project costs to be \$ 729,895.40 and are based on engineer's estimates and location maps attached.

Long Term Project:

This project is a priority project due to the problems we've had in this area over the previous years; mainly in harsh winters. The improvements will remedy the situation and provide for a new utility and roadway improvements which should last many years into the future.

Anticipated Source of Funding:

Primary funding would come through the Municipal Street Fund Millage. Potential other funding through the water and wastewater fund accounts or capital improvement could be utilized as well for a portion of the improvements.



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CITY OF GAYLORD
2020 Capital Improvements Plan
Preliminary Opinion of Probable Construction Costs

Project D

North St Reconstruction (Ohio to Clover) and Clover Dr (North to Random) & Random Ln (Ohio to End) Utility Improvements

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$51,000.00	\$51,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	4	EACH	\$1,000.00	\$4,000.00
4	Remove Drainage Structure or Manhole	7	EACH	\$400.00	\$2,800.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	50	LFT	\$6.00	\$300.00
7	Remove Concrete Sidewalk or Drive Approach	40	SYD	\$6.00	\$240.00
8	Remove HMA Surface	2260	SYD	\$3.50	\$7,910.00
9	8" Dia. PVC DR-18 Water Main	465	LFT	\$50.00	\$23,250.00
10	6" Dia. PVC DR-18 Water Main	1,750	LFT	\$42.00	\$73,500.00
11	8" Dia. Gate Valve	1	EACH	\$1,800.00	\$1,800.00
12	6" Dia. Gate Valve	4	EACH	\$1,700.00	\$6,800.00
13	1" Dia. Tapping Saddle & Corporation Stop	24	EACH	\$600.00	\$14,400.00
14	1" Dia. Type K Copper Service Lead	800	LFT	\$35.00	\$28,000.00
15	1" Dia. Curb Stop & Box	24	EACH	\$380.00	\$9,120.00
16	Hydrant Assembly	2	EACH	\$5,000.00	\$10,000.00
17	Connect to Existing Water Main	4	EACH	\$3,000.00	\$12,000.00
18	4' Dia. Sanitary Manhole including Selflevel Casting	6	EACH	\$3,300.00	\$19,800.00
19	8" Dia. PVC SDR-35 Sanitary Sewer	2,140	LFT	\$38.00	\$81,320.00
20	Connect to Existing Sanitary Sewer	3	EACH	\$500.00	\$1,500.00
21	8"x6" Sewer Wye	24	EACH	\$238.00	\$5,712.00
22	6" Dia. PVC SDR-35 Sanitary Sewer Lead	800	LFT	\$28.00	\$22,400.00
23	Sewer Cleanout Assembly	24	EACH	\$214.00	\$5,136.00
24	Sewer Cleanout Casting	4	EACH	\$155.00	\$620.00
25	2' Dia. Catch Basin including Casting	3	EACH	\$2,100.00	\$6,300.00
26	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
27	4' Dia. Storm Manhole including Self Level Casting	1	EACH	\$3,200.00	\$3,200.00
28	12" Dia. Storm Sewer	500	LFT	\$30.00	\$15,000.00
29	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
30	Connect to Existing Storm Sewer	1	EACH	\$300.00	\$300.00
31	Machine Grading Modified	4.5	STA	\$2,000.00	\$9,000.00
32	6" 22A Aggregate Base	4,600	SYD	\$6.00	\$27,600.00
33	HMA Pavement on Clover & Random trenches (1 1/2 inches)	220	TON	\$75.00	\$16,500.00
34	HMA Overlay on Clover and Random (1 1/2 inches)	440	TON	\$75.00	\$33,000.00
35	HMA Pavement on North St (3 1/2 inches)	300	TON	\$80.00	\$24,000.00
36	HMA Pathway (2 inches)	55	TON	\$90.00	\$4,950.00
36	HMA Approach (driveways)	45	TON	\$100.00	\$4,500.00



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Project D

North St Reconstruction (Ohio to Clover) and Clover Dr (North to Random) & Random Ln (Ohio to End) Utility Improvements

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
37	6" Concrete Drive Approach	500	SFT	\$5.00	\$2,500.00
38	6" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
39	4" Concrete Sidewalk	0	SFT	\$4.50	\$0.00
40	Sidewalk Ramp, ADA	100	SFT	\$9.00	\$900.00
41	Concrete Curb & Gutter, MDOT Detail F-4	950	LFT	\$18.00	\$17,100.00
42	Traffic Control and Signage	1	LSUM	\$5,000.00	\$5,000.00
43	Irrigation Systems, Protect	1	LSUM	\$1,000.00	\$1,000.00
44	Restoration 3" Topsoil & Seed	2,000	SYD	\$4.00	\$8,000.00
45	Street Tree	0	EACH	\$450.00	\$0.00
				SUBTOTAL=	\$561,458.00
				30% ENGINEERING & CONTINGENCY=	\$168,437.40
				TOTAL=	\$729,895.40

Basis for Cost Opinion

Total Reconstruction of North St. from N Ohio to Clover (add curb & gutter, storm sewer and sidewalk)

Width - 34' b-b

Clover & Random to receive new water and sanitary mains and services. Utility trenches will be patched and streets overlayed with HMA.

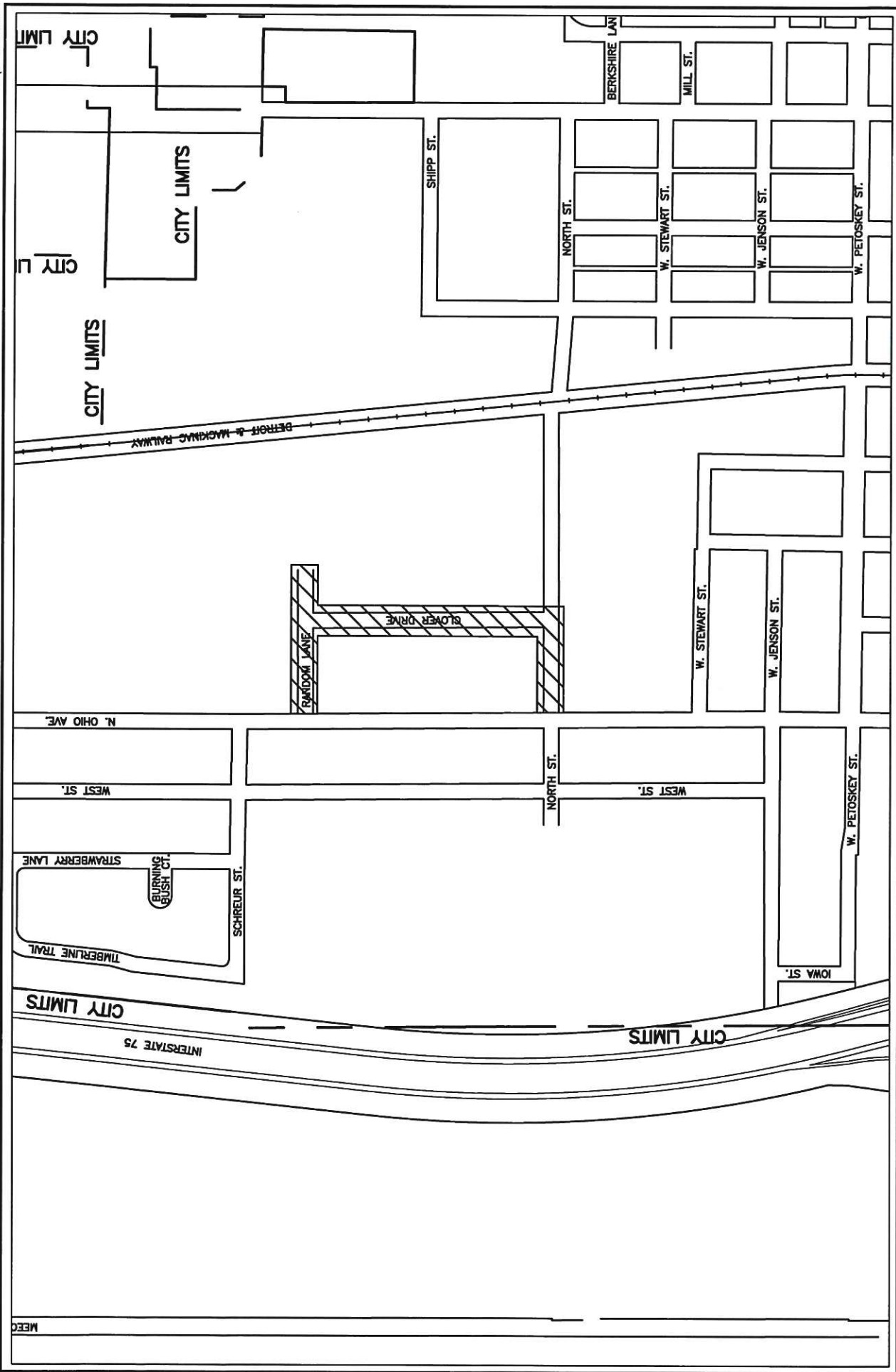
New Water Main

Sanitary Sewer Replacement

New Storm Sewer on North St. only

Concrete drive approaches on North St.; replace in kind on Clover & Random, as necessary for utility work.

New HMA sidewalk on one side of North St. only.



 architecture • engineering	PROJECT LOCATION MAP	GAYLORD CITY IMPROVEMENT PLAN
	NORTH ST, CLOVER LN, & RANDOM LN RECONSTRUCTION	SHEET D

Year: 2023

Project Name: New Water Work Truck

Department and Area of Improvement: Water Department – New Equipment

The City will replace the existing water work truck which was purchased used in 2011.

Project Description:

The new truck will replace the existing Ram truck which has been used by the Water Department since 2011. This truck was purchased used in 2011 and is need of replacement. The City will also replace the Reading work and tool box on the truck. The new truck should be a one ton four wheel drive truck with safety lights equipped.

Project Cost:

We estimate the new cost of this vehicle equipped with box and lights to be around \$60,000.

Long Term Project:

The City should be able to utilize this vehicle for the primary service vehicle of the Water Department for a 15 year period.

Anticipated Funding:

Primary funding for this vehicle should come from funds in the Water Department. It should look to be budgeted for in the 2022 – 2023 Budget of the City.

Year: 2023

Project Name: 2023 Streets Project – North Elm Avenue (Mitchell to Petoskey) and Sheldon Street (Center to North Elm Avenue) Reconstruction

Department and Area of Improvement: Wastewater, Water, and Public Works – Roadway and Utility Upgrades

New infrastructure improvements, new sidewalks, new roadway, new curb and gutter, new water main, new sanitary sewer, and new storm utilities.

Project Description:

The City will schedule to complete this work in 2023. The project will include 950' of 8" sanitary sewer collection main and leads and 760' of new water main and leads. A new storm sewer system, curb and gutter, sidewalks, and roadway construction will be completed. Also, the project will include 10 new street trees which will be planted through the construction area.

Project Costs:

We estimate the cost to be \$614,388 and an engineer's estimate and location map are attached.

Long Term Project:

This project will cycle as a normal streets project with design in the winter and construction beginning in July with a completion in September. These improvements should last a minimum of 15 -20 years for the roadway surface with utility upgrades extending out years in the future.

Anticipated Source of Funding:

Primary funding will come from through the Municipal Street Fund Millage. Potential other funding from the wastewater and water accounts could be utilized as well as roadway funding from County Road Commission Millage. State funding could be possible through grants if available.



