Please practice social distancing while attending this meeting.
If social distancing is not possible please wear a mask.

AGENDA
CITY OF ST. CHARLES
PLANNING & DEVELOPMENT COMMITTEE
ALD. RITA PAYLEITNER – CHAIR
MONDAY, NOVEMBER 9, 2020 - 7:00 PM
CITY COUNCIL CHAMBERS
2 E. MAIN STREET

1. CALL TO ORDER

2. ROLL CALL

3. OMNIBUS VOTE

Items with an asterisk (*) are considered to be routine matters and will be enacted by one motion. There will be no separate discussion on these items unless a council member/citizen so requests, in which event the item will be removed from the consent agenda and considered in normal sequence on the agenda.

4. COMMUNITY & ECONOMIC DEVELOPMENT

a. Presentation of a Concept Plan for 1401 Prairie St., Mr. A's Prairie Drive-Thru

b. Consideration of a request for City support to amend an Intergovernmental Agreement (IGA) with Kane County regarding Randall Road

c. Plan Commission recommendation to approve a Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for Pride of Kane County, southeast corner of Kirk Rd. and E. Main St.

d. Plan Commission recommendation to approve a PUD Amendment for Kirk Trace PUD (Cumberland Green Electronic Changeable Copy Sign)

*e. Recommendation to Approve and Execute an Acceptance Resolution for Public Utilities for Baker Field Subdivision (912 S. 5th St.)

5. ADDITIONAL BUSINESS

6. EXECUTIVE SESSION

- Personnel –5 ILCS 120/2(c)(1)
- Pending Litigation – 5 ILCS 120/2(c)(11)
- Probable or Imminent Litigation – 5 ILCS 120/2(c)(11)
- Property Acquisition – 5 ILCS 120/2(c)(5)
- Collective Bargaining – 5 ILCS 120/2(c)(2)
- Review of Executive Session Minutes – 5 ILCS 120/2(c)(21)

7. **ADDITIONAL ITEMS FROM MAYOR, COUNCIL, STAFF OR CITIZENS.**

8. **ADJOURNMENT**

ADA Compliance

Any individual with a disability requesting a reasonable accommodation in order to participate in a public meeting should contact the ADA Coordinator, Jennifer McMahon, at least 48 hours in advance of the scheduled meeting. The ADA Coordinator can be reached in person at 2 East Main Street, St. Charles, IL, via telephone at (630) 377 4446 or 800 526 0844 (TDD), or via e-mail at jmcmahon@stcharlesil.gov. Every effort will be made to allow for meeting participation. Notices of this meeting were posted consistent with the requirements of 5 ILCS 120/1 et seq. (Open Meetings Act).

CITY OF ST. CHARLES ILLINOIS • 1834	**AGENDA ITEM EXECUTIVE SUMMARY**	**Agenda Item Number: 4a**
	Title:	Presentation of a Concept Plan for 1401 Prairie St.
	Presenter:	Ellen Johnson

Meeting: Planning & Development Committee	**Date**: November 9, 2020	
Proposed Cost: $	Budgeted Amount: $	Not Budgeted: ☐

The subject property is located at the southwest corner of Prairie St. and S. 14th St. A liquor store has operated at the property for a number of years. In 2016, the use became nonconforming after adoption of a City-initiated zoning code amendment creating the Alcohol & Tobacco Sales Establishments use category and limiting the use within the BL zoning district to sites along Main St., Randall Rd., and Kirk Rd. As a nonconforming use, the business cannot be expanded.

Andy Patel has submitted a Concept Plan proposing to add a Drive-Through Facility to the site. This would constitute an expansion of a nonconforming use. As such, the applicant is seeking feedback on the proposed drive-through layout as well as a potential code amendment to allow an Alcohol & Tobacco Sales Establishment as a permitted use at this location. This would address the nonconforming use issue and would allow the applicant to seek approval of a Special Use for Drive-Through Facility at this location.

The Comprehensive Plan land use designation for the property is Neighborhood Commercial.

Plan Commission Review

Plan Commission reviewed the Concept Plan on 11/4/20. Comments are summarized as follows:

- A majority of commissioners were not opposed to addition of a drive-through on the site. However, some commissioners did not support the zoning code change necessary to allow the drive-through due to proximity of residential uses.
- Improvements to the site were suggested to improve the appearance of the property:
  - Addition of landscaping along the street frontages and removal of unnecessary paved areas.
  - Fencing/landscape screening along south property line adjacent to apartments.
  - Additional site lighting.
  - Updated signage and exterior building improvements.

One neighboring property owner provided feedback via email (attached). No members of the public spoke during the meeting.

Attachments (*please list*)**:**

Concept Plan Application, Plans, Correspondence from neighboring property owner

Recommendation/Suggested Action (*briefly explain*)**:**

Provide comments on the Concept Plan. Staff is recommending the Committee provide comments on the following topics:

- Potential code amendment to allow Alcohol or Tobacco Sales Establishment in the BL District along Prairie St.
- Drive-through / site layout.
- Suggested building/site improvements.

Community & Economic Development
Phone: (630) 377-4443
Fax: (630) 377-4062

ST. CHARLES
SINCE 1834

Staff Report

TO: Chairman Rita Payleitner
And Members of the Planning & Development Committee

FROM: Ellen Johnson, Planner

RE: 1401 Prairie St. Concept Plan

DATE: November 5, 2020

I. APPLICATION INFORMATION:

Project Name: 1401 Prairie St. – Mr. A's Prairie Drive-Thru

Applicant: Andy Patel

Purpose: Obtain feedback on a Concept Plan for adding a drive-through liquor store

General Information:

Site Information	
Location	Southwest corner of Prairie St. & St. 14th St.
Acres	28,449 sf / 0.653 acres

Application:	Concept Plan
Applicable City Code Sections	Ch. 17.14 – Business & Mixed-Use Districts Ch. 17.20 – Use Standards Ch. 17.26 – Landscaping & Screening

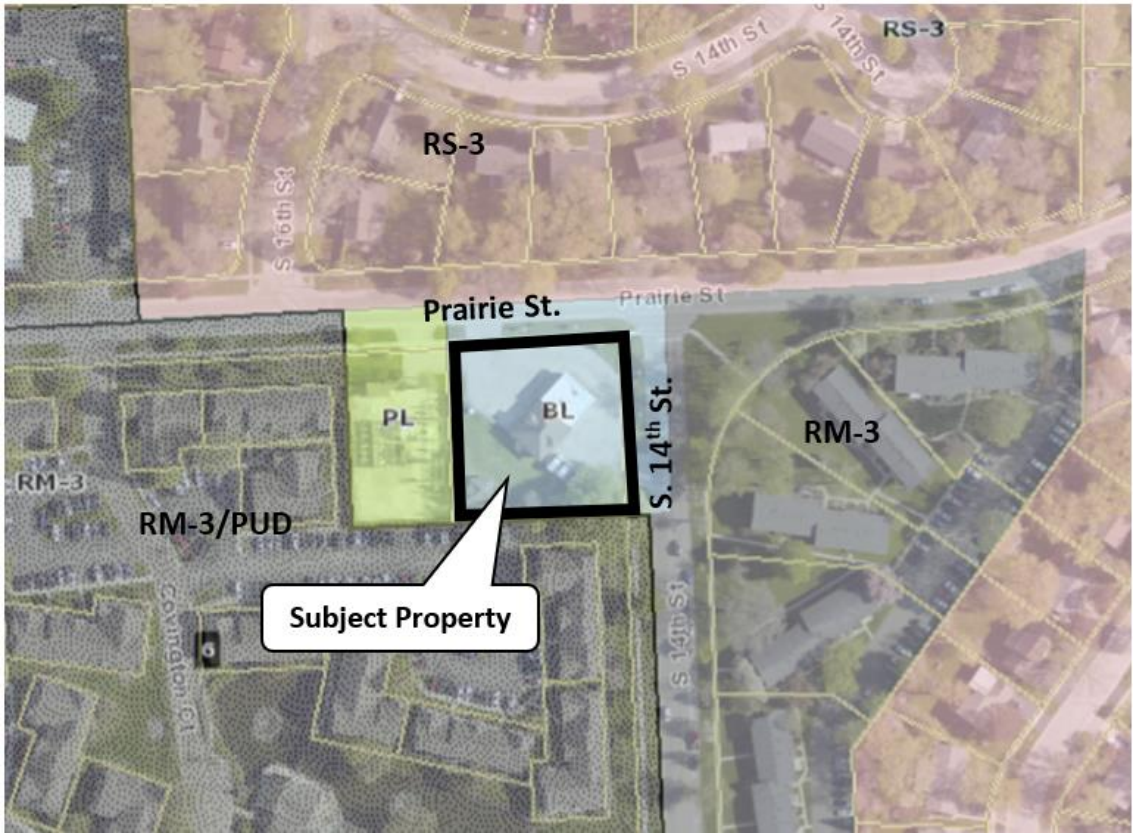
Existing Conditions	
Land Use	Retail (liquor store)
Zoning	BL Local Business

Zoning Summary		
North	RS-3 Suburban Single-Family Residential	Single-family homes
East	RM-3 General Residence	Apartments
South	RM-3 General Residence / PUD	Apartments
West	PL Public Land	City electric substation

Comprehensive Plan Designation
Neighborhood Commercial

Aerial

Zoning



II. OVERVIEW

A. BACKGROUND

Property History:
The subject property, 1401 Prairie St., is located at the southwest corner of Prairie St. and S. 14th St. The property contains a 2,800 sf retail building constructed in 1930 and a detached garage. One Stop Liquors has operated out of the building for a number of years.

Drive-Through Liquor:
In 2015, City Council discussed drive-through liquor sales. Ord. 2015-M-38 was passed which authorized retail liquor stores to sell alcoholic beverages through drive-through service. Where zoning requires granting a Special Use for a Drive-Through Facility, the Special Use approval must be granted prior to establishment of the drive-through.

Since then, the City has approved one drive-through liquor store: Lundeen Liquors at 1315 W. Main St. (Ord. 2016-Z-20). However, the drive-through has yet to be constructed.

Liquor Store Zoning:
In 2016, City Council considered a liquor license application to allow a liquor store at 710 S. 3rd St. (St. Charles Mini Mart), which is zoned BL Local Business District. Retail Sales are permitted in the BL District. At the time, sale of alcohol was considered general Retail Sales. Concerns were expressed about the possibility of liquor stores and related uses like tobacco stores locating in pockets of commercially zoned property within or adjacent to residential areas.

City Council subsequently passed Ord. 2016-Z-5 which created a new zoning use category called “Alcohol or Tobacco Sales Establishment”, separate from Retail Sales. Alcohol or Tobacco Sales Establishment is now permitted in all commercial districts. However, in the BL Local Business District, the use is limited to locations with frontage on Main St., Randall Rd., and Kirk Rd. Based on these location restrictions, sites are limited to major retail/commercial shopping areas, downtown, and along Strategic Regional Arterial routes. It was acknowledged during the review that most BL parcels that do not front on the identified arterials are surrounded by residential uses. Alcohol or Tobacco Sales Establishments are prohibited from locating on these parcels.

One Stop Liquor at 1401 Prairie St. is zoned BL, however is not located along one of the identified arterials. The liquor store use at that location became a legal, nonconforming use as a result of the 2016 amendment. Per Ch. 17.08 “Nonconformities”, a legal, nonconforming use can continue but cannot be expanded, enlarged or increased in intensity.

B. PROPOSAL

Andy Patel is under contract to purchase 1401 Prairie St. He has submitted a Concept Plan proposing to continue operating a liquor store at the site and addition of a drive-through. Given past discussions regarding drive-through liquor and zoning for liquor stores, the applicant desired to obtain informal feedback from the City before deciding whether to pursue the project.

The following changes to the site are proposed:

- Drive-through lane with 6 stacking spaces on the west side of the site running south.
- Pick-up window on the southwest side of the building.
- Sidewalk around the building.

- Striping of parking lot for 14 spaces.

Approval of two zoning applications would be needed to allow addition of a drive-through on the site:

1. **General Amendment** – Alcohol or Tobacco Sales Establishment is not a permitted use at this location; the use is considered legal, nonconforming. A nonconforming use cannot be expanded, such as by adding a drive-through. A zoning code amendment would be needed to allow Alcohol or Tobacco Sales Establishment as a permitted use at the subject location. One way to do this would be to add Prairie St. to the list of streets along which Alcohol or Tobacco Sales Establishments are permitted in the BL District.

2. **Special Use for Drive-Through Facility** – A Drive-Through Facility in the BL District requires Special Use approval. The General Amendment would need to be approved for the Special Use to be granted.

C. CONCEPT PLAN REVIEW PROCESS

The purpose of the Concept Plan review is to enable the applicant to obtain informal input on a concept prior to spending considerable time and expense in the preparation of detailed plans and architectural drawings. The Concept Plan process also serves as a forum for citizens and owners of neighboring property to ask questions and express their concerns and views regarding the potential development. Following the conclusion of the Concept Plan review, the developer can decide whether to formally pursue the project.

III. ANALYSIS

A. COMPREHENSIVE PLAN

The Land Use Plan adopted as part of the 2013 Comprehensive Plan identifies the subject property as "Neighborhood Commercial". Surrounding uses are predominately residential.

The Neighborhood Commercial land use category is described in the plan as follows (p. 46):

Areas designated as neighborhood commercial are intended toward smaller-scale retail and service commercial areas geared toward providing for the daily shopping, service, and convenience needs of surrounding neighborhoods. Uses in the neighborhood commercial areas should be of a scale and intensity to be considered generally compatible with adjacent and nearby residential uses. Grocery stores, gasoline service stations, pharmacies, personal and financial services, smaller office uses, convenience and specialty retailers, and more are appropriate…Many neighborhood commercial properties, especially those along Main Street are relatively shallow and present challenges for redevelopment. Because many of the properties along this corridor are adjacent to residential areas, buffering, screening, and setbacks should be used to protect adjacent residential neighborhoods. Hours of operation and intensity of use may also become an important issue in some neighborhood commercial areas.

The Plan provides the following Commercial Area land use policy which is relevant to the proposed redevelopment: (p. 49):

> ***To the extent possible, mitigate the negative effects of commercial and industrial uses on adjacent and nearby residential properties through use of setbacks, screening, buffers, orientation of activity, and more.*** *The composition of the City's commercial districts along corridors that transect the City means that there are many areas where commercial uses abut residential properties and neighborhoods. The use of horizontal and vertical buffering and screening, including berms, fencing, and landscaping, should be promoted to protect neighborhoods from abutting commercial or industrial land uses. The City should identify areas where land use conflicts are problematic and explore solutions to mitigate the conflicts, including buffering and screening.*

B. <u>ZONING</u>

<u>Use:</u>
Existing/proposed use of the property is classified as an Alcohol or Tobacco Sales Establishment, defined in Ch. 17.30 as follows:

> *An establishment where the primary purpose, based on floor area, is the sale of a) packaged alcoholic liquor directly to the consumer for consumption off the premises, or b) tobacco or tobacco products, alternative nicotine products, and/or shisha (flavored tobacco for hookah), as defined in Chapter 5.16 of the St. Charles Municipal Code, titled "Tobacco", directly to the consumer for consumption either on or off the premises. An establishment that has over 50% of the total retail floor area dedicated to the sale or consumption of these items shall be considered an Alcohol or Tobacco Sales Establishment. This use includes a Hookah Lounge as defined in said Chapter 15.6. This use does not include Retail Sales (G), Tavern/Bar, or Restaurant (G), as defined herein.*

As previously stated, Alcohol or Tobacco Sales Establishment is a permitted use in the BL Local Business District, but only on properties with frontage on Main St., Randall Rd., or Kirk Rd. (Ch. 17.20.030). The subject property does meet the location parameter, so the use at this location is considered legal, nonconforming. Nonconforming uses cannot be expanded, enlarged or increased in intensity. Addition of a drive-through facility on the site would be considered an expansion of use. The zoning ordinance would need to be amended to permit the use at the subject property in order to allow an expansion of said use.

One potential amendment would be a change to Ch. 17.20.030 "Standards for Specific Use". Prairie St. could be added to the list of streets along which Alcohol or Tobacco Sales Establishment is permitted in the BL district. The change would be as follows (underlined):

> Alcohol or Tobacco Sales Establishment
> 1. In the BL Local Business District, this use is permitted only on properties with frontage on Main Street/Route 64, Randall road, ~~or~~ Kirk Road, <u>or Prairie St</u>.

1401 Prairie St. is the only BL parcel on Prairie St. The change would only impact the subject property.

<u>Bulk Standards:</u>
The table below compares the BL District zoning standards with the Concept Plan, which reflects current site conditions. Parking setbacks from Prairie St. and 14th St. do not meet standards and are considered nonconforming. Per Section 17.24.010, if an existing parking lot that does not meet current setback requirements is resurfaced or reconstructed, 50% of the

required setback must be met. The Concept Plan does not indicate the level of improvements to the existing pavement. If over half of the existing pavement is resurfaced or reconstructed, not including seal coating, a 5 ft. setback along the street frontages will be needed. Landscaping would need to be added in these setback areas (See Item D below).

	BL District	**Concept Plan (Existing)**
Min. Lot Area	None	28,449 sf
Min. Lot Width	None	168 ft.
Max. Building Coverage	60%	10%
Max. Gross Floor Area per Building	10,000 sf	2,800 sf
Max. Building Height	30 ft.	Under 30 ft.
Min. Front Yard	Building: 20 ft. Parking: 10 ft. (Prairie St.)	Building: 32 ft. ***Parking: 1.3 ft.***
Min. Exterior Side Yard	Building: 20 ft. Parking: 10 ft. (14th St.)	Building: 32 ft. ***Parking: 0.7 ft.***
Min. Interior Side Yard	Building: 5 ft. Parking: none (west lot line)	Building: 56 ft. Parking: 11 ft.
Min. Rear Yard	Building: 20 ft. Parking: none (south lot line)	Building: 56 ft. Parking: 30 ft.
Landscape Buffer Yard	10 ft. along lot lines abutting/across a street from residential zoning (applies to north, east and south sides)	***North & East: does not meet*** South: appears to meet
Off-Street Parking	Gas Station: 4 spaces per 1,000 sf GFA; 11 spaces	14 spaces

C. DRIVE-THROUGH FACILITY STANDARDS

Drive-Through Facilities are subject to the requirements contained in Section 17.24.100. The table below compares the requirements with the Concept Plan.

The portion of the stacking lane not concealed by the building will need to be screened from view of public streets. This can be accomplished by adding landscaping to the median shown between the parking row and the drive through lane and along the street frontage. There is currently a narrow strip of grass between the parking lot and the sidewalk along Prairie St. This should be widened if possible with plantings added.

Another option to better screen the stacking lane and also to prevent stacking overflow onto Prairie St. would be to move the drive-through window to the southeast side of the building (along 14th St.), shifting the stacking spaces around the building. This would cause a loss of parking spaces. A total of 11 parking spaces are required and would need to be accommodated elsewhere.

	Zoning Standard	Concept Plan
Stacking Spaces	5	6
Stacking Space Size	9’ x 20’	9’ x 20’
Screening	Concealed from view from public streets to greatest extent possible	First four stacking spaces not concealed; last two spaces concealed by building
Obstruction of Required Spaces	Cannot obstruct access to required parking spaces	Meets requirement
Ingress/Egress Obstruction	Location of stacking spaces cannot obstruct ingress/egress to the site or interfere with vehicle circulation	Meets requirement, however any overflow stacking will be pushed out to the street

D. LANDSCAPING

Per Section 17.26.020, when 50% or more of an existing parking lot is resurfaced or reconstructed, street frontage landscaping and parking lot landscape screening is required to be installed within the 5 ft. setback area along Prairie St. and S. 14th St. previously identified above (Item B). If the 50% threshold is met, a landscape plan specifying the types and sizes of plantings will be needed.

E. SITE ACCESS

The subject property contains two access points, one on Prairie St. and one on S. 14th St. No changes are proposed to these driveways. Maximum width for new two-way driveways is 30 ft. The existing driveways are 36 ft. (Prairie St.) and 32 ft. (14th St.). The driveways could be reduced in width, although it will not be required.

The Prairie St. driveway is approx. 30 ft. from the driveway into the City Electric Substation to the west. Cross-access is provided between the two properties, although it does not appear that a cross-access easement exists.

F. ENGINEERING REVIEW

The Concept Plan has been reviewed on a preliminary basis to identify any significant issues concerning feasibility of the project. No “red flags” have been identified.

IV. SUGGESTED ACTION

Review the Concept Plan and provide comments to the applicant. Staff recommends the Committee provide feedback on the following:

- ✓ Potential code amendment to allow Alcohol or Tobacco Sales Establishment in the BL District along Prairie St.
- ✓ Drive-through/site layout.
- ✓ Landscaping improvements / other suggested building/site improvements.

VI. ATTACHMENTS

- Concept Plan Application; received 10/12/2020
- Site Plan

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

COMMUNITY DEVELOPMENT DIVISION PHONE: (630) 377-4443 EMAIL: cd@stcharlesil.gov

CONCEPT PLAN APPLICATION

CITYVIEW
Project Name: 1401 Prairie St.
Project Number: 2020 -PR- 016
Cityview Project Number: PLCP202000049

Received Date
RECEIVED
St. Charles, IL
OCT 12 2020
CDD
Planning Division

To request review of a Concept Plan for a property, complete this application and submit it with all required attachments to the Planning Division.

When the application is complete and has been reviewed by City staff, we will schedule a Plan Commission review, as well as a review by the Planning and Development Committee of the City Council. While these are not formal public hearings, property owners within 250 ft. of the property are invited to attend and offer comments.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. **Property Information:**	Location: 1401 Prairie St St Charles Parcel Number (s): 09 33 329 001 Proposed Project Name: MR Als Prairie Drive thru	
2. **Applicant Information:**	Name: ANDY PATEL Address: 30W001 Dean Ct WAYNE IL 60184	Phone: (630) 235 3454 Fax: (630) 231 1946 Email: mr.a.liquor@gmail.com
3. **Record Owner Information:**	Name: Please See ATTACHMENT Address:	Phone: Fax: Email:

Please check the type of application:

- ☐ **PUD Concept Plan:** Proposed Name: _____
- ☐ **Subdivision Concept Plan** Proposed Name: _____
- ☑ Other Concept Plan _____

Zoning and Use Information:

Current zoning of the property: B11

Is the property a designated Landmark or in a Historic District? NO

Current use of the property: LIQUOR STORE

Proposed zoning of the property: B11 PUD? NO

Proposed use of the property: LIQUOR STORE WITH DRIVE-THRU

Comprehensive Plan Designation: _____

Attachment Checklist

☐ **REIMBURSEMENT OF FEES AGREEMENT:**

An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.

☑ **REIMBURSEMENT OF FEES INITIAL DEPOSIT:**

Deposit of funds in escrow with the City. Required deposit is based on review items (number of applications filed) and the size of the site:

Number of Review Items	Under 5 Acres	5-15 Acres	16-75 Acres	Over 75 Acres
1	$1,000	$2,000	$3,000	$4,000
2 or 3	$2,000	$4,000	$5,000	$7,000
4 or more	$3,000	$5,000	$7,000	$10,000

☐ **PROOF OF OWNERSHIP and DISCLOSURE:**

a) a current title policy report; or
b) a deed and a current title search. Forthcoming from attorney

If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

NOTE: Private covenants and deed restrictions can limit private property rights with respect to the use of land even though the City's Zoning Ordinance may authorize the use or a less restrictive use. We strongly advise that

you perform a title search on the property to determine if there any private covenants containing use restrictions or other deed restrictions. As those private covenants and deed restrictions may conflict with the City's Zoning Ordinance, it is further recommended that you consult with an attorney to obtain an opinion with respect to whether your intended use is compatible with those restrictions.

☑ **LEGAL DESCRIPTION:** For entire subject property, on 8 ½ x 11 inch paper

☑ **PLAT OF SURVEY:**
A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

☑ **AERIAL PHOTOGRAPH:**
Aerial photograph of the site and surrounding property at a scale of not less than 1"=400', preferably at the same scale as the concept plan.

☑ **PLANS:**
All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions. A pdf document file or files of all plans shall be required with each submittal. The number of paper plans required shall be as determined by the Director of Community Development, based upon the number of copies needed for review.

Copies of Plans:

Initial Submittal - Ten (10) full size copies for non-residential projects OR Twelve (12) full size copies for residential projects; Three (3) 11" by 17"; and a PDF electronic file (On a CD-ROM or may be emailed to the Project Manager). For subsequent submittals, please contact the Project Manager to determine how many copies are required.

Concept Plans shall show:

1. Existing Features:
   - Name of project, north arrow, scale, date
   - Boundaries of property with approximate dimensions and acreage
   - Existing streets on and adjacent to the tract
   - Natural features including topography, high and low points, wooded areas, wetlands, other vegetative cover, streams, and drainage ways.
   - General utility locations or brief explanation providing information on existing sanitary sewer, storm sewer, water, and other utilities necessary to service the development.

2. Proposed Features:
   - Name of project, north arrow, scale, date
   - Boundaries of property with approximate dimensions and acreage
   - Site plan showing proposed buildings, pedestrian and vehicular circulation, proposed overall land use pattern, open space, parking, and other major features.
   - Architectural elevations showing building design, color and materials (if available)
   - General utility locations or brief explanation providing information on existing sanitary sewer, storm sewer, water, and other utilities necessary to service the development

☑ **SUMMARY OF DEVELOPMENT:**
Written information including:

- List of the proposed types and quantities of land use, number and types of residential units, building coverage, floor area for nonresidential uses and height of proposed buildings, in feet and number of stories.
- Statement of the planning objectives to be achieved and public purposes to be served by the development, including the rationale behind the assumptions and choices of the applicant
- List of anticipated exceptions or departures from zoning and subdivision requirements, if any

☐ **PARK AND SCHOOL LAND/CASH WORKSHEETS**

For residential developments, Park and School land/cash worksheets in accordance with Title 16 of the St. Charles Municipal Code with population projections establishing anticipated population and student yields.

☐ **INCLUSIONARY HOUSING SUMMARY:** For residential developments, submit information describing how the development will comply with the requirements of Title 19, "Inclusionary Housing" of the St. Charles Municipal Code.

☑ **LIST OF PROPERTY OWNERS WITHIN 250 FT.**

Fill out the attached form or submit on a separate sheet. The form or the list must be signed and notarized.

Forthcoming

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

Jerry Orciari — 10-6-20
Record Owner — Date

9/30/20
Applicant or Authorized Agent — Date

Project Description

- The objective of this project is to restore and improve the existing retail liquor sales establishment, provide safe interaction in this pandemic with a drive thru option and provide significant aesthetic improvements to the existing structure and surrounding greenspace.

OWNERSHIP DISCLOSURE FORM
FAMILY TRUST

State of Illinois)
) ss.
County of Cook)

I, William Matcalka Trustee, of 7434 N. Lincoln Avenue, Unit A, Skokie, Illinois, being first duly sworn on oath depose and say that I am one of the Trustees of the Acciari Family Trust. The Acciari Family Trust is the owner of that certain property commonly known as 1401 Prairie Street, St. Charles, Illinois (the "Property"). I have the authority to consent to Concept Plan Review Request to the City of St. Charles made by Mr. Ankur Patel as Purchaser of the Property.

By: William Matcalka
_____, as Trustee

Subscribed and sworn to before me this
8th day of October, 2020.

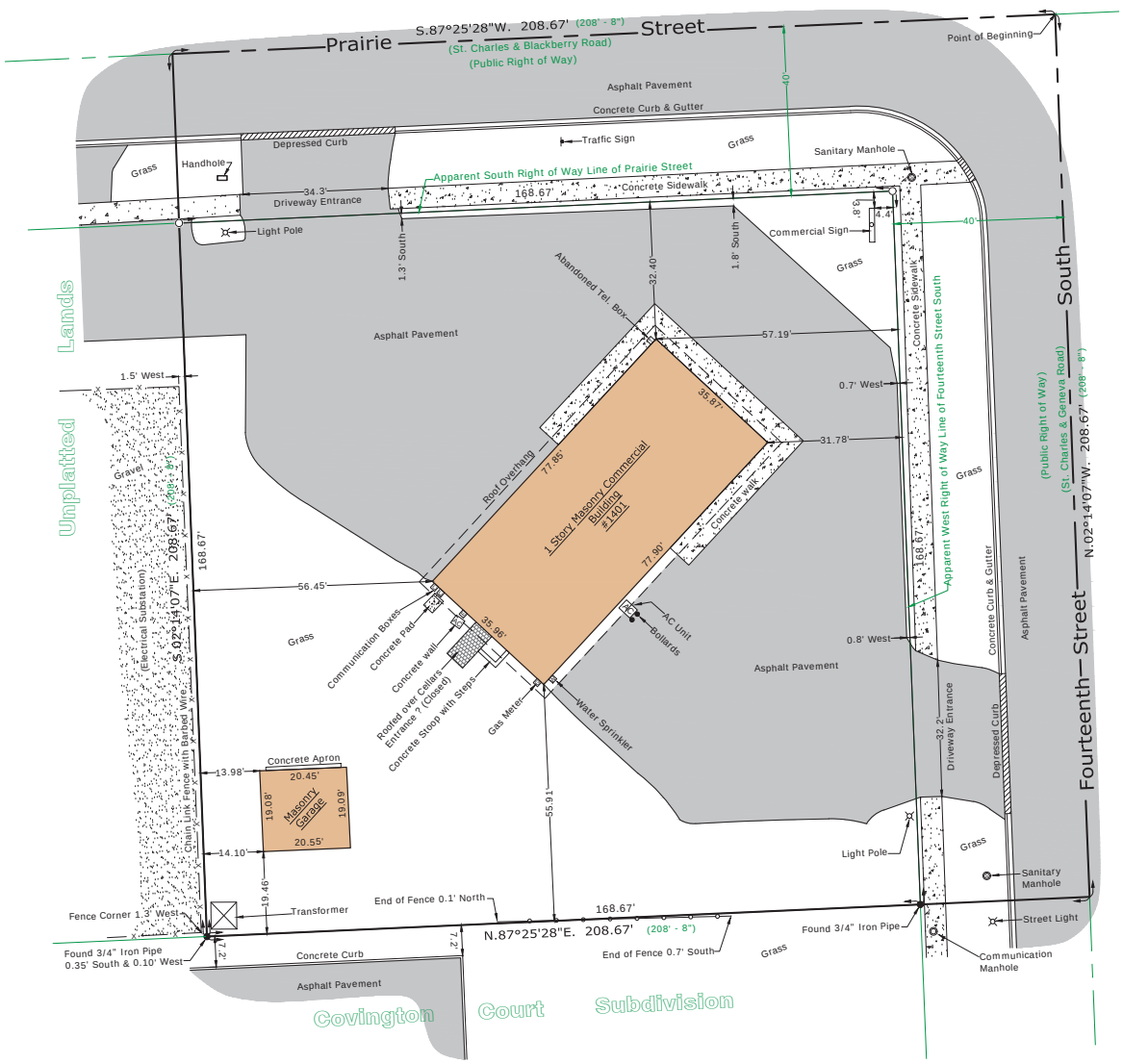
Alma D. Martinez
Notary Public

OFFICIAL SEAL
ALMA D. MARTINEZ
Notary Public - State of Illinois
My Commission Expires 1/02/2022

OWNER OF RECORD
CONTACT
JERRY ACCIARI
(847) 278-0277

WILLIAM MATSCHKE AS SUCCESSOR TRUSTEE UNDER THE NORMA ACCIARI DECLARATION OF TRUST DATED 4/21/93 AND WILLIAM MATSCHKE AS SUCCESSOR TRUSTEE UNDER THE LINO ACCIARI DECLARATION OF TRUST DAED 4/21/93 AND DORIS ACCIARI, AS TRUSTEE UNDER THE DORIS ACCIARI DECLARATION OF TRUST DATED 04/21/1993 and DORIS ACCIARI AS SUCCESSOR TRUSTEE UNDER THE LIDO ACCIARI DECLARATION OF TRUST DATED 4/21/93.

ALTA/NSPS LAND TITLE SURVEY



SCALE : 1" = 20'

0' 10' 20' 40'

BEARINGS SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE, EAST ZONE, NAD83 (2011)

SCHEDULE B, PART II EXCEPTIONS
Chicago Title Insurance Company,
Commitment No. 20GNW693052PK,
Commitment Date: September 21, 2020.

Items 1 to 7 are standard exceptions, and A 8, B 9, E 10, F 11, C 12, D 13, G 14, M 15, H 16, I 17, J 18, K 19 and L 20 are not a matter of survey.

PARKING NOTE:
(Painted Parking Spaces)

No Marked Parking Space.

LEGAL DESCRIPTION

THAT PART OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 40 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE CENTER LINE OF THE ST. CHARLES AND GENEVA ROAD WITH THE CENTER LINE OF THE OLD ST. CHARLES AND BLACKBERRY ROAD; THENCE WESTERLY ALONG THE CENTER LINE OF THE OLD ST. CHARLES AND BLACKBERRY ROAD 208 FEET AND 8 INCHES; THENCE SOUTHERLY PARALLEL WITH THE CENTER LINE OF THE ST. CHARLES AND GENEVA ROAD 208 FEET AND 8 INCHES; THENCE EASTERLY PARALLEL WITH THE CENTER LINE OF THE OLD ST. CHARLES AND BLACKBERRY ROAD 208 FEET AND 8 INCHES TO THE CENTER LINE OF ST. CHARLES AND GENEVA ROAD; THENCE NORTHERLY ALONG THE CENTER LINE OF SAID ROAD TO THE POINT OF BEGINNING; IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

SURVEYOR'S NOTES

EASEMENTS AND SETBACKS SHOWN HEREON ARE BASED UPON THE RECORDED SUBDIVISION PLAT, UNLESS NOTED OTHERWISE.

ALL BUILDING TIES ARE TO THE BRICK CORNERS.

THE PERMANENT PARCEL INDEX NUMBER FOR THE PROPERTY DESCRIBED HEREON IS 09-33-329-001.

THE PROPERTY DESCRIBED HEREON CONTAINS:
43,542 SQ. FEET OR 0.999 ACRES, MORE OR LESS.
28,449 SQ. FT. OR 0.653 ACRES, EXCLUSIVE OF ROADWAY, MORE OR LESS.

PROPERTY COMMONLY KNOWN AS: 1401 PRAIRIE STREET, ST. CHARLES, IL 60174

THE FLOOD INSURANCE RATE MAP SHOWS THAT THE PROPERTY DESCRIBED HEREON IS FALLING WITHIN ZONE "X", ACCORDING TO THE COMMUNITY PANEL NUMBER 170330 0264 H, CITY OF ST. CHARLES, MAP NUMBER 17089C0264H, KANE COUNTY, ILLINOIS AND INCORPORATED AREAS, EFFECTIVE DATE OF AUGUST 3, 2009. ZONE "X" IS AREAS OF MINIMAL FLOOD HAZARD.

EASEMENTS AND SERVITUDES SHOWN HEREON ARE BASED UPON A TITLE COMMITMENT ISSUED BY CHICAGO TITLE INSURANCE COMPANY, AND IDENTIFIED AS COMMITMENT NO. 20GNW693052PK WITH COMMITMENT DATE OF SEPTEMBER 21, 2020.

PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA/NSPS, AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT PROPER FIELD PROCEDURES, INSTRUMENTATION AND ADEQUATE SURVEY PERSONNEL WERE EMPLOYED IN ORDER TO ACHIEVE RESULTS COMPARABLE TO THOSE OUTLINED IN THE "MINIMUM ANGLE, DISTANCE AND CLOSURE REQUIREMENTS FOR SURVEY MEASUREMENTS WHICH CONTROL LAND BOUNDARIES FOR ALTA/NSPS LAND TITLE SURVEYS."

ITEMS 6(a) and 6(b) OF TABLE A:
THE ZONING SETBACK REQUIREMENTS REPORT OR LETTER WERE NOT PROVIDED TO THE SURVEYOR BY THE CLIENT AT THIS TIME.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS }
COUNTY OF KANE } S.S.

To: Shiv Ankur, Inc. and Minal Patel
GRN BANK, its successors and/or assigns as their respective interests may appear, and Chicago 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 2016 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), 6(b), 7a(1), 8, 9, AND 11 (Observable evidence only) OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 10/07/2020.

DATED AT BATAVIA, ILLINOIS ON THIS 14TH DAY OF OCTOBER, A.D., 2020.

Shawn R. Van Kampen

SHAWN R. VanKAMPEN
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-2710
LICENSE EXPIRES 11/30/2020

SHAWN R. VanKAMPEN STATE OF ILLINOIS NO. 035-002710 BATAVIA PROFESSIONAL LAND SURVEYOR

PREPARED FOR:

Di Silvestro & Associates
5231 N Harlem Avenue
Chicago, IL 60656

NO.	DATE	REVISION
1.	10/07/2020	FIELD SURVEY COMPLETED
2.	10/14/2020	FINAL SURVEY COMPLETED

SITE DESIGNATION INFORMATION:

1401 PRAIRIE STREET
ST. CHARLES, IL 60174

DRAWN BY: PS | CHECKED BY: SVK

PROJECT NO.
674164

SHEET NUMBER
ALTA

LOCATION MAP

NOT TO SCALE

LEGEND

Manhole	Found Iron Stake as Indicated
Catch Basin	Set 3/4" Iron pipe
Light Pole	xxx.xx' Measured
— x — Center Line of Chain Link Fence	(xxx.xx') Record / Deed
Center Line of Wood Fence	Boundary Line
Air Condition Unit	Lot Line
Communication Box	Building
Electrical Meter	Asphalt
Gas Meter	Concrete
	Gravel

PREPARED BY:

ASM Consultants, Inc.
16 E Wilson St, Batavia IL 60510
Tel (630) 879-0200 Fax (630) 454-3774
advanced@advct.com
Professional Design Firm #184-006014 expires 4/30/2021

ADVANCED SURVEYING & MAPPING Since 1984 Putting the Pieces Together

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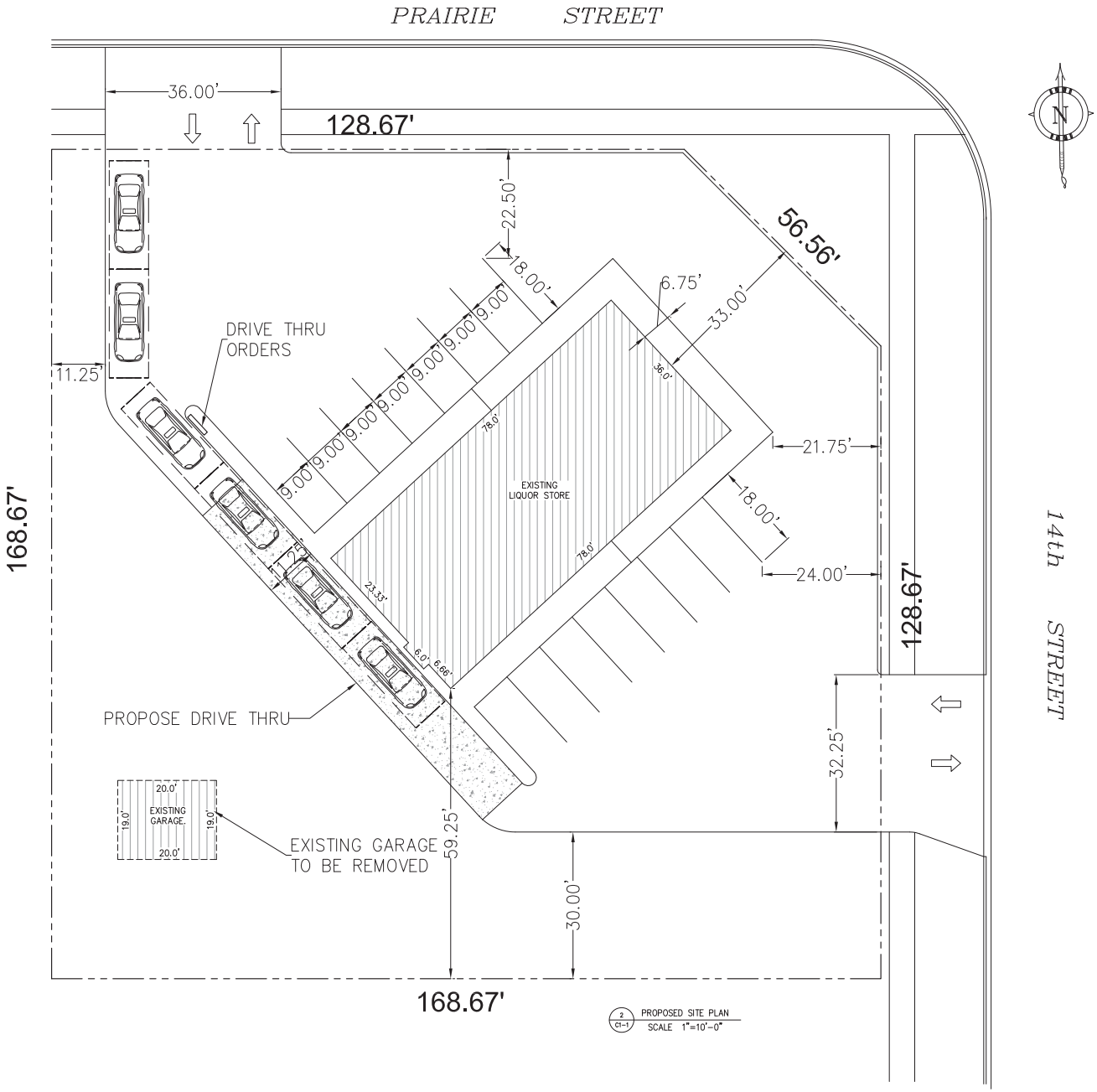


2 C1-1 PROPOSED SITE PLAN
SCALE 1"=10'-0"

HAROLD BERON
ARCHITECTS, PLANNERS & DESIGNERS
150 WEST WASHINGTON ST.
WEST CHICAGO IL 60185
TEL. (630) 473-0581
FAX. (630) 708-0581
HAROLD@BERONDESIGNGROUP.COM

MR AS PRAIRIE LIQUOR DRIVE THRU
1401 PRAIRIE STREET
ST CHARLES, ILLINOIS 60174

NO.	REVISIONS	DATE
1	PER OWNER REVIEW	03/24/2020

DSGN. HB CHKD. HB
DWN. HB
SCALE: AS SHOWN
SHEET TITLE : PROPOSED SITE PLAN

PROJECT NO. 4064
DATE 09/08/2020
SHEET NO. C1-1

11-30-2020
DATE
STATE OF ILLINOIS
REGISTERED
LICENSED ARCHITECT

DESIGN FIRM LICENSE
No.184.007748-0001

I HEREBY CERTIFY THAT THIS PLANS WERE PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLY WITH THE CITY OF ST. CHARLES BUILDING CODE AND ORDINANCES.

