

2022 Engineering Department Annual Report



West Front Street Bridge

Our Staff



Timothy Lodge, P.E.

•City Engineer

Alexander Yockey, P.E.

•Civil Engineer II

John McWethy

•Public Services Assistant

Zach Cole, P.E.

•Civil Engineer I

Kyle Kobylski, P.E.

•Civil Engineer I

Brandon Glowacki

•Engineering Aide

Tristan Graham

•Engineering Aide

Teresa Nichols

•Engineering Assistant

Staff Accolades: Staff completed over 130 hours of professional development training in topics such as, Highway Bridges Certification, MDOT Federal Aid, MDOT Concrete Paving, and Michigan Technology Engineers Workshop. Staff holds professional license in Storm Water, Soil Erosion and Sedimentation control, and Bridge Inspection.

Contact Information

City of Traverse City
Engineering Department
Governmental Center
2nd Floor
400 Boardman Avenue
Traverse City, MI 49684
P: (231) 922-4460 Office
F: (231) 922-4457

***Mission Statement:** To develop, implement, design, monitor and coordinate all public improvements constructed by or for the City.*

Engineering Department Overview

The work performed by the Engineering Department includes:

- Utility reviews in conjunction with land use permits, right-of-way permits, stormwater runoff control permits, and soil erosion permits
- Administration and inspection of right-of-way permits, stormwater runoff control permits, and soil erosion permits
- Motorized and non-motorized traffic counts and studies
- Engineering design of City infrastructure projects such as:
 - Street and Parking Lot Reconstruction and Resurfacing
 - Storm Water Quality, Sewer, and Water Systems
 - Bridge and Culvert Inspection, Load Ratings, Construction, and Rehabilitation
 - City Building Construction, Rehabilitation, and Renovation
 - Sidewalk Improvements, Repair, and Infill
 - Bike Paths and Trails
 - City Park and Bayfront Improvements
- Construction engineering and site inspection
- Contract administration
- Development of City engineering reports and guidelines for engineering best practices
- Historic record keeping for City projects
- Collaboration with numerous adjacent municipalities, advocacy groups, and private entities within the City limits
- Has representatives for numerous multi-jurisdictional committees, including:
 - Regional Bridge Council
 - Regional Transportation Planning and Traffic Assessment (TTCI)
 - North Region Pedestrian and Bicycle Committee (MDOT)
- Assists in several other aspects of the City, including:
 - Ordinance Compliance and Development
 - Economic Development Projects
 - Asset Management
 - Budgeted Capital Improvements
 - Grant Applications
 - Transportation Planning

What We Do



PERMITS



REVIEW



DESIGN



BUILD

Featured Projects: West Front Street Bridge, Garfield Avenue Resurfacing, and Phase II of the Boardman Lake Trail



West Front Street Bridge:

-This project included bridge removal and replacement along with extension of a water main. After a delayed start in fall of 2021 we were able to have the road opened just in time for Cherry Festival 2022.



Garfield Avenue Resurfacing

- Resurfacing from Hannah Ave to Front Street was completed in May 2022. We converted from a 4 lane road to 3 lanes with bike lanes south of Eighth Street. This project was funded through the MDOT Small Urban Funding (\$330,000) and COVID Funding(\$35,602)



Boardman Lake Trail Phase II:

-The 4 mile plus loop spanning over Boardman Lake and additional bridges near Medalie Park was completed in the Summer of 2022 and open for the public enjoyment.

