



## **United City of Yorkville**

651 Prairie Pointe Drive

Yorkville, Illinois 60560

Telephone: 630-553-4350

[www.yorkville.il.us](http://www.yorkville.il.us)

### **AGENDA PUBLIC WORKS COMMITTEE MEETING**

**Tuesday, November 21, 2023**

**6:00 p.m.**

East Conference Room #337

651 Prairie Pointe Drive, Yorkville, IL

---

#### **Citizen Comments:**

**Minutes for Correction/Approval:** October 17, 2023

#### **New Business:**

1. PW 2023-84 Route 47 Expansion and Improvements – Update and Overview
2. PW 2023-85 Kane-Kendall Council of Mayors (KKCOM) Call for Projects
3. PW 2023-86 Special Service Area – Fox Hill & Sunflower Estates – Maintenance Services
4. PW 2023-87 2023 Road to Better Roads – Change Order No. 1 and Final Payment Estimate
5. PW 2023-88 Meeting Schedule for 2024

#### **Old Business:**

1. PW 2023-83 Kylyns Ridge Subdivision Traffic Sign Analysis

#### **Additional Business:**

UNITED CITY OF YORKVILLE  
WORKSHEET  
**PUBLIC WORKS COMMITTEE**  
**Tuesday, November 21, 2023**  
**6:00 PM**  
CITY HALL CONFERENCE ROOM

---

**CITIZEN COMMENTS:**

---

---

**MINUTES FOR CORRECTION/APPROVAL:**

---

1. October 17, 2023

- ☐ Approved \_\_\_\_\_
- ☐ As presented
- ☐ With corrections

---

**NEW BUSINESS:**

---

1. PW 2023-84 Route 47 Expansion and Improvements – Update and Overview

- ☐ Moved forward to CC \_\_\_\_\_
  - ☐ Approved by Committee \_\_\_\_\_
  - ☐ Bring back to Committee \_\_\_\_\_
  - ☐ Informational Item
  - ☐ Notes \_\_\_\_\_
- 
-

---

2. PW 2023-85 Kane-Kendall Council of Mayors (KKCOM) Call for Projects

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

3. PW 2023-86 Special Service Area – Fox Hill & Sunflower Estates – Maintenance Services

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

4. PW 2023-87 2023 Road to Better Roads – Change Order No. 1 and Final Payment Estimate

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

5. PW 2023-88 Meeting Schedule for 2024

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

**OLD BUSINESS:**

---

1. PW 2023-83 Kylyns Ridge Subdivision Traffic Sign Analysis

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

**ADDITIONAL BUSINESS:**

---





Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input type="checkbox"/>
City Administrator	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

Minutes

Tracking Number

### Agenda Item Summary Memo

**Title:** Minutes of the Public Works Committee – October 17, 2023

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** \_\_\_\_\_  
\_\_\_\_\_

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Committee Approval

**Submitted by:** Minute Taker

Name

Department

#### Agenda Item Notes:

---

---

---

---

---

**UNITED CITY OF YORKVILLE  
PUBLIC WORKS COMMITTEE  
Tuesday, October 17, 2023, 6:00pm  
Yorkville City Hall, East Conference Room #337  
651 Prairie Pointe Drive, Yorkville, IL**

**IN ATTENDANCE:**

**Committee Members**

Chairman Ken Koch  
Alderman Rusty Corneils

Alderman Matt Marek (via Zoom)  
Alderman Craig Soling (arr. 6:07pm)

**Other City Officials**

City Administrator Bart Olson  
Engineer Brad Sanderson, EEI  
Alderman Chris Funkhouser (arr. 6:11pm)

Assistant City Administrator Erin Willrett (via Zoom)  
Public Works Director Eric Dhuse

**Other Guests:** None

The meeting was called to order at 6:00pm by Chairman Ken Koch.

**Citizen Comments:** None

**Previous Meeting Minutes:** September 19, 2023  
The minutes were approved as presented.

**New Business:**

***1. PW 2023-79 Capital Improvement Projects Update***

Mr. Sanderson said this is the quarterly update. The storage tank near the Public Works building is progressing and it should be complete in mid-November. Contract B is the second watermain project south of the tank and is about 70% complete. Some water service work east of Rt. 47 along with some concrete paving will be finishing up in the next few weeks. Alderman Koch asked if these projects will be totally complete this year and he cited some of the streets that will only receive the first coat this year. Mr. Dhuse said the projects described by Mr. Sanderson will be totally complete this year and the projects south of Somonauk St. will be fully paved. No further action needed.

***2. PW 2023-80 Quarterly Bond and Letter of Credit Reduction Summary***

This is a quarterly update also. There is one reduction in Windett Ridge and there was one earlier in the year. All homes are now built in this area, said Mr. Dhuse.

***3. PW 2023-81 North Central Tank Rehabilitation – Change Order No. 2***

Mr. Sanderson said there are 2 items for consideration. The original completion date was June 1<sup>st</sup> of this year and the city asked the contractor to delay it due to the well #7 project. The contractor agreed and did not make a change in the cost. The completion date was pushed to the end of November. The second consideration is that T-Mobile occupies space on the tank. They are changing out some equipment and requested some modifications to the tank. There were additional holes cut and miscellaneous work done. The city did not want to paint it and then cut the holes. Mr. Sanderson said T-Mobile will reimburse the city for the work in the amount of \$23,000. Mr. Sanderson recommended approval of both items and this item will move forward to the City Council consent agenda.

#### **4. *PW 2023-82 2024 Road to Better Roads – Design Engineering Agreement***

Mr. Olson said this is for the next year's road program for and is the base bid amount for about \$1.5 million. He said this amount may be increased pending the upcoming audit presentation and a discussion at the November Public Works meeting. If it is increased, a new 5-year proposal will be provided and an amendment will be made to this contract. The city wishes to proceed with scheduled work and he recommends approval of the \$84,990 design engineering contract. This will move to City Council regular agenda.

#### **5. *PW 2023-83 Kylyns Ridge Subdivision Traffic Sign Analysis***

A summary of this matter was presented by Mr. Sanderson. There were concerns raised in this area about speeding and additional signage. The four intersections in question were observed by engineering staff for possible modification of signage. Based on standard criteria, none of the intersections warranted any changes. They also looked at speed over a 7-day period. For 3 intersections, most traffic was in the speed range. They are not recommending any modifications at this time, but they suggested looking at it again in the future.

Alderman Funkhouser said this matter had been brought forth by some of the residents. He said he is just looking for traffic-calming measures including lane-striping for perceived lane narrowing, lane bumps and landscaping in the parkway. He said Aurora has used some of these methods successfully. He would like to look at this again next month. He noted there is only one street that has parking on one side only and he said residents like parking on both sides. Mr. Sanderson said a traffic-calming packet had been assembled a few years ago and he will bring that to the next meeting.

**Old Business:** None

**Additional Business:**

There was no further business and the meeting adjourned at 6:24pm.

Minutes respectfully transcribed from audio by  
Marlys Young, Minute Taker (absent from meeting)



Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #1

Tracking Number

PW 2023-84

### Agenda Item Summary Memo

**Title:** Proposed Rt 47 Improvements

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** \_\_\_\_\_  
\_\_\_\_\_

### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** None

**Council Action Requested:** Informational  
\_\_\_\_\_

**Submitted by:** Brad Sanderson Engineering  
Name Department

### Agenda Item Notes:

---

---

---

---

---



# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Rob Fredrickson, Finance Director  
Jori Behland, City Clerk

Date: November 14, 2023  
Subject: Rt 47 Improvements

---

This memo is to provide an update for the proposed Rt 47 improvements by IDOT. IDOT is planning the following projects:

## **Yorkville to Sugar Grove (\$110M)**

This project is proposed to be broken into three separate construction contracts as follows:

- Kennedy Road to Water Park Way (Yorkville)
- Water Park Way to Jericho Road (Yorkville)
- Jericho Road to Cross Street

Final Plans are being developed for each section and have been submitted to the City for review. Construction schedules are currently being developed but could begin as early as late 2024.

Soon, IDOT will be providing agreements for the City to consider and approve to finalize the breakdown of costs and maintenance expectations.

Attached are high level exhibits that depict the proposed locations of grassed medians, shared-use paths and traffic signals.

In addition, we have identified several sections of conflicts with the City's water main and sanitary sewer infrastructure. In areas where the City has existing easements, the relocation cost will be paid for by IDOT. In the other areas that are within existing IDOT row, the cost will most likely have to be borne by the City. The area near the Wrigley facility would fall into this category.

## **Caton Farm Road to Rt 71 (\$42M)**

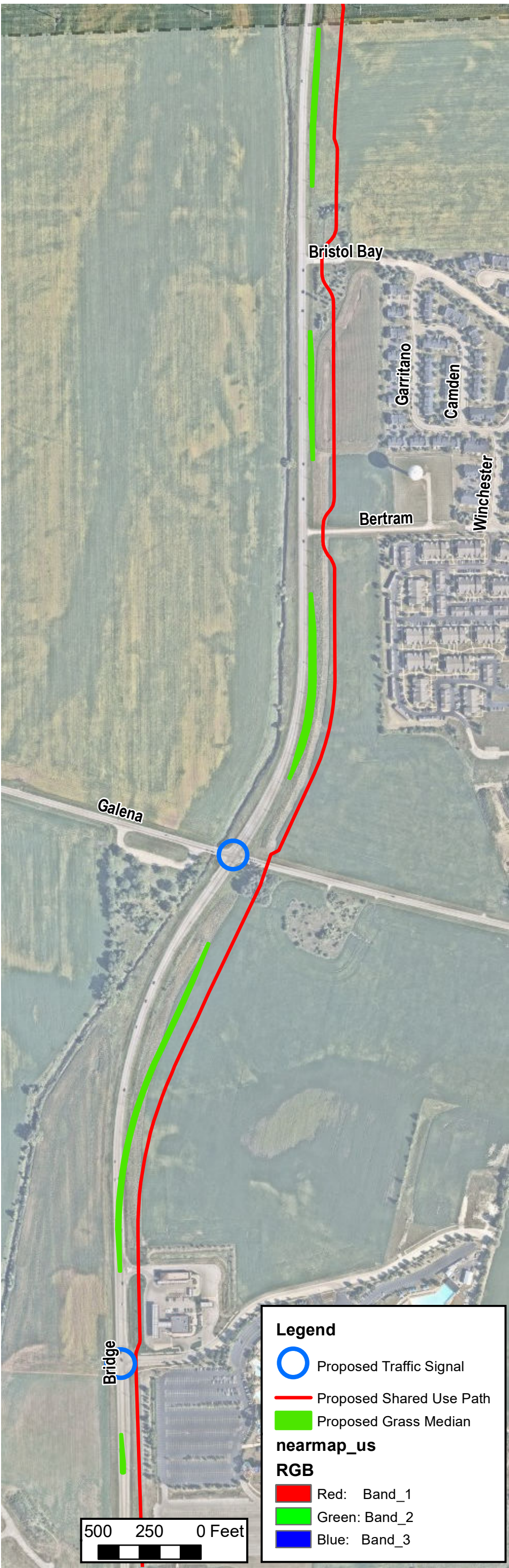
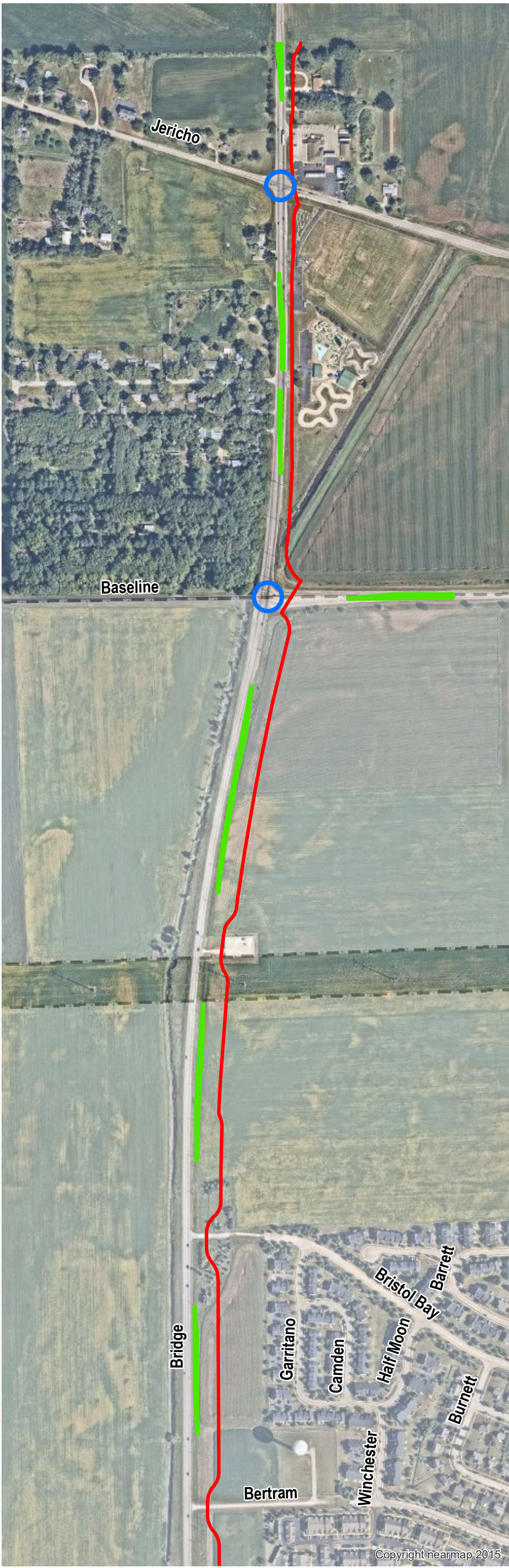
Final Plans are being developed and have been submitted to the City for review. Construction schedule is currently being developed but could begin as early as late 2024.

Soon, IDOT will be providing an agreement for the City to consider and approve to finalize the breakdown of costs and maintenance expectations.

Attached are high level exhibits that depict the proposed locations of grassed medians, shared-use paths and traffic signals.

In addition, we have identified several sections of conflicts with the City's water main infrastructure. It is likely that the cost will have to be borne by the City since the water main was constructed with existing IDOT row.





Legend

Proposed Traffic Signal

Proposed Shared Use Path

Proposed Grass Median

nearmap\_us

RGB

Red: Band\_1

Green: Band\_2

Blue: Band\_3



**Engineering Enterprises, Inc.**  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6756  
www.eeiweb.com

**United City of Yorkville**

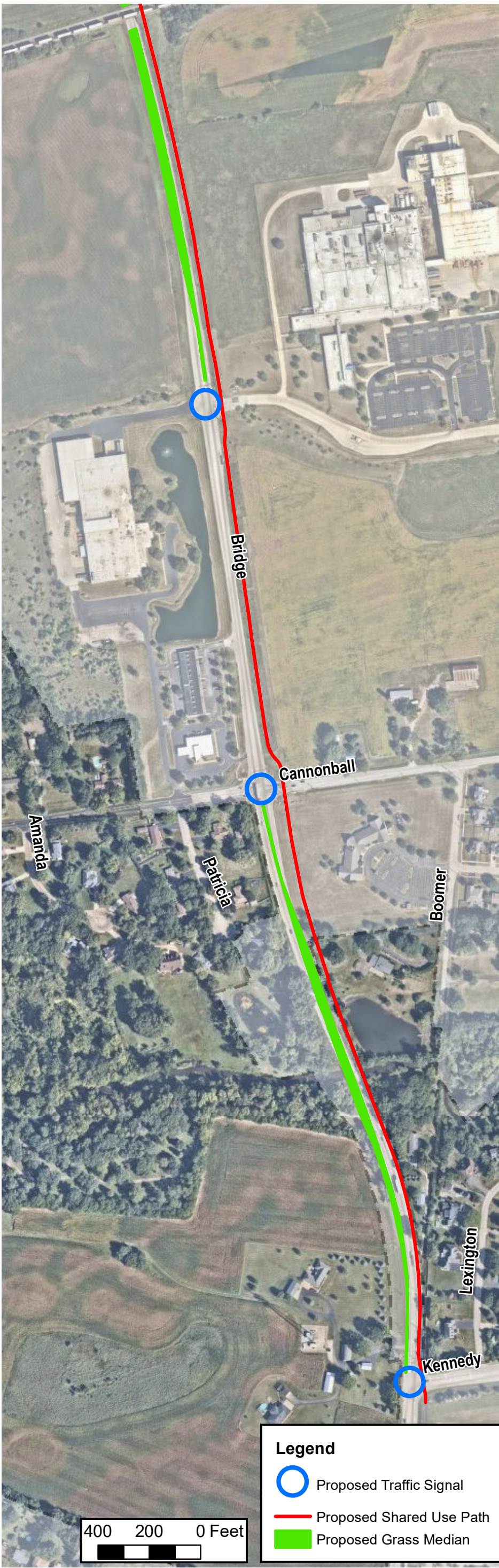
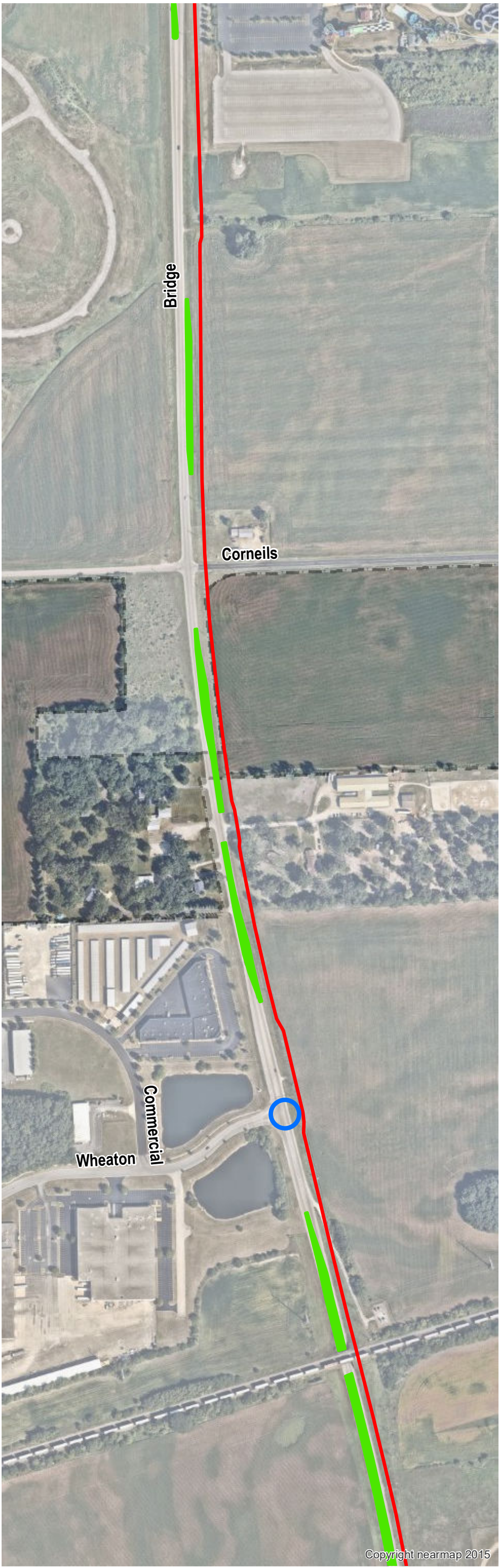
651 Prairie Pointe Dr  
Yorkville, IL 60560

DATE:	NOVEMBER 2023
PROJECT NO.:	YO1103
BY:	KKP
PATH:	H:\GIS\PUBLIC\YORKVILLE\2011\
FILE:	YO1103-DOT Contract 62M71

**CONTRACT 62M71  
PROPOSED IMPROVEMENTS**







**Engineering Enterprises, Inc.**  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6756  
[www.eeiweb.com](http://www.eeiweb.com)

**United City of Yorkville**

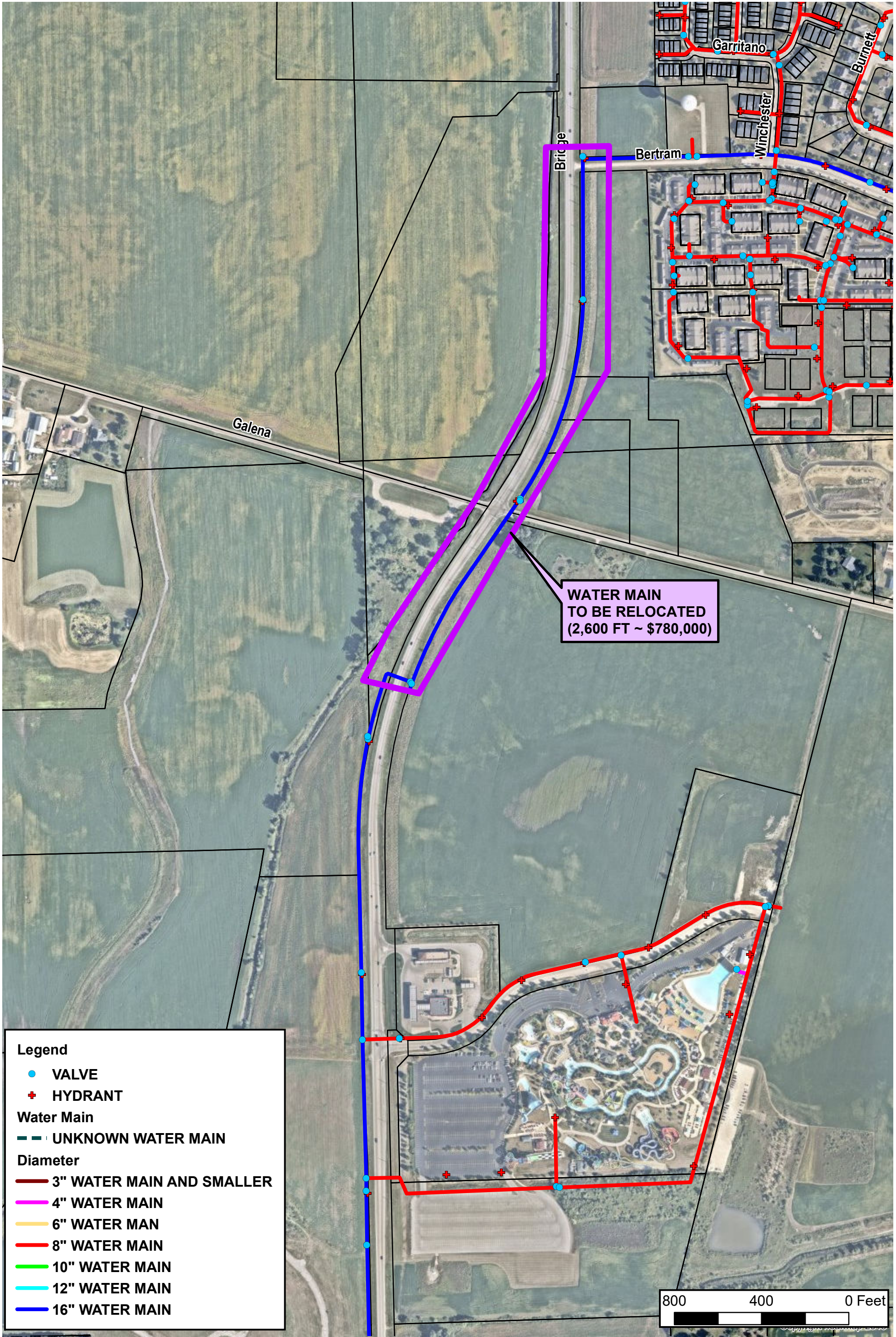
651 Prairie Pointe Dr  
Yorkville, IL 60560