From: Virginia Novak <gin.novak@yahoo.com>
Sent: Saturday, October 31, 2020 11:19 AM
To: CD <cd@stcharlesil.gov>
Subject: 1401 Prairie St.- Mr. A's Prairie Drive-Thru

We have concerns about added crime and traffic in the area. This proposed drive thru liquor store would be an additional burden on our police force and the all ready high volume traffic on Prairie Street. We are residents of this neighborhood for 32 years. We have seen a lot of negative impact on the neighborhood.

Mitch & Ginny Novak
529 S.14th Street
St. Charles, IL 60174

From: Ginny <gin.novak@yahoo.com>
Sent: Monday, November 2, 2020 12:39 PM
To: Sanchez, Christine <csanchez@stcharlesil.gov>

Subject: Re: 1401 Prairie St.- Mr. A's Prairie Drive-Thru

One more thing. Last night while sitting in our daughters bedroom I noticed the very large bright white LIQOUR & WINE sign..... sad and upsetting!

Sincerely,

Ginny Novak

	AGENDA ITEM EXECUTIVE SUMMARY	Agenda Item Number: 4b
CITY OF ST. CHARLES ILLINOIS • 1834	**Title:**	Consideration of a request for City support to amend an Intergovernmental Agreement (IGA) with Kane County regarding Randall Road
	Presenter:	Russell Colby

Meeting: Planning & Development Committee **Date**: November 9, 2020

Proposed Cost: $	Budgeted Amount: $	Not Budgeted: ☐

Executive Summary (*if not budgeted please explain*)**:**

Background

Randall Road is a County Highway under the jurisdiction of the Kane County Department of Transportation (KDOT). Kane County/KDOT regulates and permits all access to the roadway, including streets and driveways.

In 2006, the City entered into an Intergovernmental Agreement (IGA) with Kane County regarding access and improvements to Randall Road between Main St./Rt. 64 and Dean Street. The IGA was entered into at the time KDOT was reconstructing and widening this portion of Randall Road.

The agreement identified the removal and/or consolidation of Randall Road driveway access points along the corridor. In lieu of direct access from properties to Randall Road, plans identified a network of private and public access drives to connect to a future signalized intersection with Woodward Drive. The western leg of this intersection is planned for construction in 2021 with the Audi Exchange project.

Subject Property- NW Corner of Randall & Main St.

Among the closed access points was a driveway that served the vacant property at the northwest corner of Randall and Main (previously a Long John Silver's restaurant). This property, which is owned in common with adjacent parcels totaling 1.8 acres, has remained vacant since the roadway widening in 2006. Potential developers have cited the lack of direct Randall Road access as a deterrent to development.

Per the IGA, the property is to have indirect access to Randall Road through the Mercedes and Audi developments to the north, to reach Woodward Drive. Cross access easements are in place.

The subject property is owned by Semersky Enterprises, developer of the Audi Exchange and owner of other adjacent development parcels to the north and west. Semersky is under contract with a developer of a Thornton's Gas Station that would like to construct a new facility at the site. Semersky has indicated that the project will not move forward without a direct access to Randall Road, preferably a right-in/right-out access. The City has made Semersky aware of the requirements of the IGA.

Traffic Study

Semersky provided a traffic study for the Thornton's Gas Station, including the requested Randall Road right-in/out access. The study concluded that this access should be provided "to ensure that adequate and flexible access is provided" for the development's "long-term viability." The City's traffic engineer, HLR, reviewed the study and concurred with the findings, but noted a "minor safety and operational concern" due to proximity to the Main St. intersection and conflict with the high traffic volume of the southbound right-turn lane.

KDOT staff disagreed with the traffic study's assertion that the proposed access is consistent with existing access drives in the area and suggested that given the access needs, the proposed land use may not be advisable for this location. City staff hosted a teleconference with KDOT staff to review the information. The conclusion of the teleconference was that the proposed access did not comply the County's highway access standards and past practice with similar situations, and therefore KDOT staff could not support the proposal.

Continued on next page

<u>Request for City Council support</u>
In order to allow the access, the IGA would need to be amended, requiring approval by both the City Council and Kane County Board. Semersky is seeking support from the City Council for amending the IGA to allow a Randall Road access point for the lot. City Council support would provide a basis for the developer to continue discussions with Kane County regarding the access.

City staff has no objection to the concept but recognizes that any access needs to be designed in a manner that will not negatively impact traffic safety nor conflict with circulation at the Randall/Main St. intersection.

Attachments (*please list*)**:**

- Information submitted in support of the Thornton's proposal
- KDOT review of Semersky Traffic Study, 8/14/2020
- Semersky Traffic Study, prepared by KLOA, 8/4/2020 (excluding appendices)
- Intergovernmental Agreement with Kane County (2006)

Recommendation/Suggested Action (*briefly explain*)**:**

Review and provide a recommendation regarding City support to amend an Intergovernmental Agreement (IGA) with Kane County regarding Randall Road. Subject to a positive recommendation, staff will present a resolution for City Council action.

July 6, 2020

The Honorable Mayor Raymond Rogina
& City Council Members of St. Charles
City of St. Charles
2 East Main Street
St. Charles, IL 60174

Re: Project Introduction to Proposed Thorntons Project to be located on +/- 1.79 Acre Site @ NWC of Randall & Main in St. Charles, IL

Dear Mayor Rogina and Council Members:

We are pleased to present to you an introduction to our proposed Thorntons gas station development project at the northwest corner of W. Main Street and N. Randall Road.

As you may be aware, our company is the contract purchaser of the above-captioned property on behalf of Thorntons. GMX will purchase the site from Mr. Semersky and oversee the development of the Thorntons gas station and convenience store. We will enter into a long-term lease with Thornton's to operate the facility. GMX is a commercial development firm that has been in business for sixteen (16) years and we are currently working on and have closed several deals with Thorntons in the Chicagoland metropolitan area.

The enclosed preliminary site plan illustrates that Thorntons will occupy the entire 1.79 acre site. The site plan includes ten (10) gas pumps and a +/- 4,400 square-foot convenience store with safe internal circulation between the gas pumps and convenience store. There are an ample twenty-seven (27) parking stalls on the site plan for customer parking. Direct access to the site is proposed through a right-in/right-out curb cut to be located along N. Randall Road at the north end of the site and utilization of the existing right-in/right-out and left-in along Main Street. The Main Street access would be consistent with the current curb cut configuration and shared with the AT&T property at 2300 W. Main Street. The development is also accessed via the to-be-extended Woodward Drive by a cross-access easement west of the Audi Exchange and Mercedes Benz dealerships. Key to the Thorntons development proceeding is direct access to and from N. Randall Road and maintaining the existing three-quarter access on Main Street.

GMX Real Estate Group, LLC
3000 Dundee Road * Suite 408 * Northbrook, Illinois 60062
W: 847.680.8600 * F: 847.480.0033

The St. Charles project has received Thorntons' executive committee approval to proceed, provided the proposed access is granted. Our goal would is to break ground in Spring, 2021 and open this project in Spring, 2022 , subject to receipt of all of the required governmental approvals and permits.

Here is some preliminary background information regarding Thorntons and its operations, including:

- Privately-held company with headquarters in Louisville, Kentucky;
- Long-standing history in the gas and oil industry built over 47 years;
- Brand leader with high quality image and product offerings;
- Recently purchased by a venture between ArcLight Capital Partners and BP;
- New venture gives Thorntons access to an even stronger balance sheet;
- Prides itself and dedicated to "Excellent Customer Service";
- Convenience store with wide array of quality offerings and products;
- Successful "Refreshing Rewards" program for loyal customers;
- Strong history of retail team members having long and meaningful careers;
- Currently located in six U.S. states;
- Over 200 retail outlets located around the country;
- Over 70 retail outlets located throughout Chicagoland;
- Long-standing history of successful Chicagoland gas units with no store closings;
- Eco fuel variety leader utilizing sophisticated tank monitoring;
- Annual company revenues exceed $2.3BB;
- The St. Charles store's estimated sales are projected at +/- $15 million per year, including approximately the sale of 4,560,000 gallons of fuel per year
- There is an ability to increase these sales if diesel fuel is sold;
- Estimated 25 full-time employees per location;
- Estimated 375 construction workers for this project;
- Safe and well-lit 24-hour operation;
- Daylight harvesting and LED lighting;
- No truck parking allowed during overnight hours of operation;
- Architecturally-handsome building design (see examples below);
- Attractive landscaped site and well-manicured lawns;
- Well maintained stores and fuel centers with around-the-clock store managers;

- Self-contained trash corrals with regularly scheduled trash pick-ups;
- Work closely with neighborhood police and fire departments;
- *Often first to open after natural disasters and provide emergency supplies;*
- *Mindful and respectful of local community needs and ordinances; and,*
- *Good community neighbor involved in local fund raising/charity efforts.*

We believe the development of this long vacant and non-productive site will be an important addition to the St. Charles community in terms of services delivered, employment and significant sales tax, fuel tax and property tax contributions to the City of St. Charles and to Kane County.

GMX has developed over 4.0 million square feet of successfully commercial projects throughout the country. Our company has deep tenant relationships in the retail, restaurant and gas sectors. Please find the enclosed company brochure for more information on the company, which can also be viewed at www.gmxre.com.

We look forward to becoming a contributing member of the St. Charles community. Thank you for your consideration regarding our project. We look forward to working with you, your colleagues and your staff.

Best Regards,

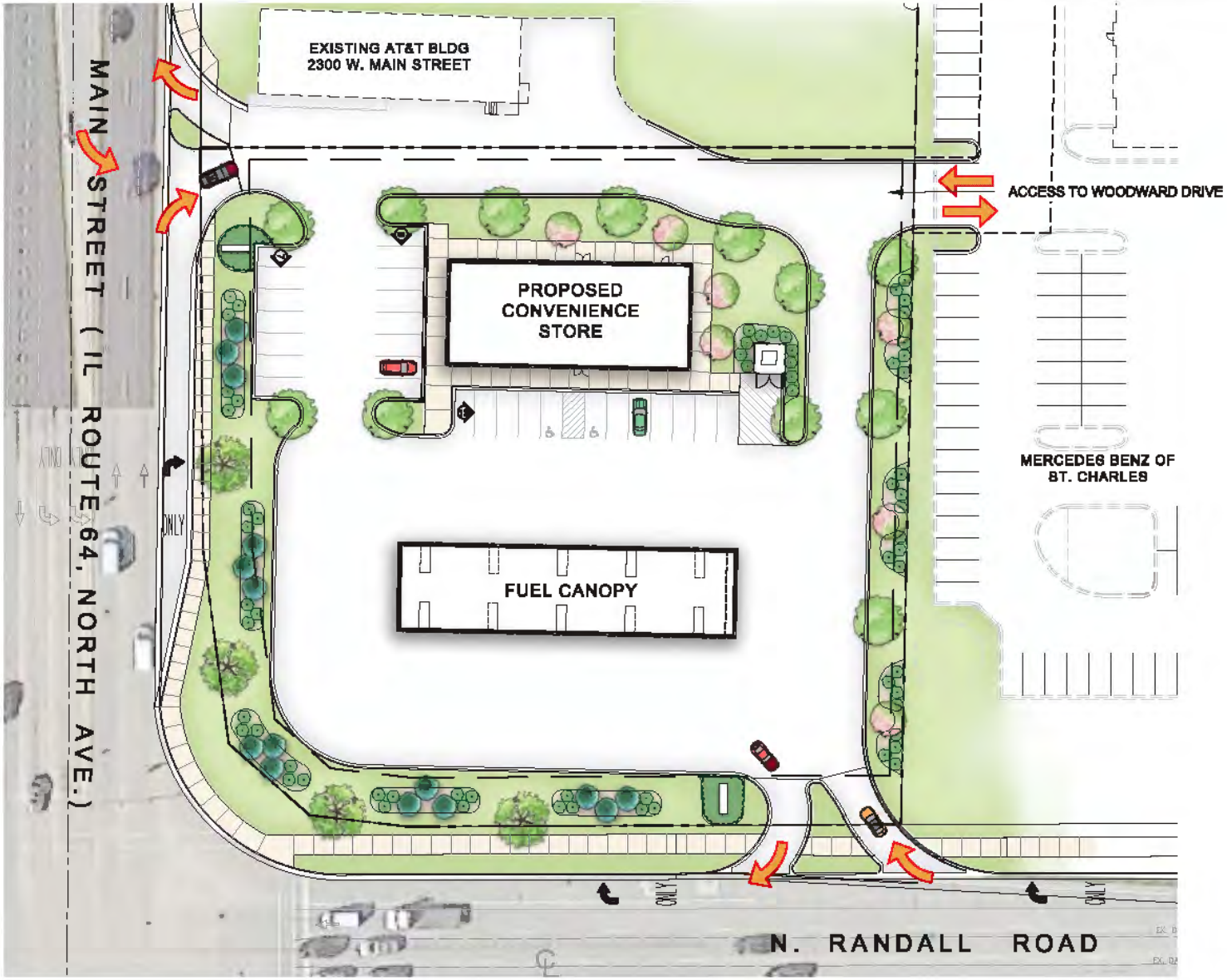
_____

Andrew S. Goodman
Co-Manager, GMX Real Estate Group, LLC

Enclosures

- Preliminary Site Plan
- Overall Development Plan
- Sample Pictures of Completed Thorntons Project
- GMX Real Estate Group Brochure

cc: Mike Krasucki, Thorntons
Dennis Somers, Thorntons
Paul Wilson, Thorntons
Jack Frigo, Frigo & Company
Austin Vanderstappen, Colliers
Kevin Mottlowitz, GMXRE
Paul Takacs, GMXRE



ILLUSTRATIVE CONCEPT SITE PLAN

THORNTON'S GAS STATION AND CONVENIENCE STORE

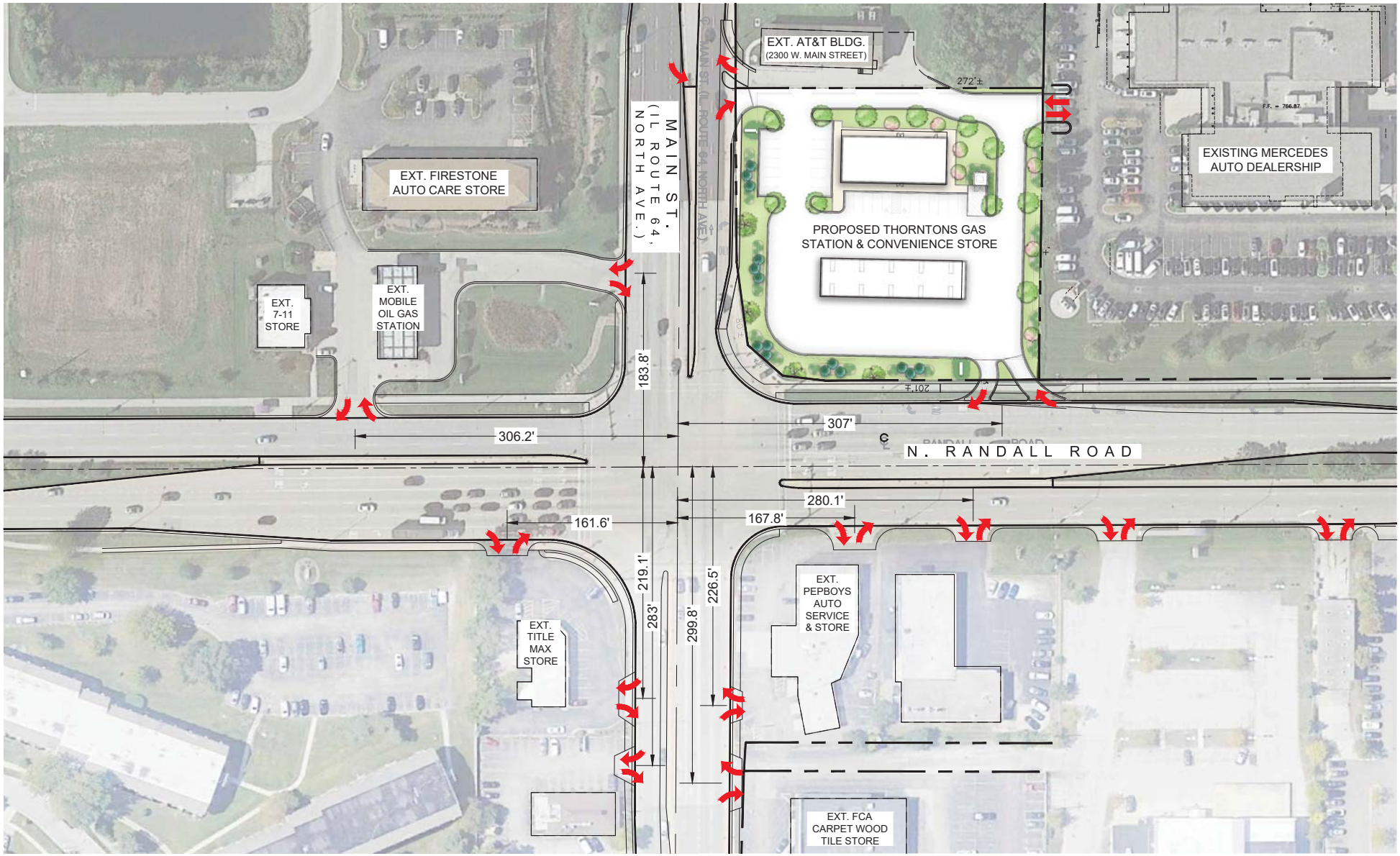
St. Charles, Illinois

10' 0' 20' 40'

N

October 29, 2020

teska



INTERSECTION EXHIBIT

THORNTON'S GAS STATION AND CONVENIENCE STORE

St. Charles, Illinois

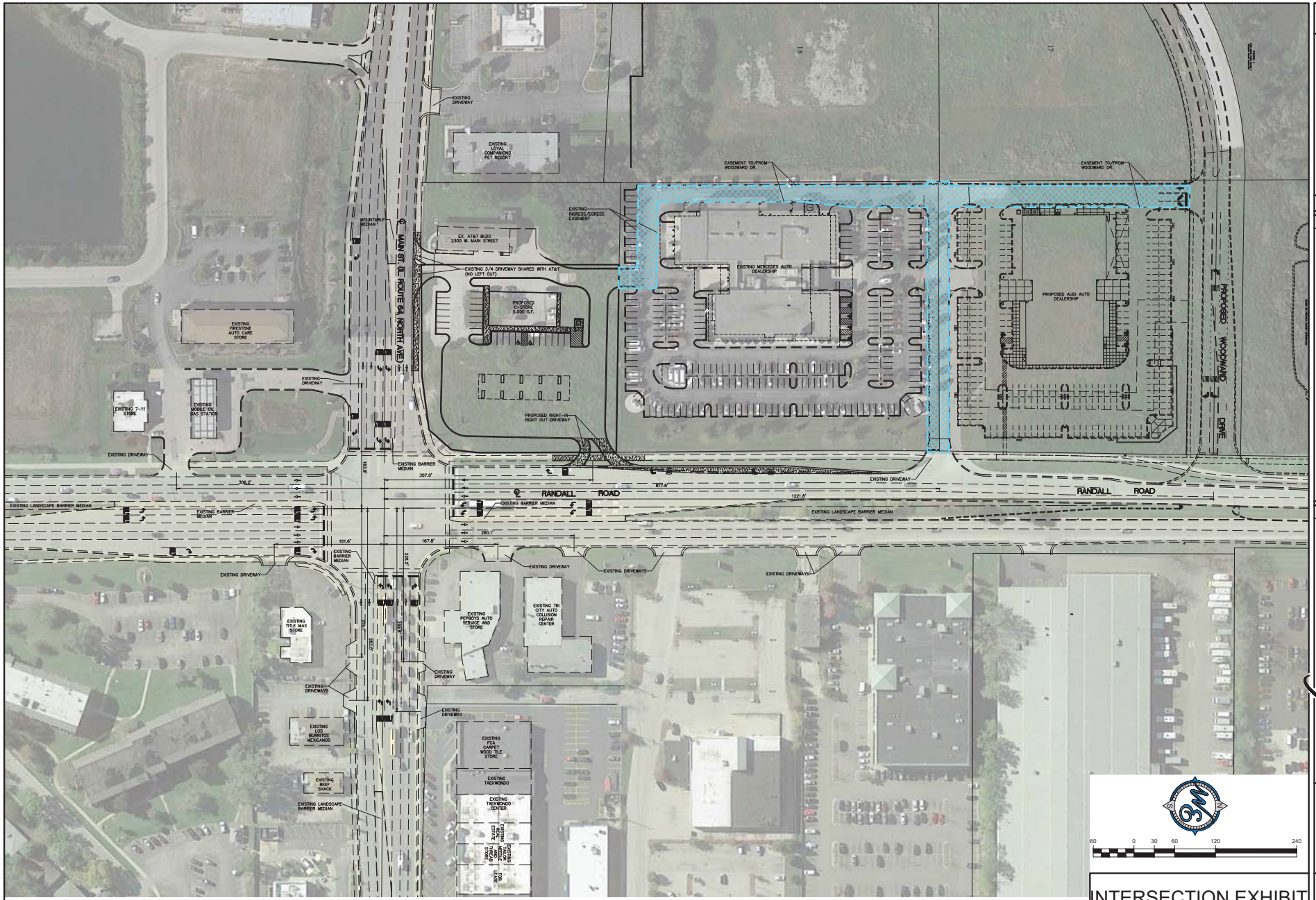
20' 0' 40' 80'

N

October 29, 2020

teska

627 Grove Street, Evanston, Illinois 60201
Tel 847.869.2015 Fax 847.869.2059



INTERSECTION EXHIBIT

NO.	REVISIONS	DATE

Prepared For:

SEMERSKY ENTERPRISES, INC.
St. Charles, IL

FUEL CENTER DEVELOPMENT
Northwest Corner of Main Street and Randall Road
St. Charles, Illinois

Prepared By:

WaterMark Engineering Resources

watermark-engineering.com | 2631 Ginger Woods Pkwy | Aurora, IL 60502 | (630) 375-1800

CHECKED BY: J. MILLER
DESIGN BY: J. MILLER
DRAWN BY: K. SACK
DATE: JUNE 29, 2020
SCALE: 1" = 60'
PROJECT NO.: 15-048

2 of 2

INTERSECTION EXHIBIT

J:\dwgs\15jobs\15048\2020-06-29_15048_Intersection Exhibit.dwg, 15048

TO: Jack Frigo, Frigo & Company
FROM: Lee Brown, FAICP, President, Teska Associates, Inc.
Carol Brobeck, Associate, Teska Associates, Inc.
DATE: August 19, 2020
RE: Projected Sales Tax Revenue for 2202-2222 W. Main St in St. Charles, IL

In response to your request for estimated impact of proposed development in St. Charles, this memo summarizes our evaluation regarding the subject site, located at 2202-2222 W. Main Street, across five parcels, which would be redeveloped as a Thorntons gas station and convenience store.

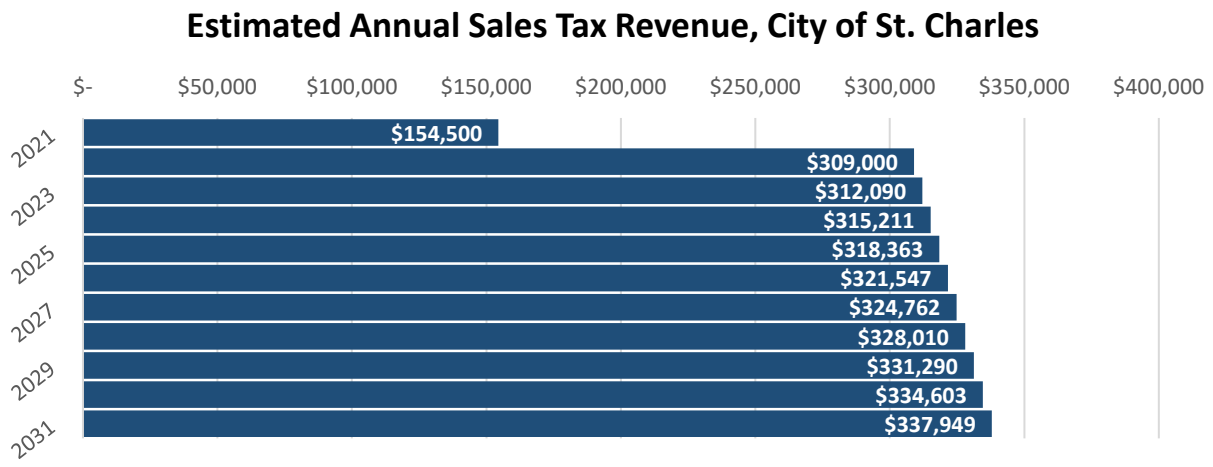
The development of this site is anticipated to increase property tax revenues and establish new sales tax revenues for both the City of St. Charles and Kane County.

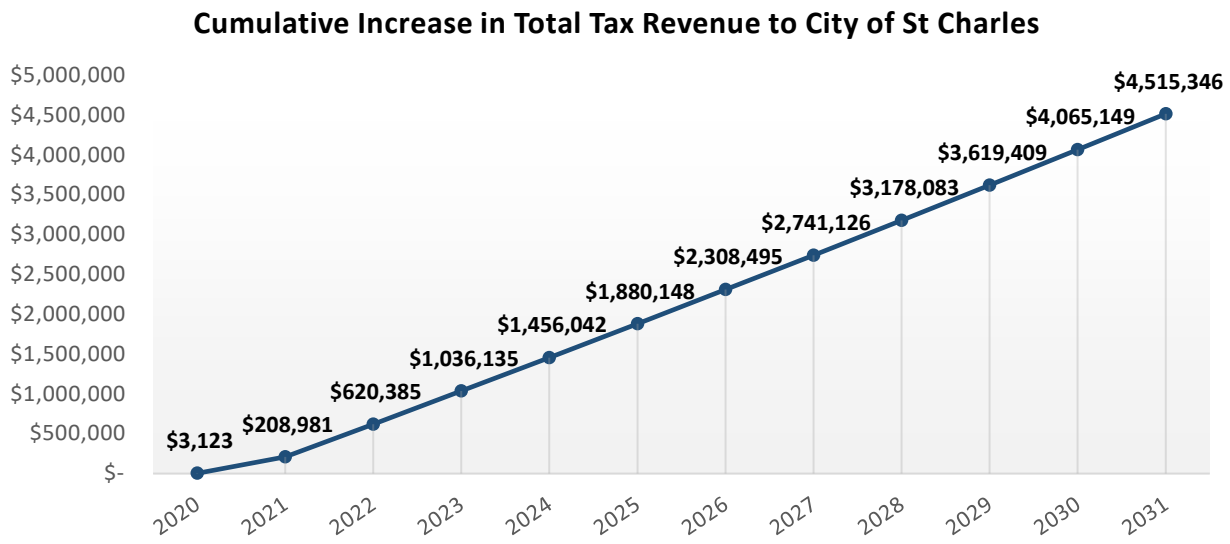
The City of St. Charles is estimated to see the following increases in annual revenues resulting from the proposed Thorntons development:

- **$8,082** in annual property tax revenues (total of $11,205 collected in property tax)
- **$309,000** in annual sales tax revenues
- **$91,200** in annual local motor fuel tax revenue

Overview of Total Estimated Annual Revenues resulting from the proposed Thorntons:

Revenue Source	City of St Charles	Kane County
Property Tax	$11,205	$5,060
Sales Tax	$309,000	$37,500
Local Motor Fuel Tax (MFT)	$91,200	$186,960
TOTAL	**$411,405**	**$229,520**





Methodology

Projected estimates are based on currently published taxation rates applicable to the development site and respective business activities, including the sale of gasoline, alcoholic beverages and general merchandise.

Property tax revenue for the development site is estimated based on the assessed valuations of property (building and land) of comparable gas station/convenience properties on adjacent and nearby sites. Estimated property taxes on the sites are based on 2019 (payable in 2020) tax rates and the 2019 Kane County equalizer.

Anticipated sales revenues for fuel and convenience goods were provided by Semersky and Thornton's. The Thornton's development is anticipated to see annual taxable fuel sales of **$12,000,000** and annual retail sales of **$3,000,000**.

Anticipated gallons of fuel (gasoline only) are estimated to total **4,560,000 gallons**, or 380,000 monthly. Motor fuel tax (MFT) revenues are based on that estimate. A representative of Thornton's indicated that these figures were comparable to existing (2019) sales at other Thornton's facilities.

Future projections of property tax revenue and sales tax revenue use a modest 1% appreciation in values.

Property Tax Revenue

The proposed Thornton's development is comprised of five parcels, covering approximately 1.84 acres:

09-29-400-044, 09-29-400-074, 09-29-400-083, 09-29-400-084, 09-29-400-098

The development anticipated a +/- 4,400 convenience store building with multiple gasoline pumps under a canopy for automobiles and light trucks. The total combined estimated 2020 EAV for the five Thornton's parcels is $377,196, yielding approximately $30,209 in annual property taxes. The previous land use on the site appears to have been a fast food restaurant, though it is not currently in operation. The location at the intersection of N Randall Rd and W Main St is prominent due to significant visibility along major roadways.

Anticipated Property Value Increase, annual			
Assessed Value	$373,406	$1,367,058	$993,652
Equalized Assessed Value	$377,196	$1,353,323	$976,127

Comparables

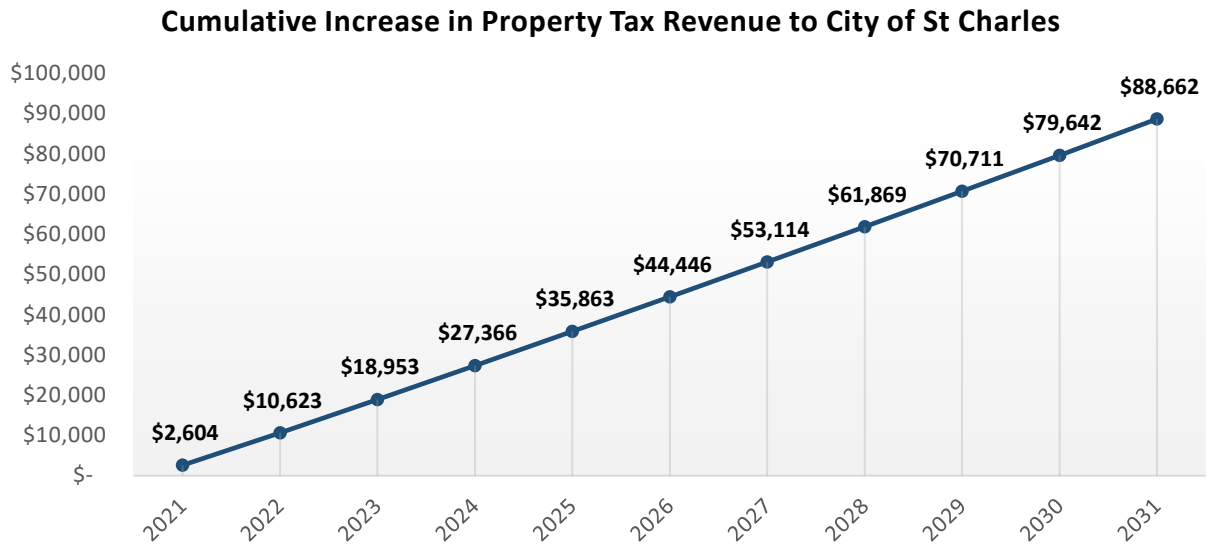
Directly south, across Main St is a 7-11 gas station and convenience store (1.21-acre site on 3 parcels). Total combined 2020 EAV is $372,190, yielding an expected property tax of $37,705. Estimated tax revenue per building square foot is $12.34 (land is $0.76/sf).

This comparable location, along with other fuel/convenience store locations within Kane County were used as the basis for estimating property assessments for Thornton's after buildout.

Property Valuation

We anticipate that the Thorntons will be very comparable in value to the adjacent 7-11; therefore, we estimate that the parcel will see a 73% increase in total property tax upon buildout and occupancy, yielding approximately **$115,114** total in property taxes upon build out. The property is expected to open in August 2021, therefore the earliest tax year which would see the full increase in property tax would be 2022. The City of St. Charles' tax rate is 0.83%, and the portion of property tax that will go to the City is expected to increase from 3,123 to **$11,548** in 2022.

Property Valuation of Thorntons		
	2020 (pre-development)	**2022 (100% assessment)**
Property Tax Revenue	$30,209	$115,114
City of St. Charles (0.83%)	$3,123	$11,548
Kane County (0.37%)	$1,410	$5,215



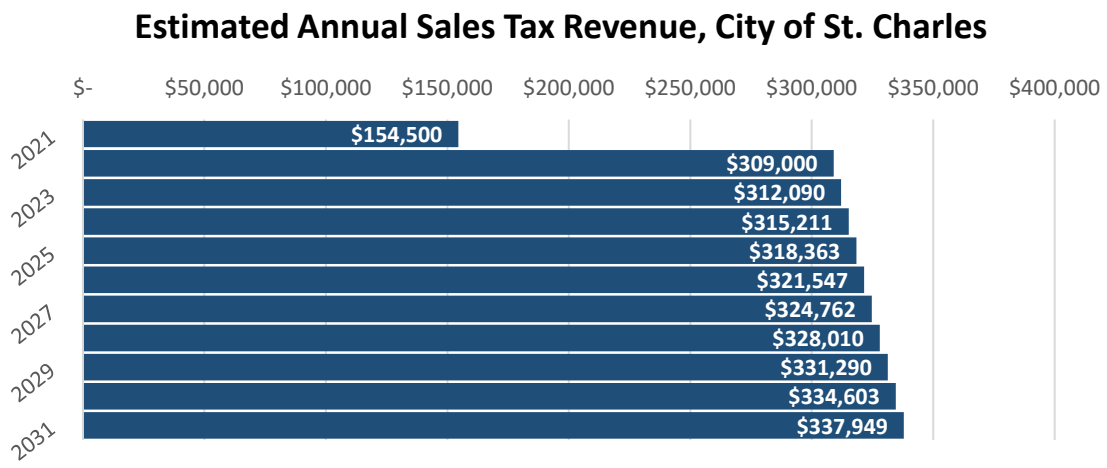
All taxing districts will benefit from the increase in property tax revenue from the Audi development. School District 303, the largest taxing district, is anticipated to see an additional $51,871 in property tax revenue upon build out.

Taxing Body	**Rate**	**2020 Tax Bill**	***Est. 2022 Tax Bill***
St Charles School District #303	5.31%	$20,044	$71,915
City of St Charles	0.83%	$3,123	$11,205
St Charles Park District	0.63%	$2,368	$8,495
Elgin College 509	0.49%	$1,835	$6,584
Kane County	0.37%	$1,410	$5,060
St Charles Library	0.32%	$1,201	$4,310
Kan Forest Preserve	0.15%	$584	$2,096
St Charles Township Road District	0.09%	$341	$1,225
St Charles Township	0.04%	$165	$591
St Charles Cemetery	0.02%	$60	$215

Sales Tax Revenue

The Thorntons gas station and convenience store will bring increased sales tax revenues for the City of St Charles and Kane County, applicable to gasoline, alcoholic beverages and retail sales. Total sales tax is 8.00%, split between the City of St. Charles' Home Rule Tax (1%), RTA tax (0.25%), and State of Illinois sales tax (6.25%). The City of St. Charles also has a 3.00% Alcohol Beverage Tax. The State sales tax remits 1% to the City and 0.25% to the county where the sale occurred.

Sales Tax Rates	
City of St Charles – Home Rule	1.00%
RTA	0.75%
State of Illinois	5.00%
Remitted to St. Charles from state receipts	1.00%
Remitted to Kane County from state receipts	0.25%
TOTAL	**8.00%**
City of St. Charles – Alcohol Beverage Sales Tax	3.00%



The Thornton's is anticipated to generate:

- total annual sales of **$15,000,000**
- total annual fuel sales of **$12,000,000**
- total annual retail sales of **$3,000,000**

The City of St. Charles is expected to see a total of **$309,000** in sales tax revenues from Thornton's fuel and retail sales. Kane County is anticipated to receive **$37,500** is sales tax revenues from fuel and retail sales.

