



MARQUETTE CHARTER TOWNSHIP

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MARQUETTE TOWNSHIP BOARD - SPECIAL MEETING

MONDAY, MAY 23, 2022 - 6:00 PM

MARQUETTE TOWNSHIP COMMUNITY CENTER

1. Call to order

- A. Pledge of Allegiance
- B. Roll Call

- 2. Public Comment (3 minutes each)** *This Board is conducting a meeting today to take care of Township business. You are allowed to address the Board at least twice tonight, but we will not have back-and-forth conversations between the staff, the Board, and the public during Public Comment. For Public Comment, or if you would like to speak on a particular agenda item, state your name and address and you have three minutes to address the Board. The Board may, but is not required to, respond at Board Member Comment immediately following Public Comment. The Board may also request follow-up with the Township Manager on some matters addressed during Public Comment.*

3. Board Member Comment in Response to Public Comment

4. Approval of the Agenda *(Declaration of Conflict of Interest, if any)*

5. Public Hearing - CWRP Application - Wastewater Improvements

- A. Lift Station Improvements Project Plan

6. Policy Discussion, Consideration and Development

- A. Consider Resolution adopting Wastewater System Improvements for the Clean Water Revolving Loan Fund

7. Public Comment (3 Minutes maximum)

8. Meeting Wrap-up

- A. Announcements
- B. Review of Motions Passed & Assignments, if any
- C. Board Member Comment

9. Adjournment

Next Scheduled Meeting Date is June 7, 2022 at 6:30PM.

CLEAN WATER REVOLVING FUND
PROJECT PLAN FOR LIFT STATION IMPROVEMENTS PROJECT
MARQUETTE TOWNSHIP, MICHIGAN
May, 2022

UP Engineers & Architects
424 South Pine Street
Marquette, Michigan 49855
Project No: M203 - 02254

PROJECT BACKGROUND

Delineation of Study Area

The study area includes the locations of the three lift stations.

The Marquette Township Sewer System has five lift stations which are shown on the system map, included in Appendix B of this report, and discussed further in the existing facilities section of this project plan.

The sewer improvements project is proposed to take place in Marquette Township. The attached maps depict the project area along with the overall system map.

Appendix B shows a delineation of the project locations within Marquette Township.

Environmental Evaluation

A. Cultural Resources

No anticipated cultural impacts since the project is removing and replacing/repairing existing infrastructure. If it appears that cultural resources are being impacted, work would be immediately ceased, and the State would be contacted. Natura, Cultural, and Scenic Resources Map is included in Attachment G.

B. The Natural Environment

The environmental impacts of the proposed project are limited due to the locations of the lift station improvements. The project will be taking place within Township right-of-way.

Climate

Marquette Charter Township is located in the North Central Upper Peninsula just off the shores of Lake Superior. The climate is temperate with major influence from Lake Superior. Recent extreme winters have significantly impacted sewer system infrastructure within the UP. The winter of 2013 was the worst winter in recent memory with frost depths reaching to over 9 feet below grade.

Air Quality

N/A – no measurable impact by the proposed project is anticipated. Measures to control fugitive dust will be implemented when necessary.

Coastal Zones

Final project to be reviewed by EGLE during the design phase of the project. Correspondence included in Attachment B.

Major Surface Waters

The Charter Township of Marquette is located on a partial boundary with Lake Superior. Small creeks and rivers run through the Township.

Wild and Scenic Rivers

According to the “Clean Water State Revolving Fund Project Plan Preparation Guidance” and the Michigan DNR website, there are no wild and scenic rivers located within the project area. Review letter response included in Attachment B.

Floodplains

The proposed project will include no surface improvements beyond the removal and replacement of sanitary manholes. Thus the project will have no impact on the floodplain.

Wetlands

The proposed project is not expected to impact any wetlands that are located within the vicinity of the proposed project. See wetland map in Appendix E.

Topography

See Appendix C for study area topographic map.

Geology and Soils

Geology and Soils maps included in Appendix D.

Protected Plants and Animals

A Part 41 permit application will be submitted to the EGLE for review during the design phase of the project.

National Natural Landmarks

None

Unique Features

EGLE Environmental Sites Map included in Attachment H.

Land Use in Study Area

The current land use for Marquette Township is shown in the land use map, included in Appendix F to this report.

Existing land use within the proposed project area includes residential and commercial property. This district includes parks and forested locations within the predominately residential area. The Bancroft St and Huron St lift stations are zoned as urban residential. The Wright St lift station is zoned as a developmental district.

POPULATION DATA

Population data for Marquette Township is located in the tables below:

Table 1. Marquette Charter Township - Historical Total Population

	1970	1980	1990	2000	2010	2020
Marquette Township	1,703	2,669	2,757	3,286	3,905	4,140*

Table 2. Marquette Township – Projected Population

Population	2021 Population	2026 +5 years	2031 +10 years	2041 +20 years
Township Total	4,140	4,450	4,761	5,382
On Sewer System	2,320	2,489	2,663	3,010

Historical population data and projections for the Township were obtained from the U.S. Census Bureau.

Marquette Charter Township has experienced strong population growth over the last 20 years. From 1990 to 2010 the population has grown in Marquette Township by over 40%. The service area has increased along with the Township population. This projected 30% growth will increase the overall demand on the sewer system.

The Cox District experiences urban residential usage throughout the entire district. Chapel Hill has a combination of Rural Residential and Commercial. Northwoods Gravity District has a mix of Urban Residential, Rural Residential and Commercial Use. Grove District is only Urban Residential. Southwest Pump District is only Rural Residential.

The majority of the land use within the study area is residential, with commercial along the main transportation corridors of US-41 and County Road 492. Some institutional areas are the next largest user group scattered throughout the study area. These areas are shown in Appendix C, Fig 4-1.

ECONOMIC CHARACTERISTICS

Marquette Township has many commercial and public employers. The largest employers in the township are Wal-Mart with 392 employees, Resolve Surgical Technologies with 250 employees, and Meijer with 270 employees.

The median household income is \$54,585.

The township is projected to grow by 30% over the next 10 years. This will increase influent to the sanitary sewer system.

EXISTING FACILITIES

A. Since 1977 the sewage from Marquette Township has been treated at the Marquette Area Wastewater Treatment Facility. The facility is in good condition and is maintained by the City of Marquette, Marquette Township, and Chocolay Township.

B. The method of residuals handling and disposal, if applicable.

Not Applicable

C. The collection system is made up of 18 miles of main, 200 manholes, four lift stations, and 300 grinder pumps. The existing lift stations at Bancroft, Huron, and Wright St have been operating with the pumps, electronics, generators, and SCADA for a long time.

D. The treatment is located at 1930 US-41 just east of the City of Marquette. The Township also has five operating lift stations located on Huron St, Bancroft St, Wright St, Center St, and US-41.

E. The design, capacity, existing flows, and characteristics of wastes.

Not Applicable

F. Septage receiving, acceptance, and treatment.

Not Applicable

G. The location and description of major industrial discharges.

Not Applicable

H. The average and peak dry-weather and wet-weather flows received by the treatment and collection facilities.

Not Applicable

I. Infiltration and inflow (I/I) problems in the collection system.

Not Applicable

J. The existence of any combined sewers and their impact on wastewater treatment and collection facilities.

Not Applicable

K. The location of all system bypasses, including sanitary sewer overflows (SSO), with their frequency, duration, and cause.

Not Applicable

L. The location of all combined sewer overflows (CSO), with their frequency, duration, and cause.

Not Applicable

M. An evaluation of pump station capacities.

The Huron St lift station has two discharge lines each capable of pumping 315 GPM. The Bancroft St lift station has two discharge lines each capable of pumping 530 GPM. The Wright St lift station has two discharge lines, one can pump at 406 GPM, the other can pump 395 GPM. The Center St lift station has two discharge lines each capable of pumping 200 GPM. The US-41 lift station has two pumps each capable of pumping 238 GPM.