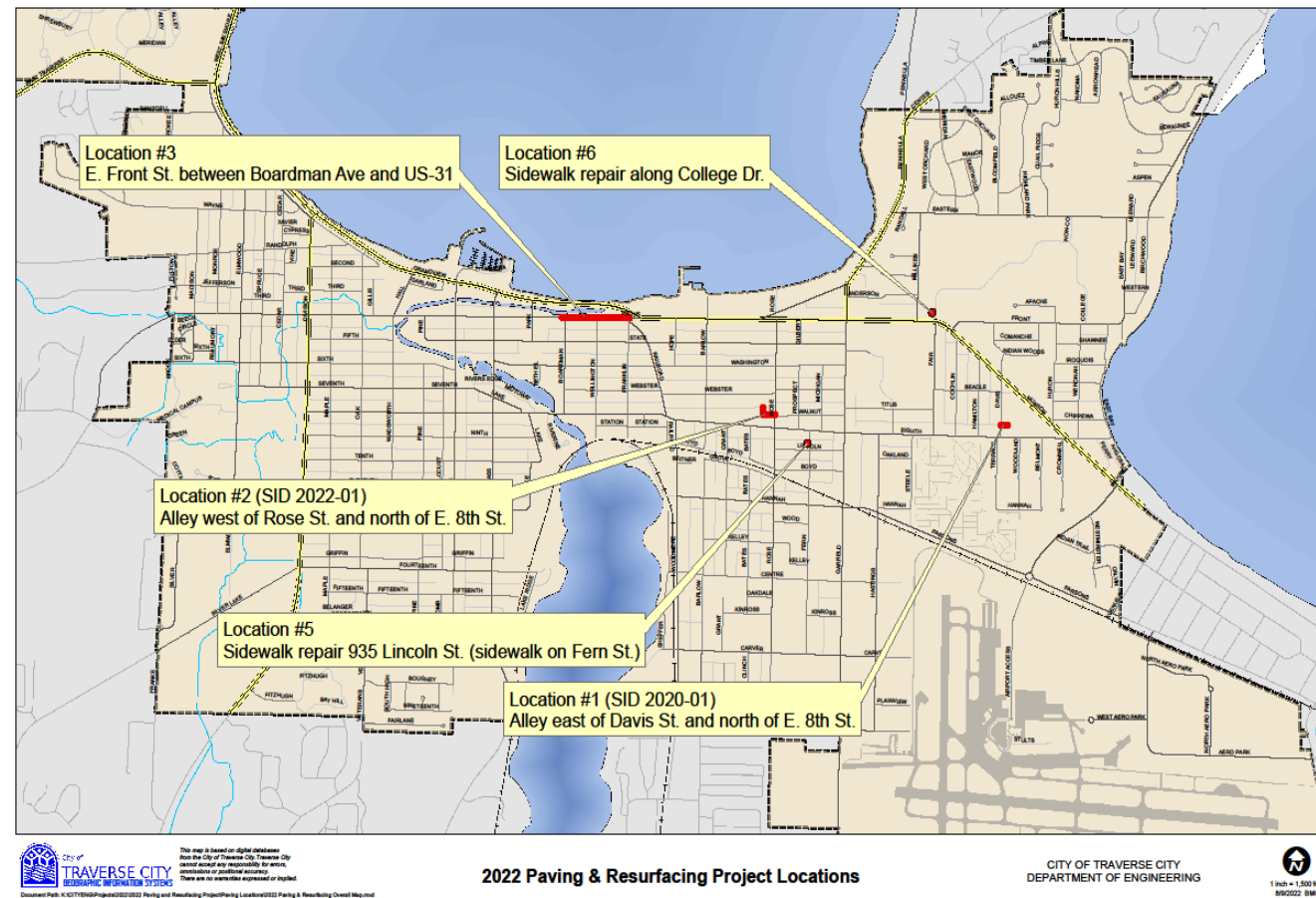
Pavement Preservation



Front
Street
Before



Front
Street
After



The Engineering Department prepared project specifications for the HMA paving projects discussed over the past few years which were deferred during the COVID 19 pandemic. These include two Special Improvement District paving projects previously approved by the City Commission, and resurfacing East Front Street between Boardman.

