United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4350
www.yorkville.il.us

PLANNING AND ZONING COMMISSION AGENDA

Wednesday, January 8, 2025
7:00 PM
Yorkville City Hall Council Chambers
651 Prairie Pointe Drive

Meeting Called to Order: 7:00 p.m.

Roll Call:

Previous meeting minutes: December 11, 2024

Citizen's Comments

Public Hearings

1. **PZC 2024-33 Stephen Cross,** representing Costco, has submitted applications to the United City of Yorkville, on behalf of Costco Wholesale Corporation (contract purchaser and petitioner) and Joda Land Holding, LLC (property owner). The applications request an amendment to the Yorkville Crossing Planned Unit Development (PUD) Agreement to allow 160,000-square-foot members-only retail store, special use authorization for a freestanding fueling facility, and final plat approval to resubdivide two parcels (totaling ~34 acres) into three parcels. The petitioner is also requesting deviations from the Unified Development Ordinance, including regulations for landscaping (Section 10-5-3), parking and loading (Section 10-5-1) related to maximum parking stalls and minimum EV charging stations, outdoor lighting pole height (Section 10-5-7), and building facade appearance standards (Section 10-5-8). The property is located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway.

Unfinished Business

New Business

1. **PZC 2024-33 Stephen Cross,** representing Costco, has submitted applications to the United City of Yorkville, on behalf of Costco Wholesale Corporation (contract purchaser and petitioner) and Joda Land Holding, LLC (property owner). The applications request an amendment to the Yorkville Crossing Planned Unit Development (PUD) Agreement to allow 160,000-square-foot members-only retail store, special use authorization for a freestanding fueling facility, and final plat approval to resubdivide two parcels (totaling ~34 acres) into three parcels. The petitioner is also requesting deviations from the Unified Development Ordinance, including regulations for landscaping (Section 10-5-3), parking and loading (Section 10-5-1) related to maximum parking stalls and minimum EV charging stations, outdoor lighting pole height (Section 10-5-7), and building facade appearance standards (Section 10-5-8). The property is located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway.

   Action Items
   PUD Amendment, Special Use, and Final Plat

2. **PZC 2024-30 Nicholas S. Bellone,** on behalf of Ament Road Solar 1, LLC (Tenant) and Janet M. Dhuse on behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner) are seeking a special use permit for a commercial solar energy facility and a variance to Section 36-282(17)(a) of the Kendall County Zoning Ordinance to allow a commercial solar energy facility on land within 1.5 miles of municipality without an annexation agreement.

   Action Item
   1.5-mile Review

Additional Business

Adjournment

PLANNING & ZONING COMMISSION

City Council Chambers
651 Prairie Pointe Drive, Yorkville, IL
Wednesday, December 11, 2024 7:00pm

Meeting Called to Order
Chairman Richard Vinyard called the meeting to order at 7:00pm, roll was called and a quorum was established.

Roll Call
Rusty Hyett-yes, Michael Crouch-yes, Marge Linnane-yes, Richard Vinyard-yes,
Ryan Forristall-yes

Absent: Danny Williams

City Staff
Krysti Barksdale-Noble, Community Development Director
Sara Mendez, Planner1
Megan Lamb, City Attorney

Other Guests
Chris Vitosh, Vitosh Reporting Service
Lynn Dubajic Kellogg, City Consultant

Previous Meeting Minutes, November 13, 2024
Motion by Rusty Hyett and second by Marge Linnane to approve the minutes as presented. Roll call: Crouch-yes, Linnane-yes, Vinyard-yes, Forristall-yes, Hyett-yes. Carried 5-0.

Citizen's Comments None

Public Hearings
Chairman Vinyard explained the procedure for the Hearing and the order for presenting testimony. A motion was made by Mr. Crouch to open the Public Hearing, seconded by Mr. Forristall. Public Hearing opened at 7:02pm. Roll call: Linnane-yes, Vinyard-yes, Forristall-yes, Hyett-yes, Crouch-yes. Carried 5-0. Mr. Vinyard read the Public Hearing description.

1. **PZC 2024-25 United City of Yorkville,** petitioner, is proposing to amend Chapter 5 Development Standards within the United City of Yorkville's Unified Development Ordinance regarding fences. The proposed text amendment will allow vinyl coated chain link fence material in side and rear yards within residential districts.

(See Court Reporter's transcript)

At approximately 7:08pm a motion was made by Mr. Crouch, seconded by Mr. Forristall to close the Public Hearing. Roll call: Linnane-yes, Vinyard-yes, Forristall-yes, Hyett-yes, Crouch-yes. Carried 5-0.

Unfinished Business None

New Business

1. **PZC 2024-25** United City of Yorkville Text Amendment (see full description above)

There was no further discussion.

Action Item

Text Amendment

Mr. Vinyard entertained a motion to approve PZC 2024-25. So moved by Mr. Hyett and seconded by Mr. Forristall. Motion: Mr. Vinyard read the motion as follows: In consideration of testimony presented during a Public Hearing on December 11, 2024 and discussions conducted at that meeting, the Planning and Zoning Commission recommends approval to the City Council of a request to amend Section 10-5-5 Fences, in the Unified Development Ordinance to allow vinyl coated chain link be listed as an acceptable fence material in the rear and side yard only in all zoning districts as presented in a staff memorandum dated December 4, 2024.
Roll call: Vinyard-yes, Forristall-yes, Hyett-yes, Crouch-yes, Linnane-yes. Carried 5-0.

Additional Business

1. 2025 Meeting Schedule

Schedule approved on a motion by Ms. Linnane and second by Mr. Crouch. Unanimous voice vote.

2. City Council Action Updates

Ms. Noble provided the following summary of the City Council updates:

a. PZC 2024-21 Marker Inc.--A first reading was held, no vote taken yet
b. PZC 2024-26 Drew Daniels—did not make last City Council agenda
c. PZC 2024-27 Grande Reserve Units 18 & 25—Final Plats approved
d. PZC 2024-28 Grande Reserve, Unit 21—Final Plat approved

Adjournment

There was no further business and the meeting was adjourned at 7:12pm on a motion by Ms. Linnane and second by Mr. Hyett. Unanimous voice vote approval.

Respectfully submitted by
Marlys Young, Minute Taker

UNITED CITY OF YORKVILLE

YORKVILLE, ILLINOIS

PLANNING AND ZONING COMMISSION

PUBLIC HEARING

651 Prairie Pointe Drive

Yorkville, Illinois

Wednesday, December 11, 2024

7:00 p.m.

PRESENT:

Mr. Rich Vinyard, Chairman,

Mr. Rusty Hyett, Commissioner,

Mr. Ryan Forristall, Commissioner,

Ms. Marge Linane, Commissioner,

Mr. Michael Crouch, Commissioner.

ALSO PRESENT:

Ms. Krysti Barksdale-Noble, Community Development Director;

Ms. Sara Mendez, Planner;

Ms. Marlys Young, Minute Taker.

APPEARANCES:

OTTOSEN, DiNOLFO, HASENBALG & CASTALDO, LTD.
BY: MS. MEGAN LAMB
1804 North Naper Boulevard, Suite 350
Naperville, Illinois 60563
(630) 682-0085

appeared on behalf of the United City of Yorkville.

- - - - -

(WHEREUPON, the following proceedings were had in public hearing, commencing at 7:03 p.m.:)

CHAIRMAN VINYARD: There is one public hearing scheduled for tonight's Planning and Zoning Commission meeting.

The purpose of this hearing is to invite testimony from the members of the public regarding the proposed requests that are being considered before the Commission tonight.

Public testimony from persons present who wish to speak may be for or against the request or to ask questions of the petitioner regarding the request being heard.

Do I really have to read all this? Since we have no one present, do I have to read the -- can I skip the instructions for people who aren't here?

MS. LAMB: You can skip the instructions, but don't do anything else just in case people read the transcript and try to challenge our hearing.

CHAIRMAN VINYARD: Very good. Persons wishing to testify are asked to speak clearly,

one at a time, state your name, who you represent. You are also asked to sign in at the podium.

If you plan to speak during tonight's public hearing as a petitioner or a member of the public, this would be where you would raise your right hand and repeat after me. So we will be moving on.

The order of receiving testimony will be the petitioner presentation, followed by those who wish to speak in favor or opposition of the request.

May I have a motion to open public hearing on PZC number 2024-25, United City of Yorkville requesting a text amendment to the UDO?

COMMISSIONER CROUCH: So moved.

COMMISSIONER FORRISTALL: Second.

CHAIRMAN VINYARD: Roll call vote on the motion, please.

MS. YOUNG: Yes. Linane.

COMMISSIONER LINANE: Yes.

MS. YOUNG: Vinyard.

CHAIRMAN VINYARD: Yes.

MS. YOUNG: Forristall.

COMMISSIONER FORRISTALL: Yes.

MS. YOUNG: Hyett.

COMMISSIONER HYETT: Yes.

MS. YOUNG: And Crouch.

COMMISSIONER CROUCH: Yes.

CHAIRMAN VINYARD: Okay. The public hearing up for discussion tonight is PZC 2024-25, United City of Yorkville, petitioner, is proposing to amend Chapter 5, Development Standards, within the United City of Yorkville's Unified Development Ordinance regarding fences.

The proposed text amendment will allow vinyl coated chain link material in side and rear yards within residential districts.

Is the petitioner for PZC 2024-25, United City of Yorkville, present and prepared to make its presentation of their proposed request?

MS. MENDEZ: Yes. So, like you said, there is a request to amend Section 10-5-5 to allow vinyl coated chain link fencing. Right now it is only permitted in the side and rear yard in non-residential districts.

The City's Community Development Department has been receiving requests to allow

vinyl coated chain link, and since the code does not permit it, we have not allowed it.

And in the City's 2015 Zoning Ordinance, vinyl coated chain link was listed as an acceptable material as you can see in the packet here, and it was only allowed in the rear and side yards for residential properties, so residents are urging the City to consider reverting the ordinance back to the 2015 Zoning Ordinance.

This change came about in the summer of 2019 where the City began updating its UDO, and to support this effort, the UDO Advisory Committee was formed.

During the December 9th, 2021 UDO Advisory Committee meeting, they reviewed Chapter 5, Development Standards, which also included fencing regulations, and in this meeting the committee unanimously agreed that plastic coated or plastic stripped chain link fences should not be allowed in residential areas, and the existing fences using this material would be grandfathered in, so because of this, vinyl coated chain link was removed and was changed to

only be allowed in the side and rear yards on properties in non-residential districts, and the City updated its UDO with these changes in January of 2024.

In the memo you will also be able to find the proposed text amendment, specifically letter H, where the possible change would be vinyl coated chain link, rear and side yard only in all zoning districts.

Staff supports the proposed text amendment because it addresses the ongoing resident requests to revert to the City's 2015 Zoning Ordinance standards, and allowing vinyl coated chain link in the rear and side yards in residential districts will not impact the public health, safety or general welfare of residents.

I also just want to add, as the UDO is currently written, the provisions may seem ambiguous to residents and staff, leading to the potential misinterpretation that vinyl coated chain link fencing is allowed in all residential yards and only in the rear and side yards for non-residential properties, so if the proposed text amendment is not approved, staff suggests

adding language to clarify this ambiguity.

And then, lastly, this text amendment request will be brought to City Council on January 14th, 2025.

CHAIRMAN VINYARD: Very good. Thank you. Is there anyone here present who wishes to speak in favor or in opposition of the request?

(No response.)

CHAIRMAN VINYARD: Seeing as there is none, do any of the commissioners have any questions regarding the petition?

COMMISSIONER HYETT: I do.

CHAIRMAN VINYARD: Please.

COMMISSIONER HYETT: So right now you cannot have a chain link fence?

MS. NOBLE: If you apply for a new permit, as of January 1st, you cannot have a chain link fence at all.

COMMISSIONER HYETT: So I have a house in my subdivision that had a chain link fence put up this summer, and it's on their side yard, too. That's why I'm like --

CHAIRMAN VINYARD: No permit.

COMMISSIONER HYETT: Maybe.

MS. NOBLE: Maybe.

COMMISSIONER HYETT: It was the same company that does our stuff for --

MS. NOBLE: We can look into that.

COMMISSIONER HYETT: I am not trying to get them in trouble, but I'm like -- I'm like why -- I'm like they have it in their back yard and their side yard, so that's why I'm like --

MS. NOBLE: It was always permitted -- Actually, you know, Mike was on the Zoning Ordinance committee when we updated the 2014 Zoning Ordinance, so prior to that it was permitted in all yards and then it was a compromise of the committee to allow them only in the side and the rear, and then when we had the UDO Committee, which had two former PZC members on there, the consensus was not to allow them at all.

Staff did mention that was going to be a burden on residents.

COMMISSIONER HYETT: I don't think it's a problem. I mean, you are not in an HOA, so I don't think the back yard is a big deal.

MS. NOBLE: And we required them to be

vinyl coated, so --

CHAIRMAN VINYARD: Any other commissioners have questions?

COMMISSIONER FORRISTALL: So there were requests? You're saying there were several requests made.

MS. NOBLE: Correct. About a handful of requests. Some applied or just called and asked what the standards were, and some applied.

CHAIRMAN VINYARD: There's got to be a significant cost to this.

COMMISSIONER HYETT: Does the vinyl have to be a certain color?

MS. NOBLE: No, we don't regulate color.

CHAIRMAN VINYARD: Anybody else? Any clarification on anything?

(No response.)

CHAIRMAN VINYARD: No, no? Okay. Since all public testimony regarding these petitions have been taken, may I have a motion to close the taking of testimony in these public hearings?

COMMISSIONER FORRISTALL: So moved.

COMMISSIONER CROUCH: So moved.

CHAIRMAN VINYARD: Sorry. I heard a

second out there, didn't I? Was that you?

COMMISSIONER FORRISTALL: Yeah.

CHAIRMAN VINYARD: Roll call vote on the motion, please.

MS. YOUNG: Yes. Linane.

COMMISSIONER LINANE: Yes.

MS. YOUNG: Vinyard.

CHAIRMAN VINYARD: Yes.

MS. YOUNG: Forristall.

COMMISSIONER FORRISTALL: Yes.

MS. YOUNG: Hyett.

COMMISSIONER HYETT: Yes.

MS. YOUNG: And Crouch.

COMMISSIONER CROUCH: Yes.

CHAIRMAN VINYARD: Okay. The public hearing portion of tonight's meeting is now closed.

(Which were all the proceedings had in the public hearing portion of the meeting, concluding at 7:10 p.m.)

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STATE OF ILLINOIS)
) SS:
COUNTY OF LASALLE)

I, CHRISTINE M. VITOSH, a Certified Shorthand Reporter of the State of Illinois, do hereby certify:

That previous to the commencement of any testimony heard, the witnesses were duly sworn to testify the whole truth concerning the matters herein;

That the foregoing public hearing transcript, Pages 1 through 13, was reported stenographically by me by means of machine shorthand, was simultaneously reduced to typewriting via computer-aided transcription under my personal direction, and constitutes a true record of the testimony given and the proceedings had;

That the said public hearing was taken before me at the time and place specified;

That I am not a relative or employee or attorney or counsel, nor a relative or employee of such attorney or counsel for any of the parties hereto, nor interested directly or indirectly in the outcome of this action.

I further certify that my certificate attached hereto applies to the original transcript and copies thereof signed and certified under my hand only. I assume no responsibility for the accuracy of any reproduced copies not made under my control or direction.

IN WITNESS WHEREOF, I do hereunto set my hand at Leland, Illinois, this 30th day of December, 2024.

/s/ Christine M. Vitosh

CHRISTINE M. VITOSH,
C.S.R. Certificate No. 084-02883

/

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Memorandum

To: Planning & Zoning Commission
From: Krysti J. Barksdale-Noble, Community Development Director
CC: Bart Olson, City Administrator
Sara Mendez, Planner I
Date: January 2, 2025
Subject: **PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plat)**
Proposed Wholesale Retail Warehouse, Fuel Station and Outlots

---

REQUEST SUMMARY:

Stephen Cross, an authorized representative of Costco, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner, are requesting approval to develop a members-only retail store spanning approximately 160,000 square feet, establish and operate a standalone fueling facility, and obtain final plat approval to subdivide the existing two parcels, totaling nearly 34 acres, into three new parcels. The Costco development, including the fueling facility, will occupy approximately 33.14 acres (Lot 1), with an additional 7 acres designated for two perimeter lots (Lot 2 and Lot 3) along Veteran's Parkway and about 3.4 acres reserved for stormwater management at the northwest corner of the property.

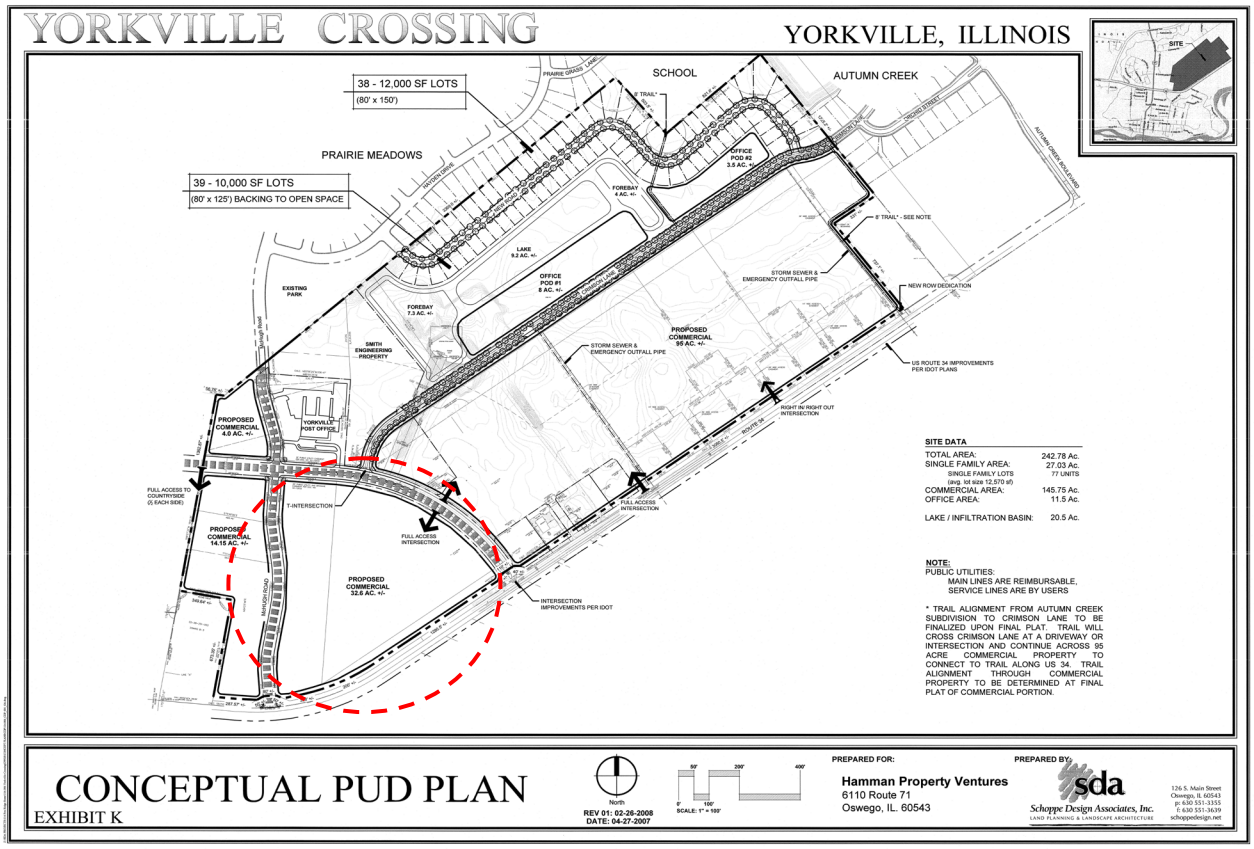
As part of the request to amend the existing "Yorkville Crossing" Planned Unit Development (PUD) agreement and Special Use authorization for the fueling station, Costco is seeking allowances for additional parking (980 stalls vs. a code-maximum of 387), exceptions to electric vehicle charging requirements, pole-mounted lighting height exceeding the 35-foot limit (proposed at 36'-6"), certain landscape regulation deviations, and a reduced masonry material percentage on building facades.



COSTCO WHOLESALE WAREHOUSE
United City of Yorkville, Illinois
Date: November 18, 2024
File Location: I:\ARCGIS TEMPLATES\COSTCO WHOLESALE WAREHOUSE

PROPERTY BACKGROUND/ZONING:

The subject property consists of two (2) parcels (#02-28-227-002 and #0 02-27-101-003) which was annexed into Yorkville through Ordinance 2000-34 as part of the Yorkville Crossing development. The Yorkville Crossing Planned Unit Development (PUD) identified the property as having an underlying **B-3 General Business District** zoning which allowed for specific land uses listed in Exhibit "D-1" of the PUD Agreement. Notably, this includes "Grocery Store-Supermarkets" as an allowable use. The following Concept PUD Plan was included as an exhibit to Ordinance 2008-21:



Further, per Table 10-3-12 (B) of the Yorkville Unified Development Ordinance (UDO), a "general retail store, greater than one (1) acre" is a permitted land use and a "gasoline service station" is a special use in the B-3 General Business District. Therefore, the petitioner is requesting the existing Yorkville Crossing Planned Unit Development be amended, or modified, to include Costco's site development plans, requested Special Use permit and all deviations required to construct the proposed project, per plans submitted. The following are the current immediate surrounding zoning and land uses to the subject property:

	Zoning	Land Use
North	E. Countryside Parkway B-3 PUD (Yorkville Crossing)	Transportation Land Use United States Post Office (USPS) & Vacant Land
South	US 34 (Veterans Parkway) B-3 General Business District B-3 (Kendall County)	Transportation Land Use Heartland Business Center American Legion & Various Business Land Uses
East	E. Countryside Center B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land
West	McHugh Road B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land

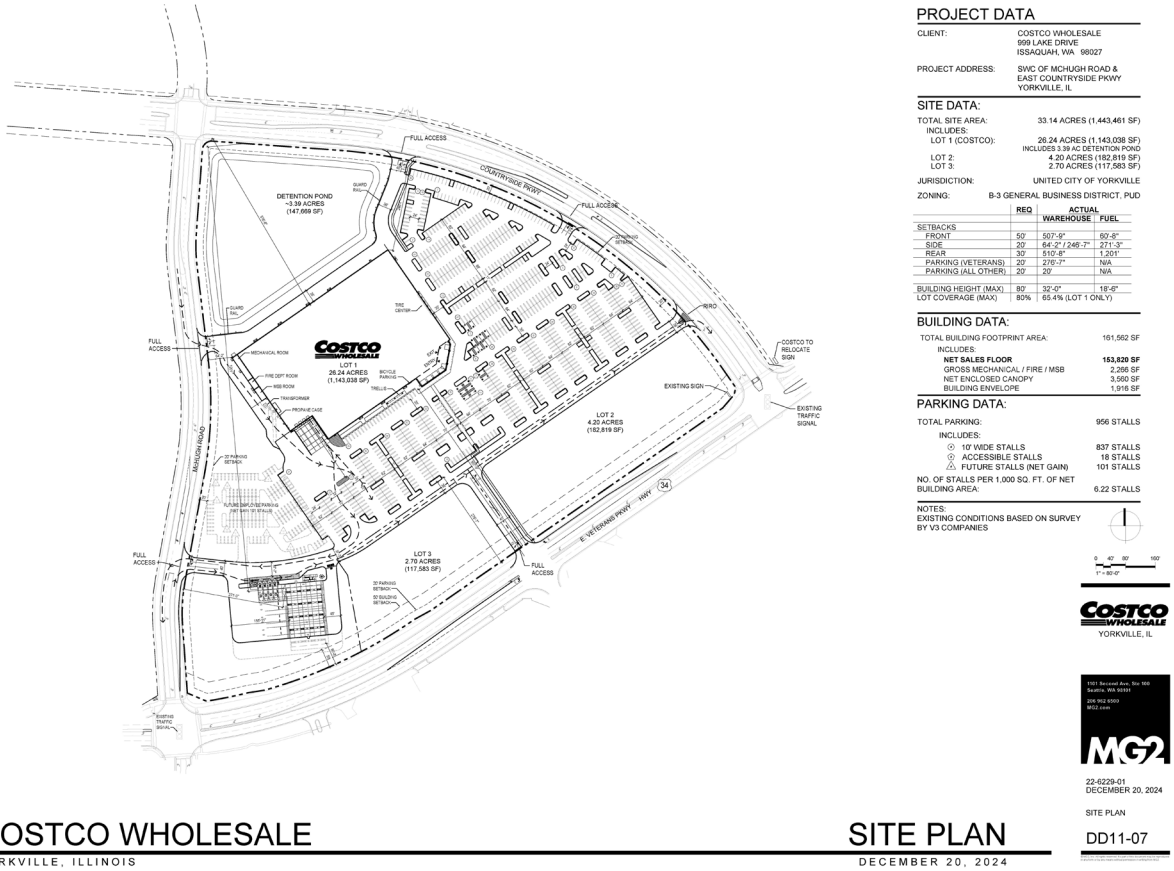
AMENDMENTS TO APPROVED PUD:

As noted earlier, the approved land use of a "grocery store/supermarket" within the Yorkville Crossing PUD's B-3 General Business District is consistent with the proposed Costco Warehouse development. However, Section 10-8-8G of the City's Unified Development Ordinance (UDO) defines the criteria for distinguishing between major and minor amendments to planned unit developments. This request is classified as a major amendment to the approved Yorkville Crossing PUD due to the proposed special use for a fueling station, several requested deviations from UDO development standards, and the inclusion of a site plan.

PROPOSED SITE PLAN:

The Costco site plan places the warehouse at the center of the property, oriented toward Veteran's Parkway, with parking arranged along the southern and eastern sides to prioritize customer accessibility. Future employee parking lot expansion is also proposed to the west of the retail warehouse building. Substantial setbacks and landscaped buffer zones with a mix of trees and shrubs separate the site physically and visibly from nearby properties, while a stormwater management area on the northern edge offers both environmental functionality and aesthetic value.

The internal building design includes a Tire Center, a conveniently located loading dock, and energy-efficient LED lighting for safe navigation across parking and pedestrian areas. Two (2) additional parcels along Veteran's Parkway are earmarked for future commercial development, aligning with the site's zoning requirements and ensuring harmony with Costco's operational goals.



PROJECT DATA

CLIENT:	COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027
PROJECT ADDRESS:	SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA:	33.14 ACRES (1,443,461 SF)
INCLUDES:	
LOT 1 (COSTCO):	26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND
LOT 2:	4.20 ACRES (182,819 SF)
LOT 3:	2.70 ACRES (117,583 SF)
JURISDICTION:	UNITED CITY OF YORKVILLE
ZONING:	B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL WAREHOUSE	ACTUAL FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
SIDE	20'	64'-2" / 246'-7"	271'-3"
REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"
LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA:	161,562 SF
INCLUDES:	
NET SALES FLOOR	**153,820 SF**
GROSS MECHANICAL / FIRE / MSB	2,266 SF
NET ENCLOSED CANOPY	3,560 SF
BUILDING ENVELOPE	1,916 SF

PARKING DATA:

TOTAL PARKING:	956 STALLS
INCLUDES:	
⊙ 10' WIDE STALLS	837 STALLS
⊙ ACCESSIBLE STALLS	18 STALLS
△ FUTURE STALLS (NET GAIN)	101 STALLS
NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA:	6.22 STALLS

NOTES:
EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES

0 40 80' 160'
1" = 80'-0"

COSTCO WHOLESALE
YORKVILLE, IL

1001 Second Ave, Ste 500
Seattle, WA 98101
206 902 6500
MG2.com

MG2

22-6229-01
DECEMBER 20, 2024

SITE PLAN
DD11-07

COSTCO WHOLESALE
YORKVILLE, ILLINOIS

SITE PLAN
DECEMBER 20, 2024

ANCILLARY USES:

While the Unified Development Ordinance does not specifically identify a "tire center" use, where car lifts will be available for tire rotations and tire replacements, the Zoning Administrator can determine if the use is substantially similar to a use listed in the tables. If it is, the use shall be treated in the same

manner as the substantially similar use. Staff identifies the use as similar to "automobile repair" or "automobile service" which are permitted uses in the B-3 General Business District.

REQUESTED PUD DEVIATIONS:

Planned Unit Developments (PUDs) may modify base district standards if the requested changes are explicitly identified and demonstrate compatibility with surrounding development, necessity for proper site development, and alignment with at least one modification standard in Section 10-8-8D of the UDO. Although not required during the amendment process, the petitioner has identified the "Sustainable Design" standard as the modification standard for the Costco development, ensuring the proposed project incorporates methods in site design, architecture, building materials, and landscaping that reduce energy consumption and improve stormwater management.

The petitioner outlines several sustainable design features, including 80% recycled content in the building's steel system and metal panels, insulation with over 50% recycled content, and a roof designed to minimize heat gain. Landscaping uses native, drought-tolerant species to reduce irrigation and maintenance needs, while LED lighting is implemented throughout the site. A water management system enhances efficiency by reducing wastewater and sewer use. Furthermore, the refrigeration system utilizes carbon dioxide (CO2), a sustainable alternative to hydrofluorocarbons (HFCs), due to its low Global Warming Potential, non-toxic, and non-flammable properties.

Below is a summary of the design components of the development plans and the identified **five (5) proposed deviations** from the Unified Development Ordinance (UDO) as part of the PUD Amendment and Special Use requests:

1. ***B-3 Bulk Regulations -*** Per the Table 10-3-9(A) Bulk and Dimensional Standards, the following compares current B-3 General Business District standards with the proposed Planned Unit Development (PUD) requested modifications:

BULK REGULATIONS	**REQUIRED MINIMUM STANDARDS** B-3 DISTRICT	**PROPOSED MINIMUM STANDARDS** COSTCO	**PROPOSED MINIMUM STANDARDS** FUEL FACILITY
FRONT YARD (Veterans Pkwy)	50 ft.	507 ft.	60'-8"
CORNER SIDE YARD (East/West)	30 ft.	246'-7"/64 ft.	271'-3"
REAR YARD (SEC Countryside Pkwy/McHugh)	20 ft.	64 ft.	1,201'
PARKING SETBACK (Veterans Pkwy)	20 ft.	275 ft.	N/A
PARKING SETBACK (Countryside Pkwy/McHugh)	20 ft.	20 ft.	N/A
MAXIMUM LOT COVERAGE	80%	65.4%	N/A (included with Costco)
MAXIMUM BUILDING HEIGHT	80 ft.	32 ft.	18'-6"

The proposed PUD for the Costco Warehouse and proposed fueling station meets the minimum building setback requirements and other regulations related to maximum lot coverage and building height for the B-3 district.

2. ***Parking Requirements*** - According to the Parking Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), there are 856 total parking spaces to be provided on the property to accommodate the proposed ~160,000 sq. ft. retail warehouse building and fueling facility uses. Future parking expansion area will include another 124 stalls for an overall total 980 parking spaces. The petitioner is also proposing to exceed the minimum standard parking stall and aisle dimensions by providing 90-degree parking stalls with a 10' width and a minimum of 18.5' stall depth with a 2' overhang. Aisle widths for the 2-way drives are 32' wide.

    a. Per the Unified Development Ordinance, the minimum parking requirement for a retail store more than 8,000 sq. ft. of the net building square feet is 2 spaces/1,000 sq. ft. Gasoline Service Stations require a minimum of 1 space/gas pump and 1space/300 sq. ft. for any accessory retail space. However, to minimize excessive areas of pavement, no off-street parking area for nonresidential uses shall exceed the required minimum number of parking spaces by more than twenty (20) percent, except as approved by the Zoning Administrator. In approving additional spaces, the Zoning Administrator shall determine that the parking is needed based on documented evidence of actual use and demand provided by the applicant. Therefore, the total required maximum parking for the subject property is 386 spaces, including a minimum of 8 ADA accessible spaces.

Deviation #1: The petitioner is requesting a variance from the UDO's required maximum parking due to parking being "*critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property*."

Staff is supportive of the deviation from a maximum of 2 parking spaces per 1,000 net sq. ft. of building area to approximately 6.22 parking spaces per 1,000 of building area, as noted in the response comments provided by Cross Engineering & Assoc. dated December 30, 2024.

3. ***Electric Vehicle (EV) Requirements*** **-** Per Section 10-5-1K-1 of the Unified Development Ordinance, infrastructure for a minimum of 8 electric vehicle charging station is required to be installed for the proposed 980 parking spaces (1 EV charging station per 50 required parking spaces).

Deviation #2: The petitioner is requesting full relief from the UDO's minimum required EV charging station requirement due to "*current Costco data reveals that an exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future.*"

Staff is supportive of the deviation of the full relief for the installation of infrastructure to accommodate the required minimum 8 electric vehicle charging stations since the petitioner will reevaluate the need for EV charging in the near future.

4. ***Off-Street Loading*** - Per Section 10-5-1-Q of the Unified Development Ordinance, the number of off-street shall be determined on a case-by-case basis, and in the instance of special uses, loading berths adequate number and size to serve such use, as determined by the Zoning Administrators, shall be provided.

a. The petitioner proposes to have four (4) recessed off-street loading spaces for the retail warehouse located at the southwest corner of the building. While not a deviation, **staff is supportive of this request.**

5. ***Vehicular Access*** - It is noted that the site has six (6) points of access. Three (3) off of E. Countryside Parkway – two (2) full access and one (1) right-in/right-out; one (1) full off of E. Veterans Parkway, which will be coordinated with IDOT; and two (2) full access points off of McHugh Road. These access points lead to internal private roadways which loop around the retail warehouse building, provides direct access to the fueling facility, and will connect to the future outlot uses.

    a. In line with Section 10-5-1-F of the Unified Development Ordinance, which encourages cross-access between adjacent properties, the development is required to promote shared parking and ease vehicular flow between commercial and residential areas. The commercial lots meet shared parking requirements, and as such, **the developer proposes to ensure vehicular cross-access between the Costco parcel and the future outlot parcels via a real estate agreement**. This aims to reduce street access points and facilitate movement between different uses, supporting connectivity and operational efficiency within the site.

6. ***Pedestrian Circulation*** - Per Section 10-5-1-N Pedestrian Circulation Standards of the Unified Development Ordinance required off-street parking areas to on-site pedestrian circulation systems and connection to existing and future planned trails.

    a. The petitioner has provided a single pedestrian connection to the public way off of E. Veterans Parkway at the intersection with Tuma Road. **A secondary pedestrian connection to the public way at the northernmost full access drive on Countryside Parkway at the intersection with Crimson Lane is also proposed**.

7. ***Traffic Study/Roadway Improvements*** – A Costco Traffic Impact Study, dated November 13, 2024 was prepared by V3 Companies, Ltd. Per the study, off-site road enhancements will involve adjusting the existing center medians along Countryside Parkway and adding lane striping to create left-turn lanes at the intersections of Countryside Parkway and McHugh Road. Additionally, new right-turn lanes will be installed at the gas station entrance on McHugh Road and at Veteran's Parkway.

    a. The City Engineer has reviewed the traffic study and has requested the study be submitted to IDOT for review and comments on certain traffic mitigations proposed as part of the development. **Staff recommends further traffic signal warrant analyses should be performed at the intersection of US 34/Veterans Parkway, Costco Driveway #4/Tuma Road, and McHugh Road/Countryside Parkway**.

8. ***Lighting -*** A photometric plan has been provided along with pole details of the proposed light standards to be installed within the parking lot area. Maximum illumination at the property line shall not exceed zero (0) foot-candle and no glare shall spill onto adjacent properties or rights of way.

Deviation #3: Per Table 10-5-7(E) of the Unified Development Ordinance, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. The petitioner seeks a deviation to this regulation to install a light fixture with a maximum height of 36'-6" to provide ample uniform light coverage of the parking lot area. **Staff supports this deviation**.

9. ***Mechanical Screening -*** Per Section 10-5-4 Screening of the Unified Development Ordinance, ground/wall-mounted and roof mounted mechanical units that are visible from any public right-of-way or adjacent residential property shall be screened from public view.

Materials used for screening shall be designed and established so that the area or element being screened is no more than twenty (20) percent visible through the screen.

a. It is noted that there are two (2) proposed ground-mounted compactors located on the west elevation adjacent to McHugh Road. It appears the petitioner has proposed to screen ground mounted mechanical equipment with landscaping material such as evergreen trees, ornamental trees and shrubbery located to the west in landscape bed edge.

Since the units may not be visible from the public way due to the location, setback and landscaping provided on the site, staff is supportive of the screening.

10. ***Landscaping*** - Section 10-5-3 of the Unified Development Ordinance establishes landscape standards for new developments. The petitioner has submitted a Costco Landscape Plan, prepared by Kimley Horn, and dated last revised 11-15-24. The landscape plan emphasizes a diverse mix of plantings to enhance aesthetic appeal and environmental integration. It includes over 1,000 canopy and ornamental trees complemented by shrubs, ornamental grasses, and perennials. Turf sod and no-mow seed mix cover large areas, while naturalized plantings and decorative rock mulch are used for ecological and visual interest.

Deviation #4 - The petitioner is requesting relief from Sections 10-5-3-C Building Foundation Landscape Zone and Section 10-5-3-E Parking Area Interior Landscaping Zone. **Considering the necessity for a clear path of ingress and egress for shoppers and the adjacent loading facility, along with the landscaping already provided in the nearby end-of-aisle parking island, staff supports the deviation from the building foundation planting requirements. Additionally, staff supports the interior landscaping requirements for the parking area, including the placement of parking lot medians every third bay of parking in front or to the side of the building and a parking island for every 10 parking spaces, due to the increased demand for vehicular parking on-site.**

11. ***Appearance Standards*** - Per Section 10-5-8-C-3.b Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty (50) percent of the total building, as broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty (50) percent of the facade. Any other facade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades. Additional standards include:

a. Loading bays for commercial and office uses shall not be located in the front of a building or in the area abutting a public right-of-way, and all commercial, office.

b. Institutional buildings shall consist of solid and durable facade materials and be compatible with the character and scale of the surrounding area.

The petitioner has submitted exterior building elevations depicting the retail warehouse with materials such materials as insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. Below is the proposed building material breakdown and architectural renderings:

MATERIAL PERCENTAGES

MATERIAL	ELEVATION SOUTH	EAST	NORTH	WEST	ENTRY	TOTAL
SMOOTH FACE CMU "*BUFF*"	1,403 SF 11%	1,151SF 14%	2,347 SF 18%	1,188 SF 12%	905 SF 21%	**14.61%**
GLAZING		390 SF 5%			993 SF 23%	**2.89%**
TEXTURED ARCHITECTURAL METAL PANEL"*SANDSTONE*"	2,549 SF 21%	2,867SF 34%	5,850 SF 44%	1,911 SF 20%	1,470 SF 34%	**30.60%**
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"*TAUPE*"	7,765 SF 63%	3,925 SF 47%	5,108 SF 38%	6,557 SF 68%	939 SF 22%	**50.76%**
CONCRETE "*NATURAL*"	546 SF 4%					**1.14%**

* CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS



c. Staff has calculated that the masonry/cementitious materials make up approximately 15-16% of the total building and 30-35% of the front elevation (South and Entry). We understand that Costco must maintain its corporate brand and image, and staff is fully supportive of this deviation from the 50% appearance code standard. The proposed textured and ribbed architectural paneling provides a solid and durable façade, which meets the intent of the UDO's requirements.

d. In Section 10-5-8C.1 of the UDO it states "Creativity and ingenuity in applying the standards and guidelines listed in this Code are encouraged. Likewise, ingenuity and creativity, while considering deviations to the standards and guidelines of this Code, are encouraged."

Deviation #5 - The petitioner is requesting relief from the minimum masonry requirements and the placement of loading bays at the front of the building and adjacent to a public right-of-way. The design incorporates vertical architectural articulation through the use of color, texture, and a strategic distribution of sustainable materials proportionate to the building's scale. Furthermore, the inclusion of a free-standing steel trellis on the south elevation helps to soften and define the building's mass as viewed from US 34/Veterans Parkway. With these enhancements and the recessed docking area, **staff supports the requested deviation**.

12. ***Signage*** - Per Section 10-6-6 of the Unified Development Ordinance, single tenant buildings shall be permitted a total of two (2) primary wall signs or one (1) primary wall sign per one hundred (100) linear feet of building frontage. One (1) additional wall sign shall be allowed per additional hundred (100) feet of building frontage. Only one (1) primary wall sign shall be displayed on any single building façade.

a. The petitioner is proposing six (6) wall mounted signs as illustrated on the exterior elevations, as illustrated below:

SIGN TABLE

IDENTITY	QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF
S1	1	COSTCO WHOLESALE	5'-0" C	175 SF	***175 SF***
S2	4	COSTCO WHOLESALE	6'-0" C	280 SF	***1120 SF***
S3	1	TIRE CENTER	17'-4" x 1'-9"	31 SF	***31 SF***
			TOTAL SIGN AREA:		**1326 SF**



Per staff's calculations, the petitioner is permitted a maximum of five (5) primary signs and eight (8) secondary signs totaling 13 wall signs, as depicted in the table below:

Elevation	Façade Length	Permitted # of Signs	Proposed # of Signs	Permitted Max. Sign Area	Proposed Sign Area
South	~358'-7"	3	1	~717.4 sq. ft.	280 sq. ft.
East	~326'-4"	3	2	~652.8 sq. ft.	311 sq. ft.
Entry	70'-3 ¾"	1	1	~140.7 sq. ft.	175 sq. ft.
North	~493'-6"	3	1	~987.2 sq. ft.	280 sq. ft.
West	~220'-0"	3	1	~440 sq. ft.	280 sq. ft.
TOTAL		**13**	**6**	**~2938.1 sq. ft.**	**1326 sq. ft.**

All proposed wall signs conform to UDO regulations. It is noted a monument sign is not proposed for the development. However, the existing pylon ground-mounted "Menards/Yorkville Crossing" sign located at the southeast corner of the property will be relocated, east of Countryside Parkway on parcel #02-27-101-004 owned by Yorkville Crossings, LLC.

PROPOSED SPECIAL USE:

As previously mentioned, the proposed fuel facility (gasoline service station) situated at the northeast corner of US 34 and McHugh Road is identified as a special use in the B-3 General Business District requiring additional discretion in the approval process due to operational characteristics that are different from, but complements, the primary retail land use.

The Costco fuel facility proposes 16 gas dispensers, accommodating 2 cars per dispenser. A total of eight (8) lanes are proposed for car queuing allowing five (5) cars per lane stacking. This results in a total of 72 cars maximum in this area of the site. No accessory retail convenience store is proposed for the fuel facility area.

During the Plan Council staff-level review, staff expressed some concerns regarding the southernmost full access off of McHugh Road leading to the fueling facility which may cause a backup onto the public roadway should there be more than the five (5) vehicles stacking per fuel lane or 40 vehicle max stacking for all pumps. The petitioner subsequently provided further details regarding the operation of the fuel station.

According to Costco, the proposed fuel facility design is based on extensive data collection and observations from facilities nationwide, ensuring efficiency by tailoring the number of pumps, queue lanes, and traffic flow to each location. The Yorkville facility, among the largest in the Midwest, includes

16 pumps (32 dispensers), a 155-foot drive lane accommodating 40 vehicles, and a total capacity for 72 vehicles in the designated area. This design aims to minimize wait times, vehicle queuing, and public road backups. If future demand warrants, the facility can expand southward to add four more pumps (40 dispensers total) and extend queuing lanes westward to further enhance traffic flow and reduce potential congestion.

Based upon this further information, staff is confident the petitioner can adequately address any on-site vehicle stacking issues, should they arise, avoiding backups into the adjacent public ways. Therefore, **staff is supportive of the special use request for a fuel facility**.

PROPOSED FINAL PLAT:

A Final Plat of Subdivision of Costco Wholesale dated last revised 12/18/24 and prepared by V3 Companies, Ltd. has been submitted by the petitioner. The plat includes detailed boundary descriptions, lot sizes, and dimensions for the proposed three (3) lots: Lot 1 (26.24 acres), Lot 2 (4.20 acres), and Lot 3 (2.70 acres). It highlights easements for utilities, drainage, and stormwater management, as well as building setback lines. The plat also identifies public utility access and stormwater provisions and references prior dedications for rights-of-way along major roads like US Route 34 and McHugh Road. **Staff recommends approval of the Final Plat of Subdivision subject to review comments provided by the EEI, City Engineer, in a letter dated December 5, 2024.**

COMPREHENSIVE PLAN:

The 2016 Comprehensive Plan Update designates this property as "Mid Density Residential (MDR)" which is defined typically for higher density residential developments near commercial areas and transportation corridors including townhomes and multi-family development.

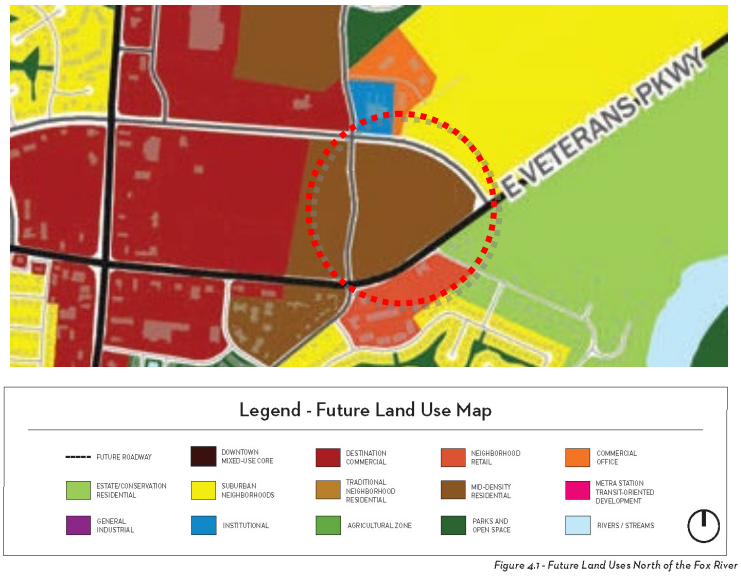


Figure 4.1 - Future Land Uses North of the Fox River

Although the proposed commercial land use does not align with the comprehensive plan's current future land use designation, staff supports the use because it is consistent with the "Destination Commercial (DC)" designation assigned to nearby properties to the west. Additionally, the property's existing B-3 zoning classification aligns with both the Destination Commercial land use and the original PUD. **If the proposed development is approved, staff will initiate an amendment to the Comprehensive Plan**.

STANDARDS FOR SPECIAL USE:

The Planning and Zoning Commission may recommend approval of a Special Use upon considering the following standards (Section 10-8-5 of the Yorkville Unified Development Ordinance):

i. The establishment, maintenance or operation of the Special Use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

ii. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within or near the neighborhood in which it is to be located.

iii. The establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

iv. Adequate utilities, access roads, drainage or other necessary facilities have been or shall be provided.

v. Adequate measures shall be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets.

vi. The proposed Special Use is not contrary to the objectives of the City's adopted Comprehensive Plan.

The petitioner has provided responses to these standards which will be incorporated into the record during the public hearing.

STAFF COMMENTS:

A staff-level technical review of the proposed plans was conducted by the Plan Council on December 12, 2024. This included written review comments on the plans prepared by EEI, the City Engineer, dated December 5, 2024, which are attached for your reference. In response, the petitioner has submitted revised plans and written responses addressing the comments in the review letter to proceed with the public hearing. Approval of the Planned Unit Development Amendment, Special Use, and Final Plat is contingent upon comments prepared by EEI dated December 5, 2024 and any subsequent reviews related to the plans submitted on December 30, 2024. **Staff is supportive of the application and requests**.

PROPOSED MOTIONS:

1. *Planned Unit Development (PUD) Amendment*
   In consideration of testimony presented during a Public Hearing on January 8, 2025, the Planning and Zoning Commission recommends approval to the City Council of a request for an amendment to the Yorkville Crossing Planned Unit Development Agreement to facilitate the development of an approximately 160,000-square-foot members-only retail store, a fuel facility, and two (2) commercial outlots with an underlying zoning designation of B-3 General Business District for an approximately 34 acre parcel located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway, subject to the conditions enumerated in a staff memorandum dated January 2, 2025 and review comments prepared by the City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan and Aerial Site Plan prepared by MG2 dated December 20, 2024 and Traffic Study prepared by V3 Companies updated December 30, 2024, and further subject to {insert any additional conditions of the Planning and Zoning Commission}…

2. *Special Use*
   In consideration of testimony presented during a Public Hearing on January 8, 2025 and approval of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council of a request for Special Use authorization for a fuel facility as part of the Costco Wholesale Warehouse development to be located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway within the Yorkville Crossing PUD subject to engineering review comments provided by the City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan and Aerial Site Plan prepared by MG2 dated December 20, 2024 and Traffic Study prepared by V3 Companies updated December 30, 2024, and further subject to {insert any additional conditions of the Planning and Zoning Commission}…

3. *Final Plat of Subdivision*
   The Planning and Zoning Commission recommends approval to the City Council of the Final Plat of Subdivision of Costco Wholesale, dated last revised 12/18/24 and prepared by V3

Companies, Ltd. subject to review comments prepared by City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to said Final Plat of Subdivision, and further subject to {insert any additional conditions of the Planning and Zoning Commission}…

Attachments:

1. Applications for Special Use, PUD Amendment, and Final Plat
2. Costco Site Plan Narrative, dated November 15, 2024 and prepared by Costco Wholesale Corporation
3. Written responses to review comments prepared by Cross Engineering & Associates dated December 30, 2024.
4. Costco ALTA Survey, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
5. Costco Site Plan, dated December 20, 2024 and prepared by MG2
6. Costco Aerial Site Plan, dated December 20, 2024 and prepared by MG2
7. Final Plat of Subdivision of Costco Wholesale, dated last revised 12/18/24 and prepared by V3 Companies, Ltd.
8. Preliminary Civil/Engineering Plans for Costco Wholesale, dated 11-13-24 and prepared by MG2
9. Costco Landscape Plan, dated last revised 11-15-24 and prepared by Kimley Horn
10. Costco Warehouse Floor Plan, dated November 15, 2024 and prepared by MG2
11. Costco Architectural Elevations, dated November 15, 2024 and prepared by MG2
12. Costco Renderings, dated November 15, 2024 and prepared by MG2
13. Costco Fuel Facility Plan, dated November 15, 2024 and prepared by MG2
14. Costco Lighting Plan, dated July 2024 and prepared by T.E., Inc.
15. Costco Traffic Impact Study, dated November 13, 2024 and Updated December 30, 2024 as prepared by V3 Companies, Ltd.
16. Costco Preliminary Stormwater Management Report, dated November 13, 2024 and prepared by V3 Companies, Ltd.
17. Plan Council Packet dated 12-12-24
18. EEI Review Letter dated December 5, 2024
19. Public Hearing Notice

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
Telephone: 630-553-4350
Fax: 630-553-7575
Website: www.yorkville.il.us

APPLICATION FOR SPECIAL USE

INVOICE & WORKSHEET PETITION APPLICATION

CONCEPT PLAN REVIEW	☐ Engineering Plan Review deposit	$500.00	Total: $ 0
AMENDMENT	☐ Annexation	$500.00	Total: $ 500.00
	☐ Plan	$500.00	
	☐ Plat	$500.00	
	☒ P.U.D.	$500.00	
ANNEXATION	☒ $250.00 + $10 per acre for each acre over 5 acres		Total: $ 0
_____ - 5 = _____ x $10 = _____ + $250 = $ _____			
# of Acres / Acres over 5 / Amount for Extra Acres / Total Amount			
REZONING	☐ $200.00 + $10 per acre for each acre over 5 acres		Total: $
If annexing and rezoning, charge only 1 per acre fee; if rezoning to a PUD, charge PUD Development Fee - not Rezoning Fee			
_____ - 5 = _____ x $10 = _____ + $200 = $ _____			
# of Acres / Acres over 5 / Amount for Extra Acres / Total Amount			
SPECIAL USE	☒ $250.00 + $10 per acre for each acre over 5 acres		Total: $ 541.30
34.13 - 5 = 29.13 x $10 = 291.30 + $250 = $ 541.30			
# of Acres / Acres over 5 / Amount for Extra Acres / Total Amount			
ZONING VARIANCE	☐ $85.00 + $500.00 outside consultants deposit		Total: $
PRELIMINARY PLAN FEE	☒ $500.00		Total: $ 500.00
PUD FEE	☐ $500.00		Total: $
FINAL PLAT FEE	☒ $500.00		Total: $ 500
ENGINEERING PLAN REVIEW DEPOSIT	☐ Less than 1 acre	$5,000.00	Total: $ 15,000
	☐ Over 1 acre, less than 10 acres	$10,000.00	
	☒ Over 10 acres, less than 40 acres	$15,000.00	
	☐ Over 40 acres, less than 100 acres	$20,000.00	
	☐ Over 100 acres	$25,000.00	
OUTSIDE CONSULTANTS DEPOSIT *Legal, land planner, zoning coordinator, environmental services*	For Annexation, Subdivision, Rezoning, and Special Use:		Total: $ 5,000
	☐ Less than 2 acres	$1,000.00	
	☐ Over 2 acres, less than 10 acres	$2,500.00	
	☒ Over 10 acres	$5,000.00	
TOTAL AMOUNT DUE:			22,041.30

United City of Yorkville
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Telephone: 630-553-4350
Fax: 630-553-7575
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APPLICATION FOR SPECIAL USE

DATE: 11-8-2024	PZC NUMBER:	DEVELOPMENT NAME:

PETITIONER INFORMATION

NAME: Stephen Cross-Authorized Costco Representative — COMPANY: Costco Wholesale Corporation

MAILING ADDRESS: c/o Cross Engineering Associates, Inc. 1955 Raymond Drive

CITY, STATE, ZIP: Northbrook, IL 60062 — TELEPHONE: ○ BUSINESS ○ HOME 847-498-0800

EMAIL: c_stephencross@costco.com — FAX:

PROPERTY INFORMATION

NAME OF HOLDER OF LEGAL TITLE Joda Land Holding, LLC

IF LEGAL TITLE IS HELD BY A LAND TRUST, LIST THE NAMES OF ALL HOLDERS OF ANY BENEFICIAL INTEREST THEREIN:

PROPERTY STREET ADDRESS: N/A

DESCRIPTION OF PROPERTY'S PHYSICAL LOCATION:

Northwest corner of Veteran's Parkway & East Countryside Parkway

CURRENT ZONING CLASSIFICATION: B-3 General Business PUD — COMPREHENSIVE PLAN FUTURE LAND USE DESIGNATION: Mid-Density Res.

REQUESTED SPECIAL USE:

Gasoline Service Station

ZONING AND LAND USE OF SURROUNDING PROPERTIES

NORTH: B-3 General Business, PUD; Institutional/ Commercial/ Office

EAST: B-3 General Business and O Office, PUD; Vacant Land & Suburban Neighborhood

SOUTH: B-3 General Business District; Commercial & Kendall County, B3, Highway Business

WEST: B-3 General Business and O Office PUD; Vacant Land & Commercial

KENDALL COUNTY PARCEL IDENTIFICATION NUMBER(S)

02-27-101-003	02-28-227-002		

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
Telephone: 630-553-4350
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APPLICATION FOR SPECIAL USE

ATTORNEY INFORMATION	
NAME: Joon Kim	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: 999 Lake Drive	
CITY, STATE, ZIP: Issaquah, WA 98027	TELEPHONE: 425-416-5456
EMAIL: joonkim@costco.com	FAX:
ENGINEER INFORMATION	
NAME: Dan Free	COMPANY: V3 Companies
MAILING ADDRESS: 7325 Janes Avenue	
CITY, STATE, ZIP: Woodridge, Illinois 60517	TELEPHONE: 630-724-9200
EMAIL: dfree@v3co.com	FAX:
LAND PLANNER/SURVEYOR INFORMATION	
NAME: Risa Yuki-Principal	COMPANY: MG2 Architects
MAILING ADDRESS: 1101 Second Ave. Ste 100	
CITY, STATE, ZIP: Seattle, WA 98101	TELEPHONE: 206-962-6630
EMAIL: risa.yuki@mg2.com	FAX:

ATTACHMENTS

Petitioner must attach a legal description of the property to this application and title it as "Exhibit A".

Petitioner must list the names and addresses of any adjoining or contiguous landowners within five hundred (500) feet of the property that are entitled notice of application under any applicable City Ordinance or State Statute. Attach a separate list to this application and title it as "Exhibit B".

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
Telephone: 630-553-4350
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APPLICATION FOR SPECIAL USE

SPECIAL USE STANDARDS

PLEASE STATE HOW THE ESTABLISHMENT, MAINTENANCE OR OPERATION OF THE SPECIAL USE WILL NOT BE UNREASONABLY DETRIMENTAL TO OR ENDANGER THE PUBLIC HEALTH, SAFETY, MORALS, COMFORT OR GENERAL WELFARE:

The proposed fuel facility will not endanger the public health, safety, morals, comfort or general welfare of any portion of the community. The fuel facility has been designed to provide a safe environment for the residents of the City of Yorkville and surrounding communities, as well as Costco's members and employees. The fuel facility will meet applicable Federal, State and local codes for fire access, pedestrian and vehicular accessibility; fuel truck movements and gas operations. Costco will maintain the fuel facilities appearance , provide State required maintenance, which includes equipment and tank testing and monitoring inspections. The fuel facility, canopy, paving, lighting, and fuel dispensers will be designed to State and all applicable zoning and development regulations.

PLEASE STATE HOW THE SPECIAL USE WILL NOT BE INJURIOUS TO THE USE AND ENJOYMENT OF OTHER PROPERTY IN THE IMMEDIATE VICINITY FOR THE PURPOSE ALREADY PERMITTED, NOR SUBSTANTIALLY DIMINISH AND IMPAIR PROPERTY VALUES WITHIN OR NEAR THE NEIGHBORHOOD IN WHICH IT IS LOCATED:

The proposed fuel facility will have no adverse impact(s) on the current use or enjoyment of nearby properties in the immediate area. The Property is zoned General Business District and the nearby zoning is predominately zoned commercial and as such , the requested special use is compatible with nearby current and future land uses. The fuel facility plan allows for generous setbacks, and landscaping along Veteran's Parkway and McHugh Road. The requested Special Use will not be injurious to other nearby property owners as the design, arrangement, land use intensity, scale and character is and will be compatible to nearby land uses and future developments.
There is no indication that the fuel facility will diminish or impair property values within the immediate commercial area or the community .

PLEASE STATE HOW THE ESTABLISHMENT OF THE SPECIAL USE WILL NOT IMPEDE THE NORMAL AND ORDERLY DEVELOPMENT AND IMPROVEMENT OF SURROUNDING PROPERTY FOR USES PERMITTED IN THE DISTRICT:

The fuel facility will not impede the orderly development and improvement of the surrounding property for uses permitted in the district as the proposed land use will encourage and promote orderly development in the area. Fuel facilities are typically located in the vicinity of a major transportation system and permitted as a special use in most commercial and business zoned districts. The proposed land use is compatible with existing land uses and is permitted as a special use in the B-3, General Business District.
The development of the Costco warehouse and fuel facility will serve as the catalyst promoting and encouraging future development in the immediate area.

PLEASE STATE HOW ADEQUATE UTILITIES, ACCESS ROADS, DRAINAGE OR OTHER NECESSARY FACILITIES HAVE BEEN OR ARE BEING PROVIDED:

The proposed fuel facility has been carefully planned to be accessible by multiple access points from McHugh Road, Veteran's Parkway and Countryside Parkway. Access directly to the fuel facility will be an efficient traffic movement with adequate queue to serve each fueling position. Drainage is designed to keep pavement areas safe and properly conveyed to an onsite storm water basin. Utilities such as water, sanitary sewer, electric and storm are available to effectively serve the fuel facility. The Property will be illuminated for safe vehicular and pedestrian travel.

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APPLICATION FOR SPECIAL USE

SPECIAL USE STANDARDS

PLEASE STATE HOW ADEQUATE MEASURES HAVE BEEN OR WILL BE TAKEN TO PROVIDE INGRESS OR EGRESS SO DESIGNED AS TO MINIMIZE TRAFFIC CONGESTION IN THE PUBLIC STREETS:

The primarily entrance to the fuel facility is located north of the McHugh Road and Veteran's Parkway, which is a signalized intersection. The fuel facility is planned to accommodate anticipated traffic volumes and provide adequate queuing for vehicles within the Property. Traffic congestion on City roads will be minimized with the carefully designed site plan and location of the fuel facility within the Costco lot. The fuel facility ingress and egress has been designed to accommodate traffic movements from west to east allowing traffic to flow back to the Costco parking lot and interior perimeter roadway eliminating congestion at the McHugh Road intersection. Left turn lane modifications are planned for McHugh Road that will adequately serve the expected traffic volumes on this road. There will be no traffic impacts to Veteran's Road or Countryside Parkway.

PLEASE STATE HOW THE PROPOSED SPECIAL USE IS NOT CONTRARY TO THE OBJECTIVES OF THE CITY'S ADOPTED COMPREHENSIVE PLAN:

The proposed Costco fuel facility promotes the general purpose and intent of the Comprehensive Plan by providing an appropriate, aesthetically pleasing commercial land use along Veteran's Parkway's commercial corridor. The proposed land use is consistent with many goals and objectives of the Comprehensive Plan such as the development of a parcel of land previously zoned commercial many years ago. The requested Special Use in association with the proposed Costco warehouse will provide a new opportunity for residents to shop and fuel within the corporate limits of the City of Yorkville. The Comprehensive Plan promotes new commercial opportunities in areas that have been undeveloped for long periods of time with the hope that additional interest will be created by those developments. Costco's presence typically draws interest from other retailers and business adding to a communities commercial base.

AGREEMENT

I VERIFY THAT ALL THE INFORMATION IN THIS APPLICATION IS TRUE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONSULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT SCHEDULED COMMITTEE MEETING.

I UNDERSTAND ALL OF THE INFORMATION PRESENTED IN THIS DOCUMENT AND UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN FAULT AND I MUST THEREFORE FOLLOW THE REQUIREMENTS OUTLINED ABOVE.

Stephen J. Cross — PETITIONER SIGNATURE

11-8-2024 — DATE

OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUE THE APPROPRIATE ENTITLEMENTS ON THE PROPERTY.

Dave Hamman — OWNER SIGNATURE

11-9-2024 — DATE

OFFICIAL SEAL
MARIAN F CROSS
Notary Public, State of Illinois
Commission No 831693
My Commission Expires January 21 2028

THIS APPLICATION MUST BE NOTARIZED PLEASE NOTARIZE HERE:

Marian F. Cross 11-8-24

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
Telephone: 630-553-4350
Fax: 630-553-7575
Website: www.yorkville.il.us

APPLICATION FOR FINAL PLAT/REPLAT

DATE: 11-8-2024	PZC NUMBER:	DEVELOPMENT NAME: Costco Yorkville, IL

PETITIONER INFORMATION

NAME: Stephen Cross-Authorized Costco Representative	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: c/o Cross Engineering, Inc 1955 Raymond Drive	
CITY, STATE, ZIP: Northbrook, IL 60062	TELEPHONE: ○ HOME ◉ BUSINESS 847-498-0800
EMAIL: c_stephencross@costco.com	FAX:

PROPERTY INFORMATION

NAME OF HOLDER OF LEGAL TITLE: Joda Land Holding, LLC

IF LEGAL TITLE IS HELD BY A LAND TRUST, LIST THE NAMES OF ALL HOLDERS OF ANY BENEFICIAL INTEREST THEREIN:

PROPERTY STREET ADDRESS: N/A

DESCRIPTION OF PROPERTY'S PHYSICAL LOCATION:
Northwest corner of Veteran's Parkway & East Countryside Parkway

CURRENT ZONING CLASSIFICATION: B-3 General Business District PUD

TOTAL LOT ACREAGE: 34.13	TOTAL NUMBER OF LOTS TO BE CREATED: 3

PROPOSED LOT AREAS AND DIMENSIONS

LOT NUMBER	LOT DIMENSIONS (W x L, IN FEET)	LOT AREA (IN SQUARE FEET)
Lot 1	See Plat	1,403,209
Lot 2	See Plat	182,819
Lot 3	See Plat	117,432

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
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APPLICATION FOR FINAL PLAT/REPLAT

ATTORNEY INFORMATION	
NAME: Joon Kim	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: 999 Lake Drive	
CITY, STATE, ZIP: Issaquah, WA 98027	TELEPHONE: 425-416-5456
EMAIL: joonkim@costco.com	FAX:
ENGINEER INFORMATION	
NAME: Dan Free	COMPANY: V3 Companies
MAILING ADDRESS: 7325 Janes Avenue	
CITY, STATE, ZIP: Woodridge, IL 60517	TELEPHONE: 630-724-9200
EMAIL: dfree@v3co.com	FAX:
LAND PLANNER/SURVEYOR INFORMATION	
NAME: Risa Yuki-Principal	COMPANY: MG2 Architects
MAILING ADDRESS: 1101 Second Ave. Ste 100	
CITY, STATE, ZIP: Seattle, WA 98101	TELEPHONE: 206-962-6630
EMAIL: risa.yuki@mg2.com	FAX:

ATTACHMENTS

Petitioner must attach a legal description of the property to this application and title it as "Exhibit A".

AGREEMENT

I VERIFY THAT ALL THE INFORMATION IN THIS APPLICATION IS TRUE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONSULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT SCHEDULED COMMITTEE MEETING.

I UNDERSTAND ALL OF THE INFORMATION PRESENTED IN THIS DOCUMENT AND UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN FAULT AND I MUST THEREFORE FOLLOW THE REQUIREMENTS OUTLINED ABOVE.

Stephen Cross — 11-8-2024

PETITIONER SIGNATURE

OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUE THE APPROPRIATE ENTITLEMENTS ON THE PROPERTY.

Dave Hamman — 11-9-2024

OWNER SIGNATURE

THIS APPLICATION MUST BE NOTARIZED
PLEASE NOTARIZE HERE:

Marian F. Cross 11-8-24

OFFICIAL SEAL
MARIAN F CROSS
Notary Public, State of Illinois
Commission No. 831693
My Commission Expires January 21, 2028

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
Telephone: 630-553-4350
Fax: 630-553-7575
Website: www.yorkville.il.us

APPLICATION FOR AGREEMENT AMENDMENT

DATE: 11-8-2024	PZC NUMBER:	DEVELOPMENT NAME: Costco Yorkville, IL

PETITIONER INFORMATION

NAME: Stephen Cross-Authorized Costco Represent COMPANY: Costco Wholesale Corporation

MAILING ADDRESS: c/o Cross Engineering, Inc. 1955 Raymond Drive

CITY, STATE, ZIP: Northbrook, IL 60062 TELEPHONE: ◉ BUSINESS ○ HOME

EMAIL: c_stephencross@costco.com FAX: 847-498-0800

PROPERTY INFORMATION

NAME OF HOLDER OF LEGAL TITLE: Joda Land Holding, LLC

IF LEGAL TITLE IS HELD BY A LAND TRUST, LIST THE NAMES OF ALL HOLDERS OF ANY BENEFICIAL INTEREST THEREIN:

PROPERTY STREET ADDRESS: N/A

DESCRIPTION OF PROPERTY'S PHYSICAL LOCATION:
Northwest corner of Veteran's Parkway & East Countryside Parkway

CURRENT ZONING CLASSIFICATION: B-3 General Business District PUD

LIST ALL GOVERNMENTAL ENTITIES OR AGENCIES REQUIRED TO RECEIVE NOTICE UNDER ILLINOIS LAW:

ZONING AND LAND USE OF SURROUNDING PROPERTIES

NORTH: B-3 General Business PUD; Institutional/ Commercial/ Office

EAST: B-3 General Business O Office PUD; Vacant land & Suburban Residential

SOUTH: B-3 General Business; Commercial & Kendall County, B3 Highway Business

WEST: B-3 General Business, O Office PUD; Vacant land & Commercial

KENDALL COUNTY PARCEL IDENTIFICATION NUMBER(S)

02-27-101-003	02-28-227-002		

United City of Yorkville
651 Prairie Pointe Drive
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Website: www.yorkville.il.us

APPLICATION FOR AGREEMENT AMENDMENT

PROPERTY INFORMATION

NAME OF AGREEMENT: An Ordinance Authorizing the Execution of a Modification to the Planned Unit Development and Annexa

DATE OF RECORDING: 05-13-2008

SUMMARIZE THE ITEMS TO BE AMENDED FROM THE EXISTING AGREEMENT:

The Amended Planned Unit Development Agreement will include the Costco Development Plan and all zoning and development standards approved by the City of Yorkville. The PUD Agreement will be coordinated between Costco Wholesale Corporation and the City of Yorkville's legal team.

ATTACHMENTS

Petitioner must attach a legal description of the property to this application and title it as "Exhibit A".

Petitioner must list the names and addresses of any adjoining or contiguous landowners within five hundred (500) feet of the property that are entitled notice of application under any applicable City Ordinance or State Statute. Attach a separate list to this application and title it as "Exhibit B", if applicable.

Petitioner must attach a true and correct copy of the existing agreement and title it as "Exhibit C".

Petitioner must attach amendments from the existing agreement and title it as "Exhibit D".

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois, 60560
Telephone: 630-553-4350
Fax: 630-553-7575
Website: www.yorkville.il.us

APPLICATION FOR AGREEMENT AMENDMENT

ATTORNEY INFORMATION	
NAME: Joon Kim	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: 999 Lake Drive	
CITY, STATE, ZIP: Issaquah, WA 98027	TELEPHONE: 425-416-5456
EMAIL: joonkim@costco.com	FAX:
ENGINEER INFORMATION	
NAME: Dan Free	COMPANY: V3 Companies
MAILING ADDRESS: 7325 Janes Avenue	
CITY, STATE, ZIP: Woodridge, Illinois 60517	TELEPHONE: 630-724-9200
EMAIL: dfree@v3co.com	FAX:
LAND PLANNER/SURVEYOR INFORMATION	
NAME: Risa Yuki -Principal	COMPANY: MG2 Architects
MAILING ADDRESS: 1101 Second Ave. Ste 100	
CITY, STATE, ZIP: Seattle, WA 9801	TELEPHONE: 206-962-6630
EMAIL: risa.yuki@mg2.com	FAX:

AGREEMENT

I VERIFY THAT ALL THE INFORMATION IN THIS APPLICATION IS TRUE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONSULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT SCHEDULED COMMITTEE MEETING.

I UNDERSTAND ALL OF THE INFORMATION PRESENTED IN THIS DOCUMENT AND UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN FAULT AND I MUST THEREFORE FOLLOW THE REQUIREMENTS OUTLINED ABOVE.

Stephen Cross — PETITIONER SIGNATURE

11-8-2024 — DATE

OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUE THE APPROPRIATE ENTITLEMENTS ON THE PROPERTY.

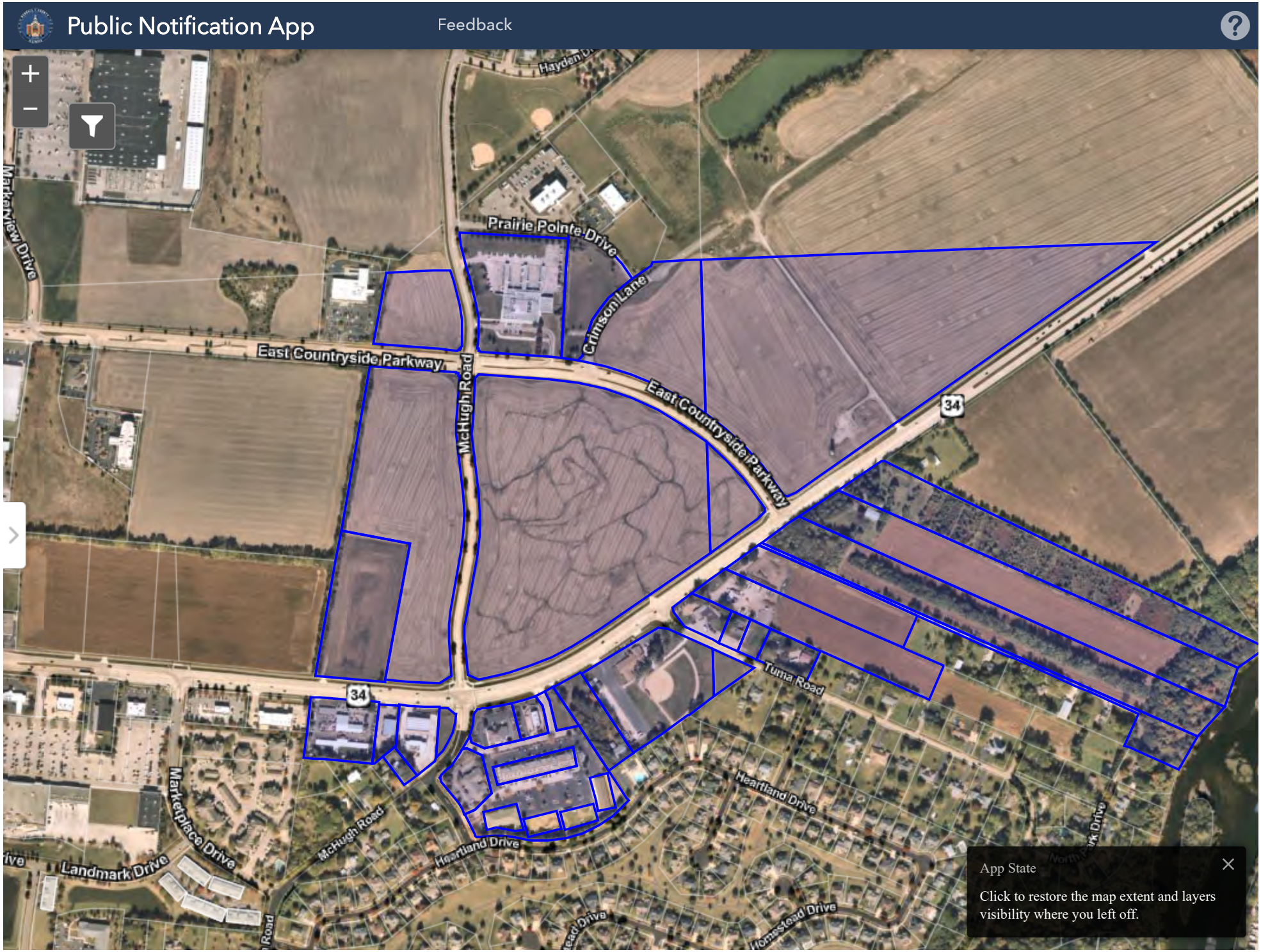
Dave Hamman — OWNER SIGNATURE

11-9-2024 — DATE

THIS APPLICATION MUST BE NOTARIZED
PLEASE NOTARIZE HERE:

OFFICIAL SEAL
MARIAN F CROSS
Notary Public, State of Illinois
Commission No. 831693
My Commission Expires January 21, 2026

Marian F Cross 11-8-24


Public Notification App
Feedback
Prairie Pointe Drive
Crimson Lane
East Countryside Parkway
McHugh Road
East Countryside Parkway
34
Tuma Road
34
Marketplace Drive
McHugh Road
Heartland Drive
Heartland Drive
Landmark Drive
Homestead Drive
App State
Click to restore the map extent and layers visibility where you left off.

VETERANS WAY LLC
207 W KENDALL DR
YORKVILLE IL 60560

PRAIRIE CREEK TRUST
EDMUND J BRONGIEL
870 SIMONS RD
OSWEGO IL 60543

AMERICAN LEGION POST 489
9054 RTE 34
YORKVILLE IL 60560

JAMES D CHESSRE TR
300 N LAKE ST
MONTGOMERY IL 60538

VETERANS WAY LLC
207 W KENDALL DR
YORKVILLE IL 60560

PLINSKE AARON P PLINSKE WALTER J
327 PLEASANT DR
SCHAUMBURG IL 60194

RICHARD NIEMIEC
5518 RESERVATION RD
OSWEGO IL 60543

NANETTE ELLIOTT MICHALEC
1105 MCHUGH RD
YORKVILLE IL 60560

DAVID REVOC TRUST KELLOGG
3507 WALKER RD
YORKVILLE IL 60560

JODA LAND HOLDING LLC
13665 TOWNHOUSE RD
NEWARK IL 60541

DHPJ PROPERTY GROUP LLC
1454 SYCAMORE RD
YORKVILLE IL 60560

SHOCKER LAND COMPANY LLC
477 E BARBERRY CIR
YORKVILLE IL 60560

JAMES D CHESSER TRUST
300 N LAKE ST
MONTGOMERY IL 60538

OM VIDHAYE NAMAHA LLC
7543 CHEROKEE LN
LIBERTY TOWNSHIP OH 45044

CASEYS RETAIL COMPANY
PO BOX 54288
LEXINGTON KY 40555

YORKVILLE CROSSINGS LLC
13351 B FAXON RD
PLANO IL 60545

ILLINOIS DEPARTMENT OF TRANSPORTATION
700 E NORRIS DR
OTTAWA IL 61350

AMERICAN LEGION POST 489
9054 RTE 34
YORKVILLE IL 60560

JAMES D CHESSER TRUST
300 N LAKE ST
MONTGOMERY IL 60538

DAVID E DEBBIE M COFFMAN
7315 W HILLSIDE
CYRSTAL LAKE IL 60012

UNITED STATES POST OFFICE
62 STRATFORD DR
BLOOMINGDALE IL 601177000

PRAIRIE CREEK TRUST
EDMUND J BRONGIEL
870 SIMONS RD
OSWEGO IL 60543

BRAD R MERKEL
4383 TUMA RD
YORKVILLE IL 60560

YORKVILLE CROSSINGS LLC
13351 B FAXON RD
PLANO IL 60545

BAKA PROPERTIES LLC
55 RIVERSIDE ST
YORKVILLE IL 60560

VETERANS WAY LLC
207 W KENDALL DR
YORKVILLE IL 60560

JODA LAND HOLDING LLC
13665 TOWNHOUSE RD
NEWARK IL 60541

CASTLE BANK
RICHARD MARKER
1626 MISTWOOD
NAPERVILLE IL 60540

YORKVILLE CROSSINGS LLC
13351 B FAXON RD
PLANO IL 60545

SVAB TRUST
HERBERT J ALICE E SVAB
906 CALLEVIEW DR
LA GRANGE IL 60525

GATES CINDY S TRUST
9498 2190 EAST ST
PRINCETON IL 61356

PAMELA S MARKER TRUST
PAMELA S RICHARD D MARKER TTEES
1626 MISTWOOD DR
NAPERVILLE IL 60540

GATES CINDY S TRUST
9498 2190 EAST ST
PRINCETON IL 61356

COSTCO WHOLESALE CORPORATION

APPLICATION for a PUD AGREEMENT AMENDMENT
SPECIAL USE PERMIT & FINAL PLAT APPROVALS

PROPOSED COSTCO WHOLESALE
UNITED CITY OF YORKVILLE , ILLINOIS

November 15, 2024

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PROPOSED COSTCO WHOLESALE

UNITED CITY OF YORKVILLE , ILLINOIS

1.0 Property Owner and Project Team

Property Owner:	**Mr. David Hamman and Mr. Joseph Hamman** Joda Land Holding, LLC Newark, Illinois
Contract Purchaser:	**Costco Wholesale Corporation** 730 Lake Drive Issaquah, WA 98027
Costco Real Estate Development:	**Eric Orren, Vice President of Real Estate Development** Costco Wholesale Corporation 730 Lake Drive Issaquah, WA 98027
Real Estate Consultant:	**Michael Stratis, Senior Vice President & Counsel** Intrepid Properties, Inc. 2311 W. 22nd Street, Suite 208 Oak Brook, IL 60523
Development Director:	**Stephen Cross, Authorized Costco Representative** President Cross Engineering & Associates, Inc. 1955 Raymond Drive, Suite 119 Northbrook, IL 60062
Architect:	**Risa Yuki, Principal** MG2 1101 Second Avenue, Suite 100 Seattle, WA 98101
Engineer, Surveyor & Traffic Consultant:	**Dan Free, P.E., Project Manager & Peter Reinhofer, Senior Project Managers** V3 Companies 7325 Janes Avenue Woodridge, IL 60517

PROPOSED COSTCO WHOLESALE
UNITED CITY OF YORKVILLE

2.0 Introduction and Subject Property

Costco Wholesale Corporation operates an international chain of membership retail buildings that carry quality, brand-name merchandise to members at lower prices than are typically found at conventional wholesale or retail sources. Costco's business model also provides assistance to local small to medium -size businesses by offering reduced costs in purchasing for resale and for everyday business use.

Costco retail presents one of the largest product category selections to be found under a single roof. Categories include groceries, candy, appliances, electronics, automotive supplies, tires, toys, hardware, sporting goods, jewelry, watches, cameras, books, housewares, apparel, health and beauty aids, furniture, office supplies, and office equipment. Costco is known for carrying top quality national and regional brands, with a 100% satisfaction guarantee, at prices consistently below traditional wholesale or retail outlets.

Members may also shop for private label Kirkland Signature™ products, designed to be of equal or better quality than national brands, including juice, cookies, coffee, housewares, luggage, clothing, and detergent. Additionally, Costco operates self-service gasoline stations, and car washes at a number of its locations.

Costco Founded in 1983
Costco Wholesale Corporation (Costco) began operations in 1983 in Seattle. In October 1993, Costco merged with The Price Company, which pioneered the membership warehouse concept in 1976. In January 1997, after the spin-off of most of its non-warehouse assets to Price Enterprises, Inc., the Company changed its name to Costco Wholesale Corporation, which trades under the NASDAQ symbol "COST."

Costco continues to be an industry leader in terms of service, quality, value, and innovation. Costco has grown to become, in terms of sales, the second-largest Global retailer and the largest operator of membership clubs worldwide.

Costco has a significant retail presence in the greater Chicagoland area. Costco Yorkville would be the 20th store to open in the Chicagoland area. The closest Costco location to the proposed Yorkville trade area is Naperville, approximately thirteen miles to the northeast at 75th Street and Route 59th.

Costco has entered into an agreement with Joda Land Holding, LLC to purchase approximately 33 acres located at the northwest corner of Veteran's Parkway and

Countryside Parkway in the United City of Yorkville in order to develop a members only retail store and free-standing fueling facility *(See Exhibit 1- ALTA Land Title Survey & Exhibit 2-Site Context Plan with Aerial Photo)*.

To construct the Costco retail and fueling facility as proposed in the Site Development Plans, certain zoning applications will be submitted, public hearings will be conducted, and approvals will be obtained to permit a commercial land use to operate on the Property. The Costco development and fueling facility will be developed on approximately 33.14 acres (Lot 1) with approximately 7 acres allocated for two perimeter lots (Lot 2 & Lot 3) along Veteran's Parkway and approximately 3.4 acres planned for stormwater management located at the northwest corner of the Property. *(See Exhibit 3-Site Plan & Exhibit 4-Final Plat)*

3.0 Property History & Zoning

The current property owners entered into a Planned Unit Development and Annexation Agreement ("Yorkville Crossing") with the United City of Yorkville in July of 2000. A modification to the Annexation and Planned Unit Development Agreement was recorded in May of 2008 amending the zoning of the Property from B-3 General Business District to B-3, PUD. The permitted uses for the Property included all uses in the B-1, B-2, B-3 and Office zoning Districts with non-permitted uses identified.

The current Planned Unit Development Agreement will be modified to include Costco's specific development plan for the Property and all requested deviations from the Development Code and Special Use permits necessary to construct our proposed retail development. The B-3 zoning district permits retail sales, automobile repair uses and gasoline service stations as a Special Use. The current zoning allows Costco to fully develop and operate their retail business on the Property. *(See applications for PUD Agreement Amendment, Final Plat and Special Use)*

4.0 Entitlements

Costco is submitting applications for an Amendment to the Planned Unit Development Agreement, Final Plat, and Special Use permit. The entitlement process will require public hearings before the Planning and Zoning Commission and City Council for final action and approvals.

The proposed Site Development Plans will require a Special Use Permit to operate the fueling facility. The site plan will conform to all Bulk and Dimensional Standards for each proposed lot. Certain relief from the Development Standards will be requested for Costco's proposed development plans. Please see section 6.0, Planned Unit Development, Special Use Permit and Development Standards Deviations for specific details.

5.0 Development Plan Proposal

Final Plat:

The Final Plat consists of a 3-lot subdivision. Lot 1, consisting of approximately 26 acres will be developed with Costco's retail building, stormwater, parking, and free-standing fueling facility. Lot 2 and Lot 3, consisting of approximately 7 acres will be platted for future retail development. The proposed lots comply with the minimum building envelop, size and minimum setback requirements as required in the Zoning Ordinance. Proposed water and sanitary utility easements are illustrated on the Final Plat. The proposed Costco building will be approximately 161,562 square feet and the overall site plan will provide for approximately 856 total parking stalls. The parking count will provide a ratio of 5.29 stalls per 1,000 square feet of building area, which provides sufficient parking based on Costco's anticipated member use. *(See Exhibit 3- Site Plan & Exhibit 4-Final Plat of Subdivision)*

Traffic/Roadway Improvements:

The Costco site is centrally located between 3 roadways that will all provide efficient ingress and egress for the Property. A full access at Veteran's Parkway and Tuma Road intersection will be provided and coordinated with IDOT. Access along E Countryside Parkway will be by two full access points and one right -in / right-out. Access along McHugh Road will be by two full access points. The fuel facilities primarily access will be off of McHugh Road to the west of the site. Off-site road improvements will require modifications to the existing center medians along Countryside Parkway and drive lane striping for left turn lanes at Countryside Parkway and McHugh Road. New right turn lanes will be constructed at the gas entrance at McHugh Road and at Veteran's Parkway. A detailed Traffic Impact Study has been submitted with our application. *(See Exhibit 3-Site Plan & Exhibit 12-Traffic Impact Study)*

Site Plan:

The Costco warehouse building is located generally in the center of the Property facing Veteran's Parkway. This location allows for an efficient parking program distributed around the south and east sides of the warehouse to maximize convenient parking spaces proximate to the customer entrance and exit located at the southeast corner of the building. The parking and internal drives are buffered from surrounding land uses by generous setbacks from property lines and planted buffer yards that include a rich mixture of evergreen, shade, shrubs, and ornamental trees. The interior of the parking lot is planted with islands throughout, offering shade and seasonal interest. 124 future

parking spaces have been planned for the southwest area of the Property. The stormwater management area is located at the north end of the property providing a visual buffer and separation between the building and McHugh Road and Countryside Parkway intersection. The stormwater management area will be planted with natives throughout the pond and side slopes. Parkway trees have been indicated along McHugh Road and Countryside Parkway providing a diverse canopy rich street parkway. *(See Exhibit 6 for Preliminary Landscape Plans)*

The Costco warehouse floor plan has been designed to offer a Member a true retail shopping experience by providing a variety of products, groceries and select services in convenient areas throughout the warehouse building. The Tire Center is located along the east building elevation inside the warehouse building. Five vehicle bays with car lifts will be available for tire rotations and tire replacements. Tires and batteries will also be sold at this warehouse location.

The loading dock is located at the southwest corner of the building, with easy ingress and egress onto McHugh Road. Trucks will exit using the same access drives. The delivery truck routes planned for this property are functional and will not have adverse impacts on member parking or existing traffic along any roadway transportation system. Apart from local vendors/suppliers and delivery services such as UPS or FedEx, all deliveries to the warehouse are controlled by Costco and most deliveries are completed during the morning or evening hours, prior to the store opening or after closing

The site lighting for the property will be provided with light poles distributed throughout the parking and drive areas. The proposed lighting plan utilizes a LED fixture mounted 36'-6" above pavement. This lighting height achieves an acceptable and safe lighting level for surface parking lots, pedestrian walkways, and drives.

The remaining property will be developed for two additional lots along Veteran's Parkway. Lot 2 will consist of a ±4.2-acre parcel and Lot 3 will consist of a ±2.7-acre parcel. It is intended that the lots will be marketed and sold for future commercial uses permitted in the B-3 zoning district. It is anticipated that the Lots will be subdivided into smaller lots, no less than 1 acre in size depending on the final need for a specific commercial use. Future retail development on both lots will be carefully considered by Costco to ensure compatibility with Costco's operations and the overall objective for the B-3 zoning district. *(See Exhibit 4- Final Plat)*

The existing Menard's pylon sign located at the southeast corner of the property will be relocated, east of Countryside Parkway. Costco will be submitting a sign permit for this work separate from the PUD and Special Use applications.

Architecture:

The proposed warehouse building design is a timeless solution utilizing a mixture of modern, traditional, and sustainable materials in a warm color palette of browns and beige. Vertical articulation is achieved through color, texture, and material distribution along the facades proportional to the scale of the building. Materials used include high quality, recycled, insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. The retail building entry is a focal point to the site and incorporates detailed pedestrian scaled smooth face CMU masonry at the columns and the use of glass. A free-standing steel trellis has been incorporated within the south elevation to soften and articulate the building mass visible from the south. Costco signage will be located on the north, south, east, west and entry building elevations in association with Costco's trademark red horizontal metal band. Extensive landscaping is planned throughout the site and will complement the building's architecture providing depth, softening and visual interest. *(See Exhibit 8 & Exhibit 9, Warehouse Elevations, Signage, Architectural Renderings)*

<u>*Sustainable Design*</u>: Awareness and responsibility to design, construct and operate Costco sites and buildings into an energy-efficient, sustainable, and environmentally responsible manner are embedded into the Costco program. This includes, but are not limited to:

- The building structure steel system and architectural metal panels are comprised of 80% recycled content with the associated batt insulation comprised of greater than 50% recycled content.

- The roof maintains reflectance, emittance and SRI rates that lessen heat gain, and the premanufactured building system provides erection efficiency reducing impacts to the carbon footprint.

- Landscaping has been designed to create a high impact with seasonal interest incorporating many native and drought tolerant species, which in turn minimizes irrigation and maintenance needs.

- All site and building lighting systems utilize LED Technology.

- Implementation of the water management system drives operational efficiency to lower wastewater and sewer use.

- The use of carbon dioxide (CO2) in the refrigeration systems, as opposed to HFCs (Hydrofluorocarbons), is widely considered a more environmentally conscious refrigerant due to its extremely low Global Warming Potential (GWP), as well as being non-toxic and non-flammable. Unlike many other refrigerants, CO2 is considered a "natural" refrigerant, readily available as a byproduct of industrial processes, making it a sustainable option.

Fuel Facility:

The fuel facility location within the Costco site has been planned southwest of the warehouse with direct access from McHugh Road. The facility is buffered from adjacent land uses by landscape setbacks to the south and west by generous setbacks and dense landscaping. The traffic flow will move through the facility in the easterly direction and exit directly onto a main east – west vehicular interior drive aisle that provides access to the main parking lot. It is anticipated that 60-65% of the members visiting the warehouse will also purchase gasoline during the same site visit. The fueling facility design is a simple contemporary structure taking cues from the retail building and incorporates similar materials, colors and textures creating a visual connection. The large canopy offers Members protection from the weather. The fuel facility will have 16 pumps or 32 fueling positions with a future expansion to the south adding 4 additional fueling pumps for a total of 20 pumps. The facility will have a controller enclosure, warming "hut" for Costco gas attendant, and 3 30,000-gallon regular fuel tanks and 1 30,000-gallon premium fuel tank. Diesel fuel will not be available at this location. Fuel trucks will access the property from McHugh Road and will exit on Countryside Parkway or Veteran's Parkway.

Utility and Stormwater Improvements:

The proposed development will connect to the existing water main located along the south and west sides of the Property. Water lines will be stubbed into the Property at the intersection of Veteran's Parkway and Countryside Parkway and along McHugh Road. Sanitary sewers will be connected to existing lines located along McHugh Road and Countryside Parkway. Sanitary sewer stubs will be provided to the outlots for future connections. Public water main will be looped around the building.

Stormwater drains across the site from south to north and discharges to the detention basin. The stormwater design includes a large stormwater pond at the northwest corner of the site to provide water quality treatment and rate control before discharging through the existing 36" culvert that runs north of Countryside Parkway. A network of storm sewer pipes within the development will convey stormwater from the Costco and future retail lots to the detention pond. The detention pond will be designed to retain a

small amount of water during storm events and will serve as an attractive amenity at the northwest corner of the Property. *(See Exhibit 5-Preliminary Engineering Plans)*

6.0 Planned Unit Development , Special Use Permit and Development Standards Deviations

The Property is currently subject to a Planned Unit Development Ordinance that was modified and recorded in 2008. The ordinance amended the zoning of the Property to B-3, PUD allowing all of the uses permitted in the B-3 General Business District. As part of Costco's development proposal, the Planned Unit Development Ordinance will be modified to include Costco's site development plans, requested Special Use permit and all deviations required to construct the proposed project as described below.

Special Use Permit: Costco is requesting a Special Use Permit to construct the proposed fuel facility on Lot 1. Gasoline Service Stations are permitted as a Special Use in the B-3 zoning district. Please refer to the Application for Special Use for additional information and responses to Special Use Standards.
Costco is requesting certain deviations from Chapter 5, Development Standards to construct the site development plans.

Code: : 10-5-1 Off-Street Parking and Loading; H. Off-Street Parking Requirements; 2. Maximum Requirements. No off-street parking for nonresidential uses shall exceed the required minimum number of parking spaces by more than 20% except as approved by the Zoning Administrator.
Proposed Deviation: Costco's total parking for the Property is 856 stalls. Future parking is 124 stalls for a total of 980 parking stalls. The maximum allowed pursuant to section 10-5-1 is 387 stalls. Parking is critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property.

Code : 10-5-1 Off-Street Parking and Loading; K. Electric Vehicle Charging Stations. Any parking area with 50 or more parking spaces, shall install the infrastructure required to accommodate a minimum of one 1 electric vehicle charging station per every 50 parking spaces.
Deviation: The site development plans do not contemplate EV Chargers or provide the infrastructure for future EV charging stations as current Costco data reveals that an

exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future.

Code: 10-5-7- Outdoor Lighting: E., Pole Mounted Outdoor Lighting, 2.; Maximum Pole Height for Business and Manufacturing Districts is 35 feet.
Deviation: The height of the light fixture throughout the Costco Property will be 36'-6" from grade. The proposed lighting plan is carefully designed and integrated with the drive and parking lot layout to provide ample uniform coverage for Member security and safety while reducing unnecessary pole lights that would be required at a lower height. Costco's lamps are LEDs with a flat lens that directs light downward minimizing light pollution while creating a more sustainable lighting solution.