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Project C

N Elm Avenue (Mitchell to Petoskey) & Sheldon Avenue (Center to Elm) Reconstruction

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$43,000.00	\$43,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	3	EACH	\$1,000.00	\$3,000.00
4	Remove Drainage Structure or Manhole	4	EACH	\$400.00	\$1,600.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	1,000	LFT	\$6.00	\$6,000.00
7	Remove Concrete Sidewalk or Drive Approach	700	SYD	\$6.00	\$4,200.00
8	6" Dia. PVC DR-18 Water Main	760	LFT	\$42.00	\$31,920.00
9	6" Dia. Gate Valve	3	EACH	\$1,700.00	\$5,100.00
10	1" Dia. Tapping Saddle & Corporation Stop	13	EACH	\$600.00	\$7,800.00
11	1" Dia. Type K Copper Service Lead	450	LFT	\$35.00	\$15,750.00
12	1" Dia. Curb Stop & Box	13	EACH	\$380.00	\$4,940.00
13	Hydrant Assembly	1	EACH	\$5,000.00	\$5,000.00
14	Connect to Existing Water Main	4	EACH	\$3,000.00	\$12,000.00
15	4' Dia. Sanitary Manhole including Selflevel Casting	4	EACH	\$3,300.00	\$13,200.00
16	8" Dia. PVC SDR-35 Sanitary Sewer	950	LFT	\$38.00	\$36,100.00
17	Connect to Existing Sanitary Sewer	0	EACH	\$500.00	\$0.00
18	8"x6" Sewer Wye	13	EACH	\$238.00	\$3,094.00
19	6" Dia. PVC SDR-35 Sanitary Sewer Lead	450	LFT	\$28.00	\$12,600.00
20	Sewer Cleanout Assembly	13	EACH	\$214.00	\$2,782.00
21	Sewer Cleanout Casting	4	EACH	\$155.00	\$620.00
22	2' Dia. Catch Basin including Casting	8	EACH	\$2,100.00	\$16,800.00
23	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
24	4' Dia. Storm Manhole including Self Level Casting	3	EACH	\$3,200.00	\$9,600.00
25	12" Dia. Storm Sewer	900	LFT	\$30.00	\$27,000.00
26	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
27	Connect to Existing Storm Sewer	2	EACH	\$300.00	\$600.00
28	Machine Grading Modified	9.5	STA	\$2,000.00	\$19,000.00
29	6" 22A Aggregate Base	3,900	SYD	\$6.00	\$23,400.00
30	HMA Pavement (3 1/2 inches)	780	TON	\$80.00	\$62,400.00



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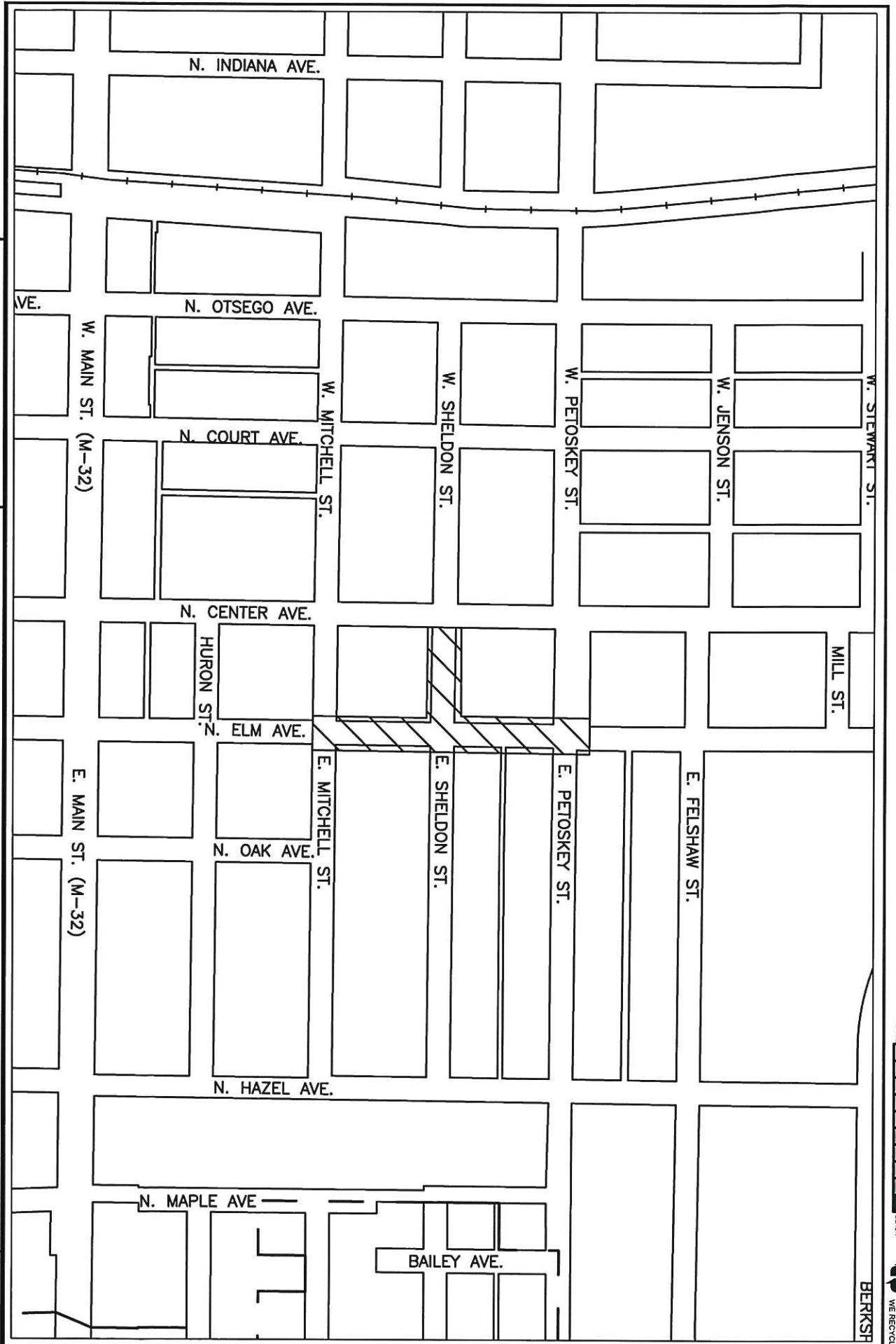
Project C

N Elm Avenue (Mitchell to Petoskey) & Sheldon Avenue (Center to Elm) Reconstruction

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
31	6" Concrete Drive Approach	4,000	SFT	\$5.00	\$20,000.00
32	6" Concrete Sidewalk	1,320	SFT	\$5.00	\$6,600.00
33	4" Concrete Sidewalk	3,000	SFT	\$4.50	\$13,500.00
34	Sidewalk Ramp, ADA	700	SFT	\$9.00	\$6,300.00
35	Concrete Curb & Gutter, MDOT Detail F-4	2,000	LFT	\$18.00	\$36,000.00
36	Traffic Control and Signage	1	LSUM	\$5,000.00	\$5,000.00
37	Irrigation Systems, Protect	1	LSUM	\$1,000.00	\$1,000.00
38	Restoration 3" Topsoil & Seed	2,800	SYD	\$4.00	\$11,200.00
39	Street Tree	10	EACH	\$450.00	\$4,500.00
SUBTOTAL=					\$472,606.00
30% ENGINEERING & CONTINGENCY=					\$141,781.80
TOTAL=					\$614,387.80

Basis for Cost Opinion

Based on 2018 CIP Cost Estimate Updates, plus small increase
 Width - 34' b-b
 New Sidewalk one side of road
 New Water Main
 Sanitary Sewer Replacement
 New Storm Sewer
 Concrete Drive Approaches
 10 new trees



THE BAR BELOW SHOWS GRAVSCALE FROM WHITE TO SOLID BLACK



BERKSH

Year: 2023

Project Name: Elkview Park Development

Department and Area of Improvement: Recreation and DPW

The City will look to begin the development of Elkview Park located at the corner of Elkview and Commerce Blvd.

Project Description:

In 2003 the City was able to acquire a 2.05 acre parcel at the corner of Elkview and Commerce Blvd. This parcel was purchased with the intention to develop a municipal park which would provide our residents and guests a place to view the City's elk herd. The park would include public restrooms, a 26 car parking lot, playground, 4 interpretive displays, pathways, grills, picnic tables, and benches. We would will look to apply for funding of this project through a grant from the MDNR Trust Fund. This would be the City's fourth application for the possible funding of this park. The last application submitted for funding was in 2006.

Project Costs:

The City estimates the project costs to be \$577,584 based on engineer's estimates site plan and location map are attached.

Long Term Project:

This park would be a long term project for the City and add a valuable addition to the City's park system. It would provide our citizens and guests a great place to view the elk herd in the Patrick Mankowski Elk Park. We feel this park has great potential to eventually extend into Aspen Park with a future lighted pathway development that would add to recreational opportunities in both the winter and the other seasons. Additional future improvements would include additional landscaping, irrigation, gazebo placement, and enhancement of picnic areas.

Due to the past difficulties with attaining funding for this park development through the MDNR Trust Fund the City, working through its DPW, may wish to develop this park on its own. Funding could be allocated annually to have the DPW complete certain tasks through the course of a three year period of time and working with the consulting engineers to establish grade and site plans and testing throughout. Then bid items for paving, playground equipment, restrooms purchase, and site amenities could all be purchased as needed and when required and installation completed by the DPW when able. We would anticipate that a savings of about 40% could occur if done in this fashion.

Anticipated Source of Funding:

Primary funding would come from a grant application to the MDNR Trust Fund. This grant could potentially provide up to \$347,000 in funding for this project. Leaving the City with a match of \$230,584. Funds would need to come from the City's General Fund for most of the cost of this project.

A "do it on our own" approach would cost approximately the same amount or \$230,000.



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Project A
Elkview Park Development

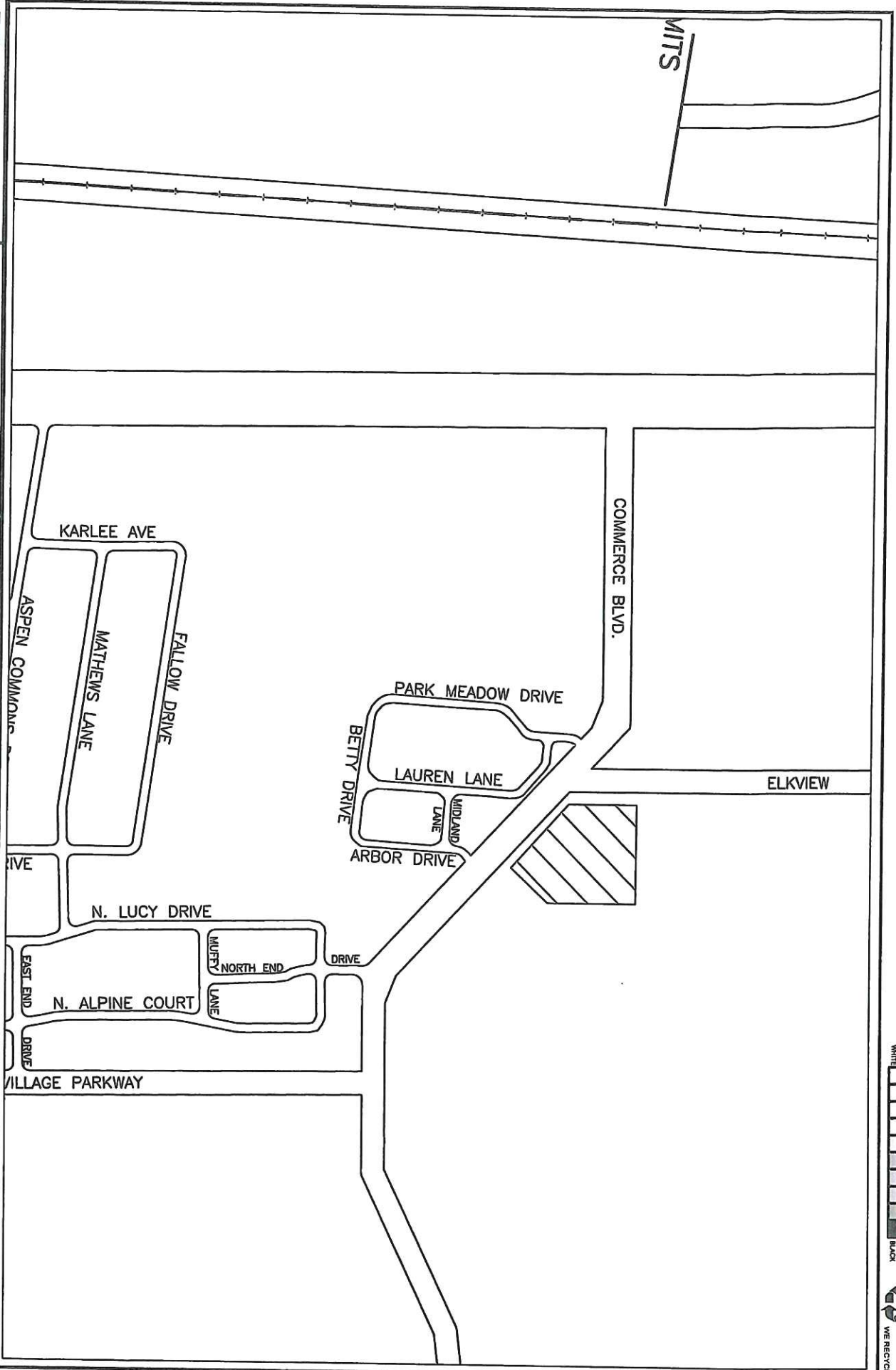
Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$40,000.00	\$40,000.00
2	Site Grading (Park only)	1	LSUM	\$10,500.00	\$10,500.00
3	Connect to Existing Storm Sewer	1	LSUM	\$3,000.00	\$3,000.00
4	2' Dia. Catch Basin including Casting	1	EACH	\$2,100.00	\$2,100.00
5	4' Dia. Storm Manhole/Catch Basin including Casting	2	EACH	\$3,200.00	\$6,400.00
6	12' Dia. Storm Sewer	200	LFT	\$30.00	\$6,000.00
7	Bike Rack	1	EACH	\$1,100.00	\$1,100.00
8	Grills	2	EACH	\$900.00	\$1,800.00
9	Interpretive Display	4	EACH	\$6,000.00	\$24,000.00
10	Park Benches	3	EACH	\$2,200.00	\$6,600.00
11	Park Entrance Sign	1	EACH	\$5,000.00	\$5,000.00
12	Picnic Table	2	EACH	\$3,500.00	\$7,000.00
13	Trash Receptacle	4	EACH	\$1,000.00	\$4,000.00
14	Play Structure (sim to Freel Park)	1	LSUM	\$84,000.00	\$84,000.00
15	Pre-Manufactured Restroom Structure & W/S Service	1	EACH	\$115,500.00	\$115,500.00
16	Drinking Fountain & Water Service	1	EACH	\$6,500.00	\$6,500.00
17	Streetlights including Base & Installation	2	EACH	\$4,600.00	\$9,200.00
18	Site Electrical (design for future connect to Aspen)	1	LSUM	\$8,000.00	\$8,000.00
19	Concrete Sidewalk (4 inch)	2800	SFT	\$5.00	\$14,000.00
20	Concrete Curb & Gutter	290	LFT	\$30.00	\$8,700.00
21	6" CIP 22A Aggregate Base	1965	SYD	\$7.00	\$13,755.00
22	HMA Pavement (3 inches for lot, 2 inches for trail)	295	TON	\$100.00	\$29,500.00
23	Pavement Markings, 4" Yellow	460	LFT	\$1.00	\$460.00
24	Barrier-Free Signing and Striping	1	LSUM	\$1,500.00	\$1,500.00
25	Landscaping	1	LSUM	\$6,000.00	\$6,000.00
26	Topsoil & Seeding (entire Park area)	7420	SYD	\$4.00	\$29,680.00
SUBTOTAL=					\$444,295.00
30% ENGINEERING & CONTINGENCY=					\$133,288.50
TOTAL=					\$577,583.50

Based on 3/14/2018 Preliminary Estimate updates for Grant Application, plus minimal increase.