West Boardman Lake Trail – Phase I



West Boardman Lake Trail – Phase II



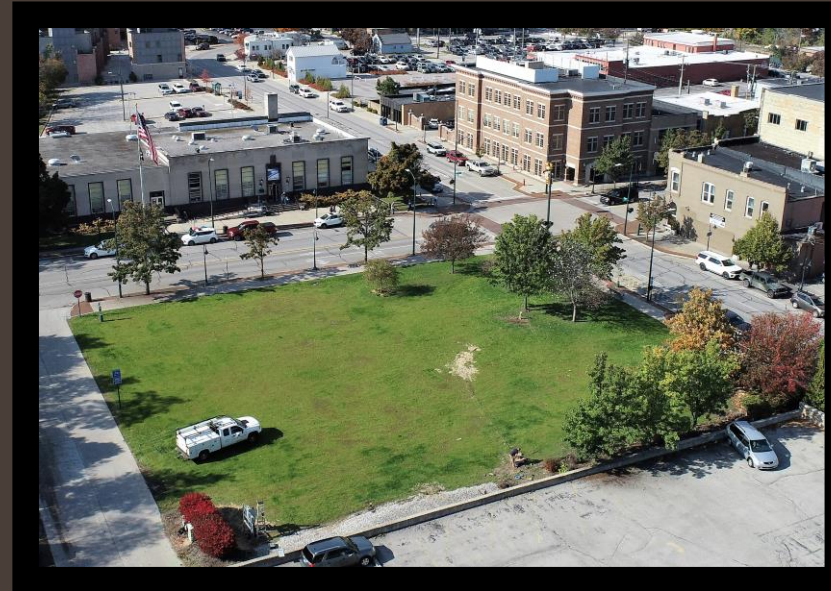
Phase I of the West Boardman Lake Trail was substantially complete in August of 2021. This new section of the trail is a one-mile paved segment between Fourteenth Street and Dendrin Drive next to NMC's University Center. Phase 2 of the project was completed in July 2022 and stretched to Medalie Park. The completion of the loop included a boardwalk spanning over Boardman Lake and additional bridges near Medalie Park. Now complete, bicyclists and pedestrians are able to circumnavigate the Boardman Lake Trail through a four +mile loop that is a part of the TART Trails network. The City, in partnership with TART Trails, Garfield Township, and Grand Traverse County worked together to complete this project



CIVIC SQUARE



Previously a financial institution the DDA acquired 203 S Union Street corner of State Street and Union in 2021. The Civic Square Demolition project was completed in fall of 2022.



Indian Woods Playground



Replaced existing play equipment with a new structure that meets current safety needs and ADA accessibility.



Elmer's Crane & Dozer was hired to complete the work for the site work while our Parks Department assisted in landscaping, and Grand Traverse Conservation District construct the timber stairs.



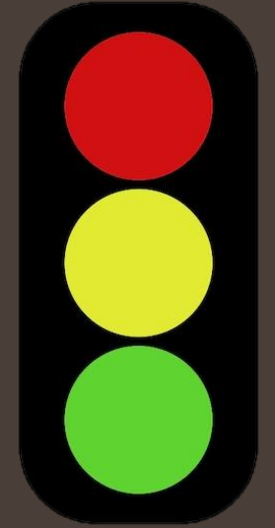
The City received a Michigan Natural Resources Trust Fund Grant for \$50,000, along with \$62,000 from the Brownfield Bridge Trust Park Improvement fund to help with the cost of the improvements.

Hickory Hills Snowmaking Grant Phase II

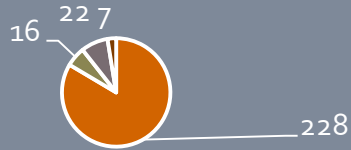


Hickory Hills Phase II work started this fall with the addition of 10 new snowmaking hydrants, a third booster pump to the snowmaking system, and drain system basins for erosion control. This is the start in moving Hickory Hills into a multi-purpose and four season use. In the 2023 we will continue to work on the Nordic Trail Homologation , and sledding hill.

