COMMUNITY LIFE, INFRASTRUCTURE AND PUBLIC PROPERTY (CLIPP) COMMITTEE MEETING AGENDA

August 04, 2025 at 6:00 PM

Kronenwetter Municipal Center - 1582 Kronenwetter Drive Board Room (Lower Level)

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1. **CALL MEETING TO ORDER**
   - **A.** Pledge of Allegiance
   - **B.** Roll Call
2. **PUBLIC COMMENT**
   Please be advised per State Statute Section 19.84(2), information will be received from the public. It is the policy of this Village that Public Comment will take no longer than 15 minutes with a three-minute time period, per person, with time extension per the Chief Presiding Officer's discretion. Be further advised that there may be limited discussion on the information received, however, no action will be taken under public comments.
3. **REPORTS AND DISCUSSIONS**
   - **C.** Police Chief Report
   - **D.** Fire Chief Report
   - **E.** Public Works Director Report
   - **F.** Community Development Director Report
   - **G.** Complaint Log
   - **H.** Review of Committee Recommendations
4. **OLD BUSINESS - DISCUSSION AND POSSIBLE ACTION**
   - **I.** Intersection of CTH X, CTH XX and Pine Road-Discussion with Marathon County Highway Department Deputy Director Kevin Lang
   - **J.** Chicken Ownership in the Village
   - **K.** Yard Waste Site Status
   - **L.** Trails and Leisure for Village Owned Property on Lea Rd.
   - **M.** Potential Upgrades for Parks
   - **N.** Proposed Improvements to Pond Area Behind Municipal Center
   - **O.** Election Inspector Selection Process
5. **NEW BUSINESS - DISCUSSION AND POSSIBLE ACTION**
   - **P.** Updated Capital Improvement Plan
   - **Q.** 2026 Budget Guidelines and Expectations
6. **NEXT MEETING: TBD**
7. **CONSIDERATION OF ITEMS FOR FUTURE AGENDA**
8. **ADJOURNMENT**

NOTE: Requests from persons with disabilities who need assistance to participate in this meeting or hearing should be made at least 24 hours in advance to the Village Clerk's office at (715) 693-4200 during business hours.

Posted: 08/01/2025 Kronenwetter Municipal Center and www.kronenwetter.org
Faxed: WAOW, WSAU, City Pages, Mosinee Times | Emailed: Wausau Daily Herald, WSAW, WAOW, Mosinee Times, Wausau Pilot and Review, City Pages, The Wausonian

KRONENWETTER POLICE DEPARTMENT

Office of the Chief of Police

Executive Summary for August 2025 CLIPP

TO: CLIPP COMMITTEE MEMBERS

DEPARTMENT ACTIVITY SUMMARY – In June, we handled 549 total calls for service. Some highlights included the following:

- Three arrests for OWI, all first offense. One was the result of a traffic stop, one resulted from an ATL (attempt to locate) and one was a subject passed out in his vehicle at the Village Crossing gas station.
- DV related cases included a subject who was referred to the DA for Interference with Child Custody and another who was referred to the DA for violating a DV restraining order.
- A pair of disturbance calls, one for a fracas at a local bar and grill and a second for a subject who received a citation for disorderly conduct with a motor vehicle.
- Two drug cases, one for possession of methamphetamine along with four counts of bail jumping, and another for possession of THC.
- Three agency assists:
    - One for the WI State Patrol, who had a subject in mental crisis acting bizarrely and threatening to kill officers as he stood in traffic on I-39. Officers had to shut down the highway during this incident until the subject could be safely taken into custody.
    - One assist for Mountain Bay PD after a subject (same one in the WI State Patrol incident but about a week later)) broke free from officers inside a hospital and barricaded himself in a room. The emergency room had to be shut down/re-routed, and the Sheriff's Office Crisis Negotiation Team was called in. The subject did not comply and was eventually tased by law enforcement (not KPD) and taken into custody. This subject later punched the transporting officer in the head upon arrival at a mental health facility.
    - One assist for Mosinee PD to assist in taking an uncooperative and combative subject into custody at the Piggly Wiggly.
- Two arrests at the request of Probation and Parole.
- One underage subject who repeatedly tried to buy alcohol at a local business was given an official trespass notification and a citation for attempting to procure alcohol.
- A physical abuse to child investigation that we have set up for a forensic interview at the CAC (Child Advocacy Center).
- A sexual assault of a child case that we have set up for a forensic interview at the CAC.

DEPARTMENT PERSONNEL ISSUES & STATUS – In addition to the cases listed above, we have been working on a very serious investigation for more than a month that could have turned into a homicide. I'm happy to report that our victim is slowly improving. The defendant has been formally charged with aggravated battery, eight offense OWI, and possession of child pornography. He remains in jail on a $500,000 cash bond. Even though we are a month into this investigation, we continue to follow up on many things. Officers have been focusing on this case and many other things have had to be prioritized as a result.

Lastly, we had an officer resignation at the end of July, and we have another officer on light duty through the end of the year and FMLA into 2026. This means we are down two full time patrol spots, making things difficult from many perspectives. What's essentially happened is we have lost our second shift officer on both work rotations, as they have been forced to move to the night shift. As I mentioned, being down two officers is dicey and creates real schedule issues.

This means we will work patrol with just three people scheduled per day: a day officer, an afternoon Sergeant, and a night officer. Bear in mind that the danger of this scenario is that any time one person takes a vacation, is

sick, has training, etc. we are down to hard minimums, meaning we have one officer on duty from 5am-5pm and one on duty from 5pm-5am car. Having one officer on duty for a Village of over 8500 people and 52 square miles is not a good scenario. From July 1 to the end of the year, we already have 42 days of hard minimums, including one seven-day stretch, and officers still have vacation to use, meaning that number will only increase unless we get part time to help.

In addition to being down two full-time officer positions on the road, our full-time clerk is also off on medical leave for at least eight weeks. Everyone has to pick up extra work to keep things moving, but we have a good group of employees who step up during times like this.

We are working to hire an officer ASAP. We set an aggressive timetable, and we were lucky to receive enough applications and get some good candidates. Interviews are now complete, and we have selected one candidate to enter the background phase. Background investigations are always difficult to predict a timeframe for because there are so many variables involved.

CURRENT GRANTS AND EQUIPMENT — Our new squad car is back from the installer and there was a minor hiccup that they fixed. We are also working with the insurance company on a possible replacement squad camera after one of our newer cameras experienced technical issues, potentially due to excessive dust and rattling on Kronenwetter Dr during the construction. We also have a portable radio down, and that has been sent back because the repair needed should be covered under warranty.

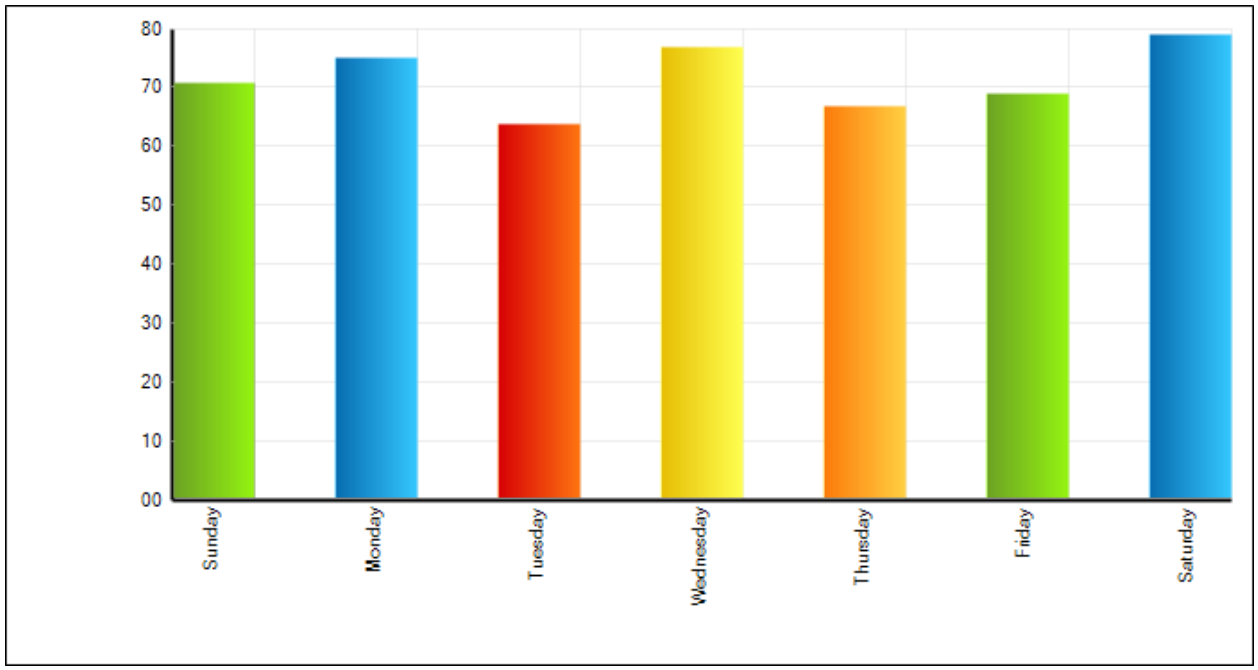
June 2025 Calls for Service Info

Events by Nature Code by Agency

KP	911 HANG UP	8
	ALARMS	4
	ANIMAL COMPLAINT	4
	BUSINESS SECURITY CHECK	47
	CIVIL COMPLAINT	11
	CRIMINAL DAMAGE TO PROPERTY	2
	CRIMINAL MISCELLANEOUS	13
	DISABLED VEHICLE	11
	EXPLOSIVE EVENT	1
	EXTRA PATROL	52
	FAMILY DISTURBANCE	3
	FIELD INTERVIEW	3
	FIGHT	1
	FINGERPRINTING	3
	FOLLOW-UP INVESTIGATION	39
	FRAUD COMPLAINT	2
	JUVENILE ATL	3
	JUVENILE DISTURBANCE	2
	LOST AND FOUND	1
	MENTAL SUBJECT	3
	OVERNIGHT PARKING	2
	PARKING MISCELLANEOUS	2
	PROCESS SERVICE	2
	SCHOOL WALK THROUGH	4
	SERVICE MISCELLANEOUS	98
	SUSPICIOUS ACTIVITY	8
	TRAFFIC HAZARD	9
	TRAFFIC MISCELLANEOUS	12
	TRAFFIC STOP	77
	VEHICLE LOCKOUT	3
	WARRANT SERVICE	2
	WELFARE CHECK	9
	TRAFFIC CRASH - INJURY	1
	TRAFFIC CRASH PDO	10
	STRUCTURE FIRE	1
	UTILITY FIRE CALL	2
	DEAD ANIMAL	6
	COMMUNITY RELATIONS ACT	2
	SPECIAL INVESTIGATIONS INFO	1
	TELEPHONE MESSAGE	10
	VEHICLE ATL	9
	MEDICAL EMERGENCY	19

June 2025 Calls for Service Info

Calls by Day of the Week



Summons/Citations Charge Summary

Agency: KRONENWETTER PD, Date Range: 06/01/2025

Charges	Count
ADULT PROCURING ALCOHOL FOR	1
DISPLAY UNAUTH. VEH. REGISTRATION	1
DRIVING WRONG WAY ON DIVIDED	1
EXCEEDING SPEED ZONES, ETC. (11-15 MPH)	4
EXCEEDING SPEED ZONES, ETC. (16-19 MPH)	2
EXCEEDING SPEED ZONES, ETC. (20-24 MPH)	1
EXCEEDING SPEED ZONES/POSTED LIMITS	2
FAILURE OF OCCUPANT TO NOTIFY POLICE	1
KNOWINGLY OPERATE WITHOUT LICENSE	1
KNOWINGLY OPERATE WITHOUT LICENSE	1
NON-REGISTRATION OF AUTO, ETC	3
OPERATE AFTER REV/SUSP OF	1
OPERATE MOTOR VEHICLE W/O PROOF OF	2
OPERATE W/O VALID LICENSE	1
OPERATE W/O VALID LICENSE (3RD+ W/IN	1
OPERATING A MOTOR VEHICLE W/O	1
OPERATING W/PAC (1ST)	1
OPERATING WHILE REVOKED (REV DUE TO	1
OPERATING WHILE SUSPENDED	2
OPERATING WHILE UNDER THE INFLUENCE	1
OPERATING WHILE UNDER THE INFLUENCE	2
POSSESS OPEN INTOXICANTS IN MV	1
POSSESSION OF THC	2
SPEEDING ON CITY HIGHWAY (25-29 MPH)	1
TRESPASS TO LAND	1
UNDERAGE DRINKING-PROCURES	1
Total:	37

KRONENWETTER FIRE DEPARTMENT
JUNE 2025

Training:

FIRE: 6/2/2025 – Hose Operations
6/16/2025 – Engine1/Truck 1 Pumping/Operations
EMS: 6/12/2025 – EKG Walk thru - Riverside
6/26/2025 – SOG/SOP Review, Annual Narcan review

Fire Calls:

June Fire Calls – 2 Structure Fires, 2 vehicle accidents, 1 weather related, 1 structure fire Rothschild, 1 cancelled call Riverside, 1 cancelled call Mosinee

EMS Calls and Updates:

June EMS Calls – 33 – YTD 215

Vehicle/Equipment Updates:

Annual Vehicle Oil Changes/DOT inspections completed
Annual pump testing completed on Engine 1 and Truck 1 – repairs needed for Engine 1 pump completed
Replaced tires on UTV trailer – added spare tire
DNR audit of grant purchases
Identified equipment needed to be replaced due to failures

- Hydrant connection from Engine 1

Equipment identified as needed

- High-rise equipment – 1 ½ Gated wye, Hose straps, 1 ½ nozzles

Fire Inspections

Completed June fire inspections – working with Pete W. on new businesses identified not currently on fire inspection listing

Past and Upcoming training and events:

Pool Fills for local residents

KRONENWETTER FIRE DEPARTMENT
JUNE 2025
TOTAL FIRE EMERGENCY CALLS ENDING 06/30/2025

	Village	Guenther	Mutual Aid	Monthly Total	Year To Date
Vehicle Accidents	2			2	10
Chimney Fire					0
Grass/Brush Fire					2
Structure Fire	2		1	3	9
Weather	1			1	3
CO/Gas/Alarms					10
Car Fire					0
Other					1
Cancelled calls			2	2	4
Total Calls	**5**	**0**	**3**	**8**	**39**
Mutual Aid Received	1			1	5
Mutual Aid Given/Dispatched	3			3	11

				Monthly	Year To Date
Engine 1				6	26
Truck 1				2	5
Tanker 2				0	3
Rescue 6				2	11
Brush 1				1	3
Car 2				2	7
UTV				0	2

TOTAL MEDICAL EMERGENCY CALLS ENDING 06/30/2025

	Monthly Total	Year To Date Total
Breathing Problems	3	18
Pain (Acute, Abdominal, Back, Hip)	1	19
Alcohol/Substance Use	0	2
Chest Pain	2	13
Sick Person	5	28
Allergic Reaction/Stings	1	1
Altered Mental Status	3	12
Cardiac Arrest/Death	0	2
Diabetic Problem	0	3
Falls	6	33
Fire Standby	1	6
Lift Assist-Mutual Aid	0	1
Medical Alarm	1	12
Psychiatric Problem/Abnormal Behavior/Suicide Attempt	0	3
Seizure	0	6
Stroke/CVA	2	8
Unknown Problem/Person Down	1	3
Traffic Crash	1	11
Traumatic Injury	3	7
Other	2	21
Unconcious Person/Fainting/Near-Fainting	1	6
TOTAL CALLS	**33**	**215**

Cancelled	7
No Transport	45
Transport	158
Fire Standby	5
YTD Total	**215**

village of Kronenwetter

Report to CLIPP

Item Name: Director of Public Works and Utilities Report
Meeting Date: August 4, 2025
Referring Body:
Committee Contact:
Staff Contact: Greg Ulman
Report Prepared by: Greg Ulman

- Kronenwetter Dr. has its first layer of pavement down from just north of Maple Ridge to Kowalski. The existing pavement south of Maple Ridge and just north of Maple Ridge will be removed in the coming weeks, and project will still be completed in early September.
- Charter Communications will be installing fiber optic cables in the Pleasant Dr. area. The permit fee for Charter Communications will be $31,118 owed to the Village.
- The chip seal project is wrapping up for the season, and crews will be sweeping and painting the roads shortly.
- The Village has received a replacement valve for the new water treatment plant from Kurita. The valve that failed was under warranty and was provided, shipped, and will be installed at no cost to the Village.
- Due to the high heat a computer failed at the water plant, they have no air conditioning at the plant, so staff installed a temporary portable air conditioner to cool off one room. Staff is looking at more permanent options.
- An RFP is available for contractors for submit for garbage and recycling services for the Village.
- Staff installed new and reprogramed existing keypads on the entrance doors to the municipal center.
- Staff has been working through a few issues with our HVAC system at the municipal center, as our software system is aging as well as a few units throughout the building. We have been working with Malbrit to correct the issues. As of now there is no huge costs associated with this, but we are looking to add HVAC items to a CIP in future years.
- Staff is exploring the security at the well houses with getting quotes for fencing as well as speaking with other communities on their security needs as well as speaking with our police department to come up with the best solutions.
- We had a failure on Saturday July 26 at lift station #2, the power went out and affected our auto-dialer and staff didn't receive a call from our systems until residents notified us of water backing up into their basements. Staff is working on a solution with and electrician and have purchased a new auto-dialer.

Community Development/Planning and Zoning Director Report

August 4, 2025

Peter S. Wegner, Community Development/Planning and Zoning Director

- Meeting with Surveyor, Engineer and Developer regarding proposed Glacier Meadows Subdivision.
- Movie Under the Stars Event.
- Correspondence with Milestone Materials regarding proposed Non-metallic Mining Operation.
- Correspondence with Appraisers regarding Village owned Kronenwetter Drive parcels.
- Review propose CSM and Rezone 3225 Martin Road.
- Construction Meeting Kronenwetter Drive & Local Roads Rehabilitation Projects.
- Review maintenance and upgrade proposal from Mastec for AT&T's existing telecommunication facility located at 3111 16th Road.
- Review proposed CSM and Rezone on Forest Road. Tax Parcel ID Number: 145-2708-191-0988.
- Correspondence with Realtor regarding vacant lot on the corner of Terrebonne Drive and Plantation Lane.
- Complaints and Correspondence.
- Review proposed CSM and Rezone on Aspen Road. Tax Parcel ID Number: 145-2708-212-0987.
- Review proposed CSM and Rezone on E. Hwy 153. Tax Parcel ID Number: 145-2707-253-0993.
- Research language options to allow chickens on smaller lots within the Village.
- Review proposed Conditional Use Permit application for a second principal building on a parcel zoned RR5- Rural Residential 5.
- Research § 520-27. - Accessory and miscellaneous land use types.
- Research ordinance language requirements for a porch pick up or farm stand in SF – Single Family Residential.
- Review proposed Rezone on Gardner Park Road. Tax Parcel ID Number: 145-2707-034-0972.
- Review ordinance requirements related to storage shed sales.
- Correspondence with Developer regarding available properties in TID 1 and 2.
- Review proposed amendments to Marathon County Chapter 15 – Private Sewage Systems.
- Research available parcels within the Village for the placement of a Single-family detached residence.
- Research and correspondence regarding proposed Office/Contractor Shop and Personal Storage Facility.
- Correspondence regarding possible CSM and Rezone on County Road X. Tax Parcel ID Number: 145-2707-364-0990.
- Correspondence with Realtor regarding buildable area on numerous parcels on Creek Road.
- Review Driveway access, buffer requirements, setbacks and permitted uses for parcel located on Old Highway 51. Tax Parcel ID Number: 145-2707-152-0031.
- Correspondence with Marathon County and Wisconsin DNR regarding manure complaint.
- Correspondence with a Wausau Tile Engineering Manager regarding proposed Slag Silo.
- Meeting with resident regarding proposed Garage and Driveway access at 2077 Prairie Meadow Drive.

Violation #	Date Received	Property Address	Owner Name	Zoning	Complainant name	Nature of the Complaint	Valid?	Action Taken	Status
25-0304-001	3/4/2025	1849 Deerwood Trail	Steven & Stephanie Woytasik	SF	Neighbor	Rubbish piles in yard	Yes	Called Steven on 03-04-2025 and VM was full. Steven called back later and I talked to him about the rubbish piles in the yard. I informed him he had 10 days to get the rubbish cleaned up. If he did not, there would be a citation given. 10 days are up 03/11/2025, I will check on the property on 03/12/2025 to see if the rubbish has been cleaned up. 03/11/2025: The large pile of rubbish was removed, there are a few item left to clean up. I talked to the owner of the land next door and they have given permission to go on the land to get more pictures. 03/19/2025 Called left a VM, Gave the owner 10 days to finish up the clean-up then will issue a citation. Letter sent 03/19/2025. 03/25/2025 Steven called and will be removing the wood, lawn mower, wheel barrow and dolley when the snow melts. I will check back after the snow is gone. 07/30/2025 checked on property, unable to get pictures due to trees blocking view.	Open
25-0314-002	3/14/2025	2054 Paintbrush	Jody Strenz - Hugh Dombeck	SF	Sonja Kurtzweil	Rubbish piles in yard, Tires, lawn tractors,	Yes	03/14/2025- Called Owner of house and she would like me to go over to the house as her sons live there. She would like me to give guidance on what needs to be cleaned up so they can be compliant. Will call to schedule an appointment to do that. 03/17/2025 Called and talked to Hue (The son). He is going to work on cleaning up the corner of the yard with all the mowers and tires. I told him I would be doing drive - by's to check on the progress. 06/04/2025 Drive by and the items have not moved. Letter to be sent with 10 day notice. 06/13/2025 Tenent called they are getting a storage unit to put all the items in there. Hugh will call with updates. 07/30/2025 Items are still in the yard and no update from Hugh.	Open
25-0529-005	5/27/2025	1775 Pine Road	JASON SCHMIRLER & DANA MORTENSEN	SF	Anonymous	Cars in the yard		Gathering information. Needs onsite. 07/30/2025 No cars in yard.	No Action
25-0521-006	5/21/2025	2718 North Road	Michael & Debra King	AR	Marathon County	Manure complaint		Gathering information. Needs onsite. 07/30/2025 DNR Letter sent 06/23/2025	Open
25-0605-007	6/5/2025	2015 Creciente	Robert Zimmerman	SF	Cynthia Brinkman	nuisance weeds, unkept yard	Yes	Received a call about nuisance weeds in the back yard that are coming into the neighbors yard. There has been a lot of snakes and mice in the area. 07/31/2025: Part of the yard is manicured and other half is natural.	Closed
25-0610-008	6/10/2025	1054 Russell Street	Susan Ficenec		Russ Stark & Diane Vanden Heuvel	Grass has not been mowed		Gathering information. Needs onsite. 06/15/2025 Updated Pictures and talked to the owner. She asked for names of lawn care companies to care for the lawn. Sent email with names. 06/19/2025 Susan called back and has calls out to people to mow, will update when one is found. 06/26/2025 Received 2nd complaint on the grass. Complaintant called for an update. 07/30/2025 Yard is cut.	Closed
25-0611-009	6/11/2025	2066 Paintbrush	Hannah Schade & Daniel Burns	SF	Anonymous	Grass in back yard has not been mowed		Gathering information. Needs onsite, Picture sent to me on 06/11/2025. need to touch base. 06/16/2025 Called and left a VM. Owner called back and they did not have a lawn mower and they just bought one. They will be mowing once the rain stops. 07/30/2025 Yard is cut	Closed
25-0612-010	6/12/2025	2115 Terrebonne			Mrs. Reid	Several cars in the driveway and in the yard		07/31/2025: Updated Pictures & sending letter	Open
25-0612-011	6/12/2025	2124 Terrebonne			Mrs. Reid	Several cars in the driveway and in the yard		07/31/2025: Updated Pictures & sending letter	Open
25-0613-012 and 23-0530-015	6/13/2025	2363 New Castle	Nicholas Wokatsch	SF	Kim Sether	Grass out of control		Gathering information. Needs onsite. 06/18/2025 Updated pictures. Sent letter on 06/19/2025. 07/30/2025 Yard established and cut.	Closed
25-0613-013	6/13/2025	2637 Canterbury		SF	Kim Sether	Yard not established & Very tall weeds		Gathering information. Needs onsite. 06/18/2025 Updated pictures. 06/18/2025 Received a 2nd complaint on property. 06/27/2025 3rd complaint received. 06/27/2025 Called onwer and they are having a landscaper come next week, will update after. 07/30/2025 Yard established.	Closed
25-0616-014	6/16/2025	1757 Kowalski Road	Tim Myers	SF	Neighbor	Junk in yard, old camper, old truck bed, old water heater, planted bush in ROW. Drove on neighbors property without permission.	Yes	Gathering information. Needs onsite. 06/16/2025 Pictures send via email. 06/18/2025 updated pictures, sending letters. 06/26/2025, Owner called and the camper will be moved to their cabin up north. The truck is for sale, the hot water heater will be disposed of correctly.	Open
25-0616-015 & 23-0630-025	45824	2142 Conestoga Lane	Dylan Buettner	SF	Bradley Crook	Grass is very high		Gathering information. Needs onsite. 06/18/2025 updated pictures. Called on 06/17/2025 and 06/19/2025 not able to leave VM. Will send letters. Certified letter sent on July7, 2025 for 10 day notice. Another complaint on this property on 07/08/2025. 07/07/2025: Sent certified mail with 10 day notice. 07/31/2025: Certified mail returned undelivered, will have owner servered by PD.	Open
25-0617-016	6/17/2025	1893 Norway & 1900 Seville	Paul Jaeger	SF	James Macintyre	Threatening Utility worker with stick	Yes	talked to James about what happened, sent to PD. 07/11/2025: Updated file with incident report.	Open
25-0711-026	7/11/2025	1893 Norway & 1900 Seville	Peter Wegner & James Macintyre		Paul Jaeger	conspiring to print and distribute untruths about Macintyre trespassing onto and into my property at 1900 Seville Road		07/11/2025: Updated file with incident report.	
25-0714-028	7/14/2025	2480 County Road X	Slavko & Monica Stefanovic		Karen Tallitsch	Lawn has not been mowed	Yes	07/30/2025 Updated pictures, Yard was attempted to be cut in some areas.	Open

24-0409-006	4/9/2024	County Road X	Stacey Stepan, 2177 River Forest Lane	SF	anonymous	Storing campers on land	Yes	04/01/2025: Camper and 2 boats are still on the lot, sending letters. 07/30/2025 Updated pictures and only 1 boat on property.	Open - Continue to monitor
24-0322-007	3/22/2024	920 Wedgewood	Cheryl Viviano	SF	anonymous	Siding coming off house, 2 vehicle Not moved and sunk into the blacktop. Car have not been registered in over 10 years. Dozen of boxes and mailbox has been removed. Home is eyesore and they are hoarders.	Yes	Pictures on 05/24/2024: Boxes are removed, Van is still sunken into the blacktop driveway. 05/28/2024, Spoke to owner and she is not home and needs time to figure out what to do with the van. She would possibly consider having the van towed and selling the car. Owner will call back in a few days. 06/17/2024: Called resident and she was going to the store and wil call back in an hour. May be in the area mid July will call when back in town. 3/18/2025: Vehicles are still in the driveway and updated pictures. 03/19/2025: Sent letter with a 10 day notice to remove both vehicles. Called on 03/31/2025 I am giving her until 04/22/2025 to move both cars. If not moved citations will be written. 04/02/2025 Got a call from Cheryl, She is will to pay the citation and move the vehicles after the 23rd of April. I will be checking back after the week of May 1, 2025. Cheryl called and will be in town the first week of May, Cars will be moved at that time. Will check again. The beginning of May the owner stopped in and is moving both vehicles. June 1, 2025, Drove by the property and the white van is still in the driveway. 07/30/2025 Updated Pictures, no change.	Open
24-0424-013	4/24/2024	2092 South Road	Faye Parker and Orman Boggs	SF	anonymous	Junkyard	Yes	Updated picture, the junk is still in place.. 04/11/2025 - Updated Pictures Junk is still in place, sending 10 day letter. 07/31/2025: Updated pictures.	Open
24-0618-047	6/18/2024	2177 Angelo Drive	Michael Ausloos	SF	Unknown, anonynous	Grass has not been mowed and is over 18 inches high.	Yes	07/17/2024: Called owner and left a VM. July 7, 2025, 10 day letter sent. 07/07/2025 - Received a 2nd call on this property, Neighbor complained about the rats and mice coming from the property. Updated pictures. 07/30/2025 Updated photos Some yard has been mowed, the backyard is still long.	Open
24-0827-052	8/27/2024	2302 & 2304 Bonneydune	The Hot Spot	SF	Unknown, anonynous	Building garden shed without permit		04/14/2025: Pictures updated. 07/31/2025: Updated Pictures, sending letter.	Open
23-0517-013	5/17/2023	860 W Nelson Road	Joel Straub	SF	Kurt Cieslek	Three trailers parked at the end of drive way, a pile of concrete rubble a pile of dirt growing weeds from it, old building materials piled up several dilapidated shed.	yes	Letter sent, Trailers at the end of the driveway and pile of concrete rubble have been resolved. Citations were issued for the delapated structure and went to court. 5/28/2025 - Defendant found guilty of § 382-6. - Public nuisances affecting peace and safety. Ordered to pay forfeiture of $124.00. Violation of the Side Lot Setback pending.	On going
23-0510-014	5/10/2023	Martin Road	Village of Kronenwetter			Martin road needs repair	Yes	Went out May 18 2023 and took pictures. Given to public works	Closed, Given to Public Works
23-0522-023	5/22/2023	2449 Pico Road	RILEY LOEBBAKA	SF	Neighbor	2 cars parked in yard that are not registered or operable. sticks and rubbish in yard	Need to visit	Given to police Letter needs to be sent. 05/30/2024: Updated pictures, 1 car still in yard, 1 boat and 1 trailer in the side yard. 04/11/2025 Updated pictures and the boat and car are still in the yard. 07/31/2025: Sending letter and updated pictures.	On going
23-0802-030	8/2/2023	2025 Amber Drive	Robert Dudley	SF	Andrew Feldmann	Junk in yard	need to check out	Checked out and took pictures I believe the only thing that can be made to pick up is old appliance. Talked with owner and he said that it was being used as a garden pot decoration thing. We requested pictures of flowers when the start growing. Check back in June 2024. 07/31/2025: Updated Pictures, sending letters.	On going check in June 2024

village of Kronenwetter

Report to CLIPP

Agenda Item: CLIPP recommendation report
Meeting Date: August 4, 2025
Referring Body:
Committee Contact: Trustee Charneski
Staff Contact: Pete Wegner
Report Prepared by: Ken Charneski

AGENDA ITEM: CLIPP recommendation report

OBJECTIVE(S): To inform the Committee of the outcomes of previous CLIPP recommendations.

HISTORY/BACKGROUND: A couple of months ago at a Planning Commission meeting, the request was made for staff to report back to PC on the ultimate outcomes of items that PC recommended to the Board. This was intended to give feedback to the Commission as to the effectiveness of their work, and basically out of plain old curiosity on the PC members' part.

I thought that that request was a good idea, and plan on reporting back to CLIPP in the same way and for the same reasons.

At the May meeting, on **Item 6M** we recommended the RFP for garbage collection services as follows from the minutes:

> ***M.*** *"Upcoming Garbage Contract Motion by Leff/Charneski to send RFP to APC with the changes we discussed. (3 and 5 year option with 2 year extension option) Motion carried by voice vote. 5:0. Discussed possible companies, size of garbage bins, changes to RFP, trick pick-up and time options."*

Outcome: APC decided against the RFP but instead opted for renewing the contract with Harter's if the new contract would represent a price increase below a certain amount (3% in discussion).

The new contract came to the Board with about a 12% increase, and up to 5% per year increase after that. So the Board moved to send out RFP's.

At the June CLIPP meeting, the committee made two motions to the Village Board. The first was **Item 5H** requested by President Baker to gather information on future road reconstruction and resurfacing for budgeting purposes.

> ***H.*** *Estimated Costs to Maintain Roads at a PASER Rating of 6 or 7.*

The minutes have not yet been prepared for the July meeting, but the audio recording has a recommendation to the Board that

> *They get core samples for Maple Ridge, South, Forest, and Autumn, and if the budget and time allows, move ahead with resurfacing Peplin* [road]*, and once we have the core samples budget accordingly.*

This motion passed 5-0.

Outcome: This motion never made it to the Board, but instead someone it replaced with a different item and it was presented to the Board by President Baker like this:

> ***AGENDA ITEM:*** *Core Samples of Maple Ridge Rd.*
> ***OBJECTIVE(S):*** *To determine the level of work needed on Maple Ridge Rd*
> ***HISTORY/BACKGROUND:*** *Staff had presented CLIPP with a 5-year CIP and Maple Ridge*

Rd. is a road of higher priority to be reconstructed. With the long process of doing engineering studies, financing the project, and the design/construction process; staff is seeking core samples to be done on Maple Ridge Rd. The core samples are the beginning aspects of a project to determine the quality of the base material in which the road was constructed on. Pending on the results we will have an accurate price point on the cost of reconstructing the road. With the results of the core samples staff will work with CLIPP of a possible timeline of construction. The cost to have core samples done are $4,500

The Board moved Forward with this item on Maple Ridge Road, but obviously was not made aware of CLIPP's motion so it took no action on the rest of the roads or resurfacing of Peplin Road.

Due to this change in the item, the original intent of providing the requested information for budgeting for a longer term road maintenance plan has not been accomplished.

At the same meeting we had another item, Item 6 O to discuss beneficial vs dangerous/detrimental effects of injecting fluoride chemicals into the Village's drinking water.

O. *Water Fluoridation*

The Motion to the Board was to

recommend that the Village discontinue injecting fluoride into the drinking water.

The motion passed 5-0.

Outcome: This item went to the Board for discussion only on July 14, and I included the CLIPP recommendation in the report. Some Board members asked about the cost of taking a survey of water customers.

As an additional note, the question of taking a survey on the fluoride issue had also gone to the **Utility Committee** back in April. They voted unanimously against the survey due to the unreliability of the results, and likelihood of unnecessary drama that it would cause. These aspects were also discussed at the July 14 Village Board meeting

The item came back to the Board for action on July 28, and the Board went ahead voted to approve the plan of sending out survey postcards at a cost not exceed $2500.

So this issue will not be resolved for several months.

PROPOSAL:

RECOMMENDED ACTION: For information only, no action to be taken.

FINANCIAL

Financial Consideration/Action:

FUNDING SOURCE: N/A

Account Number/Title: #
Current Adopted Budget: $
Spent to Date: $
Remaining Budget: $
Requested Amount: $
Remainder of Budgeted Amount, if approved:

ATTACHMENTS:

Intersection Control Evaluation for CTH X, CTH XX, and Pine Road Village of Kronenwetter Marathon County

Prepared for

Marathon County Hwy Dept
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Prepared by

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March 2025

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CONTENTS

CTH X, CTH XX, and Pine Road Intersection Control Evaluation

Project Background

The intersection of CTH X, CTH XX, and Pine Road is located in the Village of Kronenwetter, Marathon County. CTH X makes up the south and east legs, CTH XX makes up the north leg, and Pine Road makes up the west leg. It is currently two-way stop controlled on the east and west legs (CTH X and Pine Road, respectively). The intersection is being evaluated for potential safety and operational improvements. A Project Location Map is included as Attachment 1. The evaluation includes the analysis of existing and future intersection operations, as well as crashes and safety. The following details the results of the analyses and an Intersection Control Evaluation (ICE).

Study Area

CTH X is a two-lane roadway with a speed limit of 35 mph on the south leg of the intersection and 45 mph on the east leg of the intersection. The average annual daily traffic (AADT) reported by the Wisconsin Department of Transportation (WisDOT) on CTH X to the east is 5,000 (2023). CTH XX is a two-lane roadway with a speed limit of 35 mph on the north leg of the intersection. The AADT reported by WisDOT on CTH XX is 3,700 (2023). Pine Road is a two-lane roadway with a speed limit of 25 mph on the west leg of the intersection. The AADT reported by WisDOT on Pine Road is 1,200 (2019). The volumes reported by WisDOT are consistent with an intersection turning movement count collected on December 11, 2024. The existing intersection of CTH X, CTH XX, and Pine Road is two-way stop controlled on the east and west legs (CTH X and Pine Road, respectively). There are no turn lanes on any of the four approaches. The roadways intersect at a 90-degree angle.

On CTH X to the south, there is a residential driveway located approximately 90 feet away from the intersection on the west side of the roadway and a business driveway located approximately 195 away on the east side of the roadway. On CTH X to the east, there are business driveways located approximately 185 feet and 350 feet away on the south and north side of the roadway, respectively. On CTH XX to the north, there is a residential driveway located approximately 135 feet away on the west side of the roadway and on Pine Road, there is a residential driveway located approximately 325 feet away on the south side of the roadway.

Truck percentages in the AM peak range from 0% and 1% on the west and east legs to 1% and 5% on the south and north legs. In the PM peak, truck percentages range from 1% and 6% on the east and west legs to 1% and 2% on the south and north legs of the intersection.

Safety Considerations

There were 19 crashes observed at the intersection of CTH X, CTH XX, and Pine Road from January 2019 through December 2024. See Table 1 and the subsequent summary for details. The summary focuses first on the finalized crash data from 2019-2023 with the preliminary 2024 data detailed at the end of the summary. Traffic volumes at the intersection are included as Attachment 2 and a detailed Intersection Crash Diagram is included as Attachment 3.

Table 1: CTH X, CTH XX, and Pine Road Observed Crash History
Years 2019-2024

Crash Type	Fatal	Injury A	Injury B	Injury C		KABC (Fatal + Injury A + Injury B + Injury C)	Property Damage Only (PDO)	Total (KABC + PDO)
Head-on				1		1	1	2
Angle			2	1		3	6	9
Angle*		1	1			2	2	4
Rear End							3	3
No*							1	1
Total	0	1	3	2		6	13	19

* Preliminary 2024 data
** No Collision with Vehicle in Transport / Single Vehicle Crash

Crash Trends: Of the 15 total crashes, nine were there result of an eastbound or westbound driver failing to yield to a northbound or southbound vehicle causing an angle crash – three due to an eastbound driver failing to yield to a northbound vehicle, three due to a westbound driver failing to yield to a southbound vehicle, two due to an eastbound driver failing to yield to a southbound vehicle, and one due to a westbound driver failing to yield to a northbound vehicle. The two head on crashes were caused by drivers that took left turns too short and struck vehicles stopped at the stop signs. The three rear end crashes all occurred westbound on CTH X, two of which were due to icy conditions. There was one single vehicle incident where a southbound driver hit a snowbank after swerving to avoid a westbound vehicle that had slid through the stop sign under icy conditions.

Contributing Geometric Factors: Sight distance from the stop sign on Pine Road is limited in in the northwest quadrant due to visual obstructions near the roadway including large trees and power poles. Visibility is also somewhat limited in the southwest quadrant by a tree south of the private driveway, but this meets current standards.

Eastbound Pine Road looking south


Eastbound Pine Road looking north

Roadway Conditions: Lighting and pavement condition do not appear to be significant factors in the crash trends at this location There is lighting at this intersection located in the northeast quadrant. Of the 15 total crashes, 12 occurred during the day, one occurred at dawn, one at dusk, and one under lighted conditions. Two crashes occurred on wet pavement and three in the snow while ten were on dry pavement.

Driver Characteristics: Of the 15 at-fault drivers, eight were in the range of 16-29 years old. Five of these resulted in angle crashes, two were rear end incidents and the last was the single vehicle incident. These driver errors may be partly due to inexperience or risk-taking, which are both common among young drivers.

One of the at-fault drivers was 44 years old. This driver was unable to stop due to icy conditions.

The remaining six crashes were caused by older drivers in the range of 60-78 years old. Four of these resulted in angle crashes and two were the head on incidents where the drivers took the turns too short.

Fatal and A-Type Injury Crash Summaries: There were no fatal or A-type injury crashes reported.

Preliminary 2024 Data: There were a total of four crashes that occurred at the intersection in 2024. All four were angle crashes. One occurred when a southbound left turning driver (age 20) was distracted and turned in front of a northbound vehicle resulting in an A-type injury crash. Another occurred when a westbound driver (age 28) stopped at the stop sign on CTH X, looked but did not see any cross traffic, pulled out and struck the side of a southbound vehicle resulting in a B-type injury crash. One was the result of a northbound left turning driver (age 86) cutting the corner short due to sun glare and striking an eastbound vehicle stopped at the stop sign resulting in a property damage only crash. The final occurred when a distracted westbound driver (age 16) stopped at the stop sign but then failed to yield right of way to a northbound vehicle resulting in a property damage only crash. All four crashes occurred during the day on dry pavement conditions.

Description of Evaluated Alternatives

The following alternatives were evaluated:

- Existing two-way stop control
- All-way stop control (AWSC)
- Roundabout control
- Traffic Signal control

Traffic Projections

The traffic projections were completed utilizing straight-line growth from existing conditions to year 2046. The growth rate was determined based on WisDOT AADT counts on CTH X, CTH XX, and Pine Road. The AADT counts show varying growth rates ranging from a decrease in traffic to an increase of approximately 1% per year. A growth rate of 0.5% per year was utilized to determine the future traffic volumes for this analysis. See Attachment 2 for existing and future traffic data.

Warrants Analysis

Traffic Signal Control Warrants

Traffic signal warrants were evaluated using existing and forecasted traffic volumes. The evaluation of forecasted traffic data shows that no warrants are expected to be met in the year 2046. For purposes of warrant evaluation only, the year 2046 traffic volumes were recalculated utilizing a growth rate of 1% per year and warrants were re-evaluated to determine if a greater amount of traffic growth would change the outcome of the warrants analysis. The evaluation of forecasted traffic data with 1% growth per year still shows that no traffic signal warrants are expected to be met in the year 2046. Therefore, traffic signal control was not evaluated any further. See Attachment 4 for the Traffic Signal Warrants Analysis Output.

All-Way Stop Control Warrants

The Wisconsin Manual on Uniform Traffic Control Devices (WMUTCD) Section 2B.12 and WisDOT's Traffic Engineering, Operations and Safety (TEOpS) Manual were consulted to determine if AWSC is warranted at the intersection of CTH X, CTH XX, and Pine Road. Multi-way stop control is typically considered when traffic volumes on the intersecting roadways are approximately equal. The WMUTCD lists multiple criteria that should be considered in an engineering study for multi-way stop installation. The criteria include the following:

A. Where traffic signal control is justified, multi-way stop control can be used as an interim measure.
B. If five or more crashes that could be corrected by a multi-way stop were reported in a one-year period.
C. Where an engineering study indicates that sight distance on the minor road approaches controlled by a stop sign is not adequate for a vehicle to turn onto or cross the uncontrolled major road.
D. If minimum volumes for locations where the 85th percentile speed of the major street traffic is 40 mph or less are met as follows:
    i. The total vehicular volume entering the intersection from both major approaches averages at least 300 vehicles per hour for any eight hours of an average day; and
    ii. The combined vehicular, bicycle, and pedestrian volume entering the intersection from both minor approaches averages at least 200 units per hour for the same eight hours.

