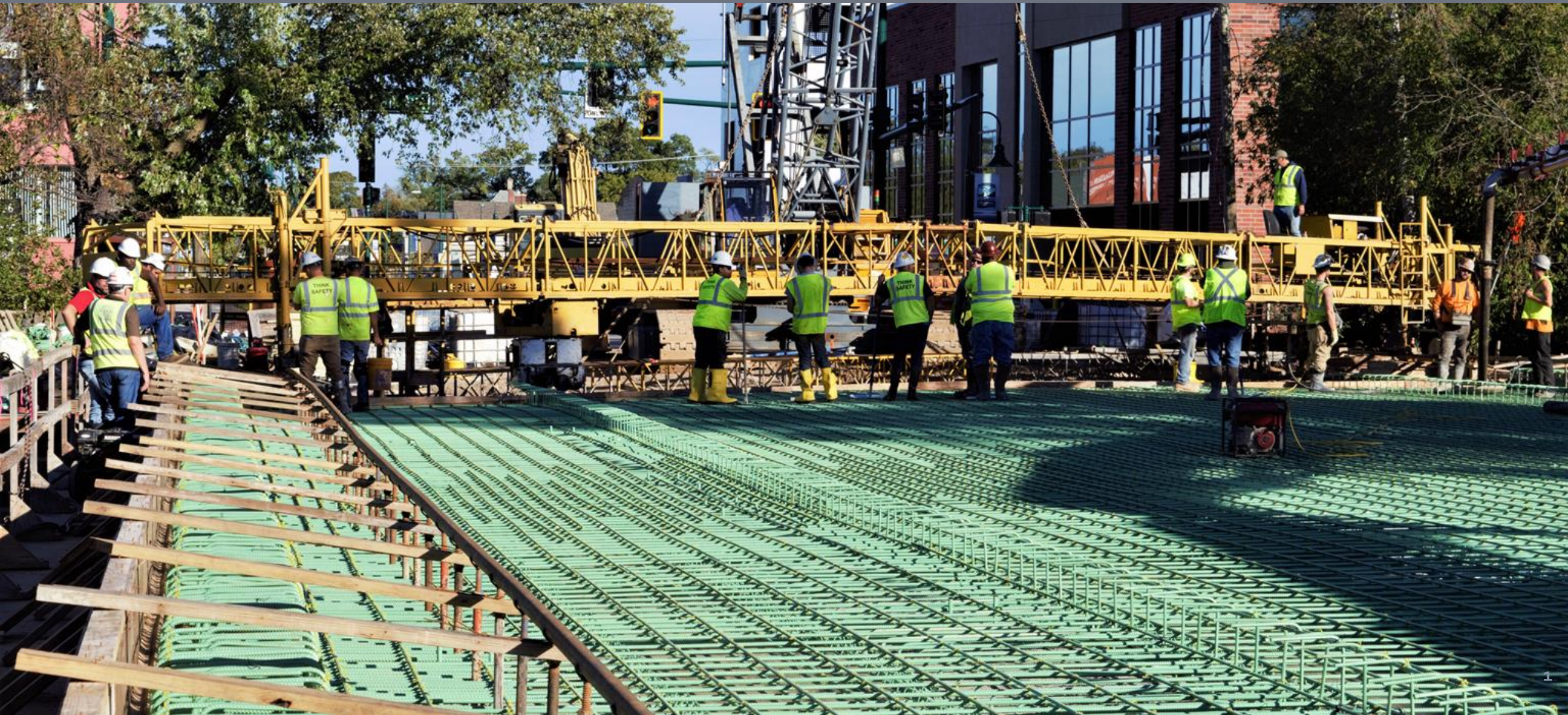


2021 Engineering Department Annual Report



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.

•Engineering Technician

Brandon Glowacki

•Engineering Aide

Kaitlyn Aldrich

•Engineering Assistant

Staff Accolades: Staff completed over 90 hours of professional development training in topics such as traffic calming, Highway Bridges, Pavement Management and Design, MDOT Federal Aid, MDOT Concrete Paving, Right-of-Way, AASHTO Flexible Pavement Preservation Treatment, FHWA Proven Safety Countermeasures, MERL, Grand Traverse County Engineers Workshop, and ARCGIS.