Traffic Signals

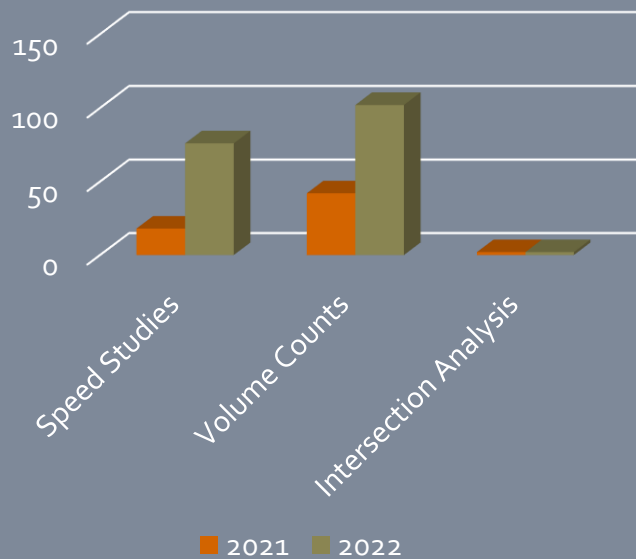


PERMITS



- Right-of-Way
- Stormwater Run-off Control
- Soil Erosion
- Utility Review

TRAFFIC DATA

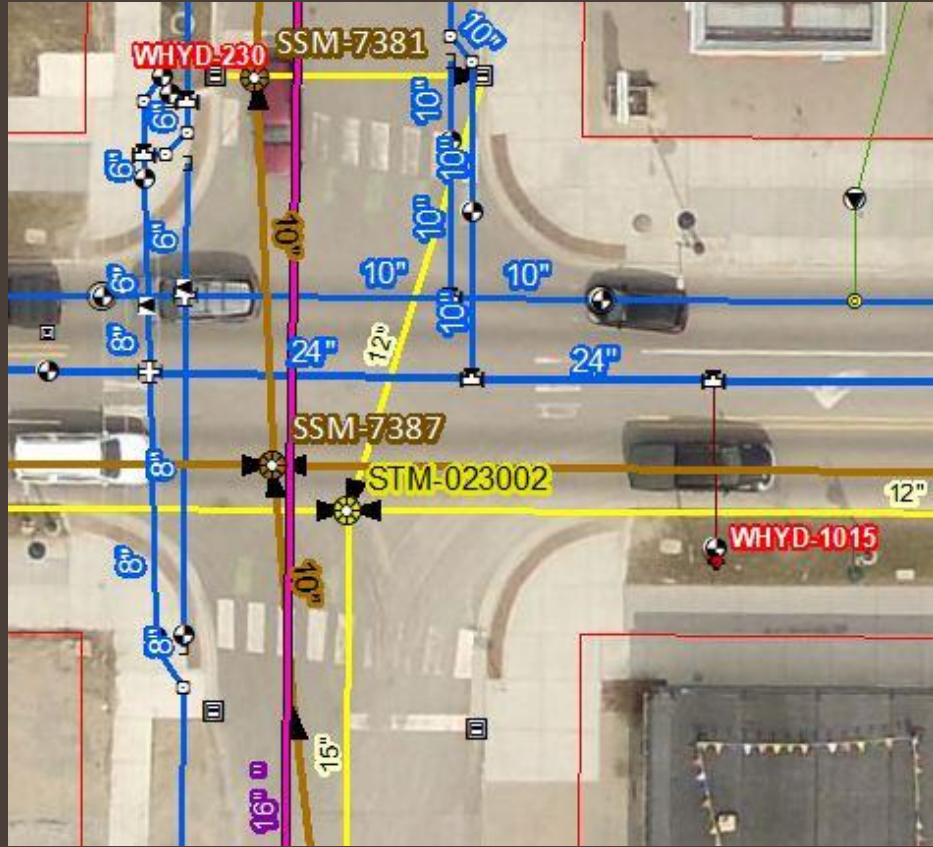


- Installed Pedestrian Signals in two locations:
 - Hastings Street at Parsons Road
 - Hannah Avenue at Garfield Avenue
- Enhanced the signal operation at 8th St. and Boardman Ave. to include the newly constructed commercial building entrance on the south leg as well as exploring the capability of pedestrian detection for signal operation
- Hired a traffic consultant to assist with evaluating the Hall St. and West Front St. intersection for operational options including a traffic signal