The TEOpS Manual states that all criteria in the MUTCD shall be considered when evaluating whether AWSC is appropriate control for intersections on the STH system, plus the following supplemental criteria shall also be considered:

1. Functional Highway Classification – for desirable AWSC, the intersecting roadways should have the same or similar functional class on at least three approaches.
2. Average Daily Traffic (ADT) – for AWSC, it is highly desirable that the intersecting roadways have closely balanced ADTs on at least three approaches (at least one of the minor approaches with a volume not less than 70% of the higher volume of the two approaches on the major roadway.
3. Crash History – AWSC should be considered if it is expected to correct a significant number of intersection crashes that have occurred in the past 5 years or reduce the overall severity of future crashes.
4. Alternatives – Improvement alternatives that are less restrictive than AWSC shall be considered and evaluated.
5. Mobility Impact – Will the high-volume of existing through traffic experience significant delays for the benefit of reducing delays for a low-volume side-street?
6. Right turn inclusion – The inclusion of right turns from the minor approaches in the AWSC warrant analysis should be evaluated similar to signal warrant evaluation.

The intersection of CTH X, CTH XX, and Pine Road is currently stop-controlled on the east and west approaches of CTH X and Pine Road, which are the highest and lowest volume approaches, respectively. Traffic volumes on CTH X to the south and CTH XX to the north are roughly even and approximately 20% lower than CTH X to the east.

Based on the WMUTCD AWSC criteria, the following applies at the intersection of CTH X, CTH XX, and Pine Road under existing or forecasted traffic conditions:

A. Traffic signal warrants are not met.
B. There are multiple crashes that could be corrected by a multi-way stop, including five angle crashes that occurred in a one-year period from August of 2023 to August of 2024.

C. The sight distance northbound and southbound from Pine Road is hindered by vegetation and power poles near the roadway.
D. Neither existing nor forecasted traffic volumes meet the minimum criteria. The total forecasted vehicular traffic entering the intersection from both major approaches (north-south) was over 300 vehicles per hour for just 4 of the 13 hours evaluated and the combined vehicular, bicycle, and pedestrian volume from both minor approaches (east-west) exceeded 200 units during only 5 of the 13 hours evaluated.

Based on the TEOPs manual supplemental criteria recommended for consideration, the following applies:

1. The intersecting roadways have the same or similar functional classification on at least three of the approaches.
2. The ADT is relatively balanced on at least three of the approaches.
3. AWSC would correct a significant number of the intersection crashes that have occurred in the past 5 years.
4. Clearing the sight distance is a viable alternative that should be considered. There are no other less restrictive alternatives that would address the safety concerns at this location.
5. The through traffic accounts for only about half of the total traffic on the north and south approaches. Also, the east leg has slightly higher volumes than both the north and the south legs.

The AWSC warrants evaluation shows that AWSC is warranted See Attachment 5 for the AWSC Warrants Output.

Operational Considerations

Intersection operations are defined by Level of Service (LOS), which is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good (LOS A) to very poor (LOS F). For this study, LOS D was used to define acceptable peak hour operating conditions. Descriptions of the various levels of service are as follows:

- LOS A is the highest level of service that can be achieved. Under this condition, intersection approaches appear to be quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At signalized and unsignalized intersections, average delays are less than 10 seconds.
- LOS B represents stable operation. At signalized intersections, average vehicle delays are 10 to 20 seconds. At unsignalized intersections, average delays are 10 to 15 seconds.
- LOS C still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At signalized intersections, average vehicle delays are 20 to 35 seconds. At unsignalized intersections, average delays are 15 to 25 seconds.
- LOS D represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At signalized intersections, average vehicle delays are 35 to 55 seconds. At unsignalized intersections, average delays are 25 to 35 seconds.
- LOS E represents the capacity of the intersection. At signalized intersections, average vehicle delays are 55 to 80 seconds. At unsignalized intersections, average delays are 35 to 50 seconds.
- LOS F represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At signalized intersections, average vehicle delays exceed 80 seconds. At unsignalized intersections, average delays exceed 50 seconds.

Level of Service was analyzed for the following traffic control scenarios: existing two way stop control (TWSC), all-way stop control (AWSC), and roundabout control. Both existing year 2024 and future year 2046 were evaluated. See Attachment 2 for existing and future traffic data.

Evaluation of existing conditions at the intersection of CTH X, CTH XX, and Pine Road shows the westbound approach is currently experiencing LOS D operations during the PM peak with the 95th percentile queue reaching up to 115 feet or roughly four vehicles. The other approaches are operating at LOS C or better during both peak periods. Future operations are expected to remain similar to existing on the eastbound, northbound, and southbound approaches. However, the westbound approach is expected to have an increase in delay resulting in LOS F operations and the 95th percentile queue is expected to reach up to 193 feet or roughly eight vehicles during the PM peak.

Evaluation of AWSC criteria is detailed above. This intersection is unique in that the stop-controlled approaches are the lowest and highest volume legs. Roughly half of the southbound traffic on CTH XX and over half of the northbound traffic on CTH X make a left and a right turn, respectively, to travel east on CTH X causing these vehicles to slow/stop at the intersection under the existing condition to make their intended movement. Through movements are also likely to be impeded by vehicles slowing to turn east onto CTH X under the existing two-way stop control. All-way stop control is expected to reduce delay to under 15 seconds for all approaches during both peaks for both the existing and future analysis years. See Attachment 5 for AWSC analysis output.

The proposed roundabout was analyzed using HCM capacity equations. The HCM capacity equations are dependent on critical and follow-up headways that are based on national headway averages. The analysis utilized WisDOT's recommended critical and follow-up headways, which can be found in Chapter 16-15, Table 20.1 of WisDOT's Traffic Engineering, Operations, and Safety Manual (TEOpS). See Table 2 for details.

Table 2: Recommended Headway Values

	Critical Headway (s)	Follow-up Headway (s)
Single Lane Entering with Single Lane Conflicting	4.7	2.6

The results of the analysis, including delay and corresponding LOS, are consistent with typical unsignalized intersection LOS and delay ranges from the HCM 7th Edition. A single-lane roundabout is expected to reduce delay to under six seconds for all approaches during both peaks for both the existing and future analysis years.

Table 3 below summarizes the intersection delay expected under the three traffic scenarios evaluated. The Synchro Capacity/LOS Analysis Summaries are included as Attachment 6 and the HCS7 Summary Reports are included as Attachment 7.

Table 3: CTH X, CTH XX, and Pine Road Intersection Delay Summary

Intersection Control	Peak Period	Pine Rd EB Approach		CTH X WB Approach		CTH X NB Approach		CTH XX SB Approach		Intersection Average	
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
Two-Way Stop	Existing AM Peak	13.2	B	15.5	C	7.3*	A	8*	A	N/A**	
	Existing PM Peak	18.9	C	32.1	D	7.5*	A	7.9*	A	N/A**	
	2046 AM Peak	14.1	B	18	C	7.3*	A	8.1*	A	N/A**	
	2046 PM Peak	23.3	C	59.6	F	7.6*	A	8*	A	N/A**	
All-Way Stop	Existing AM Peak	8.9	A	10.4	B	10.4	B	9.1	A	10.1	B
	Existing PM Peak	10	A	11.5	B	10.2	B	12.7	B	11.4	B
	2046 AM Peak	9.3	A	11.4	B	11.4	B	9.5	A	10.9	B
	2046 PM Peak	10.7	B	12.7	B	11.2	B	14.7	B	12.8	B
Single Lane Roundabout	Existing AM Peak	3.5	A	4.5	A	4.7	A	3.6	A	4.3	A
	Existing PM Peak	4.6	A	4.4	A	4.5	A	5.1	A	4.7	A
	2046 AM Peak	3.6	A	4.8	A	4.9	A	3.8	A	4.6	A
	2046 PM Peak	4.9	A	4.6	A	4.9	A	5.5	A	5.0	A

* Mainline delay on TWSC refers to left-turning vehicles. Through and right-turning vehicles have no delay.
** Average intersection delay is not calculated for TWSC intersections.

Feasibility of Alternatives

To evaluate intersection safety, both the Wisconsin Department of Transportation (WisDOT) and the Federal Highway Administration (FHWA) maintain a directory of study-based Crash Modification Factors (CMFs) related to safety improvements. The FHWA database is maintained at https://cmfclearinghouse.fhwa.dot.gov/ and the WisDOT CMF table can be found in Chapter 12 of the Traffic Engineering, Operations and Safety (TEOpS) Manual. The CMFs are used to estimate future crash rates by multiplying them by the existing crash rates. A CMF of 1 indicates no expected impact to the number of crashes, a CMF less than 1 indicates a reduction in crashes, and a CMF of more than 1 indicates an increase in crashes. These factors are often related to specific crash types.

The AWSC alternative has the potential to reduce crashes and delay for the eastbound and westbound approaches at the intersection of CTH X, CTH XX, and Pine Road with a minimal increase in delay for northbound and southbound vehicles. The roundabout will reduce delay on the eastbound and westbound approaches, maintain similar operations on the northbound and southbound approaches, and have the potential to reduce crashes and crash severity.

All-way Stop Control: The AWSC alternative would provide for a decrease in delay eastbound and westbound on CTH X and Pine Road; however, there will be a slight increase in delay northbound and southbound on CTH X and CTH XX for through vehicles, which amount to only roughly half of the traffic on these approaches. The installation of AWSC relies on drivers recognizing and obeying the traffic signs. If drivers do not obey the stop signs, the risk of severe right-angle crashes will still be present. This will be especially true as drivers re-learn this intersection after not having to stop here in the past. Probable impacts of the AWSC alternative are discussed below.

- WisDOT's CMF table includes CMFs for converting a two-way stop-controlled intersection to all-way stop control at rural, urban, and all location types. This change can be expected to reduce all

crash types and severities (fatal, injury, and property damage only) by between 48% and 68% (CMF of 0.52 for rural locations and 0.32 for all location types) and fatal/injury crashes by 77% (CMF of 0.23 for all location types).

- We anticipate the AWSC alternative to cost approximately $28,600. The estimate includes LED flashing stop signs and double Stop Ahead signs with permanent sign flags for the northbound and southbound directions, stop bars for all directions, and additional minor signing changes at the intersection. To assist with the conversion to all-way stop, temporary measures will include portable changeable message boards to be in place for two weeks and three sets of temporary rumble strips in both the northbound and southbound directions. See attachment 8 for Cost Estimates.

Single-lane Roundabout: The roundabout alternative is expected to provide the least amount of overall delay and maintain acceptable levels of service for all approaches well beyond the year 2046. Furthermore, the geometric elements of the roundabout will force drivers to slow upon entering the intersection, unlike with the AWSC alternative. Probable impacts of a single lane roundabout are discussed below. See Attachment 9 for the Preliminary Roundabout Alternative Layouts.

- The roundabout is expected to decrease the severity of crashes by decreasing speeds at the intersection. FHWA research on safety countermeasures shows that converting a two-way stop-controlled intersection to a roundabout reduces fatal and injury crashes by 82%. See Attachment 10 for the FHWA Proven Safety Countermeasures document relating to roundabouts.
- The FHWA Clearinghouse includes a CMF for converting a two-way stop-controlled intersection to a single lane roundabout. This change can be expected to reduce all crash types and severities (fatal, injury, and property damage only) by between 58% and 72% (CMF of 0.42 for rural locations and 0.28 for urban locations).
- Sidepaths will be considered per FDM 11-46-1.3.1.4 which states that in suburban or rural areas, there may be locations with on-road bicycle accommodations but without sidewalks (existing or proposed) in which case, 6-foot wide roundabout sidepaths are appropriate. Estimates were completed with and without the sidepaths to further the discussion on their inclusion if a roundabout is chosen.
- The roundabout alignment will not vary greatly from the existing roadway. There will be some widening to accommodate medians. Minor real estate impacts are expected.
- Based on conceptual estimates, we anticipate the construction of a roundabout at this location would cost approximately $1,260,000 without sidepaths and $1,300,000 with sidepaths. See Attachment 8 for details.

Providing Vision Triangles: Vision triangles allow drivers approaching the intersection to see other approaching drivers. For example, this would allow time for northbound and southbound drivers to react if an eastbound driver was not able to stop in time. From the west, the vision triangle is measured from a point 90 feet down Pine Road and 120 feet to the north and south. From the east, the vision triangle is measured from a point 150 feet down CTH X and 120 feet to the north and south. All measurements are relative to where the center of the lanes cross and distances are determined using the posted speed. See Attachment 11 for the Vision Triangles Diagram.

The vision triangle is clear in the northeast and southeast quadrants, and trees in the southwest quadrant are currently trimmed high enough so that the branches do not conflict with the vision triangle. However, the bushes and trees in the northwest quadrant are thick and would need to be removed or heavily trimmed in order to provide the vision triangle.

Clearing the portion of the vision triangle in the northwest quadrant would be beneficial for the existing condition without any other changes and would also be an enhancement to a conversion to

AWSC. In the case of conversion to AWSC, an improvement in safety will already be gained by requiring all drivers to stop, but clearing the vision triangle will provide drivers with an additional factor of safety since vehicles in both directions have the potential to run the stop signs.

The intersection currently meets standards for intersection sight distance. The standards ensure that drivers stopped at the stop signs have enough time to see approaching traffic. Intersection sight distance is met when a driver positioned 14.5 feet from the edgeline can see approaching vehicles at least 670 feet away. On the eastbound approach looking north, this distance becomes clear for a driver about 23 feet from the edgeline, meaning that drivers can only see approaching traffic at 670 feet away if they pull far enough forward. Continual trimming of the trees and bushes in the northwest quadrant will be necessary to maintain this intersection sight distance. On the eastbound approach looking south, sight distance is clearer. However, a tree located just south of the driveway on CTH X is the limiting point for visibility and the intersection sight distance should be monitored to ensure that the trees and bushes continue to be trimmed as they are now.

Conclusions

The number of angle crashes at the intersection of CTH X, CTH XX, and Pine Road is a concern. It is recommended to utilize an incremental approach at the intersection to increase safety. The first step would be to increase the sight distance by providing a clear vision triangle for the eastbound approach on Pine Road. Increasing sight distance at an intersection has the potential to decrease fatal and injury crashes by 56% (WisDOT CMF of 0.44). The cost to clear the northwest quadrant within the eastbound vision triangle would be approximately $6,800. If it is not possible to completely clear the line of sight or if the crashes are not adequately reduced, the next step would be to implement AWSC. While the roundabout alternative would maintain acceptable operations through the 2046 design year and decrease the number and severity of crashes, the construction costs are much higher than the AWSC alternative, resulting in a benefit to cost ratio 2.6 for a roundabout versus 106.9 for AWSC. See Attachment 12 for the benefit/cost analysis worksheet.

The AWSC alternative does not reduce the likelihood of severe right-angle crashes to the same degree as the roundabout. To aid in drivers obeying the new stop control, solar flashing stop signs or electric flashing beacons could be used to draw attention to the new stop control which would be placed on both sides of the roadway. WisDOT's CMF list includes a CMF for installing flashing beacons at stop-controlled intersections. While this CMF would not be applicable to the existing crashes at this intersection due to the change in the stop condition, it shows that the addition of flashing beacons draws attention to the traffic control, reducing the number of violators in comparison to stop control without flashing beacons. This improvement can be expected to reduce all crash types by 5% (CMF of 0.95) at existing stop control locations. The installation of rumble strips may also aid in reducing violations.

Future Considerations

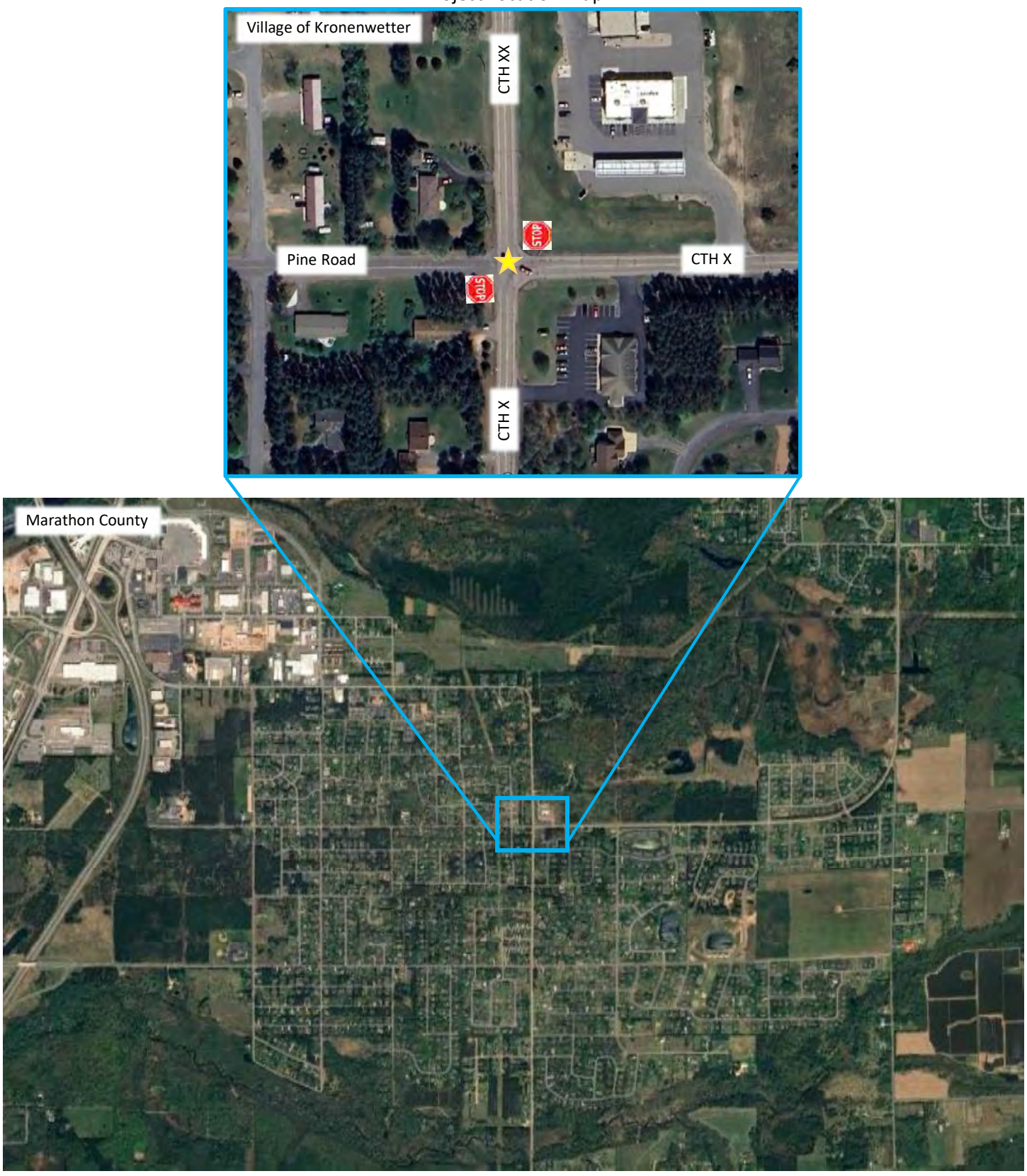
The Village of Kronenwetter has been pursuing adding an interchange at IH 39 and Kowalski Road since the late 1990s. If constructed, this interchange would modify the existing traffic patterns in the area. It would also likely spur development in the area and possibly increase traffic traveling through the intersection of CTH X, CTH XX, and Pine Road. Should this occur, the option to construct a roundabout at this location could be further investigated when the impacts to traffic volumes and patterns have been established.

Attachments

1. Project Location Map
2. Traffic Data
3. Intersection Crash Diagram
4. Traffic Signal Warrants
5. All-way Stop Control Criteria
6. Synchro Capacity/LOS Analysis Summaries
7. HCS7 Summary Reports
8. Cost Estimates
9. Preliminary Roundabout Alternative Layouts
10. FHWA Proven Safety Countermeasures: Roundabouts
11. Vision Triangles Diagram
12. WisDOT Safety Benefit Cost Analysis Tool

ATTACHMENT 1 – PROJECT LOCATION MAP

Project Location Map



Legend

Study intersection with two-way stop control

ATTACHMENT 2 – TRAFFIC DATA

Intersection Traffic Volume Report

Count Basics	Version 2023.10		
Start Date:	Wednesday, December 11, 2024	Weekday	
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Base Information, Observed (13) Hour and Estimated (24) Hour Volume Summaries

Major St: **Select Major St**
Minor St: **Select Minor St**
Intersection of: ***Select Major St & Select Minor St*** **IX_ID:**

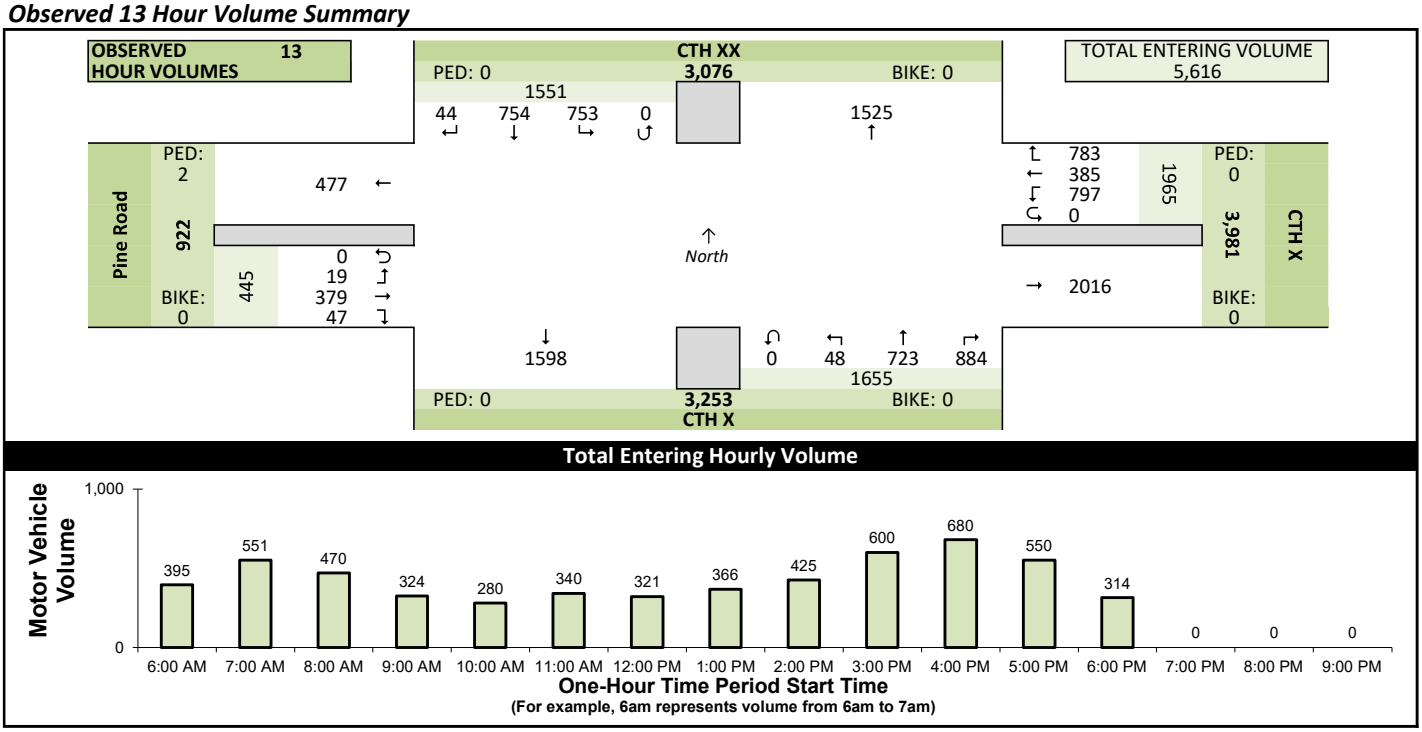
Site Information

Municipality	Village of Kronenwetter		
County	37 - Marathon	WisDOT Region	NC-W
Traffic Control	Partial Stop Control		
Roadway Names		North Direction	↑
North Leg	CTH XX		
East Leg	CTH X		
South Leg	CTH X		
West Leg	Pine Road		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

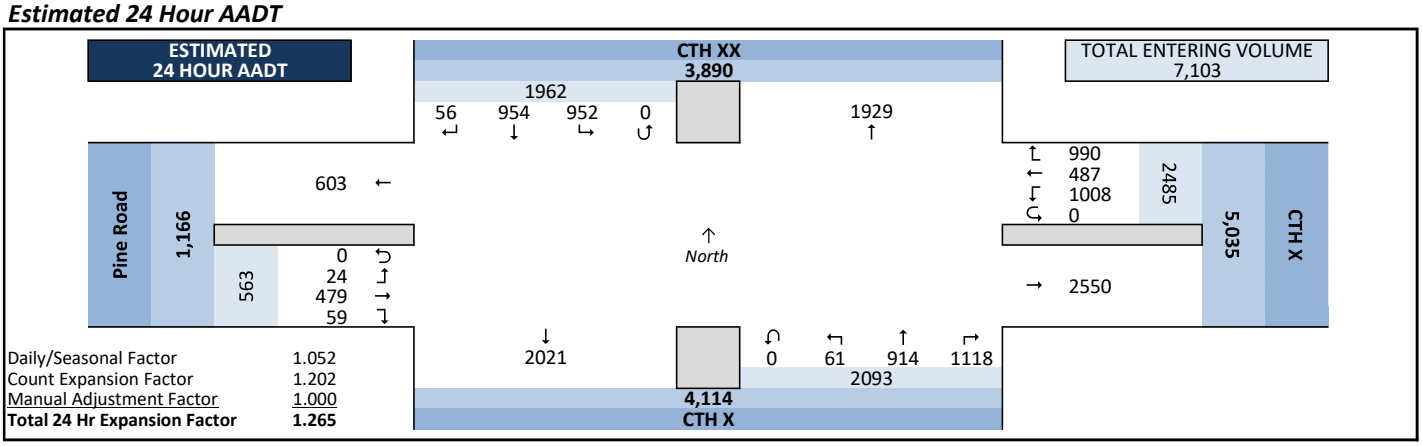
Count Information

Hrs Counted:	06:00 AM-07:00 PM				
1st Day of Count	Wednesday, December 11, 2024			Weather	
AM Peak Period	Wednesday, December 11, 2024			Clear & Dry	
Midday Peak Period	Wednesday, December 11, 2024			Clear & Dry	
PM Peak Period	Wednesday, December 11, 2024			Clear & Dry	
Calculated Peak Hours					
AM	6:45-7:45am	MD	1:00-2:00pm	PM	3:45-4:45pm
Peak Hours Selected for Analysis					
AM	6:45-7:45am	MD	1:00-2:00pm	PM	3:45-4:45pm
Daily/Seasonal Adjustment Group	(4) Rural Arterials & Collectors				
Count Expansion Group	(4) Rural Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.052		Count Expansion Factor	1.202	
Company Name	JT Engineering			Manual Adj.	1.000
Observers	AM Peak Period	Miovision			
	Midday Peak Period	Miovision			
	PM Peak Period	Miovision			
Comments	2021 DOT Daily & Seasonal Factors				

Observed 13 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

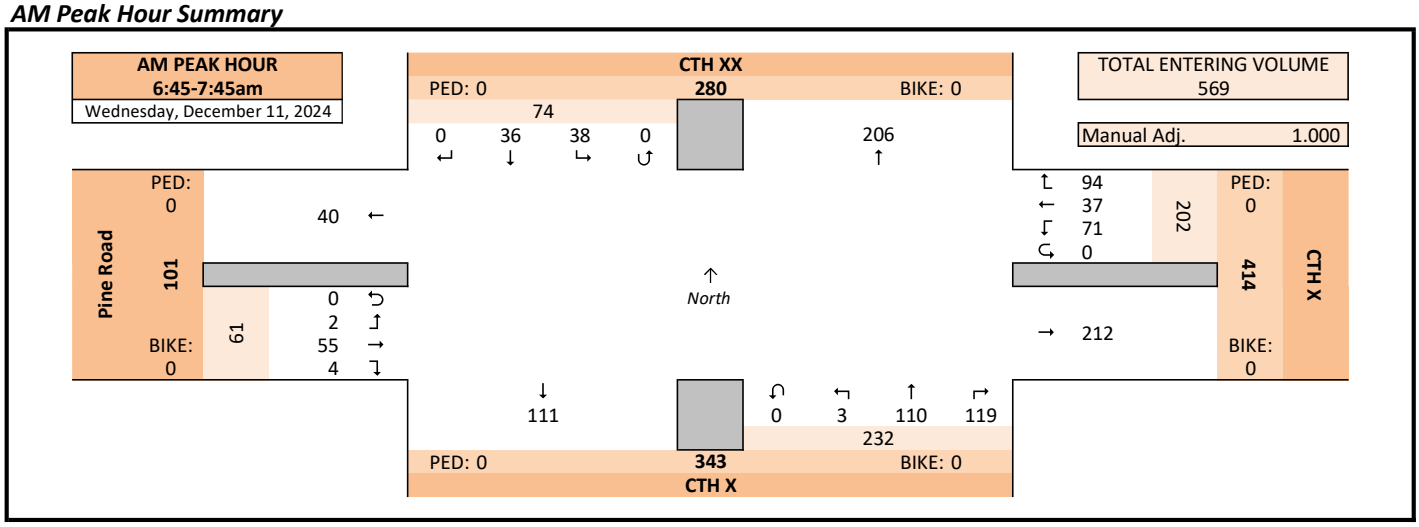
Peak Hour Volume Graphical Summary

Count Basics			
Start Date:	Wednesday, December 11, 2024	Weekday	School
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

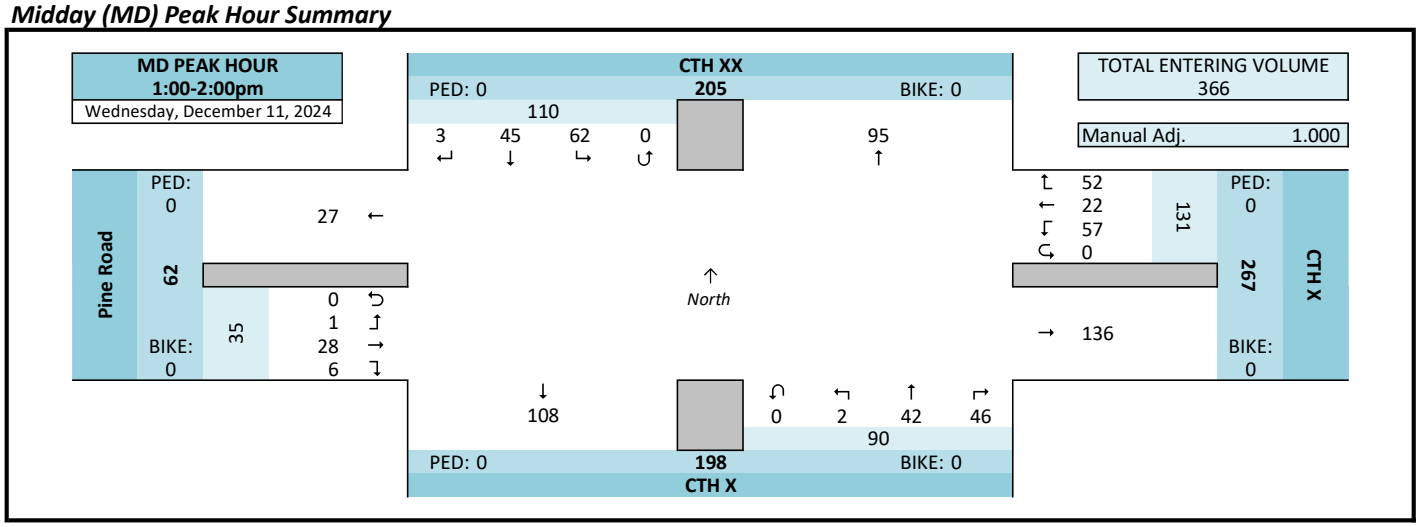
Select Major St & Select Minor St

All Motor Vehicles

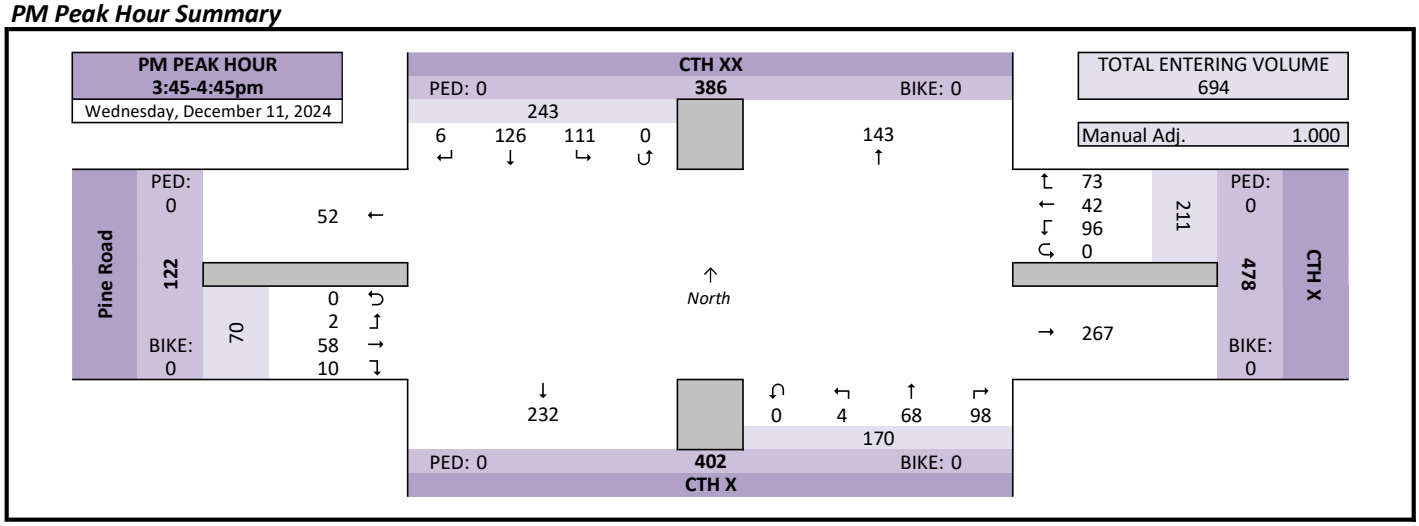
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary

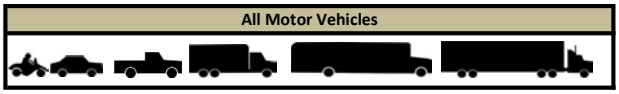


Intersection Traffic Volume Report

Count Basics			
Start Date:	Wednesday, December 11, 2024	Weekday	Sch
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Summary

Select Major St & Select Minor St



Peak Hour Volumes, Truck Percentages, and PHFs

Wednesday, December 11, 2024		From North					From East					From South					From West					
	AM Peak Hour	CTH XX					CTH X					CTH X					Pine Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	6:45 AM	0	9	11	0	20	20	6	13	0	39	33	39	2	0	74	0	18	0	0	18	151
	7:00 AM	0	7	11	0	18	21	3	18	0	42	26	22	0	0	48	2	17	1	0	20	128
	7:15 AM	0	7	14	0	21	23	12	19	0	54	22	22	1	0	45	2	9	1	0	12	132
	7:30 AM	0	13	2	0	15	30	16	21	0	67	38	27	0	0	65	0	11	0	0	11	158
	Peak Hour Volume	0	36	38	0	74	94	37	71	0	202	119	110	3	0	232	4	55	2	0	61	569
	Rounded Hourly Volume	0	35	40	0	75	95	35	70	0	200	120	110	5	0	235	5	55	0	0	60	570
	% Single Unit Trucks	0.0	2.8	7.9	0.0	5.4	1.1	0.0	1.4	0.0	1.0	0.0	0.9	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1.2
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	2.8	7.9	0.0	5.4	1.1	0.0	1.4	0.0	1.0	0.0	0.9	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1.2
	Peak Hour Factor (PHF)	0.00	0.69	0.68	0.00	0.88	0.78	0.58	0.85	0.00	0.75	0.78	0.71	0.37	0.00	0.78	0.50	0.76	0.50	0.00	0.76	0.90

Wednesday, December 11, 2024		From North					From East					From South					From West					
	MD Peak Hour	CTH XX					CTH X					CTH X					Pine Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	1:00 PM	1	8	13	0	22	18	4	17	0	39	8	15	0	0	23	1	9	1	0	11	95
	1:15 PM	1	16	10	0	27	10	8	12	0	30	10	7	2	0	19	4	5	0	0	9	85
	1:30 PM	0	9	18	0	27	14	6	12	0	32	14	10	0	0	24	0	9	0	0	9	92
	1:45 PM	1	12	21	0	34	10	4	16	0	30	14	10	0	0	24	1	5	0	0	6	94
	Peak Hour Volume	3	45	62	0	110	52	22	57	0	131	46	42	2	0	90	6	28	1	0	35	366
	Rounded Hourly Volume	5	45	60	0	110	50	20	55	0	125	45	40	0	0	85	5	30	0	0	35	355
	% Single Unit Trucks	0.0	0.0	3.2	0.0	1.8	0.0	0.0	0.0	0.0	0.0	4.3	2.4	0.0	0.0	3.3	16.7	0.0	100.0	0.0	5.7	1.9
	% Heavy Trucks	0.0	0.0	1.6	0.0	0.9	1.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	% Trucks (Total)	0.0	0.0	4.8	0.0	2.7	1.9	0.0	0.0	0.0	0.8	4.3	2.4	0.0	0.0	3.3	16.7	0.0	100.0	0.0	5.7	2.5
	Peak Hour Factor (PHF)	0.75	0.70	0.74	0.00	0.81	0.72	0.69	0.84	0.00	0.84	0.82	0.70	0.25	0.00	0.94	0.37	0.78	0.25	0.00	0.80	0.96

Wednesday, December 11, 2024		From North					From East					From South					From West					
	PM Peak Hour	CTH XX					CTH X					CTH X					Pine Road					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	3:45 PM	1	30	18	0	49	13	11	27	0	51	18	13	0	0	31	5	24	0	0	29	160
	4:00 PM	2	36	24	0	62	18	13	19	0	50	21	13	1	0	35	3	14	1	0	18	165
	4:15 PM	3	30	23	0	56	23	15	23	0	61	26	27	0	0	53	1	14	1	0	16	186
	4:30 PM	0	30	46	0	76	19	3	27	0	49	33	15	3	0	51	1	6	0	0	7	183
	Peak Hour Volume	6	126	111	0	243	73	42	96	0	211	98	68	4	0	170	10	58	2	0	70	694
	Rounded Hourly Volume	5	125	110	0	240	75	40	95	0	210	100	70	5	0	175	10	60	0	0	70	695
	% Single Unit Trucks	0.0	0.0	2.7	0.0	1.2	4.1	0.0	0.0	0.0	1.4	2.0	0.0	0.0	0.0	1.2	10.0	5.2	0.0	0.0	5.7	1.7
	% Heavy Trucks	0.0	0.0	0.9	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	% Trucks (Total)	0.0	0.0	3.6	0.0	1.6	4.1	0.0	0.0	0.0	1.4	2.0	0.0	0.0	0.0	1.2	10.0	5.2	0.0	0.0	5.7	1.9
	Peak Hour Factor (PHF)	0.50	0.87	0.60	0.00	0.80	0.79	0.70	0.89	0.00	0.86	0.74	0.63	0.33	0.00	0.80	0.50	0.60	0.50	0.00	0.60	0.93

Peak Hour Pedestrian and Bicyclist Volumes

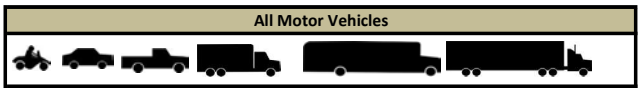
Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike Volume
		CTH XX			CTH X			CTH X			Pine Road			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Hourly Volume Summary - Motor Vehicle Data

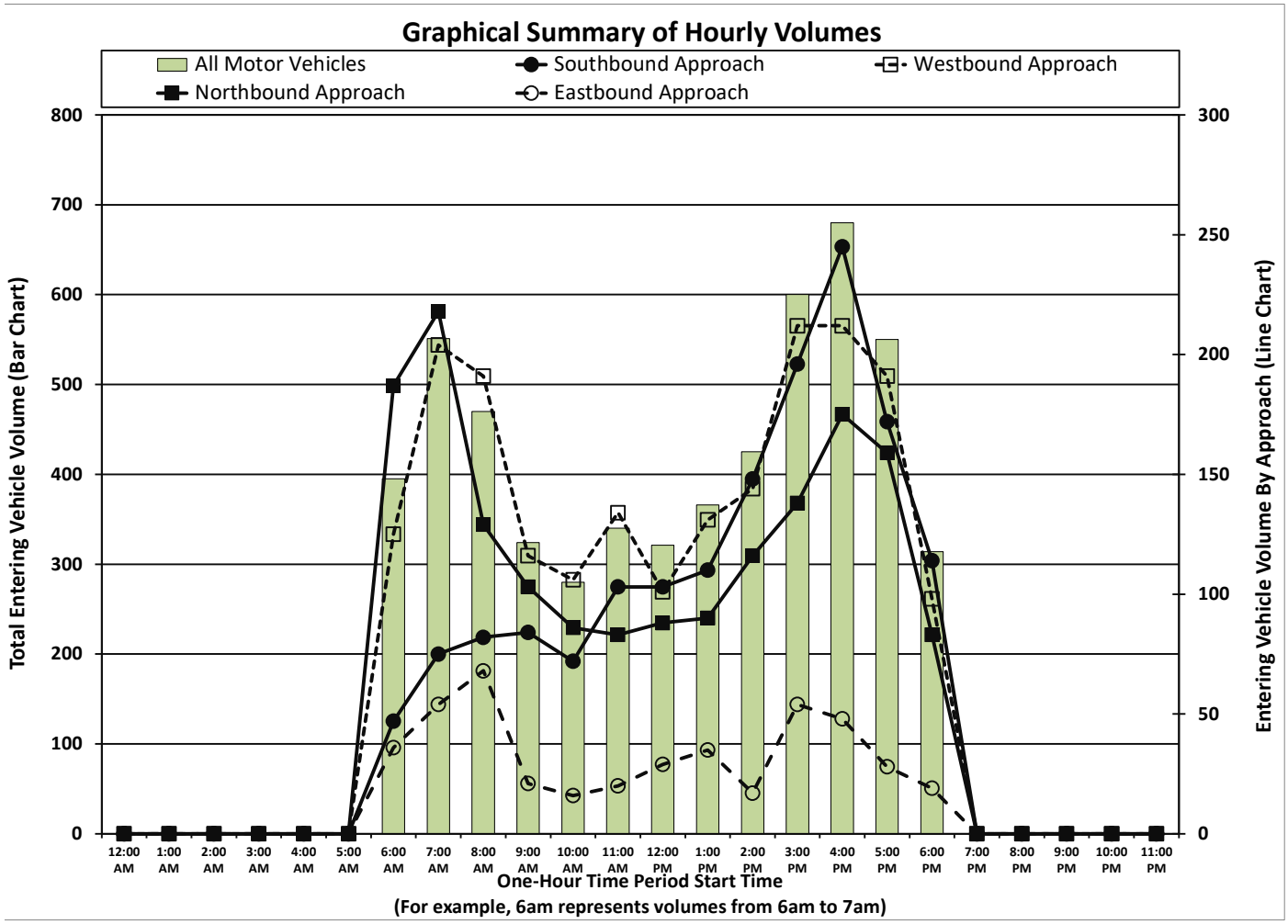
Count Basics		
Start Date: Wednesday, December 11, 2024	Weekday	Schools in Se
Total Number of Hours Counted: 13	Non-Holiday	No Special Ev