DATE:	NOVEMBER 2023
PROJECT NO.:	YO1103
BY:	KKP
PATH:	H:\GIS\PUBLIC\YORKVILLE\2011\
FILE:	YO1103-DOT Contract 66989

**CONTRACT 66989  
PROPOSED IMPROVEMENTS**







Legend

- VALVE
- + HYDRANT

Water Main

UNKNOWN WATER MAIN

Diameter

- 3" WATER MAIN AND SMALLER
- 4" WATER MAIN
- 6" WATER MAIN
- 8" WATER MAIN
- 10" WATER MAIN
- 12" WATER MAIN
- 16" WATER MAIN



**Engineering Enterprises, Inc.**  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6756  
[www.eeiweb.com](http://www.eeiweb.com)

**United City of Yorkville**

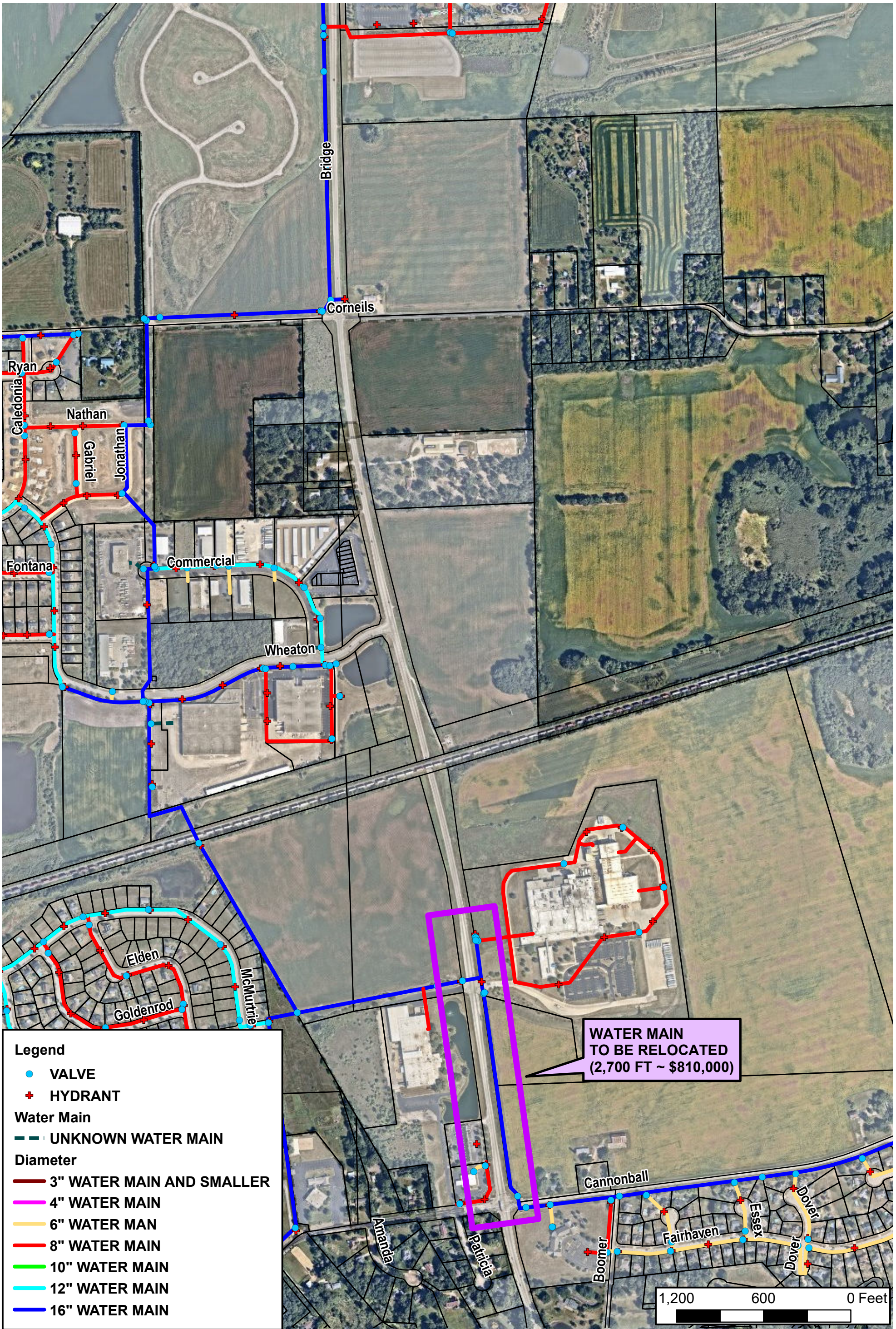
651 Prairie Pointe Dr.  
Yorkville, IL 60560

DATE:	OCTOBER 2023
PROJECT NO.:	YO1103
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2011\
FILE:	YO1103-IDOT Contract 62M7 Water Main Potential Relocation

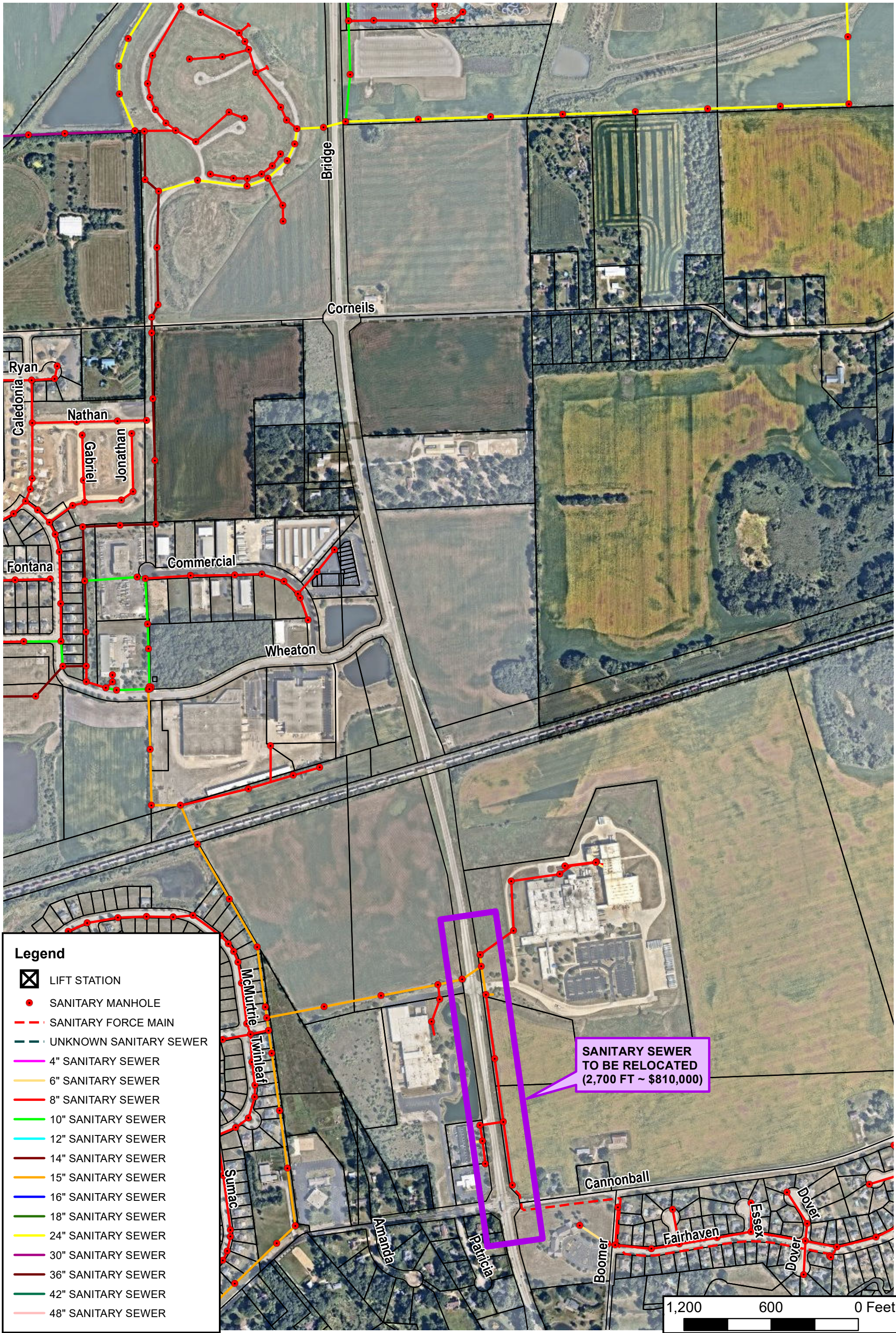
**IDOT  
CONTRACT - 62M7  
WATER MAIN  
LOCATION MAP**



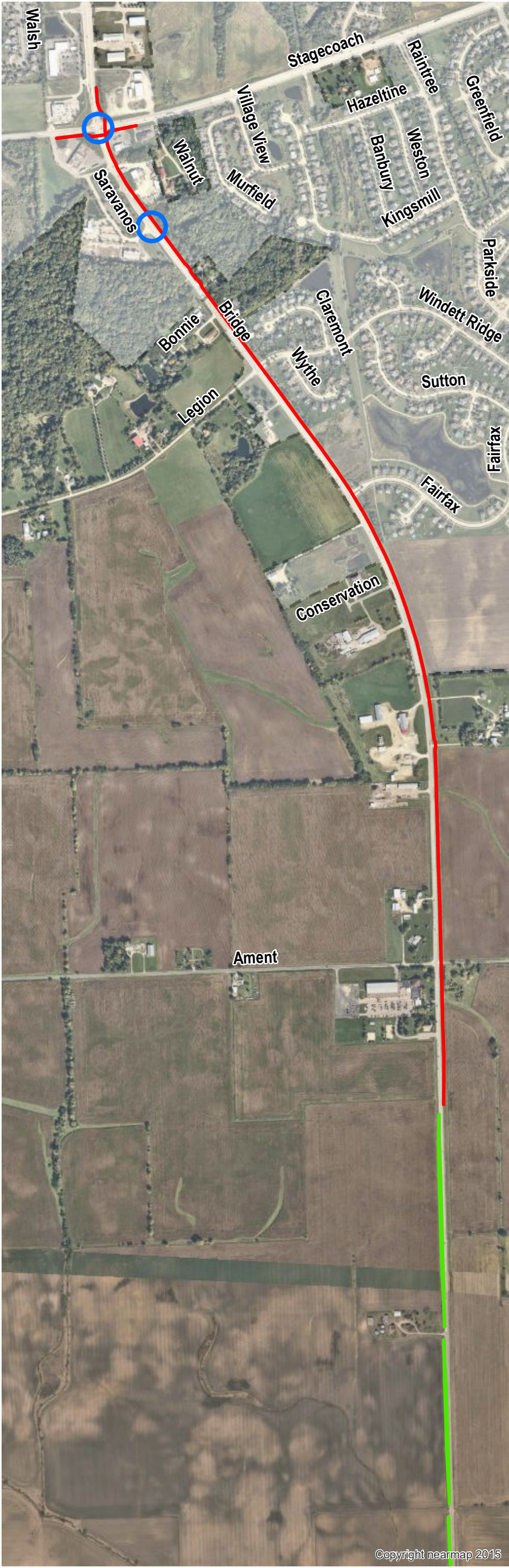












**Engineering Enterprises, Inc.**  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6756  
[www.eeiweb.com](http://www.eeiweb.com)

**United City of Yorkville**

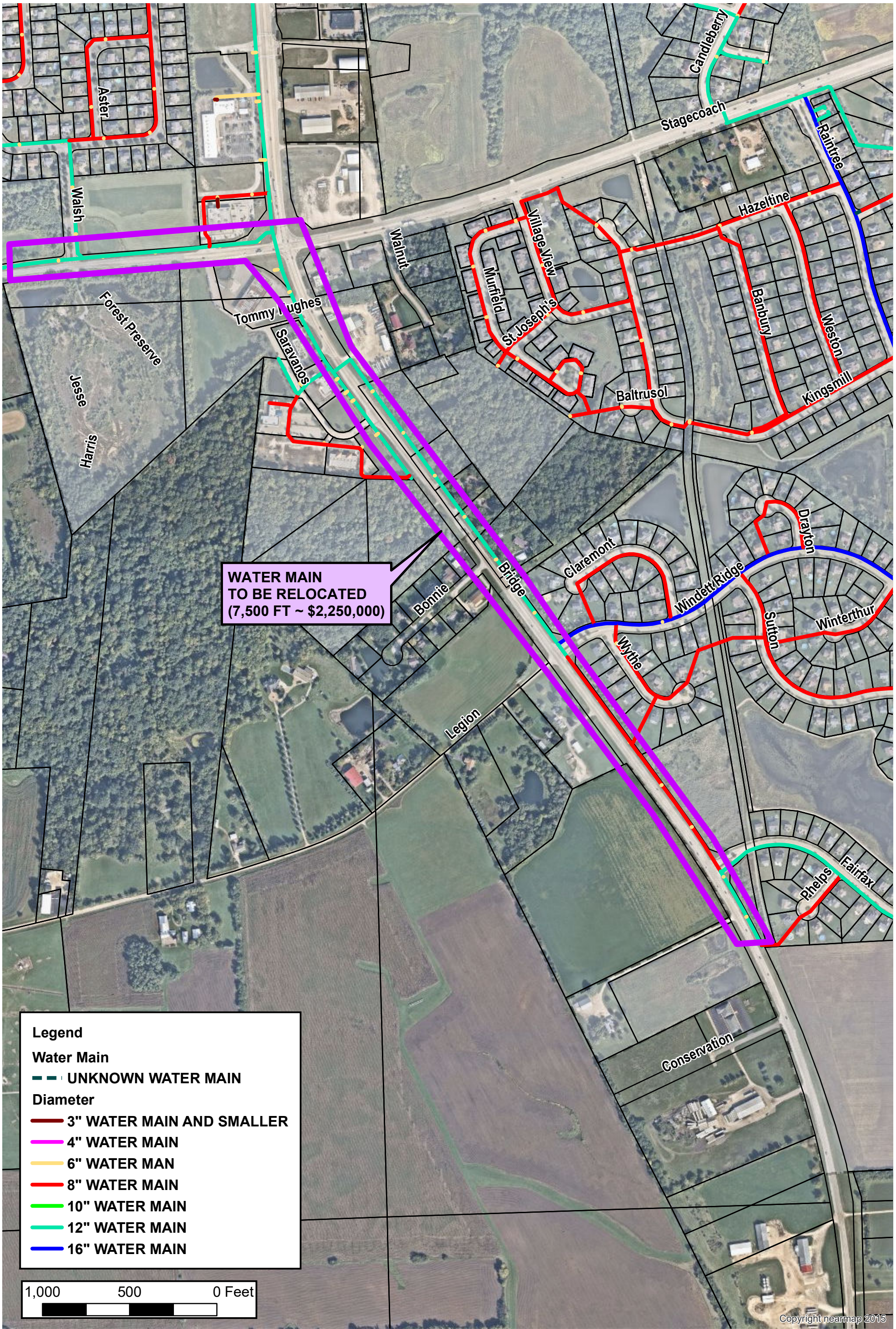
651 Prairie Pointe Dr  
Yorkville, IL 60560

DATE:	NOVEMBER 2023
PROJECT NO.:	YO1103
BY:	KKP
PATH:	H:\GIS\PUBLIC\YORKVILLE\2011\
FILE:	YO1103-IGOT Contract D366825

**CONTRACT D366825  
PROPOSED IMPROVEMENTS**











Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #2

Tracking Number

PW 2023-85

### Agenda Item Summary Memo

**Title:** KKCOM Call for Projects – Application

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** Application Consideration

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Consideration of Approval

**Submitted by:** Brad Sanderson Engineering  
Name Department

#### Agenda Item Notes:

---

---

---

---

---



# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Rob Fredrickson, Finance Director  
Jori Behland, City Clerk

Date: November 14, 2023  
Subject: KKCOM – Call for Projects

---

## **Background:**

The Kane-Kendall Council of Mayors (KKCOM) recently announced a call for projects. Generally, KKCOM funds three types of projects, Reconstruction, Minor Rehabilitation and Preservation (Resurfacing). In recent times, the City has taken advantage of the program and has received funding for Game Farm Road (Reconstruction), Cannonball Trail (Resurfacing), Mill Street (Resurfacing) and Bristol Ridge Road (Resurfacing).

## **Question Presented:**

Should the City submit an application for the 2023 Call for Projects?

## **Discussion:**

In order to be eligible for federal funding, a roadway must have a FAU Route designation. An exhibit indicating the FAU routes in the City is attached.

Staff has reviewed the City's eligible roadways and is recommending the following:

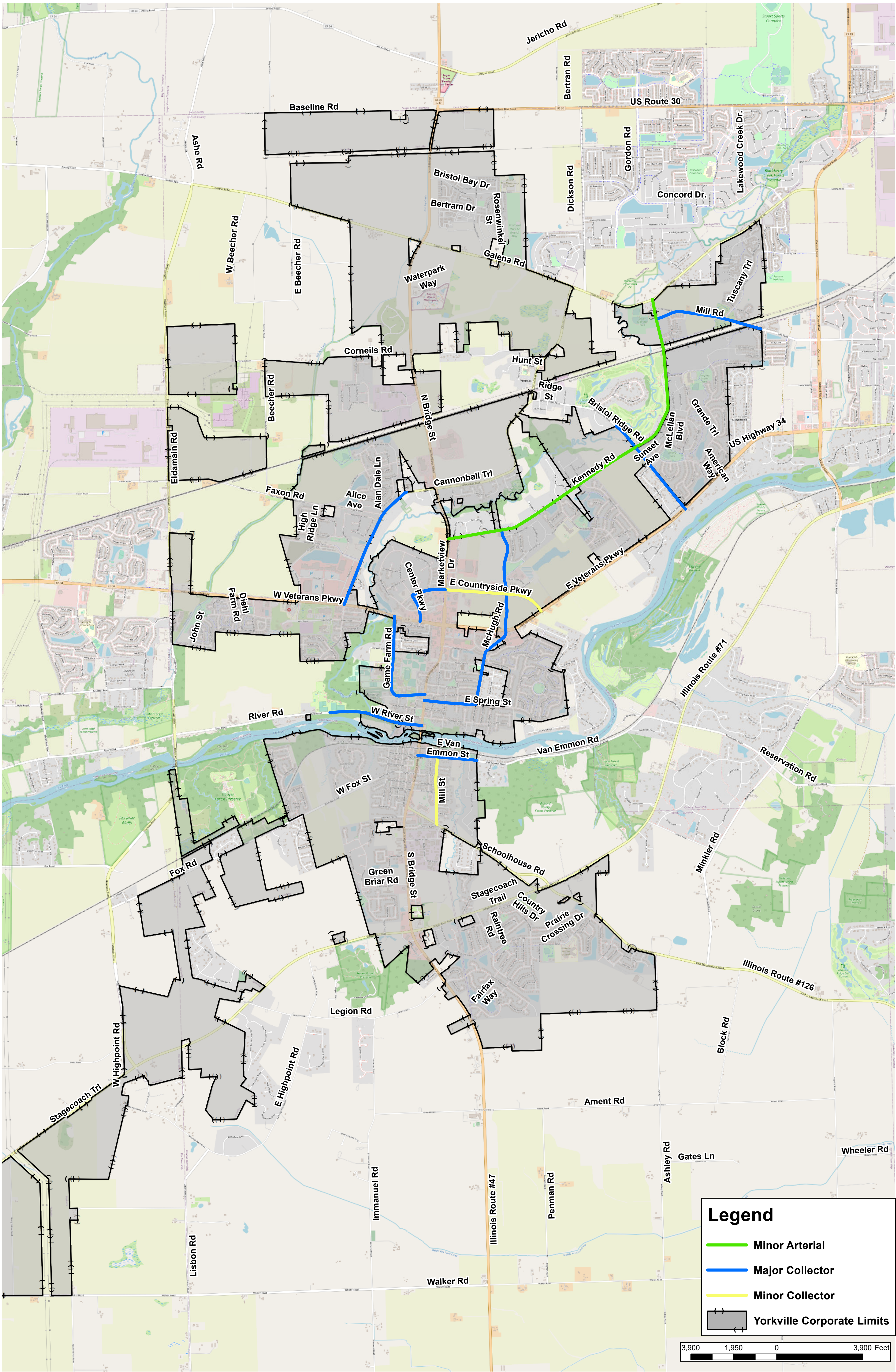
Resubmit East Van Emmon Street for this call. Recall that this roadway is currently on the contingency list and there is a high level of probability that the City will receive funding next year. The project is currently under design. If selected, the project would be 75% funded (Construction only) by the KKCOM. We are estimating a total project cost of \$583,000 (\$398,145 STP, \$184,855 Local).

Submit an application for Kennedy Road as noted on the attached exhibit. Generally, higher traffic volume streets have a better chance of receiving these funds and based on review of the potential scoring, there is a reasonable chance that this will be funded. This project would be a reconstruction/widening and would include intersection improvements at Bristol Ridge along with potential curve improvements. We are estimating a total project cost of \$3,123,000 (\$2,193,000 STP, \$930,000 Local). The detailed cost estimate is also attached for your information.

## **Action Required:**

Consideration of authorization to submit application for 2023 Call for Projects.