- N. The Bancroft, Huron, and Wright St are operated by aging pumps, electronics, and SCADA. The generators powering the Bancroft and Huron St lift stations are about 30 years old.
- O. The lift station components are a concern in maintaining the integrity of the sewer system.
- P. Evaluation of the system’s climate resiliency.

Not Applicable

FISCAL SUSTAINABILITY PLAN

See Attachment Marquette Twp – Lift Station Condition Assessment.

Summary of Project Need

Marquette Township is currently going through the process of upgrading its existing lift stations on Bancroft, Huron, and Wright Streets. Within that project area, Marquette Township has three lift stations that have old and deficient pumps, electronics, and SCADA. The Bancroft and Huron lift stations are also run off of 30-year-old generators that need to be replaced. These improvements will make the lift stations more energy efficient and reliable.

Orders or Enforcement Actions

Please provide a copy of any court or enforcement order against the sewer system manager, including written enforcement actions, such as a Notice of Violation, Consent Agreement, or Department Order to correct deficiencies and achieve compliance with Act 399.

No official documentation from EGLE in regard to these items. The proposed improvements to the pumps, electronics, SCADA, and generators will improve the reliability and efficiency of the sewer system.

WATER QUALITY PROBLEMS

Not applicable

PROJECTED NEEDS FOR THE NEXT 20 YEARS

Not Applicable

FUTURE ENVIRONMENT WITHOUT THE PROPOSED PROJECT.

Without the lift station upgrades there may be lift station failures leading to sewage backups.

ANALYSIS OF ALTERNATIVES

Identification of Potential Alternatives

No-Action

With a 'No-Action' alternative, the removal and replacement of existing pumps, electronics, SCADA, and generators and the lift stations will continue to operate as they are until failure. No-action simply means that action would be delayed, and the upgrades would be made in a piece-meal fashion. This alternative greatly increases the costs incurred by the sewer fund due to repairs being made on an emergency basis.

Upgrade of Existing Lift Station Components

This recommended proposed alternative, as outline in the project plan, includes the removal and replacement of the existing pumps, electrical systems, SCADA, and generators. Numerous conversations occurred between UP Engineers & Architects and Marquette Township staff concerning the replacement size of the pumps and generators. This option has been discussed in depth with the Township Board during meetings concerning sewer system improvements. Based on those discussions and reviews, this alternative was selected in the best interest of the Township.

Optimum Performance of Existing Facilities

The optimal performance of the Charter Township of Marquette sewer system would require upgrades outlined in the proposed project plan. By performing the upgrades outlined in this plan, the reliability, performance, and efficiency of the system will be increased. To continue to strive towards optimum performance of the system, the Township will continue to pursue funding options for all the items outlined in the 20-year improvements plan.

ANALYSIS OF PRINCIPLE ALTERNATIVES

The alternatives presented include the "No-Action" alternative which would be delayed action or deferred maintenance. Marquette Township will be forced to replace the lift station components as they fail. This alternative process will result in a lower quality service at higher cost which will negatively impact the sewer fund.

The Engineer's Opinion of Cost for this option is:

Item Description	Unit	Quantity	Unit Cost	Total Cost
Sewage Pumps	Ea	6	\$20,000	\$120,000
Electronics	Ea	3	\$150,000	\$450,000
SCADA	Ea	3	\$50,000	\$150,000
Generator	Ea	2	\$100,000	\$200,000
Construction Subtotal				\$920,000
Contingency (20%)				\$184,000.0
Engineering (15%)				\$138,000.00
Administration				\$50,000
Project Total Cost Opinion				\$1,292,000

Cost Effective Analysis

A. Sunk Costs

Not Applicable

B. Present Worth – Proposed Option of Distribution Upgrades

PW = Present Value + Present Worth of Future Value + Net Present Worth of Annual Costs

Present Value = Estimated Proposed Project Cost = \$1,292,000

Present Worth of Future Value = \$0 (Salvage Value = \$0)

Net Present Worth of Annual Costs (applicable portion of Annual Cost is the savings of 10% of sewage volume)

i. No Action

Not Applicable

C. Salvage Value

Not Applicable. There is no salvage value for lift station components in either option.

D. Escalation

Replacement of lift station components will make the lift stations more energy efficient, reducing energy costs.

E. Interest during Construction

Not Applicable

- F. Mitigation Costs
Not Applicable
- G. User Costs
Not Applicable
- H. CMAR, PDB, or FPDB Delivery Method
Not Applicable

MONETARY EVALUATION

Not Applicable

PARTIONING THE PROJECT

Not Applicable

ENVIORNMENTAL EVALUATION

Not Applicable

Implementability and Public Participation

Public Participation into the selection of an alternative is a key aspect of the Clean Water State Revolving Fund Process. The two possible options, lift station improvements and “No-Action” would be provided to the public for review during the public information meeting.

Technical and Other consideration

- A. System Reliability

Option 1 – Upgrades to existing lift stations will improve reliability and energy efficiency of the sewer system.

Option 2 – “No-Action”

This option would result in a segmented approach to upgrading the lift stations. As components fail, the Township would repair and upgrade the lift stations. This option provides the lowest possible system reliability for the project area and the highest possible replacement cost.

- B. Structural Integrity

Not Applicable

- C. Sludge and Residuals

Not Applicable

D. Industrial/Commercial/Institutional Usage

No significant large scale users located within the proposed project area.

E. Growth Capacity

The proposed work will accommodate growth over the next 20 years.

F. Areas Currently Without Sewers

Not Applicable

G. Reliability

Replacing the aging lift station components will increase the reliability of the lift stations.

H. Alternative Sites and Routing

Not Applicable

I. Combined Sewer Overflows

Not Applicable

J. Contamination at the Project Site

The work would take place in existing lift stations so there would be little disturbance outside of the lift stations.

SELECTED ALTERNATIVE

Description

The selected alternative is to upgrade the pumps, electronics, SCADA, and generators at the existing lift stations.

Relevant Design Parameters

- A. Major process features.
Proposed Project to include the removal and replacement of aging lift station components.
- B. The unit processes and sizes as related to service area needs.
The lift station components will be replaced at the same elevations and sizes as the existing parts.

- C. Design criteria (e.g., process loading, existing and projected design flows, and other aspects of the preliminary basis of design). Per 2014 10-States Standards and Michigan EGLE regulations.
- D. Residuals management such as haul routes, times, and frequencies.
Haul routes, construction means and methods are to be determined by the contractor. The engineer shall be responsible for oversight to ensure that they follow permit requirements issued by the Marquette County Road Commission
- E. Schedule for design and construction.
 - June 1, 2022: Submitted Project Plan
 - October 2022: Receive funding for lift station improvements
 - October 2022: Begin design engineering process
 - January 2023: Part 1 of Application Submitted
 - February 2023: Part 2 of Application Submitted
 - March 2023: Bid Advertisement
 - April 2023: Bid Opening
 - June 2023: Loan Closing
 - October 2023: Construction complete, project close out

Controlling Factors

- A. Service area population, including any special users (e.g., industrial or commercial customers).
No special users within the proposed project area. Numerous large users are located throughout the overall system.
- B. Characteristics of influent wastewater and treatment residuals.
The collection main takes in wastewater from residential and commercial customers. The influent is treated at the Marquette Area Wastewater Treatment Facility.
- C. Permit requirements necessary for construction, design, and operation of the selected alternative.
A Permit from EGLE will be required to perform the necessary improvements to the lift stations.
- D. Stipulations in court orders or EGLE findings.
Not Applicable
- E. Proposed effluent limits.
None
- F. Local health department findings and directives.
None
- G. Mitigation of environmental impacts resulting from project construction and continued long-term operation.
Soil Erosion and Sedimentation Control Permit will be required by Marquette County, to be supplied by the contractor. This shall protect environmental resources located within the project area.