Select Major St & Select Minor St



One-Hour Motor Vehicle Data

One-Hour Time Period Start Time		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Vehicle Volume	Directional Volume Totals E/W	Directional Volume Totals N/S
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
Pre-AM	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	6:00 AM	3	16	28	0	47	69	12	44	0	125	98	85	4	0	187	1	35	0	0	36	395	161	234
	7:00 AM	1	37	37	0	75	88	37	79	0	204	114	102	2	0	218	6	44	4	0	54	551	258	293
	8:00 AM	3	30	49	0	82	79	53	59	0	191	55	62	12	0	129	2	62	4	0	68	470	259	211
	9:00 AM	1	40	43	0	84	57	23	36	0	116	56	45	2	0	103	3	18	0	0	21	324	137	187
MD	10:00 AM	1	38	33	0	72	55	15	36	0	106	44	40	2	0	86	2	13	1	0	16	280	122	158
	11:00 AM	4	44	55	0	103	57	19	58	0	134	36	45	2	0	83	3	15	2	0	20	340	154	186
	12:00 PM	3	49	51	0	103	52	21	28	0	101	49	39	0	0	88	2	24	3	0	29	321	130	191
	1:00 PM	3	45	62	0	110	52	22	57	0	131	46	42	2	0	90	6	28	1	0	35	366	166	200
PM	2:00 PM	3	65	80	0	148	51	40	53	0	144	66	44	6	0	116	3	14	0	0	17	425	161	264
	3:00 PM	11	97	88	0	196	59	56	97	0	212	90	43	5	0	138	8	46	0	0	54	600	266	334
	4:00 PM	6	128	111	0	245	73	39	100	0	212	101	68	6	0	175	5	41	2	0	48	680	260	420
	5:00 PM	4	100	68	0	172	58	32	101	0	191	83	72	4	0	159	4	23	1	0	28	550	219	331
	6:00 PM	1	65	48	0	114	33	16	49	0	98	46	36	1	0	83	2	16	1	0	19	314	117	197
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		44	754	753	0	1551	783	385	797	0	1965	884	723	48	0	1655	47	379	19	0	445	5616	2410	3206



Intersection Traffic Volume Report

15-Minute Motor Vehicle Data

Count Basics			*Page 5 of 13*
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Select Major St & Select Minor St

All Motor Vehicles

15-Minute Motor Vehicle Data

	15-Minute Time Period	From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
AM Peak Period	6:00 AM	0	3	9	0	12	10	0	11	0	21	18	14	0	0	32	0	2	0	0	2	67	395	0.65
	6:15 AM	3	1	5	0	9	15	2	7	0	24	19	9	2	0	30	1	2	0	0	3	66	456	0.75
	6:30 AM	0	3	3	0	6	24	4	13	0	41	28	23	0	0	51	0	13	0	0	13	111	522	0.86
	6:45 AM	0	9	11	0	20	20	6	13	0	39	33	39	2	0	74	0	18	0	0	18	151	569	0.90
	7:00 AM	0	7	11	0	18	21	3	18	0	42	26	22	0	0	48	2	17	1	0	20	128	551	0.87
	7:15 AM	0	7	14	0	21	23	12	19	0	54	22	22	1	0	45	2	9	1	0	12	132	533	0.84
	7:30 AM	0	13	2	0	15	30	16	21	0	67	38	27	0	0	65	0	11	0	0	11	158	536	0.85
	7:45 AM	1	10	10	0	21	14	6	21	0	41	28	31	1	0	60	2	7	2	0	11	133	506	0.94
	8:00 AM	1	5	6	0	12	19	16	21	0	56	15	17	1	0	33	0	9	0	0	9	110	470	0.87
	8:15 AM	1	11	16	0	28	18	18	15	0	51	16	15	8	0	39	0	14	3	0	17	135	438	0.81
	8:30 AM	1	6	10	0	17	23	11	13	0	47	9	20	2	0	31	2	30	1	0	33	128	386	0.75
	8:45 AM	0	8	17	0	25	19	8	10	0	37	15	10	1	0	26	0	9	0	0	9	97	349	0.90
	9:00 AM	1	10	10	0	21	9	8	6	0	23	17	10	0	0	27	2	5	0	0	7	78	324	0.89
	9:15 AM	0	8	11	0	19	17	4	10	0	31	15	11	1	0	27	1	5	0	0	6	83	319	0.88
	9:30 AM	0	13	11	0	24	14	6	12	0	32	15	15	1	0	31	0	4	0	0	4	91	304	0.84
	9:45 AM	0	9	11	0	20	17	5	8	0	30	9	9	0	0	18	0	4	0	0	4	72	284	0.97
Midday Peak Period	10:00 AM	0	10	9	0	19	14	2	10	0	26	13	6	1	0	20	1	6	1	0	8	73	280	0.96
	10:15 AM	0	9	8	0	17	14	6	11	0	31	11	8	0	0	19	0	1	0	0	1	68	283	0.93
	10:30 AM	0	11	8	0	19	11	5	8	0	24	11	12	1	0	24	1	3	0	0	4	71	304	0.85
	10:45 AM	1	8	8	0	17	16	2	7	0	25	9	14	0	0	23	0	3	0	0	3	68	304	0.85
	11:00 AM	1	10	12	0	23	17	4	5	0	26	13	10	1	0	24	0	3	0	0	3	76	340	0.82
	11:15 AM	1	9	21	0	31	12	5	19	0	36	7	11	0	0	18	1	3	0	0	4	89	364	0.88
	11:30 AM	2	8	9	0	19	18	2	16	0	36	8	5	0	0	13	0	2	1	0	3	71	346	0.83
	11:45 AM	0	17	13	0	30	10	8	18	0	36	8	19	1	0	28	2	7	1	0	10	104	336	0.81
	12:00 PM	3	16	14	0	33	17	7	8	0	32	17	12	0	0	29	2	4	0	0	6	100	321	0.80
	12:15 PM	0	13	14	0	27	10	4	10	0	24	4	8	0	0	12	0	7	1	0	8	71	316	0.83
	12:30 PM	0	7	7	0	14	12	4	5	0	21	13	7	0	0	20	0	4	2	0	6	61	330	0.87
	12:45 PM	0	13	16	0	29	13	6	5	0	24	15	12	0	0	27	0	9	0	0	9	89	361	0.95
	1:00 PM	1	8	13	0	22	18	4	17	0	39	8	15	0	0	23	1	9	1	0	11	95	366	0.96
	1:15 PM	1	16	10	0	27	10	8	12	0	30	10	7	2	0	19	4	5	0	0	9	85	349	0.93
	1:30 PM	0	9	18	0	27	14	6	12	0	32	14	10	0	0	24	0	9	0	0	9	92	370	0.87
	1:45 PM	1	12	21	0	34	10	4	16	0	30	14	10	0	0	24	1	5	0	0	6	94	391	0.87
PM Peak Period	2:00 PM	0	13	20	0	33	6	5	8	0	19	13	10	1	0	24	0	2	0	0	2	78	425	0.83
	2:15 PM	2	21	20	0	43	11	9	12	0	32	13	13	0	0	26	1	4	0	0	5	106	494	0.84
	2:30 PM	0	13	19	0	32	22	9	12	0	43	20	12	2	0	34	0	4	0	0	4	113	541	0.88
	2:45 PM	1	18	21	0	40	12	17	21	0	50	20	9	3	0	32	2	4	0	0	6	128	568	0.93
	3:00 PM	3	26	24	0	53	15	18	18	0	51	22	11	2	0	35	2	6	0	0	8	147	600	0.94
	3:15 PM	2	20	28	0	50	14	16	25	0	55	27	10	2	0	39	0	9	0	0	9	153	618	0.94
	3:30 PM	5	21	18	0	44	17	11	27	0	55	23	9	1	0	33	1	7	0	0	8	140	651	0.88
	3:45 PM	1	30	18	0	49	13	11	27	0	51	18	13	0	0	31	5	24	0	0	29	160	694	0.93
	4:00 PM	2	36	24	0	62	18	13	19	0	50	21	13	1	0	35	3	14	1	0	18	165	680	0.91
	4:15 PM	3	30	23	0	56	23	15	23	0	61	26	27	0	0	53	1	14	1	0	16	186	658	0.88
	4:30 PM	0	30	46	0	76	19	3	27	0	49	33	15	3	0	51	1	6	0	0	7	183	629	0.86
	4:45 PM	1	32	18	0	51	13	8	31	0	52	21	13	2	0	36	0	7	0	0	7	146	565	0.90
	5:00 PM	1	26	17	0	44	12	8	24	0	44	21	27	2	0	50	1	4	0	0	5	143	550	0.88
	5:15 PM	1	29	20	0	50	10	10	36	0	56	27	14	0	0	41	2	8	0	0	10	157	496	0.79
	5:30 PM	0	27	12	0	39	15	8	14	0	37	19	18	1	0	38	0	5	0	0	5	119	432	0.82
	5:45 PM	2	18	19	0	39	21	6	27	0	54	16	13	1	0	30	1	6	1	0	8	131	376	0.72
	6:00 PM	0	21	12	0	33	10	3	8	0	21	12	14	0	0	26	1	7	1	0	9	89	314	0.84
	6:15 PM	0	19	14	0	33	9	4	22	0	35	16	6	0	0	22	0	3	0	0	3	93		
	6:30 PM	1	11	9	0	21	6	3	13	0	22	10	8	0	0	18	0	2	0	0	2	63		
	6:45 PM	0	14	13	0	27	8	6	6	0	20	8	8	1	0	17	1	4	0	0	5	69		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		44	754	753	0	1551	783	385	797	0	1965	884	723	48	0	1655	47	379	19	0	445	5616		

Peak Hour All Vehicle Volume Summary

	Hourly Time Period	From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	6:45 AM	0	36	38	0	74	94	37	71	0	202	119	110	3	0	232	4	55	2	0	61	569	0.90
MD	1:00 PM	3	45	62	0	110	52	22	57	0	131	46	42	2	0	90	6	28	1	0	35	366	0.96
PM	3:45 PM	6	126	111	0	243	73	42	96	0	211	98	68	4	0	170	10	58	2	0	70	694	0.93

Intersection Traffic Volume Report

Count Basics			Page 6 of 13
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Automobile Data

Select Major St & Select Minor St

Automobiles (Cars, Light Trucks, & Motorcycles)

15-Minute Automobile Data

15-Minute Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM Peak Period	6:00 AM	0	2	9	0	11	9	0	9	0	18	18	14	0	0	32	0	2	0	0	2	63	379
	6:15 AM	0	1	5	0	6	15	1	7	0	23	16	9	2	0	27	0	2	0	0	2	58	442
	6:30 AM	0	3	3	0	6	24	4	13	0	41	25	23	0	0	48	0	12	0	0	12	107	512
	6:45 AM	0	9	11	0	20	20	6	13	0	39	33	39	2	0	74	0	18	0	0	18	151	562
	7:00 AM	0	7	11	0	18	21	3	17	0	41	26	21	0	0	47	2	17	1	0	20	126	540
	7:15 AM	0	7	11	0	18	22	12	19	0	53	22	22	1	0	45	2	9	1	0	12	128	520
	7:30 AM	0	12	2	0	14	30	16	21	0	67	38	27	0	0	65	0	11	0	0	11	157	513
	7:45 AM	1	10	7	0	18	14	6	20	0	40	28	31	1	0	60	2	7	2	0	11	129	478
	8:00 AM	1	4	5	0	10	19	15	21	0	55	15	16	1	0	32	0	9	0	0	9	106	440
	8:15 AM	0	11	15	0	26	15	17	14	0	46	16	14	5	0	35	0	11	3	0	14	121	403
	8:30 AM	0	6	10	0	16	21	11	13	0	45	9	20	2	0	31	2	27	1	0	30	122	357
	8:45 AM	0	8	13	0	21	19	8	10	0	37	15	9	0	0	24	0	9	0	0	9	91	320
	9:00 AM	1	9	8	0	18	7	8	5	0	20	17	9	0	0	26	1	4	0	0	5	69	298
	9:15 AM	0	7	9	0	16	17	3	10	0	30	12	11	1	0	24	0	5	0	0	5	75	298
	9:30 AM	0	13	10	0	23	14	5	12	0	31	12	14	1	0	27	0	4	0	0	4	85	290
	9:45 AM	0	9	9	0	18	17	5	8	0	30	8	9	0	0	17	0	4	0	0	4	69	273
Midday Peak Period	10:00 AM	0	10	9	0	19	13	2	9	0	24	13	6	0	0	19	1	6	0	0	7	69	269
	10:15 AM	0	9	8	0	17	13	6	11	0	30	11	8	0	0	19	0	1	0	0	1	67	270
	10:30 AM	0	10	8	0	18	11	5	8	0	24	9	12	1	0	22	1	3	0	0	4	68	290
	10:45 AM	1	8	8	0	17	15	2	7	0	24	8	13	0	0	21	0	3	0	0	3	65	289
	11:00 AM	1	8	10	0	19	16	4	5	0	25	13	9	1	0	23	0	3	0	0	3	70	324
	11:15 AM	1	9	21	0	31	11	5	18	0	34	7	11	0	0	18	1	3	0	0	4	87	352
	11:30 AM	2	8	8	0	18	15	2	16	0	33	8	5	0	0	13	0	2	1	0	3	67	334
	11:45 AM	0	16	13	0	29	9	8	16	0	33	8	19	1	0	28	2	7	1	0	10	100	327
	12:00 PM	3	15	14	0	32	17	7	8	0	32	17	11	0	0	28	2	4	0	0	6	98	313
	12:15 PM	0	13	14	0	27	10	4	10	0	24	3	8	0	0	11	0	6	1	0	7	69	309
	12:30 PM	0	7	6	0	13	12	4	5	0	21	13	7	0	0	20	0	4	2	0	6	60	323
	12:45 PM	0	13	15	0	28	13	4	5	0	22	15	12	0	0	27	0	9	0	0	9	86	353
	1:00 PM	1	8	13	0	22	18	4	17	0	39	8	15	0	0	23	1	9	0	0	10	94	357
	1:15 PM	1	16	10	0	27	10	8	12	0	30	9	7	2	0	18	3	5	0	0	8	83	337
	1:30 PM	0	9	17	0	26	13	6	12	0	31	14	10	0	0	24	0	9	0	0	9	90	359
	1:45 PM	1	12	19	0	32	10	4	16	0	30	13	9	0	0	22	1	5	0	0	6	90	378
PM Peak Period	2:00 PM	0	13	17	0	30	5	5	8	0	18	13	10	1	0	24	0	2	0	0	2	74	415
	2:15 PM	2	21	19	0	42	11	9	12	0	32	13	13	0	0	26	1	4	0	0	5	105	483
	2:30 PM	0	13	19	0	32	20	9	11	0	40	19	12	2	0	33	0	4	0	0	4	109	524
	2:45 PM	1	17	21	0	39	12	17	21	0	50	20	9	3	0	32	2	4	0	0	6	127	551
	3:00 PM	3	25	24	0	52	13	18	17	0	48	22	11	2	0	35	1	6	0	0	7	142	581
	3:15 PM	2	19	27	0	48	14	16	24	0	54	27	8	2	0	37	0	7	0	0	7	146	602
	3:30 PM	4	21	18	0	43	17	10	26	0	53	22	9	1	0	32	1	7	0	0	8	136	636
	3:45 PM	1	30	18	0	49	13	11	27	0	51	18	13	0	0	31	4	22	0	0	26	157	681
	4:00 PM	2	36	22	0	60	18	13	19	0	50	21	13	1	0	35	3	14	1	0	18	163	666
	4:15 PM	3	30	21	0	54	21	15	23	0	59	25	27	0	0	52	1	13	1	0	15	180	644
	4:30 PM	0	30	46	0	76	18	3	27	0	48	32	15	3	0	50	1	6	0	0	7	181	619
	4:45 PM	1	32	17	0	50	13	8	31	0	52	20	13	1	0	34	0	6	0	0	6	142	557
	5:00 PM	1	26	17	0	44	12	8	23	0	43	21	26	2	0	49	1	4	0	0	5	141	542
	5:15 PM	1	29	20	0	50	10	10	35	0	55	26	14	0	0	40	2	8	0	0	10	155	490
	5:30 PM	0	27	12	0	39	15	8	14	0	37	19	18	1	0	38	0	5	0	0	5	119	427
	5:45 PM	2	18	18	0	38	20	6	26	0	52	16	12	1	0	29	1	6	1	0	8	127	371
	6:00 PM	0	21	12	0	33	10	3	8	0	21	12	14	0	0	26	1	7	1	0	9	89	313
	6:15 PM	0	19	14	0	33	9	4	21	0	34	16	6	0	0	22	0	3	0	0	3	92	
	6:30 PM	1	11	9	0	21	6	3	13	0	22	10	8	0	0	18	0	2	0	0	2	63	
	6:45 PM	0	14	13	0	27	8	6	6	0	20	8	8	1	0	17	1	4	0	0	5	69	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		38	741	715	0	1494	755	377	779	0	1911	859	709	42	0	1610	41	364	17	0	422	5437	

Peak Hour Automobile Volume Summary

Hourly Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	6:45 AM	0	35	35	0	70	93	37	70	0	200	119	109	3	0	231	4	55	2	0	61	562
MD	1:00 PM	3	45	59	0	107	51	22	57	0	130	44	41	2	0	87	5	28	0	0	33	357
PM	3:45 PM	6	126	107	0	239	70	42	96	0	208	96	68	4	0	168	9	55	2	0	66	681

Intersection Traffic Volume Report

Count Basics			Page 7 of 13
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Single Unit (SU) Truck & Bus Data

Select Major St & Select Minor St

Single Unit (SU) Trucks & Buses

15-Minute Single Unit (SU) Truck & Bus Data

15-Minute Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM Peak Period	6:00 AM	0	1	0	0	1	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	4	16
	6:15 AM	3	0	0	0	3	0	1	0	0	1	3	0	0	0	3	1	0	0	0	1	8	14
	6:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	1	0	0	1	4	10
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:00 AM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	11
	7:15 AM	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	13
	7:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	22
	7:45 AM	0	0	3	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4	27
	8:00 AM	0	1	1	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4	29
	8:15 AM	1	0	1	0	2	3	1	0	0	4	0	1	3	0	4	0	3	0	0	3	13	34
	8:30 AM	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	6	27
	8:45 AM	0	0	4	0	4	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	6	27
	9:00 AM	0	1	2	0	3	2	0	1	0	3	0	1	0	0	1	1	1	0	0	2	9	23
	9:15 AM	0	1	0	0	1	0	1	0	0	1	3	0	0	0	3	1	0	0	0	1	6	18
	9:30 AM	0	0	1	0	1	0	1	0	0	1	3	1	0	0	4	0	0	0	0	0	6	13
	9:45 AM	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	10
Midday Peak Period	10:00 AM	0	0	0	0	0	1	0	1	0	2	0	0	1	0	1	0	0	1	0	1	4	11
	10:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	12
	10:30 AM	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	3	12
	10:45 AM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	3	13
	11:00 AM	0	2	1	0	3	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	5	14
	11:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	11
	11:30 AM	0	0	1	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4	12
	11:45 AM	0	1	0	0	1	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	4	8
	12:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	7
	12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2	6
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:45 PM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3	6
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	7
	1:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2	9
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	1:45 PM	0	0	2	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4	11
PM Peak Period	2:00 PM	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	8
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	2:30 PM	0	0	0	0	0	2	0	1	0	3	1	0	0	0	1	0	0	0	0	0	4	15
	2:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	14
	3:00 PM	0	0	0	0	0	2	0	1	0	3	0	0	0	0	0	1	0	0	0	1	4	16
	3:15 PM	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	6	14
	3:30 PM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	3	13
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3	12
	4:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13
	4:15 PM	0	0	1	0	1	2	0	0	0	2	1	0	0	0	1	0	1	0	0	1	5	13
	4:30 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	2	10
	4:45 PM	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2	0	1	0	0	1	4	8
	5:00 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	7
	5:15 PM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2	5
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:45 PM	0	0	1	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3	4
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		6	12	29	0	47	26	8	16	0	50	24	13	6	0	43	6	15	2	0	23	163	

Peak Hour Single Unit (SU) Truck & Buses Volume Summary

Hourly Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	6:45 AM	0	1	3	0	4	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	7
MD	1:00 PM	0	0	2	0	2	0	0	0	0	0	2	1	0	0	3	1	0	1	0	2	7
PM	3:45 PM	0	0	3	0	3	3	0	0	0	3	2	0	0	0	2	1	3	0	0	4	12

Intersection Traffic Volume Report

Count Basics			Page 8 of 13
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Semi-Truck Data

Select Major St & Select Minor St

Semi-Trucks


15-Minute Semi-Truck Data

	15-Minute Time Period	From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	9:15 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	9:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	11:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	12:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	1:30 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	4
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
PM Peak Period	2:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	2:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	3:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
	3:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	2
	3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	2
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	1	9	0	10	2	0	2	0	4	1	1	0	0	2	0	0	0	0	0	16	

Peak Hour Semi-Truck Volume Summary

	Hourly Time Period	From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	1:00 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PM	3:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Intersection Traffic Volume Report

Count Basics			Page 9 of 13
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Select Major St & Select Minor St

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					15-Min Totals	Hourly Sum
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM Peak Period	6:00 AM	0	1	0	0	1	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	4	16
	6:15 AM	3	0	0	0	3	0	1	0	0	1	3	0	0	0	3	1	0	0	0	1	8	14
	6:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	1	0	0	1	4	10
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	7:00 AM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	11
	7:15 AM	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	13
	7:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23
	7:45 AM	0	0	3	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4	28
	8:00 AM	0	1	1	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4	30
	8:15 AM	1	0	1	0	2	3	1	1	0	5	0	1	3	0	4	0	3	0	0	3	14	35
	8:30 AM	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	6	29
	8:45 AM	0	0	4	0	4	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	6	29
	9:00 AM	0	1	2	0	3	2	0	1	0	3	0	1	0	0	1	1	1	0	0	2	9	26
	9:15 AM	0	1	2	0	3	0	1	0	0	1	3	0	0	0	3	1	0	0	0	1	8	21
	9:30 AM	0	0	1	0	1	0	1	0	0	1	3	1	0	0	4	0	0	0	0	0	6	14
	9:45 AM	0	0	2	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3	11
Midday Peak Period	10:00 AM	0	0	0	0	0	1	0	1	0	2	0	0	1	0	1	0	0	1	0	1	4	11
	10:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	13
	10:30 AM	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	3	14
	10:45 AM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	3	15
	11:00 AM	0	2	2	0	4	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	6	16
	11:15 AM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	2	12
	11:30 AM	0	0	1	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4	12
	11:45 AM	0	1	0	0	1	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	4	9
	12:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	8
	12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2	7
	12:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7
	12:45 PM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3	8
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	9
	1:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2	12
	1:30 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	11
	1:45 PM	0	0	2	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4	13
PM Peak Period	2:00 PM	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	10
	2:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
	2:30 PM	0	0	0	0	0	2	0	1	0	3	1	0	0	0	1	0	0	0	0	0	4	17
	2:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	17
	3:00 PM	0	1	0	0	1	2	0	1	0	3	0	0	0	0	0	1	0	0	0	1	5	19
	3:15 PM	0	1	1	0	2	0	0	1	0	1	0	2	0	0	2	0	2	0	0	2	7	16
	3:30 PM	1	0	0	0	1	0	1	1	0	2	1	0	0	0	1	0	0	0	0	0	4	15
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3	13
	4:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	14
	4:15 PM	0	0	2	0	2	2	0	0	0	2	1	0	0	0	1	0	1	0	0	1	6	14
	4:30 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	2	10
	4:45 PM	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2	0	1	0	0	1	4	8
	5:00 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2	8
	5:15 PM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2	6
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	5:45 PM	0	0	1	0	1	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	4	5
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		6	13	38	0	57	28	8	18	0	54	25	14	6	0	45	6	15	2	0	23	179	

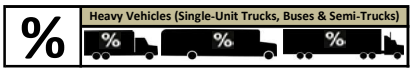
Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Hourly Volume
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	6:45 AM	0	1	3	0	4	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	7
MD	1:00 PM	0	0	3	0	3	1	0	0	0	1	2	1	0	0	3	1	0	1	0	2	9
PM	3:45 PM	0	0	4	0	4	3	0	0	0	3	2	0	0	0	2	1	3	0	0	4	13

Intersection Traffic Volume Report

Count Basics			Page 10 of 13
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Percentages



Select Major St & Select Minor St

15-Minute Heavy Vehicle Percentages

15-Minute Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Total Heavy Vehicle	Hourly Heavy Vehicle
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Percent	Percent
Pre-AM Peak Period	12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	12:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	4:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	4:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	4:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	5:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	5:15 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	5:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	5:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AM Peak Period	6:00 AM	0.0	33.3	0.0	0.0	8.3	10.0	0.0	18.2	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.1
	6:15 AM	100.0	0.0	0.0	0.0	33.3	0.0	50.0	0.0	0.0	4.2	15.8	0.0	0.0	0.0	10.0	100.0	0.0	0.0	0.0	33.3	12.1	3.1
	6:30 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0	5.9	0.0	7.7	0.0	0.0	7.7	3.6	1.9
	6:45 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	7:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	2.4	0.0	4.5	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	1.6	2.0
	7:15 AM	0.0	0.0	21.4	0.0	14.3	4.3	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.4
	7:30 AM	0.0	7.7	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.3
	7:45 AM	0.0	0.0	30.0	0.0	14.3	0.0	0.0	4.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.5
	8:00 AM	0.0	20.0	16.7	0.0	16.7	0.0	6.3	0.0	0.0	1.8	0.0	5.9	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.6	6.4
	8:15 AM	100.0	0.0	6.3	0.0	7.1	16.7	5.6	6.7	0.0	9.8	0.0	6.7	37.5	0.0	10.3	0.0	21.4	0.0	0.0	17.6	10.4	8.0
	8:30 AM	100.0	0.0	0.0	0.0	5.9	8.7	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	9.1	4.7	7.5
	8:45 AM	0.0	0.0	23.5	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	100.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	6.2	8.3
	9:00 AM	0.0	10.0	20.0	0.0	14.3	22.2	0.0	16.7	0.0	13.0	0.0	10.0	0.0	0.0	3.7	50.0	20.0	0.0	0.0	28.6	11.5	8.0
	9:15 AM	0.0	12.5	18.2	0.0	15.8	0.0	25.0	0.0	0.0	3.2	20.0	0.0	0.0	0.0	11.1	100.0	0.0	0.0	0.0	16.7	9.6	6.6
	9:30 AM	0.0	0.0	9.1	0.0	4.2	0.0	16.7	0.0	0.0	3.1	20.0	6.7	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	6.6	4.6
	9:45 AM	0.0	0.0	18.2	0.0	10.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	4.2	3.9
Midday Peak Period	10:00 AM	0.0	0.0	0.0	0.0	0.0	7.1	0.0	10.0	0.0	7.7	0.0	0.0	100.0	0.0	5.0	0.0	0.0	100.0	0.0	12.5	5.5	3.9
	10:15 AM	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.6
	10:30 AM	0.0	9.1	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	18.2	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	4.2	4.6
	10:45 AM	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	4.0	11.1	7.1	0.0	0.0	8.7	0.0	0.0	0.0	0.0	0.0	4.4	4.9
	11:00 AM	0.0	20.0	16.7	0.0	17.4	5.9	0.0	0.0	0.0	3.8	0.0	10.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	7.9	4.7
	11:15 AM	0.0	0.0	0.0	0.0	0.0	8.3	0.0	5.3	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.3
	11:30 AM	0.0	0.0	11.1	0.0	5.3	16.7	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	3.5
	11:45 AM	0.0	5.9	0.0	0.0	3.3	10.0	0.0	11.1	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	2.7
	12:00 PM	0.0	6.3	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	2.0	2.5
	12:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	8.3	0.0	14.3	0.0	0.0	12.5	2.8	2.2
	12:30 PM	0.0	0.0	14.3	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	2.1
	12:45 PM	0.0	0.0	6.3	0.0	3.4	0.0	33.3	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	2.2
	1:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	9.1	1.1	2.5
	1:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	5.3	25.0	0.0	0.0	0.0	11.1	2.4	3.4
	1:30 PM	0.0	0.0	5.6	0.0	3.7	7.1	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.0
	1:45 PM	0.0	0.0	9.5	0.0	5.9	0.0	0.0	0.0	0.0	0.0	7.1	10.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	4.3	3.3
PM Peak Period	2:00 PM	0.0	0.0	15.0	0.0	9.1	16.7	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	2.4
	2:15 PM	0.0	0.0	5.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.2
	2:30 PM	0.0	0.0	0.0	0.0	0.0	9.1	0.0	8.3	0.0	7.0	5.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	3.5	3.1
	2:45 PM	0.0	5.6	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.0
	3:00 PM	0.0	3.8	0.0	0.0	1.9	13.3	0.0	5.6	0.0	5.9	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	12.5	3.4	3.2
	3:15 PM	0.0	5.0	3.6	0.0	4.0	0.0	0.0	4.0	0.0	1.8	0.0	20.0	0.0	0.0	5.1	0.0	22.2	0.0	0.0	22.2	4.6	2.6
	3:30 PM	20.0	0.0	0.0	0.0	2.3	0.0	9.1	3.7	0.0	3.6	4.3	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	2.9	2.3
	3:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	8.3	0.0	0.0	10.3	1.9	1.9
	4:00 PM	0.0	0.0	8.3	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.1
	4:15 PM	0.0	0.0	8.7	0.0	3.6	8.7	0.0	0.0	0.0	3.3	3.8	0.0	0.0	0.0	1.9	0.0	7.1	0.0	0.0	6.3	3.2	2.1
	4:30 PM	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	1.1	1.6
	4:45 PM	0.0	0.0	5.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	50.0	0.0	5.6	0.0	14.3	0.0	0.0	14.3	2.7	1.4
	5:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	2.3	0.0	3.7	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5
	5:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	1.8	3.7	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	1.3	1.2
	5:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	5:45 PM	0.0	0.0	5.3	0.0	2.6	4.8	0.0	3.7	0.0	3.7	0.0	7.7	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	3.1	1.3
	6:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	6:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	
	6:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	6:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	7:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	8:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	9:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Post PM Peak Period	10:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	10:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:15 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:30 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	11:45 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Totals		13.6	1.7	5.0	0.0	3.7	3.6	2.1	2.3	0.0	2.7	2.8	1.9	12.5	0.0	2.7	12.8	4.0	10.5	0.0	5.2	3.2	

Peak Hour Heavy Vehicle Percentages Summary

Hourly Time Period		From North (↓) CTH XX					From East (←) CTH X					From South (↑) CTH X					From West (→) Pine Road					Hourly Heavy Vehicle
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Percent
AM	6:45 AM	0.0	2.8	7.9	0.0	5.4	1.1	0.0	1.4	0.0	1.0	0.0	0.9	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1.2
MD	1:00 PM	0.0	0.0	4.8	0.0	2.7	1.9	0.0	0.0	0.0	0.8	4.3	2.4	0.0	0.0	3.3	16.7	0.0	100.0	0.0	5.7	2.5
PM	3:45 PM	0.0	0.0	3.6	0.0	1.6	4.1	0.0	0.0	0.0	1.4	2.0	0.0	0.0	0.0	1.2	10.0	5.2	0.0	0.0	5.7	1.9

Intersection Traffic Volume Report

15-Minute Pedestrian and Bicyclist Data

Count Basics			*Page 11 of 13*
Start Date:	Wednesday, December 11, 2024	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Select Major St & Select Minor St

Pedestrians and Bicyclists

15-Minute Pedestrian and Bicyclist Data

	15-Minute Time Period Start Time	Crossing North Approach CTH XX			Crossing East Approach CTH X			Crossing South Approach CTH X			Crossing West Approach Pine Road			15-Min Totals	Hourly Sum
		Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total		
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	2
	12:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**2**	

Special Pedestrians

Pedestrian Type	None	1 or 2	A Few	Several	Many	Unknown
Pre-school Children	x					
Elementry School Age Children	x					
Visually Impaired (white cane/help	x					
Elderly/Disabled (except wheelcha	x					
Wheelchairs/Electric Scooters	x					
Other (None)	x					

LEGEND

XX (XX) = AM PEAK (PM PEAK)

COUNTS PERFORMED IN DECEMBER OF 2024

CTH X & CTH XX/PINE ROAD	COUNTY: MARATHON	EXISTING TRAFFIC COUNTS

FILE NAME : X:\PROJECTS\MARATHON\240130 CTH X & CTH XX, ICE ANALYSIS, MARATHON CTY\TRAFFIC\VOLUME EXHIBITS\VOLUME EXHIBITS.DWG
LAYOUT NAME - Existing
PLOTTED: 1/5/2025 2:48 PM
PLOT NAME :
PLOT BY : STEFANY KAT
PLOT SCALE : NOT TO SCALE

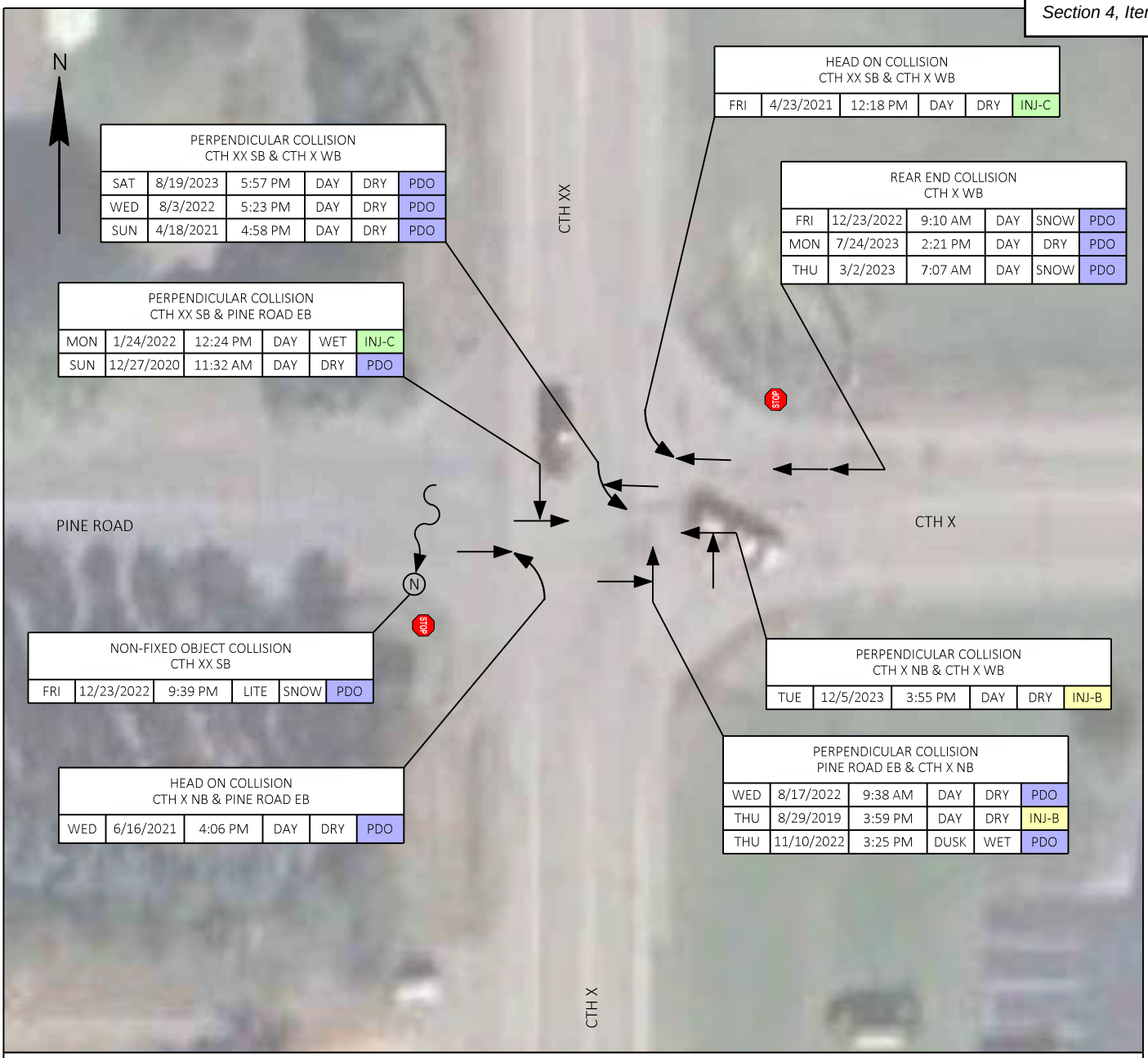
LEGEND

XX (XX) = AM PEAK (PM PEAK)

CTH X & CTH XX/PINE ROAD	COUNTY: MARATHON	FUTURE YEAR 2046 TRAFFIC VOLUMES

FILE NAME : X:\PROJECTS\MARATHON\240130 CTH X & CTH XX, ICE ANALYSIS, MARATHON CTY\TRAFFIC\VOLUME EXHIBITS\VOLUME EXHIBITS.DWG
LAYOUT NAME - 2046
PLOTTED: 7/25/2025 2:48 PM
PLOT NAME :
PLOT BY : STEFANY KAT
PLOT SCALE : NOT TO SCALE

ATTACHMENT 3 – INTERSECTION CRASH DIAGRAM



LEGEND

→	VEHICLE MOVING FORWARDS	→←	HEAD-ON COLLISION	(F)	FIXED OBJECT
←→	VEHICLE MOVING BACKWARDS	→→	REAR-END COLLISION	(N)	NON-FIXED OBJECT
	PEDESTRIAN		SIDESWIPE (OPPOSITE DIRECTION)	P	PARKED VEHICLE
	BICYCLIST		SIDESWIPE (SAME DIRECTION)		OVERTAKE
STOP	STOP SIGN		PERPENDICULAR COLLISION		OVERTURN
					OUT OF CONTROL
YIELD	YIELD SIGN		LEFT TURN COLLISION	FATAL	FATAL COLLISION
				INJ-A	SUSPECTED SEVERE INJURY COLLISION
				INJ-B	SUSPECTED MINOR INJURY COLLISION
	TRAFFIC SIGNAL		RIGHT TURN COLLISION	INJ-C	POSSIBLE INJURY COLLISION
				PDO	PROPERTY DAMAGE ONLY COLLISION

CTH X & CTH XX/PINE ROAD	2019-2023 CRASHES	COUNTY: MARATHON	CRASH DIAGRAM

FILE NAME : X:\PROJECTS\MARATHON\240130 CTH X & CTH XX, ICE ANALYSIS, MARATHON CTY\TRAFFIC\SAFETY\CRASH DIAGRAM - CTH X & CTH XX.DWG
LAYOUT NAME - Crash Diagram
PLOT DATE : 1/15/2025 10:45 AM
PLOT BY : STEFANY KATZNER
PLOT SCALE : NOT TO SCALE

ATTACHMENT 4 – TRAFFIC SIGNAL WARRANTS

Wisconsin Department of Transportation Traffic Signal Warrant Summary Worksheet

100%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: CTH X & CTH XX/Pine Road
County: Marathon
Town: Kronenwetter

Major Street: CTH X/CTH XX
Critical Approach Speed: 35 mph
Lanes: 1 lane

Minor Street: Pine Road/CTH X
Critical Approach Speed: 45 mph
Lanes: 1 lane

% Right Turns Included
From North (SB) 100%
From East (WB) 100%
From South (NB) 100%
From West (EB) 100%

In built-up area of isolated community of < 10,000 population? No
Total number of approaches at intersection? 4 or more
If it is a "T" intersection, inflate minor threshold to 150%? No
Manually set volume level? No

Analysis based on EXISTING volume data.