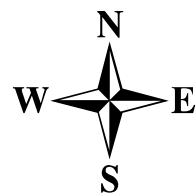
**Engineering Enterprises, Inc.**  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6700  
[www.eeiweb.com](http://www.eeiweb.com)

**CITY OF YORKVILLE**  
Kendall County, IL

DATE:	SEPTEMBER 2023
PROJECT NO.:	YO2300
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2023\YO2300
FILE:	YO2300 FAU ROUTE MAP YORKVILLE OWNERSHIP.MXD

**FAU ROUTE MAP  
CITY OF YORKVILLE**

**LOCATION MAP  
YORKVILLE'S JURISDICTION**





**PRELIMINARY COST ESTIMATE  
LAFO IMPROVEMENTS  
E. VAN EMMON STREET (FAU 2515)  
FROM IL ROUTE 47 TO CITY LIMITS  
2611 LF, 36' E-E ON AVERAGE  
UNITED CITY OF YORKVILLE, KENDALL COUNTY, IL**

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	450.0	\$ 30.00	\$ 13,500.00
2	SODDING, SALT TOLERANT	SQ YD	450.0	\$ 40.00	\$ 18,000.00
3	SUPPLEMENTAL WATERING	UNIT	10.0	\$ 10.00	\$ 100.00
4	BITUMINOUS MATERIALS (TACK COAT)	POUND	6,860.0	\$ 0.10	\$ 686.00
5	POLYMERIZED LEVELING BINDER, IL-4.75, N50	TON	590.0	\$ 100.00	\$ 59,000.00
6	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	400.0	\$ 15.00	\$ 6,000.00
7	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1,170.0	\$ 75.00	\$ 87,750.00
8	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5,215.0	\$ 7.50	\$ 39,112.50
9	DETECTABLE WARNINGS	SQ FT	100.0	\$ 30.00	\$ 3,000.00
10	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	10,160.0	\$ 3.00	\$ 30,480.00
11	COMBINATION CURB AND GUTTER REMOVAL	FOOT	440.0	\$ 5.00	\$ 2,200.00
12	SIDEWALK REMOVAL	SQ FT	5,215.0	\$ 1.50	\$ 7,822.50
13	CLASS D PATCHES, TYPE II, 5 INCH	SQ YD	110.0	\$ 50.00	\$ 5,500.00
14	CLASS D PATCHES, TYPE III, 5 INCH	SQ YD	110.0	\$ 45.00	\$ 4,950.00
15	CLASS D PATCHES, TYPE IV, 5 INCH	SQ YD	310.0	\$ 40.00	\$ 12,400.00
16	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	440.0	\$ 40.00	\$ 17,600.00
17	MOBILIZATION	L SUM	1.0	\$ 19,000.00	\$ 19,000.00
18	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.0	\$ 9,000.00	\$ 9,000.00
19	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.0	\$ 3,500.00	\$ 3,500.00
20	CHANGEABLE MESSAGE SIGN	CAL DAY	60.0	\$ 60.00	\$ 3,600.00
21	SHORT-TERM PAVEMENT MARKING	FOOT	660.0	\$ 3.00	\$ 1,980.00
22	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1,310.0	\$ 2.00	\$ 2,620.00
23	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	220.0	\$ 5.00	\$ 1,100.00
24	INLETS TO BE ADJUSTED	EACH	5.0	\$ 400.00	\$ 2,000.00
25	MANHOLES TO BE ADJUSTED	EACH	5.0	\$ 750.00	\$ 3,750.00
26	SANITARY MANHOLES TO BE ADJUSTED	EACH	5.0	\$ 1,250.00	\$ 6,250.00
27	THERMOPLASTIC PAVEMENT MARKINGS - 4"	FOOT	6,142.0	\$ 1.00	\$ 6,142.00
28	THERMOPLASTIC PAVEMENT MARKINGS - 24"	FOOT	40.0	\$ 5.00	\$ 200.00
29	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	40.0	\$ 150.00	\$ 6,000.00
	<b>TOTAL CONSTRUCTION COSTS (A)</b>				<b>\$ 373,243.00</b>

Cost estimate assumes 1" poly level binder, 2" surface & 5% patching

	<b>TOTAL CONSTRUCTION COSTS (A) - SEE FIRST SHEET</b>	<b>\$ 373,243.00</b>
	<b>CONTINGENCY (10%) (B=A*0.1)</b>	<b>\$ 37,330.00</b>
	<b>TOTAL CONSTRUCTION COST WITH CONTINGENCY AND 4% INFLATION UNTIL 2025 (C=A*1.04^3+B)</b>	<b>\$ 473,980.00</b>
	<b>PHASE II ENGINEERING (11%) (E = 0.11*C)</b>	<b>\$ 52,140.00</b>
	<b>RIGHT OF WAY (F)</b>	<b>\$ -</b>
	<b>PHASE III ENGINEERING AND MATERIAL TESTING (12%) (G=0.12*C)</b>	<b>\$ 56,880.00</b>
	<b>ESTIMATED PROJECT TOTAL (H = C+D+E+F+G)</b>	<b>\$ 583,000.00</b>



**PRELIMINARY COST ESTIMATE  
LAFO IMPROVEMENTS  
E. VAN EMMON STREET (FAU 2515)  
FROM IL ROUTE 47 TO CITY LIMITS  
2611 LF, 36' E-E ON AVERAGE  
UNITED CITY OF YORKVILLE, KENDALL COUNTY, IL**

	Local Funding Percentage	STP Funding Percentage
Engineering - Phase I:	100%	0%
Engineering - Phase II:	100%	0%
ROW:	100%	0%
Engineering - Phase III:	25%	75%
Construction:	25%	75%

	Estimated Cost (enter most recent cost)	Funding Request	Projected Fiscal Year
Engineering - Phase I:	\$ -	\$ -	
Engineering - Phase II:	\$ 52,140.00	\$ -	FY25
ROW:	\$ -	\$ -	
Engineering - Phase III:	\$ 56,880.00	\$ 42,660.00	FY26
Construction:	\$ 473,980.00	\$ 355,485.00	FY26
Total:	\$ 583,000.00	\$ 398,145.00	

	Local Funding
Engineering - Phase I:	\$ -
Engineering - Phase II:	\$ 52,140.00
ROW:	\$ -
Engineering - Phase III:	\$ 14,220.00
Construction:	\$ 118,495.00
Total:	\$ 184,855.00

G:\Public\Yorkville\2022\YO2204-C 2022 STP Call for Projects-Yorkville\Eng\East Van Emmons Street\[Van Emmon Street LAFO.xls]Yorkville





**Legend**

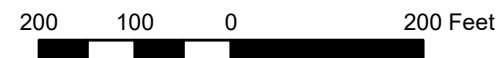
Project Limits

**Engineering Enterprises, Inc.**  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6700  
[www.eeiweb.com](http://www.eeiweb.com)



**United City of Yorkville**  
800 Game Farm Road  
Yorkville, IL 60560  
630-553-4350  
[www.yorkville.il.us](http://www.yorkville.il.us)

		DATE:	FEBRUARY 2022
		PROJECT NO.:	YO2204
		BY:	MJT
		PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
		FILE:	YO2204 VanEmmon Street Location Map
NO.	DATE	REVISIONS	



**E. VAN EMMON STREET  
LOCATION MAP**





# PRELIMINARY COST ESTIMATE

<b>JOB NO:</b>	YO2333-C
<b>DESIGNED:</b>	JHS
<b>DATE:</b>	November 10, 2023
<b>PROJECT TITLE:</b>	Kennedy Road Improvements - Emerald Ln to Freedom Dr

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	Earth Excavation	CY	2,025	\$ 50.00	\$ 101,250.00
2	Removal and Disposal of Unsuitable Material	CY	2,200	\$ 50.00	\$ 110,000.00
3	Geotechnical Fabric for Ground Stabilization	SY	3,450	\$ 3.00	\$ 10,350.00
4	Perimeter Erosion Barrier	LF	4,460	\$ 4.50	\$ 20,070.00
5	Aggregate Subgrade Improvement	CY	175	\$ 40.00	\$ 7,000.00
6	Aggregate Subgrade Improvement, 12"	SY	3,450	\$ 20.00	\$ 69,000.00
7	Bituminous Materials (Tack Coat)	LB	17,500	\$ 1.00	\$ 17,500.00
8	Hot-Mix Asphalt Surface Removal - Butt Joint	SY	140	\$ 30.00	\$ 4,200.00
9	Hot-Mix Asphalt Surface Removal, 3"	SY	22,710	\$ 3.50	\$ 79,485.00
10	Hot-Mix Asphalt Binder Course, IL-19.0, N70	TON	1,125	\$ 100.00	\$ 112,500.00
11	Polymerized Hot-Mix Asphalt Binder Course, IL-4.75, N50	TON	1,500	\$ 125.00	\$ 187,500.00
12	Hot-Mix Asphalt Surface Course, IL-9.5, Mix "D", N70	TON	3,000	\$ 105.00	\$ 315,000.00
13	Portland Cement Concrete Sidewalk, 5 Inch	SF	400	\$ 25.00	\$ 10,000.00
14	Sidewalk Removal	SF	400	\$ 10.00	\$ 4,000.00
15	Combination Concrete Curb and Gutter Removal and Replacement	LF	150	\$ 100.00	\$ 15,000.00
16	Pavement Removal	SY	460	\$ 20.00	\$ 9,200.00
17	Aggregate Shoulders, Type B 4"	SY	3,025	\$ 30.00	\$ 90,750.00
18	Thermoplastic Pavement Markings	LSUM	1	\$ 40,000.00	\$ 40,000.00
19	Traffic Staging	LSUM	1	\$ 25,000.00	\$ 25,000.00
20	Hot-Mix Asphalt Driveway Removal and Replacement	SY	375	\$ 45.00	\$ 16,875.00
21	Hot-Mix Asphalt Bike Path Removal and Replacement	SY	750	\$ 45.00	\$ 33,750.00
22	Partial Depth Patching	SY	2,275	\$ 60.00	\$ 136,500.00
23	Restoration	SY	7,500	\$ 12.00	\$ 90,000.00
24	Mobilization	LSUM	1	\$ 110,000.00	\$ 110,000.00
25	Drainage Improvements	LSUM	1	\$ 100,000.00	\$ 100,000.00
26	Traffic Control and Protection	LSUM	1	\$ 50,000.00	\$ 50,000.00

**TOTAL \$ 1,765,000.00**

**20% CONTINGENCY \$ 353,000.00**

**TOTAL ESTIMATED CONSTRUCTION COSTS \$ 2,118,000.00**

**TOTAL ESTIMATE PRELIMINARY CONSTRUCTION COST WITH INFLATION (4%) (2028) \$ 2,478,000.00**

**PHASE I ENGINEERING (8%) \$ 198,240.00**

**PHASE II ENGINEERING (8%) \$ 198,240.00**

**PHASE III ENGINEERING (10%) \$ 247,800.00**

**TOTAL PRELIMINARY COST ESTIMATE \$ 3,122,280.00**

**ESTIMATED FEDERAL SHARE \$ 2,193,030.00**

**ESTIMATED CITY SHARE \$ 929,250.00**







Copyright nearmap 2015

# **Engineering Enterprises, Inc.**



52 Wheeler Road  
Sugar Grove, Illinois 60554  
(630) 466-6700  
www.eeiweb.com



# **United City of Yorkville**

651 Prairie Pointe Dr.  
Yorkville, IL 60560  
www.yorkville.il.us

NO.	DATE	REVISIONS	DATE:	NOVEMBER 2023
			PROJECT NO.:	YO2333
			BY:	MJT
			PATH:	H:\GIS\PUBLIC\YORKVILLE\2023\
			FILE:	YO2333 Kennedy Rd.MXD

1,400 700 0 Feet

## **KENNEDY RD LOCATION MAP**







Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input checked="" type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #3

Tracking Number

PW 2023-86

### Agenda Item Summary Memo

**Title:** Fox Hill and Sunflower SSA area operational maintenance

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** Brief overview of upcoming maintenance in Fox Hill and Sunflower areas

### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** None

**Council Action Requested:** Informational

**Submitted by:** Eric Dhuse Public Works  
Name Department

### Agenda Item Notes:

---

---

---

---

---



# Memorandum

To: Public Works Committee  
From: Eric Dhuse, Director of Public Works  
CC: Bart Olson, City Administrator  
Date: November 13, 2023  
Subject: Fox Hill and Sunflower SSA Maintenance Services

---

## **Summary**

An overview of the upcoming years maintenance services for the Fox Hill and Sunflower SSA areas.

## **Background**

The Fox Hill SSA was started in 2004 and the Sunflower Estates SSA was started in 2007. In both cases, the HOA did not form when the subdivisions were at a point where the developer turns over the maintenance to the HOA. The city stepped in and created back up SSA's for the maintenance of the common areas. Since that time, the city has managed these subdivision open areas to maintain entry ways, boulevards, trails, and ponds.

Below is a breakdown of each subdivisions work items that are contemplated each year before submitting the levy to the county.

## **Fox Hill**

- Mowing – approximately 5 acres of turf grass, mainly adjacent to the trail system that runs throughout the single family portion only, of this development. Mowing also includes mechanical string trimming of all trees and the asphalt trail. We also provide fertilization and weed control for all turf grass areas. Trimming along private fences is NOT included in mowing, all fences are maintained privately. We have seen a dramatic increase in mowing and general maintenance costs over the last contract. The increase for mowing was 100% from the last contract.
- Tree trimming – Fox Hill was constructed from the mid 90's through the mid 00's, so the trees are mature and need trimming from time to time. We have increased our trimming program as the trees have matured. We now also have trees that are dying and trees that have roots that are buckling the trail system. We are addressing them as needed.
- General maintenance – this is for areas that may have grass die back, erosion, graffiti, or other items that are not specifically covered. We have our mowing contractor supply us with hourly wages in the contract, so the costs are known.
- Sign Maintenance – There was an entry sign to the subdivision at the corner of Diehl Farm Rd. and Rt. 34 before the widening of Rt. 34 occurred. IDOT paid the city \$23,000 for the right to remove the sign and widen the highway. This money is still in the account to replace the sign. It has proven very difficult to find a suitable location for a

replacement sign of any size. Without purchasing land or obtaining an easement for the sign, we will have to replace the sign with something much smaller. At this time, I cannot find a suitable site for the sign where it will be able to be seen from Rt. 34 as an entrance monument should. My last chance will be to work with the developer of the senior housing site on Sycamore Rd. to see if there is any place for an easement for the sign. If not, I would recommend that we put the money from IDOT into the maintenance of the SSA area and not have an entry sign.

- Trail maintenance – Fox Hill had been constructed for quite some time before the city took over administration and maintenance of the common areas. When we took over, the trails needed work and have been patched and sealed twice under our supervision. We are planning on having them crack filled and sealed again next year. I have also included a line item in the 5 year plan for 10% replacement every time we seal the trail after 2024. With some portions of the trail turning 30 in the coming years, we need to include some replacement costs in the budget.

### **Sunflower Estates**

- Mowing – approximately 5 acres of turf grass. The areas consist of the entrances and around the three storm water basins. This also mechanical string trimming of all landscape areas and sidewalk. Fertilization and weed control are also provided for all turf grass areas.
- Tree trimming – Sunflower has many mature trees at both entrances and along the parkway of the north stormwater basin. These trees must be trimmed from time to time. We significantly trimmed and removed trees at the north entry this year and will have to reshape the mulch area and re-landscape the area next year. In addition, we need to trim/remove trees and shrubs on the south boulevard. The mugo pines are original to the development and are now reaching their end of life. They have also become so large that they are crowding/competing with the trees causing some of both to become misshapen with no way to trim them without potentially killing them. There are also pear trees that need to be removed and a maple tree that is dying. This will be a big change in the way it looks, but it will be better for all of the plants in the long run.
- General maintenance – this is for areas that may have grass die back, erosion, graffiti, or other items that are not specifically covered. Landscape plantings are also contemplated in this area. Sunflower has perennials near the entrance signs that need replacement from time to time. We have our mowing contractor supply us with hourly wages in the contract, so the costs are known.
- Pond Maintenance – Sunflower has three stormwater basins. This has been the largest expense for this SSA area. Some years ago, it was decided to naturalize these basins to ensure proper function and to avoid dredging the pond bottoms due to silting. Instead of raising the levy to a very high amount, the city paid for the naturalization and the SSA area is repaying the city over time. This will increase the levy gradually instead of a sudden increase to the residents. To maintain these basins, it is necessary for us to perform a controlled burn in the early spring. From there, we will be able to assess the

overall health of the area and decide if we need to add more plants or leave everything as it is.

- Sign Maintenance – we contemplate any repairs, maintenance, or replacement of the entryway signs to the subdivision.

**Recommendation**

This is an informational item.





Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #4

Tracking Number

PW 2023-87

### Agenda Item Summary Memo

**Title:** 2023 Road to Better Roads Program - MFT

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** Recommendation to Approve Request for Change in Plans

and Final Payment Estimate

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Recommendation to Approve Request for Change in Plans and

Final Payment Estimate

**Submitted by:** Brad Sanderson Engineering  
Name Department

#### Agenda Item Notes:

---

---

---

---

---



# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Rob Fredrickson, Finance Director  
Jori Behland, City Clerk

Date: November 8, 2023  
Subject: 2023 Road to Better Roads - MFT

---

The 2023 Road to Better Roads Program was awarded to D. Construction 1488 S. Broadway Coal City, IL 60416 at total awarded value of \$1,197,204.31. The project is now complete and accepted.

The project came in \$22,229.78 under budget for a Final Construction Cost of \$1,174,974.53. Due to the use of Motor Fuel Tax Funds, the Request for Change in plans and Engineer's Final Payment Estimate needs to be approved by IDOT before final payment can be made.

We recommend that the City approve the Request for Change in Plans and Engineer's Final Payment Estimate.

If you have any questions or require additional information, please let us know.



## Request for Approval of Change of Plans

Local Public Agency	County	Route	Section Number
United City of Yorkville	Kendall	Various Local Roads	23-00000-00-GM
Request Number	Contractor		
1	D. Construction Inc.		
<input checked="" type="checkbox"/> Final			
Address	City	State	Zip Code
1488 S. Broadway	Coal City	IL	60416
Date			
11/06/23			

I recommend that this Deduction be made from the above contract.

The estimated quantities are shown below and the contractor agrees to furnish the materials and do the work at the unit prices.

Item Description	Unit of Measure	Quantity	Unit Price	Addition (A) or Deduction (D)	Total Addition	Total Deduction
- Supplemental Watering	Unit	10	\$220.0000	D	\$0.0000	\$2,200.0000
- Bituminous Materials (Tack Coat)	Pound	18982	\$0.0100	D	\$0.0000	\$189.8200
- Hot-Mix Asphalt Surface Removal - Butt Joint	Sq Yd	55	\$0.0100	D	\$0.0000	\$0.5500
- Hot-Mix Asphalt Binder Course, IL-9.5, N50	Ton	161	\$76.0000	D	\$0.0000	\$12,236.0000
- Hot-Mix Asphalt Surface Course, IL-9.5, Mix "D", N50	Ton	49	\$76.5000	D	\$0.0000	\$3,748.5000
- Sidewalk Removal	Sq Ft	1155	\$2.7500	A	\$3,176.2500	\$0.0000
- Portland Cement Concrete Sidewalk, 5 Inch	Sq Ft	1319	\$9.3500	A	\$12,332.6500	\$0.0000
- Detectable Warnings	Sq Ft	35	\$35.2000	A	\$1,232.0000	\$0.0000
- Combination Concrete Curb and Gutter Removal and Replacement	Foot	124	\$44.0000	A	\$5,456.0000	\$0.0000
- Hot-Mix Asphalt Surface Removal, Variable Depth	Sq Yd	196	\$2.5000	D	\$0.0000	\$490.0000
- Hot-Mix Asphalt Surface Removal, 3"	Sq Yd	298	\$2.7500	D	\$0.0000	\$819.5000
- Partial Depth Patching (Special)	Sq Yd	427	\$45.0000	D	\$0.0000	\$19,215.0000
- Routing and Sealing Cracks	Foot	405	\$0.6400	D	\$0.0000	\$259.2000
- Manholes To Be Adjusted	Each	1	\$800.0000	D	\$0.0000	\$800.0000
- Inlets To Be Adjusted	Each	14	\$440.0000	A	\$6,160.0000	\$0.0000
- Sanitary Manholes To Be Adjusted	Each	1	\$880.0000	D	\$0.0000	\$880.0000
- Type 3 Frame and Grate	Each	1	\$550.0000	A	\$550.0000	\$0.0000
- Thermoplastic Pavement Marking - Letters & Symbols	Sq Ft	347	\$6.0500	D	\$0.0000	\$2,099.3500
- Thermoplastic Pavement Marking - Line 4"	Foot	2157	\$0.6600	D	\$0.0000	\$1,423.6200
- Thermoplastic Pavement Marking - Line 6"	Foot	506	\$0.9900	A	\$500.9400	\$0.0000
- Thermoplastic Pavement Marking - Line 8"	Foot	1238	\$1.3800	D	\$0.0000	\$1,708.4400

	Item Description	Unit of Measure	Quantity	Unit Price	Addition (A) or Deduction (D)	Total Addition	Total Deduction
-	Thermoplastic Pavement Marking - Line 12"	Foot	474	\$3.0300	D	\$0.0000	\$1,436.2200
-	Thermoplastic Pavement Marking - Line 24"	Foot	120	\$5.5000	D	\$0.0000	\$660.0000
-	Modified Urethane Pavement Marking - Letters & Symbols	Sq Ft	11	\$5.9400	A	\$65.3400	\$0.0000
-	Modified Urethane Pavement Marking - Line 4"	Foot	102	\$1.2700	A	\$129.5400	\$0.0000
-	Modified Urethane Pavement Marking - Line 6"	Foot	2004	\$1.8700	A	\$3,747.4800	\$0.0000
-	Modified Urethane Pavement Marking - Line 12"	Foot	155	\$2.9700	D	\$0.0000	\$460.3500
-	Modified Urethane Pavement Marking - Line 24"	Foot	53	\$5.9400	A	\$314.8200	\$0.0000
-	Temporary Pavement Marking - Line 4"	Foot	297	\$3.0000	D	\$0.0000	\$891.0000
-	Temporary Pavement Marking Removal	Sq Ft	100	\$5.0000	D	\$0.0000	\$500.0000
-	Aggregate Surface Removal, 4"	Sq Yd	133	\$10.0000	D	\$0.0000	\$1,330.0000
-	Preparation of Base	Sq Yd	580	\$2.0000	D	\$0.0000	\$1,160.0000
-	Sodding, Special	Sq Yd	271	\$16.2500	A	\$4,403.7500	\$0.0000
-	Hot-Mix Asphalt Driveway Removal and Replacement	Sq Yd	18	\$57.0000	D	\$0.0000	\$1,026.0000
-	Recessed Reflective Pavement Marker	Each	90	\$71.5000	D	\$0.0000	\$6,435.0000
-	Raised Reflective Pavement Marker Removal	Each	9	\$10.0000	D	\$0.0000	\$90.0000
-	Emulsified Maltene-Based Rejuvenator	Sq Yd	76	\$2.0000	D	\$0.0000	\$152.0000
-	Crack Routing (Pavement)	Foot	150	\$0.0300	D	\$0.0000	\$4.5000
-	Crack Filling	Pound	50	\$1.6700	D	\$0.0000	\$83.5000
Total Changes						\$38,068.77	\$60,298.55

Add Row

Total Net Change	(\$22,229.78)
Amount of Original Contract	\$1,197,204.31
Amount of Previous Change Orders	\$0.00
Amount of adjusted/final contract	\$1,174,974.53

Total net deduction to date (\$22,229.78) which is -1.86% of the contract price.