TOTAL SALES TAX REVENUE, annual		
	City of St Charles 2% of Sales	**Kane County 0.25% of Sales**
Thorntons	$309,000	$37,500

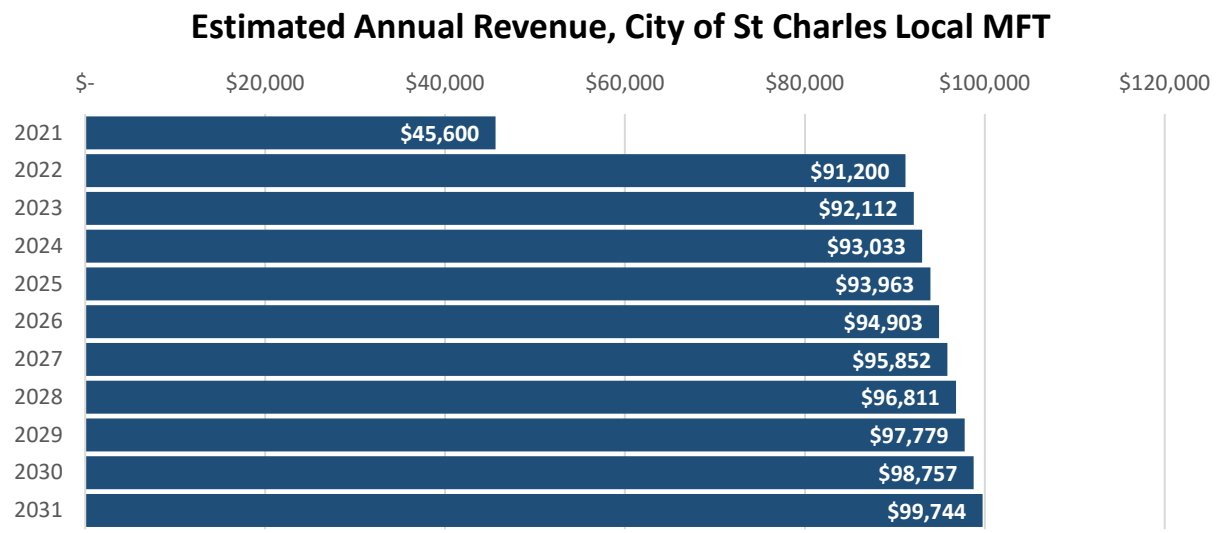
Motor Fuel Tax Revenue

Gasoline and diesel sales are also subject to motor fuel taxes (MFT) in addition to sales taxes. The City of St. Charles levies a municipal fuel tax of $0.02 per gallon. Kane County also levies an MFT of $0.041

per gallon. In addition, the State of Illinois MFT during the period of July 1, 2020 through June 30, 2021, is $0.39 per gallon of gasoline sold. The MFT for diesel (during the same period) is $0.46.

The Thornton's development is anticipated to see total annual fuel sales (gasoline only) of **$12,000,000** (4,560,000 gallons of fuel annually). **This estimate would result in approximately $91,200 in revenue for the City of St Charles and $186,960 to Kane County.** No rebate of these receipts is proposed.

	St Charles	Kane County	State*
Annual Revenue	$91,200	$186,960	$1,764,720
MFT	$0.02	$0.41	$0.39



State of Illinois Motor Fuel Tax:

As part of the Rebuild Illinois infrastructure plan, the State MFT increased the MFT in 2019 and it is expected to increase by $0.01 per year. Some of the MFT is ultimately directed back to municipalities and counties. The State remits revenues to counties based on the percentage of vehicles registered. Additionally, township and road districts also receive a remittance of the state MFT, based on the percentage of roadways in the state. Additional MFT revenue is also remitted by the state to municipalities on a per capita basis, estimated at $12.80 per resident. The construction and operation of an additional gas station/convenience store does not increase the total sales of gasoline within the State of Illinois. Therefore, the development of the Thornton's would not increase the total MFT collected by the State, nor remitted to the City of St. Charles or Kane County.

KANE COUNTY
DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer

41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1171
Fax: (630) 584-5239
www.co.kane.il.us/dot

August 14, 2020

Mr. Luay Aboona
KLOA, Inc.
9575 West Higgins Road, Suite 400
Rosemont, IL 60018

RE: Proposed Fuel Center (GMX/Thorntons)
Randall Road & IL Route 64 (NW Quadrant)
Traffic Impact Study Review

Dear Luay:

Staff from the Kane County Division of Transportation (KDOT) has reviewed the Traffic Impact Study (dated 07-01-2020, revised 08-04-2020), prepared by KLOA, Inc. We offer the following comments, primarily focused on the proposed Randall RI/RO access:

1. Randall Road is a limited access freeway, KDOT staff cannot approve any access to Randall Road without prior County Board approval and the County Board has previously denied an access at this location for various development proposals. The proposed right-in/right-out (RI/RO) access to Randall Road in not consistent with the 10-17-2006 Intergovernmental Agreement (IGA) between Kane County and the City of St. Charles. The IGA does not provide for any direct access to Randall Road from the subject parcels.
2. The Randall RI/RO access does not meet the spacing criteria of KDOT's Permit Regulations and Access Control Regulations ("Access Regulations"). The Access Regulations call for a distance of 630 feet from the adjacent signalized access.
3. On Figure 4 (page 7), we were not able to match up several of the movement counts at Randall/64 with the Traffic Count Summary Sheets in the Appendix. Please also double-check these volumes with those used in the Synchro datasheets.
4. Has IDOT reviewed and approved the traffic study?
5. On page 9, the study states that the Randall RI/RO access should be signed to prohibit outbound vehicles from using the southbound left-turn lanes at Randall/64. We agree that this maneuver would be hazardous and it is one reason KDOT has severe safety concerns with this access concept. Our opinion is that such signing would be routinely ignored and we are not aware of any MUTCD-compliant sign for this use.
6. On page 9, the study describes the cross-access easement through the Internal Combustion Subdivision that affords the site access to Woodward Drive. The study suggests way-finding signs should be provided to direct vehicles. Please provide a signage plan that would detail this concept.
7. On pages 9 and 10, the study contends that the proposed RI/RO access is consistent with existing access drives in the area, detailing the specifics of 15 nearby accesses. We did not find this presentation compelling for the following reasons:

- Most of the examples were on IL Route 64, which is not covered by the IGA, is under IDOT jurisdiction, has a 35 mph posted speed, and is much lower traffic volume than Randall Road.
- Other examples were of accesses that were downstream of the Randall/64 intersection, not upstream of the intersection as is the proposed RI/RO.
- The RI/RO access on the east side of Randall Road just south of IL Route 64 was also cited as an example. This access was not covered by the IGA and the Title Max site has much less trip generation that the proposed fuel center use.

For these reasons and others, we do not concur that these access examples are supportive of the proposed RI/RO access.

8. On page 28, the study states that southbound queues on Randall at IL Route 64 extend to the location of this access drive. We think it is more accurate to state that the intersection routinely queues to the proposed access location throughout a given weekday. The study goes on to indicate that southbound Randall gaps are sufficient to adequately service exiting vehicles from the site. We believe that at times, especially during peak hours, these gaps in SB traffic are less common. This causes more delays for exiting vehicles, driver frustration, and risk-taking, ultimately leading to increased crashes.
9. On page 28, the study contends that the proposed RI/RO access is consistent with existing access drives on Randall Road. We disagree – there are no other uses this intense on Randall upstream of a signalized intersection in this vicinity.
10. On page 28, the study indicates that the existing SB-to-WB right turn lane on Randall would be lengthened to serve the proposed RI/RO. This mingles site right-turners with intersection right-turners, which would increase crash potential.
11. The Preliminary site plan and traffic study also assumes additional variances from the County's Access Regulations and doesn't appear to adequately address multi-unit trucks navigating this site.
12. Some alternate site development designs are shown in the Appendix, including various restaurant layouts and an auto outdoor showroom, but these concepts are not mentioned in the study.

The study's overall contention is that the RI/RO to Randall Road is necessary for the viability of the site as a fuel center. This may be correct; not every land use is a good fit for a given parcel. If the access constraints on this site from the IGA, KDOT's access policies passed by ordinance, IDOT's access policies, etc. are incompatible with the proposed use, then it may be that this land use is inadvisable at this location.

Please call me directly at 630-406-7372 if you have any questions.

Sincerely,

Kurt E. Nika, P.E.
Chief of Traffic Operations & Permitting

Cc (via email): Mark Koenan, City of St. Charles
Monica Hawk, City of St. Charles
Tom Rickert, KDOT
File

Traffic Impact Study
Proposed Fuel Center
St. Charles, Illinois

Prepared For:

Semersky Enterprises, Inc.

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

August 4, 2020

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Thorntons Fuel Center in St. Charles, Illinois. The site, which is currently vacant, is located in the northwest corner of Main Street (Illinois Route 64) with Randall Road (Kane County Highway 34). As proposed, the site will be developed with a full-service fuel center with 20 passenger vehicle fueling positions and an approximately 4,400 square-foot convenience store. Access to the proposed development will be provided via a three-quarters (right-in, left-in, right-out) access drive off Main Street, a right-in/right-out access drive off Randall Road, and a connection to Woodward Drive which is proposed to be extended to Randall Road, terminating as a signalized intersection as part of the proposed Audi Dealership development to be built north of the site.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate the traffic generated by the proposed development.

Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site. The sections of this report present the following:

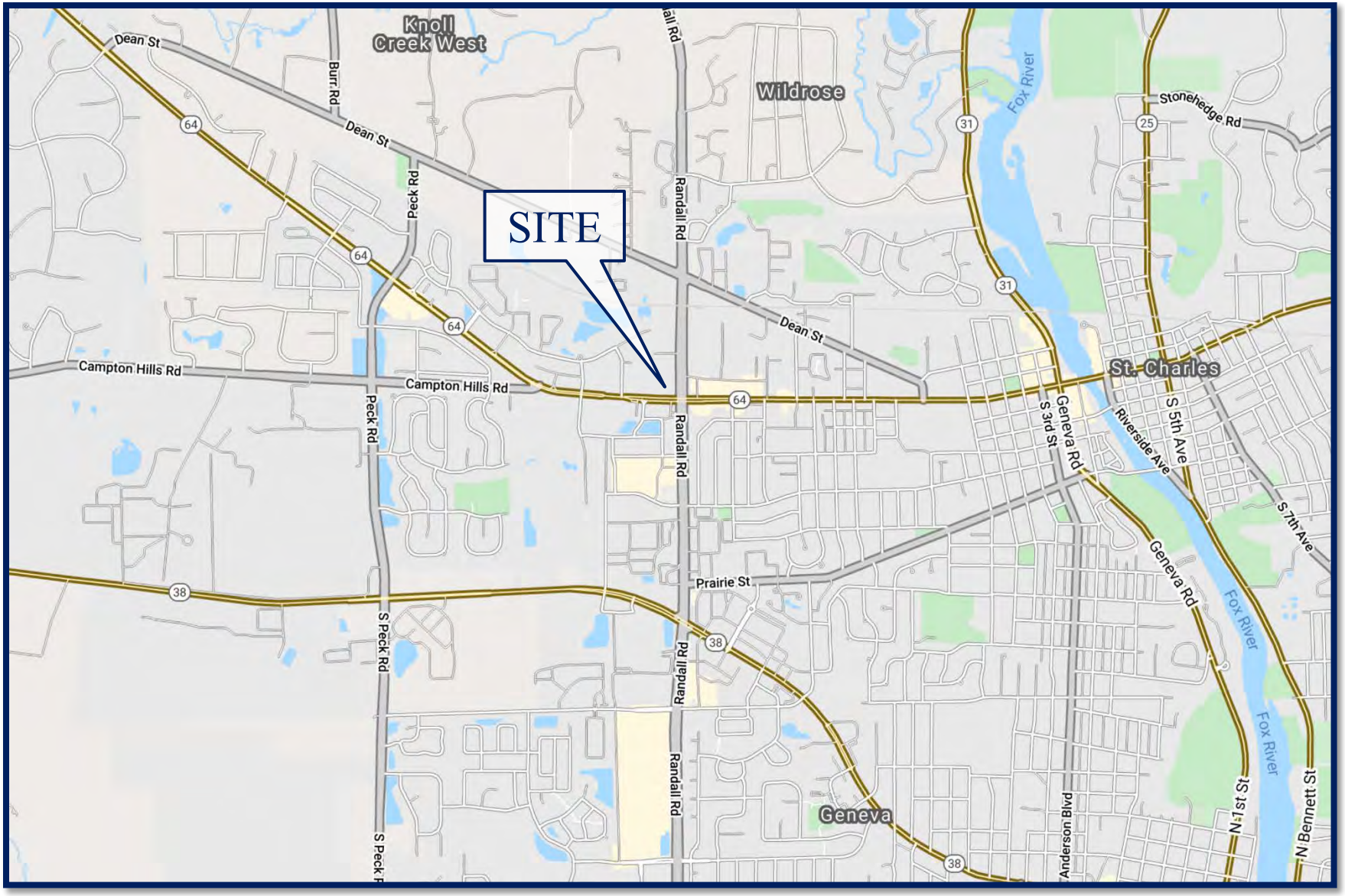
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning, weekday evening and Saturday midday peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning, weekday evening and Saturday midday peak hours for the following conditions:

1. Existing Conditions – Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. Year 2030 No-Build Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes increased by an ambient area growth rate not attributable to any particular development as well as traffic projected to be generated by the proposed Audi dealership and other area developments.

3. Year 2030 Projected Conditions – Analyze the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient traffic growth, other area developments, and the traffic estimated to be generated by the proposed development.



Site Location **Figure 1**

Aerial View of Site Location **Figure 2**

2. Existing Conditions

Existing traffic and roadway conditions were documented based on field visits and traffic counts conducted by KLOA, Inc. The following provides a detailed description of the physical characteristics of the roadways including geometry and traffic control, adjacent land uses, and peak hour traffic flows along area roadways.

Site Location

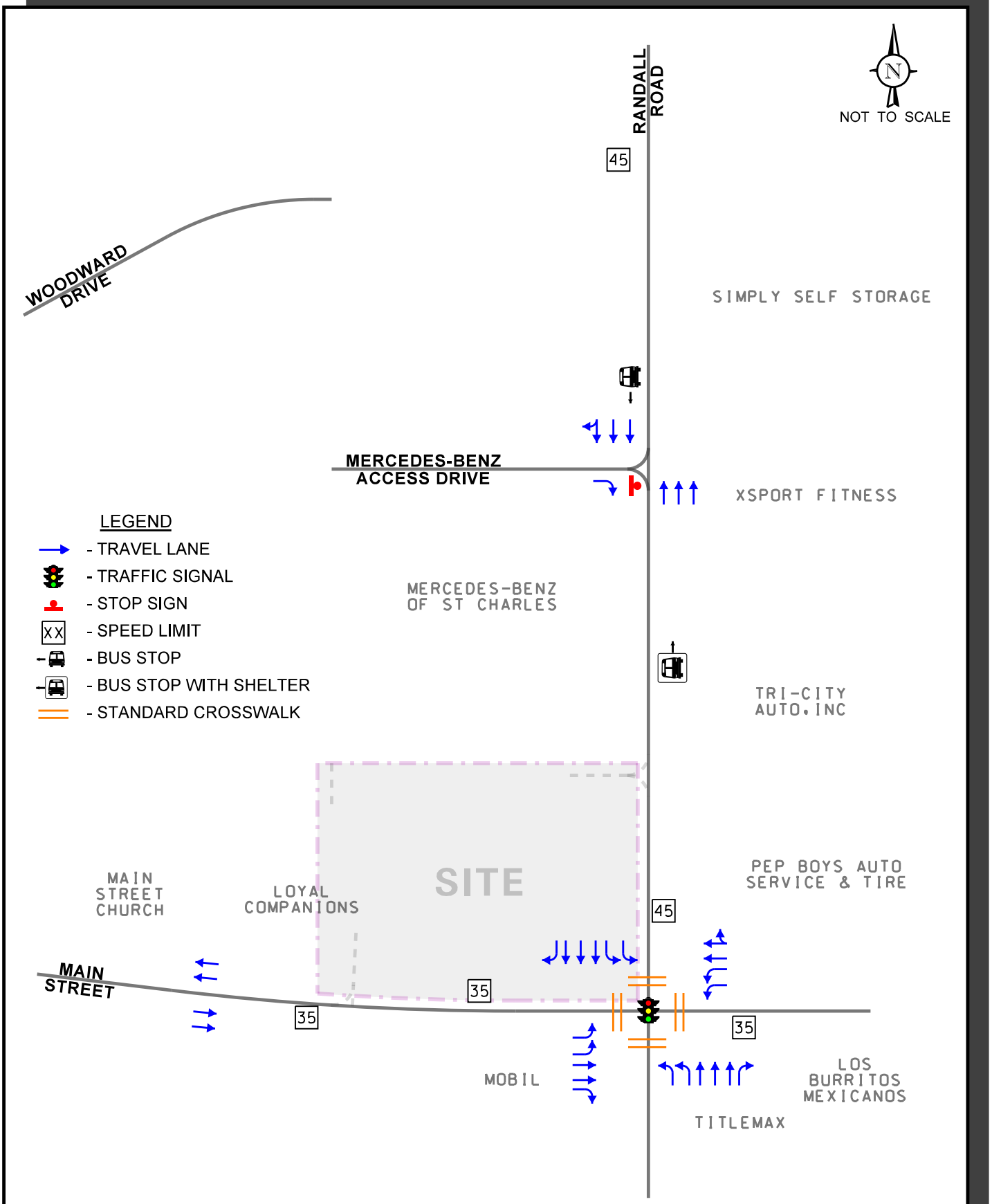
The site, which is currently vacant, is bounded by a Mercedes-Benz Car dealership to the north, Randall Road to the east, Main Street to the south, and an unlabeled brick building to the west. Land uses in the vicinity of the site include a mix of commercial, industrial, and residential uses.

Existing Roadway System Characteristics

The characteristics of the existing roadways that surround the proposed development are illustrated in **Figure 3** and described below.

Main Street (Illinois Route 64) is an east-west roadway that provides two lanes in each direction and is generally divided by a two-way left-turn lane. At its signalized intersection with Randall Road, Main Street provides dual left-turn lanes, two through lanes, and a right-turn lane on the eastbound approach and dual left turn lanes, a through lane, and a shared through/right-turn lane on the westbound approach. Both approaches provide standard style crosswalks and pedestrian signals. Main Street is under the jurisdiction of the Illinois Department of Transportation (IDOT), is classified as a Strategic Regional Arterial (SRA) route and has a posted speed limit of 35 miles per hour. East of Randall Road Main Street is designated as a principal arterial roadway and carries an Annual Average Daily Traffic (AADT) volume of 30,700 vehicles (IDOT 2019). West of Randall Road Main Street is designated as a minor arterial roadway and, west of its split from Campton Hills Drive, carries an AADT of 17,000 vehicles (IDOT 2019).

Randall Road is a north-south principal arterial roadway that provides three through lanes in each direction narrowing to two lanes in each direction north of Main Street generally divided by a landscape median. At its signalized intersection with Main Street, Randall Road provides dual left-turn lanes, three through lanes, and a right-turn lane on the northbound and southbound approaches. Both approaches provide standard style crosswalks and pedestrian signals. At its unsignalized intersections with the Mercedes-Benz car dealership access drive, Randall Road provides two through lanes on the northbound approach and two through lanes and a shared through/right-turn lane on the southbound approach. Randall Road is under the jurisdiction of the Kane County Division of Transportation (KDOT), is classified as an SRA route, and has a posted speed limit of 45 miles per hour. Randall Road carries an AADT volume of 32,200 vehicles (IDOT 2018) north of Main Street and 40,200 vehicles (IDOT 2018) south of Main Street.



Proposed Thorntons Fuel Center
St. Charles, Illinois

Existing Roadway Characteristics

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Job No: 20-118 Figure: 3

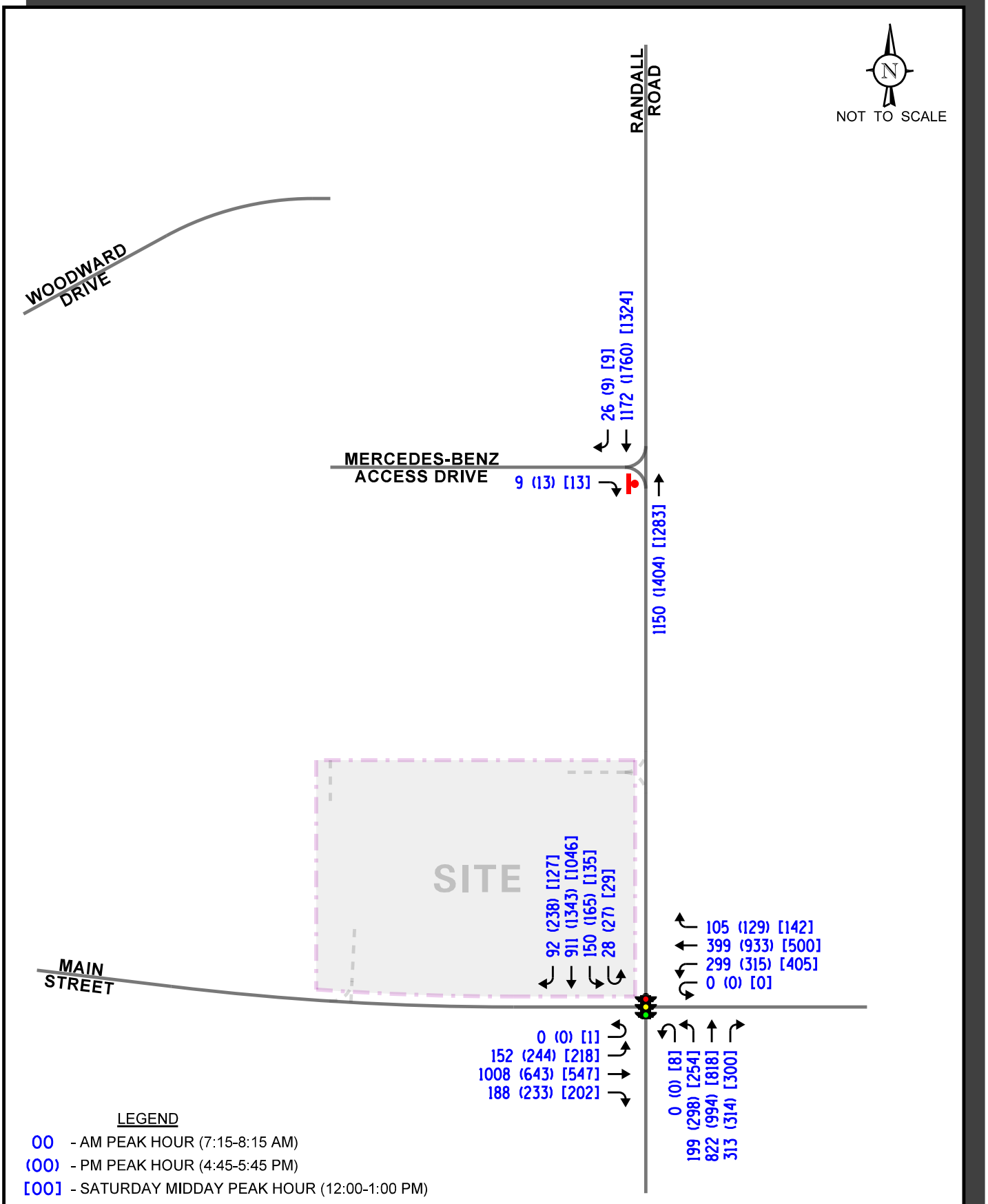
Woodward Drive is generally an east-west local roadway that extends east from Peck Road and serves as the access road for the commercial and residential developments on the north side of Main Street. Approximately 500 feet west of Randall Road, Woodward Drive terminates with a stub road. Woodward Drive is under the jurisdiction of the City of St. Charles.

Traffic Signal Interconnect

The intersection of Randall Road with Main Street is part of a seven-signal interconnect system that extends along Randall Road between Red Haw Lane/Oak Crest Creek and Bricher Road. These signals are maintained by KDOT.

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period vehicle, pedestrian, and bicycle movement traffic counts utilizing Miovision Scout Video Collection Units on Thursday, September 26, 2019 during the weekday morning (6:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods and on Saturday, September 28, 2019 during the midday (12:00 P.M. to 2:00 P.M.) peak period at the intersections of Randall Road with Main Street and Randall Road with the Mercedes-Benz of St. Charles right-in/right-out access drive. The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M., the weekday evening peak hour of traffic occurs from 4:45 P.M. to 5:45 P.M., and the Saturday midday peak hour of traffic occurs from 12:00 P.M. to 1:00 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



Proposed Thorntons Fuel Center
St. Charles, Illinois

Existing Traffic Volumes

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Job No: 20-118 Figure: 4

Crash Data Analysis

KLOA, Inc. obtained crash data[1] for the past five years (2014 to 2018) for the intersection of Randall Road with Main Street, as summarized in **Table 1.** A review of the crash data indicated that no fatalities were reported.

Table 1
RANDALL ROAD WITH MAIN STREET – CRASH SUMMARY

	Type of Crash Frequency							
Year	**Angle**	**Head On**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2014	0	0	0	8	0	1	0	9
2015	0	0	0	15	0	2	0	17
2016	1	0	0	8	0	2	0	11
2017	0	0	0	11	1	0	0	12
2018	0	0	1	7	3	3	0	14
Total	**1**	**0**	**1**	**49**	**4**	**8**	**0**	**63**
Average	**< 1**	**0**	**< 1**	**9.8**	**< 1**	**4.6**	**0**	**12.6**

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the site will be developed with a fuel center with 20 passenger vehicle fueling positions and an approximately 4,400 square-foot convenience store. Access to the development will be provided via the following:

- A three-quarters (right-in, left-in, right-out) access drive off Main Street that will be located approximately 340 feet west of Randall Road. This access drive will provide one inbound lane and one outbound lane signed and channelized to prohibit outbound left-turn movements. Outbound movements will be under stop-sign control. As indicated later in the report, a westbound right-turn lane on Main Street serving this access drive will be warranted and should be provided as part of the development. The turn lane should provide 100 feet of storage and a 60-foot taper. Inbound left turn movements at this access drive can be accommodated within the existing median on Main Street.

- A right-in/right-out access drive off Randall Road that will be located approximately 325 feet north of Main Street. This access drive will provide one inbound lane and one outbound lane restricted to right-turn only movements via triangular island median, appropriate signage, and the existing landscape median on Randall Road. Outbound movements will be under stop sign control. As part of the development, the southbound right-turn lane on Randall Road at its intersection with Main Street should be extended past the proposed access in order to accommodate inbound right-turning vehicles. In order to reduce conflicts between outbound traffic and southbound traffic on Randall Road, this access drive should be signed to prohibit outbound vehicles from accessing the southbound left-turn lanes on Randall Road at its intersection with Main Street during the weekday peak periods (7:00 A.M. to 9:00 A.M and 4:00 P.M. to 6:00 P.M.).

- A cross-connection to the Mercedes-Benz dealership that borders the site to the north. With the completion of the proposed Audi dealership north of the site and the extension of Woodward Drive, as discussed later in the report, this connection will provide access to Woodward Drive as well as its future signalized intersection with Randall Road. This will allow vehicles to access northbound Randall Road or the southbound left-turn lanes on Randall Road at its intersection with Main Street. Way-finding signs should be provided on site directing vehicles to Woodward Drive.

A site plan depicting the proposed development layout and access is included in the Appendix. It is important to note that the proposed access drives are consistent with existing access drives in the area on both Randall Road and Main Street. As can be seen in the Intersection Exhibit figures,

included in the Appendix, the following existing access are located within close proximity to the signalized intersection of Randall Road with Main Street:

- A full movement access drive on the north side of Main Street approximately 600 feet west of Randall Road serving the Loyal Companions Animal Hospital, Main Street Church, and a retail center

- A right-in/right-out access drive on the west side of Randall Road approximately 306 feet south of Main Street and a right-in/right-out access drive on the south side of Main Street approximately 184 feet west of Main Street serving a 7-Eleven fuel center

- A right-in/right-out access drive on the east side of Randall Road approximately 162 feet south of Main Street and a right-in/right-out access drive approximately 219 feet east of Randall Road serving a Title Max.

- Three right-in/right-out access drives on the south side of Main Street approximately 283, 372, and 432 feet east of Randall Road serving the Los Burritos Mexicanos and Beef Shack restaurants.

- Two full movement access drives on the south side of Main Street approximately 500 and 745 feet east of Randall Road serving a McDonalds Restaurant

- A right-in/right-out access drive on the north side of Main Street approximately 300 feet east of Randall Road and a full movement access drive on the north side of Main Street approximately 690 feet east of Randall Road serving the 2000 & 2002 West Main Street Retail Center

- Two right-in/right-out access drives on the east side of Randall Road approximately 168, 280 feet north of Main Street and a right-in/right-out access drives on the north side of Main Street approximately 227 feet east of Randall Road serving the Tri-City Auto and Pep Boys Auto Service & Tire facilities

As can be seen, the proposed access drives are generally consistent with the existing access drives on both roadways and are located farther away from the signalized intersection than multiple existing access drives.

Directional Distribution

The directions from which customers and employees of the proposed fuel center will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the development-generated traffic.

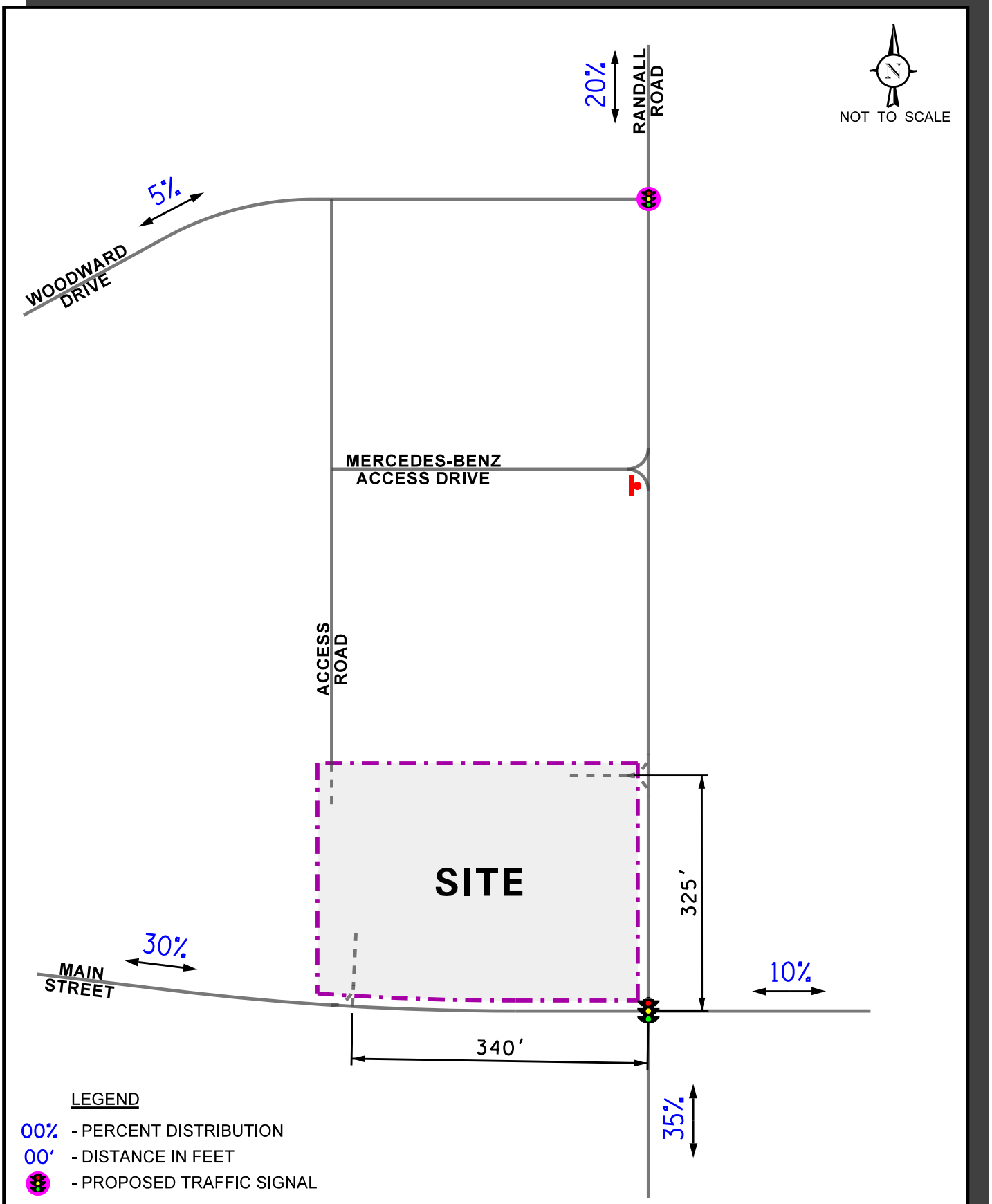
Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed fuel center was based on vehicle trip generation rates contained in *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). The "Gasoline/Service Station" (Land-Use Code 945) rate was used for the development. Copies of the trip generation worksheets are included in the Appendix.

It is important to note that surveys conducted by ITE have shown that approximately 60 percent of trips made to fuel centers are diverted from the existing traffic on the roadway system. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips (pass-by traffic). As such, the new site traffic to be generated by the fuel station was reduced by 60 percent to account for pass-by traffic. **Table 2** summarizes the trips projected to be generated by the proposed development.

Table 2
ESTIMATED PEAK HOUR VEHICLE TRIP GENERATION

ITE Land Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
945	Fuel Center (20 Pumps)	144	139	283	143	137	280	193	193	386
60% Pass-by Reduction		-85	-85	-170	-84	-84	-168	-116	-116	-232
New Fuel Center Traffic		59	54	113	59	53	112	77	77	154



Proposed Thorntons Fuel Center
St. Charles, Illinois

Estimated Directional Distribution

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Job No: 20-118 Figure: 5

4. Projected Traffic Conditions

The total projected traffic volumes take into consideration the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning, weekday evening, and Saturday midday peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the traffic assignment of the new passenger vehicle trips. As previously indicated, a 60 percent pass-by reduction was applied to the trips generated by the passenger fueling positions. **Figure 7** illustrates the traffic assignment of the pass-by trips generated by the proposed development.

Area Developments and Roadway Improvements

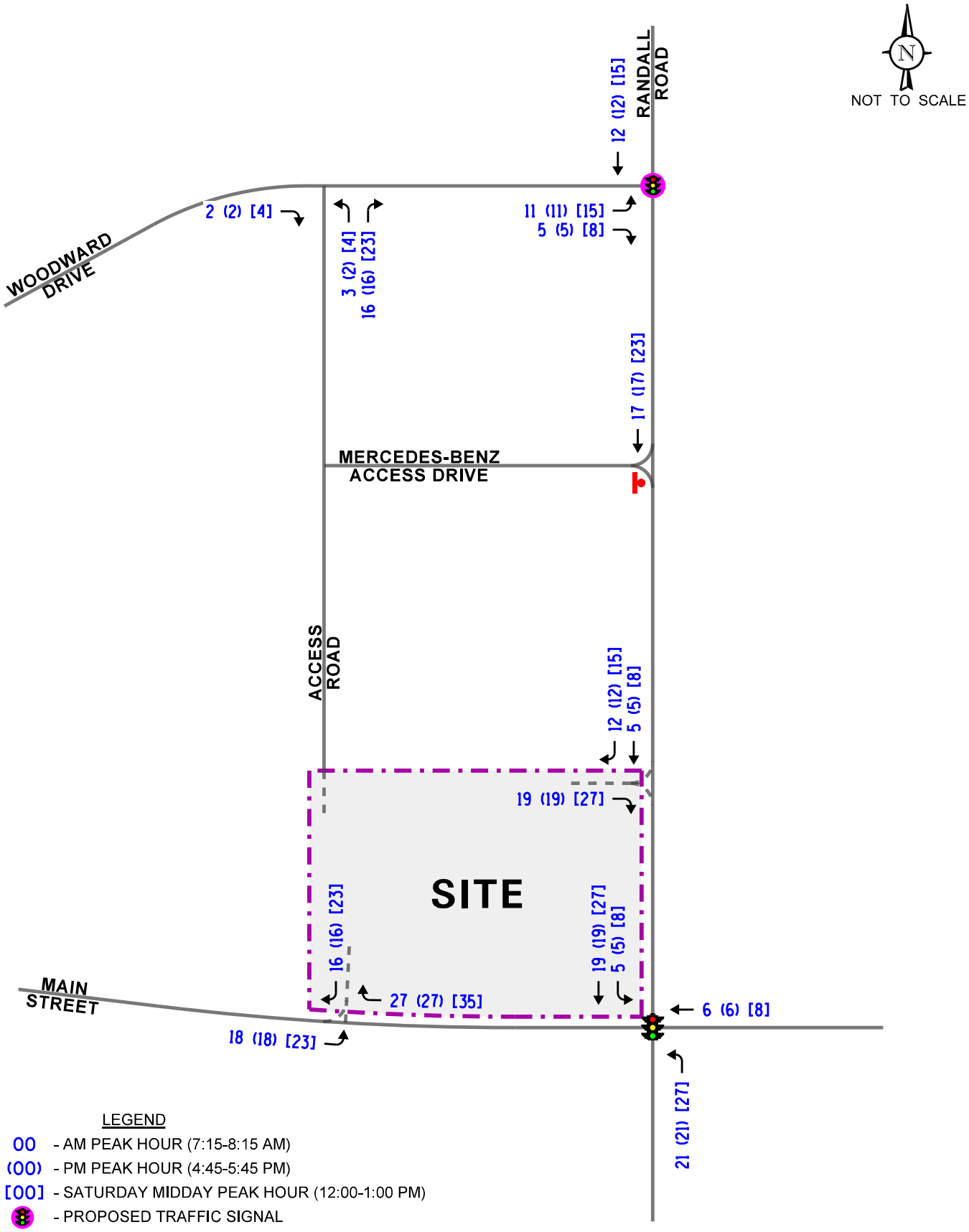
In order to accurately project future area roadway conditions, the following additional developments and roadway improvements were included in the study:

- As proposed the vacant parcel that borders the Mercedes-Benz Development to the north will be developed with an approximately 25,540 square-foot Audi Dealership. Access to the dealership will be provided via Woodward Drive and the existing Mercedes-Benz restricted access drive off Randall Road

- As part of, as part of the proposed Audi Dealership, Woodward Drive will be extended to Randall Road and the resulting "T" intersection will be signalized. The proposed signalized intersection will allow patrons, residents and employees of the existing commercial, residential and office developments located along Woodward Drive corridor to access Randall Road directly.

- The vacant parcels west of the site on Woodward Drive has the potential to be developed with additional retail and commercial uses. Based on a conceptual plan prepared by Smersky Enterprises, Inc. this space was assumed to be developed with a 36-unit townhome development, a 16,000 square foot childcare facility, and a 40,000 square foot medical office building. Access to these developments will be provided off Woodward Drive, Barbara Ann Drive and Oak Street which, with the proposed extension of Woodward Drive, will have signalized and unsignalized access drives off Randall Road and Main Street. A copy of the conceptual plan is included in the appendix.

The number of peak hour trips estimated to be generated by development of these lots was also based on vehicle trip generation rates contained in ITE's *Trip Generation Manual*, 10th Edition. Copies of the ITE trip generation worksheets are included in the Appendix. **Table A,** included in the Appendix, shows the vehicle trips estimated to be generated by the other area developments.