Date	Day of the Week	Time (HH:MM)			
		From	AM / PM	To	AM / PM
12/11/2024	Wednesday	6:00	AM	18:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	**No**
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	**No**
Warrant 3: Peak Hour Volume	**N/A**
Warrant 4: Pedestrian Volume	**N/A**
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
Warrant 5: School Crossing	**N/A**
Warrant 6: Coordinated Signal System	**N/A**
Warrant 7: Crash Experience	**No**
Warrant 8: Roadway Network	**N/A**
Warrant 9: Intersection Near a Grade Crossing	**N/A**

Warrant Analysis Conducted By:

Name: SLK
Agency: JT Engineering
Date: 1/13/2025

Warrant 1: Eight - Hour Vehicular Volume 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition A : Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	0	1

Satisfied? No

Condition B: Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	0	0

Satisfied? No

Condition C: Combination of A & B at 80%

Satisfied? No

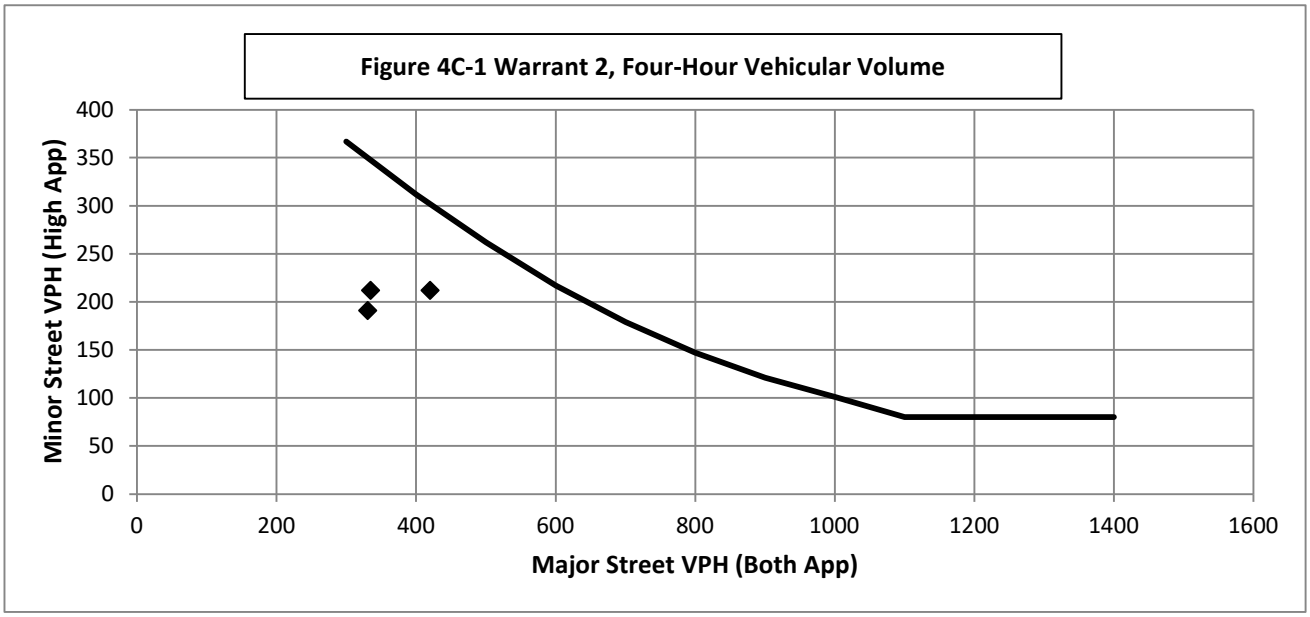
6:00 AM Enter Start Time (Military Time) (HH:MM)

Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	Total
1	6:00	7:00	234	125	359
2	7:00	8:00	293	204	497
3	8:00	9:00	211	191	402
4	9:00	10:00	187	116	303
5	10:00	11:00	158	106	264
6	11:00	12:00	186	134	320
7	12:00	13:00	191	101	292
8	13:00	14:00	200	131	331
9	14:00	15:00	264	144	408
10	15:00	16:00	335	212	547
11	16:00	17:00	420	212	632
12	17:00	18:00	331	191	522
13	18:00	19:00	197	98	295
14	19:00	20:00	0	0	0
15	20:00	21:00	0	0	0
16	21:00	22:00	0	0	0

Warrant 2: Four-Hour Volume 100%

Warrant Evaluated? Yes
Warrant Satisfied? No
Manually Set To:

Hour Start	16:00	15:00	17:00	#N/A
Major Road Vol.	420	335	331	#N/A
Minor Road Vol.	212	212	191	#N/A



Warrant 3: Peak Hour Volume 100%

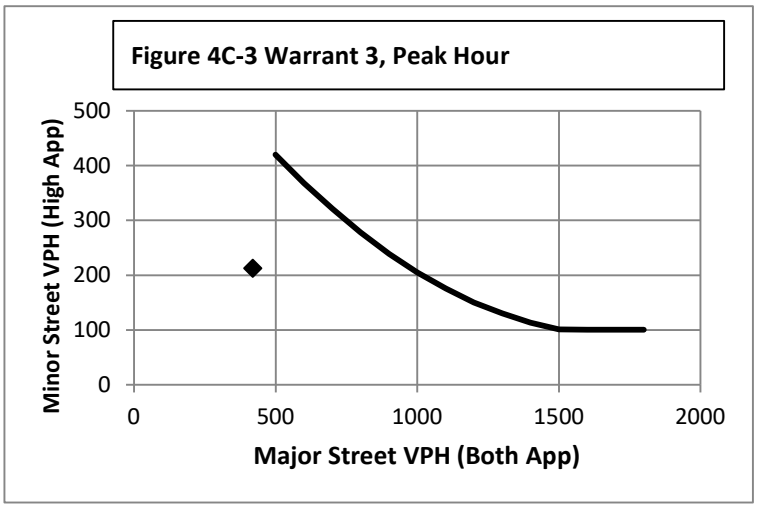
Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	No
Volume on Minor Approach	100	
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour?

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
16:00	420	212



Warrant 4: Pedestrian Volume 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

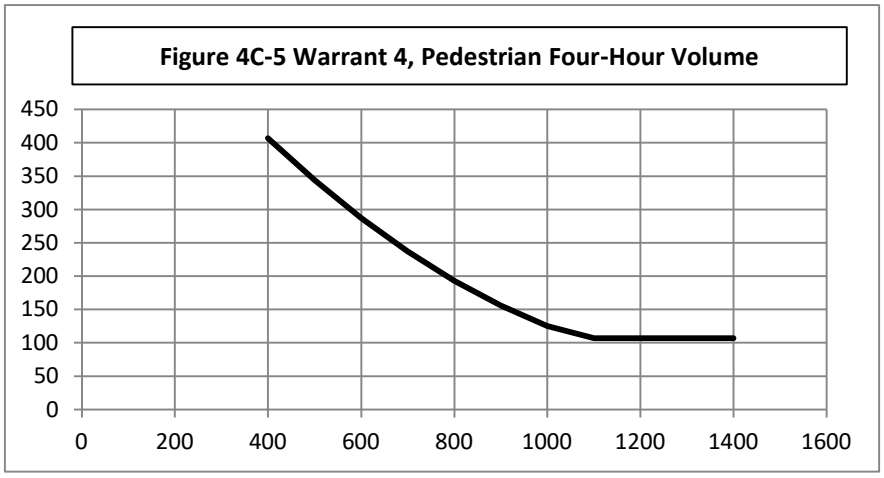
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
		0
		0
		0
		0

Manually Set Major Rd Vol?

Avg. walk speed less than 3.5 ft/s?

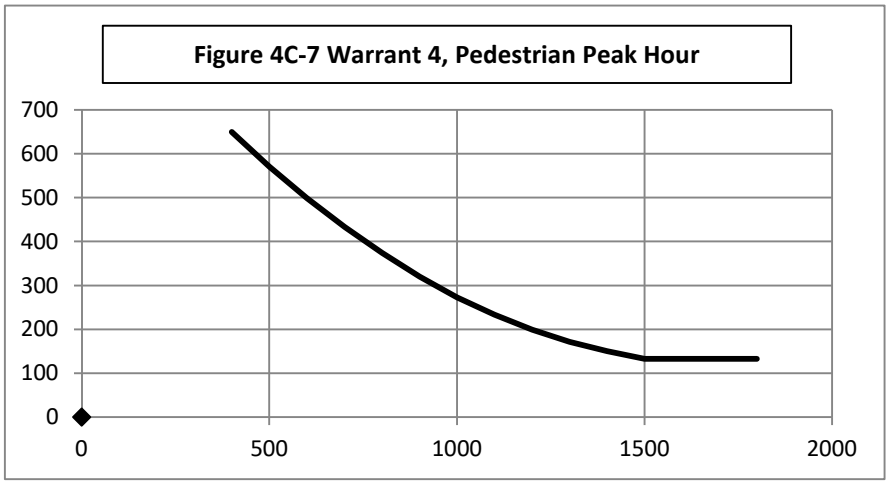
Criterion A Satisfied?



Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
0:00	0	0

Criterion B Satisfied?



Warrant 5: School Crossing 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Criteria		Fulfilled?
1	There are a MINIMUM of 20 school children during the highest crossing hour.	
2	There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
3	The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Criteria		Fulfilled?
1	Signal spacing > 1000 ft	No
2	On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
3	On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Criteria			Met?	Fulfilled?
1	Adequate trial of other remedial measures has failed to reduce crash frequency.			No
	Measures Tried:			
2	Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.	# of crashes per 12 months		No
		4		
3	Warrant 1, Condition A (80%)		No	Yes
	Warrant 1, Condition B (80%)		No	
	Warrant 4, Criterion A (80%)		No	
	Warrant 4, Criterion B (80%)		Yes	

Warrant 8: Roadway Network 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

Criteria						Met?	Fulfilled?
1	Total entering volume of at least 1,000 veh/h during typical weekday peak hour				632	No	No
	Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.					No	
2	Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)						
	Hour						
	Volume						

Characteristics of Major Routes - Select yes if all intersecting routes have characteristic		Fulfilled?
1	Part of the road or highway system that serves as the principal roadway network for through traffic flow	
2	Rural or suburban highway outside of, entering, or traversing a city	
3	Appears as a major route on an official plan	

Warrant 9: Intersection Near a Grade Crossing 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
1	0	0% to 2.5%	660	16:00	420	212	71.02

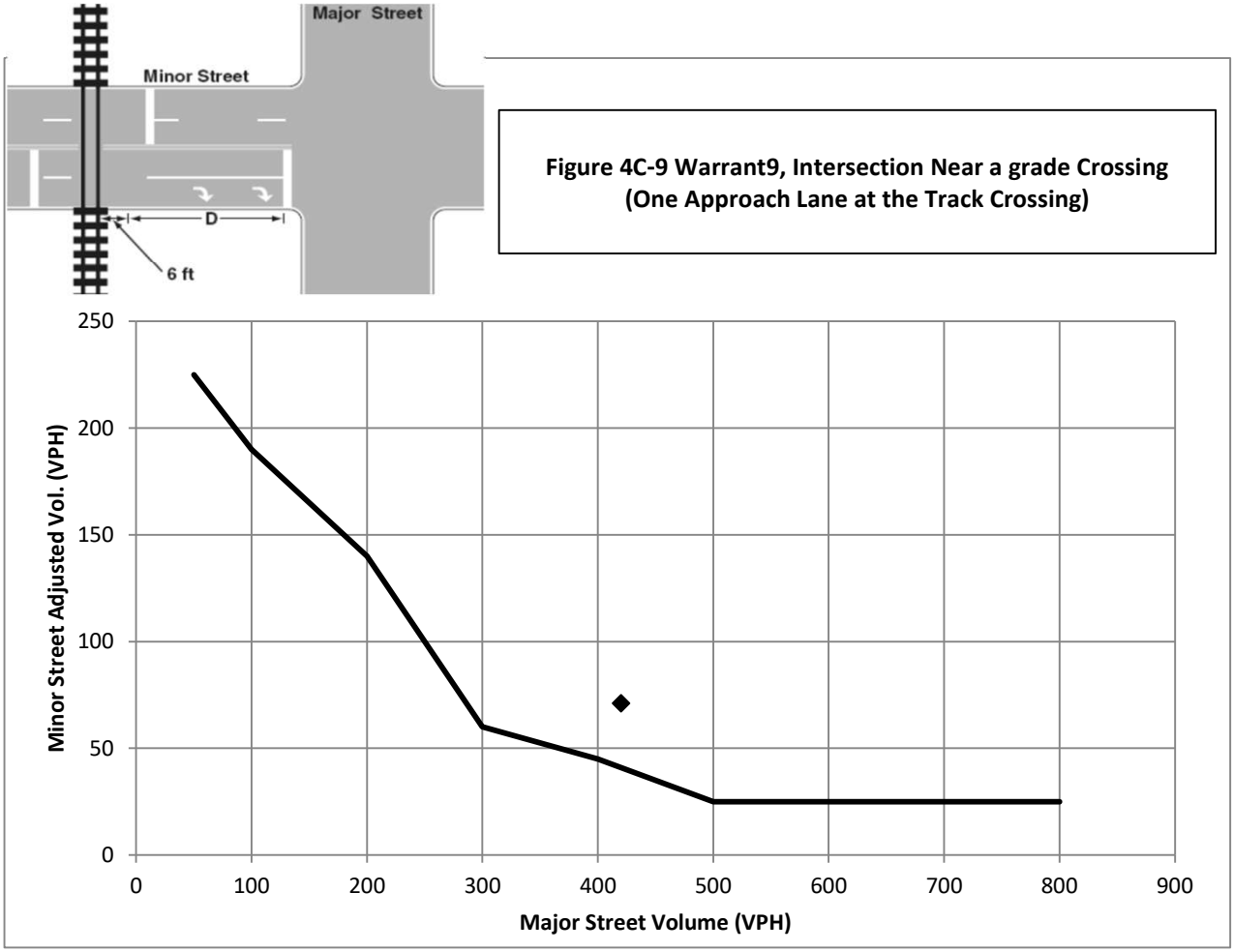


Figure 4C-9 Warrant9, Intersection Near a grade Crossing (One Approach Lane at the Track Crossing)

Conclusions/Comments:

Updated: 2/18/2016

Wisconsin Department of Transportation Traffic Signal Warrant Summary Worksheet

100%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: CTH X & CTH XX/Pine Road
County: Marathon
Town: Kronenwetter

Major Street: CTH X/CTH XX
Critical Approach Speed: 35 mph
Lanes: 1 lane

Minor Street: Pine Road/CTH X
Critical Approach Speed: 45 mph
Lanes: 1 lane

% Right Turns Included
From North (SB) 100%
From East (WB) 100%
From South (NB) 100%
From West (EB) 100%

In built-up area of isolated community of < 10,000 population? No
Total number of approaches at intersection? 4 or more
If it is a "T" intersection, inflate minor threshold to 150%? No
Manually set volume level? No

Analysis based on PROJECTED volume data. 0.5% per year

Forecast Year	Within 5 Years of Construction?	Time (HH:MM)			
		From	AM / PM	To	AM / PM
12/11/2024	Wednesday	6:00	AM	18:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	**No**
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	**No**
Warrant 3: Peak Hour Volume	**N/A**
Warrant 4: Pedestrian Volume	**N/A**
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
Warrant 5: School Crossing	**N/A**
Warrant 6: Coordinated Signal System	**N/A**
Warrant 7: Crash Experience	**No**
Warrant 8: Roadway Network	**N/A**
Warrant 9: Intersection Near a Grade Crossing	**N/A**

Warrant Analysis Conducted By:

Name: SLK
Agency: JT Engineering
Date: 1/13/2025

Warrant 1: Eight - Hour Vehicular Volume 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition A : Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	0	1

Satisfied? No

Condition B: Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	0	0

Satisfied? No

Condition C: Combination of A & B at 80%

Satisfied? No

6:00 AM Enter Start Time (Military Time) (HH:MM)

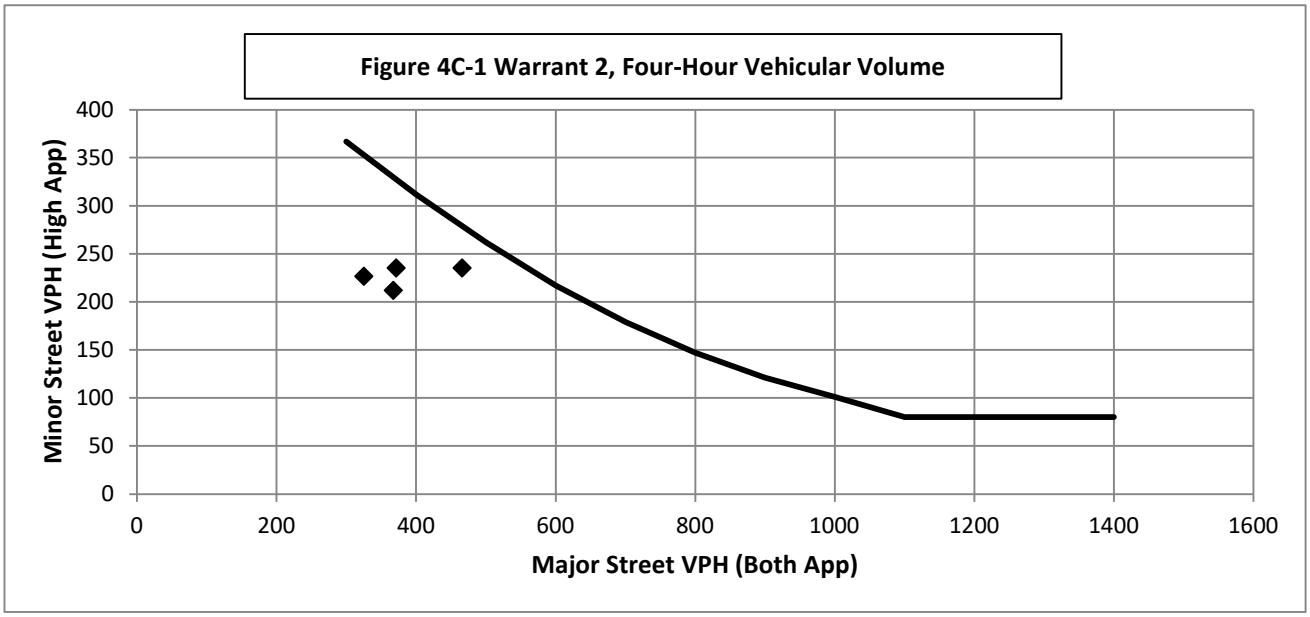
Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	Total
1	6:00	7:00	260	139	398.49
2	7:00	8:00	325	226	551.67
3	8:00	9:00	234	212	446.22
4	9:00	10:00	208	129	336.33
5	10:00	11:00	175	118	293.04
6	11:00	12:00	206	149	355.2
7	12:00	13:00	212	112	324.12
8	13:00	14:00	222	145	367.41
9	14:00	15:00	293	160	452.88
10	15:00	16:00	372	235	607.06
11	16:00	17:00	466	235	701.52
12	17:00	18:00	367	212	579.42
13	18:00	19:00	219	109	327.45
14	19:00	20:00	0	0	0
15	20:00	21:00	0	0	0
16	21:00	22:00	0	0	0

Warrant 2: Four-Hour Volume 100%

Warrant Evaluated? Yes
Warrant Satisfied? No
Manually Set To:

Hour Start	16:00	15:00	7:00	17:00
Major Road Vol.	466.2	371.74	325.23	367.41
Minor Road Vol.	235.32	235.32	226.44	212.01

Figure 4C-1 Warrant 2, Four-Hour Vehicular Volume



Warrant 3: Peak Hour Volume 100%

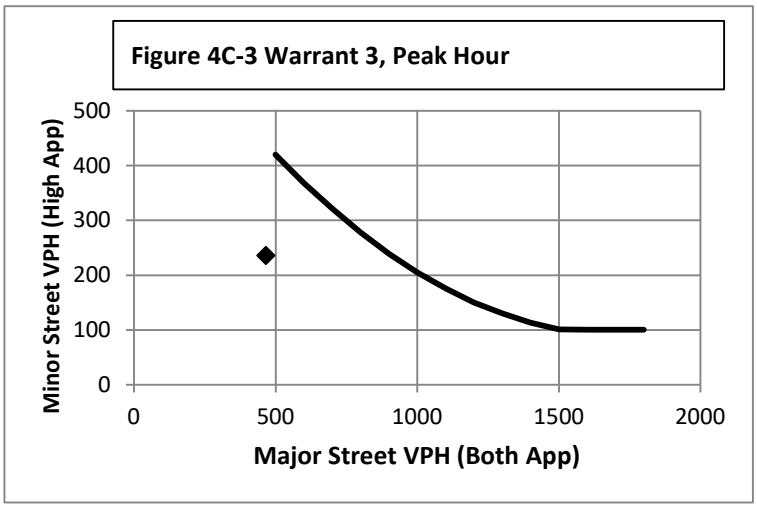
Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	No
Volume on Minor Approach	100	
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour?

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
16:00	466.2	235.32



Warrant 4: Pedestrian Volume 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

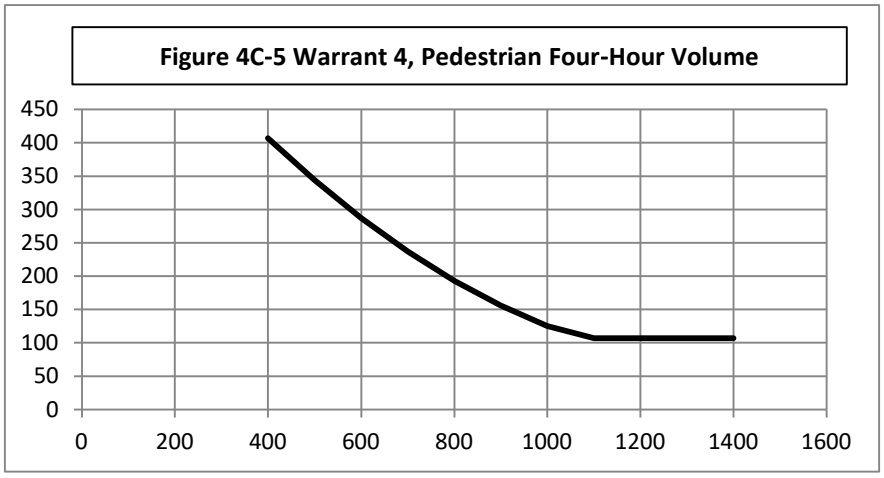
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
		0
		0
		0
		0

Manually Set Major Rd Vol?

Avg. walk speed less than 3.5 ft/s?

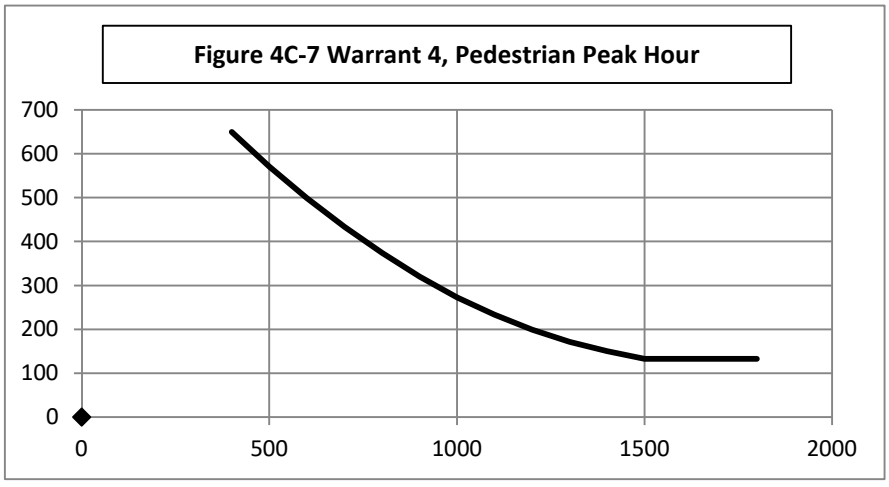
Criterion A Satisfied?



Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
0:00	0	0

Criterion B Satisfied?



Warrant 5: School Crossing 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Criteria		Fulfilled?
1	There are a MINIMUM of 20 school children during the highest crossing hour.	
2	There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
3	The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Criteria		Fulfilled?
1	Signal spacing > 1000 ft	No
2	On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
3	On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Criteria			Met?	Fulfilled?
1	Adequate trial of other remedial measures has failed to reduce crash frequency.			No
	Measures Tried:			
2	Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.	# of crashes per 12 months		No
		4		
3	Warrant 1, Condition A (80%)		No	Yes
	Warrant 1, Condition B (80%)		No	
	Warrant 4, Criterion A (80%)		No	
	Warrant 4, Criterion B (80%)		Yes	

Warrant 8: Roadway Network 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

Criteria						Met?	Fulfilled?
1	Total entering volume of at least 1,000 veh/h during typical weekday peak hour				701.52	No	No
	Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.					No	
2	Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)						
	Hour						
	Volume						

Characteristics of Major Routes - Select yes if all intersecting routes have characteristic		Fulfilled?
1	Part of the road or highway system that serves as the principal roadway network for through traffic flow	
2	Rural or suburban highway outside of, entering, or traversing a city	
3	Appears as a major route on an official plan	

Warrant 9: Intersection Near a Grade Crossing 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
1	0	0% to 2.5%	660	16:00	466.2	235.32	78.8322

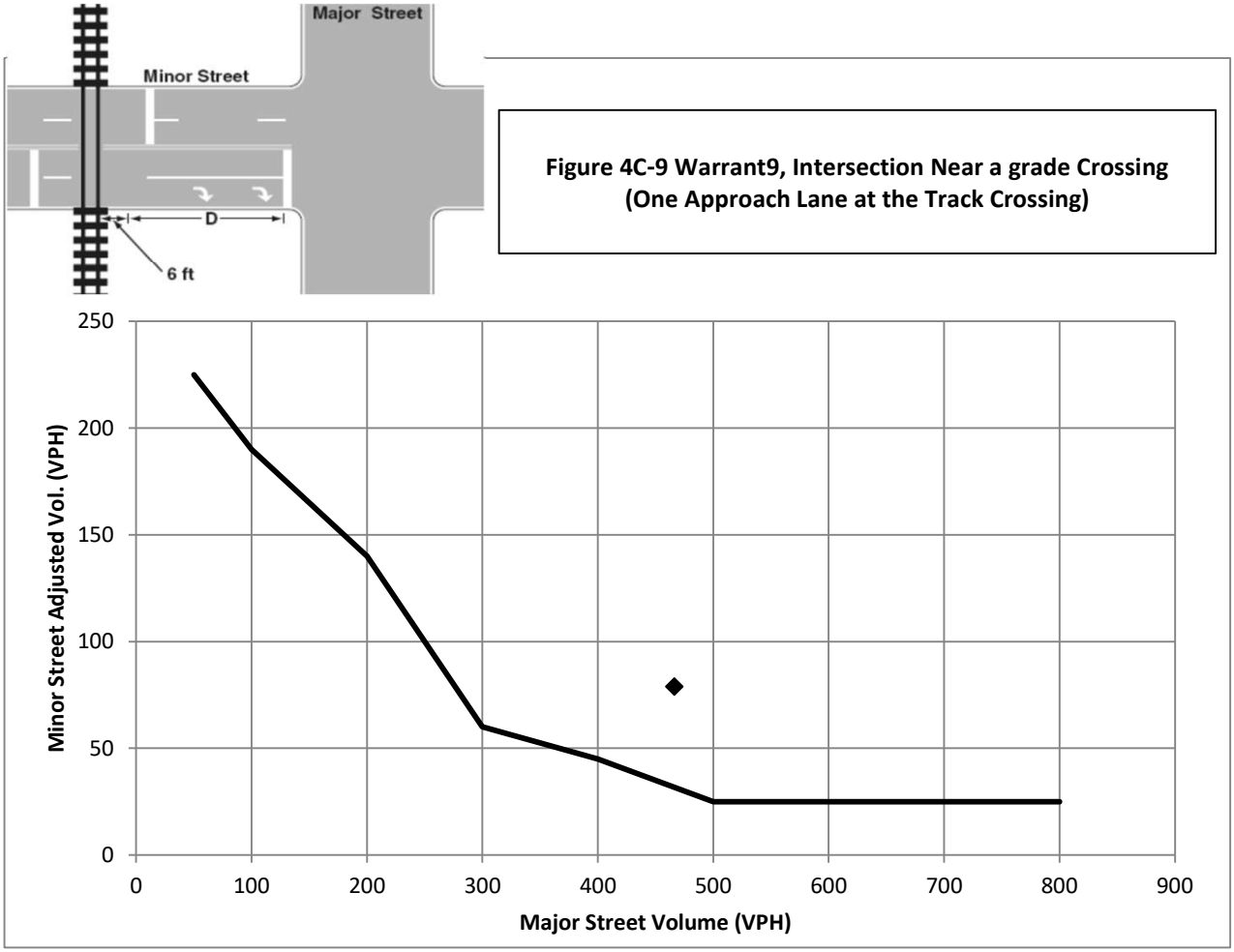


Figure 4C-9 Warrant9, Intersection Near a grade Crossing (One Approach Lane at the Track Crossing)

Conclusions/Comments:

Updated: 2/18/2016

Wisconsin Department of Transportation Traffic Signal Warrant Summary Worksheet

100%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: CTH X & CTH XX/Pine Road
County: Marathon
Town: Kronenwetter

Major Street: CTH X/CTH XX
Critical Approach Speed: 35 mph
Lanes: 1 lane

Minor Street: Pine Road/CTH X
Critical Approach Speed: 45 mph
Lanes: 1 lane

% Right Turns Included
From North (SB) 100%
From East (WB) 100%
From South (NB) 100%
From West (EB) 100%

In built-up area of isolated community of < 10,000 population? No
Total number of approaches at intersection? 4 or more
If it is a "T" intersection, inflate minor threshold to 150%? No
Manually set volume level? No

Analysis based on PROJECTED volume data. 1% per year

Forecast Year	Within 5 Years of Construction?	Time (HH:MM)			
		From	AM / PM	To	AM / PM
12/11/2024	Wednesday	6:00	AM	18:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	**No**
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	**No**
Warrant 3: Peak Hour Volume	**N/A**
Warrant 4: Pedestrian Volume	**N/A**
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
Warrant 5: School Crossing	**N/A**
Warrant 6: Coordinated Signal System	**N/A**
Warrant 7: Crash Experience	**No**
Warrant 8: Roadway Network	**N/A**
Warrant 9: Intersection Near a Grade Crossing	**N/A**

Warrant Analysis Conducted By:

Name: SLK
Agency: JT Engineering
Date: 1/13/2025

Warrant 1: Eight - Hour Vehicular Volume 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition A : Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	1	3

Satisfied? No

Condition B: Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	0	0

Satisfied? No

Condition C: Combination of A & B at 80%

Satisfied? No

6:00 AM Enter Start Time (Military Time) (HH:MM)

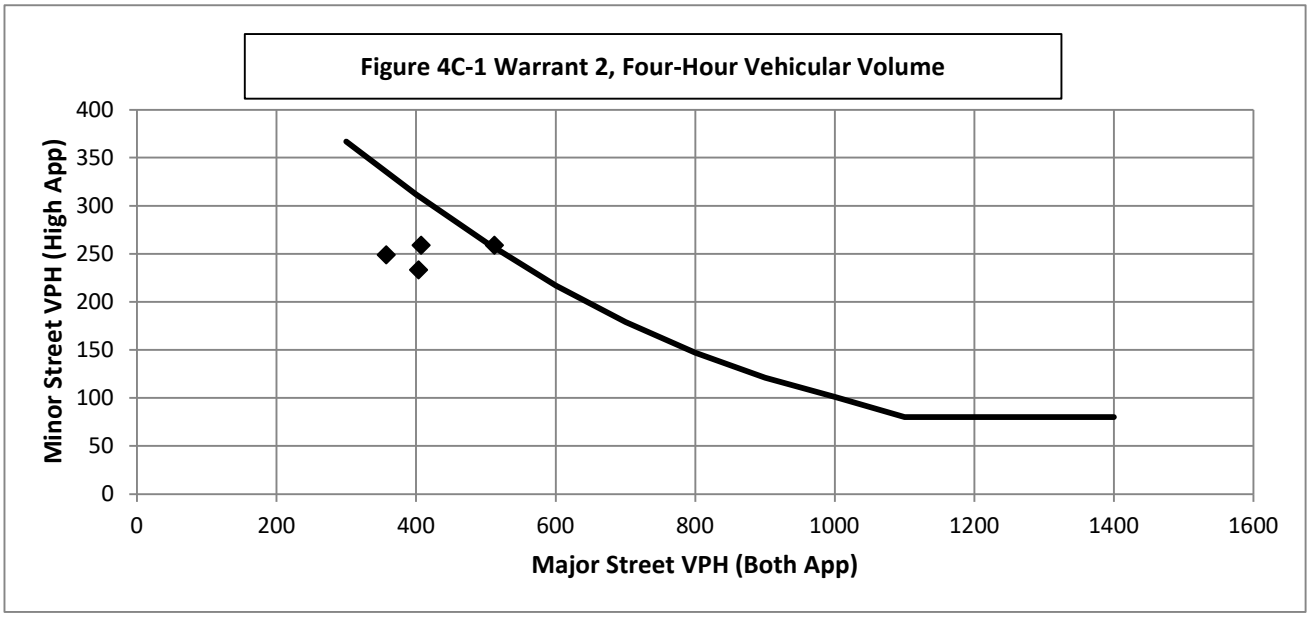
Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	Total
1	6:00	7:00	285	153	437.98
2	7:00	8:00	357	249	606.34
3	8:00	9:00	257	233	490.44
4	9:00	10:00	228	142	369.66
5	10:00	11:00	193	129	322.08
6	11:00	12:00	227	163	390.4
7	12:00	13:00	233	123	356.24
8	13:00	14:00	244	160	403.82
9	14:00	15:00	322	176	497.76
10	15:00	16:00	407	259	666.12
11	16:00	17:00	512	259	771.04
12	17:00	18:00	404	233	636.84
13	18:00	19:00	240	120	359.9
14	19:00	20:00	0	0	0
15	20:00	21:00	0	0	0
16	21:00	22:00	0	0	0

Warrant 2: Four-Hour Volume 100%

Warrant Evaluated? Yes
Warrant Satisfied? No
Manually Set To:

Hour Start	16:00	15:00	17:00	7:00
Major Road Vol.	512.4	407.48	403.82	357.46
Minor Road Vol.	258.64	258.64	233.02	248.88

Figure 4C-1 Warrant 2, Four-Hour Vehicular Volume



Warrant 3: Peak Hour Volume 100%

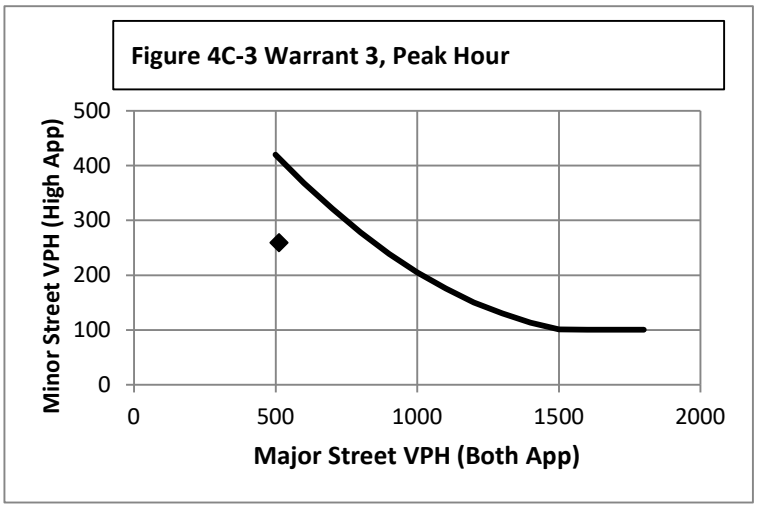
Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	No
Volume on Minor Approach	100	
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour?

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
16:00	512.4	258.64



Warrant 4: Pedestrian Volume 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

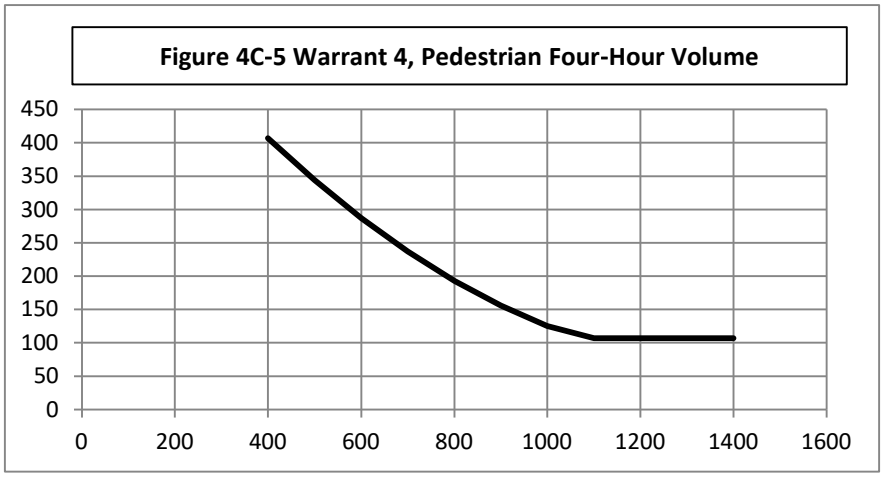
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
		0
		0
		0
		0

Manually Set Major Rd Vol?

Avg. walk speed less than 3.5 ft/s?

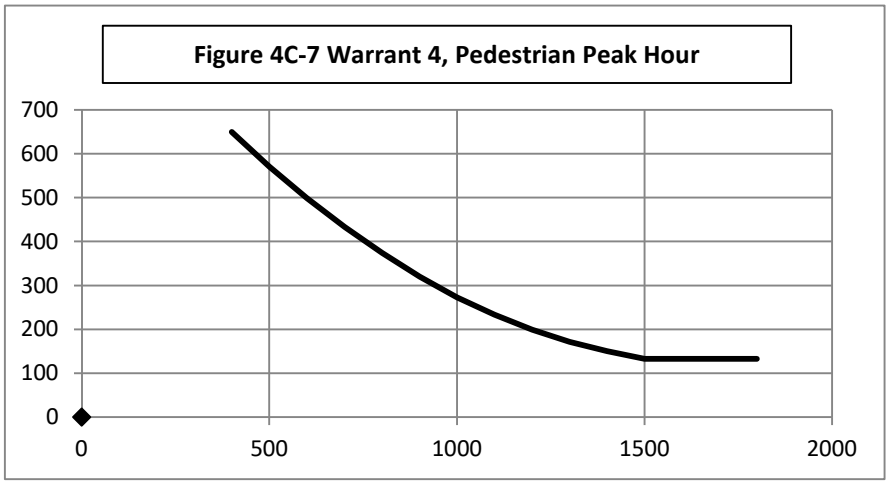
Criterion A Satisfied?



Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
0:00	0	0

Criterion B Satisfied?



Warrant 5: School Crossing 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

	Criteria	Fulfilled?
1	There are a MINIMUM of 20 school children during the highest crossing hour.	
2	There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
3	The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

	Criteria	Fulfilled?
1	Signal spacing > 1000 ft	No
2	On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
3	On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

	Criteria		Met?	Fulfilled?
1	Adequate trial of other remedial measures has failed to reduce crash frequency.			No
	Measures Tried:			
2	Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.	# of crashes per 12 months		No
		4		
3	Warrant 1, Condition A (80%)		No	Yes
	Warrant 1, Condition B (80%)		No	
	Warrant 4, Criterion A (80%)		No	
	Warrant 4, Criterion B (80%)		Yes	

Warrant 8: Roadway Network 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

	Criteria					Met?	Fulfilled?
1	Total entering volume of at least 1,000 veh/h during typical weekday peak hour					771.04	No	No
	Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.						No	
2	Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)							
		Hour						
		Volume						

	Characteristics of Major Routes - Select yes if all intersecting routes have characteristic	Fulfilled?
1	Part of the road or highway system that serves as the principal roadway network for through traffic flow	
2	Rural or suburban highway outside of, entering, or traversing a city	
3	Appears as a major route on an official plan	

Warrant 9: Intersection Near a Grade Crossing 100%

Warrant Evaluated? No **Warrant Satisfied? N/A** **Manually Set To:**

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
1	0	0% to 2.5%	660	16:00	512.4	258.64	86.6444

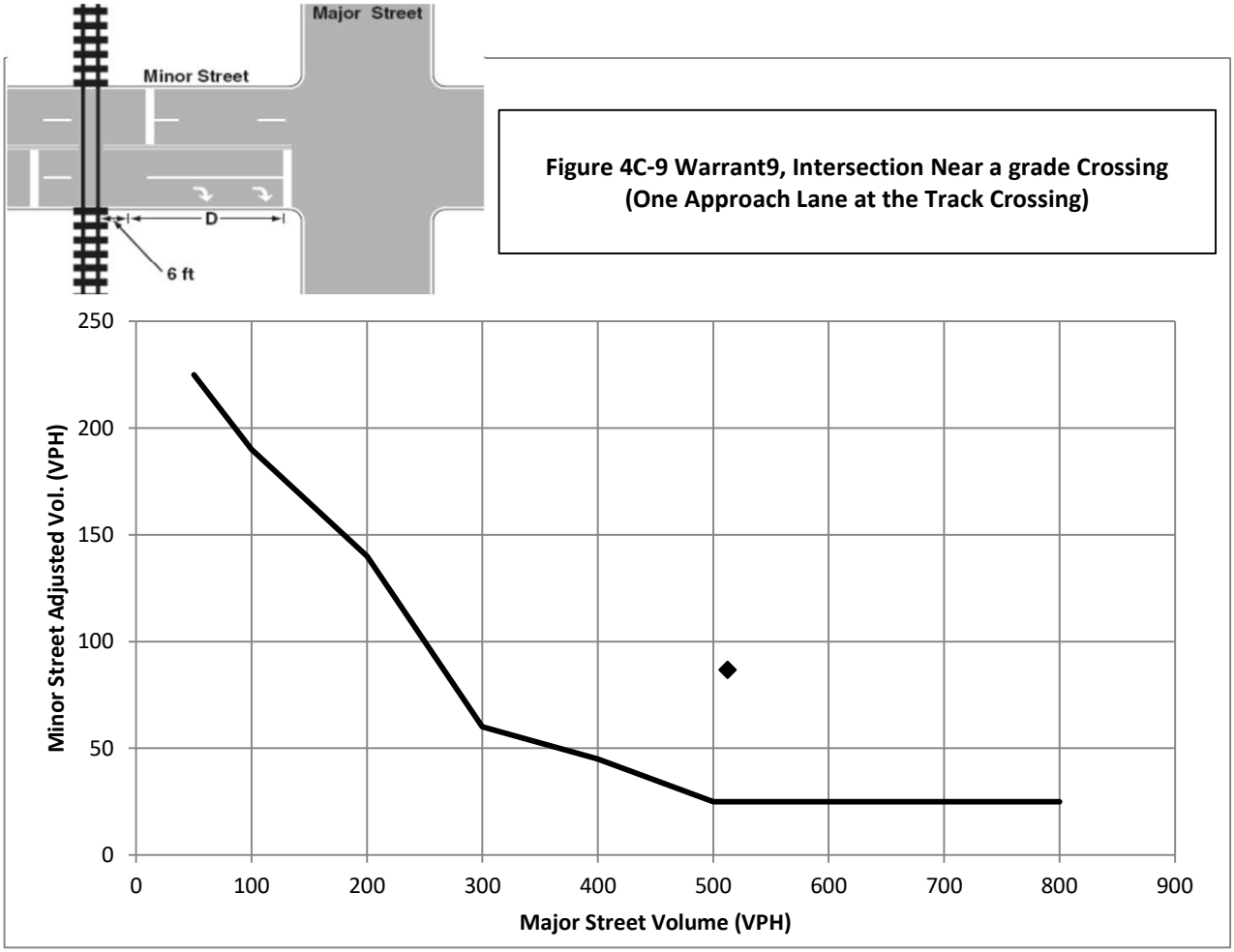


Figure 4C-9 Warrant9, Intersection Near a grade Crossing (One Approach Lane at the Track Crossing)

Conclusions/Comments:

Updated: 2/18/2016

ATTACHMENT 5 – ALL-WAY STOP CONTROL CRITERIA

ASWC Warrant Criteria

MUTCD Yes WisDOT Yes

MUTCD B, 1, 2, 3, 5

Met?	Criteria
No	A. Is a signal justified? No
Yes	B. # of crashes in a 12 month period that can be corrected by multi-way stop control: 5
No	C. Minimum Volumes

1. Major road approach volume (total of both) at least 300 vph for min 8 hours?
2. Combined ped, bike, and veh volume on minor approach (total of both) at least 200 units per hour for the same 8 hours as criteria C-1?
3. If the 85th percentile speed on the major road exceeds 40 mph, may use 70% of the values in C-1 and C-2

Major Street 85th percentile mph: 40

Time Period	From	To	Major Road: Both App.	Minor Road: Both App. (VPH)	C-1	C-2	Both Met?	D (80%)		Both Met?
1	6:00	7:00	234	161	No	No	No	No	No	No
2	7:00	8:00	293	258	No	Yes	No	No	No	No
3	8:00	9:00	211	259	No	Yes	No	No	No	No
4	9:00	10:00	187	137	No	No	No	No	No	No
5	10:00	11:00	158	122	No	No	No	No	No	No
6	11:00	12:00	186	154	No	No	No	No	No	No
7	12:00	13:00	191	130	No	No	No	No	No	No
8	13:00	14:00	200	166	No	No	No	No	No	No
9	14:00	15:00	264	161	No	No	No	No	No	No
10	15:00	16:00	334	266	Yes	Yes	Yes	No	No	No
11	16:00	17:00	420	260	Yes	Yes	Yes	No	No	No
12	17:00	18:00	331	219	Yes	Yes	Yes	No	No	No
13	18:00	19:00	197	117	No	No	No	No	No	No
14	19:00	20:00								
15	20:00	21:00								
16	21:00	22:00								

No	D. Use when previous criteria have not been met:

If 80% minimum values of Criteria B, C-1, and C-2 (C-3 excluded) are satisfied, warrant is met.