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 Project: E. Eighth St, S. Cass St, Park St Bridges Substantially Complete



E. Eighth Street Bridge:

- The work included concrete box beam deck removal and replacement, railing replacement, sidewalk widening, riverbank slope protection, approach work and related work including aesthetic treatments.



S. Cass Street Bridge:

- Bridge concrete arch rehabilitation including historic balustrade pedestrian railing, traditional streetscape, parking, and crash tested MDOT pedestrian railing.



Park Street Bridge:

- Rehabilitation of the bridge superstructure including pedestrian scale lighting, traditional streetscape, increased sidewalk width, paint steel beams, patch damaged concrete, and installation of pedestrian railing.

Sidewalk Gap Infill Project Complete



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TRAVERSE CITY, MI 49604
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www.machinengineering.net

THE CITY OF TRAVERSE
ENGINEERING DEPARTMENT

REGISTRATION:
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MICHIGAN.

PATRICK J. MACHIN
PRINT NAME

DATE:
REV. NO. DATE

PROJECT TITLE:
TC SIDEWALK GAP INFILL PROJECT

CLIENT:
CITY OF TRAVERSE CITY
400 BOARDMAN AVENUE
TRAVERSE CITY, MI 49664

SHEET TITLE:
2021 PHASE III PROJECT MAP

PROJECT NUMBER: 18133

SHEET NUMBER:

This three-year project is intended to improve the walkability of the City of Traverse City. It is financed via a 15-year bond payment at approximately \$366,500/ year. The City partnered with Machin Engineering, Landtech, and Elmer's Crane & Dozer to complete the project. In 2021, 3.3 miles of new sidewalk was constructed in the areas of Traverse Heights and along Garfield Avenue. The total investment to date is \$3,178,334.51. 2021 marked the third and final year of the Gap and Infill project.

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 Dendrinis Drive next to NMC's University Center. Two more phases of construction will follow: one segment to connect the University Center to Medalie Park – completing the Boardman Lake Loop Trail (began August 2021), and another that will connect the University Center to South Airport Road along Cass Road. This project is funded by numerous local, state, federal, and private dollars.



3.25 miles
\$2.378 million
investment

- Resolution of Support for SRTS from City Commission
- Walking Audits, Parent/Student Surveys, Public Input Sessions, Public Notice Mailings
- Application Submitted. Received Conditional Commitment from MDOT
- Announce Conditional Commitment, Gather Easement Information, Collect Data for SPHO
- Submit Application for SHPO Approval
- Receive SHPO Feedback, Meet with MDOT re: Preliminary Designs, Hold Public Open-House, Submit Final Application
- Construction Letting Date
- Construction Complete October 2022– Elmer's Crane & Dozer



Kids Creek Culvert Crossing Project

The City of Traverse City and the Watershed Center Grand Traverse Bay have recently awarded a project to Elmer's Crane and Dozer Inc. known as the Kids Creek Crossing Project. The project consists of improving 3 road crossings in the City of Traverse City along Kids Creek.

The existing culverts are having a negative hydrological and hydraulic effect on the stream, and this project will remove the undersized culverts and replace them with clear span structures. There are two locations on Cedar Street and one location on Sixth Street. This project is substantially complete with the exception of watermain work to be completed in the spring of 2022.



Kids Creek Pedestrian Bridges Trail Crossing Project



Replaced existing concrete box culverts with clear span pedestrian bridges in two locations on Kids Creek. This project is funded through a grant obtained by the Watershed Center Grand Traverse.



Elmer's Crane & Dozer was hired to complete the work. One location is the old railroad grade between Division St and Silver Dr and was completed in conjunction with a paved path that is part of the Safe Routes to School Project.



