



Twin Ports Interchange Reconstruction Project Monthly Update

September 30th, 2019

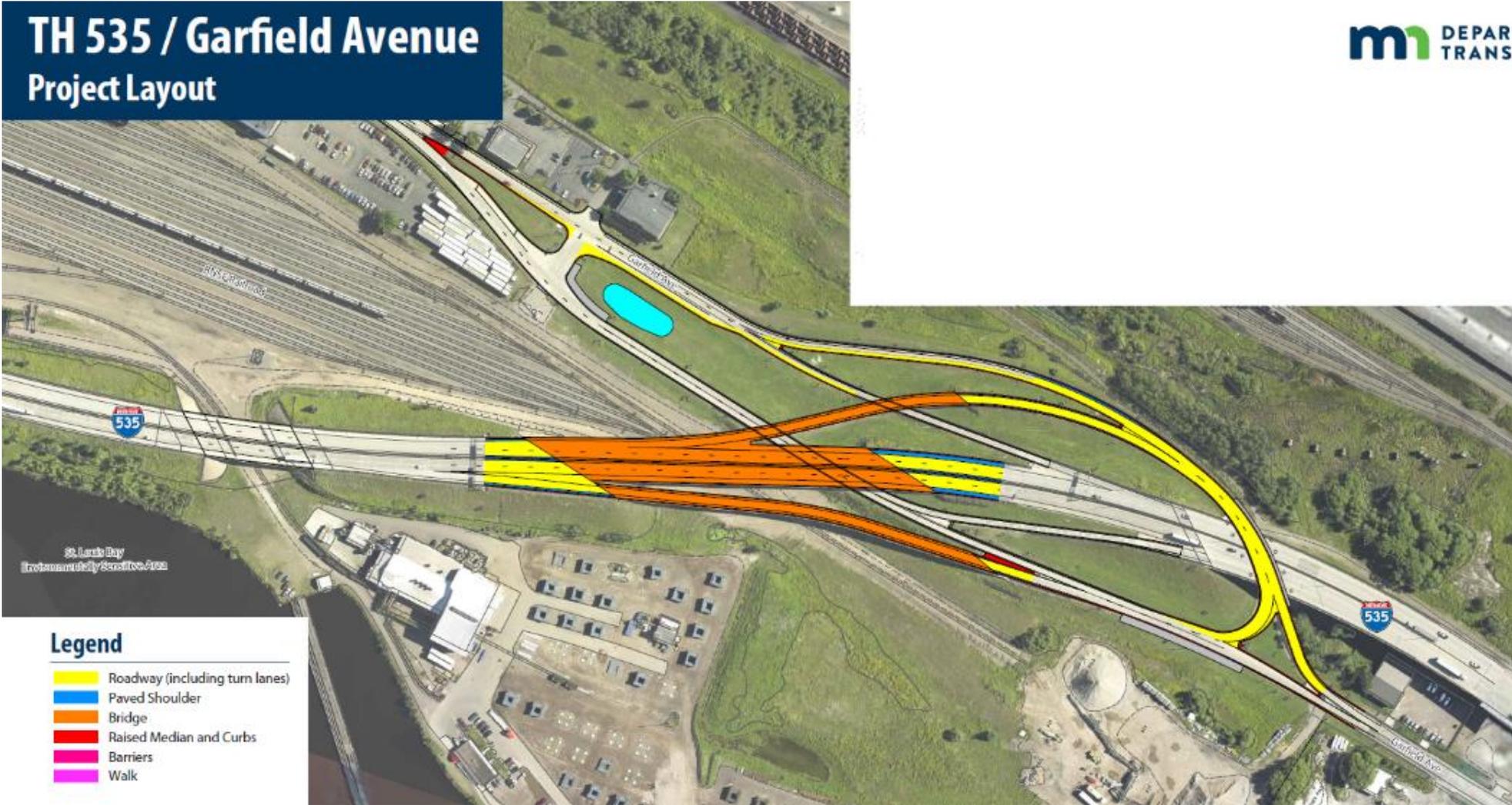
Twin Ports Interchange (TPI) 2020-2023



I-535 / Garfield Avenue (2021-2022)