WisDOT

Met?	Criteria
Yes	1 **Functional Highway Classification**

Approach	Classification
1: (SB)	Minor Arterial
2: (WB)	Minor Arterial
3: (NB)	Minor Arterial
4: (EB)	Major Collector

Yes 2 **Average Daily Traffic**

Approach	AADT
Minor 1	3757
Minor 2	2795
Major 1	3165
Major 2	4082

Yes 3 **Crash History**

# of crashes in a 12 month period that can be corrected by multi-way stop control: 5

Expected to significantly reduce the overall severity of future crashes? Yes

4 **Alternatives**

Refer to TGM 13-26-5 Section D.

Yes 5 **Mobility Impact**

Will the high-volume "through" street experience significant delays for the benefit of reducing delays for a low-volume side street? No

6 **Right Turn Inclusion**

Refer to WisDOT TSDM 2-3-2

Forecasted Traffic
0.5% growth per year

ASWC Warrant Criteria

MUTCD Yes WisDOT Yes

MUTCD B, 1, 2, 3, 5

Met?	Criteria
No	A. Is a signal justified? No
Yes	B. # of crashes in a 12 month period that can be corrected by multi-way stop control: 5
No	C. Minimum Volumes

1. Major road approach volume (total of both) at least 300 vph for min 8 hours?
2. Combined ped, bike, and veh volume on minor approach (total of both) at least 200 units per hour for the same 8 hours as criteria C-1?
3. If the 85th percentile speed on the major road exceeds 40 mph, may use 70% of the values in C-1 and C-2

Major Street 85th percentile mph: 40

Time Period	From	To	Major Road: Both App.	Minor Road: Both App. (VPH)	C-1	C-2	Both Met?	D (80%)		Both Met?
1	6:00	7:00	260	179	No	No	No	No	No	No
2	7:00	8:00	325	286	Yes	Yes	Yes	No	No	No
3	8:00	9:00	234	287	No	Yes	No	No	No	No
4	9:00	10:00	208	152	No	No	No	No	No	No
5	10:00	11:00	175	135	No	No	No	No	No	No
6	11:00	12:00	206	171	No	No	No	No	No	No
7	12:00	13:00	212	144	No	No	No	No	No	No
8	13:00	14:00	222	184	No	No	No	No	No	No
9	14:00	15:00	293	179	No	No	No	No	No	No
10	15:00	16:00	371	295	Yes	Yes	Yes	No	No	No
11	16:00	17:00	466	289	Yes	Yes	Yes	No	No	No
12	17:00	18:00	367	243	Yes	Yes	Yes	No	No	No
13	18:00	19:00	219	130	No	No	No	No	No	No
14	19:00	20:00								
15	20:00	21:00								
16	21:00	22:00								

No D. Use when previous criteria have not been met:
If 80% minimum values of Criteria B, C-1, and C-2 (C-3 excluded) are satisfied, warrant is met.

WisDOT

Met?	Criteria
Yes	1 **Functional Highway Classification**

Approach	Classification
1: (SB)	Minor Arterial
2: (WB)	Minor Arterial
3: (NB)	Minor Arterial
4: (EB)	Major Collector

Forecasted Traffic
0.5% growth per year

Yes 2 **Average Daily Traffic**

Approach	AADT
Minor 1	3757
Minor 2	2795
Major 1	3165
Major 2	4082

Yes 3 **Crash History**

# of crashes in a 12 month period that can be corrected by multi-way stop control: 5

Expected to significantly reduce the overall severity of future crashes? Yes

4 **Alternatives**

Refer to TGM 13-26-5 Section D.

Yes 5 **Mobility Impact**

Will the high-volume "through" street experience significant delays for the benefit of reducing delays for a low-volume side street? No

6 **Right Turn Inclusion**

Refer to WisDOT TSDM 2-3-2

ATTACHMENT 6 – SYNCHRO CAPACITY/LOS ANALYSIS SUMMARIES

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	55	4	71	37	94	3	110	119	38	36	0
Future Vol, veh/h	2	55	4	71	37	94	3	110	119	38	36	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	75	75	75	78	78	78	88	88	88
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	5	5	5
Mvmt Flow	3	72	5	95	49	125	4	141	153	43	41	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	301	429	41	388	352	217	41	0	0	294	0	0
Stage 1	127	127	-	225	225	-	-	-	-	-	-	-
Stage 2	173	301	-	163	127	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.245	-	-
Pot Cap-1 Maneuver	656	522	1036	572	574	825	1575	-	-	1251	-	-
Stage 1	881	795	-	780	719	-	-	-	-	-	-	-
Stage 2	833	668	-	841	793	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	489	502	1036	471	552	825	1575	-	-	1251	-	-
Mov Cap-2 Maneuver	489	502	-	471	552	-	-	-	-	-	-	-
Stage 1	850	767	-	778	717	-	-	-	-	-	-	-
Stage 2	656	666	-	731	765	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	13.2	15.51	0.09	4.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	21	-	-	519	609	924	-	-
HCM Lane V/C Ratio	0.002	-	-	0.155	0.442	0.035	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	13.2	15.5	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	2.3	0.1	-	-

Intersection	
Int Delay, s/veh	12.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	55	10	96	42	73	4	68	98	111	126	6
Future Vol, veh/h	2	55	10	96	42	73	4	68	98	111	126	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	86	86	86	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	1	1	1	1	1	1	2	2	2
Mvmt Flow	3	92	17	112	49	85	5	85	123	139	158	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	558	656	161	637	599	146	165	0	0	208	0	0
Stage 1	439	439	-	156	156	-	-	-	-	-	-	-
Stage 2	119	218	-	481	443	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.11	6.51	6.21	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.509	4.009	3.309	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	434	380	873	391	417	903	1419	-	-	1364	-	-
Stage 1	589	571	-	848	770	-	-	-	-	-	-	-
Stage 2	875	716	-	568	578	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	306	336	873	255	368	903	1419	-	-	1364	-	-
Mov Cap-2 Maneuver	306	336	-	255	368	-	-	-	-	-	-	-
Stage 1	523	507	-	845	767	-	-	-	-	-	-	-
Stage 2	740	713	-	405	513	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	18.95	32.07	0.18	3.63
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	38	-	-	369	369	815	-	-
HCM Lane V/C Ratio	0.004	-	-	0.303	0.664	0.102	-	-
HCM Ctrl Dly (s/v)	7.5	0	-	18.9	32.1	7.9	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.3	4.6	0.3	-	-

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	60	5	80	40	105	5	120	130	40	40	5
Future Vol, veh/h	5	60	5	80	40	105	5	120	130	40	40	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	75	75	75	78	78	78	88	88	88
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	5	5	5
Mvmt Flow	7	79	7	107	53	140	6	154	167	45	45	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	333	473	48	426	392	237	51	0	0	321	0	0
Stage 1	139	139	-	250	250	-	-	-	-	-	-	-
Stage 2	193	333	-	176	142	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.245	-	-
Pot Cap-1 Maneuver	625	493	1026	541	545	804	1562	-	-	1223	-	-
Stage 1	869	785	-	756	702	-	-	-	-	-	-	-
Stage 2	813	647	-	828	781	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	445	472	1026	431	522	804	1562	-	-	1223	-	-
Mov Cap-2 Maneuver	445	472	-	431	522	-	-	-	-	-	-	-
Stage 1	835	755	-	752	698	-	-	-	-	-	-	-
Stage 2	617	644	-	709	751	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	14.08	17.99	0.14	3.79
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	32	-	-	488	573	829	-	-
HCM Lane V/C Ratio	0.004	-	-	0.189	0.524	0.037	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	14.1	18	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	3	0.1	-	-

Intersection	
Int Delay, s/veh	20.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	60	10	105	45	80	5	75	110	125	140	10
Future Vol, veh/h	5	60	10	105	45	80	5	75	110	125	140	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	86	86	86	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	1	1	1	1	1	1	2	2	2
Mvmt Flow	8	100	17	122	52	93	6	94	138	156	175	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	626	738	181	713	675	163	188	0	0	231	0	0
Stage 1	494	494	-	175	175	-	-	-	-	-	-	-
Stage 2	132	244	-	538	500	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.11	6.51	6.21	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.509	4.009	3.309	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	391	341	851	348	377	885	1393	-	-	1337	-	-
Stage 1	550	540	-	829	756	-	-	-	-	-	-	-
Stage 2	862	697	-	529	545	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	260	295	851	205	326	885	1393	-	-	1337	-	-
Mov Cap-2 Maneuver	260	295	-	205	326	-	-	-	-	-	-	-
Stage 1	478	469	-	825	752	-	-	-	-	-	-	-
Stage 2	714	693	-	355	474	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	23.3	59.57	0.2	3.66
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	42	-	-	320	310	807	-	-
HCM Lane V/C Ratio	0.004	-	-	0.391	0.862	0.117	-	-
HCM Ctrl Dly (s/v)	7.6	0	-	23.3	59.6	8	0	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.8	7.7	0.4	-	-

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	55	4	71	37	94	3	110	119	38	36	0
Future Vol, veh/h	2	55	4	71	37	94	3	110	119	38	36	0
Peak Hour Factor	0.76	0.76	0.76	0.75	0.75	0.75	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	5	5	5
Mvmt Flow	3	72	5	95	49	125	4	141	153	43	41	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.9	10.4	10.4	9.1
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	3%	35%	51%
Vol Thru, %	47%	90%	18%	49%
Vol Right, %	51%	7%	47%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	232	61	202	74
LT Vol	3	2	71	38
Through Vol	110	55	37	36
RT Vol	119	4	94	0
Lane Flow Rate	297	80	269	84
Geometry Grp	1	1	1	1
Degree of Util (X)	0.377	0.114	0.353	0.124
Departure Headway (Hd)	4.564	5.116	4.713	5.296
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	782	693	757	670
Service Time	2.63	3.203	2.781	3.383
HCM Lane V/C Ratio	0.38	0.115	0.355	0.125
HCM Control Delay, s/veh	10.4	8.9	10.4	9.1
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	1.8	0.4	1.6	0.4

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	55	10	96	42	73	4	68	98	111	126	6
Future Vol, veh/h	2	55	10	96	42	73	4	68	98	111	126	6
Peak Hour Factor	0.60	0.60	0.60	0.86	0.86	0.86	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	6	6	6	1	1	1	1	1	1	2	2	2
Mvmt Flow	3	92	17	112	49	85	5	85	123	139	158	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10	11.5	10.2	12.7
HCM LOS	A	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	3%	45%	46%
Vol Thru, %	40%	82%	20%	52%
Vol Right, %	58%	15%	35%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	67	211	243
LT Vol	4	2	96	111
Through Vol	68	55	42	126
RT Vol	98	10	73	6
Lane Flow Rate	213	112	245	304
Geometry Grp	1	1	1	1
Degree of Util (X)	0.298	0.177	0.365	0.45
Departure Headway (Hd)	5.056	5.713	5.359	5.33
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	710	626	670	674
Service Time	3.098	3.762	3.4	3.367
HCM Lane V/C Ratio	0.3	0.179	0.366	0.451
HCM Control Delay, s/veh	10.2	10	11.5	12.7
HCM Lane LOS	B	A	B	B
HCM 95th-tile Q	1.2	0.6	1.7	2.3

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	60	5	80	40	105	5	120	130	40	40	5
Future Vol, veh/h	5	60	5	80	40	105	5	120	130	40	40	5
Peak Hour Factor	0.76	0.76	0.76	0.75	0.75	0.75	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	5	5	5
Mvmt Flow	7	79	7	107	53	140	6	154	167	45	45	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.3	11.4	11.4	9.5
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	7%	36%	47%
Vol Thru, %	47%	86%	18%	47%
Vol Right, %	51%	7%	47%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	70	225	85
LT Vol	5	5	80	40
Through Vol	120	60	40	40
RT Vol	130	5	105	5
Lane Flow Rate	327	92	300	97
Geometry Grp	1	1	1	1
Degree of Util (X)	0.427	0.138	0.412	0.149
Departure Headway (Hd)	4.819	5.413	4.949	5.543
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	752	665	732	648
Service Time	2.819	3.428	2.949	3.566
HCM Lane V/C Ratio	0.435	0.138	0.41	0.15
HCM Control Delay, s/veh	11.4	9.3	11.4	9.5
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	2.1	0.5	2	0.5

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	60	10	105	45	80	5	75	110	125	140	10
Future Vol, veh/h	5	60	10	105	45	80	5	75	110	125	140	10
Peak Hour Factor	0.60	0.60	0.60	0.86	0.86	0.86	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	6	6	6	1	1	1	1	1	1	2	2	2
Mvmt Flow	8	100	17	122	52	93	6	94	138	156	175	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.7	12.7	11.2	14.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	7%	46%	45%
Vol Thru, %	39%	80%	20%	51%
Vol Right, %	58%	13%	35%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	190	75	230	275
LT Vol	5	5	105	125
Through Vol	75	60	45	140
RT Vol	110	10	80	10
Lane Flow Rate	238	125	267	344
Geometry Grp	1	1	1	1
Degree of Util (X)	0.35	0.21	0.418	0.528
Departure Headway (Hd)	5.303	6.036	5.621	5.533
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	675	591	637	650
Service Time	3.368	4.112	3.684	3.592
HCM Lane V/C Ratio	0.353	0.212	0.419	0.529
HCM Control Delay, s/veh	11.2	10.7	12.7	14.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.6	0.8	2.1	3.1

ATTACHMENT 7 – HCS7 SUMMARY REPORTS

HCS7 Roundabouts Report

General Information

Analyst	SLK
Agency or Co.	JT Engineering
Date Performed	1/12/2025
Analysis Year	2024
Time Analyzed	AM Peak
Project Description	CTH X & CTH XX/Pine Rd

Site Information

Intersection	CTH X & CTH XX/Pine Rd
E/W Street Name	Pine Rd/CTH X
N/S Street Name	CTH XX/CTH X
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	Kronenwetter

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	2	55	4	0	71	37	94	0	3	110	119	0	38	36	0
Percent Heavy Vehicles, %	0	0	0	0	1	1	1	1	1	1	1	1	5	5	5	5
Flow Rate (v_{PCE}), pc/h	0	2	60	4	0	78	41	103	0	3	121	131	0	43	41	0
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		66			222			255			84	
Entry Volume, veh/h		66			220			252			80	
Circulating Flow (v_c), pc/h	162			126			105			122		
Exiting Flow (v_{ex}), pc/h	234			44			226			123		
Capacity (c_{pce}), pc/h		1188			1229			1254			1234	
Capacity (c), veh/h		1188			1217			1241			1175	
v/c Ratio (x)		0.06			0.18			0.20			0.07	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		3.5			4.5			4.7			3.6	
Lane LOS		A			A			A			A	
95% Queue, veh		0.2			0.7			0.8			0.2	
Approach Delay, s/veh	3.5			4.5			4.7			3.6		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	4.3						A					

HCS7 Roundabouts Report

General Information

Analyst	SLK
Agency or Co.	JT Engineering
Date Performed	1/12/2025
Analysis Year	2024
Time Analyzed	PM Peak
Project Description	CTH X & CTH XX/Pine Rd

Site Information

Intersection	CTH X & CTH XX/Pine Rd
E/W Street Name	Pine Rd/CTH X
N/S Street Name	CTH XX/CTH X
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	Kronenwetter

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	2	55	10	0	96	42	73	0	4	68	98	0	111	126	6
Percent Heavy Vehicles, %	6	6	6	6	1	1	1	1	1	1	1	1	2	2	2	2
Flow Rate (v_{PCE}), pc/h	0	2	63	12	0	105	46	80	0	4	75	108	0	123	140	7
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		77			231			187			270	
Entry Volume, veh/h		73			229			185			265	
Circulating Flow (v_c), pc/h	368			81			188			155		
Exiting Flow (v_{ex}), pc/h	294			57			157			257		
Capacity (c_{pce}), pc/h		978			1283			1159			1196	
Capacity (c), veh/h		923			1270			1148			1173	
v/c Ratio (x)		0.08			0.18			0.16			0.23	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		4.6			4.4			4.5			5.1	
Lane LOS		A			A			A			A	
95% Queue, veh		0.3			0.7			0.6			0.9	
Approach Delay, s/veh	4.6			4.4			4.5			5.1		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	4.7						A					

HCS7 Roundabouts Report

General Information

Analyst	SLK
Agency or Co.	JT Engineering
Date Performed	1/12/2025
Analysis Year	2046
Time Analyzed	AM Peak
Project Description	CTH X & CTH XX/Pine Rd

Site Information

Intersection	CTH X & CTH XX/Pine Rd
E/W Street Name	Pine Rd/CTH X
N/S Street Name	CTH XX/CTH X
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	Kronenwetter

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	5	60	5	0	80	40	105	0	5	120	130	0	40	40	5
Percent Heavy Vehicles, %	0	0	0	0	1	1	1	1	1	1	1	1	5	5	5	5
Flow Rate (v_{PCE}), pc/h	0	5	65	5	0	88	44	115	0	5	132	143	0	46	46	6
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		75			247			280			98	
Entry Volume, veh/h		75			245			277			93	
Circulating Flow (v_c), pc/h	180			142			116			137		
Exiting Flow (v_{ex}), pc/h	254			55			252			139		
Capacity (c_{pce}), pc/h		1168			1211			1241			1217	
Capacity (c), veh/h		1168			1199			1229			1159	
v/c Ratio (x)		0.06			0.20			0.23			0.08	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		3.6			4.8			4.9			3.8	
Lane LOS		A			A			A			A	
95% Queue, veh		0.2			0.8			0.9			0.3	
Approach Delay, s/veh	3.6			4.8			4.9			3.8		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	4.6						A					

HCS7 Roundabouts Report

General Information

Analyst	SLK
Agency or Co.	JT Engineering
Date Performed	1/12/2025
Analysis Year	2046
Time Analyzed	PM Peak
Project Description	CTH X & CTH XX/Pine Rd

Site Information

Intersection	CTH X & CTH XX/Pine Rd
E/W Street Name	Pine Rd/CTH X
N/S Street Name	CTH XX/CTH X
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	Kronenwetter

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR				LTR				LTR				LTR	
Volume (V), veh/h	0	5	60	10	0	105	45	80	0	5	75	110	0	125	140	10
Percent Heavy Vehicles, %	6	6	6	6	1	1	1	1	1	1	1	1	2	2	2	2
Flow Rate (v_{PCE}), pc/h	0	6	69	12	0	115	49	88	0	5	82	121	0	139	155	11
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.7000			4.7000			4.7000			4.7000	
Follow-Up Headway (s)		2.6000			2.6000			2.6000			2.6000	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		87			252			208			305	
Entry Volume, veh/h		82			250			206			299	
Circulating Flow (v_c), pc/h	409			93			214			169		
Exiting Flow (v_{ex}), pc/h	329			65			176			282		
Capacity (c_{pce}), pc/h		941			1268			1131			1180	
Capacity (c), veh/h		888			1256			1120			1157	
v/c Ratio (x)		0.09			0.20			0.18			0.26	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		4.9			4.6			4.9			5.5	
Lane LOS		A			A			A			A	
95% Queue, veh		0.3			0.7			0.7			1.0	
Approach Delay, s/veh	4.9			4.6			4.9			5.5		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	5.0						A					

ATTACHMENT 8 – COST ESTIMATES

CTH X & CTH XX NW Quadrant Vision Triangle - Marathon County

Cost Estimate

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	**REMOVALS**				
	Clearing & Grubbing	SY	90	$30.00	$ 2,700
11	**ROADWAY INCIDENTALS**	LS	0 % of Items 1-2	N/A	$ -
	Restoration	SY	90	$9.50	$ 855
14				**TOTAL ROADWAY COSTS (Items 1-13)**	**$ 3,560**
16	**MOBILIZATION**	LS	25 % of Items 14-15	N/A	$ 890
17				**Construction Costs Subtotal**	**$ 4,450**
18	**CONSTRUCTION DESIGN CONTINGENCY**	LS	15 % of Item 17	N/A	**$ 670**
22				**ESTIMATED CONTRACT LET AMOUNT**	$ 5,120
31	**REAL ESTATE**				
31.01	Acquisition	SF	800	$1.20	$ 960
31.05	Real Estate Incidentals	LS	0 % of Items 31.01 - 31.04	N/A	$ -
31.06				**Real Estate Subtotal**	**$ 960**
31.07	Real Estate Delivery	LS	10 % of Items 31.06	N/A	$ 100
				TOTAL REAL ESTATE COSTS	$ 1,060
32	**JURISDICTIONAL TRANSFER**	LS	0 % of Const & Utility	N/A	$ -
				TOTAL PROJECT COSTS	$ 6,180

CTH X & CTH XX AWSC - Marathon County

Cost Estimate

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
6	**TRAFFIC CONTROL**	LS			
	PCMS	DAY	28	$60.00	$ 1,680
	Temporary Rumble Strips	LF	594	$15.00	$ 8,910
8	**SIGNING/MARKINGS**				
	LED Flashing Stop Signs	EACH	2	$2,500.00	$ 5,000
	Other Signs and Posts	LS	1	$3,000.00	$ 3,000
	Pavement Markings - Stop Line	LF	80	$16.00	$ 1,280
14				**TOTAL ROADWAY COSTS (Items 1-13)**	**$ 19,870**
16	**MOBILIZATION**	LS	25 % of Items 14-15	N/A	$ 4,968
17				**Construction Costs Subtotal**	**$ 24,838**
18	**CONSTRUCTION DESIGN CONTINGENCY**	LS	**15** % of Item 17	N/A	**$ 3,726**
				TOTAL PROJECT COSTS	$ 28,600

CTH X & CTH XX RAB - Marathon County
Cost Estimate Without Sidepaths

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	**REMOVALS**				
1.02	Removing Curb & Gutter	LF	0	$2.00	$ -
2	**NEW PAVEMENT**				
2.10	Concrete Pavement	SY	0	$65.00	$ -
2.11	HMA Pavement	TON	2,100	$130.00	$ 273,000
2.13	Select Crush Material	TON	0	$18.25	$ -
2.16	Base Aggregate Dense 1 1/4-Inch	TON	6,600	$19.75	$ 130,350
				Subtotal Roadway Costs	**$ 403,350**
3	**EARTHWORK**	LS	% of Items 1-2	N/A	$ -
3.01	Excavation Common	CY	5,000	$10.00	$ 50,000
3.06	Full Depth Asphalt Saw Cut	LF	390	$2.60	$ 1,014
4	**DRAINAGE**	LS	30 % of Items 1-2	N/A	$ 121,005
5	**EROSION CONTROL**	LS	5 % of Items 1-2	N/A	$ 20,168
6	**TRAFFIC CONTROL**	LS	5 % of Items 1-2	N/A	$ 20,168
7	**LIGHTING (contractor installed)**				
	LIGHTING	LS	1	$150,000.00	$ 150,000
8	**SIGNING/MARKINGS**	LS	10 % of Items 1-2	N/A	$ 40,335
	Marking Epoxy 6-inch	LF	6,900	$1.50	$ 10,350
	Marking Epoxy 10-inch	LF	180	$2.40	$ 432
	Marking Epoxy 12-inch	LF	213	$12.50	$ 2,663
	Marking Epoxy 18-inch	LF	80	$16.00	$ 1,280
8.01	Pavement Markings	LF		$2.50	$ -
9	**ITS (contractor installed)**	LS	1		$ -
10	**TRAFFIC SIGNALS**	EACH		$0.00	$ -
11	**ROADWAY INCIDENTALS**	LS	5 % of Items 1-2	N/A	$ 20,168
11.01	Concrete Curb & Gutter	LF	2,200	$34.00	$ 74,800
11.02	Concrete Sidewalk 4-inch	SF	3,200	$6.35	$ 20,320
11.03	Truck Apron	SY	240	$180.00	$ 43,200
12	**WETLAND MITIGATION**	LS	0		$ -
13	**HAZMAT**	LS	0		$ -
14				**TOTAL ROADWAY COSTS (Items 1-13)**	**$ 991,352**
15	**STRUCTURES**				
				TOTAL STRUCTURE COSTS (Item 15)	$ -
16	**MOBILIZATION**	LS	10 % of Items 14-15	N/A	$ 99,135
17				**Construction Costs Subtotal**	**$ 1,090,487**
18	**CONSTRUCTION DESIGN CONTINGENCY**	LS	15 % of Item 17	N/A	**$ 163,573**
22				**ESTIMATED CONTRACT LET AMOUNT**	$ 1,254,100
31	**REAL ESTATE**				
31.01	Acquisition	SF	5400	$1.20	$ 6,480
31.03	Signs	LS		$0.00	$ -
31.06				**Real Estate Subtotal**	**$ 7,000**
31.07	Real Estate Delivery	LS	10 % of Items 31.06	N/A	$ 700
				TOTAL REAL ESTATE COSTS	$ 7,700
32	**JURISDICTIONAL TRANSFER**	LS	0 % of Const & Utility	N/A	$ -
				TOTAL PROJECT COSTS	$ 1,261,800

CTH X & CTH XX RAB - Marathon County
Cost Estimate With Sidepaths

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	**REMOVALS**				
1.02	Removing Curb & Gutter	LF	0	$2.00	$ -
2	**NEW PAVEMENT**				
2.10	Concrete Pavement	SY	0	$65.00	$ -
2.11	HMA Pavement	TON	2,100	$130.00	$ 273,000
2.13	Select Crush Material	TON	0	$18.25	$ -
2.16	Base Aggregate Dense 1 1/4-Inch	TON	6,700	$19.75	$ 132,325
				Subtotal Roadway Costs	**$ 405,325**
3	**EARTHWORK**	LS	% of Items 1-2	N/A	$ -
3.01	Excavation Common	CY	5,100	$10.00	$ 51,000
3.06	Full Depth Asphalt Saw Cut	LF	390	$2.60	$ 1,014
4	**DRAINAGE**	LS	30 % of Items 1-2	N/A	$ 121,598
5	**EROSION CONTROL**	LS	5 % of Items 1-2	N/A	$ 20,266
6	**TRAFFIC CONTROL**	LS	5 % of Items 1-2	N/A	$ 20,266
7	**LIGHTING (contractor installed)**				
	LIGHTING	LS	1	$150,000.00	$ 150,000
8	**SIGNING/MARKINGS**	LS	10 % of Items 1-2	N/A	$ 40,533
	Marking Epoxy 6-inch	LF	6,900	$1.50	$ 10,350
	Marking Epoxy 10-inch	LF	180	$2.40	$ 432
	Marking Epoxy 12-inch	LF	213	$12.50	$ 2,663
	Marking Epoxy 18-inch	LF	80	$16.00	$ 1,280
8.01	Pavement Markings	LF		$2.50	$ -
9	**ITS (contractor installed)**	LS	1		$ -
10	**TRAFFIC SIGNALS**	EACH		$0.00	$ -
11	**ROADWAY INCIDENTALS**	LS	5 % of Items 1-2	N/A	$ 20,266
11.01	Concrete Curb & Gutter	LF	2,200	$34.00	$ 74,800
11.02	Concrete Sidewalk 4-inch	SF	7,200	$6.35	$ 45,720
11.03	Truck Apron	SY	240	$180.00	$ 43,200
12	**WETLAND MITIGATION**	LS	0		$ -
13	**HAZMAT**	LS	0		$ -
14				**TOTAL ROADWAY COSTS (Items 1-13)**	**$ 1,020,872**
15	**STRUCTURES**				
				TOTAL STRUCTURE COSTS (Item 15)	$ -
16	**MOBILIZATION**	LS	10 % of Items 14-15	N/A	$ 102,087
17				**Construction Costs Subtotal**	**$ 1,122,959**
18	**CONSTRUCTION DESIGN CONTINGENCY**	LS	15 % of Item 17	N/A	**$ 168,444**
22				**ESTIMATED CONTRACT LET AMOUNT**	$ 1,291,500
31	**REAL ESTATE**				
31.01	Acquisition	SF	8900	$1.20	$ 10,680
31.03	Signs	LS		$0.00	$ -
31.06				**Real Estate Subtotal**	**$ 10,700**
31.07	Real Estate Delivery	LS	10 % of Items 31.06	N/A	$ 1,100
				TOTAL REAL ESTATE COSTS	$ 11,800
32	**JURISDICTIONAL TRANSFER**	LS	0 % of Const & Utility	N/A	$ -
				TOTAL PROJECT COSTS	$ 1,303,300

ATTACHMENT 9 – PRELIMINARY ROUNDABOUT ALTERNATIVE LAYOUTS

GREEN BAY | MADISON
MILWAUKEE | CHIPPEWA FALLS
MADISON OFFICE
281 W NETHERWOOD ROAD, SUITE 1
OREGON, WI 53575

CLIENT: MARATHON COUNTY

CLIENT ADDRESS: 500 FOREST STREET
WAUSAU, WI 54403

PROJECT: CTH X & CTH XX ICE ANALYSIS

PROJECT ADDRESS:

SHEET TITLE: CTH X & CTH XX
ROUNDABOUT
WITHOUT SIDEPATHS

DRAFT/REVISIONS:

NO.	DATE:	DESCRIPTION:

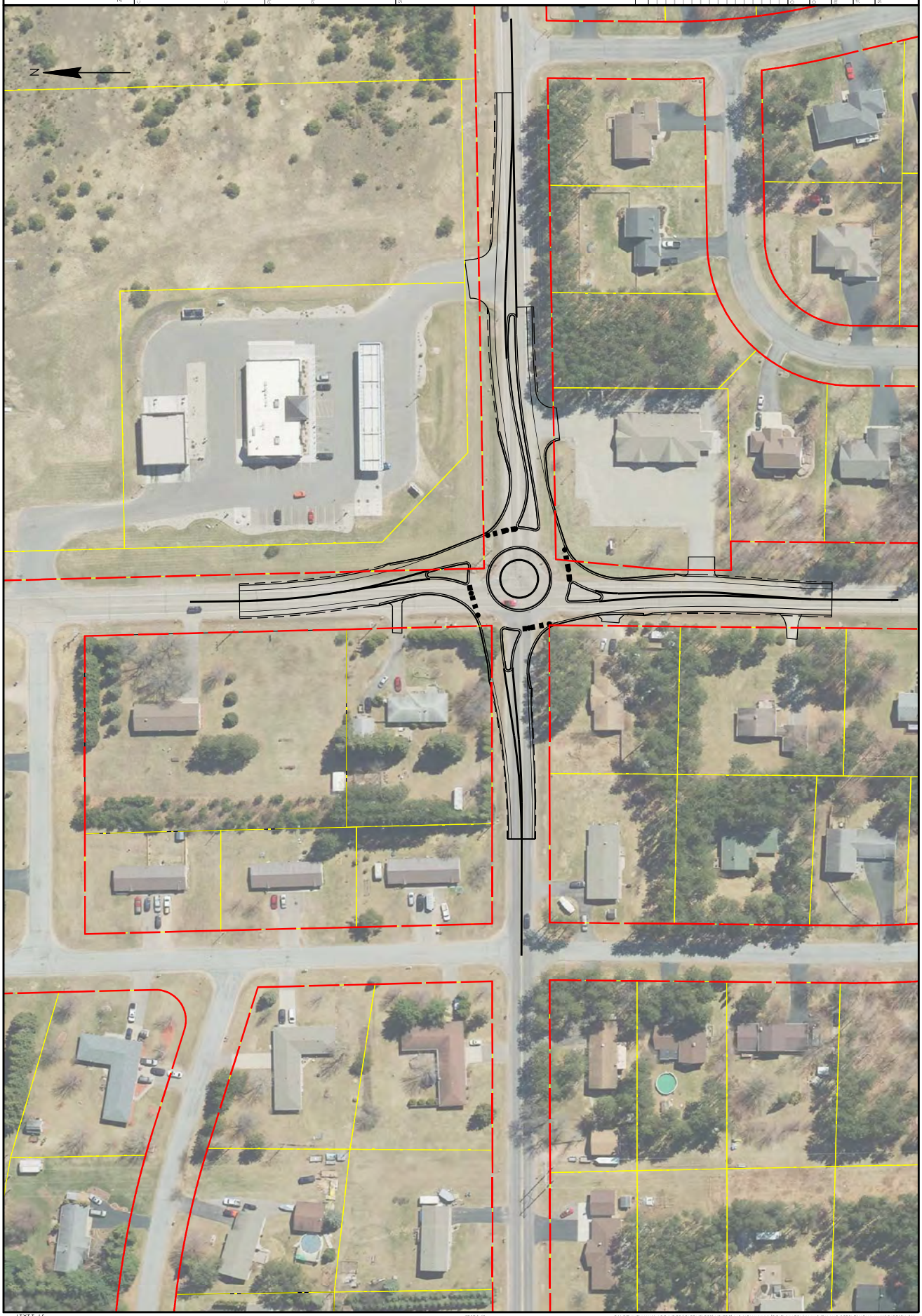
DATE ISSUED: 1/2/24

DRAWN BY: JM

REVIEWED BY:

JT PROJECT NUM:

SHEET NUMBER:



GREEN BAY | MADISON
MILWAUKEE | CHIPPEWA FALLS
MADISON OFFICE
281 W NETHERWOOD ROAD, SUITE 1
OREGON, WI 53575

CLIENT: MARATHON COUNTY

CLIENT ADDRESS: 500 FOREST STREET
WAUSAU, WI 54403

PROJECT: CTH X & CTH XX ICE ANALYSIS

PROJECT ADDRESS:

SHEET TITLE: CTH X & CTH XX
ROUNDABOUT
WITH SIDEPATHS

DRAFT/REVISIONS:

NO.	DATE:	DESCRIPTION:

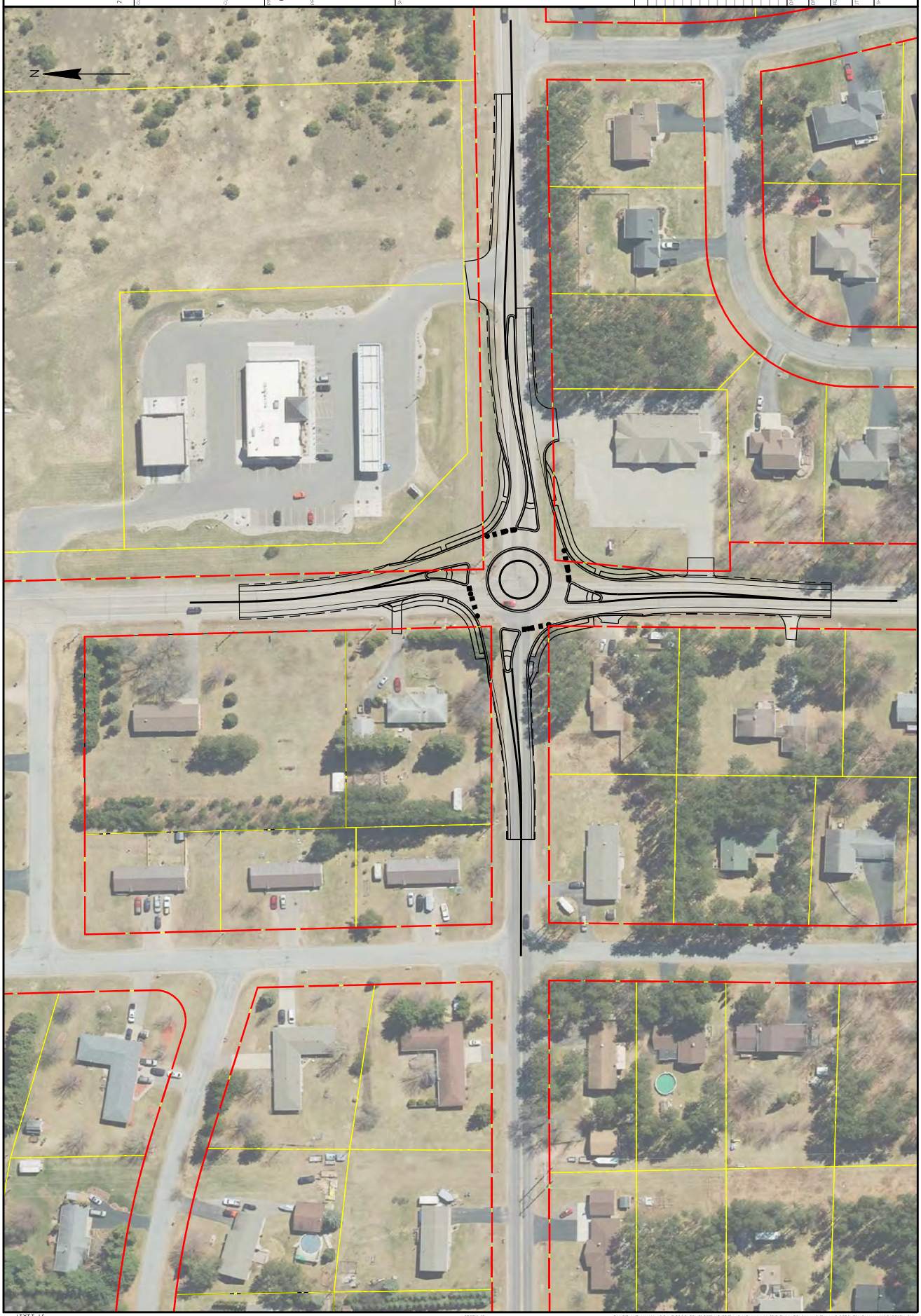
DATE ISSUED: 1/2/24

DRAWN BY: JM

REVIEWED BY:

JT PROJECT NUM:

SHEET NUMBER:



ATTACHMENT 10 – FHWA PROVEN SAFETY COUNTERMEASURES: ROUNDABOUTS

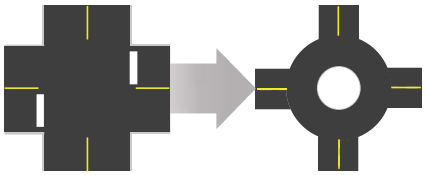
U.S. Department of Transportation
Federal Highway Administration

OFFICE OF SAFETY

Proven Safety Countermeasures

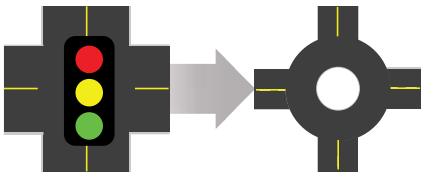
Safety Benefits:

Two-Way Stop-Controlled Intersection to a Roundabout



82%
reduction in fatal and injury crashes.[1]

Signalized Intersection to a Roundabout



78%
reduction in fatal and injury crashes.[1]

For more information on this and other FHWA Proven Safety Countermeasures, please visit https://highways.dot.gov/safety/proven-safety-countermeasures and https://highways.dot.gov/safety/intersection-safety/intersection-types/roundabouts.

FHWA-SA-21-042

Roundabouts

The modern roundabout is an intersection with a circular configuration that safely and efficiently moves traffic. Roundabouts feature channelized, curved approaches that reduce vehicle speed, entry yield control that gives right-of-way to circulating traffic, and counterclockwise flow around a central island that minimizes conflict points. The net result of lower speeds and reduced conflicts at roundabouts is an environment where crashes that cause injury or fatality are substantially reduced.

Roundabouts are not only a safer type of intersection; they are also efficient in terms of keeping people moving. Even while calming traffic, they can reduce delay and queuing when compared to other intersection alternatives. Furthermore, the lower vehicular speeds and reduced conflict environment can create a more suitable environment for walking and bicycling.

Roundabouts can be implemented in both urban and rural areas under a wide range of traffic conditions. They can replace signals, two-way stop controls, and all-way stop controls. Roundabouts are an effective option for managing speed and transitioning traffic from high-speed to low-speed environments, such as freeway interchange ramp terminals, and rural intersections along high-speed roads.

Illustration of a multilane roundabout. Source: FHWA

Example of a single-lane roundabout. Source: FHWA

1 (CMF ID: 211,226) AASHTO. The Highway Safety Manual, American Association of State Highway Transportation Professionals, Washington, D.C., (2010).