GAYLORD CITY IMPROVEMENT PLAN

ELKVIEW PARK Development



Year: 2023

Project Name: North Street Reconstruction (Clover to RR tracks)

Department and Area of Improvement: Water, Wastewater, Public Works – Roadway and Utility Upgrades

Water, wastewater infrastructure improvements, new sidewalks, curb and gutter, new roadway and storm utilities

Project Description:

This project is scheduled for 2023 and may need to be delayed or coordinated with other projects scheduled during this calendar year. North Street will see new 8" water main and leads added and new 8" sanitary collection main and leads. New curb and gutter, sidewalk, new storm utilities, and roadway reconstruction will also take place. The project will build upon the improvements completed in 2022 on the Clover/Random project and complete this quadrant of improvements in this area. North Street is a busy local street which carries a good amount of traffic to OMH, the Cathedral and Catholic Human Services. It also services Aspen Apartments, whose residents walk along this roadway daily. It is heavily traveled roadway being a quick connection between North Center Avenue and North Ohio Street, eliminating the need to travel into the downtown area. Improvements will also include new street trees to enhance the improvement area.

Project Costs:

The City estimates the project costs to be \$ 427,796 and are based on engineer's estimates and location maps attached.

Long Term Project:

This project has been discussed for many years and bid out on more than one occasion but delayed due to funding. Engineering design work is pretty much completed on this project, therefore, some cost savings will be readily available. This project will also complete the improvements done some ten years ago along North Street to the east of the railroad tracks and provided better water flows and greater flows for our sanitary sewers as well.

Anticipated Source of Funding:

Primary funding will come through our Municipal Street Fund Millage. Potential other funding through our water and sewer accounts or capital improvement accounts.



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Project E
North St Reconstruction (Clover to RR Tracks)

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$30,000.00	\$30,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	0	EACH	\$1,000.00	\$0.00
4	Remove Drainage Structure or Manhole	1	EACH	\$400.00	\$400.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	40	LFT	\$6.00	\$240.00
7	Remove Concrete Sidewalk or Drive Approach	50	SYD	\$6.00	\$300.00
8	Remove HMA Surface	0	SYD	\$3.50	\$0.00
9	8" Dia. PVC DR-18 Water Main	880	LFT	\$50.00	\$44,000.00
10	8" Dia. PVC Water Main under M-32 via DD or B&J	100	LFT	\$250.00	\$25,000.00
10	6" Dia. PVC DR-18 Water Main	40	LFT	\$42.00	\$1,680.00
11	8" Dia. Gate Valve	2	EACH	\$1,800.00	\$3,600.00
12	6" Dia. Gate Valve	1	EACH	\$1,700.00	\$1,700.00
13	1" Dia. Tapping Saddle & Corporation Stop	2	EACH	\$600.00	\$1,200.00
14	1" Dia. Type K Copper Service Lead	65	LFT	\$35.00	\$2,275.00
15	1" Dia. Curb Stop & Box	2	EACH	\$380.00	\$760.00
16	Hydrant Assembly	2	EACH	\$5,000.00	\$10,000.00
17	Connect to Existing Water Main	3	EACH	\$3,000.00	\$9,000.00
18	4' Dia. Sanitary Manhole including Selflevel Casting	1	EACH	\$3,300.00	\$3,300.00
19	8" Dia. PVC SDR-35 Sanitary Sewer	300	LFT	\$38.00	\$11,400.00
20	Connect to Existing Sanitary Sewer	1	EACH	\$500.00	\$500.00
21	8"x6" Sewer Wye	2	EACH	\$238.00	\$476.00
22	6" Dia. PVC SDR-35 Sanitary Sewer Lead	70	LFT	\$28.00	\$1,960.00
23	Sewer Cleanout Assembly	2	EACH	\$214.00	\$428.00
24	Sewer Cleanout Casting	1	EACH	\$155.00	\$155.00
25	2' Dia. Catch Basin including Casting	4	EACH	\$2,100.00	\$8,400.00
26	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
27	4' Dia. Storm Manhole including Self Level Casting	2	EACH	\$3,200.00	\$6,400.00
28	12" Dia. Storm Sewer	650	LFT	\$30.00	\$19,500.00
29	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
30	Connect to Existing Storm Sewer	1	EACH	\$300.00	\$300.00
31	Machine Grading Modified	9.0	STA	\$2,000.00	\$18,000.00
32	6" 22A Aggregate Base	3,100	SYD	\$6.00	\$18,600.00
33	HMA Pavement (3 1/2 inches)	600	TON	\$80.00	\$48,000.00
34	HMA Pathway (2 inches)	100	TON	\$90.00	\$9,000.00
35	HMA Approach (3 inch driveways)	18	TON	\$100.00	\$1,800.00



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CITY OF GAYLORD
2020 Capital Improvements Plan
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Project E
North St Reconstruction (Clover to RR Tracks)

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
36	6" Concrete Drive Approach	450	SFT	\$5.00	\$2,250.00
37	6" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
38	4" Concrete Sidewalk	0	SFT	\$4.50	\$0.00
39	Sidewalk Ramp, ADA	200	SFT	\$9.00	\$1,800.00
40	Concrete Curb & Gutter, MDOT Detail F-4	1,800	LFT	\$18.00	\$32,400.00
41	Traffic Control and Signage	1	LSUM	\$4,000.00	\$4,000.00
42	Irrigation Systems, Protect	1	LSUM	\$1,000.00	\$1,000.00
43	Restoration 3" Topsoil & Seed	1,500	SYD	\$4.00	\$6,000.00
44	Street Tree	5	EACH	\$450.00	\$2,250.00
SUBTOTAL=					\$329,074.00
30% ENGINEERING & CONTINGENCY=					\$98,722.20
TOTAL=					\$427,796.20

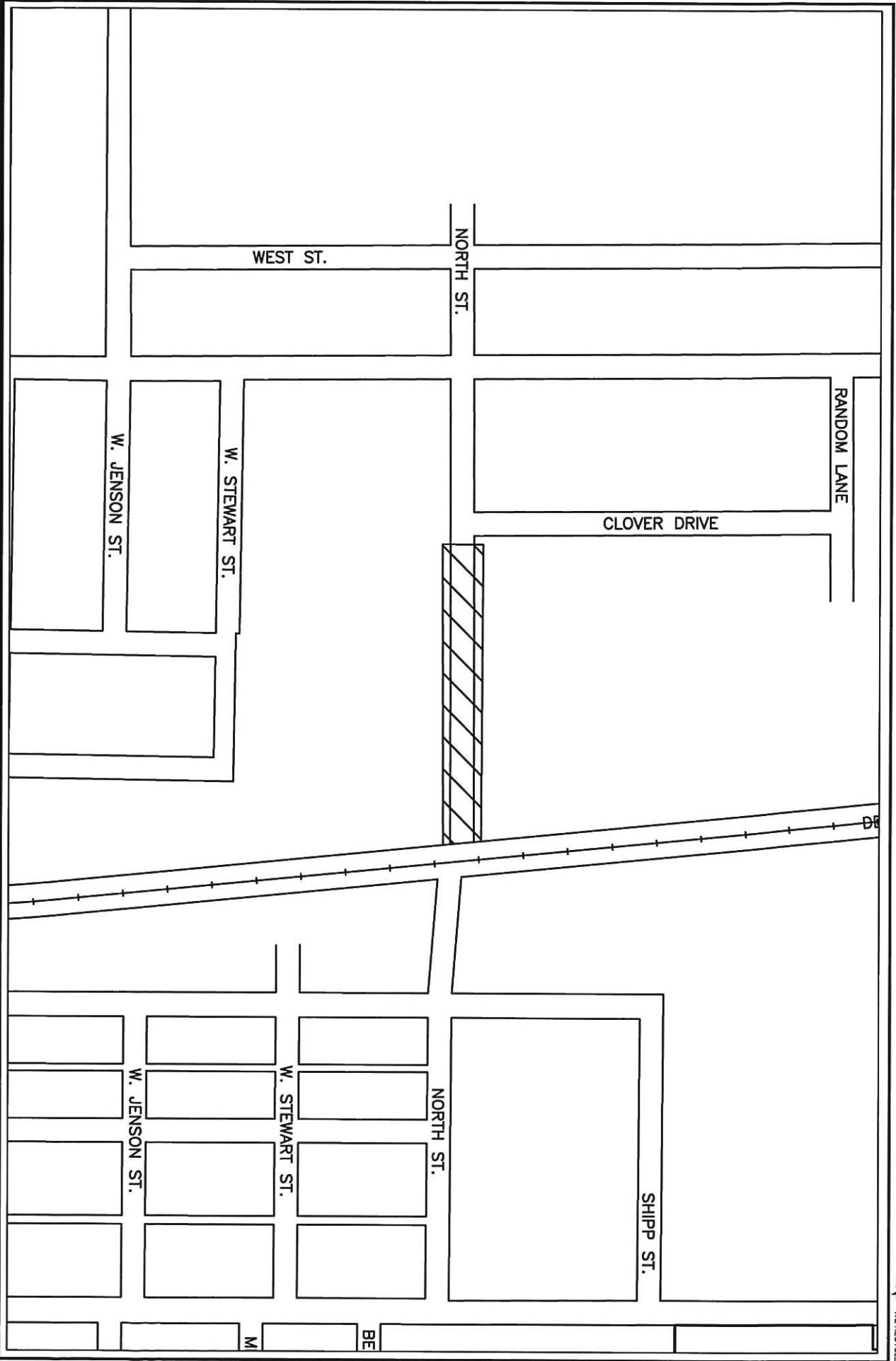
Basis for Cost Opinion

Total Reconstruction of North St. from Clover to RR Tracks (add curb & gutter, storm sewer and sidewalk)
Width - 34' b-b
New Water Main along North St. and under RR Tracks to connect with existing PVC water main from 2010.
Sanitary Sewer Replacement
New Storm Sewer on North St. only
Concrete drive approaches on North St.; replace in kind on Clover & Random, as necessary for utility work.
New HMA sidewalk on one side of North St. only.

THE BAR BELOW SHOWS GRAVSQALE FROM WHITE TO SOLID BLACK
 WHITE [] BLACK []



WE RECYCLE



PROJECT LOCATION MAP

GAYLORD CITY IMPROVEMENT PLAN

NORTH ST RECONSTRUCTION (CLOVER TO RR TRACKS)

SHEET
E

Year: 2024

Project Name: Landscaping Tractor

Department and Area of Improvement: Public Works New Equipment

The City will look to replace a 50 year old landscaping tractor for tilling soils and raking.

Project Description:

The tractor will be used to rake grounds and till soils around the DPW and WWTP grounds and level off soils in areas when construction projects occur. It is also used in the composting locations for leveling off the soils and materials collected. A new landscaping rake will also be part of the purchase.

Project Costs:

We estimate the cost to be around \$35,000 for this piece of equipment and the attachment needed. The City will concentrate its efforts in trying to attain a used model if available.

Long Term Project:

This piece of equipment is used several times per year, but not on a daily basis. It should last for over a 20 year period of time before it needs to be replaced.

Anticipated Funding:

This purchase should be planned for in the 2023-2024 Budget. Funds should be divided equally from the Motor Vehicle Pool, WWTP fund, Water fund, and Composting or recycling budget line items.

Year: 2022/2024

Project Name: Business I-75 Roadway Reconstruction and Streetscape

Department and Area of Improvement: Public Works – New Lighting and Streetscape Upgrades

The Michigan Department of Transportation (MDOT) will be completing a reconstruction of BL I-75 from Exit 279 at I-75 to Grandview Boulevard. The City will partner with MDOT to see some streetscape items (ie. new lighting, trees, benches, and planting areas) along this corridor. MDOT will also place a separated paved pedestrian pathway through the project area.

Project Description:

This project is scheduled for construction in 2024. **The City will work with MDOT to submit a TAP grant in 2022 to assist in providing funding to add some of the streetscape items desired in this important commercial corridor.** The City's water and sanitary sewer utilities are in good condition along this corridor, being largely constructed in 1994. The City will review the details of the utilities ahead of this project to insure that sections in need will be replaced. The area of principal concern would be in the areas from Grandview to Commerce Boulevard. The design would be submitted to MDOT and the construction coordinated to occur at the same time as the roadway improvements are made. MDOT is planning for a pedestrian pathway to extend the entire length of the project on both sides of the roadway. The City's streetscape would follow with improvements such as new lighting, trees, benches, and natural planting areas in several locations. The City will also be working with MDOT to coordinate the installation of cantilevered signals at the Wisconsin/Grandview, and South Otsego and Commerce intersections. These signals would be the same as the type found in the Downtown. This project is already in the preliminary design stage with the City's consulting engineer, C2AE.