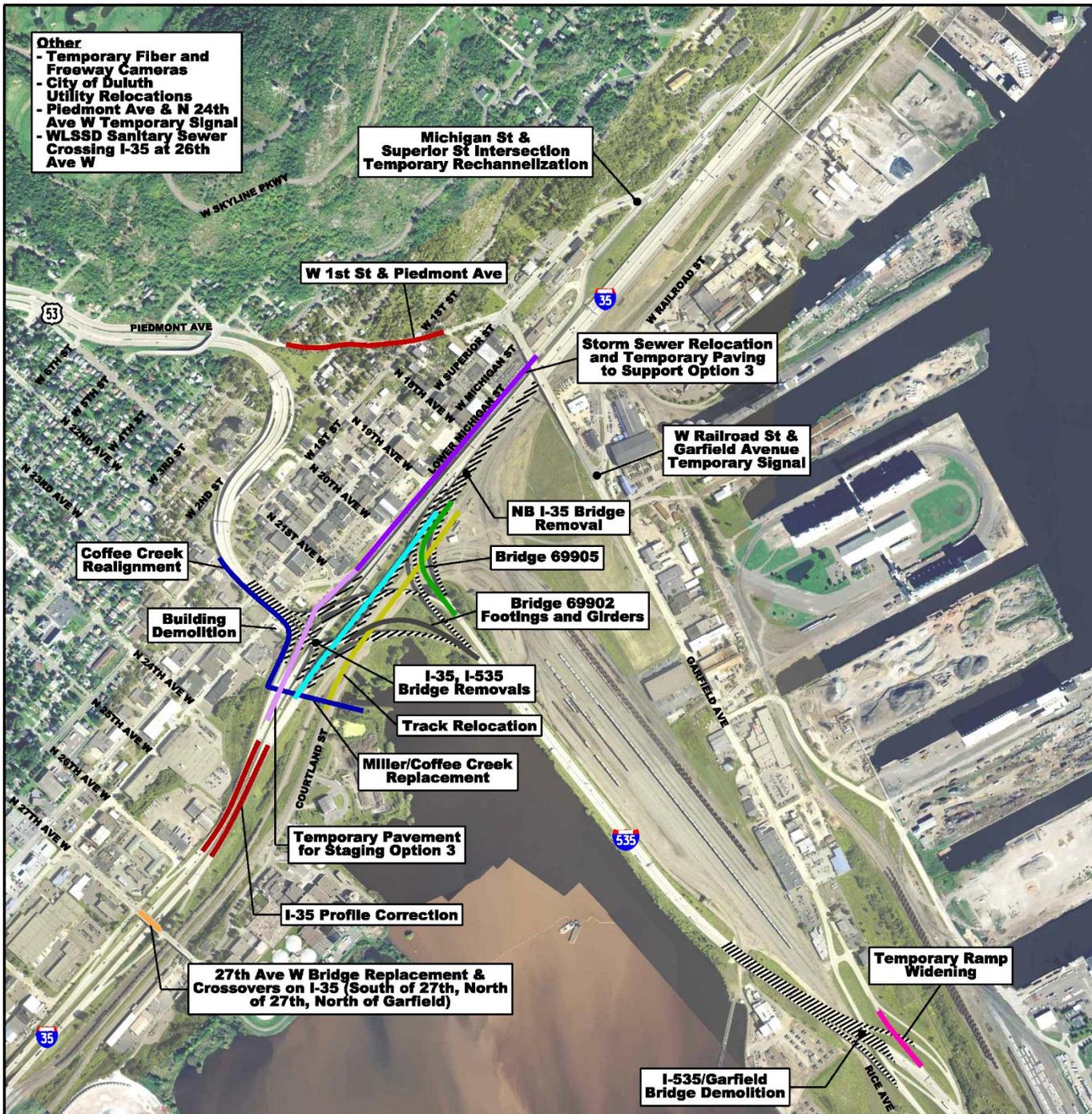
TH 535 / Garfield Avenue Project Layout



Project Purpose/Goals

- **Enhance safety by eliminating blind merges and left exits**
 - Moving left exits to the right
 - Relocating merges
- **Replace aging infrastructure**
 - Reconstructing weight restricted and non-redundant bridges
 - Reduces maintenance and closures
 - Eliminates some bridge structure
- **Improve freight mobility**
 - Allow oversize/overweight freight on the Interstate
 - First and last mile to port!

