




# 2023 Street Improvement Post Construction Review

---

1/9/2024



# Agenda

- Post Construction Review Stakeholder Roles & Responsibilities
- Project Overview
- Engineering Summary Report
- Lessons Learned
- Upcoming Road Project Status
  - 2024 Planned Road Project and design status (Lakeview Drive)
  - 2024 Road Project Grant Update
- Road Project Prioritization Tool Update
- Comments/Conclusion

Note: Blue Text indicates updates from participants in review

# Stakeholder Roles & Responsibilities

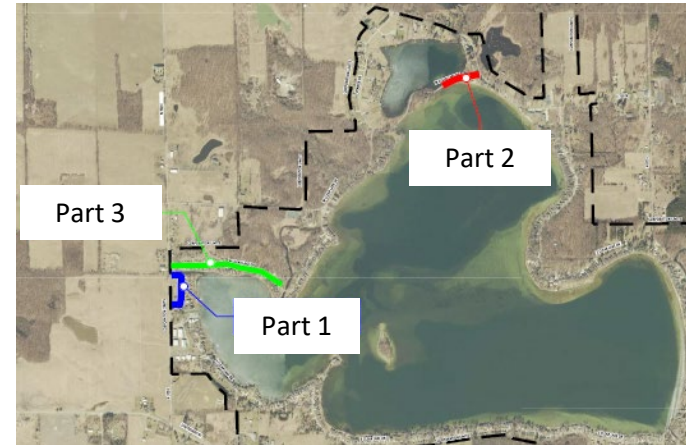
Responsibility Assignment Matrix												
Road Project Annual Process Task Name	Stakeholder Name											
	Engineering Firm	Road Construction Contractor	Town Council (All)	Town Council President	Town Council Infrastructure Member	Community	Street Superintendent	Clerk Treasurer	Billing Clerk	Zoning Administrator	Marshall	
1.0 Prioritization Tool Updates	R	-	-	-	I	R	R/A	-	-	R	R	
2.0 Update Prioritization Tool	R/A	-	-	-	-	-	R	-	-	-	-	
3.0 Publish Road Project Forecast	R	-	R	I	R	I	R/A	I	R	I	I	
4.0 Finalize & Publish Road Project Forecast	R	-	-	-	-	I	A	-	R	-	-	
5.0 Identification of Project Constraints & Design Concepts	R/A	-	-	-	C/I	-	R	-	-	-	-	
6.0 Present Project Design Concepts & Budget Estimates	R/A	-	C	C	C	C	R	C	-	I	I	
7.0 Preliminary Design	R/A	-	R	I	R	I	C/I	I	R	I	I	
8.0 Intermediate Design	R/A	-	R	I	R	I	C/I	I	R	I	I	
9.0 Final Design	R/A	-	R	I	R	I	C/I	I	R	I	I	
10.0 Project Bids	R	I	R	R	R	I	I	A	I	I	I	
11.0 Project Construction	R	A	I	R	R/I	I	C/I	I	I	I	I	
12.0 Post Construction Lessons Learned	R/A	C	C	C	C	C	C	I	R	I	C	

**R- Responsible    A-Accountable    C-Consulted    I-Informed**

Responsible:	person who performs an activity or does the work
Accountable:	person who is ultimately accountable and has Yes/No/Veto
Consulted:	person that needs to feedback and contribute to the activity.
Informed:	person that needs to know of the decision or action.

# Project Overview

- 2023 street improvements included the following road segments
  - Part 1: Quiet Harbor Drive (CR 700 to CR 700)
  - Part 2: West Clear Lake Drive (700' West of Lakeview Dr to Lakeview Dr)
  - Part 3: West Clear Lake Drive (CR 700 to Sunset Bay Ct)
- Project funding provided by Community Crossing Matching Grant (75%) & Town of Clear Lake (25%)
- API Construction Corp. awarded project with a total bid of \$839,915
  - Part 1: Quiet Harbor Drive \$213,465
  - Part 2: West Clear Lake Drive (700' West of Lakeview Dr to Lakeview Dr) \$146,820
  - Part 3: West Clear Lake Drive (CR 700 to Sunset Bay Ct) \$479,630