Code: 10-5-8-Appearance Standards; 3. Nonresidential; b. Building Design; (1) Commercial, Office and Institutional Uses; (b) Guidelines for Unbuilt Sites; (i) Masonry products or precast concrete shall be incorporated on at least 50% of the total building, as broken down as follows: The front façade shall incorporate masonry products or precast concrete on at least 50% of the façade. Any other façade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades.
Deviation: Costco's proposed building elevations will consist of a variety of sustainable materials as illustrated on the elevation drawings and at the percentages below:

MATERIAL PERCENTAGES

MATERIAL	ELEVATION					TOTAL
	SOUTH	EAST	NORTH	WEST	ENTRY	
SMOOTH FACE CMU "*BUFF*"	1,403 SF **11%**	1,151SF **14%**	2,347 SF **18%**	1,188 SF **12%**	905 SF **21%**	**14.61%**
GLAZING		390 SF **5%**			993 SF **23%**	**2.89%**
TEXTURED ARCHITECTURAL METAL PANEL"*SANDSTONE*"	2,549 SF **21%**	2,867SF **34%**	5,850 SF **44%**	1,911 SF **20%**	1,470 SF **34%**	**30.60%**
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"*TAUPE*"	7,765 SF **63%**	3,925 SF **47%**	5,108 SF **38%**	6,557 SF **68%**	939 SF **22%**	**50.76%**
CONCRETE "*NATURAL*"	546 SF **4%**					**1.14%**

* CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

7.0 Operations and Employees

Operations:

The Costco product line consists of selective department store merchandise, such as wearing apparel, dry goods, appliances, furniture, hardware, and auto accessories; as well as a broad range of grocery store items, including fresh baked goods, meats, produce, and liquor sales. In addition to the floor merchandise, Costco also provides other specialty department and services such as bakery, photo center, tire center, pharmacy, optical and hearing aid departments.

The anticipated warehouse and fueling facility operation hours are as follows:

Days	Warehouse	Fuel
Monday-Friday	10:00 am – 8:30 pm	6:00 am – 9:30 pm
Saturday	9:30 am - 7:00 pm	6:00 am – 9:30 pm
Sunday	9:30 am – 7:00 pm	6:00 am – 9:30 pm

It is anticipated that Costco's opening will coincide with the roadway improvements at Countryside Parkway and McHugh Road. Improvements on Veteran's Parkway will be completed after the store opening and will be dependent on IDOT permit issuance. Costco is planning for an opening late fall of 2025.

Employees:

Costco takes pride in their employees and provides an excellent benefit package that includes, but not limited to medical, dental, vision, pharmacy, life insurance disability, long term care, employee stock purchase program, paid holidays, college student retention program, 401(k). Part-time employees working more than 23 hours per week are also eligible for core benefits (medical, dental and vacation benefits) after 6 months of employment. Currently, 91% of U.S. employees are eligible for the above benefits. On a local level, Costco recruits primarily within the community where it is located, and their objective is to hire promotable employees who have a desire to build a career. A typical warehouse employs upon opening approximately 150 to 200 employees with the ratio of part-time/full-time of 50% each. Costco pays among the highest hourly wages in the retail industry. Due to their philosophy that Costco's employees are just as important as their customers, they experience a low turnover rate with only 13% within the first year and only 7% turnover after one year.

CROSS ENGINEERING & ASSOCIATES, INC.

December 30, 2024

Ms. Krysti Barksdale-Noble
Community Development Director
United City of Yorkville
651 Prairie Pointe1000 Civic Center Drive
Yorkville, IL 60560

RE: **PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plan)**
NW Corner of Veterans Parkway and E. Countryside Parkway
Proposed Wholesale Retail Warehouse and Fuel Station

Dear Krysti,

We have received your November 21, 2024, Plan Council Departmental Review letter and are providing the following revised drawings and responses to your comments:

1. Revised Site Plan by MG2, dated 12-20-2024;
2. Revised Final Plat by V3, dated 12/18/2024;
3. Revised Traffic Report by V3, dated 12-30-2024

PUD Amendment / General Zoning Comments

Comment 1. **Planned Unit Development (PUD)** The subject property, originally annexed into Yorkville via. Ord. 2000-34, is part of the Yorkville Crossing development .

a. The petitioner is requesting the existing Yorkville Crossing Planned Unit Development be amended, or modified, to include Costco's site development plans, requested Special Use, permit and all deviations required to construct the proposed project, per plans submitted.

Response: Noted.

Comment 2. **Planned Unit Development Amendment**

i. The petitioner has listed four (4) proposed deviations from the base B-3 General Business District standards which will be detailed separately in this review memo under subsequent headings.

Response: Costco is requesting five (5) deviations from the B-3 General Business District standards to construct the proposed project:

1. **Certain Landscape regulations in Section 10-5-3;**
2. **Certain Off-street parking and loading regulations for the maximum number of parking stalls in Section 10-5-1;**

3. **The minimum number of electric vehicle charging stations in Section 10-5-1;**
4. **Outdoor lighting standards for maximum pole height of light fixtures in Section 10-5-8;**
5. **Certain appearance standards related to the use of masonry products on building facades in Section 10-5-8.**

Comment 3. **Zoning-** The subject property consists of two (2) parcels (#02-28-227-002 and #0 02-27-101-003). Subsequently rezoned as a Planned Unit Development via Ord. 2008-21, the permitted underlying zoning for the subject property is B-3 General Business District (formerly B-3 Service Business District") and allowed all uses in the B-1, B-2, B-3 and O-Office zoning Districts with some excluded uses as identified in the ordinance. The following are the current immediate surrounding zoning and land uses:

	Zoning	Land Use
North	E. Countryside Parkway B-3 PUD (Yorkville Crossing)	Transportation Land Use United States Post Office (USPS) & Vacant Land
South	US 34 (Veterans Parkway) B-3 General Business District B-3 (Kendall County)	Transportation Land Use Heartland Business Center American Legion & Various Business Land Uses
East	E. Countryside Center B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land
West	McHugh Road B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land

Response: Noted.

Comment 4. **Permitted Uses-** Per Table 10-3-12 (B) of the Yorkville Unified Development Ordinance (UDO), a "general retail store, greater than one (1) acre" is a permitted land use and a "gasoline service station" is a special use in the B-3 General Business District

a. **Ancillary Uses** - While the Unified Development Ordinance does not specifically identify a "tire center" use, where car lifts will be available for tire rotations and tire replacements, the Zoning Administrator can determine if the use is substantially similar to a use listed in the tables. If it is, the use shall be treated in the same manner as the substantially similar use. Staff identifies the use as similar to "automobile repair" or "automobile service" which are permitted uses in the B-3 General Business District.

b. **Standards for Special Use** – The petitioner has provided responses to the following standards for special use authorization, per Section 10-8-5 of the Yorkville Unified Development Ordinance, which will be entered into the record during the public hearing process:

i. The establishment, maintenance or operation of the Special Use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

ii. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within or near the neighborhood in which it is to be located.

iii. The establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

iv. Adequate utilities, access roads, drainage or other necessary facilities have been or shall be provided.

v. Adequate measures shall be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets.

vi. The proposed Special Use is not contrary to the objectives of the City's adopted Comprehensive Plan.

c. Protest to Special Use – Per Section 10-8-5-C of the Unified Development Ordinance, in the event of written protest against any proposed Special Use, signed and acknowledged by the owners of twenty (20) percent of the frontage adjacent thereto, or across an alley, or directly opposite therefrom, such Special Use shall not be granted except by the favorable vote of two-thirds (⅔) of all members of the City Council. In such cases of written protest, a copy of the written protest shall be served by the protestor(s) on the applicant for the proposed Special Use and a copy upon applicant's Attorney, if any, by certified mail at the address of such applicant and attorney shown in the application for the proposed Special Use.

Response: Noted.

Site Plan Comments

Comment 5. **Building Setbacks** – Per the Table 10-3-9(A) Bulk and Dimensional Standards, the following compares current B-3 General Business District standards with the proposed Planned Unit Development (PUD) requested modifications:

BUILDING SETBACKS	REQUIRED MINIMUM SETBACKS B-3 DISTRICT	PROPOSED MINIMUM SETBACKS COSTCO	PROPOSED MINIMUM SETBACKS FUEL FACILITY
FRONT YARD (Veterans Pkwy)	50 ft.	507 ft.	**60'-8"**
CORNER SIDE YARD (East/West)	30 ft.	**246'-7"/**64 ft.	**271-3"**
REAR YARD (SEC Countryside Pkwy/McHugh)	20 ft.	64 ft.	**1,201'**
PARKING SETBACK* (Veterans Pkwy)	20 ft.	275 ft.	N/A

PARKING SETBACK* (Countryside Pkwy/McHugh)	20 ft.	20 ft.	N/A

a. Above information provided from Site Data Table. Please provide a clearly dimensioned site plan clearly identifying the setbacks from the nearest building point to the adjacent property line.

Response: Please see revised Site Plan for all dimensional setbacks from the building and fueling facility to the property line.

b. Per Section 10-3-9 of the Unified Development Ordinance, parking lots in the B-3 district located adjacent to an arterial roadway, as defined in the city's comprehensive plan, must maintain a minimum setback of 20 feet from the property line and 10 feet from nonarterial roadways.

Response: Noted and Site Plan complies with required setbacks.

c. "Parking Lots" are defined as "an open, hard-surfaced area, designed, arranged and made available for the storage of private passenger automobiles only of occupants of the building or buildings for which the parking area is developed and is accessory."

Response: Noted.

Comment 6. **Maximum Building Height** - The B-3 General Business District has an 80 ft. maximum building height per Table 10-3-9(A) in the Unified Development Ordinance. The petitioner has provided overall building height for the proposed Costco Warehouse building in a Project Data table and Elevation plans.

a. Per the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), the stated maximum building height is 34 ft. However, the Elevations (Sheet DD13-05) illustrates the maximum height to the top of coping is 32 ft. Please verify which is the proposed maximum building height.

Response: The maximum building height is 32'-0".

Comment 7. **Maximum Lot Coverage** – Per Section 10-3-9(A) of the Unified Development Ordinance, the maximum lot coverage for the B-3 General Business District (inclusive of sidewalks, parking areas and all impervious surfaces) is 80% of the gross lot area. According to the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), lot coverage calculations are not provided.

a. Please provide calculations for the proposed total impervious coverage including building area, parking area, future parking area, and fuel station.

Response: Please see revised Site Plan for Lot 1 impervious coverage.

b. If area exceeds 80%, a requested deviation to the bulk regulations in Section 10-3-9. Bulk and Dimensional Standards of the Unified Development Ordinance.

Response: The total impervious coverage for Lot 1 is 65.4%.

Comment 8. **Parking/ Loading** - According to the Parking Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), there are 856 total parking spaces to be provided on the property to accommodate the proposed ~160,000 sq. ft. retail warehouse building and fueling facility uses. Future parking expansion area will include another 124 stalls for an overall total 980 parking spaces.

Response: Noted.

Table 10-5-1(E)(1) Standard Parking Stall and Aisle Dimensional Requirements						
Parking Angle (degrees)	Figure Reference					
	A	B	C	D	E	F
	Space Width	Space Depth	Aisle Width (2-Way)	Aisle Width (1-Way)	Depth of Interlocking Spaces	Overhang
0	9'	20'	24'	12'	n/a	n/a
45	9'	18'	24'	12'	28.25'	2'
60	9'	18'	24'	18'	32'	2'
90	9'	18'	24'	24'	36'	2'

c. Per Table 10-5-1(E)(1) Standard Parking Stall and Aisle Dimensional Requirements are as follows:
The petitioner is proposing 90-degree parking stalls with a 10' width and a minimum of 18.5' stall depth with a 2' overhang. Aisle widths for 2-way drives are 32' wide.

Response: Aisle widths for 2-way drives vary throughout the property. Parking drive aisles are 24' and 24'-6" when stalls are adjacent to landscape islands. The perimeter drive aisle and certain interior aisles are 32' and 36' to accommodate truck movements.

d. Per Table 10-5-1(H)(5) Minimum Parking Requirements of the Yorkville Unified Development Ordinance, the minimum parking requirement for a retail store more than 8,000 sq. ft. of the net building square feet is 2 spaces/1,000 sq. ft. Gasoline Service Stations require a minimum of 1 space/gas pump and 1space/300 sq. ft. for any accessory retail space.

Response: Noted.

i. To minimize excessive areas of pavement, no off-street parking area for nonresidential or multi-family uses shall exceed the required minimum number of parking spaces by more than twenty (20) percent, except as approved by the Zoning Administrator. In approving additional spaces, the Zoning Administrator shall determine that the parking is needed based on documented evidence of actual use and demand provided by the applicant.

Response: Noted.

1. Per Section 10-5-1-H.4.b of the UDO, calculations for all area-based (square footage) parking standards must be computed on the basis of net floor area.

ii. Total required maximum parking for the subject property is 386 spaces, including a minimum of 8 ADA accessible spaces, as calculated below:

1. 153,820 net sq. ft./1,000 = 153.82 x 2 = 307.64 + 61.53 (20% of total) = 369.17 + 16 (gas dispensers) = 385.17 rounded to 386, per Section 10-5-1-H.4.a of the Unified Development Ordinance.

Response: Noted.

iii. The petitioner is requesting a variance from the UDO's required maximum parking due to parking being "critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property." **(Deviation #1).**
Staff is supportive of the deviation from a maximum of 2 parking spaces per 1,000 net sq. ft. of building area to approximately 5.04 parking spaces per 1,000 of building area as noted on Sheet C2.0 Layout Plan in Preliminary Engineering Plan Set (note page 6 of the Project Narrative under 5.0 Development Plan Proposal Final Plat, Sheet DD11-05 Site Plan, and Sheet DD12-05 Aerial Site Plan lists the parking count ratio as 5.29 stalls per 1,000 square feet of building area – possibly based on gross square footage?).

Response: The parking ratio is 6.22 stalls per 1,000 square feet of net building area.

iv. Additionally, per Section 10-5-1K-1 of the Unified Development Ordinance, infrastructure for a minimum of 8 electric vehicle charging stations is required to be installed (1 EV charging station per 50 required parking spaces).

Response: Noted.

v. The petitioner is also requesting full relief from the UDO's minimum required EV charging station requirement due to "current Costco data reveals that an exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future." **(Deviation #2).**
Staff is supportive of the deviation of the full relief for the installation of infrastructure to accommodate the required minimum 8 electric vehicle charging stations since the petitioner will reevaluate the need for EV charging in the near future.

Response: Noted.

e. Off-Street Loading – Per Section 10-5-1-Q of the Unified Development Ordinance, the number of off-street shall be determined on a case-by-case basis, and in the instance of special uses, loading berths adequate number and size to serve such use, as determined by the Zoning Administrators, shall be provided. The petitioner proposes to have four (4) recessed off-street loading spaces for the retail warehouse located at the southwest corner of the building.

Response: Noted.

Comment 9. **Fuel Facility** – Fuel facility proposes 16 gas dispensers, accommodating 2 cars per dispenser. A total of eight (8) lanes are proposed for car queuing allowing five (5) cars per

lane stacking. This results in a total of 72 cars maximum in this area of the site. No accessory retail convenience store is proposed for the fuel facility area.

Response: Noted.

a. Staff has some concerns regarding the southernmost full access off of McHugh Road leading to the fueling facility which may cause a backup onto the public roadway should there be more than the five (5) vehicles stacking per fuel lane or 40 vehicle max stacking for all pumps.

Response: Costco's fuel facilities are designed based on years of data collection, and observations made on existing facilities located throughout the Country. The number of pumps, queue lanes, and traffic movements are determined by Costco's gas operations team specific to each property and trade area. Reduced queues and wait times have been regularly observed at expanded existing fuel facilities constructed with a higher number of fuel pumps. There is a direct correlation between the number of fuel pumps and efficiency which can be applied to a new fuel facility design.

The fuel facility proposed consists of 16 pumps or 32 fuel dispensers, one of Costco's largest facilities in the Mid-west. The proposed 155' long drive lane will allow 40 vehicles in the queue storage area. For comparison, the number of pumps at the Plainfield fuel facility is 12 and the Naperville facilities are 12 and 15 pumps respectively with shorter queuing than what is being proposed at Costco Yorkville. In addition to 40 vehicles in queue, 32 vehicles will be accommodated at a fueling position for a total of 72 vehicles in the gas designated area. The 32 fueling positions will process the expected traffic volumes and peak demand efficiently and effectively decreasing wait times, vehicle queuing and reducing the possibility of a public road back-up.

In the future, if Costco determines that the average wait times during peak hours can be improved, the site plan for the fuel facility will allow the expansion of the facility south towards Veteran's Parkway to increase the number of pumps by 4 bringing the total to 20 pumps or 40 fuel dispensers as depicted in the proposed site plan. The queuing and drive lanes can also be expanded to the west allowing for more vehicle stacking thereby reducing the possibility of a back-up on McHugh Road.

Comment 10. **Traffic / Roadways**

a. Direct Access – It is noted that the site has six (6) points of access. Three (3) off of E. Countryside Parkway – two (2) full access and one (1) right-in/right-out; one (1) full off of E. Veterans Parkway, which will be coordinated with IDOT; and two (2) full access points off of McHugh Road. These access points lead to internal private roadways which loop around the retail warehouse building, provide direct access to the fueling facility, and will connect to the future outlot uses.

i. It is noted on Sheet DD12-05 Aerial Site Plan, there are two (2) right in/right out access points on E. Countryside Road. Please revise discrepancy.

Response- Site Plan has been revised to correctly identify the full access intersection.

ii. It is also noted that off-site road enhancements will involve adjusting the existing center medians along Countryside Parkway and adding lane

striping to create left-turn lanes at the intersections of Countryside Parkway and McHugh Road. Additionally, new right-turn lanes will be installed at the gas station entrance on McHugh Road and at Veteran's Parkway.

iii. Staff defers to City Engineer regarding site access and Traffic Impact Study.

b. Cross Access – Per Section 10-5-1-F of the Unified Development Ordinance, cross access between adjoining developments is required to minimize access points along streets, encourages shared parking, and allows for vehicular access between land uses. Will a cross access easement agreement be executed between the outlot developers and Costco?

Response: A cross access easement agreement will be executed with future outlot developers. This agreement will be part of the Construction, Operation and Reciprocal Easement Agreement (COREA) that will define matters relating to construction obligations, maintenance, stormwater, parking, cross access and utility easements.

i. Note, according to Section 10-5-1-F-2-c, the Zoning Administrator may waive or modify the requirement for vehicular cross access on determining that such cross access is impractical or undesirable because it would require crossing a significant physical barrier or environmentally sensitive area, would create unsafe conditions, or there exists an inability to connect to adjacent property. City Council shall have the authority to waive or modify vehicular cross access requirements for all public review processes involving review by City Council.

c. Pedestrian Circulation – Per Section 10-5-1-N Pedestrian Circulation Standards of the Unified Development Ordinance required off-street parking areas to provide on- site pedestrian circulation systems and connection to existing and future planned trails. The petitioner has provided a single pedestrian connection to the public way off of E. Veterans Parkway at the intersection with Tuma Road.

i. Would the petitioner consider an additional pedestrian connection to the public way at the northernmost full access drive on Countryside Parkway at the intersection with Crimson Lane?

Response: Yes, please see revised Site Plan for a proposed pedestrian connection from the intersection of Countryside Parkway and Crimson Lane to the Costco parking lot.

Comment 11. -**Landscaping**– Section 10-5-3 establishes landscape standards for new developments. The petitioner has submitted a Landscape Plan and per staff's review, the following sections of the Landscape Plan shall apply:

i. Section 10-5-3-C. Building Foundation Landscape Zone - All nonresidential, mixed-use, and multi-family development where a front yard setback is required, with the exception of food processing facilities regulated by the FDA, shall include landscape located at the building foundation as required by this section. Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide a softening effect at the base of buildings.

ii. Section 10-5-3-D. Parking Area Perimeter Landscape Zone - Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide screening between off-street parking areas and rights-of-way, and to provide for the integration of stormwater management with required

landscaping.

iii. Section 10-5-3-E. Parking Area Interior Landscape Zone - All off-street parking areas shall include landscape and trees located within the off-street parking area as required by this section. Trees and landscape required by this section shall be in addition to trees and landscape required under other sections of this title. It is the objective of this section to provide shade within parking areas, break up large expanses of parking area pavement, support stormwater management where appropriate, improve the appearance of parking lots as viewed from rights-of-way, and provide a safe pedestrian environment.

iv. Section 10-5-3-F. Transition Zone Landscape Requirements - Transition zone landscape shall be required along interior side and rear property lines of all nonresidential, mixed use, and multi-family development. It is not expected that the transition area will totally screen such uses but rather will minimize land use conflicts and enhance aesthetics.
Staff defers all landscape review comments to the City Engineer's subconsultant. However, we want to highlight that, due to the site's unique location, being entirely surrounded by public roadways, special attention will be required during installation to ensure clear visibility at driveway and right-of- way intersections. In accordance with Section 10-5-6 of the Unified Development Ordinance, this may necessitate minor adjustments to the approved plan, such as relocating or removing certain plant materials.

Response: Noted. Please see comment/ response under Landscaping, page 18.

Comment 12. **Lighting** – A photometric plan has been provided along with pole details of the proposed
light standards to be installed within the parking lot area. Maximum illumination at the property line shall not exceed zero (0) foot-candle, and no glare shall spill onto adjacent properties or rights of way.

a. Per Table 10-5-7(E) of the Unified Development Ordinance, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. The petitioner seeks a deviation to this regulation to install a light fixture with a maximum height of 36'-6" to provide ample uniform light coverage of the parking lot area (Deviation #3). Staff supports this deviation.

b. Staff defers to City Engineer regarding all other photometric plan review comments.

Response: Noted and see engineering responses on page 14.

Comment 13. Mechanical Screening – Per Section 10-5-4 Screening of the Unified Development Ordinance, ground/wall-mounted and roof mounted mechanical units that are visible from any public right-of-way or adjacent residential property shall be screened from public view. Materials used for screening shall be designed and established so that the area or element being screened is no more than twenty (20) percent visible through the screen.

Evergreen hedges or non-transparent walls such as stone masonry shall be allowed, as depicted below:

a. It is noted that there are two (2) proposed ground-mounted compactors located on the

west elevation adjacent to McHugh Road. It appears the petitioner has proposed to screen ground mounted mechanical equipment with landscaping material such as evergreen trees, ornamental trees and shrubbery located to the west in landscape bed edge.

i. Since the units may not be visible from the public way due to the location, setback and landscaping provided on the site, staff is supportive of the screening.

Response: Noted.

Comment 14. **Appearance Standards** – Per Section 10-5-8-C-3.b Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty (50) percent of the total building, as broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty (50) percent of the facade. Any other facade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades. Additional standards include:

a. Loading bays for commercial and office uses shall not be located in the front of a building or in the area abutting a public right-of-way, and all commercial, office.

b. Institutional buildings shall consist of solid and durable facade materials and be compatible with the character and scale of the surrounding area.

The petitioner has submitted exterior building elevations depicting the retail warehouse with materials such materials as insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. However, the petitioner is seeking relief from the minimum masonry requirements and location of loading bays in the front of the building and in an area abutting a public right-of-way (Deviation #4). Below is the proposed building material breakdown:

MATERIAL PERCENTAGES

MATERIAL	ELEVATION					TOTAL
	SOUTH	EAST	NORTH	WEST	ENTRY	
SMOOTH FACE CMU "*BUFF*"	1,403 SF 11%	1,151SF 14%	2,347 SF 18%	1,188 SF 12%	905 SF 21%	14.61%
GLAZING		390 SF 5%			993 SF 23%	2.89%
TEXTURED ARCHITECTURAL METAL PANEL"*SANDSTONE*"	2,549 SF 21%	2,867SF 34%	5,850 SF 44%	1,911 SF 20%	1,470 SF 34%	30.60%
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"*TAUPE*"	7,765 SF 63%	3,925 SF 47%	5,108 SF 38%	6,557 SF 68%	939 SF 22%	50.76%
CONCRETE "*NATURAL*"	546 SF 4%					1.14%

* CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

c. Staff has calculated that the masonry/cementitious materials make up approximately 15-16% of the total building and 30-35% of the front elevation (South and Entry). We understand that Costco must maintain its corporate brand and image, and staff is fully supportive of this deviation from the 50% appearance code standard. The proposed textured and ribbed architectural paneling provides a solid and durable façade, which meets the intent of the UDO's requirements.

d. In Section 10-5-8C.1 of the UDO it states “Creativity and ingenuity in applying the standards and guidelines listed in this Code are encouraged. Likewise, ingenuity and creativity, while considering deviations to the standards and guidelines of this Code, are encouraged.” Following this guidance, staff has previously used the credit for "major architectural features" outlined in Section 10-5-8C-2.7 (intended for residential uses) as a reference when approving deviations for unbuilt nonresidential sites that have or are seeking PUDs.

e. Therefore, as vertical articulation is accomplished through the use of color, texture, and the strategic distribution of sustainable materials along the facades in proportion to the building's scale, along with the incorporation of a free- standing steel trellis on the south elevation to soften and define the building mass visible from the south, staff is supportive of the deviation.

i. Note, while staff supports this request for relief—similar to the relief granted to the recently approved Cyrus One data center project—there is no guarantee the City Council will approve a deviation from the City’s appearance standards.

Response: **Noted.**

Comment 15. **Signage** – The petitioner is proposing six (6) wall mounted signs as illustrated on the exterior elevations, as illustrated below:

SIGN TABLE

IDENTITY	Quantity	SIGN	SIZE	AREA(EACH)	TOTAL SF
SI		COSTCO WHOLESALE	5'-0" C	175 SF	*175 SF*
S2	4	COSTCO WHOLESALE	6'-0" C	280 SF	*1120SF*
S3	1	TIRE CENTER	17'-4" x 1'-9"	31SF	*31SF*
			TOTAL SIGN AREA:	1326 SF	

a. Per Section 10-6-6 of the Unified Development Ordinance, single tenant buildings shall be permitted a total of two (2) primary wall signs or one (1) primary wall sign per one hundred (100) linear feet of building frontage. One (1) additional wall sign shall be allowed per additional hundred (100) feet of building frontage. Only one (1) primary wall sign shall be displayed on any single building façade.

i. Additionally, a maximum of two (2) secondary wall signs may be authorized for buildings with lineal frontage in excess of seventy-five (75) feet by the Zoning Administrator provided such additional signage is:

(1) In keeping with the overall design and architecture of the building,
(2) A minimum of ten (10) feet from the primary wall sign and other secondary wall signs,
(3) A maximum of fifty (50) percent of the size of the primary wall sign,
(4) Accessory to the building’s primary wall sign(s), and
(5) The total area of all primary and secondary wall signs does not exceed the maximum wall sign area as established in Section 10-6-6(A)(1).

ii. Signs Attached to a Wall With a Public Entrance or Facing a Public Right-of-Way. The maximum sign area shall be two (2) square feet for every one (1) linear foot of the exterior wall to which it is affixed. The sign shall not exceed seventy-five (75) percent of the

width of the exterior wall to which it is attached.

b. Since all building elevations (south, east, north, and west) have frontage along a public right-of-way, each façade is permitted one (1) primary wall sign.

c. Additionally, each building façade (except the entry area) exceeds 100 liner feet, so an additional two (2) secondary wall signs are permitted per facade.

d. Therefore, per staff's calculations, the petitioner is permitted a maximum of five (5) primary signs and eight (8) secondary signs totaling 13 wall signs, as depicted in the table below:

Elevation	Façade Length	Permitted # of Signs	Proposed # of Signs	Permitted Max. Sign Area	Proposed Sign Area
South	~358'-7"	3	1	~717.4 sq. ft.	280 sq. ft.
East	~326'-4"	3	2	~652.8 sq. ft.	311 sq. ft.
Entry	70'-3 ¾"	1	1	~140.7 sq. ft.	175 sq. ft.
North	~493'-6"	3	1	~987.2 sq. ft.	280 sq. ft.
West	~220'-0"	3	1	~440 sq. ft.	280 sq. ft.
TOTAL		**13**	**6**	**~2938.1 sq. ft.**	**1326 sq. ft.**

d. All proposed wall signs conform to UDO regulations.

Response: Noted.

f. It is noted a monument sign is not proposed for the development. However, the existing pylon ground-mounted "Menards/Yorkville Crossing" sign located at the southeast corner of the property will be relocated, east of Countryside Parkway on parcel #02-27-101-004 owned by Yorkville Crossings, LLC.

Comment 16. **Comprehensive Plan** – The 2016 Comprehensive Plan Update designates this property as "Mid Density Residential (MDR)" which is defined typically for higher density residential developments near commercial areas and transportation corridors including townhomes and multi-family development.

a. Although the proposed commercial land use does not align with the comprehensive plan's current future land use designation, staff supports the use because it is consistent with the "Destination Commercial (DC)" designation assigned to nearby properties to the west. Additionally, the property's existing B-3 zoning classification aligns with both the Destination Commercial land use and the original PUD. If the proposed development is approved, an amendment to the Comprehensive Plan will be required.

Response: Noted. It is our understanding that staff will prepare the necessary documents to amend the Comprehensive Plan.

Comment 17. **Final Plat** – The title block on Sheet 2 of the Final Plat of Subdivision for "City Plan Commission Certificate" shall be revised to read "City Planning and Zoning Commission Certificate".

Response: The Certificate Title for Planning and Zoning Commission has been revised as requested.

Preliminary Engineering Comments and Responses

General

Comment 1: The following permits may be required during final engineering and should be provided to the City when obtained. The City and EEI should be copied on all correspondence with the agencies.

- IEPA NPDES General Construction Permit is required. The Notice of Intent must be filed with IEPA 30 days prior to start of construction.
- IEPA Water and Sanitary Sewer Permits
- Yorkville Bristol Sanitary District (YBSD) approval is needed for the connection of the proposed sanitary lines to the existing sanitary sewer.
- IDOT for the connection to U.S. Route 34
- United City of Yorkville Stormwater Management Permit

Response: Noted.

Comment 2: The following will need to be submitted with final engineering:

a. An engineer's estimate needs to be provided and must include all public improvements within the ROW including all public utilities and connections, all soil erosion and sediment control items, and all permitted stormwater items. This cost estimate will be used to determine the construction guarantee amount. In addition, a cost estimate needs to be provided for all site improvements which will be used to calculate the building permit fees.
b. Truck turning exhibits for delivery and emergency vehicles

Response: Noted. Information requested will be provided with Final Engineering.

Comment 3: Additional forms and information can be found at

https://www.yorkville.il.us/333/Engineering- Department.

Response: Noted.

Comment 4: The comments in the attached review letter from the City's landscaping consultant must be addressed and a revised landscaping plan submitted with final engineering.

Response: Noted. Please see page 19 for Landscaping responses.

Preliminary Engineering Plans

We have completed a cursory review of the preliminary engineering plans and stormwater management report. A detailed review will be completed with the submittal of final engineering. The following comments should be considered when developing final engineering.

C0.0 - Cover Sheet

Comment 5: The plans should be signed and sealed by a Professional Engineer prior to final approval.

Response: Noted.

Comment 6 : The JULIE logo or contact information should be included on the cover sheet.

Response: Noted.

Comment 7: Include contact information for the City and YBSD on the cover sheet.

Response: Noted.

C2.0 - Layout Plan

Comment 8: The City should confirm that the number of parking spaces is adequate.

Response: Noted.

C3.0 - Preliminary Grading Plan

Comment 9: Additional grading should be shown in the fueling area.

Response: Noted. This information will be provided with final engineering.

Comment 10: Include 1-ft contours in the non-paved area to the west (where the future employee parking will be).

Response: Noted.

C4.0 - Preliminary Utility Plan

Comment 11: All utility conflicts will need to be shown.

Response: Noted. This information will be provided with Final Engineering.

Comment 12: Water valves should be included on the water main.

Response: Noted.

Comment 13: Provide details of the water main connections.

Response: Noted.

Comment 14: The storm structures should be labeled with unique identifiers and the type of structure, frame, and lids/grates.

Response: Noted.

Photometric Plan

Comment 15: The photometric plan should include a summary table that includes average, average to minimum, and maximum to minimum light intensity data to confirm that the lighting plan meets the requirements of the Ordinance.

Response: Noted. This information will be provided with Final Site Lighting Plans.

Comment 16: Light intensity shall be zero-foot candles at all property lines.

Response: Noted. This information will be provided with Final Site Lighting Plans.

Comment 17: Light fixtures should be fully cut off and conform to the dark sky concept.

Response: Noted. This information will be provided with Final Site Lighting Plans.

Preliminary Stormwater Management Report

Comment 18: A City of Yorkville Stormwater Permit Application should be submitted with Final Engineering.

Response: Noted.

Comment 19: The stormwater management report should be signed and sealed by a Professional Engineer prior to final approval.

Response: Noted.

Comment 20: Confirm that the detention basin design accounts for the future development of the fueling station and employee parking lot that is indicated on the plans.

Response: The detention basin and storm sewer are designed to accommodate the future development areas.

Comment 21: The report includes a requirement to control the outlet to 0.08 cfs/acre for a 25-year storm. It has been determined that this will not be required for this project.

Response: Noted. This will be removed from the calculations and design.

Comment 22: A full report with calculations, modeling, and exhibits as indicated in the permit application should be included with final engineering.

Response: Noted.

Comment 23: A certified wetland determination will need to be included with final engineering.

Response: Noted.

Comment 24: Confirm that the existing storm sewer that goes to the existing detention basin is installed.

Response: The ALTA / Topo survey includes the drainage easement, and the location of manholes that were located within the easement. This existing storm sewer also drains McHugh and Countryside Parkway.

Comment 25: Calculations for the drawdown time of the detention basin will be required due to the 5.8' bounce.

Response: Noted.

Traffic Study

Comment 26: The traffic impact study should be submitted to IDOT for review. The City should be copied on all correspondence with IDOT.

Response: Noted. The traffic study was submitted to IDOT on 11/19/2024. All correspondence with IDOT will be transmitted to the City.

Comment 27: IDOT should comment on the proposed mitigations at US 34 and Countryside. Note that the capacity analysis indicated an inadequate level of service without the proposed mitigations. Storage lengths were also exceeded in this area.

Response: Comments from IDOT will be provided to the City once received.

Comment 28: The storage length for the southbound Countryside Parkway at US 34 should meet the proposed mitigation queue length and avoid blocking the exit of Driveway 3.

Response: We agree. The proposed signal retiming at US 34 and Countryside Parkway results in the projected 95th percentile queue length not backing up to Driveway 3.

Comment 29: The existing traffic volumes displayed in Figure 5 along McHugh Road do not balance with the volumes entering the intersections of US 34 / McHugh Road and McHugh Road / Countryside Parkway.

Response: There is a difference in traffic volumes between intersections due to the traffic counts being conducted on different days. The existing traffic volumes have been balanced along McHugh Road between US 34 and Countryside Parkway using the higher volumes and increasing the arrival or departure volumes to balance.

Comment 30: The existing traffic volumes displayed in Figure 5 along Countryside Parkway do not balance with those entering the intersections of US 34 / Countryside Parkway and Countryside Parkway/ Crimson Lane.

Response: There is a difference in traffic volumes between intersections due to the traffic counts being conducted on different days. The existing traffic volumes have been balanced along Countryside Parkway between Crimson Lane and US 34 using the higher volumes and increasing the arrival or departure volumes to balance.

Comment 31: The pages from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, should be included in the Appendix.

Response: The pages from the ITE Trip Generation Manual have been included in the

Appendix.

Comment 32: The size utilized in Table 1 for trip generation of the Gasoline/Service Station does not account for the future expansion of the gas station.

Response: The trip generation has been updated to include the future expansion of the gas station.

Comment 33: A traffic signal warrant analysis at the intersection of US 34Neterans Parkway and Costco Driveway 4/Tuma Road found the installation of a traffic signal to be unwarranted. It is noted that an inadequate Level of Service at US 34 / Tuma Road / Driveway 4 is expected. A proposed mitigation plan should be provided. The safety of the eastbound left turn into Driveway 4 is of concern.

Response: We are proposing to modify the access at the US 34 and Tuma Road/Driveway 4 intersection to provide right in/right out/left in access. The left in movement is projected to operate at LOS A for all three peak hours with average delays of less than 10 seconds per vehicle. The projected eastbound left turns into the Costco development are slightly higher than the westbound left turns into Tuma Road during the weekday am and weekday pm peak hours. The Saturday eastbound left turn is higher but the opposing westbound through movement is also lower, resulting in the low delays. Additionally, the operations of the traffic signal at US 34 and Countryside Parkway creates gaps in westbound traffic for the eastbound left turns to occur.

Comment 34: A traffic signal warrant analysis should be performed for McHugh Road and Countryside Parkway with the anticipated project traffic volumes.

Response: A traffic signal warrant analysis was completed at the intersection of McHugh Road and Countryside Parkway and is included in the Appendix of the updated report.

Comment 35: The taper length for the left turn at Driveway 2 should meet minimum IDOT Bureau of Local Roads and Streets (BLRS) design requirements.

Response: The westbound left turn lane along Countryside Parkway at Driveway 2 was updated to meet the IDOT design requirements, providing 185 feet of storage length with a 200-foot taper.

Comment 36: The shifting of driveway 5 further north should be considered. Ideally, the taper length for the southbound left turn at US 34 is extended as it should meet minimum IDOT BLRS design requirements. This would also allow the shifting of the dedicated right-turn lane for driveway 5 away from the intersection at US 34.

Response: The southbound left turn lane at US 34 and McHugh Road has been redesigned to meet the IDOT design requirements for a roadway with a posted speed of 35 mph. Assuming a design speed of 40 mph, the left turn lane has been designed with 145 feet of storage length and a 175-foot taper. This updated design can be accommodated within the median along McHugh Road between US 34 and Driveway 5.

Final Plat of Subdivision

Comment 37: The legal description is the surveyor's certificate must describe the measured boundary.

Response: The legal description has been added to the surveyor's certificate.

Comment 38: The chord length should be added to all curve dimensions.

Response: The chord lengths have been added to the curve dimensions.

Comment 39: All easements must be dimensioned.

Response: An additional drawing has been added to identify the easement dimensions.

Comment 40: The water main easement should be changed to a C.U.E.

Response: The easement has been changed to a C.U.E.

Comment 41: The S.S.E. should be changed to C.U.E.

Response: The S.S.E. has been changed to a C.U.E.

Comment 42: Cross-access easements are needed over all lots.

Response: Cross-access easements will be part of the real estate agreement between Costo and lot purchaser drafted at the time of lot purchase.

Comment 43: The Public Utility Easement Provisions and the stand-alone Nicor Gas provisions should be removed.

Response: The P.U.E. and Nicor provisions have been removed.

Comment 44: The stormwater management easement and City Utility Easement C.U.E. provisions should be added.

Response: The S.M.E. and C.U.E. provisions have been added.

Comment 45: The building setback line on the west line of Lot 1 needs to be labeled.

Response: The building setback line has been added.

Comment 46: The area table must match the areas on the plat.

Response: The areas have been corrected.

Comment 47: All fire hydrants, valves and emergency shut off must be inside the C.U.E.

Response: The easements extents have been changed to include all watermain appurtenances.

Comment 48: The concrete monument symbols do not match the location labels on the plat.

Response: This has been revised on the Plat.

Comment 49: Note 2 on the IDOT access notes contradicts the site plan.

Response: Direct access from Route 34 is through Lots 2 and 3, not Lot 1. This is a typical note that IDOT requires.

Landscape Comments

Building Foundation Landscape Zone

Comment 1: A Building Foundation Landscape Zone, consisting of 5 square feet of landscape area per linear foot of building frontage, is required along front and side yards. No foundation landscaping is shown on the east and west sides of the building. Requirements are not met.

Response: **A zoning deviation is requested for building foundation landscape.**

Parking Area Perimeter Landscape Zone

Comment 2: Requirements appear to be met and will be confirmed later after more detailed plans have been submitted. The City may require Parking Lot Perimeter Landscape along the southern edge of the main parking lot if Outlots 1 and 2 are to remain vacant.

Response: **Each outlot will be required to provide landscaping per code that meets the requirements for the individual site use. Costco will not be providing landscaping for these outlots. A no-mow planting mix will be provided for erosion control while lots are undeveloped.**

Parking Area Interior Landscape Zone

Comment 3: Parking area medians are required every third bay of parking in front or side of building. Parking area islands spaced not more than 10 continuous spaces apart are also required . Requirements are not met.

Response: A deviation is requested for parking area interior landscape.

Transition Zone

Comment 4: Requirements appear to be met and will be confirmed later after more detailed plans have been submitted.

Response: Noted.

Species Diversity Requirements

Comment 5: Compliance with species diversity requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Response: Species diversity will be in compliance with Final Landscape Plans.

Minimum Plant Size Requirements

Comment 6: Compliance with minimum plant size requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Response: Minimum plant size requirements will be in compliance with Final Landscape Plans.

Tree Preservation and Removal

Comment 7: A review of Google Earth and Google Streetview imagery suggests there are a few parkway trees on the subject property, which are shown to be preserved. Requirements appear to be met and will be confirmed later after more detailed plans have been submitted

Response: **Noted.**

Street Trees

Comment 8: A minimum of 1 canopy tree is required per every 40 linear feet of parkway. Requirements are not met.

Response: Street trees will be adjusted on Final Landscape Plans for Countryside Parkway and McHugh Road to meet spacing and identify light pole locations.

Wetlands

Comment 9: A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

Response: Noted.

The following comments on the landscape plan were provided by Public Works, and also must be addressed.

General Question

Comment 10: You show new plantings in the median on Countryside Parkway, are you planning on maintaining the median?

Response: Costco will not be maintaining the Countryside Parkway median. Turf will be restored for any areas impacted by construction.

Sheet L1.1

Comment 11: Please locate the existing streetlights on McHugh Rd. and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights and street cuts.

Response: Final landscape plans will include existing streetlights and revised parkway tree spacing.

Comment 12: No parkway trees should be planted in medians that are less than 10' wide. We have had trees planted in these areas in the past and they do not survive.

Response: Trees shown in the median along Countryside Parkway are to be removed as the median is less than 10 feet with.
Sheet L1.2

Comment 13: The city is planning on removing the existing pear trees and reshaping the median on East Countryside Parkway to allow better site lines and make it safer to mow. Perhaps we can work together to come up with a solution since you are cutting in a turn lane on East Countryside Parkway.

Response: Costco is open to working with Yorkville to come up with a feasible solution in the median. Note that Costco will not be maintaining the median.

Comment 14: Please locate the existing streetlights on Countryside Parkway and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights and street cuts.

Response: Final landscape plans will include existing streetlights and revised parkway tree spacing.

Yorkville Police Department Memorandum

Signage

Comment 1: Handicapped parking had been identified on the plan. Proper signage must meet MUTCD Standards for enforcement.

Response: Noted. Signage will comply to MUTCD Standards for Enforcement.

Comment 2: Areas that will be posted "No parking" must be posted via proper signage meeting MUTCD Standards for Enforcement (i.e. No Parking Fire Lane); No parking on Countryside Parkway; No Parking on McHugh Road.

Response: Noted. No parking signage will comply to MUTCD Standards for Enforcement at areas specified on the Final Engineering Plans.

Comment 3: The pedestrian walking / bike path runs along Rt. 34. This walking / bike path is extremely busy. While not required, we would recommend Bike Path or Pedestrian Crossing signs be posted.

Response: Noted.

Roadway

Comment 4: No parking should be allowed on Countryside Parkway or McHugh Road.

Response: Agreed. Final Engineering plans will indicate "No parking" signs.

Comment 5: No concerns at the intersection of Rt. 34 & Countryside Parkway or Rt. 34 & McHugh Road. Both of these intersections are controlled with traffic lights. I do have a concern with the intersection of Rt. 34 & Tuma Road. There does not appear to be any traffic control devices at this intersection other than a "Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be very problematic and dangerous. If this entrance / exit will remain, I recommend this being a "right in" and "right out" only.

Response: Noted. Intersection has been modified to allow a "Right In", Right Out" and "Left In" access. Please see Traffic Report for updated data for this intersection.

Landscape

Comment 5: I have not seen a landscaping plan for this project. If landscaping is going to be put in, they should use low growth or ground cover landscaping by the entrance / exit to limit site line issues.

Response: Noted. Please see landscaping plans for details.

Ingress / Egress

Comment 6: No concerns at the intersections of Rt. 34 & Countryside Parkway or Rt 34 & McHugh Road. Both of these intersections are controlled with traffic lights. I do have a concern with the intersection of Rt. 34 & Tuma Road. There does not appear to be any traffic control devices at this intersection other than a "Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be a very problematic and dangerous. If this entrance / exit will remain, I recommend this being a "right in" and "right out" only.

Response: Noted. Intersection has been modified to allow a "Right In", Right Out" and "Left In" access. Please see Traffic Report for updated data for this intersection.

Comment 7: Are vehicle entrance / exits safe? See Comments above, Only 1 entrance / exit would be classified as unsafe.

Response: Noted. See Response 6.

Comment: 8. Are warning signs for cross traffic requested? Signage for pedestrian walking/ biking path should be added.

Response: Noted.

Comment 9: Please provide emergency contact information for after hours during construction. This will only be used if there is a law enforcement needed.

Response: Noted and General Contractor information will be provided.

Miscellaneous

Comment 10: Existing sidewalks already in place along Countryside Parkway, McHugh and

Rt. 34.

Response: Noted.

Comment 11: Are sidewalk crosswalks needed? Bike path is already existing. Proper signage “Stop Signs” is needed for bike paths.

Response: Noted and Final Engineering will indicate Stop Signs as needed.

Comment 12: Will the police department have access to the building for emergencies? Police access during emergencies would be required.

Response: Noted and Agreed.

Comment 13: Will you provide Floor Plans/ Maps to the police department to be used for emergency purposes only? We would request a copy of the floor plans to be used for emergency purposes only.

Response: Noted and agreed.

We believe this submittal has addressed the comments provided by you and the Village consultants. If you have any questions or additional information is needed, please do not hesitate to contact me directly at 847/498-0800 or via email at c_stephencross@costco.com or my associate Larry Dziurdzik at c_LarryDziurdzik@Costco.com.

We look forward to presenting our Site Plan and Special Use applications at the Economic Development Committee on January 7th and the Planning and Zoning Commission on January 8th 2025.

Respectfully,



Stephen Cross
Authorized Costco Representative

CC: Eric Orren, Vice President of Real Estate Development, Costco Wholesale
Reuben Warshawsky, Real Estate Attorney-MPS Law
Larry Dziurdzik, Authorized Costco Agent

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY OF

COSTCO WHOLESALE, YORKVILLE, IL

NWC US 34/VETERANS & COUNTYSIDE - W#, CW23-0023

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13 SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976.51 FEET; THENCE WESTERLY ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00' AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES 09 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1.41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET; THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309.47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250.39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25.00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338.21 FEET; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54.08 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS.

EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER VESTING TITLE ENTERED IN CASE NO. 15-ED-10, CIRCUIT COURT OF KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS DOCUMENT NO. 201500016982.



VICINITY MAP
NOT TO SCALE

AREA

1,443,461 SQ. FT.
33.1373 ACRES

PARKING STALLS

NO PAINTED PARKING STALLS

FLOOD HAZARD NOTE

THIS PROPERTY IS IN AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN (ZONE X) AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP OF KENDALL COUNTY, ILLINOIS & INCORPORATED AREAS (COMMUNITY PANEL NO. 17093C0045H, EFFECTIVE ON 1/8/2014).

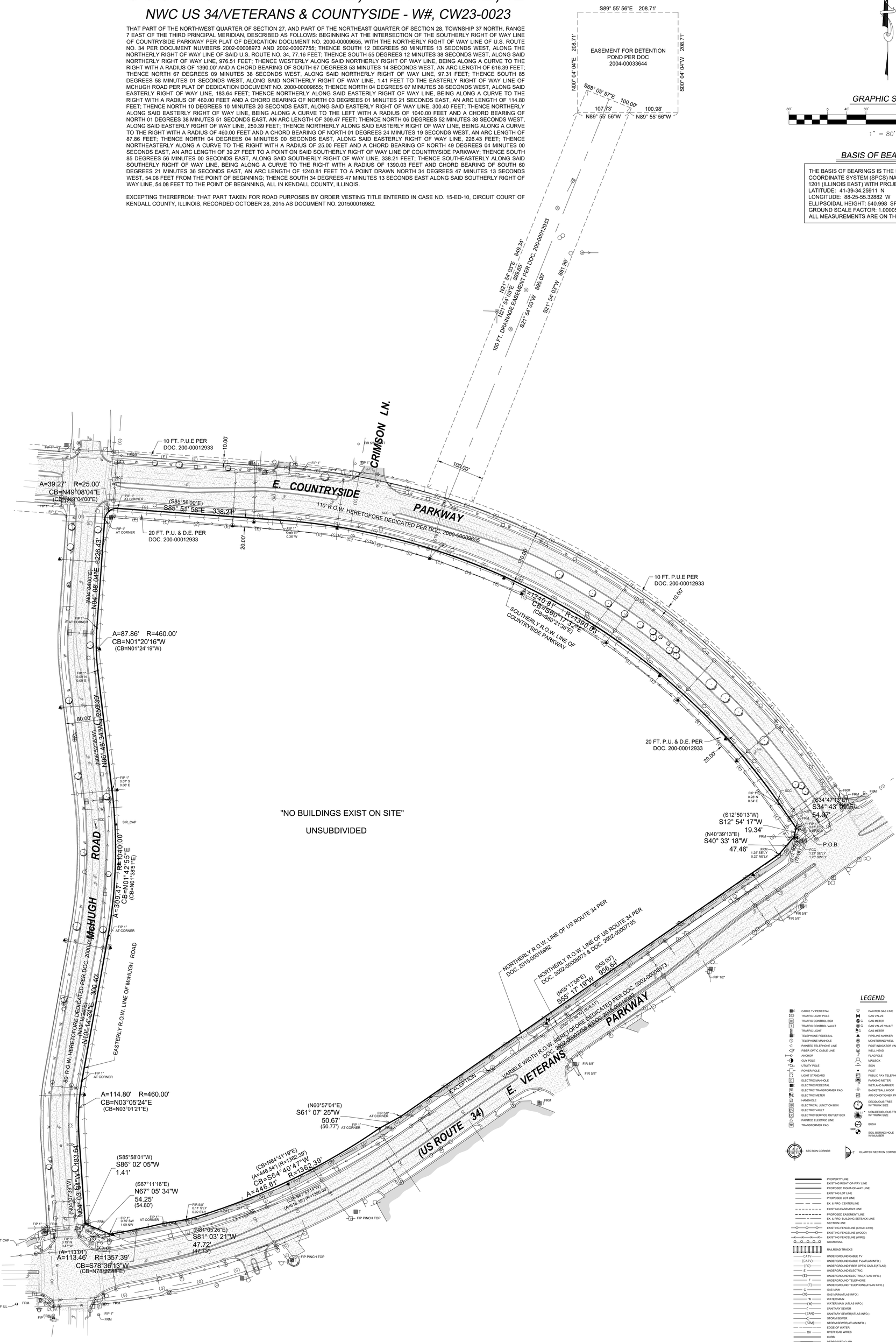
UTILITY ATLAS NOTES:

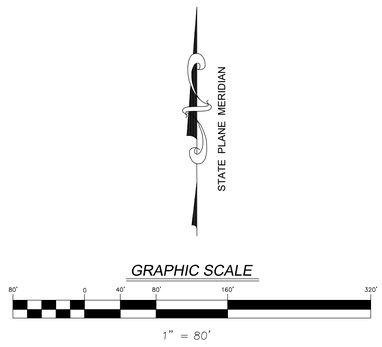
J.U.L.I.E. DESIGN STAGE REQUEST
DIG NUMBER A241923315 RECEIVED 07/10/24.

CONTACTS PROVIDED BY J.U.L.I.E. & LISTED BELOW WERE CONTACTED BY V3 VIA FAX, REQUESTING UTILITY ATLAS INFORMATION ON 07/10/24.

CONTACTS	RESPONSE
ATT/DISTRIBUTION	RESPONDED NEAR AN AT&T HIGH PROFILE FACILITY *
COMCAST	NO RESPONSE
COM-ED	RESPONDED WITH ATLAS
YORKVILLE, CITY OF	NO RESPONSE
MCI/VERIZON	RESPONDED WITH EMAIL *
NICOR GAS	RESPONDED WITH ATLAS **
METRO FIBERNET, LLC	RESPONDED "CLEAR"

* ATLAS NOT PROVIDED ** ATLAS DETAILS NOT PROVIDED





BASIS OF BEARINGS

THE BASIS OF BEARINGS IS THE STATE PLANE COORDINATE SYSTEM (SPCS) NAD 83 (2011) ZONE 1201 (ILLINOIS EAST) WITH PROJECT ORIGIN AT
LATITUDE: 41-39-34.25911 N
LONGITUDE: 88-25-55.32882 W
ELLIPSOIDAL HEIGHT: 540.998 SFT
GROUND SCALE FACTOR: 1.0000500335
ALL MEASUREMENTS ARE ON THE GROUND.

LEGEND

- CABLE TV PEDESTAL
- TRAFFIC LIGHT POLE
- TRAFFIC CONTROL BOX
- TRAFFIC CONTROL VAULT
- TRAFFIC LIGHT
- TELEPHONE PEDESTAL
- TELEPHONE MANHOLE
- PAINTED TELEPHONE LINE
- FIBER-OPTIC CABLE LINE
- ANCHOR
- GUY POLE
- UTILITY POLE
- POWER POLE
- LIGHT STANDARD
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER PAD
- ELECTRIC METER
- HANDHOLE
- ELECTRICAL JUNCTION BOX
- ELECTRIC VAULT
- ELECTRIC SERVICE OUTLET BOX
- PAINTED ELECTRIC LINE
- TRANSFORMER PAD
- PAINTED GAS LINE
- GAS VALVE
- GAS METER
- GAS VALVE VAULT
- GAS METER
- PIPELINE MARKER
- MONITORING WELL
- POST INDICATOR VALVE
- WELL HEAD
- FLAGPOLE
- MAILBOX
- SIGN
- POST
- PUBLIC PAY TELEPHONE
- PARKING METER
- WETLAND MARKER
- BASKETBALL HOOP
- AIR CONDITIONER PAD/UNIT
- DECIDUOUS TREE W/ TRUNK SIZE
- NON-DECIDUOUS TREE W/ TRUNK SIZE
- BUSH
- SOIL BORING HOLE W/ NUMBER
- HEADWALL
- CURB INLET
- STORM INLET
- STORM MANHOLE
- FLARED END SECTION
- CLEANOUT
- SANITARY MANHOLE
- HOSE BIB
- S-BOX
- HYDRANT
- WATER VALVE
- WATER VALVE VAULT
- PAINTED WATER LINE
- IRRIGATION HEAD
- IRRIGATION CONTROL VALVE
- WATER METER
- FOUND DISK IN CONCRETE
- FBD FOUND BRASS DISC
- FRD FOUND ROW MARKER
- FIR FOUND IRON ROD
- FRS FOUND RAILROAD SPIKE
- FPK FOUND PK NAIL
- FMG FOUND MAG NAIL
- FCC FOUND CUT CROSS
- FIP FOUND IRON PIPE
- FIB FOUND IRON BAR
- TP SET TRAVERSE POINT
- SPK SET PK NAIL
- SMG SET MAG NAIL
- SIP SET IRON PIPE
- SBM SET CONCRETE MONUMENT WITH BRASS DISC
- SCM SET CONCRETE MONUMENT WITH IRON PIPE
- SECTION CORNER
- QUARTER SECTION CORNER
- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- EX. & PRO. CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE
- EX. & PRO. BUILDING SETBACK LINE
- SECTION LINE
- EXISTING FENCELINE (CHAIN LINK)
- EXISTING FENCELINE (WOOD)
- EXISTING FENCELINE (WIRE)
- GUARDRAIL
- RAILROAD TRACKS
- UNDERGROUND CABLE TV
- UNDERGROUND CABLE TV(ATLAS INFO.)
- UNDERGROUND FIBER OPTIC CABLE(ATLAS)
- UNDERGROUND ELECTRIC
- UNDERGROUND ELECTRIC(ATLAS INFO.)
- UNDERGROUND TELEPHONE
- UNDERGROUND TELEPHONE(ATLAS INFO.)
- GAS MAIN
- GAS MAIN(ATLAS INFO.)
- WATER MAIN
- WATER MAIN (ATLAS INFO.)
- SANITARY SEWER
- SANITARY SEWER(ATLAS INFO.)
- STORM SEWER
- STORM SEWER(ATLAS INFO.)
- EDGE OF WATER
- OVERHEAD WIRES
- CURB
- DEPRESSED CURB
- 700 EXISTING CONTOUR LINE
- ASPHALT PAVING OR WATER (LABELED)
- UNPAVED ROAD
- CONCRETE
- WETLANDS
- EXISTING BUILDING
- MARSH AREA

ABBREVIATIONS

- 782.62 / 782.12 EXISTING TOP OF CURB ELEVATION / EXISTING EDGE OF PAVEMENT ELEVATION
- + 782.62 EXISTING SPOT ELEVATION
- A.P. ACCESSIBLE PARKING
- F.F. FINISHED FLOOR
- T.F. TOP OF FOUNDATION
- CMP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- VCP VITRIFIED CLAY PIPE
- FRM FRAME
- BRK BRICK
- TC TOP OF CURB
- DEP DEPRESSED CURB
- GUT GUTTER
- EP EDGE OF PAVEMENT
- F.L. FLOW LINE
- CONC CONCRETE
- BIT. BITUMINOUS
- MH MANHOLE
- CW CONCRETE WALK
- TW TOP OF WALL
- BW BOTTOM OF WALL
- TP TOP OF PIPE
- BW BACK OF WALK
- FES FLARED END SECTION
- INV INVERT
- DIP DUCTILE IRON PIPE
- SD STORM DRAIN
- SAN SANITARY SEWER
- N NORTH
- S SOUTH
- E EAST
- W WEST
- CB CHORD BEARING
- A ARC LENGTH
- R RADIUS
- U.E. UTILITY EASEMENT
- P.U.E. PUBLIC UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- M.U.E. MUNICIPAL UTILITY EASEMENT
- I.E. INGRESS & EGRESS EASEMENT
- PC POINT OF CURVATURE
- PCC POINT OF COMPOUND CURVATURE
- PRC POINT OF REVERSE CURVATURE
- PT POINT OF TANGENCY
- (REC) RECORD DATUM
- MEAS. MEASURED DATUM
- (CALC) CALCULATED DATUM
- <DEED> INFORMATION TAKEN FROM DEED
- ETBE EXCEPTION TO BLANKET EASEMENT

GENERAL NOTES

1. COMPARE THIS PLAT, LEGAL DESCRIPTION AND ALL SURVEY POINTS AND MONUMENTS BEFORE ANY CONSTRUCTION, AND IMMEDIATELY REPORT ANY DISCREPANCIES TO SURVEYOR.
2. DO NOT SCALE DIMENSIONS FROM THIS PLAT.
3. THE LOCATION OF THE PROPERTY LINES SHOWN ON THE FACE OF THIS PLAT ARE BASED UPON THE DESCRIPTION AND INFORMATION FURNISHED BY THE CLIENT, TOGETHER WITH THE TITLE COMMITMENT. THE PARCEL WHICH IS DEFINED MAY NOT REFLECT ACTUAL OWNERSHIP, BUT REFLECTS WHAT WAS SURVEYED. FOR OWNERSHIP, CONSULT YOUR TITLE COMPANY.
4. MANHOLES, INLETS AND OTHER UTILITY RIMS OR GRATES SHOWN HEREON ARE FROM FIELD LOCATION OF SUCH, AND ONLY REPRESENT SUCH UTILITY IMPROVEMENTS WHICH ARE VISIBLE FROM ABOVE GROUND AT TIME OF SURVEY, THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE. THE LABELING OF THESE MANHOLES (SANITARY, WATER, ETC.) IS BASED SOLELY ON THE "STAMPED" MARKINGS OF THE RIM. UNDERGROUND UTILITY LINES SHOWN HEREON, IF ANY, ARE BASED ON FIELD LOCATED STRUCTURES IN COORDINATION WITH ATLAS INFORMATION PROVIDED BY UTILITY COMPANIES THROUGH J.U.L.I.E.'S DESIGN STAGE PROCESS. SEE "UTILITY ATLAS NOTES" HEREON FOR SPECIFICS.
5. NO DRAIN TILES, IF ANY EXIST, SHOWN HEREON.
6. THIS SURVEY MAY NOT REFLECT ALL UTILITIES OR IMPROVEMENTS IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING OR ARE COVERED BY SUCH ITEMS AS DUMPSTERS, TRAILERS, CARS, DIRT, PAVING OR SNOW. AT THE TIME OF THIS SURVEY, SNOW DID NOT COVER THE SITE. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.
7. OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEMENT REGARDING THE ACTUAL PRESENCE OR ABSENCE OF ANY SERVICE.
8. CALL J.U.L.I.E. AT 1-800-892-0123 FOR FIELD LOCATION OF UNDERGROUND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION.
9. PUBLIC AND/OR PRIVATE RECORDS HAVE NOT BEEN SEARCHED TO PROVIDE ADDITIONAL INFORMATION. OVERHEAD WIRES AND POLES (IF ANY EXIST) ARE SHOWN HEREON, HOWEVER THEIR FUNCTION AND DIMENSIONS HAVE NOT BEEN SHOWN.
10. RESTRICTIONS THAT MAY BE FOUND IN LOCAL BUILDING AND/OR ZONING CODES HAVE NOT BEEN SHOWN. HEIGHTS AND BUILDING RESTRICTIONS (IF ANY) HAVE NOT BEEN SHOWN. ONLY THOSE SETBACK RESTRICTIONS SHOWN ON THE RECORDED SUBDIVISION PLAT OR IN THE TITLE COMMITMENT HAS BEEN SHOWN. THIS PROPERTY IS SUBJECT TO SETBACKS AS ESTABLISHED PURSUANT TO UNITED CITY OF YORKVILLE ZONING ORDINANCES AS AMENDED. IN REFERENCE TO TABLE A ITEM 6, THERE MAY BE A NEED FOR AN INTERPRETATION OF A RESTRICTION, THE SURVEYOR CANNOT MAKE A CERTIFICATION ON THE BASIS OF AN INTERPRETATION.
11. THIS PROPERTY IS ZONED B-3 PUD PER CITY OF YORKVILLE ZONING MAP. SEE UNITED CITY OF YORKVILLE ZONING ORDINANCES FOR SPECIFICS.
12. THERE IS NO OBSERVABLE EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
13. THE SURVEYOR IS NOT AWARE OF ANY NEW OR PROPOSED RIGHT OF WAY CHANGES. UNLESS SHOWN OR NOTED HEREON, THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
14. A CURRENT FIRST AMERICAN TITLE INSURANCE COMPANY TITLE COMMITMENT, COMMITMENT NUMBER NCS-1220410-WA1, DATED MAY 24, 204, WAS PROVIDED FOR SURVEYOR'S USE AT THE TIME OF PREPARATION OF THIS SURVEY. SEE "NOTES FROM SCHEDULE B" SHOWN HEREON.
15. NO PROPERTY ADDRESS WAS OBSERVED IN THE COURSE OF FIELD WORK. NO PROPERTY ADDRESS WAS LISTED ON THE KENDALL COUNTY GIS WEBSITE. (https://maps.co.kendall.il.us/mapviewer/)

NOTES FROM SCHEDULE B PART II

	EXCEPTIONS	NOTE
9	PERMIT FOR UNDERGROUND FACILITIES; BK 103, PG 197	(c)
10	EASEMENT AGREEMENT; DOC. 200400033643	(e)
11	EASEMENT AGREEMENT; DOC. 200800001690	(e)
12	RECAPTURE/RECOVERY AGREEMENT; DOC. 200900011621	(e)
13	PUBLIC UTILITY AND DRAINAGE EASEMENT; DOC. 200200012933	(a)
14	COVENANTS CONDITIONS AND RESTRICTIONS; R200400033644	(a)

EXCEPTIONS NOT SHOWN ABOVE AFFECT THE PROPERTY BUT ARE NOT PLOTTABLE OR NOT A SURVEY MATTER

CLARIFICATION STATEMENTS

a. its location is shown;
b. its location cannot be determined from the record document;
c. there was no observed evidence at the time of the fieldwork;
d. it is a blanket easement;
e. it is not on, does not touch, and/or - based on the description contained in the record document - does not affect, the surveyed property;
f. it limits access to an otherwise abutting right of way;
g. the documents are illegible; or
h. the surveyor has information indicating that it may have been released or otherwise terminated

ZONING INFORMATION

ZONING DESIGNATION IS B-3 PUD AS TAKEN FROM THE CITY'S WEBSITE https://www.yorkville.il.us/DocumentCenter/View/10369/2024-Zoning-Map-24x36?bidId= AND NOT PROVIDED BY THE INSURER PURSUANT TO THE ALTA REQUIREMENTS. FOR DETAILS SEE THE UNITED CITY OF YORKVILLE ZONING ORDINANCE.

YORKVILLE, IL UNIFIED DEVELOPMENT ORDINANCE > CHAPTER 3. DISTRICT STANDARDS > 10-3-9. Bulk and Dimensional Standards

Table 10-3-9(A) Bulk and Dimensional Standards

Zone	Min. Lot Size	Min. Lot Size per DU (For Single-Unit Attached Uses)	Maximum Density (For Multi. Unit Uses)	Min. Lot Width	Max. Lot Coverage	Setbacks: Min. Front	Min. Side[5]	Min. Rear[5]	Max. Building Height	Dwelling Unit Max. Height
B-3	10,000 sq. ft.	-	-	-	80%	50'	20' (30')[4]	20'	80'	-
M-1	-	-	-	-	85%	25'	Min. 10% of lot and max. 20'	-	-	-
M-2	-	-	-	-	85%	25'	Min. 10% of lot and max. 20'	-	-	-
PI	-	-	-	-	85%	25'	20' (25')	20'	80'	-
OS	-	-	-	-	-	30'	10'	20'	80'	-

Notes:
* Dimensions with ( ) = requirement for side yards adjoining a street
1. 200 feet along Illinois Routes 34, 47, 71 and 126.
2. Nonresidential principal uses shall have a minimum lot size of 15,000 square feet and 100 foot width. A one-story structure shall have a minimum of 1,200 square feet and a two-story structure shall have a minimum of 1,400 square feet of livable space.
3. 100 foot structure height shall be allowed for silos on sites with agricultural uses.
4. Parking lots in the B-3 district located adjacent to an arterial roadway, as defined in the city's comprehensive plan, must maintain a minimum setback of 20 feet from the property line and 10 feet from nonarterial roadways.
5. The minimum setback required may be less than the width of the transition yard required by use as specified in Section 10-5-3(F)(3), in which instance, the more stringent width required by the transition yard shall apply.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

TO: COSTCO WHOLESALE CORPORATION
YORKVILLE CROSSING LLC, AN ILLINOIS LIMITED LIABILITY COMPANY
FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(a), 7(a), 9, 11(a), 14, 16, 17, AND 20 OF TABLE A THEREOF.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR BOUNDARY AND TOPOGRAPHIC SURVEYS.

THE FIELD WORK WAS COMPLETED ON AUGUST 16, 2024.

DATED THIS 4TH DAY OF SEPTEMBER, A.D., 2024.

EDWARD J. MURRAY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037
MY LICENSE EXPIRES ON NOVEMBER 30, 2024.
V3 COMPANIES, LTD. PROFESSIONAL DESIGN FIRM NO. 184000902
THIS DESIGN FIRM NUMBER EXPIRES APRIL 30, 2025.
emurray@v3co.com

PROFESSIONAL LAND SURVEYOR — EDWARD J. MURRAY — 4037 — WOODRIDGE, ILLINOIS — STATE OF ILLINOIS

Engineers
Scientists
Surveyors

7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

PREPARED FOR:
Costco Wholesale Corporation
999 Lake Drive
Issaquah, WA 98027
425.313.6052

REVISIONS

NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION
1	09/23/24	REVISE PER COMMENT - MH PER PRIOR SURVEY			
2	10/28/24	REVISED "NOTES FROM SCHEDULE B" TABLE			

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY
COSTCO WHOLESALE - YORKVILLE, IL

Project No: 240757
Group No: VP01.1

DRAFTING COMPLETED: 09/03/24 | DRAWN BY: SPK | PROJECT MANAGER: EJM
FIELD WORK COMPLETED: 08/16/24 | CHECKED BY: EJM | SCALE: 1" = 80'

SHEET NO. 1 of 3

N:\2024\240757\Drawings\ALTA\240757_ALTA.dwg, 10/28/2024 11:01:04 AM, emurray

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY
OF
Costco Wholesale, Yorkville, IL
NWC US 34/VETERANS & COUNTYSIDE - W#, CW23-0023

PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 27 AND PART OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF SECTION 28, BOTH IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

LEGEND

- CABLE TV PEDESTAL
- TRAFFIC LIGHT POLE
- TRAFFIC CONTROL BOX
- TRAFFIC CONTROL VAULT
- TRAFFIC LIGHT
- TELEPHONE PEDESTAL
- TELEPHONE MANHOLE
- PAINTED TELEPHONE LINE
- FIBER OPTIC CABLE LINE
- ANCHOR
- GUY POLE
- UTILITY POLE
- POWER POLE
- LIGHT STANDARD
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER PAD
- ELECTRIC METER
- ELECTRIC BOX
- ELECTRICAL JUNCTION BOX
- ELECTRIC VAULT
- ELECTRIC SERVICE OUTLET BOX
- PAINTED ELECTRIC LINE
- TRANSFORMER PAD
- PAINTED GAS LINE
- GAS VALVE
- GAS METER
- GAS VALVE VAULT
- GAS METER
- PIPELINE MARKER
- MONITORING WELL
- POST INDICATOR VALVE
- WELL HEAD
- FLAGPOLE
- MAILBOX
- SIGN
- POST
- PUBLIC PAY TELEPHONE
- PARKING METER
- WETLAND MARKER
- BASKETBALL HOOP
- AIR CONDITIONER PAD/UNIT
- DECIDUOUS TREE W/ TRUNK SIZE
- CORNIFEROUS TREE W/ TRUNK SIZE
- BUSH
- SOIL BORING HOLE W/ NUMBER
- HEADWALL
- CURB INLET
- STORM INLET
- STORM MANHOLE
- FLARED END SECTION
- CLEANOUT
- SANITARY MANHOLE
- HOSE BIB
- BUBOX
- HYDRANT
- WATER VALVE
- WATER VALVE VAULT
- PAINTED WATER LINE
- IRRIGATION HEAD
- IRRIGATION CONTROL VALVE
- WATER METER
- FOUND DSM IN CONCRETE
- FOUND BRASS DISC
- FOUND IRON MARKER
- FOUND IRON ROD
- FOUND RAILROAD SPIKE
- FOUND PK NAIL
- FOUND MAG NAIL
- FOUND CUT CROSS
- FOUND IRON PIPE
- FOUND IRON BAR
- SET TRAVERSE POINT
- SET PK NAIL
- SET MAG NAIL
- SET IRON PIPE
- SET CONCRETE MONUMENT WITH BRASS DISC
- SET CONCRETE MONUMENT WITH IRON PIPE
- SECTION CORNER
- QUARTER SECTION CORNER

ABBREVIATIONS

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- EX. & PROP. CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE
- EX. & PRO. BUILDING SETBACK LINE
- SECTION LINE
- EXISTING FENCELINE (CHAIN LINK)
- EXISTING FENCELINE (WOOD)
- EXISTING FENCELINE (WIRE)
- GUARDRAIL
- RAILROAD TRACKS
- UNDERGROUND CABLE TV
- UNDERGROUND CABLE TV(ATLAS INFO.)
- UNDERGROUND FIBER OPTIC CABLE(ATLAS)
- UNDERGROUND ELECTRIC
- UNDERGROUND ELECTRIC(ATLAS INFO.)
- UNDERGROUND TELEPHONE
- UNDERGROUND TELEPHONE(ATLAS INFO.)
- GAS MAIN
- GAS MAIN(ATLAS INFO.)
- WATER MAIN
- WATER MAIN (ATLAS INFO.)
- SANITARY SEWER
- SANITARY SEWER(ATLAS INFO.)
- STORM SEWER
- STORM SEWER(ATLAS INFO.)
- EDGE OF WATER
- OVERHEAD WIRES
- CURB
- DEPRESSED CURB
- EXISTING CONTOUR LINE
- ASPHALT PAVING OR WATER (LABELED)
- UNPAVED ROAD
- CONCRETE
- WETLANDS
- EXISTING BUILDING
- MARSH AREA

782.62	EXISTING TOP OF CURB ELEVATION
782.12	EXISTING EDGE OF PAVEMENT ELEVATION
+ 643.00	EXISTING SPOT ELEVATION
A.P.	ACCESSIBLE PARKING
F.F.	FINISHED FLOOR
T.F.	TOP OF FOUNDATION
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
VCP	VITRIFIED CLAY PIPE
FRM.	FRAME
BRK.	BRICK
TC	TOP OF CURB
DEP.	DEPRESSED CURB
FL.	FLOW LINE
EP	EDGE OF PAVEMENT
FL.	FLOW LINE
CONC.	CONCRETE
BIT.	BITUMINOUS
W.	WATER
SW	CONCRETE WALK
TW	TOP OF WALL
BW	BOTTOM OF WALL
TP	TOP OF PIPE
BW	BACK OF WALK
FES	FLARED END SECTION
INV.	INVERT
DIP	DUCTILE IRON PIPE
SD	STORM DRAIN
SAN.	SANITARY SEWER
N	NORTH
W	WEST
E	EAST
W	WEST
CB	CHORD BEARING
A	ARC LENGTH
R	RADIUS
U.E.	UTILITY EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
M.U.E.	MUNICIPAL UTILITY EASEMENT
I.E.	INGRESS & EGRESS EASEMENT
PC	POINT OF CURVATURE
PRC	POINT OF REVERSE CURVATURE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
(REC)	RECORD DATUM
(M&S)	M&S/GRID DATUM
(NAVD)	NAVD88 DATUM
(VDED)	INFORMATION TAKEN FROM DEED
ETBE	EXCEPTION TO BLANKET EASEMENT

BENCHMARK

SOURCE: TRIMBLE VRS NETWORK WITH PROJECT ORIGIN AT:
LATITUDE: 41-39-34.25911 N
LONGITUDE: 88-25-55.32882 W
ELLIPSOIDAL HEIGHT: 540.998 SFT
GROUND SCALE FACTOR: 1.0000500335

SITE:

STATION DESIGNATION: SBM#1
ESTABLISHED BY: V3 COMPANIES
DATE: 07-31-24

ELEVATION: 644.75 (MEASURED)
DATUM: NAVD88
DESCRIPTION: NORTHWEST BONNET BOLT ON FIRE HYDRANT AT WEST SIDE OF McHUGH ROAD, 2ND HYDRANT SOUTH OF THE McHUGH ROAD AND E. COUNTRYSIDE PARKWAY INTERSECTION.

STATION DESIGNATION: SBM#2
ESTABLISHED BY: V3 COMPANIES
DATE: 07-31-24

ELEVATION: 643.88 (MEASURED)
DATUM: NAVD88
DESCRIPTION: SOUTHEAST ARROW BOLT ON FIRE HYDRANT AT THE NORTHWEST CORNER OF E. COUNTRYSIDE PARKWAY & US ROUTE 34 INTERSECTION.

THE ELEVATIONS ABOVE WERE KNOWN TO BE ACCURATE AT THE TIME THEY WERE ESTABLISHED. V3 DOES NOT CERTIFY TO THE ACCURACY THEREAFTER, NOR ASSUMES RESPONSIBILITY FOR THE MIS-USE OR MIS-INTERPRETATION OF THE INFORMATION SHOWN HEREON.

IT IS ADVISED THAT ALL OF THE ABOVE ELEVATIONS BE CHECKED BETWEEN EACH OTHER AND VERIFY A MINIMUM OF 3 SURROUNDING UTILITY RIM ELEVATIONS AND ANY ADJACENT BUILDING FINISHED FLOOR OR TOP OF FOUNDATION ELEVATIONS SHOWN HEREON PRIOR TO USE OR COMMENCEMENT OF ANY CONSTRUCTION OR OTHER WORK.

PERSONS USING THIS INFORMATION ARE TO CONTACT V3 IMMEDIATELY WITH ANY DISCREPANCIES FOUND PRIOR TO THE START OF ANY WORK.

GRAPHIC SCALE

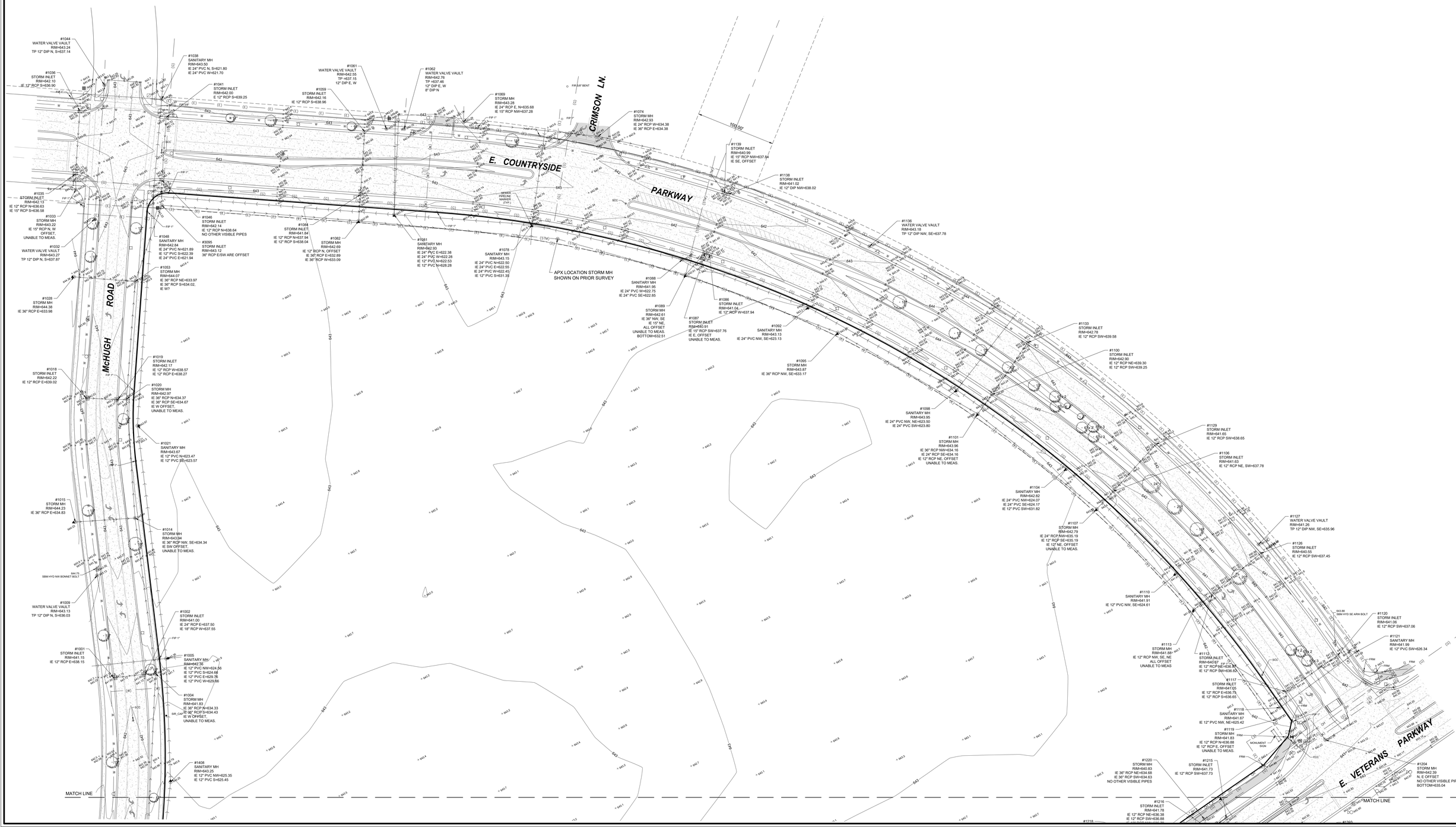
0 20' 40' 80' 160'

1" = 40'

BASIS OF BEARINGS

THE BASIS OF BEARINGS IS THE STATE PLANE COORDINATE SYSTEM (SPCS) NAD 83 (2011) ZONE 1201 (ILLINOIS EAST) WITH PROJECT ORIGIN AT
LATITUDE: 41-39-34.25911 N
LONGITUDE: 88-25-55.32882 W
ELLIPSOIDAL HEIGHT: 540.998 SFT
GROUND SCALE FACTOR: 1.0000500335
ALL MEASUREMENTS ARE ON THE GROUND.

STATE PLANE MERIDIAN



NO.	DATE	DESCRIPTION
1	09/03/24	REVISE PER COMMENT - NEW PRIOR SURVEY
2	10/28/24	REVISED "NOTES FROM SCHEDULE B" TABLE

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY
COSTCO WHOLESALE - YORKVILLE, IL

Project No: 2407S7
Group No: VP01.1
SHEET NO. 3 of 3

DRAFTING COMPLETED: 09/03/24 DRAWN BY: EJM CHECKED BY: SPK PROJECT MANAGER: EJM SCALE: 1" = 40'
FIELD WORK COMPLETED: 08/16/24

PREPARED FOR:
Issaquah, WA 98027
999 Lake Drive
Issaquah, WA 98027
425.313.6052

7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.0050 voice
630.724.0384 fax
v3co.com

Engineers
Scientists
Surveyors

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ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY
OF
Costco Wholesale, Yorkville, IL
NWC US 34/VETERANS & COUNTYSIDE - W#, CW23-0023

PART OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 27 AND PART OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF SECTION 28, BOTH IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

STATE PLANE MERIDIAN

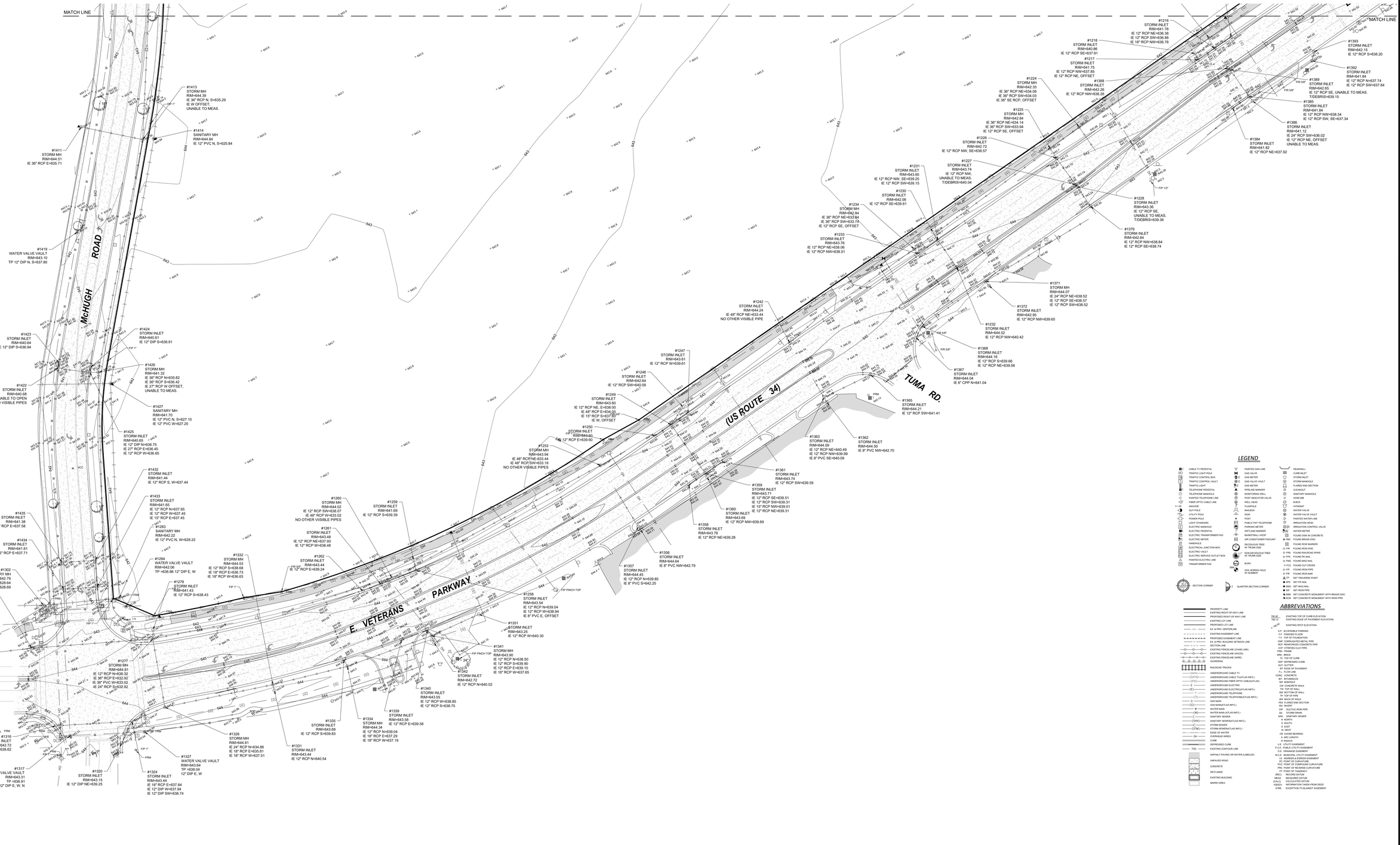
GRAPHIC SCALE

40' 0 20' 40' 80' 160'

1" = 40'

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ELLIPSOIDAL HEIGHT: 540.998 SFT
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LEGEND

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- TRAFFIC LIGHT
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- PAINTED TELEPHONE LINE
- FIBER OPTIC CABLE LINE
- ANCHOR
- GUY POLE
- UTILITY POLE
- POWER POLE
- LIGHT STANDARD
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER PAD
- ELECTRIC METER
- HANDHOLE
- ELECTRICAL JUNCTION BOX
- ELECTRIC VAULT
- ELECTRIC SERVICE OUTLET BOX
- PAINTED ELECTRIC LINE
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- PAINTED GAS LINE
- GAS VALVE
- GAS METER
- GAS VALVE VAULT
- GAS METER
- PIPELINE MARKER
- MONITORING WELL
- GAS REGULATOR VALVE
- WELL HEAD
- FLAGPOLE
- MAILBOX
- SIGN
- POST
- PUBLIC PAY TELEPHONE
- PARKING METER
- WETLAND MARKER
- BASKETBALL HOOP
- AIR CONDITIONER PAD/UNIT
- DECIDUOUS TREE W/ TRUNK SIZE
- NON-DECIDUOUS TREE W/ TRUNK SIZE
- BUSH
- SOIL BORING HOLE W/ NUMBER
- HEADWALL
- CURB INLET
- STORM INLET
- STORM MANHOLE
- FLARED END SECTION
- CLEANOUT
- SANITARY MANHOLE
- CATCH BASIN
- INLETS
- HYDRANT
- WATER VALVE
- WATER VALVE VAULT
- PAINTED WATER LINE
- IRRIGATION HEAD
- IRRIGATION CONTROL VALVE
- WATER METER
- FOUND IRON IN CONCRETE
- FND FOUND BRASS DISC
- FOUND IRON MARKER
- O FIR FOUND IRON ROD
- O FRR FOUND RAILROAD SPIKE
- O FPK FOUND PK NAIL
- O FWO FOUND MAG NAIL
- FCO FOUND CUT CROSS
- O FIP FOUND IRON PIPE
- O FIB FOUND IRON BAR
- SET TP SET TRAVERSE POINT
- SPK SET PK NAIL
- SMO SET MAG NAIL
- SIR SET IRON PIPE
- SBM SET CONCRETE MONUMENT WITH BRASS DISC
- SCA SET CONCRETE MONUMENT WITH IRON PIPE
- SECTION CORNER
- QUARTER SECTION CORNER

ABBREVIATIONS

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- UNDERGROUND ELECTRIC
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- UNDERGROUND TELEPHONE
- UNDERGROUND TELEPHONE(ATLAS INFO.)
- GAS MAIN
- GAS MAIN(ATLAS INFO.)
- WATER MAIN
- WATER MAIN (ATLAS INFO.)
- SANITARY SEWER
- SANITARY SEWER(ATLAS INFO.)
- STORM SEWER
- STORM SEWER(ATLAS INFO.)
- EDGE OF WATER
- OVERHEAD WIRES
- CURB
- DEPRESSED CURB
- 700 EXISTING CONTOUR LINE
- ASPHALT PAVING OR WATER (LABELED)
- UNPAVED ROAD
- CONCRETE
- WETLANDS
- EXISTING BUILDING
- MARSH AREA

- 740.60 / 740.10 EXISTING TOP OF CURB ELEVATION / EXISTING EDGE OF PAVEMENT ELEVATION
- 643.00 EXISTING SPOT ELEVATION
- A.P. ACCESSIBLE PARKING
- F.F. FINISHED FLOOR
- T.F. TOP OF FOUNDATION
- DWP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- PVC POLYVINYLCHLORIDE PIPE
- PRM / FRAME
- BRK BRICK
- TC TOP OF CURB
- DEP DEPRESSED CURB
- FL FLOW LINE
- EP EDGE OF PAVEMENT
- F.L. FLOW LINE
- CONC CONCRETE
- BIT BITUMINOUS
- SW SIDEWALK
- CW CONCRETE WALK
- TW TOP OF WALL
- BW BOTTOM OF WALL
- TP TOP OF PIPE
- FES FLARED END SECTION
- INV INVERT
- DIP DUCTILE IRON PIPE
- SD STORM DRAIN
- SAN SANITARY SEWER
- N NORTH
- S SOUTH
- E EAST
- W WEST
- OB OVERO BEARING
- A ARC LENGTH
- CURB
- U.E. UTILITY EASEMENT
- P.U.E. PUBLIC UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- M.U.E. MUNICIPAL UTILITY EASEMENT
- PE POWER EASEMENT
- PC POINT OF CURVATURE
- PCC POINT OF COMPOUND CURVATURE
- PRC POINT OF REVERSE CURVATURE
- PT POINT OF TANGENCY
- R RADIUS
- MEAS MEASURED DATUM
- (CALC) CALCULATED DATUM
- (DEED) INFORMATION TAKEN FROM DEED
- ETBE EXCEPTION TO BLANKET EASEMENT

NO.	DATE	DESCRIPTION
1	09/03/24	REVISE PER COMMENT - AFTER PRIOR SURVEY
2	10/28/24	REVISED "NOTES FROM SCHEDULE B" TABLE

Project No: 240757
Group No: VP01.1
SHEET NO. 3 of 3

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY
COSTCO WHOLESALE - YORKVILLE, IL

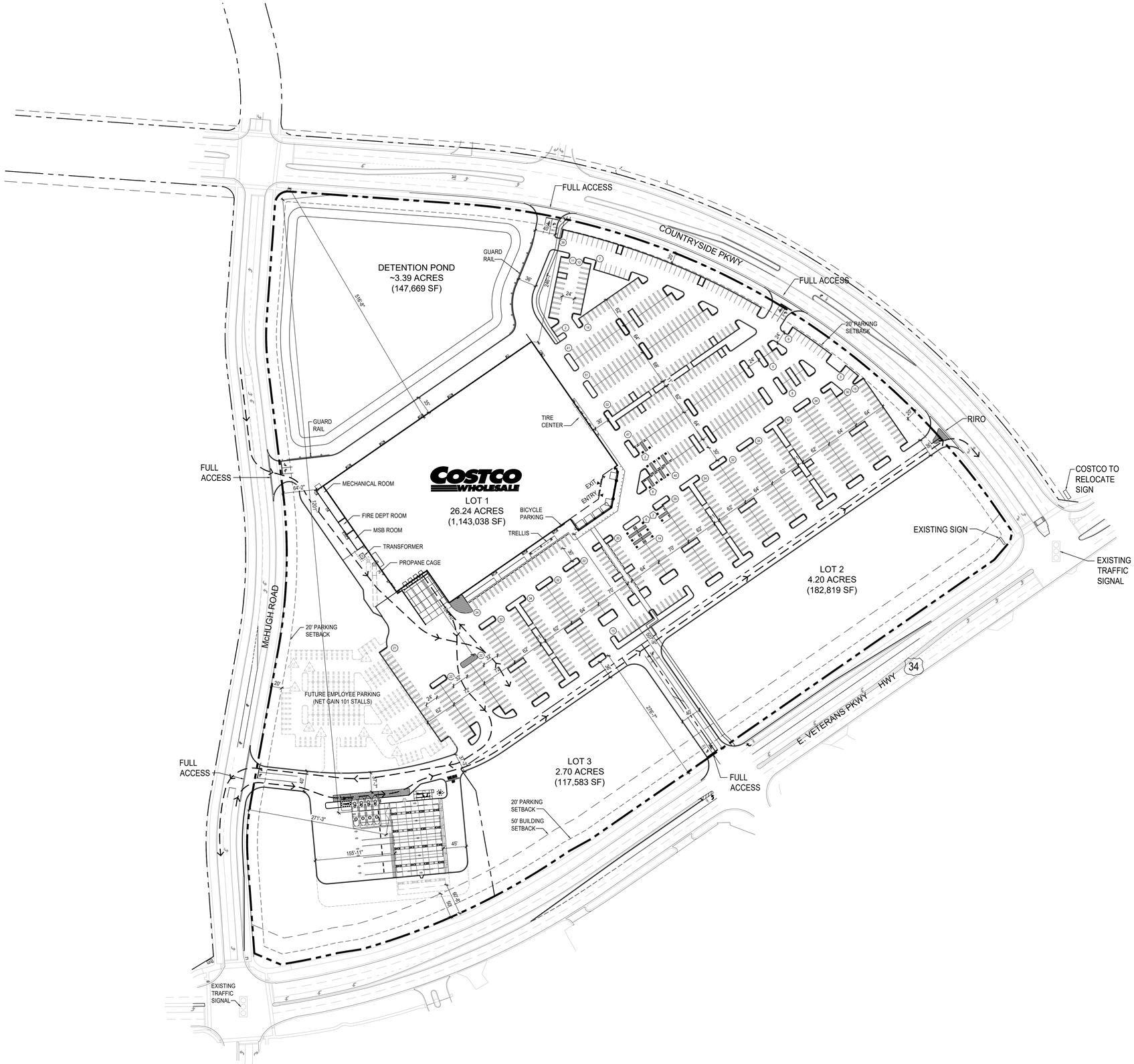
DRAFTING COMPLETED: 09/03/24
FIELD WORK COMPLETED: 08/16/24
DRAWN BY: SPK
CHECKED BY: EJM
PROJECT MANAGER: EJM
SCALE: 1" = 40'

PREPARED FOR:
Issaquah, WA 98027
999 Lake Drive
Issaquah, WA 98027
425.313.8052

Engineers
Scientists
Surveyors

7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

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PROJECT DATA

CLIENT: COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

PROJECT ADDRESS: SWC OF MCHUGH ROAD &
EAST COUNTRYSIDE PKWY
YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA: 33.14 ACRES (1,443,461 SF)
INCLUDES:
LOT 1 (COSTCO): 26.24 ACRES (1,143,038 SF)
INCLUDES 3.39 AC DETENTION POND
LOT 2: 4.20 ACRES (182,819 SF)
LOT 3: 2.70 ACRES (117,583 SF)

JURISDICTION: UNITED CITY OF YORKVILLE

ZONING: B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
SIDE	20'	64'-2" / 246'-7"	271'-3"
REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"
LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA: 161,562 SF
INCLUDES:
NET SALES FLOOR **153,820 SF**
GROSS MECHANICAL / FIRE / MSB 2,266 SF
NET ENCLOSED CANOPY 3,560 SF
BUILDING ENVELOPE 1,916 SF

PARKING DATA:

TOTAL PARKING: 956 STALLS
INCLUDES:
④ 10' WIDE STALLS 837 STALLS
⑤ ACCESSIBLE STALLS 18 STALLS
△ FUTURE STALLS (NET GAIN) 101 STALLS

NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA: 6.22 STALLS

NOTES:
EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES

0 40' 80' 160'
1" = 80'-0"

COSTCO WHOLESALE
YORKVILLE, IL

1101 Second Ave, Ste 100
Seattle, WA 98101
206 962 6500
MG2.com

22-6229-01
DECEMBER 20, 2024

SITE PLAN

DD11-07

COSTCO WHOLESALE

YORKVILLE, ILLINOIS

SITE PLAN

DECEMBER 20, 2024

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PROJECT DATA

CLIENT:	COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027
PROJECT ADDRESS:	SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA:	33.14 ACRES (1,443,461 SF)
INCLUDES:	
LOT 1 (COSTCO):	26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND
LOT 2:	4.20 ACRES (182,819 SF)
LOT 3:	2.70 ACRES (117,583 SF)
JURISDICTION:	UNITED CITY OF YORKVILLE
ZONING:	B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
SIDE	20'	64'-2" / 246'-7"	271'-3"
REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"
LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA:	161,562 SF
INCLUDES:	
NET SALES FLOOR	**153,820 SF**
GROSS MECHANICAL / FIRE / MSB	2,266 SF
NET ENCLOSED CANOPY	3,560 SF
BUILDING ENVELOPE	1,916 SF

PARKING DATA:

TOTAL PARKING:	956 STALLS
INCLUDES:	
⓪ 10' WIDE STALLS	837 STALLS
ⓟ ACCESSIBLE STALLS	18 STALLS
⚠ FUTURE STALLS (NET GAIN)	101 STALLS
NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA:	6.22 STALLS

NOTES:
EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES

0 75' 150' 300'
1" = 150'

COSTCO WHOLESALE
YORKVILLE, IL

1101 Second Ave. Ste 100
Seattle, WA 98101
206 962 6500
MG2.com
MG2

22-6229-01
DECEMBER 20, 2024

AERIAL SITE PLAN

DD12-07

COSTCO WHOLESALE

YORKVILLE, ILLINOIS

AERIAL SITE PLAN

DECEMBER 20, 2024

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FINAL PLAT OF SUBDIVISION
OF
COSTCO WHOLESALE

PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.