Work Package 1 Details



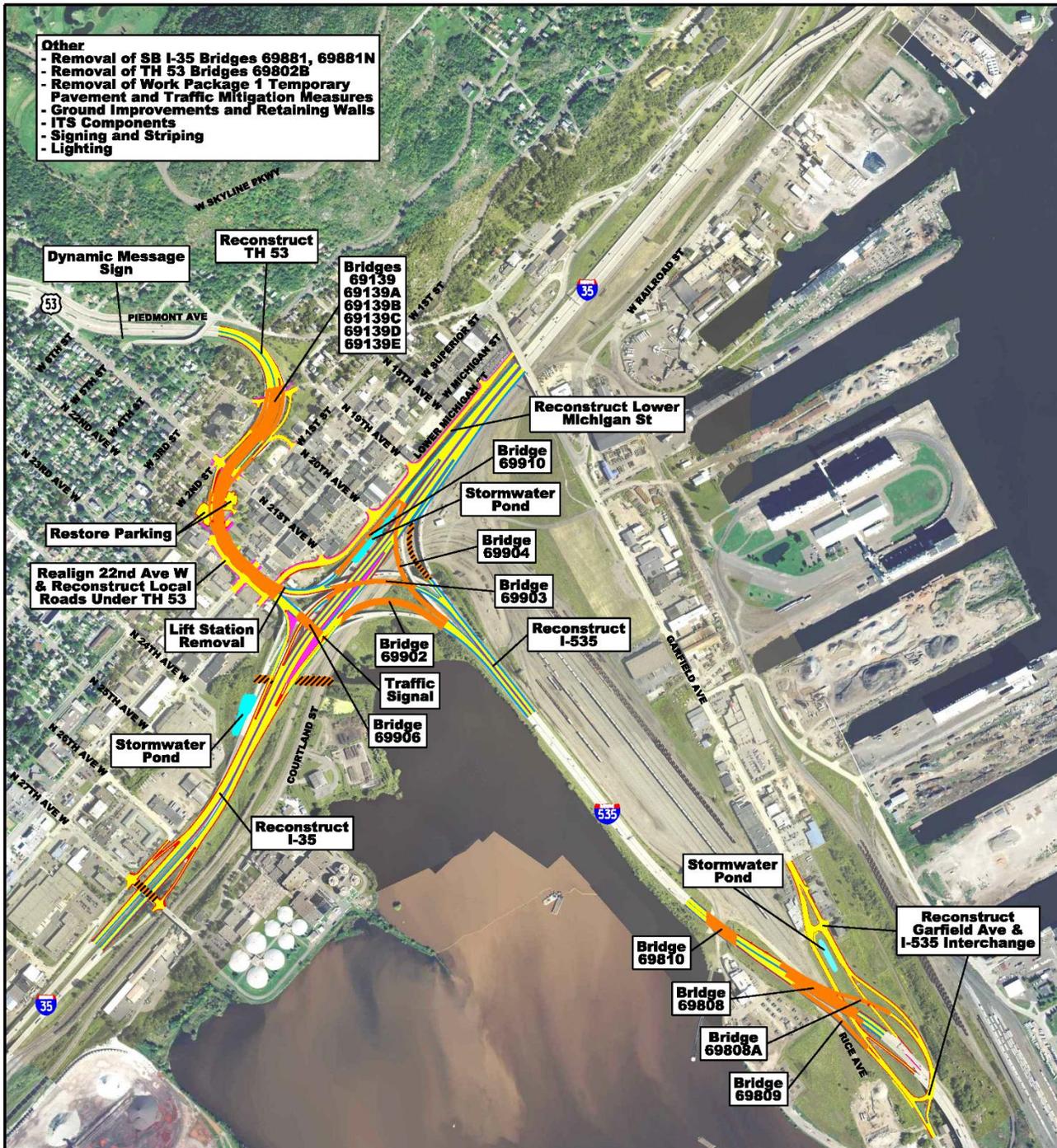
- Spring 2020 – Spring 2021
 - 27th Ave W. Bridge replacement
 - Lowering the profile (hump) of I35 for improved sight distance
 - Bridge removals/construction
 - Lower Michigan Street Storm Sewer relocation and bypass
 - W. 1st Street & Piedmont Ave
 - Temporary widening of Garfield Interchange off ramp
 - Garfield bridge removal