ATTACHMENT 11 – VISION TRIANGLES DIAGRAM

GREEN BAY | MADISON
MILWAUKEE | CHIPPEWA FALLS
MADISON OFFICE
281 W NETHERWOOD ROAD, SUITE 1
OREGON, WI 53575

CLIENT: MARATHON COUNTY

CLIENT ADDRESS: 500 FOREST STREET
WAUSAU, WI 54403

PROJECT: CTH X & CTH XX ICE ANALYSIS

PROJECT ADDRESS:

SHEET TITLE: CTH X & CTH XX
VISION TRIANGLES

DRAFT/REVISIONS:

NO.	DATE:	DESCRIPTION:

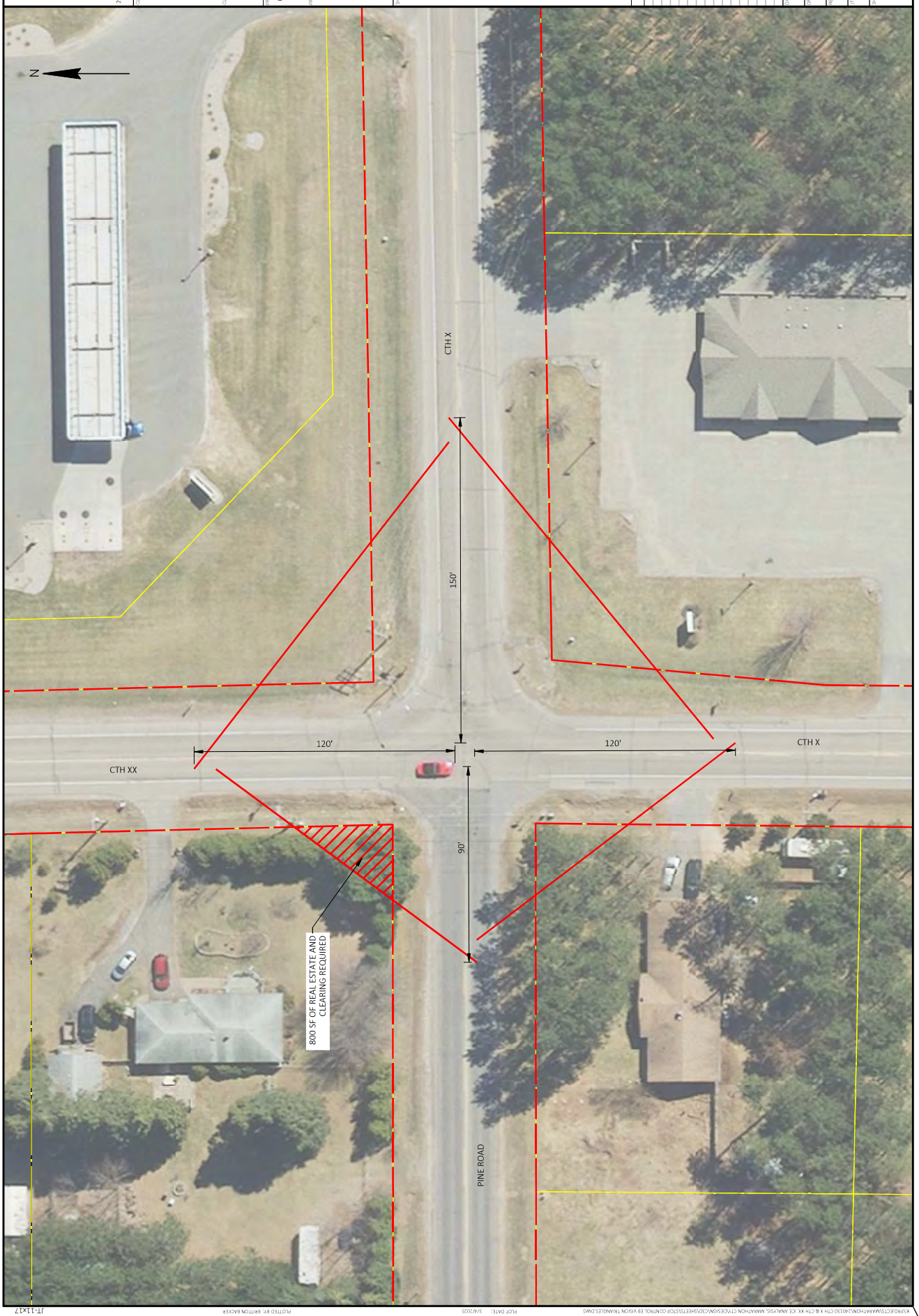
DATE ISSUED: 3/4/24

DRAWN BY: JP

REVIEWED BY:

JT PROJECT NUM

SHEET NUMBER



JT-11X17

PLOTTED BY: BRITTON BACKER

PLOT DATE: 3/4/2025

X:\PROJECTS\MARATHON\40130 CTH X & CTH XX ICE ANALYSIS, MARATHON CTY\DESIGN\CIVIL\SHEETS\TOP CONTROL EB VISION TRIANGLES.DWG

ATTACHMENT 12 – WISDOT SAFETY BENEFIT COST ANALYSIS TOOL

Project Information

Project ID:
Region:
County: Marathon
Segment/Intersection: CTH X & CTH XX/Pine Road
Analyst: SLK
Date of Analysis: 2/25/2025

Method 1 Analysis Information

	Year	AADT
First Year of Analysis Period	2024	7100
Last Year of Analysis Period	2033	7400

Observed Crash History

	Year	Avg. AAD T
First Year of Observed Data	2019	7000
Last Year of Observed Data	2023	

	Crash Totals	Average
Fatal Crashes	0	0
Injury A Crashes	0	0
Injury B Crashes	2	0.4
Injury C Crashes	2	0.4
PDO Crashes	11	2.2
Fatal & Injury Crashes	4	0.8
Total	15	3

Economic Analysis Factors

Year of Crash Costs	2023
Crash Cost Index	0.00%
Discount Rate	5.00%

	Crash Cost	KABC Distribution
Fatal	$ 15,079,21 5	2.0%
Injury A	$ 788,325	10.4%
Injury B	$ 248,69 0	44.0%
Injury C	$ 141,821	43.6%
Property Damage	$ 18,57 6	
Fatal & Injury	$ -	

* The KABC Distribution was developed using 2019-2023 statewide data. It does not contain the distributions that were developed during the calibration process.

Summary

	Treatment Used	Treatment Costs	Cost Difference	Crash Costs (in 2024 Dollars)	Benefits (in 2024 Dollars)	Benefit/Cost Ratio	Crash Totals for Analysis Period: Fatal & Injury	Property Damage	All Crashes
Base Case	No Build	$ -	-	$ 4,100,708		-	8.3	22.8	31.1
Alternative 1	AWSC	$ 28,600	$ 28,600	$ 1,042,499	$ 3,058,209	106.9	1.9	11.8	13.8
Alternative 2	RAB	$ 1,260,000	$ 1,260,000	$ 820,337	$ 3,280,371	2.6	1.5	9.6	11.1
Alternative 3	Clear Sight	$ 6,180	$ 6,180	$ 3,574,564	$ 526,144	85.1	7.1	22.8	29.9
Alternative 4			-	-	-	-	-	-	-
Alternative 5			-	-	-	-	-	-	-

Inputs for Base Case and Alternatives

Base Case: No Build

Period	Year	AADT	Crash Data Entry: Estimated Crashes KABC	PDO	CMF 1: All	KABC	PDO	CMF 2: All	KABC	PDO	Combined CMF: KABC	PDO	Adjusted Crashes: KABC	Fatal	Injury A	Injury B	Injury C	PDO
1	2024	7100	0.81	2.23	-	-	-	-	-	-	1.00	1.00	0.81	0.02	0.08	0.36	0.35	2.23
2	2025	7133	0.82	2.24	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.08	0.36	0.36	2.24
3	2026	7167	0.82	2.25	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.08	0.36	0.36	2.25
4	2027	7200	0.82	2.26	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.09	0.36	0.36	2.26
5	2028	7233	0.83	2.27	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.36	0.36	2.27
6	2029	7267	0.83	2.28	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.37	0.36	2.28
7	2030	7300	0.83	2.29	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.37	0.36	2.29
8	2031	7333	0.84	2.30	-	-	-	-	-	-	1.00	1.00	0.84	0.02	0.09	0.37	0.37	2.30
9	2032	7366	0.84	2.32	-	-	-	-	-	-	1.00	1.00	0.84	0.02	0.09	0.37	0.37	2.32
10	2033	7400	0.85	2.33	-	-	-	-	-	-	1.00	1.00	0.85	0.02	0.09	0.37	0.37	2.33
TOTALS		-	8.29	22.79	-	-	-	-	-	-	-	-	8.29	0.17	0.86	3.65	3.61	22.79

Period	Crash Costs by Year (2024- 2033): Fatal	Injury A	Injury B	Injury C	PDO	Total	Crash Costs in 2024 Dollars: Fatal	Injury A	Injury B	Injury C	PDO	Total
1	$ 249,447	$ 66,366	$ 88,836	$ 50,132	$ 41,451	$ 496,232	$ 249,447	$ 66,366	$ 88,836	$ 50,132	$ 41,451	$ 496,232
2	$ 250,617	$ 66,677	$ 89,252	$ 50,367	$ 41,645	$ 498,559	$ 238,683	$ 63,502	$ 85,002	$ 47,998	$ 39,662	$ 474,818
3	$ 251,787	$ 66,989	$ 89,669	$ 50,602	$ 41,840	$ 500,886	$ 228,378	$ 60,761	$ 81,332	$ 45,897	$ 37,950	$ 454,319
4	$ 252,957	$ 67,300	$ 90,086	$ 50,837	$ 42,034	$ 503,214	$ 218,514	$ 58,136	$ 77,819	$ 43,915	$ 36,311	$ 434,695
5	$ 254,127	$ 67,611	$ 90,502	$ 51,072	$ 42,229	$ 505,541	$ 209,071	$ 55,628	$ 74,456	$ 42,017	$ 34,742	$ 415,910
6	$ 255,297	$ 67,922	$ 90,919	$ 51,307	$ 42,423	$ 507,869	$ 200,032	$ 53,219	$ 71,237	$ 40,201	$ 33,240	$ 397,928
7	$ 256,467	$ 68,234	$ 91,335	$ 51,542	$ 42,617	$ 510,196	$ 191,379	$ 50,917	$ 68,156	$ 38,462	$ 31,802	$ 380,716
8	$ 257,637	$ 68,545	$ 91,752	$ 51,778	$ 42,812	$ 512,523	$ 183,098	$ 48,714	$ 65,207	$ 36,797	$ 30,426	$ 364,241
9	$ 258,807	$ 68,856	$ 92,169	$ 52,013	$ 43,006	$ 514,851	$ 175,171	$ 46,605	$ 62,383	$ 35,206	$ 29,108	$ 348,471
10	$ 259,977	$ 69,168	$ 92,585	$ 52,248	$ 43,201	$ 517,178	$ 167,583	$ 44,586	$ 59,681	$ 33,679	$ 27,848	$ 333,378
TOTALS	$ 2,547,119	$ 677,668	$ 907,105	$ 511,898	$ 423,259	$ 5,067,049	$ 2,061,356	$ 548,430	$ 734,110	$ 414,273	$ 342,539	$ 4,100,708

Alternative 1: AWSC

Period	Year	AADT	Crash Data Entry: Estimated Crashes KABC	PDO	CMF 1: All	KABC	PDO	CMF 2: All	KABC	PDO	Combined CMF: KABC	PDO	Adjusted Crashes: KABC	Fatal	Injury A	Injury B	Injury C	PDO
1	2024	7100	0.81	2.23	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.16
2	2025	7133	0.82	2.24	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.17
3	2026	7167	0.82	2.25	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.17
4	2027	7200	0.82	2.26	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.18
5	2028	7233	0.83	2.27	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.18
6	2029	7267	0.83	2.28	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.19
7	2030	7300	0.83	2.29	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.19
8	2031	7333	0.84	2.30	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.08	0.08	1.20
9	2032	7366	0.84	2.32	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.09	0.08	1.20
10	2033	7400	0.85	2.33	-	0.23	0.52	-	-	-	0.23	0.52	0.19	0.00	0.02	0.09	0.08	1.21
TOTALS		-	8.29	22.79	-	-	-	-	-	-	-	-	1.91	0.04	0.20	0.84	0.83	11.85

Period	Crash Costs by Year (2024- 2033): Fatal	Injury A	Injury B	Injury C	PDO	Total	Crash Costs in 2024 Dollars: Fatal	Injury A	Injury B	Injury C	PDO	Total
1	$ 57,373	$ 15,266	$ 20,432	$ 11,530	$ 21,555	$ 126,154	$ 57,373	$ 15,264	$ 20,432	$ 11,530	$ 21,555	$ 126,154
2	$ 57,642	$ 15,336	$ 20,528	$ 11,584	$ 21,656	$ 126,746	$ 54,897	$ 14,606	$ 19,550	$ 11,033	$ 20,624	$ 120,710
3	$ 57,911	$ 15,407	$ 20,624	$ 11,638	$ 21,757	$ 127,337	$ 52,527	$ 13,975	$ 18,706	$ 10,556	$ 19,734	$ 115,499
4	$ 58,180	$ 15,479	$ 20,720	$ 11,693	$ 21,858	$ 127,929	$ 50,258	$ 13,371	$ 17,898	$ 10,100	$ 18,882	$ 110,510
5	$ 58,449	$ 15,551	$ 20,816	$ 11,747	$ 21,959	$ 128,521	$ 48,086	$ 12,793	$ 17,125	$ 9,664	$ 18,066	$ 105,734
6	$ 58,718	$ 15,622	$ 20,911	$ 11,801	$ 22,060	$ 129,112	$ 46,007	$ 12,240	$ 16,385	$ 9,246	$ 17,285	$ 101,163
7	$ 58,987	$ 15,694	$ 21,007	$ 11,855	$ 22,161	$ 129,704	$ 44,017	$ 11,711	$ 15,676	$ 8,846	$ 16,537	$ 96,787
8	$ 59,256	$ 15,765	$ 21,103	$ 11,909	$ 22,262	$ 130,296	$ 42,112	$ 11,204	$ 14,998	$ 8,463	$ 15,821	$ 92,599
9	$ 59,526	$ 15,837	$ 21,199	$ 11,963	$ 22,363	$ 130,888	$ 40,289	$ 10,719	$ 14,348	$ 8,097	$ 15,136	$ 88,590
10	$ 59,795	$ 15,909	$ 21,295	$ 12,017	$ 22,464	$ 131,479	$ 38,544	$ 10,255	$ 13,727	$ 7,746	$ 14,481	$ 84,753
TOTALS	$ 585,837	$ 155,864	$ 208,634	$ 117,736	$ 220,095	$ 1,288,166	$ 474,112	$ 126,139	$ 168,845	$ 95,283	$ 178,120	$ 1,042,499

Alternative 2: RAB

Period	Year	AADT	Crash Data Entry: Estimated Crashes KABC	PDO	CMF 1: All	KABC	PDO	CMF 2: All	KABC	PDO	Combined CMF: KABC	PDO	Adjusted Crashes: KABC	Fatal	Injury A	Injury B	Injury C	PDO
1	2024	7100	0.81	2.23	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.06	0.06	0.94
2	2025	7133	0.82	2.24	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.06	0.06	0.94
3	2026	7167	0.82	2.25	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.06	0.06	0.95
4	2027	7200	0.82	2.26	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.06	0.95
5	2028	7233	0.83	2.27	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.06	0.95
6	2029	7267	0.83	2.28	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.07	0.96
7	2030	7300	0.83	2.29	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.07	0.96
8	2031	7333	0.84	2.30	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.07	0.97
9	2032	7366	0.84	2.32	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.07	0.97
10	2033	7400	0.85	2.33	-	0.18	0.42	-	-	-	0.18	0.42	0.15	0.00	0.02	0.07	0.07	0.98
TOTALS		-	8.29	22.79	-	-	-	-	-	-	-	-	1.49	0.03	0.15	0.66	0.65	9.57

Period	Crash Costs by Year (2024- 2033): Fatal	Injury A	Injury B	Injury C	PDO	Total	Crash Costs in 2024 Dollars: Fatal	Injury A	Injury B	Injury C	PDO	Total
1	$ 44,900	$ 11,946	$ 15,990	$ 9,024	$ 17,409	$ 99,270	$ 44,900	$ 11,946	$ 15,990	$ 9,024	$ 17,409	$ 99,270
2	$ 45,111	$ 12,002	$ 16,065	$ 9,066	$ 17,491	$ 99,736	$ 42,963	$ 11,430	$ 15,300	$ 8,634	$ 16,658	$ 94,986
3	$ 45,322	$ 12,058	$ 16,140	$ 9,108	$ 17,573	$ 100,201	$ 41,108	$ 10,937	$ 14,640	$ 8,262	$ 15,939	$ 90,885
4	$ 45,532	$ 12,114	$ 16,215	$ 9,151	$ 17,654	$ 100,667	$ 39,332	$ 10,465	$ 14,007	$ 7,905	$ 15,251	$ 86,940
5	$ 45,743	$ 12,170	$ 16,290	$ 9,193	$ 17,736	$ 101,132	$ 37,633	$ 10,012	$ 13,402	$ 7,563	$ 14,591	$ 83,202
6	$ 45,953	$ 12,226	$ 16,365	$ 9,235	$ 17,818	$ 101,598	$ 36,006	$ 9,579	$ 12,823	$ 7,236	$ 13,961	$ 79,605
7	$ 46,164	$ 12,282	$ 16,440	$ 9,278	$ 17,899	$ 102,063	$ 34,448	$ 9,165	$ 12,268	$ 6,923	$ 13,357	$ 76,161
8	$ 46,375	$ 12,338	$ 16,515	$ 9,320	$ 17,981	$ 102,529	$ 32,958	$ 8,768	$ 11,737	$ 6,624	$ 12,779	$ 72,865
9	$ 46,585	$ 12,394	$ 16,590	$ 9,362	$ 18,063	$ 102,995	$ 31,531	$ 8,389	$ 11,229	$ 6,337	$ 12,226	$ 69,711
10	$ 46,796	$ 12,450	$ 16,665	$ 9,405	$ 18,144	$ 103,460	$ 30,165	$ 8,025	$ 10,743	$ 6,062	$ 11,696	$ 66,691
TOTALS	$ 458,481	$ 121,980	$ 163,279	$ 92,142	$ 177,769	$ 1,013,651	$ 371,044	$ 98,717	$ 132,140	$ 74,569	$ 143,864	$ 820,337

Alternative 3: Clear Sight

Period	Year	AADT	Crash Data Entry: Estimated Crashes KABC	PDO	CMF 1: All	KABC	PDO	CMF 2: All	KABC	PDO	Combined CMF: KABC	PDO	Adjusted Crashes: KABC	Fatal	Injury A	Injury B	Injury C	PDO
1	2024	7100	0.81	2.23	-	0.86	-	-	-	-	0.86	1.00	0.70	0.01	0.07	0.31	0.30	2.23
2	2025	7133	0.82	2.24	-	0.86	-	-	-	-	0.86	1.00	0.70	0.01	0.07	0.31	0.31	2.24
3	2026	7167	0.82	2.25	-	0.86	-	-	-	-	0.86	1.00	0.70	0.01	0.07	0.31	0.31	2.25
4	2027	7200	0.82	2.26	-	0.86	-	-	-	-	0.86	1.00	0.71	0.01	0.07	0.31	0.31	2.26
5	2028	7233	0.83	2.27	-	0.86	-	-	-	-	0.86	1.00	0.71	0.01	0.07	0.31	0.31	2.27
6	2029	7267	0.83	2.28	-	0.86	-	-	-	-	0.86	1.00	0.71	0.01	0.07	0.31	0.31	2.28
7	2030	7300	0.83	2.29	-	0.86	-	-	-	-	0.86	1.00	0.72	0.01	0.07	0.32	0.31	2.29
8	2031	7333	0.84	2.30	-	0.86	-	-	-	-	0.86	1.00	0.72	0.01	0.07	0.32	0.31	2.30
9	2032	7366	0.84	2.32	-	0.86	-	-	-	-	0.86	1.00	0.72	0.01	0.08	0.32	0.32	2.32
10	2033	7400	0.85	2.33	-	0.86	-	-	-	-	0.86	1.00	0.73	0.01	0.08	0.32	0.32	2.33
TOTALS		-	8.29	22.79	-	-	-	-	-	-	-	-	7.13	0.15	0.74	3.14	3.10	22.79

Period	Crash Costs by Year (2024- 2033): Fatal	Injury A	Injury B	Injury C	PDO	Total	Crash Costs in 2024 Dollars: Fatal	Injury A	Injury B	Injury C	PDO	Total
1	$ 214,525	$ 57,075	$ 76,399	$ 43,113	$ 41,451	$ 432,562	$ 214,525	$ 57,075	$ 76,399	$ 43,113	$ 41,451	$ 432,562
2	$ 215,531	$ 57,343	$ 76,757	$ 43,315	$ 41,645	$ 434,591	$ 205,297	$ 54,612	$ 73,102	$ 41,253	$ 39,662	$ 413,896
3	$ 216,537	$ 57,610	$ 77,115	$ 43,518	$ 41,840	$ 436,620	$ 196,405	$ 52,254	$ 69,946	$ 39,472	$ 37,950	$ 396,027
4	$ 217,543	$ 57,878	$ 77,474	$ 43,720	$ 42,034	$ 438,649	$ 187,922	$ 49,997	$ 66,925	$ 37,767	$ 36,311	$ 378,921
5	$ 218,549	$ 58,146	$ 77,832	$ 43,922	$ 42,229	$ 440,677	$ 179,801	$ 47,837	$ 64,032	$ 36,135	$ 34,742	$ 362,546
6	$ 219,555	$ 58,413	$ 78,190	$ 44,124	$ 42,423	$ 442,706	$ 172,027	$ 45,768	$ 61,264	$ 34,573	$ 33,240	$ 346,872
7	$ 220,561	$ 58,681	$ 78,549	$ 44,327	$ 42,617	$ 444,735	$ 164,586	$ 43,789	$ 58,614	$ 33,077	$ 31,802	$ 331,868
8	$ 221,568	$ 58,949	$ 78,907	$ 44,529	$ 42,812	$ 446,764	$ 157,464	$ 41,894	$ 56,078	$ 31,646	$ 30,426	$ 317,507
9	$ 222,574	$ 59,216	$ 79,265	$ 44,731	$ 43,006	$ 448,793	$ 150,647	$ 40,080	$ 53,650	$ 30,276	$ 29,108	$ 303,760
10	$ 223,580	$ 59,484	$ 79,623	$ 44,933	$ 43,201	$ 450,821	$ 144,122	$ 38,346	$ 51,326	$ 28,964	$ 27,848	$ 290,603
TOTALS	$ 2,190,522	$ 582,795	$ 780,110	$ 440,232	$ 423,259	$ 4,416,918	$ 1,772,766	$ 471,650	$ 631,335	$ 356,275	$ 342,539	$ 3,574,564

Alternative 4:

Period	Year	AADT	Crash Data Entry: Estimated Crashes KABC	PDO	CMF 1: All	KABC	PDO	CMF 2: All	KABC	PDO	Combined CMF: KABC	PDO	Adjusted Crashes: KABC	Fatal	Injury A	Injury B	Injury C	PDO
1	2024	7100	0.81	2.23	-	-	-	-	-	-	1.00	1.00	0.81	0.02	0.08	0.36	0.35	2.23
2	2025	7133	0.82	2.24	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.08	0.36	0.36	2.24
3	2026	7167	0.82	2.25	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.08	0.36	0.36	2.25
4	2027	7200	0.82	2.26	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.09	0.36	0.36	2.26
5	2028	7233	0.83	2.27	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.36	0.36	2.27
6	2029	7267	0.83	2.28	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.37	0.36	2.28
7	2030	7300	0.83	2.29	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.37	0.36	2.29
8	2031	7333	0.84	2.30	-	-	-	-	-	-	1.00	1.00	0.84	0.02	0.09	0.37	0.37	2.30
9	2032	7366	0.84	2.32	-	-	-	-	-	-	1.00	1.00	0.84	0.02	0.09	0.37	0.37	2.32
10	2033	7400	0.85	2.33	-	-	-	-	-	-	1.00	1.00	0.85	0.02	0.09	0.37	0.37	2.33
TOTALS		-	8.29	22.79	-	-	-	-	-	-	-	-	8.29	0.17	0.86	3.65	3.61	22.79

Period	Crash Costs by Year (2024- 2033): Fatal	Injury A	Injury B	Injury C	PDO	Total	Crash Costs in 2024 Dollars: Fatal	Injury A	Injury B	Injury C	PDO	Total
1	$ 249,447	$ 66,366	$ 88,836	$ 50,132	$ 41,451	$ 496,232	$ 249,447	$ 66,366	$ 88,836	$ 50,132	$ 41,451	$ 496,232
2	$ 250,617	$ 66,677	$ 89,252	$ 50,367	$ 41,645	$ 498,559	$ 238,683	$ 63,502	$ 85,002	$ 47,998	$ 39,662	$ 474,818
3	$ 251,787	$ 66,989	$ 89,669	$ 50,602	$ 41,840	$ 500,886	$ 228,378	$ 60,761	$ 81,332	$ 45,897	$ 37,950	$ 454,319
4	$ 252,957	$ 67,300	$ 90,086	$ 50,837	$ 42,034	$ 503,214	$ 218,514	$ 58,136	$ 77,819	$ 43,915	$ 36,311	$ 434,695
5	$ 254,127	$ 67,611	$ 90,502	$ 51,072	$ 42,229	$ 505,541	$ 209,071	$ 55,628	$ 74,456	$ 42,017	$ 34,742	$ 415,910
6	$ 255,297	$ 67,922	$ 90,919	$ 51,307	$ 42,423	$ 507,869	$ 200,032	$ 53,219	$ 71,237	$ 40,201	$ 33,240	$ 397,928
7	$ 256,467	$ 68,234	$ 91,335	$ 51,542	$ 42,617	$ 510,196	$ 191,379	$ 50,917	$ 68,156	$ 38,462	$ 31,802	$ 380,716
8	$ 257,637	$ 68,545	$ 91,752	$ 51,778	$ 42,812	$ 512,523	$ 183,098	$ 48,714	$ 65,207	$ 36,797	$ 30,426	$ 364,241
9	$ 258,807	$ 68,856	$ 92,169	$ 52,013	$ 43,006	$ 514,851	$ 175,171	$ 46,605	$ 62,383	$ 35,206	$ 29,108	$ 348,471
10	$ 259,977	$ 69,168	$ 92,585	$ 52,248	$ 43,201	$ 517,178	$ 167,583	$ 44,586	$ 59,681	$ 33,679	$ 27,848	$ 333,378
TOTALS	$ 2,547,119	$ 677,668	$ 907,105	$ 511,898	$ 423,259	$ 5,067,049	$ 2,061,356	$ 548,430	$ 734,110	$ 414,273	$ 342,539	$ 4,100,708

Alternative 5:

Period	Year	AADT	Crash Data Entry: Estimated Crashes KABC	PDO	CMF 1: All	KABC	PDO	CMF 2: All	KABC	PDO	Combined CMF: KABC	PDO	Adjusted Crashes: KABC	Fatal	Injury A	Injury B	Injury C	PDO
1	2024	7100	0.81	2.23	-	-	-	-	-	-	1.00	1.00	0.81	0.02	0.08	0.36	0.35	2.23
2	2025	7133	0.82	2.24	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.08	0.36	0.36	2.24
3	2026	7167	0.82	2.25	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.08	0.36	0.36	2.25
4	2027	7200	0.82	2.26	-	-	-	-	-	-	1.00	1.00	0.82	0.02	0.09	0.36	0.36	2.26
5	2028	7233	0.83	2.27	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.36	0.36	2.27
6	2029	7267	0.83	2.28	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.37	0.36	2.28
7	2030	7300	0.83	2.29	-	-	-	-	-	-	1.00	1.00	0.83	0.02	0.09	0.37	0.36	2.29
8	2031	7333	0.84	2.30	-	-	-	-	-	-	1.00	1.00	0.84	0.02	0.09	0.37	0.37	2.30
9	2032	7366	0.84	2.32	-	-	-	-	-	-	1.00	1.00	0.84	0.02	0.09	0.37	0.37	2.32
10	2033	7400	0.85	2.33	-	-	-	-	-	-	1.00	1.00	0.85	0.02	0.09	0.37	0.37	2.33
TOTALS		-	8.29	22.79	-	-	-	-	-	-	-	-	8.29	0.17	0.86	3.65	3.61	22.79

Period	Crash Costs by Year (2024- 2033): Fatal	Injury A	Injury B	Injury C	PDO	Total	Crash Costs in 2024 Dollars: Fatal	Injury A	Injury B	Injury C	PDO	Total
1	$ 249,447	$ 66,366	$ 88,836	$ 50,132	$ 41,451	$ 496,232	$ 249,447	$ 66,366	$ 88,836	$ 50,132	$ 41,451	$ 496,232
2	$ 250,617	$ 66,677	$ 89,252	$ 50,367	$ 41,645	$ 498,559	$ 238,683	$ 63,502	$ 85,002	$ 47,998	$ 39,662	$ 474,818
3	$ 251,787	$ 66,989	$ 89,669	$ 50,602	$ 41,840	$ 500,886	$ 228,378	$ 60,761	$ 81,332	$ 45,897	$ 37,950	$ 454,319
4	$ 252,957	$ 67,300	$ 90,086	$ 50,837	$ 42,034	$ 503,214	$ 218,514	$ 58,136	$ 77,819	$ 43,915	$ 36,311	$ 434,695
5	$ 254,127	$ 67,611	$ 90,502	$ 51,072	$ 42,229	$ 505,541	$ 209,071	$ 55,628	$ 74,456	$ 42,017	$ 34,742	$ 415,910
6	$ 255,297	$ 67,922	$ 90,919	$ 51,307	$ 42,423	$ 507,869	$ 200,032	$ 53,219	$ 71,237	$ 40,201	$ 33,240	$ 397,928
7	$ 256,467	$ 68,234	$ 91,335	$ 51,542	$ 42,617	$ 510,196	$ 191,379	$ 50,917	$ 68,156	$ 38,462	$ 31,802	$ 380,716
8	$ 257,637	$ 68,545	$ 91,752	$ 51,778	$ 42,812	$ 512,523	$ 183,098	$ 48,714	$ 65,207	$ 36,797	$ 30,426	$ 364,241
9	$ 258,807	$ 68,856	$ 92,169	$ 52,013	$ 43,006	$ 514,851	$ 175,171	$ 46,605	$ 62,383	$ 35,206	$ 29,108	$ 348,471
10	$ 259,977	$ 69,168	$ 92,585	$ 52,248	$ 43,201	$ 517,178	$ 167,583	$ 44,586	$ 59,681	$ 33,679	$ 27,848	$ 333,378
TOTALS	$ 2,547,119	$ 677,668	$ 907,105	$ 511,898	$ 423,259	$ 5,067,049	$ 2,061,356	$ 548,430	$ 734,110	$ 414,273	$ 342,539	$ 4,100,708

REPORT TO Village Board

ITEM NAME:	Chickens
MEETING DATE:	August 4, 2025
PRESENTING COMMITTEE:	CLIPP
COMMITTEE CONTACT:	Ken Charneski
STAFF CONTACT:	Pete Wegner
PREPARED BY:	Peter Wegner

ISSUE: Currently, chickens are allowed in the Agriculture and Residential and Rural Residential 5 Districts as a permitted use and in the Rural Residential 2 District as a Conditional Use. The use is currently not permitted in the Single-Family Residential District.

OBJECTIVES: To review and discuss allowing chickens within SF – Single Family Residential Zoning Districts.

RECOMMENDED ACTION: Review materials provided by staff. Direct staff how to proceed.

ATTACHMENTS (describe briefly): Proposed Ordinance Language.

PROPOSED LANGUAGE

Draft 8/4/2025

§ 520-27. - Accessory and miscellaneous land use types.

H. Keeping of farm animals on residential lots.

(1) This is the keeping or raising of farm animals on a residential lot, in zoning districts where allowed under Figure 520-17[3] and where such activity is clearly accessory to the principal residential use. Farm animals are as defined in Article XVI. The animals may be kept for show, breeding, or products that are predominantly consumed or used by the residents of the same lot. Gardening and residential composting are allowed in all zoning districts.

(2) Performance standards:

(a) All animals shall be kept within a completely enclosed area.

(b) Uses shall meet all performance standards in Article XII, including odor standards in § 520-93.

(c) To be considered an accessory use within any RR-2 Zoning District:

[1] The only permitted farm animals are chickens, ducks, and bees.

[2] All animal enclosures and beehives shall meet the minimum interior side and rear setback requirements for detached accessory buildings per Figure V(2).

[3] No animal enclosure shall be located closer than 10 feet from the principal building.

[4] The raising or keeping of farm animals shall be permitted at a density not to exceed one animal unit per every acre owned, not considering fractional amounts of acreage.

(d) Within the AR and RR-5 Zoning Districts:

[1] The keeping or raising of hogs as an accessory use to the principal residential use shall be limited to no more than two hogs.

[2] The raising or keeping of farm animals shall be permitted at a density not to exceed one animal unit per every acre owned, not considering fractional amounts of acreage. The Zoning Administrator may approve modifications and exceptions to this animal unit density standard if, each year the normal density standard is to be exceeded, the landowner provides conservation compliance documentation from Marathon County signifying that the keeping of a higher density of animal units is in compliance with all NR 151 agricultural runoff performance standards and prohibitions.

(e) Within the SF Zoning District:

[1] The only permitted farm animals are chickens. Each parcel is limited to four (4) hens. Roosters are prohibited.

[2] Chickens shall be kept in a covered coop and attached pen located within the rear yard of the premises, no closer than five feet to any property line.

[3] Chicken coops and attached pens shall allow at least 4 square feet per chicken, not exceed a maximum of 32 square feet in size and the height of the coop and attached pen shall not exceed 6 feet above ground level. A chicken coop is excluded from figure V(1) floor area, and coverage standards associated with detached accessory structures.

[4] All chicken coops and attached pens shall be reasonably free of chicken manure and other substances such that the environment around the chickens does not become noxious or offensive.

(f) ~~(e)~~The keeping of bees shall be governed by the following additional regulations:

[1] No more than one beehive shall be kept for each 5,000 square feet of lot area.

[2] The front of any beehive shall face away from the property line of the residential property closest to the beehive. A flyway barrier consisting of a solid fence of six feet in height or a dense hedge at least six feet in height shall be placed along the side of the beehive that contains the entrance to the hive, be located within five feet of the hive, and extend at least two feet on either side of the hive. No such flyway barrier shall be required if all beehives are located at least 25 feet from all property lines.

[3] A supply of fresh water shall be maintained in a location readily accessible to all bee colonies on the site throughout the day to prevent bees from congregating at neighboring swimming pools or other sources of water on nearby properties.

[4] No Africanized bees may be kept.

Proposed Definitions:

Chicken. A female hen of any age, including chicks. This definition does not include other kinds of fowl including but not limited to ducks, quail, pheasant, geese, turkeys, guinea hens, peacocks, emus and ostriches.

Coop. An enclosed structure or pen within which chickens roost or are housed.

village of Kronenwetter

Report to CLIPP

Agenda Item: Discussion and Possible Action: Yard Waste Site Status
Meeting Date: August 4, 2025
Referring Body: CLIPP
Committee Contact:
Staff Contact: Greg Ulman
Report Prepared by: Greg Ulman

AGENDA ITEM: Discussion and Possible Action: Yard Waste Site Status

OBJECTIVE(S): To have the CLIPP Committee discuss the yard waste site.

HISTORY/BACKGROUND: The yard waste site has shrunk in size a few years ago and is more congested with the smaller footprint. The attached mapping is a current overview of the site with the grass pile by the white roofed shed, the brush along Martin Rd., and the compost piles outside of the public area.

After speaking with Brad Jacobson, our Public Works Lead, he mentioned to me that the area to the west of the rows of compost is swampy, and we are unable to fill that area in. He also stated that the Village uses the higher area just to the west of the swamp for our own piles of material. As for a staff member loading material with a loader, we would possibly be able to load on a Friday, when we have material available to load when the compost would be ready.

Other than reducing the size of the compost area, it would be difficult or impossible to change the layout of the current yard site.

RECOMMENDED ACTION: To give direction as CLIPP sees fit.

Google Maps

Imagery ©2025 Airbus, Map data ©2025 20 ft

village of Kronenwetter

Report to CLIPP

Agenda Item: Discussion and Possible Action: Trails and Leisure for Village Owned Property on Lea Rd.
Meeting Date: August 4, 2025
Referring Body: CLIPP
Committee Contact:
Staff Contact: Greg Ulman
Report Prepared by: Greg Ulman

AGENDA ITEM: Discussion and Possible Action: Trails and Leisure for Village Owned Property on Lea Rd.

OBJECTIVE(S): To have the CLIPP Committee discuss the potential trails and leisure activity on the Village owned property by Lea Rd.

HISTORY/BACKGROUND: CLIPP is looking for additional areas to enhance the quality of live in the Village and one of the areas they are looking at is the Village owned property by the Village wells by Lea Rd. Ideas that were mentioned were adding/enhancing the trails in the area, the other was adding a disc golf course. Attached I have prices for signs as well at the disc baskets. New this month I added quotes for a fence around the well houses. Other items to consider would be adding parking/benches for the residents, the time and hours needed to upkeep the amenities, as well as the funding source for adding these items.

Cost Breakdown:

Walking path – 1,300ft.	$9,000
Bike path – 2,600ft.	$26,000
Mulched Trails -	$6,500
Parking Lot -	$14,000
Driveway -	$3,000
Fence for Wells -	$48,000
Totals:	$106,500

These costs are reflective on what the previous study had mentioned for gravel trails on the property, having a natural grass path would eliminate line items from the costs. Costs above do not include any disc golf amenities.

RECOMMENDED ACTION: To give direction as CLIPP sees fit.

American Fence Company

3210 Mecca Drive
Plover, WI 54467
800-472-0505 or 715-341-4411

910 W Plummer Ct
Neenah, WI 54956
800-310-0600 or 920-886-6676

www.americanfencewi.com

Quote 00027

Date: 7/17/2025

Contact:: Greg

Business Telephone: 715-693-4200 ext 1731

2nd Telephone:

Proposal To:

Village of Kronenwetter
1582 Kronenwetter Dr.
Kronenwetter, WI 54455

Job Site:

Village of Kronenwetter
Lea Rd.
Kronenwetter, WI

Description	Price
East Well House Furnish materials, labor, and equipment to install 763' of 8' high galvanized chain link fence. The fence will include (3) 16'x8' cantilever slide gate mounted on 4" 40wt posts set in concrete footings, 3" 40wt terminal posts set in concrete foundations, 2-1/2" 40wt. line posts driven 4' or to fail, 1-5/8" 40wt. top rail, 8' high 9ga. galvanized chain link fence, 7ga. bottom tension wire.	$24,975.00
West Well House Furnish materials, labor, and equipment to install 686' of 8' high galvanized chain link fence. The fence will include (1) 16'x8' cantilever slide gate, (1) 12' double swing gate, all gates mounted on 4" 40wt posts set in concrete footings, 3" 40wt terminal posts set in concrete foundations, 2-1/2" 40wt. line posts driven 4' or to fail, 1-5/8" 40wt. top rail, 8' high 9ga. galvanized chain link fence, 7ga. bottom tension wire.	$21,240.00

Terms:
Net 10 days.

THANK YOU!
Please sign 2 copies and return one.

Subtotal:	$46,215.00
Freight:	$0.00
Sales Tax:	$0.00
Total Amount:	$46,215.00

Project Manager *Chris Zarecki*

Proposal Accepted by: _____

Prices are valid through: _____

Customer Purchase Order#: _____
(for business use)

1) Customer hereby assumes full responsibility for the location of the line upon which said fence materials are to be installed.
2) Private lines not marked by Diggers Hotline such as electric, LP gas, sprinklers, underground cables or pipes are the customers responsibility to locate.
3) Customer agrees to remove existing old fences and shrubs and dispose of spoils unless otherwise specified.
4) Customer is responsible for building permits if necessary.
5) More or less material other than the amount contracted for will be debited or credited at current rates.
6) American Fence Company reserves the right to make additional charges to the customer in the event of unusual ground conditions (such as rock formation) that impede the installation. Additional charges shall be based on actual additional labor required to complete installation under the circumstances.
7) All accounts are payable in full within ten (10) days of the date of the invoice. 1.5% per month (18% per year) late fee will be assessed on past due accounts.
8) Customer agrees to pay all costs of collection incurred by American Fence Company before and after judgment, including reasonable attorney fees. All parties agree that if collection action becomes necessary, all collections will be filed in Winnebago County, Wisconsin.
9) As required by the Wisconsin construction lien law, builder hereby notifies owner that persons or companies furnishing labor or materials for the construction on owner's land may have lien rights on owner's land and building if not paid. Those entitled to lien rights, in addition to the above signed builder, are those who contract directly with the owner or those who give the owner notice within 60 days after they first furnish labor or materials for the construction. Accordingly, owner probably will receive notices from those who furnish labor or materials for the construction, and should give a copy of each notice received to the mortgage lender, if any. Builder agrees to cooperate with the owner and the owner's lender, if any, to see that all potential lien claimants are duly paid.
10) Quotes are valid for 30 days unless otherwise specified.
11) Owner consents to American Fence Company personnel taking photos of work in-progress and finished work for marketing purposes.
12) Credit card payments exceeding $2,500.00 will be subjected to a 2% convenience fee per sale. Credit card fees are non-refundable.

Quote

Century Fence Company
1225 Lakeview Drive
Green Bay, WI 54313

Quote To:
VILLAGE OF KRONENWETTER
1582 KRONENWETTER DRIVE
KRONENWETTER, WI 54455

Project Location:
WELL HOUSE FENCING
1979 LEA ROAD
44.8395966164047, -89.61965771383635
MOSINEE (KRONENWETTER), WI 54455

Quote #: 31437
Quote Date: 7/15/2025

Description

EAST WELL HOUSE

Furnish and install 710 LF of 8' high galvanized chain link fence and (3) 15' wide manual single slide gates. The 2-1/2" OD line posts and 3" OD corner posts will be driven 5' deep. Line posts will be spaced at maximum of 10' OC. The 3" OD latch posts and 4" OD roller posts will be set in 12" x 48" concrete footings. The fence will include 1-5/8" OD top rail.

WEST WELL HOUSE

Furnish and install 660 LF of 8' high galvanized chain link fence, (1) 15' wide manual single slide gate and (1) 12' wide double swing gate. The 2-1/2" OD line posts and 3" OD corner posts will be driven 5' deep. Line posts will be spaced at maximum of 10' OC. The 3" OD latch post, 4" OD roller posts and 4" OD swing gate posts will be set in 12" x 48" concrete footings. The fence will include 1-5/8" OD top rail.