VICINITY MAP
NOT TO SCALE

STATE PLANE MERIDIAN

GRAPHIC SCALE

80' 0 40' 80' 160' 320'

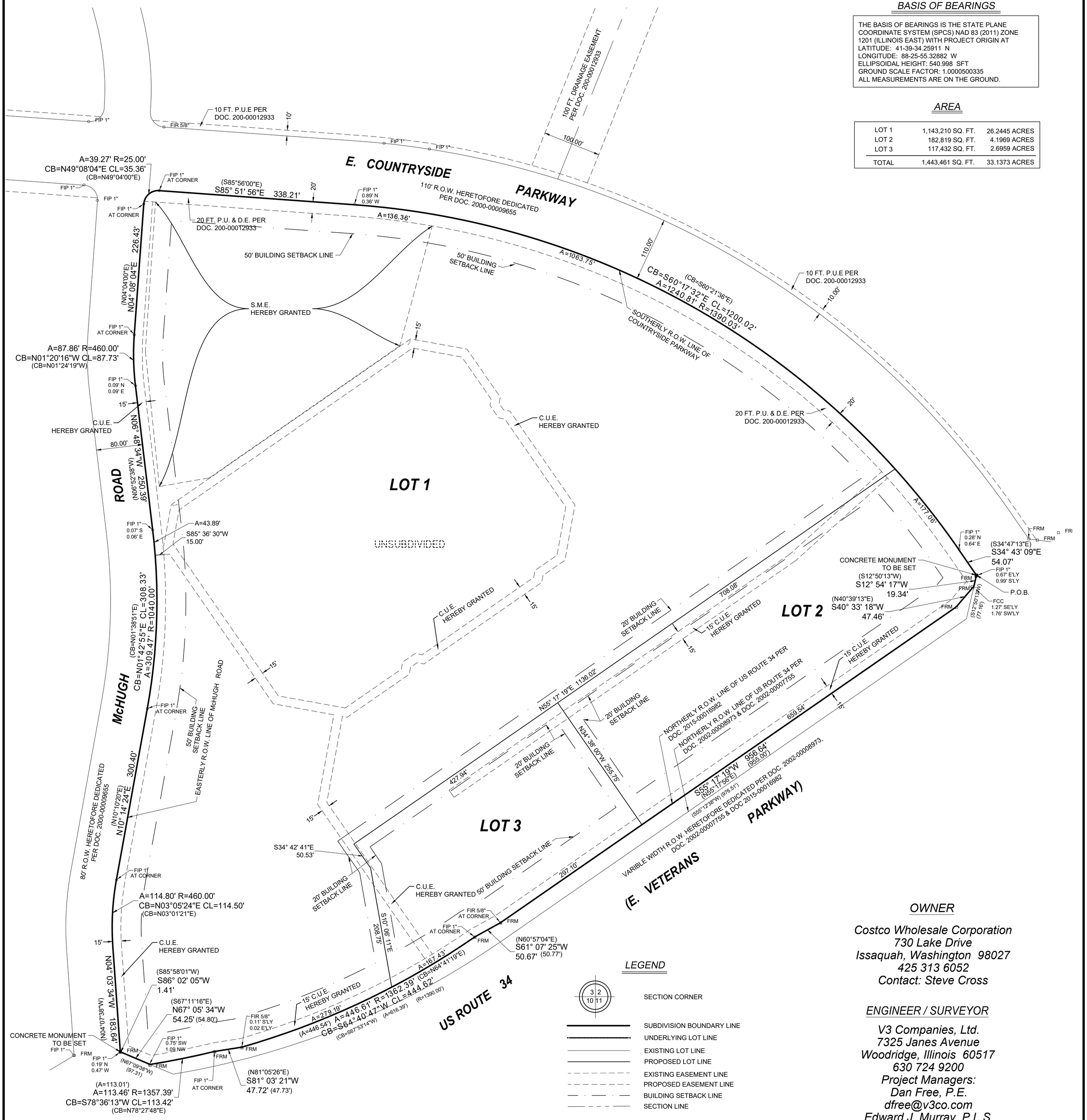
1" = 80'

BASIS OF BEARINGS

THE BASIS OF BEARINGS IS THE STATE PLANE COORDINATE SYSTEM (SPCS) NAD 83 (2011) ZONE 1201 (ILLINOIS EAST) WITH PROJECT ORIGIN AT
LATITUDE: 41-39-34.25911 N
LONGITUDE: 88-25-55.32882 W
ELLIPSOIDAL HEIGHT: 540.998 SFT
GROUND SCALE FACTOR: 1.0000500335
ALL MEASUREMENTS ARE ON THE GROUND.

AREA

LOT 1	1,143,210 SQ. FT.	26.2445 ACRES
LOT 2	182,819 SQ. FT.	4.1969 ACRES
LOT 3	117,432 SQ. FT.	2.6959 ACRES
TOTAL	1,443,461 SQ. FT.	33.1373 ACRES



OWNER

Costco Wholesale Corporation
730 Lake Drive
Issaquah, Washington 98027
425 313 6052
Contact: Steve Cross

ENGINEER / SURVEYOR

V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, Illinois 60517
630 724 9200
Project Managers:
Dan Free, P.E.
dfree@v3co.com
Edward J. Murray, P.L.S.
emurray@v3co.com

LEGEND

SECTION CORNER
SUBDIVISION BOUNDARY LINE
UNDERLYING LOT LINE
EXISTING LOT LINE
PROPOSED LOT LINE
EXISTING EASEMENT LINE
PROPOSED EASEMENT LINE
BUILDING SETBACK LINE
SECTION LINE

N	NORTH
S	SOUTH
E	EAST
W	WEST
CB	CHORD BEARING
CL	CHORD LENGTH
A	ARC LENGTH
R	RADIUS
PU&DE	PUBLIC UTILITY & DRAINAGE EASEMENT
D.E.	DRAINAGE EASEMENT
(0.00')	RECORD DATUM
0.00'	CALCULATED DATUM
■	SET CONCRETE MONUMENT
B.S.L.	BUILDING SETBACK LINE
○ FIP	FOUND IRON PIPE W/SIZE
S.S.E.	SANITARY SEWER EASEMENT

IDOT ACCESS NOTES

1. THERE SHALL BE AT MOST ONE (1) FULL VEHICULAR ACCESS POINT TO US ROUTE 34 (VETERANS PARKWAY) FROM LOT 2 AND 3 AS DEPICTED HEREON.
2. THERE SHALL BE NO DIRECT VEHICULAR ACCESS TO US ROUTE 34 (VETERANS PARKWAY) FROM LOT 1.
3. ALL OTHER ACCESS SHALL BE VIA INTERNAL CIRCULATION.

NOTES

1. ONCE THE PLAT SHOWN HEREON IS RECORDED AND UPON COMPLETION OF CONSTRUCTION, 5/8" IRON RODS WITH PLASTIC CAPS SHALL BE SET AT ALL LOT CORNERS AND CHANGES IN GEOMETRY, UNLESS SHOWN OTHERWISE.
2. ALL MEASUREMENTS AND DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF. ARC DISTANCES ARE ALONG ALL CURVES.

Engineers
Scientists
Surveyors
7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

PREPARED FOR:
Costco Wholesale Corporation
730 Lake Drive
Issaquah, WA 98027
425.313.6052

REVISIONS		
NO.	DATE	DESCRIPTION
1.	11/11/24	REVISED CROSS ACCESS EASEMENT, ADD BSL
2.	11/13/24	REVISED PER COMMENTS
3.	12/18/24	REVISED PER VILLAGE COMMENT LETTER DATED 12/05/24

FINAL PLAT OF SUBDIVISION
COSTCO WHOLESALE, YORKVILLE, IL

Project No: 240757
Group No: VP04.1

DRAFTING COMPLETED: 10/29/24 | DRAWN BY: SPK | PROJECT MANAGER: DEF
FIELD WORK COMPLETED: N/A | CHECKED BY: EJM | SCALE: 1" = 80'

SHEET NO. 1 of 3

N:\2024\240757\Drawings\ACAD\SVY\VP04.1\FNL\240757_R3.dwg, 12/19/2024 8:49:20 AM, emurray

FINAL PLAT OF SUBDIVISION
OF
COSTCO WHOLESALE

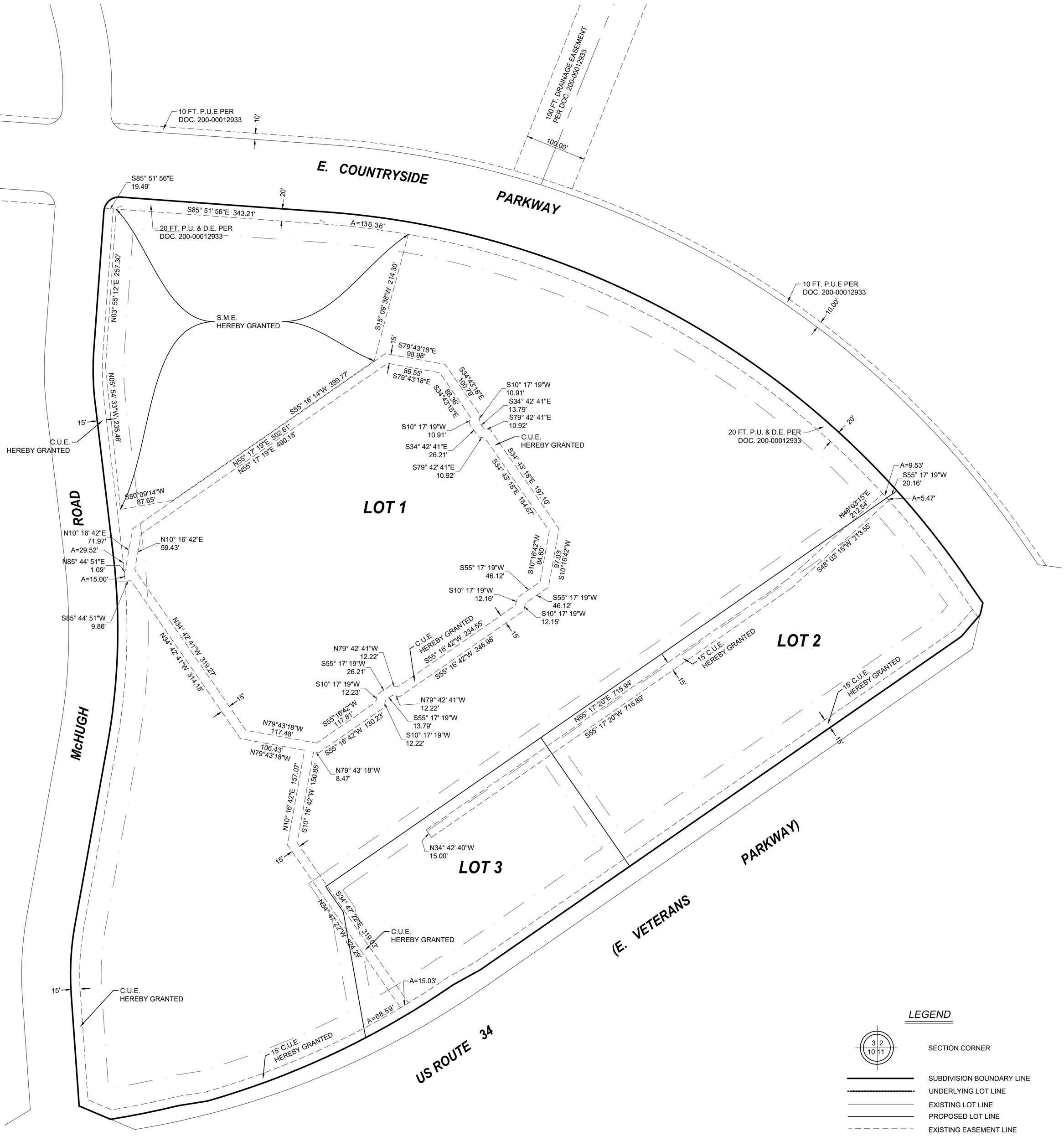
PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

STATE PLANE MERIDIAN

GRAPHIC SCALE

80' 0 40' 80' 160' 320'

1" = 80'



LEGEND

- SECTION CORNER (3 | 2 / 10 | 11)
- SUBDIVISION BOUNDARY LINE
- UNDERLYING LOT LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE
- BUILDING SETBACK LINE
- SECTION LINE

N	NORTH
S	SOUTH
E	EAST
W	WEST
CB	CHORD BEARING
CL	CHORD LENGTH
A	ARC LENGTH
R	RADIUS
PU&DE	PUBLIC UTILITY & DRAINAGE EASEMENT
D.E.	DRAINAGE EASEMENT
(0.00')	RECORD DATUM
0.00'	CALCULATED DATUM
■	SET CONCRETE MONUMENT
B.S.L.	BUILDING SETBACK LINE
○ FIP	FOUND IRON PIPE W/SIZE
S.S.E.	SANITARY SEWER EASEMENT

Engineers
Scientists
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v3co.com

PREPARED FOR:

Costco Wholesale Corporation
730 Lake Drive
Issaquah, WA 98027
425.313.6052

REVISIONS

NO.	DATE	DESCRIPTION
1.	11/11/24	REVISED CROSS ACCESS EASEMENT, ADD BSL
2.	11/13/24	REVISED PER COMMENTS
3.	12/18/24	REVISED PER VILLAGE COMMENT LETTER DATED 12/05/24

FINAL PLAT OF SUBDIVISION

COSTCO WHOLESALE, YORKVILLE, IL

Project No: 240757
Group No: VP04.1

DRAFTING COMPLETED: 10/29/24 | DRAWN BY: SPK | PROJECT MANAGER: DEF
FIELD WORK COMPLETED: N/A | CHECKED BY: EJM | SCALE: 1" = 80'

SHEET NO. 2 of 3

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FINAL PLAT OF SUBDIVISION
OF
COSTCO WHOLESALE

PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

P.I.N. 02-27-101-003
02-28-227-002

OWNERSHIP CERTIFICATE

STATE OF _____)
) SS
COUNTY OF _____)

THIS IS TO CERTIFY THAT _____, IS THE FEE SIMPLE OWNER OF THE PROPERTY DESCRIBED IN THE FOREGOING SURVEYOR'S CERTIFICATE AND HAS CAUSED THE SAME TO BE SURVEYED, SUBDIVIDED, AND PLATTED AS SHOWN HEREON FOR THE USES AND PURPOSES HEREIN SET FORTH AS ALLOWED AND PROVIDED FOR BY STATUTE, AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE THEREON INDICATED.

THE UNDERSIGNED HEREBY DEDICATES FOR PUBLIC USE THE LANDS SHOWN ON THIS PLAT FOR THOROUGHFARES, STREETS, ALLEYS AND PUBLIC SERVICES; AND HEREBY ALSO RESERVES FOR ANY ELECTRIC, GAS, TELEPHONE, CABLE TV OR OTHER TELECOMMUNICATIONS COMPANY UNDER FRANCHISE AGREEMENT WITH THE UNITED CITY OF YORKVILLE, THEIR SUCCESSORS AND ASSIGNS, THE EASEMENT PROVISIONS WHICH ARE STATED HEREON.

THE UNDERSIGNED FURTHER CERTIFY THAT ALL OF THE LAND INCLUDED IN THIS PLAT LIES WITHIN THE BOUNDARIES OF YORKVILLE COMMUNITY UNIT SCHOOL DISTRICT 115.

DATED AT _____, _____, THIS _____ DAY OF _____, 20__.

_____
CORPORATE NAME

_____
COMPLETE ADDRESS

BY: _____ _____
PRESIDENT Printed Name

_____ _____
SECRETARY Printed Name

NOTARY CERTIFICATE

STATE OF _____)
) SS
COUNTY OF _____)

I, _____, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT _____ AND _____, PERSONALLY KNOWN TO ME TO BE THE PRESIDENT AND SECRETARY OF _____, AS SHOWN ABOVE, APPEARED BEFORE ME THIS DAY AND ACKNOWLEDGED THAT AS SUCH OFFICERS, THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AND CAUSED THE CORPORATE SEAL TO BE AFFIXED THERETO AS THEIR FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION, FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20__.

_____
NOTARY PUBLIC

SURFACE WATER STATEMENT

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS _____ DAY OF _____ A.D., 20__.

_____ _____
IL. REGISTERED PROFESSIONAL ENG. OWNER OR ATTORNEY FOR OWNER

_____
STATE REGISTRATION NUMBER

_____
REGISTRATION EXPIRATION DATE

COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS)
)SS
COUNTY OF KENDALL)

I, _____, COUNTY CLERK OF KENDALL COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID CURRENT TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE PLAT HEREIN DRAWN. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT HEREIN DRAWN.

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK AT YORKVILLE,

ILLINOIS, THIS _____DAY OF _____ 20__.

_____
COUNTY CLERK

RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
)SS
COUNTY OF KENDALL)

THIS INSTRUMENT NO. _____ WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF KENDALL COUNTY, ILLINOIS, ON THIS _____ DAY OF _____, 20__, AT _____ O'CLOCK ___.M.

_____
KENDALL COUNTY RECORDER

ILLINOIS DEPARTMENT OF TRANSPORTATION STATEMENT

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT OF SECTION 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS" AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS"
WILL, BE REQUIRED BY THE DEPARTMENT.

_____ _____, A.D., 20___
ANTHONY J. QUIGLEY, P.E. DATE
REGION ONE ENGINEER

CITY ADMINISTRATOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

APPROVED AND ACCEPTED BY THE CITY ADMINISTRATOR OF THE UNITED CITY OF YORKVILLE, ILLINOIS, THIS _____DAY OF_____, 20__.

_____
CITY ADMINISTRATOR

CITY PLANNING AND ZONING COMMISSION CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

APPROVED AND ACCEPTED BY THE PLANNING AND ZONING COMMISSION OF THE UNITED CITY OF YORKVILLE, ILLINOIS, THIS _____DAY OF_____, 20__.

_____
CHAIRMAN

CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

APPROVED AND ACCEPTED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY OF YORKVILLE, ILLINOIS, THIS _____DAY OF_____, 20__.

_____
MAYOR

CITY CLERK'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

APPROVED AND ACCEPTED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY OF YORKVILLE, ILLINOIS, BY ORDINANCE No._____ AT A MEETING HELD THIS _____DAY OF_____, 20__.

_____
CITY CLERK

CITY ENGINEER'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

I, _____, CITY ENGINEER FOR THE UNITED CITY OF YORKVILLE, DO HEREBY CERTIFY THAT THE REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED OR THE REQUIRED GUARANTEE COLLATERAL HAS BEEN POSTED FOR THE COMPLETION OF ALL REQUIRED IMPROVEMENTS.

DATED AT YORKVILLE, ILLINOIS THIS DAY OF_____, 20__.

_____
CITY ENGINEER

KENDALL COUNTY RIGHT TO FARM STATEMENT

NOTICE:
KENDALL COUNTY HAS A LONG, RICH TRADITION IN AGRICULTURE AND RESPECTS THE ROLE THAT FARMING CONTINUES TO PLAY IN SHAPING THE ECONOMIC VIABILITY OF THE COUNTY. PROPERTY THAT SUPPORTS THIS INDUSTRY IS INDICATED BY A ZONING INDICATOR - A-1 OR AG SPECIAL USE. ANYONE CONSTRUCTING A RESIDENCE OR FACILITY NEAR THIS ZONING SHOULD BE AWARE THAT NORMAL AGRICULTURAL PRACTICES MAY RESULT IN OCCASIONAL SMELLS, DUST, SIGHTS, NOISE, AND UNIQUE HOURS OF OPERATION THAT ARE NOT TYPICAL IN OTHER ZONING AREAS.

CITY UTILITY EASEMENTS PROVISIONS

THE UNITED CITY OF YORKVILLE, IT'S SUCCESSORS, LICENSEES AND ASSIGNS, ARE HEREBY GIVEN EASEMENT RIGHTS TO ALL PLATTED EASEMENTS DESIGNATED "CITY UTILITY EASEMENT OR C.U.E." SAID EASEMENTS SHALL BE USED SOLELY TO INSTALL, OPERATE, MAINTAIN AND REMOVE FROM TIME TO TIME UNDERGROUND FACILITIES AND APPURTENANCES USED IN CONNECTION WITH THE WATER, SANITARY SEWER OR STORM DRAINAGE SYSTEMS OF THE UNITED CITY OF YORKVILLE, EXCEPT THAT THE EASEMENTS MAY BE GRADED AS SWALES TO RECEIVE LOCAL SURFACE DRAINAGE. NO PERMANENT BUILDING OR TREES SHALL BE PLACED ON SAID EASEMENT, BUT SAME MAY BE USED FOR GARDENS, SHRUBS, LANDSCAPING AND OTHER PURPOSES THAT DO NOT THEN OR LATER INTERFERE WITH THE AFORESAID USES OR RIGHTS HEREIN GRANTED.

FOLLOWING ANY WORK TO BE PERFORMED BY THE UNITED CITY OF YORKVILLE IN THE EXERCISE OF ITS EASEMENT RIGHTS HEREIN GRANTED, SAID CITY SHALL HAVE NO OBLIGATION WITH RESPECT TO SURFACE RESTORATION, INCLUDING BUT NOT LIMITED TO, THE RESTORATION, REPAIR OR REPLACEMENT OF PAVEMENT, CURB, GUTTERS, TREES, LAWN OR SHRUBBERY, PROVIDED, HOWEVER, THAT SAID CITY SHALL BE OBLIGATED, FOLLOWING SUCH MAINTENANCE WORK, TO BACKFILL AND MOUND ALL TRENCH CREATED SO AS TO RETAIN SUITABLE DRAINAGE, TO COLD PATCH ANY ASPHALT OR CONCRETE SURFACE, TO REMOVE ALL EXCESS DEBRIS AND SPOIL, AND TO LEAVE THE MAINTENANCE AREA IN A GENERALLY CLEAN AND WORKMANLIKE CONDITION.

STORMWATER MANAGEMENT EASEMENT PROVISIONS

AN EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE UNITED CITY OF YORKVILLE AND TO ITS SUCCESSORS AND ASSIGNS, OVER ALL OF THE AREAS MARKED "STORMWATER MANAGEMENT EASEMENT" (S.M.E.) ON THE PLAT FOR THE PERPETUAL RIGHT, PRIVILEGE, AND AUTHORITY TO SURVEY, CONSTRUCT, RECONSTRUCT, REPAIR, INSPECT, MAINTAIN AND OPERATE STORM SEWERS AND THE STORMWATER MANAGEMENT AREA, TOGETHER WITH ANY AND ALL NECESSARY MANHOLES, CATCH BASINS, SANITARY SEWERS, WATER MAINS, ELECTRIC AND COMMUNICATION CABLES, CONNECTIONS, DITCHES, SWALES, AND OTHER STRUCTURES AND APPURTENANCES AS MAY BE DEEMED NECESSARY BY SAID CITY, OVER, UPON, ALONG, UNDER AND THROUGH SAID INDICATED EASEMENT, TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE PROPERTY FOR NECESSARY MEN AND EQUIPMENT TO DO ANY OF THE ABOVE WORK. THE RIGHT IS ALSO GRANTED TO CUT DOWN, TRIM OR REMOVE ANY TREES, SHRUBS OR OTHER PLANTS ON THE EASEMENT THAT INTERFERE WITH THE OPERATION OF SEWERS OR OTHER UTILITIES. NO PERMANENT BUILDINGS SHALL BE PLACED ON SAID EASEMENT. NO CHANGE TO THE TOPOGRAPHY OR STORMWATER MANAGEMENT STRUCTURES WITHIN THE EASEMENT AREA SHALL BE MADE WITHOUT EXPRESS WRITTEN CONSENT OF THE CITY ENGINEER, BUT SAME MAY BE USED FOR PURPOSES THAT DO NOT THEN OR LATER INTERFERE WITH THE AFORESAID USES OR RIGHTS.

THE OWNER OF THE PROPERTY SHALL REMAIN RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER MANAGEMENT AREA AND APPURTENANCES. THE UNITED CITY OF YORKVILLE WILL PERFORM ONLY EMERGENCY PROCEDURES AS DEEMED NECESSARY BY THE CITY ENGINEER OF THE UNITED CITY OF YORKVILLE.

SURVEYORS AUTHORIZATION CERTIFICATE

I, EDWARD J. MURRAY, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 4037, DO HEREBY AUTHORIZE THE CITY OF YORKVILLE OR THEIR AGENT TO FILE WITH THE KENDALL COUNTY RECORDER'S OFFICE THE FINAL PLAT KNOWN AS COSTCO WHOLESALE, BEING A SUBDIVISION OF PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

_____
EDWARD J. MURRAY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037
MY LICENSE EXPIRES ON NOVEMBER 30, 2026.
emurray@v3co.com

PROFESSIONAL LAND SURVEYOR
EDWARD J. MURRAY
4037
WOODRIDGE, ILLINOIS
STATE OF ILLINOIS

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT I, EDWARD J. MURRAY, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 4037 HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13 SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976.51 FEET; THENCE WESTERLY ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00' AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES 09 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1.41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET; THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309.47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250.39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25.00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338.21 FEET; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54.08 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS.

EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER VESTING TITLE ENTERED IN CASE NO. 15-ED-10, CIRCUIT COURT OF KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS DOCUMENT NO. 201500016982.

BEING THE SAME AS:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973, 2002-00007755 AND 2015-00016982; THENCE ALONG THE SAID NORTHERLY RIGHT OF WAY OF U.S. ROUTE NO. 34, THE FOLLOWING 9 COURSES AND DISTANCES; 1) THENCE SOUTH 12 DEGREES 54 MINUTES 17 SECONDS WEST, 19.34 FEET; 2) THENCE SOUTH 40 DEGREES 33 MINUTES 18 SECONDS WEST, 47.46 FEET; 3) THENCE SOUTH 55 DEGREES 17 MINUTES 19 SECONDS WEST, 956.64 FEET; 4) THENCE SOUTH 61 DEGREES 07 MINUTES 25 SECONDS WEST, 50.67 FEET; 5) THENCE ALONG THE ARC OF CURVE, BEING A CURVE TO THE RIGHT, HAVING A RAIUS OF 1362.39 FEET, A CHORD BEARING OF SOUTH 64 DEGREES 40 MINUTES 47 SECONDS WEST, A CHORD LENGTH OF 444.62 FEET, AN ARC LENGTH OF 446.61; 6) THENCE SOUTH 81 DEGREES 03 MINUTES 21 SECONDS WEST, 47.72 FEET; 7) THENCE ALONG THE ARC OF CURVE, BEING A CURVE TO THE RIGHT, HAVING A RAIUS OF 1357.39 FEET, A CHORD BEARING OF SOUTH 78 DEGREES 36 MINUTES 13 SECONDS WEST, A CHORD LENGTH OF 113.42 FEET, AN ARC LENGTH OF 113.46; 8) THENCE NORTH 67 DEGREES 05 MINUTES 34 SECONDS WEST, 54.25 FEET; 9) THENCE SOUTH 86 DEGREES 02 MINUTES 05 SECONDS WEST, 1.41 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD, AS DEDICATED PER DOCUMENT 2000-00009655; THENCE ALONG SAID EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD, THE FOLLOWING 8 COURSES AND DISTANCES; 1) THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, 183.64 FEET; 2) THENCE ALONG THE ARC OF A CUVE, BEING ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, A CHORD BEARING OF NORTH 03 DEGREES 05 MINUTES 24 SECONDS EAST, A CHORD LENGTH OF 114.50 FEET, AN ARC LENGTH OF 114.80 FEET; 3) THENCE NORTH 10 DEGREES 14 MINUTES 24 SECONDS EAST, 300.40 FEET; 4) THENCE ALONG THE ARC OF A CURVE, BEING ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 1040.00 FEET, A CHORD BEARING OF NORTH 01 DEGREES 42 MINUTES 55 SECONDS EAST, A CHORD LENGTH OF 308.33 FEET, AN ARC LENGTH OF 309.47 FEET; 5) THENCE NORTH 06 DEGREES 48 MINUTES 34 SECONDS WEST, 250.39 FEET; 6) THENCE ALONG THE ARC OF A CURVE, BEING ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, A CHORD BEARING OF NORTH 01 DEGREES 20 MINUTES 16 SECONDS WEST, A CHORD LENGTH OF 87.73 FEET, AN ARC LENGTH OF 87.86 FEET; 7) THENCE NORTH 04 DEGREES 08 MINUTES 04 SECONDS EAST, 226.43 FEET; 8) THENCE ALONG THE ARC OF A CURVE, BEING A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, A CHORD BEARING OF NORTH 49 DEGREES 08 MINUTES 04 SECONDS EAST, A CHORD LENGTH OF 35.36 FEET, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF SAID COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 51 MINUTES 56 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338.21 FEET; THENCE CONTINUING ALONG SAID SOUTERLY LINE, BEING THE ARC OF CURVE, BEING ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 17 MINUTES 32 SECONDS EAST, A CHORD LENGTH OF 1200.02 FEET, AN ARC LENGTH OF 1240.81 FEET; THENCE CONTINUING ALONG SAID SOUTERLY LINE, SOUTH 34 DEGREES 43 MINUTES 19 SECONDS EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 54.07 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS.

I FURTHER CERTIFY THAT THIS LAND IS WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY WHICH HAS AUTHORIZED A COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE, AS NOW OR HEREAFTER AMENDED.

I FURTHER CERTIFY THAT THE ANNEXED PLAT IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. PERMANENT MONUMENTS WILL BE SET AT ALL LOT CORNERS, EXCEPT WHERE CONCRETE MONUMENTS ARE INDICATED.

I FURTHER CERTIFY THAT THE ABOVE DESCRIBED AREA IS IN AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN (ZONE X) AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP OF KENDALL COUNTY, ILLINOIS & INCORPORATED AREAS (COMMUNITY PANEL NO. 17093C0045H, EFFECTIVE ON 1/8/2014).

DATED THIS ____ DAY OF _____, A.D., 20___.

_____
EDWARD J. MURRAY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037
MY LICENSE EXPIRES ON NOVEMBER 30, 2026.
V3 COMPANIES, LTD. PROFESSIONAL DESIGN FIRM NO. 184000902
THIS DESIGN FIRM NUMBER EXPIRES APRIL 30, 2025.
EMURRAY@V3CO.COM

PROFESSIONAL LAND SURVEYOR
EDWARD J. MURRAY
4037
WOODRIDGE, ILLINOIS
STATE OF ILLINOIS

Engineers
Scientists
Surveyors

7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

PREPARED FOR:
Costco Wholesale Corporation
730 Lake Drive
Issaquah, WA 98027
425.313.6052

REVISIONS

NO.	DATE	DESCRIPTION
1.	11/11/24	REVISED CROSS ACCESS EASEMENT, ADD BSL
2.	11/13/24	REVISED PER COMMENTS
3.	12/18/24	REVISED PER VILLAGE COMMENT LETTER DATED 12/05/24

FINAL PLAT OF SUBDIVISION

COSTCO WHOLESALE, YORKVILLE, IL

Project No: 240757
Group No: VP04.1

DRAFTING COMPLETED: 10/29/24 | DRAWN BY: SPK | PROJECT MANAGER: DEF
FIELD WORK COMPLETED: N/A | CHECKED BY: EJM | SCALE: 1" = N/A

SHEET NO. 3 of 3

N:\2024\240757\Drawings\ACAD\SVY\VP04.1\FNL_240757_R3.dwg, 12/19/2024 8:38:16 AM, emurray

PRELIMINARY ENGINEERING PLANS

FOR

COSTCO WHOLESALE

NWC US34/VETERANS AND
COUNTRYSIDE PARKWAY
YORKVILLE, ILLINOIS

PROJECT TEAM

OWNER

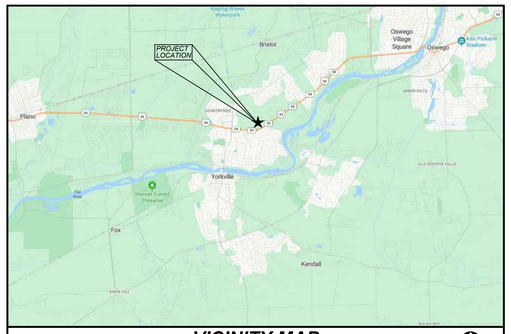
Costco Wholesale Corporation
730 Lake Drive
Issaquah, Washington 98027
847 498 0800
Contacts: Steve Cross, Authorized Representative

ENGINEER

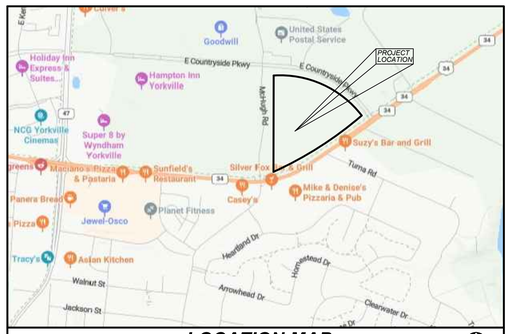
V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, Illinois 60517
630 724 9200
Project Manager: Dan Free, P.E.
dfree@v3co.com
Project Engineer: Peter Wagenmaker, P.E.
pwagenmaker@v3co.com
Civil Designer: Jacob Morrow
jmorrow@v3co.com

ARCHITECT

MG2
1101 Second Avenue, Suite 100
Seattle, Washington 98101
206 962 6500
Contact: Risa Yuki



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

INDEX

PRELIMINARY ENGINEERING PLANS

C0.0	TITLE SHEET
C1.0	EXISTING CONDITIONS PLAN
C2.0	PRELIMINARY LAYOUT AND PAVING PLAN
C3.0	PRELIMINARY GRADING PLAN
C4.0	PRELIMINARY UTILITY PLAN

BENCHMARKS

SOURCE: TRIMBLE VRS NETWORK WITH PROJECT ORIGIN AT:
LATITUDE: 41-39-34.25911 N
LONGITUDE: 88-25-55.32882 W
ELLIPSOIDAL HEIGHT: 540.998 SFT
GROUND SCALE FACTOR: 1.0000500335

SITE:

STATION DESIGNATION: SBM#1
ESTABLISHED BY: V3 COMPANIES
DATE: 07-31-24

ELEVATION: 644.75 (MEASURED)
DATUM: NAVD88
DESCRIPTION: NORTHWEST BONNET BOLT ON FIRE HYDRANT AT WEST SIDE OF McHUGH ROAD, 2ND HYDRANT SOUTH OF THE McHUGH ROAD AND E. COUNTRYSIDE PARKWAY INTERSECTION.

STATION DESIGNATION: SBM#2
ESTABLISHED BY: V3 COMPANIES
DATE: 07-31-24

ELEVATION: 643.88 (MEASURED)
DATUM: NAVD88
DESCRIPTION: SOUTHEAST ARROW BOLT ON FIRE HYDRANT AT THE NORTHWEST CORNER OF E. COUNTRYSIDE PARKWAY & US ROUTE 34 INTERSECTION.

THE ELEVATIONS ABOVE WERE KNOWN TO BE ACCURATE AT THE TIME THEY WERE ESTABLISHED. V3 DOES NOT CERTIFY TO THE ACCURACY THEREAFTER, NOR ASSUMES RESPONSIBILITY FOR THE MIS-USE OR MIS-INTERPRETATION OF THE INFORMATION SHOWN HEREON.

IT IS ADVISED THAT ALL OF THE ABOVE ELEVATIONS BE CHECKED BETWEEN EACH OTHER AND VERIFY A MINIMUM OF 3 SURROUNDING UTILITY RIM ELEVATIONS AND ANY ADJACENT BUILDING FINISHED FLOOR OR TOP OF FOUNDATION ELEVATIONS SHOWN HEREON PRIOR TO USE OR COMMENCEMENT OF ANY CONSTRUCTION OR OTHER WORK.

PERSONS USING THIS INFORMATION ARE TO CONTACT V3 IMMEDIATELY WITH ANY DISCREPANCIES FOUND PRIOR TO THE START OF ANY WORK.

PRELIMINARY ENGINEERING
NOT FOR CONSTRUCTION

COSTCO WHOLESALE
YORKVILLE, IL
CW # 23-0023
NWC US34/VETERANS AND COUNTRYSIDE PARKWAY
YORKVILLE, ILLINOIS 60560

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△	DATE	DESCRIPTION
1	11-13-24	FINAL PLAT SUBMITTAL

PROJECT NUMBER: 240757 S03
PM: DEF
DRAWN: KS
DATE: SEPTEMBER 20, 2024

PLOTTED BY: PETER WAGENMAKER DATE/TIME: 11/14/2024 10:25 AM FILE: N:\2024\240757\DRAWINGS\ACAD\LDI\S03\SHEET DRAWINGS\C0.0 TSHT240757.DWG

NOTES:

1. EXISTING CONDITIONS BASED ON SURVEY PERFORMED BY V3 COMPANIES. FIELD WORK COMPLETED 9-03-24. SEE SURVEY FOR ADDITIONAL INFORMATION INCLUDING EASEMENTS, ETC.

"NO BUILDINGS EXIST ON SITE"

UNSUBDIVIDED

COSTCO WHOLESALE

YORKVILLE, IL

CW # 23-0023

NWC US34/VETERANS AND COUNTRYSIDE PARKWAY

YORKVILLE, ILLINOIS 60560

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PM: DEF

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DATE: SEPTEMBER 20, 2024

EXISTING CONDITIONS PLAN

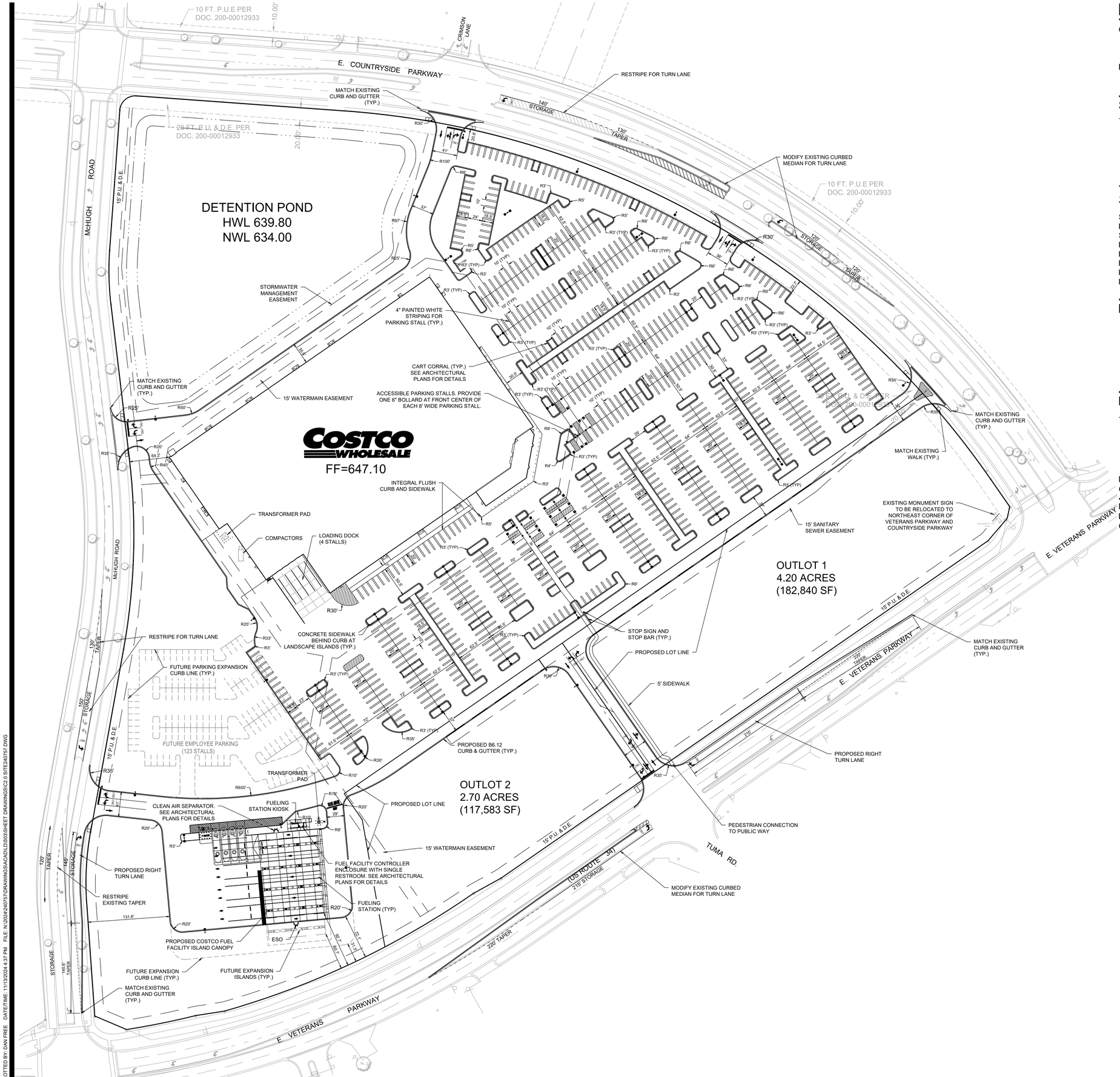
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GRAPHIC SCALE

60 30 0 60

1" = 60'

PLOTTED BY: DAN FREE DATE/TIME: 11/13/2024 4:37 PM FILE: N:\2024\240757\DRAWINGS\ACAD\LDS\03\SHEET DRAWINGS\C1.0 EXP240757.DWG



PROJECT DATA

CLIENT:	COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027
PROJECT ADDRESS:	SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL

SITE DATA:

TOTAL COSTCO SITE AREA:	33.14 ACRES (1,443,461 SF)
INCLUDES:	
COSTCO AREA:	26.24 ACRES (1,143,038 SF) INCLUDES 3.39 ACRE DETENTION POND
OUTLOT 1:	4.20 ACRES (182,819 SF)
OUTLOT 2:	2.70 ACRES (117,583 SF)
JURISDICTION:	UNITED CITY OF YORKVILLE
ZONING:	B-3 GENERAL BUSINESS DISTRICT, PUD

SETBACKS:	REQUIRED	ACTUAL
FRONT:	50'	507'
SIDE:	20'	64'
REAR:	30'	64'
PARKING (VETERANS):	20'	275'
PARKING (COUNTRYSIDE/McHUGH)	10'	20'
POND:	30'	30'
BUILDING HEIGHT MAX:	80'	34'

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA:	161,552 SF
INCLUDES:	
NET SALES FLOOR	**153,820 SF**
GROSS MECHANICAL / FIRE / MSB	2,265 SF
NET ENCLOSED VESTIBULE	3,559 SF
BUILDING ENVELOPE	1,908 SF

PARKING DATA:

TOTAL PARKING:	856 STALLS
INCLUDES:	
① 10' WIDE STALLS	838 STALLS
② ACCESSIBLE STALLS	18 STALLS
NUMBER OF STALLS PER 1000 SF OF BUILDING AREA:	5.04 STALLS

NOTES:
EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES

NOTES:

1. CURB & GUTTER SHALL BE B6.12 OR B6 BARRIER CURB PER THE CITY OF YORKVILLE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
3. ALL SITE SIGNAGE SHALL BE IN CONFORMANCE WITH M.U.T.C.D. STANDARDS.
4. ALL PARKING SPACES SHALL BE ANGLED AT 90° TO THE ASSOCIATED DRIVE AISLE.
5. PROPOSED ACCESS POINTS AND SITE LAYOUT SUBJECT TO APPROVAL BY THE CITY OF YORKVILLE.
6. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND DETAILS.
7. THE PAVEMENT SECTIONS SHOULD BE VERIFIED BASED ON RECOMMENDATION OF THE COMPLETED GEOTECHNICAL REPORT.
8. PROVIDE FROST-RESISTIVE FILL AND UNDERDRAIN BELOW ALL SIDEWALKS ADJACENT TO BUILDING. TIE UNDERDRAIN TO BUILDING FOUNDATION DRAIN.

GRAPHIC SCALE
60 30 0 60
1" = 60'

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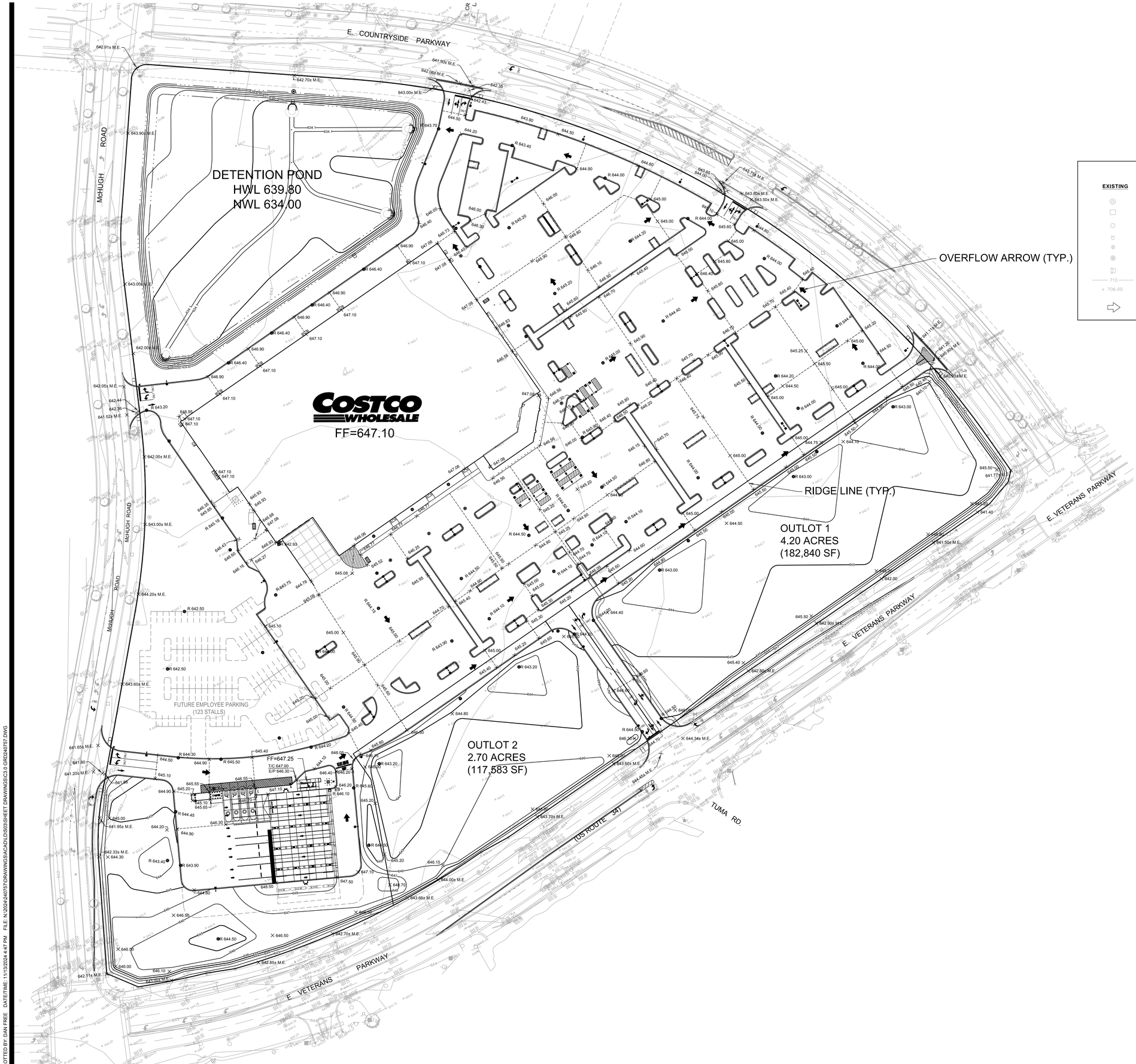
△	DATE	DESCRIPTION
1	11-13-24	FINAL PLAT SUBMITTAL

PROJECT NUMBER: 240757 S03
PM: DEF
DRAWN: KS
DATE: SEPTEMBER 20, 2024

LAYOUT PLAN

C2.0

PLOTTED BY: DAN FREE DATE/TIME: 11/13/2024 4:37 PM FILE: N:\2024\240757\DRAWINGS\ACAD\LD\S03\SHEET DRAWINGS\C2.0 SITE240757.DWG



NOTES:

1. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. SUBTRACT TOPSOIL THICKNESS OR PAVEMENT SECTION TO ESTABLISH SUBGRADE ELEVATIONS.
3. PROVIDE 1.50% MAX (1.00% MIN) CROSS SLOPE AND 4.00% MAX LONGITUDINAL SLOPE ON ALL SIDEWALKS. ALWAYS MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING.
4. CONTRACTOR TO REFER TO RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT TO BE COMPLETED BY OTHERS.
5. OUTLOTS TO BE MASS GRADED TO DRAIN.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		UTILITY STRUCTURE WITH CLOSED LID
		CURB INLET
		DRAINAGE STRUCTURE WITH OPEN LID
		FIRE HYDRANT
		VALVE IN VALVE BOX
		GATE VALVE IN VALVE VAULT
		FLARED END SECTION (F.E.S.)
710	710	CONTOUR
× 706.00	× 706.0	SPOT ELEVATION
		STORMWATER FLOW DIRECTION
		STORMWATER OVERFLOW ROUTE

DETENTION SUMMARY

DETENTION REQUIRED: 15.48 AC-FT

DETENTION PROVIDED: 15.75 AC-FT

COSTCO WHOLESALE

YORKVILLE, IL

CW # 23-0023

NWC US34/VETERANS AND COUNTRYSIDE PARKWAY

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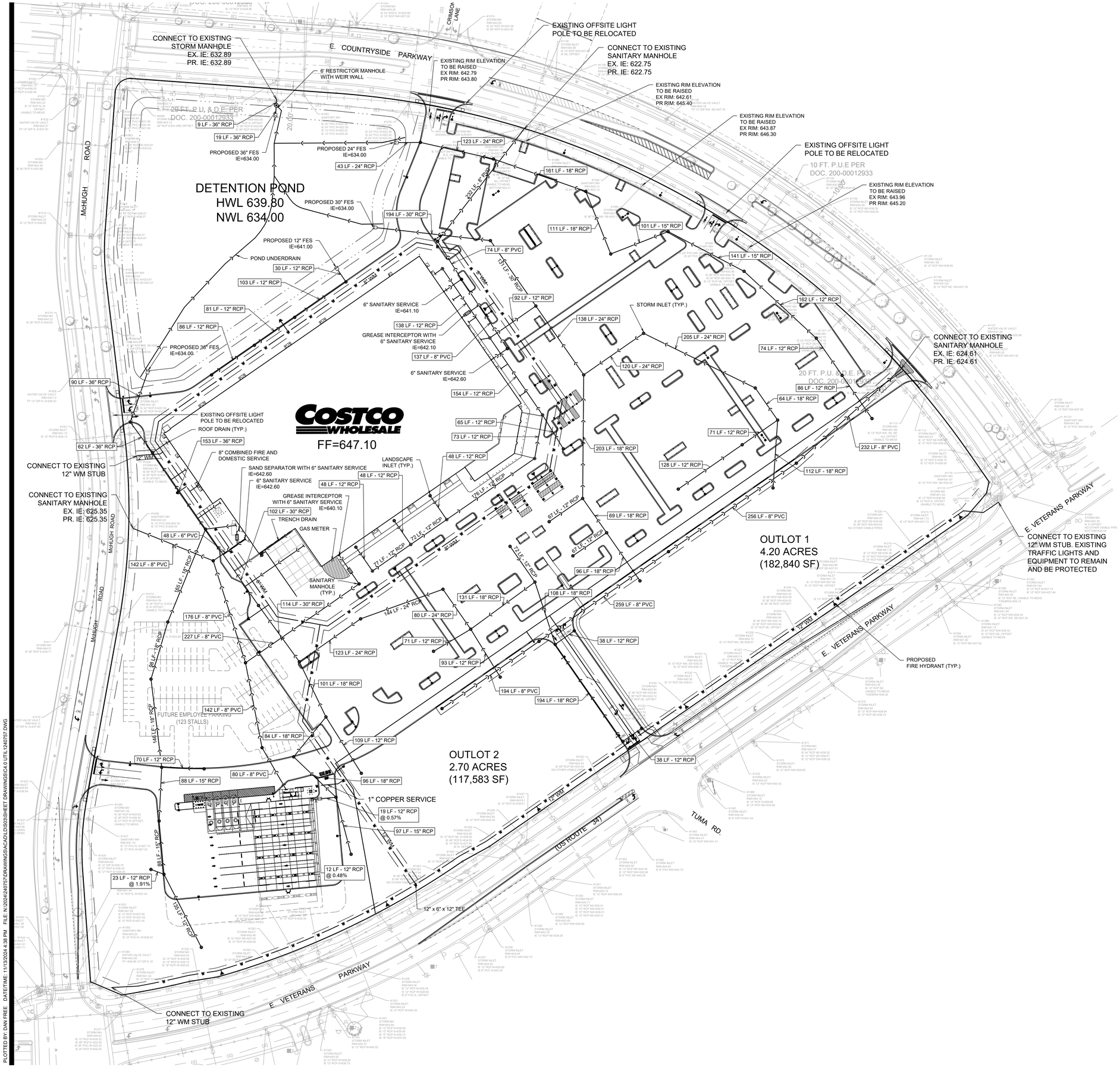
1" = 60'

PROJECT NUMBER: 240757 S03
PM: DEF
DRAWN: KS
DATE: SEPTEMBER 20, 2024

PRELIMINARY GRADING PLAN

C3.0

PLOTTED BY: DAN FREE DATE/TIME: 11/13/2024 4:47 PM FILE: N:\2024\240757\DRAWINGS\ACAD\LDS\03\SHEET DRAWINGS\C3.0 GRD240757.DWG



NOTES:

1. CONTRACTOR TO UTILIZE DUCTILE IRON PIPE, CLASS 52 CONFORMING TO ANSI A21.4 (AWWA C104) AND PUSH-ON JOINTS CONFORMING TO ANSI A21.11 (AWWA C111).
2. SANITARY SEWER MAINS AND SERVICES SHALL BE PVC SDR 26 CONFORMING TO ASTM D-2241. ELASTOMETRIC GASKET JOINTS SHALL BE IN CONFORMANCE WITH ASTM D-3139.
3. UNLESS OTHERWISE INDICATED ON THE PLANS, STORM SEWER PIPE SHALL BE REINFORCED CONCRETE IN CONFORMANCE WITH IDOT STANDARD SPECIFICATIONS DETERMINATION FOR PIPE CLASS, AND CONFORMING TO ASTM C76. ALL STORM SEWER SHALL HAVE GASKETED JOINTS CONFORMING TO ASTM C461.
4. SEE LANDSCAPE PLANS BY OTHERS FOR TREE, PLANTING AND LANDSCAPING.
5. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE AND INVERT ELEVATION OF EXISTING UTILITIES PRIOR TO ORDERING MATERIALS AND STARTING CONSTRUCTION.
6. FIRE HYDRANTS SHALL MAINTAIN A MINIMUM OF 5 FEET OF SEPARATION FROM BACK OF CURB. ALL WATERMAIN LEADS TO FIRE HYDRANTS SHALL BE A MINIMUM OF 6 INCHES UNLESS OTHERWISE NOTED.
7. THE PROPOSED WATERMAIN ON-SITE IS ANTICIPATED TO BE A LOOPED PUBLIC WATERMAIN.
8. ALL STORM SEWER ROOF DRAINS FROM BUILDING TO MAIN STORM SEWER TRUNK LINE SHALL BE PVC SDR 26 AT 1.0% SLOPE (MINIMUM) UNLESS OTHERWISE NOTED.
9. FRAMES AND GRATES ARE AS FOLLOWS UNLESS OTHERWISE NOTED:
   F&CL IN OPEN SPACE AND PAVEMENT: NEENAH R-1772 (OR APPROVED EQUAL)
   F&OL IN OPEN SPACE: NEENAH R-4340-B (OR APPROVED EQUAL)
   F&OL IN PAVEMENT: NEENAH R-3563-HB (OR APPROVED EQUAL)

   F&CL = FRAME AND CLOSED LID
   F&OL = FRAME AND OPEN LID
10. RADIAL UNDERDRAINS TO BE PROVIDED AT EACH OPEN LID MANHOLE WITHIN THE PAVEMENT. PROVIDE UNDERDRAIN ALONG ALL EDGES OF CONCRETE PAVEMENT THAT ABUT ASPHALT PAVEMENT.
11. ALL PROPOSED PUBLIC WATER MAIN SHALL BE PLACED WITHIN A 15' PUBLIC UTILITY EASEMENT.
12. PROVIDE ONE 6" FOUNDATION DRAIN DISCHARGE CONNECTION TO STORM SEWER DOWNSTREAM OF DETENTION BASIN.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SANITARY SEWER
		SANITARY FORCE MAIN
		STORM SEWER
		COMBINED SEWER
W	W	WATER MAIN
FO	FO	UNDERGROUND FIBER OPTIC
E	E	UNDERGROUND ELECTRIC
T	T	UNDERGROUND TELEPHONE
OHE	OHE	OVERHEAD ELECTRIC
OHT	OHT	OVERHEAD TELEPHONE
OHW	OHW	OVERHEAD WIRE
		UTILITY STRUCTURE WITH CLOSED LID
		CURB INLET
		DRAINAGE STRUCTURE WITH OPEN LID
		FIRE HYDRANT
		VALVE IN VALVE BOX
		GATE VALVE IN VALVE VAULT
		FLARED END SECTION (F.E.S.)
		LIGHT STANDARD
		OVERHEAD UTILITY POLE

GRAPHIC SCALE
60 30 0 60
1" = 60'

COSTCO WHOLESALE
YORKVILLE, IL
CW # 23-0023
NWC US34/VETERANS AND COUNTRYSIDE PARKWAY
YORKVILLE, ILLINOIS 60560

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Visio, Veritere, Virtute...*"The Vision to Transform with Excellence"*

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△	DATE	DESCRIPTION
1	11-13-24	FINAL PLAT SUBMITTAL

PROJECT NUMBER: 240757 S03
PM: DEF
DRAWN: KS
DATE: SEPTEMBER 20, 2024

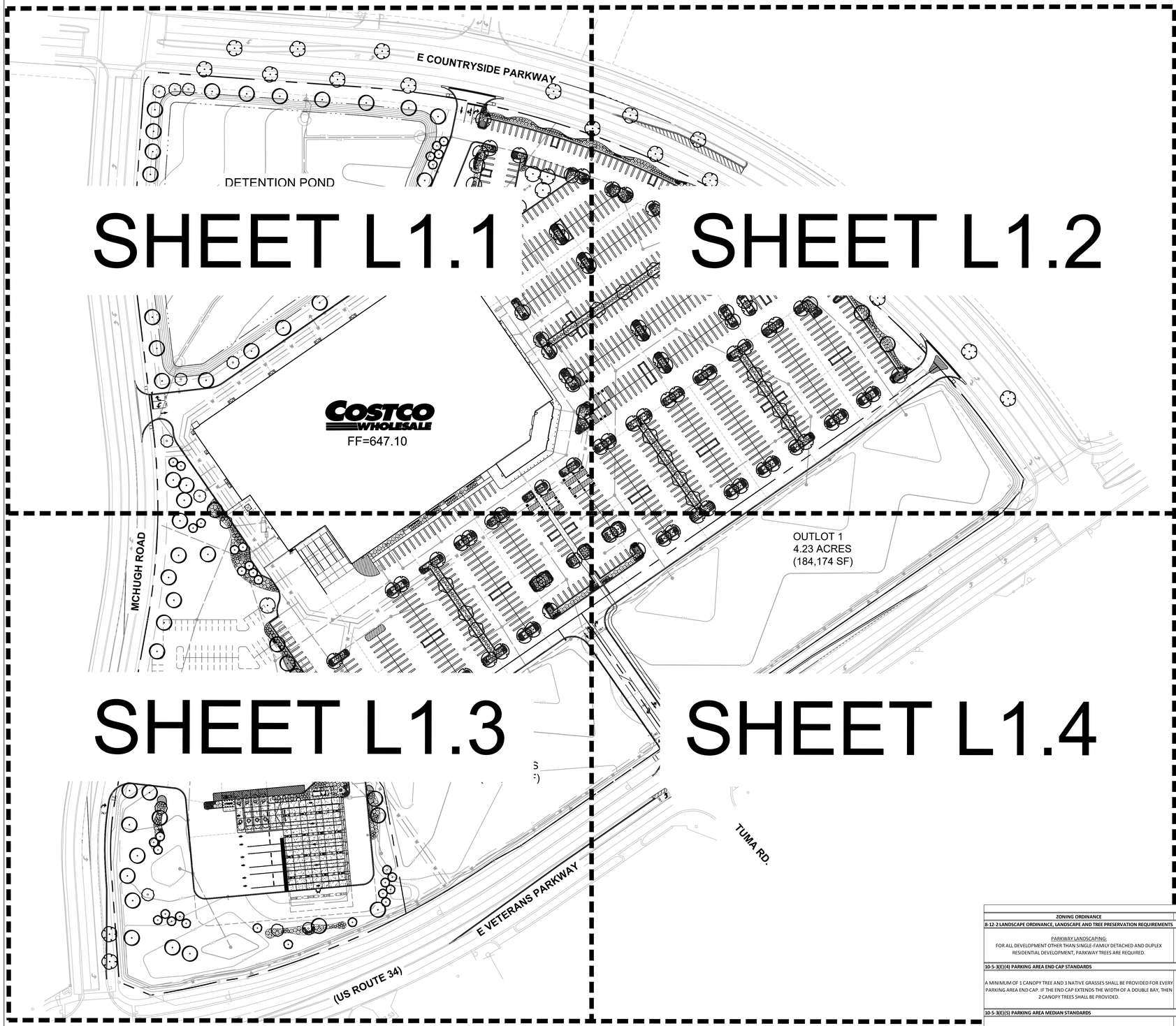
PRELIMINARY UTILITY PLAN

C4.0

PLOTTED BY: DAN FREE DATE/TIME: 11/13/2024 4:38 PM FILE: N:\2024\240757\DRAWING\SACADD\LDS\03\SHEET DRAWINGS\C4.0 UTIL 240757.DWG

NOTE: NOT FOR CONSTRUCTION

NOTE: ALL INTERIOR ISLANDS AND FOUNDATION LANDSCAPE TO BE MULCHED WITH ROCK MULCH.



CONCEPT PLANT SCHEDULE

CANOPY TREE 2.5" DBH MINIMUM		63
CANOPY TREE - PARKWAY 2.5" DBH MINIMUM		21
CANOPY TREE - PARKING AREA 2.5" DBH MINIMUM		112
CANOPY TREE - PARKING AREA MEDIAN 2.5" DBH MINIMUM		16
EVERGREEN TREE 6` HT MINIMUM		32
ORNAMENTAL TREE 1.5" DBH MINIMUM FOR SINGLE STEM 6` HT. MINIMUM FOR MULTI-STEM		20
LARGE DECIDUOUS SHRUB		190
LARGE DECIDUOUS SHRUB - PARKING AREA PERIMETER		30
LARGE EVERGREEN SHRUB		83
LARGE EVERGREEN SHRUB - PARKING AREA PERIMETER		58
MEDIUM DECIDUOUS SHRUB		769
MEDIUM DECIDUOUS SHRUB - PARKING AREA MEDIAN		203
MEDIUM DECIDUOUS SHRUB - PARKING AREA PERMIETER		136
SMALL DECIDUOUS SHRUB		1,575
SMALL DECIDUOUS SHRUB - PARKING AREA MEDIAN		40
SMALL DECIDUOUS SHRUB - PARKING AREA PERIMETER		78
ORNAMENTAL GRASS		283
ORNAMENTAL GRASS - PARKING AREA PERIMETER		31
PERENNIALS		
TURF SOD		
NO-MOW TURF SEED MIX		
NATURALIZED PLANTINGS		

YORKVILLE, IL LANDSCAPE CODE REQUIREMENTS		
ZONING ORDINANCE	**REQUIRED**	**PROVIDED**
8-12-2 LANDSCAPE ORDINANCE, LANDSCAPE AND TREE PRESERVATION REQUIREMENTS		
PARKWAY LANDSCAPING: FOR ALL DEVELOPMENT OTHER THAN SINGLE-FAMILY DETACHED AND DUPLEX RESIDENTIAL DEVELOPMENT, PARKWAY TREES ARE REQUIRED.	**PARKWAY TREES REQUIRED ALONG FRONTAGE ROADS**	MCHUGH ROAD = EXISTING PARKWAY TREES TO REMAIN E COUNTRYSIDE PARKWAY = PARKWAY TREES PROVIDED WITHIN PARKWAY AND MEDIAN E VETERANS PARKWAY = PARKWAY TREES NOT PROVIDED (IDOT ROAD)
10-5-3(E)(4) PARKING AREA END CAP STANDARDS		
A MINIMUM OF 1 CANOPY TREE AND 3 NATIVE GRASSES SHALL BE PROVIDED FOR EVERY PARKING AREA END CAP. IF THE END CAP EXTENDS THE WIDTH OF A DOUBLE BAY, THEN 2 CANOPY TREES SHALL BE PROVIDED.	**1 CANOPY TREE AND 3 NATIVE GRASSES PER PARKING AREA END CAP REQUIRED**	PARKING LOT TREES AND SHRUBS/GRASSES PROVIDED WITHIN PARKING LOT ISLANDS
10-5-3(E)(5) PARKING AREA MEDIAN STANDARDS		
A MINIMUM OF 1 CANOPY TREE AND 15 SHRUBS OR NATIVE GRASSES SHALL BE PLANTED FOR EACH 50 LF OF PARKING AREA MEDIAN.	LENGTH OF PARKING AREA MEDIANS = 773 LF 773 LF / 50 LF = 15.5 15.5 x 1 CANOPY TREE = 16 = **16 CANOPY TREES REQUIRED** 15.5 x 15 SHRUBS OR NATIVE GRASSES = 231.9 = **232 SHRUBS OR NATIVE GRASSES REQUIRED**	16 CANOPY TREES AND 243 SHRUBS PROVIDED WITHIN PARKING AREA MEDIANS
10-5-3(E)(6) PARKING AREA ISLAND STANDARDS		
A MINIMUM OF 1 UNDERSTORY TREE SHALL BE PROVIDED FOR EVERY PARKING AREA ISLAND. IF THE ISLAND EXTENDS THE WIDTH OF A DOUBLE BAY, THEN 2 UNDERSTORY TREES SHALL BY PROVIDED.	**1 UNDERSTORY TREE PER PARKING AREA ISLAND REQUIRED.**	1 CANOPY TREE PER PARKING AREA ISLAND PROVIDED
10-5-3(C) BUILDING FOUNDATION LANDSCAPE		
FIVE (5) SQUARE FEET OF LANDSCAPE AREA SHALL BE PROVIDED PER LINEAR FOOT OF BUILDING FRONTAGE FACING THE FRONT AND EXTERIOR SIDE YARDS AND SHALL BE DISPERSED ALONG THE BUILDING FOUNDATION.	LENGTH OF BUILDING FOUNDATION = 748.05 LF 748.05 LF x 5 SQ FT = 3,740.25 SQ FT **3,740 SQ FT OF LANDSCAPING REQUIRED ALONG FRONT AND EXTERIOR SIDE OF BUILDING**	2,276.95 SQ FT OF LANDSCAPING PROVIDED ALONG FRONT OF BUILDING (SOUTH) 3,687.41 SQ FT OF LANDSCAPING PROVIDED ALONG EXTERIOR SIDE (WEST)
10-5-3(D) PARKING AREA PERIMETER LANDSCAPE		
ONE (1) SHRUB OR NATIVE GRASSES SHALL BE PLANTED FOR EVERY THREE (3) FEET OF LANDSCAPE AREA LENGTH.	LENGTH OF COUNTRYSIDE PARKWAY (NOT INCLUDING DRIVEWAYS) = 792.13 LF 792.13 LF / 3 LF = 264.04 **264 SHRUBS OR NATIVE GRASSES REQUIRED**	333 SHRUBS AND NATIVE GRASSES PROVIDED ALONG COUNTRYSIDE PARKWAY

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NORTH ARROW AND SCALE

NORTH

GRAPHIC SCALE IN FEET
0 35 70 140

SEAL AND SIGNATURES

COSTCO WHOLESALE
WAREHOUSE SITE
SWC OF MCHUGH ROAD &
EAST COUNTRYSIDE PKWY
YORKVILLE, IL

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09/20/2024	GREEN INK	
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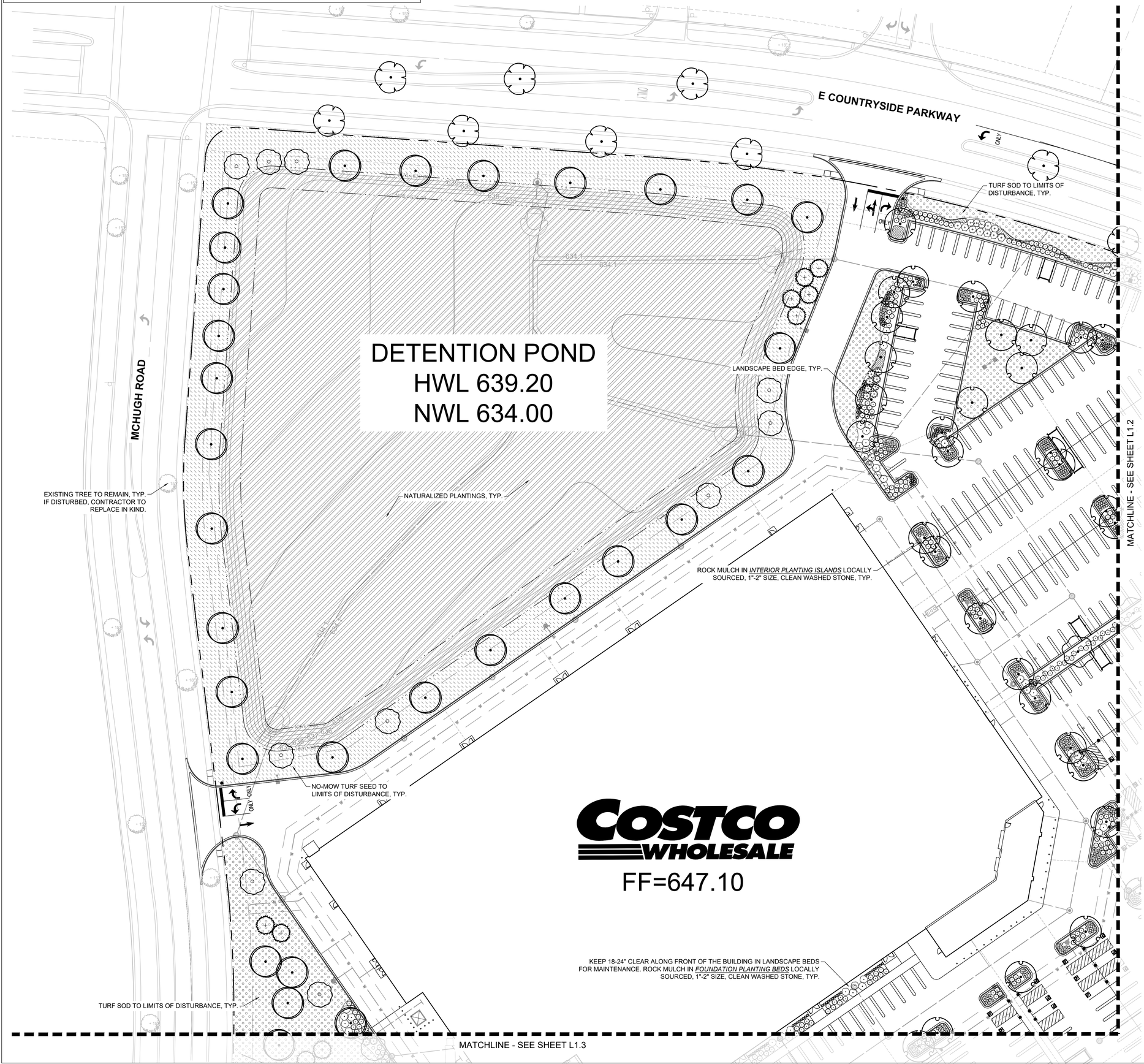
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OVERALL LANDSCAPE PLAN

AS INDICATED

NOTE: NOT FOR CONSTRUCTION

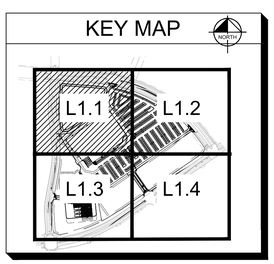
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- SMALL DECIDUOUS SHRUB - PARKING AREA MEDIAN
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- ORNAMENTAL GRASS - PARKING AREA PERIMETER
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- TURF SOD
- NO-MOW TURF SEED MIX
- NATURALIZED PLANTINGS

KEY MAP



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NORTH ARROW AND SCALE

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

SEAL AND SIGNATURES

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EAST COUNTRYSIDE PKWY
YORKVILLE, IL

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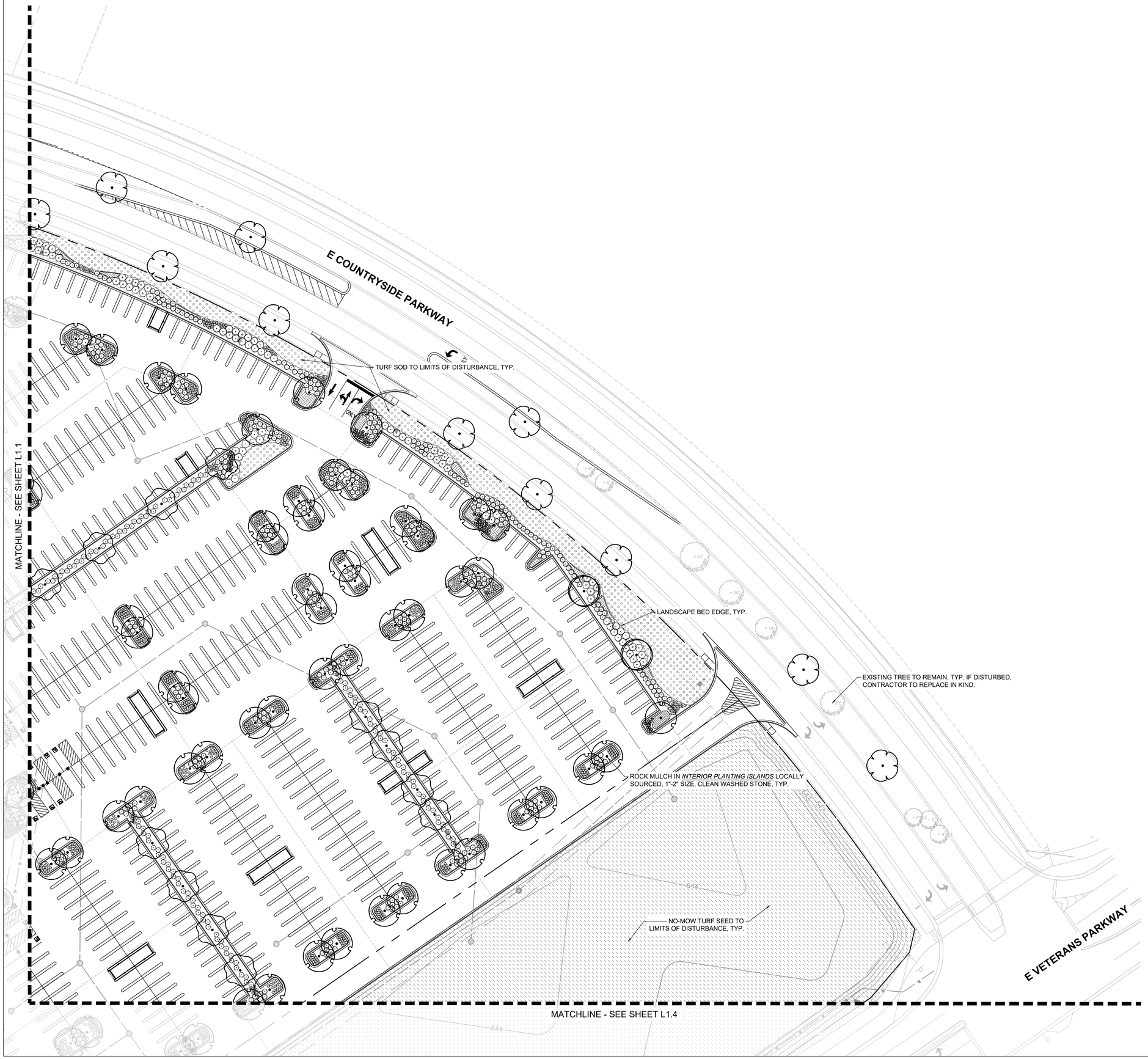
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LANDSCAPE PLAN

AS INDICATED

NOTE: NOT FOR CONSTRUCTION

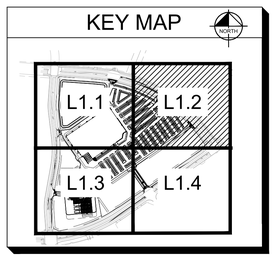
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NORTH ARROW AND SCALE

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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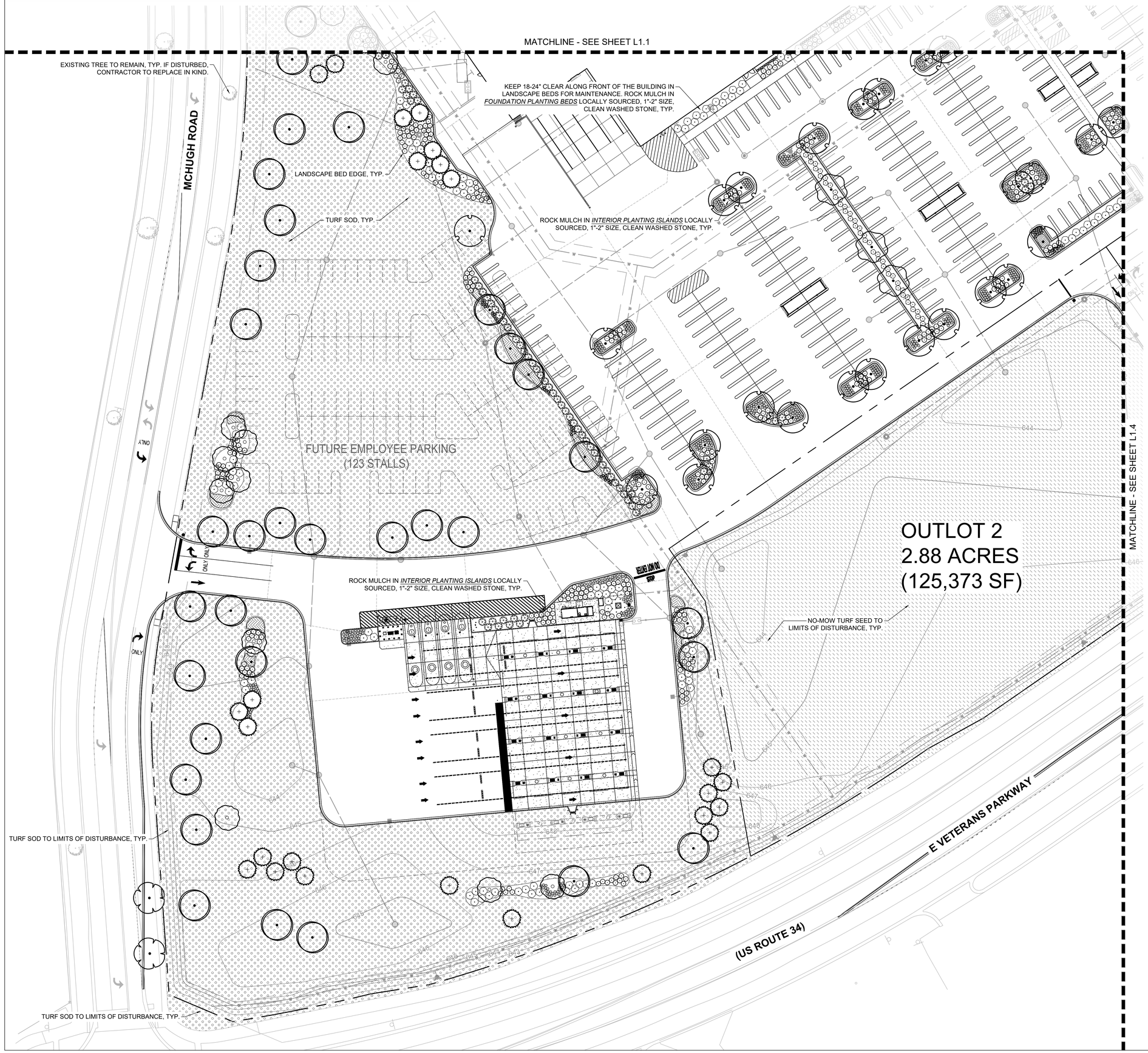
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LANDSCAPE PLAN

AS INDICATED

NOTE: NOT FOR CONSTRUCTION

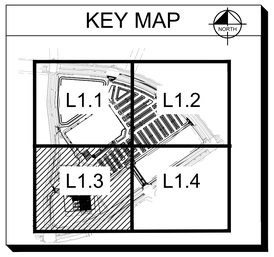
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KEY MAP



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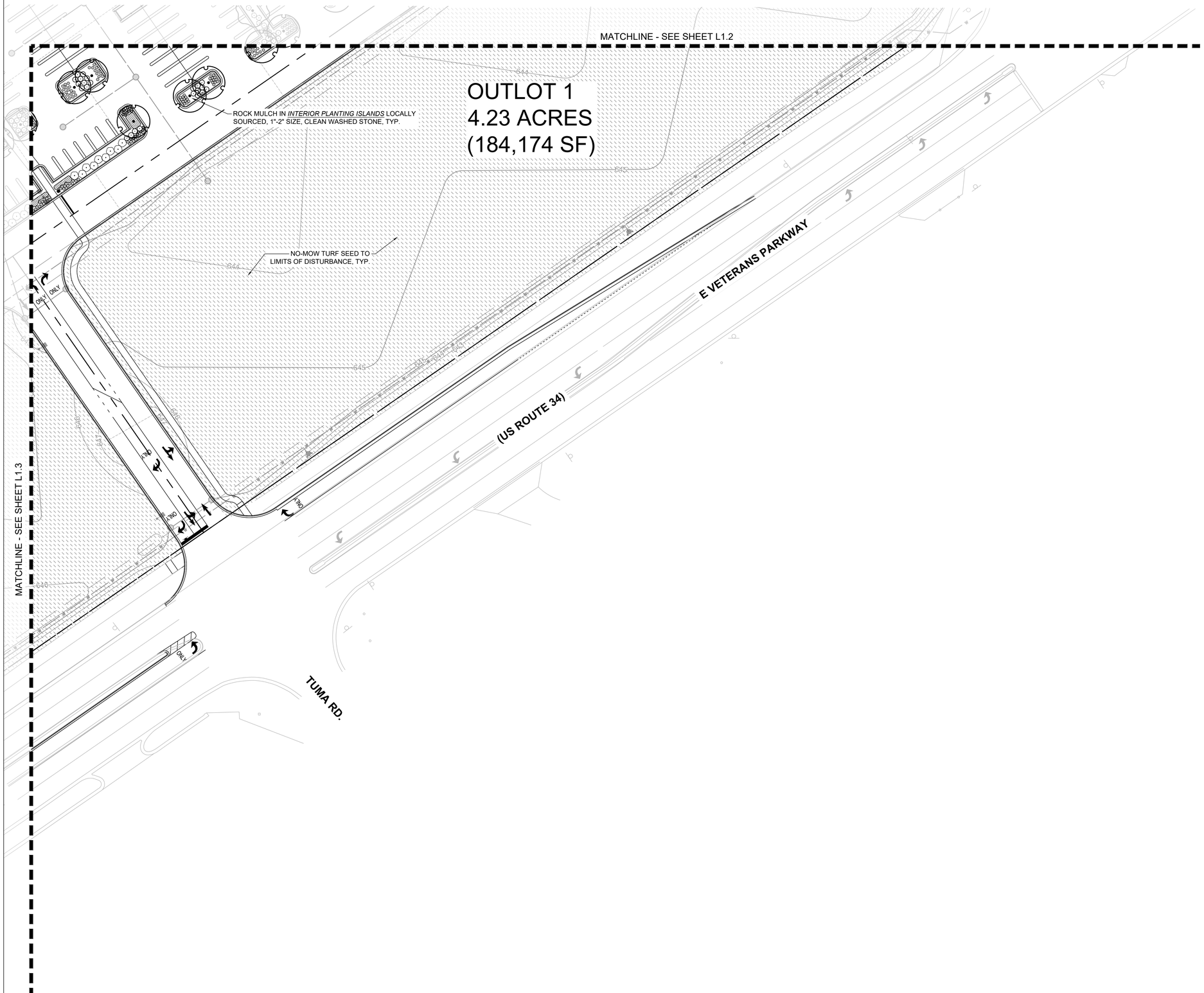
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LANDSCAPE PLAN

AS INDICATED

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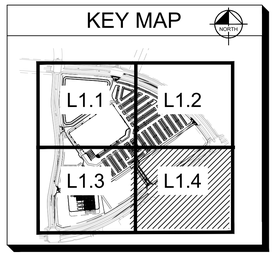
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L1.4

LANDSCAPE PLAN

AS INDICATED

NOTE: NOT FOR CONSTRUCTION

NOTE: ALL INTERIOR ISLANDS AND FOUNDATION LANDSCAPE TO BE MULCHED WITH ROCK MULCH.

PLANT SCHEDULE

BOTANICAL / COMMON NAME

TREES
ACER MIYABEI 'MORTON' / STATE STREET™ MIYABE MAPLE

ACER X FREEMANII 'AUTUMN BLAZE' / AUTUMN BLAZE MAPLE

CELTIS OCCIDENTALIS / COMMON HACKBERRY

GINKGO BILOBA 'AUTUMN GOLD' / AUTUMN GOLD MAIDENHAIR TREE

GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' / SKYLINE HONEY LOCUST

GYMNOCLADUS DIOICUS 'ESPRESSO' / KENTUCKY COFFEETREE

OSTRYA VIRGINIANA / AMERICAN HOPHORNBEAM

QUERCUS BICOLOR / SWAMP WHITE OAK

QUERCUS MACROCARPA / BURR OAK

TAXODIUM DISTICHUM 'SHAWNEE BRAVE' / SHAWNEE BRAVE BALD CYPRESS

TILIA AMERICANA 'BOULEVARD' / BOULEVARD AMERICAN LINDEN

ULMUS AMERICANA 'PRINCETON' / PRINCETON AMERICAN ELM

ULMUS X 'FRONTIER' / FRONTIER ELM

ULMUS X 'MORTON' / ACCOLADE™ ELM

ZELKOVA SERRATA 'GREEN VASE' / GREEN VASE JAPANESE ZELKOVA

EVERGREEN TREES
ABIES CONCOLOR / WHITE FIR

PICEA ABIES / NORWAY SPRUCE

PICEA OMORIKA / SERBIAN SPRUCE

PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' / VANDERWOLF'S PYRAMID LIMBER PINE

PSEUDOTSUGA MENZIESII / DOUGLAS FIR

ORNAMENTAL TREES
AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE APPLE SERVICEBERRY

MALUS X 'PRAIRIFIRE' / PRAIRIFIRE CRABAPPLE

SYRINGA RETICULATA 'IVORY SILK' / IVORY SILK JAPANESE TREE LILAC

SHRUBS
ARONIA MELANOCARPA 'MORTON' / IROQUOIS BEAUTY™ BLACK CHOKEBERRY

ARONIA MELANOCARPA 'UCONNAM165' / LOW SCAPE MOUND CHOKEBERRY

CEANOTHUS AMERICANUS / NEW JERSEY TEA

CORNUS ALBA 'BAILHALO' / IVORY HALO® TATARIAN DOGWOOD

CORNUS SANGUINEA 'CATO' / ARCTIC SUN® BLOODTWIG DOGWOOD

DEUTZIA X 'NCDX1' / YUKI SNOWFLAKE® DEUTZIA

DIERVILLA X 'G2X88544' / KODIAK® ORANGE DIERVILLA

FORSYTHIA X INTERMEDIA 'NIMBUS' / SHOW OFF® SUGAR BABY® DWARF FORSYTHIA

HYDRANGEA PANICULATA 'JANE' / LITTLE LIME® PANICLE HYDRANGEA

PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' / LITTLE DEVIL™ DWARF NINEBARK

PHYSOCARPUS OPULIFOLIUS 'SEWARD' / SUMMER WINE® NINEBARK

POTENTILLA FRUTICOSA 'JACKMANII' / JACKMAN'S BUSH CINQUEFOIL

SPIRAEA BETULIFOLIA 'TOR GOLD' / GLOW GIRL® BIRCHLEAF SPIREA

SPIRAEA JAPONICA 'NEON FLASH' / NEON FLASH JAPANESE SPIREA

SPIRAEA JAPONICA 'WALBUMA' / MAGIC CARPET JAPANESE SPIREA

VIBURNUM DENTATUM 'BLUE MUFFIN' / BLUE MUFFIN ARROWWOOD VIBURNUM

WEIGELA FLORIDA 'ALEXANDRA' / WINE & ROSES® WEIGELA

WEIGELA FLORIDA 'BRAMWELL' / FINE WINE® WEIGELA

WEIGELA FLORIDA 'VERWEIG' / MY MONET® WEIGELA

EVERGREEN SHRUBS
JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER

TAXUS X MEDIA 'TAUNTONII' / TAUNTON'S ANGLO-JAPANESE YEW

ORNAMENTAL GRASSES
CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS

PANICUM VIRGATUM 'CHEYENNE SKY' / CHEYENNE SKY PRAIRIE WINDS® SWITCH GRASS

PANICUM VIRGATUM 'HEAVY METAL' / HEAVY METAL SWITCH GRASS

PENNISETUM ALOPECUROIDES 'BURGUNDY BUNNY' / BURGUNDY BUNNY DWARF FOUNTAIN GRASS

PENNISETUM ALOPECUROIDES 'HAMELN' / HAMELN FOUNTAIN GRASS

PENNISETUM ALOPECUROIDES 'PIGLET' / PIGLET DWARF FOUNTAIN GRASS

SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PERENNIALS
ALLIUM X 'SUMMER BEAUTY' / SUMMER BEAUTY ORNAMENTAL ONION

AMSONIA TABERNAEMONTANA 'BLUE ICE' / BLUE ICE EASTERN BLUESTAR

ECHINACEA X 'BUTTERFLY KISSES' / BUTTERFLY KISSES CONEFLOWER

HEMEROCALLIS X 'ROSY RETURNS' / ROSY RETURNS DAYLILY

RUDBECKIA FULGIDA 'LITTLE GOLDSTAR' / LITTLE GOLDSTAR BLACK-EYED SUSAN

SEDUM X 'AUTUMN JOY' / AUTUMN JOY SEDUM

NATURALIZED POND PLANTINGS, POND DESIGN AND EXACT SEED MIXES TO BE DETERMINED AT A LATER DATE:

Pizzo NATIVE PLANT NURSERY

Pizzo Native Plant Nursery, LLC • 10729 Pine Road • Leland, IL 60531 • Phone : 815-981-8000 • www.pizzonursery.com

Economy Prairie Seed Mix (Dry-Mesic Soils)

MIX STATISTICS	
Average Mix Height (ft)	3.0
Median Mix Height (ft)	3.0
Species Heights (# of Occurrences in Mix)	**2' (11)**, 3' (8), 4' (8), 5' (3)
Number of Native Species in Mix	20
Native FQI	18.8
Native Mean C Value	4.2
Native Mean W Value	2.5
National Wetland Category	FACU+
Lbs/Acre of Native Seed	15.0
Seeds per Square Foot	90.7
Percent of Mix (by Seed Count) Requiring Stratification	#REF!