LEGEND

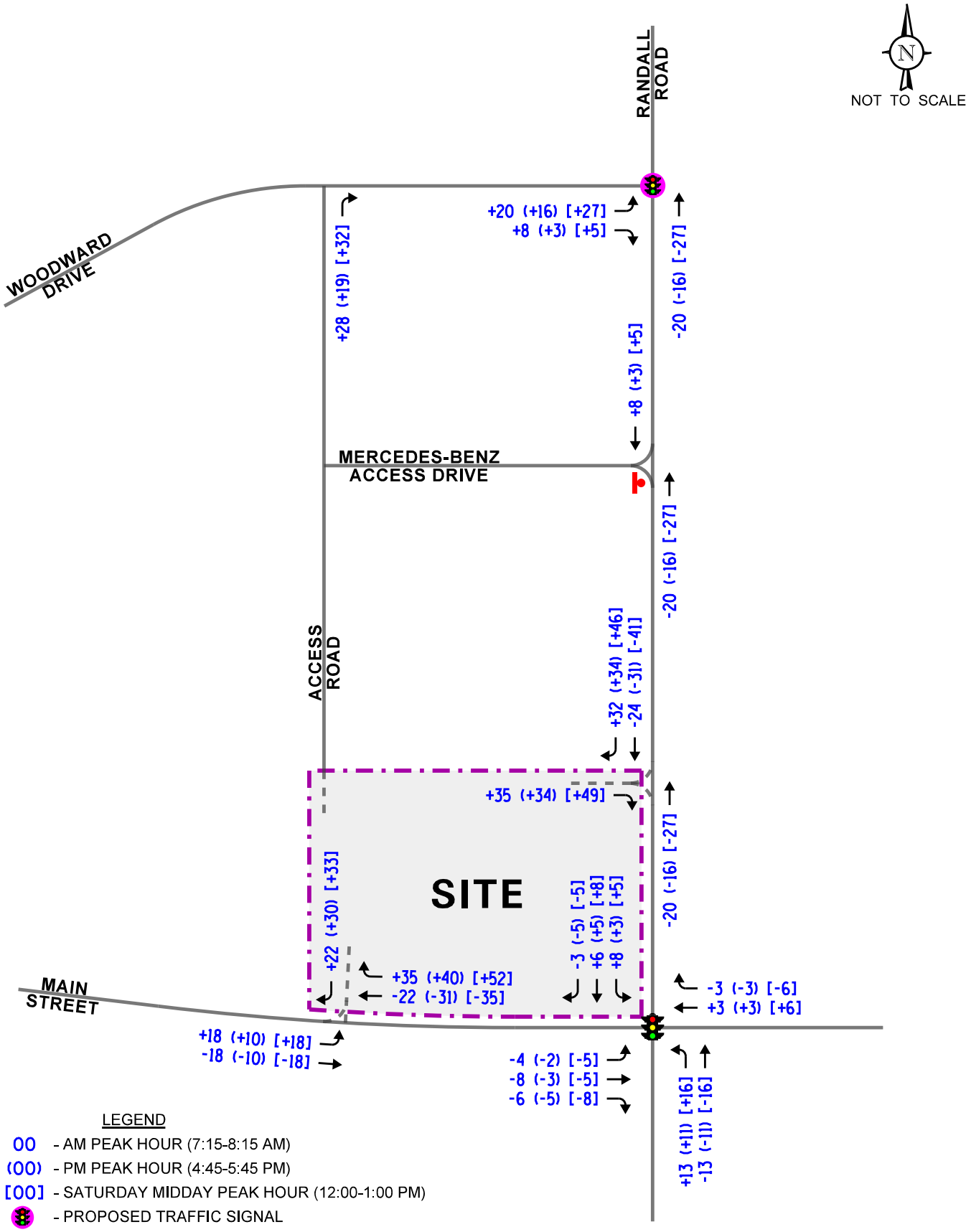
00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:45-5:45 PM)

[00] - SATURDAY MIDDAY PEAK HOUR (12:00-1:00 PM)

- PROPOSED TRAFFIC SIGNAL

Proposed Thorntons Fuel Center St. Charles, Illinois	Estimated New Site-Generated Traffic Volumes	KLOA Kenig,Lindgren,O'Hara,Aboona,Inc. Job No: 20-118 Figure: 6



LEGEND

00 - AM PEAK HOUR (7:15-8:15 AM)

(00) - PM PEAK HOUR (4:45-5:45 PM)

[00] - SATURDAY MIDDAY PEAK HOUR (12:00-1:00 PM)

- PROPOSED TRAFFIC SIGNAL

Proposed Thorntons Fuel Center St. Charles, Illinois	Pass-By Traffic Volumes	KLOA Kenig,Lindgren,O'Hara,Aboona,Inc. Job No: 20-118 Figure: 7

The estimated weekday morning, weekday evening and Saturday midday peak hour traffic volumes that will be generated by the full buildout of the other area developments were assigned to the roadway system. **Figure A,** included in the Appendix, illustrates the traffic assignment of the vehicle trips. With the extension of Woodward Drive, some existing traffic will access the land uses in the northwest quadrant of Main Street with Randall Road via Woodward Drive and its signalized intersection Randall Road as opposed to Main Street. As such, some existing traffic volumes were reassigned to the roadway system to take into consideration the proposed signalized intersection. **Figure B**, also included in the Appendix, illustrates the reassigned existing traffic volumes.

Background Traffic Conditions

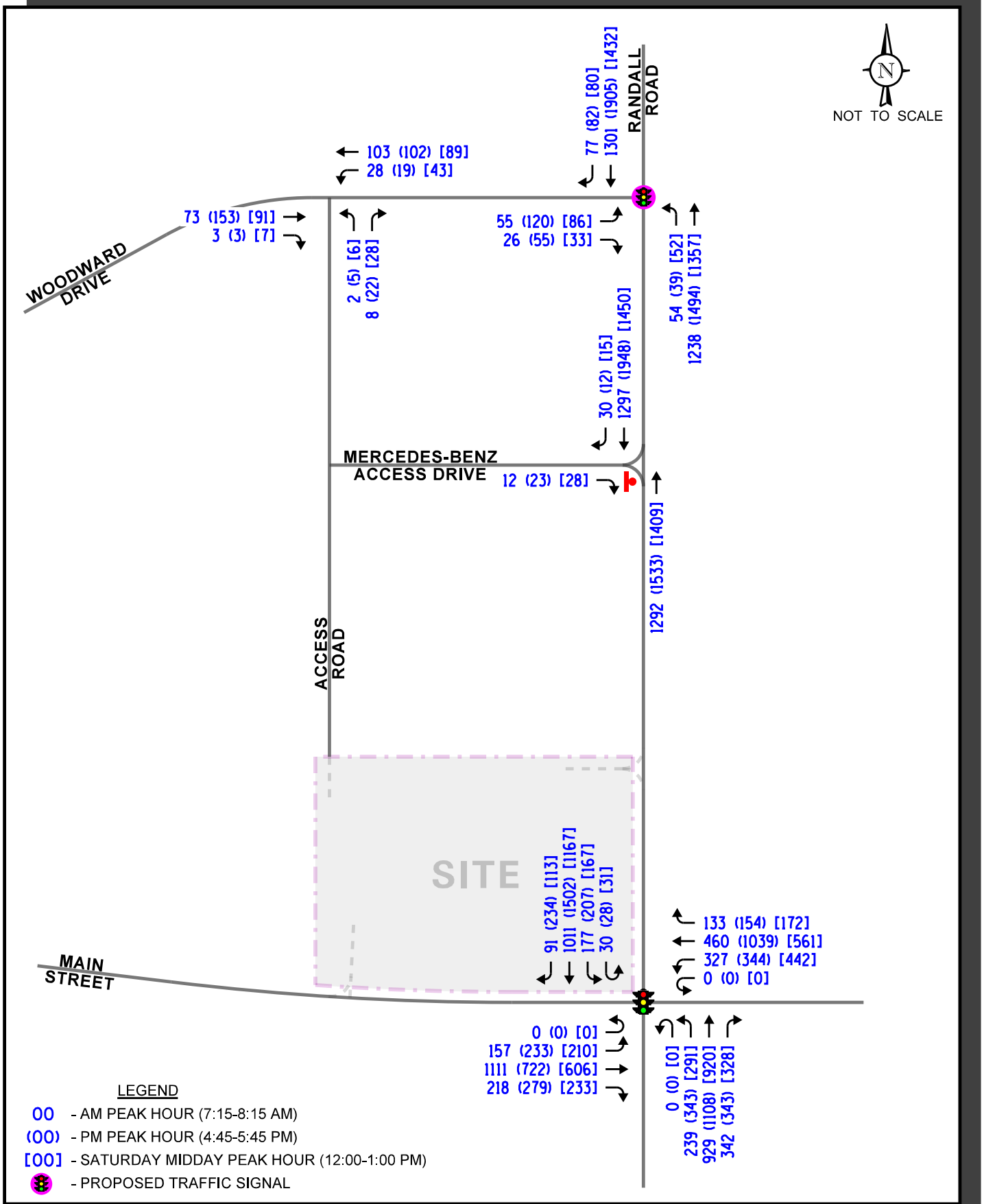
The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on ADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes are projected to increase by a compound annual growth rate of approximately 0.8 percent per year. As such, traffic volumes were increased by 9.2 percent to represent 11 years of growth (2019 to 2030). A copy of the CMAP projections letter is included in the Appendix.

Year 2030 No-Build Traffic Volumes

The traffic expected to be generated by the full buildout of other area developments (Figure A) as well as reassignment of existing traffic volumes (Figure B) was added to the existing traffic volumes increased by the ambient growth factor to determine the Year 2030 no-build traffic volumes illustrated in **Figure 8.**

Year 2030 Projected Traffic Volumes

The development-generated traffic (Figures 6 and 7) was added to the Year 2030 no-build traffic volumes to determine the Year 2030 total projected traffic volumes illustrated in **Figure 9.**



Proposed Thorntons Fuel Center
St. Charles, Illinois

Year 2030 No-Build Traffic Volumes

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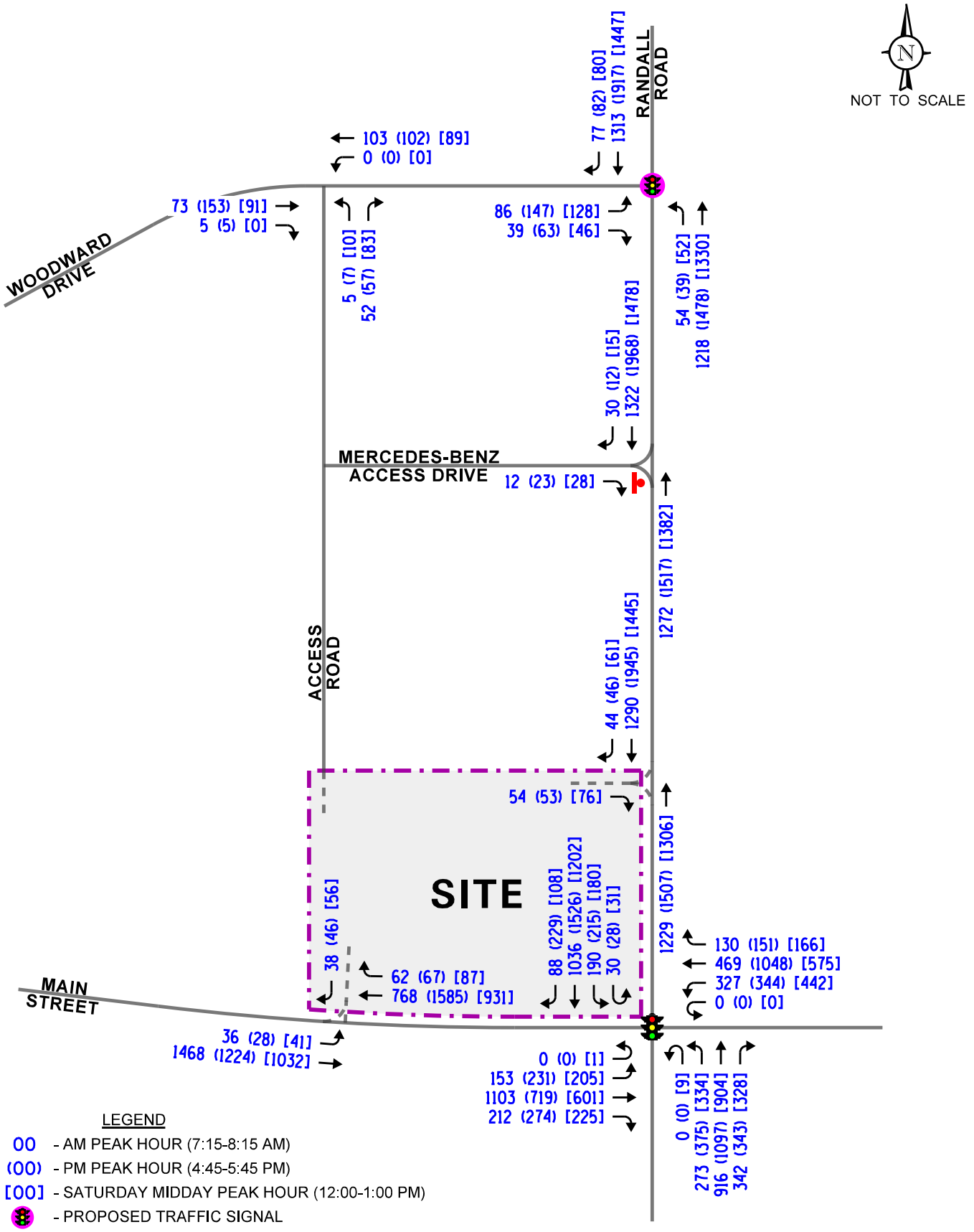
Job No: 20-118 Figure: 8



Proposed Thorntons Fuel Center
St. Charles, Illinois

Year 2030 Total Projected Traffic Volumes

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 20-118 Figure: 9

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning, weekday evening, and Saturday midday peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing, Year 2030 no-build, and Year 2030 total projected conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 6th Edition* and analyzed using Synchro/SimTraffic 10 software. The analysis for the traffic-signal controlled intersection of Randall Road with Main Street was accomplished using actual cycle lengths, phasings and offsets provided by Kane County to determine the average overall vehicle delay and levels of service.

For the purposes of the capacity analyses, the cycle lengths utilized at the proposed signalized intersection of Randall Road with Woodward Drive were the same as at the intersections of Randall Road with Main Street and Dean Street and the phasings and offsets for each peak hour were optimized to maintain the progression of vehicles on Randall Road.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, Year 2030 no-build, and Year 2030 total projected conditions are presented in **Tables 3** through **7**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS – RANDALL ROAD WITH MAIN STREET– SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Weekday Morning Peak Hour	Existing Conditions	E 76.6	D 49.0	B 15.4	F 94.1	C 31.5		E 65.1	D 38.5	C 28.5	E 61.6	D 54.5	C 20.4	D 48.0
		D – 47.4			D – 54.8			D – 40.1			D – 52.9			
	Year 2030 No Build Conditions	E 77.8	E 56.5	B 16.8	F 99+	C 33.0		E 76.1	D 41.1	C 30.0	E 65.9	E 58.0	C 20.9	D 52.8
		D – 52.9			E – 61.3			D – 44.1			E – 56.6			
	Year 2030 Total Projected Conditions	E 76.8	E 55.7	B 16.5	F 99+	C 33.2		F 97.5	D 41.0	C 30.0	E 69.9	E 57.7	C 21.0	D 54.1
		D – 52.2			E – 61.2			D – 46.8			E – 57.3			
Weekday Evening Peak Hour	Existing Conditions	F 91.5	D 48.0	B 16.9	E 72.0	E 60.1		D 52.2	E 55.9	C 31.6	E 65.4	E 69.0	C 33.1	E 57.5
		D – 51.0			E – 62.8			D – 50.5			E – 63.8			
	Year 2030 No Build Conditions	F 88.2	D 51.7	B 19.7	E 71.9	E 83.2		E 58.4	E 57.6	C 31.4	E 76.8	E 79.8	C 30.0	E 65.3
		D – 51.3			F – 80.6			D – 52.7			E – 73.5			
	Year 2030 Total Projected Conditions	F 87.7	D 51.6	B 19.3	E 71.9	F 84.2		E 64.9	E 57.4	C 31.3	E 78.3	F 86.2	C 29.4	E 67.4
		D – 51.2			F – 81.5			D – 54.0			E – 78.8			

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Table 3 - Continued
CAPACITY ANALYSIS RESULTS – RANDALL ROAD WITH MAIN STREET– SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Saturday Midday Peak Hour	Existing Conditions	E 69.4	D 54.2	B 16.7	E 66.4	D 46.0		E 61.7	C 33.0	B 17.6	E 71.5	C 33.6	A 9.5	D 42.6
		D – 49.8			D – 53.9			C – 35.1			D – 36.0			
	Year 2030 No Build Conditions	E 69.2	E 55.2	B 16.7	E 66.6	D 46.6		E 63.8	D 35.8	B 20.0	E 75.3	D 36.4	A 8.0	D 44.4
		D – 50.4			D – 54.2			D – 37.8			D – 39.5			
	Year 2030 Total Projected Conditions	E 69.0	E 55.0	B 18.5	E 66.6	D 47.0		E 68.3	D 35.7	B 20.0	E 75.4	D 39.3	A 7.3	D 45.6
		D – 49.9			D – 54.4			D – 39.5			D – 42.1			

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Table 4
CAPACITY ANALYSIS RESULTS
RANDALL ROAD WITH WOODWARD DRIVE – SIGNALIZED

	Peak Hour	Eastbound		Northbound		Southbound		Overall
		L	R	L	T	T	R	
Weekday Morning Peak Hour	Year 2030 No Build Conditions	E 69.4	B 14.6	E 74.1	A 8.1	A 1.2	A 0.1	A 7.2
		D – 52.0		B – 10.9		A – 1.1		
	Year 2030 Total Projected Conditions	E 71.0	B 11.9	E 66.3	A 10.0	A 1.3	A 0.1	A 7.6
		D – 52.7		B – 12.4		A – 1.2		
Weekday Evening Peak Hour	Year 2030 No Build Conditions	E 77.0	D 36.0	F 99+	A 6.9	A 6.4	A 0.1	B 10.3
		E – 64.1		A – 9.5		A – 6.2		
	Year 2030 Total Projected Conditions	E 76.9	D 35.5	F 99+	A 7.0	A 7.1	A 0.1	B 11.2
		E – 64.5		A – 9.7		A – 6.8		
Saturday Midday Peak Hour	Year 2030 No Build Conditions	E 71.0	B 12.5	F 91.8	A 5.5	A 3.3	A 0.4	A 7.7
		D – 54.8		A – 8.7		A – 3.2		
	Year 2030 Total Projected Conditions	E 71.6	B 14.7	F 94.7	A 5.7	A 4.9	A 0.8	A 9.6
		E – 56.6		A – 9.1		A – 4.7		

Letter denotes Level of Service L – Left-Turns R – Right-Turns
Delay is measured in seconds. T – Through

Table 5
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED
EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Randall Road with the Mercedes-Benz Access Drive						
• Eastbound Approach	C	15.4	C	21.7	C	16.5

LOS = Level of Service
Delay is measured in seconds.

Table 6
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED
YEAR 2030 NO-BUILD CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Randall Road with the Mercedes-Benz Access Drive						
• Eastbound Approach	C	16.7	D	25.8	C	18.6
Woodward Drive with the Access Road						
• Westbound Left Turn	A	7.4	A	7.6	A	7.5
• Northbound Left Turn	A	9.9	B	10.4	B	10.3
• Northbound Right Turn	A	8.7	A	9.2	A	8.9

LOS = Level of Service
Delay is measured in seconds.

Table 7
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED
YEAR 2030 TOTAL PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Randall Road with the Mercedes-Benz Access Drive						
• Eastbound Approach	C	17.0	D	26.2	C	19.0
Woodward Drive with the Access Road						
• Westbound Left Turn	A	7.4	A	7.6	A	7.5
• Northbound Left Turn	A	9.9	B	10.4	B	10.3
• Northbound Right Turn	A	8.9	A	9.4	A	9.1
Main Street with Proposed Access Drive						
• Eastbound Left Turn	A	9.8	C	15.7	B	10.9
• Southbound Approach	B	11.4	C	18.4	B	12.7
Randall Road with Proposed Access Drive						
• Eastbound Right Turn	C	17.6	D	26.2	C	21.2

LOS = Level of Service
Delay is measured in seconds.

Discussion and Recommendations

The following is an evaluation of the analyzed intersections based on the projected traffic volumes and the capacity analyses performed.

Randall Road with Main Street

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS D) during the weekday morning and Saturday midday peak hours and at LOS E during the weekday evening peak hour.

Under Year 2030 no-build conditions, this intersection is projected to continue operating at LOS D during the weekday morning peak hour, LOS E during the weekday evening peak hour, and at LOS D during the Saturday midday peak hour with increases in delay of approximately five, eight, and two seconds, respectively. Furthermore, all of the approaches are projected to continue operating at LOS E or better during the peak hours except the westbound approach, which is projected to operate at LOS F during the weekday evening peak hour.

Under Year 2030 total projected conditions, the intersection overall and all of the approaches are projected to continue operating at the same levels of service as under no-build conditions with increases in delay of approximately two seconds or less over no-build conditions. It is important to note that the westbound left-turn movement is projected to operate at LOS F during the weekday morning peak hour. However, neither the proposed development nor the other area developments are projected to increase the volume of traffic performing this movement. During the peak hours, southbound 95th percentile queues at this intersection are projected to extend up to 700 feet and will block the location of the proposed access drive. However, this approach operates at an acceptable LOS E during the peak hours and the queues are projected to clear the location of the access drive with every cycle.

Overall, the proposed fuel center is only projected to increase the volume of traffic traversing this intersection by approximately one percent or less during all three peak hours. As such, the traffic estimated to be generated by the proposed fuel center will have a limited impact on the operations of this intersection.

Randall Road with Woodward Drive

The results of the capacity analysis indicate that overall this intersection is projected to operate at LOS A during the weekday morning and Saturday midday peak hours and LOS B during the weekday evening peak hour under both Year 2030 no-build and Year 2030 total projected conditions. Furthermore, the northbound and southbound through movements are projected to operate at LOS A during the peak hours.

Under Year 2030 total projected conditions, the eastbound approach is projected to operate at LOS E or better during the peak hours. However, this level of service is expected for a minor roadway that has an intersection with a major arterial roadway such as Randall Road given the long cycle length provided and limited amount of green time allocated to the Woodward Drive approach. Furthermore, it should be noted that the northbound left-turning movements from Randall Road onto Woodward Drive are projected to operate at LOS F during the weekday evening and Saturday midday peak hours. However, the 95th percentile queues are projected to be less than 100 feet which can be accommodated within the 215 feet of left-turn lane storage provided. Additionally, this level of service is expected given the long cycle length, the limited amount of green time allocated to the movement, and the operation of this movement under a protected phase only.

As such, this proposed intersection will be adequate in accommodating the traffic estimated to be generated by the proposed fuel center and will provide efficient and flexible access.

Randall Road with Mercedes-Benz of St. Charles Access Drive

The results of the capacity analysis indicate that right-turning movements from the Mercedes-Benz access drive onto Randall Road currently operate at LOS C during the weekday morning, weekday evening, and Saturday midday peak hours. Under Year 2030 no-build conditions, right-turning movements from the access drive onto Randall Road are projected to continue operating at LOS D or better during the peak hours. Under Year 2030 total projected conditions, right-turning movements from the access drive onto Randall Road are projected to continue to operate at LOS D or better during the peak hours with increases in delay of approximately one second over existing conditions. As such, this access drive will continue to be adequate in accommodating the traffic generated by the Mercedes-Benz of St. Charles as well as the traffic estimated to be generated by the proposed fuel center.

Woodward Drive with Access Roadway

As previously indicated, access to Woodward Drive will be provided via a connection to the Mercedes-Benz dealership, which, in conjunction with the proposed fuel center, will be provided via a full movement access roadway that intersects Woodward Drive west of Randall Road. The results of the capacity analysis indicate that all movements at this intersection are projected to operate at LOS B or better during the peak hours under both Year 2030 no-build and Year 2030 total projected conditions. This connection between the development and Woodward Drive should be provided given the following:

- The connection will allow vehicles to exit the site and travel north on Randall Road, which would otherwise not be possible without increasing the already large volume of southbound U-turns at the intersection of Randall Road with Main Street.

- The connection will allow vehicles to enter and exit the site from Woodward Drive to the west. These vehicles would otherwise be travelling on Main Street to access the site.

- The connection will provide a safer alternative for exiting vehicles to travel east on Main Street.

- Both the access drive and the signalized intersection of Woodward Drive with Randall Road will have adequate reserve capacity to accommodate site traffic.

As such, this access roadway will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

Main Street with the Proposed Access Drive

The results of the capacity analysis indicate that outbound movements from the proposed three-quarters access drive onto Main Street are projected to operate at LOS B during the weekday morning and Saturday midday peak hours and LOS C during the weekday evening peak hour with 95th percentile queues of one to two vehicles. Further, eastbound left-turn movements into the site are projected to operate at LOS A during all three peak hours with 95th percentile queues of one to two vehicles, which can be adequately accommodated within the existing median. While eastbound queues on Randall Road at its intersection with Main Street are projected to extend to the location of this access drive during the peak hours, these queues will not prevent westbound right-turn movements from entering the site and eastbound left-turn movements will progress forward with through traffic every green cycle until they are able to enter the median.

When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT BDE Manual, an exclusive right-turn lane serving the proposed access drive will be warranted on Main Street Serving this access drive and should be provided. Given the proximity of the access drive to the signalized intersection of Main Street with Randall Road, the turn lane should provide 100 feet of storage and a 60-foot taper. A copy of the turn lane warrant is included in the Appendix.

As such, given the provision of a right-turn lane on Main Street, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed fuel center and will ensure efficient and flexible access is provided.

Randall Road with the Proposed Access Drive

The results of the capacity analysis indicate that outbound movements from the right-in/right-out access drive onto Randall Road are projected to operate at LOS C during the weekday morning and Saturday midday peak hours and LOS D during the weekday evening peak hour with 95th percentile queues of one to two vehicles. As previously mentioned, southbound queues on Randall Road from its signalized intersection with Main Street extend to the location of this access drive. However, vehicles are projected to be able to exit given that southbound Randall Road operates at an acceptable level of service and outbound traffic will be restricted to right-turns only, which only requires a gap in one direction of traffic. As such, vehicles are expected to be able to exit when the southbound queues on Randall Road clear. However, and as previously mentioned, in order to reduce conflicts between outbound vehicles and southbound traffic on Randall Road, this access drive should be signed to prohibit vehicles from accessing the southbound left-turn lanes on Randall Road during the weekday peak periods (7:00 A.M. to 9:00 A.M and 4:00 P.M. to 6:00 P.M.).

While this access drive is located within close proximity to a signalized intersection on an SRA route, this access is necessary and should be provided given the following:

- As previously mentioned, this access drive is consistent with existing access drives on Randall Road also located within close proximity to the intersection of Randall Road with Main Street.

- The access drive will reduce the volume of traffic turning at the proposed signalized intersection of Woodward Drive with Randall Road.

- The access drive will be restricted to right-turn only movements which will have minimal impact on through traffic on Randall Road and will operate at an acceptable LOS despite the large volume of traffic on Randall Road.

- Direct access to Randall Road will be necessary to ensure the viability of the proposed fuel center, as a significant volume of traffic will be diverted from Randall Road.

- Allowing right turns out is critical as left turns out onto Main Street will not be provided. Without it, exiting site traffic will be severely restricted, limiting site accessibility.

- A southbound right-turn lane will be provided on Randall Road via the extension of the existing right-turn lane.

As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed fuel center and will ensure efficient and flexible access is provided.

6. Conclusion

Based on existing conditions and the traffic capacity analyses for the full buildout of the development, the findings and recommendations of this study are outlined below:

- The traffic projected to be generated by the proposed fuel center will be reduced due to pass-by or diverted trips from the existing traffic.

- The proposed development-generated traffic and proposed access system will have a limited impact on the operations of the roadway system, including the proposed extension of Woodward Drive and its signalized intersection with Randall Road.

- The proposed access system will be adequate in accommodating the traffic projected to be generated by the proposed development and will provide efficient and flexible access.

- A right-in/right-out access drive should be provided off Randall Road to ensure that adequate and flexible access is provided and to ensure its long-term viability.

- When the projected traffic volumes are compared to the turn lane-warrant guidelines published in Chapter 36 of the IDOT BDE Manual, an eastbound right-turn lane on Main Street serving the proposed three-quarters access drive will be warranted.

INTERGOVERNMENTAL AGREEMENT BETWEEN THE CITY OF ST. CHARLES AND THE COUNTY OF KANE REGARDING ACCESS AND IMPROVEMENTS TO RANDALL ROAD FROM IL64 TO DEAN STREET

This Agreement (hereinafter, the "Agreement") entered into this 14th day of November 2006, by and between the County of Kane, a body corporate and politic of the State of Illinois (hereinafter, the "COUNTY") and the City of St. Charles, a municipal corporation of the State of Illinois (hereinafter, the "CITY"). The COUNTY and the CITY are sometimes hereinafter collectively referred to as the "Parties" and individually as a "Party".

WITNESSETH

Whereas, the CITY and the COUNTY are authorized to agree and cooperate among themselves pursuant of the provisions of the Illinois Constitution of 1970 and the Intergovernmental Cooperation Act of the Illinois Compiled Statutes; and,

Whereas, the COUNTY has exclusive jurisdiction over Kane County Highway No. 34, also known as Randall Road: and,

Whereas, Illinois Compiled Statutes 605 ILCS 5/8-101 et. seq. authorize the COUNTY to designate certain highways within its jurisdiction as "freeways" and, when so designated, authorize the COUNTY to, among other things, control access with respect to such designated highways; and

Whereas, the COUNTY represents that it has designated, in conformance with law, Randall Road as a freeway on August 8, 1972, and has further represents that it has adopted, in conformance to law the Kane County Division of Transportation - Transportation Permit Regulations and Access Control Regulations (hereinafter, the "KDOT-TPR"); and

Whereas, the COUNTY has undertaken, commencing in 2006, the construction, widening and improvement of Randall Road from immediately north of Dean Street to immediately south of Oak Street, within the municipal limits of the CITY by constructing improvements including but not limited to additional lanes of through traffic, additional left and right-turn lanes at certain

existing and planned intersections, barrier medians and storm water management facilities, (hereinafter, the "Randall Road Project"); and,

Whereas, the properties located along the east and west sides of the section of Randall Road between Illinois State Route 64 on the South and Dean Street on the North, are within the corporate limits of the CITY (hereinafter, the "Subject Corridor") and is depicted in Exhibits "B1" and "B2" and, further, that some of these properties are being redeveloped, and the CITY desires the COUNTY to permit an access point that will be a Signalized Full Intersection approximately 1,200 feet north of Illinois Route 64 and to permit and retain certain other access points to Randall Road for the benefit of existing and future commercial and residential development in the Subject Corridor that is anticipated by the CITY; and,

Whereas, the COUNTY wishes to secure the support and cooperation of the CITY in the enforcement of the KDOT-TPR related to the control of access to that segment of Randall Road identified in the immediately preceding recital so as to facilitate and assure the safety of the motoring public and to facilitate the free flow of traffic now and in the future, and to otherwise permit the orderly development of property adjacent to the identified segment of Randall Road; and,

Whereas, the Parties have determined that, subject to the controls hereinafter set forth, the control of access to Randall Road as set forth in this Agreement is necessary for the safety of the motoring public, responsible transportation planning and proper land use planning; and,

Whereas, the Parties acknowledge and agree that, subject to the controls hereinafter set forth, the planning and improvements as described herein are and will be a benefit to the residents of the COUNTY and the CITY.

NOW THEREFORE, in consideration of the foregoing recitals and of other good and valuable consideration, the adequacy and sufficiency of which is hereby stipulated, the Parties hereto covenant and agree as follows:

1. The Parties acknowledge and agree that the recitals set forth above are hereby incorporated herein as substantive provisions of this Agreement. The Parties further acknowledge and agree that the "Definitions" that are attached hereto as Exhibit "C" are incorporated and shall define the terms of this Agreement.

2. The Parties agree that each shall, in the exercise of its respective planning jurisdiction, provide that all new development in the Subject Corridor shall provide for ingress to and egress from Randall Road in a manner consistent with the provisions of this Agreement and at the locations as generally depicted on Exhibit "A-3" which is attached hereto and made a part hereof.

3. The Parties agree that the location and nature of all access points to and from Randall Road within the Subject Corridor shall be as set forth herein and as generally illustrated on the conceptual plan attached hereto and incorporated herein as Exhibits "A1" and "A3". In the exercise of its authority over development, the CITY shall, to the extent permitted by law which shall not include the exercise of eminent domain or acting in a manner that may constitute an unlawful regulatory taking, (hereinafter "to the extent permitted by law") use its best efforts to secure the closure of access points other than those set forth herein and the elimination of those access points designated herein for elimination along the Subject Corridor and shall also, to the extent permitted by law, secure conveyance to the COUNTY in fee simple of additional right of way to facilitate planned future Randall Road improvements as contained in the COUNTY adopted Kane County 2030 Transportation Plan and the KDOT-TPR and the design and construction of any intersections at Access Points as hereinafter described. The COUNTY shall approve the Access Points and intersections described below and illustrated on Exhibits A1 through A3, provided, however, the design and construction of the intersections at said Access Points, including the design and construction of any additional appurtenances therefor shall be pursuant to permit issued by the COUNTY and in conformance with the KDOT-TPR except as may otherwise be modified by this Agreement. The exact location and final design of said access points shall be subject to the approval of the COUNTY in accordance with the KDOT-TPR, which approval shall not be unreasonably delayed or denied.

The following lettered subsections of this Section 3 correspond to the letters contained on Exhibits "A1-A3" attached hereto and incorporated herein:

A. DEAN STREET (ACCESS POINT A)—A Full Signalized Intersection with Randall Road.

B. SEIGLES NORTH ENTRANCE (ACCESS POINT B)—A "T" intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project. This access point and intersection shall be eliminated upon the relocation of Access Point C as herein provided. However, the County Engineer, with the approval of the Kane County Board, may approve retaining a Right-In/Right-Out Only intersection or Right-Out Only intersection at Access Point B if, in the County Engineer's determination, the intersection does not negatively impact the safety of the motoring public and helps to improve overall traffic circulation in the redevelopment of the site.

C. SEIGLES SOUTH ENTRANCE (ACCESS POINT C)—A "T" Intersection with Randall Road. This intersection shall become a temporary Right-In/Right-Out Only during or upon the completion of the Randall Road Project. This temporary Right-In/Right-Out Only shall be permitted to be closed and subsequently relocated to a point approximately 1,190 feet north of IL 64 subject to terms of this Agreement relative to access on the east side of Randall Road. When the relocation of Access Point C is complete, a Signalized Full Intersection (a public or private roadway on the east approach) with Randall Road is planned (See Access Point E). At the point in time the Full Intersection is opened to traffic on the east approach the Right-In/Right-Out Only Intersection and Access Point B shall be eliminated unless otherwise determined by the County Engineer and the Kane County Board as stated in paragraph B above.

D. FORMER EUCLID BEVERAGE ENTRANCE (ACCESS POINT D)—A "T" intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project. This access point and intersection shall be eliminated upon the construction of Access Point C to the Euclid site. The County Engineer may approve retaining a temporary Right-In/Right-Out Only intersection , Right-In Only intersection or Right-Out Only intersection at Access Point D if, in the County Engineer's determination, the intersection does not impact the safety of the motoring public and helps to maintain adequate traffic circulation for the existing building on the Euclid site. At such time the Euclid site is redeveloped, ingress and egress shall be from Access Point C.

E. FORMER PAYLINE WEST ENTRANCE (ACCESS POINT E)—A "T" Intersection with Randall Road. This intersection shall be relocated to approximately 1,190 feet north of IL 64 and shall become a temporary Right-In/Right-Out Only during or upon the completion of the Randall Road Project. The temporary Right-In/Right-Out Only shall be relocated and reconstructed as a Signalized Full Intersection (as shown on Exhibit "A-3"; Woodward Drive on its west approach) with Randall Road.

F. X-SPORT FITNESS ENTRANCE (ACCESS POINT F)—A "T" Intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project.

G. CITY WATER WELL ENTRANCE (ACCESS POINT G)—A "T" Intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project to permit emergency or periodic uses by the City or their contractors for purposes of City well maintenance.

H. FORMER BUS YARD ENTRANCE (ACCESS POINT H)—A "T" Intersection with Randall Road. This access point and intersection shall be relocated to approximately 630 feet north of IL 64 and become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project.

I. FORMER HINES ENTRANCE (ACCESS POINT I)—A "T" Intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project.

J. AUTO REPAIR ENTRANCE (ACCESS POINT J)—A "T" Intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project. At any time in the future, in the event that ingress and egress becomes available from another County approved access point, Access Point J will be eliminated.

K. FORMER LONG JOHN SILVER ENTRANCE (ACCESS POINT K)—A "T" Intersection with Randall Road. This access point and intersection shall be eliminated with the Randall Road Project.

L. FOX VALLEY TIRE (ACCESS POINT L)—A "T" Intersection with Randall Road. This intersection shall become a Right-In/Right-Out Only during or upon the completion of the Randall Road Project. At any time in the future, in the event that ingress and egress becomes available from another County approved access point, Access Point L will be eliminated.

4. Internal Circulation. The Parties agree that it is necessary and desirable to provide a system of public streets and/or cross access easements in conjunction with the development of property adjacent to Randall Road within the Subject Corridor so as to avoid burdening Randall Road and other arterial streets with the internal traffic movements of said development. The location of the intersections of access roads with Randall Road and the respective throat lengths of those access roads shall be generally as illustrated on the conceptual plans attached hereto as Exhibits "B1" and "B2". Nonetheless, the throat lengths of those Access Roads shall be adequate in length to minimize negative impacts to Randall Road. The Parties agree to cooperatively review any new development which would impact the Randall Road and Woodward Drive Intersection (Access Point E).

A. The CITY intends to make the future access road and access road extensions and connections as generally depicted in Exhibits "B1" and "B2". The timing of these extensions and connections and the CITY's ability to accomplish the same are dependent upon the future development of property adjacent to the proposed road extensions and connections. Other than as provided for herein, the CITY makes no representations or warranties with respect to when the extensions and connections will be constructed. To the extent permitted by law, the CITY agrees to use its best efforts in the exercise of its authority over development entitlements and approvals to require that the owner(s)/developer(s) of property contiguous to and within the Subject Corridor of Randall Road provide the Access Roads, and Access Road extensions and connections and/or cross access easements as depicted and illustrated on the conceptual plans attached as Exhibit "B1" and "B2".

B. To the extent permitted by, the CITY agrees to use its best efforts in the exercise of its authority over development entitlements and approvals to require owner(s)/developer(s) of property contiguous to and within the Subject Corridor of Randall Road to construct and dedicate the Access Roads as generally illustrated on the conceptual plan attached as Exhibits "B1" and "B2" and detailed as follows:

i) Woodward Drive Extension West of Randall.

As a condition of the development of the property adjoining, and extending approximately 500 feet west of the centerline of Randall Road, the CITY shall require the dedication and construction Woodward Drive for a distance approximately 500 feet west of the centerline of Randall Road tying into Woodward Drive (a subdivision requirement of Pine Ridge Park Subdivision) and intersecting with Illinois State Route 64 via Oak Street, conforming generally with Exhibit "B-1" and with all requirements of the St. Charles Municipal Code for residential collector streets, or similar standards.

ii) Future Woodward Drive Extension.

As a condition of the development of property referred to as the Cardinal Site on Exhibit "B-1" which is generally located more than 2,600 feet west of the centerline of Randall Road, between Pine Ridge Park and Remington Glen Subdivision (hereinafter referred to as the "Cardinal Property"), the CITY shall require the dedication and construction of the "Future Woodward Drive Extension" as a continuous roadway between the Woodward Drive Extension and Peck Road. The Future Woodward Drive Extension shall include an 80 feet wide right of way and shall further consist of all improvements, and shall be designed to conform to all requirements, of the St. Charles Municipal Code for residential collector streets, or similar standards.

iii) Public or Private Roadway Extension to Dean Street & IL 64.