SPECIAL ASSESSMENT DISTRICT PROJECTS

Not Applicable

SENSITIVE FEATURES

The environmental impacts of this project are limited due to the fact that the proposed project is limited to the existing lift stations. An all-inclusive environmental map is included in the attachment. The map includes wetland locations, existing streams and LUST sites.

Mitigation of Environmental Impacts

No direct adverse environmental impacts are expected for this project. To address possible impacts on the storm sewer infrastructure, soil erosion and sedimentation control (SESC) measures will be taken. This would include silt fence, check dams and inlet sedimentation traps. An SESC permit would be required through Marquette County to address this item of construction.

Schedule for Design and Construction

- June 1, 2022: Submitted Project Plan
- October 2022: Receive funding for lift station improvements
- October 2022: Begin design engineering process
- January 2023: Part 1 of Application Submitted
- February 2023: Part 2 of Application Submitted
- March 2023: Bid Advertisement
- April 2023: Bid Opening
- June 2023: Loan Closing
- October 2023: Construction complete, project close out

TRANSMISSION SYSTEM DOCUMENTATION

Capacity

The proposed lift station improvements project is capable of handling the projected 20 year sewer demand.

Engineers Opinion of Cost

Item Description	Unit	Quantity	Unit Cost	Total Cost
Sewage Pumps	Ea	6	\$20,000	\$120,000
Electronics	Ea	3	\$150,000	\$450,000
SCADA	Ea	3	\$50,000	\$150,000
Generator	Ea	2	\$100,000	\$200,000
Construction Subtotal				\$920,000
Contingency (20%)				\$184,000.0
Engineering (15%)				\$138,000.00
Administration				\$50,000
Project Total Cost Opinion				\$1,292,000

User Costs

- *Engineers Opinion of Cost*
\$1,292,000
- *Estimated operation and maintenance costs, including replacement of equipment which may be necessary to ensure that the waterworks function properly throughout its useful life.*

See Appendix Attachment E for a summary of Sewer Budget Expenses including O & M costs. 2020 operation and maintenance costs were \$1,022,214.64.

Disadvantaged Community

See attached worksheets.

USEFUL LIFE

The life expectancies of the proposed items to be replaced vary. A pump lasts about 20 years, a generator lasts 40 years, and SCADA telemetry hardware and a control panel last about 25 years. With these life expectancies the weighted useful life of the project is about 27.6 years. A calculation showing the weighted useful life of the project is shown below.

Life Values:

Pumps \$120,000 X 20 years = \$2,400,000 years

Electronics \$450,000 X 25 years = \$11,250,000 yrs

SCADA \$150,000 X 25 years = \$3,750,000 years

Generators \$200,000 X 40 years = \$8,000,000 years

Weighted Useful Life = Total of Life Values/Construction Costs

Weighted Useful Life = $(\$2,400,000 + \$11,250,000 + \$3,750,000 + \$8,000,000)/\$920,000 = 27.6$ years

EVALUATION OF ENVIRONMENTAL IMPACTS

Direct Impacts

- A. Historical, archaeological, geological, cultural, or recreational areas.
No Impact
- B. Natural settings and sensitive ecosystems (e.g., floodplains, wetlands, endangered species, wild and scenic rivers, sensitive coastal zones, and prime and unique agricultural land).
No impact
- C. Consumption of materials, land, and energy in construction and operation.
The project will take place in existing lift stations. This will greatly reduce the negative environmental impacts posed by this project. Energy will be used during construction activities to perform the necessary construction. There are no unique aspects of construction in regards to this project.
- D. Human, social, and economic impacts (e.g., dislocation, employment changes, and user charges).
Temporary inconveniences will be experienced by the residents that live in the project area. However, the contractor will be responsible to accommodate the needs of the residents to ensure that they are able to safely access their property. User fees will increase to finance the project. The calculation for increased user charges is included in the section above.
- E. Construction and operational impacts.
The contractor will be responsible to accommodate the needs of the residence within the project area during construction. Once the upgrades are completed, the Township will be able to operate its system with a higher level of reliability.
- F. Other impacts.
None

Indirect Impacts

- A. Changes in land use (e.g., open space, floodplains, prime agricultural land, and coastal zones).
None
- B. Changes in air or water quality stemming from primary and secondary development.
Minor impact to air quality during construction due to construction activities. This impact would include necessary dust control measures.
- C. Changes to the natural setting or sensitive ecosystems, or jeopardy to endangered species resulting from secondary growth.
None

- D. Impacts on cultural, human, social, and economic resources.
None
- E. Resource consumption over the useful life of the facility and the generation of wastes.
None
- F. Aesthetic and other impacts.
None

Operational Impacts

Not Applicable

Social Impacts

Not Applicable

CUMULATIVE IMPACTS

- A. Siltation or other impacts caused by successive discharges to the same watercourse over time.

Not Applicable
- B. Water quality impacts from direct discharges and nonpoint sources.

Not Applicable
- C. Indirect impacts from development facilitated by a new interceptor where a new interstate highway or other infrastructure additions will help induce development.

Not Applicable
- D. The impacts from multiple public works projects occurring in the same vicinity upon business or residential access and traffic patterns. Segments occurring in successive years may also have a cumulative disruptive impact.

Not Applicable
- E. Fiscal impacts on the municipality and its citizens resulting from multiple public works projects occurring in the same time frame.

Not Applicable

MITIGATION

Minor mitigation is expected to handle construction related environmental issues.

Mitigation Short-Term Impacts

Short-term impacts shall be addressed with all necessary construction permits. Soil Erosion and Sedimentation Control permit shall be required to be obtained by the contractor prior to construction. Minor inconveniences will exist for the residential population located within the project area. The contractor shall be required to accommodate local traffic to the best of their ability during the construction process.

Mitigation Long-Term Impacts

Long-term impacts from the proposed project include increased reliability to the project area.

General Construction

All EGLE required permits shall be obtained with necessary mitigation measures included. Certain areas will require Soil Erosion and Sedimentation Control Measures be put in place. That permit will be required to be obtained from Marquette County prior to construction.

Siting and Routing Decisions

The proposed project is taking place within existing road right-of-way. There are no real alternative locations that should be evaluated. Traffic control plans will be reviewed and approved by the Marquette County Road Commission during the design phase of the project.

Operational Impacts

The sewer system will continue to function by not taking the lift station out of service long enough to cause sewage to back up

PUBLIC PARTICIPATION

Public Meetings on Proposed Alternatives

Due to the lack of feasible or competitive alternatives to this project, it is the opinion of UP Engineers & Architects and Marquette Township that additional meetings above and beyond Township Board Meetings would be an unnecessary requirement of the decision making process.

The Formal Public Hearing

Scheduled to take place in April 2022 to provide sufficient time to receive and react to public feedback.

Public Hearing Advertisement

A notice of the public hearing must be advertised at least 30 days prior to the hearing in a newspaper of general circulation in the communities affected by the proposed project. A copy of the advertisement and an affidavit confirming its publication must be included in the final project plan. Instructions on

where to find copies of the project plan and how to submit written comments about the project must be included in the advertisement. A model public hearing notice is provided in Attachment D.
Public Hearing Transcript or Recording

The final project plan must be accompanied by one of the following:

- A. *A verbatim transcript of the public hearing, recorded by a court reporter or transcribed by a stenographer from a recording of the proceedings (most preferred).*
- B. *An audio recording of the public hearing*
- C. *A video recording of the public hearing (least preferred).*

Public Hearing Contents

The following items must be discussed during the public hearing:

- A. *A description of the existing lift station conditions.*
- B. *A description of the recommended alternative, including its capital costs and a cost breakdown by project components.*
- C. *A discussion of project financing and costs to users, including the proposed method of project financing and estimated monthly debt retirement; the proposed annual, quarterly, or monthly charge to the typical residential customer; and any special fees that will be assessed.*
- D. *A description of the anticipated social and environmental impacts associated with the recommended alternative and the measures that will be taken to mitigate adverse impacts.*

In the event no one from the public attends the hearing (a reporter would be considered a member of the public, as would members of the applicant's governing body), the public hearing may be opened and closed without a formal presentation of the project plan. However, a transcript or recording must still be submitted with the final project plan documenting this action.