24th Ave. West & Piedmont Ave: Temporary Signal



- Temporary signal being added to help traffic flow during TPI construction
- Spring 2020 installation
- Will remain throughout duration of TPI project

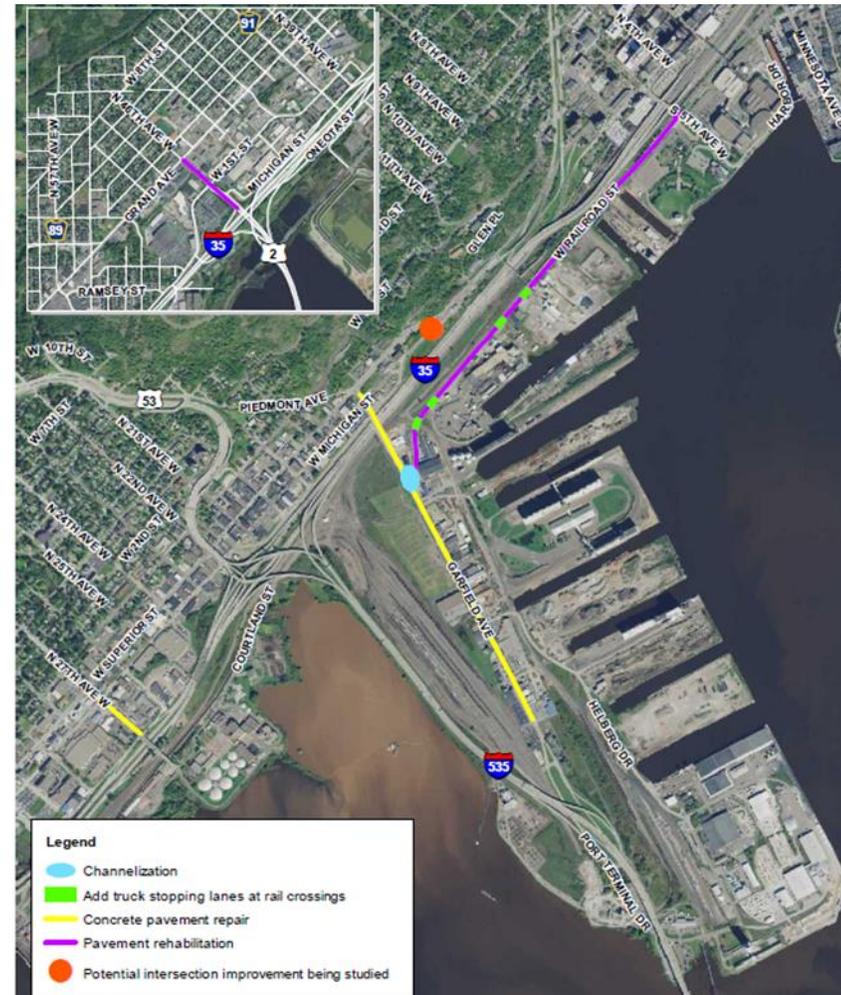
Work Package 2 Details



- Spring 2021 – Fall 2023
 - Majority of staged bridge removals and construction
 - Storm water pond construction
 - Ground improvements and retaining walls
 - Restore areas surrounding US53 bridges
 - Lighting and ITS Components