Designed as the most economical way to establish an ecologically functional prairie while maintaining the highest aesthetic value. This mix includes prairie species that quickly establish for a more immediate naturalized setting in sunny areas that remain mesic to dry for the most of the growing season. Over 55% of this mix is composed of wildflowers that provide an array of blooms from April through October. When installed and managed correctly, this mix typically begins flowering in its second growing season, starting with the yellow blooms of annual Partridge Pea and biennial Black-Eyed Susan. An additional colorful matrix of perennial species appears in the succeeding 3 to 5 years. This is a medium-short height prairie with an average height of 2.9' by seed count.

Grasses, Sedges, & Rushes

CODE	SCIENTIFIC NAME	COMMON NAME	C-VALUE	W-VALUE	WETNESS	HEIGHT		BLOOM	BLOOM TIME						SEEDS/OZ	OZ/ACRE	LB/ACRE	% OF MIX		GERMINATION	TOP SOW
						Min-Max	Typical	COLOR	A	M	J	J	A	S	O				by Weight	by Seed Count		
BOUCUR	*Bouteloua curtipendula*	Side-oats Grama	8	5	UPL	1.5-2.5'	2	N/A								6,000	32.00	2.00	13.29%	4.86%	N/A	
CXBREV	*Carex brevior*	Plains Oval Sedge	4	0	FAC	1-3'	2	N/A								29,000	2.00	0.13	0.83%	1.47%	CM-60	
SORNUT	*Sorghastrum nutans*	Indian Grass	5	3	FACU	3-7'	6	N/A								12,000	16.00	1.00	6.65%	4.86%	N/A	
ELYCAN	*Elymus canadensis*	Canada Wild Rye	4	3	FACU	3-5'	5	N/A								5,200	48.00	3.00	19.94%	6.32%	N/A	
PANVIR	*Panicum virgatum*	Switch Grass	5	0	FAC	3-6'	4	N/A								14,000	32.00	2.00	13.29%	11.34%	N/A	
SCHSCO	*Schizachyrium scoparium*	Little Bluestem	5	3	FACU	2-3'	3	N/A								15,000	32.00	2.00	13.29%	12.15%	N/A	
																Grass/Sedge Subtotals		**10.125**	**67.29%**	**40.99%**		

Wildflowers

CODE	SCIENTIFIC NAME	COMMON NAME	C-VALUE	W-VALUE	WETNESS	HEIGHT		BLOOM	BLOOM TIME						SEEDS/OZ	OZ/ACRE	LB/ACRE	% OF MIX		GERMINATION	TOP SOW
						Min-Max	Typical	COLOR	A	M	J	J	A	S	O				by Weight	by Seed Count		
ASCSYR	*Asclepias syriaca*	Common Milkweed	0	3	FACU	2-6'	3	Pink								4,000	4.00	0.25	1.66%	0.40%	CM-30	
CHAFAS	*Chamaecrista fasciculata*	Partridge Pea	5	3	FACU	6"-2'	2	Yellow								2,700	16.00	1.00	6.65%	1.09%	CM-10, H, I	
CORLAN	*Coreopsis lanceolata*	Sand Coreopsis	5	3	FACU	1.5-3'	2	Yellow								20,000	4.00	0.25	1.66%	2.02%	CM-30	
DESCAA	*Desmodium canadense*	Showy Tick Trefoil	4	3	FACU	3-6'	4	Purple								5,500	2.50	0.16	1.04%	0.35%	J, I	
ECHPUR	*Echinacea purpurea*	Purple Coneflower	3	5	UPL	2-5'	4	Purple								6,600	12.00	0.75	4.98%	2.00%	N/A	
HELHEL	*Heliopsis helianthoides*	Early Sunflower	5	3	FACU	3-5'	5	Yellow								6,300	8.00	0.50	3.32%	1.28%	CM-30	
MONFIS	*Monarda fistulosa*	Wild Bergamot	4	3	FACU	2.5-4'	4	Purple								70,000	2.00	0.13	0.83%	3.54%	N/A	
PENDIG	*Penstemon digitalis*	Foxglove Beardtongue	4	0	FAC	2-3'	3	White								130,000	1.75	0.11	0.73%	5.76%	CM-30, G	
RUDHIR	*Rudbeckia hirta*	Black-eyed Susan	1	3	FACU	2-3'	2	Yellow								92,000	16.00	1.00	6.65%	37.25%	CM-30	
SILINT	*Silphium integrifolium*	Rosin Weed	5	5	UPL	2-6'	5	Yellow								1,200	3.00	0.19	1.25%	0.09%	CM-60	
SYMNOV	*Symphyotrichum novae-angliae*	New England Aster	4	-3	FACW	3-5'	4	Purple								66,000	1.00	0.06	0.42%	1.67%	CM-60	
TRAOHI	*Tradescantia ohiensis*	Ohio Spiderwort	2	3	FACU	2-4'	3	Blue								8,000	1.50	0.09	0.62%	0.30%	CM-120 or M, G	
VERSTR	*Verbena stricta*	Hoary Vervain	4	5	UPL	1-3'	2	Blue								28,000	3.00	0.19	1.25%	2.13%	CM-60	
ZIZAUR	*Zizia aurea*	Golden Alexanders	7	0	FAC	1-2.5'	2	Yellow								11,000	4.00	0.25	1.66%	1.11%	CM-60 or M, G	Yes
																Wildflower Subtotals		**4.922**	**32.71%**	**59.01%**		
																Mix TOTALS		**15.047**	**100.00%**	**100.00%**		

NO-MOW TURF SEED MIX

BOTANICAL NAME	COMMON NAME	LBS / ACRE	% OF TOTAL
GRASSES, SEDGES, & RUSHES			
Lolium perenne	Perennial Rye	25.0	13%
Agrostis gigantea	Red Top	15.0	8%
Festuca rubra	Creeping Red Fescue	80.0	40%
Festuca arundinacea	Tall Fescue	20.0	10%
Festuca ovina	Sheep's Fescue	20.0	10%
Poa pratensis	Kentucky Bluegrass	40.0	20%
	SEED MIX TOTAL LBS PER ACRE:	**200**	

CONSULTANT

Kimley»Horn

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WWW.KIMLEY-HORN.COM

NORTH ARROW AND SCALE

SEAL AND SIGNATURES

COSTCO WHOLESALE
WAREHOUSE SITE
SWC OF MCHUGH ROAD &
EAST COUNTRYSIDE PKWY
YORKVILLE, IL

DATE	ISSUED FOR	REV
09/20/2024	GREEN INK	
11/15/2024	CITY SUBMITTAL	

L2.0

LANDSCAPE NOTES AND DETAILS

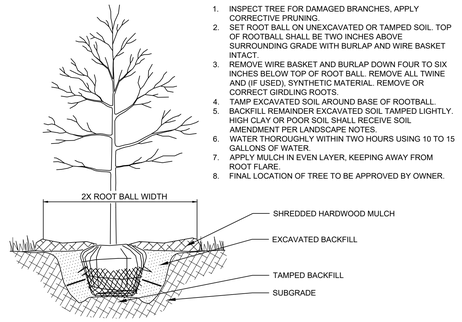
AS INDICATED

NOTE: NOT FOR CONSTRUCTION

NOTE: ALL INTERIOR ISLANDS AND FOUNDATION LANDSCAPE TO BE MULCHED WITH ROCK MULCH.

NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

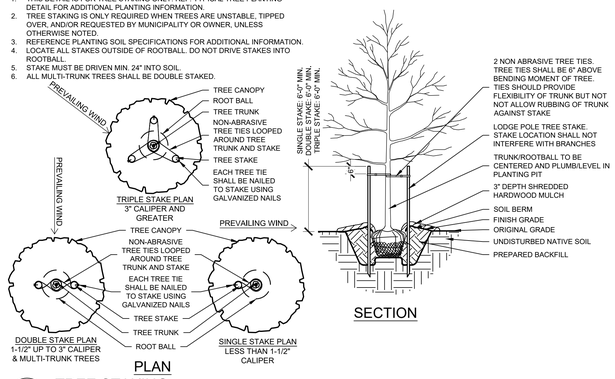


1 TREE PLANTING

NTS

NOTES:

1. THIS DETAIL IS FOR TREE STAKING ONLY. REF. TYPICAL TREE PLANTING DETAIL FOR ADDITIONAL PLANTING INFORMATION.
2. TREE STAKING IS ONLY REQUIRED WHEN TREES ARE UNSTABLE, TIPPED OVER, AND/OR REQUESTED BY MUNICIPALITY OR OWNER, UNLESS OTHERWISE NOTED.
3. REFERENCE PLANTING SOIL SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. LOCATE ALL STAKES OUTSIDE OF ROOTBALL. DO NOT DRIVE STAKES INTO ROOTBALL.
5. STAKE MUST BE DRIVEN MIN. 24" INTO SOIL.
6. ALL MULTI-TRUNK TREES SHALL BE DOUBLE STAKED.

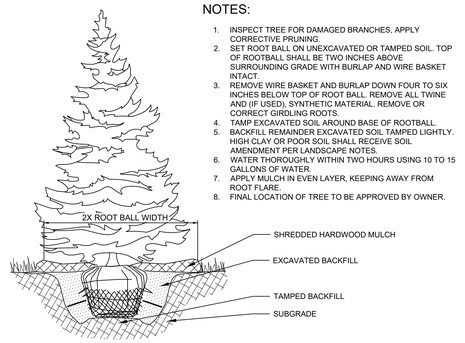


2 TREE STAKING

N.T.S.

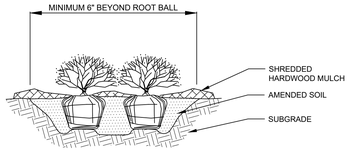
NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.



3 EVERGREEN TREE PLANTING

NTS



NOTES:

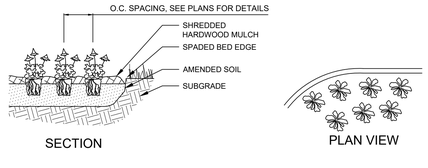
1. APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL OR CONTAINER ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL (CONTAINER) SHALL BE ONE INCH ABOVE SURROUNDING GRADE. FOR LARGER SHRUBS WITHIN PLANTING BED DIG A DEEPER PIT ONLY FOR THOSE SHRUBS.
3. REMOVE BURLAP FROM TOP HALF THE LENGTH OF ROOTBALL. TWINE AND (IF USED) SYNTHETIC MATERIAL SHALL BE REMOVED FROM PLANTING BED. FOR CONTAINER GROWN SHRUBS, REMOVE CONTAINER AND LOOSEN ROOTS PRIOR TO INSTALLATION.
4. REMOVE OR CORRECT GIRDLING ROOTS.
5. PLUMB AND BACKFILL WITH AMENDED SOIL PER LANDSCAPE NOTES. WATER THOROUGHLY WITHIN TWO HOURS.
6. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE. MULCH LIMITS FOR SHRUBS EXTEND TO ALL LIMITS OF PLANTING BED, SEE PLANS FOR BED LAYOUTS.

4 SHRUB PLANTING

NTS

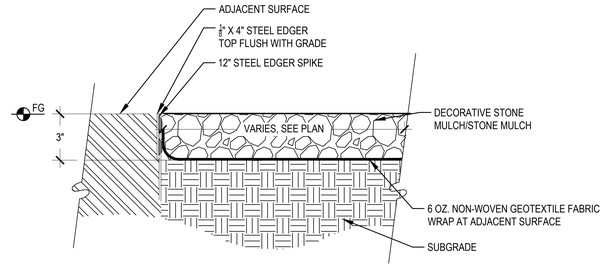
NOTES:

1. EXCAVATE PLANTING BED.
2. BED HEIGHT IS TO BE 2" ABOVE FINISH GRADE AND WELL DRAINED.
3. REMOVE CONTAINER, SCORE SOIL MASS TO REDIRECT AND PREVENT CIRCLING ROOTS. CORRECT GIRDLING ROOTS.
2. PLANT MATERIAL SHALL BE LAID OUT BY FOLLOWING THE BED EDGE, WORKING TOWARDS THE CENTER OF THE BED USING TRIANGULAR (STAGGERED) SPACING AS PLAUSIBLE.
3. PLUMB AND BACKFILL WITH PLANTING MIX AS SPECIFIED IN LANDSCAPE NOTES.
4. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE. MULCH LIMITS FOR PERENNIALS/GROUNDCOVER EXTEND TO ALL LIMITS OF PLANTING BED, SEE PLANS FOR BED LAYOUTS.
5. SPACING TO BE AS SPECIFIED IN THE PLANT LIST. PERENNIALS SHALL BE PLACED WITH THEIR CENTER 24" FROM EDGE OF BED.



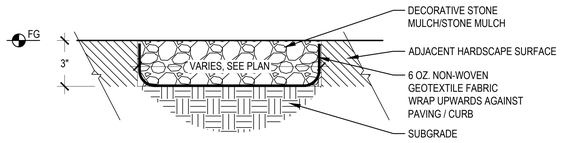
5 PERENNIAL PLANTING

NTS



6 STONE MULCH

3" = 1'-0"



7 STONE MULCH ADJACENT TO HARDSCAPE

3" = 1'-0"

YORKVILLE, IL PARKWAY TREE NOTES:

1. NO TREE SHALL BE PLANTED CLOSER THAN THIRTY FEET (30') OF THE RIGHT=OF-WAY INTERSECTION.
2. IF A STOP OF YIELD SIGN IS LOCATED AT AN INTERSECTION, NO TREE, WHEN APPROACHING THE INTERSECTION, SHALL BE PLANTED CLOSER THAN 50 LINEAL FEET IN FRONT OF A SIGN.
3. TREES SHALL HAVE A MINIMUM SPACING OF TWENTY FEET (20') FROM LIGHT POLES, STREET SIGNS, FIRE HYDRANTS AND ANY OTHER SUCH ITEMS THAT MAY, IN THE OPINION OF THE CITY PLANNER OR PUBLIC WORKS DIRECTOR, REQUIRE SIMILAR INTERVALS.

LANDSCAPE NOTES

SPECIFICATIONS SHALL SUPERCEDE LANDSCAPE NOTES.

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION OR DURING THE SPECIFIED MAINTENANCE PERIOD. CALL FOR UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL REPORT ANY DISCREPANCY IN PLAN VS. FIELD CONDITIONS IMMEDIATELY TO THE LANDSCAPE ARCHITECT, PRIOR TO CONTINUING WITH THAT PORTION OF WORK. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
5. CONFORM TO AMERICAN ASSOCIATION OF NURSERYMEN'S SPECIFICATIONS TRUE TO NAME. PLANTS TO BE FIRST QUALITY, WELL FOLIATED WITH WELL-DEVELOPED ROOT SYSTEMS AND A NORMAL, WELL-SHAPED TRUNK AND LEADER, LIMBS, STEMS AND A HEAD. PLANTS DEEMED UNSUITABLE MAY BE REJECTED BEFORE OR AFTER DELIVERY. PLANT MATERIAL IS REQUIRED TO BE FREE OF EVIDENCE OF DISEASE, INSECTS, INSECT EGGS, AND LARVAE. OVERSIZE PLANTS MAY BE USED WITH APPROVAL, BUT AT NO INCREASE IN PRICE. BALLS THAT ARE CRACKED, BROKEN OR DRY TO THE CENTER WILL BE REJECTED.
6. THE OWNER'S REPRESENTATIVE MAY REJECT ANY PLANT MATERIALS THAT ARE DISEASED, DEFORMED, OR OTHERWISE NOT EXHIBITING SUPERIOR QUALITY.
7. GUARANTEE TREES, SHRUBS AND GROUND COVER FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM NEGLECT BY OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND LANDSCAPE CONTRACTOR'S CONTROL.
8. AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE.
9. PLANTS TO BE INSTALLED AS PER ANSI STANDARD PLANTING PRACTICES.
10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
11. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
12. PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
13. WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
14. STAKING OF TREES AS NEEDED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
15. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
16. TOPSOIL SHALL BE HIGH-QUALITY, AMENDED PER AGRONOMICAL SOIL REPORT AND BE AND GRADED BY GENERAL CONTRACTOR TO THE FOLLOWING MINIMUM DEPTHS BELOW FINISHED GRADE. REFER TO SOIL SPECIFICATION FOR MORE DETAIL.
    - PLANTING AREAS WITHIN 10 FEET OF BUILDINGS: 6 INCHES
    - OTHER PLANTING AREAS: 4 INCHES
    - LANDSCAPE ISLANDS: 6 INCHES
    - TURF AREAS: 4 INCHES
17. SEED/SOD LIMIT LINES ARE APPROXIMATE. CONTRACTOR SHALL SEED/SOD ALL AREAS WHICH ARE DISTURBED BY GRADING WITH THE SPECIFIED SEED/SOD MIXES. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. SOD/SEED SHALL BE LOCAL HARDY TURF GRASS MIX UNLESS, OTHERWISE NOTED.
18. EDGING TO BE A SPADED EDGE UNLESS INDICATED OTHERWISE ON THE PLANS. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. A SPADED BED EDGE SHALL SEPARATE MULCH BEDS FROM TURF OR SEEDED AREAS. A SPADED EDGE IS NOT REQUIRED ALONG CURBED EDGES.
19. CONTRACTOR SHALL INSTALL NATURAL BROWN SHREDDED HARDWOOD MULCH AT A 3" DEPTH TO ALL TREES, SHRUB, PERENNIAL, AND GROUNDCOVER AREAS. TREES PLACED IN AREA COVERED BY TURF SHALL RECEIVE A 4 FT WIDE MAXIMUM TREE RING WITH 3" DEPTH SHREDDED HARDWOOD MULCH. ALL FOUNDATION PLANTING AREAS AND INTERIOR PARKING ISLANDS SHALL BE INSTALLED WITH DECORATIVE ROCK MULCH.
20. INSTALLATION OF TREES WITHIN PARKWAYS SHALL BE COORDINATED IN THE FIELD WITH LOCATIONS OF UNDERGROUND UTILITIES. TREES SHALL NOT BE LOCATED CLOSER THAN 5' FROM UNDERGROUND UTILITY LINES AND NO CLOSER THAN 10' FROM UTILITY STRUCTURES.
21. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
22. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
23. DO NOT DISTURB THE EXISTING PAVING, LIGHTING, OR LANDSCAPING THAT EXISTS ADJACENT TO THE SITE UNLESS OTHERWISE NOTED ON PLAN.
24. PLANT QUANTITIES SHOWN ARE FOR THE CONVENIENCE OF THE OWNER AND JURISDICTIONAL REVIEW AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES AS DRAWN.
25. SEE IRRIGATION PLANS FOR IRRIGATION AND IRRIGATION NOTES.
26. SEE ELECTRICAL PLANS FOR SITE LIGHTING.

CONSULTANT

Kimley»Horn

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NORTH ARROW AND SCALE

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COSTCO WHOLESALE

WAREHOUSE SITE

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YORKVILLE, IL

DATE	ISSUED FOR	REV
09/20/2024	GREEN INK	
11/15/2024	CITY SUBMITTAL	

L2.1

LANDSCAPE NOTES AND DETAILS

AS INDICATED

PROJECT DATA

NET WAREHOUSE AREA	**153,820 SF**
ENCLOSED CANOPY	3,560 SF
ENVELOPE / EXTERIOR WALL	1,916 SF
FIRE DEPT ROOM	464 SF
MECHANICAL ROOM	1,214 SF
MSB	588 SF
TOTAL BUILDING - GROSS	161,562 SF

RACK COUNT -(COLD CLIMATE)

TYPE	PALLET TOTAL	RACK TOTAL
GROCERY PALLETS	76	0
GROCERY RACKS (15 FT)	626	313
GROCERY RACKS (HALF)	14	4
HARDLINE PALLETS	36	0
HARDLINE RACKS (15 FT)	340	170
CENTER SECTION	19,847 SF	

0 8' 16' 32'

1/16" = 1'-0"

COSTCO WHOLESALE

YORKVILLE, IL

1101 Second Ave, Ste 100
Seattle, WA 98101

206 962 6500
MG2.com

22-6229-01
NOVEMBER 15, 2024

FLOOR PLAN

DD21-03

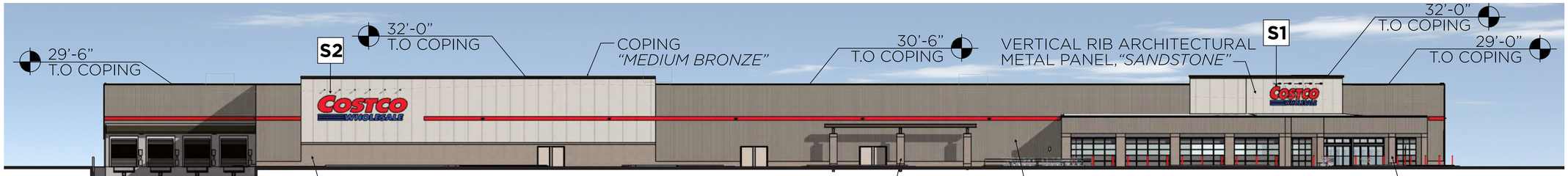
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COSTCO WHOLESALE

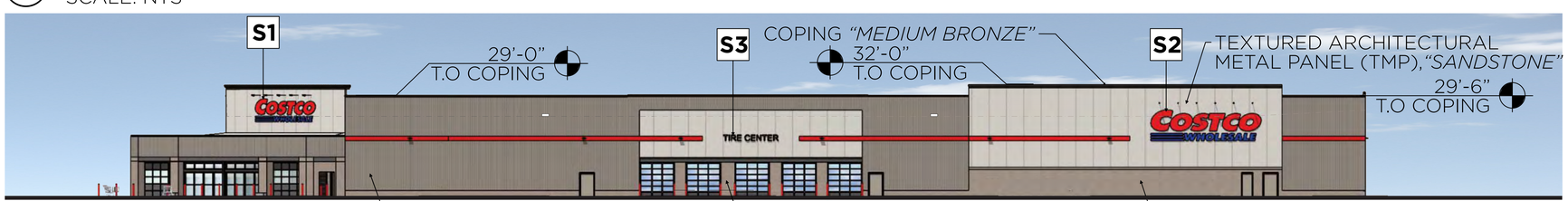
YORKVILLE, ILLINOIS

FLOOR PLAN

NOVEMBER 15, 2024



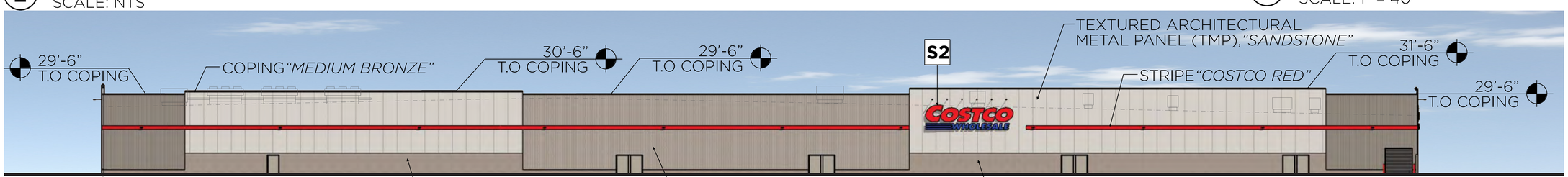
1 SOUTH ELEVATION
SCALE: NTS



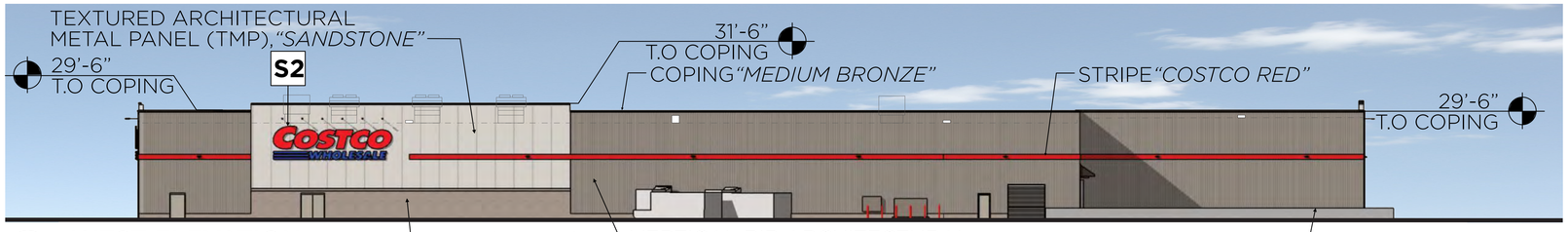
2 EAST ELEVATION
SCALE: NTS



3 ENTRY ELEVATION
SCALE: 1" = 40'



4 NORTH ELEVATION
SCALE: NTS



5 WEST ELEVATION
SCALE: NTS

SIGN TABLE

IDENTITY	QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF
S1	1	COSTCO WHOLESALE	5'-0" C	175 SF	***175 SF***
S2	4	COSTCO WHOLESALE	6'-0" C	280 SF	***1120 SF***
S3	1	TIRE CENTER	17'-4" x 1'-9"	31 SF	***31 SF***
			TOTAL SIGN AREA:		**1326 SF**

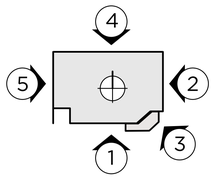


6 SIGN PACKAGE

MATERIAL PERCENTAGES

MATERIAL	ELEVATION SOUTH	EAST	NORTH	WEST	ENTRY	TOTAL
SMOOTH FACE CMU "*BUFF*"	1,403 SF **11%**	1,151SF **14%**	2,347 SF **18%**	1,188 SF **12%**	905 SF **21%**	**14.61%**
GLAZING		390 SF **5%**			993 SF **23%**	**2.89%**
TEXTURED ARCHITECTURAL METAL PANEL"*SANDSTONE*"	2,549 SF **21%**	2,867SF **34%**	5,850 SF **44%**	1,911 SF **20%**	1,470 SF **34%**	**30.60%**
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"*TAUPE*"	7,765 SF **63%**	3,925 SF **47%**	5,108 SF **38%**	6,557 SF **68%**	939 SF **22%**	**50.76%**
CONCRETE "*NATURAL*"	546 SF **4%**					**1.14%**

* CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS



COSTCO WHOLESALE
YORKVILLE, IL

1101 Second Ave, Ste 100
Seattle, WA 98101
206 962 6500
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22-6229-01
NOVEMBER 15, 2024

ELEVATIONS

DD13-05

COSTCO WHOLESALE

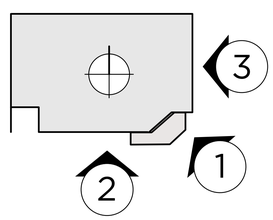
YORKVILLE, ILLINOIS

ELEVATIONS

NOVEMBER 15, 2024

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1 ENTRY CANOPY PERSPECTIVE



2 SOUTHWEST PERSPECTIVE



3 NORTHEASTT PERSPECTIVE

COSTCO WHOLESALE

YORKVILLE, ILLINOIS

RENDERINGS

NOVEMBER 15, 2024

COSTCO WHOLESALE

YORKVILLE, IL

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NOVEMBER 15, 2024

RENDERINGS

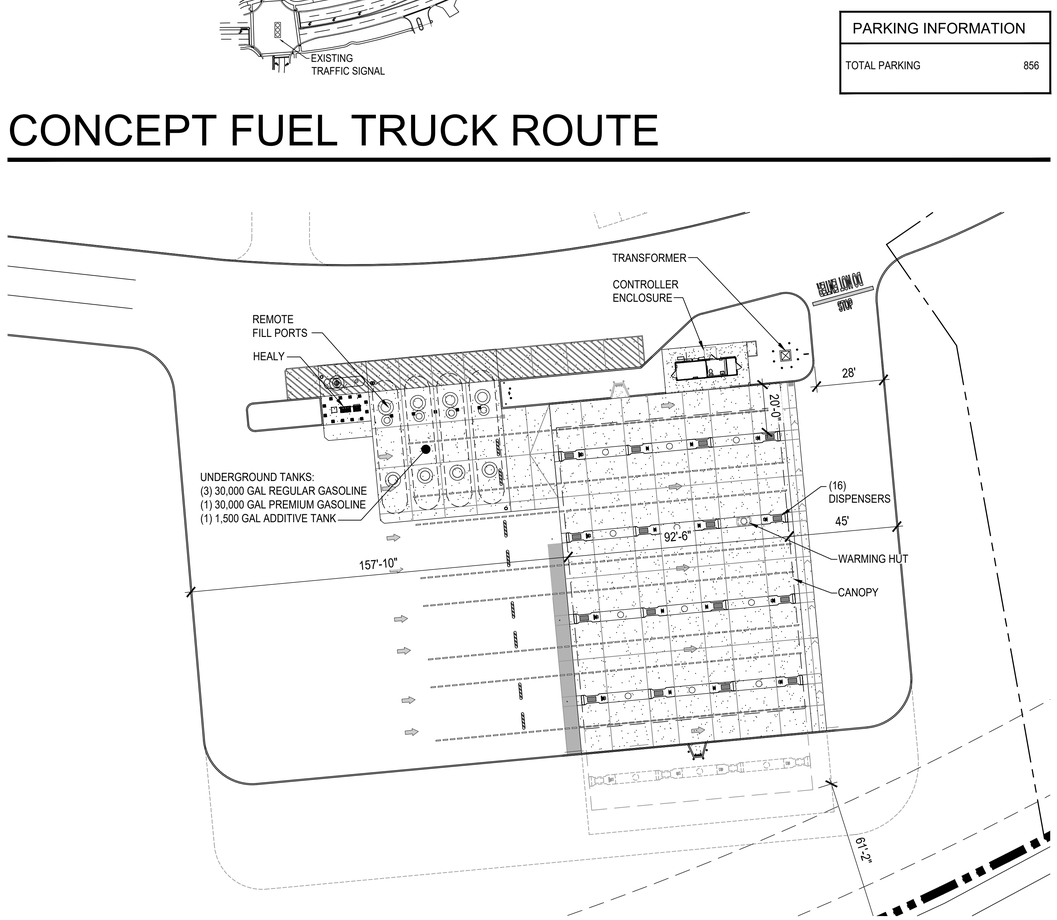
DD14-05

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PARKING INFORMATION	
TOTAL PARKING	856

CONCEPT FUEL TRUCK ROUTE

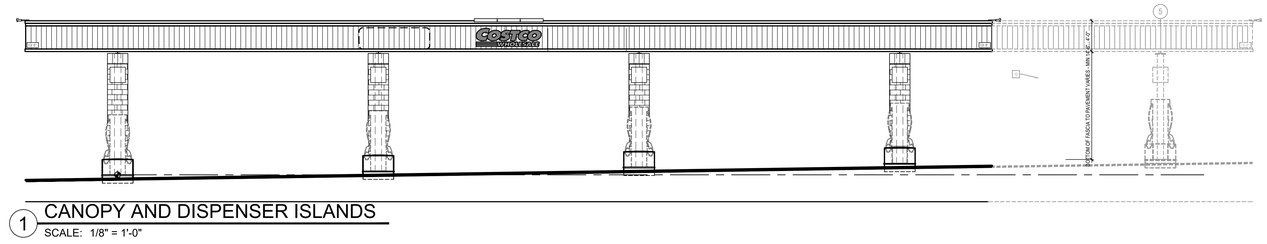


DETAIL SITE PLAN

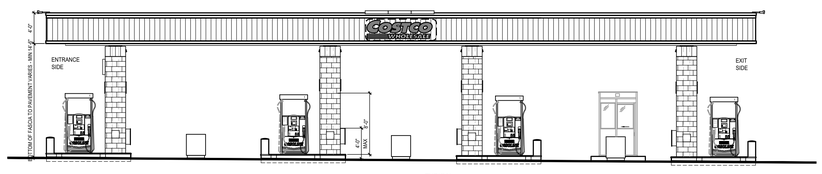
NO DIESEL

COSTCO WHOLESALE

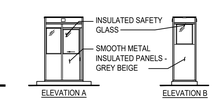
YORKVILLE, ILLINOIS



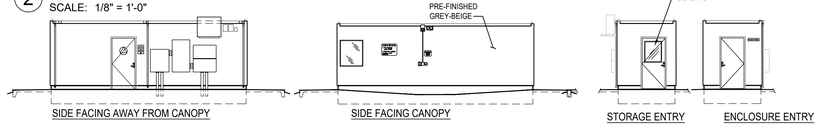
1 CANOPY AND DISPENSER ISLANDS
SCALE: 1/8" = 1'-0"



2 CANOPY AND DISPENSER ISLANDS
SCALE: 1/8" = 1'-0"



3 WARMING HUT ELEVATIONS
SCALE: 1/8" = 1'-0"



4 CONTROLLER ENCLOSURE ELEVATIONS
SCALE: 1/8" = 1'-0"

CONCEPTUAL STACKING	
CARS @ DISPENSERS	32
CARS STACKING	40
TOTAL CARS IN AREA	72



STACKING PLAN

FUEL FACILITY PLAN

NOVEMBER 15, 2024

COSTCO WHOLESALE
YORKVILLE, IL

1101 Second Ave, Ste 100
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22-6229-01
NOVEMBER 15, 2024

FUEL FACILITY
PLAN

DD41-02

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TRAFFIC IMPACT STUDY

REPORT FOR:

Costco Wholesale, Yorkville



US 34/VETERANS PARKWAY & COUNTRYSIDE PARKWAY
YORKVILLE, ILLINOIS

PREPARED BY:

V3 Companies
7325 Janes Avenue
Woodridge, Illinois 60517

V3 Project No. 240757

November 13, 2024
Updated December 30, 2024

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I. INTRODUCTION

V3 Companies has been retained by Costco Wholesale Corporation to conduct a traffic impact study for a proposed Costco Warehouse located at the northeast corner of US 34/Veterans Parkway and McHugh Road in the City of Yorkville, Illinois. The site is bounded by Countryside Parkway to the north, US 34/Veterans Parkway to the southeast, and McHugh Road to the west. A location map is included as Figure 1.

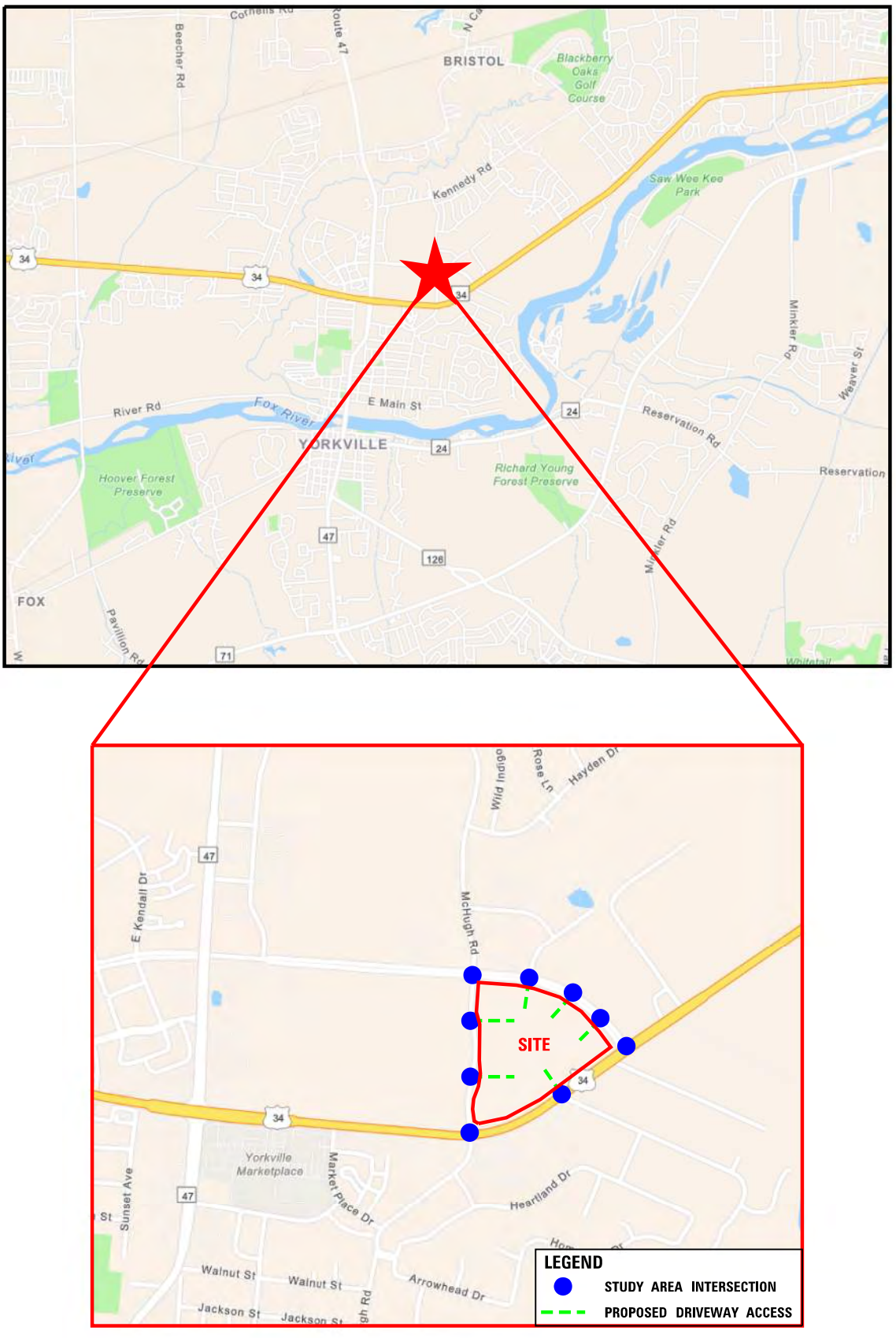
The proposed development consists of a Costco Wholesale building with approximately 161,064 square feet and a members-only gas station with 32 fueling positions when the store opens. The site plan illustrates the future expansion of the gas station to provide an additional eight fueling positions. The proposed access plan includes a right-in/right-out/left-in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a second full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway. The site plan proposes 859 parking stalls. Figure 2 illustrates the proposed site plan with driveway locations.

The purpose of this study is to evaluate the potential traffic impacts of the proposed Costco Wholesale warehouse and the members-only gas station. Traffic estimates are projected to 2031, which is five years beyond the potential build out in 2026, based on traffic projections from CMAP.

The study area includes the following intersections as well as the proposed driveways to the site.

- Countryside Parkway and McHugh Road (unsignalized)
- Countryside Parkway and Crimson Lane/Costco Driveway 1 (unsignalized)
- Countryside Parkway and Costco Driveway 2 (unsignalized)
- Countryside Parkway and Costco Driveway 3 (unsignalized)
- US Route 34/Veterans Parkway and Countryside Parkway (signalized)
- US Route 34/Veterans Parkway and Tuma Road/Costco Driveway 4 (unsignalized)
- US Route 34/Veterans Parkway and McHugh Road (signalized)
- McHugh Road and Costco Driveway 5 (unsignalized)
- McHugh Road and Costco Driveway 6 (unsignalized)

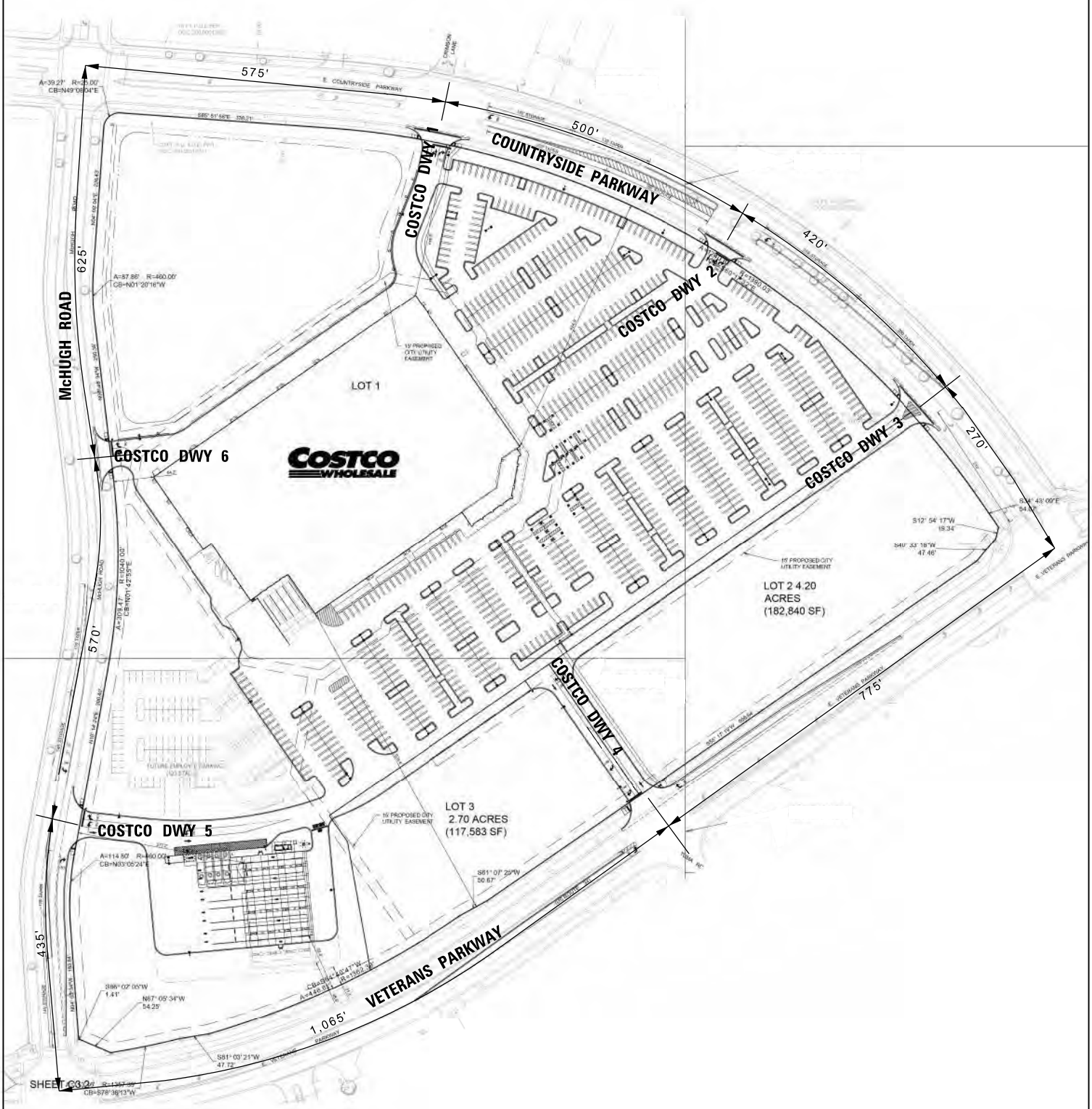
This report includes a description of existing conditions, data collection and capacity analysis, evaluation of data, traffic signal warrant analysis and turn lane warrant analysis, and conclusions.



COSTCO WHOLESALE CORPORATION
YORKVILLE, IL

FIGURE 1
SITE LOCATION MAP

YORKVILLE ILLINOIS



NOT TO SCALE

COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 2 CONCEPTUAL SITE PLAN

YORKVILLE ILLINOIS

II. PROJECT CONDITIONS

Land Uses

The land uses near the project site primarily consist of residential and retail uses as well as undeveloped land. The surrounding land uses are illustrated in Figure 3.

Roadway System

The characteristics of the roadways in the vicinity of the site are presented below. The existing lane configurations in the study area are illustrated in Figure 4.

Roadway Descriptions

US 34/Veterans Parkway is an east/west roadway classified as a Strategic Regional Arterial (SRA) with a posted speed limit of 45 mph adjacent to the proposed development. US 34 provides two travel lanes in each direction that widens to include a striped median that facilitates auxiliary turn lanes at intersections. US 34 is under jurisdiction of the Illinois Department of Transportation. The average daily traffic (ADT) volume on US 34 to the east of McHugh Road was 16,200 vehicles per day in 2023, while the west side was 14,00 vehicles per day based on the IDOT database.

Countryside Parkway is an east/west roadway classified as a minor collector with a posted speed of 40 mph that curves to intersect US 34. Countryside Parkway consists of a five-lane boulevard section that includes turn lanes at intersections. There are raised concrete and landscaped medians along the Countryside Parkway corridor. Countryside Parkway is under municipal jurisdiction. The average daily traffic (ADT) volume on Countryside Parkway to the east of McHugh Road was 1,600 vehicles per day in 2019, while the west side was 3,600 vehicles per day based on the IDOT database.

McHugh Road is a north/south roadway classified as a major collector with one travel lane in each direction and a striped median as a two-way left turn lane that facilitates auxiliary turn lanes at major intersections. McHugh Road is under municipal jurisdiction and has a posted speed limit of 35 mph. McHugh Road has a 2019 ADT of 2,000 vehicles per day north of US 34 while the south side was 2,950 vehicles per day based on the IDOT database.

Tuma Road is an east/west roadway classified as a local road with one travel lane in each direction. Tuma Road provides access to the existing residential development south of US 34. The posted speed limit is 30 mph and is under township jurisdiction with a 2019 ADT of 1,100 vehicles per day based on the IDOT database.

Crimson Lane is a north/south roadway classified as a local road with one travel lane in each direction and a striped median as a two-way left turn lane that facilitates auxiliary turn lanes at major intersections.

Crimson Lane provides access to the existing Children of America Yorkville, the Police Station, and City Hall facilities north of Countryside Parkway. Crimson Lane is under municipal jurisdiction.

Intersection Descriptions

US 34/Veterans Parkway and Countryside Parkway is a coordinated signalized three-leg intersection. The northeast-bound approach of US 34 consists of one left turn lane and two through lanes while the southwest-bound approach consists of two through lanes and one right turn lane. The southbound approach on Countryside Parkway consists of one left turn lane and one right turn lane. All approaches operate with a protected/permitted left turn movement. The traffic signal was observed during the peak hours and found that the cycle length for the weekday am is 110 seconds, the weekday pm is 120 seconds and Saturday midday is 100 seconds.

US 34/Veterans Parkway and McHugh Road is a coordinated signalized intersection. The northbound approach of McHugh Road consists of one left turn lane, one through lane, and one right turn lane while the southbound approach consists of one left turn lane and one shared through/right turn lane. The eastbound and westbound approaches of US 34 consist of one left turn lane, one through lane, and one shared through/right turn lane. All approaches operate with a protected/permitted left turn movement. The traffic signal was observed during the peak hours and found that the cycle length for the weekday am is 110 seconds, the weekday pm is 120 seconds and Saturday midday is 100 seconds.

McHugh Road and Countryside Parkway is an unsignalized all-way stop-controlled intersection. The northbound and southbound approaches of McHugh Road consist of one left turn lane and one shared through/right turn lane. The eastbound and westbound approaches of Countryside Parkway consists of one left turn lane and one shared through/right turn lane.

US 34/Veterans Parkway and Tuma Road is a minor leg stop-controlled t-intersection with the northbound approach of Tuma Road signed as the stop approach. The northeast-bound approach of US 34 consists of one through lane and one shared through/right turn lane while the southwest-bound approach consists of one left turn lane and two through lanes. The northbound approach of Tuma Road consists of one shared left turn/right turn lane.

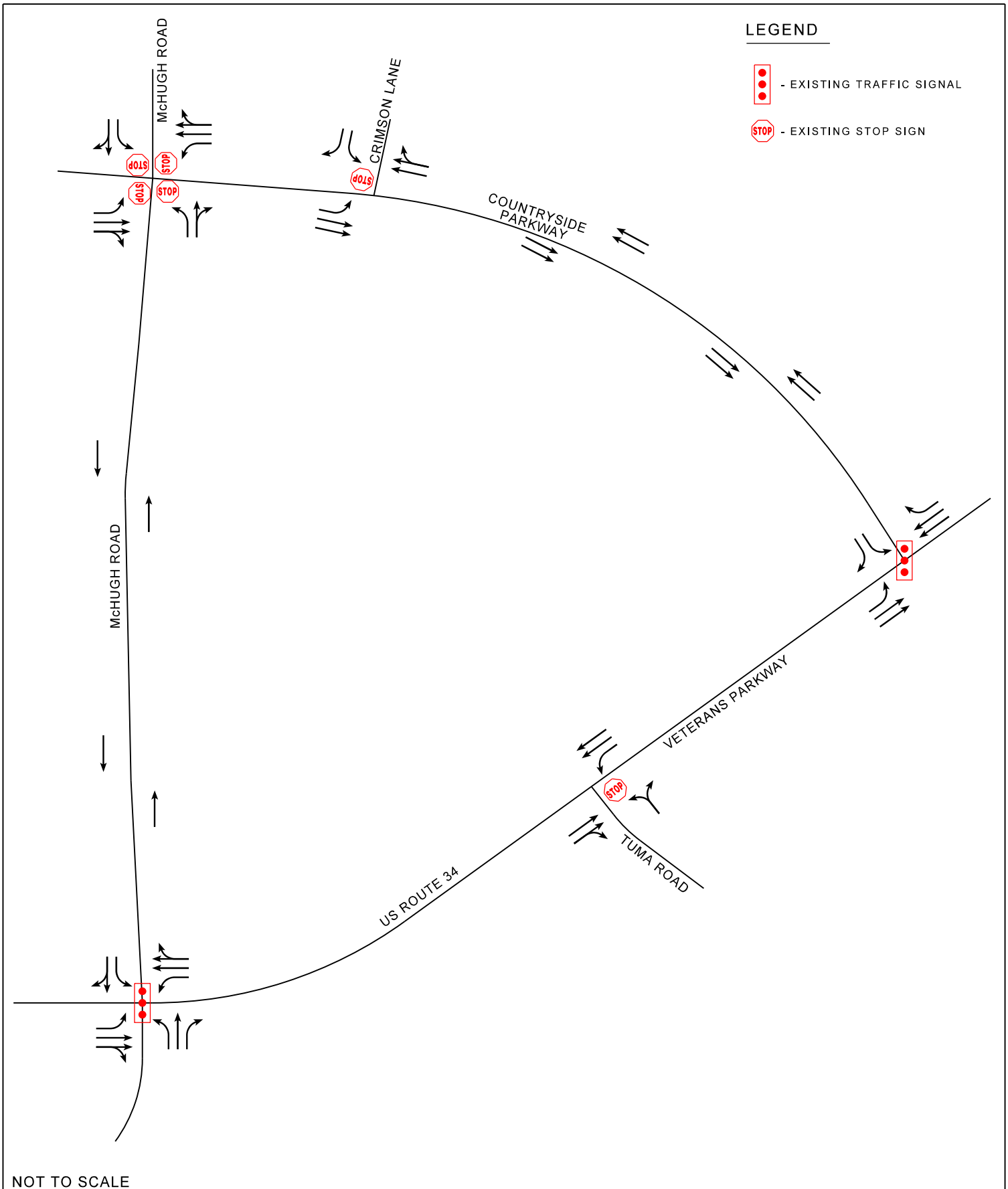
Countryside Parkway and Crimson Lane is a minor leg stop-controlled t-intersection with the southbound approach of Crimson Lane signed as the stop approach. The eastbound approach of Countryside Parkway consists of one left turn lane and two through lanes while the westbound approach of Countryside Parkway consists of one through lane and one shared through/right turn lane. The southbound approach of Crimson Lane consists of one left turn lane and right turn lane.



COSTCO WHOLESALE CORPORATION
YORKVILLE, IL

FIGURE 3
LAND USE MAP

YORKVILLE ILLINOIS



NOT TO SCALE

COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 4
EXISTING LANE CONFIGURATION

YORKVILLE ILLINOIS

Traffic Volumes

To assist in the evaluation of the traffic impact on the roadway system resulting from the proposed development, existing vehicular volumes were collected at the study area intersections.

Existing traffic counts were collected on Saturday, September 14, 2024, Tuesday, September 17, 2024, and Wednesday, September 18, 2024. The weekday am peak hour traffic counts were collected from 7:00 am to 9:00 am, the weekday pm peak hour traffic counts were collected from 4:00 pm to 6:00 pm, and the Saturday midday counts were collected from 11:00 am to 3:00 pm. The time periods of the traffic counts were selected to coincide with the typical peak hours of the arterial roadways like US 34/Veterans Parkway, as well as the typical peak hours for a retail development.

It should be noted that due to complications with the traffic data collection equipment, the study area intersections were counted on two consecutive weekdays. The intersections of Countryside Parkway and McHugh Road, US 34 and Countryside Parkway, and US 34 and Tuma Road were collected on Tuesday, September 17, 2024, and the intersections of US 34 and McHugh Road and Countryside Parkway and Crimson Lane were collected on Wednesday, September 18, 2024. The weekday peak hour traffic volumes were balanced with the approach and departure volumes along McHugh Road between US 34 and Countryside Parkway and along Countryside Parkway between Crimson Lane and US 34 adjusted by taking the higher approach traffic volume and distributing it based on the existing turning distribution.

The weekday am peak hour occurs between 7:00 am – 8:00 am, the weekday pm peak hour occurs between 4:30 pm – 5:30 pm, and the Saturday midday peak hour occurs 12:45 pm – 1:45 pm, respectively. The existing peak hour volumes at the study area intersections are illustrated in Figure 5. A summary of the traffic volumes collected in fifteen-minute increments is provided in Appendix A.

Proposed Development

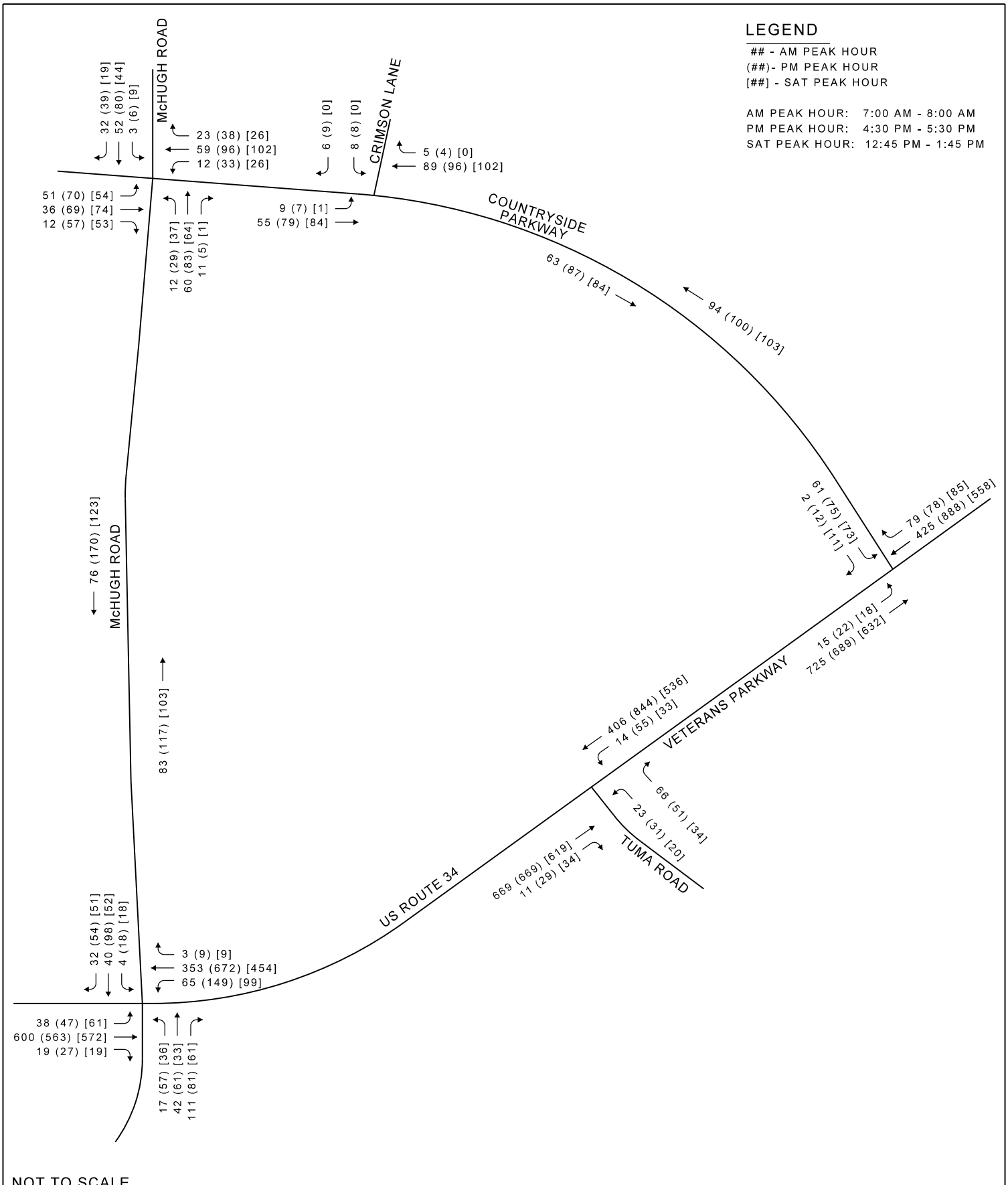
Land Use Development

It is our understating that there are no known development plans within the immediate study area that are likely to alter traffic patterns in the near future. It should be noted that the properties on the west side of McHugh Road and the east side of Countryside Parkway will likely be developed in the future. At this time, there are no specific development plans for those sites.

Roadway Development

It is our understanding that there are no other known planned roadway developments that will impact traffic patterns in the study area.

The proposed access plan includes a right-in/right-out/left-in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway north of the US 34 intersection.



NOT TO SCALE

COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 5 EXISTING TRAFFIC VOLUMES

YORKVILLE ILLINOIS

III. TRAFFIC FORECASTS

Project Traffic Volumes

Trip Generation

The proposed site plan consists of an approximately 161,064 square foot Costco Wholesale building and a members-only gas station with 40 pumps. Project traffic is estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The following land use category is used to determine project traffic:

> Discount Club (ITE Land Use Code 857) – A discount club is a discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items such as food, clothing, tires, and appliances; many items are sold in large quantities or bulk. Some sites may include on-site fueling pumps.
>
> Gasoline/Service Station (ITE Land Use Code 944) – This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have ancillary facilities for servicing and repairing motor vehicles and may have a car wash.

The *Trip Generation Manual, 11th Edition* assigns trip generation estimates based on a regression equation for each peak period and an independent variable. In this case, the gross building area is applicable for the discount club and vehicle fueling positions for the gas station. The weekday am and weekday pm peak hour trip generation equations are selected for weekday, peak hour of adjacent street traffic for one hour from 7 am to 9 am and 4 pm to 6 pm. The Saturday midday peak hour equations are selected for the Saturday peak hour of generator for both uses.

Trip generation is estimated based on the operational areas, which are summarized in Table 1. The Costco store will not be open during the weekday am peak hour as warehouse stores typically open after the morning commuter peak hour. A nominal number of trips are assumed for the weekday am peak hour to account for deliveries and employee trips to the store. The gas station is expected to be open to members only during the weekday am peak hour.

It is unlikely that the ITE *Trip Generation Handbook* methodology for internal capture is applicable since both the discount club and gas station are members only. The discount club operator stated that for locations in the Midwest, typically 65 to 75 percent of all gas station trips also include a trip into the discount club. In order to maintain a conservative analysis, it is assumed that 65 percent of gas station trips are internally captured, resulting in an overall internal capture of 22 percent during the weekday pm peak hour and 15 percent during the Saturday midday peak hour. Weekday daily and Saturday volumes

were calculated using a ten percent reduction for internal capture and a pass by reduction similar to the peak hour for the gas station and discount club.

As documented in the ITE *Trip Generation Handbook*, some land uses do not typically generate all new traffic on the roadway system. The total traffic generation is a combination of pass-by trips, or traffic drawn from the existing traffic flow on the adjacent streets, and primary trips, which represent new traffic drawn to the roadway network. In order to assess the pass-by trips, the data published in the ITE *Trip Generation Handbook* was utilized to estimate the pass-by percentages for the applicable land uses. It should be noted that pass-by trip reductions do not reduce the total number of trips into and out of the site, but decrease the number of new trips on the roadway network. A 34 percent pass-by rate was used for the discount club land use during the weekday pm peak hour and a 25 percent pass-by rate during the Saturday midday peak hour. Similarly, a 63 percent pass-by rate was applied for the gas station during the weekday am peak hour, while a 57 percent and 49 percent was used for the weekday pm and Saturday midday peak hours, respectively.

The new and pass-by trips will be assigned to the site driveways and local roadway network based on a trip distribution of these trips. The assignment of traffic to the driveways will likely follow a similar distribution to the existing condition, with adjustments made to account for modifications to the internal roadway network and the gas station location.

Table 1: Costco Trip Generation

LUC	LAND USE	SIZE	Weekday	Weekday AM			Weekday PM			Saturday	Saturday MD		
			Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total
857	Discount Club	161,064 SF	**6,836**	5	5	**10**	337	338	**675**	**8,657**	503	523	**1,026**
	Internal Capture Reduction:		*-686*	0	0	0	-90	-91	-181	-719	-81	-85	-166
	Pass-By Trips:		*-2,276*	0	0	0	-84	-84	-168	-2,381	-108	-108	-216
944	Gasoline/Service Station	40 Fueling Position	**6,880**	206	205	**411**	278	278	**556**	**5,736**	255	256	**511**
	Internal Capture Reduction:		*-686*	0	0	0	-91	-90	-181	-719	-85	-81	-166
	Pass-By Trips:		*-2,602*	-129	-129	-258	-107	-107	-214	-2,107	-85	-85	-170
	Total Trip Generation:		**13,716**	**211**	**210**	**421**	**615**	**616**	**1,231**	**14,393**	**758**	**779**	**1,537**
	Less Internal Capture:		*-1,371*	*0*	*0*	*0*	*-181*	*-181*	*-362*	*-1,438*	*-166*	*-166*	*-332*
	Internal Capture Rate:		*10%*	*0%*			*29%*			*10%*	*22%*		
	Total External Trips		***12,345***	***211***	***210***	***421***	***434***	***435***	***869***	***12,955***	***592***	***613***	***1,205***
	Less Pass-by:		*-4,878*	*-129*	*-129*	*-258*	*-191*	*-191*	*-382*	*-4,488*	*-193*	*-193*	*-386*
	Total New Traffic Generated on Network:		***7,467***	***82***	***81***	***163***	***243***	***244***	***487***	***8,467***	***399***	***420***	***819***

Overall, 163, 487, and 819 total new trips are estimated during the weekday am, weekday pm, and Saturday midday peak hours, respectively. An additional 258, 382, and 386 pass-by trips are anticipated during the weekday am, weekday pm, and Saturday midday peak hour, respectively.

It should be noted that the gasoline/service station land use includes ancillary uses on the site, including convenience and car wash. The Costco gas stations do not have any ancillary uses. Therefore, the 163 new

trips generated by the 40 fueling positions may be overestimated as it is unlikely that over 80 vehicles will make a home-to-gas station only trip during the weekday am peak hour.

Pages from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* are included in Appendix I for reference.

Trip Distribution and Assignment

The direction from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems.

The distribution of discount club and gasoline/service station is based on the location of schools, employment centers, and commercial/retail areas. Traffic is primarily assigned to US 34 and Countryside Parkway due to the high-volume arterial nature of these streets. Much lower volumes are assigned to McHugh Road. The overall trip distribution is summarized in Table 2.

Table 2: Trip Distribution

Cordon Location	Distribution
Veterans Parkway/US 34 - East of Countryside Parkway	45%
Veterans Parkway/US 34 - West of McHugh Road	25%
Countryside Parkway - West of McHugh Road	20%
McHugh Road - North of Countryside Parkway	5%
McHugh Road - South of Veterans Parkway/US 34	5%

The assignment of traffic to the driveways follows a similar distribution to the existing condition, with adjustments made to account for modifications to the internal roadway network and the location of the gas station. The proposed access plan includes a full access driveway on US 34 that aligns with Tuma Road, two full access driveways and one right in/right out driveway on Countryside Parkway, and two full access driveways on McHugh Road. Therefore, approximately 40 percent of the total Costco trips are assigned to the driveway on US 34, 35 percent of the Costco trips are assigned to the Countryside driveways, and 25 percent to the driveways along McHugh Road. The distribution and assignment of proposed primary trips is illustrated in Figure 6.

It is assumed that most pass-by and diverted trips will be along US 34, Countryside Parkway, and McHugh Road. The directional split favors the westbound vehicles utilize the driveways to access the site via right

turns to and from US 34. The distribution and assignment of proposed pass by trips is illustrated in Figure 7.

The proposed primary trips are added to the proposed pass by trips to obtain the total proposed trips, which are illustrated in Figure 8.

Background Traffic Volumes

Background traffic volumes are estimated for the year 2031 which is five years beyond the anticipated build out in 2026. These volumes account for future non-project related growth in the area. The AADT for the study area roadways were obtained from the IDOT database. A summary of the CMAP growth rates is provided in Table 3. CMAP correspondence is provided in Appendix B.

Table 3: CMAP Growth Rates

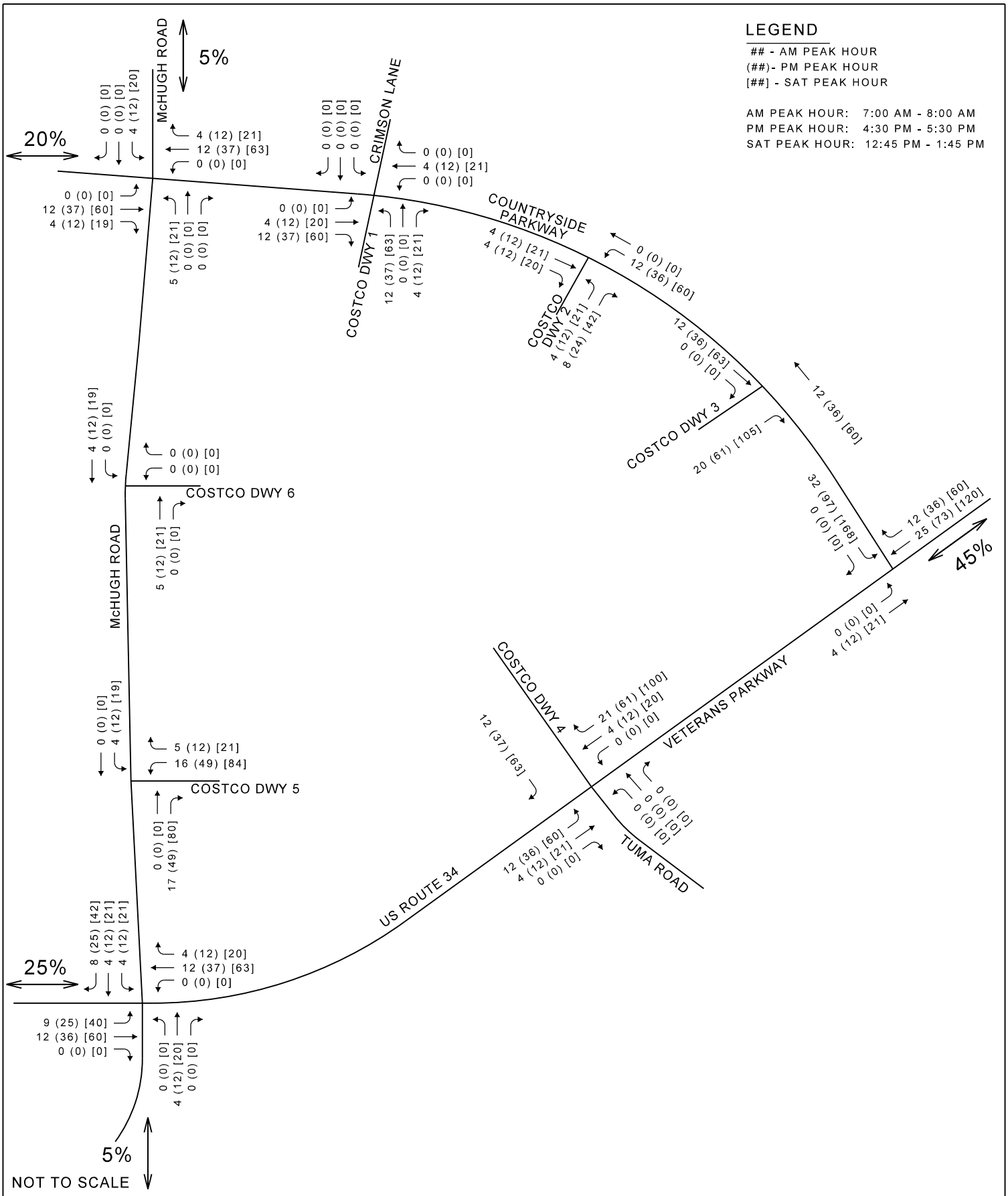
Street	AADT		Total Growth from Count Year to 2050	Compounded Yearly Rate	Total Growth from 2024 to 2031	Total Growth from 2024 to 2050
	Existing AADT (Year)	2050 Proj.				
US Route 34 east of McHugh Road	16,200 (2023)	21,000	29.6%	1.0%	7.0%	28.4%
US Route 34 west of McHugh Road	14,000 (2023)	18,100	29.3%	1.0%	6.9%	28.1%
Countryside Parkway between US 34 and McHugh Road	1,600 (2019)	2,000	25.0%	0.7%	5.2%	20.6%
Countryside Parkway west of McHugh Road	3,600 (2019)	4,500	25.0%	0.7%	5.2%	20.6%
McHugh Road south of US 34	2,950 (2019)	3,700	25.4%	0.7%	5.2%	20.9%
McHugh Road north of US 34	2,000 (2019)	2,500	25.0%	0.7%	5.2%	20.6%
Tuma Road south of US 34	1,100 (2019)	1,380	25.5%	0.7%	5.3%	20.9%

Overall, the CMAP projections indicate that there will be overall growth in traffic along the study area roadways around the proposed development. For the purposes of this study, a uniform total growth factor of 7.0 percent is applied to all movements throughout the study area to accommodate non-project related growth.

The 2031 background traffic volumes are illustrated in Figure 9.

Future Traffic Volumes

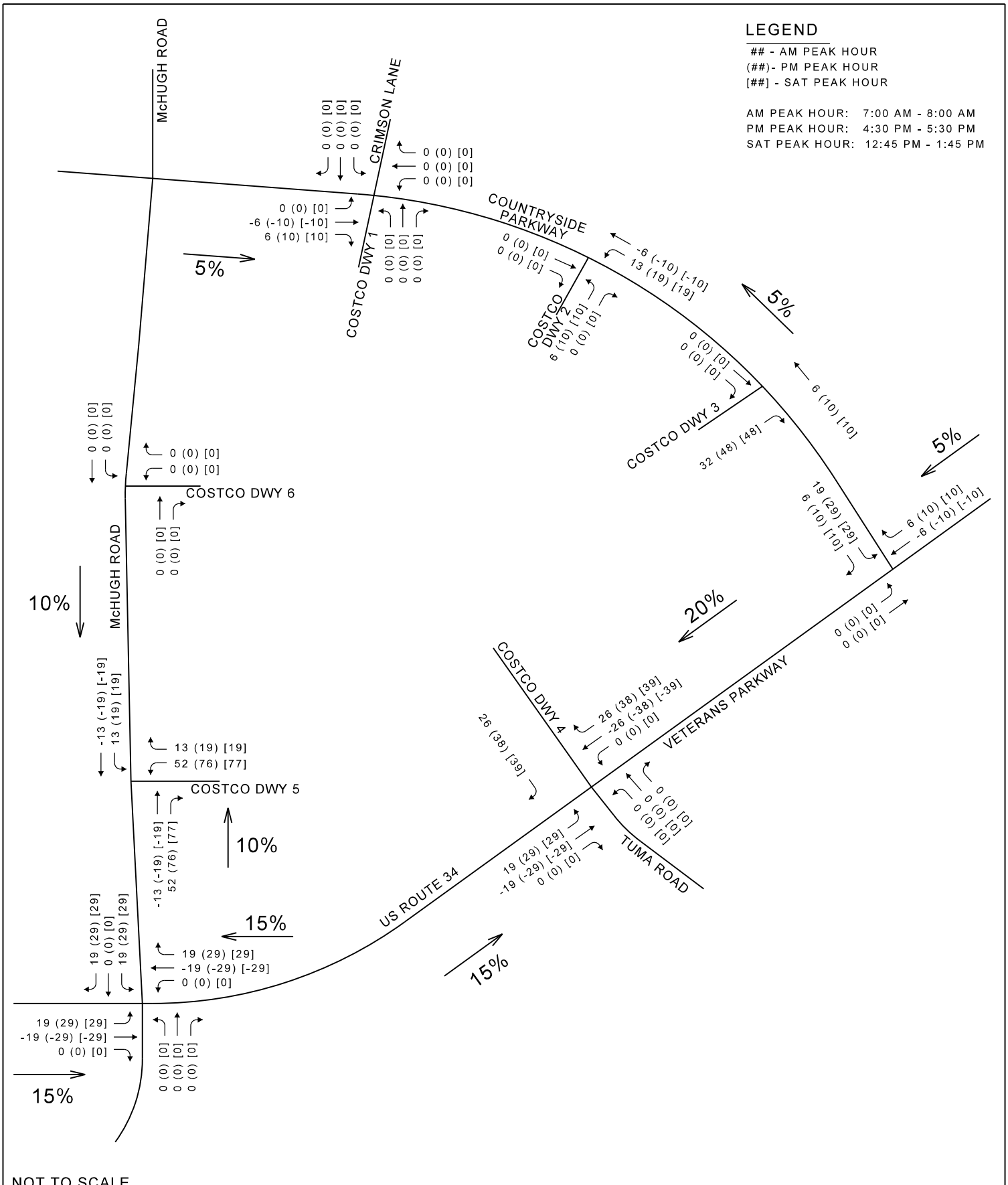
The total project trips are added to the background volume to obtain the future with project traffic volumes for the study area intersections. Future with project traffic volumes are depicted in Figure 10.



COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 6 NEW PROJECT TRAFFIC VOLUMES

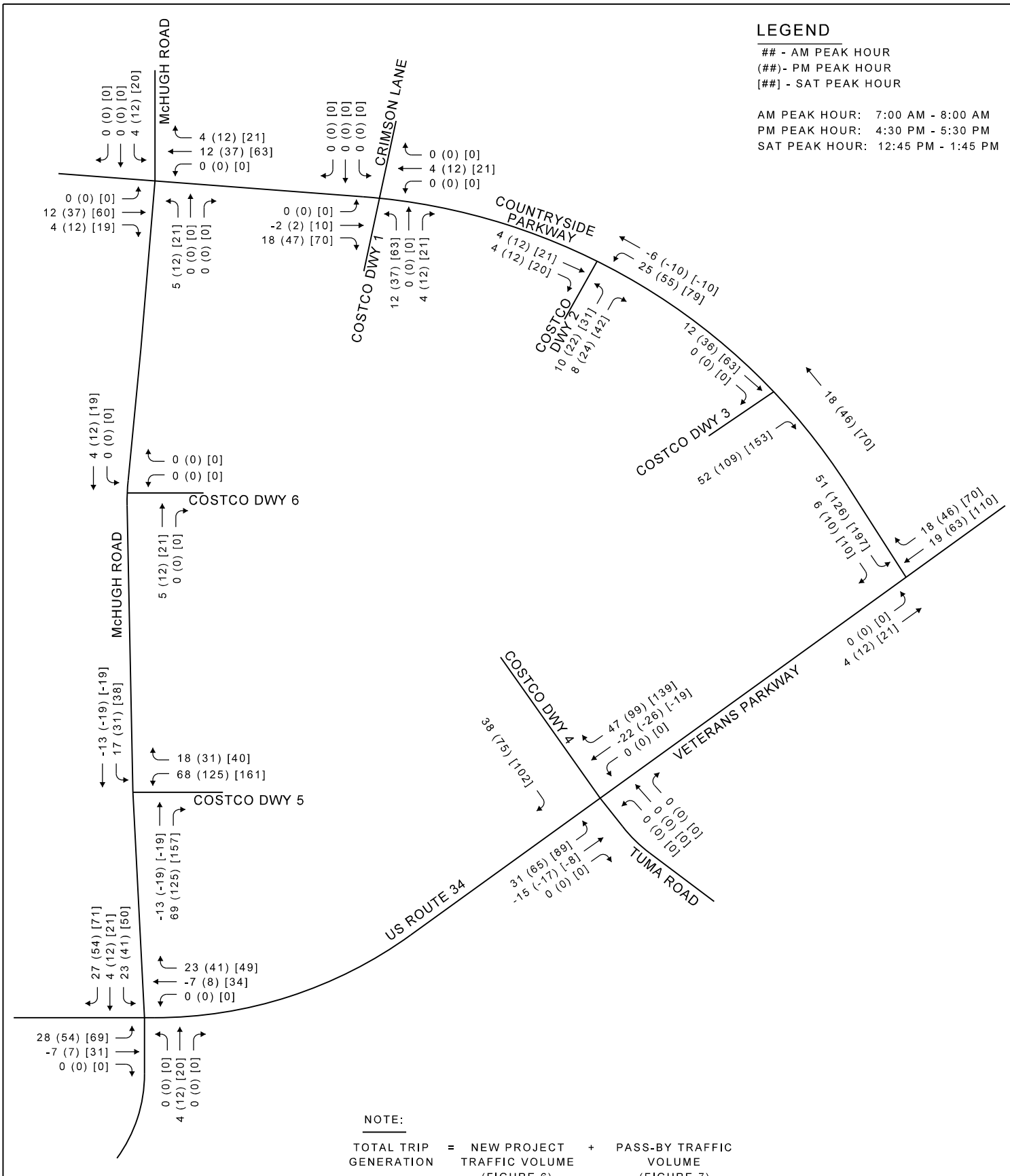
YORKVILLE ILLINOIS



COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 7 PASS BY TRAFFIC VOLUMES

YORKVILLE ILLINOIS



NOTE:

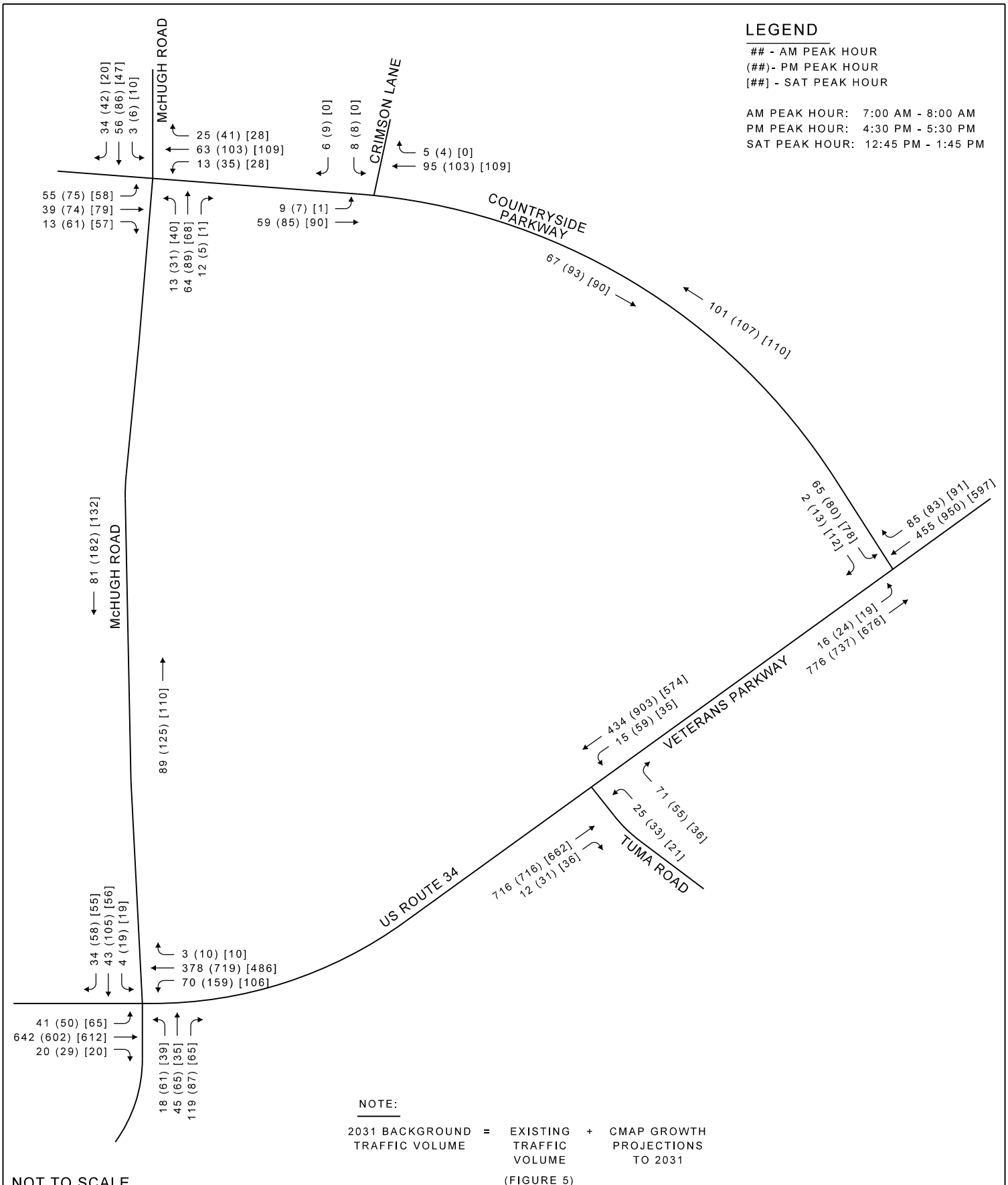
TOTAL TRIP GENERATION = NEW PROJECT TRAFFIC VOLUME (FIGURE 6) + PASS-BY TRAFFIC VOLUME (FIGURE 7)

NOT TO SCALE

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FIGURE 8 TOTAL TRAFFIC VOLUMES

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NOTE:

2031 BACKGROUND TRAFFIC VOLUME = EXISTING TRAFFIC VOLUME + CMAP GROWTH PROJECTIONS TO 2031

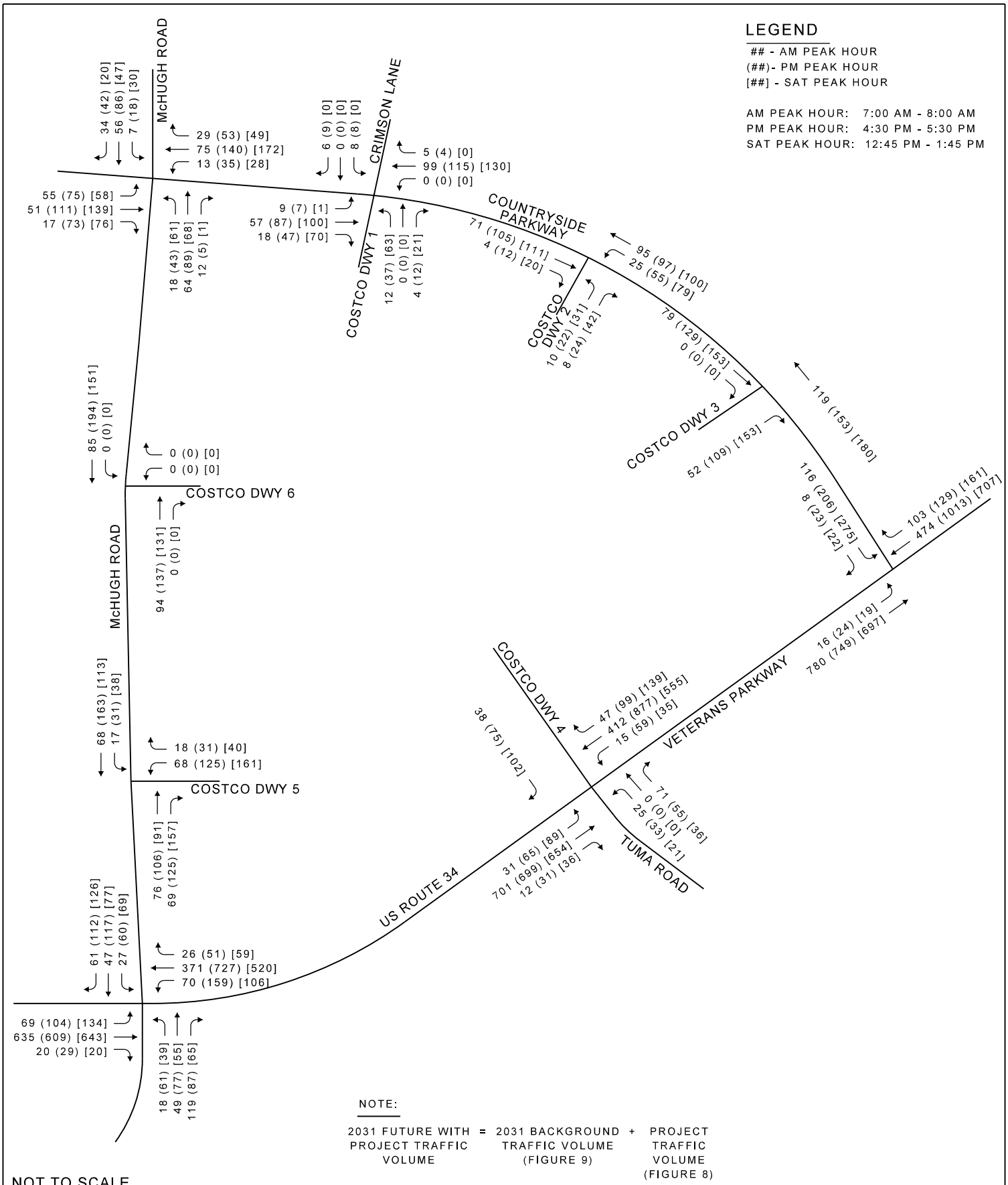
(FIGURE 5)

NOT TO SCALE

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FIGURE 9
2031 BACKGROUND TRAFFIC VOLUMES

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NOTE:

2031 FUTURE WITH PROJECT TRAFFIC VOLUME = 2031 BACKGROUND TRAFFIC VOLUME (FIGURE 9) + PROJECT TRAFFIC VOLUME (FIGURE 8)

NOT TO SCALE

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FIGURE 10
2031 FUTURE WITH PROJECT TRAFFIC VOLUMES

YORKVILLE ILLINOIS

IV. TRAFFIC ANALYSIS

Auxiliary Lane Analysis

This study evaluated whether additional auxiliary lanes are warranted at the study area intersections. The warrant analysis follows the methodology detailed in IDOT's *Bureau of Design and Environmental Manual* (BDE). Warrants are determined based on factors such as through volume, opposing volume, and percentage of turning vehicles. Different warrants are used for left and right turn lanes, and factors such as design speed. Worksheets displaying all right and left turn lane warrants are included in Appendix C.

Overall, it is found that the westbound right turn movement at Costco Driveway 4 on US 34 and the northbound right turn movement at Costco Driveway 5 on McHugh Road meet the right turn lane warrant based on the BDE chart comparing right turn and approach volumes and should therefore be considered. This warrant is intended to identify areas with high right turn volumes that can unduly impair the through movements. In this case, the through volumes along US 34 are relatively high. Based on the results of the auxiliary warrants, it is recommended that right turn lanes are provided on the westbound approach of US 34 at Costco Driveway 4 and the northbound approach of McHugh Road at Costco Driveway 5.

Left turn lanes are not currently provided at Costco Driveways 1, 2, and 4. It is found that the westbound approach of Countryside Parkway at Costco Driveway 1 and Driveway 2 and the eastbound approach of US 34 at Costco Driveway 4 meet the warrant of uniformity of intersection design for auxiliary left turn lanes. Currently, the striped median along McHugh Road provides a two-way left turn lane which will accommodate the southbound left turns at Driveways 5 and 6. Based on the results of the auxiliary lane warrants, it is recommended that left turn lanes are provided on the westbound approach of Countryside Parkway at Costco Driveway 1 and Costco Driveway 2 and on the eastbound approach of US 34 at the Costco Driveway 4.

Traffic Signal Warrant Analysis

Based on the projected traffic volumes at the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road, a traffic signal warrant analysis has been conducted at each intersection. The investigation for the need for a traffic control signal is based on the methodology established in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD establishes nine individual warrants. The installation of a traffic signal should be further investigated at locations that meet one or more warrants. However, warrant 1, the eight-hour vehicular volume warrant, is typically the only vehicular volume/delay warrant that is considered for intersections on designated SRA routes.

Warrant 1 is met if a total of eight hours in the day exceeds the thresholds established in the MUTCD. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. However, additional guidance from IDOT states that in cases involving future volumes, the eight-hour vehicular volume hour can be estimated as 55 percent of the peak hour volumes.

The IDOT methodology also requires a reduction of the minor approach right turn volume based on factors such as lane configuration and conflicting volumes. Additionally, the minor street threshold volumes are typically increased for intersections located on SRA's to reflect more rigid warranting requirements. The policy for new traffic signals along an SRA route are described in Section 10.4.2 of the *Strategic Regional Arterial Design Concept Report*, February 1994.

Based on the projected weekday pm peak hour traffic volumes and utilizing the IDOT guidance to estimate the eighth hour volumes, the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road do not meet the eight-hour warrants. Therefore, for the purposes of this study, the intersections of US 34 and Costco Driveway 4/Tuma Road was analyzed as a two-way stop-controlled intersection and the intersection of Countryside Parkway and McHugh Road was analyzed as the existing all-way stop-controlled configuration. The supporting Signal Warrant Review Sheet and Right Turn Factorization Sheet are included in Appendix E.

Capacity Analysis

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's *Highway Capacity Manual (HCM), 7th Edition*. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the intersection as a whole. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 4.

Table 4: Level of Service Definitions for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
A	≤ 10	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0
C	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*, National Research Council, 2016.

Typically, various state and local governments adopt standards varying between LOS C and LOS E, depending on the area's size and roadway characteristics.

The study area includes the existing signalized intersections of US 34/Veterans Parkway and Countryside Parkway and US 34/Veterans Parkway and McHugh Road, the existing unsignalized intersections of McHugh Road and Countryside Parkway, Crimson Lane and Countryside Parkway, and US 34/Veterans Parkway and Tuma Road, and the proposed connections on US 34/Veterans Parkway, McHugh Road, and Countryside Parkway. Capacity analysis was performed with Synchro 11.1. Models were created for the weekday am, weekday pm, and Saturday midday peak hours for the existing, 2031 background, and 2031 future with project scenarios.

The capacity analysis results at the signalized intersections are summarized in Table 5 and at the unsignalized intersections in Table 6. The traffic signal timing plans were obtained from videos captured during the traffic counts and utilized for this analysis. Supporting capacity analysis worksheets are provided in Appendices E, F, and G, respectively.