Project Map

# Summary of Engineering Report

- Summary of construction items that went better than plan
  - Road subgrade at 248 WCLD had good structure
  - API made a second crew available to maintain schedule
- Summary of construction items that went as planned
  - Coring samples were a good representation of subbase and subgrade across length of project (nonstructural material (e.g., sand, etc.))
  - Geo-Grid worked as advertised and placed over entire project area
- Summary of construction items that did not go as planned (ALL MINOR)
  - Geo-Fabric used in combination with the Geo-Grid in areas with soft loam or wet sub grade
  - Availability of dump truck drivers, NIPSCO utility detour and asphalt plant closure at 5pm slowed daily progress
  - NIPSCO utility work detour increased drive time to asphalt plant
  - Private utilities were not located







# Geo Fabric Areas



# Summary of Engineering Report

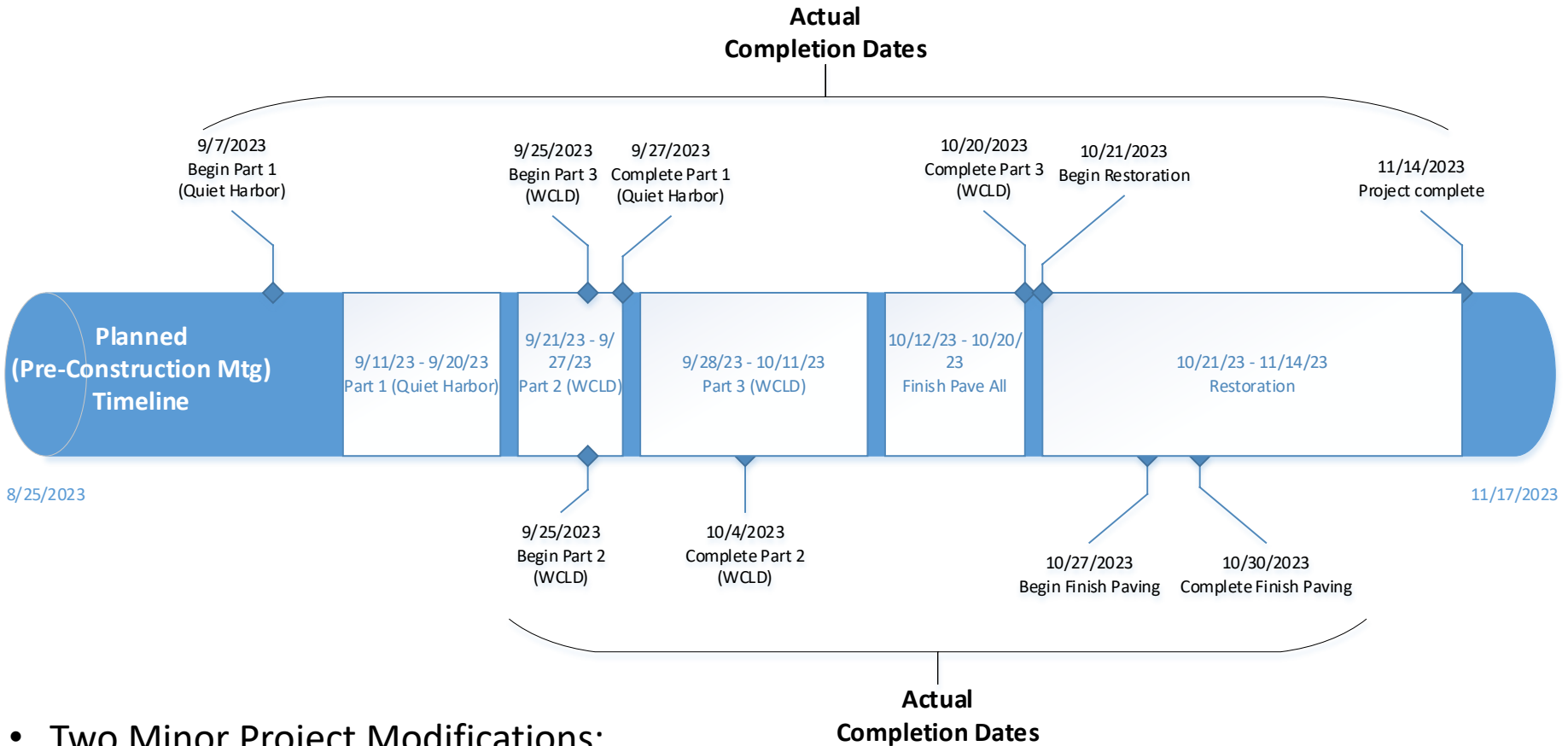
- Inspection points performed to ensure as-designed equals as-built
  - Preparation of subbase
    - Proof Roll of Subgrade
    - Geo-Grid and if needed Geo-Fabric installed over subgrade
    - Thickness of subbase stone
  - Thickness of base asphalt
  - Thickness of finish asphalt
  - Location and size of passive swales
  - Location of road signs and detours
  - Drainage components size, set elevation, grade.
- No issues occurred during construction not previously discussed as risks
- Traffic control
  - Effective apart from barricades being moved
  - Chris Emerick (Marshal CLPD) “I didn’t receive any complaints/compliments from any of the citizens of Clear Lake, nor did I receive any from the deputies. I believe everything went very well and the road closure signs were placed accordingly”