Notes:

- Both areas are figured to be done at the same time
- Pricing does not include sales tax

Excludes: Private Utility Locate, Hydro-excavating (if necessary), Excavation through rock, Winter Installation

Quote Total: $47,940.00

Quote Valid For 15 days

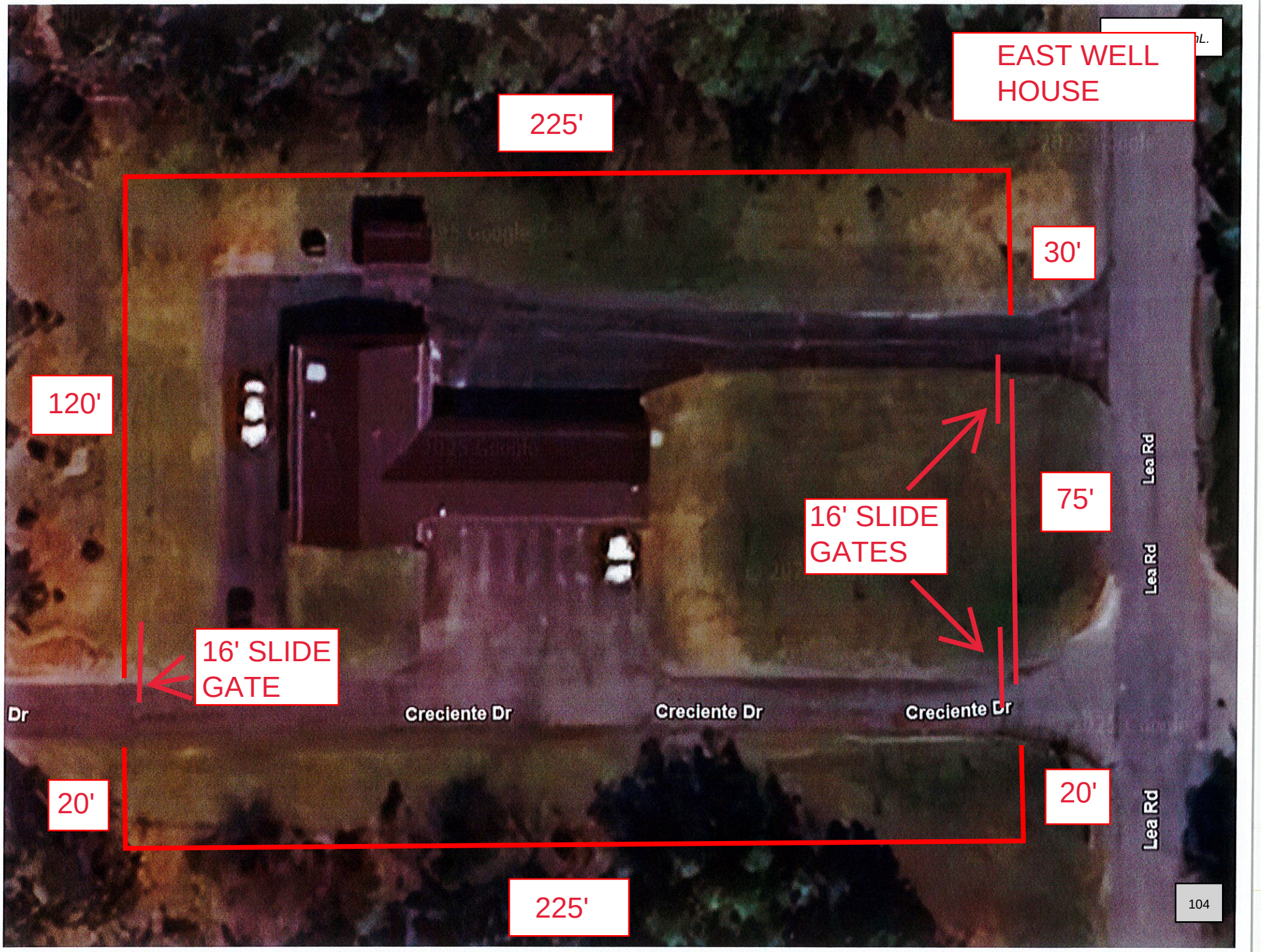
Buyer's Signature: _____ **Date:** _____ **Submitted by:** Jason Plate

Change Acceptance:

This quote when accepted in writing by purchaser and by Century Fence Company includes the terms and conditions set forth on www.centuryfence.com which are incorporated by reference and becomes a contract between two parties. If the project is cancelled upon agreement and special materials were purchased, the customer agrees to pay 100% of the material cost

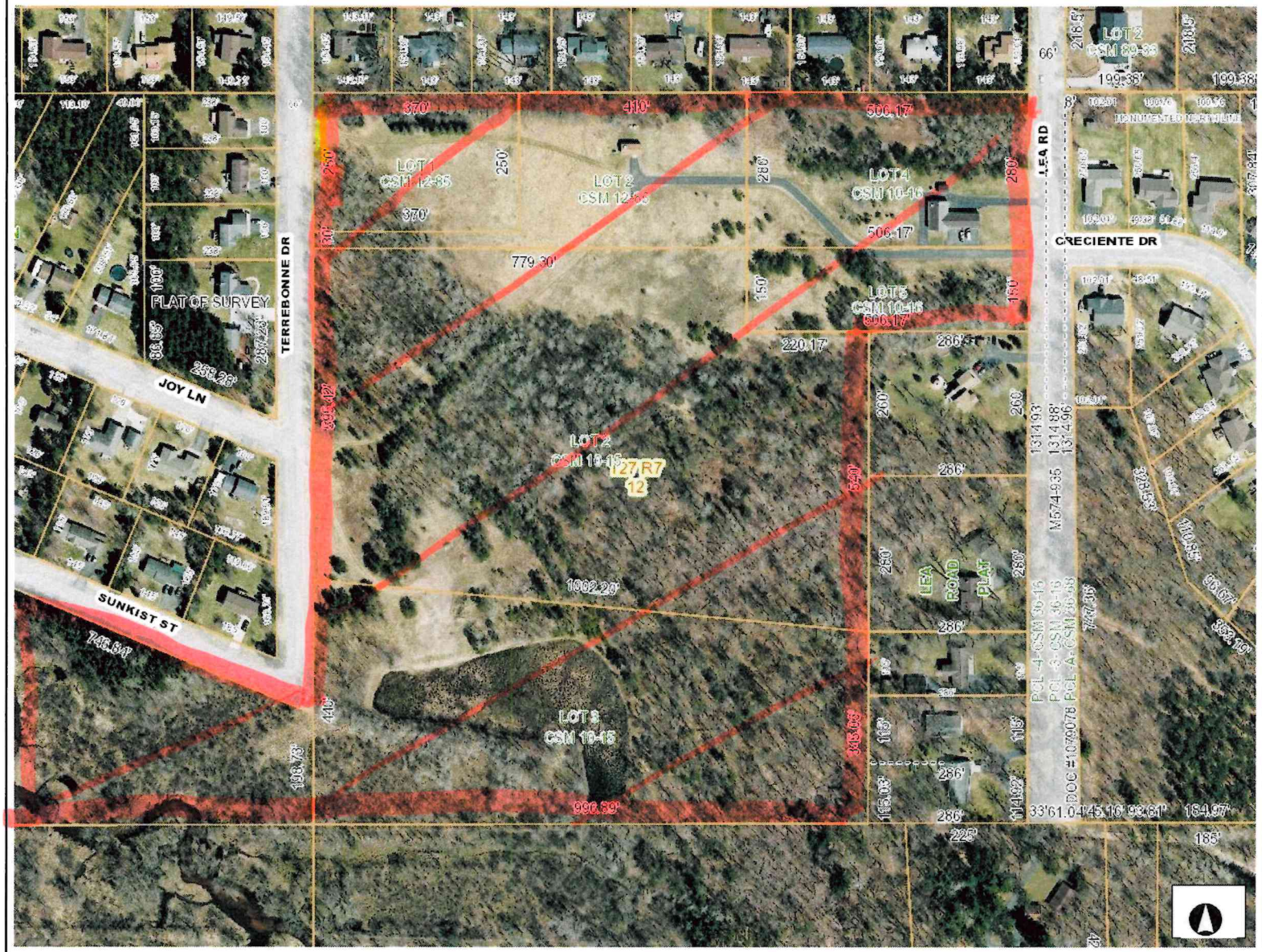
Jason Plate
Office: 920-857-2624
Cell:920-360-6398
Email:jplate@ffence.com

Terms of Payment: Net Cash upon receipt of invoice.


EAST WELL HOUSE
225'
30'
120'
75'
16' SLIDE GATES
16' SLIDE GATE
Dr
Creciente Dr
Creciente Dr
Creciente Dr
Lea Rd
Lea Rd
Lea Rd
20'
20'
225'
104


WEST WELL HOUSE
180'
NEW WELL HOUSE BUILDING
65'
16' SLIDE GATE
30'
145'
Creciente Dr
Creciente Dr
10'
12' DBL GATE
35'
95'
110'

Land Information Mapping System



Legend

- Road Names
- Parcels
- Parcel Lot Lines
- Land Hooks
- Section Lines/Numbers
- Right Of Ways
- Named Places
- Municipalities
- 2020 Orthos Countywide
  - Red: Band_1
  - Green: Band_2
  - Blue: Band_3

30 acres

133.01 0 133.01 Feet

D_1983_HARN_WISCRS_Marathon_County_Feet

DISCLAIMER: The information and depictions herein are for informational purposes and Marathon County-City of Wausau specifically disclaims accuracy in this reproduction and specifically admonishes and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Marathon County-City of Wausau will not be responsible for any damages which result from third party use of the information and depictions herein or for use which ignores this warning. THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

"Bringing the Parks to the People"

Park Proposal for the Village of Kronenwetter

Caleb Dammen, Lexi Dargiewicz, Matt Domzalski, Kali Eder

November 29, 2022

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Executive Summary

Starting this project we aimed to know more about the Village of Kronenwetter. We wanted to know what pre-existing parks they had, the communities they served, and how the general population of Kronenwetter felt about the existing parks. To

see what they already had established, we referenced the outdoor recreation plan.

From the park plans we were able to determine that the Village of Kronenwetter did not have a park solely designated for nature immersion.

After meeting with Kronenwetter officials we were tasked with creating a park that is connective; they stressed the desire to connect with the preexisting bike paths, and that they had an end goal of eventually connecting Kronenwetter to Marathon County's trail system as a whole. It was stressed that they wanted to keep trails out of flood zones, and out of the wetlands. In addition they wanted facilities and parking requirements. One of the last requirements they wanted fulfilled is they wanted the park to be eligible for Knowles-Nelson Stewardship Grant.

Taking a closer examination of the Knowles-Nelson Stewardship Grant for the Recreational Trails Program we found that to be eligible for this grant we must fulfill the following requirements:

1. Maintenance and restoration of existing trails;
2. Development and rehabilitation of trailside and trailhead facilities and trail linkages;
3. Construction of new trails (with certain restrictions on federal lands*); and acquisition of easements and fee simple title to property for recreational trails or recreational trail corridors.

However, on top of all of these requirements there needs to be three types of trails present; non-motorized walking and biking trails, motorized ATV and snowmobile trails, and a diversified trail that can be used for walking, biking, ATV, and snowmobiling. We have successfully been able to create a non-motorized trail that fits into the grant requirements, but

looking at the outdoor recreational plans there are no plans for motorized, or diversified trails.

After validating what we needed to achieve the non-motorized trails standard of the grant we began to refine the ideas we had into clear and concise metrics. Our metrics for this project are:

- Making a scenic nature park in Kronenwetter Wisconsin
- Ability to connect the residents of Kronenwetter to nature
- In addition to the park we want to find and place a parking lot to make the park more accessible to those who want to bike, and walk in the scenic trails.
- Keeping the parking lots high and dry, outside of the flood zones.
- Placing trail heads as close to the parking lot as possible, making it intuitive to go from the parking lot to the trails.
- Adding bike repair stations, making this park appealing to those who bike.

With our metrics completed we were able to visit the village of Kronenwetter first hand; here we had the opportunity to look at the land we were working with. While walking on the existing trails, we discovered spots that were well traveled for potential future trails, and further consulted a representative of Kronenwetter to hear more about what he wanted from these trails.

Image 1.1: This image shows the view from the northeast point of interest.

With this new information we were able to undertake the process of planning MACK park (acronym of the GeoDesigner names).

Study Area Representation

The study area of the project is confined within the borders of the Village of Kronenwetter; specifically in the boundaries of the village parcels available to work within. The combined village parcels available to work within amount to 55.56 Acres. The site-specific geography of these parcels determines the suitability of different amenities within the park. In the greater village scale it is important to consider where the site is in relation to residents, other parks, and existing infrastructure when determining where and what park amenities to recommend. We gathered data and assessed the site based on current time period status in order to evaluate characteristics of the site to ensure accuracy and relevancy in our design.

The Following is a List of Data Sources, Creation, and Description

- **Floodplain**
  - Data layers depicting location and extend of floodplains in project area.
  - Source: Proposed floodplain data ArcMap package from AECOM vendor
  - 100 Year, 500 Year Polygon features
- **Existing Path Locations**
  - Data layers: Location of existing trails, village easement paths, bike routes connecting to site area
  - Source: Existing trails mapped via GPS at onsite field study, Kronenwetter bike routes and easement path digitized from PDF on Kronenwetter's website, Wausau Area Bike Routes shapefile downloaded from Marathon County GIS Data website
  - Line
- **Elevation**
  - Data showing elevation of site area
  - Source: Digital Elevation Model (DEM) and Hillshade raster files downloaded from AGOL Living Atlas WiDNR
  - Raster cells
- **Existing Parcel Data**
  - Parcel data throughout Kronenwetter, Village boundary
  - Source: Marathon County GIS Data website
  - Polygons
- **Park Walking Distance**
  - Data showing park access points and proximity for residents living near site service area
  - Source: Digitized park access points to run Network Analysis Tool on to create 1/2 mile increment walking distance zones
  - Polygons
- **Water, Sewer, Electricity**
  - Data showing existing locations of these lines to help evaluate placement of facilities requiring proximity to

these infrastructure types
    - Source: Digitized from PDF's: Electrical lines from WPS, Watermain and Sewer lines of Kronenwetter Map created by Marathon Technical Services LLC Consulting Engineers
    - Line, point
- **Soils (Hydrologic Group)**
    - Data that shows the type of soils present in site area to determine infiltration rate
    - Source: Soil Survey Geographic Database (SSURGO) soil data raster files downloaded from website, clipped the data to site area
    - Polygon
- **Land Cover**
    - Distinguishing open areas from forested
    - Source: Digitize LC polygons based on aerial imagery of site area
    - Polygon
- **Proposed Additions**
    - Bike trails, hiking trails, parking lot, proposed trail amenities
    - Source: Conducted suitability analyses and digitized findings
    - Line, polygon, point
- **Existing Park Amenities**
    - Existing trails, wellhouses, points of interest
    - Source: field visit, remote sensing digitizing
    - Line, polygon, point

Processes in the Study Area

Having talked about the scope of the study area as well as the goals, we made a trip out to the site in question to conduct our scoping. We brought GPS devices to keep track of notable features that were already on the site. The main things we found included existing walking paths, wildlife trails, tree-

stands, areas with particularly good vistas and well-established entry points to the park. After gathering the data, we compiled it to show important aspects of the existing state of the park. Using the data we gathered from our site visit as well as from the county, we were able to synthesize layers and created the following maps:

- Floodplain
- Soil Composition
- Elevation Data
- Existing Bike and Pedestrian Trails

As seen in the map, the portion of the floodplain which is most likely to flood covers up to the northern edge of the wetland, leaving most of the southern area in the park prone to flooding. Then further into the park, you see the 100-year floodplain covering most of the open area in the northern section but leaving most of the wooded section to the east

untouched. This is also seen with the 500-year floodplain however this projection covers more area to the northeast side of the park.

Map 1.1

Powered by Esri

This map displays soil hydrologic group data provided by the Soil Survey Geographic Database (SSURGO). Hydrologic group designations are used to represent infiltration rates following rain events. The soil data from within the study area falls within three classes.

- Group A
  - Soils composed of deep, well drained sands with high infiltration and low runoff.
- Group A/D
  - Soils with slow infiltration due to high water table, but fast infiltration and low runoff rates if drained.
- Group B/D

- Soils with slow infiltration due to high water table, but moderate infiltration and runoff rates if drained.
-

Map 1.2

There is little to no change in the park area. The most noticeable elevation changes can be seen in the south side as well as the east side. The south side sees a large drop in elevation due to the wetland and then just past the village's land it starts to rise uphill. Then to the east there is a small drop off towards the road. This small drop does not seem to influence the operating condition of the park. However, the wetland depression has helped to shape some of the existing trails in the area.

Map 1.3

The area already has characteristics of a functioning park. There are seven total entry points into the area that are used. Of six of these points, you can find clear paths around the area that people have been using as trails. These trails go down the access road, through open fields and through wooded areas. Upon further inspection, wildlife trails were found littered throughout the wooded area and the edges of the open area. While exploring the wildlife trails, we also came across multiple scenic vistas that give a nice display of certain areas of the park. In the southeastern wooded area two standing tree stands were found.

Map 1.4

This photo was taken during our second field visit to the study area.

It clearly shows a trail that has been used by both people and wildlife.

Picture 1.1

Powered by Esri

This map displays the existing bike trail network throughout both Kronenwetter (Light Orange) and Marathon County (Dark Orange). As shown, there are multiple paths that pass by the park parcels, but the park is not efficiently utilized.

Integrating this space into the greater bike trail system is a goal specified by Kronenwetter Village representatives.

Map 1.5

Using these maps to evaluate the area we are working with allows us to have a good overview of the study area and what it all contains. The standing condition of the park paired with the models we made granted us the ability to create maps showing the best suitable areas for improvements to be made within the park.

Suitability Evaluations

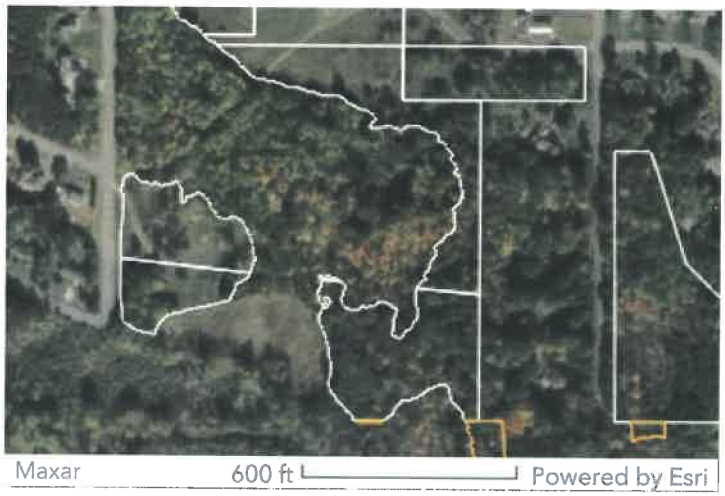
Parking Lot Suitability

In order to effectively assess the suitability of the landscape for a parking lot, we needed to determine which factors should be considered. The factors that proved to be important are as follows:

- Flooding Status
- Soil Type (Hydrologic Class)
- Open Areas vs. Forest Cover
- Proximity to Roads

- Proximity Neighboring Parcels

With criteria established, we were able to assess the site's suitability. First, we removed all areas within the floodplain (100 and 500 year).



Map 2.1: This map shows the process of floodplain erasure from the parcels.

Then, we assessed soil type, targeting well-drained soils.

Map 2.2: This map displays the soil hydrologic information as it relates to the floodplain.

This map shows that all of the soils outside of the floodplain are SSURGO Hydrologic Group A, which defines soils categorized by deep, well drained sands or gravelly sands. These soils observe high rates of infiltration and low runoff rates.

With no areas eliminated due to soil hydrologic class, we moved to open areas vs. forested cover. Ideally, a parking lot would be built within an area that is already open. Using our information discovered during field visits, partnered with remote sensing techniques, we were able to digitize the open areas within the parcels. We performed a union, joining the open area polygons to the site parcels with the floodplain removed.

Map 2.3: This map depicts floodplain (red) and open areas (green) within the proposed park boundaries.

Next, we created buffers to identify proximities to the neighboring residential parcels and to the road system. According to the, "American Trails," webpage, trail systems should be at least 100 feet from adjacent properties for privacy reasons. We applied the same logic to the parking lot criteria, creating a 100 foot buffer from neighbor property lines. As GeoDesigners, we decided that our ideal parking lot would be located between 50 and 100 feet off of the road. We wanted the lot to be off of the road, but not too far into the property that it would disrupt the natural processes. We conducted another union, combining the two buffers into the site parcel with open areas and excluding the floodplain.

Map 2.4: This map displays the 100 feet neighboring parcel buffer (blue) and the 50-100 feet range road buffer (green) as they occur within the study area.

With all of our criteria integrated within the feature layer, we needed to create a system for evaluating each polygon. With flooded areas eliminated and soil hydrologic class becoming an irrelevant evaluation criterion, the evaluation would occur for the open areas, proximity to residential parcels, and road proximity.

Areas within an open area were rated with a 1, while non-open areas received a 0. Areas within the 100 feet neighbor buffer were rated a 0 and all outside were rated with a 1. Areas within the 50-100 feet buffer were rated a 1 and all outside were rated a 0. After the ratings, a data field was created within the final layer, serving as a sum of all ideal factors. Polygons that fulfilled all three factors were rated a 3, which is considered highly suitable. If a polygon had 2 ideal factors, it is considered moderately suitable, and 1 factor is marginally suitable. If a polygon does not fulfill any of the three requirements, it is considered not suitable.

Map 2.5: This map shows the final parking lot suitability.

The results of this analysis identified one location as highly suitable for a parking lot. This location would be used to create alternative suitabilities, such as trail suitability and amenity suitability.

Trail Suitability

With the parking lot location established, we were able to focus our energy on trail placement. As a group, the criteria we decided on for trail placement is as follows:

- Must Begin and End at Trailhead (No Dead Ends)
- Must Connect Points of Interest
- Must Not Be in Floodplain
- Must Avoid Wetland + Well Houses
- Must Not Occur within 100 Feet of Adjacent Property Boundary

With this criteria established, we were able to narrow down the study area.

Shrinking the study area and adding the points of interest gave us a rough idea of what a trail system might look like.

According to the aforementioned, "American Trails," website, trails should not veer directly past scenic areas, but should be within 50-100 feet and have a perpendicular trail branch approach the site. In order to visualize this, we created a buffer which made a ring between 50 and 100 feet from each point. We decided to add the 100 and 500 year floodplain layers to help steer the trails away from potential wet areas.

3.1: This map displays the areas to avoid within the park parcels, floodplain data, and points of interest with buffers.

The final trail design managed to connect the parking lot to all scenic areas, while minimizing distance within the floodplain and maximizing distance outside. This process is as follows:

Maxar 200 ft Powered by Esri Maxar 200 ft Powered by Esri

Map 3.2: This feature displays the floodplain, areas of interest and possible trail extent within the parcels (left) and the trail design within the floodplain and areas of interest (right).

Ultimately, the final design is as follows:

Map 3.3: This map displays the final trail design within the study area.

Trail Amenities

The final suitability analysis that needed to be conducted was for park amenities. The important criteria for trail amenity placement is as follows:

- Near Trail Path (Within 15 Feet)
- Near Trailhead
- Equally Spaced
- Preferably in Open Areas (But Not Required)
- Near Points of Interest

For trail amenities, the most important factor is trail proximity. Amenities should not be more than 15 feet off of the trail. Trailheads serve as excellent checkpoints along a hiking, biking, or walking trail. Generally, appropriate trailhead amenities include signage, informational stations, restrooms, drinking fountains, bike racks, bike repair stations, and garbage receptacles. Ideally, park amenities should be equally spaced along the trail. Our GeoDesign team decided on 200 yard spacing, with a buffer of 50 feet in either direction. Certain park amenities such as tables and structures should be located in open areas rather than in forested land cover. Throughout the proposed park, we identified three points of interest during field visits that would end up taking priority.

To conduct the suitability analysis, we created a 15 foot buffer along the proposed trails, a 15 foot buffer around points of interest, a 50 foot buffer around equidistant points (every 200 Yards) along the trail, a 30 foot buffer around trailheads, and used the already digitized open area polygons. We joined each buffer to the parcel boundary and then filled in attributes for each polygon. The preliminary analysis is displayed below:

Map 4.1: This map shows all of the criteria buffers as they occur within the study area.

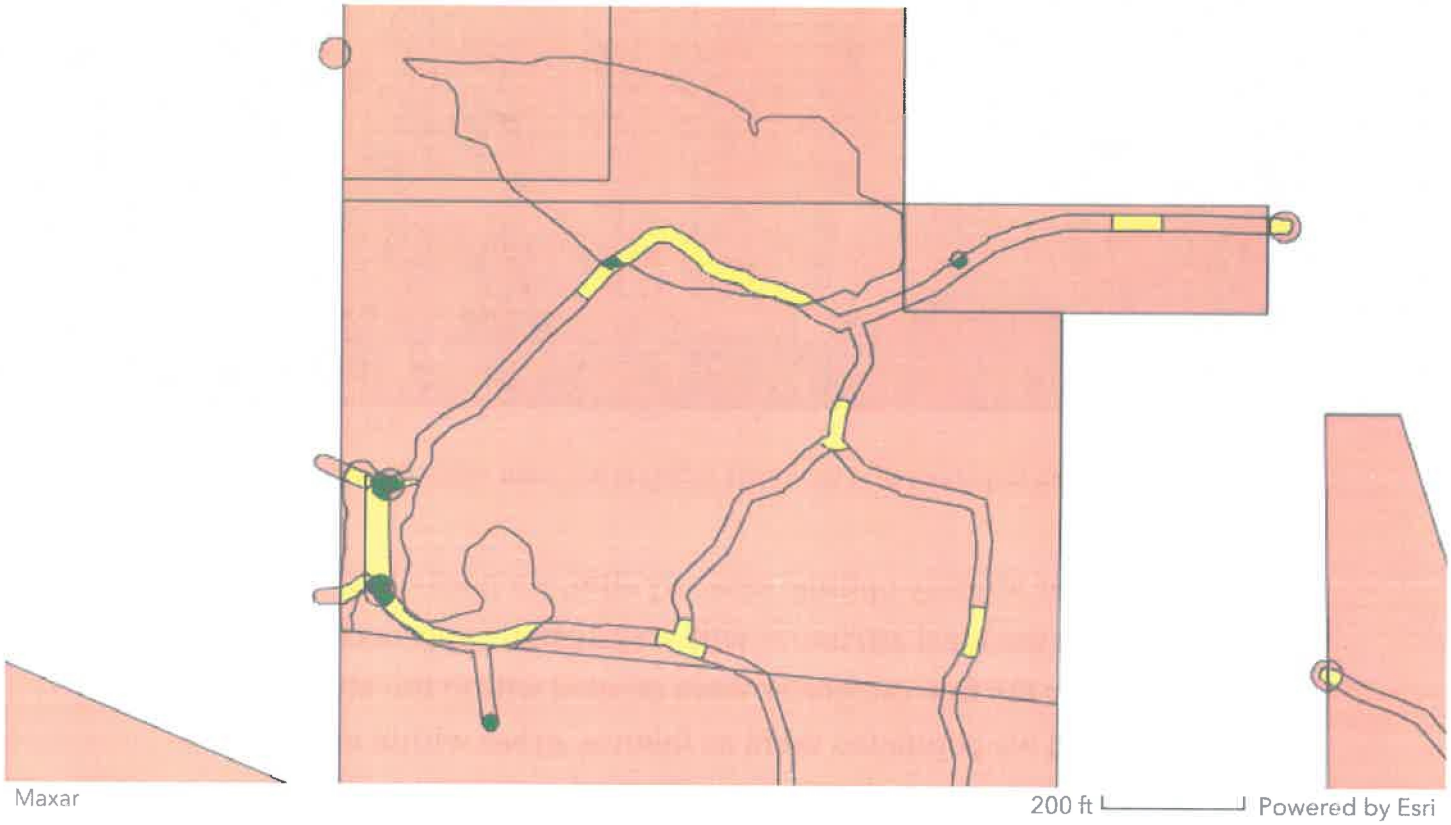
To further identify optimal amenity sites, we needed to populate the ideal attributes with a systematic approach. Fields for the five categories were created within the attribute table and we populated them as follows. Areas within an open area were designated with a 1 and all other areas a 0. Areas within 15 feet of the trail were assigned a 1 and all other areas a 0. Areas near the points of interest were assigned a 2, weighted for their importance, and all other areas a 0. Areas within the equidistant range were given a 1 and all other areas a 0. Lastly, areas near the trailhead were given a 1 and all other areas a 0.

Without a mathematical sum of each characteristic, the analysis was incomplete. A suitability sum field was created and we created an equation based on the importance of the criteria. The equation is as follows:

Suitability Sum = Trail Proximity × (Open Area + Point of Interest Proximity + Equidistant Sections + Trailhead

Proximity)

By multiplying the sum of the characteristics by the trail proximity, all areas outside of the 15 foot trail buffer were deemed not suitable. The results of the analysis are shown below:



Map 4.2: This map depicts the results of the trail amenities suitability model described above.

Proposed Changes and Impacts

Below is a map with all of the proposed changes integrated. Park Amenity Points can be seen throughout the area. Recommendations for the three amenity types listed, Mid-Trail, Point of Interest, and Trailhead are as follows.

- **Mid-Trail**
  - Benches
  - Informational Signage
  - Tables (If in Open Area)
- **Point of Interest**

- Benches
- Informational Signage
- Tables
- Railing to Block Off Hazards (if applicable)

- **Trailheads**
  - Signage
  - Informational Kiosks
  - Bike Racks + Repair Stations
  - Trash Receptacles
- **Trailheads (In Parking Lot)**
  - Informational Kiosks
  - Restrooms + Water Facilities
  - Bike Racks + Repair Stations
  - Seating
  - Trash Receptacles
  - Signage

Map 5.1: This map depicts the proposed changes to the study area. These changes include a parking lot, trails, trail amenities, bike trail additions, and buildings.

Dashboard 1.1: This dashboard displays the parcel count within half-mile increments of the proposed park.

This dashboard is representative of walking distance from residential parcels to our parks in .5-mile increments. We wanted to be able to look at how many residents are within 1.5 miles of MACK park. This shows how many households will potentially be impacted by the creation and addition of the park.

The main impact to the residents of Kronenwetter would be an increased amount of traffic to the park. The other important impact will be that residents will now have access to a unique park that they will be able to use for generations.

Changes Being Made to the Existing Park

We want to be able to change the existing trail system so that they are more accessible to the current population.

With our change models we want to add a parking lot to get more people to be able to drive here so that people outside of Kronenwetter are able to come into the park.

We want to add facilities for people to use in the park to accommodate guests. The main facilities we are looking to add

are bike repair stations and restrooms. The addition of a bike repair station makes it a more attractive park for bikers to come to since they know they will be able to fix their bike along the trails. This will add more connectivity from the village to the county.

We want to add a structure; a hard shelter would be the most ideal so that there could be picnic tables to allow for the park guests to spend more time enjoying nature.

There are several points throughout the map that we deemed to be a great fit for nature viewing. At these spots we have decided to add amenities such as benches so people are able to sit and enjoy the views for as long as they possibly can.

We designed a nature-based park since Kronenwetter does not currently have any parks that are purely nature-based.

Changes and Impacts for Trails

Map 5.2: This map displays the changes between current and proposed trails.

We propose that the main (bike) trail is made up of crushed stone. Crushed stone has a lot of positive impacts, it is great for drainage. It is ADA accessible, and it is easy to bike on due to the large size of the stone being able to bear more weight without slipping or rolling.

- The pricing for crushed rock on the bike trail would be approximately $16,622*. This number was calculated using the assumption that the trail will be 6" deep and 10' wide. The depth is to ensure that the trail will stay in place with minimal maintenance. It will also allow for the rocks to be more sturdy and stable for those who are biking across them.

- The cost for the hiking trails it would be approximately $6,307*. This trail would be 6" deep and 6' wide. The reasoning for the depth is the same as stated above, the width makes it large enough that hikers can walk side by side comfortably. With the width we have decided on the trail is also plenty wide for bikers to be able to get on as well if they choose. Reducing the width would significantly reduce trail clearing costs and lessen the impact on existing ecosystems.

- The cost of creating the scenic access trails would be approximately $264*. The scenic accesses serve to direct hikers to the more aesthetic areas of the park. These trails will be 3' wide and 6" deep. We made the decision of having them be 3' so that they are ADA complaint while also being small enough that it encourages few visitors to be in the area at a time to preserve the natural beauty.

- The greatest impact of this project is the overall cost. Using our price estimations, the combined hiking, scenic, and bike trails would cost approximately $23,193*.

One alternative to these options is using crushed granite on the bike trail and mulch for hiking and scenic access trails. The prices for this alternative are as follows:

- Bike trail would remain $16,622*
- Mulched Hiking Trails that are 6' wide and 3" deep would cost $3,153*

- Mulched Scenic Access Trails that are 3' wide and 3" deep would cost about $176*
- Total = $19,951*

One drawback on this alternative is the mulch would be very erodible during high water events. It would also significantly limit the bike-ability and potentially limit visitors that are wheelchair-bound.

We want our trails to be very scenic, we would love for guests of our parks to have the opportunity to see local wildlife in their natural habitats. This does come with some impacts as well.

Wildlife might be drawn away from some areas if visitors who come are too loud, stray off of the trail, or if they try to touch or interact with the animals.

**Pricing may vary, these prices are based off of cost of crushed rock and mulch wholesale as well as cost of labor and might not be truly representative of the final cost. Cost was also calculated under the assumption that the village didn't previously have access to materials.*

Parking Lot Changes and Impacts

The addition of a parking lot is crucial to the success of the park. Based on the polygon deemed suitable by the analysis, it has the capacity to have 22 stalls that are 20'x10' and 12" deep with a driving lane, if a structure (bathroom or pavilion) is added within that area it will be able to contain less stalls accordingly.

- The cost of the parking lot will be $9,043*
  - Based off of 9,766 square feet (not including 830 square feet for potential restroom or structure site).

- The cost of the drive will be $1,173*

The parking lot and drive will be made of crushed stone. The depth of the crushed stone will be 12" deep for both the drive and parking lot. This is the recommended safe depth of a road according to the Wisconsin Transport Bulletin. This depth is so that cars can safely drive on it without losing grip, this also will help with drainage in the spring, and makes it so vehicles are less likely to slip in the winter.

**Pricing may vary, these prices are based off of cost of crushed rock wholesale as well as cost of labor and might not be truly representative of the final cost. Cost was also calculated under the assumption that the village didn't previously have access to materials.*

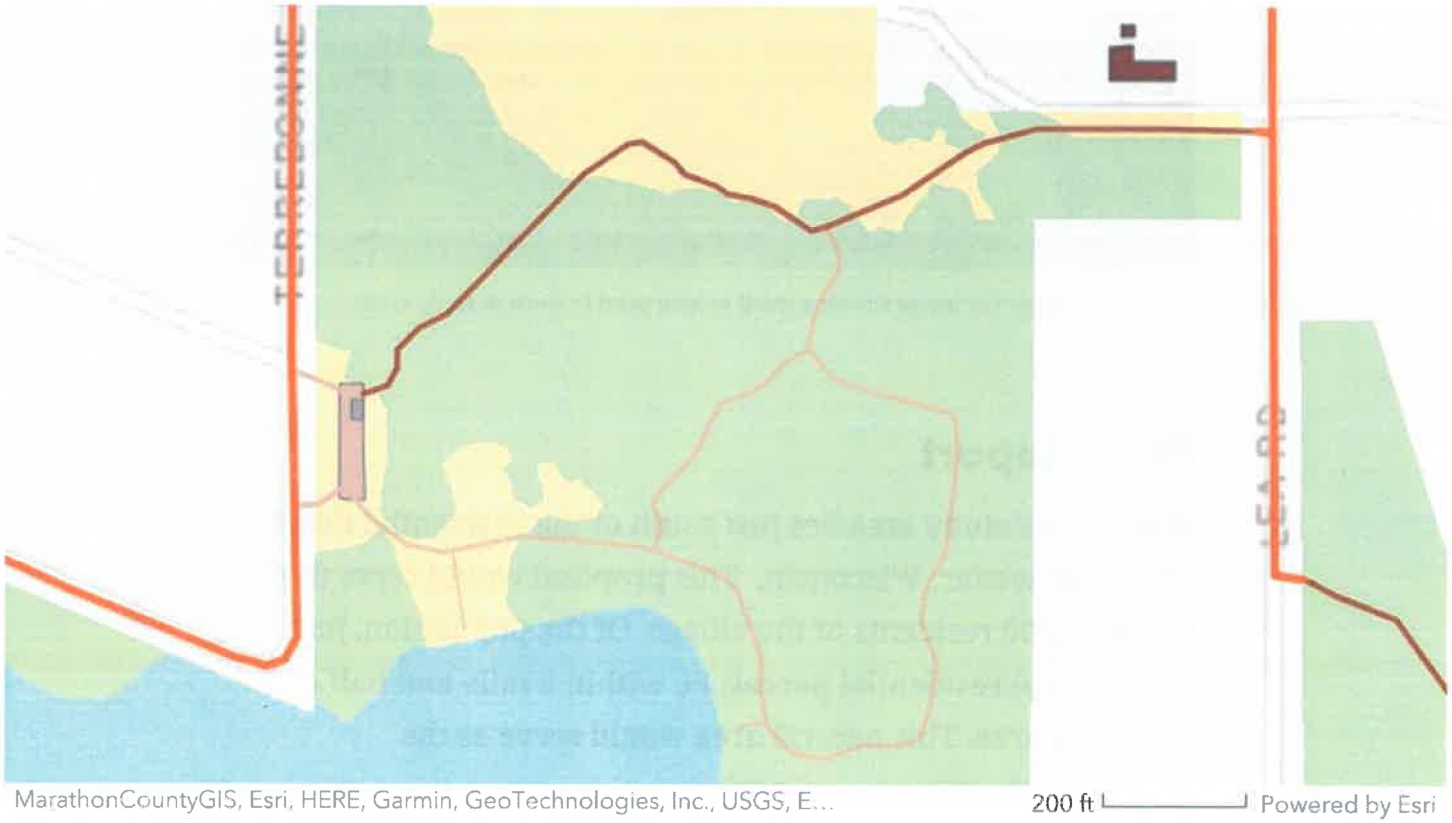
Image 1.3: Image showing small animal print in snow at study area.

Final Report

The 55 acre study area lies just south of the residential district of Kronenwetter, Wisconsin. This proposal would serve the almost 8,500 residents of the village. Of the population, just under 1,800 residential parcels lie within a mile and half of the study area. This natural area would serve as the community's only natural park.

A significant amount of the proposed park lies within the floodplain of Bull Junior Creek, which is a tributary of the Wisconsin River system. The areas outside of the floodplain observe sandy soils with high rates of infiltration and low rates of runoff, which are optimal for minimizing erosion. The park currently holds two well houses, with potential for a third in the near future. The area is already being used by residents, as there is one well-defined trail with a few other secondary trails used by both people and wildlife. The park is bordered on two sides by the existing bike trail network, with potential to provide a convenient link.

After running suitability analyses on parking lot, trail, and trail amenity placement, we were able to design a fully functional park that can be utilized by bikers, hikers, walkers, wildlife observers, and nature lovers. The linkage to the Kronenwetter and Marathon County bike system will prove to be a significant attraction for bringing people to the park.



Map 6.1: Final map showing all proposed changes within proposed park site.

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Department of Geography and Geology
College of Letters and Science
University of Wisconsin-Stevens Point

Caleb Dammen, Kali Eder, Lexi Dargiewicz, Matt Domzalski

village of Kronenwetter

Report to CLIPP

Agenda Item: Discussion and Possible Action: Potential Upgrades for Parks
Meeting Date: July 7, 2025
Referring Body: CLIPP
Committee Contact:
Staff Contact: Greg Ulman
Report Prepared by: Greg Ulman

AGENDA ITEM: Discussion and Possible Action: Potential Upgrades for Parks

OBJECTIVE(S): To have the CLIPP Committee informed with the CIP for the parks

HISTORY/BACKGROUND: Attached is a plan for park improvements, financial dependent. Staff would like CLIPP input on changes or any other recommendations to this list, as well as moving the dates around.

RECOMMENDED ACTION: To give direction as CLIPP sees fit.

Capital Improvements

Parks

2026

New Playground Structure – Buska Park - $125,000

Kayak Launch/Dock – Municipal Park Pond - $25,000

2027

Diggers – Seville Park - $5,000

2028

Repair/Remove Ball Diamond and Dugouts – Buska Park - ?

2029

Climbing Web – Municipal Park - $40,000

2030

Park Benches – Norm Plaza Park - $4,000

Fencing for New Dog Park – Norm Plaza - $65,000

2031

New Playground Structure – Towering Pines Park - $175,000

village of Kronenwetter

Report to CLIPP

Agenda Item: Municipal Pond Beach
Meeting Date: August 4, 2025
Referring Body:
Committee Contact: Trustee Charneski
Staff Contact: Pete Wegner
Report Prepared by: Ken Charneski

AGENDA ITEM: Swimming area and trails

OBJECTIVE(S): Discuss the potential benefits and cost of improvements to the Village swim area.

HISTORY/BACKGROUND: This is a water body owned by the village that currently has a walking trail along the west side and a small swimming area at the north end.

This area seems to have potential to be improved cost-effectively with a larger beach area, picnic tables, benches, etc, and possibly a fishing area and/or new trail around the east side.

PROPOSAL: To make better use of this Village property. Gather and discuss information on development ideas, costs, sources of funding, etc.

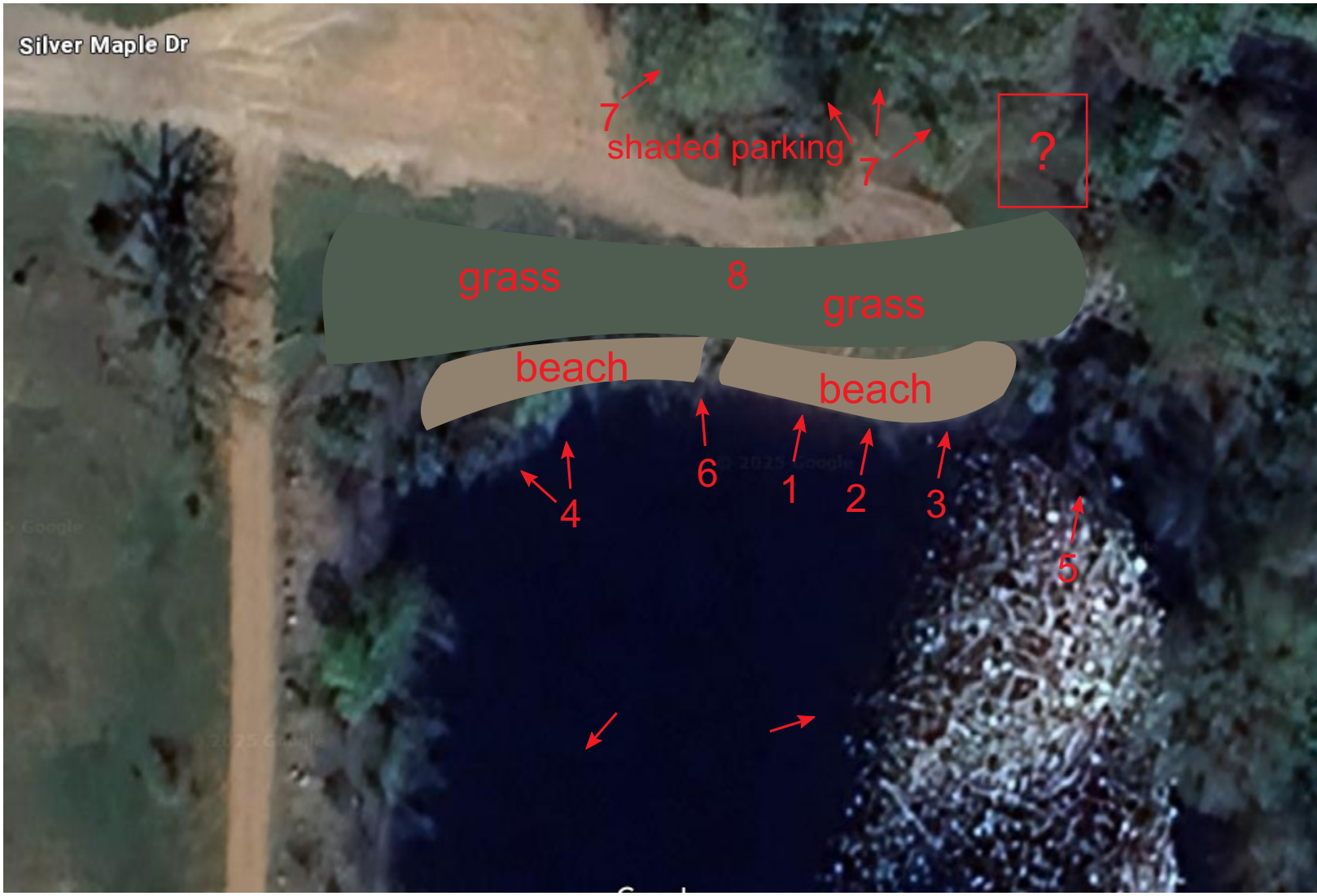
RECOMMENDED ACTION: Begin fact finding ideas to eventually create a plan to present to the KVB for consideration.

FINANCIAL

Financial Consideration/Action: Funding sources to be determined.