Table 5: Capacity Analysis of Signalized Intersections

Intersection	Peak Hour	Scenario	Eastbound		Westbound		Northbound		Southbound		Intersection	
			Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Veterans Parkway (US 34) & Countryside Parkway	Weekday AM	Existing (2024)	2.5	A	4.5	A	-	-	46.9	D	5.4	A
		Background (2031)	2.5	A	4.6	A	-	-	47.4	D	5.5	A
		Future with Project (2031)	2.7	A	4.5	A	-	-	53.5	D	7.6	A
	Weekday PM	Existing (2024)	1.4	A	6.0	A	-	-	50.3	D	6.4	A
		Background (2031)	1.5	A	6.3	A	-	-	50.8	D	6.5	A
		Future with Project (2031)	2.4	A	6.2	A	-	-	114.7	F	16.4	B
		FwP (2031) w/ Mitigation	9.1	A	17.3	B	-	-	33.8	C	16.1	B
	Saturday MD	Existing (2024)	1.4	A	5.4	A	-	-	39.3	D	5.6	A
		Background (2031)	1.4	A	5.4	A	-	-	39.6	D	5.6	A
		Future with Project (2031)	2.2	A	5.4	A	-	-	136.1	F	24.8	C
		FwP (2031) w/ Mitigation	12.8	B	16.1	B	-	-	25.0	C	16.2	B
Veterans Parkway (US 34) & McHugh Road	Weekday AM	Existing (2024)	14.2	B	10.6	B	15.9	B	28.0	C	14.1	B
		Background (2031)	14.5	B	11.3	B	15.7	B	29.0	C	14.5	B
		Future with Project (2031)	14.2	B	11.4	B	18.2	B	27.9	C	15.1	B
	Weekday PM	Existing (2024)	17.9	B	15.2	B	23.5	C	41.3	D	19.4	B
		Background (2031)	18.4	B	15.5	B	23.4	C	42.6	D	19.9	B
		Future with Project (2031)	17.9	B	17.0	B	26.6	C	45.2	D	22.0	C
	Saturday MD	Existing (2024)	20.2	C	17.3	B	15.2	B	20.3	C	18.7	B
		Background (2031)	20.7	C	18.1	B	15.3	B	20.9	C	19.3	B
		Future with Project (2031)	20.5	C	21.0	C	18.9	B	23.1	C	20.9	C

Table 6: Capacity Analysis of Unsignalized Intersections

Intersection / Approach	Weekday AM						Weekday PM						Saturday MD					
	Existing (2024)		Background (2031)		Future w/ Project (2031)		Existing (2024)		Background (2031)		Future w/ Project (2031)		Existing (2024)		Background (2031)		Future w/ Project (2031)	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
McHugh Road & Countryside Parkway																		
NB Left	9.0	A	9.1	A	9.4	A	9.7	A	9.8	A	10.5	B	9.3	A	9.5	A	10.6	B
NB Thru/right	9.2	A	9.4	A	9.7	A	9.9	A	10.2	B	10.8	B	9.1	A	9.3	A	10.1	B
EB Left	9.7	A	9.8	A	10.1	B	10.1	B	10.4	B	10.8	B	9.3	A	9.5	A	10.1	B
EB Thru	8.6	A	8.7	A	9.0	A	9.1	A	9.3	A	10.1	B	8.7	A	8.8	A	10.0	A
EB Thru/right	8.3	A	8.5	A	8.7	A	8.9	A	9.1	A	10.0	A	8.4	A	8.5	A	9.8	A
WB Left	9.0	A	9.1	A	9.3	A	9.6	A	9.8	A	10.1	B	9.0	A	9.2	A	9.7	A
WB Thru	8.8	A	9.0	A	9.3	A	9.5	A	9.7	A	10.5	B	9.0	A	9.1	A	10.4	B
WB Thru/right	8.6	A	8.8	A	9.1	A	9.0	A	9.3	A	10.0	A	8.6	A	8.7	A	9.9	A
SB Left	10.0	A	10.1	B	10.4	B	9.3	A	9.4	A	10.1	B	9.1	A	9.2	A	10.2	B
SB Thru/right	9.2	A	9.5	A	9.8	A	10.1	B	10.5	B	11.2	B	8.9	A	9.1	A	9.9	A
Countryside Parkway & Crimson Lane/Costco Driveway 1																		
NB Left/thru	-	-	-	-	10.2	B	-	-	-	-	10.4	B	-	-	-	-	10.7	B
NB Right	-	-	-	-	8.6	A	-	-	-	-	8.8	A	-	-	-	-	8.9	A
EB Left	7.8	A	7.9	A	7.9	A	7.5	A	7.5	A	7.5	A	7.4	A	7.5	A	7.5	A
WB Left	-	-	-	-	0.0	A	-	-	-	-	0.0	A	-	-	-	-	0.0	A
SB Left	10.0	B	10.1	B	10.4	B	9.6	A	9.7	A	10.1	B	0.0	A	0.0	A	0.0	A
SB Right	8.7	A	8.8	A	8.8	A	8.6	A	8.7	A	8.7	A	0.0	A	0.0	A	0.0	A
Countryside Parkway & Costco Driveway 2																		
NB Left	-	-	-	-	9.6	A	-	-	-	-	10.8	B	-	-	-	-	11.6	B
NB Right	-	-	-	-	8.6	A	-	-	-	-	8.7	A	-	-	-	-	8.9	A
WB Left	-	-	-	-	7.4	A	-	-	-	-	7.6	A	-	-	-	-	7.7	A
Countryside Parkway & Costco Driveway 3 (RIRO)																		
EB Right	-	-	-	-	8.7	A	-	-	-	-	9.2	A	-	-	-	-	9.5	A
Veterans Parkway (US 34) & Tuma Road/Costco Driveway 4																		
NE Left	-	-	-	-	7.9	A	-	-	-	-	8.9	A	-	-	-	-	8.5	A
NW Appr.	15.4	C	16.8	C	18.4	C	24.1	C	29.4	D	56.3	F	16.6	C	18.0	C	27.2	D
SE Right	-	-	-	-	9.0	A	-	-	-	-	10.6	B	-	-	-	-	9.8	A
SW Left	9.4	A	9.6	A	9.6	A	9.4	A	9.7	A	9.7	A	9.1	A	9.3	A	9.3	A
McHugh Road & Costco Driveway 5																		
WB Left	-	-	-	-	10.1	B	-	-	-	-	11.9	B	-	-	-	-	12.0	B
WB Right	-	-	-	-	8.8	A	-	-	-	-	9.0	A	-	-	-	-	8.9	A
SB Left	-	-	-	-	7.6	A	-	-	-	-	7.8	A	-	-	-	-	7.9	A
McHugh Road & Costco Driveway 6																		
WB Left	-	-	-	-	0.0	A	-	-	-	-	0.0	A	-	-	-	-	0.0	A
WB Right	-	-	-	-	0.0	A	-	-	-	-	0.0	A	-	-	-	-	0.0	A
SB Left	-	-	-	-	0.0	A	-	-	-	-	0.0	A	-	-	-	-	0.0	A

Existing Scenario

Based on the analysis results at the signalized intersections, the major approaches operate with LOS D or lower at the study area intersections. At the signalized intersection of US 34/Veterans Parkway and Countryside Parkway, the overall intersection operates at LOS A for all three time periods, while the signalized intersection of US 34/Veterans Parkway and McHugh Road operates at LOS B for all three time periods.

All movements at the unsignalized intersections operate adequately with LOS C or better.

Background Scenario

For the 2031 background scenario, delays tend to increase slightly at the signalized intersections. The addition of background traffic results in similar delay times for each approach and the overall intersection. It is worth noting that slight delay improvements are observed on some minor street approaches. This is due to the increased side street volumes placing more calls on the intersection approach which extends the effective green times for the side street and results in a decreased average delay for that approach.

All movements at the unsignalized intersections continue to operate adequately. The northwest approach of Tuma Road is projected to operate at LOS D during the weekday pm peak hour.

Future with Project Scenario

Delays again tend to slightly increase with the addition of project related traffic for the weekday am, weekday pm, and Saturday midday peak hours. Based on the projected analysis, the southbound approach at Countryside Parkway and US 34/Veterans Parkway operates at LOS F during the weekday pm and Saturday midday peak hours and the overall intersection delay drops from LOS A to LOS B for the weekday pm and from LOS A to LOS C for the Saturday midday peak hour. At the signalized intersection of US 34/Veterans Parkway and McHugh Road, all approaches operate at LOS D or better for all three time periods. The overall intersection delay drops from LOS B to LOS C for both the weekday pm and Saturday midday peak hours.

All movements at the unsignalized intersections continue to operate adequately, with all levels of service remaining at LOS D or better with the exception of the northwest approach of Tuma Road which is projected to operate at LOS F during the weekday pm peak hour. Higher delays are typical at stop-controlled approaches on minor streets and driveways at intersections with arterial roadways during peak periods. Additionally, it should be noted that the volume-to-capacity ratio of the minor approaches are less than one, indicating available capacity. While left-turn movements from driveways onto arterials may experience delays during peak hours, they are expected to operate adequately at all other hours of the day.

Potential Mitigation Scenario

As described, the southbound approach at the intersection of Countryside Parkway and US 34/Veterans Parkway is projected to operate at LOS F during the weekday pm and Saturday midday peak hour using the existing traffic signal timing plan. One option to reduce the southbound approach delay would be to retime the existing signal timing plan by shifting 22 seconds of green time from the US 34/Veterans Parkway eastbound/westbound through movement to the southbound approach during the weekday pm and 23 seconds of green time during the Saturday midday peak hours. As illustrated in Table 5, retiming the traffic signal would result in the southbound approach operating at LOS C with minimal impact on the eastbound and westbound approaches, with the US 34 approaches both operating at LOS B during both

peak hours. The signal retiming would have to be approved by IDOT. The capacity worksheets for this mitigation can be found in Appendix H.

Queue Length Analysis

A queue length analysis was conducted at each of the study area intersections. A summary of this analysis is provided in Table 7. This data is comprised of the 95th percentile queue output from the Synchro analysis.

For the existing, background, and future with project scenarios, all left and right turning queue lengths do not exceed the provided storage lengths with the exception of the southbound left turn at the signalized US 34 and Countryside Parkway intersection. This southbound movement exceeds the existing storage during the weekday pm peak hour and Saturday midday peak hours with a queue of 341 feet and 381 feet, respectively. It should be noted that this is a trap lane and the queues do not spill back into the main travel lanes, however, it is anticipated that this queue will back up to the proposed Costco Driveway 4 (right in/right out). Based on the proposed mitigation scenario, the southbound queues will decrease to 208 feet during the weekday pm peak hour and 211 feet during the Saturday midday peak hour.

No queuing issues are anticipated at any of the unsignalized intersections.

It should be noted that based on the location of the proposed Costco Driveway 5 at McHugh Road, north of the US 34/Veterans Parkway intersection with McHugh Road, the southbound left turn storage and taper will be reduced to accommodate this Costco Driveway. Proposed storage and taper lengths are included in Table 7. As illustrated in Table 7, the reduction of the existing storage and taper will likely not impact the 95th percentile queue length for any of the three time periods.

It is concluded that no queue storage mitigation is required at any of the intersections and site driveways.

Table 7: 95th Percentile Queue Lengths

Intersection	Peak Hour	Scenario	Eastbound		Westbound		Northbound		Southbound	
			Left	Right	Left	Right	Left	Right	Left	Right
McHugh Road & Countryside Parkway (All-Way Stop Controlled)	Weekday AM	Existing (2024)	10	-	3	-	3	-	0	-
		Background (2031)	13	-	3	-	3	-	0	-
		Future with Project (2031)	13	-	3	-	3	-	3	-
	Weekday PM	Existing (2024)	13	-	5	-	5	-	0	-
		Background (2031)	13	-	5	-	5	-	0	-
		Future with Project (2031)	15	-	5	-	8	-	3	-
	Saturday MD	Existing (2024)	8	-	3	-	5	-	3	-
		Background (2031)	10	-	5	-	5	-	3	-
		Future with Project (2031)	10	-	5	-	10	-	5	-
	Storage Length (ft)		**150**	**-**	**150**	**-**	**160**	**-**	**120**	**-**
	Taper Length (ft)		**160**	**-**	**145**	**-**	**175**	**-**	**115**	**-**
Countryside Parkway & Crimson Lane / Costco Driveway 1 (Two-Way Stop Controlled)	Weekday AM	Existing (2024)	0	-	-	-	-	-	3	0
		Background (2031)	0	-	-	-	-	-	3	0
		Future with Project (2031)	0	-	0	-	3	0	3	0
	Weekday PM	Existing (2024)	0	-	-	-	-	-	0	0
		Background (2031)	0	-	-	-	-	-	0	0
		Future with Project (2031)	0	-	0	-	5	0	0	0
	Saturday MD	Existing (2024)	0	-	-	-	-	-	0	0
		Background (2031)	0	-	-	-	-	-	0	0
		Future with Project (2031)	0	-	0	-	8	3	0	0
	Storage Length (ft)		**150**	**-**	**140***	**-**	**30***	**30***	**100**	**100**
	Taper Length (ft)		**145**	**-**	**130***	**-**	**-**	**-**	**100**	**-**
Countryside Parkway & Costco Driveway 2 (Two-Way Stop Controlled)	Weekday AM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	3	-	0	0	-	-
	Weekday PM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	3	-	3	3	-	-
	Saturday MD	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	5	-	5	3	-	-
	Storage Length (ft)		**-**	**-**	**185***	**-**	**30***	**30***	**-**	**-**
	Taper Length (ft)		**-**	**-**	**200***	**-**	**-**	**-**	**-**	**-**
Countryside Parkway & Costco Driveway 3 (Two-Way Stop Controlled)	Weekday AM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	5	-	-	-	-	-	-
	Weekday PM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	10	-	-	-	-	-	-
	Saturday MD	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	15	-	-	-	-	-	-
	Storage Length (ft)		**-**	**90***	**-**	**-**	**-**	**-**	**-**	**-**
	Taper Length (ft)		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Veterans Parkway/US 34 & Countryside Parkway (Signalized)	Weekday AM	Existing (2024)	3	-	-	5	-	-	84	8
		Background (2031)	3	-	-	5	-	-	89	8
		Future with Project (2031)	4	-	-	5	-	-	144	15
	Weekday PM	Existing (2024)	4	-	-	5	-	-	110	20
		Background (2031)	4	-	-	5	-	-	114	21
		Future with Project (2031)	6	-	-	6	-	-	341	26
		FwP (2031) w/ Mitigation	13	-	-	6	-	-	208	21
	Saturday MD	Existing (2024)	2	-	-	5	-	-	90	16
		Background (2031)	2	-	-	6	-	-	94	18
		Future with Project (2031)	3	-	-	7	-	-	381	23
		FwP (2031) w/ Mitigation	11	-	-	8	-	-	211	16
	Storage Length (ft)		**180**	**-**	**-**	**250**	**-**	**-**	**210**	**210**
	Taper Length (ft)		**160**	**-**	**-**	**190**	**-**	**-**	**-**	**-**

Table 7: 95th Percentile Queue Lengths (cont.)

Intersection	Peak Hour	Scenario	Eastbound		Westbound		Northbound		Southbound	
			Left	Right	Left	Right	Left	Right	Left	Right
Veterans Parkway/US 34 & Tuma Road/Costco Driveway 4 (Two-Way Stop Controlled))	Weekday AM	Existing (2024)	-	-	3	-	20		-	-
		Background (2031)	-	-	3	-	25		-	-
		Future with Project (2031)	3	-	3	0	28		-	3
	Weekday PM	Existing (2024)	-	-	5	-	35		-	-
		Background (2031)	-	-	8	-	45		-	-
		Future with Project (2031)	5	-	5	0	80		-	10
	Saturday MD	Existing (2024)	-	-	3	-	15		-	-
		Background (2031)	-	-	3	-	18		-	-
		Future with Project (2031)	8	-	3	0	28		-	10
		Storage Length (ft)	**215***	**-**	**275**	**215***	**-**	**-**	**-**	**110***
		Taper Length (ft)	**220***	**-**	**170**	**220***	**-**	**-**	**-**	**-**
Veterans Parkway/US 34 & McHugh Road (Signalized)	Weekday AM	Existing (2024)	21	-	31	-	29	43	11	-
		Background (2031)	22	-	33	-	30	44	11	-
		Future with Project (2031)	33	-	33	-	30	46	40	-
	Weekday PM	Existing (2024)	28	-	73	-	68	35	29	-
		Background (2031)	30	-	77	-	72	36	30	-
		Future with Project (2031)	54	-	77	-	72	38	71	-
	Saturday MD	Existing (2024)	36	-	57	-	37	23	23	-
		Background (2031)	38	-	68	-	40	25	24	-
		Future with Project (2031)	69	-	60	-	40	26	61	-
		Storage Length (ft)	**170**	**-**	**180**	**-**	**105**	**105**	**245/145***	**-**
		Taper Length (ft)	**180**	**-**	**180**	**-**	**110**	**110**	**150/175***	**-**
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled)	Weekday AM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	8	3	-	0	0	-
	Weekday PM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	20	3	-	0	3	-
	Saturday MD	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	25	3	-	0	3	-
		Storage Length (ft)	**-**	**-**	**75***	**75***	**-**	**145***	**145***	**-**
		Taper Length (ft)	**-**	**-**	**-**	**-**	**-**	**145***	**175***	**-**
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled)	Weekday AM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	0	0	-	-	0	-
	Weekday PM	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	0	0	-	-	0	-
	Saturday MD	Existing (2024)	-	-	-	-	-	-	-	-
		Background (2031)	-	-	-	-	-	-	-	-
		Future with Project (2031)	-	-	0	0	-	-	0	-
		Storage Length (ft)	**-**	**-**	**25***	**25***	**-**	**-**	**-**	**-**
		Taper Length (ft)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Notes:
1. All values in feet
2. * Proposed Storage and taper lengths.

Site Circulation

In the proposed site plan, Costco Driveway 3, Costco Driveway 4, and Costco Driveway 5 will serve as the access point to the main internal road through the site. Costco Driveway 3 will be connected to Countryside Parkway providing access from the east side of the site while Costco Driveway 5 will connect

to McHugh Road facilitating access from the west. This connection will also provide convenient access to the proposed gas station and access points to the Costco parking fields. For the purpose of the discussion below, the internal roadway is described as an east-west street. Overall, it is expected that the internal roadway configuration, with the limited access points and stop controlled intersections, will operate effectively.

Internal Intersection Summary

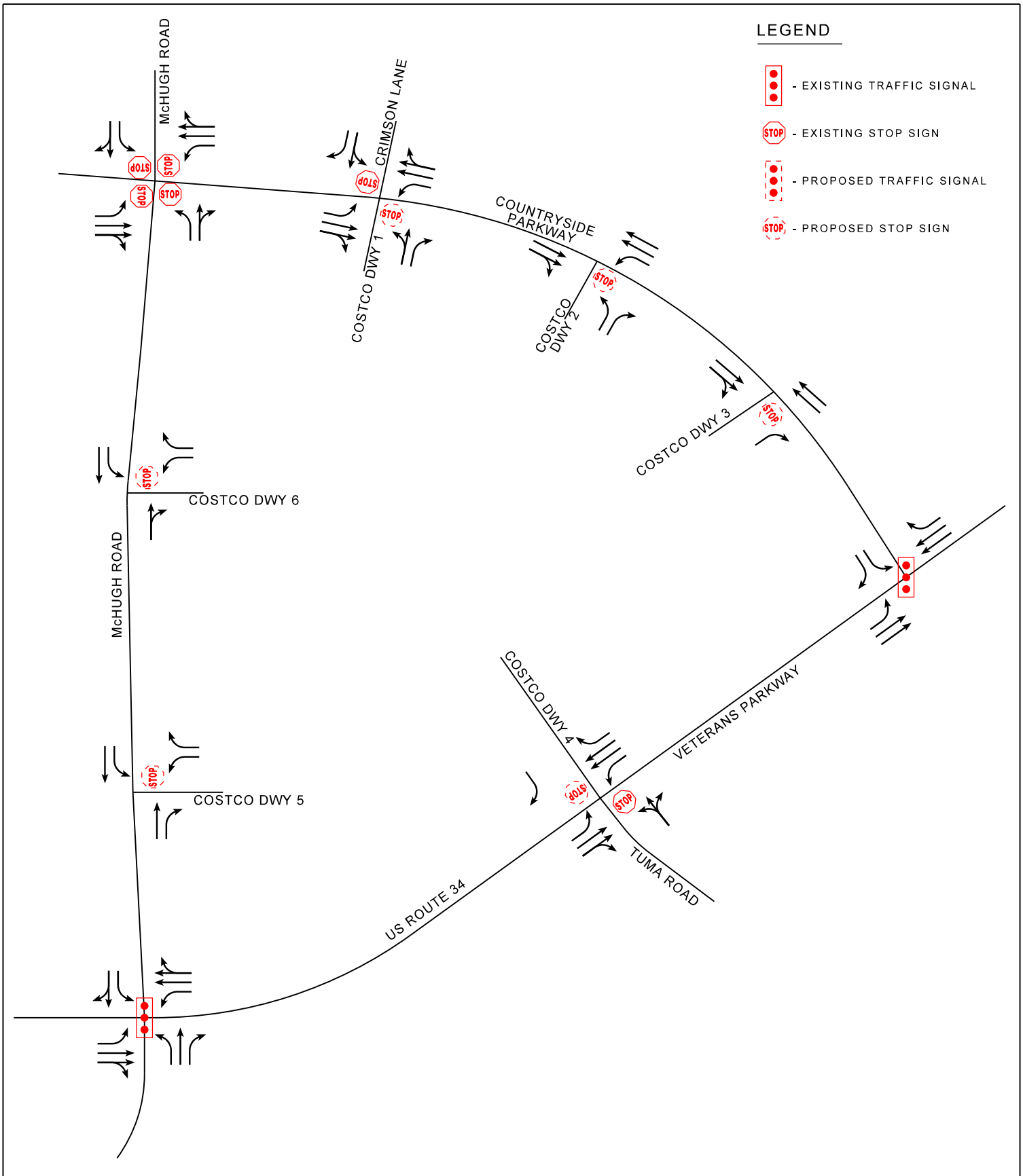
- Intersection 1 – Located approximately 390 feet east of McHugh Road
  - Three leg intersection
  - Stop controlled on the northbound approach exit from the gas station
- Intersection 2 – Costco Driveway 4 Located approximately 460 feet east of Intersection 1
  - Three leg intersection
  - Stop Controlled on the eastbound and westbound approaches
  - Free flow traffic for inbound traffic from US 34/Veterans Parkway

Each driveway connected to the roadway network is anticipated to contain two existing lanes and one departing lane with the exception of the right in/right out driveway.

The entrance for the gas station is located on Costco Driveway 5. The opening day gas station configuration consists of eight individual drive aisles with four fueling positions each. Conservatively, each drive aisle has space for approximately for six vehicles to queue waiting to pull up to the pump. Therefore, a minimum of 80 vehicles can be accommodated within the gas station area. The future expansion of the gas station by eight fueling positions includes additional queuing area.

Proposed Lane Configuration

Based on the auxiliary lane, capacity, and queue length analysis, it is recommended that no geometric changes are needed at any of the study area intersections. The proposed lane configuration is illustrated in Figure 11.



NOT TO SCALE

COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 11 PROPOSED LANE CONFIGURATION

YORKVILLE ILLINOIS

V. CONCLUSIONS

The purpose of this study is to evaluate the potential traffic impacts of the proposed Costco Warehouse located along the north side of US Route 34 at the northwest corner of Route 34 and Countryside Parkway in the City of Yorkville, Illinois. The proposed development consists of approximately 161,064 square foot Costco Wholesale building and a members-only gas station with 40 gas pumps.

The proposed access plan includes a right in/right out/left in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway. The site plan proposes 859 parking stalls.

Traffic estimates are projected to 2031, which is five years beyond the anticipated build out in 2026, utilizing growth rates from CMAP that projected traffic volumes to 2050. The study area includes the existing signalized intersections of US 34/Veterans Parkway and Countryside Parkway and US 34/Veterans Parkway and McHugh Road, the existing unsignalized intersections of McHugh Road and Countryside Parkway, Crimson Lane and Countryside Parkway, and US 34/Veterans Parkway and Tuma Road, and the proposed connections on US 34/Veterans Parkway, McHugh Road, and Countryside Parkway.

This study evaluated whether additional auxiliary lanes are warranted at the study area intersections, the westbound approach of US 34/Veterans Parkway at Costco Driveway 4 and the northbound approach of McHugh Road at Costco Driveway 5 meet the warrant based on the chart comparing right turn and approach volumes and were therefore considered. Similarly, the westbound approach of Countryside Parkway at Costco Driveway 1 and Costco Driveway 2 and on the eastbound approach of US 34/Veterans Parkway at the Costco Driveway 4 meet the warrant based on uniformity of intersection design and were therefore considered. Therefore, it is recommended that right turn and left turn lanes are considered at these driveways.

As part of this study would be the installation of a traffic signal following the methodology established in the MUTCD and IDOT SRA criteria. Warrant 1, the eight-hour vehicular volume warrant, is typically the only vehicular volume/delay warrant that is considered for intersections on designated SRA routes. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. However, additional guidance from IDOT states that in cases involving future volumes, the eight-hour vehicular volume hour can be estimated as 55 percent of the peak hour volumes.

Based on the projected weekday pm peak hour traffic volumes and utilizing the IDOT guidance to estimate the eighth hour volumes, the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road do not meet the eight-hour warrants. Therefore, for the purposes of this study, the intersection of US 34 and Costco Driveway 4/Tuma Road was analyzed as a two-way stop-controlled intersection and the intersection of Countryside Parkway and McHugh Road was analyzed as the existing all-way stop-controlled configuration.

Results of the capacity analysis for the existing scenario indicate that all approaches are experiencing low delays at the signalized and unsignalized intersections. Delays increased in the background scenario and all movements operate adequately. In the future with project scenario, both signalized intersections continue to operate at adequate LOS, however the southbound approach at Countryside Parkway and US 34/Veterans Parkway operates at LOS F during the weekday pm and Saturday midday peak hours. One potential mitigation option to reduce the southbound approach delay would be to retime the existing signal timing plan by shifting 22 seconds of green time from the US 34/Veterans Parkway eastbound/ westbound through movement to the southbound approach during the weekday pm and 23 seconds of green time during the Saturday midday peak hours. As illustrated in Table 5, retiming the traffic signal would result in the southbound approach operating at LOS C with minimal impact on the eastbound and westbound approaches, with the US 34 approaches both operating at LOS B during both peak hours. The signal retiming would have to be approved by IDOT.

The results of the capacity analysis for the unsignalized intersections during the existing as well as the background scenario are projected to operate with low delays. In the future with project scenario, all movements at the unsignalized intersections continue to operate adequately, with all levels of service remaining at LOS D or better with the exception of the northwest approach of Tuma Road which is projected to operate at LOS F during the weekday pm peak hour. Higher delays are typical at stop-controlled approaches on minor streets and driveways at intersections with arterial roadways during peak periods. Additionally, it should be noted that the volume-to-capacity ratio of the minor approaches are less than one, indicating available capacity. While left turn movements from driveways onto arterials may experience delays during peak hours, they are expected to operate adequately at all other hours of the day.

Additionally, a 95th percentile queue analysis was conducted at each of the study area driveways. No major queues were observed at the turning movements with the exception of the southbound left turn at the Countryside Parkway and US 34/Veterans Parkway intersection. This southbound movement exceeds the existing storage during the weekday pm peak hour and Saturday midday peak hours with a queue of 341 feet and 381 feet, respectively. It should be noted that this is a trap lane and the queues do not spill back into the main travel lanes, however, it is anticipated that this queue will back up to the proposed Costco Driveway 4 (right in/right out). Based on the proposed mitigation scenario, the southbound queues will decrease to 208 feet during the weekday pm peak hour and 211 feet during the Saturday midday peak hour. Therefore, it is concluded that no queue storage mitigation is required at any of the intersections and site driveways.

Site circulation will be aided by a limited access internal roadway which is configured with traditional stop-controlled intersections and no direct access to parking aisles. The gas station is configured such that 80 vehicles can be held within the gas station area.

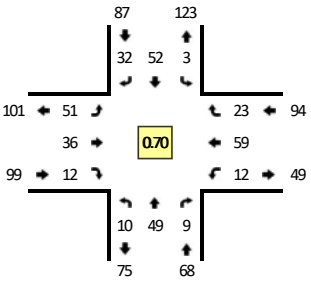
APPENDIX A

EXISTING TRAFFIC COUNTS

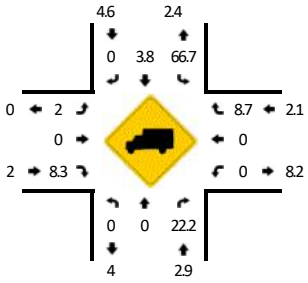
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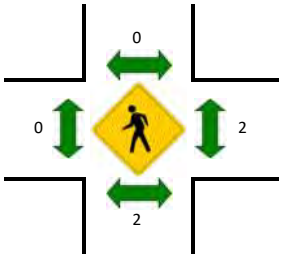
LOCATION: McHugh Rd -- E Countryside Pkwy | **QC JOB #:** 16749101
CITY/STATE: Yorkville, IL | **DATE:** Tue, Sep 17 2024

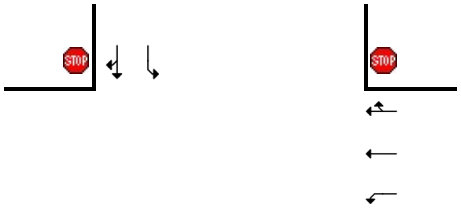
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

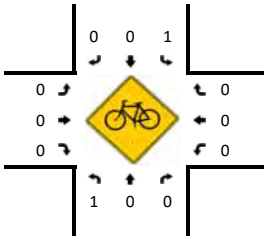


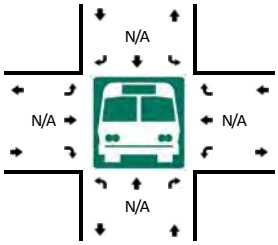


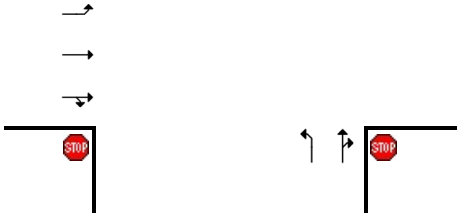


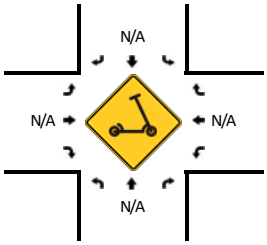












15-Min Count Period Beginning At	McHugh Rd (Northbound)				McHugh Rd (Southbound)				E Countryside Pkwy (Eastbound)				E Countryside Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	10	1	0	0	16	10	0	8	7	1	0	2	9	3	0	69	
7:15 AM	1	13	0	0	0	8	3	0	5	9	3	0	1	11	5	0	59	
7:30 AM	2	14	4	0	3	8	10	0	15	10	5	0	3	16	4	1	95	
7:45 AM	5	12	4	0	0	20	9	0	23	10	3	0	5	23	11	0	125	348
8:00 AM	0	21	0	0	2	13	2	0	11	9	1	0	4	12	2	1	78	357
8:15 AM	1	21	3	0	1	10	9	0	10	14	3	0	3	10	7	2	94	392
8:30 AM	3	7	3	0	1	22	13	0	13	8	3	0	4	5	6	0	88	385
8:45 AM	6	7	0	0	0	14	5	0	14	7	4	0	6	17	3	1	84	344

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	48	16	0	0	80	36	0	92	40	12	0	20	92	44	0	500
Heavy Trucks	0	0	8		0	4	0		4	0	0		0	0	0		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 10/11/2024 7:18 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

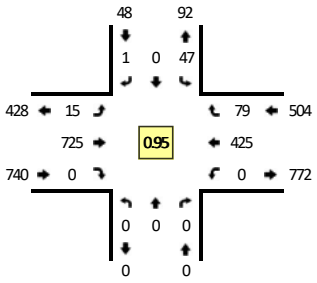
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

LOCATION: E Countryside Pkwy -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749104

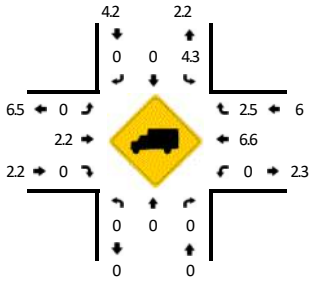
CITY/STATE: Yorkville, IL | **DATE:** Tue, Sep 17 2024

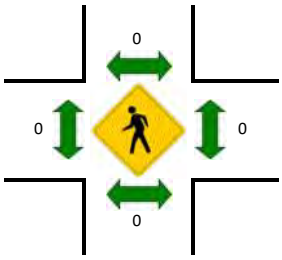
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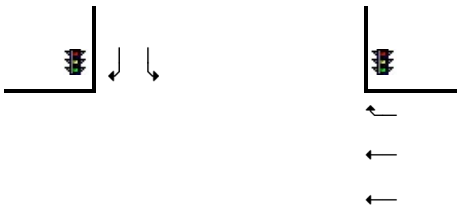
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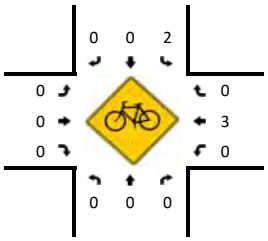


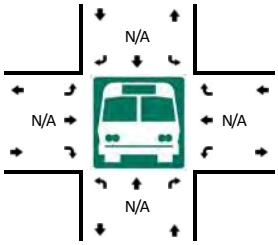




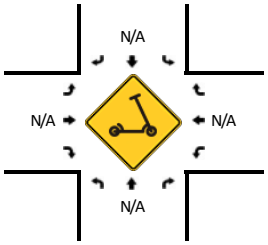












15-Min Count Period Beginning At	E Countryside Pkwy (Northbound)				E Countryside Pkwy (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	8	0	0	0	3	184	0	0	0	133	11	0	339	
7:15 AM	0	0	0	0	12	0	0	0	3	217	0	2	0	84	14	0	332	
7:30 AM	0	0	0	0	15	0	0	0	4	181	0	0	0	85	17	0	302	
7:45 AM	0	0	0	0	12	0	1	0	3	143	0	0	0	123	37	0	319	1292
8:00 AM	0	0	0	0	9	0	3	0	2	156	0	0	0	105	8	0	283	1236
8:15 AM	0	0	0	0	14	0	4	0	2	167	0	3	0	110	12	0	312	1216
8:30 AM	0	0	0	0	12	0	1	0	0	148	0	0	0	106	9	0	276	1190
8:45 AM	0	0	0	0	9	0	0	0	1	124	0	0	0	101	14	0	249	1120

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	32	0	0	0	12	736	0	0	0	532	44	0	1356
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	32	0		40
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4
Scooters																	

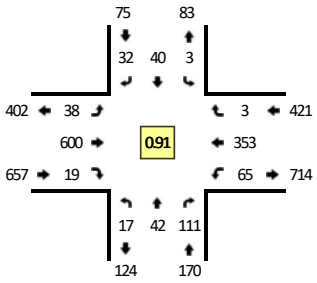
Comments:

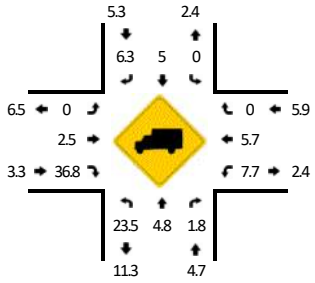
Report generated on 10/11/2024 7:18 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

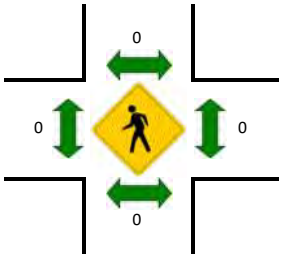
LOCATION: McHugh Rd -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749107
CITY/STATE: Yorkville, IL | **DATE:** Wed, Sep 18 2024

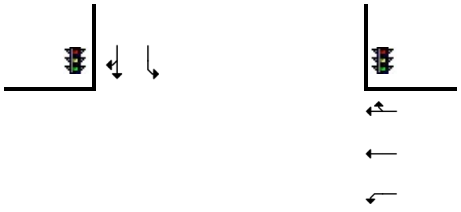
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

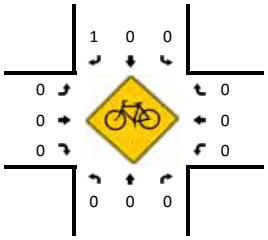


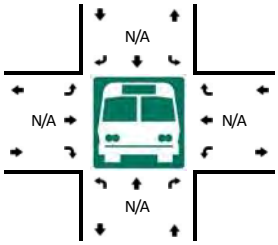


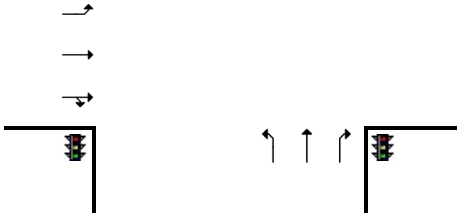
TRUE DATA TO IMPROVE MOBILITY

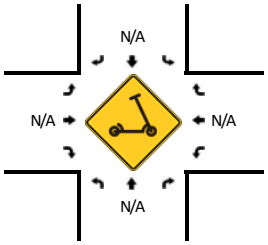












15-Min Count Period Beginning At	McHugh Rd (Northbound)				McHugh Rd (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	9	27	0	1	7	9	0	12	137	8	0	19	107	0	0	338	
7:15 AM	6	10	42	0	1	7	8	0	7	199	2	0	14	69	0	0	365	
7:30 AM	6	8	22	0	0	11	9	0	10	140	3	0	17	91	0	0	317	
7:45 AM	3	15	20	0	1	15	6	0	9	124	6	0	15	86	3	0	303	1323
8:00 AM	5	13	31	0	2	3	4	0	10	114	3	0	17	91	2	0	295	1280
8:15 AM	7	11	31	0	2	5	15	0	18	144	8	0	13	91	1	0	346	1261
8:30 AM	7	7	19	0	1	21	16	0	16	104	1	0	23	106	0	0	321	1265
8:45 AM	4	9	26	0	2	12	10	0	9	93	6	0	15	104	2	0	292	1254

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	40	168	0	4	28	32	0	28	796	8	0	56	276	0	0	1460
Heavy Trucks	4	0	0		0	0	4		0	12	4		0	12	0		36
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

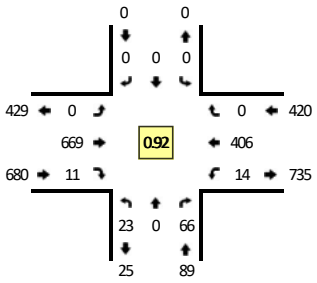
Comments:

Report generated on 10/11/2024 7:18 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

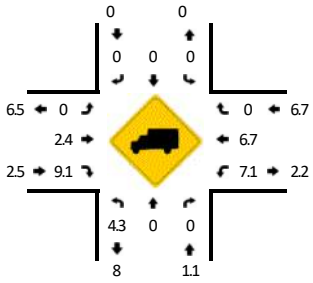
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

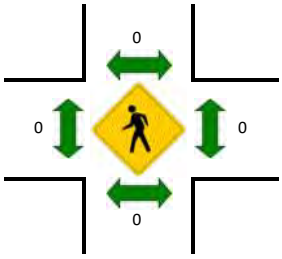
LOCATION: Tuma Rd -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749110
CITY/STATE: Yorkville, IL | **DATE:** Tue, Sep 17 2024

Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

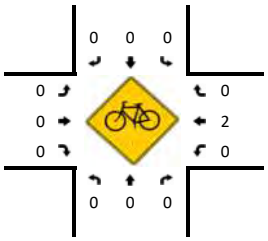


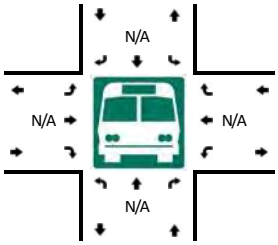
TRUE DATA TO IMPROVE MOBILITY



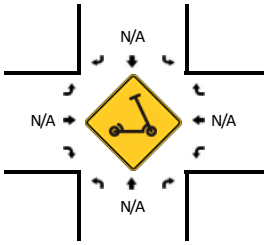












15-Min Count Period Beginning At	Tuma Rd (Northbound)				Tuma Rd (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	7	0	23	0	0	0	0	0	0	160	0	0	7	125	0	0	322	
7:15 AM	4	0	15	0	0	0	0	0	0	205	2	0	2	82	0	0	310	
7:30 AM	4	0	17	0	0	0	0	0	0	166	6	0	3	85	0	0	281	
7:45 AM	8	0	11	0	0	0	0	0	0	138	3	0	2	114	0	0	276	1189
8:00 AM	10	0	13	0	0	0	0	0	0	144	3	0	10	106	0	0	286	1153
8:15 AM	3	0	17	0	0	0	0	0	0	155	4	0	7	108	0	0	294	1137
8:30 AM	5	0	7	0	0	0	0	0	0	138	4	0	5	103	0	0	262	1118
8:45 AM	7	0	6	0	0	0	0	0	0	122	1	0	8	90	0	0	234	1076

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	0	92	0	0	0	0	0	0	640	0	0	28	500	0	0	1288
Heavy Trucks	4	0	0		0	0	0		0	12	0		0	32	0		48
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

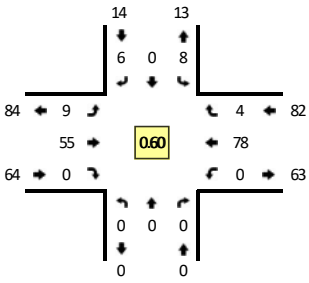
Comments:

Report generated on 10/11/2024 7:18 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

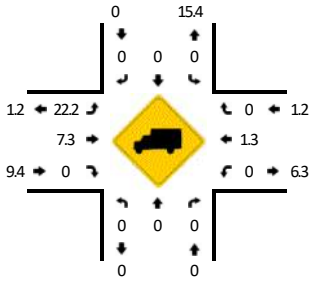
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

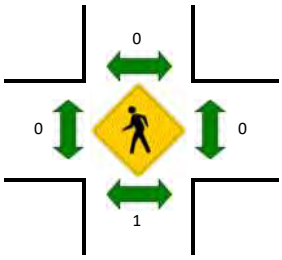
LOCATION: Prairie Pointe Dr -- E Countryside Pkwy | **QC JOB #:** 16749113
CITY/STATE: Yorkville, IL | **DATE:** Wed, Sep 18 2024

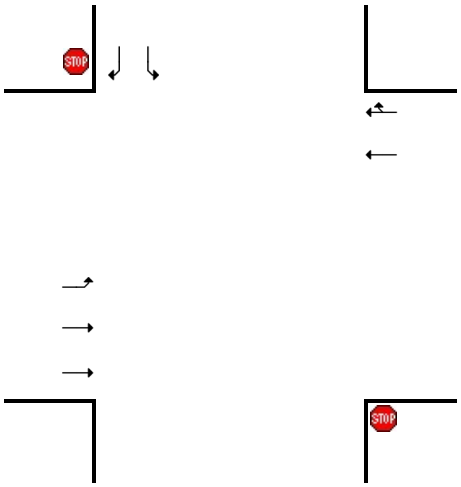
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

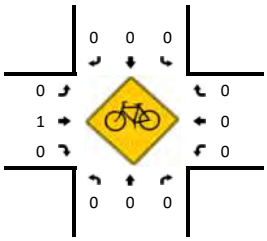


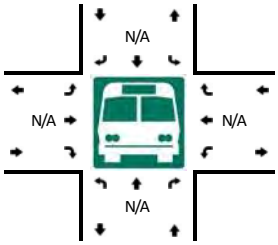


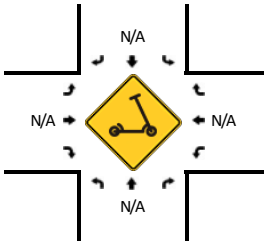












15-Min Count Period Beginning At	Prairie Pointe Dr (Northbound)				Prairie Pointe Dr (Southbound)				E Countryside Pkwy (Eastbound)				E Countryside Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	2	0	1	0	1	10	0	0	0	8	0	0	22	
7:15 AM	0	0	0	0	5	0	2	0	1	17	0	0	0	19	1	0	45	
7:30 AM	0	0	0	0	0	0	1	0	0	11	0	0	0	12	2	0	26	
7:45 AM	0	0	0	0	1	0	2	0	7	17	0	0	0	39	1	0	67	160
8:00 AM	0	0	0	0	2	0	1	0	0	10	0	0	0	14	1	0	28	166
8:15 AM	0	0	0	0	0	0	2	0	3	10	0	0	0	18	2	0	35	156
8:30 AM	0	0	0	0	1	0	2	0	1	11	0	0	0	12	1	0	28	158
8:45 AM	0	0	0	0	1	0	2	0	3	10	0	0	0	19	4	0	39	130

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	8	0	28	68	0	0	0	156	4	0	268
Heavy Trucks	0	0	0		0	0	0		8	0	0		0	0	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

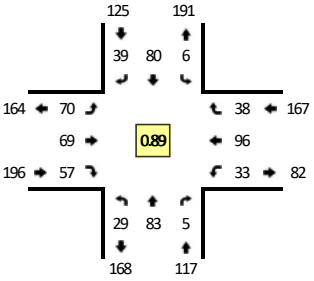
Comments:

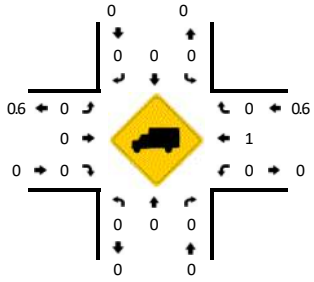
Report generated on 10/11/2024 7:18 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

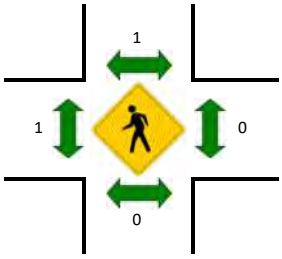
LOCATION: McHugh Rd -- E Countryside Pkwy | **QC JOB #:** 16749102
CITY/STATE: Yorkville, IL | **DATE:** Tue, Sep 17 2024

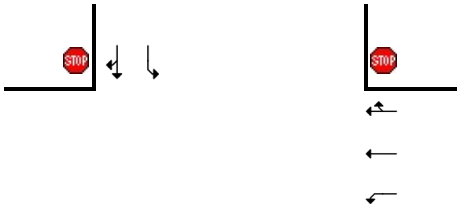
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

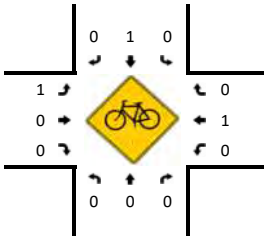


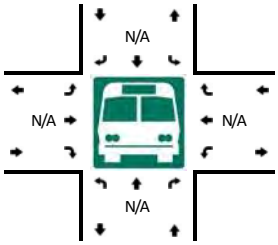


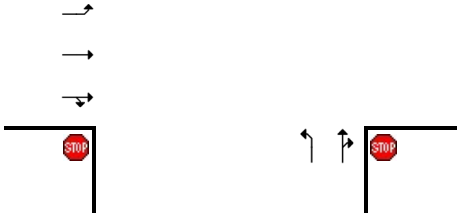
TRUE DATA TO IMPROVE MOBILITY

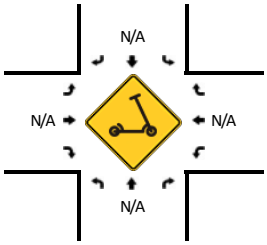












15-Min Count Period Beginning At	McHugh Rd (Northbound)				McHugh Rd (Southbound)				E Countryside Pkwy (Eastbound)				E Countryside Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	6	23	1	0	2	17	9	0	11	12	14	0	10	20	5	4	134	
4:15 PM	4	17	1	0	4	11	8	0	15	17	9	0	8	29	9	4	136	
4:30 PM	6	26	2	0	0	13	11	0	11	23	12	0	8	27	11	1	151	
4:45 PM	8	18	0	0	4	26	10	0	22	16	19	0	8	29	9	0	169	590
5:00 PM	7	20	2	0	2	20	12	0	21	15	14	0	6	17	6	1	143	599
5:15 PM	8	19	1	0	0	21	6	0	16	15	12	0	9	23	12	0	142	605
5:30 PM	5	13	0	0	3	15	13	0	12	12	17	0	6	26	7	1	130	584
5:45 PM	9	15	0	0	3	13	6	0	11	17	14	0	7	32	6	0	133	548

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	72	0	0	16	104	40	0	88	64	76	0	32	116	36	0	676
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	4	0		4	0	0		0	0	0		8
Scooters																	

Comments:

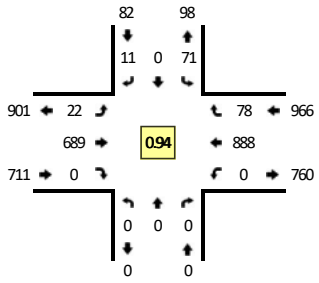
Report generated on 10/11/2024 7:30 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

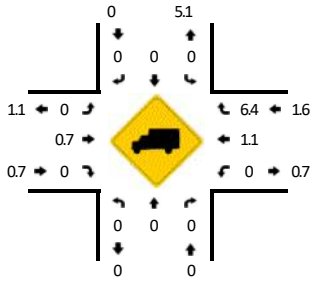
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

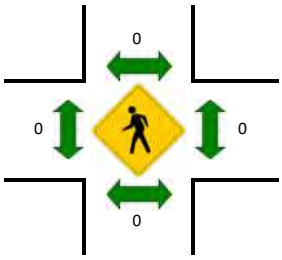
LOCATION: E Countryside Pkwy -- E Veterans Pkwy/US 34
CITY/STATE: Yorkville, IL

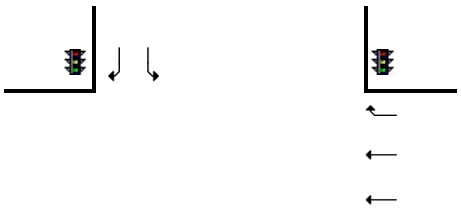
QC JOB #: 16749105
DATE: Tue, Sep 17 2024

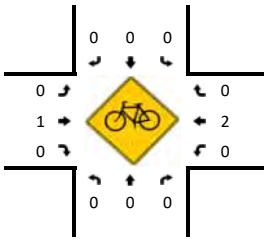
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

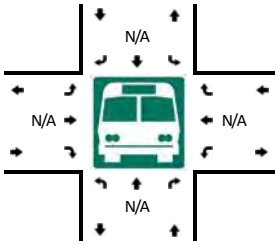




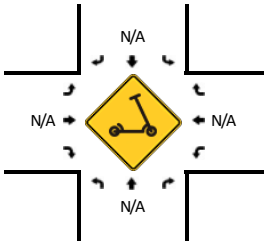












15-Min Count Period Beginning At	E Countryside Pkwy (Northbound)				E Countryside Pkwy (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	20	0	2	0	9	147	0	0	0	219	18	0	415	
4:15 PM	0	0	0	0	18	0	10	0	5	148	0	4	0	223	31	0	439	
4:30 PM	0	0	0	0	21	0	3	0	7	182	0	1	0	186	23	0	423	
4:45 PM	0	0	0	0	19	0	1	0	2	154	0	0	0	209	23	0	408	1685
5:00 PM	0	0	0	0	14	0	4	0	4	171	0	1	0	251	15	0	460	1730
5:15 PM	0	0	0	0	17	0	3	0	7	182	0	0	0	242	17	0	468	1759
5:30 PM	0	0	0	0	12	0	4	0	5	154	0	0	0	237	22	0	434	1770
5:45 PM	0	0	0	0	15	0	5	0	5	150	0	1	0	201	29	0	406	1768

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	68	0	12	0	28	728	0	0	0	968	68	0	1872
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	8	4		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

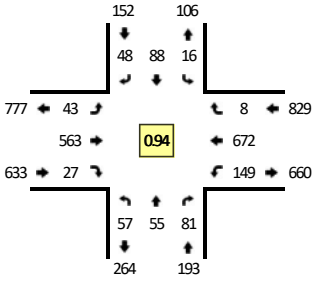
Report generated on 10/11/2024 7:30 AM

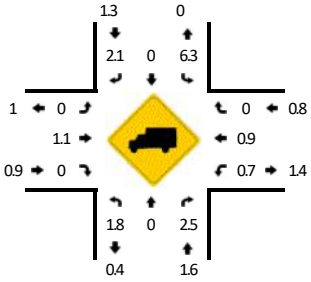
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

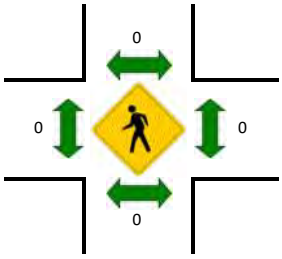
LOCATION: McHugh Rd -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749108
CITY/STATE: Yorkville, IL | **DATE:** Wed, Sep 18 2024

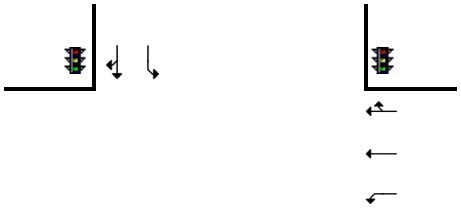
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

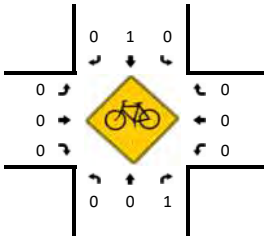


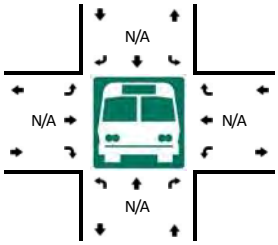


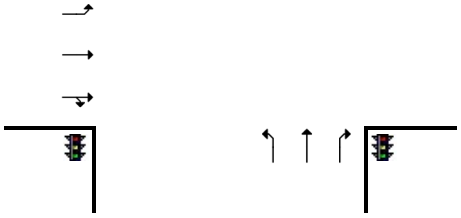
TRUE DATA TO IMPROVE MOBILITY

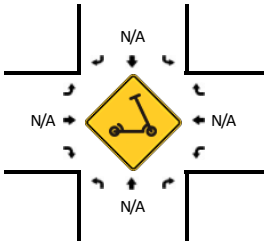












15-Min Count Period Beginning At	McHugh Rd (Northbound)				McHugh Rd (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	21	9	17	0	4	18	11	0	16	137	6	0	37	166	2	0	444	
4:15 PM	12	9	18	0	2	14	6	0	11	99	6	0	28	146	3	0	354	
4:30 PM	12	12	21	0	3	18	14	0	13	121	9	0	40	178	1	0	442	
4:45 PM	14	22	23	0	6	28	14	0	10	127	5	0	32	151	4	0	436	1676
5:00 PM	16	11	13	0	4	20	7	0	12	149	3	0	37	173	2	0	447	1679
5:15 PM	15	10	24	0	3	22	13	0	8	166	10	0	40	170	1	0	482	1807
5:30 PM	20	11	23	0	1	15	13	0	14	144	4	0	27	165	2	0	439	1804
5:45 PM	11	9	17	0	4	27	8	0	10	116	12	0	20	122	1	0	357	1725

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	40	96	0	12	88	52	0	32	664	40	0	160	680	4	0	1928
Heavy Trucks	4	0	4		4	0	0		0	4	0		0	4	0		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	4		0	0	0		0	0	0		0	0	0		4
Scooters																	

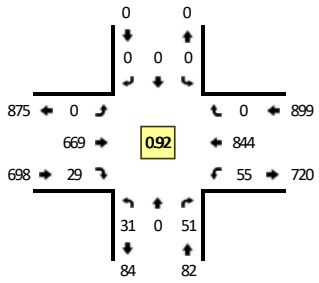
Comments:

Report generated on 10/11/2024 7:30 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

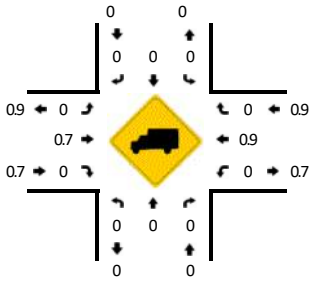
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

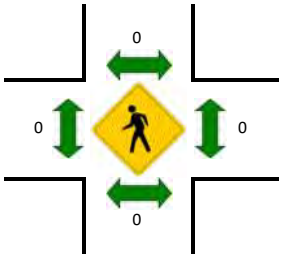
LOCATION: Tuma Rd -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749111
CITY/STATE: Yorkville, IL | **DATE:** Tue, Sep 17 2024

Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

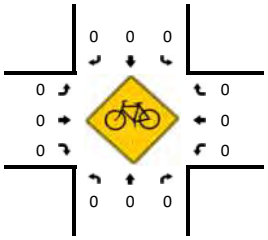


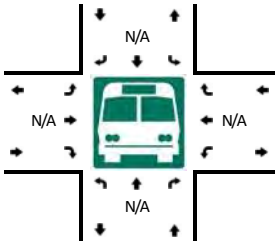




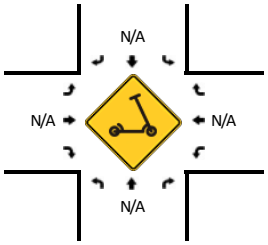












15-Min Count Period Beginning At	Tuma Rd (Northbound)				Tuma Rd (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	0	12	0	0	0	0	0	0	153	13	0	9	204	0	0	393	
4:15 PM	5	0	10	0	0	0	0	0	0	135	12	0	16	222	0	0	400	
4:30 PM	2	0	15	0	0	0	0	0	0	176	5	0	12	177	0	0	387	
4:45 PM	8	0	7	0	0	0	0	0	0	153	5	0	6	206	0	0	385	1565
5:00 PM	8	0	14	0	0	0	0	0	0	163	11	0	19	237	0	0	452	1624
5:15 PM	13	0	15	0	0	0	0	0	0	177	8	0	18	224	0	0	455	1679
5:30 PM	5	0	12	0	0	0	0	0	0	146	6	0	13	204	0	0	386	1678
5:45 PM	3	0	13	0	0	0	0	0	0	141	5	0	15	185	0	0	362	1655

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	0	60	0	0	0	0	0	0	708	32	0	72	896	0	0	1820
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	8	0		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

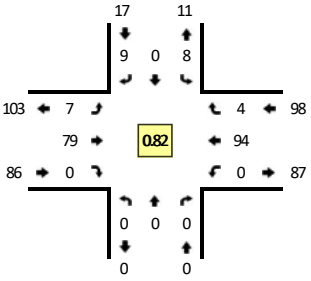
Comments:

Report generated on 10/11/2024 7:30 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

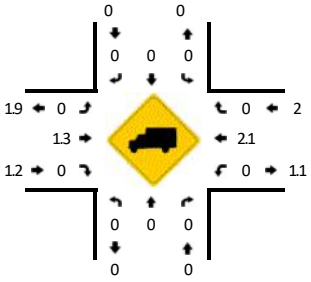
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

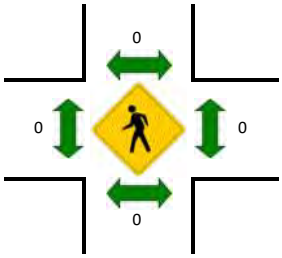
LOCATION: Prairie Pointe Dr -- E Countryside Pkwy | **QC JOB #:** 16749114
CITY/STATE: Yorkville, IL | **DATE:** Wed, Sep 18 2024

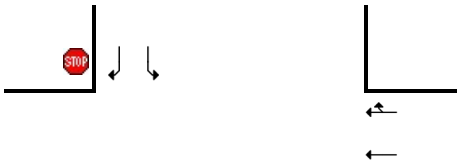
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

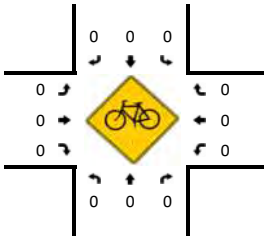


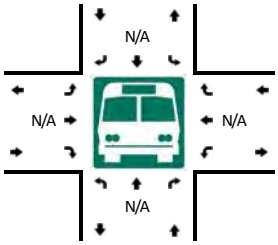
TRUE DATA TO IMPROVE MOBILITY



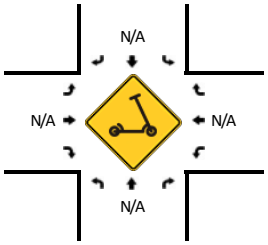












15-Min Count Period Beginning At	Prairie Pointe Dr (Northbound)				Prairie Pointe Dr (Southbound)				E Countryside Pkwy (Eastbound)				E Countryside Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	2	0	3	23	0	0	0	21	3	0	52	
4:15 PM	0	0	0	0	3	0	2	0	1	20	0	0	0	25	0	0	51	
4:30 PM	0	0	0	0	3	0	4	0	3	11	0	0	0	26	0	0	47	
4:45 PM	0	0	0	0	2	0	1	0	0	20	0	0	0	20	1	0	44	194
5:00 PM	0	0	0	0	1	0	2	0	1	19	0	0	0	25	1	0	49	191
5:15 PM	0	0	0	0	2	0	2	0	3	29	0	0	0	23	2	0	61	201
5:30 PM	0	0	0	0	2	0	0	0	1	17	0	0	0	13	0	0	33	187
5:45 PM	0	0	0	0	1	0	0	0	1	18	0	0	0	21	0	0	41	184

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	8	0	8	0	12	116	0	0	0	92	8	0	244
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

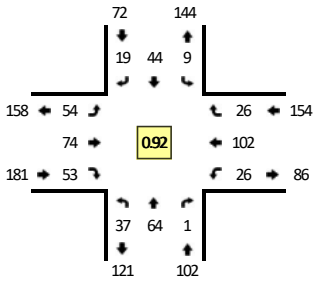
Comments:

Report generated on 10/11/2024 7:30 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

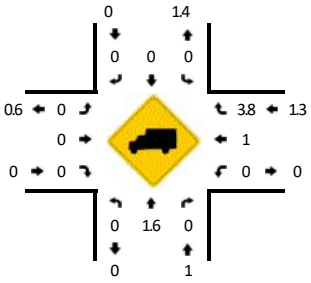
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

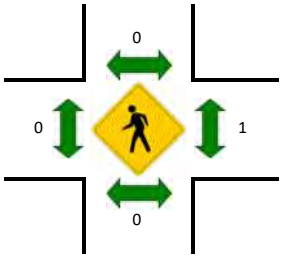
LOCATION: McHugh Rd -- E Countryside Pkwy | **QC JOB #:** 16749103
CITY/STATE: Yorkville, IL | **DATE:** Sat, Sep 14 2024

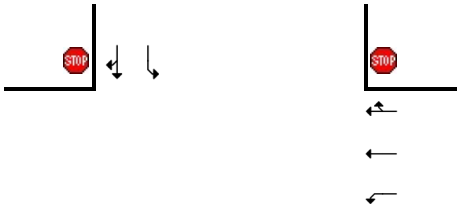
Peak-Hour: 12:45 PM -- 1:45 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

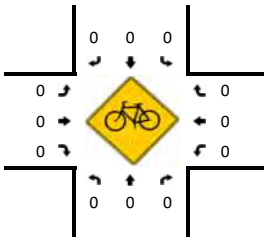


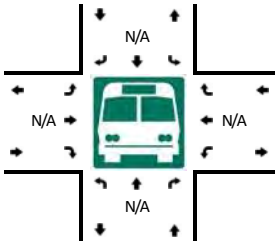


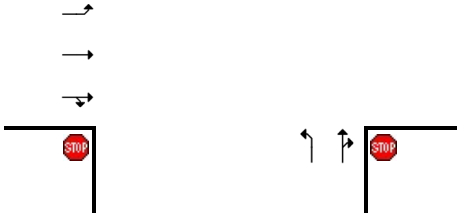


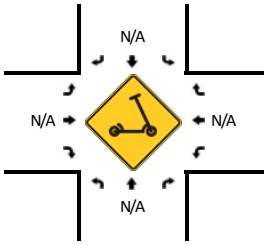












15-Min Count Period Beginning At	McHugh Rd (Northbound)				McHugh Rd (Southbound)				E Countryside Pkwy (Eastbound)				E Countryside Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	10	17	0	0	4	11	10	0	13	15	7	0	9	25	9	2	132	
11:15 AM	10	18	0	0	2	7	8	0	24	20	9	0	7	23	11	2	141	
11:30 AM	6	17	0	0	1	15	15	0	10	13	18	0	8	20	9	1	133	
11:45 AM	9	16	1	0	3	16	8	0	21	8	13	0	8	22	10	1	136	542
12:00 PM	16	14	0	0	0	11	6	0	16	12	10	0	6	26	6	2	125	535
12:15 PM	8	15	0	0	5	6	9	0	13	24	12	0	4	37	9	0	142	536
12:30 PM	13	11	0	0	3	10	6	0	10	14	17	0	3	28	12	1	128	531
12:45 PM	9	17	1	0	1	16	3	0	12	28	17	0	6	24	5	0	139	534
1:00 PM	10	13	0	0	4	6	5	0	12	12	7	0	4	26	10	1	110	519
1:15 PM	9	19	0	0	2	11	4	0	19	14	14	0	7	24	5	1	129	506
1:30 PM	9	15	0	0	2	11	7	0	11	20	15	0	7	28	6	0	131	509
1:45 PM	10	12	0	0	1	11	2	0	13	24	8	0	7	17	8	1	114	484
2:00 PM	8	12	0	0	0	11	9	0	14	16	8	0	0	14	11	0	103	477
2:15 PM	4	13	0	0	4	9	8	0	4	17	13	0	3	24	5	0	104	452
2:30 PM	9	13	0	0	3	12	3	0	9	14	9	0	5	21	8	0	106	427
2:45 PM	4	11	0	0	2	9	4	0	8	13	6	0	2	16	4	0	79	392

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	68	4	0	4	64	12	0	48	112	68	0	24	96	20	0	556
Heavy Trucks	0	4	0		0	0	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 10/11/2024 7:31 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

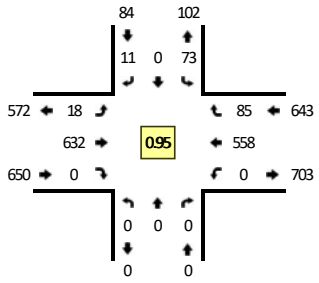
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

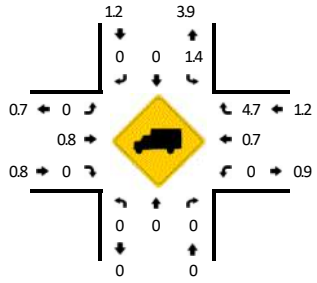
LOCATION: E Countryside Pkwy -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749106

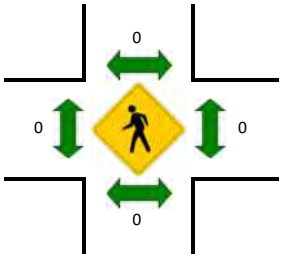
CITY/STATE: Yorkville, IL | **DATE:** Sat, Sep 14 2024

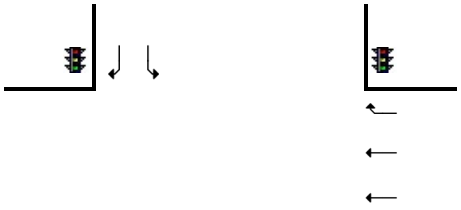
Peak-Hour: 12:45 PM -- 1:45 PM

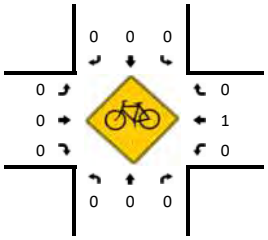
Peak 15-Min: 1:30 PM -- 1:45 PM

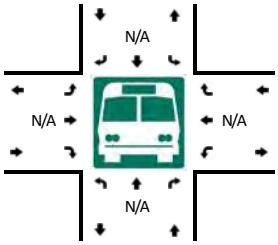




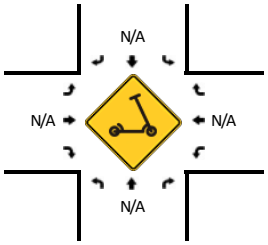












15-Min Count Period Beginning At	E Countryside Pkwy (Northbound)				E Countryside Pkwy (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	0	0	0	24	0	2	0	2	145	0	1	0	144	20	0	338	
11:15 AM	0	0	0	0	20	0	3	0	1	171	0	0	0	113	20	0	328	
11:30 AM	0	0	0	0	15	0	1	0	1	153	0	0	0	132	19	0	321	
11:45 AM	0	0	0	0	9	0	1	0	0	131	0	0	0	144	15	0	300	1287
12:00 PM	0	0	0	0	13	0	2	0	2	144	0	0	0	136	22	0	319	1268
12:15 PM	0	0	0	0	27	0	1	0	4	141	0	0	0	159	30	0	362	1302
12:30 PM	0	0	0	0	19	0	1	0	2	136	0	0	0	130	25	0	313	1294
12:45 PM	0	0	0	0	25	0	3	0	2	151	0	1	0	136	22	0	340	1334
1:00 PM	0	0	0	0	13	0	3	0	4	144	0	1	0	142	27	0	334	1349
1:15 PM	0	0	0	0	11	0	3	0	3	158	0	1	0	144	20	0	340	1327
1:30 PM	0	0	0	0	22	0	2	2	6	179	0	0	0	136	16	0	363	1377
1:45 PM	0	0	0	0	14	0	6	0	11	157	0	3	0	137	12	0	340	1377
2:00 PM	0	0	0	0	17	0	3	0	1	146	0	0	0	128	20	0	315	1358
2:15 PM	0	0	0	0	20	0	2	0	3	133	0	0	0	146	25	0	329	1347
2:30 PM	0	0	0	0	16	0	2	0	3	141	0	0	0	137	20	0	319	1303
2:45 PM	0	0	0	0	12	0	4	0	1	136	0	0	0	123	17	0	293	1256

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	88	0	8	8	24	716	0	0	0	544	64	0	1452
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	0	4		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

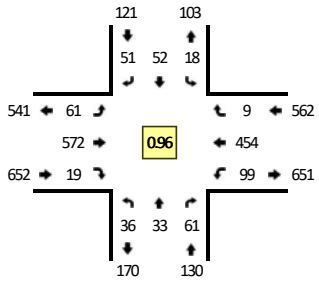
Report generated on 10/11/2024 7:31 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

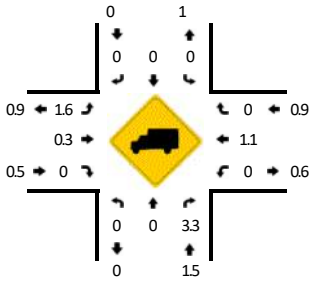
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

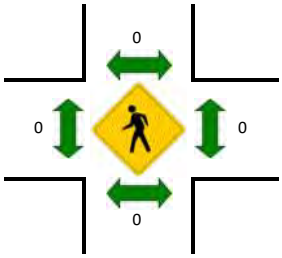
LOCATION: McHugh Rd -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749109
CITY/STATE: Yorkville, IL | **DATE:** Sat, Sep 14 2024

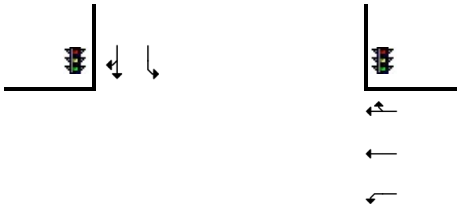
Peak-Hour: 12:45 PM -- 1:45 PM
Peak 15-Min: 1:30 PM -- 1:45 PM

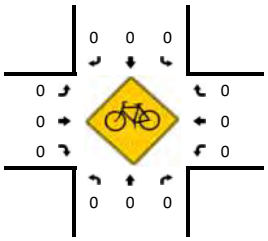


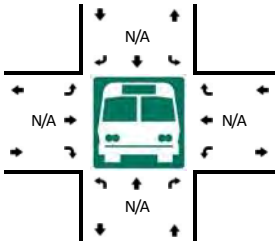


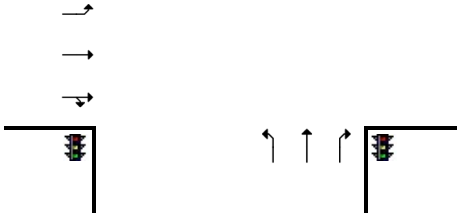


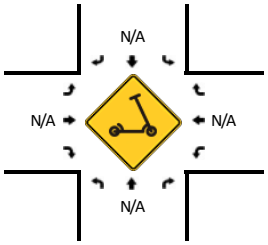












15-Min Count Period Beginning At	McHugh Rd (Northbound)				McHugh Rd (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	10	9	20	0	1	14	10	0	13	130	3	0	11	134	1	0	356	
11:15 AM	8	11	16	0	4	8	9	0	14	162	6	0	16	96	1	0	351	
11:30 AM	8	8	18	0	4	24	12	0	13	134	6	0	13	115	2	0	357	
11:45 AM	9	12	18	0	5	21	15	0	16	114	11	0	24	108	1	0	354	1418
12:00 PM	21	20	10	0	3	8	14	0	10	130	9	0	18	119	0	0	362	1424
12:15 PM	11	16	16	0	1	14	6	0	6	125	4	0	18	128	0	0	345	1418
12:30 PM	19	8	17	0	0	19	12	0	12	113	7	0	17	116	2	0	342	1403
12:45 PM	7	8	19	0	3	19	17	0	17	148	3	0	19	114	2	0	376	1425
1:00 PM	9	10	12	0	4	8	6	0	12	133	6	0	23	115	2	0	340	1403
1:15 PM	7	9	16	0	4	13	14	0	20	138	3	0	27	114	1	0	366	1424
1:30 PM	13	6	14	0	7	12	14	0	12	153	7	0	30	111	4	0	383	1465
1:45 PM	11	10	19	0	5	10	10	0	9	130	7	0	27	127	3	0	368	1457
2:00 PM	8	9	11	0	2	8	6	0	10	137	8	0	21	102	1	0	323	1440
2:15 PM	13	11	9	0	6	15	6	0	5	118	7	0	18	127	1	0	336	1410
2:30 PM	13	10	12	0	2	16	7	0	10	120	9	0	29	112	1	0	341	1368
2:45 PM	8	8	11	0	2	10	5	0	6	130	5	0	16	119	1	0	321	1321

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	24	56	0	28	48	56	0	48	612	28	0	120	444	16	0	1532
Heavy Trucks	0	0	4		0	0	0		0	0	0		0	4	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

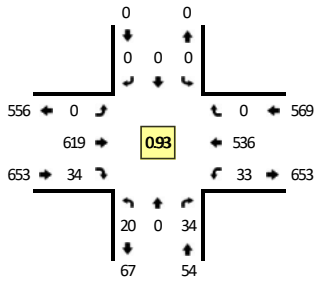
Comments:

Report generated on 10/11/2024 7:31 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

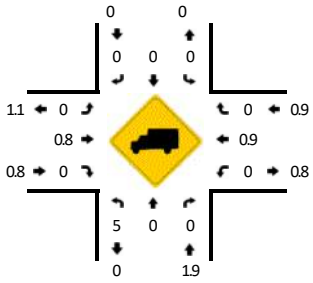
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

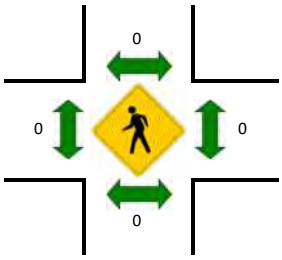
LOCATION: Tuma Rd -- E Veterans Pkwy/US 34 | **QC JOB #:** 16749112
CITY/STATE: Yorkville, IL | **DATE:** Sat, Sep 14 2024

Peak-Hour: 12:45 PM -- 1:45 PM
Peak 15-Min: 1:30 PM -- 1:45 PM

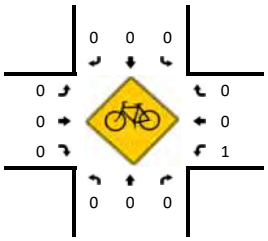


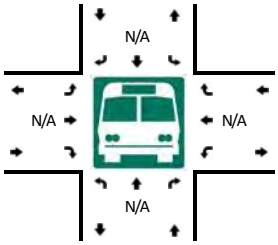




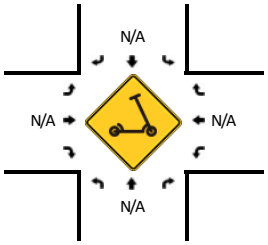












15-Min Count Period Beginning At	Tuma Rd (Northbound)				Tuma Rd (Southbound)				E Veterans Pkwy/US 34 (Eastbound)				E Veterans Pkwy/US 34 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	7	0	7	0	0	0	0	0	0	140	4	0	10	139	0	0	307	
11:15 AM	7	0	10	0	0	0	0	0	0	163	6	0	16	101	0	0	303	
11:30 AM	9	0	9	0	0	0	0	0	0	138	11	0	7	125	0	0	299	
11:45 AM	6	0	3	0	0	0	0	0	0	131	3	0	7	137	0	0	287	1196
12:00 PM	4	0	8	0	0	0	0	0	0	137	5	0	4	131	0	0	289	1178
12:15 PM	7	0	7	0	0	0	0	0	0	134	8	0	13	144	0	0	313	1188
12:30 PM	10	0	4	0	0	0	0	0	0	131	3	0	8	125	0	0	281	1170
12:45 PM	5	0	3	0	0	0	0	0	0	153	8	0	5	131	0	0	305	1188
1:00 PM	4	0	10	0	0	0	0	0	0	138	8	0	12	133	0	0	305	1204
1:15 PM	4	0	10	0	0	0	0	0	0	152	8	0	6	144	0	0	324	1215
1:30 PM	7	0	11	0	0	0	0	0	0	176	10	0	10	128	0	0	342	1276
1:45 PM	6	0	15	0	0	0	0	0	0	153	5	0	11	129	0	0	319	1290
2:00 PM	4	0	6	0	0	0	0	0	0	143	5	0	10	126	0	0	294	1279
2:15 PM	7	0	8	0	0	0	0	0	0	126	5	0	9	138	0	0	293	1248
2:30 PM	3	0	11	0	0	0	0	0	0	134	7	0	7	126	0	0	288	1194
2:45 PM	7	0	9	0	0	0	0	0	0	127	7	0	7	126	0	0	283	1158

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	0	44	0	0	0	0	0	0	704	40	0	40	512	0	0	1368
Heavy Trucks	4	0	0		0	0	0		0	4	0		0	0	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

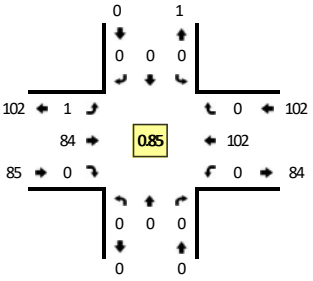
Comments:

Report generated on 10/11/2024 7:31 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

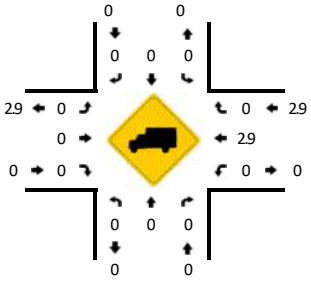
Type of peak hour being reported: System-wide Peak | Method for determining peak hour: Total Entering Volume

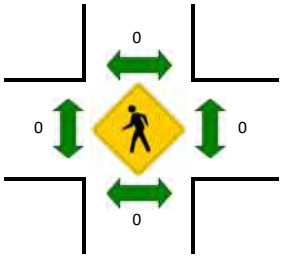
LOCATION: Prairie Pointe Dr -- E Countryside Pkwy | **QC JOB #:** 16749115
CITY/STATE: Yorkville, IL | **DATE:** Sat, Sep 14 2024

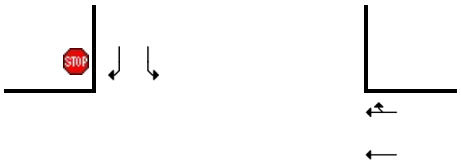
Peak-Hour: 12:45 PM -- 1:45 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

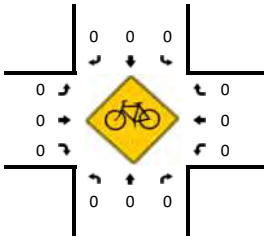


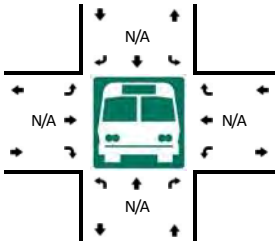




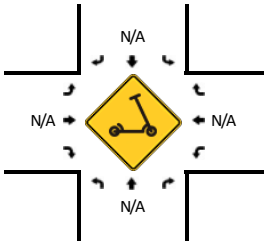












15-Min Count Period Beginning At	Prairie Pointe Dr (Northbound)				Prairie Pointe Dr (Southbound)				E Countryside Pkwy (Eastbound)				E Countryside Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	0	0	0	0	0	1	0	0	22	0	0	0	22	1	0	46	
11:15 AM	0	0	0	0	0	0	0	0	0	25	0	0	0	21	0	0	46	
11:30 AM	0	0	0	0	0	0	0	0	0	15	0	0	0	20	0	0	35	
11:45 AM	0	0	0	0	0	0	0	0	0	11	0	0	0	16	0	0	27	154
12:00 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	23	0	0	39	147
12:15 PM	0	0	0	0	0	0	0	0	0	28	0	0	0	35	0	0	63	164
12:30 PM	0	0	0	0	0	0	0	0	0	18	0	0	0	27	0	0	45	174
12:45 PM	0	0	0	0	0	0	0	0	0	30	0	0	0	25	0	0	55	202
1:00 PM	0	0	0	0	0	0	0	0	1	17	0	0	0	30	0	0	48	211
1:15 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	24	0	0	40	188
1:30 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	23	0	0	44	187
1:45 PM	0	0	0	0	0	0	0	0	0	26	0	0	0	22	0	0	48	180
2:00 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	21	0	0	38	170
2:15 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	28	1	0	50	180
2:30 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	22	0	0	39	175
2:45 PM	0	0	0	0	0	0	0	0	0	15	0	0	0	19	0	0	34	161

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	0	0	0	120	0	0	0	100	0	0	220
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 10/11/2024 7:31 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

APPENDIX B

CMAP CORRESPONDENCE

Chicago Metropolitan Agency for Planning

433 West Van Buren Street, Suite 450
Chicago, IL 60607
cmap.illinois.gov | 312-454-0400

October 24, 2024

Peter Reinhofer, P.E.
Chicago Traffic Services Leader/Senior Planner Manager
V3 Companies
7325 Janes Avenue
Woodridge, IL 60517

Subject: US34 and Countryside Parkway
IDOT

Dear Mr. Reinhofer:

In response to a request made on your behalf and dated October 18, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
US Route 34 east of McHugh Road	16,200	**21,000**
US Route 34 west of McHugh Road	14,000	**18,100**
Countryside Parkway between US 34 and McHugh Road	1,600	**2,000**
Countryside Parkway west of McHugh Road	3,600	**4,500**
McHugh Road south of US 34	2,950	**3,700**
McHugh Road north of US 34	2,000	**2,500**
Tuma Road south of US 34	1,100	**1,380**

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2024 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

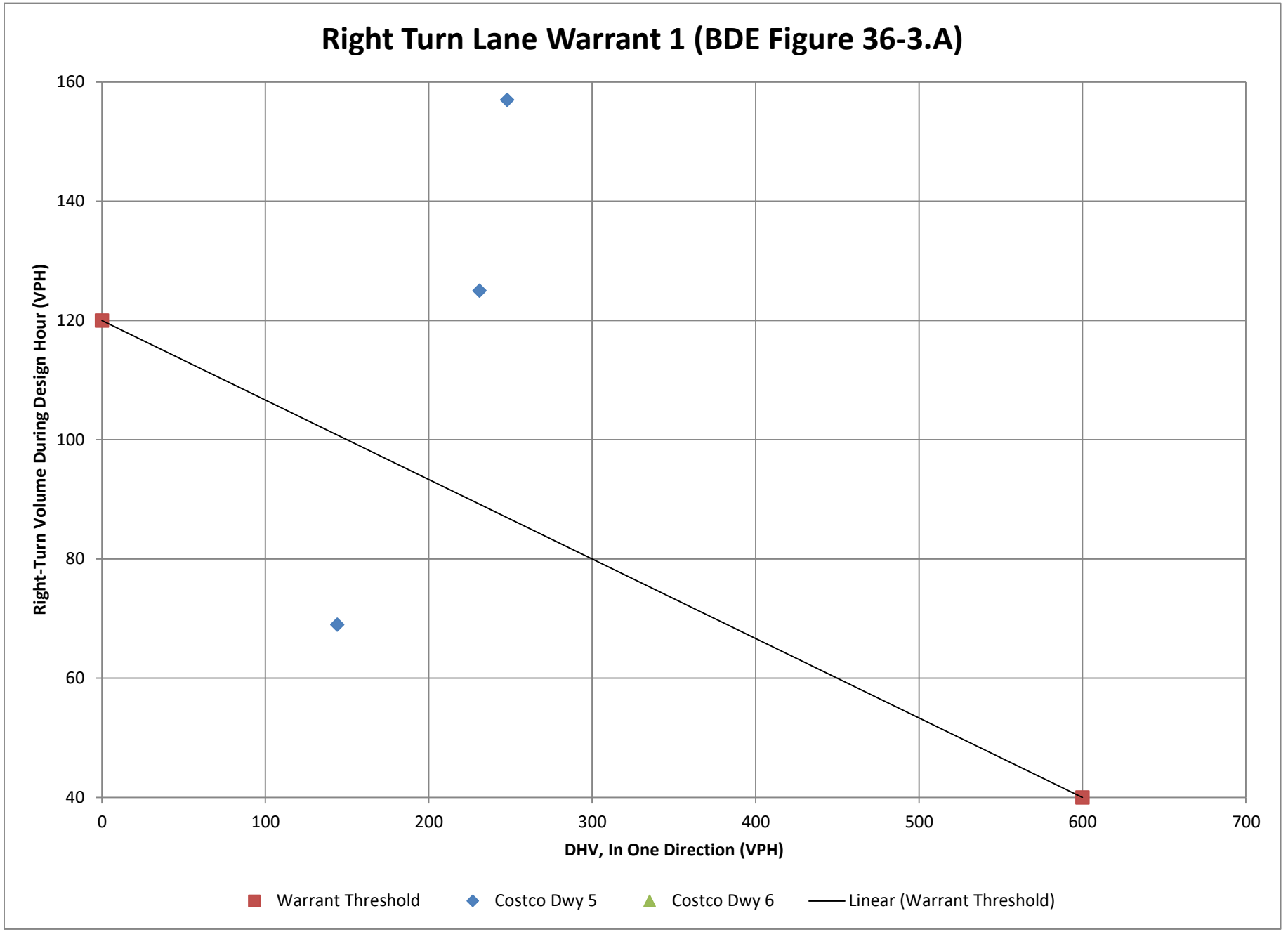
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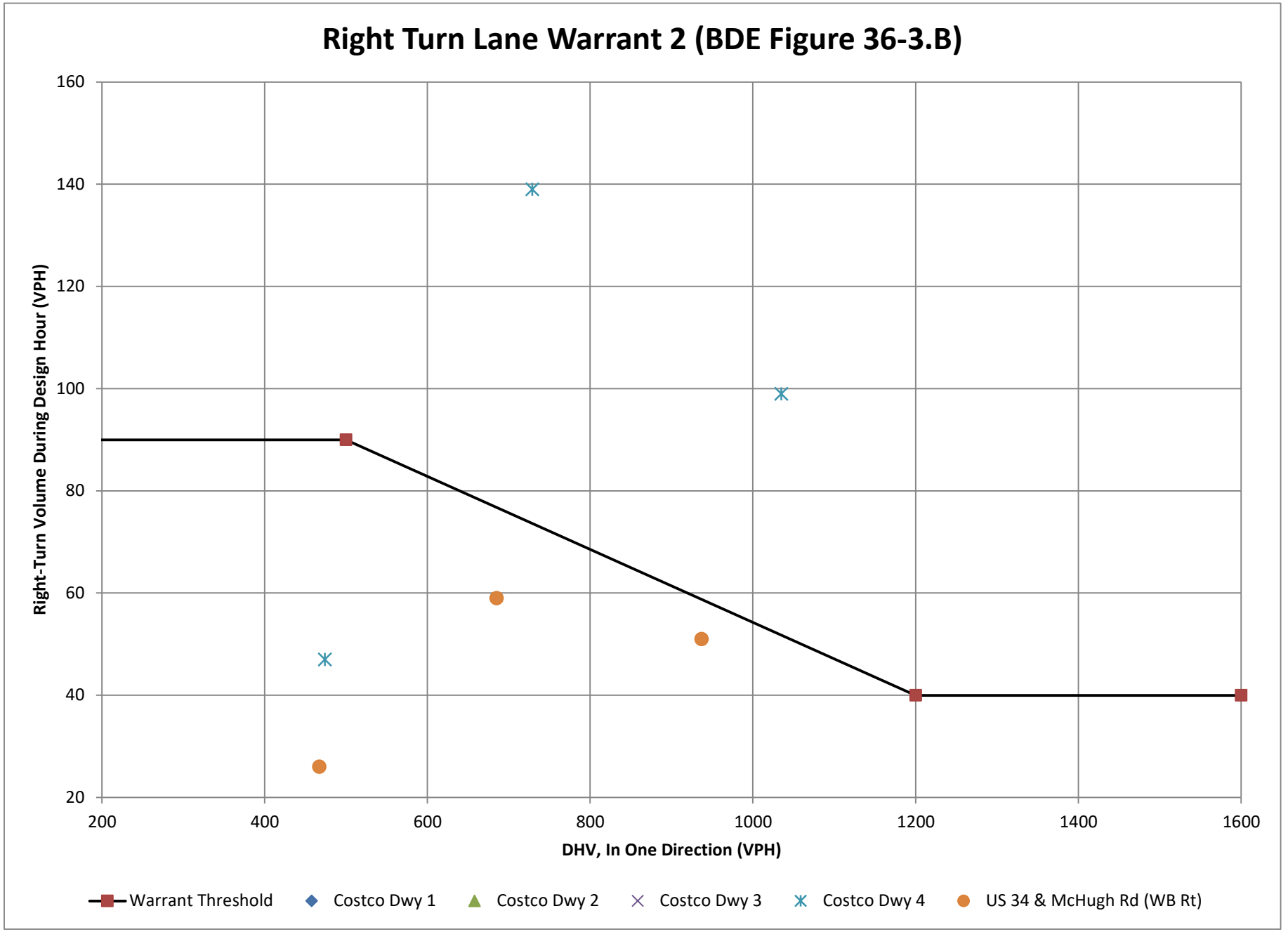
APPENDIX C

AUXILIARY LANE ANALYSIS

Criteria	Right-Turn Lane Warrants	Criteria Met?						Comments
		Costco Dwy 1	Costco Dwy 2	Costco Dwy 3	Costco Dwy 4	Costco Dwy 5	Costco Dwy 6	
1	Unsignalized intersection on a two lane highway that satisfies the criteria in BDE Figures	N/A	N/A	N/A	N/A	Yes	No	Costco Dwy 1 thru 4 are not a two-lane Highway. Costco Dwy 5 meets criteria to consider a right turn lane.
2	Unsignalized intersection on a four lane highway that satisfies the criteria in BDE Figures	No	No	No	Yes	N/A	N/A	Costco Dwy 4 meets the criteria to consider a right turn lane.
3	On expressways where the side street ADT is over 250	No	No	No	No	No	No	Not on an expressway.
4	Any intersection where a capacity analysis determines a right-turn lane is necessary to meet the LOS criteria	No	No	No	No	No	No	All movements operate at acceptable LOS.
5	At any intersection where the right-turning volume is greater than 150 vph and where there is greater than 300 vplph on the mainline	No	No	No	No	No	No	Right-turn lane volumes are less than 150 vph.
6	Uniformity of intersection design along the highway if other intersections have right-turn lanes	No	No	No	No	No	No	No unsignalized intersections in the area have right turn lanes
7	Any intersection where the mainline is curved to the left and the mainline curve requires superelevation	No	No	No	No	No	No	Roads are not on superelevated curves
8	At railroad crossings where the railroad is located close to the intersection and a right turn lane would be desirable to efficiently move through traffic on the parallel roadway	No	No	No	No	No	No	Not near a railroad.
9	Any intersection where the crash experience, traffic operations, sight distance restrictions, or engineering judgement indicates a significant conflict related to right-turning vehicles.	No	No	No	No	No	No	No additional indicators mandating right-turn lanes.

Criteria	Left-Turn Lane Warrants	Criteria Met?						Comments
		Costco Dwy 1	Costco Dwy 2	Costco Dwy 3	Costco Dwy 4	Costco Dwy 5	Costco Dwy 6	
1	Unsignalized intersection on a two lane highway that satisfies the criteria in BDE Figures	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	Not a two-lane Highway.
2	Signalized intersetion where the left-turning volume is equal to or greater than 75 vph	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	Not Signalized intersections
3	Any intersection where a capacity analysis determines a left-turn lane is necessary to meet the LOS criteria	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	All movements operate at acceptable LOS
4	Uniformity of intersection design along the highway if other intersections have left-turn lanes	Yes	Yes	N/A - RIRO Only	Yes	N/A - Already Provided	N/A - Already Provided	Intersections to the west of Costco Dwy 1 and 2 and east and west of Costco Dwy 4 provide left turn lanes.
5	Any intersection where the crash experience, traffic operations, sight distance restrictions, or engineering judgement indicates a significant conflict related to left-turning vehicles.	No	No	N/A - RIRO Only	No	N/A - Already Provided	N/A - Already Provided	No additional indicators mandating left-turn lanes.