Project Costs:

\$1,194,000 and preliminary cost estimates (non-engineered) are attached.

Long Term Project:

These improvements should provide for a substantial roadway reconstruction which should last 15 – 20 years. The typical streetscape improvements will also last about the same time period. The project will be coordinated with MDOT and state bidding of both the streetscape and roadway construction projects will take place. Davis Bacon and federal requirements will be applicable to both the roadway improvements and the streetscape improvements.

Anticipated Funding:

Primary funding will come through the Municipal Streets Fund Millage. Potential other funding for any water and sewer improvements could be charged off to these funds as well. The anticipated funding would be \$699,000. A TAP grant in the amount of \$495,000 would make up the balance of the costs so associated.

Business Loop I-75 Project – Streetscape (2024)

Estimate of Costs

1. Streetscape Items	
• Benches	
• Trees	
• Lighting Roadway	
• Planting Areas – Natural	
	\$900,000
2. Engineering Estimate	
Design and Construction	\$180,000
3. Cantilevered Signals	
Wisconsin/Grandview	
Commerce/S.Otsego	\$114,000
Total Costs	\$1,194,000

Funding Sources

1. MDOT Tap Grant (45%)	\$495,000
2. City of Gaylord	
Municipal Street Funds	
For Construction, Engineering, Cantilevered Signals	
	\$699,000

The City of Gaylord will need to submit for funding to the TAP grant program of the MDOT a full two years ahead of this project. Therefore a grant application should be submitted in 2022 working with both MDOT and the engineers to determine actual pricing.

MDOT TAP grants require a minimum of 20% match on these projects. MDOT has indicated that past awards of funding for successful applicants are between 35% and 45% of municipal contributions.

An engineer's estimate should also replace this once completed.

Year: 2025

Project Name: M-32 Water & Sewer Improvements – Dickerson Road to Family Fare Driveway and Dickerson Road to Meecher/Edelweiss Village Parkway

Department and Area of Improvement: Wastewater, Water, and Public Works – Utility Upgrades

New infrastructure improvements, include the replacement of water main and sanitary sewer during MDOT project scheduled for 2025.

Project Description:

The City will look to coordinate construction activities with an MDOT project occurring in this location. We will work to replace an existing 8" and 6" water main with new 8" mains throughout. Approximately 2,110' of 8" water main will be replaced and another 125' of 6" main will be replaced from Dickerson Road to the Family Fare Driveway and West Street on the north side of M-32. The City will also replace existing 1,680' of 15" sanitary collection mains with 18" mains and replace a 300' section of force main as well. The City will also replace existing 580' of 6" water main with 8" main on the south side of the project area and replace an existing 500' of 8" sanitary sewer from Meecher/Edelweiss Village Parkway to Dickerson Road with new sanitary main.

Project Costs:

The City estimates the project costs to be \$446,728 and \$226,711 for both sections of this project and engineer's estimates and location maps are attached. The total estimated cost of these two combined projects is \$673,439.

Long Term Project:

This project is anticipated to assist the City in removing old utility mains that will someday fail, at a time when an MDOT project is anticipated in the area, thereby saving money by not having to replace and repair roadway infrastructure at the same time. This project will also be proposed to extend the project to Meecher and Edelweiss Village Parkway are proposed if funding is available.

Anticipated Source of Funding:

Primary funding will come from the Municipal Street Fund Millage. Potential other funding from the wastewater and water fund accounts may be utilized in order to get this work completed.



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Project M

Main St (M-32) Water & Sewer Improvements - Dickerson Rd to Family Fare Dr

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$30,000.00	\$30,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	0	EACH	\$1,000.00	\$0.00
4	Remove Drainage Structure or Manhole	6	EACH	\$400.00	\$2,400.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	0	LFT	\$6.00	\$0.00
7	Remove Concrete Sidewalk or Drive Approach	0	SYD	\$6.00	\$0.00
8	8" Dia. PVC DR-18 Water Main	2,110	LFT	\$50.00	\$105,500.00
9	6" Dia. PVC DR-18 Water Main	125	LFT	\$42.00	\$5,250.00
10	8" Dia. Gate Valve	4	EACH	\$1,800.00	\$7,200.00
11	6" Dia. Gate Valve	1	EACH	\$1,700.00	\$1,700.00
12	1" Dia. Tapping Saddle & Corporation Stop	2	EACH	\$600.00	\$1,200.00
13	1" Dia. Type K Copper Service Lead	100	LFT	\$35.00	\$3,500.00
14	1" Dia. Curb Stop & Box	2	EACH	\$380.00	\$760.00
15	Hydrant Assembly	2	EACH	\$5,000.00	\$10,000.00
16	Connect to Existing Water Main	4	EACH	\$3,000.00	\$12,000.00
17	4' Dia. Sanitary Manhole including Selflevel Casting	7	EACH	\$3,300.00	\$23,100.00
18	18" Dia. PVC SDR-35 Sanitary Sewer	1,680	LFT	\$55.00	\$92,400.00
19	8" Dia. PVC SDR-35 Sanitary Sewer	0	LFT	\$38.00	\$0.00
20	6" Dia. Sanitary Force Main	300	LFT	\$40.00	\$12,000.00
21	Connect to Existing Sanitary Sewer	4	EACH	\$500.00	\$2,000.00
22	Connect to Existing Sanitary Force Main	1	EACH	\$900.00	\$900.00
22	8"x6" Sewer Wye	0	EACH	\$238.00	\$0.00
23	6" Dia. PVC SDR-35 Sanitary Sewer Lead	0	LFT	\$28.00	\$0.00
24	Sewer Cleanout Assembly	0	EACH	\$214.00	\$0.00
25	Sewer Cleanout Casting	0	EACH	\$155.00	\$0.00
26	2' Dia. Catch Basin including Casting	0	EACH	\$2,100.00	\$0.00
27	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
28	4' Dia. Storm Manhole including Self Level Casting	0	EACH	\$3,200.00	\$0.00
29	12" Dia. Storm Sewer	0	LFT	\$30.00	\$0.00
30	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
31	Connect to Existing Storm Sewer	0	EACH	\$300.00	\$0.00
32	Machine Grading Modified	0.0	STA	\$2,000.00	\$0.00
33	6" 22A Aggregate Base	0	SYD	\$6.00	\$0.00
34	HMA Pavement (3 1/2 inches)	0	TON	\$80.00	\$0.00
35	HMA Approach (3 1/2 inches)	0	TON	\$100.00	\$0.00



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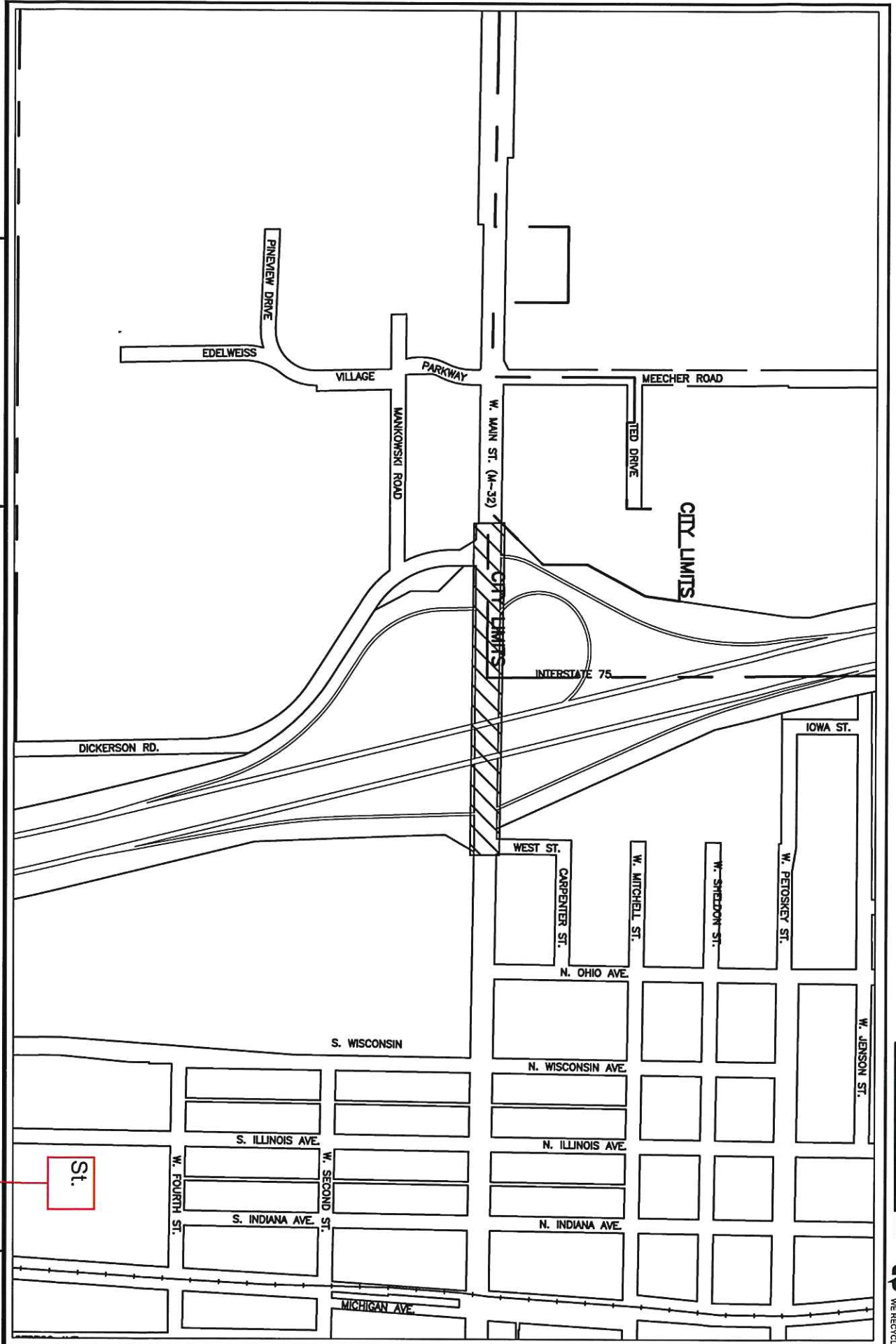
Project M

Main St (M-32) Water & Sewer Improvements - Dickerson Rd to Family Fare Dr

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
36	6" Concrete Drive Approach	0	SFT	\$5.00	\$0.00
37	6" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
38	4" Concrete Sidewalk	0	SFT	\$4.50	\$0.00
39	Sidewalk Ramp, ADA	0	SFT	\$9.00	\$0.00
40	Concrete Curb & Gutter, MDOT Detail F-4	0	LFT	\$18.00	\$0.00
41	Traffic Control and Signage	0	LSUM	\$4,000.00	\$0.00
42	Irrigation Systems, Protect	0	LSUM	\$1,000.00	\$0.00
43	Restoration 3" Topsoil & Seed	0	SYD	\$4.00	\$0.00
44	MDOT Coordination	1	LSUM	\$20,000.00	\$20,000.00
SUBTOTAL=					\$330,910.00
35% ENGINEERING & CONTINGENCY=					\$115,818.50
TOTAL=					\$446,728.50

Replace ex. 8" water along north side of road from west of Dickerson intersection to Family Fare Drive
 Replace ex. 6" crossing of M-32 at Dickerson and across Dickerson with new 8" water
 Replace ex. 4" crossing of M-32 at Family Fare with new 6" water
 Replace existing sanitary force main from west Marathon property line to MH at Biggby
 Replace existing 15" sanitary with 18" sanitary sewer.
 Assume work to take place during MDOT 2025 project, therefore no roadway/sidewalk removals or replacement are included (west side of Marathon gas station property east to of Family Fare gas station property)
 Traffic control and restoration costs to be included in MDOT project.