# Cost Performance – On Target

- API completed construction mid November 2023 at a cost of \$811,379
  - Decrease of \$28,535 from Contract Amount
- No changes recommended in estimation of future projects

# Schedule Performance – On Target



- **Two Minor Project Modifications:**

- 8/27/23 Changed substantial completion date from 10/1 to 10/16
- 9/11/23 Moving drain 4' to North outside footprint of residential driveways approved by ILP

- **Recommended schedule changes for 2024 project**

- Add margin to account for unknown unknowns like detours and weather
- Start before Labor Day to account for longer overall length of road

# Lessons Learned

Item #	Originator	LL Description	Status	Phase	Action Taken	Actionee
1	Rippe, Thurber, Rodgers	Document new TOCL Drainage System components, Road edges, Road ROW and Public & Private utilities on TOCL GIS system	Open	Operational		Rodgers
2	Rippe, Thurber, Rodgers	Inform Contractors of damage responsibilities & Locate TOCL drainage system components prior to ILP approval	Open	Construction		Hawley Rodgers
3	Rippe, Thurber, Rodgers	Ensure Construction Schedule considers asphalt plant operational hours end at 5pm due to noise ordinance	Open	Construction		Thurber
4	Rippe, Thurber, Rodgers	Ensure Construction Schedule considers if utility (NIPSCO, etc) work will interfere with access to Asphalt Plant	Open	Construction		Thurber
5	Rippe, Thurber, Rodgers	Flags marking utility locations were removed by residents	Open	Construction		Thurber Rodgers
6	Rippe, Thurber, Rodgers	Mediacom did not mark their utility in timely manner	Open	Construction		Thurber
7	Rippe, Thurber, Rodgers	Secure Easements 2-months prior to start of construction	Open	Construction		Rippe Thurber
8	Rippe, Thurber, Rodgers	Identify any outstanding Resident commitments associated with completed ILPs	Open	Design	Meet with TOCL Zoning Administrator upon return to office prior to final design review	Hawley Rodgers
9	Rippe, Thurber, Rodgers	Gather Resident interest in contracting additional work on private driveway & coordinate w/ Asphalt Contractor	Open	Construction		Rippe Thurber
10	Rippe, Thurber, Rodgers	Improve process for locating Private Utilities and place	Open	Construction		Rodgers
11	Rippe, Thurber, Rodgers	Establish an application process for new private utilities passing under road	Open	Operational		Rodgers Rippe
12	Rippe, Thurber, Rodgers	Restoration should consider using sod vs grass seed due to fall leaf vac collection	Open	Design	Get comparison quote for sod vs seed for final desi	Thurber Rodgers
13	Rippe, Thurber, Rodgers	Geo Grid & Geo Mesh worked well and should be in baseline design	Open	Design	Specify Geo Grid under 100% of road length and Geo Fabric under 25% of road length	Thurber
14	Rippe, Thurber, Rodgers	Road closure signs were moved by persons without authority	Open	Construction		Thurber