State fully the nature and reason for the change

Balance quantities based on as-built conditions. See attached for explanation of items increased or decreased over \$10,000

When the net increase or decrease in the cost of the contract is \$10,000.00 or more, or the time of completion is increased or decreased by 30 days or more, one of the following statements must be checked:

- ☐ The Local Public Agency has determined that the circumstances which necessitate this change were not reasonably foreseeable at the time the contract was signed.
- ☒ The Local Public Agency has determined that the change is germane to the original contract as signed.
- ☐ The Local Public Agency has determined that this change is in the best interest of the Local Public Agency and is authorized by law.

Prepared By

Christopher J. Ott

Title of Preparer

Project Manager

Submitted/Approved

Local Public Agency Signature & Date

BY:

Title: Mayor

**For a Road District project County Engineer signature required.**

County Engineer/Superintendent of Highways Signature & Date

**Approved:**

**Illinois Department of Transportation**

Regional Engineer Signature & Date

**IDOT Department Use Only**

Received Location

Received Date

Additional Location?

☐

WMFT Entry By

Entry Date

UNITED CITY OF YORKVILLE  
2023 MFT (ROADS TO BETTER ROADS PROGRAM)  
SECTION 23-00000-00-GM  
BLR 13210 SUPPLEMENT  
EXPLANATION OF PAY ITEM CHANGES IN EXCESS OF \$10,000

**HOT-MIX ASPHALT BINDER COURSE, IL-9.5., N50 (161 TONS DEDUCTED AT \$76.00/TON  
= \$12,236.00**

This item was decreased based on existing field conditions and reflects actual delivered tonnages.

**PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (1,319 SQ FT ADDED AT \$9.35/SQ  
FT = \$12,332.65)**

This item was increased in quantity due to additional sidewalk deterioration that occurred between design and construction of the project.

**PARTIAL DEPTH PATCHING (SPECIAL) (427 SQ YD DEDUCTED AT \$45.00/SQ YD =  
\$19,215.00)**

This item was reduced in quantity due to existing pavement conditions not needing to be patched.



## Engineer's Payment Estimate

Local Public Agency

County

Route(s) (Street/Road)

Section Number

Estimate 5

United City of Yorkville

Kendall

Various Local Roads

23-00000-00-GM

☒ Final

Payable to Name

D. Construction Inc.

Address

1488 S. Broadway Coal City, IL 60416

Date From

11/06/23

Date To

11/24/23

Pay Items	Unit of Meas.	Awarded		Approved Change in Plans		Completed to Date		
		Quantity	Values	Added	Deducted	Quantity	Unit Price	Value
Supplemental Watering	Unit	10	\$2,200.00		10	0	\$220.0000	
Bituminous Materials (Tack Coat)	Pound	28946	\$289.46		18982	9964	\$0.0100	\$99.6400
Hot-Mix Asphalt Surface Removal - Butt Joint	Sq Yd	413	\$4.13		55	358	\$0.0100	\$3.5800
Hot-Mix Asphalt Binder Course, IL-9.5, N50	Ton	3556	\$270,256.00		161	3395	\$76.0000	\$258,020.0000
Hot-Mix Asphalt Surface Course, IL-9.5, Mix "D", N50	Ton	3686	\$281,979.00		49	3637	\$76.5000	\$278,230.5000
Sidewalk Removal	Sq Ft	5500	\$15,125.00	1155		6655	\$2.7500	\$18,301.2500
Portland Cement Concrete Sidewalk, 5 Inch	Sq Ft	5500	\$51,425.00	1319		6819	\$9.3500	\$63,757.6500
Detectable Warnings	Sq Ft	332	\$11,686.40	35		367	\$35.2000	\$12,918.4000
Combination Concrete Curb and Gutter Removal and Replacement	Foot	2010	\$88,440.00	124		2134	\$44.0000	\$93,896.0000
Hot-Mix Asphalt Surface Removal, Variable Depth	Sq Yd	32982	\$82,455.00		196	32786	\$2.5000	\$81,965.0000
Hot-Mix Asphalt Surface Removal, 3"	Sq Yd	9306	\$25,591.50		298	9008	\$2.7500	\$24,772.0000
Partial Depth Patching (Special)	Sq Yd	427	\$19,215.00		427	0	\$45.0000	
Routing and Sealing Cracks	Foot	19683	\$12,597.12		405	19278	\$0.6400	\$12,337.9200
Manholes To Be Adjusted	Each	4	\$3,200.00		1	3	\$800.0000	\$2,400.0000
Inlets To Be Adjusted	Each	47	\$20,680.00	14		61	\$440.0000	\$26,840.0000

Local Public Agency			County		Route(s) (Street/Road)		Section Number	
United City of Yorkville			Kendall		Various Local Roads		23-00000-00-GM	
Pay Items	Meas.	Quantity	Values	Added	Deducted	Quantity	Unit Price	Value
Sanitary Manholes To Be Adjusted	Each	1	\$880.00		1	0	\$880.0000	
Type 1 Frame, Open Lid	Each	4	\$2,200.00			4	\$550.0000	\$2,200.0000
Type 3 Frame and Grate	Each	1	\$550.00	1		2	\$550.0000	\$1,100.0000
Thermoplastic Pavement Marking - Letters & Symbols	Sq Ft	1307	\$7,907.35		347	960	\$6.0500	\$5,808.0000
Thermoplastic Pavement Marking - Line 4"	Foot	27168	\$17,930.88		2157	25011	\$0.6600	\$16,507.2600
Thermoplastic Pavement Marking - Line 6"	Foot	2266	\$2,243.34	506		2772	\$0.9900	\$2,744.2800
Thermoplastic Pavement Marking - Line 8"	Foot	2988	\$4,123.44		1238	1750	\$1.3800	\$2,415.0000
Thermoplastic Pavement Marking - Line 12"	Foot	1093	\$3,311.79		474	619	\$3.0300	\$1,875.5700
Thermoplastic Pavement Marking - Line 24"	Foot	458	\$2,519.00		120	338	\$5.5000	\$1,859.0000
Modified Urethane Pavement Marking - Letters & Symbols	Sq Ft	273	\$1,621.62	11		284	\$5.9400	\$1,686.9600
Modified Urethane Pavement Marking - Line 4"	Foot	2792	\$3,545.84	102		2894	\$1.2700	\$3,675.3800
Modified Urethane Pavement Marking - Line 6"	Foot	4120	\$7,704.40	2004		6124	\$1.8700	\$11,451.8800
Modified Urethane Pavement Marking - Line 12"	Foot	3183	\$9,453.51		155	3028	\$2.9700	\$8,993.1600
Modified Urethane Pavement Marking - Line 24"	Foot	737	\$4,377.78	53		790	\$5.9400	\$4,692.6000
Temporary Pavement Marking - Line 4"	Foot	500	\$1,500.00		297	203	\$3.0000	\$609.0000
Temporary Pavement Marking, Removal	Sq Ft	168	\$840.00		100	68	\$5.0000	\$340.0000
Aggregate Surface Removal, 4"	Sq Yd	580	\$5,800.00		133	447	\$10.0000	\$4,470.0000



Local Public Agency			County		Route(s) (Street/Road)		Section Number	
United City of Yorkville			Kendall		Various Local Roads		23-00000-00-GM	
Preparation of Base	Sq Yd	580	\$1,160.00		580	0	\$2.0000	
Sodding, Special	Sq Yd	1151	\$18,703.75	271		1422	\$16.2500	\$23,107.5000
Hot-Mix Asphalt Driveway Removal and Replacement	Sq Yd	117	\$6,669.00		18	99	\$57.0000	\$5,643.0000
Recessed Reflective Pavement Marker	Each	90	\$6,435.00		90	0	\$71.5000	
Raised Reflective Pavement Marker Removal	Each	90	\$900.00		9	81	\$10.0000	\$810.0000
Traffic Control and Protection, (Special)	L Sum	1	\$15,000.00			1	\$15,000.0000	\$15,000.0000
Emulsified Maltene-Based Rejuvenator	Sq Yd	75742	\$151,484.00		76	75666	\$2.0000	\$151,332.0000
Crack Routing (Pavement)	Foot	60000	\$1,800.00		150	59850	\$0.0300	\$1,795.5000
Crack Filling	Pound	20000	\$33,400.00		50	19950	\$1.6700	\$33,316.5000
Total			\$1,197,204.31	Total			\$1,174,974.53	

Miscellaneous Extras and Credits				Values	
				Total Miscellaneous Extras and Credits	
				Total Value of Completed Work	
				\$1,174,974.53	
				Deduct Retainage	
				\$0.00	
				Balance Due of Completed Work	
				\$1,174,974.53	
Miscellaneous Debits				Values	
				Total Miscellaneous Debits	
				Net Cost of Section	
				\$1,174,974.53	
				Previous Payments	
				\$1,145,612.55	
				Net Amount Due	
				\$29,361.98	

- ☐ The Local Public Agency (LPA) certifies that the above pay estimate quantities do not require submission to the Department of Transportation of a Change in Plans (BLR 13210).
- ☒ The LPA certifies that a Change in Plans (BLR 13210) has been submitted to, and approved by the Department of Transportation as required for the above quantities.
- ☐ The LPA is under agreements of understanding and has completed the required paperwork and documentation, with submissions made per the agreement.

Local Public Agency

United City of Yorkville

County

Kendall

Route(s) (Street/Road)

Various Local Roads

Section Number

23-00000-00-GM

Resident Engineer Signature & Date

Prepared by

Christopher J. Ott

Title

Project Manager

Local Agency Signature & Date

Approved

Regional Engineer Signature & Date

**IDOT Department Use Only**

Received Location

Received Date

Additional Location?

☐

WMFT Entry By

Entry Date





Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #5

Tracking Number

PW 2023-88

### Agenda Item Summary Memo

**Title:** Meeting Schedule for 2024

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** Proposed meeting schedule for 2024.

### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Approval

**Submitted by:** Jori Behland Administration  
Name Department

### Agenda Item Notes:

---

---

---

---

---

*Have a question or comment about this agenda item?*

Call us Monday-Friday, 8:00am to 4:30pm at 630-553-4350, email us at [agendas@yorkville.il.us](mailto:agendas@yorkville.il.us), post at [www.facebook.com/CityofYorkville](https://www.facebook.com/CityofYorkville), tweet us at @CityofYorkville, and/or contact any of your elected officials at <http://www.yorkville.il.us/320/City-Council>



# Memorandum

To: Public Works Committee  
From: Jori Behland, City Clerk  
CC: Bart Olson, City Administrator  
Date: November 8, 2023  
Subject: Public Works Committee Meeting Schedule for 2024

---

## **Summary**

Proposed 2024 meeting schedule for the Public Works Committee.

## **Meeting Schedule for 2024**

Listed below are the proposed meeting dates for the Public Works Committee meeting for 2024. The proposed schedule has the committee continuing to meet on the third Tuesday of the month at 6:00 p.m.

- January 16, 2024
- February 20, 2024
- March 19, 2024
- April 16, 2024
- May 21, 2024
- June 18, 2024
- July 16, 2024
- August 20, 2024
- September 17, 2024
- October 15, 2024
- November 19, 2024
- December 17, 2024

## **Recommendation**

Staff recommends review of the proposed meeting dates and time so that a meeting schedule can be finalized for 2024.



## January

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## February

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

## March

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## April

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

## May

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## June

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## July

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## August

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## September

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## October

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## November

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## December

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

Old Business #1

Tracking Number

PW 2023-83

### Agenda Item Summary Memo

**Title:** Kylyns Ridge Subdivision Traffic Sign Analysis

**Meeting and Date:** Public Works Committee – November 21, 2023

**Synopsis:** Please see the attached memo.

### Council Action Previously Taken:

Date of Action: PW – 10/17/23      Action Taken: A discussion took place at the 10/17/23 PW meeting.

Item Number: PW 2023-83

**Type of Vote Required:** None

**Council Action Requested:** Informational

**Submitted by:** Brad Sanderson      Engineering  
Name      Department

### Agenda Item Notes:

---

---

---

---

---





**DRAFT**

# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Krysti Barksdale-Noble, Community Dev. Dir.  
Jori Behland, City Clerk  
James Jensen, Chief of Police  
Date: October 10, 2023  
Subject: Kylyn's Ridge Subdivision – Traffic Sign and Speed Analyses

As requested, we investigated the possible installation of a multi-way stop sign at the following intersections:

- Northland Lane and Blackberry Shore Lane
- High Ridge Lane and Western Lane
- High Ridge Lane and Canyon Trail / Canyon Trail Court

We also investigated the possible installation of stop or yield signs at the following intersection:

- Northland Lane and Western Lane

Finally, a 7-day traffic speed study was conducted on the following streets:

- High Ridge Lane
- Northland Lane
- Blackberry Shore Lane

The governing entity on traffic control signage is the Manual on Uniform Traffic Control Devices (MUTCD). The manual states as follows in regards to multi-way stop sign installation:

*Guidance:*

*The decision to install multi-way stop control should be based on an engineering study.*

*The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*

*A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*

*B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*

*C. Minimum volumes:*

- 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
- 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
- 3. If the 85<sup>th</sup>-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*



*D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

*Option:*

*Other criteria that may be considered in an engineering study include:*

- A. The need to control left-turn conflicts;*
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and*
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection*

The governing entity on traffic control signage is the Manual on Uniform Traffic Control Devices (MUTCD). The manual states as follows in regard to yield and stop sign installation:

*Guidance:*

*Engineering judgment should be used to establish intersection control. The following factors should be considered:*

- A. Vehicular, bicycle, and pedestrian traffic volumes on all approaches;*
- B. Number and angle of approaches;*
- C. Approach speeds;*
- D. Sight distance available on each approach; and*
- E. Reported crash experience.*

*YIELD or STOP signs should be used at an intersection if one or more of the following conditions exist:*

- A. An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;*
- B. A street entering a designated through highway or street; and/or*
- C. An unsignalized intersection in a signalized area.*

*In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:*

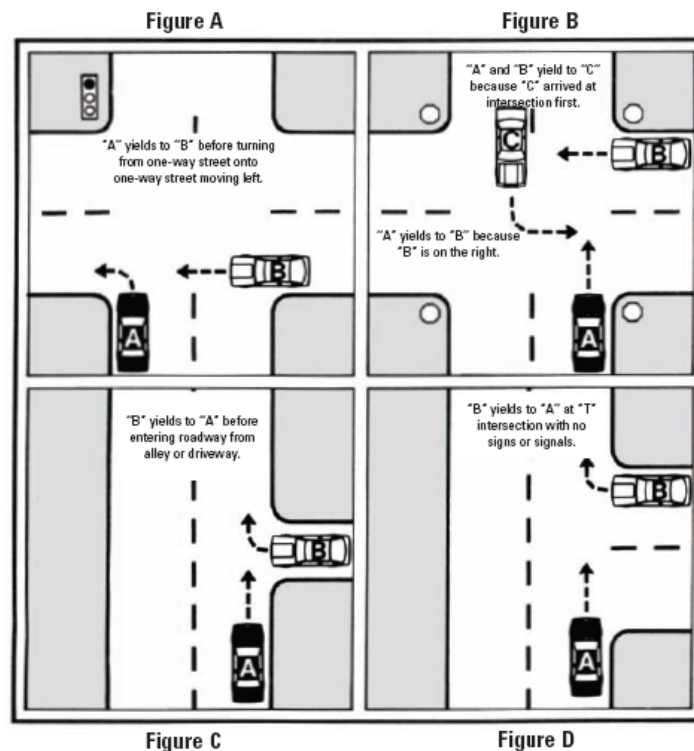
- A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;*
- B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or*
- C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.*

*Yield or Stop signs should not be used for speed control.*

At unsigned intersections, the application of the normal right-of-way rules would apply.



Figure D taken from the Illinois Drivers Manual shows that the minor roadway should yield to traffic on the major roadway at uncontrolled intersections.



Our findings were as follows:

- **Northland Lane and Blackberry Shore Lane (Multi-Way Stop)**
  - Currently, the intersection has a stop sign on the northbound and southbound approaches of Northland Lane.
  - Parking is not permitted on the westbound lane of Blackberry Shore Lane after the intersection.
  - There are no sight distance constraints in any direction approaching the intersection.
  - The Yorkville Police Department had reported no accidents at this intersection in the past three years.
  - The Blackberry Shore Lane bi-directional vehicle volume entering the intersection during evening commute hours was less than 300 vehicles per hour (approx. 108 vehicles per hour).
  - The Northland Lane bi-directional vehicular, pedestrian, and bicycle volume entering the intersection during evening commute hours was less than 200 units per hour (approx. 52 units per hour).
  - The speed limit on all approaches was unmarked, therefore the speed limit was 30 mph.
  - Left-turn conflicts do not appear to be an issue on any of the intersection approaches.
  - A park is situated northwest of this intersection; however, no pedestrian traffic was observed approaching the intersection during the study.
  - This intersection does not appear to be a good candidate for a multi-way stop.
  - It is our understanding that there may be a concern regarding speed on Blackberry Shore Lane. Since the MUTCD states that yield or stop signs should not be used for speed



control, this issue may be more properly addressed with enforcement or traffic calming devices if necessary.

- **High Ridge Lane and Western Lane (Multi-Way Stop)**

- Currently, the intersection has a yield sign on the eastbound and westbound approaches of Western Lane.
- Parking is permitted on all approaches to the intersection.
- There are no sight distance constraints in any direction approaching the intersection.
- The Yorkville Police Department had reported one accident at this intersection in the past three years (See attached crash report). In the incident, an eastbound vehicle on Western Lane entered the intersection and struck a vehicle heading northbound on High Ridge Lane. The eastbound driver stated they had not seen the vehicle travelling northbound. The incident was not a turning incident.
- The High Ridge Lane bi-directional vehicle volume entering the intersection during evening commute hours was less than 300 vehicles per hour (approx. 52 vehicles per hour).
- The Western Lane bi-directional vehicular, pedestrian, and bicycle volume entering the intersection during evening commute hours was less than 200 units per hour (approx. 30 units per hour).
- The speed limit on all approaches was unmarked, therefore the speed limit was 30 mph.
- Left-turn conflicts do not appear to be an issue on any of the intersection approaches. The reported accident was not an issue of left-turn conflict.
- A total of 14 pedestrians were observed approaching the intersection during the study. The area does not appear to need to control vehicle/pedestrian conflicts due to low pedestrian volumes during peak hours.
- This intersection does not appear to be a good candidate for a multi-way stop.

- **High Ridge Lane and Canyon Trail / Canyon Trail Court (Multi-Way Stop)**

- Currently, the intersection has a yield sign on the eastbound approach of Canyon Trail Court, and the westbound approach of Canyon Trail.
- Parking is permitted on all approaches to the intersection.
- A bus stop is located at the northeast corner of the intersection.
- The Yorkville Police Department had reported no accidents at this intersection in the past three years.
- The High Ridge Lane bi-directional vehicle volume entering the intersection during evening commute hours was less than 300 vehicles per hour (approx. 44 vehicles per hour).
- The Canyon Trail Court / Canyon Trail bi-directional vehicular, pedestrian, and bicycle volume entering the intersection during evening commute hours was less than 200 units per hour (approx. 29 units per hour).
- The speed limit on all approaches was unmarked, therefore the speed limit was 30 mph.
- There are no sight distance constraints in any direction approaching the intersection.
- Left-turn conflicts do not appear to be an issue on any of the intersection approaches. The reported accident was not an issue of left-turn conflict.
- A total of 14 pedestrians were observed approaching the intersection during the study.
- This intersection does not appear to be a good candidate for a multi-way stop.

- **Northland Lane and Western Lane (Stop or Yield Sign)**
  - Currently, there are no traffic signs at the intersection.
  - Parking is not permitted on the westbound lane of Western Lane or the southbound Lane of Northland Lane after the intersection.
  - Cannonball Trail Park is directly southwest of the intersection.
  - There are no sight distance constraints in any direction approaching the intersection.
  - Neither street has a posted speed limit, therefore the speed limit is 30 mph on both streets.
  - The traffic volume approaching the intersection appears to be below 2,000 units per day (approx. 1,296 units per day).
  - The Yorkville Police Department had reported no accidents at this intersection in the past three years.
  - A total of 0 pedestrians approached the intersection from any direction during the study.
  - Based on the above criteria, this intersection does not appear to be a good candidate for the stop sign or yield sign.
  
- **High Ridge Lane (Traffic Speed Study)**
  - A 7-day, bi-directional, traffic speed study was conducted south of the intersection of High Ridge Lane and Canyon Trail / Canyon Trail Court. A total of 2,894 vehicles were examined. The average speed was 28.8 mph, the 85<sup>th</sup> percentile speed was 34.0 mph, and the highest recorded speed was 65.0 mph, respectively. Since the MUTCD states that yield or stop signs should not be used for speed control, the perceived speeding issue may be more properly addressed with enforcement or traffic calming devices. However, the traffic speed study does not indicate a speeding issue on High Ridge Lane.
  
- **Northland Lane (Traffic Speed Study)**
  - A 7-day, bi-directional, traffic speed study was conducted north of the intersection of Northland Lane and Western Lane. A total of 3,777 vehicles were examined. The average speed was 25.8 mph, the 85<sup>th</sup> percentile speed was 30.0 mph, and the highest recorded speed was 46.0 mph, respectively. Since the MUTCD states that yield or stop signs should not be used for speed control, the perceived speeding issue may be more properly addressed with enforcement or traffic calming devices. However, the traffic speed study does not indicate a speeding issue on Northland Lane.
  