Traffic Calming

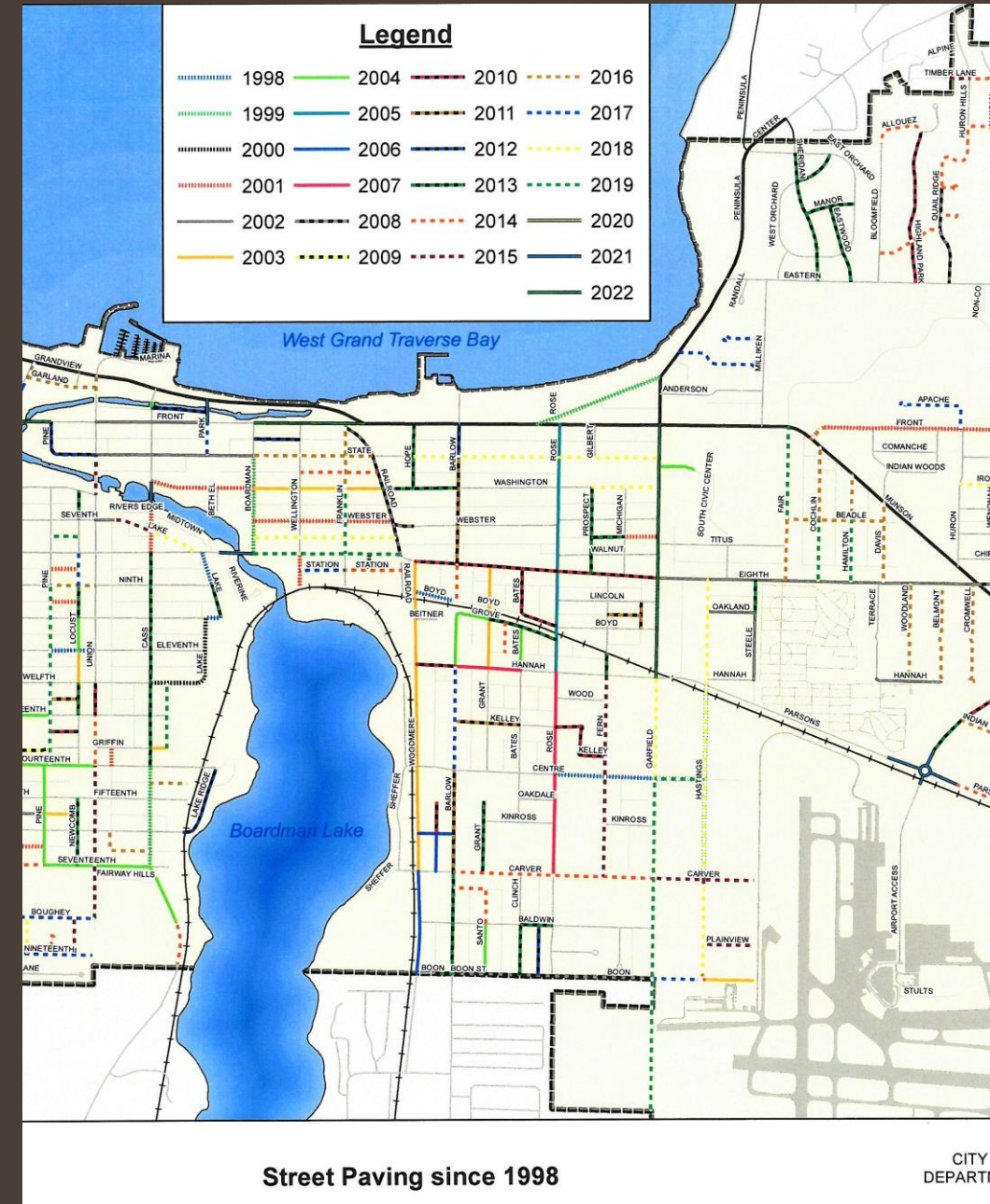
- Full time staff position that emphasis on traffic reporting
- Monitor and analyze the effectiveness and usage of pedestrian safety treatments.
- Data collection and analysis of Traffic Volume Counts, Stop Warrants, and Speed Studies.