Comments Received and Answered

The final project plan must include the following items:

- A. *A typed list with the names and addresses of the people who attended the public hearing.*
- B. *A copy of any written comments which were received during the public comment period for the proposed project.*
- C. *The applicant's responses to the comments received.*
- D. *A description of any changes which were made to the project as a result of the public participation process.*

Adoption of the Project Plan (Required)

The official period for receiving public comments on the proposed project may either end at the close of the formal public hearing or extend for a several days after the hearing. After the close of the public comment period, an alternative must be selected for implementation by the municipalities participating in the project. The final project plan submitted by the May 1 deadline must include resolutions from all of the participating local units of government to formally adopt the project plan and implement the selected alternative. A sample resolution can be found in Attachment A.

Figure 1-1: General Location Map

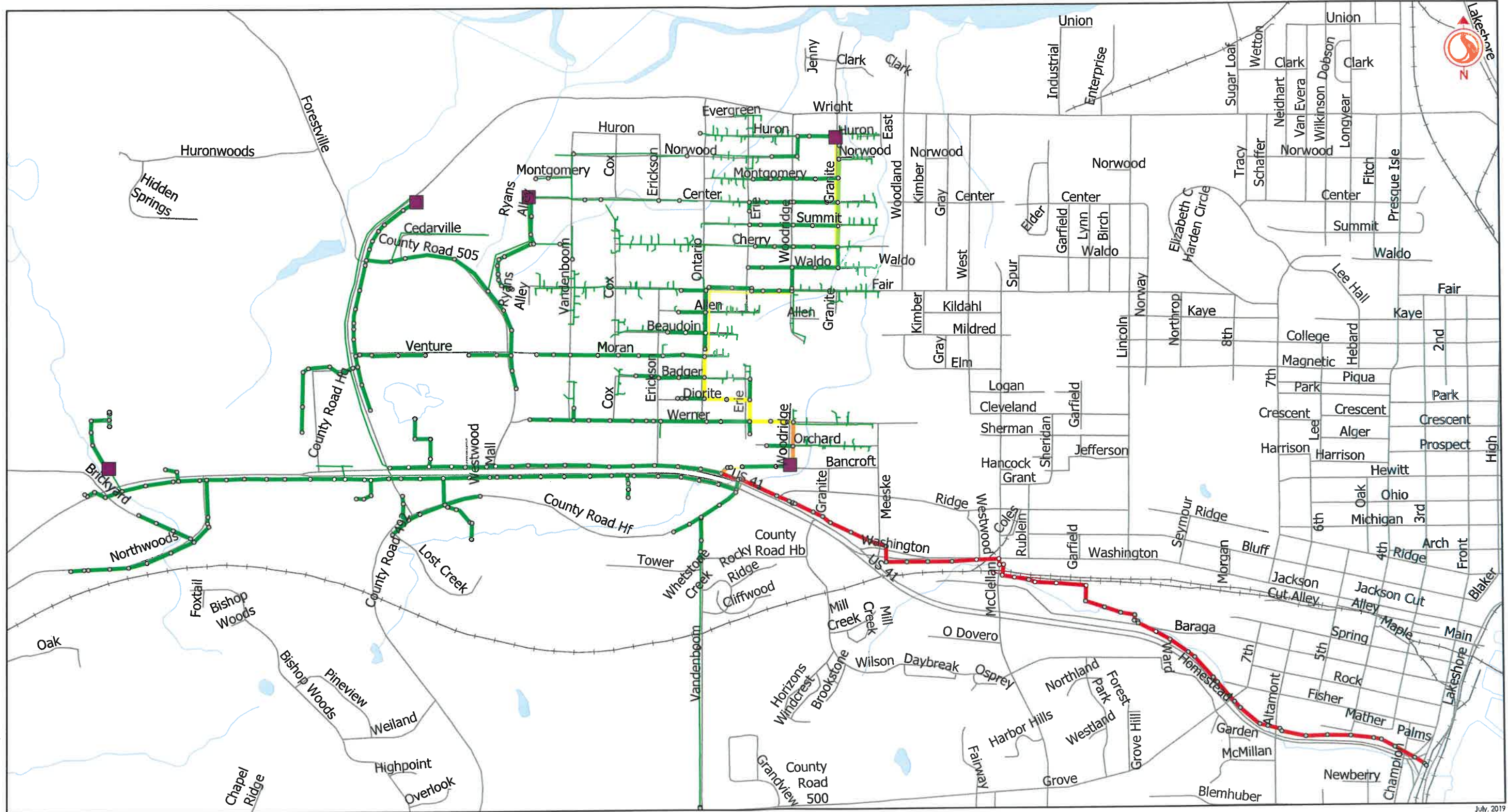


Location Map
Marquette Township, MI



Source: ESRI, UPEA GIS. MAB 5.9.2011





7/23/2019 09:27 AM By: shurline

July, 2019
110861443

Original Sheet - ANSI B

- Pump Station
- Sanitary Sewer Manholes
- Customer Accounts**
- 614-818
- 205-409
- 819-1020
- 410-613
- 614-818
- 819-1020
- Sewer Gravity Mains**
- 0-204
- 205-409
- 614-818
- 819-1020
- Sewer Pressurized Mains**
- 0-204
- 819-1020