Right Turn Lane Warrant 1 (BDE Figure 36-3.A)
Right-Turn Volume During Design Hour (VPH)
160
140
120
100
80
60
40
0
100
200
300
400
500
600
700
DHV, In One Direction (VPH)
Warrant Threshold
Costco Dwy 5
Costco Dwy 6
Linear (Warrant Threshold)


Right Turn Lane Warrant 2 (BDE Figure 36-3.B)
Right-Turn Volume During Design Hour (VPH)
160
140
120
100
80
60
40
20
200
400
600
800
1000
1200
1400
1600
DHV, In One Direction (VPH)
Warrant Threshold
Costco Dwy 1
Costco Dwy 2
Costco Dwy 3
Costco Dwy 4
US 34 & McHugh Rd (WB Rt)

APPENDIX D

TRAFFIC SIGNAL WARRANT ANALYSIS

Date	12/26/2024

Location Information

Intersection	Countryside Parkway & McHugh Road
City	Yorkville
County	Kendall
District	3

Street Information

Major Street (EB/WB)	Countryside Parkway
Minor Street (NB/SB)	McHugh Road

Review Information

Counts Used	Quality Counts - 2031 FwP Volumes
Count Dates	9/17/2024
Date Reviewed	12/26/2024
Reviewed By	MFM

Warrant Information

Speed Limit of Major Street	40
Number of Lanes on Major	2
Number of Lanes on Minor	1
Isolated Community?	No
SRA Route Number	No

Countryside Parkway & McHugh Road
City: **Yorkville**
County: **Kendall**
District: **3**

Major Countryside Parkway
Minor McHugh Road

State Of Illinois
Department of Transportation
Bureau of Traffic

Date: 12/26/2024

SUMMARY OF TRAFFIC SURVEY

Route:	TRAFFIC FROM NORTH McHugh Road N. of: Countryside Parkway Going				TRAFFIC FROM SOUTH McHugh Road S. of: Countryside Parkway Going				TOTAL NORTH AND SOUTH	TRAFFIC FROM EAST Countryside Parkway E. of: McHugh Road Going				TRAFFIC FROM WEST Countryside Parkway W. of: McHugh Road Going				TOTAL EAST AND WEST	GRAND TOTAL
START TIME	EAST	SOUTH	WEST	TOTAL	WEST	NORTH	EAST	TOTAL		SOUTH	WEST	NORTH	TOTAL	NORTH	EAST	SOUTH	TOTAL		
AM	7	56	34	97	18	64	12	94	**191**	13	75	29	117	55	51	17	123	**240**	**431**
PM	18	86	42	146	43	89	5	137	**283**	35	140	53	228	73	111	75	259	**487**	**770**
SAT	30	47	20	97	61	68	1	130	**227**	28	172	49	249	58	139	76	273	**522**	**749**
55th % AM	4	31	19	54	10	36	7	53	**107**	7	41	16	64	30	28	9	67	**131**	**238**
55th % PM	10	47	23	80	24	50	3	77	**157**	19	77	29	125	40	61	41	142	**267**	**424**
55th % Sat	17	26	11	54	34	38	1	73	**127**	15	95	27	137	32	76	42	150	**287**	**414**

REVIEW INFORMATION

COUNTS USED: Quality Counts - 2031 FwP Volumes
COUNT DATE(S): 9/17/2024
DATA REVIEWED: 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Countryside Parkway & McHugh Road
MUNCIPALITY: Yorkville COUNTY: Kendall

DIR	PEAK HOUR	MINOR STREET STREET NAME		McHugh Road		CRITICAL MAINLINE APPROACH VOLUME PER LANE	BASE RIGHT TURN REDUCTION %	MAINLINE CONGESTION FACTOR %	ADJUSTED RIGHT TURN REDUCTION %	ADJUSTED RIGHT TURNS	ADJUSTED MINOR STREET VOLUME
		CONFIG. #		2							
		CRIT. MAINLINE LANE #		2							
		LEFT	THROUGH	RIGHT	APP. TOTAL						
SB	AM	7	56	34	97	38	40%	0%	40%	20	83
SB	PM	18	86	42	146	70	40%	0%	40%	25	129
SB	SAT	30	47	20	97	86	40%	0%	40%	12	89
SB	55th AM	4	31	19	54	21	40%	0%	40%	11	46
SB	55th PM	10	47	23	80	39	40%	0%	40%	14	71
SB	55th Sat	17	26	11	54	48	40%	0%	40%	7	49

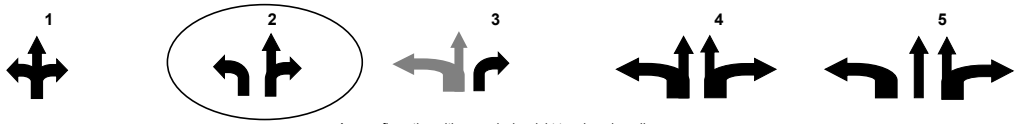
MAINLINE CONGESTION FACTORS	
VOLUMES	FACTOR %
0-399	0%
400-499	5%
500-599	10%
600-699	15%
700-799	20%
800-899	25%
900-999	30%
1000-1099	35%
1100-1199	40%
1200-1299	45%
1300-1399	50%
1400-1499	55%

REVIEW INFORMATION
COUNTS USED: Quality Counts - 2031 FwP Volumes
COUNT DATE(S): 9/17/2024
DATE REVIEWED 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS

1 2 3 4 5



Any configuration with an exclusive right turn lane (usually up to 600 ft. long)

PH	LEFT	THROUGH	RIGHT	TOTAL (A)	0.7A	0.35A	3T	T/3	(T+L)	(T+R)	3R	3L	T/2	T/4	L=T=R (+/-)
AM	7	56	34	97	68	34	168	19	63	90	102	21	28	14	NO
PM	18	86	42	146	102	51	258	29	104	128	126	54	43	22	NO
SAT	30	47	20	97	68	34	141	16	77	67	60	90	24	12	NO
55th AM	4	31	19	54	38	19	93	10	35	50	57	12	16	8	NO
55th PM	10	47	23	80	56	28	141	16	57	70	69	30	24	12	NO
55th Sat	17	26	11	54	38	19	78	9	43	37	33	51	13	7	NO

PH	BASE REDUCTION				
	CONFIG 1	CONFIG 2	CONFIG 3	CONFIG 4	CONFIG 5
AM	40%	40%	75%	30%	50%
PM	20%	40%	75%	30%	30%
SAT	20%	40%	75%	30%	30%
55th AM	40%	40%	75%	30%	50%
55th PM	20%	40%	75%	30%	30%
55th Sat	20%	40%	75%	30%	30%

SIGNAL WARRANT REVIEW SHEET

District #3

SRA: No / YES (NO)

INTERSECTION: Countryside Parkway & McHugh Road
MUNCIPALITY: Yorkville
COUNTY: Kendall

Speed Limit of Major Route 40
Number of Lanes of Major Approach 2
Isolated Community with Population< 10, No
Number of Lanes of Minor Approach 1

	MAJOR	ADJ. MINOR	Check any hours which meet the following Warrants			
			WARRANT 1			
HOUR BEGIN	STREET VOLUME (both approaches)	STREET VOLUME (higher volume approaches)	A	B	WARRANT 1 A/B: 8 hrs of both	
			100%	100%	80% of A	80% of B
AM	240	83				
PM	487	129			X	
SAT	522	89				
55th % AM	131	46				
55th % PM	267	71				
55th % SAT	287	49				
Met:			No	No	No	No
Volume Requirements:	MAJOR:		600	900	480	630
	MINOR:		150	100	120	80

REVIEW INFORMATION

COUNTS USED: Quality Counts - 2031 FwP Volumes
COUNT DATE(S): 9/17/2024
DATE REVIEWED: 12/26/2024
REVIEWED BY: MFM

Comments

WARRANT 1 YES (NO) N/A
Warrant 1 is met if any of the following Conditions are met:

- CONDITION A — Minmum Vehicular Volume — YES (NO) N/A
- CONDITION B — Interruption of Continuous Traffic — YES (NO) N/A
- CONDITION A/B — Combination of Warranrts — YES (NO) N/A

WARRANT 2 — Four Hour Volume — YES NO (N/A)

WARRANT 3 — Peak Hour Volume — YES NO (N/A)

WARRANT 4 — Pedestrian Volume — YES NO (N/A)

WARRANT 5 — School Crossing — YES NO (N/A)

WARRANT 6 — Coordinated Signal System — YES NO (N/A)

WARRANT 7 — Accidents Experience — YES NO (N/A)

WARRANT 8 — Roadway Network — YES NO (N/A)

WARRANT 9 — Intersection Near a Grade Crossing — YES NO (N/A)

Date	12/26/2024

Location Information

Intersection	US Route 34 & Tuma Road/Costco Dwy 4
City	Yorkville
County	Kendall
District	3

Street Information

Major Street (EB/WB)	US 34
Minor Street (NB/SB)	Tuma Road/Costco Dwy 4

Review Information

Counts Used	Quality Counts extrapolated to 2031
Count Dates	9/17/2024
Date Reviewed	12/26/2024
Reviewed By	MFM

Warrant Information

Speed Limit of Major Street	45
Number of Lanes on Major	2
Number of Lanes on Minor	1
Isolated Community?	No
SRA Route Number	513

US Route 34 & Tuma Road/Costco Dwy 4
City: **Yorkville**
County: **Kendall**
District: **3**

State Of Illinois
Department of Transportation
Bureau of Traffic

Date: 12/26/2024

Major US 34
Minor Tuma Road/Costco Dwy 4

SUMMARY OF TRAFFIC SURVEY

Route:	TRAFFIC FROM NORTH Tuma Road/Costco Dwy 4 N. of: US 34 Going				TRAFFIC FROM SOUTH Tuma Road/Costco Dwy 4 S. of: US 34 Going				TOTAL NORTH AND SOUTH	TRAFFIC FROM EAST US 34 E. of: Tuma Road/Costco Dwy 4 Going				TRAFFIC FROM WEST US 34 W. of: Tuma Road/Costco Dwy 4 Going				TOTAL EAST AND WEST	GRAND TOTAL
START TIME	EAST	SOUTH	WEST	TOTAL	WEST	NORTH	EAST	TOTAL		SOUTH	WEST	NORTH	TOTAL	NORTH	EAST	SOUTH	TOTAL		
AM	0	0	38	38	25	0	71	96	**134**	15	412	47	474	31	701	12	744	**1,218**	**1,352**
PM	0	0	75	75	33	0	55	88	**163**	59	877	99	1,035	65	699	31	795	**1,830**	**1,993**
SAT	0	0	102	102	21	0	36	57	**159**	35	555	139	729	89	654	36	779	**1,508**	**1,667**
55th % AM	0	0	21	21	14	0	40	54	**75**	8	227	26	261	17	386	7	410	**671**	**746**
55th % PM	0	0	41	41	18	0	31	49	**90**	32	482	54	568	36	384	17	437	**1,005**	**1,095**
55th % Sat	0	0	56	56	12	0	20	32	**88**	19	305	76	400	49	360	20	429	**829**	**917**

REVIEW INFORMATION

COUNTS USED: Quality Counts extrapolated to 2031
COUNT DATE(S): 9/17/2024
DATA REVIEWED: 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: US Route 34 & Tuma Road/Costco Dwy 4
MUNCIPALITY: Yorkville COUNTY: Kendall

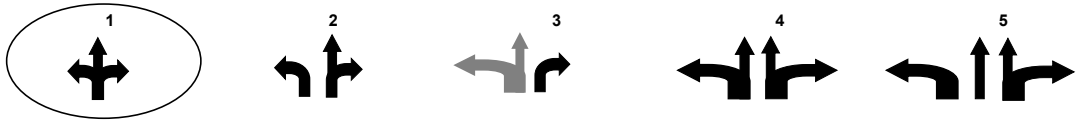
DIR	PEAK HOUR	MINOR STREET STREET NAME			Tuma Road/Costco Dwy 4	CRITICAL MAINLINE APPROACH VOLUME PER LANE	BASE RIGHT TURN REDUCTION %	MAINLINE CONGESTION FACTOR %	ADJUSTED RIGHT TURN REDUCTION %	ADJUSTED RIGHT TURNS	ADJUSTED MINOR STREET VOLUME
		CONFIG. #			1						
		CRIT. MAINLINE LANE #			2						
		LEFT	THROUGH	RIGHT	APP. TOTAL						
NB	AM	25	0	71	96	351	60%	0%	60%	28	53
NB	PM	33	0	55	88	350	40%	0%	40%	33	66
NB	SAT	21	0	36	57	327	40%	0%	40%	22	43
NB	55th AM	14	0	40	54	193	60%	0%	60%	16	29
NB	55th PM	18	0	31	49	192	40%	0%	40%	19	36
NB	55th Sat	12	0	20	32	180	40%	0%	40%	12	24

MAINLINE CONGESTION FACTORS	
VOLUMES	FACTOR %
0-399	0%
400-499	5%
500-599	10%
600-699	15%
700-799	20%
800-899	25%
900-999	30%
1000-1099	35%
1100-1199	40%
1200-1299	45%
1300-1399	50%
1400-1499	55%

REVIEW INFORMATION
COUNTS USED: Quality Counts extrapolated to 2031
COUNT DATE(S): 9/17/2024
DATE REVIEWED 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS



Any configuration with an exclusive right turn lane (usually up to 600 ft. long)

PH	LEFT	THROUGH	RIGHT	TOTAL (A)	0.7A	0.35A	3T	T/3	(T+L)	(T+R)	3R	3L	T/2	T/4	L=T=R (+/-)
AM	25	0	71	96	67	34	0	0	25	71	213	75	0	0	NO
PM	33	0	55	88	62	31	0	0	33	55	165	99	0	0	NO
SAT	21	0	36	57	40	20	0	0	21	36	108	63	0	0	NO
55th AM	14	0	40	54	38	19	0	0	14	40	120	42	0	0	NO
55th PM	18	0	31	49	34	17	0	0	18	31	93	54	0	0	NO
55th Sat	12	0	20	32	22	11	0	0	12	20	60	36	0	0	NO

PH	BASE REDUCTION				
	CONFIG 1	CONFIG 2	CONFIG 3	CONFIG 4	CONFIG 5
AM	60%	60%	75%	65%	75%
PM	40%	60%	75%	65%	75%
SAT	40%	60%	75%	65%	75%
55th AM	60%	60%	75%	65%	75%
55th PM	40%	60%	75%	65%	75%
55th Sat	40%	60%	75%	65%	75%

SIGNAL WARRANT REVIEW SHEET

District #1

SRA: 513 (YES / NO)

INTERSECTION: US Route 34 & Tuma Road/Costco Dwy 4
MUNCIPALITY: Yorkville

COUNTY: Kendall

Speed Limit of Major Route 45
Number of Lanes of Major Approach 2

Isolated Community with Population< 10, No
Number of Lanes of Minor Approach 1

	MAJOR	ADJ. MINOR	Check any hours which meet the following Warrants			
	STREET	STREET	WARRANT 1			
	VOLUME	VOLUME	A	B	WARRANT 1 A/B: 8 hrs of both	
HOUR BEGIN	(both approaches)	(higher volume approaches)	100%	100%	80% of A	80% of B
AM	1,218	53				
PM	1,830	66				
SAT	1,508	43				
55th % AM	671	29				
55th % PM	1,005	36				
55th % SAT	829	24				
Met:			No	No	No	No
Volume Requirements:		MAJOR:	600	900	480	630
		MINOR:	150	125	120	80

REVIEW INFORMATION

COUNTS USED: Quality Counts extrapolated to 2031
COUNT DATE(S): 9/17/2024
DATE REVIEWED: 12/26/2024
REVIEWED BY: MFM

Comments

WARRANT 1 YES (NO) N/A
Warrant 1 is met if any of the following Conditions are met:

- CONDITION A — Minmum Vehicular Volume — YES (NO) N/A
- CONDITION B — Interruption of Continuous Traffic — YES (NO) N/A
- CONDITION A/B — Combination of Warranrts — YES (NO) N/A

WARRANT 2 — Four Hour Volume — YES NO (N/A)

WARRANT 3 — Peak Hour Volume — YES NO (N/A)

WARRANT 4 — Pedestrian Volume — YES NO (N/A)

WARRANT 5 — School Crossing — YES NO (N/A)

WARRANT 6 — Coordinated Signal System — YES NO (N/A)

WARRANT 7 — Accidents Experience — YES NO (N/A)

WARRANT 8 — Roadway Network — YES NO (N/A)

WARRANT 9 — Intersection Near a Grade Crossing — YES NO (N/A)

APPENDIX E

CAPACITY ANALYSIS WORKSHEETS
2024 EXISTING

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	61	2	15	725	425	79
Future Volume (vph)	61	2	15	725	425	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
Flt Permitted	0.950		0.472			
Satd. Flow (perm)	1736	1615	897	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2				83
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0%	0%	2%	7%	3%
Adj. Flow (vph)	64	2	16	763	447	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	64	2	16	763	447	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

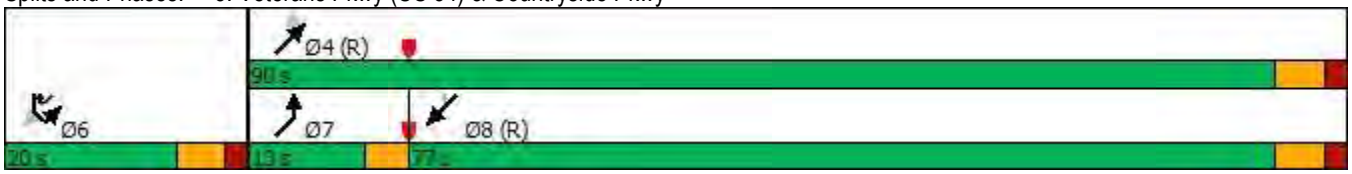


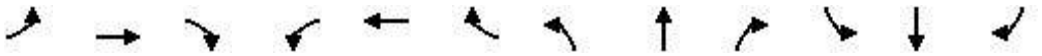
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.29	0.01	0.02	0.28	0.18	0.06
Control Delay	47.5	29.5	1.5	2.5	5.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	29.5	1.5	2.5	5.3	0.3
LOS	D	C	A	A	A	A
Approach Delay	46.9			2.5	4.5	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	42	0	1	34	37	0
Queue Length 95th (ft)	84	8	m3	37	76	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	220	207	783	2702	2460	1484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.01	0.02	0.28	0.18	0.06

Intersection Summary

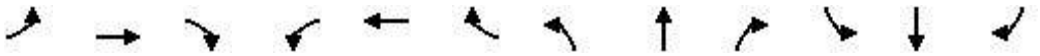
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 5.4		Intersection LOS: A	
Intersection Capacity Utilization 34.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	600	19	65	353	3	17	42	111	4	40	32
Future Volume (vph)	38	600	19	65	353	3	17	42	111	4	40	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3452	0	1671	3404	0	1456	1810	1583	1805	1683	0
Flt Permitted	0.521			0.328			0.655			0.727		
Satd. Flow (perm)	990	3452	0	577	3404	0	1004	1810	1583	1381	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			1				122		30	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%
Adj. Flow (vph)	42	659	21	71	388	3	19	46	122	4	44	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	680	0	71	391	0	19	46	122	4	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

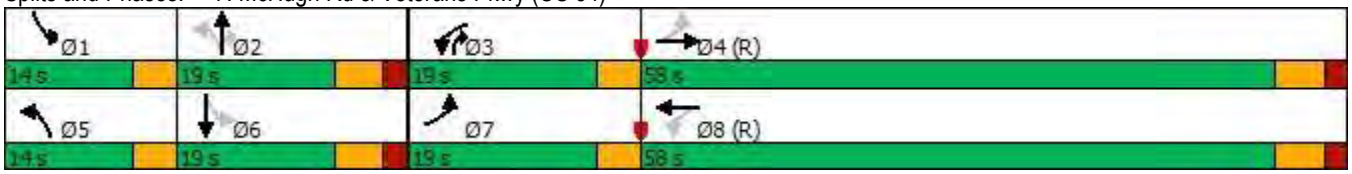


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.3	60.4		72.0	64.8		29.2	25.0	38.1	27.4	22.5	
Actuated g/C Ratio	0.63	0.55		0.65	0.59		0.27	0.23	0.35	0.25	0.20	
v/c Ratio	0.06	0.36		0.16	0.19		0.06	0.11	0.19	0.01	0.22	
Control Delay	6.6	14.6		7.4	11.2		30.6	36.5	5.8	29.8	27.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.6	14.6		7.4	11.2		30.6	36.5	5.8	29.8	27.9	
LOS	A	B		A	B		C	D	A	C	C	
Approach Delay		14.2			10.6			15.9			28.0	
Approach LOS		B			B			B			C	
90th %ile Green (s)	7.4	58.9		8.6	60.1		8.4	17.2	8.6	6.3	15.1	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	6.7	59.8		7.7	60.8		7.3	27.0	7.7	0.0	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	Ped	
50th %ile Green (s)	6.3	60.4		7.1	61.2		0.0	27.0	7.1	0.0	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	0.0	61.0		6.5	71.0		0.0	27.0	6.5	0.0	27.0	
30th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.9		5.6	71.0		0.0	27.0	5.6	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	9	134		16	67		10	25	0	2	27	
Queue Length 95th (ft)	21	180		31	90		29	63	43	11	78	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	776	1897		539	2006		312	412	740	406	367	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.36		0.13	0.19		0.06	0.11	0.16	0.01	0.22	

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 14.1		Intersection LOS: B	
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	36	12	12	59	23	12	60	11	3	52	32
Future Vol, veh/h	51	36	12	12	59	23	12	60	11	3	52	32
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	73	51	17	17	84	33	17	86	16	4	74	46
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.1	8.7	9.2	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	85%	0%	100%	50%	0%	100%	46%	0%	62%
Vol Right, %	0%	15%	0%	0%	50%	0%	0%	54%	0%	38%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	71	51	24	24	12	39	43	3	84
LT Vol	12	0	51	0	0	12	0	0	3	0
Through Vol	0	60	0	24	12	0	39	20	0	52
RT Vol	0	11	0	0	12	0	0	23	0	32
Lane Flow Rate	17	101	73	34	34	17	56	61	4	120
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.029	0.152	0.122	0.052	0.05	0.029	0.086	0.09	0.009	0.177
Departure Headway (Hd)	6.018	5.409	6.031	5.493	5.278	6.027	5.523	5.297	7.15	5.312
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	592	658	591	647	673	591	645	672	499	671
Service Time	3.788	3.18	3.805	3.268	3.052	3.798	3.295	3.069	4.918	3.08
HCM Lane V/C Ratio	0.029	0.153	0.124	0.053	0.051	0.029	0.087	0.091	0.008	0.179
HCM Control Delay	9	9.2	9.7	8.6	8.3	9	8.8	8.6	10	9.2
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.5	0.4	0.2	0.2	0.1	0.3	0.3	0	0.6

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	55	89	5	8	6
Future Vol, veh/h	9	55	89	5	8	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	22	7	1	0	0	0
Mvmt Flow	15	92	148	8	13	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	156	0	-	0	228	78
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	76	-
Critical Hdwy	4.54	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.42	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1287	-	-	-	745	973
Stage 1	-	-	-	-	866	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1287	-	-	-	736	973
Mov Cap-2 Maneuver	-	-	-	-	736	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	944	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1287	-	-	-	736	973
HCM Lane V/C Ratio	0.012	-	-	-	0.018	0.01
HCM Control Delay (s)	7.8	-	-	-	10	8.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	1.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	23	66	669	11	14	406
Future Vol, veh/h	23	66	669	11	14	406
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	9	7	7
Mvmt Flow	25	72	727	12	15	441

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	984	370	0	0	739	0
Stage 1	733	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	242	627	-	-	831	-
Stage 1	431	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	238	627	-	-	831	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	748	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	15.4	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	441	831	-
HCM Lane V/C Ratio	-	-	0.219	0.018	-
HCM Control Delay (s)	-	-	15.4	9.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	75	12	22	689	888	78
Future Volume (vph)	75	12	22	689	888	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
Flt Permitted	0.950		0.269			
Satd. Flow (perm)	1805	1615	511	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13				83
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	80	13	23	733	945	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	13	23	733	945	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

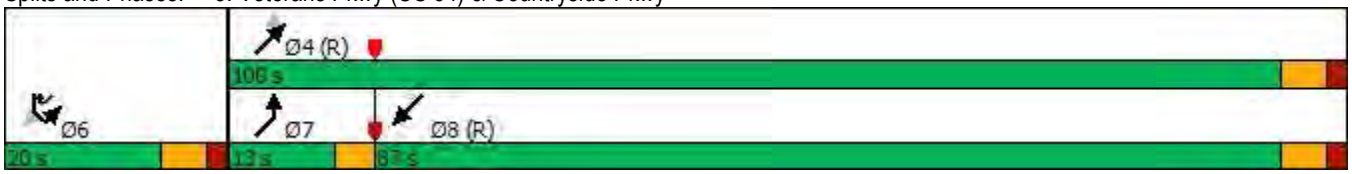


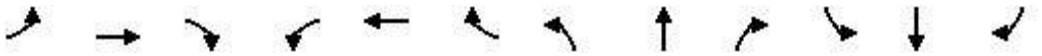
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	0.38	0.07	0.05	0.26	0.36	0.06
Control Delay	54.8	22.2	1.2	1.4	6.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	22.2	1.2	1.4	6.5	0.3
LOS	D	C	A	A	A	A
Approach Delay	50.3			1.4	6.0	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.2	94.0	84.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	94.0	84.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	58	0	1	20	137	0
Queue Length 95th (ft)	110	20	4	34	172	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	210	199	513	2799	2630	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.07	0.04	0.26	0.36	0.06

Intersection Summary

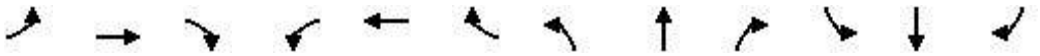
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 6.4		Intersection LOS: A	
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	563	27	149	672	9	57	61	81	18	98	54
Future Volume (vph)	47	563	27	149	672	9	57	61	81	18	98	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998				0.850		0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3568	0	1770	1900	1568	1703	1787	0
Flt Permitted	0.343			0.338			0.500			0.715		
Satd. Flow (perm)	652	3551	0	636	3568	0	931	1900	1568	1282	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				86		20	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	50	599	29	159	715	10	61	65	86	19	104	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	628	0	159	725	0	61	65	86	19	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

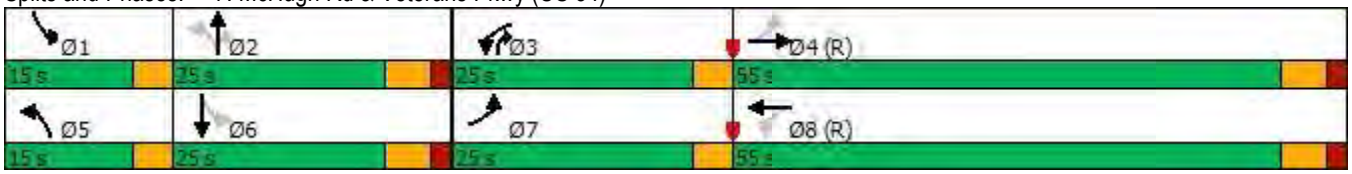


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.9	60.7		76.2	65.6		36.3	29.6	45.4	31.8	23.9	
Actuated g/C Ratio	0.58	0.51		0.64	0.55		0.30	0.25	0.38	0.26	0.20	
v/c Ratio	0.11	0.35		0.32	0.37		0.18	0.14	0.13	0.05	0.43	
Control Delay	9.0	18.6		10.6	16.2		31.6	38.7	6.2	30.1	42.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	9.0	18.6		10.6	16.2		31.6	38.7	6.2	30.1	42.6	
LOS	A	B		B	B		C	D	A	C	D	
Approach Delay		17.9			15.2			23.5			41.3	
Approach LOS		B			B			C			D	
90th %ile Green (s)	8.0	58.0		12.5	62.5		11.3	22.5	12.5	8.0	19.2	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.2	59.7		10.8	63.3		9.6	23.5	10.8	7.0	20.9	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	6.7	60.8		9.7	63.8		8.4	34.0	9.7	0.0	22.1	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.2	61.8		8.7	64.3		7.3	34.0	8.7	0.0	23.2	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	63.3		7.2	74.0		0.0	34.0	7.2	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	13	146		46	159		34	37	0	10	98	
Queue Length 95th (ft)	28	199		73	191		68	84	35	29	174	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	622	1799		611	1950		363	468	791	419	371	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.08	0.35		0.26	0.37		0.17	0.14	0.11	0.05	0.43	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	69	57	33	96	38	29	83	5	6	80	39
Future Vol, veh/h	70	69	57	33	96	38	29	83	5	6	80	39
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	79	78	64	37	108	43	33	93	6	7	90	44
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.4	9.3	9.9	10.1
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	94%	0%	100%	29%	0%	100%	46%	0%	67%
Vol Right, %	0%	6%	0%	0%	71%	0%	0%	54%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	88	70	46	80	33	64	70	6	119
LT Vol	29	0	70	0	0	33	0	0	6	0
Through Vol	0	83	0	46	23	0	64	32	0	80
RT Vol	0	5	0	0	57	0	0	38	0	39
Lane Flow Rate	33	99	79	52	90	37	72	79	7	134
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.059	0.164	0.139	0.084	0.133	0.066	0.118	0.121	0.012	0.214
Departure Headway (Hd)	6.514	5.973	6.349	5.844	5.341	6.417	5.93	5.529	6.503	5.773
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	551	601	566	614	672	559	605	649	551	623
Service Time	4.241	3.701	4.073	3.569	3.065	4.143	3.656	3.255	4.231	3.501
HCM Lane V/C Ratio	0.06	0.165	0.14	0.085	0.134	0.066	0.119	0.122	0.013	0.215
HCM Control Delay	9.7	9.9	10.1	9.1	8.9	9.6	9.5	9	9.3	10.1
HCM Lane LOS	A	A	B	A	A	A	A	A	A	B
HCM 95th-tile Q	0.2	0.6	0.5	0.3	0.5	0.2	0.4	0.4	0	0.8

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	79	96	4	8	9
Future Vol, veh/h	7	79	96	4	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	9	96	117	5	10	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	122	0	-	0	186	61
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	66	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1478	-	-	-	791	998
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	955	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1478	-	-	-	786	998
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	893	-
Stage 2	-	-	-	-	955	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1478	-	-	-	786	998
HCM Lane V/C Ratio	0.006	-	-	-	0.012	0.011
HCM Control Delay (s)	7.5	-	-	-	9.6	8.6
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

Intersection	
Int Delay, s/veh	1.5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	31	51	669	11	55	844
Future Vol, veh/h	31	51	669	11	55	844
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	34	55	727	12	60	917

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1312	370	0	0	739	0
Stage 1	733	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	153	633	-	-	876	-
Stage 1	442	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	143	633	-	-	876	-
Mov Cap-2 Maneuver	143	-	-	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	493	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	24.1	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	276	876	-
HCM Lane V/C Ratio	-	-	0.323	0.068	-
HCM Control Delay (s)	-	-	24.1	9.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	73	11	18	632	558	85
Future Volume (vph)	73	11	18	632	558	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.406			
Satd. Flow (perm)	1787	1615	771	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12				89
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	77	12	19	665	587	89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	77	12	19	665	587	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

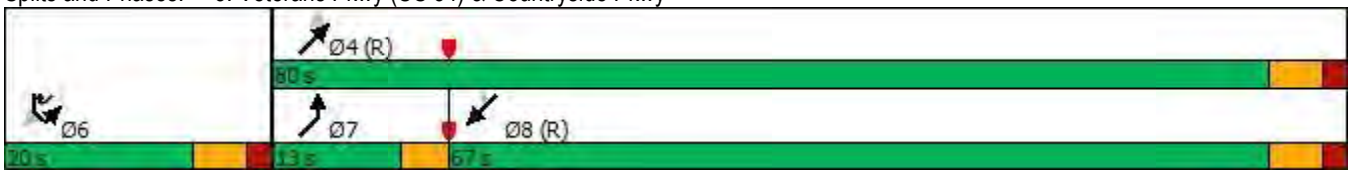


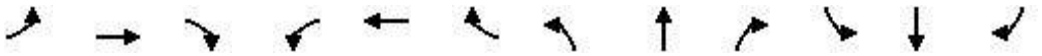
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	0.31	0.05	0.03	0.25	0.23	0.06
Control Delay	42.4	19.4	0.9	1.4	6.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	19.4	0.9	1.4	6.1	0.4
LOS	D	B	A	A	A	A
Approach Delay	39.3			1.4	5.4	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	45	0	1	15	51	0
Queue Length 95th (ft)	90	16	m2	25	101	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	250	236	688	2644	2508	1448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.05	0.03	0.25	0.23	0.06

Intersection Summary

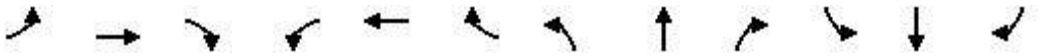
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 31.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	572	19	99	454	9	36	33	61	18	52	51
Future Volume (vph)	61	572	19	99	454	9	36	33	61	18	52	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.997				0.850		0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3592	0	1805	3564	0	1805	1900	1568	1805	1759	0
Flt Permitted	0.461			0.328			0.646			0.735		
Satd. Flow (perm)	859	3592	0	623	3564	0	1227	1900	1568	1396	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2				71		44	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	64	596	20	103	473	9	38	34	64	19	54	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	616	0	103	482	0	38	34	64	19	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

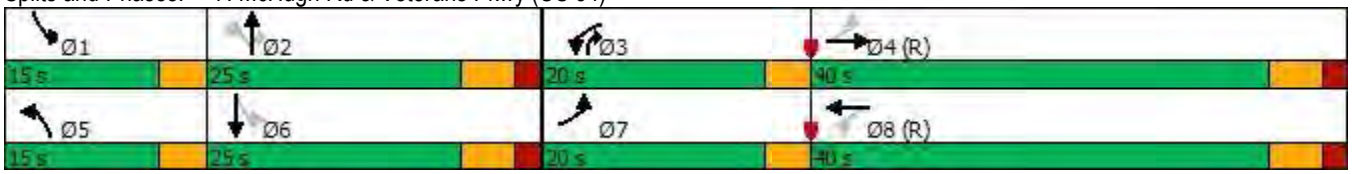


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	52.0	42.4		54.6	45.2		35.5	29.8	43.9	33.8	27.3	
Actuated g/C Ratio	0.52	0.42		0.55	0.45		0.36	0.30	0.44	0.34	0.27	
v/c Ratio	0.13	0.40		0.24	0.30		0.08	0.06	0.09	0.04	0.21	
Control Delay	10.6	21.2		12.4	18.4		21.2	28.3	4.6	20.8	20.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.6	21.2		12.4	18.4		21.2	28.3	4.6	20.8	20.3	
LOS	B	C		B	B		C	C	A	C	C	
Approach Delay		20.2			17.3			15.2			20.3	
Approach LOS		C			B			B			C	
90th %ile Green (s)	8.8	40.2		10.3	41.7		8.6	23.1	10.3	7.4	21.9	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.8	41.5		9.0	42.7		7.5	23.9	9.0	6.6	23.0	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	7.1	42.4		8.1	43.4		6.8	34.0	8.1	0.0	23.7	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.4	43.3		7.2	44.1		0.0	34.0	7.2	0.0	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	44.4		6.1	54.0		0.0	34.0	6.1	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	17	139		28	97		16	14	0	8	32	
Queue Length 95th (ft)	36	193		57	132		37	43	23	23	79	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	635	1524		547	1611		514	566	853	554	512	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.40		0.19	0.30		0.07	0.06	0.08	0.03	0.21	

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 18.7		Intersection LOS: B	
Intersection Capacity Utilization 43.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	74	53	26	102	26	37	64	1	9	44	19
Future Vol, veh/h	54	74	53	26	102	26	37	64	1	9	44	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	59	80	58	28	111	28	40	70	1	10	48	21
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	8.8	8.8	9.2	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	98%	0%	100%	32%	0%	100%	57%	0%	70%
Vol Right, %	0%	2%	0%	0%	68%	0%	0%	43%	0%	30%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	65	54	49	78	26	68	60	9	63
LT Vol	37	0	54	0	0	26	0	0	9	0
Through Vol	0	64	0	49	25	0	68	34	0	44
RT Vol	0	1	0	0	53	0	0	26	0	19
Lane Flow Rate	40	71	59	54	84	28	74	65	10	68
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.068	0.111	0.097	0.081	0.116	0.047	0.113	0.095	0.017	0.104
Departure Headway (Hd)	6.116	5.639	5.928	5.425	4.945	5.98	5.494	5.241	6.197	5.485
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	582	631	601	656	719	595	648	679	574	648
Service Time	3.892	3.415	3.696	3.193	2.712	3.749	3.263	3.009	3.978	3.266
HCM Lane V/C Ratio	0.069	0.113	0.098	0.082	0.117	0.047	0.114	0.096	0.017	0.105
HCM Control Delay	9.3	9.1	9.3	8.7	8.4	9	9	8.6	9.1	8.9
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.3	0.3	0.4	0.1	0.4	0.3	0.1	0.3

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	84	102	0	0	0
Future Vol, veh/h	1	84	102	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	1	99	120	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	120	0	-	0	172	60
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	52	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1480	-	-	-	807	999
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1480	-	-	-	806	999
Mov Cap-2 Maneuver	-	-	-	-	806	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1480	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-	-
HCM Control Delay (s)	7.4	-	-	-	0	0
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	20	34	619	34	33	536
Future Vol, veh/h	20	34	619	34	33	536
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	0	1	0	0	1
Mvmt Flow	22	37	666	37	35	576

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1043	352	0	0	703	0
Stage 1	685	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.9	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	220	650	-	-	904	-
Stage 1	454	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	211	650	-	-	904	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	643	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	16.6	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	367	904	-
HCM Lane V/C Ratio	-	-	0.158	0.039	-
HCM Control Delay (s)	-	-	16.6	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

APPENDIX F

CAPACITY ANALYSIS WORKSHEETS
2031 BACKGROUND

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	65	2	16	776	455	85
Future Volume (vph)	65	2	16	776	455	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
Flt Permitted	0.950		0.458			
Satd. Flow (perm)	1736	1615	870	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2				89
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0%	0%	2%	7%	3%
Adj. Flow (vph)	68	2	17	817	479	89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	2	17	817	479	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

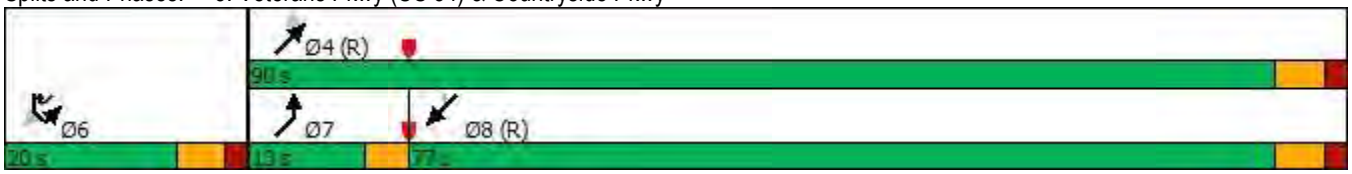


Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.31	0.01	0.02	0.30	0.19	0.06
Control Delay	47.9	29.5	1.6	2.6	5.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	29.5	1.6	2.6	5.4	0.3
LOS	D	C	A	A	A	A
Approach Delay	47.4			2.5	4.6	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	44	0	1	36	41	0
Queue Length 95th (ft)	89	8	m3	40	81	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	220	207	764	2702	2460	1485
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.01	0.02	0.30	0.19	0.06

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 35.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



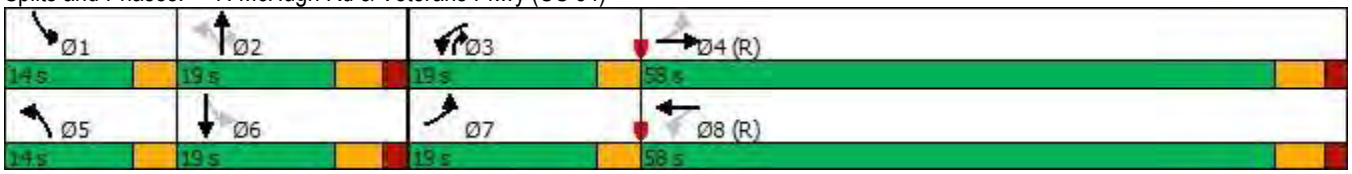
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	642	20	70	378	3	18	45	119	4	43	34
Future Volume (vph)	41	642	20	70	378	3	18	45	119	4	43	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3453	0	1671	3404	0	1456	1810	1583	1805	1683	0
Flt Permitted	0.507			0.312			0.649			0.725		
Satd. Flow (perm)	963	3453	0	549	3404	0	994	1810	1583	1377	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			1				131		29	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%
Adj. Flow (vph)	45	705	22	77	415	3	20	49	131	4	47	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	727	0	77	418	0	20	49	131	4	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.2	60.3		71.4	62.9		29.2	25.0	38.3	27.4	22.4	
Actuated g/C Ratio	0.63	0.55		0.65	0.57		0.27	0.23	0.35	0.25	0.20	
v/c Ratio	0.07	0.38		0.18	0.21		0.07	0.12	0.21	0.01	0.23	
Control Delay	6.6	15.0		7.6	12.0		30.7	36.6	5.6	29.8	28.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.6	15.0		7.6	12.0		30.7	36.6	5.6	29.8	28.9	
LOS	A	B		A	B		C	D	A	C	C	
Approach Delay		14.5			11.3			15.7			29.0	
Approach LOS		B			B			B			C	
90th %ile Green (s)	7.5	58.7		8.8	60.0		8.5	17.2	8.8	6.3	15.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	6.8	59.7		7.8	60.7		7.3	27.0	7.8	0.0	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	Ped	
50th %ile Green (s)	6.4	60.3		7.2	61.1		0.0	27.0	7.2	0.0	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.0	60.9		6.6	61.5		0.0	27.0	6.6	0.0	27.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.8		5.7	71.0		0.0	27.0	5.7	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	10	146		17	72		10	27	0	2	30	
Queue Length 95th (ft)	22	195		33	94		30	66	44	11	83	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	762	1893		524	1945		310	412	745	405	366	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.06	0.38		0.15	0.21		0.06	0.12	0.18	0.01	0.23	

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	39	13	13	63	25	13	64	12	3	56	34
Future Vol, veh/h	55	39	13	13	63	25	13	64	12	3	56	34
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	79	56	19	19	90	36	19	91	17	4	80	49
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.2	8.9	9.4	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	84%	0%	100%	50%	0%	100%	46%	0%	62%
Vol Right, %	0%	16%	0%	0%	50%	0%	0%	54%	0%	38%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	76	55	26	26	13	42	46	3	90
LT Vol	13	0	55	0	0	13	0	0	3	0
Through Vol	0	64	0	26	13	0	42	21	0	56
RT Vol	0	12	0	0	13	0	0	25	0	34
Lane Flow Rate	19	109	79	37	37	19	60	66	4	129
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.031	0.166	0.133	0.057	0.055	0.032	0.093	0.098	0.009	0.193
Departure Headway (Hd)	6.101	5.49	6.111	5.573	5.357	6.108	5.604	5.375	7.232	5.396
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	583	648	582	637	662	581	634	660	492	660
Service Time	3.881	3.271	3.897	3.358	3.143	3.894	3.39	3.161	5.011	3.174
HCM Lane V/C Ratio	0.033	0.168	0.136	0.058	0.056	0.033	0.095	0.1	0.008	0.195
HCM Control Delay	9.1	9.4	9.8	8.7	8.5	9.1	9	8.8	10.1	9.5
HCM Lane LOS	A	A	A	A	A	A	A	A	B	A
HCM 95th-tile Q	0.1	0.6	0.5	0.2	0.2	0.1	0.3	0.3	0	0.7

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	59	95	5	8	6
Future Vol, veh/h	9	59	95	5	8	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	22	7	1	0	0	0
Mvmt Flow	15	98	158	8	13	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	166	0	-	0	241	83
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	4.54	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.42	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1275	-	-	-	732	966
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	941	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1275	-	-	-	723	966
Mov Cap-2 Maneuver	-	-	-	-	723	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1275	-	-	-	723	966
HCM Lane V/C Ratio	0.012	-	-	-	0.018	0.01
HCM Control Delay (s)	7.9	-	-	-	10.1	8.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	1.4

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	25	71	716	12	15	434
Future Vol, veh/h	25	71	716	12	15	434
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	9	7	7
Mvmt Flow	27	77	778	13	16	472

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1053	396	0	0	791	0
Stage 1	785	-	-	-	-	-
Stage 2	268	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	218	603	-	-	793	-
Stage 1	405	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	214	603	-	-	793	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	732	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	16.8	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	409	793	-
HCM Lane V/C Ratio	-	-	0.255	0.021	-
HCM Control Delay (s)	-	-	16.8	9.6	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1	0.1	-

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	80	13	24	737	950	83
Future Volume (vph)	80	13	24	737	950	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
Flt Permitted	0.950		0.248			
Satd. Flow (perm)	1805	1615	471	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				88
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	85	14	26	784	1011	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	14	26	784	1011	88
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

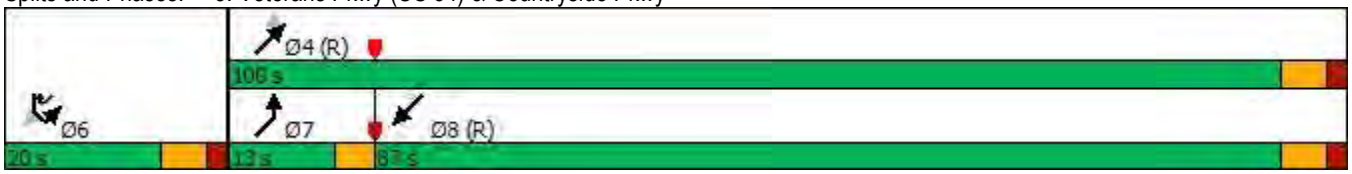


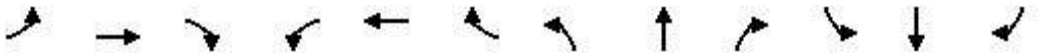
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	0.40	0.07	0.06	0.28	0.38	0.06
Control Delay	55.5	22.1	1.3	1.5	6.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	22.1	1.3	1.5	6.8	0.3
LOS	E	C	A	A	A	A
Approach Delay	50.8			1.5	6.3	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.3	94.0	84.2	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	6.0	94.0	84.5	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	62	0	1	22	151	0
Queue Length 95th (ft)	114	21	4	37	188	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	210	200	484	2799	2629	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.07	0.05	0.28	0.38	0.06

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





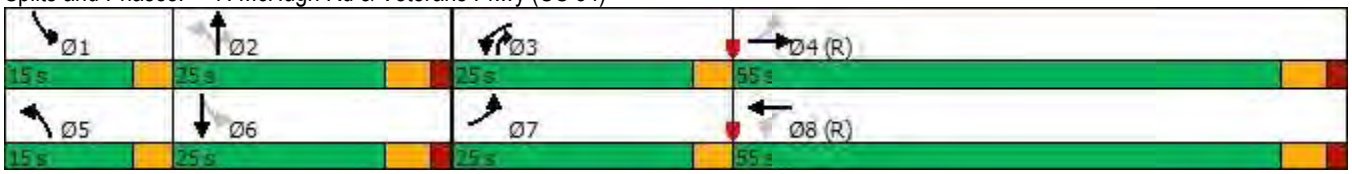
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	602	29	159	719	10	61	65	87	19	105	58
Future Volume (vph)	50	602	29	159	719	10	61	65	87	19	105	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998				0.850		0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3568	0	1770	1900	1568	1703	1787	0
Flt Permitted	0.318			0.316			0.474			0.712		
Satd. Flow (perm)	604	3551	0	594	3568	0	883	1900	1568	1276	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				93		20	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	53	640	31	169	765	11	65	69	93	20	112	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	671	0	169	776	0	65	69	93	20	174	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.7	60.4		76.3	65.5		36.3	29.6	45.6	31.7	23.7	
Actuated g/C Ratio	0.58	0.50		0.64	0.55		0.30	0.25	0.38	0.26	0.20	
v/c Ratio	0.13	0.37		0.35	0.40		0.20	0.15	0.14	0.06	0.47	
Control Delay	9.1	19.1		11.1	16.5		31.9	38.8	6.0	30.2	44.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	9.1	19.1		11.1	16.5		31.9	38.8	6.0	30.2	44.1	
LOS	A	B		B	B		C	D	A	C	D	
Approach Delay		18.4			15.5			23.4			42.6	
Approach LOS		B			B			C			D	
90th %ile Green (s)	8.1	57.6		12.9	62.4		11.5	22.5	12.9	8.0	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Max	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.3	59.4		11.1	63.2		9.8	23.4	11.1	7.1	20.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	6.8	60.5		10.0	63.7		8.6	34.0	10.0	0.0	21.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.2	61.6		8.9	64.3		7.5	34.0	8.9	0.0	23.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	63.1		7.4	74.0		0.0	34.0	7.4	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	14	160		49	171		36	40	0	11	108	
Queue Length 95th (ft)	30	216		77	204		72	89	36	30	188	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	600	1791		592	1948		353	468	794	416	369	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.09	0.37		0.29	0.40		0.18	0.15	0.12	0.05	0.47	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 19.9		Intersection LOS: B	
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	74	61	35	103	41	31	89	5	6	86	42
Future Vol, veh/h	75	74	61	35	103	41	31	89	5	6	86	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	84	83	69	39	116	46	35	100	6	7	97	47
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.6	9.6	10.1	10.5
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	95%	0%	100%	29%	0%	100%	46%	0%	67%
Vol Right, %	0%	5%	0%	0%	71%	0%	0%	54%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	94	75	49	86	35	69	75	6	128
LT Vol	31	0	75	0	0	35	0	0	6	0
Through Vol	0	89	0	49	25	0	69	34	0	86
RT Vol	0	5	0	0	61	0	0	41	0	42
Lane Flow Rate	35	106	84	55	96	39	77	85	7	144
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.064	0.179	0.151	0.092	0.146	0.071	0.13	0.133	0.012	0.236
Departure Headway (Hd)	6.642	6.103	6.466	5.961	5.458	6.538	6.05	5.648	6.629	5.898
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	540	588	555	601	657	548	593	635	540	610
Service Time	4.377	3.839	4.198	3.693	3.189	4.273	3.785	3.382	4.362	3.631
HCM Lane V/C Ratio	0.065	0.18	0.151	0.092	0.146	0.071	0.13	0.134	0.013	0.236
HCM Control Delay	9.8	10.2	10.4	9.3	9.1	9.8	9.7	9.3	9.4	10.5
HCM Lane LOS	A	B	B	A	A	A	A	A	A	B
HCM 95th-tile Q	0.2	0.6	0.5	0.3	0.5	0.2	0.4	0.5	0	0.9

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	85	103	4	8	9
Future Vol, veh/h	7	85	103	4	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	9	104	126	5	10	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	131	0	-	0	199	66
Stage 1	-	-	-	-	129	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1467	-	-	-	777	991
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	950	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1467	-	-	-	772	991
Mov Cap-2 Maneuver	-	-	-	-	772	-
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1467	-	-	-	772	991
HCM Lane V/C Ratio	0.006	-	-	-	0.013	0.011
HCM Control Delay (s)	7.5	-	-	-	9.7	8.7
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

Intersection	
Int Delay, s/veh	1.8

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	33	55	716	31	59	903
Future Vol, veh/h	33	55	716	31	59	903
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	36	60	778	34	64	982

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1414	406	0	0	812	0
Stage 1	795	-	-	-	-	-
Stage 2	619	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	131	600	-	-	823	-
Stage 1	410	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	121	600	-	-	823	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	410	-	-	-	-	-
Stage 2	466	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	29.4	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	241	823	-
HCM Lane V/C Ratio	-	-	0.397	0.078	-
HCM Control Delay (s)	-	-	29.4	9.7	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.8	0.3	-



Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	78	12	19	676	597	91
Future Volume (vph)	78	12	19	676	597	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.387			
Satd. Flow (perm)	1787	1615	735	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13				96
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	82	13	20	712	628	96
Shared Lane Traffic (%)						
Lane Group Flow (vph)	82	13	20	712	628	96
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

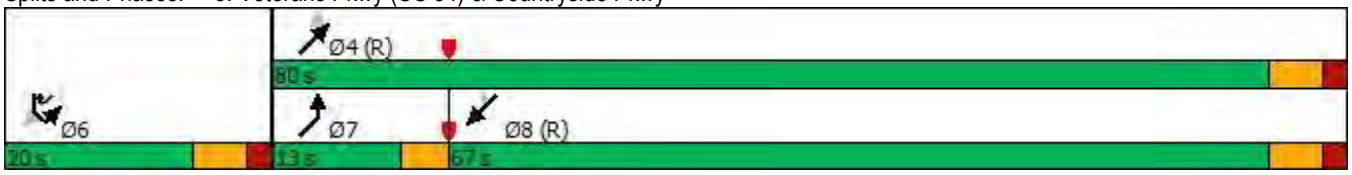


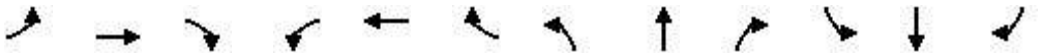
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	0.33	0.05	0.03	0.27	0.25	0.07
Control Delay	42.9	18.8	1.1	1.4	6.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	18.8	1.1	1.4	6.2	0.4
LOS	D	B	A	A	A	A
Approach Delay	39.6			1.4	5.4	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	48	0	1	16	55	0
Queue Length 95th (ft)	94	18	m2	26	109	6
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	250	237	663	2644	2508	1448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.05	0.03	0.27	0.25	0.07

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





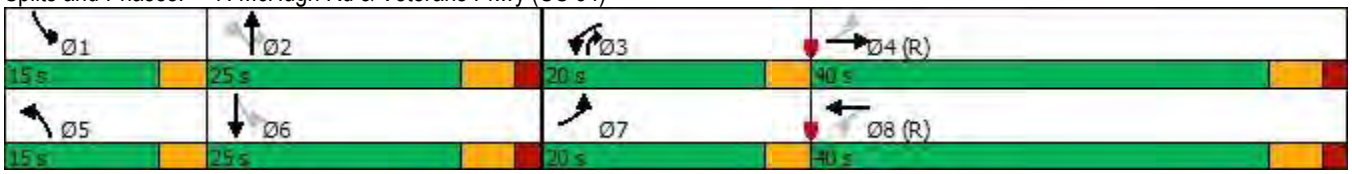
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	612	20	106	486	10	39	35	65	19	56	55
Future Volume (vph)	65	612	20	106	486	10	39	35	65	19	56	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.997				0.850		0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3592	0	1805	3564	0	1805	1900	1568	1805	1759	0
Flt Permitted	0.438			0.302			0.639			0.734		
Satd. Flow (perm)	816	3592	0	574	3564	0	1214	1900	1568	1395	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2				71		44	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	68	638	21	110	506	10	41	36	68	20	58	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	659	0	110	516	0	41	36	68	20	115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	51.9	42.2		54.7	45.1		35.6	29.8	44.1	33.8	27.2	
Actuated g/C Ratio	0.52	0.42		0.55	0.45		0.36	0.30	0.44	0.34	0.27	
v/c Ratio	0.14	0.43		0.26	0.32		0.09	0.06	0.09	0.04	0.23	
Control Delay	10.7	21.8		13.7	19.0		21.3	28.3	4.9	20.8	21.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.7	21.8		13.7	19.0		21.3	28.3	4.9	20.8	21.0	
LOS	B	C		B	B		C	C	A	C	C	
Approach Delay		20.7			18.1			15.3			20.9	
Approach LOS		C			B			B			C	
90th %ile Green (s)	8.9	39.9		10.6	41.6		8.8	23.1	10.6	7.4	21.7	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.9	41.3		9.2	42.6		7.7	23.8	9.2	6.7	22.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	7.2	42.2		8.3	43.3		6.9	34.0	8.3	0.0	23.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.5	43.1		7.4	44.0		0.0	34.0	7.4	0.0	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	44.3		6.2	54.0		0.0	34.0	6.2	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	18	152		31	104		17	15	0	8	36	
Queue Length 95th (ft)	38	209		68	146		40	44	25	24	86	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	618	1516		527	1608		511	566	853	554	511	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	0.43		0.21	0.32		0.08	0.06	0.08	0.04	0.23	

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 19.3		Intersection LOS: B	
Intersection Capacity Utilization 45.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	79	57	28	109	28	40	68	1	10	47	20
Future Vol, veh/h	58	79	57	28	109	28	40	68	1	10	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	63	86	62	30	118	30	43	74	1	11	51	22
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	8.9	9	9.4	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	99%	0%	100%	32%	0%	100%	56%	0%	70%
Vol Right, %	0%	1%	0%	0%	68%	0%	0%	44%	0%	30%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	69	58	53	83	28	73	64	10	67
LT Vol	40	0	58	0	0	28	0	0	10	0
Through Vol	0	68	0	53	26	0	73	36	0	47
RT Vol	0	1	0	0	57	0	0	28	0	20
Lane Flow Rate	43	75	63	57	91	30	79	70	11	73
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.075	0.119	0.105	0.087	0.126	0.051	0.122	0.103	0.019	0.113
Departure Headway (Hd)	6.199	5.723	6.001	5.497	5.016	6.054	5.568	5.312	6.286	5.576
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	621	593	647	708	587	638	669	565	636
Service Time	3.984	3.508	3.778	3.274	2.792	3.834	3.348	3.093	4.075	3.366
HCM Lane V/C Ratio	0.075	0.121	0.106	0.088	0.129	0.051	0.124	0.105	0.019	0.115
HCM Control Delay	9.5	9.3	9.5	8.8	8.5	9.2	9.1	8.7	9.2	9.1
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.4	0.3	0.4	0.2	0.4	0.3	0.1	0.4

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	90	109	0	0	0
Future Vol, veh/h	1	90	109	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	1	106	128	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	128	0	-	0	183	64
Stage 1	-	-	-	-	128	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1470	-	-	-	795	994
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1470	-	-	-	794	994
Mov Cap-2 Maneuver	-	-	-	-	794	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	967	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1470	-	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-	-
HCM Control Delay (s)	7.5	-	-	-	0	0
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	21	36	662	36	35	574
Future Vol, veh/h	21	36	662	36	35	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	0	1	0	0	1
Mvmt Flow	23	39	712	39	38	617

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1117	376	0	0	751	0
Stage 1	732	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Critical Hdwy	6.9	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	197	627	-	-	868	-
Stage 1	429	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	627	-	-	868	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	18	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	337	868	-
HCM Lane V/C Ratio	-	-	0.182	0.043	-
HCM Control Delay (s)	-	-	18	9.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

APPENDIX G

CAPACITY ANALYSIS WORKSHEETS
2031 FUTURE WITH PROJECT

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	116	8	16	780	474	103
Future Volume (vph)	116	8	16	780	474	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
Flt Permitted	0.950		0.449			
Satd. Flow (perm)	1736	1615	853	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		8				108
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0%	0%	2%	7%	3%
Adj. Flow (vph)	122	8	17	821	499	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	8	17	821	499	108
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

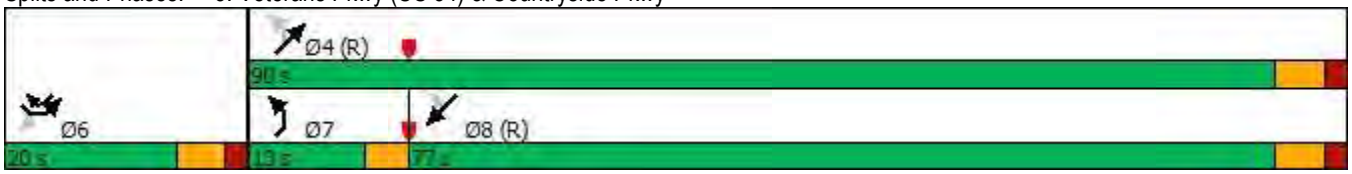


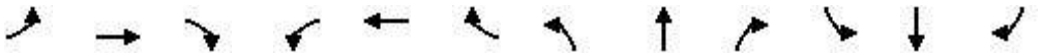
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.55	0.04	0.02	0.30	0.20	0.07
Control Delay	55.5	23.5	1.8	2.7	5.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	23.5	1.8	2.7	5.4	0.3
LOS	E	C	A	A	A	A
Approach Delay	53.5			2.7	4.5	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	82	0	1	44	43	0
Queue Length 95th (ft)	144	15	m4	49	85	5
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	220	212	752	2702	2460	1486
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.04	0.02	0.30	0.20	0.07

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 38.0%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





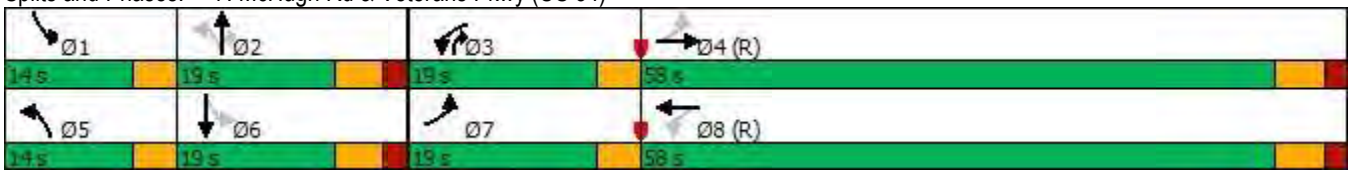
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	635	20	70	371	26	18	49	119	27	47	61
Future Volume (vph)	69	635	20	70	371	26	18	49	119	27	47	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			120		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.990				0.850		0.916	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3453	0	1671	3384	0	1456	1810	1583	1805	1649	0
Flt Permitted	0.497			0.320			0.681			0.677		
Satd. Flow (perm)	944	3453	0	563	3384	0	1043	1810	1583	1286	1649	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9				131		48	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%
Adj. Flow (vph)	76	698	22	77	408	29	20	54	131	30	52	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	720	0	77	437	0	20	54	131	30	119	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.9	60.3		70.8	62.3		27.3	20.3	33.5	28.2	22.4	
Actuated g/C Ratio	0.64	0.55		0.64	0.57		0.25	0.18	0.30	0.26	0.20	
v/c Ratio	0.12	0.38		0.18	0.23		0.07	0.16	0.23	0.08	0.32	
Control Delay	6.8	15.0		7.4	12.2		30.8	42.3	6.5	30.8	27.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.8	15.0		7.4	12.2		30.8	42.3	6.5	30.8	27.1	
LOS	A	B		A	B		C	D	A	C	C	
Approach Delay		14.2			11.4			18.3			27.9	
Approach LOS		B			B			B			C	
90th %ile Green (s)	8.5	58.7		8.8	59.0		8.5	14.8	8.8	8.7	15.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	7.6	59.7		7.8	59.9		7.3	15.9	7.8	7.6	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
50th %ile Green (s)	7.1	60.3		7.2	60.4		0.0	16.7	7.2	6.8	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	Ped	Gap	Gap	MaxR	
30th %ile Green (s)	6.5	60.9		6.6	61.0		0.0	27.0	6.6	0.0	27.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.8		5.7	71.0		0.0	27.0	5.7	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	17	144		17	74		10	34	0	16	40	
Queue Length 95th (ft)	33	193		33	97		30	73	46	40	105	
Internal Link Dist (ft)		812			993			776			369	
Turn Bay Length (ft)	180			180			110		110	195		
Base Capacity (vph)	752	1893		532	1919		315	333	682	390	374	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.38		0.14	0.23		0.06	0.16	0.19	0.08	0.32	

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 15.1		Intersection LOS: B	
Intersection Capacity Utilization 43.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	51	17	13	75	29	18	64	12	7	56	34
Future Vol, veh/h	55	51	17	13	75	29	18	64	12	7	56	34
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	79	73	24	19	107	41	26	91	17	10	80	49
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.4	9.2	9.6	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	84%	0%	100%	50%	0%	100%	46%	0%	62%
Vol Right, %	0%	16%	0%	0%	50%	0%	0%	54%	0%	38%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	76	55	34	34	13	50	54	7	90
LT Vol	18	0	55	0	0	13	0	0	7	0
Through Vol	0	64	0	34	17	0	50	25	0	56
RT Vol	0	12	0	0	17	0	0	29	0	34
Lane Flow Rate	26	109	79	49	49	19	71	77	10	129
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.045	0.173	0.138	0.078	0.075	0.033	0.115	0.12	0.021	0.202
Departure Headway (Hd)	6.345	5.734	6.318	5.779	5.563	6.316	5.812	5.587	7.477	5.66
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	566	626	569	621	645	568	619	643	480	638
Service Time	4.068	3.457	4.041	3.502	3.286	4.038	3.533	3.308	5.197	3.36
HCM Lane V/C Ratio	0.046	0.174	0.139	0.079	0.076	0.033	0.115	0.12	0.021	0.202
HCM Control Delay	9.4	9.7	10.1	9	8.7	9.3	9.3	9.1	10.4	9.8
HCM Lane LOS	A	A	B	A	A	A	A	A	B	A
HCM 95th-tile Q	0.1	0.6	0.5	0.3	0.2	0.1	0.4	0.4	0.1	0.8

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	57	18	0	99	5	12	0	4	8	0	6
Future Vol, veh/h	9	57	18	0	99	5	12	0	4	8	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	92	92	60	60	92	92	92	60	92	60
Heavy Vehicles, %	22	7	2	2	1	0	2	2	2	0	2	0
Mvmt Flow	15	95	20	0	165	8	13	0	4	13	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	173	0	0	115	0	0	218	308	58	247	-	87
Stage 1	-	-	-	-	-	-	135	135	-	169	-	-
Stage 2	-	-	-	-	-	-	83	173	-	78	-	-
Critical Hdwy	4.54	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.42	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1267	-	-	1472	-	-	719	605	996	692	0	961
Stage 1	-	-	-	-	-	-	854	784	-	822	0	-
Stage 2	-	-	-	-	-	-	916	755	-	928	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1472	-	-	705	598	996	683	-	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	705	598	-	683	-	-
Stage 1	-	-	-	-	-	-	844	775	-	812	-	-
Stage 2	-	-	-	-	-	-	906	755	-	913	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	9.8	9.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	705	996	1267	-	-	1472	-	-	683	961
HCM Lane V/C Ratio	0.019	0.004	0.012	-	-	-	-	-	0.02	0.01
HCM Control Delay (s)	10.2	8.6	7.9	-	-	0	-	-	10.4	8.8
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0	-	-	0.1	0

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	4	25	95	10	8
Future Vol, veh/h	71	4	25	95	10	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	4	27	103	11	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	81	0	185	41
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	106	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1515	-	787	1021
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	907	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1515	-	773	1021
Mov Cap-2 Maneuver	-	-	-	-	773	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	773	1021	-	-	1515	-
HCM Lane V/C Ratio	0.014	0.009	-	-	0.018	-
HCM Control Delay (s)	9.7	8.6	-	-	7.4	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	52	79	0	0	119
Future Vol, veh/h	0	52	79	0	0	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	86	0	0	129

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	43	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	1018	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	1018	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT	EBLn1	SET	SER
Capacity (veh/h)	-	1018	-	-
HCM Lane V/C Ratio	-	0.056	-	-
HCM Control Delay (s)	-	8.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	0	38	25	0	71	31	701	12	15	412	47
Future Vol, veh/h	0	0	38	25	0	71	31	701	12	15	412	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	4	2	2	2	2	9	7	7	2
Mvmt Flow	0	0	41	27	0	77	34	762	13	16	448	51

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	224	1093	1368	388	499	0	0	775	0	0
Stage 1	-	-	-	837	837	-	-	-	-	-	-	-
Stage 2	-	-	-	256	531	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	7.58	6.54	6.94	4.14	-	-	4.24	-	-
Critical Hdwy Stg 1	-	-	-	6.58	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.58	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.54	4.02	3.32	2.22	-	-	2.27	-	-
Pot Cap-1 Maneuver	0	0	*938	*192	159	611	1277	-	-	805	-	-
Stage 1	0	0	-	*323	380	-	-	-	-	-	-	-
Stage 2	0	0	-	*880	669	-	-	-	-	-	-	-
Platoon blocked, %			1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	-	-	*938	*177	151	611	1277	-	-	805	-	-
Mov Cap-2 Maneuver	-	-	-	*177	151	-	-	-	-	-	-	-
Stage 1	-	-	-	*314	370	-	-	-	-	-	-	-
Stage 2	-	-	-	*825	655	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	9	18.4	0.3	0.3
HCM LOS	A	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1277	-	-	373	938	805	-	-
HCM Lane V/C Ratio	0.026	-	-	0.28	0.044	0.02	-	-
HCM Control Delay (s)	7.9	-	-	18.4	9	9.6	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.1	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	68	18	75	69	17	68
Future Vol, veh/h	68	18	75	69	17	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	145	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	20	82	75	18	74

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	192	82	0	0	157	0
Stage 1	82	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	797	978	-	-	1423	-
Stage 1	941	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	787	978	-	-	1423	-
Mov Cap-2 Maneuver	779	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	1.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	779	978	1423	-
HCM Lane V/C Ratio	-	-	0.095	0.02	0.013	-
HCM Control Delay (s)	-	-	10.1	8.8	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	94	0	0	85
Future Vol, veh/h	0	0	94	0	0	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	102	0	0	92

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	194	102	0	0	102	0
Stage 1	102	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	795	953	-	-	1490	-
Stage 1	922	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	953	-	-	1490	-
Mov Cap-2 Maneuver	786	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1490	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	206	23	24	749	1013	129
Future Volume (vph)	206	23	24	749	1013	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
Flt Permitted	0.950		0.228			
Satd. Flow (perm)	1805	1615	433	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				137
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	219	24	26	797	1078	137
Shared Lane Traffic (%)						
Lane Group Flow (vph)	219	24	26	797	1078	137
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	1.04	0.11	0.06	0.28	0.41	0.10
Control Delay	125.2	18.7	2.0	2.4	7.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.2	18.7	2.0	2.4	7.0	0.3
LOS	F	B	A	A	A	A
Approach Delay	114.7			2.4	6.2	
Approach LOS	F			A	A	
90th %ile Green (s)	14.0	14.0	6.3	94.0	84.2	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	6.0	94.0	84.5	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	~183	0	2	36	165	0
Queue Length 95th (ft)	#341	26	6	54	206	6
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	210	209	456	2799	2629	1416
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.11	0.06	0.28	0.41	0.10

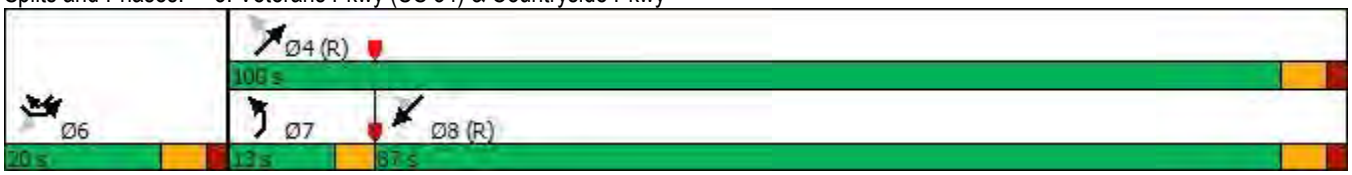
Intersection Summary

Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	609	29	159	727	51	61	77	87	60	117	112
Future Volume (vph)	104	609	29	159	727	51	61	77	87	60	117	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			120		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.990				0.850		0.927	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3541	0	1770	1900	1568	1703	1744	0
Flt Permitted	0.278			0.325			0.376			0.704		
Satd. Flow (perm)	528	3551	0	611	3541	0	700	1900	1568	1262	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			7				93		34	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	111	648	31	169	773	54	65	82	93	64	124	119
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	679	0	169	827	0	65	82	93	64	243	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

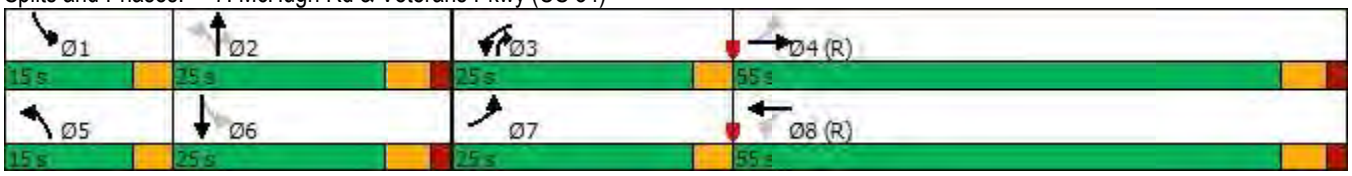
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	71.3	60.4		74.7	62.2		33.7	23.7	39.7	33.7	23.7	
Actuated g/C Ratio	0.59	0.50		0.62	0.52		0.28	0.20	0.33	0.28	0.20	
v/c Ratio	0.28	0.38		0.35	0.45		0.24	0.22	0.16	0.17	0.65	
Control Delay	10.4	19.2		10.9	18.3		32.7	44.5	6.6	31.6	48.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.4	19.2		10.9	18.3		32.7	44.5	6.6	31.6	48.8	
LOS	B	B		B	B		C	D	A	C	D	
Approach Delay		17.9			17.0			26.6			45.2	
Approach LOS		B			B			C			D	
90th %ile Green (s)	10.4	57.6		12.9	60.1		11.5	19.0	12.9	11.5	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Max	MaxR	Gap	Max	MaxR	
70th %ile Green (s)	9.1	59.4		11.1	61.4		9.8	20.6	11.1	9.9	20.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	8.3	60.5		10.0	62.2		8.6	21.8	10.0	8.7	21.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
30th %ile Green (s)	7.5	61.6		8.9	63.0		7.5	23.0	8.9	7.5	23.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
10th %ile Green (s)	6.4	63.1		7.4	64.1		0.0	34.0	7.4	0.0	34.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	31	162		49	182		36	55	0	36	154	
Queue Length 95th (ft)	54	219		77	220		72	106	38	71	#288	
Internal Link Dist (ft)		812			993			776			369	
Turn Bay Length (ft)	180			180			110		110	195		
Base Capacity (vph)	565	1791		600	1837		308	375	721	413	371	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.20	0.38		0.28	0.45		0.21	0.22	0.13	0.15	0.65	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 22.0		Intersection LOS: C	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	111	73	35	140	53	43	89	5	18	86	42
Future Vol, veh/h	75	111	73	35	140	53	43	89	5	18	86	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	84	125	82	39	157	60	48	100	6	20	97	47
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	10.3	10.2	10.7	11.1
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	95%	0%	100%	34%	0%	100%	47%	0%	67%
Vol Right, %	0%	5%	0%	0%	66%	0%	0%	53%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	43	94	75	74	110	35	93	100	18	128
LT Vol	43	0	75	0	0	35	0	0	18	0
Through Vol	0	89	0	74	37	0	93	47	0	86
RT Vol	0	5	0	0	73	0	0	53	0	42
Lane Flow Rate	48	106	84	83	124	39	105	112	20	144
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.094	0.19	0.158	0.144	0.198	0.075	0.185	0.185	0.039	0.251
Departure Headway (Hd)	7.03	6.491	6.751	6.245	5.774	6.823	6.334	5.939	7.016	6.284
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	509	551	530	573	619	524	565	602	509	570
Service Time	4.789	4.25	4.504	3.998	3.527	4.574	4.085	3.691	4.772	4.041
HCM Lane V/C Ratio	0.094	0.192	0.158	0.145	0.2	0.074	0.186	0.186	0.039	0.253
HCM Control Delay	10.5	10.8	10.8	10.1	10	10.1	10.5	10	10.1	11.2
HCM Lane LOS	B	B	B	B	A	B	B	A	B	B
HCM 95th-tile Q	0.3	0.7	0.6	0.5	0.7	0.2	0.7	0.7	0.1	1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	87	47	0	115	4	37	0	12	8	0	9
Future Vol, veh/h	7	87	47	0	115	4	37	0	12	8	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	92	92	82	82	92	92	92	82	92	82
Heavy Vehicles, %	0	1	2	2	2	0	2	2	2	0	2	0
Mvmt Flow	9	106	51	0	140	5	40	0	13	10	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	145	0	0	157	0	0	220	295	79	214	-	73
Stage 1	-	-	-	-	-	-	150	150	-	143	-	-
Stage 2	-	-	-	-	-	-	70	145	-	71	-	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1450	-	-	1420	-	-	717	615	965	729	0	981
Stage 1	-	-	-	-	-	-	837	772	-	851	0	-
Stage 2	-	-	-	-	-	-	932	776	-	936	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1420	-	-	706	611	965	716	-	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	611	-	716	-	-
Stage 1	-	-	-	-	-	-	832	767	-	846	-	-
Stage 2	-	-	-	-	-	-	922	776	-	918	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	10	9.4
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	706	965	1450	-	-	1420	-	-	716	981
HCM Lane V/C Ratio	0.057	0.014	0.006	-	-	-	-	-	0.014	0.011
HCM Control Delay (s)	10.4	8.8	7.5	-	-	0	-	-	10.1	8.7
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.2	0	0	-	-	0	-	-	0	0

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	12	55	97	22	24
Future Vol, veh/h	105	12	55	97	22	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	13	60	105	24	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	294	64
Stage 1	-	-	-	-	121	-
Stage 2	-	-	-	-	173	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1457	-	673	987
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	645	987
Mov Cap-2 Maneuver	-	-	-	-	645	-
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	806	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	645	987	-	-	1457	-
HCM Lane V/C Ratio	0.037	0.026	-	-	0.041	-
HCM Control Delay (s)	10.8	8.7	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	109	129	0	0	153
Future Vol, veh/h	0	109	129	0	0	153
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	118	140	0	0	166

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	70	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	978	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	978	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT	EBLn1	SET	SER
Capacity (veh/h)	-	978	-	-
HCM Lane V/C Ratio	-	0.121	-	-
HCM Control Delay (s)	-	9.2	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	0	75	33	0	55	65	699	31	59	877	99
Future Vol, veh/h	0	0	75	33	0	55	65	699	31	59	877	99
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	0	0	1	2
Mvmt Flow	0	0	82	36	0	60	71	760	34	64	953	108

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	477	1524	2108	397	1061	0	0	794	0	0
Stage 1	-	-	-	919	919	-	-	-	-	-	-	-
Stage 2	-	-	-	605	1189	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	7.5	6.54	6.9	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	-	-	-	6.5	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.5	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.5	4.02	3.3	2.22	-	-	2.2	-	-
Pot Cap-1 Maneuver	0	0	*721	*91	52	608	1004	-	-	836	-	-
Stage 1	0	0	-	*296	348	-	-	-	-	-	-	-
Stage 2	0	0	-	*683	452	-	-	-	-	-	-	-
Platoon blocked, %			1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	-	-	*721	*72	44	608	1004	-	-	836	-	-
Mov Cap-2 Maneuver	-	-	-	*72	44	-	-	-	-	-	-	-
Stage 1	-	-	-	*275	323	-	-	-	-	-	-	-
Stage 2	-	-	-	*560	417	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	10.6	56.3	0.7	0.6
HCM LOS	B	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1004	-	-	160	721	836	-	-
HCM Lane V/C Ratio	0.07	-	-	0.598	0.113	0.077	-	-
HCM Control Delay (s)	8.9	-	-	56.3	10.6	9.7	-	-
HCM Lane LOS	A	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	3.2	0.4	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	125	31	106	125	31	163
Future Vol, veh/h	125	31	106	125	31	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	145	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	136	34	115	136	34	177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	360	115	0	0	251	0
Stage 1	115	-	-	-	-	-
Stage 2	245	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	639	937	-	-	1314	-
Stage 1	910	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	622	937	-	-	1314	-
Mov Cap-2 Maneuver	659	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	659	937	1314	-
HCM Lane V/C Ratio	-	-	0.206	0.036	0.026	-
HCM Control Delay (s)	-	-	11.9	9	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.1	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	137	0	0	194
Future Vol, veh/h	0	0	137	0	0	194
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	149	0	0	211

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	360	149	0	0	149	0
Stage 1	149	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	639	898	-	-	1432	-
Stage 1	879	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	639	898	-	-	1432	-
Mov Cap-2 Maneuver	679	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1432	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	275	22	19	697	707	161
Future Volume (vph)	275	22	19	697	707	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.336			
Satd. Flow (perm)	1787	1615	638	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				169
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	289	23	20	734	744	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	289	23	20	734	744	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	1.16	0.09	0.04	0.28	0.30	0.12
Control Delay	145.6	16.0	1.6	2.2	6.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	145.6	16.0	1.6	2.2	6.5	0.4
LOS	F	B	A	A	A	A
Approach Delay	136.1			2.2	5.4	
Approach LOS	F			A	A	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	~219	0	1	29	68	0
Queue Length 95th (ft)	#381	23	m3	39	133	7
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	250	245	598	2644	2508	1453
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.09	0.03	0.28	0.30	0.12

Intersection Summary

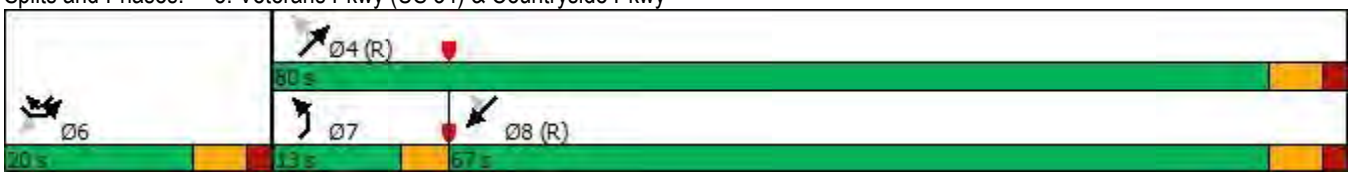
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.16		
Intersection Signal Delay: 24.8		Intersection LOS: C
Intersection Capacity Utilization 44.8%		ICU Level of Service A
Analysis Period (min) 15		

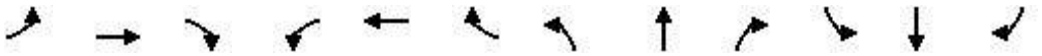
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





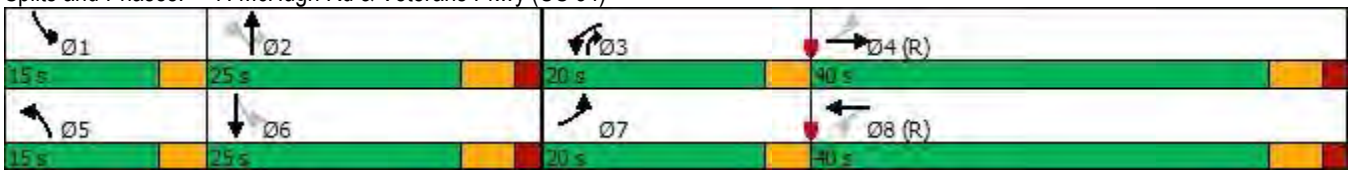
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	643	20	106	520	59	39	55	65	69	77	126
Future Volume (vph)	134	643	20	106	520	59	39	55	65	69	77	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			120		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.985				0.850		0.907	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3592	0	1805	3524	0	1805	1900	1568	1805	1723	0
Flt Permitted	0.342			0.311			0.592			0.659		
Satd. Flow (perm)	637	3592	0	591	3524	0	1125	1900	1568	1252	1723	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			13				71		73	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	140	670	21	110	542	61	41	57	68	72	80	131
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	691	0	110	603	0	41	57	68	72	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	53.9	42.2		52.1	41.2		32.6	24.2	38.5	35.3	27.2	
Actuated g/C Ratio	0.54	0.42		0.52	0.41		0.33	0.24	0.38	0.35	0.27	
v/c Ratio	0.31	0.46		0.27	0.41		0.10	0.12	0.11	0.15	0.40	
Control Delay	12.3	22.1		12.3	22.6		21.5	33.1	5.4	22.0	23.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	12.3	22.1		12.3	22.6		21.5	33.1	5.4	22.0	23.4	
LOS	B	C		B	C		C	C	A	C	C	
Approach Delay		20.5			21.0			18.9			23.1	
Approach LOS		C			C			B			C	
90th %ile Green (s)	12.0	39.9		10.6	38.5		8.8	19.8	10.6	10.7	21.7	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	10.3	41.3		9.2	40.2		7.7	21.4	9.2	9.1	22.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	9.2	42.2		8.3	41.3		6.9	22.4	8.3	8.1	23.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
30th %ile Green (s)	8.1	43.1		7.4	42.4		0.0	23.4	7.4	7.1	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Gap	MaxR	
10th %ile Green (s)	6.7	44.3		6.2	43.8		0.0	34.0	6.2	0.0	34.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	40	161		31	122		17	29	0	30	73	
Queue Length 95th (ft)	69	221		60	181		40	65	26	61	148	
Internal Link Dist (ft)		812			993			776			369	
Turn Bay Length (ft)	180			180			110		110	195		
Base Capacity (vph)	546	1516		534	1460		479	459	770	518	522	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.26	0.46		0.21	0.41		0.09	0.12	0.09	0.14	0.40	

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	139	76	28	172	49	61	68	1	30	47	20
Future Vol, veh/h	58	139	76	28	172	49	61	68	1	30	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	63	151	83	30	187	53	66	74	1	33	51	22
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.9	10.1	10.3	10
HCM LOS	A	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	99%	0%	100%	38%	0%	100%	54%	0%	70%
Vol Right, %	0%	1%	0%	0%	62%	0%	0%	46%	0%	30%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	61	69	58	93	122	28	115	106	30	67
LT Vol	61	0	58	0	0	28	0	0	30	0
Through Vol	0	68	0	93	46	0	115	57	0	47
RT Vol	0	1	0	0	76	0	0	49	0	20
Lane Flow Rate	66	75	63	101	133	30	125	116	33	73
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.127	0.133	0.114	0.168	0.206	0.056	0.21	0.186	0.063	0.127
Departure Headway (Hd)	6.885	6.408	6.524	6.019	5.58	6.568	6.08	5.806	6.988	6.278
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	520	559	550	596	644	546	591	618	513	571
Service Time	4.626	4.149	4.26	3.755	3.316	4.304	3.816	3.542	4.731	4.02
HCM Lane V/C Ratio	0.127	0.134	0.115	0.169	0.207	0.055	0.212	0.188	0.064	0.128
HCM Control Delay	10.6	10.1	10.1	10	9.8	9.7	10.4	9.9	10.2	9.9
HCM Lane LOS	B	B	B	A	A	A	B	A	B	A
HCM 95th-tile Q	0.4	0.5	0.4	0.6	0.8	0.2	0.8	0.7	0.2	0.4

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	100	70	0	130	0	63	0	21	0	0	0
Future Vol, veh/h	1	100	70	0	130	0	63	0	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	92	92	85	85	92	92	92	85	92	85
Heavy Vehicles, %	0	0	2	2	3	0	2	2	2	0	2	0
Mvmt Flow	1	118	76	0	153	0	68	0	23	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	153	0	0	194	0	0	235	311	97	214	-	77
Stage 1	-	-	-	-	-	-	158	158	-	153	-	-
Stage 2	-	-	-	-	-	-	77	153	-	61	-	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1440	-	-	1377	-	-	700	602	940	729	0	975
Stage 1	-	-	-	-	-	-	828	766	-	840	0	-
Stage 2	-	-	-	-	-	-	923	770	-	949	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1440	-	-	1377	-	-	699	601	940	711	-	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	601	-	711	-	-
Stage 1	-	-	-	-	-	-	827	765	-	839	-	-
Stage 2	-	-	-	-	-	-	923	770	-	925	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.3	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	699	940	1440	-	-	1377	-	-	-	-
HCM Lane V/C Ratio	0.098	0.024	0.001	-	-	-	-	-	-	-
HCM Control Delay (s)	10.7	8.9	7.5	-	-	0	-	-	0	0
HCM Lane LOS	B	A	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	20	79	100	31	42
Future Vol, veh/h	111	20	79	100	31	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	22	86	109	34	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	143	0	359	72
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	227	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1437	-	613	975
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1437	-	576	975
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	742	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	576	975	-	-	1437	-
HCM Lane V/C Ratio	0.058	0.047	-	-	0.06	-
HCM Control Delay (s)	11.6	8.9	-	-	7.7	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	153	153	0	0	180
Future Vol, veh/h	0	153	153	0	0	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	166	166	0	0	196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	83	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	960	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	960	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	SE	NW
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT	EBLn1	SET	SER
Capacity (veh/h)	-	960	-	-
HCM Lane V/C Ratio	-	0.173	-	-
HCM Control Delay (s)	-	9.5	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	0	102	21	0	36	89	654	36	35	555	139
Future Vol, veh/h	0	0	102	21	0	36	89	654	36	35	555	139
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	92	93	92	93	93	93	93	92
Heavy Vehicles, %	2	2	2	5	2	0	2	1	0	0	1	2
Mvmt Flow	0	0	111	23	0	39	97	703	39	38	597	151

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	299	1292	1741	371	748	0	0	742	0	0
Stage 1	-	-	-	917	917	-	-	-	-	-	-	-
Stage 2	-	-	-	375	824	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	7.6	6.54	6.9	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	-	-	-	6.6	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.6	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.55	4.02	3.3	2.22	-	-	2.2	-	-
Pot Cap-1 Maneuver	0	0	*863	*135	91	632	1117	-	-	874	-	-
Stage 1	0	0	-	*287	349	-	-	-	-	-	-	-
Stage 2	0	0	-	*807	546	-	-	-	-	-	-	-
Platoon blocked, %			1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	-	-	*863	*106	80	632	1117	-	-	874	-	-
Mov Cap-2 Maneuver	-	-	-	*106	80	-	-	-	-	-	-	-
Stage 1	-	-	-	*262	319	-	-	-	-	-	-	-
Stage 2	-	-	-	*673	523	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	9.8	27.2	1	0.4
HCM LOS	A	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1117	-	-	223	863	874	-	-
HCM Lane V/C Ratio	0.087	-	-	0.275	0.128	0.043	-	-
HCM Control Delay (s)	8.5	-	-	27.2	9.8	9.3	-	-
HCM Lane LOS	A	-	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.1	0.4	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	161	40	91	157	38	113
Future Vol, veh/h	161	40	91	157	38	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	145	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	175	43	99	171	41	123

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	304	99	0	0	270	0
Stage 1	99	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	688	957	-	-	1293	-
Stage 1	925	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	666	957	-	-	1293	-
Mov Cap-2 Maneuver	689	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	689	957	1293	-
HCM Lane V/C Ratio	-	-	0.254	0.045	0.032	-
HCM Control Delay (s)	-	-	12	8.9	7.9	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	1	0.1	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	131	0	0	151
Future Vol, veh/h	0	0	131	0	0	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	142	0	0	164

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	306	142	0	0	142	0
Stage 1	142	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	686	906	-	-	1441	-
Stage 1	885	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	686	906	-	-	1441	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	865	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1441	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

APPENDIX H

CAPACITY ANALYSIS WORKSHEETS
2031 FUTURE WITH PROJECT
WITH PROPOSED MITIGATION

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	206	23	24	749	1013	129
Future Volume (vph)	206	23	24	749	1013	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
Flt Permitted	0.950		0.176			
Satd. Flow (perm)	1805	1615	334	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				137
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	219	24	26	797	1078	137
Shared Lane Traffic (%)						
Lane Group Flow (vph)	219	24	26	797	1078	137
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

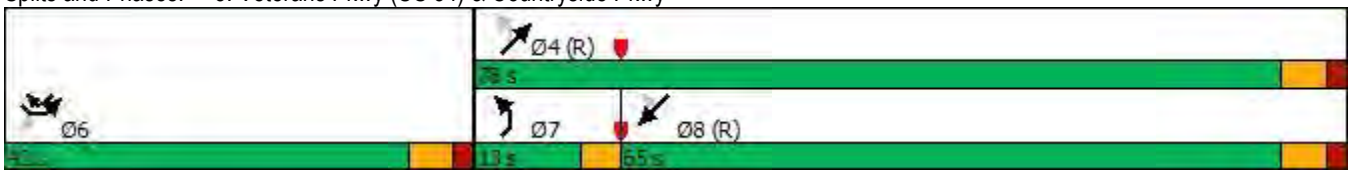


Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	42.0	42.0	13.0	78.0	65.0	42.0
Total Split (%)	35.0%	35.0%	10.8%	65.0%	54.2%	35.0%
Maximum Green (s)	36.0	36.0	9.5	72.0	59.0	36.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	36.0	36.0	74.5	72.0	66.0	110.4
Actuated g/C Ratio	0.30	0.30	0.62	0.60	0.55	0.92
v/c Ratio	0.40	0.05	0.09	0.37	0.55	0.10
Control Delay	36.2	11.2	7.5	9.1	19.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	11.2	7.5	9.1	19.5	0.3
LOS	D	B	A	A	B	A
Approach Delay	33.8			9.1	17.3	
Approach LOS	C			A	B	
90th %ile Green (s)	36.0	36.0	7.1	72.0	61.4	36.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	36.0	36.0	6.5	72.0	62.0	36.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	36.0	36.0	6.1	72.0	62.4	36.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	36.0	36.0	0.0	72.0	72.0	36.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	36.0	36.0	0.0	72.0	72.0	36.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	135	0	5	92	291	0
Queue Length 95th (ft)	208	21	13	118	364	6
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	541	501	323	2144	1964	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.05	0.08	0.37	0.55	0.10

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 16.1		Intersection LOS: B	
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	275	22	19	697	707	161
Future Volume (vph)	275	22	19	697	707	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180			250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.271			
Satd. Flow (perm)	1787	1615	515	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				169
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	289	23	20	734	744	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	289	23	20	734	744	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

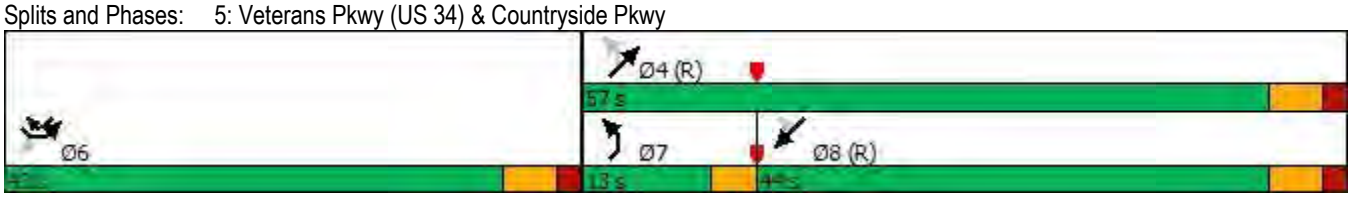


Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	43.0	43.0	13.0	57.0	44.0	43.0
Total Split (%)	43.0%	43.0%	13.0%	57.0%	44.0%	43.0%
Maximum Green (s)	37.0	37.0	9.5	51.0	38.0	37.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	37.0	37.0	53.5	51.0	47.0	93.6
Actuated g/C Ratio	0.37	0.37	0.54	0.51	0.47	0.94
v/c Ratio	0.44	0.04	0.06	0.40	0.44	0.12
Control Delay	26.3	8.3	9.7	12.8	19.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	8.3	9.7	12.8	19.7	0.4
LOS	C	A	A	B	B	A
Approach Delay	25.0			12.8	16.1	
Approach LOS	C			B	B	
90th %ile Green (s)	37.0	37.0	6.9	51.0	40.6	37.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	37.0	37.0	6.3	51.0	41.2	37.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	137	0	4	89	147	0
Queue Length 95th (ft)	211	16	m11	144	238	8
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	661	612	398	1822	1678	1450
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.04	0.05	0.40	0.44	0.12

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



APPENDIX I

ITE TRIP GENERATION MANUAL EXCERPTS

Land Use: 857
Discount Club

Description

A discount club is a discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items such as food, beverages, household items, clothing, tires, and appliances. Many items are sold in large quantities or bulk. Some sites may include on-site fueling pumps.

Additional Data

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alabama, Alberta (CAN), California, Connecticut, Delaware, Florida, Maryland, Massachusetts, Minnesota, Ohio, Oregon, Pennsylvania, and Washington.

To assist in the future analysis of this land use, it is important to collect and include information on the presence of vehicle fueling stations in trip generation data submissions.