GIS Integration



We are continuously updating our GIS maps to show:

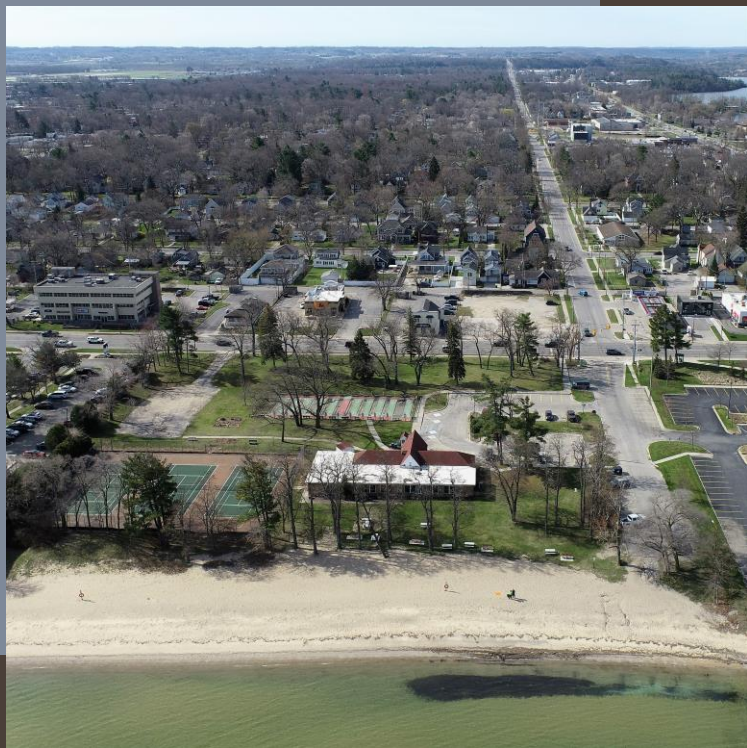
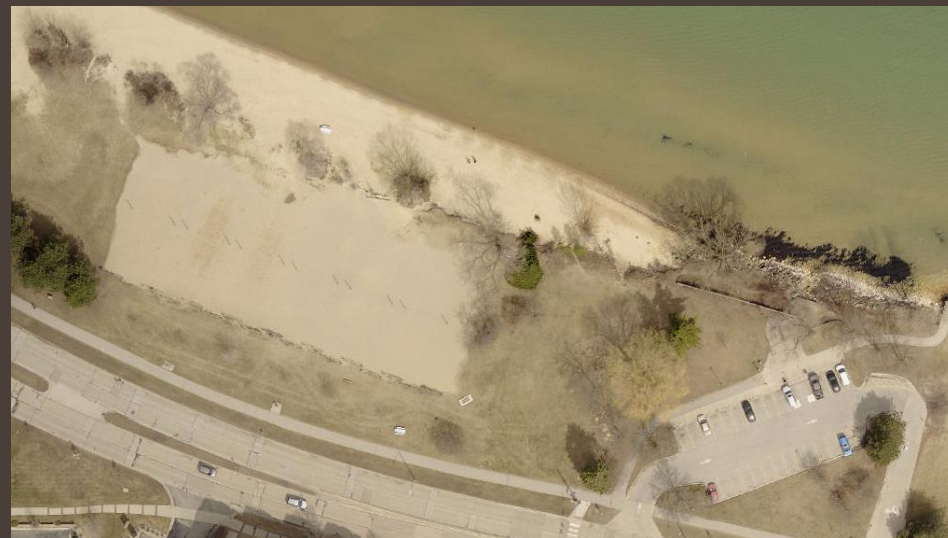
- Water Main Lines
- Sanitary Sewer Lines
- Storm Sewer Lines
- Historical Street Paving
- Existing and Proposed City Sidewalks





Upcoming Projects

- North Cass Street Bridge
- South Union Street Bridge
- Pavement Preservation
- Annual Street Reconstruction
- East Front Street Sanitary Sewer Rehabilitation
- Madison Street Reconstruction
- Jefferson Street Reconstruction
- US-31 Watermain Replacement
- Hickory Hills & other park projects
- Volleyball Court Expansion
- Fire Station #1 & #2 Improvements
- Senior Center
- Harbor Master Building Repairs



An aerial photograph of a city, likely Madison, Wisconsin, situated along a large body of water (Monona Lake). The city features a mix of historic and modern architecture, surrounded by dense green forests. A semi-transparent grey rectangular overlay covers the left and central portions of the image, serving as a background for the 'THANK YOU' text.

THANK YOU