GAYLORD CITY IMPROVEMENT PLAN
 W MAIN ST / M32 WATER & SEWER IMPROVEMENTS (DICKERSON TO WEST)





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Project N

Main St (M-32) Water & Sewer Improvements - Meecher/Edelweiss Village Pkwy to Dickerson Rd

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$15,000.00	\$15,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	0	EACH	\$1,000.00	\$0.00
4	Remove Drainage Structure or Manhole	2	EACH	\$400.00	\$800.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	175	LFT	\$6.00	\$1,050.00
7	Remove Concrete Sidewalk or Drive Approach	180	SYD	\$6.00	\$1,080.00
8	8" Dia. PVC DR-18 Water Main	400	LFT	\$50.00	\$20,000.00
9	8" Dia. PVC Water Main under M-32 via DD or B&J	100	LFT	\$250.00	\$25,000.00
10	6" Dia. PVC DR-18 Water Main	0	LFT	\$42.00	\$0.00
11	8" Dia. Gate Valve	3	EACH	\$1,800.00	\$5,400.00
12	6" Dia. Gate Valve	0	EACH	\$1,700.00	\$0.00
13	1" Dia. Tapping Saddle & Corporation Stop	2	EACH	\$600.00	\$1,200.00
14	1" Dia. Type K Copper Service Lead	60	LFT	\$35.00	\$2,100.00
15	1" Dia. Curb Stop & Box	2	EACH	\$380.00	\$760.00
16	Hydrant Assembly	1	EACH	\$5,000.00	\$5,000.00
17	Connect to Existing Water Main	3	EACH	\$3,000.00	\$9,000.00
18	4' Dia. Sanitary Manhole including Selflevel Casting	2	EACH	\$3,300.00	\$6,600.00
19	18" Dia. PVC SDR-35 Sanitary Sewer	0	LFT	\$55.00	\$0.00
20	8" Dia. PVC SDR-35 Sanitary Sewer	500	LFT	\$38.00	\$19,000.00
21	Connect to Existing Sanitary Sewer	1	EACH	\$500.00	\$500.00
22	8"x6" Sewer Wye	2	EACH	\$238.00	\$476.00
23	6" Dia. PVC SDR-35 Sanitary Sewer Lead	40	LFT	\$28.00	\$1,120.00
24	Sewer Cleanout Assembly	2	EACH	\$214.00	\$428.00
25	Sewer Cleanout Casting	2	EACH	\$155.00	\$310.00
26	2' Dia. Catch Basin including Casting	0	EACH	\$2,100.00	\$0.00
27	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
28	4' Dia. Storm Manhole including Self Level Casting	0	EACH	\$3,200.00	\$0.00
29	12" Dia. Storm Sewer	0	LFT	\$30.00	\$0.00
30	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
31	Connect to Existing Storm Sewer	0	EACH	\$300.00	\$0.00
32	Machine Grading Modified	0.0	STA	\$2,000.00	\$0.00
33	6" 22A Aggregate Base	110	SYD	\$6.00	\$660.00
34	HMA Pavement (3 1/2 inches)	0	TON	\$80.00	\$0.00
35	HMA Approach (3 1/2 inches)	23	TON	\$100.00	\$2,300.00



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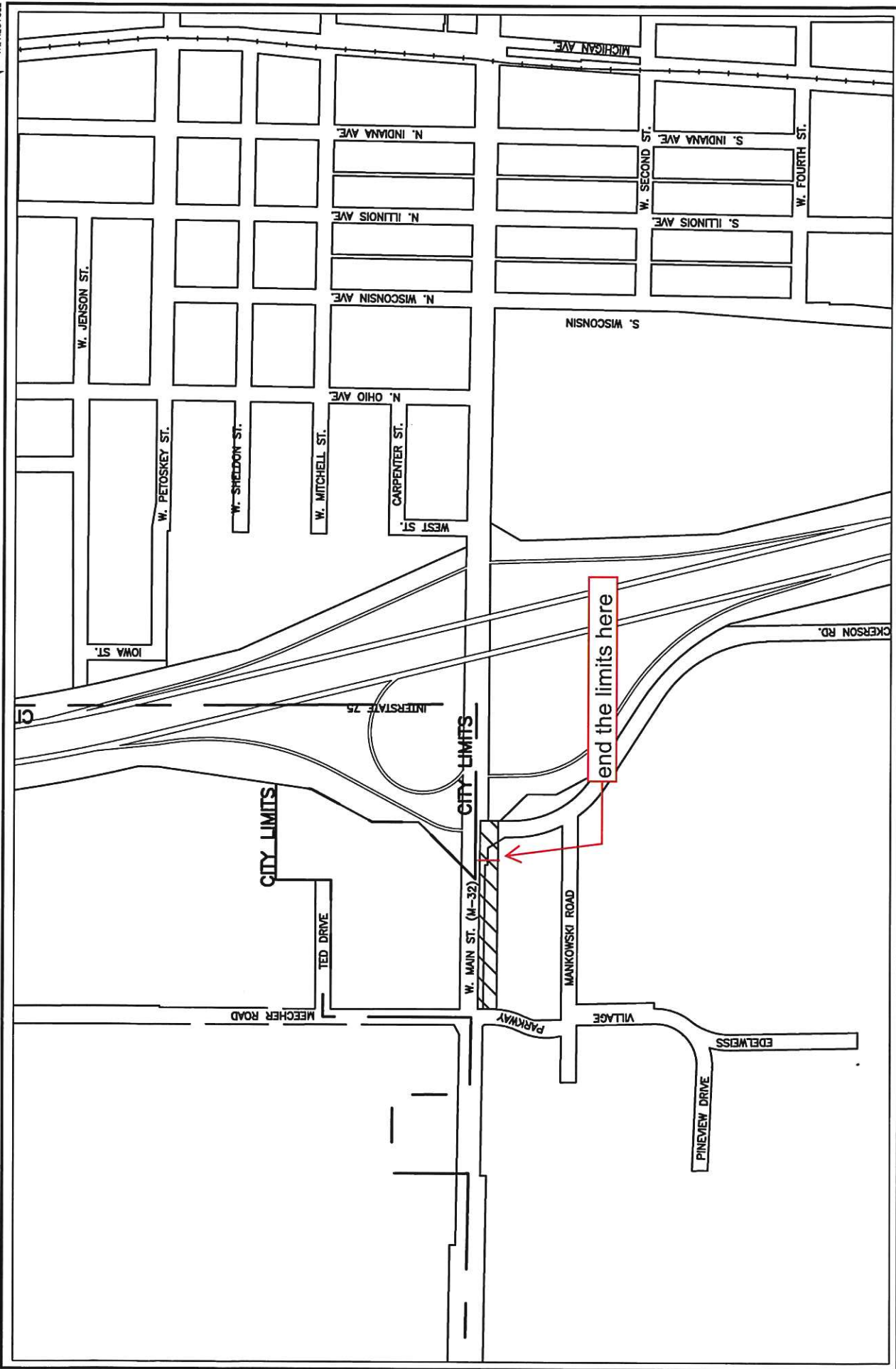
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Project N

Main St (M-32) Water & Sewer Improvements - Meecher/Edelweiss Village Pkwy to Dickerson Rd

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
36	6" Concrete Drive Approach/Parking	1,600	SFT	\$8.00	\$12,800.00
37	6" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
38	4" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
39	Sidewalk Ramp, ADA	0	SFT	\$4.50	\$0.00
40	Concrete Curb & Gutter, MDOT Detail F-4	175	LFT	\$18.00	\$3,150.00
41	Traffic Control and Signage	1	LSUM	\$10,000.00	\$10,000.00
42	Irrigation Systems, Protect	1	LSUM	\$1,000.00	\$1,000.00
43	Restoration 3" Topsoil & Seed	550	SYD	\$4.00	\$2,200.00
44	Street Tree	0	EACH	\$450.00	\$0.00
45	MDOT Coordination	1	LSUM	\$20,000.00	\$20,000.00
SUBTOTAL=					\$167,934.00
35% ENGINEERING & CONTINGENCY=					\$58,776.90
TOTAL=					\$226,710.90

Replace ex. 6" water along south side of M-32 with 8"
 Replace ex. 8" crossing of M-32 east of Meecher with new 8" water via Bore & Jack or Directional Drill
 Replace existing 8" sanitary sewer along south side of Main St. to Edelweiss Village Pkwy (MH SAWM-39)
 Assume work to take place along south side of M-32, no impact to roadway.



 <p>architecture • engineering</p>	<p>PROJECT LOCATION MAP</p>	<p>GAYLORD CITY IMPROVEMENT PLAN</p>	<p>W MAIN ST M32 WATER & SEWER IMPROVEMENTS (MEECHER TO DICKERSON)</p>	<p>SHEET</p> <p>N</p>
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Year: 2025

Project Name: Sidewalk Snow Blower (Holder) and Mower

Department and Area of Improvement: Public Works Equipment

The City will be looking to replace one of the two Holder Snow Blowers used in the winter to keep its sidewalks and Downtown areas clean of snow. These pieces of equipment will also cut grass areas around town in the summer.

Project Description:

The snow blower will be used primarily for the removal of snow in the Downtown areas during the winter. It will also be used to remove snow from sidewalks around the City, concentrating on the areas surrounding our schools and neighborhoods. The tractor will serve a dual purpose, having a grass cutting attachment to be used in the summer for cutting the sides of some of our roadways and rough park areas. Currently we have two Holders which perform these tasks. One is 20 years old and the other is 14 years old. We would look to replace the oldest tractor with this purchase.

Project Cost:

We estimate the cost on a new Holder tractor to be \$200,000. In years past we have been able to secure used equipment from other municipalities to serve our purposes. The City's DPW Superintendent and Manager will continue to monitor working with vendors and other Cities' on the availability of such equipment coming to market for sale.

Long Term Project:

The City has been able to keep this equipment running for long periods of time. The average life of these is close to 20 years.

Anticipated Funding:

This purchase should come from the City's Motor Vehicle Fund and planned to purchase in the 2024-25 Budget.

Year: 2026

Project Name: First Street Utility Replacements & Court to Center Alley Improvements (behind Phoenix & 5/3 Buildings)

Department and Area of Improvement: Water, Wastewater, Public Works – Roadway, Alleyway, Utility, and Sidewalk Upgrades

Water, Wastewater, Storm sewer infrastructure improvements, new decorative sidewalks, curb and gutter, bollard lighting in alleyway, and roadway reconstruction.

Project Description:

The project will be scheduled in 2026 unless we see a developer request utility upgrades due to new development in area. The project will include 1,040' of new 6" water main, which could be upgraded to 8" water main and leads, and create a looped system through the alleyway. The City will also place 800' of new 8" sanitary sewer and leads through the project area as needed. New curb and gutter and 680' of new 12" and 24" storm sewer and 100' of new 8" storm leads to service the roof drains will be added. This area has seen several water main breaks over the years and has two dead end water mains servicing the Downtown Buildings in this area. A new utility easement will need to take place to accommodate the development which will allow looping of the water main to provide better quality of water and improved flows in the area. First Street and the alleyway will be totally reconstructed and new decorative sidewalks and bollard lighting will be added and possibly a patio area to service the Phoenix building for outdoor dining opportunities.

Project Costs:

The City estimates the project costs to be \$683,542 and are based on engineer's estimates and location maps attached.

Long Term Project:

The project is expected to eliminate old sewer and water mains and increase flow and water quality in the area. The roadway surfaces will also be improved, adding to the longevity of the project.

Anticipated Funding:

Anticipated funding will come from the Municipal Street Fund Millage. Potential other funding could come from the MEDC if the project could be tied to new development activities in the area. Potential other funding could be from the wastewater and water fund accounts.



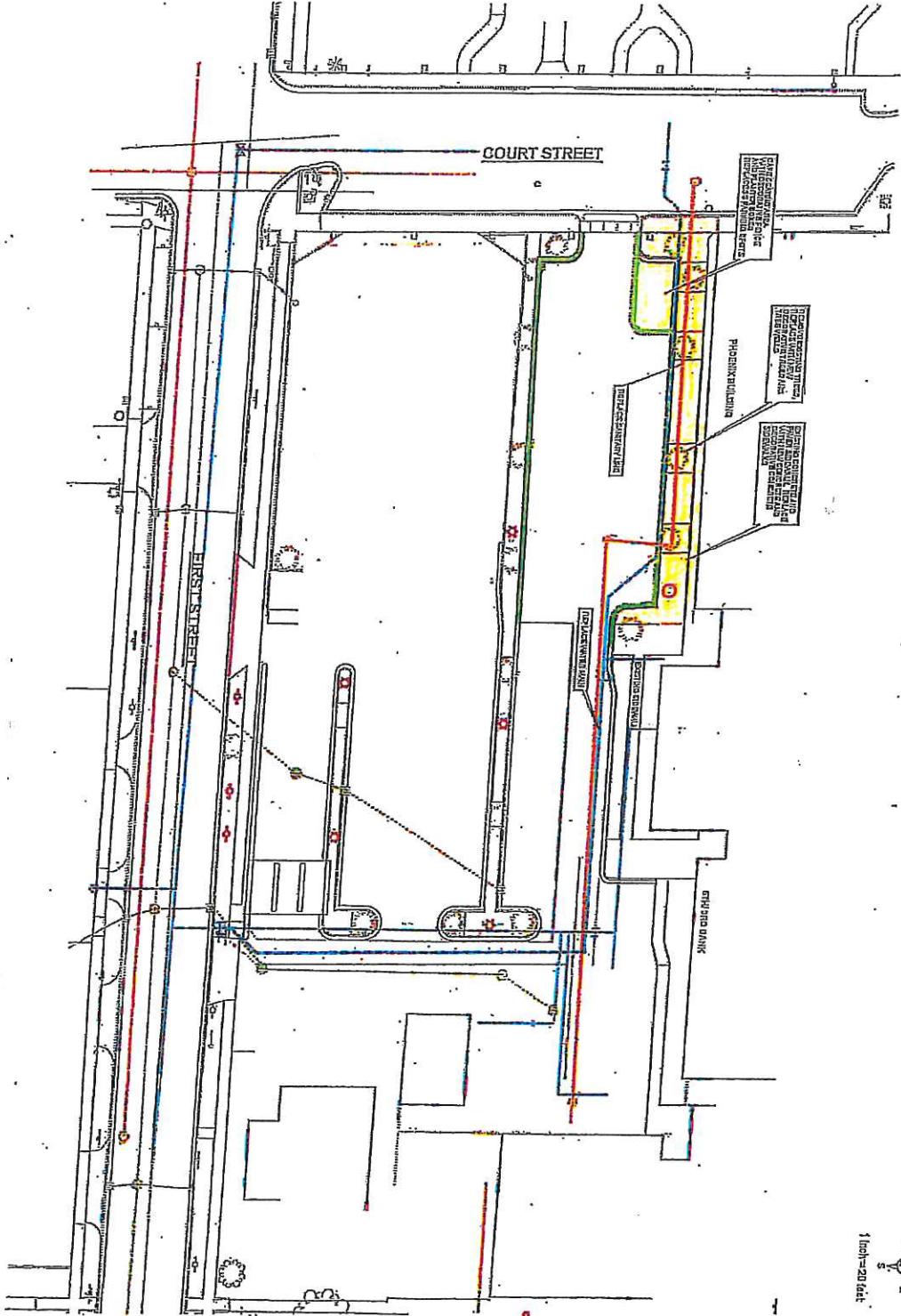
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Project B