2019 Local Streets Update

- Railroad Street
 - Paving and striping complete
 - BNSF railroad crossing work will start today (9/30/19) and will take 3-4 weeks
 - Closures will likely continue through the weekends
- 27th Ave W and 46th Ave W
 - Paving and striping complete
 - Signal work at 46th Ave (ADA Push Buttons)
- Garfield Street and Nelson
 - Painting signal system markings



David Schauer / 2019

Wind Loads



Photo Credit:
Destination Duluth

Wind Loads



Wind Loads



Old Piedmont and First Street: Profile Correction



- Wind loads to continue through December
- Temporary pavement remaining in place until permanent fix is constructed as part of the TPI project

Ground Improvement Test Program



- Ground improvements are techniques used to build the interstate on ground/fill versus constructing a bridge
- Test results will be used to optimize final design for project wide ground improvements
- Program 95% complete, additional layer of gravel to be placed on top of site throughout this week
- Will remain in place as it is located where future I35 SB will run

Pile Foundation Test Program



- Test results will be used to supplement the final foundation recommendations for bridges and other structures on the TPI project
- Program complete, final analysis will be used for final bridge design

Test Wells for Pumping Water



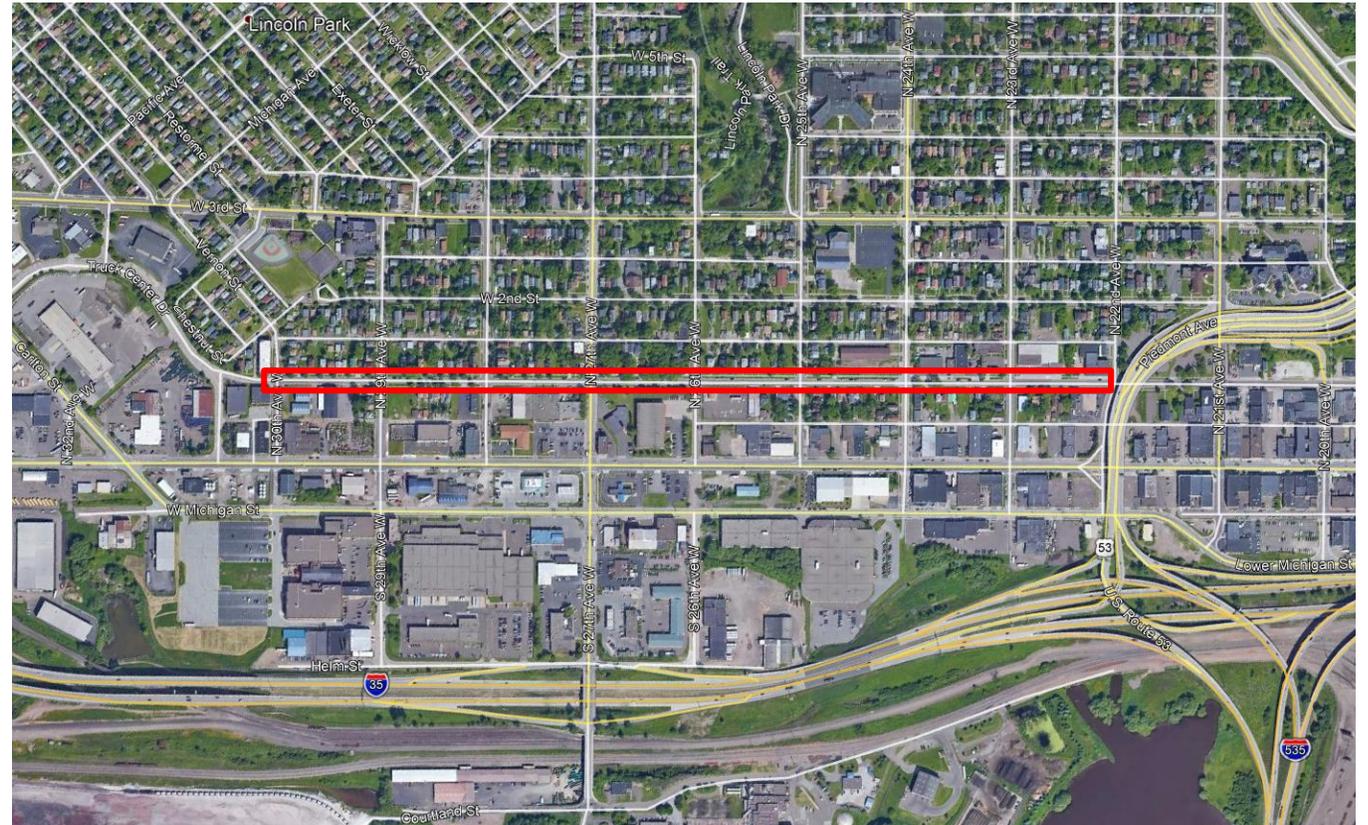
- Purpose:
 - Determine how much water must be pumped during certain operations of the main project
 - Determine the water chemistry to see if/how the water needs to be treated
- Testing and Results:
 - Testing complete and results being analyzed