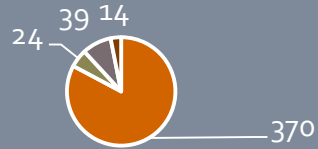
The second location is where Kids Creek crosses the abandoned portion of Elmwood Avenue between 11th Street and Silver Lake Road. The project is substantially complete.

Parsons Road and Airport Access Roundabout



Replacement of the traffic signal at the Parsons and Airport Access Intersection with a roundabout using MDOT 2020 fiscal year funds and City funds. The project included pedestrian improvements to accommodate pedestrians who wish to cross at the intersection and provide easier access to the existing shared path that runs parallel to Parsons.

PERMITS



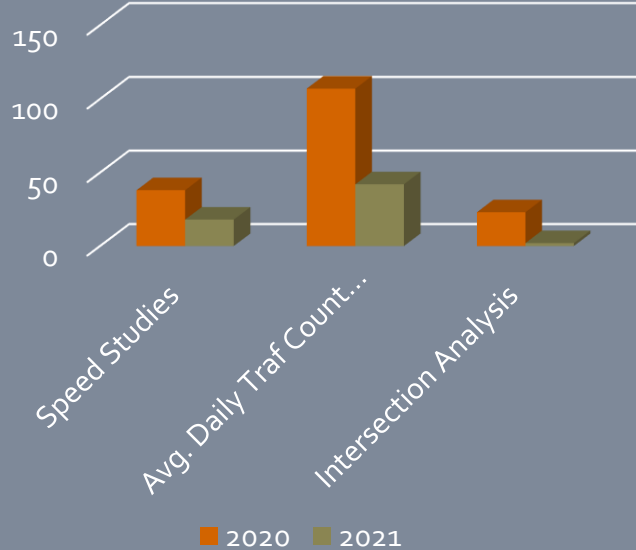
Right-of-Way

Stormwater Run-off Control

Soil Erosion

Utility Review

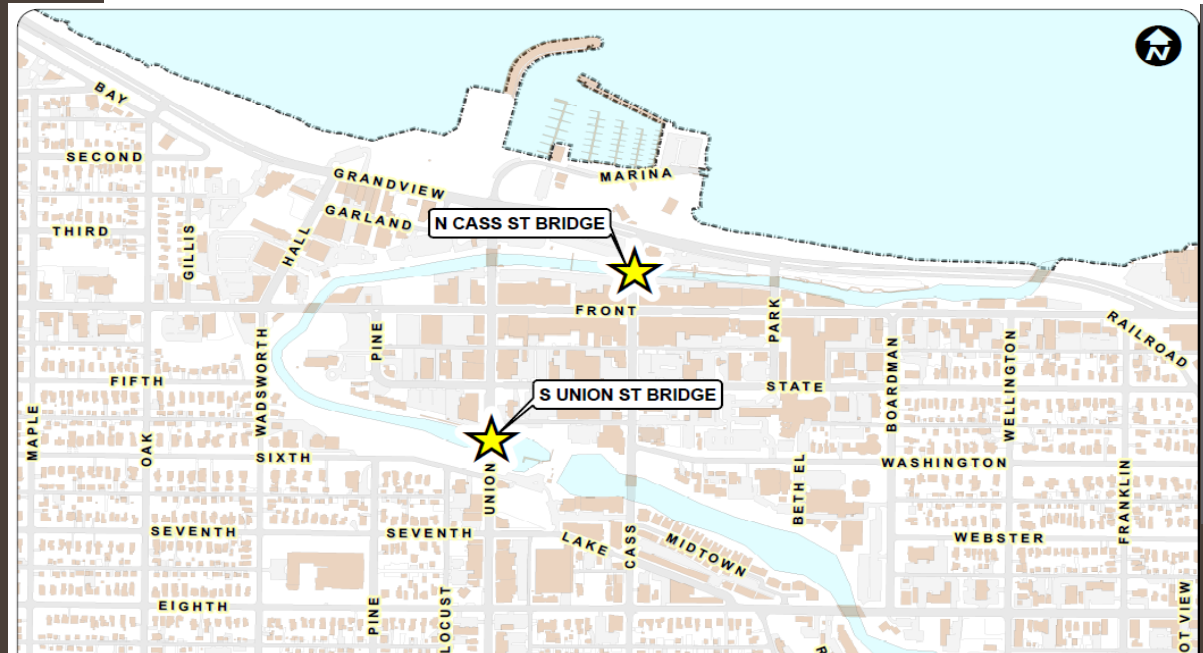
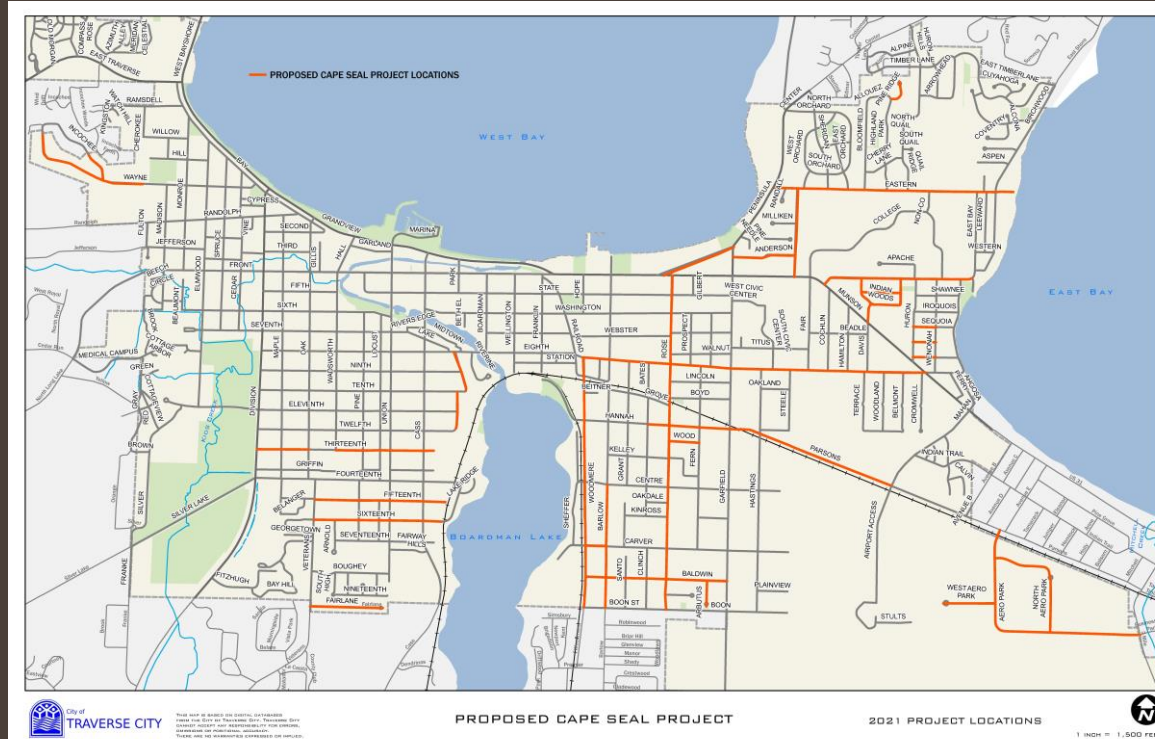
TRAFFIC DATA



2020 2021

Upcoming Projects

- North Cass Street Bridge
- South Union Street Bridge
- Pavement Preservation
- Cape Seal
- Garfield Avenue
- Annual Street Reconstruction
- East Front Street Sanitary Sewer Rehabilitation
- Madison Street Reconstruction
- Jefferson Street Reconstruction
- US-31 Watermain Replacement
- Veterans Drive: 14th Street to Bay Hill Dr.
- Hickory Hills & other park projects



An aerial photograph of a city, likely Madison, Wisconsin, situated along a large body of water (Lake Monona). The city features a mix of historic and modern architecture, including a prominent domed building. The foreground shows a marina with many sailboats. A semi-transparent grey rectangle covers the left and center portions of the image, serving as a background for the 'THANK YOU' text.

THANK YOU