First Street Utility Replacements & Court to Center Alley Improvements (behind Phoenix Bldg & 5/3 Bank)

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$48,000.00	\$48,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Remove Existing Tree	5	EACH	\$750.00	\$3,750.00
4	Remove Concrete Curb and Gutter	1340	LFT	\$6.00	\$8,040.00
5	Remove Concrete Sidewalk/Drive Approach	315	SYD	\$6.00	\$1,890.00
6	Remove Concrete Paver Sidewalk	75	SYD	\$6.50	\$487.50
7	Remove HMA Surface	3880	SYD	\$3.50	\$13,580.00
8	6" Dia. PVC DR-18 Water Main	1040	LFT	\$42.00	\$43,680.00
9	6" Dia. Gate Valve	4	EACH	\$1,700.00	\$6,800.00
10	Fire Hydrant Assembly	1	EACH	\$5,000.00	\$5,000.00
11	2" Dia. Tapping Saddle & Corporation Stop	7	EACH	\$750.00	\$5,250.00
12	2" Dia. Type K Copper Service Lead	210	LFT	\$38.00	\$7,980.00
13	2" Dia. Curb Stop & Box	7	EACH	\$400.00	\$2,800.00
14	Connect to Existing Water Main	5	EACH	\$3,000.00	\$15,000.00
15	4' Dia. Sanitary Manhole including Selflevel Casting	5	EACH	\$3,300.00	\$16,500.00
16	8" Dia. PVC SDR-35 Sanitary Sewer	800	LFT	\$38.00	\$30,400.00
17	8"x6" Sewer Wye	7	EACH	\$238.00	\$1,666.00
18	6" Dia. PVC SDR-35 Sanitary Sewer Lead	175	LFT	\$28.00	\$4,900.00
19	Sewer Cleanout Assembly	7	EACH	\$214.00	\$1,498.00
20	Sewer Cleanout Casting	7	EACH	\$155.00	\$1,085.00
21	2' Dia. Catch Basin including Casting	7	EACH	\$2,100.00	\$14,700.00
22	4' Dia. Catch Basin including Casting	1	EACH	\$2,800.00	\$2,800.00
23	4' Dia. Storm Manhole including Self Level Casting	6	EACH	\$3,200.00	\$19,200.00
24	12" Dia. Storm Sewer	200	LFT	\$30.00	\$6,000.00
25	24" Dia. Storm Sewer	480	LFT	\$45.00	\$21,600.00
26	8" Dia. Storm Sewer (Roof Drains)	100	LFT	\$28.00	\$2,800.00
27	Connect to Existing Drainage Structure	2	EACH	\$600.00	\$1,200.00
28	Connect to Existing Storm Sewer	5	EACH	\$300.00	\$1,500.00
29	Connect to Existing Roof Drain	2	EACH	\$500.00	\$1,000.00
30	Concrete Paver Sidewalk/Pavement Replacement	600	SFT	\$15.00	\$9,000.00
31	4" Concrete Sidewalk	2100	SFT	\$4.50	\$9,450.00
32	6" Concrete Sidewalk/Drive Approach	635	SFT	\$5.00	\$3,175.00
33	6" Concrete Sidewalk Ramp	160	SFT	\$9.00	\$1,440.00
34	Detectable Warning Surface, EJIW	20	LFT	\$70.00	\$1,400.00
35	Decorative Concrete Sidewalk	1100	SFT	\$14.00	\$15,400.00
36	Concrete Curb & Gutter	1340	LFT	\$20.00	\$26,800.00
37	Aggregate Base, 6 inch	3880	SYD	\$6.00	\$23,280.00
38	HMA in Alley/parking (330 lb/syd)	340	TON	\$90.00	\$30,600.00



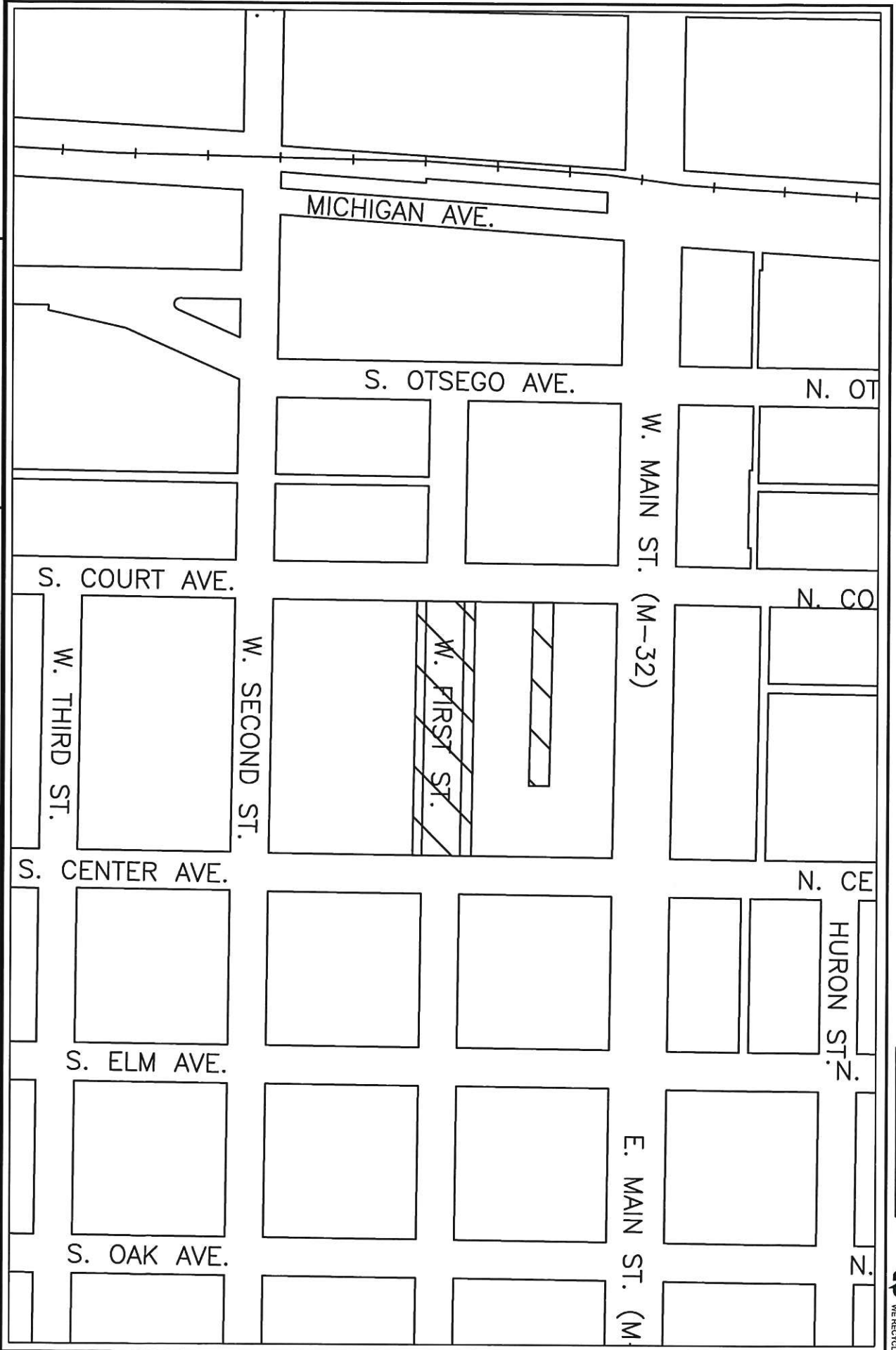
Legend	
—	new_water
—	new_sewer
—	new_gas
—	new_other
—	demo_concrete
—	demo_asphalt



PROJECT LOCATION MAP

GAYLORD CITY IMPROVEMENT PLAN
FIRST ST & COURT TO CENTER ALLEY IMPROVEMENTS

SHEET
B



THE BAR BELOW SHOWS GRAVSCALE FROM WHITE TO SOLID BLACK



WE RECYCLE

Year: 2026

Project Name: Wisconsin Avenue & Grandview Boulevard Improvements (Main Street/M-32 to South Otsego Avenue)

Department and Area of Improvement: Wastewater, Water, Public Works – Utility Upgrades

These improvements would complete improvements in the Wisconsin Avenue corridor. Only partial improvements have currently been completed.

Project Description:

The City will look to make complete infrastructure improvements to this corridor. The existing sanitary sewer is currently undersized and will become a critical problem should greater development activities occur in this corridor. This sanitary collection main will need to be reconstructed the entire length from Main Street to South Otsego Avenue. The water main should be in good shape with reconstruction occurring several years ago in sections from Eight Street to Main Street. However, the water main between Eight and South Otsego should be replaced and upsized accordingly when the sanitary improvements are scheduled.

Project Costs:

The City estimates the project costs to be \$ 1,782,739 for these improvements based upon the engineer's estimates and location map as attached.

Long Term Project:

This project is considered critical and will become even more important as future development activities take place on the Catt Properties along this corridor. Once these improvements are completed and the I-75 Crossing Water/Sewer Improvements Project (Van Tyle to Wisconsin Avenue) are completed this corridor will be in very good shape for the long term future of the City. Both projects are considered critical for the well-being of the City's utility infrastructure.

Anticipated Source of Funding:

This project is expensive and to some extent beyond the means of the City's utility and funding sources. The City will need to seek out funding either from the CDBG, US Department of Commerce's EDA program, or through the MEDC. Some funds for City match dollars could come from the Municipal Street Fund Millage or from water and wastewater capital or fund accounts.



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CITY OF GAYLORD
2020 Capital Improvements Plan
Preliminary Opinion of Probable Construction Costs

Project R

Wisconsin Ave & Grandview Blvd Utility Improvements - Main St/M-32 to S Otsego Ave

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$125,000.00	\$125,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	0	EACH	\$1,000.00	\$0.00
4	Remove Drainage Structure or Manhole	50	EACH	\$400.00	\$20,000.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	1,000	LFT	\$6.00	\$6,000.00
7	Remove Concrete Sidewalk or Drive Approach	1,000	SYD	\$6.00	\$6,000.00
8	Remove HMA Surface	7000	SYD	\$3.50	\$24,500.00
9	12" Dia. PVC DR-18 Water Main	1,700	LFT	\$60.00	\$102,000.00
10	12" Dia. PVC DR-18 Water Main under RR Tracks	100	LFT	\$250.00	\$25,000.00
11	8" Dia. PVC DR-18 Water Main	200	LFT	\$50.00	\$10,000.00
12	6" Dia. PVC DR-18 Water Main	0	LFT	\$42.00	\$0.00
13	12" Dia. Gate Valve	6	EACH	\$2,400.00	\$14,400.00
14	8" Dia. Gate Valve	2	EACH	\$1,800.00	\$3,600.00
15	6" Dia. Gate Valve	0	EACH	\$1,700.00	\$0.00
16	1" Dia. Tapping Saddle & Corporation Stop	6	EACH	\$600.00	\$3,600.00
17	1" Dia. Type K Copper Service Lead	200	LFT	\$35.00	\$7,000.00
18	1" Dia. Curb Stop & Box	6	EACH	\$380.00	\$2,280.00
19	Hydrant Assembly	4	EACH	\$5,000.00	\$20,000.00
20	Connect to Existing Water Main	5	EACH	\$3,000.00	\$15,000.00
21	4' Dia. Sanitary Manhole including Selflevel Casting	15	EACH	\$3,300.00	\$49,500.00
22	18" Dia. PVC SDR-35 Sanitary Sewer	3,750	LFT	\$55.00	\$206,250.00
23	8" Dia. PVC SDR-35 Sanitary Sewer	0	LFT	\$38.00	\$0.00
24	Connect to Existing Sanitary Sewer	7	EACH	\$500.00	\$3,500.00
25	18"x6" Sewer Wye	22	EACH	\$400.00	\$8,800.00
26	6" Dia. PVC SDR-35 Sanitary Sewer Lead	700	LFT	\$28.00	\$19,600.00
27	Sewer Cleanout Assembly	22	EACH	\$214.00	\$4,708.00
28	Sewer Cleanout Casting	0	EACH	\$155.00	\$0.00
29	2' Dia. Catch Basin including Casting	10	EACH	\$2,100.00	\$21,000.00
30	4' Dia. Catch Basin including Casting	6	EACH	\$2,800.00	\$16,800.00
31	4' Dia. Storm Manhole including Self Level Casting	5	EACH	\$3,200.00	\$16,000.00
32	12" Dia. Storm Sewer	500	LFT	\$30.00	\$15,000.00
33	30" Dia. Storm Sewer	3,000	LFT	\$50.00	\$150,000.00
34	Connect to Existing Drainage Structure	3	EACH	\$800.00	\$2,400.00
35	Connect to Existing Storm Sewer	4	EACH	\$300.00	\$1,200.00
36	HMA Cold Milling	24,000.0	SYD	\$2.00	\$48,000.00
37	6" 22A Aggregate Base	7,000	SYD	\$6.00	\$42,000.00