- **Blackberry Shore Lane (Traffic Speed Study)**
  - A 7-day, bi-directional, traffic speed study was conducted west of the intersection of Northland Lane and High Ridge Lane. A total of 7,629 vehicles were examined. The average speed was 30.6 mph, the 85<sup>th</sup> percentile speed was 36.0 mph, and the highest recorded speed was 59.0 mph, respectively. Since the MUTCD states that yield or stop signs should not be used for speed control, the perceived speeding issue may be more properly addressed with enforcement or traffic calming devices. However, the traffic speed study does not indicate a speeding issue on Blackberry Shore Lane.



# **PART I: INTERSECTION TRAFFIC SIGN ANALYSIS**



# **Engineering Enterprises, Inc.**

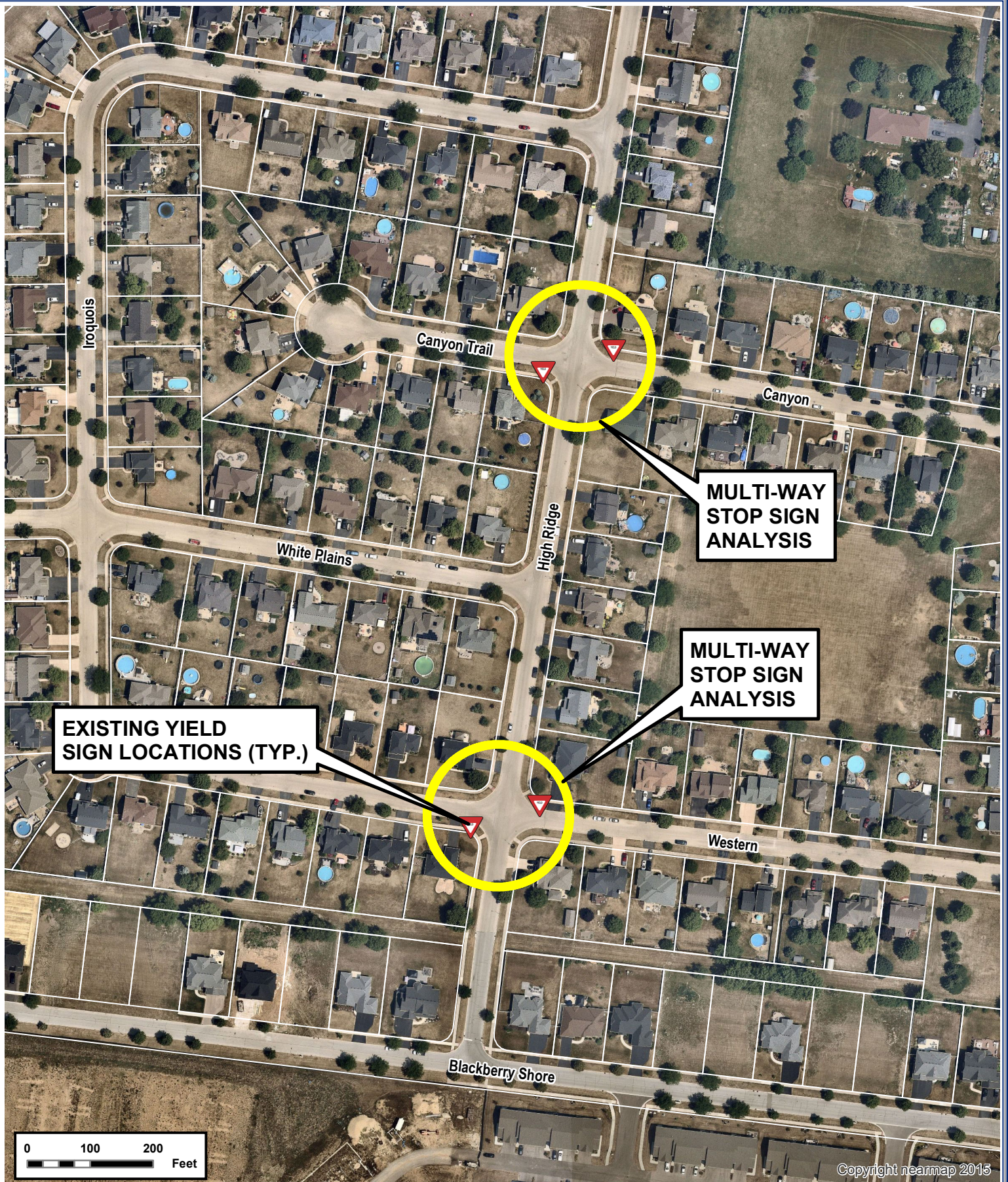
52 Wheeler Road  
 Sugar Grove, Illinois 60554  
 (630) 466-6700  
[www.eeiweb.com](http://www.eeiweb.com)

DATE:	OCTOBER 2023
PROJECT NO.:	YO1107
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2021\
FILE:	YO2107-Stop Sign Northland.mxd

## **KYLYN'S RIDGE SUBDIVISION TRAFFIC SIGN ANALYSES**







**Engineering Enterprises, Inc.**

52 Wheeler Road  
 Sugar Grove, Illinois 60554  
 (630) 466-6700  
[www.eeiweb.com](http://www.eeiweb.com)

DATE:	OCTOBER 2023
PROJECT NO.:	YO2107
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2021\
FILE:	YO2107-Stop Sign High Ridge.mxd

**KYLYN'S RIDGE  
 SUBDIVISION TRAFFIC  
 SIGN ANALYSES**





# UNITED CITY OF YORKVILLE MULTI-WAY STOP PRELIMINARY ENGINEERING EVALUATION

**Location:** Northland Lane and Blackberry Shore Lane

## Primary Criteria to Consider\*

<u>Criteria Met</u>			<u>Criteria**</u>
Yes	Additional Study Required	No	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
			C. Minimum Volumes:
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. The vehicular volume entering the intersections from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. The combined vehicular, pedestrian, and bicycle volume entering the intersections from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	D. Where no single criterion is satisfied, but where Criteria B, C.1 and C.2 are all satisfied to 80 percent of the minimum values, criterion C.3 is excluded from this condition.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. The need to control left-turn conflicts;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	F. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	G. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

Based on a preliminary review of the criteria for a multi-way stop sign the following action is recommended:

- ☐ Criteria are clearly met recommending installation of a multi-way stop
- ☒ Criteria are not clearly met at this time - no further action recommended
- ☐ Criteria may or may not be met - additional engineering study required

By: Gabrieil Braboy Date: 9/11/2023

\_\_\_\_\_  
Title

By: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
Title

\* Based upon Professional Engineer's Review  
\*\* Manual on Uniform Traffic Control Devices (MUTCD)





NORTHLAND LANE – NORTHBOUND  
APPROACH

LOOKING NORTH



NORTHLAND LANE – NORTHBOUND  
APPROACH

LOOKING EAST



NORTHLAND LANE – NORTHBOUND  
APPROACH

LOOKING WEST



NORTHLAND LANE – SOUTHBOUND  
APPROACH

LOOKING SOUTH





NORTHLAND LANE – SOUTHBOUND  
APPROACH

LOOKING EAST



NORTHLAND LANE – SOUTHBOUND  
APPROACH

LOOKING WEST



BLACKBERRY SHORE LANE –  
EASTBOUND APPROACH

LOOKING EAST



BLACKBERRY SHORE LANE –  
EASTBOUND APPROACH

LOOKING NORTH





BLACKBERRY SHORE LANE –  
EASTBOUND APPROACH

LOOKING SOUTH



BLACKBERRY SHORE LANE –  
WESTBOUND APPROACH

LOOKING WEST



BLACKBERRY SHORE LANE –  
WESTBOUND APPROACH

LOOKING NORTH



BLACKBERRY SHORE LANE –  
WESTBOUND APPROACH

LOOKING SOUTH





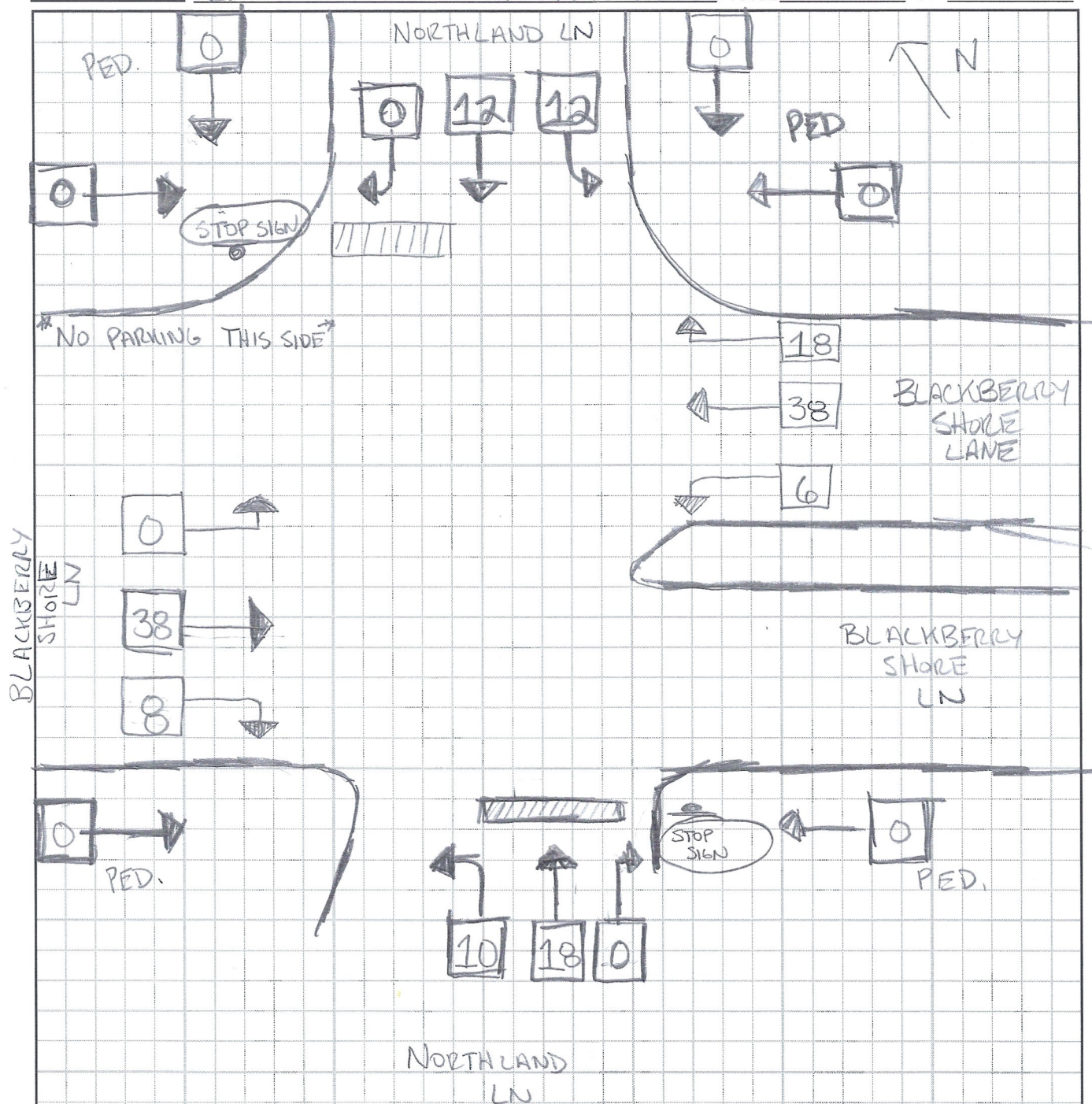
# Engineering Enterprises, Inc.

52 Wheeler Road • Sugar Grove, Illinois 60554

TEL: (630) 466-6700

FAX: (630) 466-6701

PROJECT TRAFFIC CONTROL SIGNAGE - YORKVILLE PROJECT NUMBER Y01107-C  
SUBJECT NORTLAND LN - BLACK BY GAB DATE 8/24/23  
BERRY SHORE LN - TRAFFIC COUNTS PAGE 1 OF 1



## NOTES

- OBSERVATIONS ON THURS. 8/24/23, 355<sup>PM</sup> - 455<sup>PM</sup>
- VEH  
Volume =  $\frac{160 \text{ VEH}}{\text{HR}} \times 24 \text{ HR} \approx 3,840 \frac{\text{VEH}}{\text{DAY}}$
- 30 MPH NEIGHBORHOOD SPEED LIMIT

# UNITED CITY OF YORKVILLE MULTI-WAY STOP PRELIMINARY ENGINEERING EVALUATION

Location: High Ridge Lane and Western Lane

## Primary Criteria to Consider\*

<u>Criteria Met</u>			<u>Criteria**</u>
Yes	Additional Study Required	No	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
			C. Minimum Volumes:
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. The vehicular volume entering the intersections from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. The combined vehicular, pedestrian, and bicycle volume entering the intersections from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	D. Where no single criterion is satisfied, but where Criteria B, C.1 and C.2 are all satisfied to 80 percent of the minimum values, criterion C.3 is excluded from this condition.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. The need to control left-turn conflicts;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	F. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	G. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

Based on a preliminary review of the criteria for a multi-way stop sign the following action is recommended:

- ☐ Criteria are clearly met recommending installation of a multi-way stop
- ☒ Criteria are not clearly met at this time - no further action recommended
- ☐ Criteria may or may not be met - additional engineering study required

By: Gabriel Braboy Date: 9/11/2023

\_\_\_\_\_  
Title

By: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
Title

\* Based upon Professional Engineer's Review  
\*\* Manual on Uniform Traffic Control Devices (MUTCD)





HIGH RIDGE LANE – NORTHBOUND  
APPROACH

LOOKING NORTH



HIGH RIDGE LANE – NORTHBOUND  
APPROACH

LOOKING EAST



HIGH RIDGE LANE – NORTHBOUND  
APPROACH

LOOKING WEST



HIGH RIDGE LANE – SOUTHBOUND  
APPROACH

LOOKING SOUTH





HIGH RIDGE LANE – SOUTHBOUND  
APPROACH

LOOKING EAST



HIGH RIDGE LANE – SOUTHBOUND  
APPROACH

LOOKING WEST



WESTERN LANE – EASTBOUND  
APPROACH

LOOKING EAST



WESTERN LANE – EASTBOUND  
APPROACH

LOOKING NORTH





WESTERN LANE – EASTBOUND  
APPROACH

LOOKING SOUTH



WESTERN LANE – WESTBOUND  
APPROACH

LOOKING WEST



WESTERN LANE – WESTBOUND  
APPROACH

LOOKING NORTH



WESTERN LANE – WESTBOUND  
APPROACH

LOOKING SOUTH





# Engineering Enterprises, Inc.

52 Wheeler Road • Sugar Grove, Illinois 60554

TEL: (630) 466-6700

FAX: (630) 466-6701

PROJECT TRAFFIC CONTROL SIGNAGE-YORKVILLE

PROJECT NUMBER Y022107-C

SUBJECT \_\_\_\_\_

BY GAB

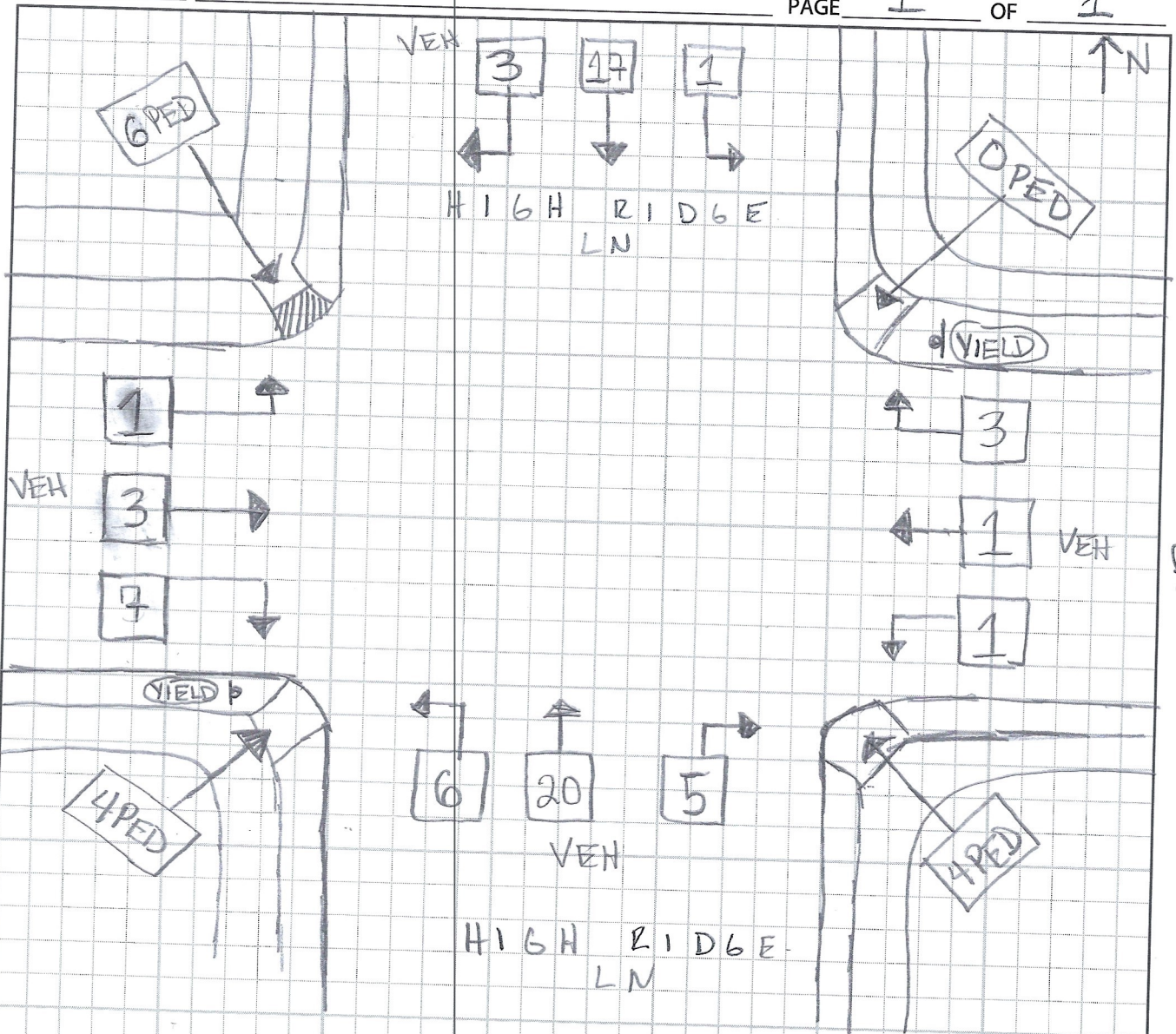
DATE 8/31/23

PAGE 1

OF 1

WESTERN LN

WESTERN LN



- OBSERVATIONS WED. 8/30/2023 420-520 PM
- $78 \frac{\text{UNITS}}{\text{HR}} \times 24 \text{ HR} = 1872 \frac{\text{UNITS}}{\text{HR}}$
- LACK OF SIGNALING ON WESTERN LN ONTO HIGH RIDGE LN
- MOTORCYCLES EXCESSIVE SPEED AND NOISE NB HIGH RIDGE
- CARS PARKED ON WESTERN LN (EAST & WEST BOUND) NEAR INTERSECTION
- 30 MPH NEIGHBORHOOD SPEED LIMIT

## ILLINOIS TRAFFIC CRASH REPORT

Sheet 1 of 1 Sheets



IY003



\* X002608966 \*

DRAC	1	1	TRFD	4	TRFC	4	WEAT	1	DRVA	2	U2	1	U1	1	U2	1	VEHD	1	U1	1	U2	1	LGHT	1	COLL	15	MANV	1	U1	1	U2
------	---	---	------	---	------	---	------	---	------	---	----	---	----	---	----	---	------	---	----	---	----	---	------	---	------	----	------	---	----	---	----

INVESTIGATING AGENCY <b>Yorkville Police Department</b>		DAMAGE TO ANY ONE PERSON'S VEHICLE / PROPERTY <input type="checkbox"/> \$500 OR LESS <input type="checkbox"/> \$501 - \$1,500 <input checked="" type="checkbox"/> OVER \$1,500		TYPE OF REPORT <input checked="" type="checkbox"/> ON SCENE <input type="checkbox"/> NOT ON SCENE (DESK REPORT) <input type="checkbox"/> AMENDED		<input checked="" type="checkbox"/> A No Injury / Drive Away <input type="checkbox"/> B Injury and / or Tow Due to Crash		YR <b>22</b>	AGENCY CRASH REPORT NO. <b>22-00670</b>		TRFW <b>14</b>			
ADDRESS NO.		HIGHWAY OR STREET NAME <b>WESTERN LN</b>		<input checked="" type="checkbox"/> City <b>YORKVILLE</b>		INTERSECTION RELATED <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		DATE OF CRASH <b>4/23/2022</b>		TIME <b>6:28</b>		SECONDARY CRASH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		VEHT <b>1</b>
(CIRCLE) <input type="checkbox"/> ..... FT / MI N S E W		(CIRCLE) <b>HIGH RIDGE LN</b>		COUNTY <b>KENDALL</b>		PRIVATE PROPERTY <input type="checkbox"/> Y <input checked="" type="checkbox"/> N		DOORING WITH PEDALCYCLIST? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N		# OF MOTOR VEHICLES INVLD <b>2</b>		FLOW CONDITION <input type="checkbox"/> SLOW <input type="checkbox"/> STOPPED <input checked="" type="checkbox"/> FREE FLOW		U1 <b>1</b>
<input checked="" type="checkbox"/> AT INTERSECTION WITH		(NAME OF INTERSECTION OR ROAD FEATURE)		HIT & RUN <input type="checkbox"/> Y <input checked="" type="checkbox"/> N										U2 <b>0</b>