As a condition of the redevelopment of the property adjoining, and extending approximately 1,100 feet east of the centerline of Randall Road the CITY shall require the dedication or provision for cross access easements and construction of Access Roads as generally shown on Exhibit "B-2" which shall include connections to Illinois State Route 64 and Dean Street. The public/private roadway shall be at least 26 feet wide and conform to the St. Charles Municipal Code for residential streets or greater as a function of the proposed use.

C. The CITY and/or the property owner(s) shall maintain said access road(s), including upkeep of roadway striping, signage, and pavement necessary to keep said access roads open and available for convenient and continuous public use.

D. As a condition to the issuance of a permit, the COUNTY shall require all intersection improvements to be provided for in accordance with the KDOT-TPR at any of the proposed Access Points identified in Paragraph 3 hereof. The COUNTY shall determine the specific location and design of any improvements. These improvements may include, but are not necessarily limited to:

i. Improvements: Additional or new travel lanes, shoulders, and storm water drainage systems, including right of way necessary therefor.
ii. Auxiliary lanes: Right-and left-turn lanes, channelization and center medians.
iii. Traffic Control Devices: Signalization, traffic signal interconnect or coordination systems, signage and pavement marking, including right of way necessary therefor.
iv. Roadway lighting including intersection lighting.
v. Barrier Medians.
vi. Bike Paths, including right of way necessary therefor.
vii. Storm Water Detention Facilities, including right of way necessary therefor.

To the extent permitted by law, the CITY agrees to use its best efforts in the exercise of its authority over development entitlements and approvals to require owner(s)/developer(s) of property contiguous to and within the Subject Corridor of Randall Road to construct and dedicate the access improvements consistent with the KDOT-TPR.

5. The Randall Road Project includes improvements that benefit both the CITY and COUNTY. The CITY agrees to contribute $1,470,000 toward that part of the Randall Road Project within the Subject Corridor. The CITY's contribution is in consideration of the expenses incurred by the COUNTY for the planning and constructing the Randall Road Project, including improvements that will facilitate access to existing and future development within the Subject Corridor contiguous to Randall Road. The City shall pay the County; (i) $490,000.00 within 30 days of the issuance of the permit for the construction of an intersection at Access Point E, (ii) $490,000.00 within thirty days after the opening to the public of the Intersection at Access Point E and (iii) $490,000.00 within two (2) years of the opening of the Intersection at Access Point E to the public.

6. The COUNTY agrees to work with the CITY and the property owner(s)/develop(s) within the Subject Corridor contiguous to Randall Road to incorporate, where possible and appropriate, changes to the Randall Road Project to assist with facilitating the relocation of access points C, E, and H and the construction of improvements needed to safely and efficiently accommodate proposed development. Such improvements may include the abandonment and subsequent relocation of access points C and E and H and the construction of traffic signals proposed at the future Woodward Drive intersection. The Parties anticipate that any and all such improvements and related costs will be at the expense of the property owner(s)/developer(s) requesting such improvements.

7. All access points on Randall Road within the Subject Corridor contiguous to Randall Road shall be subject to the review and approval of the COUNTY. Access points will be permitted in accordance with this Agreement and the KDOT-TPR and any other applicable regulations and design standards. If, however, there is a conflict between said KDOT-TPR and this Agreement, the terms of this Agreement shall control. Pursuant to 765 ILCS 205/2 et. seq. and 605 ILCS 5/8-102, the CITY shall obtain written approval or plat approval from the COUNTY, whenever any property within the Subject Corridor is proposed to be developed with any ingress to and egress from Randall Road, Access Road, and Access Road extension or connection, to ensure that the proposed intersection design and Randall Road intersection improvements are acceptable to the COUNTY.

8. The COUNTY shall own, operate and maintain the roadway lighting, future traffic signals and signal interconnect systems, and emergency vehicle preemption system within the right-of-way of Randall Road. The CITY shall pay the cost to energize and maintain such roadway lighting, future traffic signals and signal interconnect systems, and emergency vehicle preemption system within the Subject Corridor of Randall Road. This obligation shall be deemed to include all costs associated with the operation and maintenance of said signals, signal interconnect, and preemption systems and street lighting and approach lighting including, but not limited to, the lamps, brackets, poles, cable, and special equipment for Randall Road, Dean Street, Route 64 and Access Points C and E as part of the Randall Road Project. "Maintenance" is defined as the periodical replacement of the elements listed herein which have failed due to normal use and operation or due to accidental damage. The CITY is not required to replace any part or parts of the lighting system that warrant replacement due to changes in the COUNTY's lighting policy or due to roadway widening or other projects initiated or approved by the COUNTY. The CITY is

not responsible for replacement of part or parts of the system due to damage caused by utility companies, public bodies or other entities using the Randall Road right-of-way for approved purposes. In the event that any reimbursable costs are billed to and paid by the COUNTY, the CITY shall reimburse the COUNTY within forty-five (45) days of the receipt of an invoice for the CITY's share of the actual costs incurred.

9. Upon (i) receipt of all necessary right of way, storm water detention, a complete permit application and, (ii) the review and subsequent approval thereof by the County Engineer, the COUNTY agrees to grant a permit for widening Randall Road, traffic signals and other related improvements for the intersection of Randall Road and Woodward Drive (Access Points "C" & "E"). The permit will allow for a signal to be installed in conjunction with the construction of the westerly leg of future Woodward Drive at Randall Road. The CITY or the property owner(s)/developer(s) shall be responsible for the cost of design, constructing and installing said intersection improvements. The goal of the Parties is to construct the entire Signalized Full Intersection at Woodward Drive and Randall Road as one project. However, the Parties contemplate that the construction of the Full Signalized Intersection of Woodward Drive may be phased over time and shall be initially accomplished by the permitting and construction of the west leg of the intersection of Woodward Drive and Randall Road (that portion of the intersection west of the centerline of Randall Road) first. In the event that the phased approach to the intersection construction for Woodward Drive and Randall Road is utilized, then the right of way and storm water detention requirements necessary for only that phase of the intersection to be constructed will be required by the COUNTY.

10. At the completion of the Randall Road Project, a storm water management facility shall have been constructed by the COUNTY along the west side of Randall Road immediately south of the Union Pacific Railroad tracks as illustrated on the conceptual plan attached as Exhibits "A2" and "A3". This facility currently has the storm water capacity of 11 acre feet (ac-ft) and services the needs of the Randall Road Project as defined by the COUNTY's Storm Water Ordinance. The CITY and COUNTY agree that the storm water detention facility has the ability to be expanded to a capacity of 16.6 ac-ft. The COUNTY will permit the CITY or their agents, subject to the conditions of the existing easement therefor, to construct the incremental additional capacity up to 5.6 ac-ft in the future. This construction of incremental additional capacity shall take place if adjacent development desires to manage storm water with a facility at the location of the afore described storm

water management facility. The COUNTY agrees to permit adjacent development to utilize up to but not to exceed 4 ac-ft of the incremental additional capacity. The COUNTY and CITY agree that 1.6 ac-ft is required and reserved exclusively to the COUNTY for the future expansion of Randall Road as contained in the COUNTY adopted Kane County 2030 Transportation Plan in accordance with the current County of Kane Storm Water Ordinance. Specific conditions related to the 5.6 ac-ft incremental additional capacity are as follows:

i. The CITY or their agents will agree to build the 1.6 ac-ft of additional capacity for the future expansion of Randall Road as referenced herein above with the first event of construction activity to enlarge the aforesaid storm water management facility. The costs for enlarging the storm water management facility including design and construction engineering, construction and landscaping will be a CITY expense.

ii. The COUNTY shall review and approve the design for the storm water facility. The COUNTY's approval shall not unreasonably be withheld.

iii. The CITY agrees to maintain the storm water detention facility at its sole cost and expense.

11. The Parties agree to cooperate during the development review process for development of property within the Subject Corridor. The CITY shall solicit the COUNTY's review and comment prior to any development approval including but not limited to annexation, subdivision, zoning, or land use changes. The CITY agrees to solicit the COUNTY's advice on transportation, right of way, storm water, detention, and traffic issues for any annexation agreement covering property within the Subject Corridor which is contiguous to Randall Road. To the extent permitted by law, the CITY agrees to use its best efforts in the exercise of its authority over development entitlements and approvals to cause to be provided in the name of the County of Kane additional right of way and storm water detention to accommodate current and future projected Randall Road widening as set forth in the Kane County 2030 Transportation Plan and the KDOT-TPR at no cost to the Parties.. In the event that the CITY fails to provide the additional right of way and/or storm water detention, for the intersection(s) at Access Point C and/or at Access Point E, the COUNTY shall not approve or otherwise permit an intersection at either of the aforesaid access

point(s) for which right of way and storm water detention has not been provided by the CITY unless otherwise provided for in this Agreement.

12. In the exercise of its authority over development entitlements, the CITY will use its best efforts to provide, or cause to be provided, utility easements located outside the present or planned future right of way of Randall Road unless otherwise agreed to by the County Engineer. All utilities located within the right of way of Randall Road shall require a permit from the COUNTY. The Parties acknowledge and agree that the COUNTY shall have no obligation to place any utilities in its right of way, but will work with the CITY to reasonably accommodate utility placement in COUNTY right-of-way where necessary.

13. Except as otherwise provided herein, the Parties agree that Access Roads intersecting Randall Road should provide a minimum distance (the throat) between Randall Road and any other intersecting Access Roads of five hundred feet (500') or the minimum throat length as provided in the KDOT-TPR or any lesser distance as may be approved by the County Engineer.

14. The Randall Road Project includes a landscape barrier median in certain locations. The Parties agree that the CITY may, in the future, develop a plan to modify the median landscape as included in the Randall Road Project. Any costs for the design, construction and maintenance of the median landscaping shall be the sole responsibility of the CITY.

15. The CITY shall indemnify, defend, and save harmless as herein provided, the COUNTY, its officers, agents, officials, servants, and employees from any and all liability, claims, manner of actions, cause, and causes of action, suits, sums of money, covenants, controversies, agreements, promises, damages, judgments, claims, and demands, whatsoever, in law or in equity, and particularly and without limiting the generality of the forgoing any and all personal injuries, property damage or death, including claims for indemnity or contribution, attorneys' fees, and litigation expenses all and in any case or manner arising out of, caused by, or in consequence of the negligence of the CITY, and/or their employees, officers, agents, or servants, or out of, caused by, or in consequence of and relating in any manner to the CITY's design, construction, and maintenance of any landscaped median within the right-of-way of Randall Road.

16. Nothing in this Agreement shall be construed to require either Party to exercise the power of eminent domain or to take any action which either Party reasonably believes constitutes an unlawful regulatory taking under the law. Nothing in this Agreement shall be construed to authorize the COUNTY to exercise any zoning, subdivision, or other land use or building authority with respect to property located within, or which, pursuant to the terms of any annexation agreement, is proposed for inclusion within, the corporate limits of the CITY. Nothing in this Agreement shall be construed to authorize the CITY to exercise any authority conferred by law upon the COUNTY. Nothing in this Agreement shall be construed to require either Party to mandate any action by a third party that is not permitted by law.

17. The Parties acknowledge and agree that Exhibits B1 and B2 are a conceptual plan intended to demonstrate an intention by the Parties that the property as depicted thereon shall be improved with a system of access roads, and cross access easements which will serve the purpose of dispersing traffic in a manner which will serve to reduce traffic loads on Randall Road. The COUNTY acknowledges that the actual development of the property might require the location of access, roads and cross access easements in places other than those depicted on Exhibits "B1" and "B2". Provided that the CITY's processing and approval of any development proposal covering the property contiguous to Randall Road within the Subject Corridor is coordinated with the COUNTY as required by Paragraph 11 hereof, and provided such development proposal makes reasonable provision for access roads and cross access easements intended to serve the same planning purposes stated herein, such substitute access road, and cross access easements will not be deemed to violate this Agreement.

18. This Agreement shall be in full force and effect for a period of 20 years from and after the date first stated above. Notwithstanding the foregoing, and assuming that the COUNTY has received complete and correct applications for permit approvals for the Access Points C (relocated) and E, as described in Paragraph 3 hereof, and assuming that the County Engineer has approved said complete and correct permit applications, should the COUNTY fail to issue such permits within the first forty eight (48) months of the term of this Agreement, the CITY shall have the unconditional right to terminate this Agreement.

19. In the event that any future development occurs on property contiguous to the Subject Corridor as heretofore identified on Exhibits – and/or with respect to any future

development along any access road within the Subject Corridor which intersects with Randall Road (i.e. Woodward Avenue) that generates vehicular traffic that meets or exceeds warrants for any additional improvement(s) to said intersection(s) or that, in the opinion of the County Engineer, degrade the operation of the intersection(s) and consequently the operation of Randall Road, then the CITY acknowledges that the COUNTY may at its sole option control and restrict to any extent, any intersection within the Subject Corridor until such time that the operational level of the intersection(s) is improved to the satisfaction of the County Engineer.

20. This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their respective successors and assigns.

21. This Agreement may not be modified, amended or otherwise altered except upon the execution of a written amendment thereto properly authorized and executed by each of the Parties hereto.

Executed this 1st day of ~~November~~ December, 2006, at Geneva, Illinois.

COUNTY OF KANE

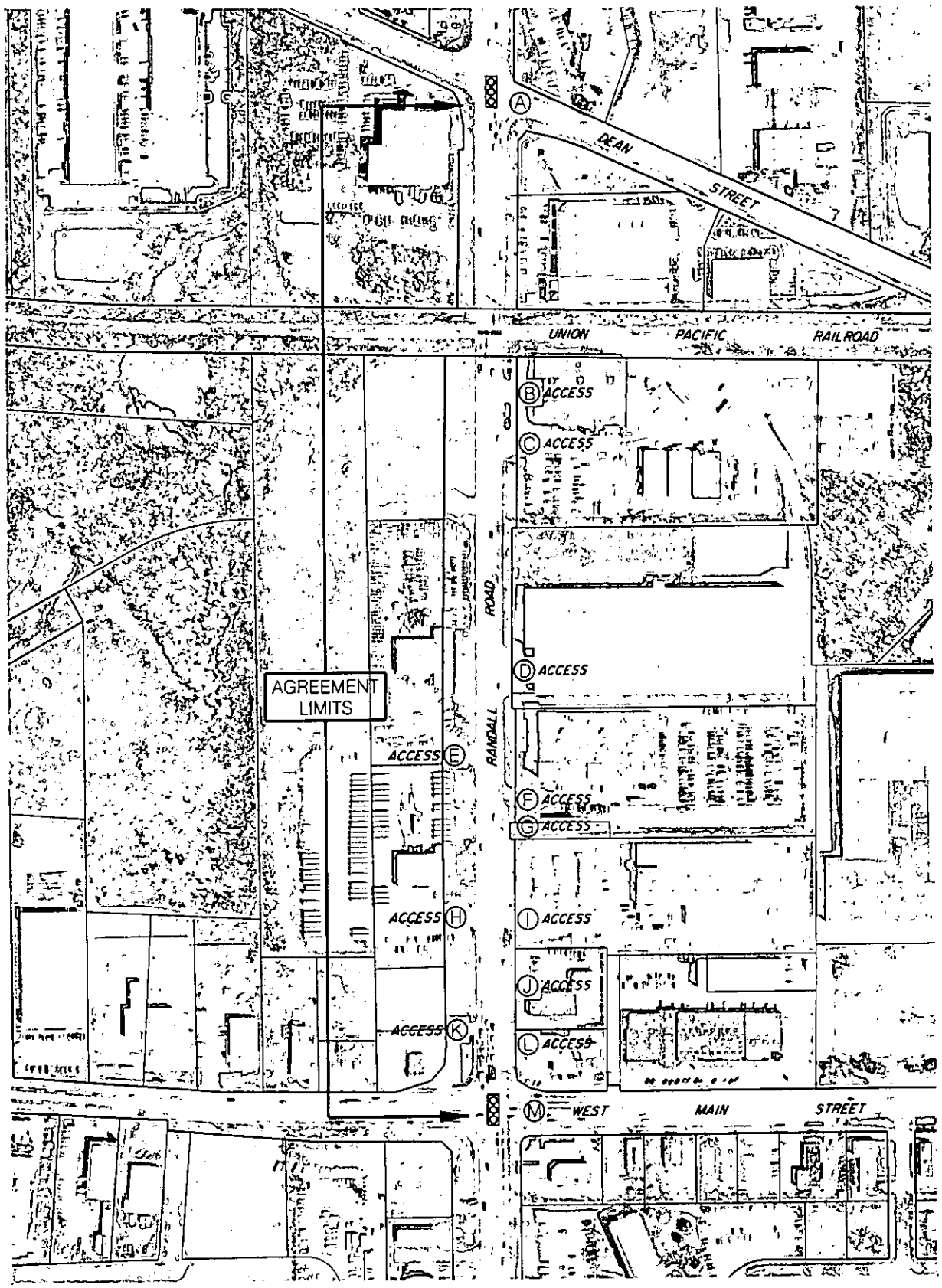
By: _____
County Board Chairman

Attest: _____
County Clerk

CITY OF ST. CHARLES

By: _____
Mayor

Attest: _____
City Clerk



LEGEND

EXISTING TRAFFIC SIGNAL

PROPOSED TRAFFIC SIGNAL

(A) ACCESS POINT

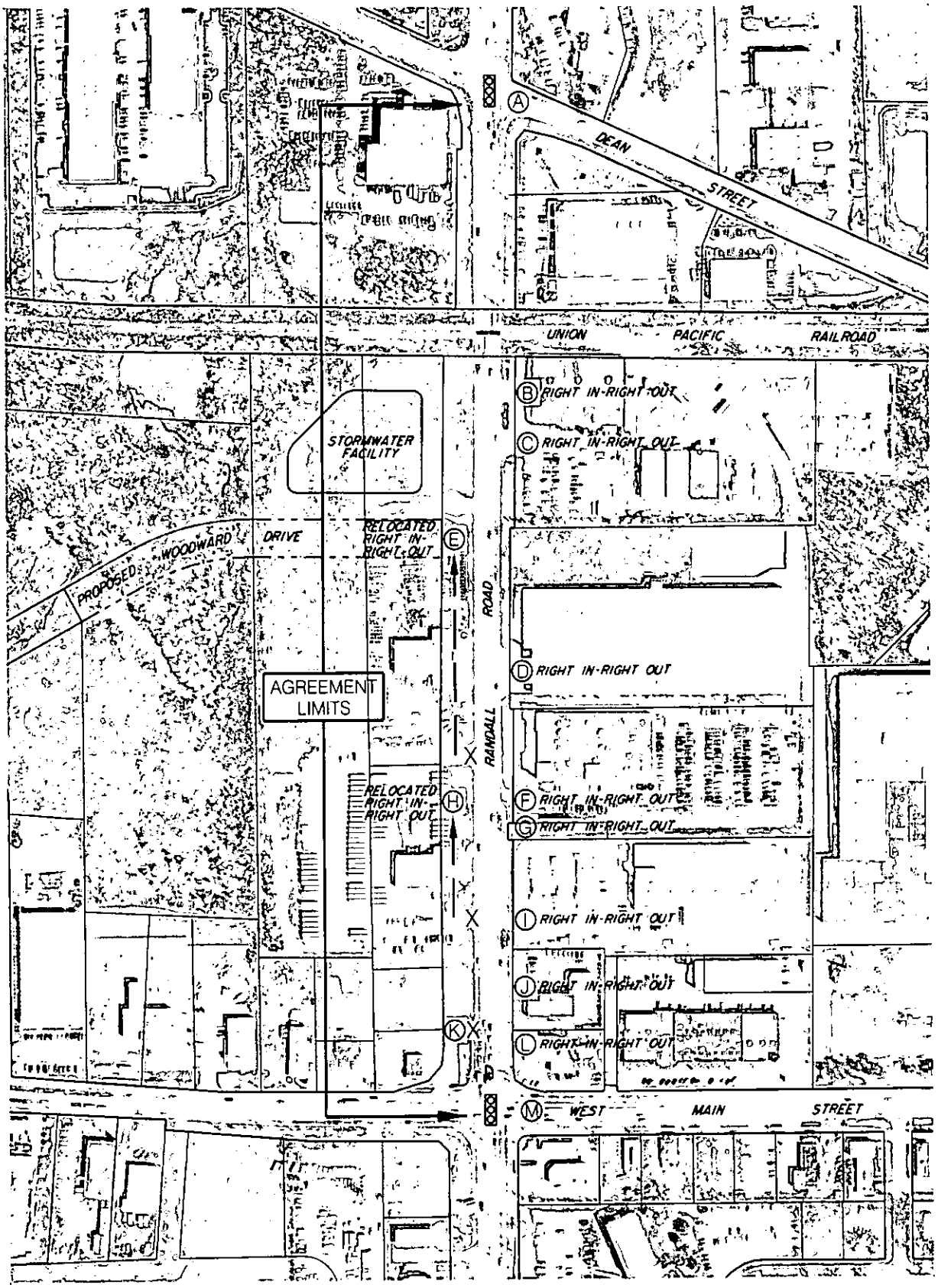
X REMOVE ACCESS POINT

RANDALL ROAD IGA
EXISTING CONDITIONS

NORTH

Scale: 1" = 300'
Date: September 22, 2006
Aerial: Spring 2004
File: Randall-IGA-3.dgn

EXHIBIT A-1



LEGEND

EXISTING TRAFFIC SIGNAL

PROPOSED TRAFFIC SIGNAL

(A) ACCESS POINT

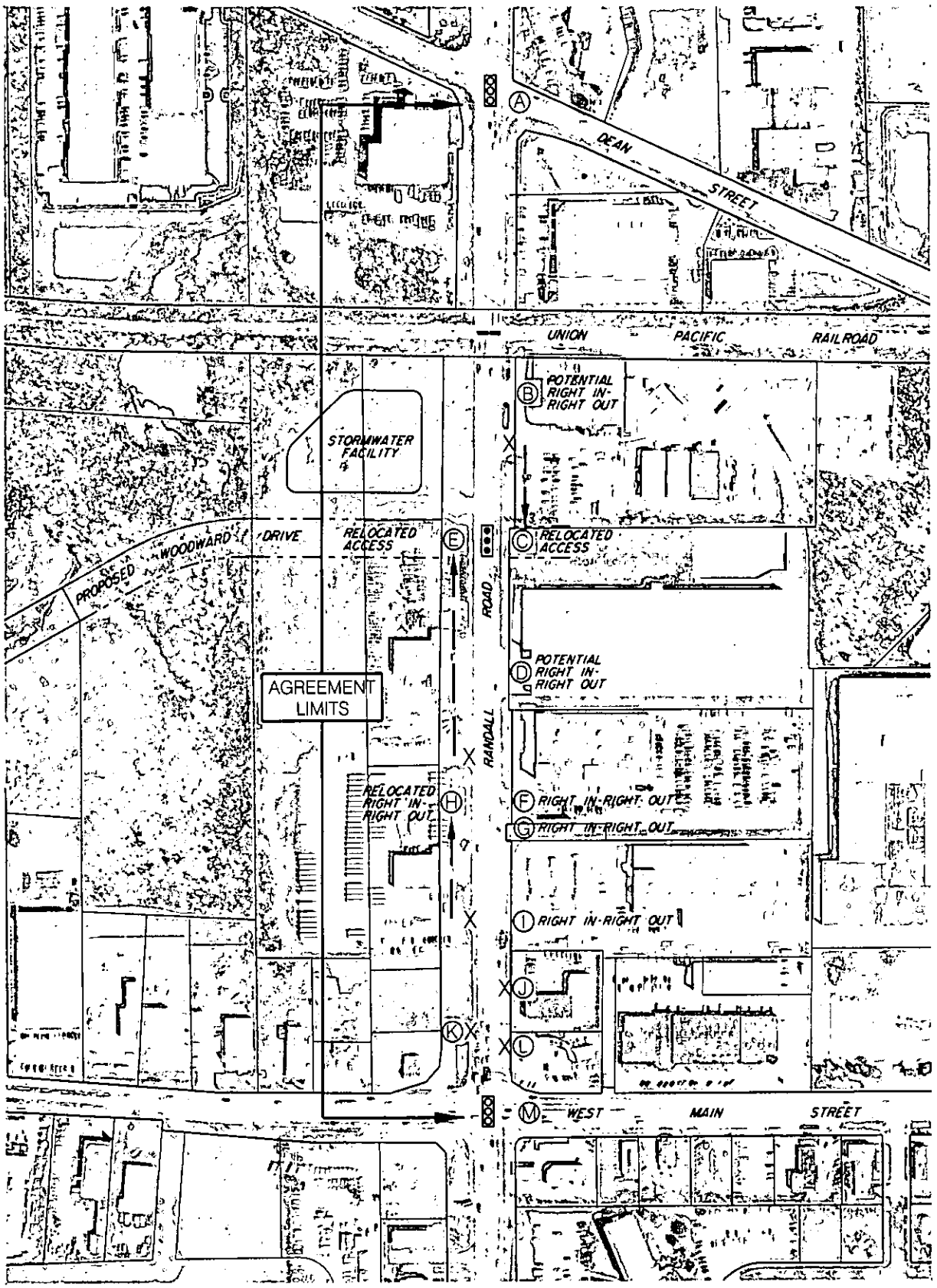
X REMOVE ACCESS POINT

RANDALL ROAD IGA
INTERIM CONDITIONS

NORTH

Scale: 1"=300'
Date: September 22, 2006
Aerial: Spring 2004
File: Randall-IGA-4.dgn

EXHIBIT A-2



LEGEND

EXISTING TRAFFIC SIGNAL

PROPOSED TRAFFIC SIGNAL

(A) ACCESS POINT

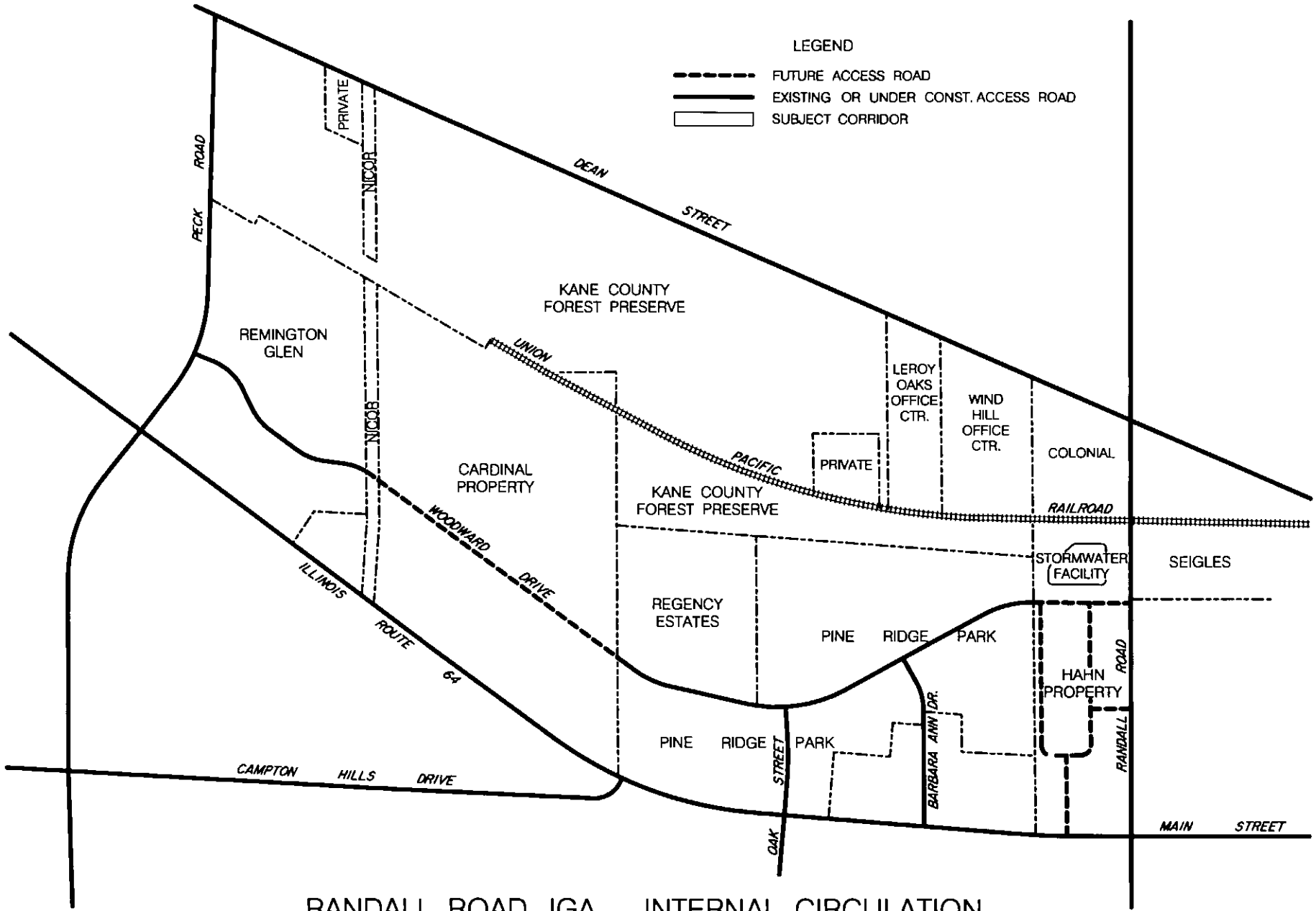
X REMOVE ACCESS POINT

RANDALL ROAD IGA FUTURE CONDITIONS

NORTH

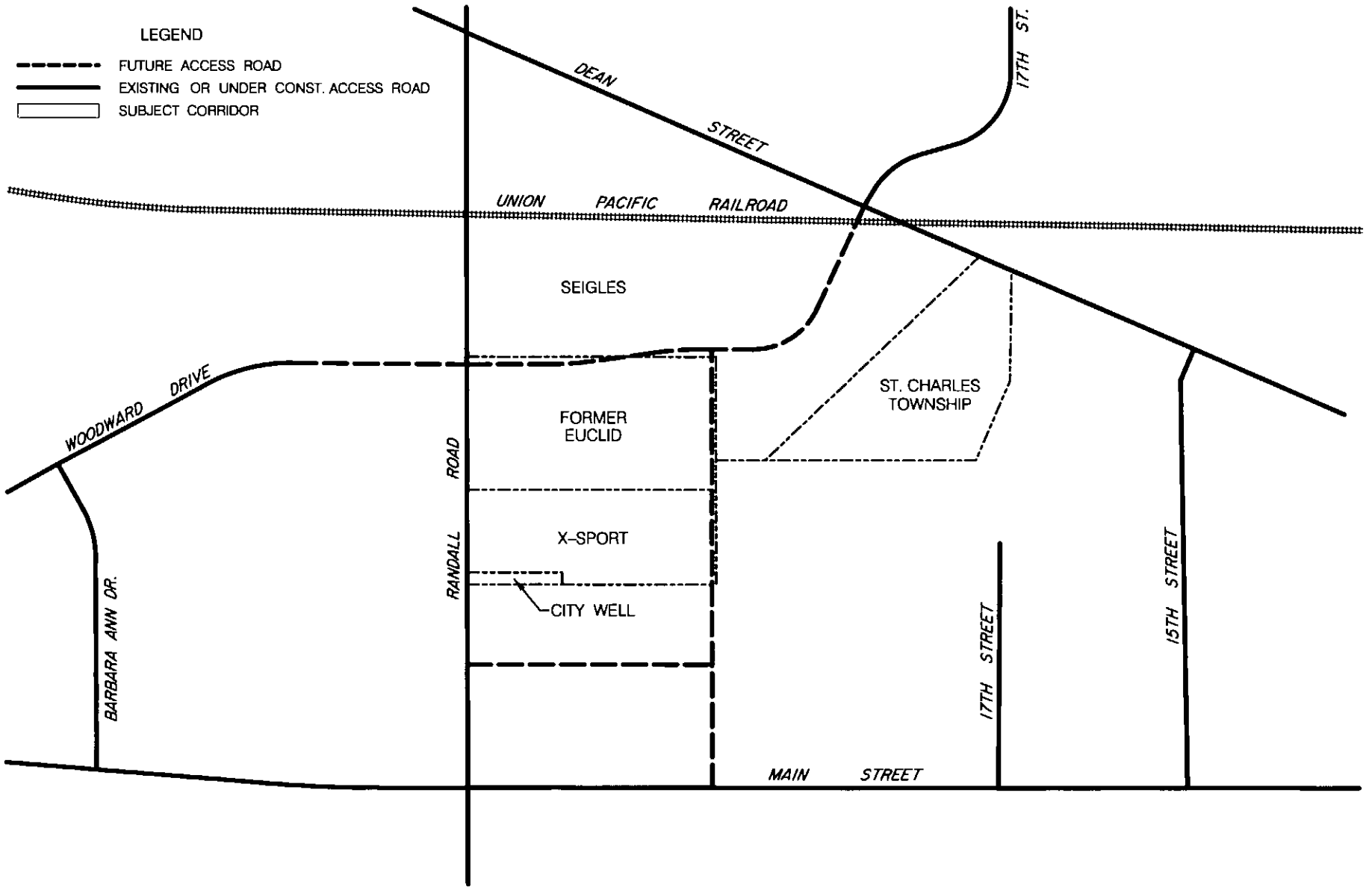
Scale: 1"=300'
Date: September 22, 2006
Aerial: Spring 2004
File: Randall-IGA-5.dgn

EXHIBIT A-3



RANDALL ROAD IGA – INTERNAL CIRCULATION
WEST SIDE
EXHIBIT "B–1"

Scale: 1"=700'
Date: September 22, 2006
File: Randall-IGA-7.dgn



RANDALL ROAD IGA – INTERNAL CIRCULATION
EAST SIDE
EXHIBIT "B–2"

NORTH

Scale: 1"=400'
Date: September 22, 2006
File: Randall-IGA-8.dgn

EXHIBIT "C"

DEFINITIONS

Access, *n.*: The right of an owner of property immediately adjacent to a highway to ingress to and egress from said property by way of the immediately adjoining highway.

Access Point *n.*: The permitted location along a highway where ingress to and egress from a property immediately adjoining the highway is allowed. The location of an access point is governed by the Kane County Division of Transportation, Permit Regulations (hereinafter "KDOT-PR") unless otherwise agreed to in writing by the County of Kane.

Access Regulation *n.*: Various measures utilized by the County of Kane, intended to regulate or control access, including, but not necessarily limited to control, restriction or elimination of an Intersection at an Access Point pursuant to the police power or by other appropriate means of the County of Kane. (See also: KDOT-PR).

Access Road, *n.*: See also Internal Access Road. A highway or private road that directly connects to an Access Point. That portion of a highway that connects to an Access Point is sometimes referred to as a leg of an Intersection.

Auxiliary Lanes, *n.*: Lanes, other than through lanes, of the traveled portion of a highway such as dedicated left turn lanes, right hand turn lanes or deceleration lanes.

County Highway, *n.*: a highway under the exclusive jurisdiction of the County of Kane. "County Highway" may include a highway under the exclusive jurisdiction of the County of Kane for which maintenance or other responsibilities are performed by another unit of government pursuant to an intergovernmental agreement with the County of Kane.

County Engineer, n: the Kane County Engineer.

Cross Access Easement, *n.*: An easement, granted by the owners of property adjacent to a highway, to the public for highway purposes. Cross access easements are intended to serve as locations for internal access roads or access roads to connect properties adjacent to the highway to an access point.

Detention, *n.*: A dry bottom earthen depression in the ground utilized for the temporary storage and controlled discharge of storm water.

Development, n.: any change or conversion in any use of real property that causes or otherwise requires, due to any increase in the amount of vehicular traffic either entering and/or leaving the real property, the laying out, provision of construction of any new means or the enlarging or extending any existing means of ingress and egress at a new or existing Access Point to or from a County Highway. Development includes "re-development" and the improvement of vacant land.

Highway, *n.*: A general term for denoting a public way for purposes of the travel of vehicular traffic including the entire area within the right of way thereof and any associated appurtenance therefor. "Highway" includes a City of St. Charles street or a township road.

Internal Access Road, *n.*: **A** highway servient to and which runs generally parallel with a dominant County highway and is sometimes referred to as a "frontage road" or a" local service drive" as defined by the Illinois Highway Code (605 ILCS 5/8-105). An internal access road is intended to collect traffic generated from properties adjacent to the frontage road to convey the traffic to an Access Road and an Access Point on a County or other highway.

Intersection, *n.*: The area within the right of way of two different highways, access roads, internal access roads, private roads, alleys, driveways within which vehicles traveling on the traveled portion of each highway come into conflict with one another. The junction of a private alley or a private driveway with a highway may for purposes of this Agreement constitute an intersection. Intersection includes:

A. **Full Intersection,** *n.*: An Intersection of two highways that has four intersecting legs which allows traffic certain traffic movements to and from each leg of the intersection to any other leg of the intersection.
B. **Right In/Right Out Only,** *n.* : A "T" Intersection where the movement of traffic is limited to the following movements only: (i) through movements on the horizontal legs of the "T" , (ii) a right hand turning movement only from the left horizontal leg of the "T" to the vertical leg of the "T" and, (iii) a right hand turning movement only from the vertical leg of the "T" to the right hand leg of the "T". No left hand turns are permitted on a right in/right out only intersection.
C. **Right In Only,** n.: An intersection where the movement of traffic on a County Highway is limited to only a right hand turning movement from the County Highway into property adjacent to a County Highway.
D. **Right Out Only,** n.:
E. **Signalized Intersection,** *n.*: An intersection that utilizes signalization, such as a Signalized Full Intersection or a Signalized "T" Intersection.
F. **"T" Intersection,** *n.*: An intersection of two highways or the intersection of a highway and an access road, internal access road, private drive or alley that has only three intersecting legs which allows traffic movements to and from each leg of the intersection to any other leg of the intersection. As its name implies this intersection appears as various forms of the letter "T".

Intersection Lighting, *n.*: Overhead electric lighting at an Intersection intended to illuminate the pavement surface of the Intersection as may be required by the County Engineer of Kane County or the KDOT-TPR.

KDOT-PR, *n.*: The Kane County Division of Transportation, Permit Regulations as amended from time to time and duly authorized by the Kane County Board.

MUTCD, *n.*: The most recent addition of the Manual of Uniform Traffic Control Devices.

Owner(s)/developer(s). n., An owner or any other person or entity having any interest in real estate.

Planning Jurisdiction, *n.*: The area described in the Illinois Compiled Statutes by 65 ILCS 5/11-12-5 through 65 ILCS 5-11-12-6 of the Municipal Code over which the City of St. Charles has planning authority.

Private Road, *n.*: A way for the purpose of travel of vehicular traffic including the entire area within the right of way thereof and any associated appurtenance therefor that is not intended for use by the general public, or alternatively, not under the jurisdiction of a unit of government.

Property Adjacent to Randall Road, *n.*: Real estate that is contiguous to the right of way of Randall Road and/or any other real estate that desires ingress to and egress from Randall Road.

Retention, *n.*: A wet bottom earthen depression in the ground utilized for the temporary and or permanent storage and controlled discharge of storm water.

Roadway Lighting, *n.*: Overhead electric lighting adjacent to a highway intended to illuminate the pavement surface and surrounding area as may be required by the County Engineer of Kane County.

Signalization, *n.*: Electronic traffic control devices also referred to as: traffic lights, traffic control devices, stop and go lights or traffic control signals, intended for the regulation of vehicular and pedestrian traffic at an Intersection where such devices on different legs of the same intersection alternately direct traffic to stop and to proceed. Signalization is designed, constructed operated and maintained to the satisfaction of the County Engineer of Kane County.