Source Numbers

212, 245, 333, 344, 345, 346, 424, 438, 445, 580, 584, 700, 715, 719, 975, 1047

Discount Club
(857)

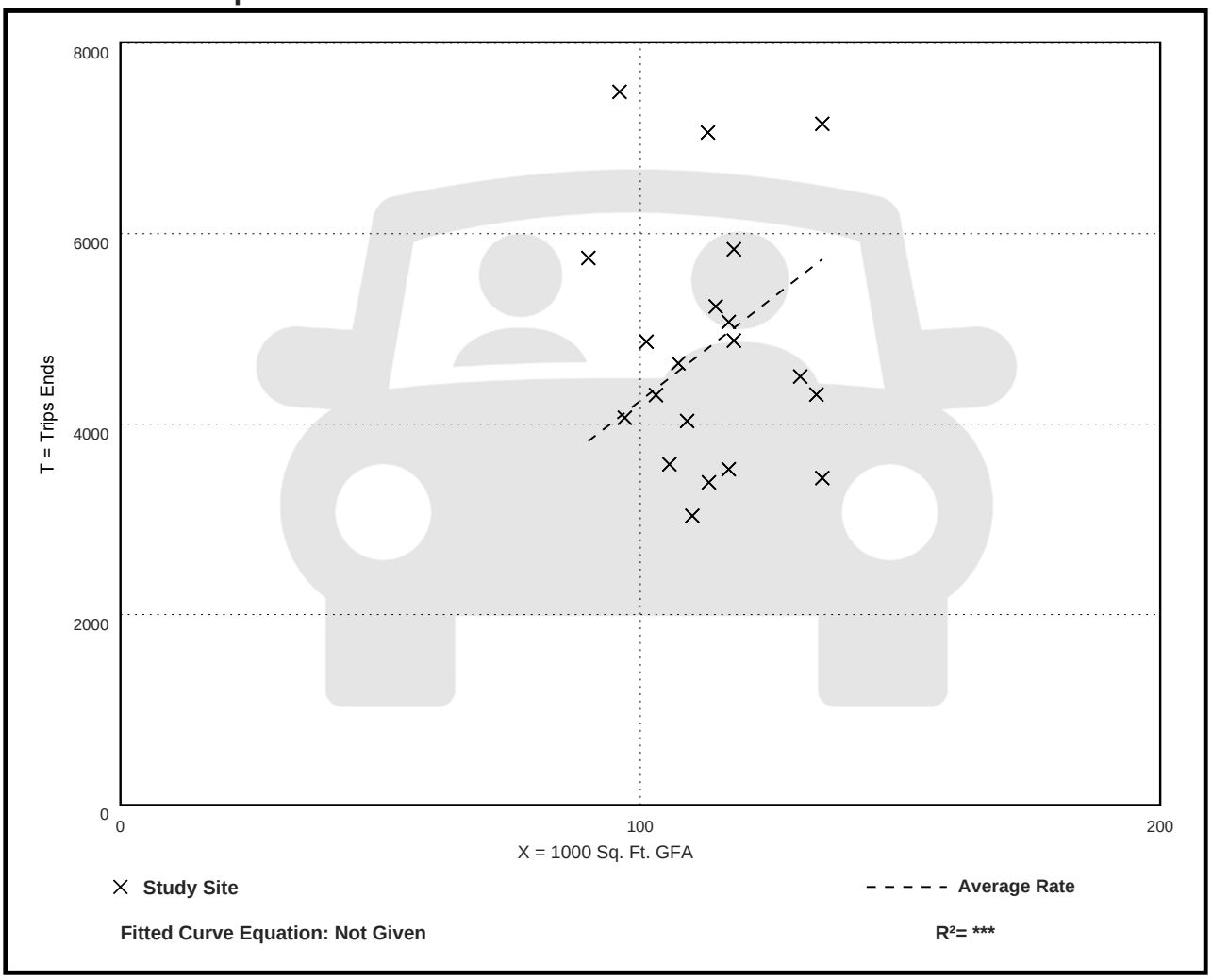
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 20
Avg. 1000 Sq. Ft. GFA: 113
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
42.46	25.44 - 78.02	13.04

Data Plot and Equation



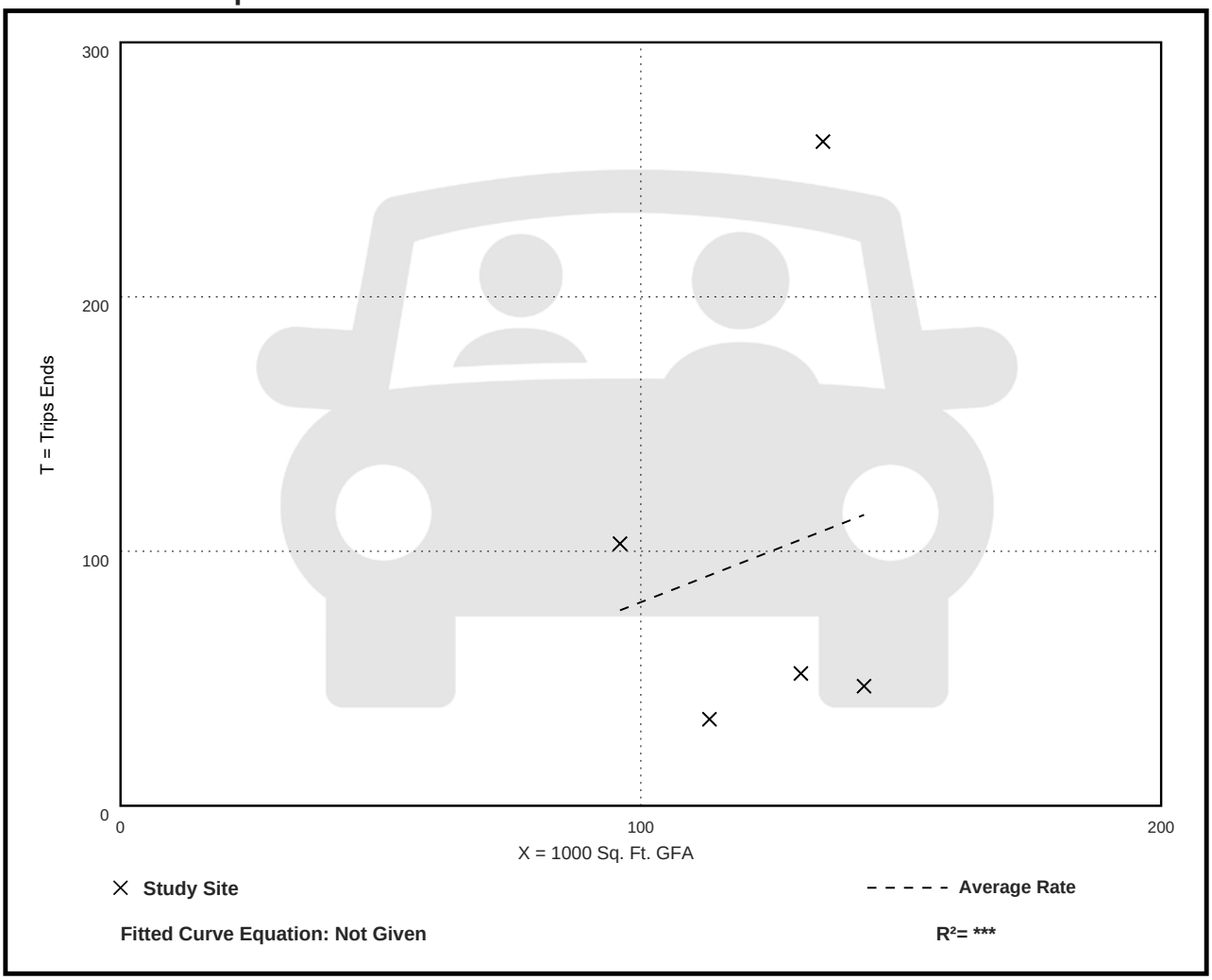
Discount Club
(857)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. 1000 Sq. Ft. GFA: 124
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.80	0.30 - 1.93	0.73

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= *

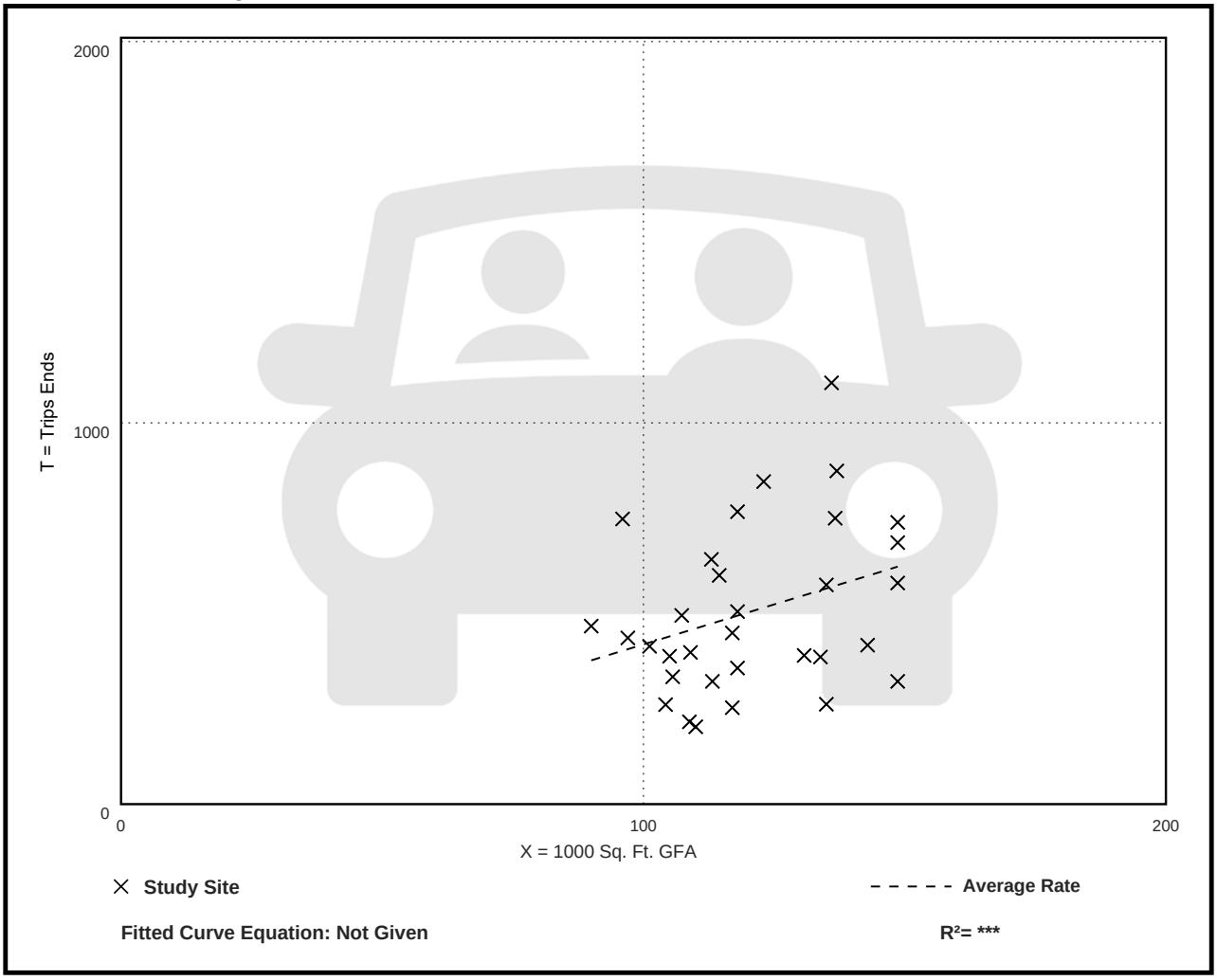
Discount Club
(857)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 32
Avg. 1000 Sq. Ft. GFA: 121
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.19	1.85 - 8.13	1.70

Data Plot and Equation



Discount Club
(857)

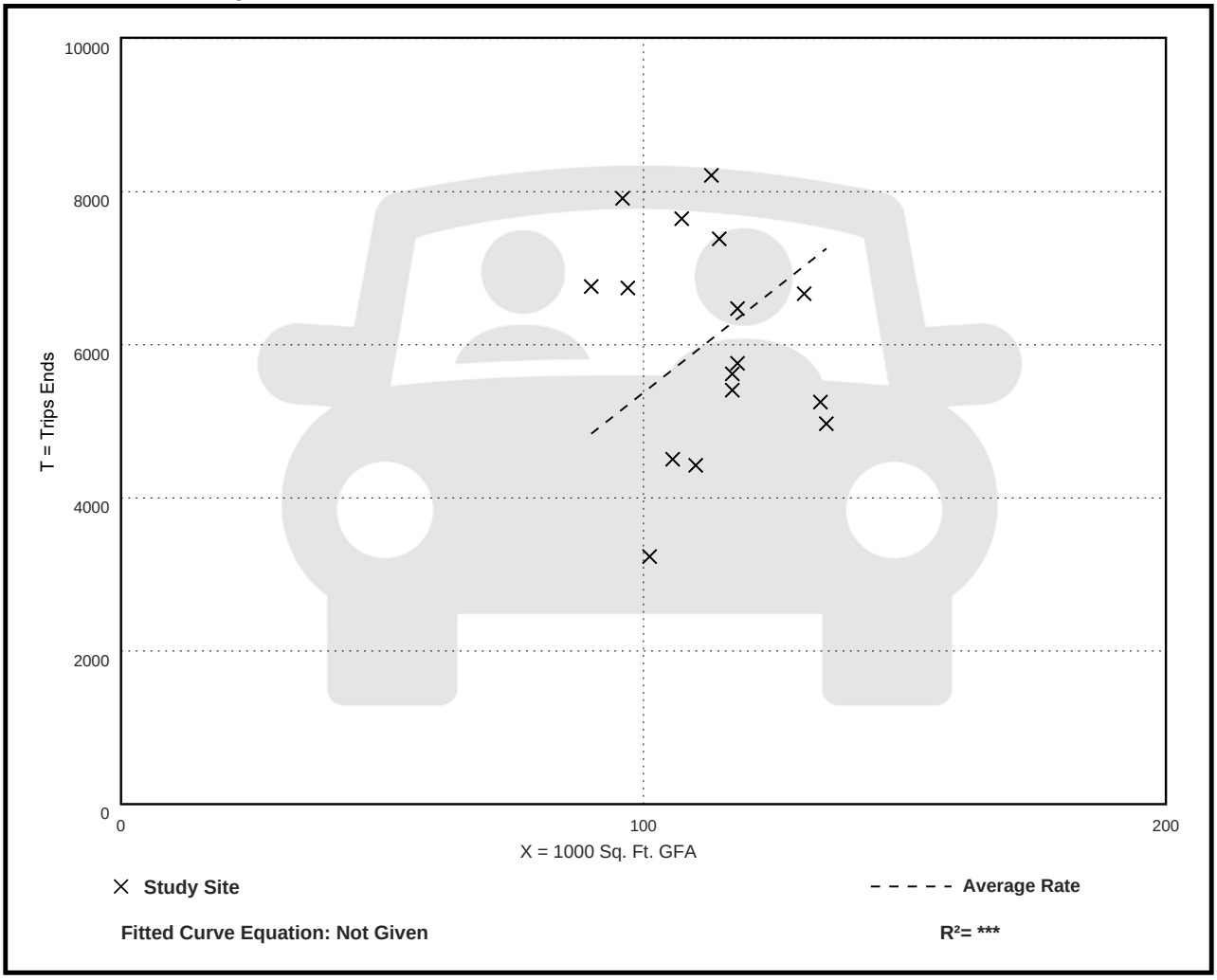
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 113
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
53.75	31.97 - 82.43	15.25

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

Discount Club
(857)

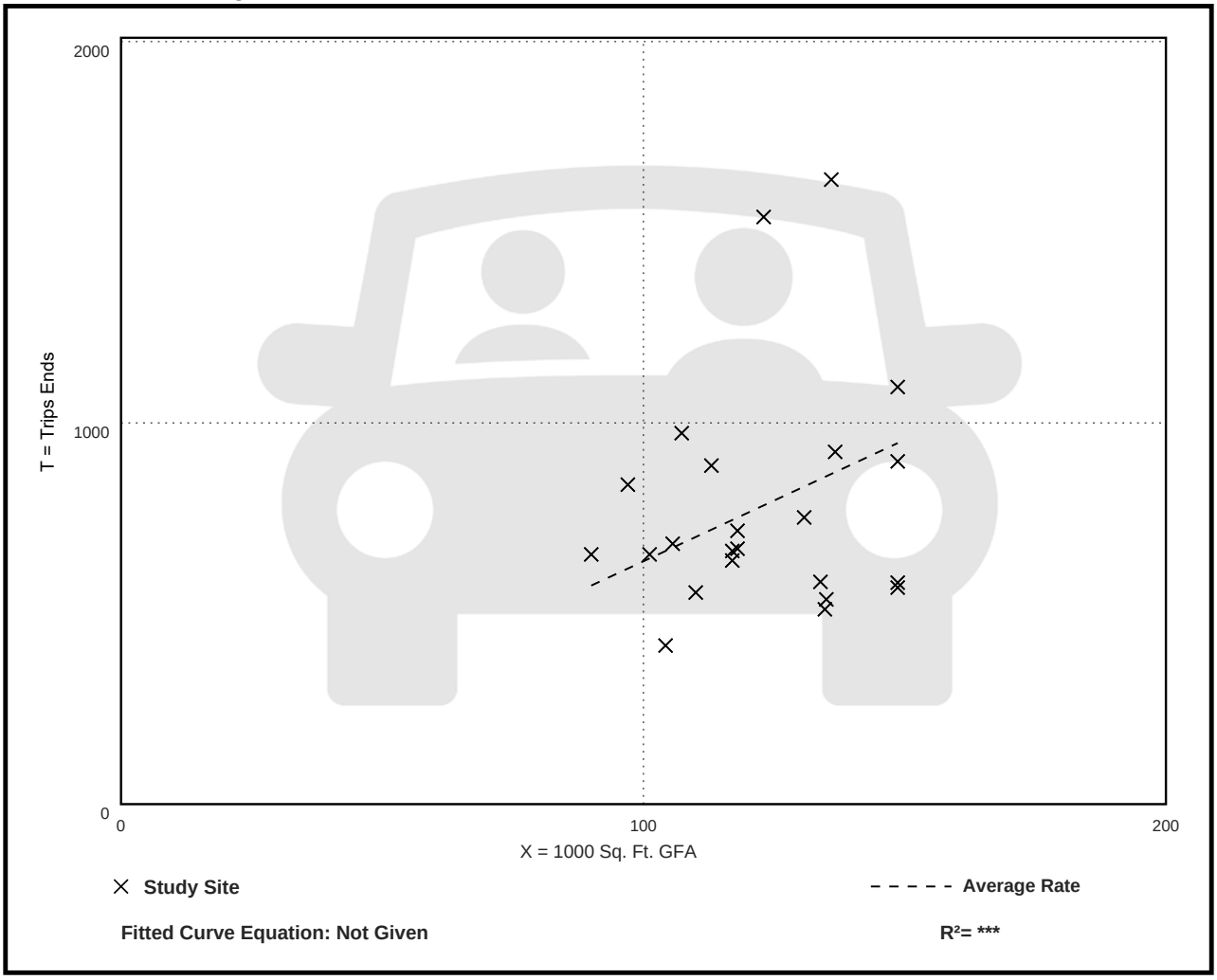
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 23
Avg. 1000 Sq. Ft. GFA: 123
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
6.37	3.79 - 12.52	2.43

Data Plot and Equation



Land Use: 944
Gasoline/Service Station

Description

This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have facilities for servicing and repairing motor vehicles. The gasoline/service station may also have a car wash. Convenience store/gas station (Land Use 945) and truck stop (Land Use 950) are related uses.

Additional Data

The independent variable—vehicle fueling positions—is defined as the maximum number of vehicles that can be fueled simultaneously. The sites in this land use include both self-pump and attendant-pumped fueling positions and both pre-pay and post-pay operations.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Kentucky, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario (CAN), Oregon, South Dakota, Texas, and Washington.

Specialized Land Use Data

A 2006 study provided data on four private fuel facilities in Florida (source 721). These facilities provide self-fuel service for any motorist with a pre-established membership account. The site is not open to the general public. The trip generation characteristics of these sites differ from sites included in this land use; therefore, trip generation information for these sites is excluded from the data plots. The four sites have an average of nine vehicle fueling positions, with an average of 12 vehicle trips during the weekday, AM peak hour of adjacent traffic and 7 vehicle trips during the weekday, PM peak hour of adjacent street traffic.

Source Numbers

221, 274, 278, 288, 340, 350, 351, 355, 359, 366, 440, 583, 617, 618, 631, 721, 867, 882, 883, 888, 954, 977

Gasoline/Service Station (944)

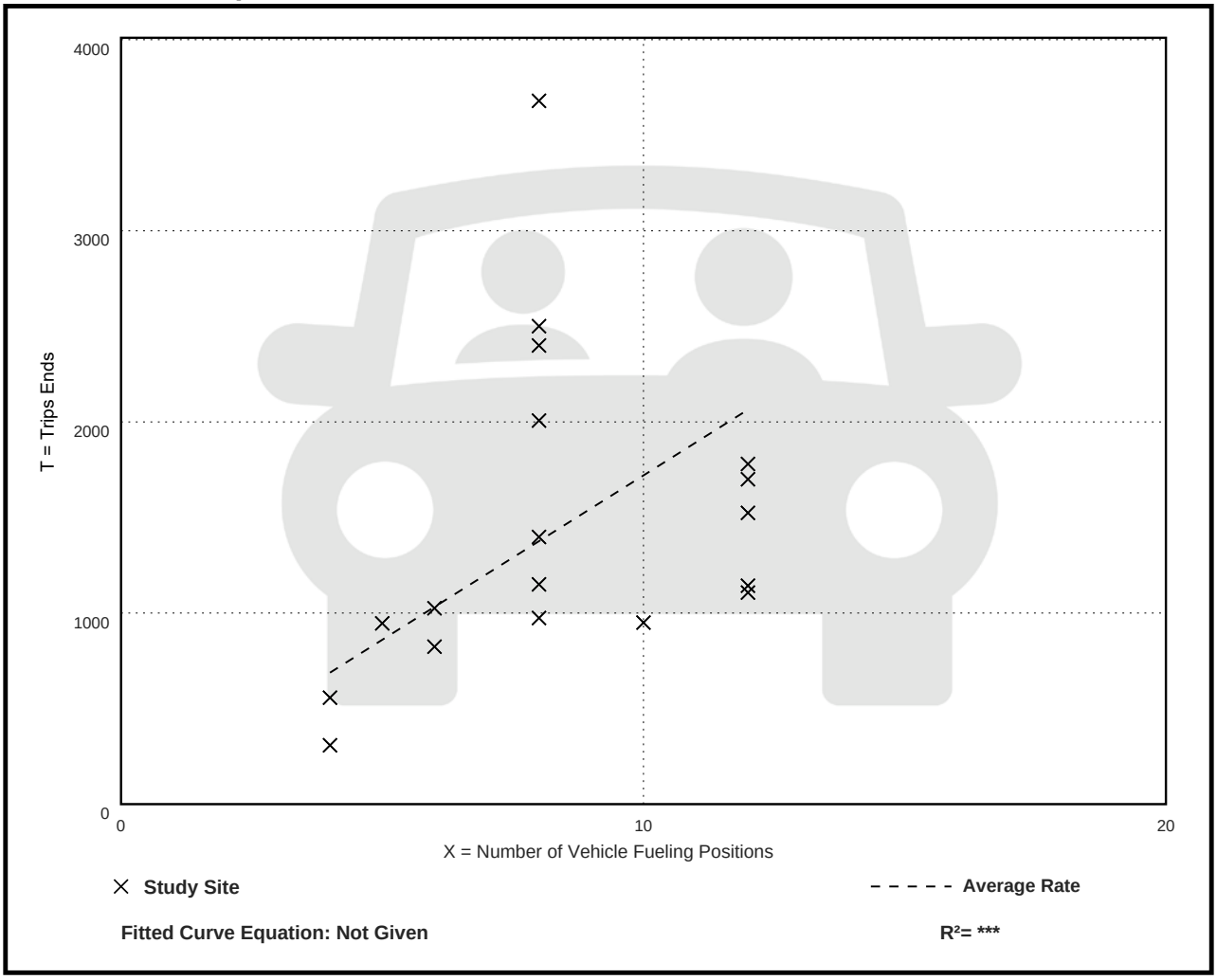
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. Num. of Vehicle Fueling Positions: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
172.01	77.00 - 460.00	96.45

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

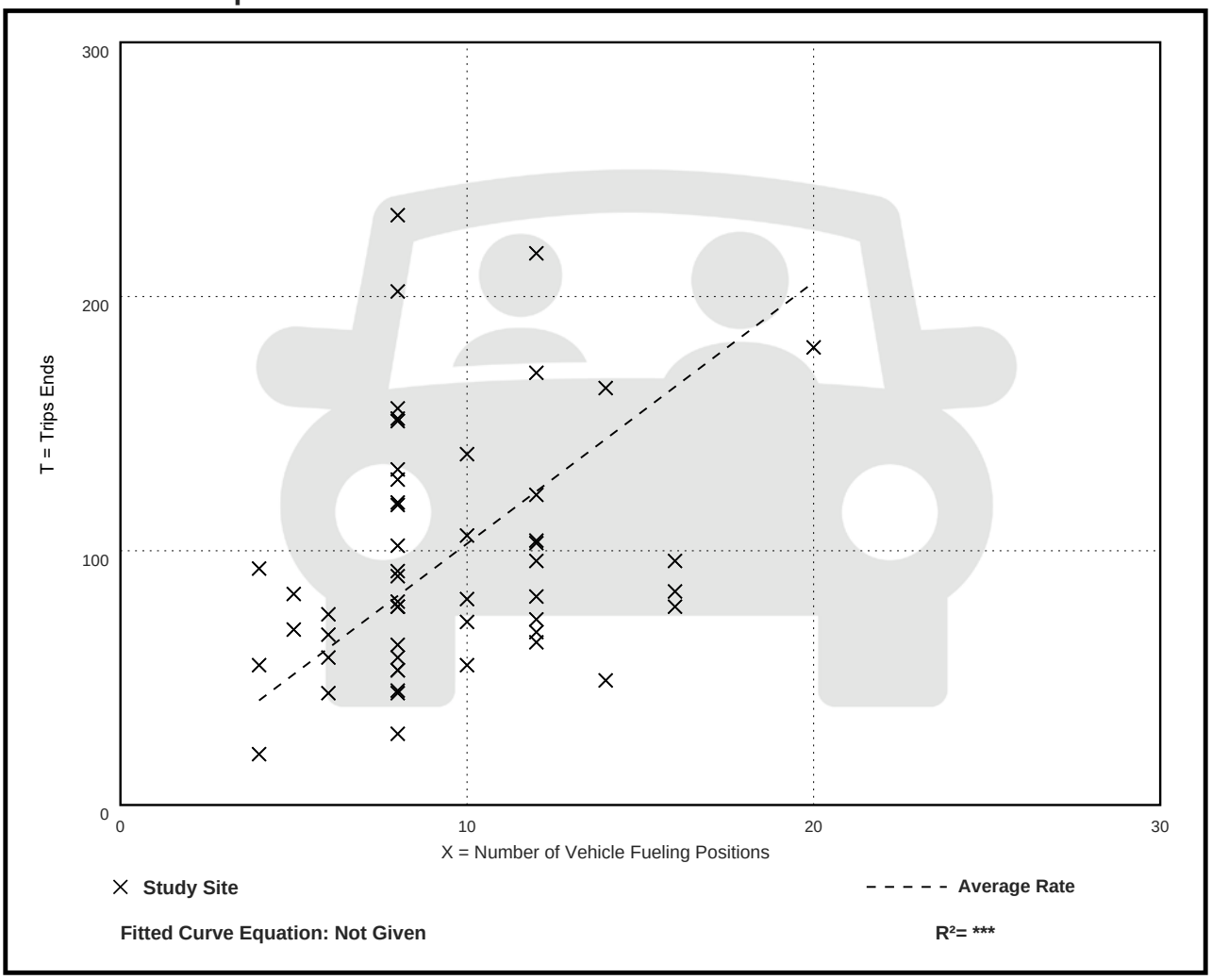
Gasoline/Service Station
(944)

Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 53
Avg. Num. of Vehicle Fueling Positions: 9
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
10.28	3.50 - 29.00	5.36

Data Plot and Equation



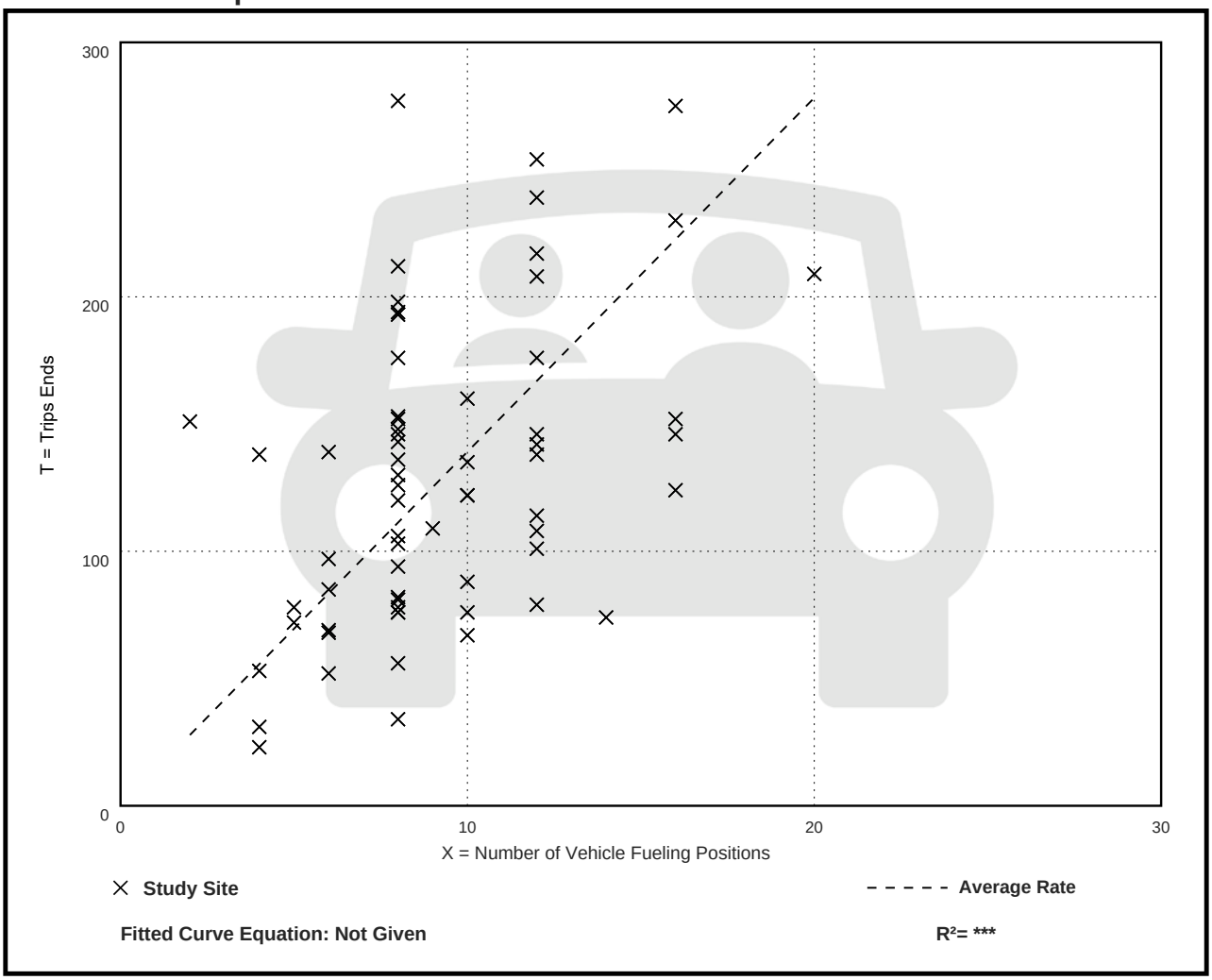
Gasoline/Service Station
(944)

Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 65
Avg. Num. of Vehicle Fueling Positions: 9
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
13.91	4.25 - 75.50	6.93

Data Plot and Equation



Gasoline/Service Station
(944)

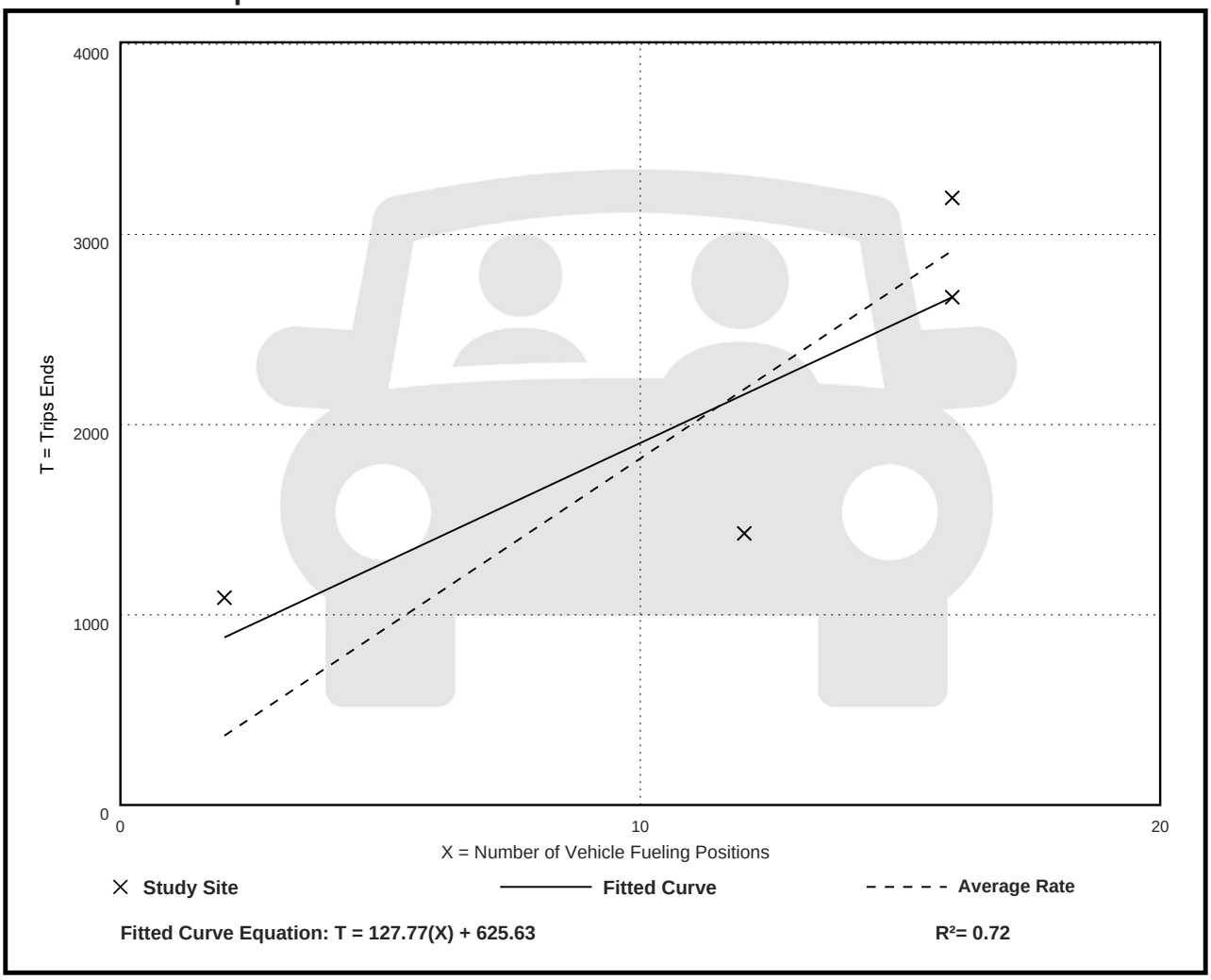
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Saturday

Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Vehicle Fueling Positions: 12
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
182.17	119.00 - 545.00	96.27

Data Plot and Equation



Fitted Curve Equation: T = 127.77(X) + 625.63

R^2= 0.72

Gasoline/Service Station
(944)

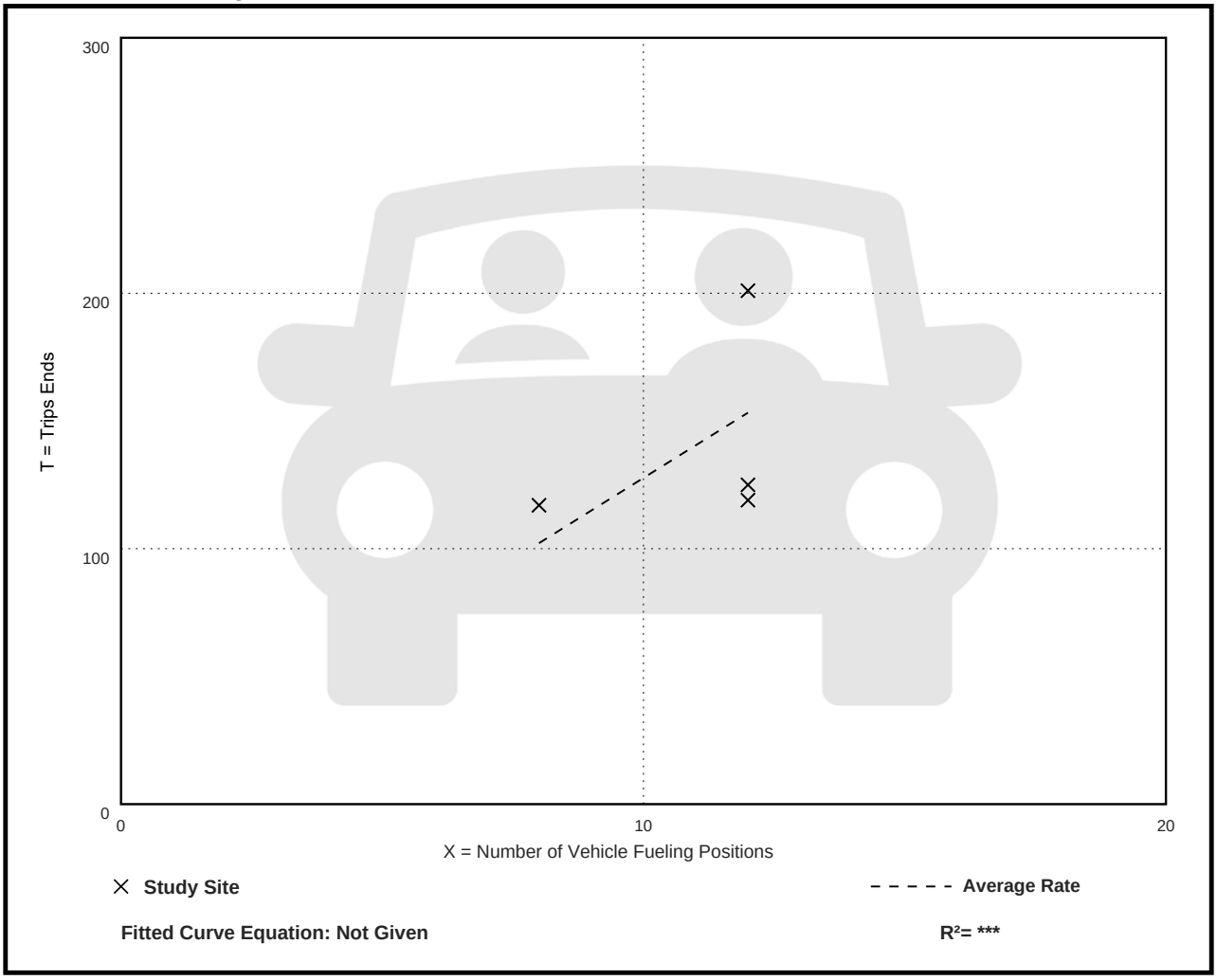
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Vehicle Fueling Positions: 11
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
12.77	9.92 - 16.75	3.40

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= *

PRELIMINARY STORMWATER MANAGEMENT REPORT

PROJECT SITE:

COSTCO WHOLESALE
VETERANS PARKWAY (RT. 34) AND COUNTRYSIDE PARKWAY
YORKVILLE, KENDALL COUNTY, ILLINOIS

PREPARED FOR:

Costco Wholesale Corporation
730 Lake Drive
Issaquah, WA 98027
425.313.8100

PREPARED BY:

V3 COMPANIES, LTD.
7325 JANES AVENUE
WOODRIDGE, ILLINOIS 60517
630.724.9200

NOVEMBER 13, 2024

COSTCO – YORKVILLE
STORMWATER MANAGEMENT REPORT

YORKVILLE, KENDALL COUNTY, ILLINOIS

OVERVIEW

The proposed 33.14± acre Costco Wholesale project is located in Sections 27 and 28, Township 37 North, Range 7 East in the City of Yorkville, Kendall County, Illinois. The property is located at the southeast corner of McHugh Road and Countryside Parkway (see enclosed project location map). The project includes the construction of the Costco Wholesale Warehouse and Fuel Facility with surface parking and underground utilities. The Costco warehouse and parking area would occupy 26.24± acres of the site, with the rest to be developed in the future. Stormwater management is also proposed as part of the improvements.

The proposed development area is currently undeveloped farmland that is tributary to an existing offsite stormwater management basin located north of the site (see enclosed aerial map exhibit). The triangular site is bounded by Countryside Parkway to the north and northeast, Veterans Parkway (U.S. Route 34) to the south and southeast, and McHugh Road to the west. There are residential subdivisions further to the north and south of the development along with some commercial frontage across Veterans Parkway to the south.

The existing site is undeveloped and generally drains to one of two watersheds that divide the site (see enclosed USGS Topographic Map). Stormwater runoff on the west side of the site drains to Blackberry Creek to the north of the site while the east side drains to the Ferson Creek/Fox River watershed to the southeast. All stormwater runoff from the site is ultimately tributary to the Fox River and currently drains uncontrolled to nearby receiving waters which either are or flow into the Fox River.

According to the FEMA Flood Insurance Rate Maps (FIRM) (see enclosed FIRM exhibit), there is no 100-year mapped floodplain within the proposed Costco development. According to the USGS Hydrologic Atlas and the National Wetlands Inventory (NWI), there are no mapped wetlands present on the proposed development (see enclosed USGS Hydrologic Atlas and NWI Map). The soil survey of DuPage County shows that the site predominantly consists of two different soil types; Waupecan silt loam and Dresden silt loam, both classified as well drained soils (see enclosed Soil Survey Map).

DETENTION NARRATIVE

The site is to follow the Kendall County Stormwater Management Ordinance. The Ordinance requires that volume storage be provided to limit stormwater runoff from the developed site to 0.15 cfs per acre for the 100-year storm as well as 0.04 cfs per acre for the 2-year storm. Based on these requirements and the proposed impervious coverage, roughly 15.48 ac-ft of storage will be required for the 33.14± acre site. The Yorkville Stormwater Management Plan also has a further requirement for outlet control to limit the 25-year storm event to 0.08 cfs per acre.

There is an existing offsite stormwater detention facility to the northeast that was designed and constructed to provide enough storage volume for the entire Yorkville Crossing

development. However, due to costs of detention credits and onsite earthwork balancing considerations, Costco is planning to construct a new detention basin for the development within the site rather than connect to this offsite detention facility with new storm sewer.

A stormwater detention basin is proposed on the northwest corner of the site to store runoff on site and limit the release rate of stormwater leaving the site. The basin will be sized to provide volume storage to meet the requirements of the Kendall County Stormwater Management Plan and the City of Yorkville's standard specifications. Based on these requirements, 15.48 ac-ft of storage are required, and 15.75 ac-ft are provided in the basin. Required runoff volume was calculated based on the proposed site plan assuming 80% impervious coverage of the outlots when eventually developed, not including onsite roadways.

The proposed Costco grading plan will convey the 100-year overflow to the proposed stormwater basin via overland flow, as the site is graded to direct water north around the warehouse until it flows into the basin.

STORM SEWER

The proposed additions for this project are the 161,064 sf Costco warehouse along with surface parking, internal roadways, and associated utilities. The site will be graded to drain to stormwater inlets at low points which will send runoff into storm sewers, through which water will be directed into the onsite detention facility. The proposed Costco fuel facility and outlots will also be included in this storm sewer system and have their runoff conveyed to the northwest basin as well. The proposed storm sewer for the Costco development area will be sized to convey runoff from the 10-year rainfall event using the latest Bulletin 75 rainfall data.

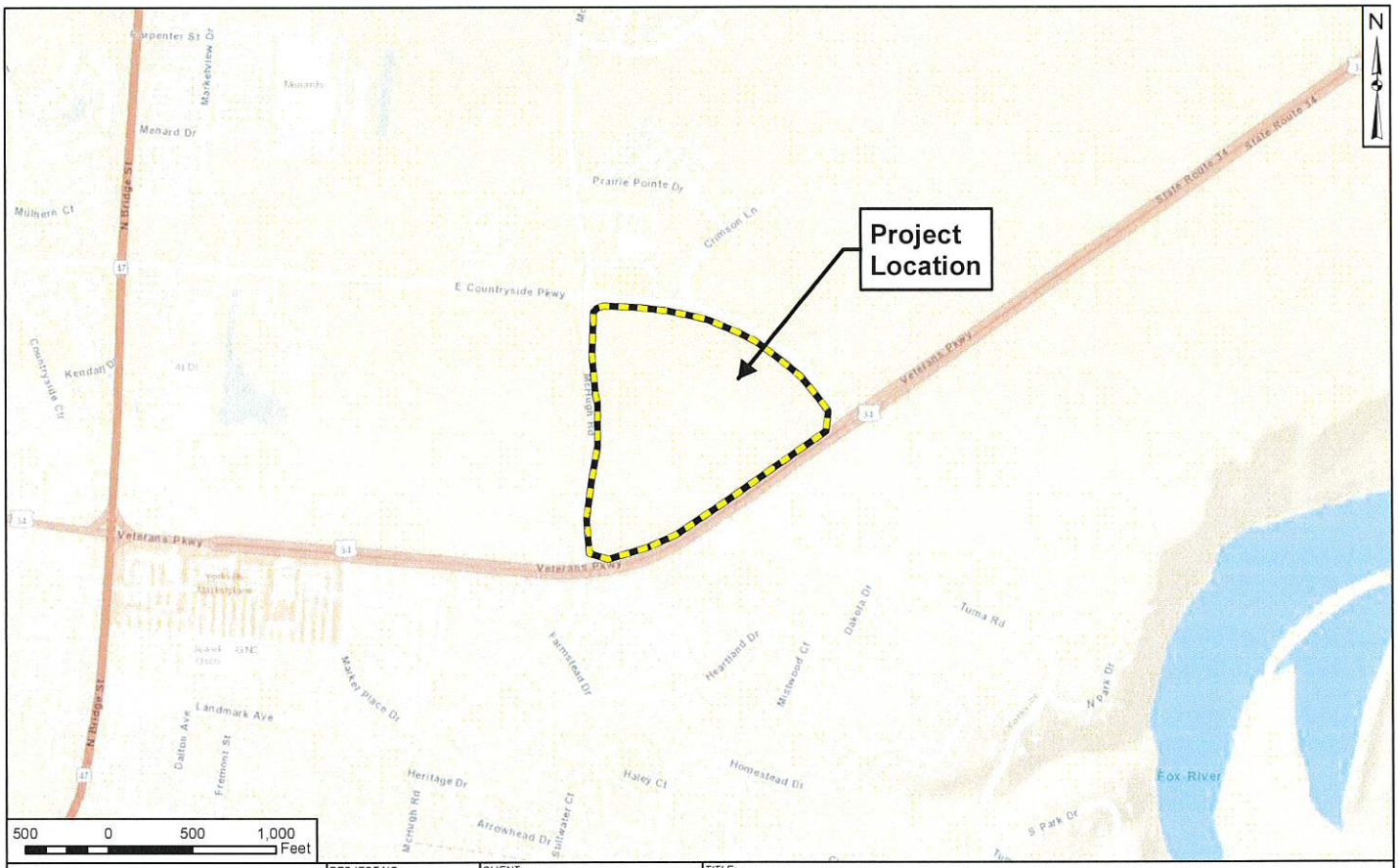
Four outfall connections to the detention basin are proposed to direct storm sewer flow from the Costco development into the proposed basin. This basin is designed to provide runoff volume storage to limit the release rate to City storm sewers during storm events. The basin is proposed to release through a restrictor manhole into storm sewer south of Countryside Parkway in the northwest corner of the site, north of the basin. Water leaving the pond will be restricted to a rate of 4.97 cfs for the 33.14-acre site, per Kendall County stormwater regulations.

CONCLUSION

It is our opinion that the proposed stormwater management design conforms to the requirements of the Kendall County Stormwater Management Ordinance. The proposed stormwater management basin located in the northwest corner of the property will provide stormwater runoff storage for the proposed Costco warehouse, fuel facility, parking area, and outlots under the proposed condition.

APPENDIX 1 – Exhibits

- Project Location Map
- Aerial Map
- USGS Topographic Atlas Map
- FEMA Flood Insurance Rate Map (FIRM)
- Flood Zones of Kendall County Map
- National Wetland Inventory (NWI) Map
- Soil Survey of Kendall County Map
- Illinois Hydrologic Unit (HUC) Map

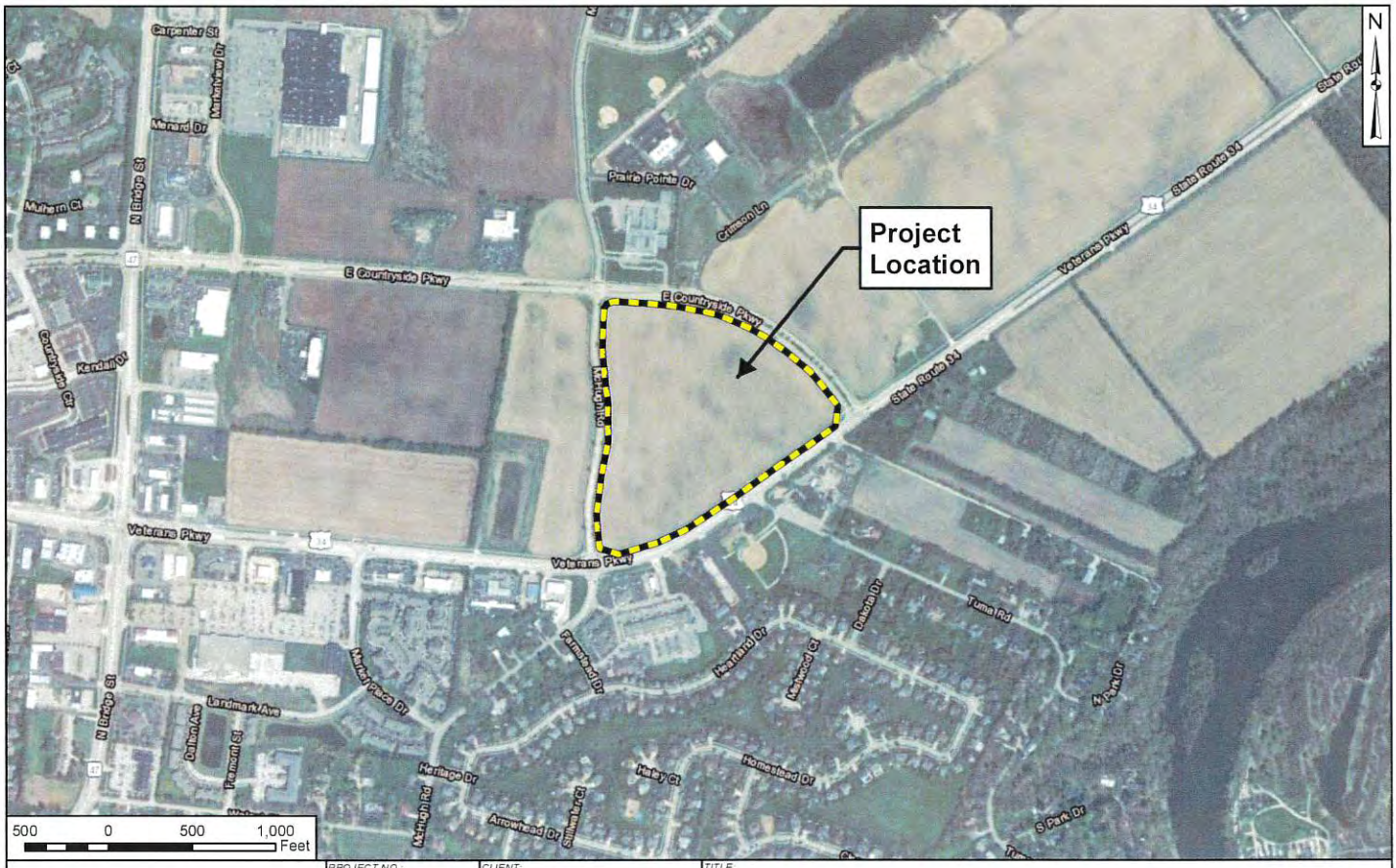


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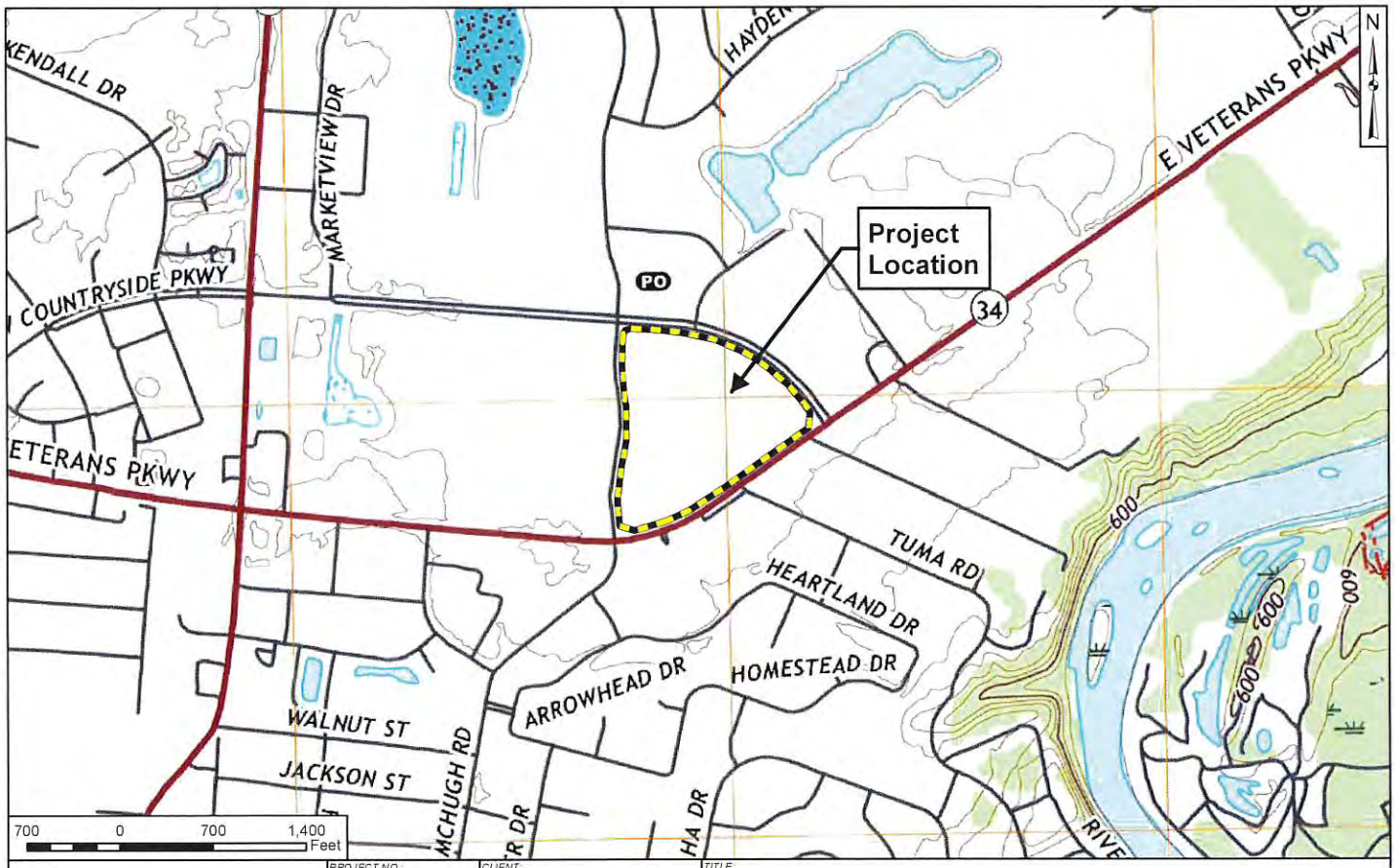
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CREATED BY: SWV			
DATE: 07/01/2024	BASE LAYER: ESRI World Street Map (2022)	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 1
SCALE: See Scale Bar			

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7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **AERIAL MAP**	
	CREATED BY: SWV			
	DATE: 07/01/2024	BASE LAYER: Kendall County Aerial Imagery (2022)	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 2
Visio, Vertere, Virtute... *"The Vision To Transform With Excellence"*	SCALE: See Scale Bar			

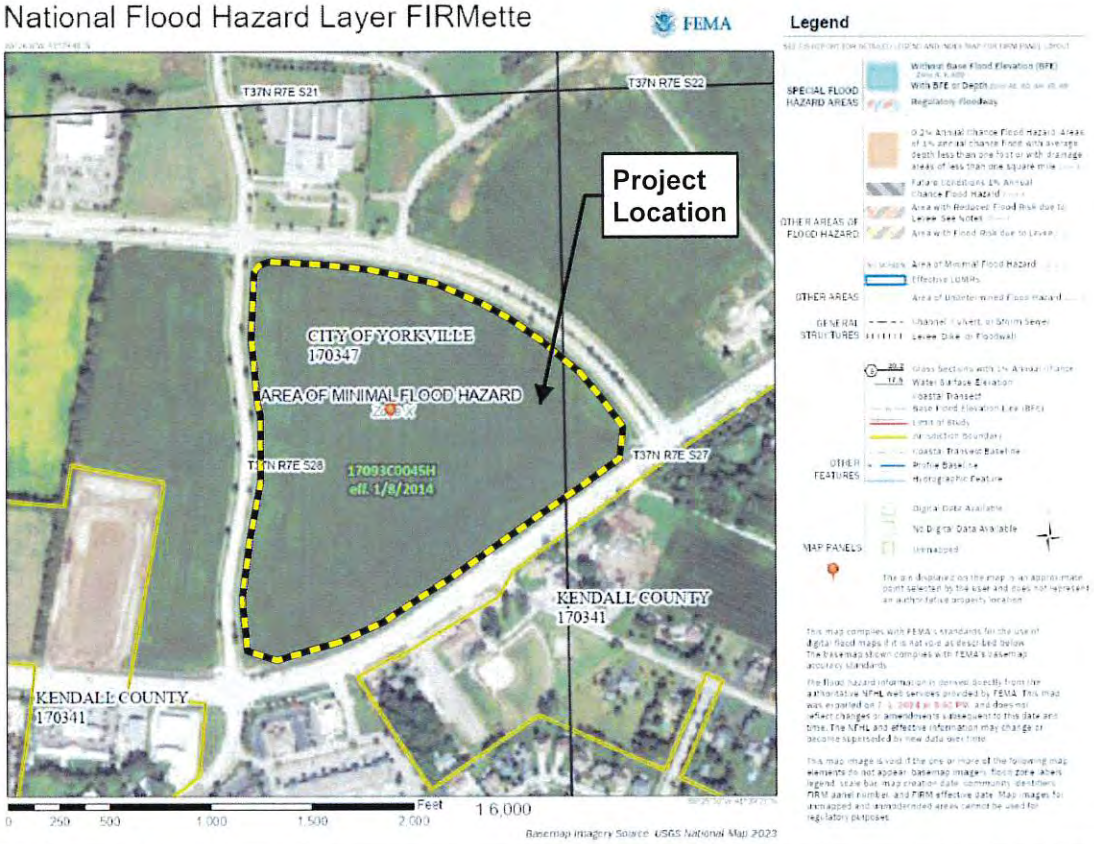
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7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757 CREATED BY: SWV	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **USGS TOPOGRAPHIC MAP**	
Visio, Vertere, Virtute... *"The Vision To Transform With Excellence"*	DATE: 07/01/2024 SCALE: See Scale Bar	BASE LAYER: USGS Topographic Map Yorkville Quadrangle (2021)	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 3

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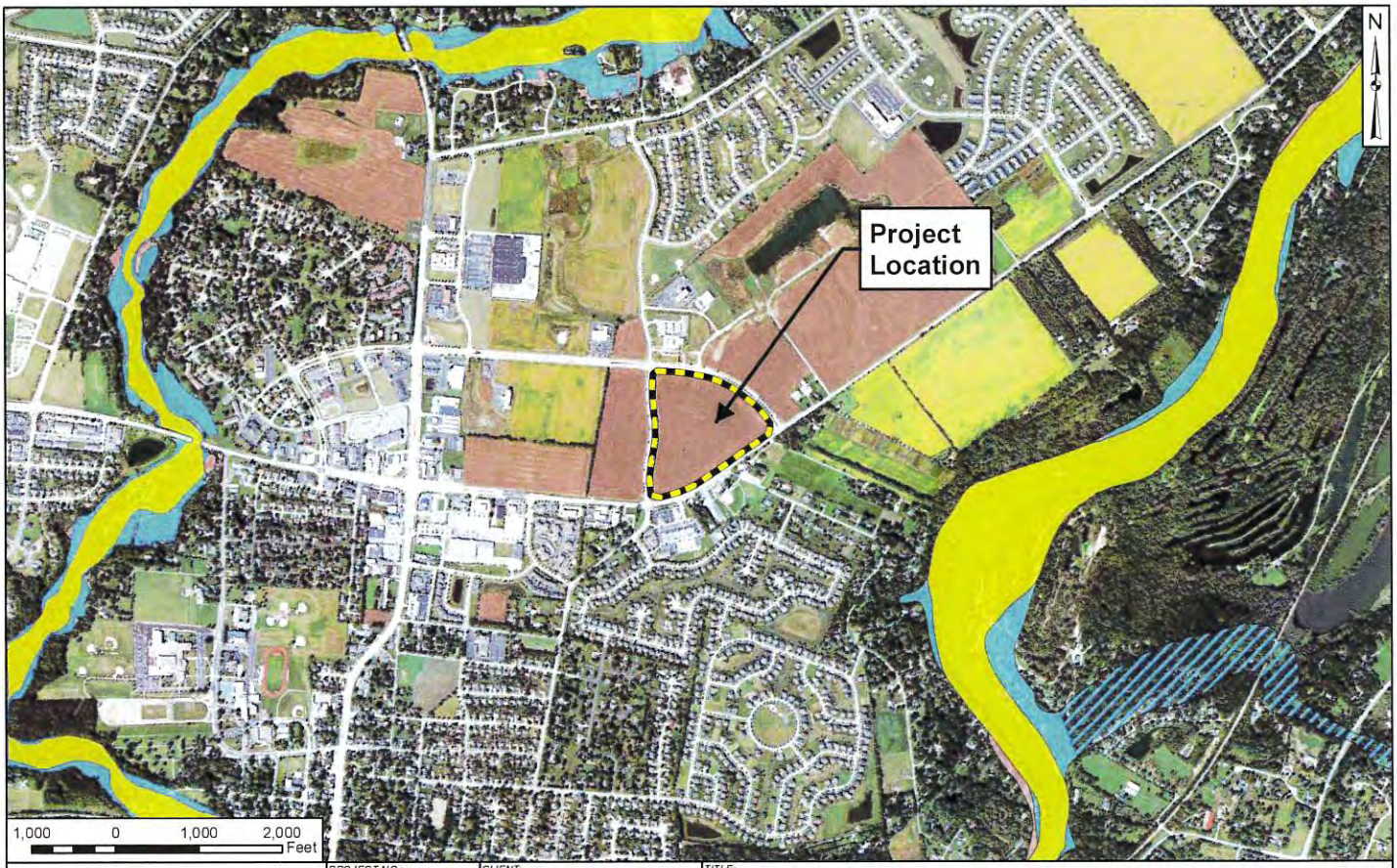
National Flood Hazard Layer FIRMette



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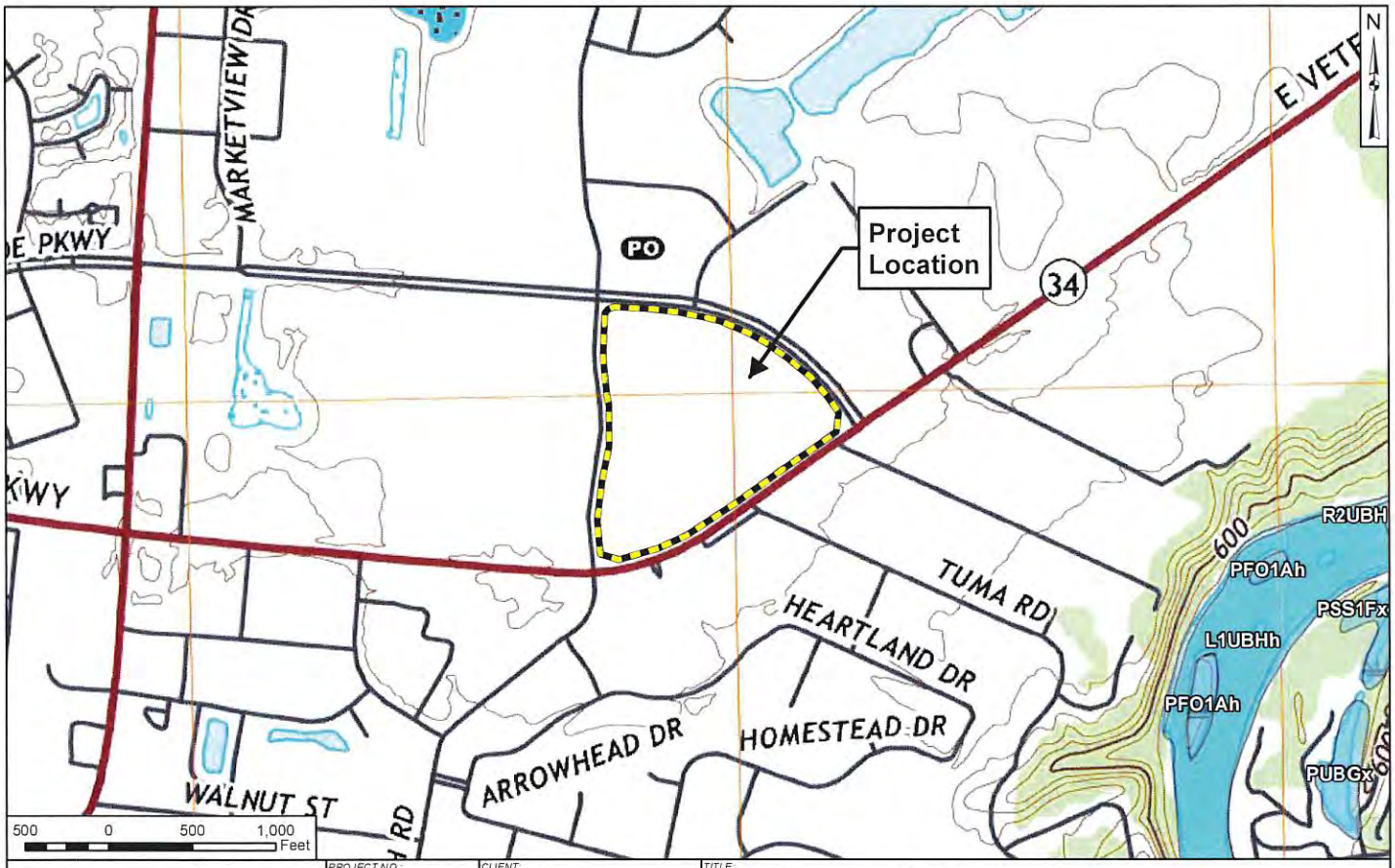
7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **FEMA FLOOD INSURANCE RATE MAP (FIRM)**	
	CREATED BY: SWV			
	DATE: 07/01/2024	BASE LAYER: FEMA Firm Panel 17093C0045H	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 4
Visio, Vertere, Virtute... *"The Vision To Transform With Excellence"*	SCALE: NTS			

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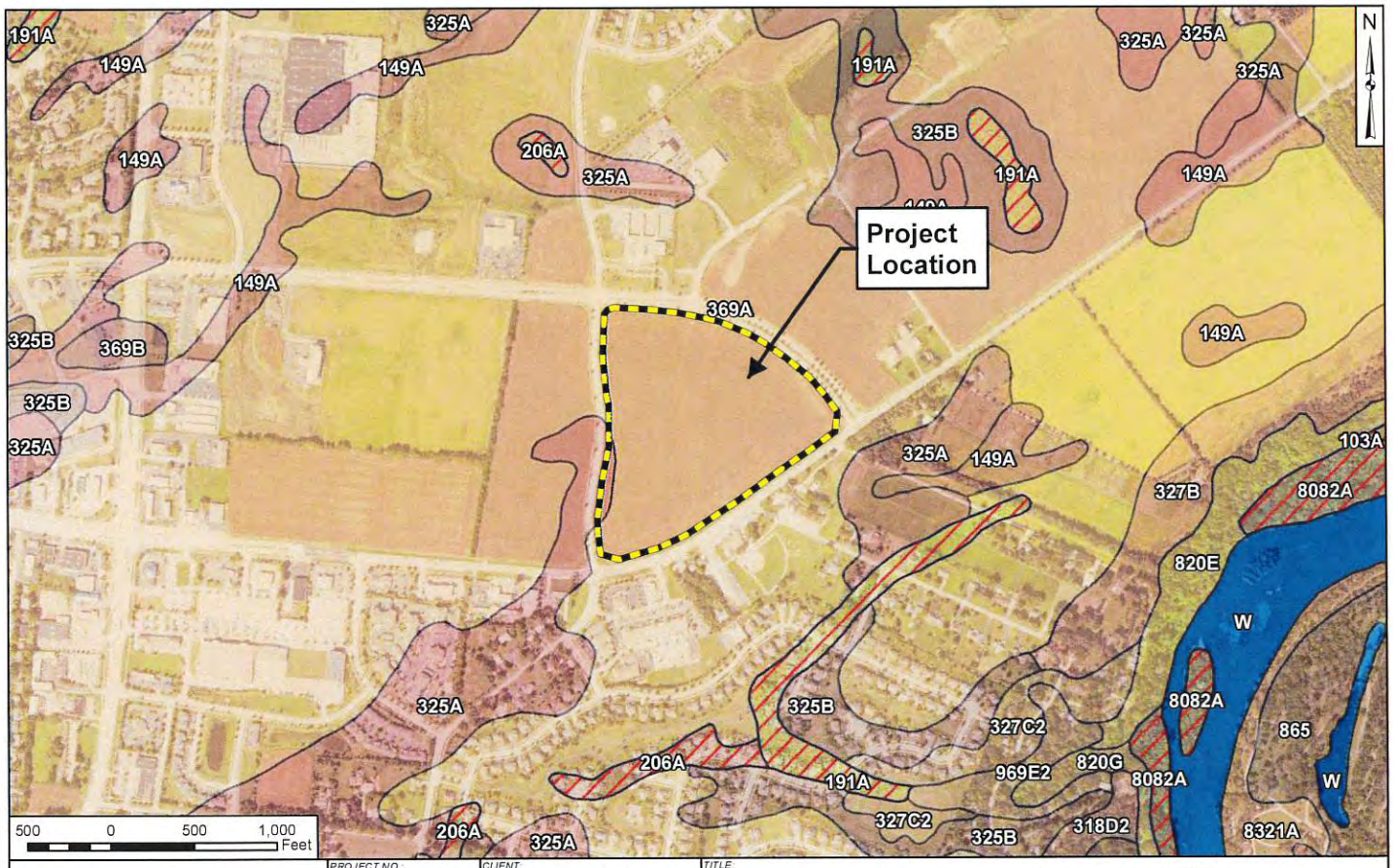
7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757 CREATED BY: SWV	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **FLOOD ZONES OF KENDALL COUNTY, ILLINOIS (2022) MAP**	
	DATE: 07/01/2024	BASE LAYER: Kendall County Aerial Imagery (2015)	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 5
Visio, Vertere, Virtute... *"The Vision To Transform With Excellence"*	SCALE: See Scale Bar			

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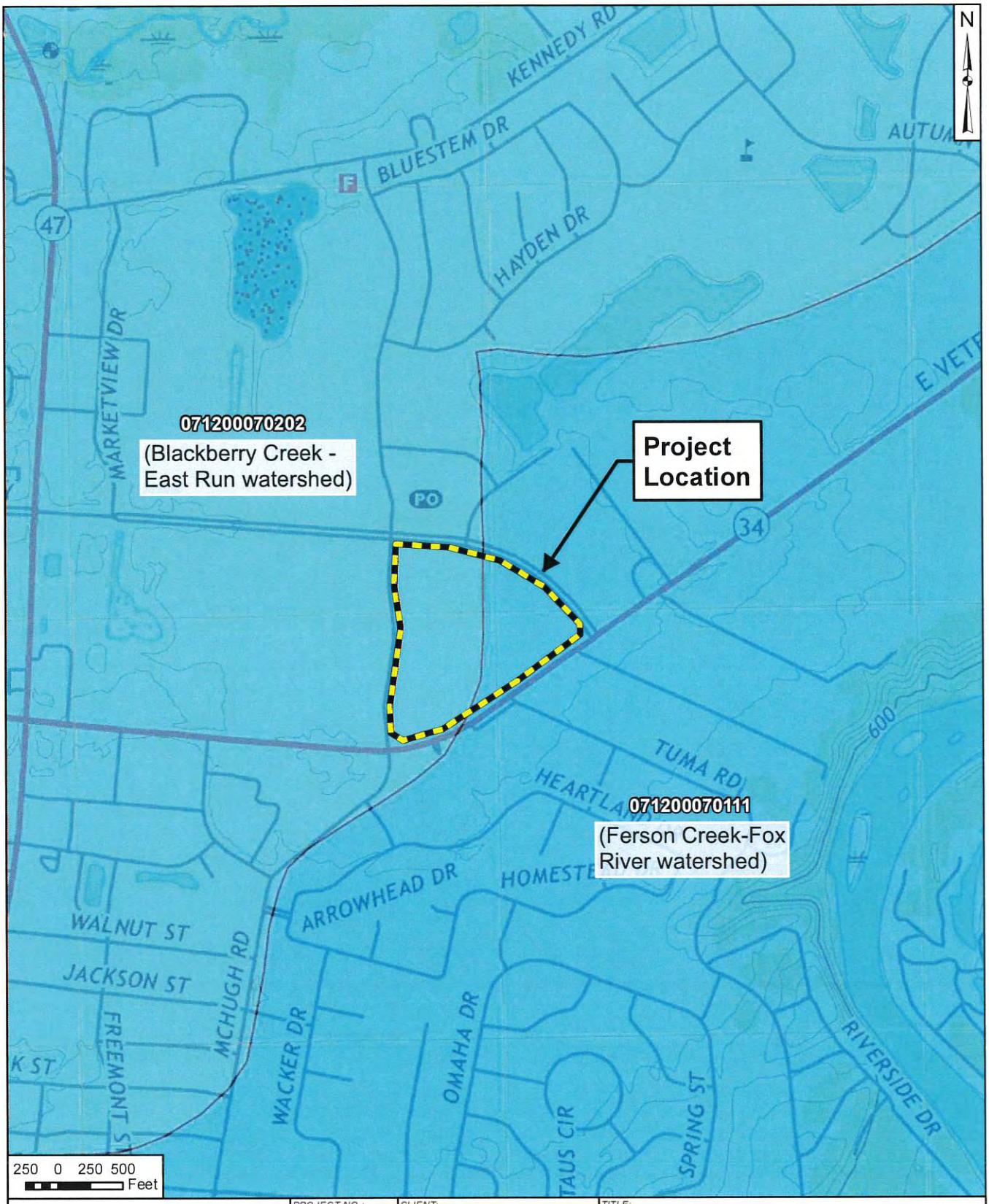
7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **NATIONAL WETLANDS INVENTORY (NWI) MAP**	
	CREATED BY: SWV			
	DATE: 07/01/2024	BASE LAYER: USGS Topographic Map Yorkville Quadrangle (2021)	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 6
Visio, Vertere, Virtute... *"The Vision To Transform With Excellence"*	SCALE: See Scale Bar			

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7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **SOIL SURVEY OF DUPAGE COUNTY, ILLINOIS MAP**	
	CREATED BY: SWV			
	DATE: 07/01/2024	BASE LAYER: Kendall County Aerial Imagery (2015)	SITE: Costco Wholesale Yorkville, IL	EXHIBIT: 7
Visio, Vertere, Virtute... *"The Vision To Transform With Excellence"*	SCALE: See Scale Bar			

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7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	PROJECT NO.: 240757 CREATED BY: JEM	CLIENT: Costco Wholesale 999 Lake Drive Issaquah, WA 98027	TITLE: **12-DIGIT HYDROLOGIC UNIT CODE (HUC) MAP**
Visio, Vertere, Virtute... *"The Vision To Transform with Excellence"*	DATE: 07/22/2024 SCALE: See Scale Bar	BASE LAYER: USGS Topographic Map Yorkville Quadrangle (2021)	SITE: Costco Wholesale Yorkville, Illinois FIGURE: 8

Memorandum

To: Plan Council
From: Krysti Barksdale-Noble, Community Development Director
Date: November 21, 2024
Subject: **PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plat)**
NW Corner of Veterans Parkway and E. Countryside Parkway
Proposed Wholesale Retail Warehouse and Fuel Station

I have reviewed the applications for Planned Unit Development (PUD) Agreement Amendment to Ord. 2008-21 for Yorkville Crossing, Special Use for a fuel station, and Final Plat received November 15, 2024 as submitted by Stephen Cross, an authorized representative of Costco, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner. The submittal also included the following plans and documents:

1) Costco Site Plan Narrative, dated November 15, 2024 and prepared by Costco Wholesale Corporation
2) Costco ALTA Survey, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
3) Costco Site Context Plan, dated November 15, 2024 and prepared by MG2
4) Costco Site Plan, dated November 15, 2024 and prepared by MG2
5) Final Plat of Subdivision of Costco Wholesale, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
6) Preliminary Civil/Engineering Plans for Costco Wholesale, dated 11-13-24 and prepared by MG2
7) Costco Landscape Plan, dated last revised 11-15-24 and prepared by Kimley Horn
8) Costco Warehouse Floor Plan, dated November 15, 2024 and prepared by MG2
9) Costco Architectural Elevations, dated November 15, 2024 and prepared by MG2
10) Costco Renderings, dated November 15, 2024 and prepared by MG2
11) Costco Fuel Facility Plan, dated November 15, 2024 and prepared by MG2
12) Costco Lighting Plan, dated July 2024 and prepared by T.E., Inc.
13) Costco Traffic Impact Study, dated November 13, 2024 and prepared by V3 Companies, Ltd.
14) Costco Preliminary Stormwater Management Report, dated November 13, 2024 and prepared by V3 Companies, Ltd

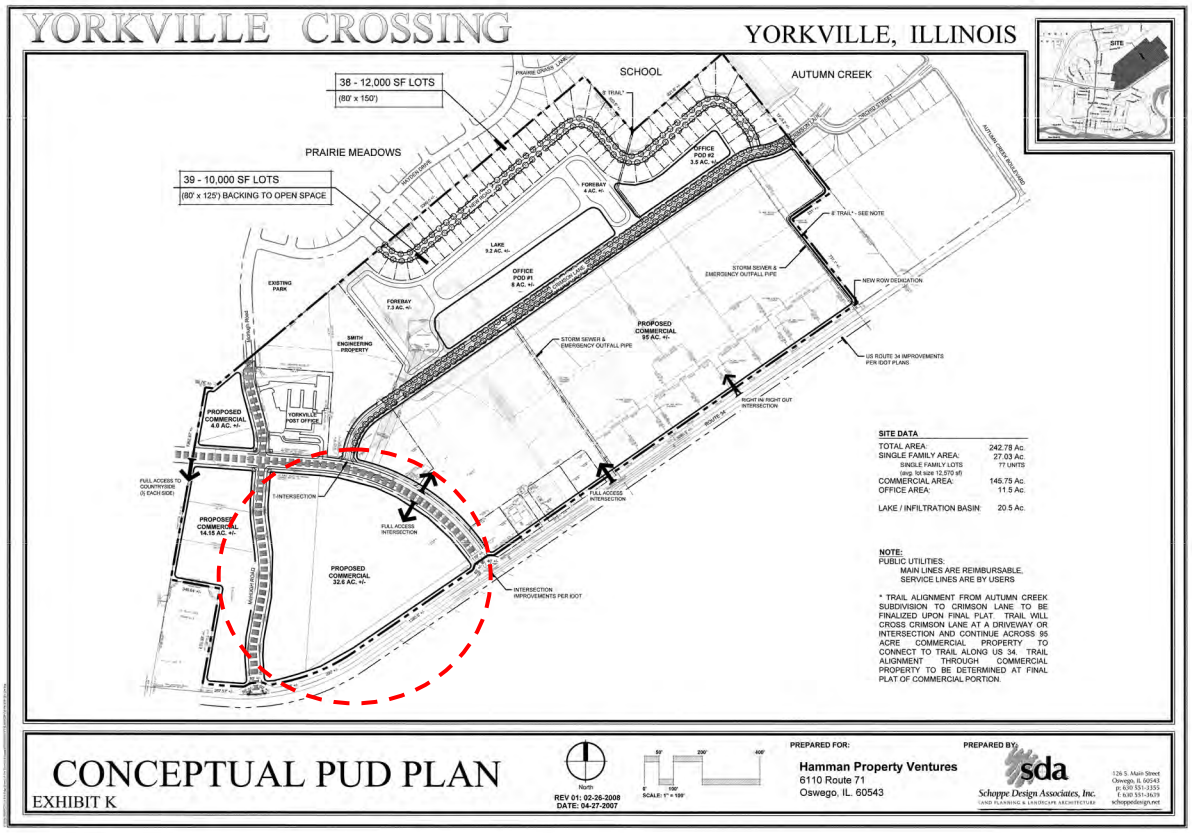
The petitioner is requesting approval to develop a members-only retail store spanning approximately 160,000 square feet, establish and operate a standalone fueling facility, and obtain final plat approval to subdivide the existing two parcels, totaling nearly 34 acres, into three new parcels. The Costco development, including the fueling facility, will occupy approximately 33.14 acres (Lot 1), with an additional 7 acres designated for two perimeter lots (Lot 2 and Lot 3) along Veteran's Parkway and about 3.4 acres reserved for stormwater management at the northwest corner of the property.

As part of the request to amend the existing "Yorkville Crossing" Planned Unit Development (PUD) agreement and Special Use authorization for the fueling station, Costco is seeking allowances for additional parking (980 stalls vs. a code-maximum of 387), exceptions to electric vehicle charging requirements, pole-mounted lighting height exceeding the 35-foot limit (proposed at 36'-6"), and a reduced masonry material percentage on building facades.

Based upon my review of the applications, documents and related plans, I have compiled the following comments:

PUD AMENDMENT/GENERAL ZONING COMMENTS:

1. **PLANNED UNIT DEVELOPMENT (PUD)** – The subject property, originally annexed into Yorkville via Ord. 2000-34, is part of the Yorkville Crossing development. The following Concept PUD Plan was included as an exhibit to Ord. 2008-21:



   a. The petitioner is requesting the existing Yorkville Crossing Planned Unit Development be amended, or modified, to include Costco's site development plans, requested Special Use permit and all deviations required to construct the proposed project, per plans submitted.

2. **PLANNED UNIT DEVELOPMENT AMENDMENT –** Section 10-8-8G of City's Unified Development Ordinance (UDO) establishes criteria for major and minor planned unit development amendments. It is the finding of the Zoning Administrator that the request is deemed a <u>major amendment</u> to the approved Yorkville Crossing PUD based upon the requested deviations from the Unified Development Ordinance.

   a. Section 10-8-8 of City's Unified Development Ordinance (UDO) also establishes standards for Planned Unit Development (PUDs). PUDs are allowed to modify standards of the base district as long as the requested modifications are specifically identified and demonstrates how each allowance is compatible with surrounding development, is necessary for proper development of the site, and is aligned with at least one (1) modification standard found in Section 10-8-8D of the UDO.

      i. The petitioner has listed **<u>four (4) proposed deviations</u>** from the base B-3 General Business District standards which will be <u>detailed separately in this review memo under subsequent headings</u>.

   b. While not required as part of the amendment process, PUDs should identify at least one (1) modification standard the proposed development will meet per Section 10-8-8D.

i. Staff believes modification standard #2 “Sustainable Design” applies, as the proposed development will be designed with consideration given to various methods of site design, architecture and building materials, and landscaping design capable of reducing energy consumption and improving onsite stormwater management.

ii. According to the petitioner, the sustainable design elements include, but are not limited to:

1. The building structure steel system and architectural metal panels are comprised of 80% recycled content with the associated batt insulation comprised of greater than 50% recycled content.
2. The roof maintains reflectance, emittance and SRI rates that lessen heat gain, and the premanufactured building system provides erection efficiency reducing impacts to the carbon footprint.
3. Landscaping has been designed to create a high impact with seasonal interest incorporating many native and drought tolerant species, which in turn minimizes irrigation and maintenance needs.
4. All site and building lighting systems utilize LED Technology.
5. Implementation of the water management system drives operational efficiency to lower wastewater and sewer use.
6. The use of carbon dioxide (CO2) in the refrigeration systems, as opposed to HFCs (Hydrofluorocarbons), is widely considered a more environmentally conscious refrigerant due to its extremely low Global Warming Potential (GWP), as well as being non-toxic and non-flammable. Unlike many other refrigerants, CO2 is considered a "natural" refrigerant, readily available as a byproduct of industrial processes, making it a sustainable option.

3. **ZONING** - The subject property consists of two (2) parcels (#02-28-227-002 and #0 02-27-101-003). Subsequently rezoned as a Planned Unit Development via Ord. 2008-21, the permitted underlying zoning for the subject property is **B-3 General Business District** (formerly “B-3 Service Business District”) and allowed all uses in the B-1, B-2, B-3, and O-Office zoning districts with some excluded uses as identified in the ordinance. The following are the current immediate surrounding zoning and land uses:

	Zoning	Land Use
North	E. Countryside Parkway B-3 PUD (Yorkville Crossing)	Transportation Land Use United States Post Office (USPS) & Vacant Land
South	US 34 (Veterans Parkway) B-3 General Business District B-3 (Kendall County)	Transportation Land Use Heartland Business Center American Legion & Various Business Land Uses
East	E. Countryside Center B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land
West	McHugh Road B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land

4. **PERMITTED USES** – Per Table 10-3-12 (B) of the Yorkville Unified Development Ordinance (UDO), a “general retail store, greater than one (1) acre” is a permitted land use and a “gasoline service station” is a special use in the B-3 General Business District.

a. **Ancillary Uses** - While the Unified Development Ordinance does not specifically identify a "tire center" use, where car lifts will be available for tire rotations and tire replacements, the Zoning Administrator can determine if the use is substantially similar to a use listed in the tables. If it is, the use shall be treated in the same manner as the substantially similar use. Staff identifies the use as similar to "automobile repair" or "automobile service" which are permitted uses in the B-3 General Business District.

b. **Standards for Special Use** – The petitioner has provided responses to the following standards for special use authorization, per Section 10-8-5 of the Yorkville Unified Development Ordinance, which will be entered into the record during the public hearing process:

   i. The establishment, maintenance or operation of the Special Use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

   ii. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within or near the neighborhood in which it is to be located.

   iii. The establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

   iv. Adequate utilities, access roads, drainage or other necessary facilities have been or shall be provided.

   v. Adequate measures shall be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets.

   vi. The proposed Special Use is not contrary to the objectives of the City's adopted Comprehensive Plan.

c. **Protest to Special Use** – Per Section 10-8-5-C of the Unified Development Ordinance, in the event of written protest against any proposed Special Use, signed and acknowledged by the owners of twenty (20) percent of the frontage adjacent thereto, or across an alley, or directly opposite therefrom, such Special Use shall not be granted except by the favorable vote of two-thirds (⅔) of all members of the City Council. In such cases of written protest, a copy of the written protest shall be served by the protestor(s) on the applicant for the proposed Special Use and a copy upon applicant's Attorney, if any, by certified mail at the address of such applicant and attorney shown in the application for the proposed Special Use.

SITE PLAN COMMENTS:

The Costco site plan places the warehouse at the center of the property, oriented toward Veteran's Parkway, with parking arranged along the southern and eastern sides to prioritize customer accessibility. Future employee parking lot expansion is also proposed to the west of the retail warehouse building. Substantial setbacks and landscaped buffer zones with a mix of trees and shrubs separate the site physically and visibly from nearby properties, while a stormwater management area on the northern edge offers both environmental functionality and aesthetic value. The internal building design includes a Tire Center, a conveniently located loading dock, and energy-efficient LED lighting for safe navigation across parking and pedestrian areas. Two (2) additional parcels along Veteran's Parkway are earmarked for future commercial development, aligning with the site's zoning requirements and ensuring harmony with Costco's operational goals. The following is a summary review of the various Site Plan components:

5. **BUILDING SETBACKS –** Per the Table 10-3-9(A) Bulk and Dimensional Standards, the following compares current B-3 General Business District standards with the proposed Planned Unit Development (PUD) requested modifications:

BUILDING SETBACKS	**REQUIRED MINIMUM SETBACKS** B-3 DISTRICT	**PROPOSED MINIMUM SETBACKS** COSTCO	**PROPOSED MINIMUM SETBACKS** FUEL FACILITY
FRONT YARD (Veterans Pkwy)	50 ft.	507 ft.	???
CORNER SIDE YARD (East/West)	30 ft.	??/64 ft.	???
REAR YARD (SEC Countryside Pkwy/McHugh)	20 ft.	64 ft.	???
PARKING SETBACK* (Veterans Pkwy)	20 ft.	275 ft.	???
PARKING SETBACK* (Countryside Pkwy/McHugh)	20 ft.	20 ft.	???

   a. **Above information provided from Site Data Table. Please provide a clearly dimensioned site plan clearly identifying the setbacks from the nearest building point to the adjacent property line.**

   b. Per Section 10-3-9 of the Unified Development Ordinance, parking lots in the B-3 district located adjacent to an arterial roadway, as defined in the city's comprehensive plan, must maintain a minimum setback of 20 feet from the property line and 10 feet from nonarterial roadways.

   c. "Parking Lots" are defined as "an open, hard-surfaced area, designed, arranged and made available for the ***storage*** of private passenger automobiles only of occupants of the building or buildings for which the parking area is developed and is accessory."

6. **MAXIMUM BUILDING HEIGHT** - The B-3 General Business District has an 80 ft. maximum building height per Table 10-3-9(A) in the Unified Development Ordinance. The petitioner has provided overall building height for the proposed Costco Warehouse building in a Project Data table and Elevation plans.

   a. Per the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), the stated maximum building height is 34 ft. However, the Elevations (Sheet DD13-05) illustrates the maximum height to the top of coping is 32 ft. **Please verify which is the proposed maximum building height**.

7. **MAXIMUM LOT COVERAGE** – Per Section 10-3-9(A) of the Unified Development Ordinance, the maximum lot coverage for the B-3 General Business District (inclusive of sidewalks, parking areas and all impervious surfaces) is 80% of the gross lot area. According to the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), lot coverage calculations are ***not*** provided.

   a. **Please provide calculations for the proposed total impervious coverage including building area, parking area, future parking area, and fuel station.**

b. **If area exceeds 80%, a requested deviation to the bulk regulations in Section 10-3-9. Bulk and Dimensional Standards of the Unified Development Ordinance.**

8. **PARKING/LOADING** - According to the Parking Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), there are 856 total parking spaces to be provided on the property to accommodate the proposed ~160,000 sq. ft. retail warehouse building and fueling facility uses. Future parking expansion area will include another 124 stalls for an overall total 980 parking spaces.

Table 10-5-1(E)(1) Standard Parking Stall and Aisle Dimensional Requirements						
Parking Angle (degrees)	Figure Reference					
	A	B	C	D	E	F
	Space Width	Space Depth	Aisle Width (2-Way)	Aisle Width (1-Way)	Depth of Interlocking Spaces	Overhang
0	9'	20'	24'	12'	n/a	n/a
45	9'	18'	24'	12'	28.25'	2'
60	9'	18'	24'	18'	32'	2'
90	9'	18'	24'	24'	36'	2'

c. Per Table 10-5-1(E)(1) Standard Parking Stall and Aisle Dimensional Requirements are as follows:

The petitioner is proposing 90-degree parking stalls with a 10' width and a minimum of 18.5' stall depth with a 2' overhang. Aisle widths for 2-way drives are 32' wide.

d. Per Table 10-5-1(H)(5) Minimum Parking Requirements of the Yorkville Unified Development Ordinance, the minimum parking requirement for a retail store more than 8,000 sq. ft. of the net building square feet is 2 spaces/1,000 sq. ft. Gasoline Service Stations require a minimum of 1 space/gas pump and 1space/300 sq. ft. for any accessory retail space.

i. To minimize excessive areas of pavement, no off-street parking area for nonresidential or multi-family uses shall exceed the required minimum number of parking spaces by more than twenty (20) percent, except as approved by the Zoning Administrator. In approving additional spaces, the Zoning Administrator shall determine that the parking is needed based on documented evidence of actual use and demand provided by the applicant.

1. Per Section 10-5-1-H.4.b of the UDO, calculations for all area-based (square footage) parking standards must be computed on the basis of net floor area.

ii. **Total required maximum parking for the subject property is 386 spaces, including a minimum of 8 ADA accessible spaces, as calculated below:**

1. *153,820 net sq. ft./1,000 = 153.82 x 2 = 307.64 + 61.53 (20% of total) = 369.17 + 16 (gas dispensers) = 385.17 rounded to 386, per Section 10-5-1-H.4.a of the Unified Development Ordinance.*

iii. The petitioner is requesting a variance from the UDO's required maximum parking due to parking being "*critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property.*" (**Deviation #1**).

Staff is supportive of the deviation from a maximum of 2 parking spaces per 1,000 net sq. ft. of building area to approximately 5.04 parking

spaces per 1,000 of building area as noted on Sheet C2.0 Layout Plan in Preliminary Engineering Plan Set (*note page 6 of the Project Narrative under 5.0 Development Plan Proposal Final Plat, Sheet DD11-05 Site Plan, and Sheet DD12-05 Aerial Site Plan lists the parking count ratio as 5.29 stalls per 1,000 square feet of building area – possibly based on gross square footage?*)**.**

iv. Additionally, per Section 10-5-1K-1 of the Unified Development Ordinance, infrastructure for a **minimum of 8 electric vehicle charging station is required to be installed (1 EV charging station per 50 required parking spaces)**.

v. The petitioner is also requesting full relief from the UDO's minimum required EV charging station requirement due to "*current Costco data reveals that an exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future*." **(Deviation #2).**

Staff is supportive of the deviation of the full relief for the installation of infrastructure to accommodate the required minimum 8 electric vehicle charging stations since the petitioner will reevaluate the need for EV charging in the near future.

e. **Off-Street Loading** – Per Section 10-5-1-Q of the Unified Development Ordinance, the number of off-street shall be determined on a case-by-case basis, and in the instance of special uses, loading berths adequate number and size to serve such use, as determined by the Zoning Administrators, shall be provided. The petitioner proposes to have four (4) recessed off-street loading spaces for the retail warehouse located at the southwest corner of the building.