UNIT 1

<input checked="" type="checkbox"/> DRIVER <input type="checkbox"/> PARKED <input type="checkbox"/> DRIVERLESS <input type="checkbox"/> PED <input type="checkbox"/> PEDAL <input type="checkbox"/> EQUES <input type="checkbox"/> NMV <input type="checkbox"/> NCV <input type="checkbox"/> DV	DATE OF BIRTH mo / day / yr	MAKE <b>TOYOTA</b>	MODEL <b>COROLLA</b>	YEAR <b>2021</b>	CIRCLE NUMBER(S) FOR DAMAGED AREA(S) 00 - NONE 13 - UNDER CARRIAGE 14 - TOTAL (ALL) 15 - OTHER 99 - UNKNOWN	11 FRONT 12 TOP 16 REAR	TOWED DUE TO CRASH <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	U1 <b>0</b>
STREET ADDRESS	SEX <b>F</b>	SAFT <b>2</b>	AIR <b>4</b>	AUTOMATION SYSTEM <input type="checkbox"/> Y <input checked="" type="checkbox"/> NO <input type="checkbox"/> UNK	LEVEL IN VEH. <b>0</b>	LEVEL ENGAGED AT CRASH <b>0</b>	FIRE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	U2 <b>1</b>
CITY	INJ <b>O</b>	EJCT <b>1</b>	EPHT <b>0</b>	PLATE NO.	STATE	YEAR	DISTRACTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	U1 <b>1</b>
PHONE NUMBER	STATE <b>IL</b>	CLASS <b>D</b>	CDL ID <b>0</b>	VIN <b>JTDVPMAE8MJ130577</b>	INSURANCE CO. <b>State Farm</b>		COM VEH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	U2 <b>1</b>
EMS AGENCY	PEDV <b>99</b>	PPA <b>9</b>	PPL <b>9</b>	VEHICLE OWNER (LAST, FIRST, M.I.) <b>TOYOTA LEASE TRUST</b>	POLICY NO. <b>J11 8510-D27-13</b>		EXPIRED <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	U2 <b>1</b>
HOSPITAL (TAKEN TO)	INCIDENT RESPONDER <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	IF "Y"	OWNER STREET, CITY, STATE, ZIP		PHONE NUMBER			VEHU <b>2</b>

UNIT 2

<input checked="" type="checkbox"/> DRIVER <input type="checkbox"/> PARKED <input type="checkbox"/> DRIVERLESS <input type="checkbox"/> PED <input type="checkbox"/> PEDAL <input type="checkbox"/> EQUES <input type="checkbox"/> NMV <input type="checkbox"/> NCV <input type="checkbox"/> DV	DATE OF BIRTH mo / day / yr	MAKE <b>FORD</b>	MODEL <b>EXPLORER</b>	YEAR <b>2021</b>	CIRCLE NUMBER(S) FOR DAMAGED AREA(S) 00 - NONE 13 - UNDER CARRIAGE 14 - TOTAL (ALL) 15 - OTHER 99 - UNKNOWN	11 FRONT 12 TOP 16 REAR	TOWED DUE TO CRASH <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	U1 <b>2</b>
NAME (LAST, FIRST, M)	SEX <b>F</b>	SAFT <b>2</b>	AIR <b>4</b>	AUTOMATION SYSTEM <input type="checkbox"/> Y <input checked="" type="checkbox"/> NO <input type="checkbox"/> UNK	LEVEL IN VEH. <b>0</b>	LEVEL ENGAGED AT CRASH <b>0</b>	FIRE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	U2 <b>0</b>
STREET ADDRESS	INJ <b>O</b>	EJCT <b>1</b>	EPHT <b>0</b>	PLATE NO.	STATE	YEAR	DISTRACTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	U1 <b>0</b>
CITY	STATE <b>IL</b>	CLASS <b>D</b>	CDL ID <b>0</b>	VIN <b>1FM5K8GC7MGB20272</b>	INSURANCE CO. <b>Progressive</b>		COM VEH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	U2 <b>1</b>
PHONE NUMBER	PEDV <b>99</b>	PPA <b>9</b>	PPL <b>9</b>	VEHICLE OWNER (LAST, FIRST, M.I.)	POLICY NO. <b>939294017</b>		EXPIRED <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	U2 <b>1</b>
EMS AGENCY	INCIDENT RESPONDER <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	IF "Y"	OWNER ADDRESS (STREET, CITY, STATE, ZIP)		PHONE NUMBER			BAC <b>996</b>
HOSPITAL (TAKEN TO)								U1 <b>996</b>

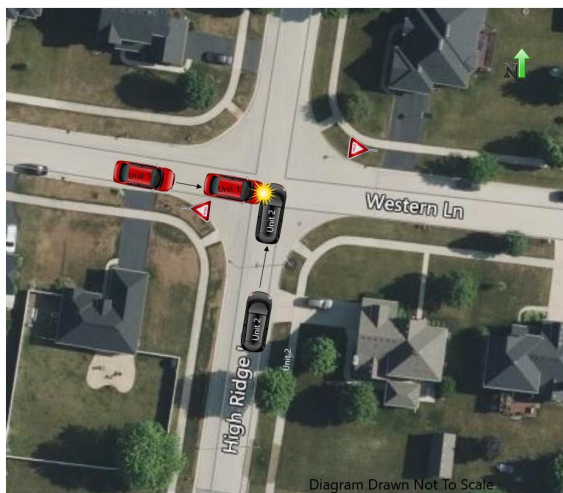
(UNIT)	(SEAT)	(DOB)	(SEX)	(SAFT)	(AIR)	(INJ)	(EJCT)	(EPHT)	PASSENGERS & WITNESSES ONLY	(NAME) / (ADDR) / (TEL)	(HOSP)	(EMS)
1	6		F	13	4	O	1	0				

UNIT 1	(EVNO)	(MOST)	(EVNT)	(LOC)	DAMAGED PROPERTY OWNER NAME		DAMAGED PROPERTY		POLICE NOTIFIED <b>4/23/2022</b>	TIME <b>6:28</b>	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Did crash occur in a Work Zone? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
	1	<input checked="" type="checkbox"/>	<b>11</b>	<b>4</b>					EMS NOTIFIED	TIME	<input type="checkbox"/> AM <input type="checkbox"/> PM	If YES check one below: <input type="checkbox"/> Construction <input type="checkbox"/> Maintenance <input type="checkbox"/> Utility <input type="checkbox"/> Unknown work zone type
	2	<input type="checkbox"/>			PROPERTY OWNERS ADDRESS: STREET, CITY, STATE, ZIP		PRIMARY <b>02</b>		SECONDARY <b>99</b>			
UNIT 2	3	<input type="checkbox"/>			<input checked="" type="checkbox"/> CITATIONS ISSUED <input type="checkbox"/> PENDING		SECTION <b>11-904</b>		CITATION NO. <b>YK0002145</b>	EMS ARRIVED	TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	
	1	<input checked="" type="checkbox"/>	<b>11</b>	<b>4</b>	ARREST NAME		SECTION		CITATION NO.	ROAD CLEARANCE <b>4/23/2022</b>	TIME <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
	2	<input type="checkbox"/>			ARREST NAME		SECTION		CITATION NO.	COURT DATE <b>5/19/2022</b>	TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	Workers present? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
	3	<input type="checkbox"/>			OFFICER ID. <b>230</b>		SIGNATURE <b>Joshua Opp</b>		BEAT / DIST.	SUPERVISOR ID. <b>Sam Stroup, 209</b>		



X002608966

A **Diagram** and **Narrative** are required on all **Type B** crashes,  
**even if** units have been moved prior to the officer's arrival.

**NARRATIVE (refer to vehicle by unit #)**

UNIT 1 WAS EASTBOUND WESTERN LN AT THE INTERSECTION OF HIGH RIDGE LN. UNIT 2 WAS NORTHBOUND HIGH RIDGE LN AT THE INTERSECTION OF WESTERN LN. BOTH VEHICLES TRAVELED THROUGH THE INTERSECTION AT THE SAME TIME AND THE FRONT PASSENGER SIDE BUMPER OF UNIT 1 STRUCK THE FRONT DRIVER SIDE OF UNIT 2 CAUSING MODERATE DAMAGE.

UNIT 1 ADVISED THEY WERE APPROACHING THE INTERSECTION AND SLOWING DOWN TO THE YIELD SIGN. UNIT 1 ADVISED THEY DID NOT SEE UNIT 2 AND DID NOT YIELD TO THEM APPROACHING. UNIT 1 ADVISED THAT AS THEY WENT THROUGH THE INTERSECTION THEY STRUCK UNIT 2.

UNIT 2 ADVISED THEY WERE NORTHBOUND ON HIGH RIDGE LN WHEN UNIT 1

**LOCAL USE ONLY**U1 Race: **W**U2 Race: **W**U1 COLOR **Red**U2 COLOR **Black**U1 Drug 1 **000**

U1 Drug 2

U2 Drug 1 **000**

U2 Drug 2

U1 TOWED DUE TO ☐ DISABLING DAMAGE ☐ NOT DISABLING DAMAGE

DAMAGE EXTENT:

U1 TOWED BY / TO :

U2 TOWED DUE TO ☐ DISABLING DAMAGE ☐ NOT DISABLING DAMAGE

DAMAGE EXTENT:

U2 TOWED BY / TO :

**LARGE TRUCK, BUS, OR HM VEHICLE**

IF MORE THAN ONE CMV IS INVOLVED, USE SR 1050A  
ADDITIONAL UNITS FORMS.

A CMV is defined as any motor vehicle used to transport passengers or property and:

1. Has a weight rating of more than 10,000 pounds (example: truck or truck/trailer combination); or
2. Is used or designed to transport more than 15 passengers including the driver (example: shuttle or charter bus); or
3. Is designed to carry 15 or fewer passengers and operated by a contract carrier transporting employees in the course of their employment (example: employee transporter - usually a van type vehicle or passenger car); or
4. Is used or designed to transport between 9 and 15 passengers, including the driver, for direct compensation (example: large van used for specific purpose); or
5. Is any vehicle used to transport any hazardous material (HAZMAT) that requires placarding (example: placards will be displayed on the vehicle).

UNIT \_\_\_\_\_

CARRIER NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/STATE/ZIP \_\_\_\_\_

MOTOR CARR. ID ☐ Interstate ☐ Intrastate  
☐ Not In Comm./Govt. ☐ Not In Comm./Other

USDOT NO. \_\_\_\_\_ ILLCC NO. \_\_\_\_\_

Source of above  
☐ Side of Truck ☐ Papers ☐ Driver ☐ Log Book  
GVWR/GCWR  
☐ <10,000 ☐ 10,000 - 26,000 ☐ >26,000

Were HAZMAT placards on vehicle? ☐ Yes ☐ No

If yes, name on placard \_\_\_\_\_  
4 digit UN NO. \_\_\_\_\_ 1 digit Hazard Class NO. \_\_\_\_\_

Did HAZMAT Spill from vehicle (do NOT consider FUEL from vehicle's own tank)? ☐ Yes ☐ No ☐ Unknown

Did HAZMAT Regulations violation contribute to the crash?  
☐ Yes ☐ No ☐ Unknown

Did Motor Carrier Safety Regulations (MCS) violation contribute to the crash? ☐ Yes ☐ No ☐ Unknown

Was a Driver/Vehicle Examination Report form completed?

HAZMAT ☐ Yes ☐ No ☐ Unknown Out of Service ☐ Yes ☐ No  
MCS ☐ Yes ☐ No ☐ Unknown Out of Service ☐ Yes ☐ No

Form Number \_\_\_\_\_

IDOT PERMIT NO. \_\_\_\_\_ WIDELOAD? ☐ Y ☐ N

TRAILER VIN 1 \_\_\_\_\_

TRAILER VIN 2 \_\_\_\_\_

TRAILER WIDTH(S) 0 - 96" 97 - 102" > 102"  
TRAILER 1 ☐ ☐ ☐  
TRAILER 2 ☐ ☐ ☐

TRAILER LENGTH(S) 1 \_\_\_\_\_ ft 2 \_\_\_\_\_ ft

TOTAL VEHICLE LENGTH \_\_\_\_\_ ft NO. OF AXLES \_\_\_\_\_

SELECT CODES FROM BACK OF CRASH BOOKLET

VEHICLE CONFIG. \_\_\_\_\_ CARGO BODY TYPE \_\_\_\_\_ LOAD TYPE \_\_\_\_\_

## Narrative

BEGAN TO GO THROUGH THE INTERSECTION AND ULTIMATELY STRUCK THEIR VEHICLE.

NO INJURIES REPORTED. NO VEHICLES TOWED.



**UNITED CITY OF YORKVILLE  
MULTI-WAY STOP  
PRELIMINARY ENGINEERING EVALUATION**

**Location:** High Ridge Lane and Canyon Trail / Canyon Trail Court

### Primary Criteria to Consider\*

<u>Criteria Met</u>			<u>Criteria**</u>
Yes	Additional Study Required	No	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
			C. Minimum Volumes:
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. The vehicular volume entering the intersections from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. The combined vehicular, pedestrian, and bicycle volume entering the intersections from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	D. Where no single criterion is satisfied, but where Criteria B, C.1 and C.2 are all satisfied to 80 percent of the minimum values, criterion C.3 is excluded from this condition.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. The need to control left-turn conflicts;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	F. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	G. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

Based on a preliminary review of the criteria for a multi-way stop sign the following action is recommended:

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/>            | Criteria are clearly met recommending installation of a multi-way stop    |
| <input checked="" type="checkbox"/> | Criteria are not clearly met at this time - no further action recommended |
| <input type="checkbox"/>            | Criteria may or may not be met - additional engineering study required    |

By: Gabriel Braboy Date: 9/11/2023

---

Title

By: \_\_\_\_\_ Date: \_\_\_\_\_

---

Title

\* Based upon Professional Engineer's Review

\*\* Manual on Uniform Traffic Control Devices (MUTCD)



HIGH RIDGE LANE – NORTHBOUND  
APPROACH

LOOKING NORTH



HIGH RIDGE LANE – NORTHBOUND  
APPROACH

LOOKING EAST





HIGH RIDGE LANE – NORTHBOUND  
APPROACH

LOOKING WEST



HIGH RIDGE LANE – SOUTHBOUND  
APPROACH

LOOKING SOUTH



HIGH RIDGE LANE – SOUTHBOUND  
APPROACH

LOOKING EAST



HIGH RIDGE LANE – SOUTHBOUND  
APPROACH

LOOKING WEST





CANYON TRAIL COURT – EASTBOUND  
APPROACH

LOOKING EAST



CANYON TRAIL COURT – EASTBOUND  
APPROACH

LOOKING NORTH



CANYON TRAIL COURT – EASTBOUND  
APPROACH

LOOKING SOUTH



CANYON TRAIL – WESTBOUND  
APPROACH

LOOKING WEST





CANYON TRAIL COURT –  
WESTBOUND APPROACH

LOOKING NORTH



CANYON TRAIL COURT –  
WESTBOUND APPROACH

LOOKING SOUTH





# Engineering Enterprises, Inc.

52 Wheeler Road • Sugar Grove, Illinois 60554

TEL: (630) 466-6700

FAX: (630) 466-6701

PROJECT TRAFFIC CONTROL SIGNAGE - YORKVILLE

PROJECT NUMBER Y022107-C

SUBJECT HIGH RIDGE LN AND

BY GAB

DATE 8/31/23

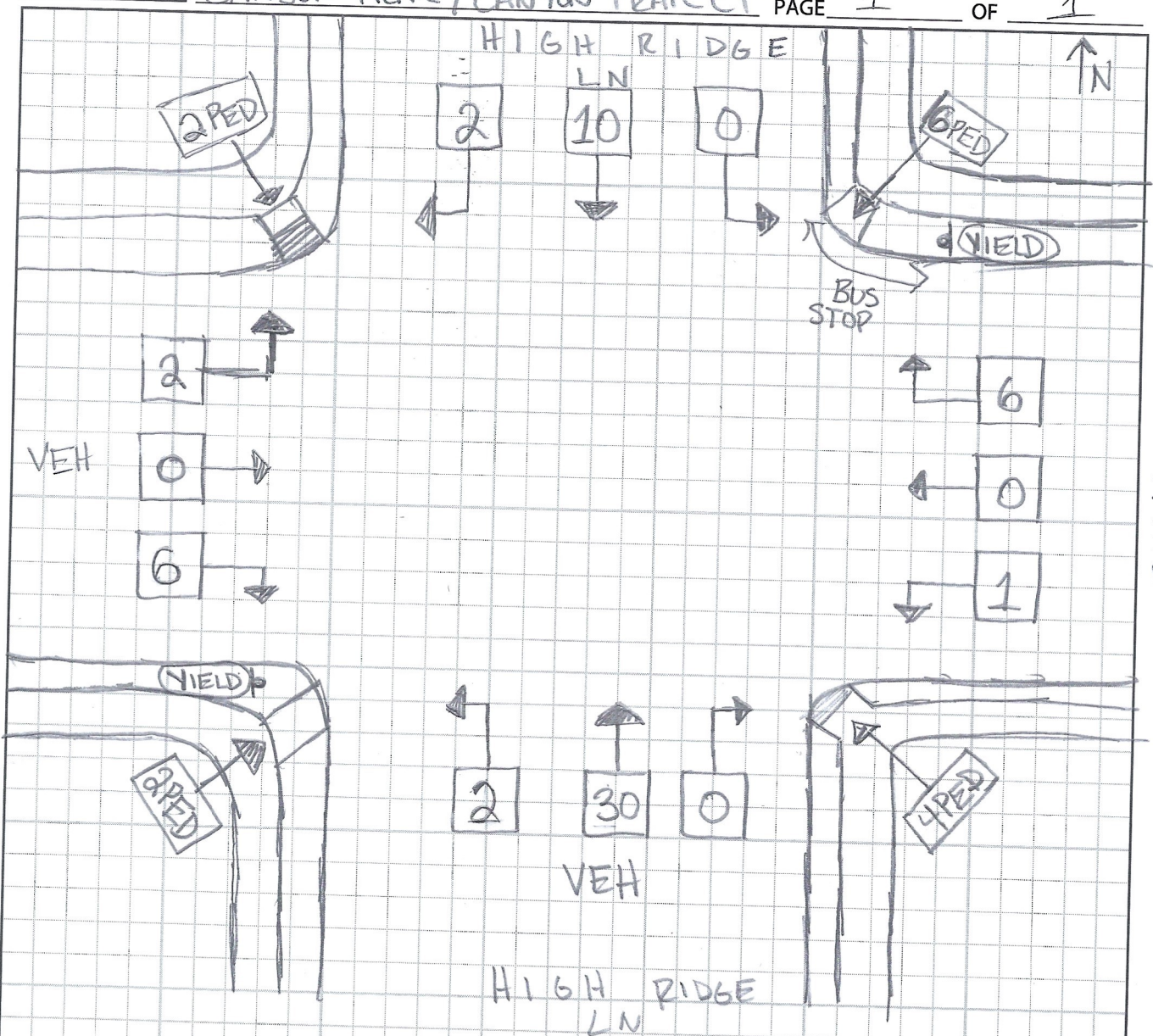
CANYON TRAIL / CANYON TRAIL CT

PAGE 1

OF 1

CANYON TRAIL COURT

CANYON TRAIL



- OBSERVATIONS THURS 8/31/2023 350-450 PM
- 73  $\frac{\text{UNITS}}{\text{HR}}$  x 24 HR = 1752  $\frac{\text{UNITS}}{\text{DAY}}$
- MANY CARS PARK ON CANYON TRAIL (WB)
- YIELD SIGNS OBSERVED BY DRIVERS
- BUS STOPPED AT 4:12 PM, NE CORNER - WEST BOUND
- ALL VEHICLES OBSERVED & STOPPED FOR BUS<sup>35</sup>
- 30 MPH NEIGHBORHOOD SPEED LIMIT



**UNITED CITY OF YORKVILLE  
TWO WAY YIELD OR STOP  
PRELIMINARY ENGINEERING EVALUATION**

**Location:** Northland Lane and Western Lane

**Evaluation Criteria**

**Guidance: Engineering judgement should be used to establish intersection control. The following factors should be considered:**

- A. Vehicular, bicycle, and pedestrian traffic volumes on all approaches;
- B. Number and angle of approaches;
- C. Approach speeds;
- D. Sight distance available on each approach; and
- E. Reported crash experience.

<u>Criteria Met</u>		<u>Criteria**</u>
Yes	Additional Study Required	No
<b>I. YIELD or STOP signs should be used at an intersection if one or more of the following conditions exist:</b>		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> A. An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> B. A street entering a designated through highway or street; and/or
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> C. An unsignalized intersection in a signalized area.
<b>II. In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:</b>		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.