# Lessons Learned

Item #	Originator	LL Description	Status	Phase	Action Taken	Actionee
15	Billing Clerk Sattison	Improve coordination of trash/recycling pickup with road closure	Open	Construction		Thurber Sattison
16	John Wilhelm	Consider communicating additional details to impacted homeowners' regarding the work being done on the segment of road where they own homes	Open	Construction	<p>Consider a One Page Flyer outlining several topics.</p> <ul style="list-style-type: none"> <li>-Timeline of the project by segment</li> <li>- Proposed detours</li> <li>- When they should expect utilities to be marked, when they can remove the flags, suggest that if flags are removed before work is completed it could directly impact their homes. Homeowners should communicate this to their lawn service providers who may remove flags for convenience.</li> <li>- Swales – why we install them, why they need to remain clear, and when they can remove the seeding nets.</li> </ul>	Thurber Rodgers Rippe
17	Brian Woodward	Miscommunication resulted in road & driveway sloping to the west vs east	Open	Construction	Gathering information regarding the miscommunication and escalation paths for future interactions with residents during construction	Thurber Rodgers Rippe
18	Brent Schlosser	Consider developing an approach to prevent grass buildup along road edges leading to drainage problems	Open	Operational		Rodgers
19	George Schenkel	Consider developing informational and policing guidelines for drainage swales to prevent destruction and/or filling with debris	Open	Operational		Rodgers

# 2024 Street Improvement Project

- 2024 street improvement includes all Lakeview Dr road segments
- Notification of CCMG award received 11/03/2023
- Project Estimate \$1.1M
  - INDOT CCMG \$825,000
  - TOCL \$275,000
- Near Term Milestones
  - 1/9/24 Intermediate Design Review
  - 1/30/24 Final Design Review
  - 2/2 & 9/24 Advertise for Bids
  - 2/20/24 Award Project
  - 3/1/24 Submit Documents to INDOT



# Prioritization Tool Update (as of 1/4/24)

Project Forecast	CCMG Year/ *Recom mended	Ref #	Priority	# of Vehicles	Designation	Roadway	From	To
5-Year Plan (Starting 2023)	2024	13	27	5	Lakeview Drive-1	Lakeview Drive	Town Limits	132 Lakeview Drive
	2024	14	26	5	Lakeview Drive-2	Lakeview Drive	132 Lakeview Drive	West Clear Lake Drive
	2024	15	26	5	Lakeview Drive-3	Lakeview Drive	West Clear Lake Drive	Town Limits
	2025*	47	26	1	Sand Point Road	Sand Point Road	East Clear Lake Drive	Town Limits
	2025*	3	24	2	West Clear Lake Drive-4	West Clear Lake Drive	192 West Clear Lake Dr	Bridge
	2026*	25	23	4	East Clear Lake Drive-1	East Clear Lake Drive	South Clear Lake Drive	572 East Clear Lake Drive
	2027*	24	23	4	East Clear Lake Drive-2	East Clear Lake Drive	572 East Clear Lake Drive	520 East Clear Lake Drive
	2027*	19	23	4	East Clear Lake Drive-6	East Clear Lake Drive	356 East Clear Lake Drive	Maple Street
2027*	34	23	2	South Clear Lake Drive-2	South Clear Lake Drive	891 South Clear Lake Dr	770 South Clear Lake Dr	
10-Year Plan		40	23	2	South Clear Lake Drive-9	South Clear Lake Drive	Elm Street	Paradise Point
		38	23	2	Elm Street	Elm Street	South Clear Lake Drive	South Clear Lake Drive
		7	22	2	Penner Drive-1	Penner Drive	West Clear Lake Drive	Penny Court
		35	22	2	South Clear Lake Drive-1	South Clear Lake Drive	Fountain Beach Drive	891 South Clear Lake Dr
		33	22	2	South Clear Lake Drive-3	South Clear Lake Drive	770 South Clear Lake Dr	Buck Point Drive
		32	22	2	South Clear Lake Drive-4	South Clear Lake Drive	Buck Point Drive	Terrace Drive
		37	22	2	Paradise Point	Paradise Point	South Clear Lake Drive	Dead End
		17	21	4	Maple Street	Maple Street	East Clear Lake Drive	Dead End
		20	21	4	East Clear Lake Drive-5	East Clear Lake Drive	384 East Clear Lake Drive	356 East Clear Lake Drive
		18	21	4	East Clear Lake Drive-7	East Clear Lake Drive	Maple Street	Lakeview Drive
		26	21	4	Outer Drive	Outer Drive	Buck Point Drive	South Clear Lake Drive
		41	21	2	Gecowets Drive	Gecowets Drive	State Road 120	South Clear Lake Drive
		31	21	2	South Clear Lake Drive-5	South Clear Lake Drive	Terrace Drive	East Clear Lake Drive
		40	21	2	South Clear Lake Drive-8	South Clear Lake Drive	Gecowets Drive	Elm Street
		23	20	4	East Clear Lake Drive-3	East Clear Lake Drive	520 East Clear Lake Drive	Sand Point Road
		11	20	1	Penny Court	Penny Court	Penner Drive	Cul-de-sac
		12	20	1	Powhattan Court	Powhattan Court	Penner Drive	Cul-de-sac
		46	20	1	Rieke Drive	Rieke Drive	Town Limits	West Clear Lake Drive
		9	20	1	John Court	John Court	Penner Drive	Cul-de-sac
		10	20	1	Joann Court	Joann Court	Penner Drive	Cul-de-sac
		29	19	1	Chapel Drive	Chapel Drive	Outer Drive	South Clear Lake Drive
		27	17	3	Lakeside Court	Lakeside Court	South Clear Lake Drive	East Clear Lake Drive
	43	17	2	South Clear Lake Drive-6	South Clear Lake Drive	CR 700 E	Clear Lake Cove	
	42	17	2	South Clear Lake Drive-7	South Clear Lake Drive	Clear Lake Cove	Gecowets Drive	