1:17,103

Client/Project
Marquette Township
SAW Grant
Criticality Analysis

Figure No.
1.1

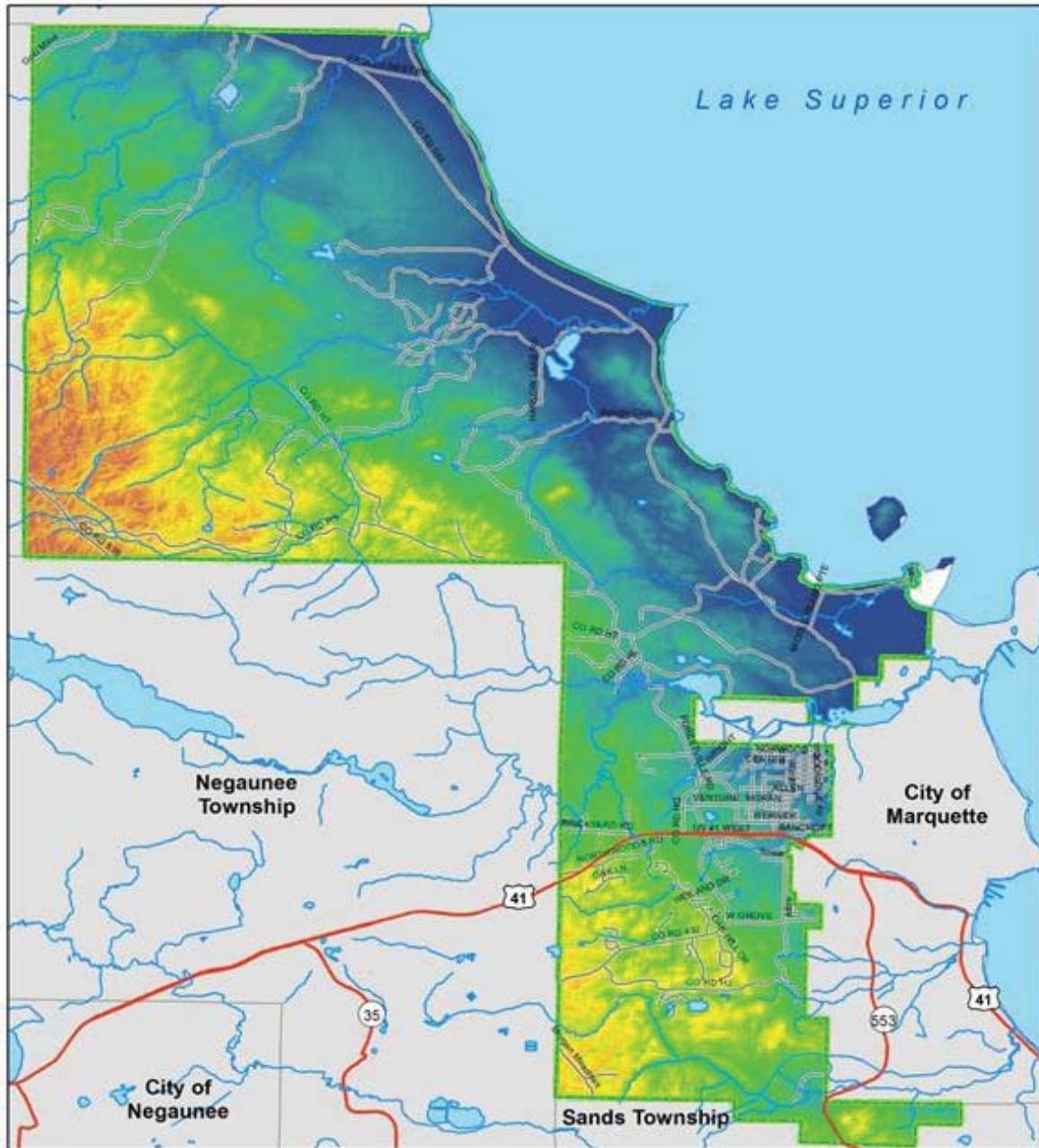
Title
Customer Accounts



3754 Ranchero Drive, Ann Arbor, Michigan 48108
Stantec does not certify the accuracy of the data.
This map is for reference only and should not be used for construction.



Figure 3-3: Digital Elevation Model





Topography
Marquette Township, MI



0 3,900 7,800 Feet



Legend

 Water	 High Elevations
 Highways	 Low Elevations
 Township Boundary	
 Marquette Township Roads	

Source: Marquette County Digital Elevation Model, MQT County RMD, UPEA GIS, MAB, 3.9.2011

Figure 1-2: Township Base Map

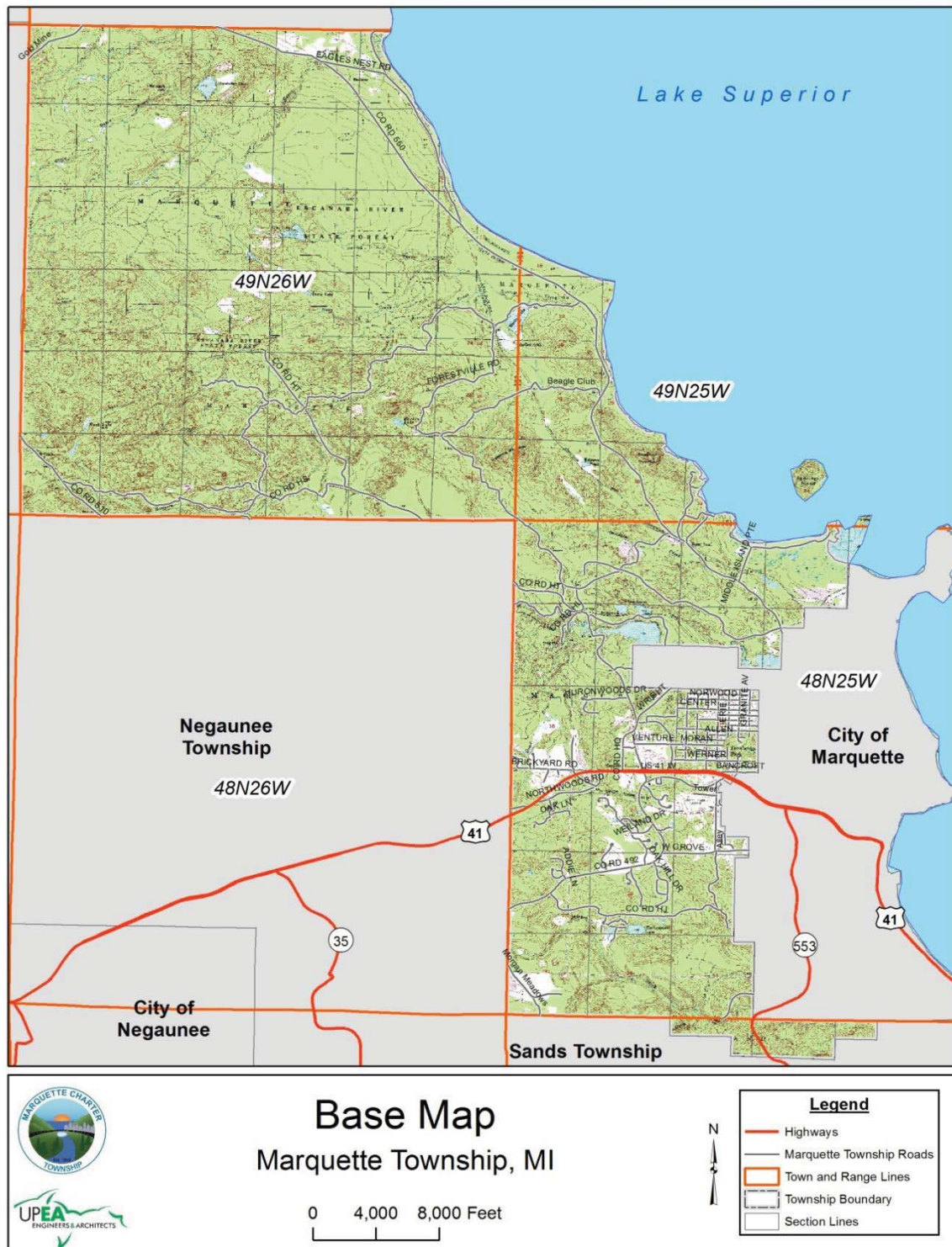
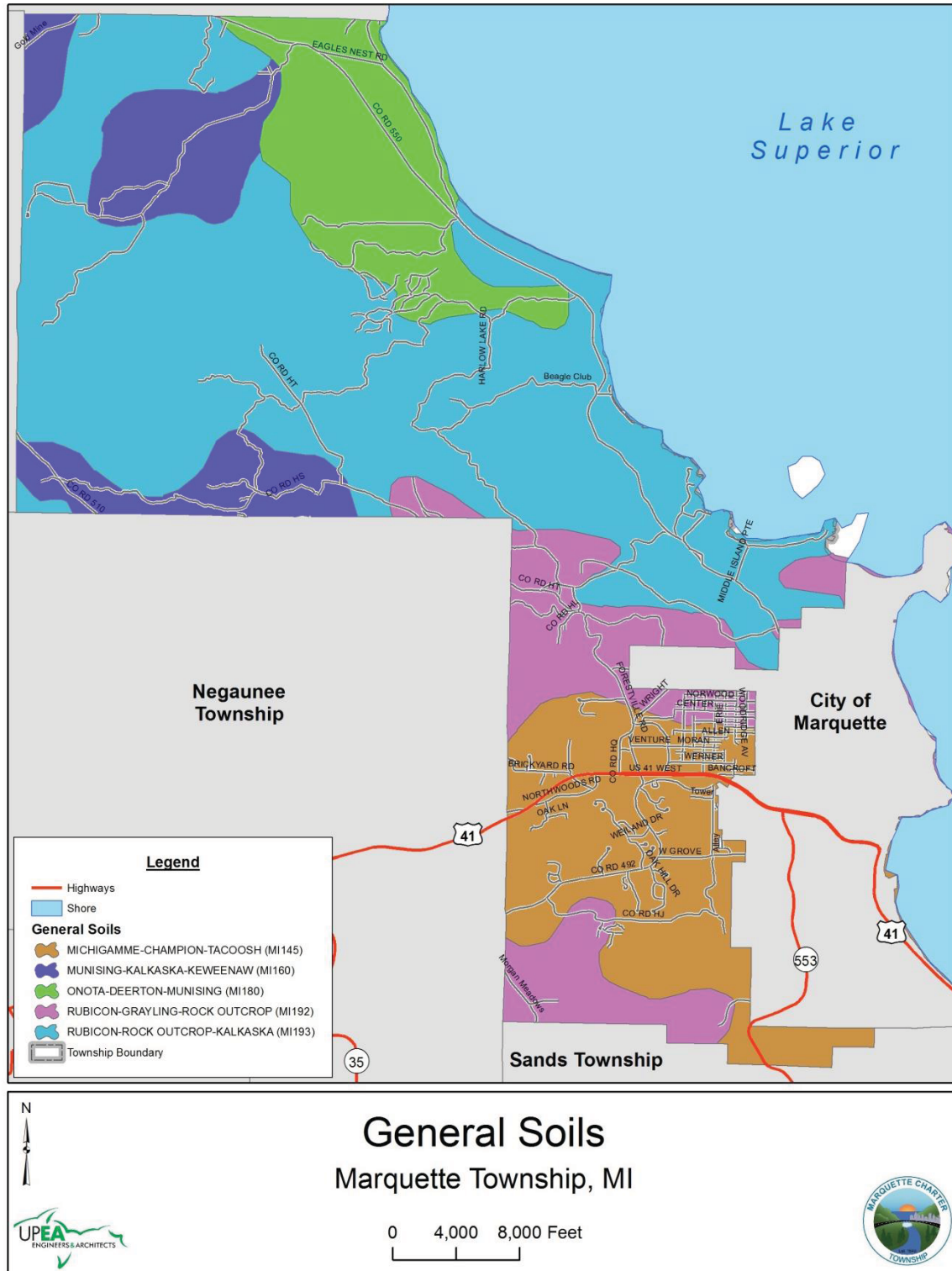