Based on a preliminary review of the criteria for a YIELD or STOP sign the following action is recommended:

- A. ☐ Criteria are clearly met recommending installation of a YIELD or STOP sign (Circle designated sign type)  
Designate Location: \_\_\_\_\_
- B. ☒ Criteria are not clearly met at this time - no further action recommended
- C. ☐ Criteria may or may not be met - additional engineering study required

By: Gabriel Braboy Date: 9/11/2023

PROJECT ENGINEER  
Title

By: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
Title

\* Based upon Professional Engineer's Review  
\*\* Manual on Uniform Traffic Control Devices (MUTCD)



NORTHLAND LANE – NORTHBOUND  
APPROACH

LOOKING NORTH



NORTHLAND LANE – NORTHBOUND  
APPROACH

LOOKING WEST





NORTHLAND LANE – SOUTHBOUND  
APPROACH

LOOKING SOUTH



NORTHLAND LANE – SOUTHBOUND  
APPROACH

LOOKING WEST



WESTERN LANE – EASTBOUND  
APPROACH

LOOKING EAST



WESTERN LANE – EASTBOUND  
APPROACH

LOOKING NORTH





WESTERN LANE – EASTBOUND  
APPROACH

LOOKING SOUTH



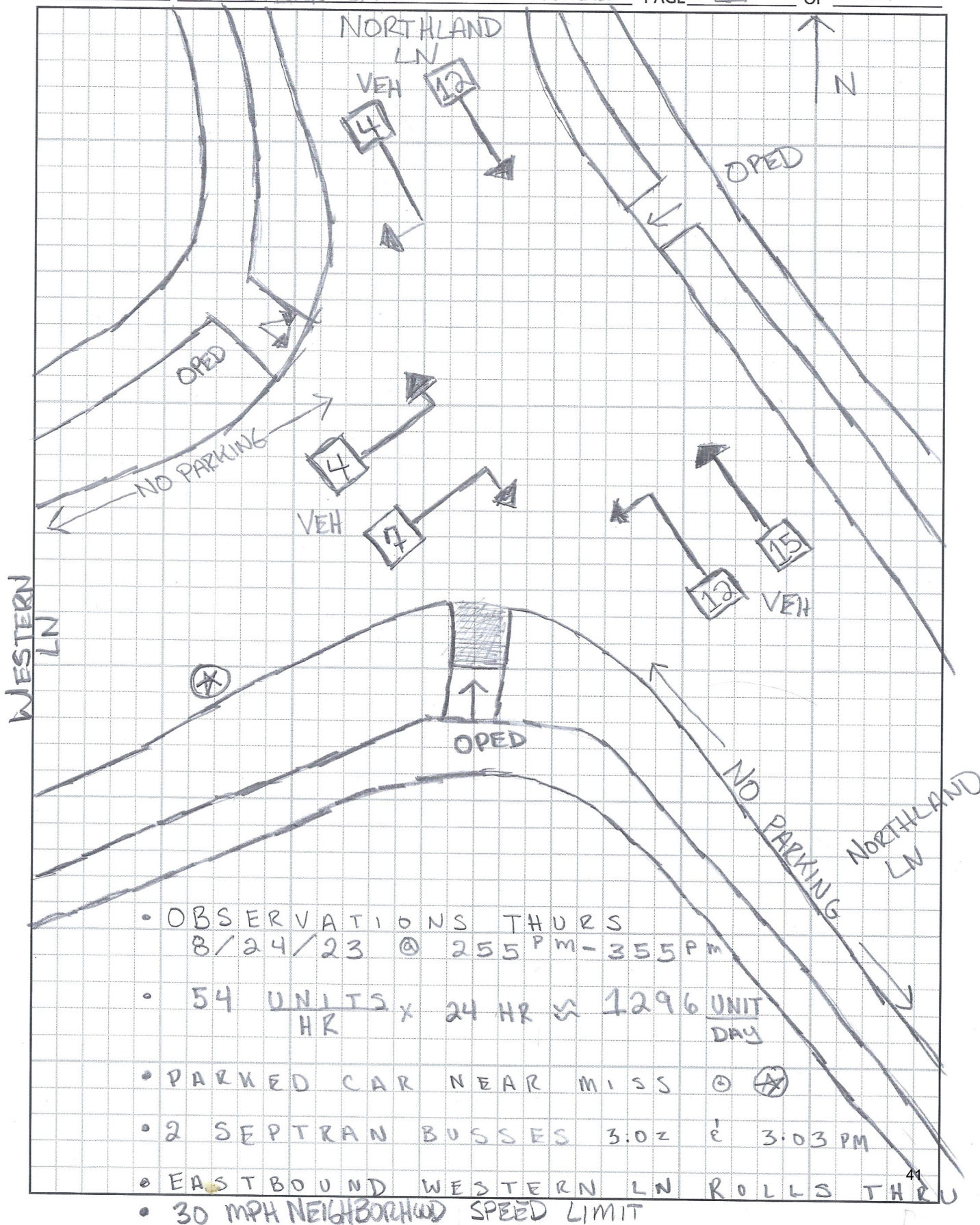
# Engineering Enterprises, Inc.

52 Wheeler Road • Sugar Grove, Illinois 60554

TEL: (630) 466-6700

FAX: (630) 466-6701

PROJECT TRAFFIC CONTROL SIGNAGE - YORKVILLE PROJECT NUMBER VO1107-C  
SUBJECT NORTHLAND LN AND WESTERN LN BY GAB DATE 08/24/2023  
PAGE 1 OF 1





# **PART II: TRAFFIC SPEED STUDY**



**Engineering Enterprises, Inc.**  
 52 Wheeler Road  
 Sugar Grove, Illinois 60554  
 (630) 466-6700  
[www.eeiweb.com](http://www.eeiweb.com)

DATE:	OCTOBER 2023
PROJECT NO.:	YO1107
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2021\
FILE:	YO2107-Kylyn Ridge Traffic Collection.mxd

## 7-DAY SPEED STUDY LOCATIONS





For Project:	High Ridge Lane					
Project Notes:						
Location/Name:	Merged					
Report Generated:	9/20/2023	8:17:42 AM				
Speed Intervals	1 MPH					
Time Intervals	Instant					
Traffic Report From	9/13/2023	6:00:00 PM	through	9/20/2023	6:59:59 AM	
85th Percentile Speed	34 MPH					
85th Percentile Vehicles	2460					
Max Speed	65 MPH	on	9/16/2023	4:06:48 PM		
Total Vehicles	2894					
AADT:	442					

Volumes - weekly counts

Time	5 Day	7 Day
Average Daily	386	404
AM Peak	7:00 AM 29	25
PM Peak	4:00 PM 45	42

Speed

Speed Limit:	30	
85th Percentile Speed:	34	
50th Percentile Speed:	29	
10 MPH Pace Interval:	23.0 MPH	33.0 MPH
Average Speed:	28.82	

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	173	168	35	179	203	164	161
% over limit	37.8	39.3	29.4	35.9	41.5	31.4	42.5
Avg Speeder	33.9	34.0	34.1	34.3	34.4	34.8	34.1
Avg Speed	28.9	28.7	28.1	28.7	29.3	28.1	29.6

Class Counts

	Number	%
VEH_SM	32	1.1
VEH_MED	2781	96.1
VEH_LG	81	2.8
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]

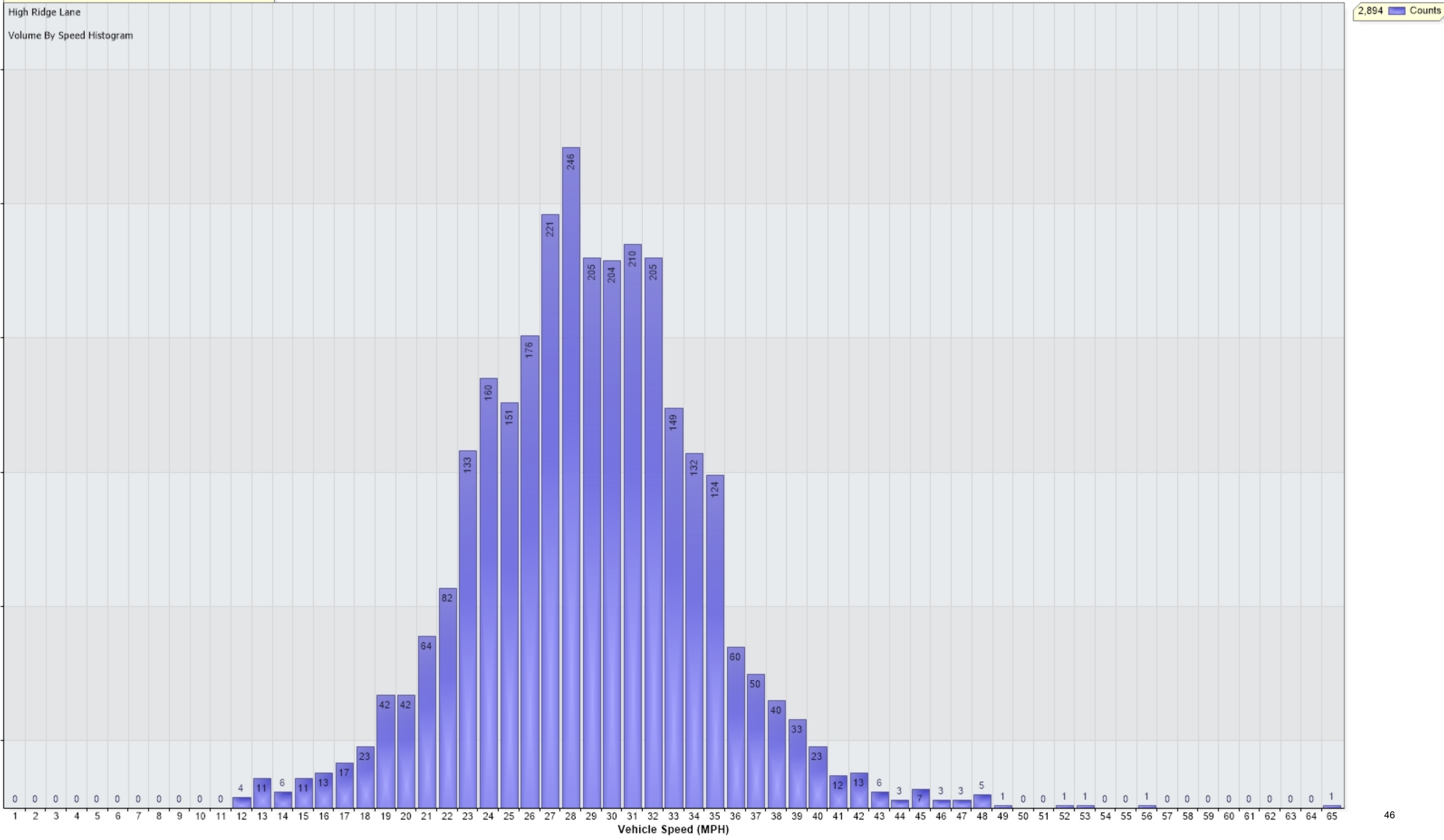
Summary of Violators  
High Ridge Lane

from Wed-Sep-13-2023-06-00-PM to Wed-Sep-20-2023-06-59-AM

Starting Hour	Count	Average Speed of all Traffic	Violator Counts	Average Speed of Violators
00:00:00	27	28.6	8	35.6
01:00:00	7	30.6	4	31.5
02:00:00	13	29.3	6	33.3
03:00:00	6	35.3	5	39.4
04:00:00	22	26.7	6	32.3
05:00:00	31	27.0	6	33.0
06:00:00	105	26.4	27	33.9
07:00:00	141	28.9	52	34.3
08:00:00	154	28.0	52	33.6
09:00:00	131	29.0	52	34.3
10:00:00	141	29.4	50	34.4
11:00:00	146	29.7	71	33.6
12:00:00	183	29.2	79	33.9
13:00:00	181	29.2	75	33.5
14:00:00	187	29.3	78	34.8
15:00:00	238	28.7	86	34.4
16:00:00	254	29.6	100	35.1
17:00:00	219	29.1	91	34.1
18:00:00	229	28.5	73	34.5
19:00:00	177	28.6	64	33.7
20:00:00	145	28.0	46	33.9
21:00:00	85	28.7	29	34.4
22:00:00	47	27.0	11	36.5
23:00:00	25	30.9	12	37.0



Vehicle Counts Vs. Speed [High Ridge Lane: Merged]



For Project:	Northland Lane					
Project Notes:						
Location/Name:	Merged					
Report Generated:	9/27/2023	7:37:38 AM				
Speed Intervals	1 MPH					
Time Intervals	Instant					
Traffic Report From	9/20/2023	4:00:00 PM	through	9/27/2023	7:59:59 AM	
85th Percentile Speed	30 MPH					
85th Percentile Vehicles	3210					
Max Speed	46 MPH	on	9/21/2023	5:16:51 PM		
Total Vehicles	3777					
AADT:	566					

Volumes - weekly counts

Time	5 Day	7 Day
Average Daily	492	521
AM Peak	11:00 AM 32	39
PM Peak	5:00 PM 58	53

Speed

Speed Limit:	30	
85th Percentile Speed:	30	
50th Percentile Speed:	26	
10 MPH Pace Interval:	21.0 MPH	31.0 MPH
Average Speed:	25.82	

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	61	66	18	67	78	55	56
% over limit	10.3	11.2	7.2	11.7	13.3	8.8	9.9
Avg Speeder	32.5	32.3	34.5	32.5	33.0	33.0	32.4
Avg Speed	25.8	26.1	25.2	26.2	26.4	25.1	25.7

Class Counts

	Number	%
VEH_SM	2	0.1
VEH_MED	3707	98.1
VEH_LG	68	1.8
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]

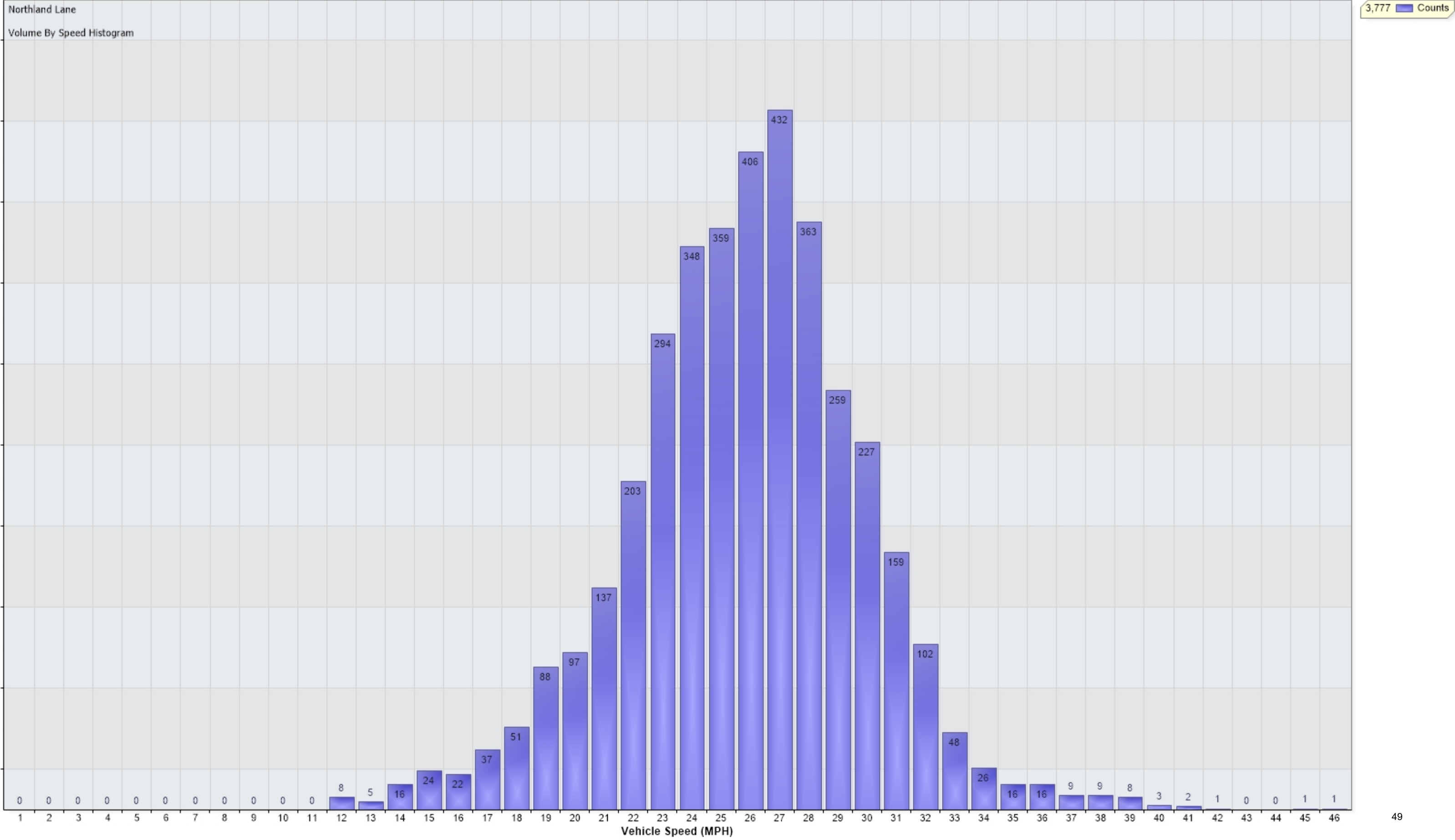


Summary of Violators  
Northland Lane

from Wed-Sep-20-2023-04-00-PM to Wed-Sep-27-2023-07-59-AM

Starting Hour	Count	Average Speed of all Traffic	Violator Counts	Average Speed of Violators
00:00:00	10	26.7	2	35.5
01:00:00	3	20.7	0	0.0
02:00:00	2	27.5	1	31.0
03:00:00	9	26.4	0	0.0
04:00:00	18	27.3	2	35.5
05:00:00	29	24.3	1	32.0
06:00:00	115	26.1	17	32.1
07:00:00	182	26.9	40	32.3
08:00:00	137	26.3	11	32.4
09:00:00	157	26.3	17	32.1
10:00:00	197	26.2	24	32.3
11:00:00	235	25.8	22	32.2
12:00:00	260	26.4	42	32.8
13:00:00	214	25.9	24	32.6
14:00:00	262	25.5	27	32.6
15:00:00	250	25.6	22	32.0
16:00:00	356	26.1	35	32.5
17:00:00	373	25.8	38	33.1
18:00:00	339	25.4	29	33.1
19:00:00	249	25.2	19	33.4
20:00:00	182	24.8	11	33.8
21:00:00	112	25.4	10	34.4
22:00:00	63	25.3	5	34.4
23:00:00	23	25.5	2	35.5

Vehicle Counts Vs. Speed [Northland Lane: Merged]





For Project:	Blackberry Shore Ln				
Project Notes:					
Location/Name:	Merged				
Report Generated:	10/4/2023	3:25:52 PM			
Speed Intervals	1 MPH				
Time Intervals	Instant				
Traffic Report From	9/27/2023	4:00:00 PM	through	10/4/2023	2:59:59 PM
85th Percentile Speed	36 MPH				
85th Percentile Vehicles	6485				
Max Speed	59 MPH	on	10/2/2023	7:13:12 AM	
Total Vehicles	7629				
AADT:	1096				

Volumes - weekly counts

Time	5 Day	7 Day
Average Daily	1035	1023
AM Peak	7:00 AM 69	61
PM Peak	5:00 PM 105	97

Speed

Speed Limit:	30	
85th Percentile Speed:	36	
50th Percentile Speed:	31	
10 MPH Pace Interval:	26.0 MPH	36.0 MPH
Average Speed:	30.55	

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	560	525	504	713	657	569	502
% over limit	52.5	48.4	53.9	55.3	51.8	51.7	56.8
Avg Speeder	34.7	34.8	34.3	34.8	34.6	34.4	34.8
Avg Speed	30.5	30.2	30.7	30.9	30.4	30.3	31.1

Class Counts

	Number	%
VEH_SM	547	7.2
VEH_MED	6816	89.3
VEH_LG	266	3.5
[VEH_SM=motorcycle,	VEH_MED = sedan,	VEH_LG = truck]

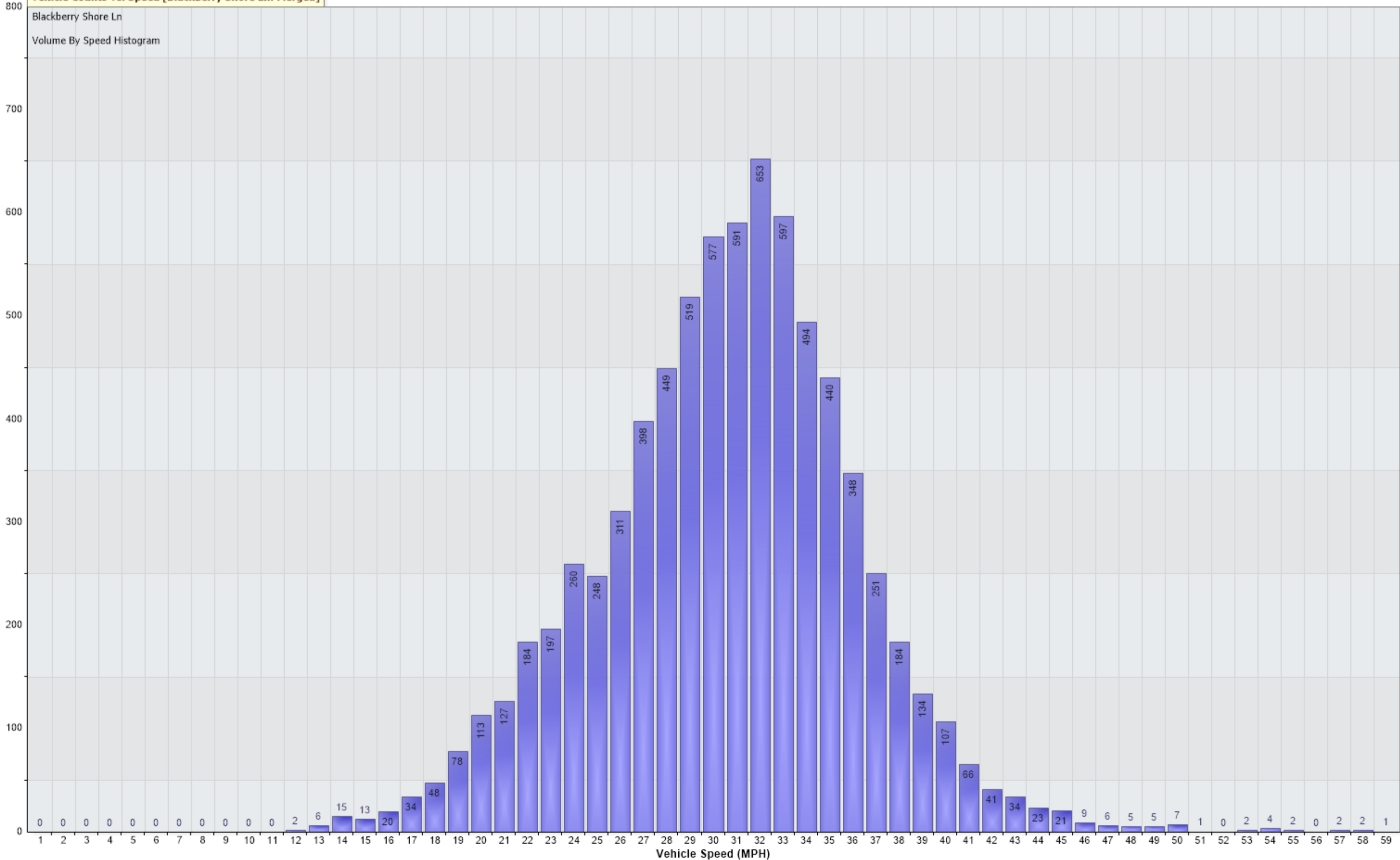
Summary of Violators  
Blackberry Shore Ln

from Wed-Sep-27-2023-04-00-PM to Wed-Oct-04-2023-02-59-PM

Starting Hour	Count	Average Speed of all Traffic	Violator Counts	Average Speed of Violators
00:00:00	69	30.9	39	34.2
01:00:00	21	32.0	14	34.6
02:00:00	8	29.3	3	33.0
03:00:00	16	30.9	10	35.0
04:00:00	46	30.3	26	34.4
05:00:00	81	30.4	45	34.5
06:00:00	234	30.0	113	35.2
07:00:00	405	30.7	211	34.8
08:00:00	397	30.0	200	34.4
09:00:00	350	30.2	170	34.5
10:00:00	432	30.7	226	34.7
11:00:00	426	30.2	218	34.9
12:00:00	500	30.9	287	34.8
13:00:00	406	30.6	214	34.9
14:00:00	447	31.4	263	35.3
15:00:00	551	30.9	301	34.8
16:00:00	623	31.1	364	34.6
17:00:00	683	30.9	366	34.8
18:00:00	562	30.0	291	34.2
19:00:00	473	29.7	226	33.6
20:00:00	369	29.9	168	34.5
21:00:00	245	30.5	118	34.7
22:00:00	173	30.3	91	34.4
23:00:00	112	31.3	66	34.7



Vehicle Counts



# ***TRAFFIC CALMING TOOLBOX***

*United City of Yorkville  
Kendall County, Illinois*

November, 2015



*PREPARED BY:*



*Engineering Enterprises, Inc.*

***Supporting the Communities  
We Work and Live In***



# **TRAFFIC CALMING TOOLBOX**

## **UNITED CITY OF YORKVILLE**

This traffic calming toolbox is designed to be a reference for some of the more common and applicable traffic calming measures. This is not a complete listing of all possible traffic calming measures. Cost information was obtained during research and is for use in planning. Project construction costs can be highly variable depending on size, scope, and complexity of the project.