Signal Interconnect System, *n.:* An electronic system designed and intended to electronically connect signalization at various Intersections into a continuous series for the intended purpose of coordinating the movement of traffic through the various signalized intersections. Signal interconnect systems are designed, constructed, operated and maintained to the satisfaction of the County Engineer of Kane County.

Throat, *n.*: The area of a highway, access road, internal access road, leg of an Intersection, private road, alley or driveway where the Intersection with any of the same is not permitted.

CITY OF ST. CHARLES ILLINOIS • 1834	**AGENDA ITEM EXECUTIVE SUMMARY**	**Agenda Item Number: 4c**
	Title:	Plan Commission recommendation to approve a Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for Pride of Kane County, southeast corner of Kirk Rd. and E. Main St.
	Presenter:	Ellen Johnson

Meeting: Planning & Development Committee **Date**: November 9, 2020

Proposed Cost: $	Budgeted Amount: $	Not Budgeted: ☐

Executive Summary (*if not budgeted please explain*)**:**
This item was discussed at the August and September P&D Committee meetings and continued.

Background
CIMA Developers, LP are requesting approval to develop a Pride fuel facility, convenience store, and car wash on the 2.37-acre property at the southeast corner of Kirk Rd. and E. Main St. Proposed is the following:

- Annexation to the City of St. Charles.
- Rezoning to the BR Regional Business District with a Planned Unit Development (PUD).
- Fuel Facility (west side of property): Canopy with 8 fuel pumps at the corner. 1-story, 4,500 sf convenience store with quick-serve restaurant (Taco Urbano).
- Car Wash (east side of property): 1-story, 1,650 sf automatic car wash. 10 vacuum stalls.
- Right-in/right-out access on E. Main St. and cross-access through Main Street Commons.

Plan Commission held a public hearing on July 7, July 21 and August 4. The public hearing discussion is summarized in the attached Staff Memo. Plan Commission voted 8-1 to recommend approval, subject to resolution of outstanding staff comments prior to City Council action.

Annexation Agreement
Staff prepared a draft Annexation Agreement and PUD Ordinance for the Committee's consideration. Relative to the developer's previous requests, the agreement states the following:

- Sidewalks: Developer to install public sidewalk along the site frontages; City to reimburse the owner for the actual construction cost, not to exceed $40,000.
- Kirk Rd. Crosswalk: The developer will not be required to install or contribute to a crosswalk across Kirk Road- the City will assume this as a future project.
- Competitive Use restriction: The restriction on other gas station locations is not included in the draft.

A draft PUD Ordinance has been prepared as an exhibit to the agreement. The ordinance incorporates deviations from certain zoning requirements as requested by the applicant.

Regarding landscaping, the plans remain deficient in meeting code requirements for trees and planting beds along the building and street frontages. The Committee should indicate if there is interest in requiring compliance with the landscaping requirements, otherwise, these deficiencies will be added as PUD deviations.

Revised plans or a response to outstanding staff comments will be needed prior to City Council approval.

Attachments (*please list*)**:**
Annexation Agreement, PUD Ordinance, P&D Minutes from August and September 2020, Plan Commission Resolution, Staff Memo (PC Summary), HLR Memo- Eastern Access, Staff Report, Letter from Developer- Sidewalk Cost, Email from Developer- Gas Station facilities, Letters from Residents, Applications, Plans, Traffic Study / Review Memo

Recommendation/Suggested Action (*briefly explain*)**:**
Plan Commission recommendation to approve a Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for Pride of Kane County, southeast corner of Kirk Rd. and E. Main St.

Upon a recommendation to approve the zoning applications, Staff will proceed with scheduling a City Council public hearing regarding annexation of the property.

ANNEXATION AGREEMENT

THIS ANNEXATION AGREEMENT (hereinafter referred to as the "AGREEMENT") made and entered into this _____ day of _____, 2020 by and between the CITY OF ST. CHARLES, an Illinois municipal corporation located in Kane and DuPage Counties, Illinois (hereinafter referred as "CITY") and CIMA Developers, LP (hereinafter referred to as "OWNER"; the CITY and the OWNER being sometimes hereinafter referred to individually as "PARTY" and collectively as the "PARTIES").

WITNESSETH:

WHEREAS, the OWNER is the owner of record of a certain parcel of real estate, legally described in Exhibit "A" attached hereto and incorporated herein (hereinafter referred to as "SUBJECT REALTY"); and

WHEREAS, the OWNER has agreed to develop the SUBJECT REALTY and assume all responsibility and liability for the development of the SUBJECT REALTY in accordance with the terms and conditions of this AGREEMENT, and will carry out the duties and obligations of the OWNER as hereinafter provided; and

WHEREAS, the SUBJECT REALTY constitutes territory which is contiguous to and may be annexed to the CITY as provided in 65 ILCS 5/7-1-1, *et seq*.; and

WHEREAS, a Petition for Annexation for the SUBJECT REALTY has been filed by OWNER with the CITY in accordance with 65 ILCS 5/7-1-8; and

WHEREAS, the OWNER desires to have the SUBJECT REALTY annexed to the CITY upon the terms and conditions hereinafter set forth; and

WHEREAS, the CITY has considered the annexation of the SUBJECT REALTY and has determined that the best interest of the CITY will be met if the SUBJECT REALTY is annexed; and

WHEREAS, this Agreement is made pursuant to the provisions of 65 ILCS 5/11-15.1-1, *et seq*.; and

WHEREAS, all public hearings, as required by law, have been held by the Plan Commission and the City Council of the CITY, upon the matters covered by this AGREEMENT; and

WHEREAS, by a favorable vote of at least two-thirds (2/3) of the City Council of the CITY, a Resolution has heretofore been adopted authorizing the execution of this AGREEMENT.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, IT IS HEREBY AGREED BY AND BETWEEN THE CITY and OWNER, as follows:

Section 1. INCORPORATION OF RECITALS: The PARTIES hereby confirm and admit the truth and validity of the representations and recitations set forth in the foregoing recitals. The PARTIES further acknowledge that the same are material to this AGREEMENT and are hereby incorporated into and made a part of this AGREEMENT as though they were fully set forth in this Section 1 and the same shall continue for so long as this AGREEMENT is of force and effect.

Section 2. MUTUAL ASSISTANCE: The PARTIES shall do all things necessary or appropriate to carry out the terms and provisions of this AGREEMENT and to aid and assist each other in furthering the objectives of this AGREEMENT and the intent of the PARTIES as reflected by the terms of this AGREEMENT, including, without limitation, the giving of such notices, the holding of such public hearings, and the enactment by the CITY of such resolutions and ordinances, the execution of such permits, applications and agreements and the taking of such other actions as may be necessary to enable the PARTIES' compliance with the terms and provisions of this AGREEMENT and as may be necessary to give effect to the objectives of this AGREEMENT and the intentions of the PARTIES as reflected by the terms of this AGREEMENT.

Section 3. ANNEXATION: Subject to the provisions of 65 ILCS 5/7-1-8, as amended, the PARTIES respectively agree to do all things necessary or appropriate to cause the SUBJECT REALTY to be duly and validly annexed to the CITY as soon as practicable after the execution of this AGREEMENT. Attached hereto and incorporated herein as Exhibit "B" is the form of Ordinance providing for the annexation of the SUBJECT REALTY, entitled “An Ordinance Annexing Certain Unincorporated Territory to the City of St. Charles, Illinois (Pride of Kane County)”, together with a copy of the plat of annexation attached thereto.

Should any person having proper standing to do so bring a cause of action before any court of competent jurisdiction challenging the CITY’S lawful authority to annex the SUBJECT REALTY or challenging the method or procedures by or through which the PARTIES purported to cause the SUBJECT REALTY to be annexed to the CITY, the PARTIES agree that they shall fully cooperate, as provided in Section 2 hereof, to defend such cause of action. Should a court of competent jurisdiction finally determine that annexation of the SUBJECT REALTY was defective because of the failure of the PARTIES to follow a procedural requirement constituting a valid precondition to proper annexation of the SUBJECT REALTY, the PARTIES agree to promptly cause the SUBJECT REALTY to be reannexed to the CITY in a manner which satisfies all procedural requirements.

Should a court of competent jurisdiction finally determine that annexation of the SUBJECT REALTY by the CITY was without lawful authority (i.e., lack of contiguity), the PARTIES agree that this AGREEMENT shall thereafter be deemed a Pre-Annexation Agreement authorized pursuant to 65 ILCS 5/7-1-1, as amended, and shall remain in full force and effect to the extent permitted by law. Thereafter, should the SUBJECT REALTY become

contiguous to the CITY, the PARTIES agree to promptly take all necessary steps as may then be provided by law to perfect the annexation of the SUBJECT REALTY to the CITY.

Section 4. ZONING: Immediately subsequent to the annexation of the SUBJECT REALTY to the CITY, the PARTIES respectively agree to do all things necessary or appropriate to cause the SUBJECT REALTY to be duly and validly rezoned to the BR Regional Business District, pursuant to the provisions of Title 17 of the St. Charles Municipal Code, as amended ("ZONING ORDINANCE"), and to grant a Special Use for Planned Unit Development for the SUBJECT REALTY. Attached hereto and incorporated herein as Exhibit "C" is a copy of the Ordinance rezoning the SUBJECT REALTY to the BR Regional Business District and granting a Special Use for a Planned Unit Development, entitled "An Ordinance Granting Approval of a Map Amendment, Special Use for PUD and PUD Preliminary Plan for Pride Kane County" ("PUD ORDINANCE").

Should any person having proper standing to do so bring a cause of action before any court of competent jurisdiction challenging the rezoning of the SUBJECT REALTY as provided in this AGREEMENT and in the ordinance referenced in the preceding paragraph, the PARTIES agree that they shall fully cooperate, as provided in Section 2 hereof, to defend against such cause of action. Further, the PARTIES specifically agree that to the extent such litigation proves successful, the CITY shall take such legislative action as then may be lawfully required to cause the SUBJECT REALTY to be zoned for the purposes herein contemplated.

Section 5. PRELIMINARY PLAT OF SUBDIVISION & PRELIMINARY ENGINEERING PLANS: Subject to the provisions of 65 ILCS 5/11-12-8, as amended, and Title 16 of the St. Charles Municipal Code, as amended ("SUBDIVISION ORDINANCE"), the CITY will grant preliminary plat of subdivision approval for the subdivision of the SUBJECT REALTY and preliminary engineering plan approval for the SUBJECT REALTY pursuant to the plans attached as exhibits to the PUD ORDINANCE, heretofore attached and incorporated herein as Exhibit "C".

The OWNER shall not be required to submit for review or obtain approval of any additional preliminary plan or plat in order to obtain approval by the CITY of a final plat of subdivision of the SUBJECT REALTY which is in substantial conformity with the preliminary plat of subdivision. Upon the submission of a final plat of subdivision ("FINAL PLAT") accompanied by final engineering plans ("FINAL ENGINEERING PLANS"), for the SUBJECT REALTY, and provided such FINAL PLAT and FINAL ENGINEERING PLANS comply with applicable ordinances of the CITY and this AGREEMENT, the CITY shall approve such FINAL PLAT and FINAL ENGINEERING PLANS within the time period provided in 65 ILCS 5/11-12-8, as amended.

Section 6. APPLICABLE MUNICIPAL STANDARDS: Upon annexation of the SUBJECT REALTY, all zoning, subdivision, building and development of the SUBJECT REALTY (including any area adjacent thereto, the improvement of which is necessary or proposed to facilitate the development of the SUBJECT REALTY) shall be undertaken in conformity with the requirements of all applicable CITY codes, ordinances, rules, regulations and standards generally in force, from time to time, within the CITY, except to the extent that the same are

superseded by more restrictive standards imposed by other regulatory authorities having jurisdiction and, further, as the same may be specifically modified by the terms of this AGREEMENT. Said applicable municipal standards shall otherwise be referred to herein as the "CITY CODE".

Section 7. RESPONSIBILITY FOR CITY REVIEW EXPENSES: OWNER agrees to pay all CITY expenses for the review, preparation of documents and plans, hearings and approvals through the adoption of this AGREEMENT incurred by the CITY, including, but not limited to, legal fees, engineering fees, and any other fees incurred with respect to this AGREEMENT. Said expenses shall be paid out of the account established with the CITY by the OWNER; provided, however, that should such account have insufficient funds, any remaining amounts due hereunder shall be billed to the OWNER and the OWNER shall pay, within thirty (30) days of the date of invoicing, same in full as a condition to the CITY'S execution of this AGREEMENT.

Section 8. UTILITY EASEMENTS: To the extent that any required public improvements are to be dedicated to the CITY, the OWNER shall grant, or cause to be granted, to the CITY, adequate easements and public rights-of-way in form and substance reasonably acceptable to the CITY.

Section 9. REQUIRED IMPROVEMENTS:

(a) Engineering Conformance. All public improvements to be constructed shall be constructed in conformance with the approved engineering plans, Section 5 hereof and the Land Improvement Agreement referred to herein (the "IMPROVEMENT AGREEMENT"). In the event that any provision of the CITY CODE, the IMPROVEMENT AGREEMENT or any engineering plans shall conflict with any other provision of the CITY CODE, the IMPROVEMENT AGREEMENT or any engineering plans, that provision determined by the CITY'S Community & Economic Development Director to be the most restrictive shall apply.

(b) Sanitary Sewer, Water and Electric Facilities. OWNER shall connect to the CITY owned wastewater, water and electric utilities to serve the SUBJECT REALTY. At such time as OWNER connects to CITY utilities, OWNER shall apply for any connection permits required by the CITY and shall pay the CITY'S required tap-on or connection fees as, from time to time, may be provided by ordinance. Except as otherwise set forth herein, the OWNER shall be responsible for the costs associated with bringing the aforesaid utilities from the connection point to the locations on the SUBJECT REALTY where the utilities will be utilized, and completing any related system improvements deemed necessary by the CITY to serve the SUBJECT REALTY.

The CITY shall not be responsible for its inability to provide any of the utility services identified herein, or for any loss or damage, including consequential damage, or delay in installation caused by strikes, riots, the elements, embargos, the failure of carriers or the inability to obtain materials or other acts of God or by virtue of any other cause beyond the CITY'S reasonable control, including but not limited to inability to acquire necessary easements or permits subject to review and issuance by other agencies. The CITY shall cooperate with the OWNER in obtaining any necessary easements.

OWNER shall disconnect the Commonwealth Edison electric service and remove any unused overhead service lines and poles from the Subject Realty. Any private water wells or sanitary sewer septic systems shall be properly abandoned in accordance with applicable codes.

(c) Storm Water Facilities.

(i) OWNER shall provide for storm water drainage and the retention/detention thereof upon and from the SUBJECT REALTY, in substantial conformity with the PRELIMINARY ENGINEERING PLANS and the CITY'S applicable storm water management ordinance, subject to review and approval of FINAL ENGINEERING PLANS.

(ii) The storm water retention/detention area ("DETENTION AREA") as identified on the PRELIMINARY PLAN, as adjusted pursuant to the review and approval of the FINAL ENGINEERING PLANS, shall be impressed with a stormwater detention easement in form and content approved by the CITY. The DETENTION AREA shall be maintained by the OWNER.

(iii) In accordance with Title 18 of the St. Charles Municipal Code ("STORMWATER ORDINANCE"), Section 18.04.010 – Stormwater Management Ordinance - Adopted – Modifications, Subsection P', the SUBJECT REALTY, identified as item No. 8, "Pride Gas Station," was exempted from the 2019 revisions to the Kane County Stormwater Ordinance. The PRELIMINARY ENGINEERING PLANS and associated DETENTION AREA have been designed in accordance with this exemption. The SUBJECT REALTY may be developed in conformance with the PRELIMINARY ENGINEERING PLANS irrespective of the expiration of said exemption.

(d) Public Sidewalks. OWNER shall cause public sidewalks to be installed along the public street frontages adjacent to the SUBJECT REALTY in substantial conformity with the PRELIMINARY ENGINEERING PLANS, as approved, and the applicable provisions of the Subdivisions Regulations of the CITY. OWNER shall install all public sidewalks and CITY shall reimburse the OWNER for the actual construction cost, not to exceed $40,000.00. Actual construction cost shall be based on paid invoices and waivers of lien provided by the OWNER.

(e) Kirk Road Crosswalk. The CITY acknowledges that future installation of a pedestrian crosswalk across the south leg of the intersection of Kirk Road and E. Main St./IL Route 64, as shown on the PRELIMINARY ENGINEERING PLANS, would improve pedestrian connectivity. The OWNER shall not be required to install or otherwise contribute to the cost of the crosswalk in connection with the development of SUBJECT REALTY.

(f) Cross Access. As shown on the PRELIMINARY ENGINEERING PLANS, OWNER shall provide for cross access vehicular connections to the south and east to the Main Street Commons shopping center. Said cross access shall be available for use by the SUBJECT REALTY, subject to the terns and conditions of any easement agreement between the OWNER and shopping center.

(g) Building Permit Timing and Completion of Improvements Prior to Occupancy. OWNER agrees to comply with Section 16.04.140.B with regards to the timing and issuance of Building Permits and to complete the required improvements before a Certificate of Occupancy issued as stipulated in Section 16.04.140.C.

(h) Guarantee for Land Improvements. As a condition of approval of a FINAL PLAT, the OWNER shall execute a LAND IMPROVEMENT AGREEMENT, in substantially the form provided in Appendix D of the SUBDIVISION ORDINANCE and tender the security provided for therein.

Section 10. FEES AND CONTRIBUTIONS: The OWNER pay all the necessary fees and connection charges that may be applicable with respect to the SUBJECT REALTY.

Section 11. REQUIREMENTS OF OTHER JURIDICTIONS: It is agreed that the CITY is not liable or responsible for any restrictions on CITY'S obligations under this AGREEMENT that may be required or imposed by any other governmental bodies or agencies having jurisdiction over the SUBJECT REALTY, CITY and/or OWNER, including but not limited to county, state and federal regulatory bodies.

Section 12. BINDING EFFECT, SUCCESSION IN INTEREST AND TERM: This AGREEMENT shall constitute a covenant running with the land and shall be binding upon and inure to the benefit of the PARTIES hereto, successors in interest, assignees, lessees, and upon any successor municipal authorities of the CITY and successor municipalities for a period of twenty (20) years from the date hereof.

Section 13. DISCONNECTION: Once the SUBJECT REALTY has been annexed to CITY and a final plat and collateral approval granted for any part of the SUBJECT REALTY, OWNER agrees not to petition for disconnection of any part of the SUBJECT REALTY from CITY without CITY approval under any statutory provision and agrees that if the SUBJECT REALTY is disconnected from the CITY (a) the growth prospects and plan and zoning ordinances of the CITY would be unreasonably disrupted; (b) substantial disruption will result to existing municipal service facilities, such as, but not limited to, sewer systems, street lighting, water mains, garbage collection and fire protection; and (c) the CITY would be unduly harmed through loss of tax revenue in the future. However, the CITY may disconnect the SUBJECT REALTY with the written consent of OWNER.

Section 14. HOLD HARMLESS AND INDEMNIFICATION: In the event a claim is made against the CITY, its officers, other officials, agents and employees or any of them or if the CITY is made a party-defendant in any proceeding arising out, or alleged to arise out of, or in any other way be connected with this AGREEMENT or the annexation of the SUBJECT REALTY, or the development of the SUBJECT REALTY arising out of the intentional or negligent acts of owner, or owner's agents, the OWNER, to the extent permitted by law, shall defend and hold the CITY and such officers, other officials, agents and employees, past present and future, harmless from all claims, liabilities, losses, taxes, judgments, costs, and fees, including expenses and reasonable attorney's fees, in connection therewith. Any such

indemnified person may obtain separate counsel to participate in the defense thereof at his own expense; however, if the Illinois Rules of Professional Conduct, or such applicable rules, require such indemnified person to be separately defended where there is no consent to a conflict of interest, then OWNER shall bear such expense. The CITY and such officers, other officials, agents and employees shall reasonably cooperate in the defense of such proceedings. Said indemnification shall not include claims, liabilities, losses, judgments, costs and fees arising from the negligent or willfully wrongful acts or omissions of the CITY, its officers, other officials, agents and employees.

Section 15. REMEDIES: Upon a breach of this AGREEMENT, either of the PARTIES may, in law or equity, by suit, action, mandamus or any other proceeding, including specific performance, enforce or compel the performance of this AGREEMENT. Pursuit of any remedy to enforce or compel performance of this AGREEMENT shall not preclude a PARTY from pursuing any other remedy available to it to enforce or compel performance of this AGREEMENT.

Before any failure of any PARTY to this AGREEMENT to perform its obligations under this AGREEMENT shall be deemed to be a breach of this AGREEMENT, the PARTY claiming such failure shall notify, in writing by certified mail, return receipt requested, the PARTY alleged to have to perform and performance shall be demanded.

In the event that either the CITY or the OWNER sue in order to enforce the terms of this AGREEMENT, the prevailing PARTY in any such litigation shall pay all costs and expenses incurred in prosecuting or defending such litigation (including, but not limited to, reasonable attorneys fees and court costs).

Section 16. WAIVER AND SEVERABILITY: No provisions of this AGREEMENT may be waived by any PARTY except by writing signed by that PARTY. If any provision of this AGREEMENT is held invalid, such provision shall be deemed to be excised from this AGREEMENT and the remainder of this AGREEMENT shall continue in full force and effect to the extent possible; provided, however, CITY shall under no circumstances be required to incur any liability, loss or incur any expenses for any reason in the event that such section, paragraph, clause, provision or item is held invalid.

Section 17. NOTICE: Unless otherwise notified in writing, all notices, requests and demands shall be in writing and shall be delivered to or be mailed by certified mail, return receipt requested, as follows:

If to the CITY: City of St. Charles
2 East Main Street
St. Charles, IL 60174
Attention: City Administrator

With copy to: Storino, Ramello & Durkin
9501 W. Devon Avenue
Suite 800

Rosemont, IL 60018
Attention: Nicholas S. Peppers, City Attorney

If to the OWNER: CIMA Developers, LP
30W180 Butterfield Rd.
Warrenville, IL 60555
Attention: Peter M. Spina

With copy to:

The names and addresses provided in this Section may be changed from time to time by notice duly given in compliance with the provisions of this Section.

Section 18. AMENDMENT: This AGREEMENT, and any exhibits or attachments hereto, may be amended from time to time in writing with the consent of the PARTIES hereto.

Section 19. CONVEYANCES: Nothing contained in this AGREEMENT shall be constructed to restrict or limit the right of the OWNER to sell or convey all or any portion of the SUBJECT REALTY, whether improved or unimproved.

Section 20. CAPTIONS AND PARAGRAPH HEADINGS: The captions and paragraph headings used herein are for convenience only and shall not be used in construing any term or provision of this AGREEMENT.

Section 21. RECORDING: This AGREEMENT shall be recorded in the Office of the Recorder of Deeds, Kane County, Illinois, at OWNER'S expense.

Section 22. CHANGES IN REGULATIONS: It is understood and agreed, except as otherwise provided for herein, that the various requirements of the CITY CODE, including all fees and charges provided for therein, shall not be frozen during the term of this AGREEMENT and may, from time to time, be amended, and as amended, shall apply to the SUBJECT REALTY. Notwithstanding the foregoing, it is expressly understood and agreed by the PARTIES that during the term of this AGREEMENT, pursuant to the zoning to be granted hereunder, the OWNER, his successors and assigns shall be permitted to use the SUBJECT REALTY pursuant to the zoning to be granted hereunder.

Section 23. GOVERNING LAW: This AGREEMENT, and the terms and provisions contained herein, shall be construed and governed under the laws of the State Illinois.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEROF, the PARTIES have hereunto placed their hands and the CITY its seal on the date first above written.

CITY OF ST. CHARLES, an Illinois municipal corporation

By: _____
Mayor Raymond P. Rogina

ATTEST

By:_____
City Clerk Charles Amenta

STATE OF ILLINOIS)
) SS
COUNTY OF KANE)

I, _____, a Notary Public, in and for the County and State aforesaid, do hereby certify, that Raymond P. Rogina, personally known to me to be the Mayor of the City of St. Charles, Kane and DuPage Counties, Illinois, a municipal corporation, and Charles Amenta, personally known to me to be the City Clerk of said corporation, and personally known to me to be the same persons whose names are subscribed to the forgoing instrument appeared before me this day in person and severally acknowledged that as such Mayor and City Clerk, they signed and delivered the said instrument and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority given by the City Council of said corporation, as the free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and official seal this ____ day of _____, 2020.

_____
Notary Public

DRAFT 11/2/2020

OWNER:

CIMA DEVELOPERS, LP
An Illinois Limited Partnership

By_____
PETER M. SPINA

STATE OF ILLINOIS)
) SS
COUNTY OF KANE)

I, _____, a Notary Public, in and for the County and State aforesaid, do hereby certify, that Peter M. Spina, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his free and voluntary act for the uses and purposes therein set forth.

GIVEN under by hand and official seal this ____ day of _____, 2020.

_____
Notary Public

EXHIBIT "A"

LEGAL DESCRIPTION OF SUBJECT REALTY

THAT PART OF THE NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE SOUTH LINE OF SAID QUARTER SECTION, 3.49 CHAINS WEST OF THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER THEREOF; THENCE NORTH 8 DEGREES EAST 20.94 CHAINS; THENCE NORTH 77 DEGREES WEST 14.23 CHAINS; THENCE SOUTH 8 DEGREES WEST 20.58 CHAINS; THENCE NORTH 89 DEGREES EAST 3.35 CHAINS; THENCE SOUTH 3.66 CHAINS TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 25; THENCE EAST ON SAID SOUTH LINE 10.52 CHAINS TO THE POINT OF BEGINNING (EXCEPT THAT PART NORTH OF THE CENTER LINE OF ROUTE 64 AND EXCEPT THAT PART WEST OF THE EAST LINE OF KIRK ROAD AND ALSO EXCEPT THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE EASTERLY LINE OF KIRK ROAD (COUNTY HIGHWAY NO. 77) AS DESCRIBED IN DOCUMENT 1107922 WITH A LINE DRAWN PARALLEL WITH AND 50.0 FEET SOUTHERLY OF THE CENTER LINE OF ILLINOIS STATE ROUTE NO. 64 (MEASURED AT RIGHT ANGLES THERETO); THENCE ON AN ASSUMED BEARING OF SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE 60.0 FEET; THENCE NORTH 43 DEGREES, 53 MINUTES, 42 SECONDS EAST 83.76 FEET TO SAID PARALLEL LINE; THENCE NORTH 1 DEGREE, 01 MINUTES, 58 SECONDS WEST 50.0 FEET TO SAID CENTER LINE; THENCE SOUTH 88 DEGREES, 58 MINUTES, 02 SECONDS WEST ALONG SAID CENTER LINE 42.29 FEET TO SAID EASTERLY LINE EXTENDED; THENCE SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE EXTENDED 50.59 FEET TO THE POINT OF BEGINNING, ALSO EXCEPT THAT PART OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 25 TOWNSHIP 40 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 5, UNIT 1, THE "ST. CHARLES" ILLINOIS INDUSTRIAL DEVELOPMENT OF THE CENTRAL MANUFACTURING DISTRICT; PROCEED NORTHERLY ON THE NORTHERLY EXTENTION OF THE WEST LINE OF SAID LOT 5, 109.41 FEET, TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF NORTH AVENUE (RT. 64); THENCE NORTHEASTERLY ON SAID RIGHT OF WAY LINE WHICH FORMS AN EXTERIOR ANGLE OF 216 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 21.19 FEET TO A POINT ON A LINE 12.50 FEET EASTERLY OF AND PARALLEL WITH THE NORTHERLY EXTENTION OF THE WEST LINE OF SAID LOT 5; THENCE SOUTHERLY ON SAID PARALLEL LINE WHICH FORMS AN INTERIOR ANGLE OF 36 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 124.63 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 5; THENCE WESTERLY ON SAID NORTH LINE, WHICH FORMS AN INTERIOR ANGLE OF 98 DEGREES 33 MINUTE 48 SECONDS WITH THE LAST DESCRIBED LINE, 12.64 FEET, TO THE POINT OF BEGINNING), IN THE TOWNSHIP AND CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

EXHIBIT "B"

ORDINANCE ANNEXING SUBJECT REALTY

EXHIBIT "C"

PUD ORDINANCE

DRAFT 11/2/2020

City of St. Charles, Illinois
Ordinance No. 2020-Z-

An Ordinance Granting Approval of a Map Amendment, Special Use for Planned Unit Development and PUD Preliminary Plan for Pride of Kane County

WHEREAS, on or about April 7, 2020, CIMA Developers, LP (the "Applicant") filed petitions for: 1) Map Amendment from RE-1 Single-Family Estate District to BR Regional Business District; 2) Special Use for Planned Unit Development; and 3) PUD Preliminary Plan, all for the real estate legally described on Exhibit "A" attached hereto and incorporated herein (the "Subject Property"), for the purpose of developing a gas fueling facility, convenience store, and car wash; and,

WHEREAS, Notice of Public Hearing on said petitions for Map Amendment and Special Use for Planned Unit Development was published on or about June 18, 2020 in a newspaper having general circulation within the City, to-wit, the Daily Herald newspaper, as required by the statutes of the State of Illinois and the ordinances of the City; and,

WHEREAS, pursuant to said Notice, the Plan Commission conducted a public hearing on or about July 7, 2020, July 21, 2020 and August 4, 2020 on said petitions in accordance with the statutes of the State of Illinois and the ordinances of the City; and,

WHEREAS, at said Public Hearing, the Applicant presented testimony in support of said petitions and all interested parties had an opportunity to be heard; and,

WHEREAS, the Plan Commission recommended approval of said Map Amendment, Special Use for Planned Unit Development and PUD Preliminary Plan petitions on or about August 4, 2020; and,

WHEREAS, the Planning & Development Committee of the City Council recommended approval of said petitions on or about November 9, 2020; and,

WHEREAS, the City Council of the City of St. Charles has received the recommendations of the Plan Commission and Planning & Development Committee and has considered the same.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CHARLES, KANE AND DUPAGE COUNTIES, ILLINOIS, as follows:

1. The preambles set forth hereinabove are incorporated herein as substantive provisions of this Ordinance as though fully set out in this Section 1.

2. That passage of this Ordinance shall constitute approval of the petition for a Map Amendment for the Subject Property from the RE-1 Single-Family Estate District to the BR

Regional Business District, and the Findings of Fact for Map Amendment attached hereto and incorporated herein as Exhibit "B" are expressly adopted by the corporate authorities of the City.

3. That passage of this Ordinance shall constitute approval of a Special Use for Planned Unit Development pursuant to the provisions of Title 17 of the St. Charles Municipal Code, as amended, and based upon the Applicant's petitions and the evidence presented at the Public Hearing, the City Council hereby finds that the Special Use for Planned Unit Development is in the public interest and adopts the Criteria for Planned Unit Developments, set forth on Exhibit "C", which is attached hereto and incorporated herein.

4. That passage of this Ordinance shall constitute approval of the PUD Preliminary Plan, incorporated herein as Exhibit "D", such that the following documents and illustrations are hereby approved, reduced copies of which are attached hereto, subject to satisfactory resolution of all outstanding staff review comments and compliance with such conditions, corrections, and modifications as may be required by the Director of Community & Economic Development and the Director of Public Works to comply with the requirements of the St. Charles Municipal Code:

- Preliminary Engineering Plans; WT Groups; revisions dated
- Preliminary Plat of Subdivision; WT Group; revisions dated
- Landscape Plan; Heller & Associates; revisions dated
- Lighting Plan; LSI; revisions dated 6/16/2020
- Building Elevations; Arch7; not dated
- Canopy Elevations; dated 6/18/2020
- Signage Plan; Parvin-Clauss Sign Company; revisions dated 6/19/2020

5. The Subject Property shall be developed only in accordance with all ordinances of the City as now in effect and as hereafter amended (except as specifically varied herein), and subject to the terms, conditions and restrictions set forth herein, as follows:

a. Zoning: The Subject Property shall be subject to the requirements of the BR Regional Business District, as amended, and all other applicable requirements of the St. Charles Zoning Ordinance, as amended, except as specifically varied in the "PUD Deviations" attached hereto and incorporated herein as Exhibit "E".
b. Stormwater Management: Per Title 18 of the St. Charles Municipal Code, "Stormwater", Section 18.04.010 – Stormwater Management Ordinance - Adopted – Modifications, Subsection P', the Subject Property was exempted from the 2019 revisions to the Kane County Stormwater Ordinance. The Subject Property may be developed in conformance with the approved PUD Preliminary Plan irrespective of the expiration of said exemption.

6. That after the adoption and approval hereof, the Ordinance shall (i) be printed or published in book or pamphlet form, published by the authority of the Council, or (ii) within thirty (30) days after the adoption and approval hereof, be published in a newspaper published in and with a general circulation within the City of St. Charles.

PRESENTED to the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois this 7th day of December 2020.

PASSED by the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois this 7th day of December 2020.

APPROVED by the Mayor of the City of St. Charles, Kane and DuPage Counties, Illinois this 7th day of December 2020.

_____
Raymond P. Rogina, Mayor

Attest:

_____
Charles Amenta, City Clerk

Vote:
Ayes:
Nays:
Absent:
Abstain:
Date:_____

EXHIBIT "A"

LEGAL DESCRIPTION

THAT PART OF THE NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE SOUTH LINE OF SAID QUARTER SECTION, 3.49 CHAINS WEST OF THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER THEREOF; THENCE NORTH 8 DEGREES EAST 20.94 CHAINS; THENCE NORTH 77 DEGREES WEST 14.23 CHAINS; THENCE SOUTH 8 DEGREES WEST 20.58 CHAINS; THENCE NORTH 89 DEGREES EAST 3.35 CHAINS; THENCE SOUTH 3.66 CHAINS TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 25; THENCE EAST ON SAID SOUTH LINE 10.52 CHAINS TO THE POINT OF BEGINNING (EXCEPT THAT PART NORTH OF THE CENTER LINE OF ROUTE 64 AND EXCEPT THAT PART WEST OF THE EAST LINE OF KIRK ROAD AND ALSO EXCEPT THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE EASTERLY LINE OF KIRK ROAD (COUNTY HIGHWAY NO. 77) AS DESCRIBED IN DOCUMENT 1107922 WITH A LINE DRAWN PARALLEL WITH AND 50.0 FEET SOUTHERLY OF THE CENTER LINE OF ILLINOIS STATE ROUTE NO. 64 (MEASURED AT RIGHT ANGLES THERETO); THENCE ON AN ASSUMED BEARING OF SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE 60.0 FEET; THENCE NORTH 43 DEGREES, 53 MINUTES, 42 SECONDS EAST 83.76 FEET TO SAID PARALLEL LINE; THENCE NORTH 1 DEGREE, 01 MINUTES, 58 SECONDS WEST 50.0 FEET TO SAID CENTER LINE; THENCE SOUTH 88 DEGREES, 58 MINUTES, 02 SECONDS WEST ALONG SAID CENTER LINE 42.29 FEET TO SAID EASTERLY LINE EXTENDED; THENCE SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE EXTENDED 50.59 FEET TO THE POINT OF BEGINNING, ALSO EXCEPT THAT PART OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 25 TOWNSHIP 40 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 5, UNIT 1, THE "ST. CHARLES" ILLINOIS INDUSTRIAL DEVELOPMENT OF THE CENTRAL MANUFACTURING DISTRICT; PROCEED NORTHERLY ON THE NORTHERLY EXTENTION OF THE WEST LINE OF SAID LOT 5, 109.41 FEET, TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF NORTH AVENUE (RT. 64); THENCE NORTHEASTERLY ON SAID RIGHT OF WAY LINE WHICH FORMS AN EXTERIOR ANGLE OF 216 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 21.19 FEET TO A POINT ON A LINE 12.50 FEET EASTERLY OF AND PARALLEL WITH THE NORTHERLY EXTENTION OF THE WEST LINE OF SAID LOT 5; THENCE SOUTHERLY ON SAID PARALLEL LINE WHICH FORMS AN INTERIOR ANGLE OF 36 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 124.63 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 5; THENCE WESTERLY ON SAID NORTH LINE, WHICH FORMS AN INTERIOR ANGLE OF 98 DEGREES 33 MINUTE 48 SECONDS WITH THE LAST DESCRIBED LINE, 12.64 FEET, TO THE POINT OF BEGINNING), IN THE TOWNSHIP AND CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

EXHIBIT "B"

FINDINGS OF FACT FOR MAP AMENDMENT

1. **The existing uses and zoning of nearby property.**

   The intended use is consistent with the other retail business uses along Kirk Rd. and along E. Main St.

2. **The extent to which property values are diminished by the existing zoning restrictions.**

   Property values will not be affected. The intended use is consistent with all nearby uses.

3. **The extent to which the reduction of the property's value under the existing zoning restrictions promotes the health, safety, morals or general welfare of the public.**

   The property value will not be diminished, and in fact will provide an added amenity and convenience to the surrounding city and community.

4. **The suitability of the property for the purposes for which it is presently zoned, i.e. the feasibility of developing the property for one or more of the uses permitted under the existing zoning classification.**

   The subject property's current zoning does not allow for our intended use.

5. **The length of time that the property has been vacant, as presently zoned, considered in the context of the land development in the area where the property is located.**

   This property has been vacant for a substantial amount of time.

6. **The evidence, or lack of evidence, of the community's need for the uses permitted under the proposed district.**

   The intended use is consistent with development trends and all neighboring uses.

7. **The consistency of the proposed amendment with the City's Comprehensive Plan.**

   Our intended use is consistent with the Comprehensive Plan.

8. **Whether the proposed amendment corrects an error or omission in the Zoning Map.**

   Per Title 17 of the City Code, unless otherwise requested, land being annexed is automatically zoned RE-1 Single-Family Estates District. BR zoning is requested to accommodate the proposed commercial development.

9. The extent to which the proposed amendment creates nonconformities.

The proposed development will only require paving setback and off-site sign deviations. Other than that, the development will comply with zoning requirements.

10. The trend of development, if any, in the general area of the property in question.

The intended use is consistent with the other retail business uses.

EXHIBIT "C"

CRITERIA FOR PLANNED UNIT DEVELOPMENTS

i. The proposed PUD advances one or more of the purposes of the Planned Unit Development procedure stated in Section 17.04.400.A:

1. **To promote a creative approach to site improvements and building design that results in a distinctive, attractive development that has a strong sense of place, yet becomes an integral part of the community.**

2. **To create places oriented to the pedestrian that promote physical activity and social interaction, including but not limited to walkable neighborhoods, usable open space and recreational facilities for the enjoyment of all.**

3. **To encourage a harmonious mix of land uses and a variety of housing types and prices.**

4. **To preserve native vegetation, topographic and geological features, and environmentally sensitive areas.**

5. **To promote the economical development and efficient use of land, utilities, street improvements, drainage facilities, structures and other facilities.**

6. **To encourage redevelopment of sites containing obsolete or inappropriate buildings or uses.**

7. **To encourage a collaborative process among developers, neighboring property owners and residents, governmental bodies and the community.**

We believe that the proposed development advances many of the purposes of the Planned Unit Development as outlined and stated in Section 17.04.400.A.

The architectural building design will provide a unique and distinctive look that will include "barn" like features that will capture the historic essence of the property.

New sidewalks are proposed along the entire west and north property lines to connect existing sidewalk structures along Kirk Rd. and Main St. to help promote pedestrian traffic and physical activity.

This property has remained undeveloped for a very long time and the proposed development allows for and encourages and promotes economic growth and efficient land use.