FUNDING SOURCE: N/A
Account Number/Title: #
Current Adopted Budget: $
Spent to Date: $
Remaining Budget: $
Requested Amount: $
Remainder of Budgeted Amount, if approved:

ATTACHMENTS: Aerial photos


Silver Maple Dr
7
shaded parking
7
?
grass
8
grass
beach
beach
6
4
1
2
3
5

Aerial Photo 2020

Google Earth Parking and Launch Area

Pond Parking and Launch Area

Total Area 7.33 acres

REPORT TO CLIPP

ITEM NAME:	Election Inspector Selection Process
MEETING DATE:	August 4, 2025
PRESENTING COMMITTEE:	
COMMITTEE CONTACT:	Trustee Ken Charneski
STAFF CONTACT:	Jennifer Poyer
PREPARED BY:	Jennifer Poyer

ISSUE: Multiple election complaints filed with the Wisconsin Election Commission regarding Kronenwetter's local elections.

OBJECTIVES: Address the election complaints and add clarification regarding election facilitation in the Village's ordinances. The committee will address and make recommendations regarding the election inspector selection process first.

ISSUE BACKGROUND/PREVIOUS ACTIONS:
The Wisconsin Election Commission has received multiple election complaints regarding elections in the Village of Kronenwetter. The Village's ordinances contain very little guidance and information related to the local election process. CLIPP committee members would like to create local election ordinances for clarification of the process and to address the issues behind the complaints.
The first topic the committee is addressing is the election inspector selection process. The process of selecting election inspectors and election chiefs is clearly laid out in the Election Administration Manual for Wisconsin Municipal Clerks. (section "Election Officials" attached).
If followed correctly, many of the issues in the complaint would be addressed. See the full complaint here: https://elections.wi.gov/resources/complaints/el-24-26-charneski-v-birk-labarge The issues in the complaint are listed below:

1. Removed and/or disregarded available duly appointed election inspectors, both Republican and unaffiliated, in at least 4 separate elections and primaries, and instead arbitrarily hired workers for those positions "off the street" who were not submitted by either of the main political parties, nor were they approved by the Village Board. **Removal of election officials is addressed on page 137 of the Election Administration Manual – "Removing Election Officials." The Village could add an ordinance requiring a hearing before the Village Board before a dismissal is made instead of recommending a hearing before the government body and/or leaving it to the discretion of the clerk.**
The process of choosing election inspectors from party lists and unaffiliated electors is addressed on page 125 of the Election Administration Manual –"When Lists are Received from One or Both Parties." If followed correctly no submitted, available and interested elector will be disregarded.

2. There were two other elections which likely involve similar violations, but for which LaBarge has not provided worker schedules (see EXHIBIT Q).
3. Apparently no effort was made to achieve the statutory balance between Republican and unaffiliated workers at any of the elections conducted by Ms LaBarge. **Addressed on page 124 of the Election Administration Manual - "Determining Party Imbalance at Each Polling Place." In past elections the chief election inspectors created a work schedule for the election. In order to achieve statutory imbalance, the**

clerk should be tasked with schedule verification in order to determine whether each polling place and duties performed within the polling place meet the required imbalance.

4. Split shifts without a Village Ordinance to authorize such action, in violation of.
In past elections, many election inspectors request to work a split shift because a 13+ hour day is too difficult. The Village could add an ordinance allowing for split shifts during elections.
See page 124 "Number of Election Inspectors" (2) Wis. Stat 7.30(1)(a)

The Village of Rothschild has the following:

§ 39-2**Split shifts for election officials.**
[Added 6-13-2016[1]]
The Village Clerk shall have discretion for the selection of alternate officials or the selection of two or more sets of officials to work at different times on election day and may establish different working hours for different officials assigned to the same polling place.
[1]
Editor's Note: This ordinance also repealed former § 39-2, Poll hours.

5. Openly admitted to removing at least one election inspector without cause, documentation, or notification. (see EXHIBIT K) **See 1. "Removing Election Officials"**
6. For all practical purposes, she removed other workers from the Republican list, as some of them have never been called in to work the polls, while others, often unapproved, have been called in numerous times. **See 1. "Removing Election Officials"**
7. Submitted the election worker names to the Village Board for approval, without breaking down the list by party affiliation. **There is no specific statute requiring identification of an inspector's party, but the Village could require the received lists be shared in the packet and to the Village Board members upon receipt.**

8. Removed names from the list submitted by the Republican Party, before forwarding that list to the Village Board for approval. **See 7.**

9. Hired at least one worker who is not a resident of the municipality, in preference over other approved workers from within the municipality who, according to statute 7.30 (4) (c), must be used first. There may be other workers from outside the municipality being being given preference as well. We do not know, because Clerk LaBarge has not provided information on any of the unaffiliated workers for us to confirm who they are, or where they live.(see EXHIBITQ) **See 1**.

CLIPP Committee Member Patty Tikalsky and I looked at area municipalities election ordinances and found it is not out of the ordinary to have few election ordinances in local code.

Rothschild included in their ordinance the following:

§ 39-1**Election inspectors.**
[Amended 2-24-2003; 6-13-2016]
A.
At every election held in the Village of Rothschild, the Clerk shall have the authority to determine the number of election inspectors to adequately staff each election

and to reduce the number of election inspectors to an odd number of not fewer than three per reporting ward at any given election held within the Village of Rothschild. The Village Clerk shall also have discretion to utilize one additional inspector to serve at each polling place without regard to party affiliation who shall serve as a greeter to answer questions and to direct electors to the proper locations for registration and voting and who shall be available to substitute for other election officials who must leave the room during the voting process.

We think it is important to include similar verbiage in our ordinances giving the clerk authority to determine the number of needed election inspectors at each polling place based on the size of the election and expected turnout. Attached is a document created by Patty Tikalsky outlining the highest number of election inspectors needed if two polls were being utilized. (Community Room and Fire Department)

PROPOSAL: Give direction to staff on how to proceed.

ADVANTAGES:

DISADVANTAGES:

ITEMIZE ALL ANTICIPATED COSTS (Direct or Indirect, Start-Up/One-Time, Capital, Ongoing & Annual, Debt Service, etc.)

RECOMMENDED ACTION:

OTHER OPTIONS CONSIDERED:

TIMING REQUIREMENTS/CONSTRAINTS:

FUNDING SOURCE(s) – Must include Account Number/Description/Budgeted Amt CFY/% Used CFY/$
Remaining CFY
Account Number:
Description:
Budgeted Amount:
Spent to Date:
Percentage Used:
Remaining:

ATTACHMENTS (describe briefly): Section of the Election Administration Manual for Municipal Clerks, table of election workers required by the Village

ELECTION OFFICIALS

Summary

An election official is defined as "an individual who is charged with any duties relating to the conduct of an election." Wis. Stat. § 5.02(4e). County, municipal and school district clerks are election officials, as are election inspectors, chief inspectors, election registration officials (EROs), tabulators, greeters, and canvass board members. Election officials perform a very important public service by enhancing the high quality and integrity of our elections. It is important that you, as a municipal clerk, ensure there are qualified and well-trained individuals for these positions. Wisconsin Statute Chapter 7 prescribes the selection, training, and duties for election officials.

Municipal Clerks

Appointment and Qualifications

Municipal clerks are elected by the electors or appointed to their positions by the governing body of a given town, village, or city. For specific qualification and residency requirements, consult your municipal attorney.

Duties

The municipal clerk's election duties include, but are not limited to, supervision of elections and voter registration in the municipality, equipping polling places, purchasing and maintaining election equipment, preparing ballots and notices, and conducting and tracking the training of other election officials. The municipal clerk is responsible for conducting the election in his or her municipality. Wis. Stat. § 7.15.

A municipal clerk may register voters in his or her office on Election Day if located within the same building as the polling place with a resolution of the governing body.

Training Requirement

Under Wisconsin law, each municipal clerk must attend training sponsored by the Wisconsin Elections Commission every two years. Wis. Stat. § 7.15(1m). In order to comply with this training requirement, municipal clerks must obtain six hours of training every two-year term, beginning January 1 of even-numbered years and ending on December 31 of odd-numbered years. EL 12.03(2).

All clerks must be initially certified by attending the Municipal Clerk Core Curriculum Training course, which counts as three hours of training toward the six hours required in any given term. Clerks always need to earn a minimum of six hours of training during the current term in order to recertify for the next term. EL 12.03(1), (2).

Clerks must report their election training and the number of hours to the WEC using the Municipal Clerk Recertification Reporting Form which is available on the WEC's website. WisVote users can enter their training directly into the system for review and approval by WEC staff. Training not reported using the form or entered into WisVote will not be counted towards recertification hours. Training "sponsored" by the WEC includes any training for municipal clerks that the WEC approves. This includes, but is not limited to, election trainings conducted by county clerks, online training presentations, and election administration or WisVote webinar sessions, either live or recorded. EL 12.03 (4), (5)

Election Inspectors

Election inspectors, often referred to as "poll workers," staff the polling place on Election Day. Election inspectors' duties include setting up the polling place, preserving order, registering electors, recording voter numbers, issuing ballots, monitoring voting equipment, counting votes, and properly completing required forms. Wis. Stat. § 7.37.

Special note regarding election inspector appointments: It is the opinion of the Commission that election inspectors may not serve at elections where they, their spouse, or immediate family member is a candidate on the ballot or under other circumstances where a candidate's success or failure to win election would affect the election inspector financially. There may be other laws that specifically prohibit certain individuals from serving as election inspectors. Clerks are encouraged to check with their local municipal attorney if they have any questions as to whether a given individual may serve.

Number of Election Inspectors

1. Each polling place should have seven inspectors.

   The governing body may increase the number where more than one voting device is used or polling places are combined. Wis. Stat. 7.30(1)(a).

2. By ordinance, the governing body may provide for the selection of alternates or for the selection of two or more sets of inspectors to work at different times on Election Day. Alternate officials may be appointed to maintain adequate staffing of polling places. Wis. Stat. § 7.30(1)(a).

3. The governing body of the municipality may reduce the number of election inspectors by resolution. However, no polling place may have fewer than three election inspectors. Wis. Stat. § 7.32.

Qualification of Election Inspectors

Election inspectors must meet the following criteria:

1. They must be nominated.

   The two political parties whose candidates for governor or president received the largest number of votes in the previous general election may submit lists of election inspector nominees no later than November 30 of an odd-numbered year. When party lists are received, election inspector appointments must be made from them. When lists of election inspector nominees are not received from the political parties, appointments are made without regard to party affiliation. Wis. Stat. § 7.30 (4) (b).

   As a municipal clerk, you should contact the appropriate statutory committeeperson or voluntary county party chairperson before the first week in November and advise him or her of their responsibility to submit a list of nominees to the Mayor, Village President or Town Board Chairperson. Do not hesitate to recommend election inspectors who have proven to be effective workers.

   If the list of appointed election inspectors is emailed, Administrative Rule EL § 6.04(3) requires that, in addition, the signed original of the document must also be received, either postmarked or delivered by, the filing deadline.

   <u>Determining Party Imbalance at Each Polling Place</u>

   a. The party whose candidate for Governor President at the last general election received the most votes *at that polling place* (the "dominant" party) is entitled to one extra inspector.

b. Determine party imbalance for each polling place in anticipation of receiving lists of inspector nominees from the political parties.

Example:
Republican candidate for governor received the most votes at the polling place at the last general election. Seven total inspectors are needed. Positions available: Four Republican positions and three Democratic positions.

c. Positions identified as Republican and Democratic remain as such for the duration of the term.

When Lists are Received from One or Both Parties:

Clerks are advised to contact each party's nominees to confirm their willingness to serve before submitting the names to the governing body for appointment.

a. Document any nominees not willing to serve and provide the Party those names.

b. The clerk may also inquire as to willingness to serve as a chief inspector and arrange for training for those who are interested.

Note: Refusal to serve as a chief inspector is not grounds for nonappointment.

Appointments must be made from the lists submitted by the parties for as long as election inspector positions are available. If party lists have been timely received, positions must be filled from the lists until the names on those lists have been depleted.

a. Nominees must be qualified electors of the county in which they reside.

b. The lists may also designate individuals as first choice nominees, who must be appointed first. Wis. Stat. § 7.30 (4)(b)(1).

1) First choice nominees may be designated by a symbol, such as a star, asterisk or checkmark.

2) If "first choice" is not indicated, but the names are numbered, they should be appointed in numerical order.

3) If the governing body has good cause not to appoint an individual whose name is submitted as a "first-choice" nominee, it may request the WEC authorize non-appointment, and may not decline to appoint such individual until receiving the WEC's authorization. Wis. Stat. §7.30(4)(e).

Appointment of persons not appearing on the lists may only occur after the lists have been depleted. Note: The parties have sole discretion to determine nominee criteria.

When party lists are received, the clerk must adhere to "party imbalance" *at each polling place*. The dominant party is entitled to one more election inspector at that polling place than the other party.

Example: Five election inspectors are to be placed at a polling place. The Democratic candidate for governor or president received the most votes at the polling place at the last general election. This means that three positions are Democratic and two positions are Republican. The governing body appoints three names from the Democratic list and two names from the Republican list.

It is possible that the dominant party will differ between polling places in the same municipality.

<u>If Lists are Received but are Insufficient</u>:

If the Democratic and Republican parties' lists are insufficient or the nominees decline to serve in the positions available for that party's nominees, the remaining positions are filled without regard to party affiliation.

Example: Seven inspectors are to be placed at a polling place. The Republican candidate for governor or president received the most votes at the polling place at the last general election. This party imbalance gives the Republican Party the extra inspector so the ratio is four Republican positions to three Democratic positions. If sufficient lists from both parties were

submitted, four names would be appointed from the Republican list and three names would be appointed from the Democratic list. However, in this example there are only three names on the Republican list and no Democratic list was submitted. The governing body appoints the three Republican names and the Mayor, Village President or Town Board Chairperson nominates other qualified individuals, regardless of party affiliation, and submits the names to the governing body for appointment to the remaining four positions.

If the Democratic Party submitted a list with two names, the two Democratic nominees and two unaffiliated nominees would be appointed along with the three Republican nominees.

The parties may supplement their initial list of nominees at any time during the term. Wis. Stat. § 7.38.

If No Lists are Received:

If no lists are submitted, the Mayor, Village President or Town Board Chairperson nominates other qualified individuals, regardless of party affiliation, and submits the names to the governing body for appointment. All appointments are made without regard to party affiliation. Wis. Stat. § 6.875.

Appointment of Inspectors by Governing Body

Appointment of inspectors must occur no later than December 31st of an odd-numbered year. Wis. Stat. § 7.30 (4)(a).

a. The clerk submits the party lists to the governing body.

   1) Advise the governing body of the requirement to appoint any first-choice nominees first.

   2) Advise the governing body if lists are insufficient so that unaffiliated inspectors may be nominated.

b. The governing body must appoint at least as many inspectors as there are positions to be filled.

c. Appointments are made from the party lists until each party's positions have been filled or until the lists are depleted.

d. If positions remain open and the lists have been depleted, "unaffiliated" inspectors may be appointed to the remaining positions.

e. Additional inspectors may be appointed as alternate.

2. Inspectors must be able to read, write and understand the English language. As municipal clerk, you may administer an examination, if required by the governing body, to all persons nominated as election inspectors to prove their ability to read, write and understand the English language, and their general knowledge of the election laws. Wis. Stat. § 7.30 (2)(c).

3. Inspectors are required to receive training from the municipal clerk within the two years preceding the election event at which the inspector intends to work. Wis. Stat. 7.315 (b)(1).

4. An inspector may not be a candidate for any office to be voted on at an election at which they serve. Wis. Stat. § 7.30 (2)(a).

5. Election inspectors must be qualified electors of the county served by the polling place in which they work.

   a. The chief inspector(s) must be a qualified elector of the municipality, except if a qualified candidate is not available. Wis. Stat. § 7.30 (2)(a).

   b. A high school poll worker must be a resident of the municipality. Wis. Stat. § 7.30 (2)(am).

6. The municipal clerk should identify any election inspectors appointed by one of the two major political parties. The chief inspector must ensure that any Election Day tasks which require completion by two election inspectors are represented by each party, whenever possible. Wis. Stat. § 7.30 (2)(a).

Term of Office

Election inspector terms run from January 1 of an even-numbered year through December 31 of the subsequent odd-numbered year. Wis. Stat. § 7.31 (4).

Filling Vacancies

Permanent vacancies in Republican or Democratic positions are filled by the municipal clerk from the remaining names on the lists submitted by the parties or from names submitted by the parties to supplement the original lists.
Wis. Stat. § 7.30 (2)(b), (4)(d).

Temporary vacancies created by a candidacy, illness or other temporary causes can be filled by the municipal clerk to serve for one election only.

1. A party that did not submit a list by November 30th may not submit a list of names after that deadline.

2. If there are no lists or the lists have been exhausted, the municipal clerk may fill the vacancy without regard to party affiliation.

3. If an unaffiliated inspector vacates his or her position, and the party entitled to that position has submitted supplemental names, the vacancy is filled from the supplemental list.

    a. If no supplemental list has been submitted since the unaffiliated appointment was made, the clerk may fill the vacancy with another unaffiliated inspector.

Training Election Inspectors

1. Election inspectors are required to attend training every two years and must have attended training within two years of any election at which they serve.

    a. It is the responsibility of the municipal clerk to see that all election inspectors are provided with adequate training for the performance of their duties.

    b. You may remove an inspector for failure to attend required training sessions.

    c. Absence from training is neglect of duty, one of the grounds for dismissal.

2. The Wisconsin Elections Commission suggests, at a minimum, the clerk go over the Election Day duties listed in the Election Day manual.

Wis. Stat. § 7.315.

Chief Election Inspectors

Designating a Chief Inspector

The municipal clerk designates one of the inspectors as chief inspector for the polling place. This individual acts as liaison between the election inspectors and the municipal clerk and is in charge of the polling place on Election Day. The chief inspector must be a qualified elector of the municipality, except when no qualified candidate is available. The chief inspector is counted in the overall odd number of inspectors at the polling place. EL 11.01(1).

Although the municipal clerk ultimately designates the chief inspector, care should be taken to maintain the party imbalance.

1. If all positions at the polling place have been filled from party lists, clerks are encouraged to select one of the party appointees as the chief inspector.

   R R (R) D D or R R R (D) D

2. If none of the party appointees are qualified as chief inspectors, select a qualified unaffiliated inspector. (Keep party representation even.)

   R R U D D

3. If you have mixture of affiliated and unaffiliated inspectors, choose any qualified inspector.

4. If it is necessary to remove an inspector in order to insert a qualified chief inspector, replace an unaffiliated inspector if possible.

Chief Inspectors: Municipal Residents vs. County Residents

Wis. Stat. §7.30(2)(a) indicates a preference for the CI to be a municipal resident, but offers an exception: "…each chief inspector shall be a qualified elector of the municipality in which the chief inspector serves. *If no qualified candidate for chief*

inspector is available…the person so appointed need not be a qualified elector of the municipality…"

Again, the municipal clerk chooses the chief inspector, but the statute confines the selection to municipal residents unless no qualified municipal resident is available. This requirement intertwined with the requirement to maintain party imbalance can be a challenge to implement.
It is recommended that you choose a chief inspector using the following priority order:

1. **Affiliated municipal resident**
   If there is an affiliated inspector who is a resident of the municipality who is trained or willing to be trained as a CI, arrange for training and use for CI. Maintain party imbalance at the polling place.

2. **Unaffiliated municipal resident**
   If no affiliated municipal resident is trained or willing to be trained as a CI, arrange for training of an unaffiliated municipal resident. If this means replacing an affiliated inspector, keep the party representation even.
   R R U D D

3. **Affiliated resident of the county**
   If there is no affiliated or unaffiliated municipal resident trained or willing to be trained as a CI, arrange for training a willing affiliated inspector who is a resident of the county.

4. **Unaffiliated county resident**
   If there is no municipal resident or affiliated county resident trained or willing to be trained, arrange for training of a willing unaffiliated county resident. If this means replacing an affiliated inspector, keep the party representation even.
   R R U D D

Training of Chief Inspectors

Chief inspectors are required to attend "Baseline" training in order to be initially certified. Attending Baseline training certifies the attendee as a chief inspector for the current term. In order to recertify for the following term, a chief inspector must attend at least six hours of Wisconsin Elections Commission approved continuing election education during the current term. (Attendance at Baseline training also

counts toward recertification for the following term.) Please see the agency website for a list of approved methods of accumulating hours toward recertification of chief inspectors. Wis. Stat. § 7.31(4). EL 11.02.

The county or municipal clerk conducting recertification training for other clerks or election inspectors must submit an agenda or course outline to the Wisconsin Elections Commission for approval. EL 11.03(3). Training hours of election inspectors are documented and tracked by the municipal clerk. Chief inspectors may be given a self-administered evaluation as part of training, the results of which will not affect the chief inspector's appointment or qualifications to serve. The results do not have to be reported to the WEC.

High School Student Election Inspectors

State law permits certain qualified high school students to work at the polls on Election Day. Students must be enrolled in a public, private, tribal school, or private home-based educational program. Students may decide for themselves to serve as election inspectors or in response to a school sponsored initiative. Civics, government or political science teachers may see this as an opportunity for a real-life learning experience. Student organizations may find this to be an attractive form of community service and an interesting learning opportunity. Allowing students to work as election inspectors provides an opportunity for students to become involved in the election process and also offers clerks another resource for filling election inspector positions. Students with foreign language skills can serve at polling places where voters may need assistance understanding the ballot, voting equipment and other election-related materials. In many locations, Hmong and Spanish speaking voters need special assistance. Municipal clerks are encouraged to work with their local high schools to enable students to serve as election inspectors.

Qualifications

A student qualifies to serve as an election inspector if the student:

1. Is 16 or 17 years of age

2. Is enrolled in grades 9 to 12 in a public, private, tribal school, or private home-based educational program.

3. Has at least a 3.0 grade point average or the equivalent

4. Has the written approval of the student's parent or guardian

5. Has the written approval of the principal of the school in which the student is enrolled, if the student has less than a 3.0 grade point average

6. Is a resident of the municipality of the polling place at which he or she serves

Written Authorization

Before a student may be appointed as an inspector, the municipal clerk shall obtain written authorization from the student's parent or guardian and from the principal of the school where the student is enrolled, if the student has less than a 3.0 grade point average. Upon appointment, the municipal clerk shall notify the principal of the school where the student is enrolled of the date of the election at which the student will serve.

Restrictions

1. A student may only serve as an inspector at a polling place if at least one inspector, other than the chief inspector, is a qualified elector of the municipality

2. A student may not serve as chief inspector at a polling place

3. A student serving as an election inspector may not challenge any person offering to vote

Wis. Stat. § 7.30 (2)(am).

Election Registration Officials (EROs)

Appointment and Qualifications

Municipal Clerks may appoint Election Registration Officials to conduct voter registration at the polling place, at residential care facilities during the open registration period, and in the clerk's office during in-person absentee voting. An ERO must be a qualified elector of the county for the polling place, residential care facility or clerk's office at which they serve. However, a non-resident clerk or deputy clerk may serve as an ERO in case of a vacancy.

EROs are appointed to a two-year term, which runs from January 1 of an even-numbered year through December 31 of the subsequent odd-numbered year. The ERO is required to take the same training as election inspectors. If an ERO will be filling in for an election inspector (lunch, breaks, etc.), he or she must also be appointed as an election inspector.

Duties

If appointed, EROs carry out the registration duties at the polling place on Election Day, in the clerk's office during in-person absentee voting and in residential care facilities during open registration. At particularly high-turnout elections, EROs ease the election inspectors' workload. Wis. Stat. § 6.28(1)(a).

Training Requirement

EROs are required to receive training from the municipal clerk within two years of any election at which they serve and take an oath. It is the responsibility of the municipal clerk to see that EROs are provided with adequate training for the performance of their duties.

Wis. Stat. § 7.315 (4).

Special Voting Deputies

Special Voting Deputies (SVDs) conduct absentee voting at certain care facilities. SVDs are one of the methods by which absentee voting may be conducted in qualified care facilities and retirement homes. Wis. Stat. § 6.875.

A person who is appointed an SVD must:

1. Be a qualified elector of the county
2. Must attend training
3. May not currently be employed by the facility
4. May not have been employed by the facility within two years of the appointment

5. May not be an immediate family member of anyone currently employed by the facility or employed by the facility within two years of the appointment

Selection and Appointment

1. Nominations for special voting deputy positions may be submitted by the two dominant political parties at the same time as election inspector nominations are submitted. If no nominations are submitted, then the municipal clerk may appoint qualified electors of the municipality of his or her choosing, without regard to party affiliation.

2. The two deputies designated to conduct absentee voting at each facility should be affiliated with different political parties whenever possible.

3. SVDs are appointed by the municipal clerk for one election cycle.

4. At the discretion of the municipal clerk multiple pairs of SVDs may be assigned to conduct absentee voting at a care facility due to the size of the facility and/or large numbers of registered voters.

SVD Training

Special Voting Deputies are required to attend training every two years, and must have attended training within two years of any election at which they serve. The Wisconsin Elections Commission has developed a manual for clerks to use to train Special Voting Deputies. The *Absentee Voting in Residential Care Facilities and Retirement Homes* manual is available on the agency website. Wis. Stat. § 7.315 (1)(a).

Greeters and Tabulators

Greeters

Each municipality may appoint one additional inspector regardless of party affiliation to act as a greeter and substitute for other officials as necessary on Election Day. Greeters may not participate in the canvass after the polls close. Wis. Stat. § 7.30(1)(b).

Tabulators

Not less than 30 days before an election, the governing body may, by resolution, authorize the municipal clerk to select and employ tabulators. Tabulators are to assist and be under the direction of the election inspectors after the polls close. Wis. Stat. § 7.30(3)(b).

Oaths of Office

1. All election officials are required to take and file an oath.
2. Municipal clerks administer the oath of office at the time of appointment or at a training session to:
    a. Election Inspectors (including Chief Inspectors)
    b. Election Registration Officials
    c. Special Voting Deputies
    d. Greeters
    e. Tabulators
3. The oath must be filed before the commencement of the official's duties.
4. The oath is valid for the entire two-year term of the appointment.
5. Substitute inspectors may be given the oath by another inspector, preferably the chief inspector, on Election Day at the polling place.
6. The following oaths may be obtained from the agency website or directly from the Wisconsin Elections Commission.
    a. *Official Oath (EL-154)*: Filed by Election Inspectors, Chief Inspectors and Election Registration Officials , Greeters and Tabulators.
    b. *Oath of Special Voting Deputy (EL-155)*: Filed by Special Voting Deputies.

Wis. Stat. § 7.30 (5).

Removing Election Officials

As municipal clerk, you have the authority to dismiss an inspector summarily if he or she is found to lack the qualifications for the position, neglects his or her duties during an election, electioneers, or commits official misconduct. Wis. Stat. § 7.15(1)(f). However, in the interest of fairness, a hearing before the governing body is recommended before dismissal. Where it is found that an inspector has intentionally failed to properly endorse a ballot or intentionally given a voter a ballot not properly endorsed, that inspector should be suspended immediately by the chief inspector pending the filing of formal charges by the District Attorney. The chief inspector needs to inform the municipal clerk of such an action. The clerk fills the temporary vacancy for that election and schedules a hearing before the governing body to hear the case before taking final action.

Frequently Asked Questions

1. *What if a trained election inspector is not available to work at an election, and I have to use an inspector who has not been trained within the last two years?*

   In the event that a trained election inspector has an emergency and can't work on Election Day, an inspector who has not received training may be appointed to serve as an inspector, but not as a chief inspector, Election Registration Official or Special Voting Deputy. The appointment of an untrained individual is for a specific election only, and the untrained individual may only be appointed once in a two-year period. If the clerk is aware of the vacancy prior to Election Day, the clerk must provide some type of election training to the election inspector.

2. *What should I do if there is an emergency and I do not have a certified chief inspector?*

   You should contact an Elections Specialist at the Wisconsin Elections Commission who will direct you on the actions to be taken. The Wisconsin Elections Commission recommends arrangements should be made to have alternate trained chief inspectors available in case of emergency.

3. *What is "Baseline" training?*

   Baseline training is a two or three-hour chief inspector training course on basic election-day administration conducted by Wisconsin Elections Commission staff or WEC certified clerk-trainers. The Baseline class is also available online in the WEC Learning Center. Baseline training is required for initial certification as a chief inspector.

4. *I have a person who is interested in becoming a certified chief inspector. What does the person have to do to qualify as a certified chief inspector for the current term?*

   The individual may accomplish certification by attending the Baseline training. Attendance at Baseline training will certify the new chief inspector for the current term. The newly certified chief inspector is eligible to serve at all subsequent elections during the current term.

5. *My chief inspector is certified for the current term. What else must he or she do in order to recertify for the next term?*

   In order to recertify for the next term, the inspector will need to accumulate a minimum of six hours of Wisconsin Elections Commission approved training during the current term.

Election Inspectors
Kronenwetter Village Elections

Election Inspectors /Assignments	Wards 1-6	Wards 7-11
Greeter	1 for both	
Badger Books	4	4
DS200	1	1
Ballot Table	2	2
Absentee Ballots	3	3
Chief Inspectors	2	2
Election Inspectors due to Spilt Shifts	5	5

village of Kronenwetter

Report to CLIPP

Agenda Item: Discussion and Possible Action: Updated Capital Improvement Plan
Meeting Date: August 4, 2025
Referring Body: CLIPP
Committee Contact:
Staff Contact: Greg Ulman
Report Prepared by: Greg Ulman

AGENDA ITEM: Discussion and Possible Action: Updated Capital Improvement Plan

OBJECTIVE(S): To have the CLIPP Committee discuss the CIP and move items around based on available funding and priority.

HISTORY/BACKGROUND: CLIPP is looking to recommend projects to the Village Board based on our needs and our budget. The CIP presented may not have all budgetary information attached because we are still waiting on more information to be presented to staff, ex: road costs based on core holes.

RECOMMENDED ACTION: To give direction as CLIPP sees fit.

VILLAGE OF KRONENWETTER
Capital Improvements Program: 2026-2032
Estimates as of 7/31/2025

	YEAR						
	2026	2027	2028	2029	2030	2031	2032
Sewer Revenue Bonds:							
Lift Station 3 removal	$ 600,000						
Lift Station 1 generator	$ 250,000						
Village Garage (2 Sewer bays)	$ 266,666						
Lift Station 5 Panel Upgrade & Generator		$ 300,000					
Hoist Truck (if garage exists)		$ 100,000					
Sewer Vacuum Truck (if garage exists)		$ 550,000					
Replace Plow Truck		$ 80,000					
Lift Station 7 Panel Upgrade & Generator			$ 500,000				
Lift Station 9 Panel Upgrade				$ 300,000			
Lift Station 10 removal					$ 400,000		
TOTAL - Sewer Revenue Bonds	$ 1,116,666	$ 1,030,000	$ 500,000	$ 300,000	$ 400,000	$ -	$ -
Water Revenue Bonds:							
Upgrade all lift stations to SCADA/Cellular Systems					$ 550,000		
TOTAL - Water Revenue Bonds	$ -	$ -	$ -	$ -	$ 550,000	$ -	$ -
General Obligation Debt or General Tax Levy:							
Village-wide:							
Village Garage (2 parks bays, 2 police bays)	$ 533,334						
Public Works:							
Crew Cab Pickup Truck - DPW		$ 65,000					
Front End Loader - DPW			$ 275,000				
Tandem Axle Dump Truck - DPW					$ 400,000		
Wheeled Excavator - DPW						$ 320,000	
Front End Loader - DPW							$ 300,000
Parks:							
1-Ton Dump Truck - Parks	$ 80,000						
New Playground Structure - Buska Park	$ 125,000						
Kyak Launch/Dock - Municipal Park Pond	$ 25,000						
Diggers - Seville Park		$ 5,000					
Toro Groundsmaster Lawnmower - Parks			$ 25,000				
Repair/Remove Ball Diamond and Dugouts - Buska			?				
Climbing Web - Municipal Park				$ 40,000			
Park Benches - Norm Plaza Park					$ 4,000		
Fencing for New Dog Park - Norm Plaza Park					$ 65,000		
New Playground Structure - Towering Pines Park							
Roads:							
Maple Ridge Road - CTH X to Kronen Dr	?						
Peplin Road - pulverize & chip (1 mile)		$ 120,000					
Martin Road - reconstruction (3 miles)			$ 3,000,000				
South Road - Village limits to Wisz Rd			?				
Forrest Road				?			
Autumn Road				?			
TOTAL - General Obligation Debt or General Tax Levy	$ 763,334	$ 190,000	$ 3,300,000	$ 40,000	$ 469,000	$ 320,000	$ 300,000
Equipment Replacement Fund Balance:							
Tandem Axle Dump Truck - DPW (2025 = $160,000 Chassis; and 2026 = $155,000 Box/Plow)	$ 155,000						
TOTAL - Equipment Replacement Fund Balance	$ 155,000	$ -	$ -	$ -	$ -	$ -	$ -
GRAND TOTAL	**$ 2,035,000**	**$ 1,220,000**	**$ 3,800,000**	**$ 340,000**	**$ 1,419,000**	**$ 320,000**	**$ 300,000**

REPORT TO CLIPP

ITEM NAME:	2026 Budget Guidelines and Expectations
MEETING DATE:	July 28, 2025
PRESENTING COMMITTEE:	NA
COMMITTEE CONTACT:	David Baker
STAFF CONTACT:	John Jacobs
PREPARED BY:	David Baker

ISSUE: The Village is developing a Budget per the Budget timeline approved by the Village Board.

OBJECTIVES: Provide the Standing Committees and the Village Board with opportunities to provide guidance and set expectations for development of the 2025 Village Budget

ISSUE BACKGROUND/PREVIOUS ACTIONS: This agenda item is in accordance with the "Budget Guidelines and Expectations" APC meeting specified in the Budget timeline.

PROPOSAL:

ADVANTAGES:
DISADVANTAGES:

ITEMIZE ALL ANTICIPATED COSTS (Direct or Indirect, Start-Up/One-Time, Capital, Ongoing & Annual, Debt Service, etc.)

RECOMMENDED ACTION: Review, Consider and potentially make recommendations regarding the 2026 Budget.

OTHER OPTIONS CONSIDERED:
TIMING REQUIREMENTS/CONSTRAINTS:

FUNDING SOURCE(s) – Must include Account Number/Description/Budgeted Amt CFY/% Used CFY/$
Remaining CFY
Account Number:
Description:
Budgeted Amount:
Spent to Date:
Percentage Used:
Remaining:

ATTACHMENTS (describe briefly): Preliminary proposed Budget Worksheets

VILLAGE OF KRONENWETTER
Property Tax Levies for 2020-2030 Budget Years
(excluding Tax Increment Districts)
Prepared as of 7/23/2025

Fund Name	Fund #	2020 Adopted	2021 Adopted	2022 Adopted	2023 Adopted	2024 Adopted	2025 Original Adopted	2025 Amended on 4/14/2025	2026 Estimate	2027 Estimate	2028 Estimate	2029 Estimate	2030 Estimate
		Budget Years											
General	100	$ 967,594	$ 1,094,850	$ 1,351,978	$ 1,631,019	$ 1,655,461	$ 2,206,116	$ 1,940,583	TBD	TBD	TBD	TBD	TBD
Debt Service	350	$ 1,162,002	$ 1,110,000	$ 750,000	$ 700,000	$ 193,012	$ 110,636	$ 662,169	$ 725,900	$ 775,853	$ 778,128	$ 551,278	$ 385,828
Capital Projects	410	$ 125,361	$ 100,000	$ 200,000	$ -	$ 200,000	$ 200,000	$ -	TBD	TBD	TBD	TBD	TBD
Equipment Replacement	750	$ 100,000	$ 130,000	$ 200,000	$ 200,000	$ 428,500	$ 86,000	$ -	TBD	TBD	TBD	TBD	TBD
TOTAL PROPERTY TAX LEVY - excluding TID's		**$ 2,354,957**	**$ 2,434,850**	**$ 2,501,978**	**$ 2,531,019**	**$ 2,476,973**	**$ 2,602,752**	**$ 2,602,752**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Remaining Tax Levy to be distributed, if keep Tax Levy "frozen" at 2025 budgetary level --->									$ 1,876,852	$ 1,826,899	$ 1,824,624	$ 2,051,474	$ 2,216,924
Total Tax Levy, if kept "frozen" at 2025 budget level								$ 2,602,752	$ 2,602,752	$ 2,602,752	$ 2,602,752	$ 2,602,752	$ 2,602,752
Tax Levy Adjustment Assumptions:													
1) Plus: Net New Construction Increase: 0.25% for 2026									$ 4,650	$ 4,650	$ 4,650	$ 4,650	$ 4,650
2) Plus: Net New Construction Increase: 0.25% for 2027									$ -	$ 4,662	$ 4,662	$ 4,662	$ 4,662
3) Plus: Net New Construction Increase: 0.25% for 2028									$ -	$ -	$ 4,674	$ 4,674	$ 4,674
4) Plus: Net New Construction Increase: 0.25% for 2029									$ -	$ -	$ -	$ 4,685	$ 4,685
5) Plus: Net New Construction Increase: 0.25% for 2030									$ -	$ -	$ -	$ -	$ 4,697
Estimated Annual Tax Levy for Village, using 2025 Budget as the "Base" amount.								**$ 2,602,752**	**$ 2,607,402**	**$ 2,612,064**	**$ 2,616,738**	**$ 2,621,423**	**$ 2,626,120**

Notes:

1) Debt Service Tax Levy for 2024 budget should have been = $732,428. This was $539,416 short.
2) Debt Service Tax Levy for 2025 budget should have been = $794,578. This was $683,942 short.

TAX LEVY DISTRIBUTION - 2025 Budget:

	General Fund	Debt Service Fund	Capital Projects	Internal Equipment Replacement Fund	TOTAL
2025 Original Adopted Budget	$ 2,206,116	$ 110,636	$ 200,000	$ 86,000	$ 2,602,752
Proposed Budget Adjustments:					
Move Tax Levy - TID #1 Transfer	$ (100,533)	$ 100,533	$ -	$ -	$ -
Move Tax Levy - Public Works savings	$ (145,000)	$ 145,000	$ -	$ -	$ -
Move Tax Levy - Treasurer savings	$ (20,000)	$ 20,000	$ -	$ -	$ -
Move Tax Levy - from Capital Projects Fund	$ -	$ 200,000	$ (200,000)	$ -	$ -
Move Tax Levy - from Equip. Replace. Fund	$ -	$ 86,000	$ -	$ (86,000)	$ -
2025 Amended Budget - as of 4/14/25	**$ 1,940,583**	**$ 662,169**	**$ -**	**$ -**	**$ 2,602,752**

2026 Budget Worksheet
Guidelines and Expectations
Very Preliminary
Prepared by David Baker
Not Reviewed by any Staff

Initial Assumption: No Revenue Increase Except Levy

AL FUND - REVENUES BY CATEGORY	2024	2025	2026			Change in Revenue
Tax Levy	$2,476,973.00	$2,602,752.00	$2,711,512.44	Net New Construction	0.25%	$4,650.36
Intergovernmental Revenues	$2,397,359.85	$2,802,477.67	$2,802,477.67	Tax Levy Increase (%)	4.00%	$104,110.08
Permits & Licenses	$62,927.23	$57,775.00	$57,775.00		4.25%	
Municipal Court	$34,000.00	$36,000.00	$36,000.00			
Public Charges for Services	$538,918.64	$537,700.00	$537,700.00			
Misc. Revenues	$269,609.83	$247,700.00	$247,700.00			
Other Financing Sources	$402,528.07	$2,500.00	$2,500.00			
Total Revenues	$6,182,316.62	$6,286,904.67	$6,395,665.11			
Less Debt Service	$193,012.00	$662,169.00	$725,900.00			
Less Capital Projects	$200,000.00	$0.00	$200,000.00			
Less Equipment Replacement	$428,500.00	$0.00	$100,000.00			
Less TID #1 Shortfall	$112,500.00	$112,500.00	$112,500.00			
Available for General Fund	$5,248,304.62	$5,512,235.67	$5,257,265.11			
Estimated General Fund Expenditure	$4,926,966.42	$5,074,775.41	$5,222,584.41	(Based on 2024 Actual Expenditures + 3% per year)		
Surplus (Shortage)		$437,460.26	$34,680.70			

General Fund
Expenditures
Based on 2024 Actual Expenditures

CostCenter	Cost Center Name	2024 ACT	2024 BUD	Percent Increase 3% Per Year, for 2 years	Based on 2024 Actual Expenditures Plus Increase
100-51000	Village Board	$29,277.49	$37,524.50	$1,756.65	$31,034.14
100-51200	Municipal Court	$19,013.58	$32,500.00	$1,140.81	$20,154.39
100-51300	Legal	$126,639.87	$130,000.00	$7,598.39	$134,238.26
100-51400	General Office	$150,688.04	$136,850.00	$9,041.28	$159,729.32
100-51410	Administrator	$59,482.84	$122,782.12	$3,568.97	$63,051.81
100-51420	CD/z	$111,448.10	$132,553.36	$6,686.89	$118,134.99
100-51421	Village Clerk	$92,484.85	$99,392.82	$5,549.09	$98,033.94
100-51422	Deputy Clerk	$7,636.17	$8,909.58	$458.17	$8,094.34
100-51423	Admin Assistant	$77,569.11	$79,116.12	$4,654.15	$82,223.26
100-51425	Plan Tech	$38,799.82	$71,064.59	$2,327.99	$41,127.81
100-51427	Account Clerk	$65,248.92	$79,543.12	$3,914.94	$69,163.86
100-51440	Elections	$46,524.68	$48,530.00	$2,791.48	$49,316.16
100-51500	Committees	$4,152.90	$11,100.00	$249.17	$4,402.07
100-51520	Finance	$53,706.64	$67,254.66	$3,222.40	$56,929.04
100-51530	Assessor	$19,824.39	$17,450.00	$1,189.46	$21,013.85
100-51600	Municipal Building	$183,312.95	$330,662.25	$10,998.78	$194,311.73
100-51900	Other	$129,753.51	$77,742.00	$7,785.21	$137,538.72
100-52000	Police	$1,427,847.72	$1,543,853.17	$85,670.86	$1,513,518.58
100-52200	Fire & EMS	$400,096.91	$445,180.35	$24,005.81	$424,102.72
100-52400	Building Inspector	$18,497.81	$26,600.00	$1,109.87	$19,607.68
100-52800	PFC	$6,207.59	$7,652.31	$372.46	$6,580.05
100-53000	Public Works	$1,732,748.39	$2,050,585.46	$103,964.90	$1,836,713.29
100-55000	Parks	$108,609.14	$123,764.80	$6,516.55	$115,125.69
100-59000	Transfer	$17,395.00	$17,395.00	$1,043.70	$18,438.70
		$4,926,966.42	$5,698,006.21	$295,617.99	$5,222,584.41

Major Potential Adjustments to 2024 Actual Expenditures

Item	Expected Cost	2024 Actual Cost	Additional 2026	Or Savings 2026
Reassessment	$190,000	(Recommended to Fund from 2025)		
Administrator	$140,000	$60,044	$79,956	$60,044
Planning Tech	$85,000	$39,174	$45,826	
Administrative Assistant	$83,000	$83,500		
Finance Director	$42,172	$54,096		$11,924
Salt				
Village Clerk			$10,000	
Account Clerk Training			$6,400	
Building (Vaccum Truck, Police)				
Maple Ridge				
Storm Sewer				
Contingency				