# TRAFFIC CALMING MEASURES

VOLUME CONTROL MEASURES	SPEED CONTROL MEASURES				
	ACTIVE MEASURES			PASSIVE MEASURES	SIGNALIZATION
	VERTICAL DEFLECTION	HORIZONTAL DEFLECTION	CONSTRICTION		
FULL CLOSURE	SPEED HUMPS	ROUNDAABOUTS	CURB EXTENSIONS	ON-STREET PARKING	SIGNALS
PARTIAL CLOSURE	SPEED TABLES	MINI ROUNDAABOUTS/ TRAFFIC CIRCLES	NECK-DOWNS/ BULB-OUTS	BICYCLE LANES	PEDESTRIAN HYBRID BEACONS
FORCED TURN ISLANDS (DIVERTERS)	RAISED CROSSWALKS	CHICANES	CHOKERS/ MID-BLOCK CROSSINGS	NARROWED LANES	RAPID FLASH BEACONS
MEDIAN BARRIERS (DIVERTERS)	RAISED INTERSECTIONS	ALTERNATE SIDE PARKING	SLOW POINTS	MARKED CROSSWALKS	ACCESSIBLE PEDESTRIAN SIGNALS
DIVERTERS	SPEED CUSIONS	REALIGNED INTERSECTION	GATEWAYS	TRANSVERSE LANE MARKINGS	PEDESTRIAN COUNTDOWN TIMERS
SIGNED TURN RESTRICTIONS	SPEED BUMPS		PEDESTRIAN REFUGE ISLANDS	RUMBLE STRIPS	LEADING PEDESTRIAN INTERVALS
			CENTER ISLAND MEDIANS	RUMBLE STRIPES	LAGGING LEFT TURNS
			CURB RADIUS REDUCTION	COLORED PAVEMENT	
				TEXTURED PAVEMENT	
				TEXTURED MARKINGS	
				SPEED GUN WITH VMS	
				SPECIAL SIGNS	



# CHICANES AND ALTERNATING-SIDE PARKING

A **chicane** is a series of narrowings or curb extensions that alternate from one side of the street to the other forming S-shaped curves.<sup>1</sup>

Chicanes are used at midblock locations lower volume streets.<sup>1</sup>

**Alternating-side parking** (on-street) can also be used to create a chicane.<sup>4</sup>



<b>Typical Cost:</b> <b>\$7,000 - \$15,000 (Chicanes)</b>
---

# CURB EXTENSIONS

**Curb extensions** visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians while increasing the available space for street furniture, benches, plantings, and street trees. Curb extensions have multiple applications, ranging from neckdowns/bulbouts, to chokers/mid-block crossings, to chicanes (discussed on another page), to one-lane slow points.<sup>3</sup>

**Neckdowns** or **bulbouts** are curb extensions at intersection corners that narrow a street by extending the sidewalk or widening the planting strip.<sup>1</sup>

**Chokers** or **midblock crossings** are curb extensions at midblock that narrow a street by extending the sidewalk or widening the planting strip.<sup>1</sup>

**One-lane slow points** are curb extensions that narrow a street by widening the sidewalks or planting strips, effectively creating a pinch point along the street. They can be created by bringing both curbs in, or they can be done by widening one side at a midblock location.<sup>6</sup>

Curb extensions of all kinds may be implemented on downtown, neighborhood, and residential streets, large and small.<sup>3</sup>



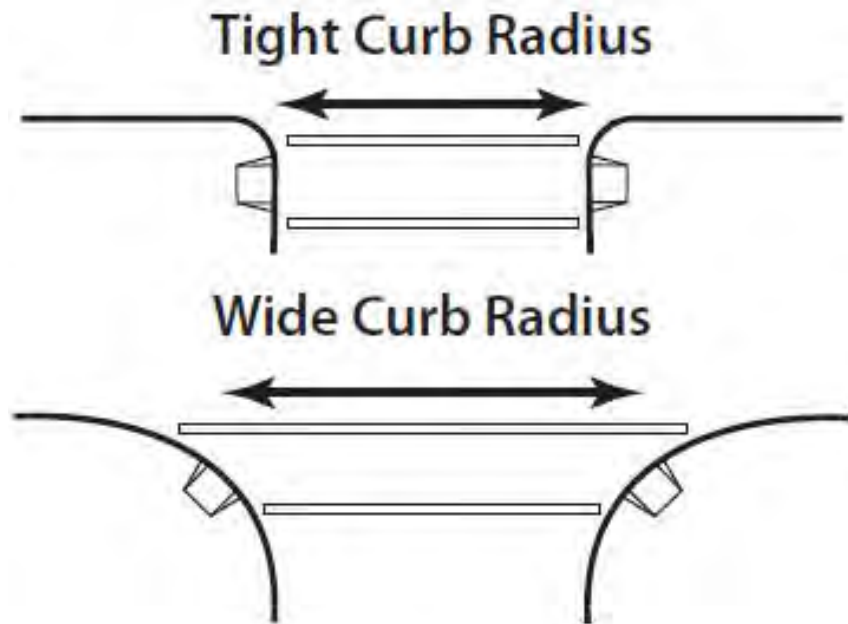
<b>Typical Cost:</b>	<b>\$10,000 - \$20,000 (Neckdowns – per corner)</b>
	<b>\$7,000 - \$15,000 (Chokers)</b>
	<b>\$7,000 - \$20,000 (One-Lane Slow Points)</b>



# CURB RADIUS REDUCTIONS

**Curb radius reductions** are reconstructions of the turning radius on one or more legs of an intersection to a tighter turn(s).

These shorten the crossing distance for pedestrians, slow the motorists down, and improve sight distance between pedestrians and motorists.

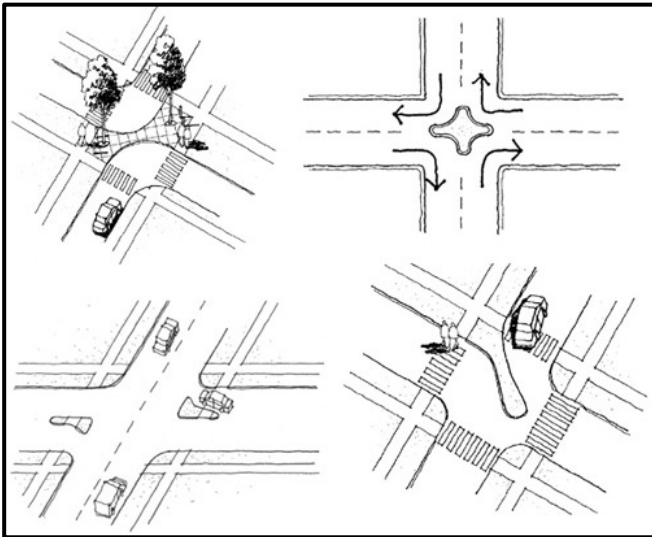


**Typical Cost: \$5,500 - \$6,500 (per leg)**

# DIVERTERS

A **diverter** is an island built at a residential street intersection that prevents certain through and/or turning movements. There are different types of diverters: diagonal, star, forced turn, and truncated.

Diverters affect people living in the neighborhood most of all and must be carefully considered. They are mainly used to discourage or prevent traffic from cutting through a neighborhood.<sup>9</sup>



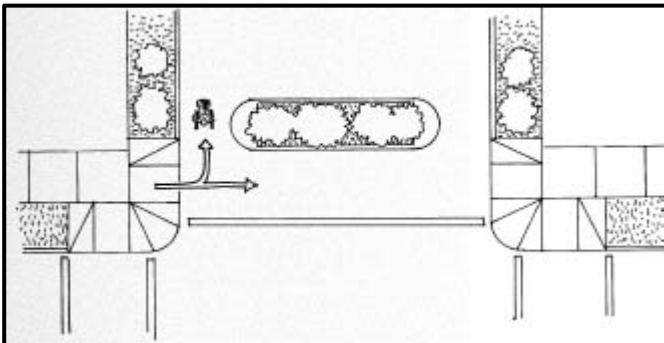
**Typical Cost:     \$5,000 - \$85,000 (Per intersection depending on type and complexity of diverter)**



# FULL-STREET CLOSURES

**Full-street closures** are barriers placed across a street to completely close the street to through-traffic, usually leaving only sidewalks open; they are sometimes called cul-de-sacs or dead-ends.

Full-street closures are typically applied only after other measures have failed or been determined to be inappropriate.<sup>1</sup>



**Typical Cost:     \$500 - \$125,000 (Depending on type and complexity of system used)**



# GATEWAYS

**Gateways** are physical or geometric landmarks that indicate a change in environment from a higher speed arterial or collector road to a lower speed residential or commercial district. They may be a combination of street narrowing, medians, signing, archways, roundabouts, or other identifiable feature.

Signing and archways will be shown here. Other means are discussed in other parts of this toolbox.



<b>Typical Cost:</b>	<b>\$150 - \$500 (Gateway Signs)</b>
	<b>\$5,000 - \$50,000 (Gateway Structures)</b>



# PARTIAL-STREET CLOSURES

**Partial-street closures** are barriers that block travel in one direction for a short distance on otherwise two-way streets and are sometimes called half-closures, entrance barriers, or one-way closures.

Generally, provisions are made to make these closures passable for pedestrians and cyclists.<sup>1</sup>

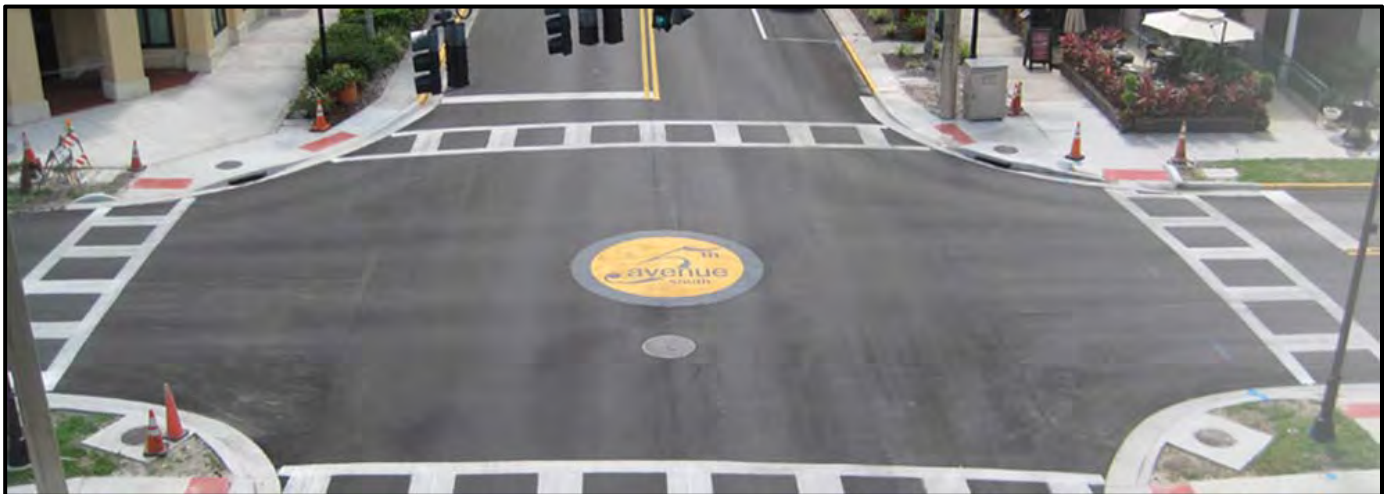


**Typical Cost: \$500 - \$45,000 (Depending on type and complexity of system used)**

# PAVEMENT MARKINGS

**Pavement markings** are used to define traveled lanes for motorists and pedestrians. Pavement markings may be used to reduce lane widths, delineate parking lanes and/or bicycle lanes, delineate areas restricted to motor travel or parking, and delineate cross walks for pedestrian travel.

Roadway narrowing by use of edge lines, bicycle lanes, and parking lanes is an effective way to reduce speed by about 1 to 3 mph. Transverse pavement markings, if they are raised, can help to slow traffic in areas such as school zones. These markings, when driven over, produce noise and vibration that alerts the driver. They are less effective and less costly than installing rumble strips.



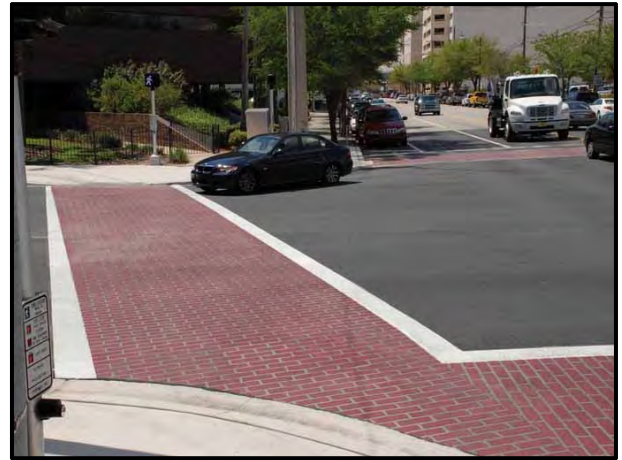
<b>Typical Cost:</b> <b>\$2 - \$10 (Per linear foot of pavement marking)</b>
--



# PAVING TREATMENTS

**Paving treatments** are colors or textures of pavement (or pavement marking) used to provide warning to drivers or to delineate pedestrian or bicycle lanes. Colored pavement either by design or pavement marking visually enhances the function of portions of the roadway, such as a colored bicycle lane. Colored pavement marking can also be used to delineate areas of lower speed.

Textured pavement can alert the driver to a change in function or speed of the roadway visually and through noise and vibration as they drive over it. For instance, cross walks made of stamped concrete or pavers visually stand out as well as are noisy to cross. Rumble strips can be made of raised reflective pavement markers, raised plastic, or milled into the pavement. These cause noise and vibration to alert the driver.



<b>Typical Cost:</b>	<b>\$2 - \$10 (Per linear foot of pavement marking)</b>
	<b>\$0.25 - \$2.00 per linear foot (Rumble strips)</b>
	<b>\$75 - \$200 per square yard (Textured pavement)</b>

# MEDIAN/PEDESTRIAN REFUGE ISLANDS

**Median/Pedestrian refuge islands** are raised islands placed in the center of the street at intersections or midblock crossings to help protect crossing pedestrians and cyclists from motor vehicles.

These are particularly helpful on wider streets to allow pedestrians to focus on traffic from one direction at a time while crossing a street. They are most useful on high-volume, high-speed roads.



**Typical Cost: \$2,000 - \$40,000 (Per intervention)**



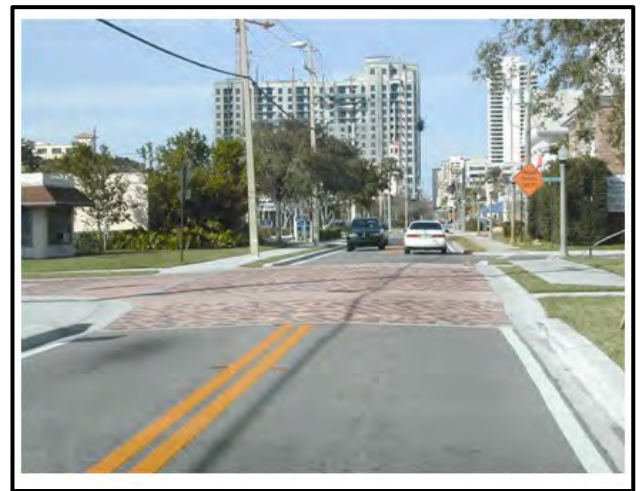
# RAISED CROSSWALKS and RAISED INTERSECTIONS

A **raised crosswalk** is a speed table outfitted with crosswalk markings and signage to channelize pedestrian crossings, providing pedestrians with a level street crossing. This also makes pedestrians more visible to approaching motorists.

Raised crosswalks are good for locations where pedestrian crossings occur at haphazard locations and vehicle speeds are excessive.<sup>4</sup>

A **raised intersection** is a flat raised area covering an entire intersection with ramps on all approaches and often with brick or other textured materials on the flat section and ramps.

Raised intersections are often used in densely developed urban areas where loss of parking would be unacceptable.<sup>1</sup>



**Typical Cost:     \$4,000 - \$10,000 (Raised Crosswalks)**  
**\$15,000 - \$60,000 (Raised Intersections)**

# ROUNDBABOUTS and TRAFFIC CIRCLES

A **roundabout** is a type of circular intersection in which traffic travels counterclockwise (in right-hand traffic countries) around a central island. Specific design and traffic control features define and distinguish roundabouts from traffic circles. These include yield control of all entering traffic, channelized approaches that deflect traffic flow and appropriate geometric curvature to ensure that travel speeds on the circulatory roadway are typically less than 30 mph.<sup>5</sup>

Roundabouts are used on higher volume streets than traffic circles.<sup>4</sup>

A **traffic circle** is a raised island, placed in an intersection, around which traffic circulates. They are usually 10' – 20' in diameter<sup>6</sup> and require drivers to slow to a speed that allows them to comfortably maneuver around them.<sup>1</sup> These are smaller than roundabouts and do not have yield control of all entering traffic.

Traffic circles are mainly used on intersections of local or collector streets.<sup>1</sup>



<b>Typical Cost:</b>	<b>\$60,000 - \$300,000 (Roundabouts)</b>
	<b>\$10,000 - \$50,000 (Traffic Circles)</b>



# SPEED BUMPS and SPEED CUSHIONS

A **speed bump** is a low raised ridge across a road or parking lot that causes people to drive more slowly.<sup>2</sup>

Speed bumps are typically used in parking lots or very low volume roads.

A **speed cushion** is a speed bump, hump, or speed table that includes wheel cutouts to allow large vehicles to pass unaffected while reducing passenger car speeds.

Speed cushions allow emergency vehicles to pass their wheels on either side of the raised area. They also allow cyclists to pass on the side of the raised area.<sup>3</sup>



<b>Typical Cost:</b>	<b>\$1,500 - \$2,500 (Speed Bumps)</b>
	<b>\$3,000 - \$5,000 (Speed Cushions – per set of 3)</b>

# SPEED HUMPS and SPEED TABLES

A **speed hump** is a rounded raised area of pavement typically 12 to 14 feet in length. They are often placed in a series (typically spaced 300 to 600 feet apart). They are sometimes called road humps or undulations.

Speed humps are typically used on residential streets, but not major roads, bus routes, or primary emergency response routes. They are placed at mid-block, not at intersections.

A **speed table** is a speed hump that has a flat middle section that is typically 22 feet in length and ramps on the ends that are typically 6 feet in length (see bottom right picture).

Speed tables are mainly used on local and collector streets or on main roads through small communities.<sup>1</sup>



<b>Typical Cost:</b>	<b>\$1,500 - \$3,000 (Speed Humps)</b>
	<b>\$2,500 - \$5,000 (Speed Tables)</b>



# TRAFFIC AND PEDESTRIAN SIGNALS

**Traffic signals** generally create gaps in the traffic flow and allow pedestrians to cross the street at locations where pedestrians would otherwise experience excessive delay, difficulties crossing, or safety issues. Signal timings can be adjusted for **lagging left turns** and/or **leading pedestrian intervals**.

There are many enhancements to the standard traffic signals that further advance the safety of the pedestrians. The most common is the **pedestrian-activated signal** (the push button seen below), which can also be made an **accessible pedestrian signal**. Further refinements to that include a **pedestrian countdown timer** (seen in bottom photo) and pedestrian detector signals. **Detectors** can also be used to extend the crossing time for slower moving pedestrians (called a **PUFFIN crossing**).

**Rapid flash beacons** (sign-mounted) and **pedestrian hybrid beacons** (pole mounted – see top right photo below) are also used to alert drivers to upcoming pedestrian crossings. These are less costly but also more passive than traditional signals, which actually stop traffic.



Typical Cost:	\$150,000 - \$500,000 (New signals and installation)
	\$300 - \$15,000 (Signal enhancements – per enhancement)
	\$10,000 - \$60,000 (Rapid-flash & pedestrian hybrid beacons)

# REFERENCES

- 1 Institute of Transportation Engineers (2015). *ITE Traffic Calming website* ([www.ite.org/traffic/](http://www.ite.org/traffic/))
- 2 Merriam-Webster Dictionary
- 3 National Association of City Transportation Officials (NACTO) (2015). *NACTO website* ([www.nacto.org](http://www.nacto.org))
- 4 Fehr & Peers (2015). *Traffic Calming website* ([www.trafficcalming.org](http://www.trafficcalming.org))
- 5 Illinois Department of Transportation (2015). *Bureau of Design and Environment (BDE) Manual* ([www.dot.il.gov](http://www.dot.il.gov))
- 6 City of Alameda (1996). *Traffic Calming Toolbox*
- 7 Pedestrian and Bicycle Information Center (2015). *Pedestrian and Bicycle Information Center website* ([www.pedbikeinfo.org](http://www.pedbikeinfo.org))
- 8 Pedestrian and Bicycle Information Center (2015). *Pedestrian Safety Guide and Countermeasure Selection System* ([www.pedbikesafe.org/pedsafe/countermeasures.cfm](http://www.pedbikesafe.org/pedsafe/countermeasures.cfm))
- 9 Project for Public Spaces (2015). *Traffic Calming 101* ([www.pps.org/reference/livememtraffic/](http://www.pps.org/reference/livememtraffic/))