This development includes a reciprocal easement agreement with the neighboring property owner (Main Street Commons) which allows for cross-access service roads and shared stormwater detention.

ii. The proposed PUD and PUD Preliminary Plans conform to the requirements of the underlying zoning district or districts in which the PUD is located and to the applicable Design Review Standards contained in Chapter 17.06, except where:

A. Conforming to the requirements would inhibit creative design that serves community goals, or
B. Conforming to the requirements would be impractical and the proposed PUD will provide benefits that outweigh those that would have been realized by conforming to the applicable requirements.

Factors listed in Section 17.04.400.B shall be used to justify the relief from requirements:

1. **The PUD will provide community amenities beyond those required by ordinance, such as recreational facilities, public plazas, gardens, public are, pedestrian and transit facilities.**
2. **The PUD will preserve open space, natural beauty and critical environmental areas in excess of what is required by ordinance or other regulation.**
3. **The PUD will provide superior landscaping, buffering or screening.**
4. **The buildings within the PUD offer high quality architectural design.**
5. **The PUD provides for energy efficient building and site design.**
6. **The PUD provides for the use of innovative stormwater management techniques.**
7. **The PUD provides accessible dwelling units in numbers or with features beyond what is required by the Americans with Disabilities Act (ADA) or other applicable codes.**
8. **The PUD provides affordable dwelling units in conformance with, or in excess of, City policies and ordinances.**
9. **The PUD preserves historic buildings, sites or neighborhoods.**

The following factors below per Section 17.04.400.B are highlighted to justify relief from certain zoning requirements:
- The PUD will provide superior landscaping and buffering as allowed by the site parameters.
- The buildings within the PUD will be unique and distinctive in nature, capturing historic features.
- The buildings will be built with energy efficiency guidelines and site design.
- The development will be designed with shared detention with Main Street Commons.

Zoning deviations for the following are being requested: paving setbacks, off-site signage, convenience store building signage, freestanding sign setback, building foundation landscape, carwash stacking requirement.

iii. The proposed PUD conforms with the standards applicable to Special uses (section 17.04.330.C.0):

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

Yes. The proposed development will serve as a public convenience and an added amenity. The development will offer fueling, convenience store, quick service restaurant and carwash.

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

Yes. The proposed development has sufficient infrastructure required to develop. Utilities, added service roads, and adequate on-site and off-site detention are being provided.

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

The development is consistent and compatible with surrounding land uses and will not affect nearby property in any way.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The development will not impede the normal and orderly development and improvement of the surrounding property and will complete the needed development at that particular property location in a manner that is consistent and compatible with surrounding and neighboring property.

E. Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.

No. The proposed development will not pose any detriment to or endanger the public health, safety, comfort or general welfare.

F. Conformance with Codes: That the proposed Special Use conforms to all existing Federal, State and local legislation and regulation and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.

Yes. The development will be built to conform to all applicable codes and ordinances and meets all applicable provisions, except as may be varied pursuant to a Special Use for PUD.

iv. The proposed PUD will be beneficial to the physical development, diversity, tax base and economic well-being of the City.

Yes. The proposed development will provide an added and substantial tax base to the City, improving the overall economic well-being of the City.

v. The proposed PUD conforms to the purposes and intent of the Comprehensive Plan.

Yes. The proposed development is in conformance with the goals, objectives and policies of the adopted City of St. Charles Comprehensive Plan.

EXHIBIT "D"

PUD PRELIMINARY PLAN
(?? pages)

EXHIBIT "E"

PUD DEVIATIONS

Section 17.24.100 Drive-Through Facilities	
Stacking Lane Configuration	Two lanes of car wash vehicle stacking, as shown on the PUD Preliminary Plan.
Section 17.26.080 Building Foundation Landscaping	
Foundation Landscape Planting Beds	3 ft. along west side of convenience store building, as shown on the PUD Preliminary Plan.
Table 17.28-2 Permitted Signs for Business & Mixed-Use Districts – BL, BC and BR Districts	
Freestanding Signs	3 ft. setback for monument sign at the corner of Main St. and Kirk Rd., as shown on the PUD Preliminary Plan.
Wall Signs	Four wall signs on the convenience store building, as shown on the PUD Preliminary Plan.
Section 17.28.080 Prohibited Signs	
Off-Premise Signs	Three off-premise signs to be placed in the Main Street Commons PUD: one monument sign at the Main St. entrance of Main Street Commons; one monument sign at the Kirk Rd. entrance of Main Street Commons; one directional sign within Main Street Commons; all as shown on the PUD Preliminary Plan

project because they are considered residential units. The Inclusionary Housing Ordinance requires projects to provide a portion of units as affordable or a fee in lieu paid. One of the incentives to have the units constructed is that there is a development cost offset that would essentially waive all the City's applicable development fees, including the school and park land cash fees, for the portion of units that are affordable. A project of this size would typically require 10% of the units be made affordable and those fees would be waived. Since the entire project consists of affordable units, the request is for the development cost offset incentive be applied to the entire project. This would mean all the City's fees, along with the school and park fees, would be waived. Staff sent the request information to the school and park districts for feedback. The school district would not be as impacted, because based on the type of units, this would be a relatively low fee. The park district reviewed the request, but would like to hear the City's opinion before offering their opinion. Mr. Colby said if this moves forward, the request could be accommodated through the PUD ordinance.

Aldr. Silkaitis asked if they could put the age restriction in the ordinance so that whatever they agree to goes with the property and not the ordinance. Ms. Shears said that would be acceptable.

Aldr. Silkaitis asked if they bypassed the park donation for other similar developments. Mr. Colby said they have not had this type of request with a 100% affordable age-restricted project. Adlr. Silkaitis also asked if there has been an increased demand for this type of housing in the area. Ms. Shears said they leased out phase 1 units within a two-month period and they have a healthy waitlist for the next phase. Aldr. Lewis asked if they could guarantee priority to St. Charles residents. Ms. Shears stated they need to abide by the Fair Housing Act. However, from past experience the vast majority of residents have been within the region of St. Charles.

e. Plan Commission recommendation to approve a Zoning Map Amendment, Special Use for Planned Unit Development and PUD Preliminary Plan for Munhall Glen.

This item was not presented.

f. Plan Commission recommendation to approve a Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for Pride of Kane County, southeast corner of Kirk Rd. and E. Main St.

Ms. Johnson presented the Executive Summary posted in the meeting packet.

Aldr. Lemke said he would need to see a draft of the annexation agreement before deciding. Ms. Johnson said it was not fully drafted yet because they were waiting for further feedback on the proposed items and before setting of a public hearing date for the annexation agreement. Aldr. Lemke felt there was no reason to limit what is otherwise permitted in other retail zoning areas.

Mario Spina, owner of Parent Petroleum, said it is going to be an expensive site to develop due to the restrictions on the site. He said they are not asking for sales tax abatement as others do with annexed properties which is why they asked for assistance with the

sidewalk. He clarified their request to restrict other gas stations on Main Street. He said if the property doesn't currently allow for gas station use, that there won't be any new rezoning for that use on Main Street. It's not to change the existing zoning for sites already zoned for gas station use. Another station in close proximity can kill the economics of the location.

Jayme Muenz, 27 Southgate Course, expressed concerns over the use of this lot. She felt it wasn't the right use of the lot and stated the number of accidents would increase. She also noted the plan for this particular use goes against at least five points in the Comprehensive Plan. She was against the non-competitive nature of the restriction limiting other gas stations in the area and having a gas station at the entry to the east gateway.

Aldr. Silkaitis said he has trouble supporting the sidewalk request and the restriction on rezoning other properties.

Aldr. Bancroft felt the radius restriction wasn't appropriate, but he would be open to further discussion on incentives. He said they have not seen any other options presented for that site and they need to consider if they would prefer to keep it left as is.

Aldr. Vitek said she only has an issue with the competitive piece. Aldr. Pietryla was not in favor of the plan.

Aldr. Bessner asked if the radius restriction applied all the way down Main Street to the river. Mr. Spina said that is correct and it is due to the volume of customers needed to survive. Aldr. Bessner asked staff if any current gas stations close or resell, would they fall under the "no gas station" restriction. Mr. Colby stated they would need to go through a process to understand what they would be trying to accomplish by imposing this type of restriction. Mr. Peppers said he would have serious reservation of the legal sufficiency of this Council agreeing to enact zoning in an annexation agreement or a zoning approval to limit competition on other property.

Aldr. Lewis stated this is not the proper land use. She felt the corner needs to be more of a destination than an in/out convenience type thing.

Aldr. Bessner asked if the restriction on other gas stations is a deal breaker. Mr. Spina said it's a concern.

Aldr. Stellato said that corner should have been an outlot in conjunction with Main Street Commons and they missed the boat. They are dealing with a very complex corner. The Comprehensive Plan is simply a guide and it needs to be adapted to the market. He feels this is the right development for this corner at this time and sales tax dollars are huge for gas stations. However, he still has issues with the non-compete clause.

Chair Payleitner asked staff for advice on moving forward. Ms. Tungare said based on the feedback received, the applicant needs to decide if they want to advance forward with the annexation agreement. She said a motion is not necessary at this point.

Tom Anderson, 712 Horne St., commented on the concept. He said it was a very nice project and he especially liked the idea of expanding the bridge to connect the east and west side of Main Street.

b. Plan Commission recommendation to approve a Map Amendment for 1001 N. 5th Ave.

Ms. Johnson presented the Executive Summary posted in the meeting packet.

Aldr. Pietryla met with the residents to hear their objections. The neighbors and the developers are very close to a mutually beneficial agreement.

Aldr. Pietryla made a motion to recommend forwarding the Zoning Map agreement for 1001 N. 5th Ave. to City Council, subject to staff receiving and reviewing an easement or covenant that is agreeable to both the applicant and the neighbors, Mr. & Mrs. Snodgrass, and the signed agreement being submitted to the City for recording. Seconded by Aldr. Vitek.

Roll was called:
Ayes: Vitek, Pietryla, Bessner, Silkaitis, Lemke, Bancroft
Absent: Stellato, Turner, Lewis
Recused:
Nays:
Motion passed 6-0

c. Plan Commission recommendation to approve a Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for Pride of Kane County, southeast corner of Kirk Rd. and E. Main St.

Ms. Johnson presented the Executive Summary posted in the meeting packet.

Aldr. Lemke asked if the access off of Kirk was a revision since they last reviewed this. Ms. Johnson said it was the same as before.

Aldr. Silkaitis asked the developer why the City should deviate from the requirement to install sidewalks. Dan Soltis, CIMA Developers, said this is a $6 million investment that will generate approximately $350,000 tax revenue to the City. Aldr. Silkaitis noted that he is not in favor of having the City contribute to the cost of the crosswalk or having an ordinance that forbids other gas stations in that area.

Aldr. Pietryla said he does not support these three requests. He said he is not sure this is in alignment with the Comprehensive Plan. Aldr. Bessner stated he would not agree to limiting other gas stations on Main Street, but he felt there could be some room for negotiating on the other two items. Mr. Soltis stated the owner will not move forward with the project if he does not receive the fuel restriction built into the annexation. Aldr. Silkaitis said nobody has ever asked to be the only one developed and he will not restrict another business from moving into town.

Chair Payleitner said this is a very limited opportunity to shape the entryway into the City. She questioned whether this is the highest and best use of the property and noted these four corners are destination locations. She doesn't see any quick-stop businesses there. Mr. Soltis said the broker had a lot of interest in this site, but mostly from convenience store type uses. He said other types of businesses might not be able to make that corner work due to the economics involved.

Aldr. Vitek said she is not opposed to this and they have a strong brand that doesn't deter from anything else. Aldr. Bancroft said they could decide to let it sit as is and wait for something better, but for how long. He noted the site has been sitting as is for quite some time. They may not be able to get what they want on that corner. Chair Payleitner mentioned that nothing has been brought before the Committee in 20 years, but felt they were settling for what is being presented. Aldr. Bancroft said it will sit the way it is, which is worse than if there was a vibrant, ongoing business there. Nothing better has been proposed.

Aldr. Bessner asked if there would be interest in considering a certain amount of footages between this business and other gas stations instead of having a non-compete agreement. Chair Payleitner said they would need to check into the legality of this. Aldr. Bancroft said it would be a bad decision to allow a radius restriction. Mr. Soltis mentioned he would like the opportunity to relay the message back to ownership.

Chair Payleitner asked about the tree deficit. Mr. Soltis said they do not want to add any other parkway trees because they don't want to lose visibility.

There was a discussion to continue this item to the next meeting to allow staff and applicant time to gather further information.

Aldr. Bessner made a motion to approve to continue discussion to the next Committee meeting. Seconded by Aldr. Vitek.

Roll was called:
Ayes: Pietryla, Bessner, Lemke, Bancroft, Vitek
Absent: Stellato, Turner, Lewis
Recused:
Nays: Silkaitis
Motion passed 5-1

d. Plan Commission recommendation to approve an Amendment to Special Use for PUD, Special Use for a Pet Care Facility, and PUD Preliminary Plan for Petsuites, Pine Ridge Park PUD.

Ms. Johnson presented the Executive Summary posted in the meeting packet.

Aldr. Silkaitis made a motion to approve an Amendment to Special Use for PUD, Special Use for a Pet Care Facility, and PUD Preliminary Plan for Petsuites, Pine Ridge Park PUD. Seconded by Aldr. Vitek. Approved unanimously by voice vote. Motion Carried.

City of St. Charles, Illinois
Plan Commission Resolution No. 15-2020

A Resolution Recommending Approval of a Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for The Pride of Kane County (CIMA Developers LP)

Passed by Plan Commission on August 4, 2020

WHEREAS**,** it is the responsibility of the St. Charles Plan Commission to hold public hearings and review requests for Map Amendment, Special Use, and PUD Preliminary Plan; and,

WHEREAS, the Plan Commission held a public hearing and reviewed the applications for Map Amendment, Special Use for Planned Unit Development, and PUD Preliminary Plan for The Pride of Kane County (CIMA Developers LP); and,

WHEREAS, in accordance with Section 17.04.320.D, the Plan Commission has considered the following findings for Map Amendment:

FINDINGS OF FACT FOR MAP AMENDMENT

1. **The existing uses and zoning of nearby property.**

   The intended use is consistent with the other retail business uses along Kirk Rd. and along E. Main St.

2. **The extent to which property values are diminished by the existing zoning restrictions.**

   Property values will not be affected. The intended use is consistent with all nearby uses.

3. **The extent to which the reduction of the property's value under the existing zoning restrictions promotes the health, safety, morals or general welfare of the public.**

   The property value will not be diminished, and in fact will provide an added amenity and convenience to the surrounding city and community.

4. **The suitability of the property for the purposes for which it is presently zoned, i.e. the feasibility of developing the property for one or more of the uses permitted under the existing zoning classification.**

   The subject property’s current zoning does not allow for our intended use.

5. **The length of time that the property has been vacant, as presently zoned, considered in the context of the land development in the area where the property is located.**

This property has been vacant for a substantial amount of time.

6. **The evidence, or lack of evidence, of the community's need for the uses permitted under the proposed district.**

   The intended use is consistent with development trends and all neighboring uses.

7. **The consistency of the proposed amendment with the City's Comprehensive Plan.**

   Our intended use is consistent with the Comprehensive Plan.

8. **Whether the proposed amendment corrects an error or omission in the Zoning Map.**

   Per Title 17 of the City Code, unless otherwise requested, land being annexed is automatically zoned RE-1 Single-Family Estates District. BR zoning is requested to accommodate the proposed commercial development.

9. **The extent to which the proposed amendment creates nonconformities.**

   The proposed development will only require paving setback and off-site sign deviations. Other than that the development will comply with zoning requirements.

10. **The trend of development, if any, in the general area of the property in question.**

    The intended use is consistent with the other retail business uses.

WHEREAS, in accordance with Section 17.04.410.D.3, the Plan Commission finds the Special Use for PUD to be in the public interest based on the following criteria for Planned Unit Developments:

CRITERIA FOR PLANNED UNIT DEVELOPMENTS (PUDs)

i. The proposed PUD advances one or more of the purposes of the Planned Unit Development procedure stated in Section 17.04.400.A:

1. **To promote a creative approach to site improvements and building design that results in a distinctive, attractive development that has a strong sense of place, yet becomes an integral part of the community.**
2. **To create places oriented to the pedestrian that promote physical activity and social interaction, including but not limited to walkable neighborhoods, usable open space and recreational facilities for the enjoyment of all.**
3. **To encourage a harmonious mix of land uses and a variety of housing types and prices.**

4. **To preserve native vegetation, topographic and geological features, and environmentally sensitive areas.**
5. **To promote the economical development and efficient use of land, utilities, street improvements, drainage facilities, structures and other facilities.**
6. **To encourage redevelopment of sites containing obsolete or inappropriate buildings or uses.**
7. **To encourage a collaborative process among developers, neighboring property owners and residents, governmental bodies and the community.**

We believe that the proposed development advances many of the purposes of the Planned Unit Development as outlined and stated in Section 17.04.400.A.

The architectural building design will provide a unique and distinctive look that will include "barn" like features that will capture the historic essence of the property.

New sidewalks are proposed along the entire west and north property lines to connect existing sidewalk structures along Kirk Rd. and Main St. to help promote pedestrian traffic and physical activity.

This property has remained undeveloped for a very long time and the proposed development allows for and encourages and promotes economic growth and efficient land use.

This development includes a reciprocal easement agreement with the neighboring property owner (Main Street Commons) which allows for cross-access service roads and shared stormwater detention.

ii. The proposed PUD and PUD Preliminary Plans conform to the requirements of the underlying zoning district or districts in which the PUD is located and to the applicable Design Review Standards contained in Chapter 17.06, except where:

A. Conforming to the requirements would inhibit creative design that serves community goals, or
B. Conforming to the requirements would be impractical and the proposed PUD will provide benefits that outweigh those that would have been realized by conforming to the applicable requirements.

Factors listed in Section 17.04.400.B shall be used to justify the relief from requirements:

1. **The PUD will provide community amenities beyond those required by ordinance, such as recreational facilities, public plazas, gardens, public are, pedestrian and transit facilities.**
2. **The PUD will preserve open space, natural beauty and critical environmental areas in excess of what is required by ordinance or other regulation.**

3. **The PUD will provide superior landscaping, buffering or screening.**
4. **The buildings within the PUD offer high quality architectural design.**
5. **The PUD provides for energy efficient building and site design.**
6. **The PUD provides for the use of innovative stormwater management techniques.**
7. **The PUD provides accessible dwelling units in numbers or with features beyond what is required by the Americans with Disabilities Act (ADA) or other applicable codes.**
8. **The PUD provides affordable dwelling units in conformance with, or in excess of, City policies and ordinances.**
9. **The PUD preserves historic buildings, sites or neighborhoods.**

The following factors below per Section 17.04.400.B are highlighted to justify relief from certain zoning requirements:

- The PUD will provide superior landscaping and buffering as allowed by the site parameters.
- The buildings within the PUD will be unique and distinctive in nature, capturing historic features.
- The buildings will be built with energy efficiency guidelines and site design.
- The development will be designed with shared detention with Main Street Commons.

Zoning deviations for the following are being requested: paving setbacks, off-site signage, convenience store building signage, freestanding sign setback, building foundation landscape, carwash stacking requirement.

iii. The proposed PUD conforms with the standards applicable to Special Use (Section 17.04.330.C.2):

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

Yes. The proposed development will serve as a public convenience and an added amenity. The development will offer fueling, convenience store, quick service restaurant and carwash.

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

Yes. The proposed development has sufficient infrastructure required to develop. Utilities, added service roads, and adequate on-site and off-site detention are being provided.

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes

already permitted, nor substantially diminish or impair property values within the neighborhood.

The development is consistent and compatible with surrounding land uses and will not affect nearby property in any way.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The development will not impede the normal and orderly development and improvement of the surrounding property and will complete the needed development at that particular property location in a manner that is consistent and compatible with surrounding and neighboring property.

E. Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.

No. The proposed development will not pose any detriment to or endanger the public health, safety, comfort or general welfare.

F. Conformance with Codes: That the proposed Special Use conforms to all applicable provisions of the St. Charles Municipal Code and meets or exceeds all applicable provisions of this Title, expect as may be varied pursuant to a Special Use for Planned Unit Development.

Yes. The development will be built to conform to all applicable codes and ordinances and meets all applicable provisions, except as may be varied pursuant to a Special Use for PUD.

iv. The proposed PUD will be beneficial to the physical development, diversity, tax base and economic well-being of the City.

Yes. The proposed development will provide an added and substantial tax base to the City, improving the overall economic well-being of the City.

v. The proposed PUD conforms to the purposes and intent of the Comprehensive Plan.

Yes. The proposed development is in conformance with the goals, objectives and policies of the adopted City of St. Charles Comprehensive Plan.

NOW, THEREFORE, be it resolved by the St. Charles Plan Commission to recommend to the City Council approval of a Map Amendment, Special Use for Planned Unit Development, and

PUD Preliminary Plan for The Pride of Kane County (CIMA Developers LP) subject to resolution of outstanding staff comments prior to City Council action.

Roll Call Vote:
Ayes: Becker, Funke, Holderfield, Purdy, Pretz, Melton, Wallace, Kessler
Nays: Vargulich
Absent: 0
Motion carried: 8-1

PASSED, this 4th day of August 2020.

_____
Chairman
St. Charles Plan Commission

Community & Economic Development
Planning Division
Phone: (630) 377-4443
Fax: (630) 377-4062

ST. CHARLES
SINCE 1834

STAFF MEMO

TO: Chairman Rita Payleitner
And Members of the Planning & Development Committee

FROM: Ellen Johnson, Planner

RE: Pride of Kane County – Plan Commission Public Hearing Discussion Summary

DATE: August 6, 2020

Plan Commission opened the public hearing for the Pride of Kane County zoning applications on July 7, 2020. The hearing was continued and subsequently discussed on July 21 and August 4.

This memo summarizes the main discussion points during the hearing and the responses to these items.

- **Orientation of Convenience Store & Canopy** – Commissioners expressed a desire for the convenience store and gas station canopy to be flipped, so that the convenience store building is located on the corner of Main/Kirk, with the gas station canopy to the east. Commissioners discussed that flipping these structures would improve the aesthetics of the intersection, which is important as a gateway intersection into St. Charles.

  Applicant's response:
  - The applicant stated the Pride ownership considered the request and determined they would be unwilling to move the gas station canopy off the corner. They cited visibility concerns for the business.

- **Crosswalk across Kirk Rd.** – Commissioners requested a crosswalk across Kirk Rd. in connection with the proposed development in order to improve pedestrian connectivity and safety through this corridor. The following information was gathered by staff:
  - Kirk Road is under the jurisdiction of Kane County Division of Transportation (KDOT). Main Street (IL Rt. 64) is under the jurisdiction of Illinois Department of Transportation (IDOT).
  - IDOT would be the permitting agency for traffic signal work. An additional Traffic Impact Study may be needed.
  - Both IDOT and KDOT have indicated the installation of a crosswalk necessitates the design and improvement of other components in order to facilitate a functional intersection. This would include traffic signal design, install of sidewalk approaches with ADA landings, potential challenges with the small traffic island at the southwest corner, install of new pedestrian signals and push buttons, conduit, wiring, and optimizing the signal timing.

- KDOT is supportive of a crosswalk across the south leg of Kirk/64. They have indicated it would be a nice complement to the existing crosswalk on the west leg of the intersection and would make the site more accessible to pedestrians.
- The intersection is identified in (KDOT)'s Comprehensive Road Improvement Project list. Currently, there are two northbound and two southbound thru lanes with one left turn lane and one right turn lane on the south leg, and one left turn lane on the north leg. The ultimate intersection improvements would include three northbound and three southbound thru lanes with dual lefts on the Kirk Road legs. This would be a significant project and it is not currently on KDOT's multi-year funding plan. It is anticipated that future project is at least 10-15 years away.

Applicant's response:

- The site plan has been revised showing the requested crosswalk, as well as public sidewalk connecting to the crosswalk.
- The applicant expressed interested in discussing payment options with the City; the applicant has not committed to covering the cost of the crosswalk.

- **Landscaping along Kirk and Main St. frontages and building foundation** – Commissioners stated that all landscaping required under the Zoning Ordinance should be provided. The Staff Report notes that additional trees are needed along Main St. and Kirk Rd., additional planting areas are needed along Main St., and one additional tree is needed along the north wall of the convenience store and gas station.

Applicant's response:

- Additional trees and plantings were added to the revised landscape plan. However, additional landscaping is still needed as listed above.

- **Internal pedestrian connections from Main St.** – Commissioners requested sidewalk be added from the Main St. sidewalk to the convenience store.

Applicant's response:

- The site plan has been revised showing a sidewalk connecting to the convenience store entrance.

- **Easter site access safety** – Commissioners expressed concerns regarding the eastern site access from the main entrance drive of Main Street Commons. Staff commissioned HLR Engineering to analyze the access and provide an opinion on safety (see HLR memo attached). HLR's comments are summarized as follows:
  - HLR noted no major safety concerns due to the relatively low volumes of traffic and the varying peak hours of the surrounding land uses.
  - There is concern with having adequate gaps for left turns out of the Pride site. An option is to make the eastern access a right-in right-out only. Drivers seeking to go westbound on Main St. would either have to travel through Main Street Commons to use the Kirk Rd. exit, or turn right out of the Pride site on to Main St. going eastbound and make a U-turn at the signalized intersection of Main Street Commons/Main St. to go westbound.

Applicant's response:

- Plans for the access were not revised.
- Plan Commission did not require revisions to the eastern access.

- **Appearance of south retaining wall and guardrail** – Commissioners stated concerns about the appearance of the metal guard rail and the retaining wall running south of the southern access drive, north of the detention pond on the Main Street Commons property.

  Applicant's response:
  - The guardrail was modified from standard metal to wood.
  - Plantings were added along the north side of the guard rail.
  - A photo of a three-tier retaining wall with landscaping was provided as an example of a similar design.
  - Plan Commission did not request further changes to the guard rail or retaining wall.

- **Location of trash enclosure** – Commissioners expressed concerns that the location of the trash enclosure near the intersection of the car wash stacking land and southern access drive would cause visibility issues.

  Applicant's response:
  - The trash enclosure was shifted north as reflected on the revised site plan.
  - Plan Commission did not request further changes to the trash enclosure location.

<u>Public Comment</u>

- No members of the public spoke during the public hearing.
- Three letters of opposition were received from residents. These are included in the packet materials.

Hampton, Lenzini and Renwick, Inc.
Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists
www.hlrengineering.com

Memorandum

To: City of St. Charles
ATTN: Ellen Johnson

From: Hampton Lenzini & Renwick, Inc. (HLR)
Callie Allbright PE, PTOE and Amy McSwane PE, PTOE

Date: 8/6/2020

Re: PRIDE of Kane County Gas Station - Traffic Impact Study

HLR has reviewed the site circulation and has developed the following conclusions regarding the eastern access driveway.

There are no major safety concerns regarding the eastern access of the proposed site because of the relatively low volumes and varying peak hours of the land uses in the area. However, there is concern with having adequate gaps for drivers to turn left out of the eastern access to reach the Main Street Commons/Charlestown Mall signalized intersection. The main concerns occur in the PM and SAT peak periods. Based on the future HCS analysis, estimated queues on the northbound approach of the signalized intersection extend beyond the eastern driveway. Vehicles wanting to make a left turn from the driveway would potentially have a trouble finding gaps to turn into through the queues.

It would also be assumed that most drivers making a left turn out of the eastern access want to travel westbound on North Avenue.

A couple options that could be considered to satisfy safety and operational concerns of the eastern access are the following.

1. Make the eastern access a right-in right-out only. If drivers want to go westbound on North Avenue, they can either use the northern right-out access and make a U-turn at the signalized intersection at Main Street Commons/North Avenue or use the Kirk Road right-in right-out access to reach the North Ave/Kirk Road signalized intersection and proceed from there. Otherwise, drivers can use the right-out access to travel eastbound on North Avenue.

2. Moving the driveway farther south would have impacts to the detention pond design and require redesign. Driver's would still have to potentially cross many lanes of traffic and would not have major safety or operational benefits when compared to the current design location.

If you have any questions or concerns regarding this memo, please contact HLR at 847-697-6700.

380 Shepard Drive
Elgin, Illinois 60123-7010
Tel. 847.697.6700
Fax 847.697.6753

6825 Hobson Valley Drive, Suite 302
Woodridge, Illinois 60517
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323 W. Third Street, P.O. Box 160
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Community & Economic Development
Planning Division
Phone: (630) 377-4443
Fax: (630) 377-4062

ST. CHARLES
SINCE 1834

Staff Report

TO: Chairman Rita Payleitner
And Members of the Planning & Development Committee

FROM: Ellen Johnson, Planner

RE: Pride of Kane County – Southeast corner of Kirk Rd. and E. Main St.

DATE: August 6, 2020

I. APPLICATION INFORMATION:

Project Name: Pride of Kane County

Applicant: CIMA Developers, LP

Purpose: Zoning approvals for development of a gas station and car wash

General Information:

Site Information	
Location	Southeast corner of Kirk Rd. and E. Main St. (unincorporated)
Acres	2.37 acres (103,237 sf)

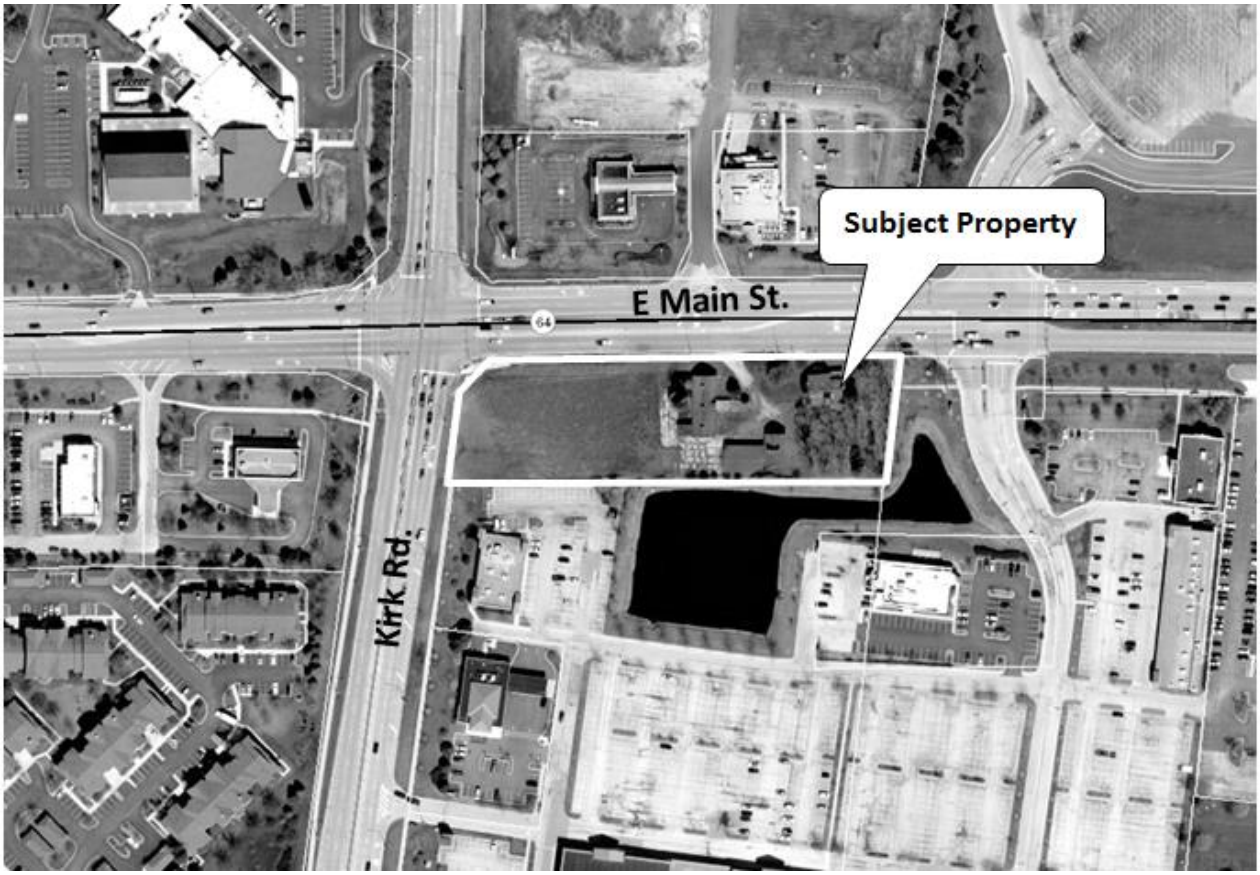
Applications:	Map Amendment, Special Use for Planned Unit Development, PUD Preliminary Plan
Applicable City Code Sections	Ch. 17.04 – Design Review Standards & Guidelines Ch. 17.14 – Business & Mixed Use Districts Ch. 17.24 – Off-Street Parking, Loading & Access Ch. 17.26 – Landscaping & Screening Title 16 – Subdivisions & Land Improvement

Existing Conditions	
Land Use	Vacant/formerly agriculture
Zoning	F- Farming (Kane County Zoning)

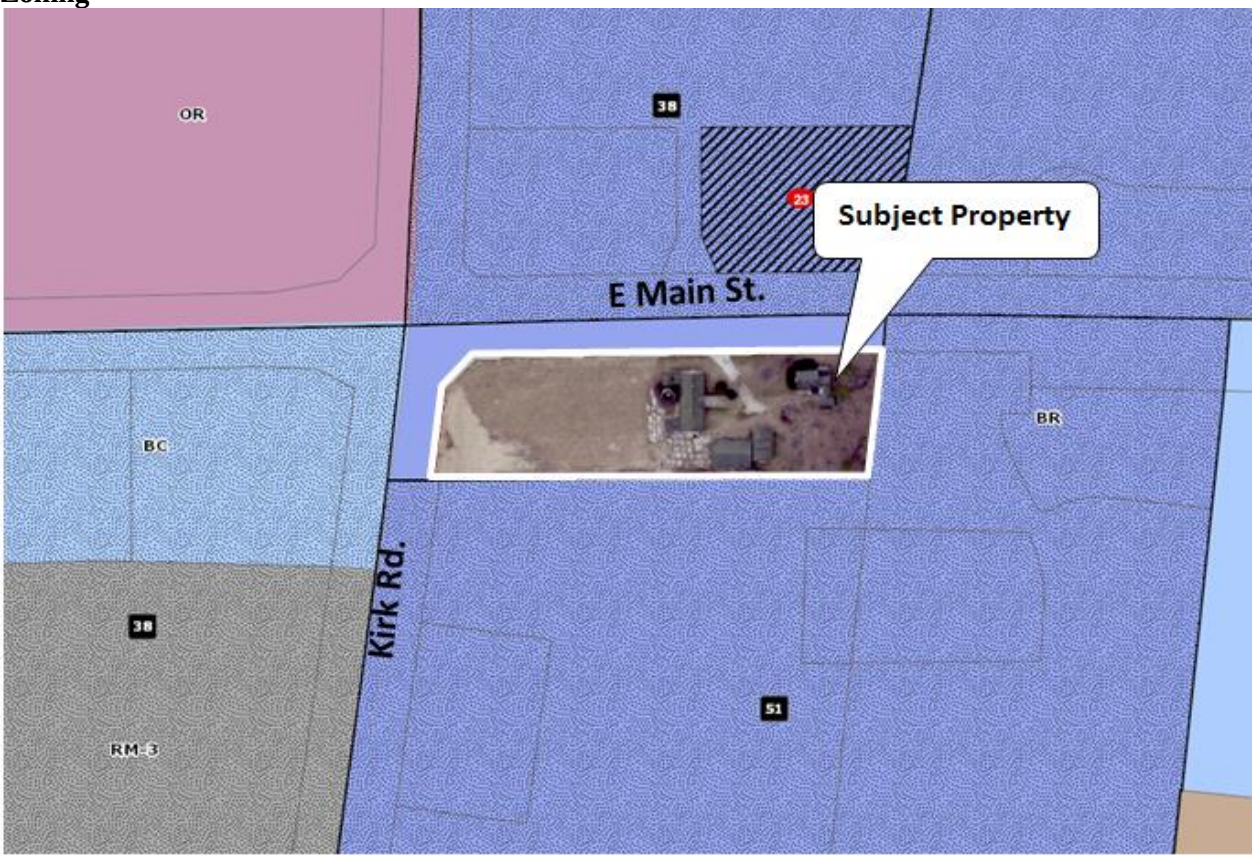
Zoning Summary		
North	BR Regional Business (PUD)	West Suburban Bank, On the Border
East	BR Regional Business (PUD)	Main Street Commons shopping center
South	BR Regional Business (PUD)	Main Street Commons shopping center
West	BC Community Business (PUD)	First American Bank

Comprehensive Plan Designation
Corridor/Regional Commercial

Aerial



Zoning



II. OVERVIEW

A. PROPERTY HISTORY

The subject property is a 2.37 acre parcel located at the southeast corner of Kirk Rd. and E. Main St. It is the known as the Regole family homestead. The property contains several buildings including a house, barn, additional shed and corn crib. The buildings have been vacant for a number of years.

The Regole family once farmed around 300 acres of land in the surrounding area. The farmland was sold off over time, making way for development of the Main Street Commons shopping center surrounding the subject property on the east and south sides, and Stuart's Crossing to the north and west. The remnant homestead has not been annexed to St. Charles and remains under the jurisdiction of Kane County.

B. CONCEPT PLAN

In June of 2019, the City reviewed a Concept Plan for the subject property proposing development of a gas station with a convenience store and car wash. The Concept Plan was submitted by CIMA Developers, LP which was under contract to purchase the property at the time. Plan Commission provide comments on the plan, summarized as follows:

- High quality architecture and landscaping will be important due to the prominence of the intersection. Consider reversing the location of the convenience store building and the gas station canopy so the building is on the corner.
- The car wash building should be shifted to the south to reduce its visibility along Main St. Consider flipping the car wash entrance so any overflow stacking does not interfere with the main driveway intersection.
- A future traffic study should analyze vehicle circulation both internal to the site and through the cross-access drives, as well as car wash stacking.

C. PROPOSAL

CIMA Developers, LP have purchased the subject property. They have submitted zoning applications in support of developing the site with a Pride fueling facility, convenience store, and car wash. Details of the proposal are as follows:

- Annexation to the City of St. Charles.
- Rezoning to the BR Regional Business District with a Planned Unit Development (PUD).
- Fuel Facility (west side of property):
    - Canopy with 8 fuel pumps at the corner.
    - 1-story, 4,500 sf convenience store with quick-serve restaurant inside (Taco Urbano).
- Car Wash (east side of property):
    - 1-story, 1,650 sf automatic car wash.
    - 10 vacuum stalls.
- Right-in/right-out access on E. Main St.
- Cross-access to the east and south through Main Street Commons shopping center.

The PUD Preliminary Plan is similar to the Concept Plan reviewed last year. The following significant changes have been made to the site layout:

- The car wash building has been shifted south and is now set back from E. Main St. approximately the same distance as the convenience store.
- The car wash vacuums are now proposed to be accessed from the southern internal access drive instead of a separate area off the access drive.
- Additional areas for building foundation landscaping.

The following Zoning Applications have been submitted in support of this project:

1. **Map Amendment** – To rezone the property from the RE-1 Estate Residential District (automatic zoning designation of all newly annexed property) to the BR Regional Business District.
2. **Special Use for Planned Unit Development** – To establish a PUD with unique development standards for the property.
3. **PUD Preliminary Plan** – To approve preliminary engineering plans, landscape plan, building elevations, and preliminary plat of subdivision.

A Petition for Annexation has also been submitted. City Council will hold a public hearing on the annexation after the Plan Commission and Planning & Development Committee have provided recommendations on the zoning applications.