The image features two stylized speech bubbles. The one on the left is yellow and contains a question mark. The one on the right is blue and contains an exclamation mark. Both bubbles have a drop shadow effect. The text 'Questions/Closing Comments' is centered over the space between the two bubbles.

Questions/Closing Comments

# Attendee Comments/Questions

- Mary Lee Gecowets Comments
  - Stated concerns regarding the dangers of the road between their properties on South Clear Lake Drive
    - Road narrows and cars are encroaching on their property.
    - Deterioration of the road currently
    - What is the plan to improve safety on this part of the road?
    - Offered to help with the development of the plan.
  - It was shared that this part of the road is scheduled for 2028 based on current PASER ratings (reference segment 40 on slide 14).





# Attendee Comments/Questions

- Brian Woodward (22 WCLD)
  - Identified and stated that the grade of the road and driveway are flowing opposite of what they should be (West vs East) despite efforts to define the grade prior to pouring the driveway and completing the final layer of asphalt



# Annual Process Timeline

January	February	March	April	May	June
9. Develop Final Design per Roadway Design Standards Document	1. Gather Prioritization Tool updates (except 1.2) 10. Bidding per Roadway Design Standards Document	1.2. Perform Annual PASER Assessment 2. Update Prioritization Tool per Update Instructions (see instruction Tab in spreadsheet) 3. Publish Road Project Forecast	4. Update Prioritization Tool Following Town Council Meeting if Necessary 5. Identify Constraints and Recommended Approach (TOCL Input to Road Engineering Firm for projects approved in 3.3)	6. Provide next (current year +1 approved in 3.3) year's Road Budget Estimates to Town Council & Zoning Administrator	7. Develop Preliminary Design per Roadway Design Standards Document

July	August	September	October	November	December
7.3 Council Approval to Proceed with CCMG Application	11. Construction (Previous Years CCMG projects)	11. Construction (Previous Years CCMG projects)	5.2. Engineering Firm Assesses Road Segment Projects Compliance to Governing Requirements	8. Develop Intermediate Design per Roadway Design Standards Document 12. Post Construction Review	

**2023 Road Project We are Here**