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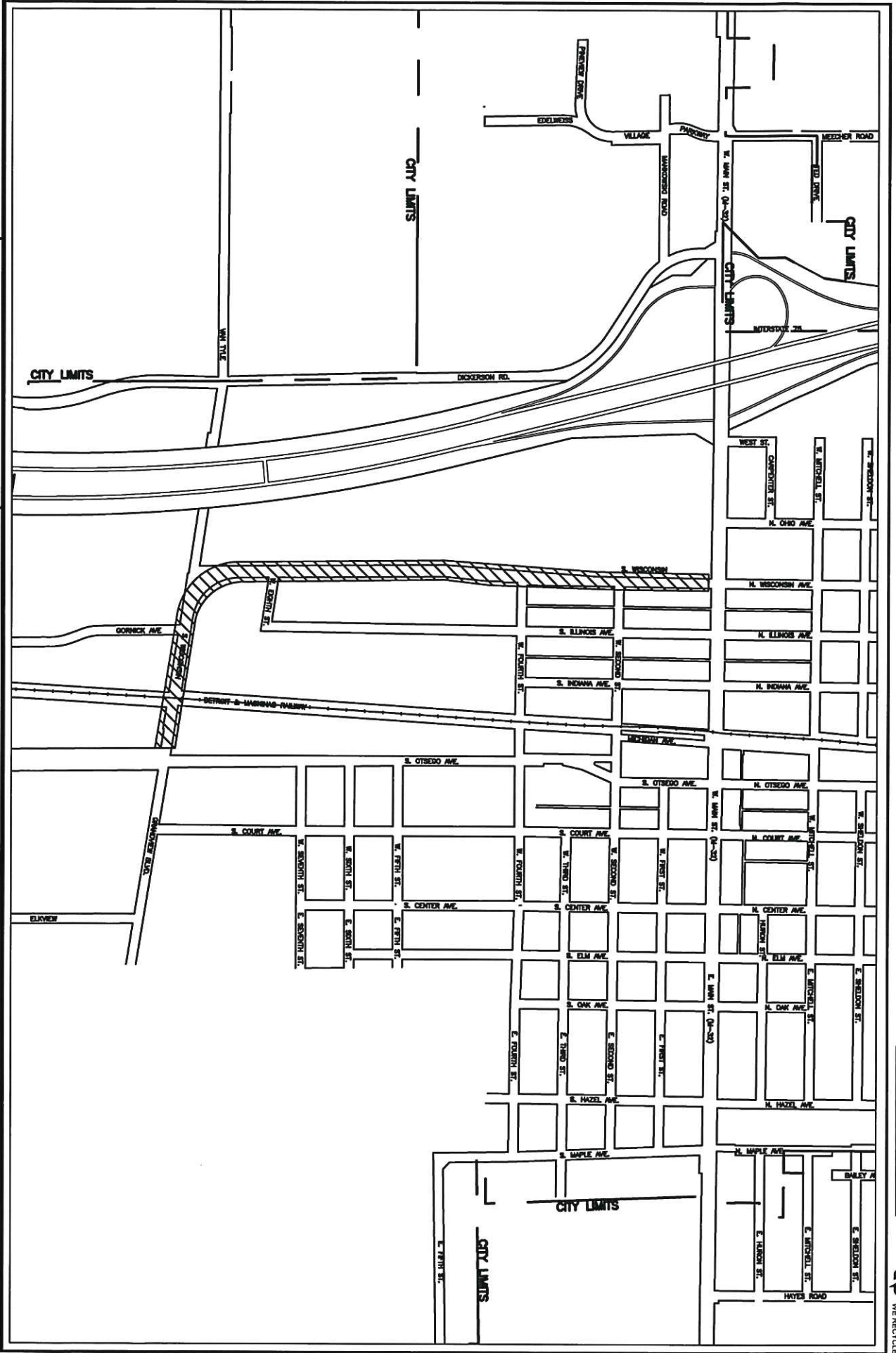
CITY OF GAYLORD
2020 Capital Improvements Plan
Preliminary Opinion of Probable Construction Costs

Project R
Wisconsin Ave & Grandview Blvd Utility Improvements - Main St/M-32 to S Otsego Ave

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
38	HMA Pavement (3 inches) trenches	1,200	TON	\$80.00	\$96,000.00
39	HMA Pavement (1 1/2 inches) top course	2,330	TON	\$90.00	\$209,700.00
40	HMA Approach (3 inch driveways)	100	TON	\$100.00	\$10,000.00
41	6" Concrete Drive Approach	500	SFT	\$5.00	\$2,500.00
42	6" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
43	4" Concrete Sidewalk	0	SFT	\$4.50	\$0.00
44	Sidewalk Ramp, ADA	0	SFT	\$9.00	\$0.00
45	Concrete Curb & Gutter, MDOT Detail F-4	1,000	LFT	\$18.00	\$18,000.00
46	Traffic Control and Signage	1	LSUM	\$20,000.00	\$20,000.00
47	Irrigation Systems, Protect	1	LSUM	\$1,000.00	\$1,000.00
48	Restoration 3" Topsoil & Seed	6,000	SYD	\$4.00	\$24,000.00
49	Street Tree	0	EACH	\$450.00	\$0.00
SUBTOTAL=					\$1,371,338.00
30% ENGINEERING & CONTINGENCY=					\$411,401.40
TOTAL=					\$1,782,739.40

Basis for Cost Opinion

- Replace existing 12" water main from Eighth St to S Otsego Ave
- Replace existing sanitary sewer full length, with new 18" dia. sanitary
- Replace existing storm sewer full length, with new 12" and 30" storm
- Replace curb & gutter, pathway and driveways, only as needed for utility construction.
- Patch trenches with HMA, and mill & resurface entire top course of HMA Pavement.



THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK



WE RECYCLE

Year: 2026

Project Name: I-75 Crossing Water & Sewer Improvements (VanTyle to Wisconsin)

Department and Area of Improvement: Water and Wastewater – Utility Upgrades

These improvements would allow the City to replace two critical pieces of infrastructure which connect the east side of the City to the west side and upgrade these utility mains which have been in place since the early 1950s.

Project Description:

The City would look to replace both the existing water main and sanitary sewer main underneath the I-75 corridor and reconnect the two mains to the existing utility system. Both of these mains have been underneath this federal highway since it was constructed in the 1950s. The City is very concerned about the age of these utilities and the effect which it could have in the event of a failure. Currently, we have only one additional crossing carrying sanitary sewer to our wastewater treatment plant from our ever growing west side of the City to the east side, where our plant is located. Should a failure to this sanitary sewer main or to our water main occur it could cause some severe problems for the City in servicing our large commercial and industrial business community. The project would replace and upgrade the utility mains and place a new 12" water main to replace an existing 6". This would increase fire flows and water to our west side. The sanitary sewer would be upgraded to a 15" main, replacing the existing 6" collection main that is currently in place. The reliability of these upgrades would tremendously benefit our entire utility system.

We would look to make these improvements at the same time as we make significant utility main upgrades along Wisconsin Avenue, which is having difficulty in handling the existing and future utility loads.

Project Costs:

The City estimates the project costs to be \$ 587,979 for these improvements based upon the engineer's estimate and location map as attached.

Long Term Project:

The project is considered critical to the City's utility system. We are attempting to address a potential problem that we know is inevitable by addressing the replacements in the near future. Thereby removing the potential for an event that could damage both our utility system and shut down businesses for an undetermined amount of time.

Anticipated Source of Funding:

This project is expensive when looking at the utility improvements also needed along the Wisconsin Avenue corridor. Together they are beyond the means of the City to address at this time. The City will seek funding either from the CDBG program, the US Department of Commerce's EDA program, or through the MEDC. Some matching funds could be available from the City's Municipal Street Fund Millage or from the water and wastewater capital or fund accounts.



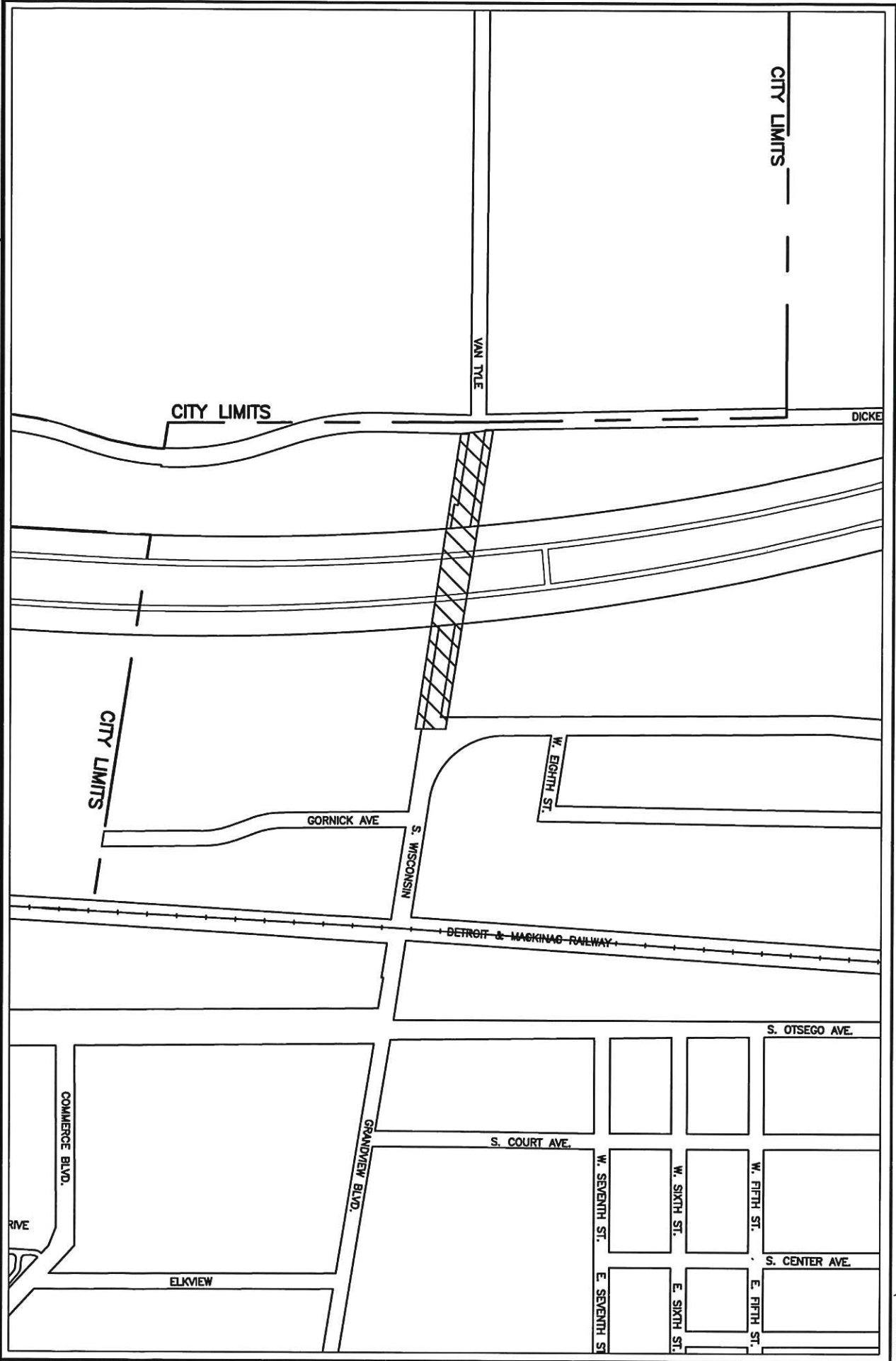
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CITY OF GAYLORD
2020 Capital Improvements Plan
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Project Q
I-75 Crossing Water & Sewer Improvements - VanTyle to Wisconsin