Pre-Condition Surveys

- Usually apply to any building within 300 feet of the project.
- Will be vibrations from pile driving, blasting not anticipated.
- Done by American Engineering Testing, Duluth
- Impacted owners will first receive a certified letter.
- Building survey prior to November at the owners convenience.
- Average time is 1 ½ - 2 hours.
- **64/89** properties have surveys completed
- **Owners should contact AET to complete their building survey by the end of October**

First Street: 22nd Ave W – 30th Ave W

- Changing from one-way to two-way street
- City of Duluth Project near the interchange
- Re-striping and signing changes are currently in progress
- Help facilitate traffic flow during TPI construction
- Permanent change



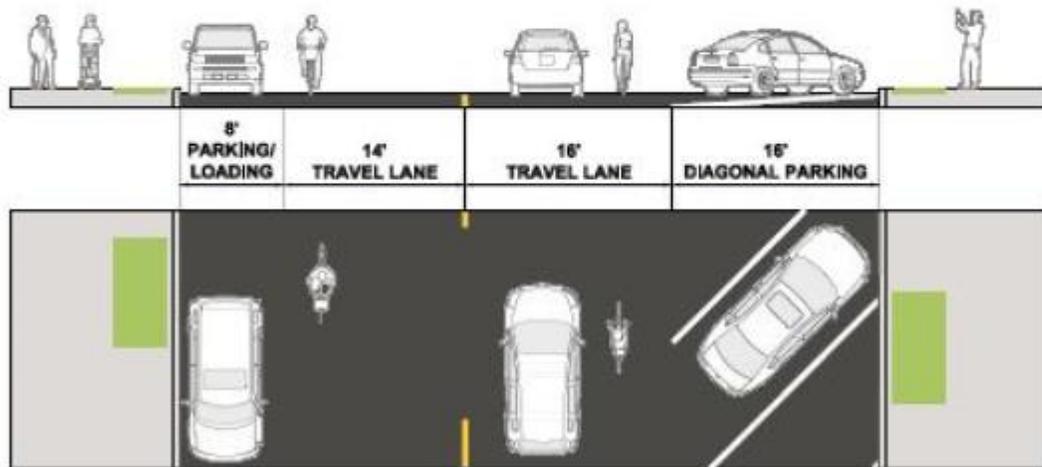
Cross City Trail Detour

SUPERIOR STREET ALTERNATIVE

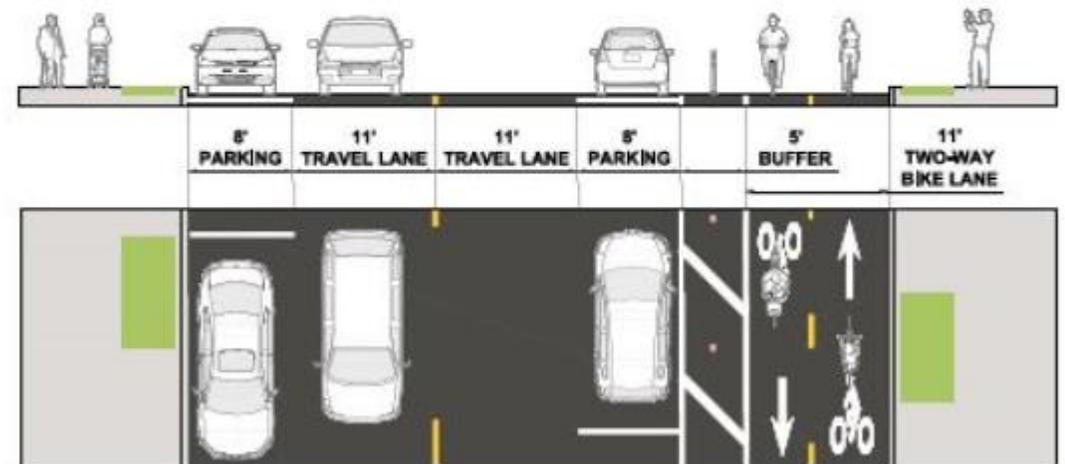