Figure 3-4: General Soil Types Map



Map Legend

Change what items you see on the map by using the checkboxes

Wetland Data

- Wetland (Hydric) Soils
- National Wetlands Inventory 2005

Potential Wetland Restoration Wetland Overlay

- Highest Potential - Hydric and Presettlement
- High Potential - Hydric Soils Only
- Moderate Potential - Presettlement Wetlands Only

Part 303 Final Wetlands Inventory

- Wetlands as identified on NWI and MIRIS maps
- Soil areas which include wetland soils
- Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils

Stream Data

Coastal Data

Historic Landcover

SSURGO Soils

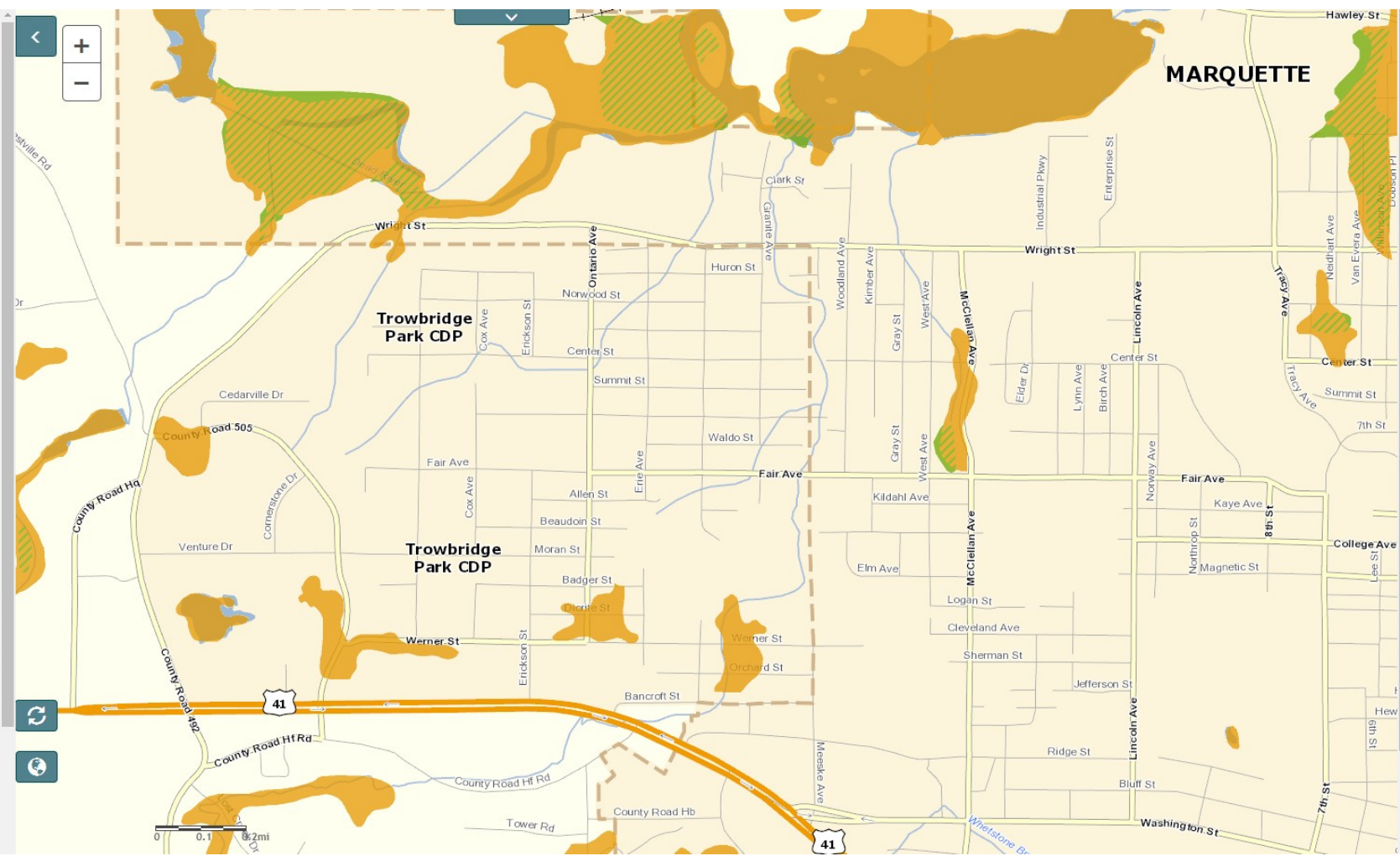




Figure 3-5: Hydric Soils