9. **FUEL FACILITY** – Fuel facility proposes 16 gas dispensers, accommodating 2 cars per dispenser. A total of eight (8) lanes are proposed for car queuing allowing five (5) cars per lane stacking. This results in a total of 72 cars maximum in this area of the site. No accessory retail convenience store is proposed for the fuel facility area.

a. **Staff has some concerns regarding the southernmost full access off of McHugh Road leading to the fueling facility which may cause a backup onto the public roadway should there be more than the five (5) vehicles stacking per fuel lane or 40 vehicle max stacking for all pumps.**

10. **TRAFFIC/ROADWAYS**

a. **Direct Access** – It is noted that the site has six (6) points of access. Three (3) off of E. Countryside Parkway – two (2) full access and one (1) right-in/right-out; one (1) full off of E. Veterans Parkway, which will be coordinated with IDOT; and two (2) full access points off of McHugh Road. These access points lead to internal private roadways which loop around the retail warehouse building, provides direct access to the fueling facility, and will connect to the future outlot uses.

i. It is noted on Sheet DD12-05 Aerial Site Plan, there are two (2) right in/right out access points on E. Countryside Road. **Please revise discrepancy**.

ii. It is also noted that off-site road enhancements will involve adjusting the existing center medians along Countryside Parkway and adding lane striping to create left-turn lanes at the intersections of Countryside Parkway

and McHugh Road. Additionally, new right-turn lanes will be installed at the gas station entrance on McHugh Road and at Veteran's Parkway.

iii. **Staff defers to City Engineer regarding site access and Traffic Impact Study.**

b. **Cross Access** – Per Section 10-5-1-F of the Unified Development Ordinance, cross access between adjoining developments is required to minimize access points along streets, encourages shared parking, and allows for vehicular access between land uses. **Will a cross access easement agreement be executed between the outlot developers and Costco**?

i. Note, according to Section 10-5-1-F-2-c, the Zoning Administrator may waive or modify the requirement for vehicular cross access on determining that such cross access is impractical or undesirable because it would require crossing a significant physical barrier or environmentally sensitive area, would create unsafe conditions, or there exists an inability to connect to adjacent property. City Council shall have the authority to waive or modify vehicular cross access requirements for all public review processes involving review by City Council.

c. Pedestrian Circulation – Per Section 10-5-1-N Pedestrian Circulation Standards of the Unified Development Ordinance required off-street parking areas to provide on-site pedestrian circulation systems and connection to existing and future planned trails. The petitioner has provided a single pedestrian connection to the public way off of E. Veterans Parkway at the intersection with Tuma Road.

i. **Would the petitioner consider an additional pedestrian connection to the public way at the northernmost full access drive on Countryside Parkway at the intersection with Crimson Lane?**

11. **LANDSCAPING** – Section 10-5-3 establishes landscape standards for new developments. The petitioner has submitted a Landscape Plan and per staff's review, the following sections of the Landscape Plan shall apply:

i. Section 10-5-3-C. Building Foundation Landscape Zone - All nonresidential, mixed-use, and multi-family development where a front yard setback is required, with the exception of food processing facilities regulated by the FDA, shall include landscape located at the building foundation as required by this section. Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide a softening effect at the base of buildings.

ii. Section 10-5-3-D. Parking Area Perimeter Landscape Zone - Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide screening between off-street parking areas and rights-of-way, and to provide for the integration of stormwater management with required landscaping

iii. Section 10-5-3-E. Parking Area Interior Landscape Zone - All off-street parking areas shall include landscape and trees located within the off-street parking area as required by this section. Trees and landscape required by this section shall be in addition to trees and landscape required under other sections of this title. It is the objective of this section to provide shade within parking areas, break up large expanses of parking area pavement, support stormwater management where appropriate, improve the appearance of

parking lots as viewed from rights-of-way, and provide a safe pedestrian environment.

iv. Section 10-5-3-F. Transition Zone Landscape Requirements - Transition zone landscape shall be required along interior side and rear property lines of all nonresidential, mixed use, and multi-family development. It is not expected that the transition area will totally screen such uses but rather will minimize land use conflicts and enhance aesthetics.

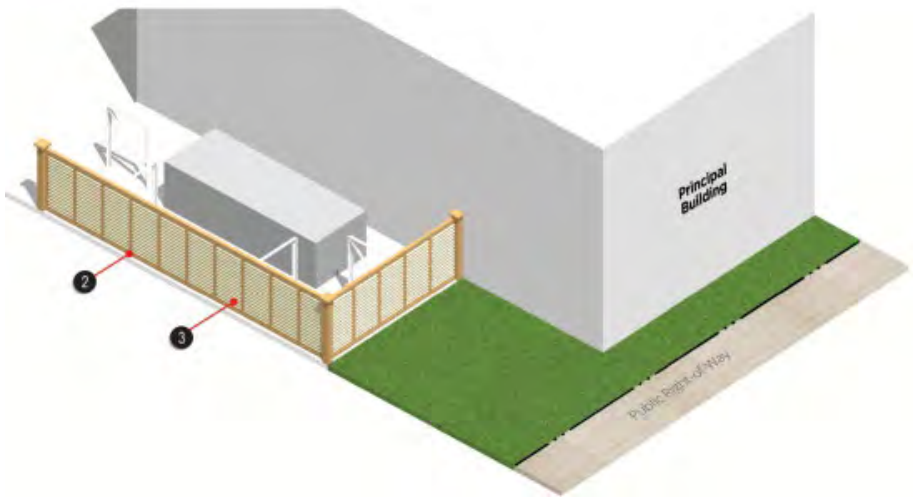
Staff defers all landscape review comments to the City Engineer's subconsultant. However, we want to highlight that, due to the site's unique location, being entirely surrounded by public roadways, special attention will be required during installation to ensure clear visibility at driveway and right-of-way intersections. In accordance with Section 10-5-6 of the Unified Development Ordinance, this may necessitate minor adjustments to the approved plan, such as relocating or removing certain plant materials.

12. **LIGHTING** – A photometric plan has been provided along with pole details of the proposed light standards to be installed within the parking lot area. Maximum illumination at the property line shall not exceed zero (0) foot-candle and no glare shall spill onto adjacent properties or rights of way.

    a. Per Table 10-5-7(E) of the Unified Development Ordinance, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. **The petitioner seeks a deviation to this regulation to install a light fixture with a maximum height of 36'-6" to provide ample uniform light coverage of the parking lot area (Deviation #3)**. **Staff supports this deviation.**

    b. **Staff defers to City Engineer regarding all other photometric plan review comments.**

13. **MECHANICAL SCREENING –** Per Section 10-5-4 Screening of the Unified Development Ordinance, ground/wall-mounted and roof mounted mechanical units that are visible from any public right-of-way or adjacent residential property shall be screened from public view. Materials used for screening shall be designed and established so that the area or element being screened is no more than twenty (20) percent visible through the screen. Evergreen hedges or non-transparent walls such as stone masonry shall be allowed, as depicted below:



a. It is noted that there are two (2) proposed ground-mounted compactors located on the west elevation adjacent to McHugh Road. It appears the petitioner has proposed to screen ground mounted mechanical equipment with landscaping material such as evergreen trees, ornamental trees and shrubbery located to the west in landscape bed edge.

   i. **Since the units may not be visible from the public way due to the location, setback and landscaping provided on the site, staff is supportive of the screening.**

14. **APPEARANCE STANDARDS** – Per Section 10-5-8-C-3.b Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty (50) percent of the total building, as broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty (50) percent of the facade. Any other facade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades. Additional standards include:

   a. Loading bays for commercial and office uses shall not be located in the front of a building or in the area abutting a public right-of-way, and all commercial, office.

   b. Institutional buildings shall consist of solid and durable facade materials and be compatible with the character and scale of the surrounding area.

The petitioner has submitted exterior building elevations depicting the retail warehouse with materials such materials as insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. **However, the petitioner is seeking relief from the minimum masonry requirements and location of loading bays in the front of the building and in an area abutting a public right-of-way** (**Deviation #4**). Below is the proposed building material breakdown:

MATERIAL PERCENTAGES

MATERIAL	ELEVATION SOUTH	EAST	NORTH	WEST	ENTRY	TOTAL
SMOOTH FACE CMU "BUFF"	1403 SF 11%	1,015 SF 14%	2,332 SF 18%	1,088 SF 12%	905 SF 21%	14.61%
GLAZING		340 SF 5%			995 SF 23%	2.89%
TEXTURED ARCHITECTURAL METAL PANEL "SANDSTONE"	2,548 SF 21%	2,462 SF 34%	5,850 SF 44%	1,911 SF 30%	1,470 SF 34%	30.60%
VERTICAL RIBBED ARCHITECTURAL METAL PANEL "TAUPE"	7,788 SF 65%	3,925 SF 47%	5,105 SF 38%	4,567 SF 68%	933 SF 22%	50.76%
CONCRETE "NATURAL"	346 SF 4%					1.14%

* CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

   c. Staff has calculated that the masonry/cementitious materials make up approximately 15-16% of the total building and 30-35% of the front elevation (South and Entry). We understand that Costco must maintain its corporate brand and image, and staff is fully supportive of this deviation from the 50% appearance code standard. The proposed textured and ribbed architectural paneling provides a solid and durable façade, which meets the intent of the UDO's requirements.

   d. In Section 10-5-8C.1 of the UDO it states "Creativity and ingenuity in applying the standards and guidelines listed in this Code are encouraged. Likewise, ingenuity and creativity, while considering deviations to the standards and guidelines of this Code, are encouraged." Following this guidance, staff has previously used the credit for "major architectural features" outlined in Section 10-5-8C-2.7 (intended for

residential uses) as a reference when approving deviations for unbuilt nonresidential sites that have or are seeking PUDs.

e. **Therefore, as vertical articulation is accomplished through the use of color, texture, and the strategic distribution of sustainable materials along the facades in proportion to the building's scale, along with the incorporation of a free-standing steel trellis on the south elevation to soften and define the building mass visible from the south, staff is supportive of the deviation**.

i. Note, while staff supports this request for relief—similar to the relief granted to the recently approved Cyrus One data center project—there is no guarantee the City Council will approve a deviation from the City's appearance standards.

15. **SIGNAGE** – The petitioner is proposing **six (6) wall mounted signs** as illustrated on the exterior elevations, as illustrated below:

SIGN TABLE

IDENTITY	QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF
S1	1	COSTCO WHOLESALE	5'-0" C	175 SF	***175 SF***
S2	4	COSTCO WHOLESALE	6'-0" C	280 SF	***1120 SF***
S3	1	TIRE CENTER	17'-4" x 1'-9"	31 SF	***31 SF***
			TOTAL SIGN AREA:		**1326 SF**



a. Per Section 10-6-6 of the Unified Development Ordinance, single tenant buildings shall be permitted a total of two (2) primary wall signs or one (1) primary wall sign per one hundred (100) linear feet of building frontage. One (1) additional wall sign shall be allowed per additional hundred (100) feet of building frontage. Only one (1) primary wall sign shall be displayed on any single building façade.

i. Additionally, a maximum of two (2) secondary wall signs may be authorized for buildings with lineal frontage in excess of seventy-five (75) feet by the Zoning Administrator provided such additional signage is:

(1) In keeping with the overall design and architecture of the building,

(2) A minimum of ten (10) feet from the primary wall sign and other secondary wall signs,

(3) A maximum of fifty (50) percent of the size of the primary wall sign,

(4) Accessory to the building's primary wall sign(s), and

(5) The total area of all primary and secondary wall signs does not exceed the maximum wall sign area as established in Section 10-6-6(A)(1).

ii. Signs Attached to a Wall With a Public Entrance or Facing a Public Right-of-Way. The maximum sign area shall be two (2) square feet for every one (1) linear foot of the exterior wall to which it is affixed. The sign shall not to exceed seventy-five (75) percent of the width of the exterior wall to which it is attached.

b. Since all building elevations (south, east, north, and west) have frontage along a public right-of-way, each façade is permitted one (1) primary wall sign.

c. Additionally, each building façade (except the entry area) exceeds 100 liner feet, so an additional two (2) secondary wall signs are permitted per facade.

d. **Therefore, per staff's calculations, the petitioner is permitted a maximum of five (5) primary signs and eight (8) secondary signs totaling 13 wall signs, as depicted in the table below:**

Elevation	Façade Length	Permitted # of Signs	Proposed # of Signs	Permitted Max. Sign Area	Proposed Sign Area
South	~358'-7"	3	1	~717.4 sq. ft.	280 sq. ft.
East	~326'-4"	3	2	~652.8 sq. ft.	311 sq. ft.
Entry	70'-3 ¾"	1	1	~140.7 sq. ft.	175 sq. ft.
North	~493'-6"	3	1	~987.2 sq. ft.	280 sq. ft.
West	~220'-0"	3	1	~440 sq. ft.	280 sq. ft.
TOTAL		**13**	**6**	**~2938.1 sq. ft.**	**1326 sq. ft.**

e. **All proposed wall signs conform to UDO regulations.**

f. **It is noted a monument sign is not proposed for the development. However, the existing pylon ground-mounted "Menards/Yorkville Crossing" sign located at the southeast corner of the property will be relocated, east of Countryside Parkway on parcel #02-27-101-004 owned by Yorkville Crossings, LLC.**

16. **COMPREHENSIVE PLAN** – The 2016 Comprehensive Plan Update designates this property as "Mid Density Residential (MDR)" which is defined typically for higher density residential developments near commercial areas and transportation corridors including townhomes and multi-family development.

a. Although the proposed commercial land use does not align with the comprehensive plan's current future land use designation, **staff supports** the use because it is consistent with the "Destination Commercial (DC)" designation assigned to nearby properties to the west. Additionally, the property's existing B-3 zoning classification aligns with both the Destination Commercial land use and the original PUD. If the proposed development is approved, an amendment to the Comprehensive Plan will be required.





Figure 4.1 - Future Land Uses North of the Fox River

17. **FINAL PLAT –** The title block on Sheet 2 of the Final Plat of Subdivision for "City Plan Commission Certificate" shall be revised to read "City Planning and Zoning Commission Certificate".

Yorkville Police Department Memorandum
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4340
Fax: 630-553-1141

Date: December 2, 2024
To: Krysti Barksdale-Noble (Community Development Director)
From: James Jensen (Chief of Police)
Reference: Plan Review PZC 2024-33 Costco
Project Name: Costco Wholesale Corporation
Applicant Name: Costco Wholesale Corporation
Project Manager:
Project Number: PZC 2024-33 Costco

The comments listed below are referenced to the above project:

Signage

Handicapped Signage Required: __X__ Yes ____ No

Comments: **Handicapped parking has been identified on the plan. Proper signage must meet MUTCD Standards for enforcement.**

***Signage must meet MUTCD Standards*
***Fine amount must be listed on sign*

Speed Limit Signage Required/Recommended ____ Yes __X__ No
School Zone Special Signage ____ Yes __X__ No
Special Speed Zone Signage Requested ____ Yes __X__ No

No Parking Signage Recommended? __X__ Yes ____ No

Comments: **Areas that will be posted "No Parking" must be posted via proper signage meeting MUTCD Standards for enforcement (i.e. No Parking Fire Lane)**

No Parking Locations:

- **No Parking on Countryside Parkway**
- **No Parking on McHugh Road**

Dedicated Parking signage needed? ____ Yes __X__ No

____ Located by Park
____ School

Yorkville Police Department Memorandum
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4340
Fax: 630-553-1141

____ Common Parking Area

Are there Street Name Conflicts? ____ Yes __X__ No
Comments:

Pedestrian/Bike Path Crossing Signage? __X__ Yes ____ No
Comments: **The pedestrian walking/bike path runs along Rt. 34. This walking/bike path is extremely busy. While not required, we would recommend Bike Path or Pedestrian Crossing signs be posted.**

NO Construction Traffic Signage being requested? ____ Yes __X__ No
Location: _____

****We request that all signage is posted prior to the first occupancy permit being issued for each POD or phase.****
****All traffic control signage must conform to MUTCD Standards specific to location, size, color, and height levels****

Roadway

Street Width: **N/A**

Should parking be allowed on BOTH sides of road? ____ Yes ____ No
Should parking be restricted to fire hydrant side? ____ Yes ____ No

Comments: **No Parking should be allowed on Countryside Parkway or McHugh Road.**

Center Roadway Medians: ____ Yes __X__ No
Limit Parking on Median? ____ Yes ____ No
Signage Needed? ____ Yes ____ No
Room for Emergency Veh. w/ one lane Obstructed? ____ Yes ____ No

Do you have intersection Concerns? __X__ Yes ____ No
Comments: **No concerns at the intersections of Rt. 34 & Countryside Parkway or Rt. 34 & McHugh Road. Both of these intersections are controlled with traffic lights. I do have a concern with the intersection of Rt. 34 & Tuma Road. There does not appear to be any traffic control devices at this intersection other than a**

Yorkville Police Department Memorandum
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4340
Fax: 630-553-1141

"Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be very problematic and dangerous. If this entrance/exit will remain, I recommend this being a "right in" and "right out" only.

Landscape

Low Growth or Ground Cover Landscaping? ____ Yes ____ No
Low Growth or Ground Cover Landscaping by windows? ____ Yes ____ No
Low Growth or Ground Cover Landscaping by Entrances ____ Yes ____ No

I have not seen a landscaping plan for this project. If landscaping is going to be put in, they should use low growth or ground cover landscaping by the entrance/exit to limit site line issues.

Ingress / Egress

Entrance/Exits match up with adjacent driveways? __X__ Yes ____ No

Total Entrance/Exits for development? __5__

Comments: **No concerns at the intersections of Rt. 34 & Countryside Parkway or Rt. 34 & McHugh Road. Both of these intersections are controlled with traffic lights. I do have a concern with the intersection of Rt. 34 & Tuma Road. There does not appear to be any traffic control devices at this intersection other than a "Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be very problematic and dangerous. If this entrance/exit will remain, I recommend this being a "right in" and "right out" only.**

Are vehicle entrance/exits safe? ____ Yes __X__ No

Comments: **See comments above. Only 1 entrance/exit would be classified as unsafe.**

Are warning signs for cross traffic requested? __X__ Yes ____ No

Comments: **Signage for pedestrian walking/biking path should be added.**

Raised Median & Signage for Right in & Right Out? ____ Yes __X__ No

Comments:

Yorkville Police Department Memorandum
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4340
Fax: 630-553-1141

Emergency Contact for after hours during construction

Comments: **Please provide emergency contact information for after hours during construction. This will only be used if there is a law enforcement need.**

Is this a gated or controlled access development? ____ Yes __X__ No
If yes, will police & Fire and Access? ____ Yes ____ No

Miscellaneous

Individual Mailboxes? ____ Yes __X__ No
Cluster Mailbox Kiosks? ____ Yes __X__ No
Will this cause traffic choke points? ____ Yes __X__ No

Are sidewalks being planned for the development? __X__ Yes ____ No

Existing sidewalks already in place along Countryside Parkway, McHugh and Rt. 34.

Are sidewalk crosswalks needed? ____ Yes __X__ No
Are there bike paths planned for this project? ____ Yes __X__ No
Comments: **Bike path is already existing.**
Proper Signage needed for bike paths __X__ Yes ____ No
__X__ Stop Signs ____ Yield Signs ____ NO Motorized Vehicles
____ Trespassing ____ Other _____

Are there HOA Controlled Roadway OR Parking Areas? ____ Yes __X__ No

Ample Parking on Site? __X__ Yes ____ No

Are there other City Ordinance Concerns? ____ Yes __X__ No

____ Noise Ordinance ____ Parking Ordinances ____ Alarm Ordinance

Security

Will security cameras be in use during construction? ____ Yes ____ No

Yorkville Police Department Memorandum
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4340
Fax: 630-553-1141

Will security cameras be in use during normal business hours? ____ Yes ____ No

Access to the building will be membership only controlled. Will the police department have access to the building for emergencies? ____ Yes ____ No

Comments: **Police access during emergencies would be required.**

What are the business Hours of Operation?		
	Monday – Friday	10:00a.m – 8:30p.m
	Saturday	9:30a.m – 7:00p.m
	Sunday	9:30a.m – 7:00p.m
	Fuel Station	6:00a.m – 9:30p.m

Will the building be alarmed? ____ Yes ____ No

Will you provide Floor Plans/Maps to the police department to be used for emergency purposes only? ____ Yes ____ No

Comments: **We would request a copy of the floor plans to be used for emergency purposes only.**

I hope you find this information helpful, and we look forward to reviewing the revisions. If you should have any questions, comments, or concerns please do not hesitate to contact me.

December 5, 2024

Ms. Krysti Barksdale-Noble
Community Development Director
United City of Yorkville
651 Prairie Pointe
Yorkville, IL 60560

Re: Costco
Preliminary Engineering – 1st Submittal
United City of Yorkville

Dear Krysti:

We have reviewed the following items for the above-referenced project:

- Preliminary Engineering Plans (5 sheets) dated November 13, 2024, and prepared by V3 Companies
- Final Plat of Subdivision (2 sheets) dated October 29, 2024, and prepared by V3 Companies.
- Photometric Plan dated July 22, 2024, and prepared by T.E. Inc.
- Preliminary Stormwater Management Report dated November 13, 2024, and prepared by V3 Companies
- Traffic Impact Study dated November 13, 2024, and prepared by V3 Companies
- Preliminary Landscape Plan dated November 15, 2024, and prepared by Kimley-Horn
- Other Supporting Documentation

Our review of these plans and reports are to generally determine their compliance with local ordinances and whether the improvements will conform to existing local systems and equipment. This review and our comments do not relieve the designer from his duties to conform to all required codes, regulations, and acceptable standards of engineering practice. Engineering Enterprises, Inc.'s review is not intended as an in-depth quality assurance review, we cannot and do not assume responsibility for design errors or omissions in the plans. As such, we offer the following comments:

General

1. The following permits may be required during final engineering and should be provided to the City when obtained. The City and EEI should be copied on all correspondence with the agencies.
    - IEPA NPDES General Construction Permit is required. The Notice of Intent must be filed with IEPA 30 days prior to start of construction.
    - IEPA Water and Sanitary Sewer Permits
    - Yorkville Bristol Sanitary District (YBSD) approval is needed for the connection of the proposed sanitary lines to the existing sanitary sewer.
    - IDOT for the connection to U.S. Route 34
    - United City of Yorkville Stormwater Management Permit

2. The following will need to be submitted with final engineering:
    a. An engineer's estimate needs to be provided and must include all public improvements within the ROW including all public utilities and connections, all soil erosion and sediment control items, and all permitted stormwater items. This cost estimate will be used to determine the construction guarantee amount. In addition, a cost estimate needs to be provided for all site improvements which will be used to calculate the building permit fees.
    b. Truck turning exhibits for delivery and emergency vehicles

3. Additional forms and information can be found at https://www.yorkville.il.us/333/Engineering-Department.

4. The comments in the attached review letter from the City's landscaping consultant must be addressed and a revised landscaping plan submitted with final engineering.

Preliminary Engineering Plans

We have completed a cursory review of the preliminary engineering plans and stormwater management report. A detailed review will be completed with the submittal of final engineering. The following comments should be considered when developing final engineering.

C0.0 - Cover Sheet

5. The plans should be signed and sealed by a Professional Engineer prior to final approval.

6. The JULIE logo or contact information should be included on the cover sheet.

7. Include contact information for the City and YBSD on the cover sheet.

C2.0 - Layout Plan

8. The City should confirm that the number of parking spaces is adequate.

C3.0 – Preliminary Grading Plan

9. Additional grading should be shown in the fueling area.

10. Include 1-ft contours in the non-paved area to the west (where the future employee parking will be).

C4.0 – Preliminary Utility Plan

11. All utility conflicts will need to be shown.

12. Water valves should be included on the water main.

13. Provide details of the water main connections.

14. The storm structures should be labeled with unique identifiers and the type of structure, frame, and lids/grates.

Photometric Plan

15. The photometric plan should include a summary table that includes average, average to minimum, and maximum to minimum light intensity data to confirm that the lighting plan meets the requirements of the Ordinance.

16. Light intensity shall be zero-foot candles at all property lines.

17. Light fixtures should be fully cut off and conform to the dark sky concept.

Preliminary Stormwater Management Report

18. A City of Yorkville Stormwater Permit Application should be submitted with Final Engineering.

19. The stormwater management report should be signed and sealed by a Professional Engineer prior to final approval.

20. Confirm that the detention basin design accounts for the future development of the fueling station and employee parking lot that is indicated on the plans.

21. The report includes a requirement to control the outlet to 0.08 cfs/acre for a 25-year storm. It has been determined that this will not be required for this project.

22. A full report with calculations, modeling, and exhibits as indicated in the permit application should be included with final engineering.

23. A certified wetland determination will need to be included with final engineering.

24. Confirm that the existing storm sewer that goes to the existing detention basin is installed.

25. Calculations for the drawdown time of the detention basin will be required due to the 5.8' bounce.

Traffic Study

The following roadway-related improvements are anticipated to accommodate the new development based on the submitted traffic study:

- A new full-access driveway on US 34 that aligns with Tuma Road.
    a. Eastbound dedicated left turn lane into Costco.
    b. Westbound dedicated right turn lane into Costco.
- Two new full-access driveways on McHugh Road.
    c. Restriping the existing two-way left turn lane into a dedicated left turn lane into the proposed Costco gas station.
    d. Widening McHugh Road near US 34 for a dedicated right-turn lane into the proposed Costco gas station.
- A new full-access driveway on Countryside Parkway that aligns with Crimson Lane.
    e. Restriping the unused, existing left turn lane in the paved, westbound Countryside Parkway median area.
- A new full-access driveway on Countryside Parkway.
    f. Removal of the existing landscaped and curbed median area.
    g. Adding dedicated left turn lane into the proposed Costco parking lot.
- A new Right-In Right-Out driveway on Countryside Parkway.

26. The traffic impact study should be submitted to IDOT for review. The City should be copied on all correspondence with IDOT.

27. IDOT should comment on the proposed mitigations at US 34 and Countryside. Note that the capacity analysis indicated an inadequate level of service without the proposed mitigations. Storage lengths were also exceeded in this area.

28. The storage length for the southbound Countryside Parkway at US 34 should meet the proposed mitigation queue length and avoid blocking the exit of Driveway 3.

29. The existing traffic volumes displayed in Figure 5 along McHugh Road do not balance with the volumes entering the intersections of US 34 / McHugh Road and McHugh Road / Countryside Parkway.

30. The existing traffic volumes displayed in Figure 5 along Countryside Parkway do not balance with those entering the intersections of US 34 / Countryside Parkway and Countryside Parkway / Crimson Lane.

31. The pages from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, should be included in the Appendix.

32. The size utilized in Table 1 for trip generation of the Gasoline/Service Station does not account for the future expansion of the gas station.

33. A traffic signal warrant analysis at the intersection of US 34/Veterans Parkway and Costco Driveway 4/Tuma Road found the installation of a traffic signal to be unwarranted. It is noted that an inadequate Level of Service at US 34 / Tuma Road / Driveway 4 is expected. A proposed mitigation plan should be provided.

    The safety of the eastbound left turn into Driveway 4 is of concern.

34. A traffic signal warrant analysis should be performed for McHugh Road and Countryside Parkway with the anticipated project traffic volumes.

35. The taper length for the left turn at Driveway 2 should meet minimum IDOT Bureau of Local Roads and Streets (BLRS) design requirements.

36. The shifting of driveway 5 further north should be considered. Ideally, the taper length for the southbound left turn at US 34 is extended as it should meet minimum IDOT BLRS design requirements.

    This would also allow the shifting of the dedicated right-turn lane for driveway 5 away from the intersection at US 34.

Final Plat of Subdivision

37. The legal description is the surveyor's certificate must describe the measured boundary.

38. The chord length should be added to all curve dimensions.

39. All easements must be dimensioned.

40. The water main easement should be changed to a C.U.E.

41. The S.S.E. should be changed to C.U.E.

42. Cross-access easements are needed over all lots.

43. The Public Utility Easement Provisions and the stand-alone Nicor Gas provisions should be removed.

44. The stormwater management easement and City Utility Easement C.U.E. provisions should be added.

45. The building setback line on the west line of Lot 1 needs to be labeled.

46. The area table must match the areas on the plat.

47. All fire hydrants, valves and emergency shut off must be inside the C.U.E.

48. The concrete monument symbols do not match the location labels on the plat.

49. Note 2 on the IDOT access notes contradicts the site plan.

The plans should be resubmitted for further review. If you have any questions or require additional information, please contact our office.

Respectfully Submitted,

ENGINEERING ENTERPRISES, INC.

Bradley P. Sanderson, P.E.
Chief Operating Officer / President

BPS/tnp/pgw2

pc: Mr. Bart Olson, City Administrator (via email)
Ms. Erin Willrett, Assistant City Administrator (via email)
Mr. Eric Dhuse, Director of Public Works (via email)
Mr. Pete Ratos, Building Department (via email)
Ms. Gina Nelson, Admin Assistant (via email)
Ms. Sara Mendez, City Planner (via email)
Building Department (via email) Bzpermits@yorkville.il.us
Ms. Jori Behland, City Clerk (via email)
Mr. Stephen Cross, Costco (via email)
Mr. Dan Free, V3 (via email)
TNP, PGW2, EEI (via e-mail)

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

8755 W. Higgins Road, Suite 835
Chicago, Illinois 60631
Phone (773) 693-9200
Fax (773) 693-9200

December 5, 2024

Pamela Whitfield, PE, CFM
Senior Project Engineer II
Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, IL 60554

Project No.: 21-0275 AO

Re: Landscape Plan Review
Costco

Dear Pamela:

We have completed our first landscape plan review of the proposed Costco development located southwest of McHugh Road and East Countryside Parkway in Yorkville.

Landscape Plan – NOT RECOMMENDED FOR APPROVAL

Because it is preliminary and lacks sufficient detail, and based upon comments below, this landscape plan is not recommended for approval at this time. A response letter from the petitioner which addresses all review comments should be provided with their next submittal.

Review Comments

Comments must be addressed before landscape plan approval can be recommended. If there are any changes to the proposed project, additional comments may be provided. Please note that the requirements of each section are in addition to the requirements of all other sections of the ordinance (i.e., trees and other plant materials cannot be "double counted" to meet multiple requirements).

Building Foundation Landscape Zone

A Building Foundation Landscape Zone, consisting of 5 square feet of landscape area per linear foot of building frontage, is required along front and side yards. No foundation landscaping is shown on the east and west sides of the building. Requirements are not met.

Parking Area Perimeter Landscape Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted. The City may require Parking Lot Perimeter Landscape along the southern edge of the main parking lot if Outlots 1 and 2 are to remain vacant.

Parking Area Interior Landscape Zone

Parking area medians are required every third bay of parking in front or side of building. Parking area islands spaced not more than 10 continuous spaces apart are also required . Requirements are not met.

Transition Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted.

Species Diversity Requirements

Compliance with species diversity requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Minimum Plant Size Requirements

Compliance with minimum plant size requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Tree Preservation and Removal

A review of Google Earth and Google Streetview imagery suggests there are a few parkway trees on the subject property, which are shown to be preserved. Requirements appear to be met and will be confirmed later after more detailed plans have been submitted

Street Trees

A minimum of 1 canopy tree is required per every 40 linear feet of parkway. Requirements are not met.

Wetlands

A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

SUMMARY

This review was based upon the following documents, pursuant to relevant landscape requirements of the City's Unified Development Ordinance and Wetland Regulations.

- Landscape Plans, 7 sheets, prepared by Kimley-Horn, most recently dated 11/15/2024

Let us know if there are any questions or comments.

Sincerely,

Tim Pollowy, RLA (IL & WI)
Senior Landscape Architect

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

8755 W. Higgins Road, Suite 835
Chicago, Illinois 60631
Phone (773) 693-9200
Fax (773) 693-9200

December 10, 2024

Pamela Whitfield, PE, CFM
Senior Project Engineer II
Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, IL 60554

Project No.: 21-0275 AO

Re: Landscape Plan Review
Costco

Dear Pamela:

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Street Trees

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Wetlands

A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

The following comments on the landscape plan were provided by Public Works, and also must be addressed.

General Question

- You show new plantings in the median on Countryside Parkway, are you planning on maintaining the median?

Sheet L1.1

- Please locate the existing streetlights on McHugh Rd. and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights and street cuts.

- No parkway trees should be planted in medians that are less than 10’ wide. We have had trees planted in these areas in the past and they do not survive.

Sheet L1.2

- The city is planning on removing the existing pear trees and reshaping the median on East Countryside Parkway to allow better site lines and make it safer to mow. Perhaps we can work together to come up with a solution since you are cutting in a turn lane on East Countryside Parkway.

- Please locate the existing streetlights on Countryside parkway and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights.

SUMMARY

This review was based upon the following documents, pursuant to relevant landscape requirements of the City's Unified Development Ordinance and Wetland Regulations.

- Landscape Plans, 7 sheets, prepared by Kimley-Horn, most recently dated 11/15/2024

Let us know if there are any questions or comments.

Sincerely,



Tim Pollowy, RLA (IL & WI)
Senior Landscape Architect

Order ID: 7739822

* Agency Commission not included

GROSS PRICE * : **$923.67**

PACKAGE NAME: IL Govt Legal Aurora Beacon

Product(s): SubTrib_Aurora Beacon News, Publicnotices.com
AdSize(s): 2 Column
Run Date(s): Monday, December 16, 2024
Zone: Full Run
Color Spec. B/W

Preview

PUBLIC NOTICE
NOTICE OF PUBLIC HEARING
BEFORE UNITED CITY OF YORKVILLE PLANNING AND ZONING COMMISSION
PZC 2024-33

NOTICE IS HEREBY GIVEN THAT Stephen Cross, an authorized representative of Costco, has submitted applications to the City of Yorkville, Kendall County, Illinois, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner. The applications request an amendment to the Yorkville Crossing Planned Unit Development (PUD) Agreement to facilitate the development of an approximately 160,000-square- foot members-only retail store. Additionally, the petitioner seeks special use authorization to construct and operate a freestanding fueling facility, as well as final plat approval to resubdivide the existing two (2) parcels, totaling nearly 34 acres, into three (3) new parcels. The petitioner is also requesting deviations from the Unified Development Ordinance, including Section 10-5-3 regarding Landscape regulations; Section 10-5-1 regarding Off-Street Parking and Loading regulations for the maximum number of parking stalls and the minimum number of electric vehicle charging stations; Section 10-5-7 regarding Outdoor Lighting standards for the maximum pole height of light fixtures; and Section 10-5-8 regarding Appearance Standards related to the use of masonry products or precast concrete on building facades. The subject property is located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway.
The legal description is as follows:
THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13 SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976.51 FEET; THENCE WESTERLY

GROSS PRICE * : **$923.67**

PACKAGE NAME: IL Govt Legal Aurora Beacon

ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00'; AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES 09 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1.41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET; THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT
WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309.47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250.39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25.00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338.21 FEET; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54.08 FEET FROM THE POINT OF BEGINNING;
THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY
RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL
COUNTY, ILLINOIS.
EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER VESTING TITLE ENTERED IN CASE NO. 15-ED-10, CIRCUIT COURT OF KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS

Order ID: 7739822

* Agency Commission not included

GROSS PRICE * : **$923.67**

PACKAGE NAME: IL Govt Legal Aurora Beacon

DOCUMENT NO. 201500016982.
PINs: 02-28-227-002 and 02-27-101-003
A copy of the application is available for review during normal City business hours at the office of the Community Development Director.
NOTICE IS HEREWITH GIVEN THAT the Planning and Zoning Commission for the United City of Yorkville will conduct a Public Hearing on said applications on **Wednesday, January 8, 2025 at 7 p.m.** at the United City of Yorkville, City Hall, located at 651 Prairie Pointe Drive, Yorkville, Illinois 60560.
The public hearing may be continued from time to time to dates certain without further notice being published.
All interested parties are invited to attend the public hearing and will be given an opportunity to be heard. Any written comments should be addressed to the United City of Yorkville Community Development Department, City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois, and will be accepted up to the date of the public hearing. For more project information, please scan the QR code below.
By order of the Corporate Authorities of the United City of Yorkville, Kendall County, Illinois.
JORI BEHLAND
City Clerk



12/16/24 - 7739822

Memorandum

To: Planning and Zoning Commission
From: Sara Mendez, Planner I
Krysti Barksdale-Noble, Community Development Director

CC: Bart Olson, City Administrator
Date: January 2, 2024
Subject: **PZC 2024-30 – Nicholas S. Bellone on Behalf of Ament Road Solar 1, LLC (Tenant) and Janet M. Dhuse on Behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner)**
1.5 Mile Review

SUMMARY:

Staff has reviewed a request from Kendall County Planning and Zoning Department along with the subsequent documents attached. This property is located within one and a half miles of the planning boundary for Yorkville, allowing the City the opportunity to review and provide comments to Kendall County. The petitioner, Nicholas S. Bellone on behalf of Ament Road Solar 1, LLC (Tenant) and Janet M. Dhuse on behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner) are seeking a special use permit for a commercial solar energy facility and a variance to Section 36-282(17)(a) of the Kendall County Zoning Ordinance to allow a commercial solar energy facility on land within 1.5 miles of municipality without an annexation agreement.



The real property is located immediately south of Ament Road and approximately 0.33 miles west of Route 47 in unincorporated Kendall County.

PROPERTY BACKGROUND:

The property is located south of 9949 and 10021 Ament Road in unincorporated Kendall County and comprised of two (2) parcels totaling ~93.4 acres. The parcel located closest to the left (PIN #05-17-400005) consists of ~35.4 acres. The parcel closest to Route 47 (PIN #05-16-300-006) is larger in area at ~58 acres. Currently owned by Janet Dhuse Family Trust, the site is undeveloped and utilized for agricultural purposes. While the parcel is not immediately adjacent to incorporated Yorkville, it is approximately 0.82 miles (~4,000 feet) south of the Towns at Windett Reserve subdivision.

In August 2024, New Leaf Energy, dba Ament Road Solar 1, LLC, formally requested confirmation from the City Council on whether Yorkville wished to enter a pre-annexation agreement for the proposed solar energy facility on parcels #05-17-400-005 and #05-16-300-006. Although the site is unincorporated and not contiguous to the City of Yorkville, it falls within Yorkville's 1.5-mile planning jurisdiction. As such, New Leaf Energy sought guidance on the City's interest in pursuing a pre-annexation agreement.

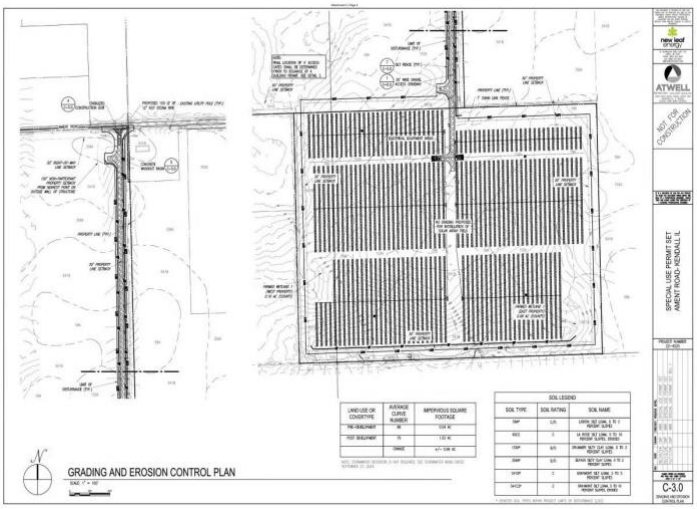
At the August 27, 2024, City Council meeting, the Council formally confirmed that Yorkville would not pursue a pre-annexation agreement for the proposed solar energy facility. Per Section 36-282(17)(a) of the Kendall County Zoning Ordinance: "All commercial solar energy facilities and test solar energy systems located within one and one-half (1½) miles of a municipality shall either annex to the municipality or obtain an annexation agreement with the municipality requiring the municipality's regulations to flow through the property."

Given Yorkville's decision not to enter a pre-annexation agreement, the applicant, Ament Road Solar 1, LLC, has filed for a variance to Section 36-282(17)(a) with Kendall County. This variance would allow the proposed solar energy facility to proceed without annexation or an annexation agreement.

PROPOSED DEVELOPMENT:

The property is currently zoned A-1 Agricultural District. Per Kendall County's Zoning Ordinance, all development proposed in the district must obtain site plan approval from the County Board. According to the application and site plans provided, the applicant is proposing a 5 MW AC community solar farm on two parcels (PIN #05-17-400-005 and #05-16-300-006) in Kendall County. The project encompasses an approximate 39.34-acre portion of the total 95.3 acres. Per Section 36-282 of Kendall County's Zoning Ordinance, construction and operation of Commercial Solar Energy Facilities are permitted in the Agricultural District by Special Use Permit.

The proposed setback of 1,442 feet from the Ament Road is consistent with the City of Yorkville's required setback of 1,000 feet from the nearest roadway network and Kendall County's required 50 feet from the nearest edge of public road rights-of-way.



YORKVILLE COMPREHENSIVE PLAN:

Yorkville's 2016 Comprehensive Plan designation for this property is Agricultural Zone (AZ). The agricultural zone future land use designation is primarily intended for lands expected to remain for agricultural uses, both general farming and restricted forms such as pastures, gardening, kennel, riding stables, nurseries, and greenhouses. The proposed commercial solar energy facility, along with the A-1 zoning in Kendall County is consistent with Yorkville's Comprehensive Plan.

STAFF COMMENTS

Staff is seeking input from the Planning and Zoning Commission as the one-and-a-half-mile review allows for the City to make comments and requests to the petitioner and County prior to their public meetings. This review will also be brought to City Council at the January 14, 2025 meeting. This item was delivered to the City on October 25, 2024.

ATTACHMENTS

1. Application with Attachments

DEPARTMENT OF PLANNING, BUILDING & ZONING
111 West Fox Street • Room 203
Yorkville, IL • 60560
(630) 553-4141 Fax (630) 553-4179

Petition 24-27
Steve W. Jeffers on Behalf of Revolution Investments, LLC
Plat of Vacation of a Drainage and Utility Easement in Whitetail Ridge Subdivision

INTRODUCTION

A ten foot (10') drainage and utility easement presently exists between Lots 110 and 111 in Whitetail Ridge Subdivision. The Petitioner own the subject lots and would like to construct a home in the center of the combined lots.

SITE INFORMATION

PETITIONER Steve W. Jeffers on Behalf of Revolution Investments, LLC

ADDRESS 5682 and 5834 Championship Court, Yorkville (Lots 110 and 111 of Whitetail Ridge)

LOCATION Approximately 0.10 Miles Northwest of the Intersection of Clubhouse Drive and Championship Court on the South Side of Championship Court



TOWNSHIP Na-Au-Say Township

PARCEL #s 06-07-374-004 and 06-07-374-005

LOT SIZE 1.5 +/- Acres

EXISTING LAND USE Residential/Vacant

ZONING RPD-2

LRMP

Current Land Use	Vacant One-Family Residential
Future Land Use	Rural Residential (Max 0.65 Du/Acre)
Roads	Championship Court is a Township Road classified as a Local Road
Trails	None
Floodplain/ Wetlands	None

REQUESTED ACTION: Vacate a Ten Foot (10') Drainage and Utility Easement Between Lots 110 and 111

APPLICABLE REGULATIONS: Section 7.06 (Subdivision Control Ordinance)

SURROUNDING LAND USE

Location	Adjacent Land Use	Adjacent Zoning	Land Resource Management Plan	Zoning within ½ Mile
North	Single-Family Residential	RPD-2	Rural Residential (Max 0.65 DU/Acre)	N/A
South	Open Space (Golf Course)	RPD-2 SU	Open Space (Golf Course)	N/A
East	Open Space (Golf Course)	RPD-2 SU	Open Space (Golf Course)	N/A
West	Single-Family Residential	RPD-2	Rural Residential	N/A

The RPD-2 special use is for a golf course.

ACTION SUMMARY

NA-AU-SAY TOWNSHIP

Na-Au-Say Township was emailed information on August 23, 2024.

UNITED CITY OF YORKVILLE

The United City of Yorkville was emailed information on August 23, 2024.

BRISTOL-KENDALL FIRE PROTECTION DISTRICT

The Bristol-Kendall Fire Protection District was emailed information on August 23, 2024.

GENERAL

The application materials are included as Attachment 1. The plat of vacation is included as Attachment 2. The topographic information is included as Attachment 3.

On August 22, 2024, Greg Chismark sent an email stating that he had no objections to the vacation from a drainage perspective. This email is included as Attachment 4.

On August 22, 2024, a representative from the Whitetail Ridge Homeowners' Association submitted an email stating the HOA had no objections to the requested easement vacation. This email is included as Attachment 5.

As of the date of this memo, the Petitioner was still obtaining approvals from the utilities.

RECOMMENDATION
Staff recommends approval of the requested easement vacation provided that Lots 110 and 111 remain under the same ownership.

ATTACHMENTS
1. Application Materials
2. Plat of Vacation
3. Topographic Information
4. August 22, 2024, Email from WBK Engineering
5. August 22, 2024, Email from Homeowners' Association

DEPARTMENT OF PLANNING, BUILDING & ZONING
111 West Fox Street • Yorkville, IL • 60560
(630) 553-4141 Fax (630) 553-4179

APPLICATION

PROJECT NAME Revolution Investments, LLC **FILE #:**_____

NAME OF APPLICANT (Including First, Middle Initial, and Last Name)
Steve W. Jeffers

CURRENT LANDOWNER/NAME(s)
Revolution Investments, LLC

SITE INFORMATION ACRES	SITE ADDRESS OR LOCATION	ASSESSOR'S ID NUMBER (PIN)
.0695 acres	Lots 110 and 111 Championship Court, Yorkville, IL 60560	06-07-374-004 06-07-374-005

EXISTING LAND USE	CURRENT ZONING	LAND CLASSIFICATION ON LRMP
vacant residential lots	PUD	PUD

REQUESTED ACTION (Check All That Apply):

_____SPECIAL USE
___ MAP AMENDMENT (Rezone to ____)
___ VARIANCE
____ADMINISTRATIVE VARIANCE
___ A-1 CONDITIONAL USE for:_____
___ SITE PLAN REVIEW
___ TEXT AMENDMENT
___ PRELIMINARY PLAT
___ RPD (___Concept; ___ Preliminary; ___ Final)
___ FINAL PLAT
___ ADMINISTRATIVE APPEAL
X OTHER PLAT (Vacation, Dedication, etc.)
___ AMENDMENT TO A SPECIAL USE (____Major; ____Minor)

[1]PRIMARY CONTACT	PRIMARY CONTACT MAILING ADDRESS	PRIMARY CONTACT EMAIL
Attorney Daniel J. Kramer	[redacted]	[redacted]

PRIMARY CONTACT PHONE #	PRIMARY CONTACT FAX #	PRIMARY CONTACT OTHER # (Cell, etc.)
[redacted]	[redacted]	

[2]ENGINEER CONTACT	ENGINEER MAILING ADDRESS	ENGINEER EMAIL
Eric at Todd Surveying	[redacted]	[redacted]

ENGINEER PHONE #	ENGINEER FAX #	ENGINEER OTHER # (Cell, etc.)
[redacted]		

I UNDERSTAND THAT BY SIGNING THIS FORM, THAT THE PROPERTY IN QUESTION MAY BE VISITED BY COUNTY STAFF & BOARD/ COMMISSION MEMBERS THROUGHOUT THE PETITION PROCESS AND THAT THE PRIMARY CONTACT LISTED ABOVE WILL BE SUBJECT TO ALL CORRESPONDANCE ISSUED BY THE COUNTY.

I CERTIFY THAT THE INFORMATION AND EXHIBITS SUBMITTED ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT I AM TO FILE THIS APPLICATION AND ACT ON BEHALF OF THE ABOVE SIGNATURES. **THE APPLICANT ATTESTS THAT THEY ARE FREE OF DEBT OR CURRENT ON ALL DEBTS OWED TO KENDALL COUNTY AS OF THE DATE OF THE APPLICATION.**

SIGNATURE OF APPLICANT **DATE**
X [redacted] August 20, 2024

FEE PAID:$_____
CHECK #:_____

[1]*Primary Contact will receive all correspondence from County*
[2]*Engineering Contact will receive all correspondence from the County's Engineering Consultants*

Date Stamp Here If Checklist Is Complete

KENDALL COUNTY
DISCLOSURE OF BENEFICIARIES FORM

1 Applicant Revolution Investments, LLC

Address [redacted]

City [redacted] State IL Zip 60541

2. Nature of Benefit Sought Landowner

3. Nature of Applicant: (Please check one)
___ Natural Person (a)
___ Corporation (b)
___ Land Trust/Trustee (c)
___ Trust/Trustee (d)
___ Partnership (e)
___ Joint Venture (f)
x Limited Liability Company

4. If applicant is an entity other than described in Section 3, briefly state the nature and characteristics of the applicant:
A Limited Liability Company that owns the land

5. If your answer to Section 3 you have checked letter b, c, d, e, or f, identify by name and address each person or entity who is a 5% shareholder in case of a corporation, a beneficiary in the case of a trust or land trust, a joint venture in the case of a joint venture, or who otherwise has proprietary interest, interest in profits and losses or right to control such entity:

NAME	ADDRESS	INTEREST
Stephen Jeffers	[redacted]	50%
Angela Jeffers		50%

6. Name, address, and capacity of person making this disclosure on behalf of the applicant:
Dnaiel J. Kramer, Attorney for Applicant [redacted]

VERIFICATION

I, Colleen Hanson, being first duly sworn under oath that I am the person making this disclosure on behalf of the applicant, that I am duly authorized to make the disclosure, that I have read the above and foregoing Disclosure of Beneficiaries, and that the statements contained therein are true in both substance and fact.

Subscribed and sworn to before me this 21st day of August A.D. 2024

(seal) [redacted]
Notary Public

"OFFICIAL SEAL"
COLLEEN T HANSON
NOTARY PUBLIC, STATE OF ILLINOIS
COMMISSION NO. 979188
MY COMMISSION EXPIRES 10/6/2027

Office of the Secretary of State
ilsos.gov

Business Entity Search

Entity Information

Entity Name	REVOLUTION INVESTMENTS LLC		
Principal Address	8942 WILCOX CT NEWARK,IL 605419119		
File Number	11613802	**Status**	ACTIVE on 02-07-2024
Entity Type	LLC	**Type of LLC**	Domestic
Org. Date/Admission Date	03-23-2022	**Jurisdiction**	IL
Duration	PERPETUAL		
Annual Report Filing Date	02-07-2024	**Annual Report Year**	2024
Agent Information	ANGIE JEFFERS [redacted]	**Agent Change Date**	03-23-2022

Services and More Information

Choose a tab below to view services available to this business and more information about this business.

Managers	↑ Address
JEFFERS, ANGELA	[redacted]
JEFFERS, STEPHEN	

Showing 1 to 2 of 2 entries

Previous 1 Next

WHEATLAND
TITLE COMPANY

5/1/2024 12:01PM
Commitment for Title Insurance
[2021 v. 01.00 (07-01-2021)]

ALTA COMMITMENT FOR TITLE INSURANCE
issued by
Fidelity National Title Insurance Company

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Fidelity National Title Insurance Company (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part I—Requirements have not been met within 6 months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Law Offices of Daniel J. Kramer

By [redacted]
Authorized Signatory

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.
Registered Agent: Law Offices of Daniel J. Kramer [redacted]

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AMERICAN LAND TITLE ASSOCIATION

WHEATLAND
TITLE COMPANY

5/1/2024 12:01PM
Commitment for Title Insurance
[2021 v. 01.00 (07-01-2021)]

Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

ORIGINATING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Wheatland Title Company 105 W. Veterans Parkway Yorkville, IL 60560 Main Phone: (630) 892-2323 Email: closings@wheatlandtitle.com	Wheatland Title Company 105 W. Veteran's Parkway Yorkville, IL 60560 Main Phone: 630-892-2323 x 9989 Email: closings@wheatlandtitle.com

Name & Address of Title Insurance Agent: Law Offices of Daniel J. Kramer [redacted]

Issuing Office File Number: WTC-HC-2024KL-11233
Property Address: 5834 & 5862 Championship Court, Yorkville, IL 60560

SCHEDULE A

1. Commitment Date: April 25, 2024

2. Policy to be issued:
   a. 2021 ALTA® Owner's Policy
      Proposed Insured: Revolution Investments, LLC
      Proposed Amount of Insurance: $110,000.00
      The estate or interest to be insured: FEE SIMPLE

   b. 2021 ALTA® Lender's Policy
      Proposed Insured:
      Proposed Amount of Insurance:
      The estate or interest to be insured: FEE SIMPLE

3. The estate or interest in the Land at the Commitment Date is:

   FEE SIMPLE

4. The Title is, at the Commitment Date, vested in:

   Whitetail Developments, LLC

5. The Land is described as follows:

   See Exhibit A Attached

Fidelity National Title Insurance Company

Law Offices of Daniel J. Kramer [redacted]

By [redacted]
Authorized Signatory

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.
Registered Agent: Law Offices of Daniel J. Kramer [redacted]

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AMERICAN LAND TITLE ASSOCIATION

WHEATLAND
TITLE COMPANY

5/1/2024 12:01PM
Commitment for Title Insurance
[2021 v. 01.00 (07-01-2021)]

Exhibit A

LOTS 110 AND 111 OF WHITETAIL RIDGE SUBDIVISION OF PART OF SECTION 12, TOWNSHIP 36 NORTH, RANGE 7, PART OF SECTION 7, TOWNSHIP 36 NORTH, RANGE 8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION IN KENDALL AND NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS.

END OF SCHEDULE A

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WHEATLAND
TITLE COMPANY

SCHEDULE B, PART I—Requirements

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
5. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the company is not able to close or insure any transaction involving Land that is associated with these activities.
6. The "Good Funds" section of the Title Insurance Act (215 ILCS 155/26) is effective January 1, 2010. This Act places limitations upon our ability to accept certain types of deposits into escrow. Please contact your local Title office regarding the application of this new law to your transaction.
7. Effective June 1, 2009, pursuant to Public Act 95-988, satisfactory evidence of identification must be presented for the notarization of any and all documents notarized by an Illinois notary public. Satisfactory identification documents are documents that are valid at the time of the notarial act; are issued by a state or federal government agency; bear the photographic image of the individual's face; and bear the individual's signature.
8. The Proposed Policy Amount(s) must be increased to the full value of the estate or interest being insured, and any additional premium must be paid at that time. An Owner's Policy should reflect the purchase price or full value of the Land. A Loan Policy should reflect the loan amount or value of the property as collateral. Proposed Policy Amount(s) will be revised and premiums charged consistent therewith when the final amounts are approved.
9. We should be furnished a properly executed ALTA statement and, unless the land insured is a condominium unit, a survey if available. Matters disclosed by the above documentation will be shown specifically.
10. Satisfy requirements for final utilities and any transfer stamps pursuant to the requirements set forth by municipality for which the subject property lies.
11. The company should be provided a statement from the borrower(s) relative to any mortgage shown on Schedule B disclosing whether the borrower(s) have entered into any forbearance or loan modification agreement with the lender relative to delayed or past postponed payments or other restructuring of the debt secured by the mortgage.
12. Any recorded lien shown in Schedule B-2 will appear as an exception in the policy unless a sufficient release of said lien is recorded in the county where the subject premises is located.

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WHEATLAND
TITLE COMPANY

13. We should be furnished (A) a certification from the Illinois Secretary of State that Whitetail Developments, LLC has properly filed its articles of organization; (B) a copy of the articles of organization together with any amendments thereto; (C) a copy of the operating agreement together with any amendments thereto; (D) a list of incumbent managers or a roster of current members if managers have not been appointed; and (E) a certification that no event of dissolution has occurred.

    In the event of a sale of all or substantially all of the assets of said limited liability company, we should be furnished a copy of the resolution adopted by the members of said limited liability company authorizing the sale and the execution and delivery of the anticipated deed. This commitment is subject to such additional requirements and/or exceptions as may be deemed necessary upon our review of these exhibits.

14. Upon any conveyance or mortgage of the land, a statement from the Secretary of the Board of Managers that there are no unpaid assessment liens arising by reason of the nonpayment of assessments should be furnished.

END OF SCHEDULE B, Part I

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WHEATLAND
TITLE COMPANY

SCHEDULE B, PART II—Exceptions

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Rights or claims of parties in possession not shown by the Public Records.

2. The effect on the Title of an encumbrance, violation, variation, adverse circumstance, boundary line overlap, or encroachment (including an encroachment of an improvement across the boundary lines of the Land), but only if the encumbrance, violation, variation, adverse circumstance, boundary line overlap, or encroachment would have been disclosed by an accurate and complete land title survey of the Land.

3. Easements, or claims of easements, not shown by the Public Records.

4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.

5. Taxes or special assessments which are not shown as existing liens by the Public Records.

6. Loss or damage by reason of there being recorded in the Public Records, any deeds, mortgages, lis pendens, liens or other title encumbrances subsequent to the Commitment date and prior to the effective date of the final Policy.

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WHEATLAND
TITLE COMPANY

SCHEDULE B, PART II, CONTINUED

7. Taxes and assessments for the year 2023 and all subsequent years are a lien but not yet due and payable.

8. Tax Year: 2022

   Tax ID #: 06-07-374-005
   Taxes Assessed in the Name of: Whitetail Development LLC
   18 Stonehill Rd
   Oswego, IL 60543
   Total Annual Tax: $1.26
   First Installment Amount: $0.63
   First Installment Status: Paid
   Second Installment Amount: $0.63
   Second Installment Status: Paid

   Note: Property is subject to a Special Assessment.

   Tax Year: 2022

   Tax ID #: 06-07-374-004
   Taxes Assessed in the Name of: Whitetail Development LLC
   18 Stonehill Rd
   Oswego, IL 60543
   Total Annual Tax: $1.26
   First Installment Amount: $0.63
   First Installment Status: Paid
   Second Installment Amount: $0.63
   Second Installment Status: Paid

   Note: Property is subject to a Special Assessment.

9. Intentionally Left Blank

10. Building setback line of 30 feet from the northwesterly lot line, 10 feet from the northeasterly and southwesterly lot line, and 50 feet from the southeasterly lot line as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985.

11. Easement for public utilities and drainage over and across the northwesterly 15 feet, northeasterly and southwesterly 5 feet, and southeasterly 10 feet of subject property as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985.

12. Easement for golf course over and across the southeasterly 40 feet of subject property as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985.

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AMERICAN LAND TITLE ASSOCIATION

WHEATLAND TITLE COMPANY

13. Building Lines and Easements as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985; Document No. 200500015985.

14. Covenants, conditions, restrictions and easements contained in Declaration of Protective Covenants for Whitetail Ridge Homeowners Association, recorded on June 9, 2005 as Document No. 200500015992; Document No. 200500015992.

    Note: See document copy for particulars.

15. Amendment to Declaration of Protective Covenants for Whitetail Ridge Subdivision Homeowners' Association recorded September 16, 2020 as Document Number 202000017966

    Note: See document copy for particulars.

16. Terms and conditions contained in By-Laws for Whitetail Ridge Subdivision Homeowners' Association recorded July 1, 2011 as Document No. 201100010720 in the Kendall County Recorder's Office.

17. Terms and conditions contained in Consent to Creation of Special Service Tax Area dated March 16, 2005 and recorded June 9, 2005 as Document No. 200500015986 made by Whitetail Development, LLC recorded in the Kendall County Recorder's Office.

18. Terms and conditions contained in an Ordinance establishing a back-up Special Tax Service Area Number 2005-32 for Whitetail Ridge Subdivision recorded June 9, 2005 as Document No. 200500015987 recorded in the Kendall County Recorder's Office.

19. Terms and conditions contained in an Ordinance Establishing a back-up Special Tax Service Area Number 2005-33 recorded June 9, 2005 as Document No. 200500015988 made by the County of Kendall, recorded in the Kendall County Recorder's Office.

20. Terms and conditions contained in an Ordinance Establishing Back Up Special Tax Service Area 2005-30 recorded June 9, 2005 in Document No. 200500015990 made by County of Kendall, recorded in the Kendall County Recorder's Office.

21. Terms and conditions contained in an Ordinance enabling creation of Special Service Area 2005-31 recorded June 9, 2005 in Document No. 200500015991 made by County of Kendall, recorded in the Kendall County Recorder's Office.

22. Terms and conditions contained in a Grant of Conservation Easement dated May 16, 2005 and recorded June 9, 2005 as Document No. 200500015993 made by Whitetail Development, LLC to Whitetail Ridge Homeowners Association LLC recorded in the Kendall County Recorder's Office.

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WHEATLAND
TITLE COMPANY

23. Terms, conditions and provisions contained in Grant of Conservation Easement dated May 16, 2005 and recorded June 9, 2005 in Document No. 200500015994 made by Whitetail Development, LLC to Whitetail Ridge Golf Club, LLC recorded in the Kendall County Recorder's Office.

24. Rights of the public, the State of Illinois, the County, the Township and the Municipality in and to that part of the land, if any, taken or used for road purposes.

25. Rights of way for drainage ditches, tiles, feeders and laterals, if any.

END OF SCHEDULE B, Part II

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AMERICAN LAND TITLE ASSOCIATION

WHEATLAND
TITLE COMPANY

COMMITMENT CONDITIONS

1. DEFINITIONS
   a. "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.
   b. "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.
   c. "Land": The land described in Item 5 of Schedule A and improvements located on that land that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
   d. "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.
   e. "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
   f. "Proposed Amount of Insurance": Each dollar amount specified in Schedule A as the Proposed Amount of Insurance of each Policy to be issued pursuant to this Commitment.
   g. "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
   h. "Public Records": The recording or filing system established under State statutes in effect at the Commitment Date under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.
   i. "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.
   j. "Title": The estate or interest in the Land identified in Item 3 of Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
   a. the Notice;
   b. the Commitment to Issue Policy;
   c. the Commitment Conditions;
   d. Schedule A;
   e. Schedule B, Part I—Requirements; and
   f. Schedule B, Part II—Exceptions; and
   g. a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND
   The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company is not liable for any other amendment to this Commitment.

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AMERICAN LAND TITLE ASSOCIATION

WHEATLAND
TITLE COMPANY

5. LIMITATIONS OF LIABILITY
   a. The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
      i. comply with the Schedule B, Part I—Requirements;
      ii. eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
      iii. acquire the Title or create the Mortgage covered by this Commitment.
   b. The Company is not liable under Commitment Condition 5.a. if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
   c. The Company is only liable under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
   d. The Company's liability does not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Condition 5.a. or the Proposed Amount of Insurance.
   e. The Company is not liable for the content of the Transaction Identification Data, if any.
   f. The Company is not obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
   g. The Company's liability is further limited by the terms and provisions of the Policy to be issued to the Proposed Insured.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT; CHOICE OF LAW AND CHOICE OF FORUM
   a. Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
   b. Any claim must be based in contract under the State law of the State where the Land is located and is restricted to the terms and provisions of this Commitment. Any litigation or other proceeding brought by the Proposed Insured against the Company must be filed only in a State or federal court having jurisdiction.
   c. This Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
   d. The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
   e. Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
   f. When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT IS ISSUED BY AN ISSUING AGENT
   The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for closing, settlement, escrow, or any other purpose.

8. PRO-FORMA POLICY
   The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

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AMERICAN LAND TITLE ASSOCIATION

WHEATLAND
TITLE COMPANY

9. CLAIMS PROCEDURES
This Commitment incorporates by reference all Conditions for making a claim in the Policy to be issued to the Proposed Insured. Commitment Condition 9 does not modify the limitations of liability in Commitment Conditions 5 and 6.

10. CLASS ACTION
ALL CLAIMS AND DISPUTES ARISING OUT OF OR RELATING TO THIS COMMITMENT, INCLUDING ANY SERVICE OR OTHER MATTER IN CONNECTION WITH ISSUING THIS COMMITMENT, ANY BREACH OF A COMMITMENT PROVISION, OR ANY OTHER CLAIM OR DISPUTE ARISING OUT OF OR RELATING TO THE TRANSACTION GIVING RISE TO THIS COMMITMENT, MUST BE BROUGHT IN AN INDIVIDUAL CAPACITY. NO PARTY MAY SERVE AS PLAINTIFF, CLASS MEMBER, OR PARTICIPANT IN ANY CLASS OR REPRESENTATIVE PROCEEDING. ANY POLICY ISSUED PURSUANT TO THIS COMMITMENT WILL CONTAIN A CLASS ACTION CONDITION.

11. ARBITRATION
The Policy contains an arbitration clause. All arbitrable matters when the Proposed Amount of Insurance is $2,000,000 or less may be arbitrated at the election of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

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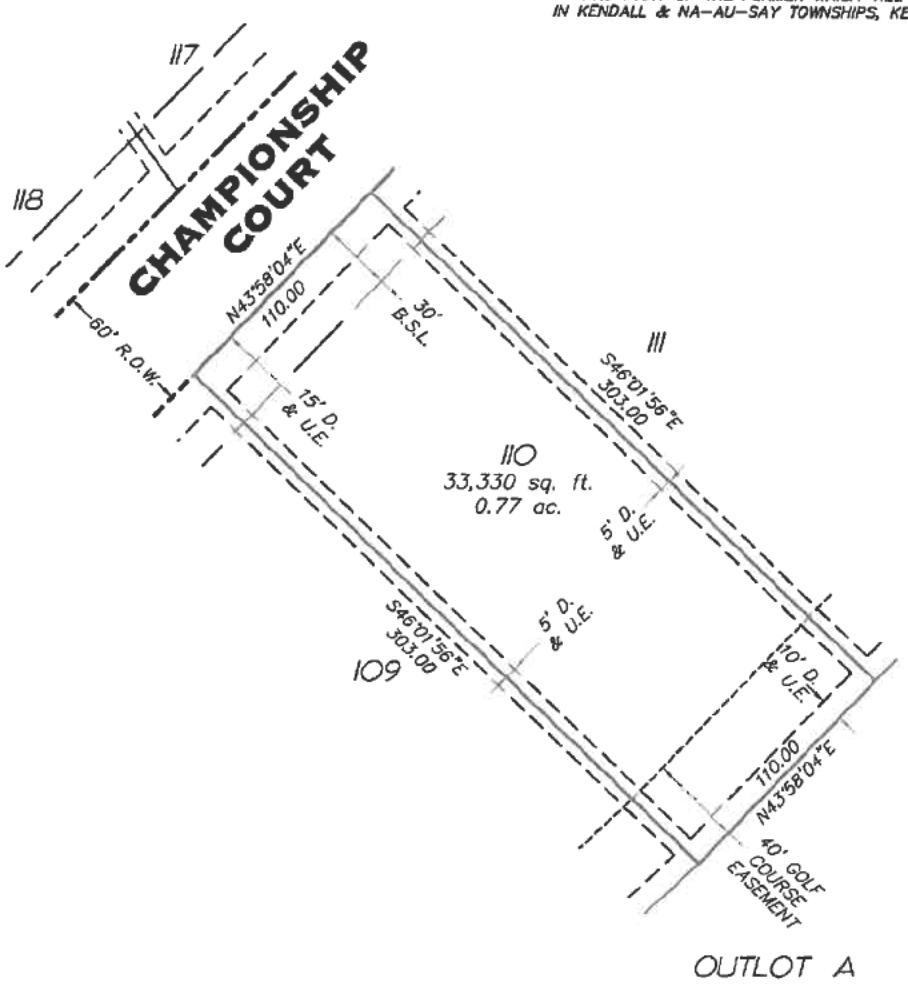
AMERICAN LAND TITLE ASSOCIATION

PLAT OF SURVEY

LOT 110 OF WHITETAIL RIDGE SUBDIVISION
ACCORDING TO THE PLAT THEREOF RECORDED JUNE 8, 2005 AS DOCUMENT NUMBER 200500015985, BEING A SUBDIVISION OF PART OF SECTION 12-36-7, PART OF SECTION 7-36-8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION, IN KENDALL & NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/ENVIRONMENTAL ENGINEERING AND SURVEYING
116 John Street
P.O. Box 765 • Yorkville, Illinois 60560
Ph. 630-553-7531 • FAX 630-553-7538
e-mail: info@smithengineering.com • e-mail: surveying@smithengineering.com
e-MARKET • e-BIDDER • e-TENDER
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-001169

COMP. FILE: 040538-bnd-110.dwg
PLOT FILE: 538BNDD
SITE: Layout



ADDITIONAL NOTE:
Side yard building set back lines are 10' or 10% of the distance between side lot lines at the building setback line, as determined by the Kendall County Planning, Building and Zoning Department, whichever is greater.

STATE OF ILLINOIS)
) S.S
COUNTY OF KENDALL)

This is to certify that we have surveyed the premises above described, and that the plat hereon is a representation of the said survey.

Dated at Yorkville, Kendall County, Illinois, July 14, A.D. 2005.

Smith Engineering Consultants, Inc.

Illinois Professional Land Surveyor No. 3359
License Expiration 11/30/06



D.E. = PUBLIC DRAINAGE EASEMENT
L.E. = LANDSCAPE EASEMENT
M.E. = MAINTENANCE AND CONSTRUCTION EASEMENT
S.E. = SIDEWALK EASEMENT
U.E. = PUBLIC UTILITY EASEMENT
B.S.L. = BUILDING SETBACK LINE

NOTE:
5/8" STEEL REBAR TO BE SET AT ALL LOT CORNERS UNLESS OTHERWISE NOTED PER RECORDED PLAT OF SUBDIVISION.

NOTE: Only those Building Line Restrictions or Easements shown on a Recorded Subdivision Plat are shown hereon unless the description ordered to be surveyed contains a proper description of the required building lines or easements.
* Basis of bearings: Geodetic North [Recorded Whitetail Ridge Plat of Subdivision]
* No distance should be assumed by scaling.
* No underground improvements have been located unless shown and noted.
* No representation as to ownership, use, or possession should be hereon implied.
* This Survey and Plat of Survey are void without original embossed or red colored seal and signature affixed.
* Field work completed: Under construction at time of survey.
* This professional service conforms to the current Illinois minimum standards for a boundary survey and was performed for:

Whitetail LLC

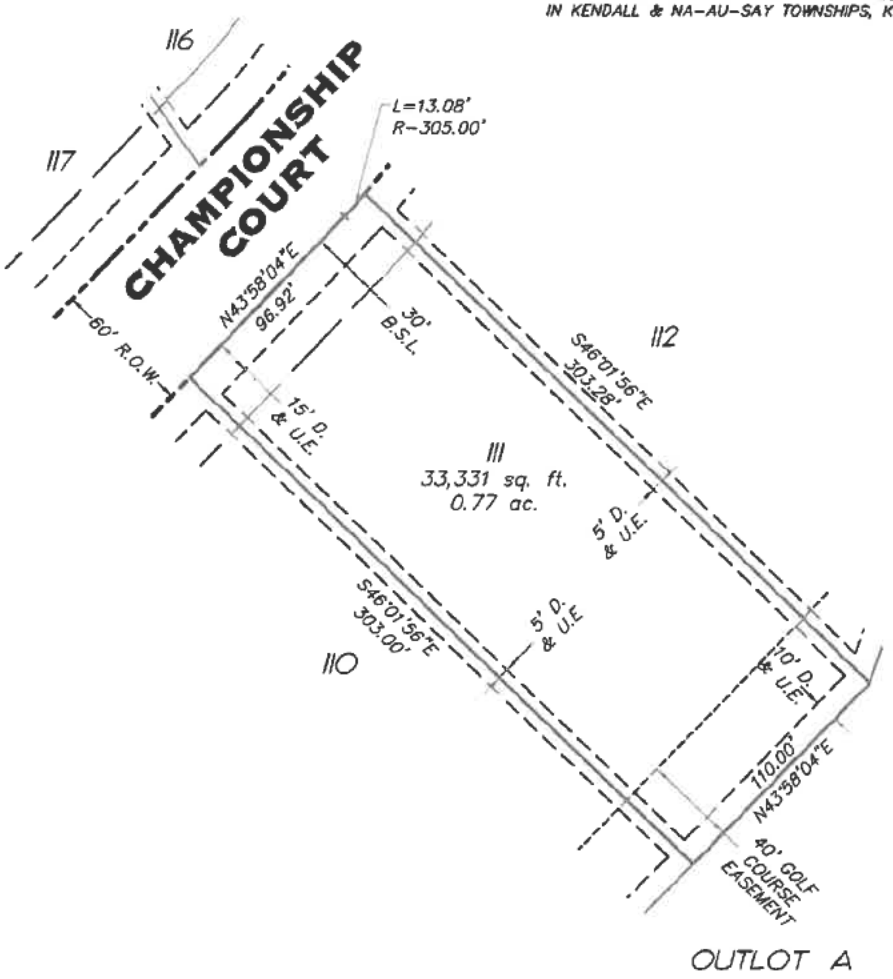
Compare your description and site markings with this plat and AT ONCE report any discrepancies which you may find.

LOT 110 OF WHITETAIL RIDGE SUBDIVISION, KENDALL COUNTY, ILLINOIS

	DRAWN BY: NTD	DATE: 7/14/05	PROJECT NO. 040538.08
	DESIGNED BY:	HORZ. SCALE: 1"=50'	SHEET NO. 1
	CHECKED BY: CLD	VERT. SCALE: N/A	

PLAT OF SURVEY

LOT 111 OF WHITETAIL RIDGE SUBDIVISION
ACCORDING TO THE PLAT THEREOF RECORDED JUNE 8, 2005 AS DOCUMENT NUMBER 200500015985, BEING A SUBDIVISION OF PART OF SECTION 12-36-7, PART OF SECTION 7-36-8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION, IN KENDALL & NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS



ADDITIONAL NOTE:
Side yard building set back lines are 10' or 10% of the distance between side lot lines at the building setback line, as determined by the Kendall County Planning, Building and Zoning Department, whichever is greater.

STATE OF ILLINOIS)
) S.S
COUNTY OF KENDALL)

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Dated at Yorkville, Kendall County, Illinois, July 14, A.D. 2005.

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Illinois Professional Land Surveyor No. 3359
License Expiration 11/30/08

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* Basis of bearings: Geodetic North [Recorded Whitetail Ridge Plat of Subdivision]
* No distance should be assumed by scaling.
* No underground improvements have been located unless shown and noted.
* No representation as to ownership, use, or possession should be hereon implied.
* This Survey and Plat of Survey are void without original embossed or red colored seal and signature affixed.
* Field work completed: Under construction at time of survey.
* This professional service conforms to the current Illinois minimum standards for a boundary survey and was performed for:

Whitetail LLC

Compare your description and site markings with this plat and AT ONCE report any discrepancies which you may find.

D.E. = PUBLIC DRAINAGE EASEMENT
L.E. = LANDSCAPE EASEMENT
M.E. = MAINTENANCE AND CONSTRUCTION EASEMENT
S.E. = SIDEWALK EASEMENT
U.E. = PUBLIC UTILITY EASEMENT
B.S.L. = BUILDING SETBACK LINE

NOTE:
5/8" STEEL REBAR TO BE SET AT ALL LOT CORNERS UNLESS OTHERWISE NOTED PER RECORDED PLAT OF SUBDIVISION.

LOT 111 OF WHITETAIL RIDGE SUBDIVISION, KENDALL COUNTY, ILLINOIS

1		AJD	7/14/05	040638.09
2			HORIZ. SCALE: 1"=50'	SHEET NO.
3				
4				
5		CLD	VERT. SCALE: N/A	1

← BACK

|revolution investments **Results: 8**

Document No	Document Type	Recorded Date	Party1	Party2	Legals
P202400006...	PTAX	6/18/2024 1...	WHITETAIL ...	REVOLUTIO...	Sub: WHITET...
2024000068...	WARRANTY ...	6/18/2024 1...	WHITETAIL ...	REVOLUTIO...	Sub: WHITET...

202400006856
6/18/2024 12:37:41 PM
WARRANTY DEED
Purchase more information and the image for this document

Parties
Party 1:
WHITETAIL DEVELOPMENT LLC
Party 2:
REVOLUTION INVESTMENTS LLC

Legals
WHITETAIL RIDGE L: 110
WHITETAIL RIDGE L: 111

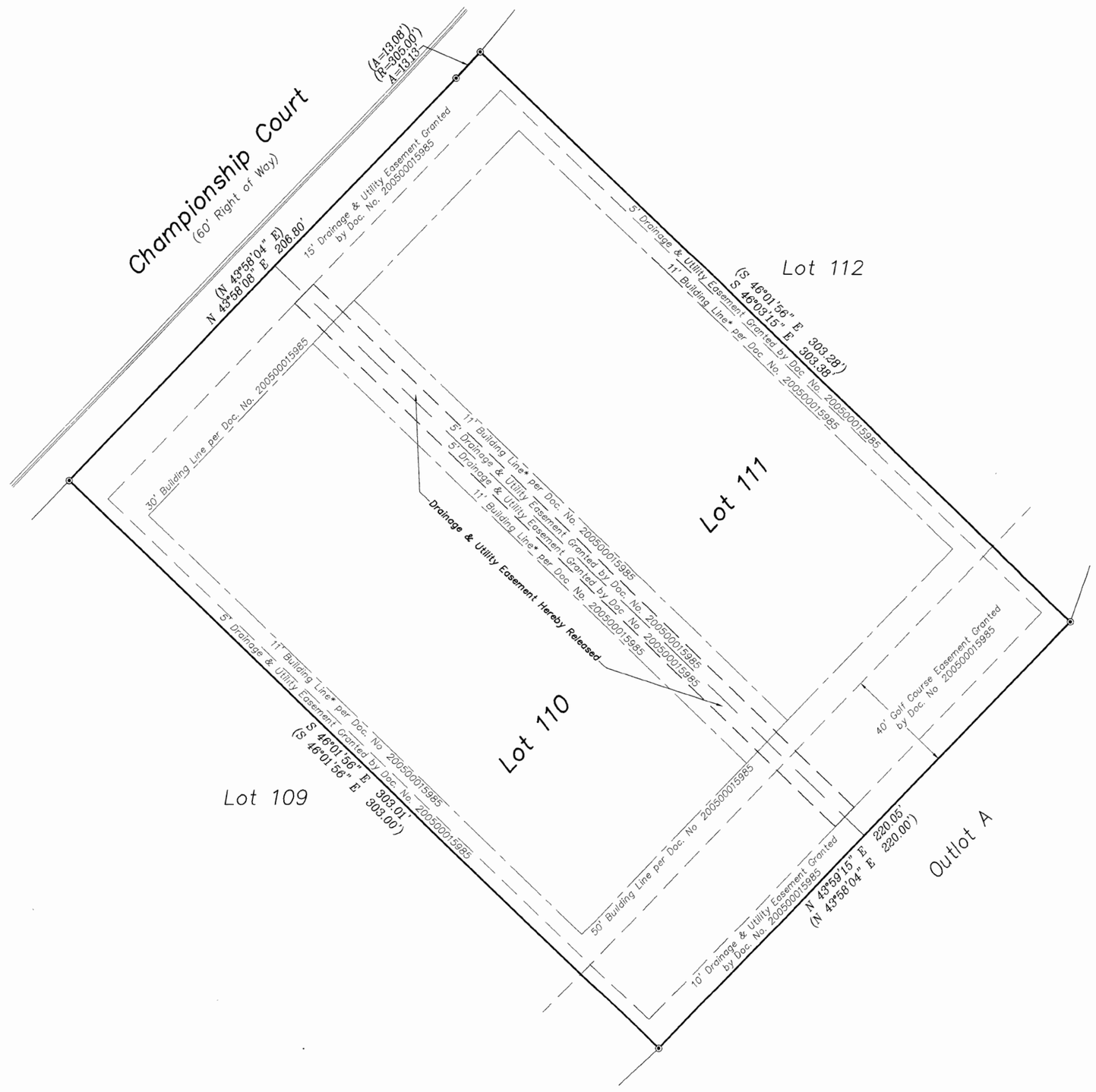
Additional

P202400002...	PTAX	3/7/2024 12:...	WIENCKOW...	REVOLUTIO...	Sub: WHITET...
2024000024...	WARRANTY ...	3/7/2024 12:...	WIENCKOW...	REVOLUTIO...	Sub: WHITET...
2023000015...	WARRANTY ...	2/14/2023 8:...	CAK INVEST...	REVOLUTIO...	Sub: 181 WO...
2022000085...	ASSIGNMEN...	5/16/2022 1...	REVOLUTIO...	BUSEY BANK	Sub: 181 WO...
2022000085...	MORTGAGE	5/16/2022 1...	REVOLUTIO...	BUSEY BANK	
2022000085...	WARRANTY ...	5/16/2022 1...	CAK INVEST...	REVOLUTIO...	

Contact FAQ

Privacy - Terms

PLAT OF EASEMENT RELEASE
PART OF LOTS 110 AND 111 WHITETAIL RIDGE
KENDALL & NA-AU-SAY TOWNSHIPS KENDALL COUNTY ILLINOIS



Scale: 1" = 30'

PROPERTY LOCATION:

PIN: 06-07-374-004
06-07-374-005

5834 & 5862 CHAMPIONSHIP COURT
YORKVILLE, ILLINOIS 60560

SURVEYOR'S NOTE:

* 10% OF LOT WIDTH

COMMONWEALTH EDISON COMPANY

THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,

THIS _____ DAY OF _____, A.D. 20____.

BY: _____
SIGNATURE

BY: _____
PRINT NAME

TITLE: _____

AT&T

THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,

THIS _____ DAY OF _____, A.D. 20____.

BY: _____
SIGNATURE

BY: _____
PRINT NAME

TITLE: _____

COMCAST

THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,

THIS _____ DAY OF _____, A.D. 20____.

BY: _____
SIGNATURE

BY: _____
PRINT NAME

TITLE: _____

NICOR

THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,

THIS _____ DAY OF _____, A.D. 20____.

BY: _____
SIGNATURE

BY: _____
PRINT NAME

TITLE: _____

**SURVEYOR'S NOTE:
SIDEYARD SETBACK LINES ARE 10' OR 10% OF WIDTH PER DETAIL ON WHITETAIL RIDGE SUBDIVISION PLAT.

LEGAL DESCRIPTION OF EASEMENT TO BE RELEASED:

THE SOUTHWESTERLY 5.0 FEET OF LOT 111 (EXCEPT THE SOUTHEASTERLY 10.0 FEET AND THE NORTHWESTERLY 15.0 FEET THEREOF) AND THE NORTHEASTERLY 5.0 FEET OF LOT 110 (EXCEPT THE SOUTHEASTERLY 10.0 FEET AND THE NORTHWESTERLY 15.0 FEET THEREOF) ALL IN WHITETAIL RIDGE SUBDIVISION, BEING A SUBDIVISION OF PART OF SECTION 12, TOWNSHIP 36 NORTH, RANGE 7, PART OF SECTION 7, TOWNSHIP 36, RANGE 8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION, IN KENDALL AND NA-AU-SAY TOWNSHIPS, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 9, 2005 AS DOCUMENT NO. 200500015985, IN KENDALL COUNTY, ILLINOIS.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

WE, CORNERSTONE SURVEYING, P.C., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYOR CORPORATION NO. 184.006522, DO HEREBY STATE THAT WE HAVE PREPARED THIS PLAT OF EASEMENT RELEASE FOR THE PROPERTY DESCRIBED HEREON.

DATED AT YORKVILLE, ILLINOIS ON JULY 31, 2024.

_____
ERIC POKORNY P.L.S. NO. [redacted]

OWNER'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

THIS IS TO CERTIFY THAT WE, _____ AND _____ ARE THE OWNERS OF THE PROPERTY DESCRIBED HEREON, AND DO WILLINGLY ACCEPT AND APPROVE THE EASEMENT RELEASE DESCRIBED HEREON.

DATED AT _____, ILLINOIS

THIS _____ DAY OF _____, A.D. 20____.

_____
(OWNER'S NAME)

_____
(OWNER'S NAME)

NOTARY'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

I, _____, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID, TO HEREBY CERTIFY THAT _____ AND _____, WHO ARE PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING OWNER'S CERTIFICATE, APPEARED BEFORE ME THIS DAY, IN PERSON, AND ACKNOWLEDGED THE EXECUTION OF THE ANNEXED PLAT AND ACCOMPANYING INSTRUMENTS FOR USES AND PURPOSES THEREIN SET FORTH AS THEIR FREE AND VOLUNTARY ACT.

GIVEN UNDER MY HAND AND NOTARIAL SEAL,

THIS _____ DAY OF _____, A.D. 20 _____.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____.

COUNTY BOARD CERTIFICATE

STATE OF ILLINOIS)
)SS
COUNTY OF KENDALL)

APPROVED BY THE COUNTY BOARD OF KENDALL COUNTY, ILLINOIS,

ON THIS _____ DAY OF _____, A.D. 20_____.

_____
CHAIRMAN OF COUNTY BOARD

_____
COUNTY CLERK

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
)SS
COUNTY OF KENDALL)

THIS INSTRUMENT NO. _____ WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF KENDALL COUNTY, ILLINOIS, AFORESAID,

ON THIS _____ DAY OF _____,

A.D. 20____, AT _____ O'CLOCK ____.M.

_____
KENDALL COUNTY RECORDER

Legend

○=Found 3/4" Dia. Iron Pipe
◉=Found 1/2" Dia. Iron Rod
⊘=Found 5/8" Dia. Iron Rod
(XX.XX')= Record Distance
XX.XX'= Measured Distance
N= North E= East
S= South W= West
R= Radius A= Arc Length
-X-X-X- = Fence
▭ = Concrete/Asphalt

Michel C. Ensalaco, P.L.S. [redacted] Exp. 11/30/2024
Eric C. Pokorny, P.L.S. [redacted] Exp. 11/30/2024

TODD SURVEYING
Professional Land Surveying Services
"Cornerstone Surveying PC"
759 John Street, Suite D
Yorkville, IL 60560
Phone: 630-892-1309

Survey is only valid if original seal is shown in red.

Client:	Revolution Builders
Book #: sheets	Drawn By: JG, JJH / Plat #: 7249
Reference:	
Field Work Completed:	7/19/2024
Rev. Date	Rev. Description
Project Number:	2024-0533 Release

Topographic Exhibit

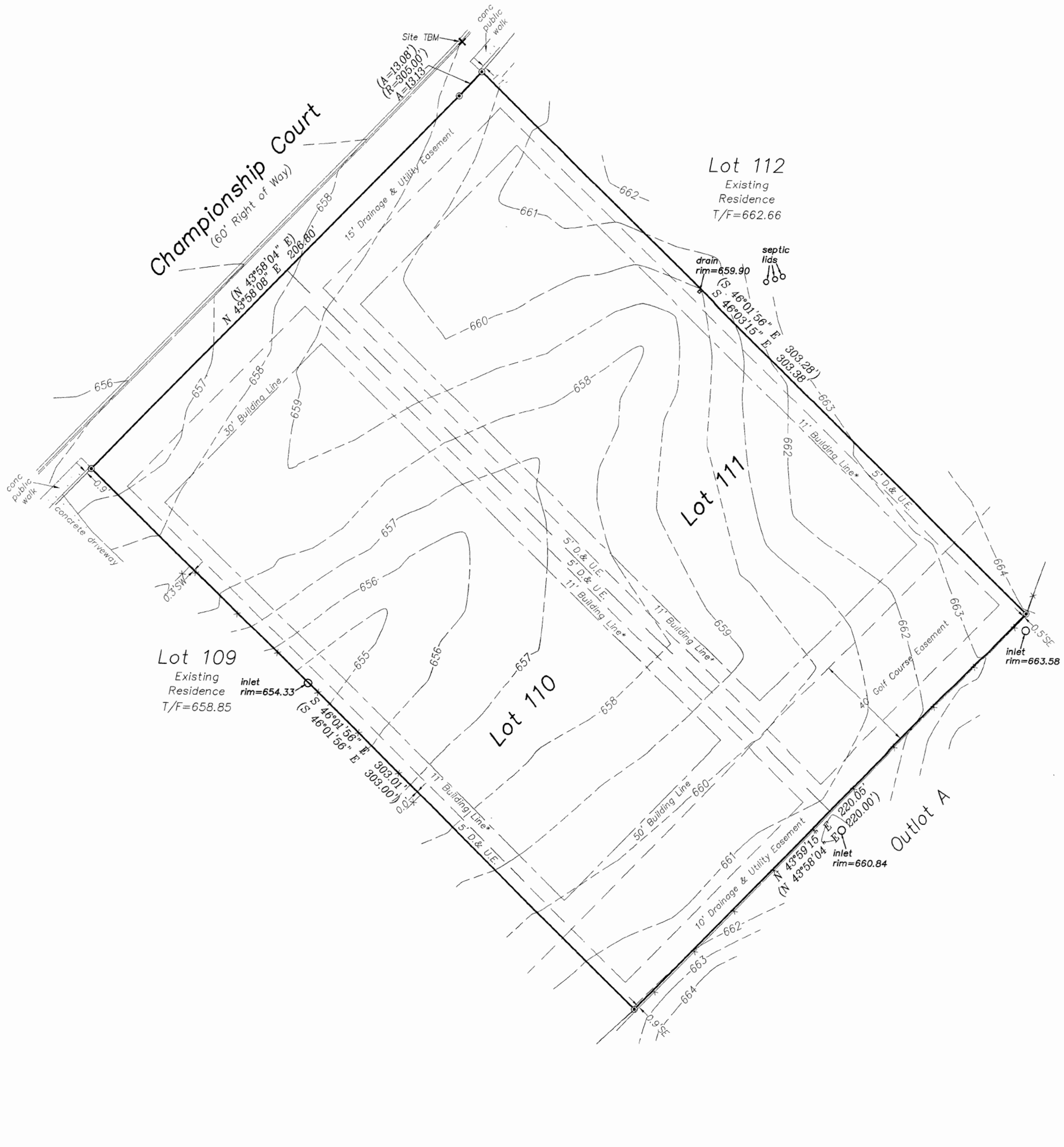
LOTS 110 AND 111 OF WHITETAIL RIDGE SUBDIVISION, A SUBDIVISION OF PART OF SECTION 12, TOWNSHIP 36, RANGE 7, PART OF SECTION 7, TOWNSHIP 36, RANGE 8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION, IN KENDALL AND NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS.

COMMONLY KNOWN AS: 5862 & 5834 CHAMPIONSHIP COURT, YORKVILLE, ILLINOIS.

PROPERTY CONTAINS: 1.53 ACRES / 66,667.6 SQUARE FEET, MORE OR LESS

SURVEYOR'S NOTE:

* 10% OF LOT WIDTH



PREPARED ON JULY 25, 2024 BY:

[redacted]

ERIC C. POKORNY
I.P.L.S. NO. [redacted]

PROFESSIONAL LAND SURVEYOR
ERIC C. POKORNY [redacted]
YORKVILLE, IL
STATE OF ILLINOIS

Scale: 1" = 30'

⊙=Found 5/8" Dia. Iron Rod
(XX.XX')= Record Distance
XX.XX'= Measured Distance
N= North E= East
S= South W= West
R= Radius A= Arc Length
-X-X-X- = Fence
[ ] = Concrete/Asphalt
D.&U.E.= Drainage & Utility Easement

Michel C. Ensalaco, P.L.S. [redacted] Exp. 11/30/2024
Eric C. Pokorny, P.L.S. [redacted] Exp. 11/30/2024

TODD SURVEYING
Professional Land Surveying Services
"Cornerstone Surveying PC"
759 John Street, Suite D
Yorkville, IL 60560
Phone: 630-892-1309

Survey is only valid if original seal is shown in red.

Client: Revolution Builders
Book #: sheets | Drawn By: JG.JJH | Plot #: 7249
Reference:
Field Work Completed: 7/19/2024

Rev. Date	Rev. Description

Project Number: 2024-0533

Matt Asselmeier

From: Greg Chismark <gchismark@bodwegroup.com>
Sent: Thursday, August 22, 2024 7:06 AM
To: Matt Asselmeier
Subject: [External]RE: Kendall County Petition 24-27

CAUTION - This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Matt,
I have no concerns. I checked the original subdivision plans and see no utilities. Drainage patterns should remain unaffected. Let me know if you want something more than this e-mail.
Greg

Greg Chismark, PE
Mobile 847-344-5619 | Office 630-338-8527 | gchismark@bodwegroup.com

From: Matt Asselmeier <masselmeier@kendallcountyil.gov>
Sent: Wednesday, August 21, 2024 1:08 PM
To: Greg Chismark <gchismark@bodwegroup.com>
Subject: Kendall County Petition 24-27

Greg:

The County received a request to vacated the public utility and drainage easement between lots 110 and 111 in Whitetail Ridge.

The topo is attached.

Do you have any concerns regarding this vacation from a stormwater perspective?

Thanks,

Matthew H. Asselmeier, AICP, CFM
Director
Kendall County Planning, Building & Zoning
111 West Fox Street
Yorkville, IL 60560-1498
PH: 630-553-4139
Fax: 630-553-4179

Matt Asselmeier

From: Debbie Mika <[redacted]
Sent: Thursday, August 22, 2024 7:53 AM
To: Matt Asselmeier
Subject: [External]Re: 5862 Championship Court

CAUTION - This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Matt,

The HOA has no issues.

Thanks,

Debbie Mika

From: Matt Asselmeier <masselmeier@kendallcountyil.gov>
Sent: Wednesday, August 21, 2024 1:09:48 PM
To: Debbie Mika <tdmika@live.com>
Subject: 5862 Championship Court

Debbie:

The County received a request from Steve Jeffers on Behalf of Revolution Investment, LLC to vacate a public utility and drainage easement between Lots 110 and 111 in Whitetail Ridge in order to be able to construct a house in the middle of the combined lots.

Does the HOA have any objections to this vacation?

Thanks,

Matthew H. Asselmeier, AICP, CFM
Director
Kendall County Planning, Building & Zoning
111 West Fox Street
Yorkville, IL 60560-1498
PH: 630-553-4139
Fax: 630-553-4179