Cross City Trail Detour

EXISTING TYPICAL SECTION

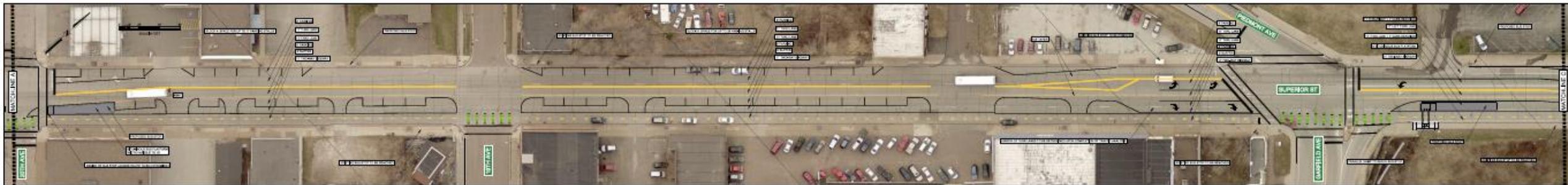
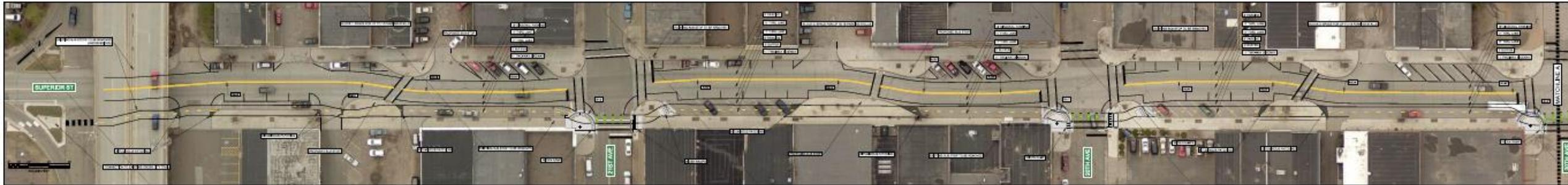


PROPOSED TYPICAL SECTION

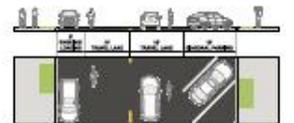


- 11 foot, two-way bike path on the lower side of Superior Street
- Restriping Superior Street to fit the bike lane between the sidewalk and parking (by changing some angled parking to parallel parking)
- Design in progress (about 30% complete)

Cross City Trail Detour



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION



Upcoming Meetings

- Public Update Meeting –Monday October 28th, 2019
 - Clyde Iron
 - 11:30 am -12:30 pm and 6:00 – 7:00 pm with presentations 11:45 am and 6:15 pm
- Stakeholder Advisory Group Meeting - October 10
- Hwy 53 Uses Group - TBD
- Farmer's Market – Lincoln Park and Superior

Questions/Comments?

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