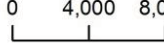




Hydric Soils
Marquette Township, MI



0 4,000 8,000 Feet



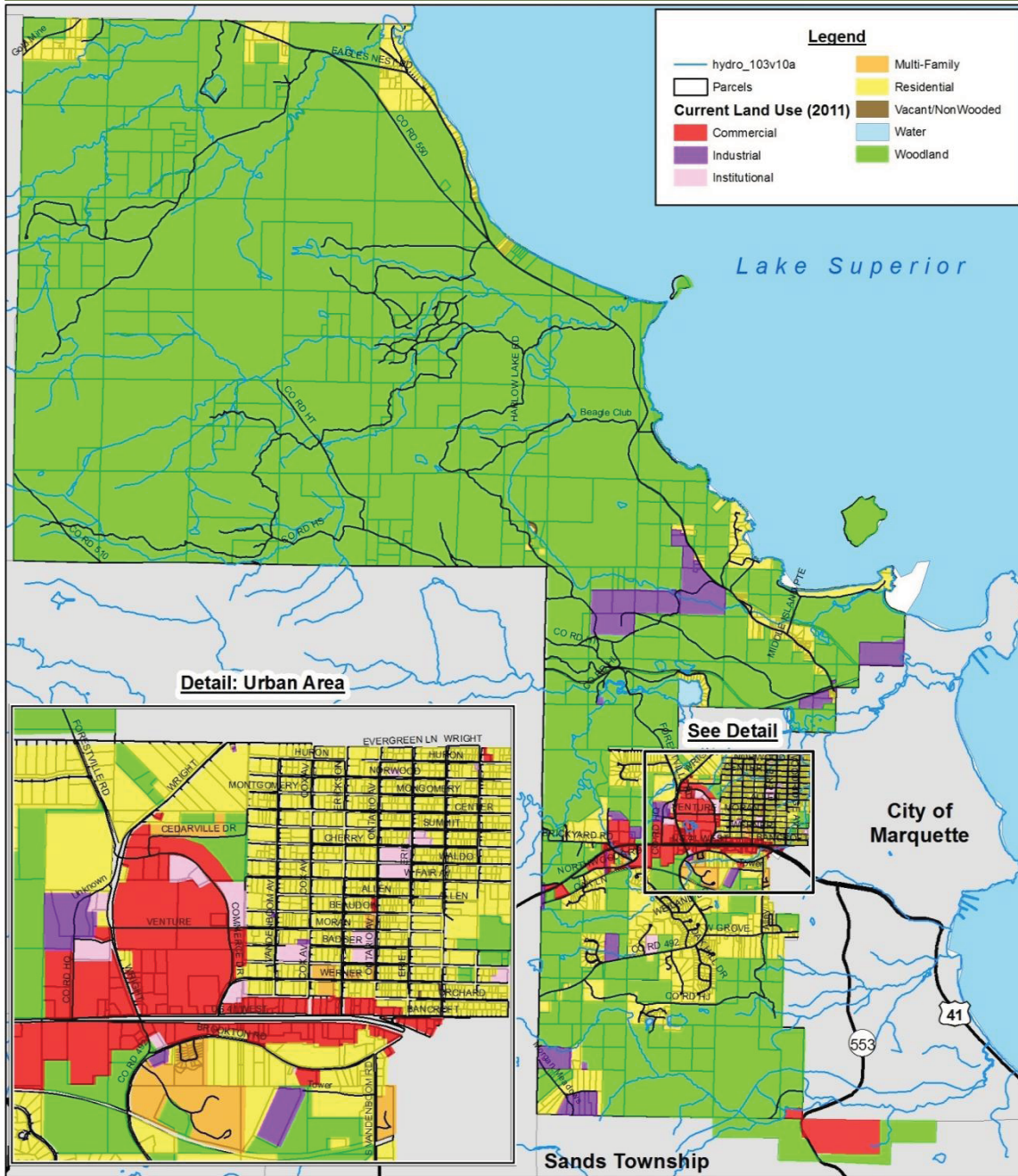
Legend

- Highways
- Shore
- Hydric Soils
- Township Boundary

Source: Michigan Geographic Data Library, UPEA GIS, MAB, 5.9.2011



Figure 4-1: Current Land Use



Current Land Use
Marquette Township, MI

UPEA ENGINEERS & ARCHITECTS

MARQUETTE CHARTER TOWNSHIP

0 4,000 8,000 Feet

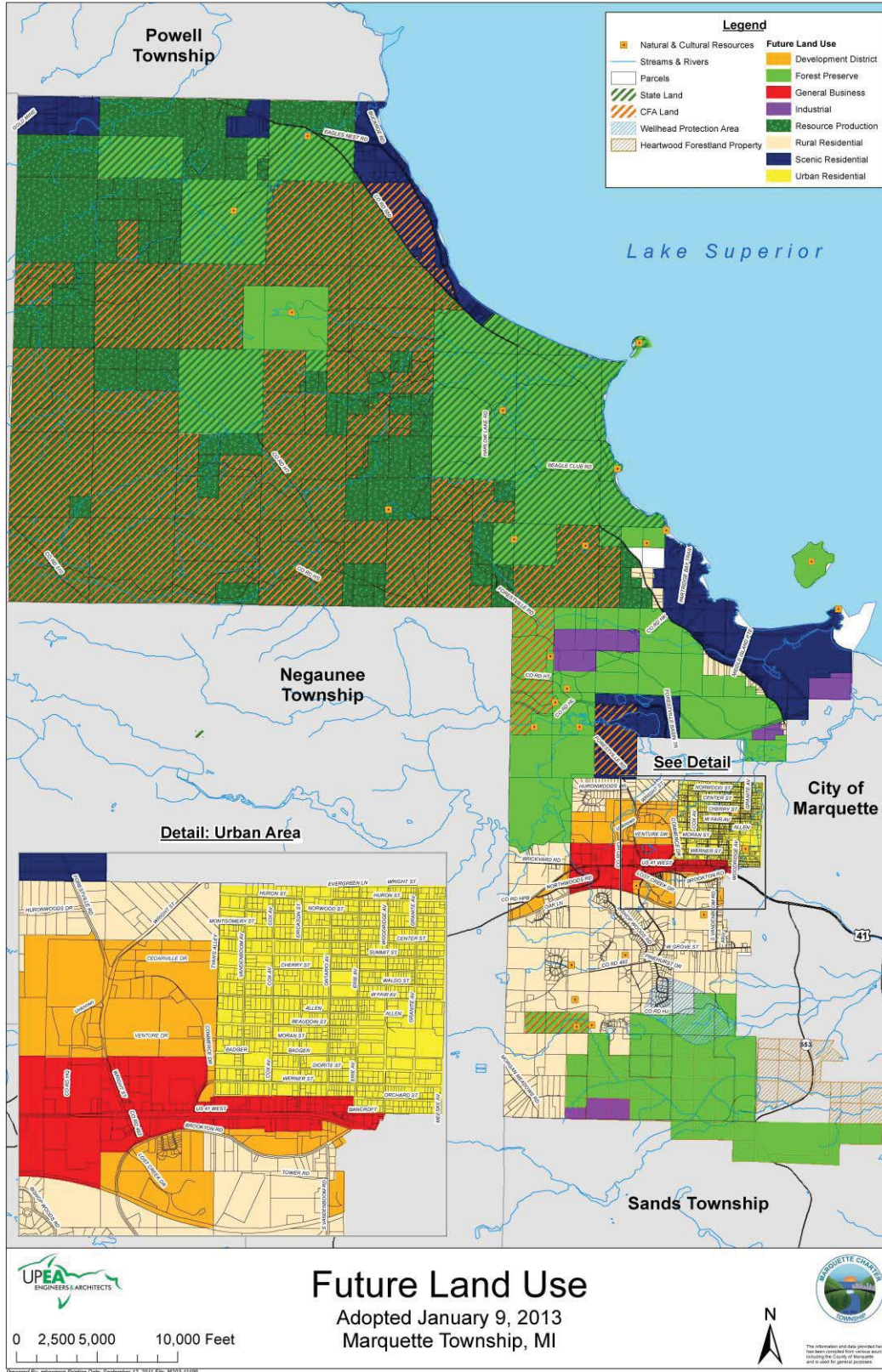
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The information and data provided herewith has been compiled from various sources, including the County of Marquette and is used for general purposes.