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$40,000.00	\$40,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	0	EACH	\$1,000.00	\$0.00
4	Remove Drainage Structure or Manhole	8	EACH	\$400.00	\$3,200.00
5	Tree, Rem, 6 inch to 18 inch	4	EACH	\$750.00	\$3,000.00
6	Remove Concrete Curb & Gutter	10	LFT	\$6.00	\$60.00
7	Remove Concrete Sidewalk or Drive Approach	0	SYD	\$6.00	\$0.00
8	Remove HMA Pavement on Van Tyle Rd	900	SYD	\$5.00	\$4,500.00
9	12" Dia. PVC Water Main under I-75 via DD or B&J	320	LFT	\$250.00	\$80,000.00
10	12" Dia. PVC DR-18 Water Main	975	LFT	\$70.00	\$68,250.00
11	6" Dia. PVC DR-18 Water Main	0	LFT	\$42.00	\$0.00
12	12" Dia. Gate Valve	4	EACH	\$2,800.00	\$11,200.00
13	8" Dia. Gate Valve	0	EACH	\$1,800.00	\$0.00
14	6" Dia. Gate Valve	0	EACH	\$1,700.00	\$0.00
15	1" Dia. Tapping Saddle & Corporation Stop	0	EACH	\$600.00	\$0.00
16	1" Dia. Type K Copper Service Lead	0	LFT	\$35.00	\$0.00
17	1" Dia. Curb Stop & Box	0	EACH	\$380.00	\$0.00
18	Hydrant Assembly	0	EACH	\$5,000.00	\$0.00
19	Connect to Existing Water Main	2	EACH	\$3,000.00	\$6,000.00
20	4' Dia. Sanitary Manhole including Selflevel Casting	2	EACH	\$3,300.00	\$6,600.00
21	4' Dia. Sanitary Manhole including Standard Casting	6	EACH	\$2,900.00	\$17,400.00
21	15" Dia. PVC SDR-35 Sanitary Sewer	975	LFT	\$50.00	\$48,750.00
22	15" Dia. PVC SDR-35 Sanitary Sewer under I-75 via B&J	320	LFT	\$250.00	\$80,000.00
23	6" Dia. Sanitary Force Main	0	LFT	\$40.00	\$0.00
24	Connect to Existing Sanitary Sewer	2	EACH	\$500.00	\$1,000.00
25	18"x6" Sewer Wye	0	EACH	\$500.00	\$0.00
26	8"x6" Sewer Wye	0	EACH	\$238.00	\$0.00
27	6" Dia. PVC SDR-35 Sanitary Sewer Lead	0	LFT	\$28.00	\$0.00
28	Sewer Cleanout Assembly	0	EACH	\$214.00	\$0.00
29	Sewer Cleanout Casting	0	EACH	\$155.00	\$0.00
30	2' Dia. Catch Basin including Casting	0	EACH	\$2,100.00	\$0.00
31	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
32	4' Dia. Storm Manhole including Self Level Casting	0	EACH	\$3,200.00	\$0.00
33	12" Dia. Storm Sewer	0	LFT	\$30.00	\$0.00
34	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
35	Connect to Existing Storm Sewer	0	EACH	\$300.00	\$0.00
36	Machine Grading Modified	0.0	STA	\$2,000.00	\$0.00
37	12" 22A Aggregate Base	0	SYD	\$10.00	\$0.00



THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK
 WHITE ██████████ SOLID BLACK



Year: 2027

Project Name: South Otsego Avenue Water & Sewer Improvements (Grandview to Second Street)

Department and Area of Improvement: Wastewater, Water, Public Works – Utility Upgrades

These improvements are necessary as this corridor is one of the oldest commercial corridors in the City with very little, if any public improvements, made in the last fifty years.

Project Description:

The City will look to make complete infrastructure improvements in this commercial corridor. Both the water and sanitary sewer are in need of replacement. Both are undersized and have been added to over the years with some sewer running in different directions to accommodate needs as development occurred. The improvements will improve and increase water flows and quality and the sanitary improvements will increase reliability as breaks have been a problem over time. The City will coordinate the improvements with the MDOT who also has the storm drainage system in this corridor as South Otsego is part of the Business Loop of I-75 running through the City. The storm drainage system is also very old and is also in need of repair.

Project Costs:

The City estimates the project costs to be \$ 852,079 for these improvements based on the engineer's estimates and location map as attached.

Long Term Project:

The project is becoming more important as time goes by. There are two potential improvements and new developments which could add more flows to the sanitary sewer and the need for greater water volume and flows in this area. Once this project is completed the City will be in much better shape to address and keep up with the utilities affecting this roadway and commercial corridor. This project is considered critical to the well-being of the City's utility infrastructure.

Anticipated Source of Funding:

This project will be very expensive to address for the City. We will look to seek funding opportunities for a portion of the improvements through MDOT for the storm improvements and the CDBG program, US Department of Commerce's EDA program, or through the MEDC for assistance on this project. Some funds could also come from the City's Municipal Street Fund Millage or from the water and wastewater capital fund accounts.



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CITY OF GAYLORD
2020 Capital Improvements Plan
Preliminary Opinion of Probable Construction Costs

Project S
South Otsego Avenue Water & Sanitary Sewer Improvements - Grandview Blvd to Second St

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
1	Mobilization, Max 10%	1	LSUM	\$60,000.00	\$60,000.00
2	Asbestos Abatement Allowance	1	LSUM	\$1,000.00	\$1,000.00
3	Adjust Drainage Structure or Manhole & Replace Casting	0	EACH	\$1,000.00	\$0.00
4	Remove Drainage Structure or Manhole	20	EACH	\$400.00	\$8,000.00
5	Tree, Rem, 6 inch to 18 inch	0	EACH	\$750.00	\$0.00
6	Remove Concrete Curb & Gutter	0	LFT	\$6.00	\$0.00
7	Remove Concrete Sidewalk or Drive Approach	0	SYD	\$6.00	\$0.00
8	Remove HMA Surface	0	SYD	\$3.50	\$0.00
9	12" Dia. PVC DR-18 Water Main	0	LFT	\$60.00	\$0.00
10	12" Dia. PVC DR-18 Water Main under RR Tracks	0	LFT	\$150.00	\$0.00
11	8" Dia. PVC DR-18 Water Main	3,600	LFT	\$50.00	\$180,000.00
12	6" Dia. PVC DR-18 Water Main	0	LFT	\$42.00	\$0.00
13	12" Dia. Gate Valve	0	EACH	\$2,400.00	\$0.00
14	8" Dia. Gate Valve	12	EACH	\$1,800.00	\$21,600.00
15	6" Dia. Gate Valve	0	EACH	\$1,700.00	\$0.00
16	1" Dia. Tapping Saddle & Corporation Stop	30	EACH	\$600.00	\$18,000.00
17	1" Dia. Type K Copper Service Lead	1,000	LFT	\$35.00	\$35,000.00
18	1" Dia. Curb Stop & Box	30	EACH	\$380.00	\$11,400.00
19	Hydrant Assembly	5	EACH	\$5,000.00	\$25,000.00
20	Connect to Existing Water Main	7	EACH	\$3,000.00	\$21,000.00
21	4' Dia. Sanitary Manhole including Selflevel Casting	11	EACH	\$3,300.00	\$36,300.00
22	12" Dia. PVC SDR-35 Sanitary Sewer	2,800	LFT	\$45.00	\$126,000.00
23	8" Dia. PVC SDR-35 Sanitary Sewer	300	LFT	\$38.00	\$11,400.00
24	Connect to Existing Sanitary Sewer	7	EACH	\$500.00	\$3,500.00
25	12"x6" Sewer Wye	30	EACH	\$350.00	\$10,500.00
26	6" Dia. PVC SDR-35 Sanitary Sewer Lead	1,000	LFT	\$28.00	\$28,000.00
27	Sewer Cleanout Assembly	30	EACH	\$214.00	\$6,420.00
28	Sewer Cleanout Casting	15	EACH	\$155.00	\$2,325.00
29	2' Dia. Catch Basin including Casting	0	EACH	\$2,100.00	\$0.00
30	4' Dia. Catch Basin including Casting	0	EACH	\$2,800.00	\$0.00
31	4' Dia. Storm Manhole including Self Level Casting	0	EACH	\$3,200.00	\$0.00
32	12" Dia. Storm Sewer	0	LFT	\$30.00	\$0.00
33	30" Dia. Storm Sewer	0	LFT	\$50.00	\$0.00
34	Connect to Existing Drainage Structure	0	EACH	\$800.00	\$0.00
35	Connect to Existing Storm Sewer	0	EACH	\$300.00	\$0.00
36	HMA Cold Milling	0.0	SYD	\$2.00	\$0.00
37	6" 22A Aggregate Base	0	SYD	\$6.00	\$0.00
38	HMA Pavement (3 inches) trenches	0	TON	\$80.00	\$0.00



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Project S

South Otsego Avenue Water & Sanitary Sewer Improvements - Grandview Blvd to Second St

Item #	ITEM DESCRIPTION	Estimated Quantity	Item Unit	Unit Price	Total Price
39	HMA Pavement (1 1/2 inches) top course	0	TON	\$90.00	\$0.00
40	HMA Approach (3 inch driveways)	0	TON	\$100.00	\$0.00
41	6" Concrete Drive Approach	0	SFT	\$5.00	\$0.00
42	6" Concrete Sidewalk	0	SFT	\$5.00	\$0.00
43	4" Concrete Sidewalk	0	SFT	\$4.50	\$0.00
44	Sidewalk Ramp, ADA	0	SFT	\$9.00	\$0.00
45	Concrete Curb & Gutter, MDOT Detail F-4	0	LFT	\$18.00	\$0.00
46	Traffic Control and Signage	1	LSUM	\$20,000.00	\$20,000.00
47	Irrigation Systems, Protect	0	LSUM	\$1,000.00	\$0.00
48	Restoration 3" Topsoil & Seed	0	SYD	\$4.00	\$0.00
49	Street Tree	0	EACH	\$450.00	\$0.00
50	MDOT Coordination	1	LSUM	\$30,000.00	\$30,000.00
				SUBTOTAL=	\$655,445.00
				30% ENGINEERING & CONTINGENCY=	\$196,633.50
				TOTAL=	\$852,078.50

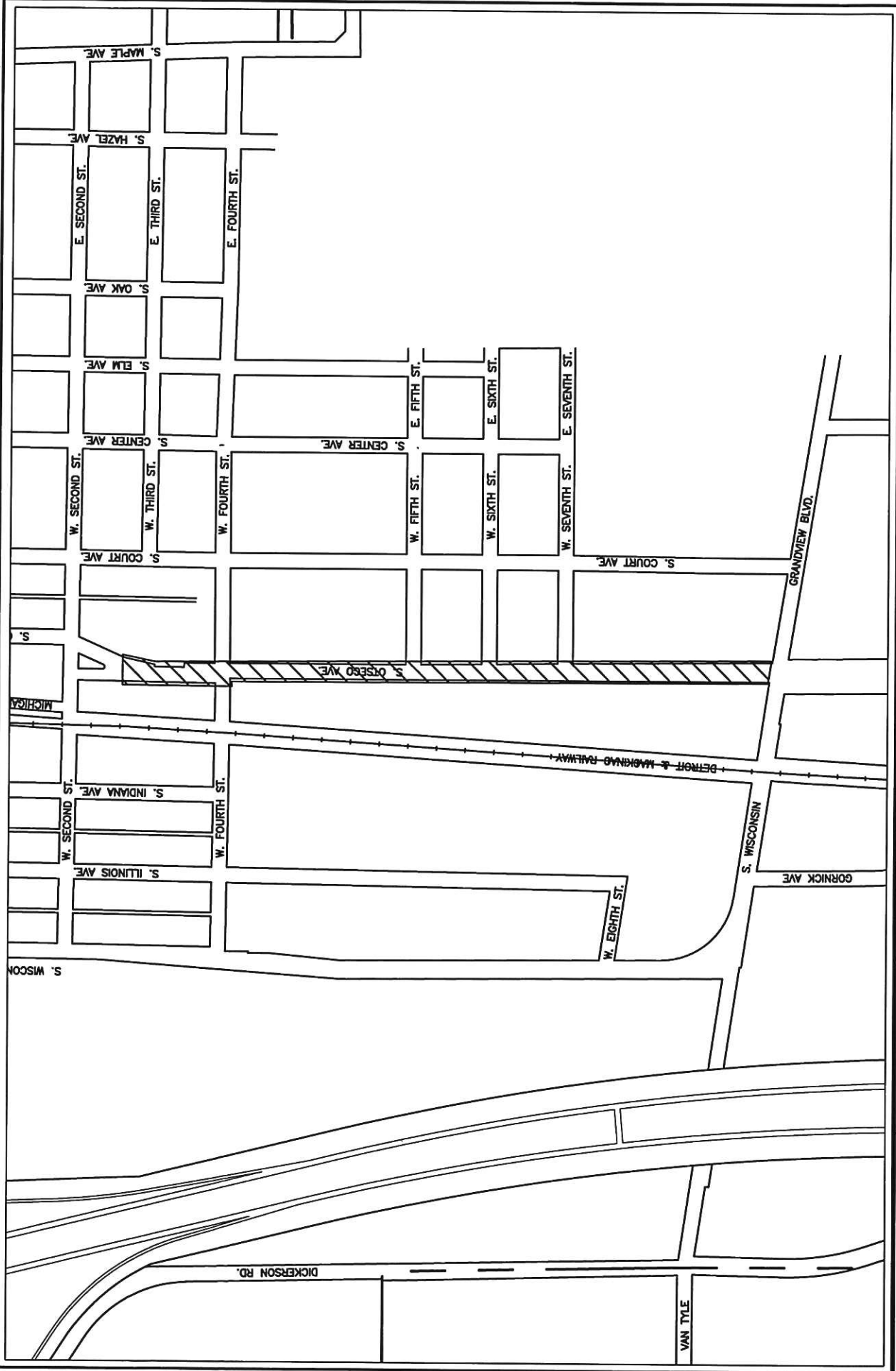
Basis for Cost Opinion

Replace existing 8" water main with new 8" water main and services, full length.
 Replace existing dual sanitary sewer mains, full length, with one new 12" dia. sanitary. Replace all services
 No costs are included for storm sewer upgrades
 No costs are included for roadway replacement or restoration (this estimate assumes roadway work by others(MDOT)).

THE BAR BELOW SHOWS GRAYS SCALE FROM WHITE TO SOLID BLACK
 WHITE ██████████ BLACK



WE RECYCLE



	PROJECT LOCATION MAP
	GAYLORD CITY IMPROVEMENT PLAN
S OTSEGO AVE WATER & SEWER IMPROVEMENTS (GRANDVIEW TO SECOND)	
SHEET S	