Prepared By: mbergeon Printing Date: September 12, 2011 File: M203-11199

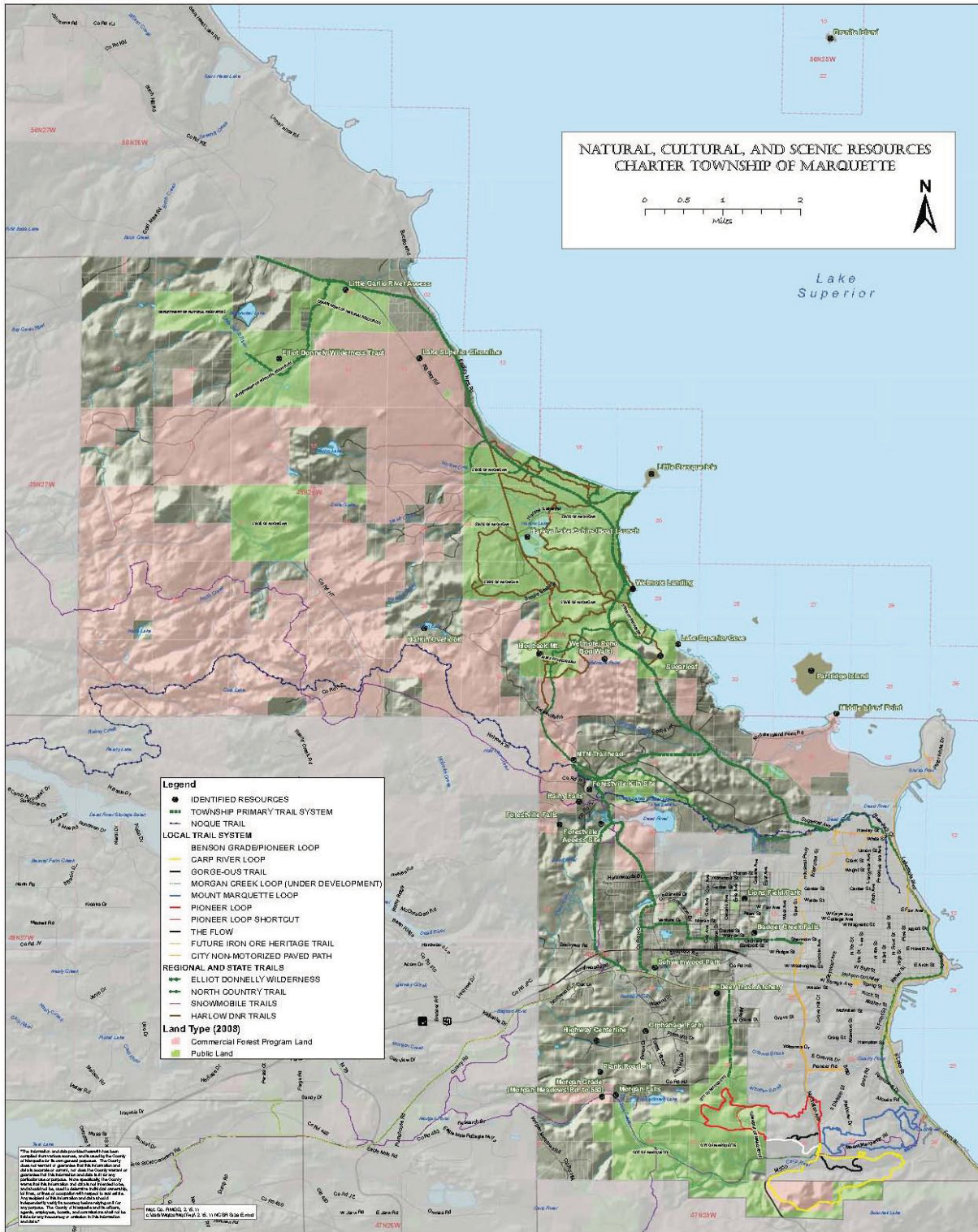


Figure 8-1: Future Land Use Map



A small playground located on Badger Street that primarily serves preschoolers attending programs through the Parish.

Figure 5-5: Natural, Cultural and Scenic Resources Map

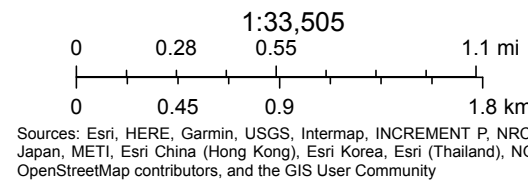


Environmental Mapper



April 12, 2022

- | | | | | | |
|--|---------------|--|-----------------------------------|--|---|
| | SFC | | Brownfield Loan | | Active Tanks |
| | WRG | | Brownfield Grant | | Sites of Environmental Contamination (Part 201) |
| | TIF - Act 381 | | Baseline Environmental Assessment | | Open |
| | Assessments | | Closed Tanks | | Closed |





MARQUETTE CHARTER TOWNSHIP

1000 Commerce Drive
Marquette, Michigan 49855
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www.marquettetownship.org

Board Action Item

Board Meeting Date: May 23, 2022
Agenda Item #: 6.A.
Proposal: To approve a resolution adopting a CWRP final project plan and designate an authorized project representative.
Presented by: Leonard Bodenus

Background:

UP Engineers & Architects was contracted by Marquette Township to complete the Clean Water State Revolving Fund (CWRP) Project Plan for potential funding through the State Revolving Fund (SRF) Program. The Project Plan was specific to the 2023 construction items identified by Township Staff for improvements to the Marquette Township Sewer System. This work includes updated pumps and electronics at the Wright, Bancroft, and Huron Street Lift Stations. Also updates 30-year old generators at Huron and Bancroft. Update sewer SCADA at all lift stations. The approval of this project plan and the adoption of the attached resolution moves the application process forward with the State of Michigan but does not require the Township to accept a funding offer.

Attachments:

1. 2022 CWRP Resolution
2. 2022 CWRP UPEA Tran Letter

Cost: \$ NA

Budget Account: NA

Recommended motion:

To approve a resolution adopting a CWRP final project plan for wastewater system improvements and designate an authorized project representative.

Mission Statement:

“Recognize and meet the needs of the Township Community.”



A RESOLUTION ADOPTING A FINAL PROJECT PLAN FOR WASTEWATER SYSTEM IMPROVEMENTS AND DESIGNATING AN AUTHORIZED PROJECT REPRESENTATIVE

WHEREAS, **Marquette Township** recognizes the need to make improvements to its existing wastewater treatment and collection system; and

WHEREAS, **Marquette Township** authorized **UP Engineers & Architects, Inc.** to prepare a Project Plan, which recommends the construction of **updated pumps and electronics at the Wright, Bancroft, and Huron Street Lift Stations. Also update 30-year old generators at Huron and Bancroft. Update sewer SCADA at all lift stations;** and

WHEREAS, said Project Plan was presented at a Public Hearing held on **May 23, 2022** and all public comments have been considered and addressed;

NOW THEREFORE BE IT RESOLVED, that **Marquette Township** formally adopts said Project Plan and agrees to implement the selected alternative (Alternative No. 1).

BE IT FURTHER RESOLVED, that the **Township Manager**, a position currently held by **Jon Kangas**, is designated as the authorized representative for all activities associated with the project referenced above, including the submittal of said Project Plan as the first step in applying to the State of Michigan for a revolving fund loan to assist in the implementation of the selected alternative.

Yeas:

Nays:

Abstain:

Absent:

I certify that the above Resolution was adopted by **Marquette Township** on **May 23, 2022**.

BY: Rand J. Ritari, Township Clerk

Name and Title (please print or type)

Signature Date



May 18, 2022

Marquette Township Board of Commissioners
1000 Commerce Drive
Marquette, MI 49855

Dear Marquette Township Board,

UP Engineers & Architects was contracted by Marquette Township to complete the Clean Water State Revolving Fund (CWRP) Project Plan for potential funding through the State Revolving Fund (SRF) Program. The Project Plan was specific to the 2023 construction items identified by Township Staff for improvements to the Marquette Township Sewer System. This work includes updated pumps and electronics at the Wright, Bancroft, and Huron Street Lift Stations. Also update 30-year old generators at Huron and Bancroft. Update sewer SCADA at all lift stations. These improvements are needed to improve the operational capabilities and emergency reliability of the system. The current project cost estimate is at \$1,292,000. It is projected that this project size, with a term of 30 years and a rate of 2.125%, would result in a rate increase of approximately \$3 per residential user. It is worth noting that this assumes zero dollars in principal forgiveness/grant or the use of any current annual reserves that the Township collects on the Marquette Township Sewer System.

If EGLE makes a funding offer to Marquette Township for the proposed project, an analysis will be performed by UPEA to determine if that is the most cost-effective funding option. The approval of this project plan and the adoption of the attached resolution moves the application process forward with the State of Michigan but does not require the Township to accept a funding offer. UPEA will be evaluating all options once a funding offer is made and bringing that information back to the Township Board for review/discussion/approval.

Kinds regards,

Matthew Treado, PE
UPEA Ishpeming Office Manager
424 S Pine Street, Ishpeming, MI
906-235-4810