III. COMPREHENSIVE PLAN

The Land Use Plan adopted as part of the 2013 Comprehensive Plan identifies the subject property as "Corridor/Regional Commercial". The Plan states (p 39):

"Areas designated as corridor/regional commercial are intended to accommodate larger shopping centers and developments that serve a more regional function, drowning on a customer base that extends beyond the City limits. These areas often have a mix of "big box" stores, national retailers, and a "critical mass" of multiple stores and large shared parking areas. Areas designated for corridor/regional commercial are located primarily in larger consolidated areas along the City's heavily traveled corridors and intersections. Commercial service uses can also have an appropriate place in corridor/regional commercial areas, but must be compatible with adjacent and nearby retail and commercial shopping areas and be located as to not occupy prime retail locations."

The following items in the Commercial Areas Policies section relates to this project (p. 48):

"Promote a mix of attractive commercial uses along the Main Street Corridor that provide a range of goods and services to the St. Charles Community. *A wide range of commercial uses exist along the Main Street corridor, providing a variety of goods and services to residents. As a primary east-west route through the City, Main Street contributes to the overall character, image, and appearance of St. Charles…The City should continue to promote reinvestment along this key commercial corridor and maintain Main Street as a unique commercial corridor that can accommodate a wide array of business types to cater to the diverse needs of the St. Charles community."*

"Focus retail development at key notes/intersections along the City's commercial corridors. *Busy streets do not alone equate to demand for unlimited expanses of retail development. The market can only support so much commercial development, and within the City's competitive market position, having expectations for all corridors to be retail may not be realistic.*

Instead, retail development should be clustered near key intersections and activity generators, like Main Street & Kirk Road and Lincoln Highway & Randall Road…"

The subject property is located within the East Gateway Subarea. The East Gateway Improvement Plan on p.103 recommends the following improvements in the vicinity:

- Kirk Road & Main Street is a "Gateway Intersection", with Kirk Road averaging nearly 25,000 vehicles per day and Main Street averaging over 48,000 vehicles per day. The plan recommends the City install gateway features such as signage, landscaping, decorative lighting, and pedestrian amenities in this area.
- Fill sidewalk gaps along the Main and Kirk frontages of the subject property.
- Sidewalk connection should be added from Main Street into the Main Street Commons shopping center.

The subject property is identified as part of Catalyst Site C in the East Gateway Subarea (p.104) which also includes the adjacent Main Street Commons shopping center. The discussion of Site C references high vacancy at Main Street Commons and the need for the City to work with the property owner to address issues impacting the commercial vitality of the shopping center. While Main Street Commons has recently undergone renovation and is fully leased, the last portion of the Site C discussion is relevant to the subject property:

"…The City should work with the owners of the parcels that comprise this site to…incorporate the development of the remaining farmstead at the corner of Kirk and Main Street to jumpstart its revitalization."

IV. ANALYSIS

A. ZONING REVIEW

The subject property is currently zoned F- Farming under Kane County zoning. The applicant has submitted an application for Zoning Map Amendment requesting rezoning to the BR Regional Business District upon annexation to the City. An Application for Special Use for Planned Unit Development has also been submitted, requesting deviations from certain zoning standards.

The purpose of the BR Regional Business District as noted in the Zoning Ordinance is as follows:

"To provide locations along Strategic Regional Arterial corridors for shopping centers and business uses that draw patrons from St. Charles, surrounding communities and the broader region. The BR District consists primarily of large-scale development that has the potential to generate significant automobile traffic. It should be designed in a coordinated manner with an interconnected street network that is consistent with the City's Comprehensive Plan. Uncoordinated, piecemeal development of small parcels that do not fit into a larger context are discouraged in the BR District. Compatible land uses, access, traffic circulation, stormwater management and natural features, all should be integrated into an overall development plan. Because this district is primarily at high visibility locations, quality building architecture, landscaping and other site improvements are required to ensure superior aesthetic and functional quality."

The subject property is surrounded by BR zoning on three sides with BC Community Business zoning to the west. BR zoning is appropriate for this property based on surrounding zoning and its location at a gateway intersection.

Two uses are proposed for the property: Gas Station and Car Wash. Both uses are permitted in the BR District.

The table below compares the BR District bulk standards with the PUD Preliminary Plan. A PUD deviation has been requested for the item denoted in bold italics, as detailed below the table.

	BR District (proposed zoning)	**Proposed**
Min. Lot Area	1 acre (2 acres required for two buildings on one lot)	2.19 acres
Max. Building Coverage	30%	6%
Max. Building Height	40 ft.	Convenience Store: 21.5 ft. Car Wash: 15.5 ft.
Front Yard (Main St.)	Bldg: 20 ft. Parking: 20 ft.	Convenience Store: 26 ft. Car Wash: 24 ft. Parking (paving): 20 ft.
Interior Side Yard (east)	Bldg: 15 ft. Parking: 0 ft.	Car Wash: 55 ft. Parking (paving): 10 ft.
Exterior Side Yard (Kirk Rd.)	Bldg: 20 ft. Parking: 20 ft.	Convenience Store: 190 ft. Parking (paving): 20 ft.
Rear Yard (south)	Bldg: 30 ft. Parking: 0 ft.	Convenience Store: 81 ft. Car Wash: 109 ft. Parking: 5.7 ft.
Landscape Buffer Yard	Not Required	N/A
Off-Street Parking	Car Wash: 2 per bay + 10 stacking per bay Gas Station: 4 per 1,000 sf GFA (reduced by number of fuel pumps) Restaurant within convenience store: 10 per 1,000 sf GFA Total Required: 16 spaces (8 for Gas Station, 6 for Taco Urbano restaurant within C-Store, 2 for Car Wash)	34 parking spaces 11 car wash stacking spaces

PUD Deviation – The applicant has requested a zoning deviation to allow a reduced paving setback from the Kirk Rd. property line. A previous version of the plan proposed a 13 ft. setback from the corner of the property to the northwest corner of the fuel pump paving. However, the revised plan shows a 20 ft. setback in compliance with the BR district.

B. <u>TRAFFIC & ACCESS</u>

Direct access to the property is proposed via a right-in/right-out only access point on E. Main St. A new right turn lane on Main St. is also proposed. IDOT approval will be needed for the proposed design. IDOT reviewed the site plan prior to Concept Plan review and appeared to be supportive of the configuration.

No access on Kirk Rd. is proposed; KDOT was not supportive of access on Kirk to this lot due to the proximity to the Main/Kirk intersection.

Two internal drive connections through the Main Street Commons shopping center are also proposed: one at the east side of the property, connecting to the signalized shopping center entrance on Main St., and the other at the south side of the gas station for vehicles entering from the Kirk Rd. shopping center entrance. A Reciprocal Easement Agreement between CIMA Developers and Main Street Commons has been recorded which grants CIMA cross access easements through the shopping center as proposed.

Sidewalk connections are provided along Kirk Rd. and Main St., connecting to the existing sidewalk network. The applicant has submitted a letter requesting the City to incur the cost of the sidewalk installation. It is standard practice for developers to install public sidewalk at their expense as part of any new development.

Traffic Study:

The applicant has submitted a Traffic Study prepared by Eriksson Engineering Associates. The study concludes that the proposed development will not adversely impact the level-of-service of the intersections of the site entrances and the intersection of Main/Kirk.

The applicant also submitted a supplemental On-Site Circulation Memo prepared by Eriksson Engineering Associates analyzing on-site circulation, site access, and car wash stacking.

The Traffic Study and Circulation Memo were reviewed on behalf of the City by HLR Engineering.

HLR provided comments in a memo dated 6/23/20. HLR stated their agreement with the conclusions made in the Traffic Study. HLR also commented that they have no concerns regarding the internal circulation of the gas station. They also do not have major safety concerns about the internal access drive through the Panda Express/Orangetheory Fitness property since most vehicles are predicted to access the site from Main St. and the gas station will have different peak hours than Panda Express and Orangetheory.

The Traffic Study and Site Circulation Memo have been revised per HLR's comments. HLR reviewed the revised Traffic Study and noted one typo regarding dates in one of the tables, but otherwise had no remaining comments.

C. GAS STATION

Gas stations are subject to the use standards contained in Section 17.20.030, listed below.

1. Restaurants in gas stations shall be required to meet the parking requirements for restaurants in addition to those for gas stations.
   - *A quick-service restaurant, Taco Urbano, is proposed to locate within the convenience store. Based on 588 of restaurant area indicated on the convenience store floorplan, there is adequate parking to meet the requirement.*

2. Fuel pumps shall be located no closer than 20 feet from any lot line and shall be located so that a vehicle using the fuel pump does not encroach into the public right of way or onto adjoining property

- *The proposed canopy is a minimum of 42 ft. from the property line. The paved area for vehicle maneuvering is a minimum of 13 ft. from the property line; vehicles using the pumps will not encroach into the public ROW.*

3. Gas station canopies shall be subject to the lighting standards of Section 17.22.040 (Site Lighting). Gas station canopies shall also meet all applicable setback requirements for the principal building.
   - *A photometric plan has been submitted demonstrating compliance with the lighting standards of Section 17.22.040.*
   - *The gas station canopy meets the setback requirements for the principal building.*

4. The provisions hereof relating to Outdoor Sales shall apply if Outdoor Sales are included.
   - *The applicant has indicated that a 16 sf propane cage will be located on sidewalk adjacent to the convenience store. This complies with the standards related to outdoor sales accessory to gas stations.*

D. CAR WASH

The proposed car wash is located on the east side of the subject property. Vehicle stacking is on the west side of the building with vehicles travelling east into the car wash bay. Vehicles exit the facility via the internal access drive.

Car wash establishments are subject to the requirements of Section 17.24.100 "Drive-Through Facilities". The table below compares the ordinance requirements with the PUD Preliminary Plan:

Category	Zoning Ordinance Standard	Proposed
Screened from Public Street	Stacking spaces concealed from view from public streets to greatest extent possible by orientation, design or screening	Meets requirement with landscape screening
Obstruction of Required Parking	Stacking spaces cannot obstruct access to required parking spaces	Meets requirement
Obstruction of Ingress/Egress	Location of stacking spaces cannot obstruct ingress/egress to the site or interfere with vehicle circulation	Meets requirement
Lane Configuration	Stacking spaces must be placed in a single line up to point of service	***Two stacking lanes***
Required Stacking Spaces	10	11 (two lanes)
Required Stacking Space Size	9' x 20'	9' x 20'

PUD Deviation – The applicant has requested the following zoning deviation from the Drive-Through Facilities standards:

- Proposed vehicle stacking is accommodated in two lanes instead of a single lane. A dual pay station kiosk can accommodate two cars at a time. The application materials indicate this will maximize car wash speed time and that the conveyor style car wash system allows for multiple cars in the wash bay at the same time.

E. LANDSCAPING

A landscape plan has been submitted as part of the PUD Preliminary Plan. Landscaping is subject to the standards contained in Ch. 17.26 "Landscaping & Screening". The table below

compares the ordinance requirements with the submitted plan. Requirements that are not met are donated with an asterisk*.

Category	Zoning Ordinance Standard	Proposed
Overall Landscape Area	15%	Meets requirement (37%)
Public Street Frontage Landscaping	1 tree / 50 ft. of street frontage (Main St: 12 trees Kirk Rd: 3 trees) 75% of street frontage	**Main St: 8 trees*** **Does not meet street frontage*** **Kirk Rd: 2 trees*** Meets street frontage
Parking Lot Screening	50% of parking lot to height of 30”	Meets requirement
Interior Parking Lot Landscape Area	1 landscape island / 10 parking spaces All parking rows terminate in landscape area	Meets requirement
Parking Lot Landscape Materials	1 tree per island Variety of plantings in islands	Meets requirement
Building Foundation Landscaping		
Foundation Planting Beds	50% of total building walls; 50% of walls facing a public street (Main St.) 5 ft. wide planting beds	Meets requirement
Foundation Plantings	20 shrubs/bushes/perennials per 50 ft. of planting bed	Meets requirement
Foundation Trees	2 trees per 50 ft. of planting bed	**Additional trees needed***
Monument Sign Lndscaping	3 ft. around sign	Meets requirement
Refuse Dumpster Screening	Enclosed and screened on all sides when visible from public street	Meets requirement

Staff Comments:

- 4 additional trees are needed along Main St. and 1 additional tree is needed along Kirk Rd.
- Landscaping is needed along 75% of the 20 ft. setback area along Main St. Additional plantings are needed.
- Additional trees are needed within the foundation planting beds of both the convenience store and car wash:
    - Convenience Store north wall: 1 additional tree is needed (3 are provided and 4 are required).
    - Gas Station north wall: 1 additional tree is needed (2 are provided and 3 are required).

PUD Deviations:

- A deviation has been requested to reduce the width of the foundation planting bed along the west wall of the convenience store from 5 ft. to 3 ft. It appears the building could be shifted east to accommodate the required 5 ft. wide planting bed. The previous version of the plan provided an 8 ft. planting bed. The revised plan adds a 5 ft. sidewalk along the west elevation which connects to sidewalk along Main St. This reduced the planting bed to 3 ft.

F. BUILDING ARCHITECTURE

Architectural elevations for the convenience store and car wash have been submitted. The primary wall material of both buildings is wood siding. Metal awnings are incorporated, as well as transparent storefront windows along E Main St. The rooflines, materials and detailing exhibit a barn inspired motif.

Buildings in the BR District are subject to the Design Review requirements of Section 17.06.030 Standards and Guidelines – BL, BC, BR, & O/R Districts. The elevations meet the applicable standards.

A rendering has also been submitted for the gas station canopy. Brick columns are proposed which match the brick on the monument signs.

Staff Comments:

- The design of the canopy does not relate to the design of the convenience store and car wash buildings in terms of materials. Brick columns are proposed, while brick is not used on the buildings. Cedar finish columns like those used on the buildings could be incorporated instead of brick. However, the proposed masonry would likely be more durable. If the Plan Commission has a preference on column materials, that should be expressed during the meeting.

G. SIGNAGE

A signage plan has been submitted. Signage is subject to the requirements of Ch. 17.28 "Signs". Proposed is the following:

- Three monument signs with brick bases/columns:
  - 15 ft. electronic price sign at the corner of Main and Kirk.
  - 6 ft. sign at the eastern access drive near the signalized Main Street Commons entrance (off-site sign).
  - 5 ft. sign at the Main Street Commons entrance off Kirk Rd. (off-site sign).
- Convenience Store:
  - 4 wall signs; 2 on the north and 2 on the south elevations, advertising The Pride and Taco Urbano.
- Gas Station Canopy:
  - 2 Mobil signs attached to the canopy, on the north and west sides.
- Car Wash:
  - 1 Pride Car Wash sign on the south elevations.
  - "Welcome" and "Car Wash Exit" signs at the bay entrance and exit. These informational/directional signs will not be counted as wall signs.
- Directional Sign:
  - To be placed on top of a stop sign post near Ross, with arrows directing vehicles to The Pride, Panda Express, and Orangetheory Fitness.

PUD Deviations – The applicant has requested deviations from the signage requirements of Ch. 17.28, as follows:

- Off-premise signs are not permitted. Proposed is to permit three off-premise signs, one monument sign at each of the Main Street Commons access points off Main St. and Kirk Rd. and one directional sign within the shopping center. A Reciprocal Easement Agreement between CIMA Developers and Main Street Commons has been recorded which grants CIMA the right to place and maintain these signs on the Main Street Commons property.

- Two wall signs are permitted for the convenience store due to the two street frontages. Proposed are four wall signs.
- A 10 ft. setback is required for freestanding signs. The proposed monument sign at the corner of Main St. and Kirk Rd. is set back 3 ft. from the property line.

H. SITE LIGHTING

A photometric plan has been submitted. Lighting levels at property lines and gas station canopy lighting comply with the standards contained in Section 17.22.040 "Site Lighting".

I. PLAT OF SUBDIVISION

A Preliminary Plat of Subdivision has been submitted as part of the PUD Preliminary Plan. A single lot for the development is proposed. Approx. 11 ft. of right-of-way along E Main St. is to be dedicated to Illinois Department of Transportation. Along Kirk Rd., approx. 12.5 ft. of right-of-way is to be dedicated to Kane County Department of Transportation. The proposed public sidewalk falls within the new IDOT and KDOT right-of-way, with the exception of a stretch at the northeast corner of the subject property. A public sidewalk easement is proposed in this location.

A Final Plat of Subdivision will be reviewed should the project move forward. The Final Plat will need to be approved by both KDOT and IDOT in addition to the City.

J. ENGINEERING REVIEW

City staff reviewed an initial submittal of the preliminary engineering plans and provided review comments to the applicant. Revised plans have been submitted and are under review. Any outstanding comments will need to be addressed prior to City Council approval of the PUD Preliminary Plan.

A portion of an existing detention pond that provides stormwater management for Main Street Commons is located over the proposed eastern cross-access drive. The existing pond will be modified and an additional pond will be added on the east side of the subject property. The aforementioned Reciprocal Easement Agreement between CIMA Developers and Main Street Commons demonstrates agreement among the property owners for sharing detention, construction and maintenance.

V. PLAN COMMISSION RECOMMENDATION

Plan Commission held a public hearing on July 7, 2020 which was continued to July 21 and August 4. On August 4, Plan Commission voted 8-1 to recommend approval, subject to resolution of outstanding staff comments prior to City Council action.

A summary of the items discussed during the hearing is provided in a separate Staff Memo dated 8/6/20.

CIMA DEVELOPERS, LP

30W180 Butterfield Road
Warrenville, IL 60555
O: (630) 653-1700
F: (630) 791-8283

October 22, 2019

City of St. Charles
Community and Economic Development/Planning Division
Two East Main Street
St. Charles, IL 60174-1984

RE: Request for Relief to construct Public Sidewalks on Proposed SEC Main St & Kirk Road Development

To Whom It May Concern:

Please allow this correspondence to serve as CIMA Developers, LP's (Developer) formal request to have Public sidewalk costs associated with the proposed development to be incurred by the City of St. Charles.

On our current site plan dated April 3, 2019, we show approximately 700 LFT of sidewalk running the entire length of the frontages of the site.

We depict it on the plan, however our intent is to **not** have to incur the costs of that Public sidewalk. We feel this should be the responsibility of the City, especially since this development would be part of an Annexation. We are not asking for any type of TIF, we are not asking for any type of tax abatement, or any other type of relief. With the additional costs of all the other requirements on this property that we will need to incur, (stormwater, retaining walls, etc) we feel this is a very reasonable request.

Thank you and we will look forward to the City's overall review and Staff notes, and subsequent approval of this request.

Regards,

Dan Soltis
Vice President of Real Estate
CIMA Developers, LP.

From: Colby, Russell
To: Johnson, Ellen
Subject: FW: CIMA Developers The PRIDE of Kane County Pheasant Run property
Date: Thursday, August 6, 2020 1:19:55 PM

Russell Colby | Assistant Director of Community & Economic Development
2 E. Main Street, St. Charles, IL 60174-1984
phone: 630.762.6925 | fax: 630.377.4062 | www.stcharlesil.gov
rcolby@stcharlesil.gov

CITY OF ST CHARLES, ILLINOIS

From: Daniel Soltis <dsoltis@cimadevelopers.org>
Sent: Thursday, July 2, 2020 11:11 AM
To: Colby, Russell <rcolby@stcharlesil.gov>
Cc: Mario Spina <mspina@parentpetroleum.com>
Subject: CIMA Developers The PRIDE of Kane County Pheasant Run property

Russell,

We have recently spoken regarding the Pheasant Run property and its current status and potential for new development.

Please note that it has been brought to our attention that the current brokers for the property have received multiple interest from major Gas/Convenience store users, including multiple Letters of Intent for that hard corner (SEC North & Kautz) of that property, and a preliminary site plan layout depicts a gas station/convenience store offer.

On the eve of our upcoming Plan Commission meeting next week, we wanted to clearly communicate to the City that we need to have guarantees from the City, and it is written into our Zoning approval, that no other new PUD's or Zoning approvals for Gas Station/Convenience Stores will be granted in St. Charles off of North Ave.

There are already a great deal of Gas Stations in St. Charles off North Ave West of the Corner (Circle K Shell, BP next to Carwash, Shell downtown St. Charles, 7Eleven Mobil, BP across from Rookies, plus a few more), and this should not be a concern to stop the approval of any other Stations in the future. Obviously, if they are currently a Station, that is not an issue, as we have already accounted for the current competition.

We have worked diligently on this project and are excited to present our PRIDE of Kane County plan to City Officials, but we do not want to be put into a position to spend Millions of Dollars on this corner to have the City approve another station right down the Street, now or in the future.

We certainly hope you can understand our position.

We are available for further communication on this, and I have cc'd Ownership on this correspondence.

Regards,

***Dan Soltis| VP Real Estate* | CIMA Developers, LP**
30W180 Butterfield Rd., Warrenville, IL 60555 | O: 630.653.1700 F: 630.791.8283
dsoltis@cimadevelopers.org | Please Visit: www.cimadevelopers.org

July 20, 2020

Dear Commissioners ,

I read the letters from Jayme Muenz and Mony Bryant. I agree with their conclusion.

“A through review of the Plan as a whole makes clear that this proposal does not meet the requirements or objectives of the agreed-upon Plan for development. Therefore, it would be recommended that the Commission deny this proposal and allow the land owner to work with new developers on an alternative plan that conforms to the guidelines of the Comprehensive Plan.”

Does the City of Saint Charles have needs assessments studies? Is a gas station, car wash, convenience store, taco restaurant required for the current population? Will a new facility detrimentally effect the current St. Charles businesses?

As an eighteen year resident, the traffic at the proposed intersection is already heavy; this is an observation from a resident - not a traffic study conducted in 2017. In the morning, from northbound Kirk Road, turning right/east on to Main Street, the right turning lane could have ten+ cars waiting to turn. I passed through this intersection daily for years while traveling to work - it is already busy! Will a gas station create additional traffic on Kirk and North Avenue?

Thank you in advance for reading my concerns. My thoughts are as a resident. I share a concern for the optics of a gas station, convenience store, car wash combination projects as we enter our city. My concerns are for existing businesses being pushed aside and is there even a need for these services? My concerns are for traffic

on a road currently being used by both cars and buses transporting students to Wredling Middle School and St. Charles East High School.

Elaine Delves
1138 Hidden Glen Circle

July 6, 2020

Attn: St. Charles City Council Plan Commission

Re: SE Corner of Kirk Rd and East Main Street – Special Use for PUD – 7/7/2020

Dear Commissioners:

Thank you for the opportunity to share my thoughts as a resident of St. Charles. I have called this beautiful city home for over 15 years, and am happy every day that my husband and I thoughtfully decided to start and raise our family here. Our first St. Charles home was in Ward 1, and we moved a few years ago to Ward 2. We have watched many changes over that 15 years to the east side, and have a commitment to ensuring the needs and image of this side of the city are not overlooked or the importance of this corridor undervalued, as many resources have been drawn toward the historic district. After recently learning of the development opportunity that has been presented for the south east corner of Kirk Road and East Main Street, I reviewed the most recent version of the Comprehensive Plan and found some inconsistencies between the proposal at hand and the guiding Plan.

This annexation affords the City and this commission the unique opportunity and ability to strategically plan this important site within our eastern corridor. It is very important to note that the property in question has never come up for sale until this proposal, and there are numerous other types of developers who would have keen interest in an intersection with this level of access and visibility. That is to say, there are many other opportunities for this land use that would better meet the strategic vision and goals set forth by the City. As the site is adjacent to the near-capacity Main Street Commons shopping center, many developers will find this an attractive site when they learn of the availability of the parcel.

The Plan indicates that the purpose is to set a course to guide land use decision-making to ensure the City continues to improve upon its legacy with an eye toward the future. In the East Gateway Subarea Plan section, the intersection in question for this proposal indicates that the East Gateway of St. Charles is centered at the intersection in question today. Since moving to the area, we have seen many changes to the retail and restaurant businesses on the east side. Recent changes in occupancy of several plazas have been very positive, and leave us hopeful for a continued improvement in that arena.

The unfortunate and continued stalled reinvention of the Charlestown Mall property, combined with the closure and recent dilapidation of the Pheasant Run property, have left the gateway into our beautiful city less than ideal. As a vast majority of travelers come down Route 64 to visit, they enter through what appears to be neglect and untended property. While hopefully rectified soon, the Pheasant Run property is visibly falling apart, and the grass overgrown. The vacancy of the mall and out lots are obvious as well, even with the wonderful additions of the Starbucks and Cooper's Hawk buildings. As stated in the East Gateway Subarea Plan, a goal of the City is to keep this area economically healthy and aesthetically attractive.

It is stated in the Plan that a goal is to create, "Attractive streets and sites to distinguish the Subarea and key corridors from neighboring communities." In reviewing the proposed plan, the proposed usage would do quite the opposite. The travelers from both I-88 and I-355 pass almost a dozen gas stations and car wash establishments before reaching St. Charles. Rt. 64 and Rt. 59 have 4 car wash facilities, and 2 gas stations, alone. A gas station and car wash, accompanied by a restaurant, would be

indistinguishable from driving through West Chicago, for example. Opportunities for residents and visitors to get self and full-service car washes, and gasoline, are abundant within the City already.

I would also point out from the recent Annual Report by the St. Charles Police Department that in this same corridor at the intersection of East Main Street and Dunham Road finds ranks **number one** in the top ten intersection crash locations of 2019. It is the number 5 location of 2019's top ten roadway crash locations, tied by number of crashes with 4000 East Main Street (adjacent to the intersection in the proposal at hand), and one fewer than 3700 East Main Street (also adjacent to the intersection in this proposal at hand). This intersection also happens to have a Shell gas station, and the multiple cars entering and exiting at all times have a great impact on the safety of this intersection. It is a far less busy intersection than the parcel in question, which currently ranks 3rd, and 4th based on address on the 2019 top ten roadway crash locations in the City. Adding a high-volume of traffic entering and exiting at this intersection would be counter to the statement in the Main Street Subarea Plan of creating, "a more efficient corridor at the City-wide level." It is also counter to the statement in this section of the Plan to create, "A corridor that presents a unified image and identity for St. Charles."

A through review of the Plan as a whole makes clear that this proposal does not meet the requirements or objectives of the agreed-upon Plan for development. Therefore, it would be recommended that the Commission deny this proposal and allow the land owner to work with new developers on an alternative plan that conforms to the guidelines of the Comprehensive Plan.

Thank you for the opportunity to share my thoughts and concerns, and for your valued service to our beautiful community.

Sincerely,

Jayme Muenz

27 Southgate Course

Johnson, Ellen

To: Sanchez, Christine
Subject: RE: Plan Commission -Proposal

From:
Sent: Monday, July 06, 2020 5:25 PM
To: CD
Subject: Plan Commission -Proposal

Commissioners:

I have lived in St Charles for 14 years, and my husband, 3 boys and I love where we live and are active in our community.

We have lived in Ward 2 for 9 years and have watched the many changes on the east side of town, including the demise of the mall with no real progress other than Cooper's Hawk and Starbucks.

The image of this side of the city is important, but oftentimes feels overlooked.

After learning of the development opportunity that has been presented for the south east corner of Kirk Road and East Main Street, I set out to learn more.

The Comprehensive Plan indicates that the purpose is to guide land use decision-making to ensure the city continues to improve upon its legacy with an eye toward the future.

As stated in the East Gateway Subarea Plan, a goal of the city is to keep this area economically healthy and aesthetically attractive. It is stated in the Plan that a goal is to create, "Attractive streets and sites to distinguish the Subarea and key corridors from neighboring communities." The proposed plan of a car wash and gas station would not support that statement.

How does another gas station and car wash distinguish us from West Chicago, Batavia on Kirk Rd, etc.? Visitors pass numerous gas stations and car washes before reaching St. Charles. There is not distinguishing change from one city to the next -Rt. 64 and Rt. 59 have 4 car wash facilities, and 2 gas stations just east of us.

Additionally, my neighbors and I have reviewed the recent Annual Report by the St. Charles Police Department in this same corridor as the proposal, and the intersection of East Main Street and Dunham Road ranks the **number one** in the top ten intersection crash locations of 2019. It is the number 5 location of 2019's top ten roadway crash locations, tied by number of crashes with 4000 East Main Street (adjacent to the intersection in the proposal at hand), and one fewer than 3700

East Main Street (also adjacent to the intersection in this proposal at hand). This intersection also happens to have a gas station, and the multiple cars entering and exiting at all times impact the safety of this intersection. It is a far less busy intersection than the proposed plan for the parcel in question, which currently ranks 3rd, and 4th based on address on the 2019 top ten roadway crash locations in the City. Adding a high-volume of traffic entering and exiting at this intersection would be counter to the statement in the Main Street Subarea Plan of creating, "a more efficient corridor at the City-wide level." It is also counter to the statement in this section of the Plan to create, "A corridor that presents a unified image and identity for St. Charles."

Our neighbors and our review of the Comprehensive plan and of the 2019 annual police report makes it clear that this proposal does not meet the requirements or objectives of the agreed-upon plan for development. We can do better. I strongly encourage the Commission to deny this proposal and ask the developer to return with alternative plan that meets the guidelines of the Comprehensive Plan and is in the best interest of development on the East side of our city.

Molly Bryant
29 Southgate Course

Sent from my iPhone

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

ST. CHARLES SINCE 1834

COMMUNITY DEVELOPMENT DIVISION PHONE: (630) 377-4443 EMAIL: cd@stcharlesil.gov

ZONING MAP AMENDMENT APPLICATION

CITYVIEW	
Project Name:	Pride of Kane County
Project Number:	2019 -PR- 007
Cityview Project Number:	PLMA202000019

Received Date
RECEIVED
St. Charles, IL
APR 07 2020
CDD
Planning Division

Instructions:

To request a zoning map amendment (rezoning) for a property, complete this application and submit it with all required attachments to the Planning Division.

City staff will review submittals for completeness and for compliance with applicable requirements prior to establishing a Plan Commission public hearing or meeting date.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Location: SEC KIRK ROAD AND MAIN ST. (IL STATE ROUTE 64)	
	Parcel Number (s): 09-25-100-036	
	Proposed PUD Name: THE PRIDE OF KANE COUNTY	
2. Applicant Information:	Name: CIMA DEVELOPERS, LP	Phone: 630.653.1700
	Address: 30W180 BUTTERFIELD RD WARRENVILLE, IL 60555	Fax: 630.791.8283
		Email: dsoltis@cimadevelopers.org
3. Record Owner Information:	Name: CIMA DEVELOPERS, LP	Phone: - SAME -
	Address: 30W180 BUTTERFIELD RD WARRENVILLE, IL 60555	Fax: -
		Email

Zoning and Use Information:

Comprehensive Plan Land Use Designation of the property: Corridor / Regional Commercial

Current zoning of the property: F - Farming (Kane County)

Is the property a designated Landmark or in a Historic District? NO

Current use of the property: VACANT

Proposed zoning of the property: BR

Proposed use of the property: RETAIL

If the proposed Map Amendment is approved, what improvements or construction are planned? (An accurate site plan may be required to establish that the proposed improvement can meet the minimum zoning requirements)

CONSTRUCTION OF GAS FUELING FACILITY, CONVENIENCE STORE AND STAND ALONE CAR WASH

Attachment Checklist:

If multiple zoning or subdivision applications are being submitted concurrently, do not submit duplicate checklist items or plans. Fee must be paid for each application.

☑ **APPLICATION FEE:**

Application fee in accordance with Appendix B of the Zoning Ordinance. ($500)

☑ **REIMBURSEMENT OF FEES AGREEMENT:**

An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.

☑ **REIMBURSEMENT OF FEES INITIAL DEPOSIT:**

Deposit of funds in escrow with the City. Required deposit is based on review items (number of applications filed) and the size of the site:

Number of Review Items	Under 5 Acres	5-15 Acres	16-75 Acres	Over 75 Acres
1	$1,000	$2,000	$3,000	$4,000
2 or 3	$2,000	$4,000	$5,000	$7,000
4 or more	$3,000	$5,000	$7,000	$10,000

☑ **PROOF OF OWNERSHIP and DISCLOSURE:**

a) A current title policy report; or

b) A deed and a current title search.

If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

NOTE: Private covenants and deed restrictions can limit private property rights with respect to the use of land even though the City's Zoning Ordinance may authorize the use or a less restrictive use. We strongly advise that you perform a title search on the property to determine if there any private covenants containing use restrictions or other deed restrictions. As those private covenants and deed restrictions may conflict with the City's Zoning Ordinance, it is further recommended that you consult with an attorney to obtain an opinion with respect to whether your intended use is compatible with those restrictions.

☑ **LEGAL DESCRIPTION:** For entire subject property, on 8 ½ x 11 inch paper

☑ **PLAT OF SURVEY:**

A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

☑ **SITE PLAN:**

Simple site plan drawn to scale to demonstrate that the property can meet the requirements of the proposed zoning district (parking requirements, setbacks, landscaping, etc.)

☑ **FINDINGS OF FACT:**

Fill out the attached form or submit responses on a separate sheet.

☑ **LIST OF PROPERTY OWNERS WITHIN 250 FT.**

Fill out the attached form or submit on a separate sheet. The form or the list must be signed and notarized.

☑ **SOIL AND WATER CONSERVATION DISTRICT APPLICATION:**

Copy of completed Land Use Opinion application as required by state law, as submitted to The Kane-Dupage Soil and Water Conservation District. http://www.kanedupageswcd.org/

Submit the application form and fee directly to the Kane-DuPage Soil and Water Conservation District. Provide a copy with this application.

☑ **ENDANGERED SPECIES REPORT:**

Copy of Endangered Species Consultation Agency Action to be filed with the Illinois Department of Natural Resources. http://dnrecocat.state.il.us/ecopublic/

Fill out the online form, print the report and submit with this application.

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

4/1/20

Record Owner — Date

3-29-20

Applicant or Authorized Agent — Date

FINDINGS OF FACT – MAP AMENDMENT

ST. CHARLES
SINCE 1834

The St. Charles Zoning Ordinance requires the Plan Commission to consider factors listed below in making a recommendation to the City Council.

As an applicant, the "burden of proof" is on you to show why the proposed zoning is more appropriate than the existing zoning. Therefore, you need to "make your case" by explaining how the following factors support your proposal. If a factor does not apply to the property in question, indicate "not applicable" and explain why it does not apply.

PRIDE OF KANE COUNTY
33W573 E. MAIN ST.
Project Name or Address

3-28-20
Date

From the Charles Zoning Ordinance, Section 17.04.320.D:
In making its recommendation to grant or deny an application for a Zoning Map Amendment, including changes to Zoning District and Overlay boundaries, the Plan Commission shall consider:

1. The existing uses and zoning of nearby property. *(Relate the proposed land use and zoning to the land use and zoning of other properties in the area)*

   THE INTENDED USE IS VERY CONSISTENT WITH THE OTHER RETAIL BUSINESS USES ALONG KIRK ROAD AND ALONG (ILRT 64) MAIN STREET.

2. The extent to which property values are diminished by the existing zoning restrictions. *(Compare the value of the subject property and nearby properties under the current zoning to their potential value under the proposed zoning.)*

   PROPERTY VALUES WILL NOT BE AFFECTED. THE INTENDED USE IS CONSISTENT WITH ALL NEARBY USES.

3. The extent to which the reduction of the property's value under the existing zoning restrictions promotes the health, safety, morals or general welfare of the public. *(If the existing zoning decreases the value of the subject realty, does it also produce any perceptible public benefits?*

   THE PROPERTY VALUE WILL NOT BE DIMINISHED AND IN FACT WILL PROVIDE AN ADDED AMENITY AND CONVENIENCE TO THE SURROUNDING CITY AND COMMUNITY

4. The suitability of the property for the purposes for which it is presently zoned, i.e. the feasibility of developing the property for one or more of the uses permitted under the existing zoning classification. *(Can the subject property reasonably be used for any of the uses currently permitted? Physical and market conditions may be considered.)*

THE SUBJECT PROPERTY'S CURRENT ZONING DOES NOT ALLOW FOR OUR INTENDED USE.

5. The length of time that the property has been vacant, as presently zoned, considered in the context of the land development in the area where the property is located. *(If a property has been vacant longer than other similar properties in the area, it may be an indicator that the existing zoning is inappropriate.)*

THIS PROPERTY HAS BEEN VACANT FOR A SUBSTANTIALLY LONG AMOUNT OF TIME.

6. The evidence, or lack of evidence, of the community's need for the uses permitted under the proposed district. *(Development trends, market forces, and the Comprehensive Plan may be considered.)*

THE INTENDED USE IS VERY CONSISTENT WITH DEVELOPMENT TRENDS AND ALL NEIGHBORING USES.

7. The consistency of the proposed amendment with the City's Comprehensive Plan.

OUR INTENDED USE IS CONSISTENT

8. Whether the proposed amendment corrects an error or omission in the Zoning Map.

Per Title 17 of the City Code, unless otherwise requested, land being annexed is automatically zoned RE-1 Single-Family Estate District. BR zoning is requested to accommodate the proposed commercial development.

9. The extent to which the proposed amendment creates nonconformities. *(Generally it is not appropriate to rezone a property unless it can comply with the requirements of the new zoning.)*

THE PROPOSED DEVELOPMENT WILL ONLY REQUIRE PAVING SETBACKS, OTHER THAN THAT WILL COMPLY WITH NEW ZONING REQUIREMENTS. OFF-SITE SIGNS ALSO WILL BE PART OF OUR PUD DEVIATION REQUEST

10. The trend of development, if any, in the general area of the property in question. *(New development, redevelopment, changes in use, or other changes in the area may help to justify a change in zoning.)*

THE INTENDED USE IS CONSISTENT WITH THE OTHER RETAIL BUSINESS USES.

Plan Commission recommendation shall be based upon the preponderance of the evidence presented and the Commission shall not be required to find each Finding of Fact in the affirmative to recommend approval of an application for Map Amendment.

OWNERSHIP DISCLOSURE FORM

OWNER: CIMA Developers Limited Partnership

_____

By: Peter M. Spina, sole managing member of
Angel Associates LLC, general partner

STATE OF ILLINOIS)
)SS
COUNTY OF DuPage)

I, Brian G. Boylan, a Notary Public in and for the County and State aforesaid, DO HEREBY CERTIFY that Peter M. Spina, personally known to me to be the managing member of Angel Associates LLC, the general partner of Cima Developers Limited Partnership, and personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that as such managing member, he signed and delivered such instrument, as his free and voluntary act and deed, and as the free and voluntary act and deed of Angel Associates LLC, the general partner of such Limited Partnership, for the uses and purposes therein set forth.

Given under my hand and official seal this 1 day of April, 2020

OFFICIAL SEAL
BRIAN G BOYLAN
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:05/23/20

_____
Notary Public

My Commission Expires: _____

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

ST. CHARLES
SINCE 1834

COMMUNITY DEVELOPMENT DIVISION PHONE: (630) 377-4443 EMAIL: cd@stcharlesil.gov

SPECIAL USE APPLICATION

(To request a Special Use or Amendment, or a Special Use for PUD or Amendment)

For City Use	
Project Name:	Pride of Kane County
Project Number:	2019 -PR- 007
Cityview Project Number:	PL5420200021

~~Received Date~~
RECEIVED
St. Charles, IL
APR 07 2020
CDD
Planning Division

To request a Special Use for a property, or to request to amend an existing Special Use Ordinance for a property, complete this application and submit it with all required attachments to the Planning Division.

City staff will review submittals for completeness and for compliance with applicable requirements prior to establishing a public hearing date for an application.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Location: SEC KIRK RD AND MAIN ST. (IL STATE ROUTE 64)	
	Parcel Number (s): 09-25-100-036	
	Proposed Name: THE PRIDE OF KANE COUNTY	
2. Applicant Information:	Name: CIMA DEVELOPERS, LP	Phone: 630.653.1700
	Address: 30W180 BUTTERFIELD RD WARRENVILLE, IL 60555	Fax: 630.791.8283
		Email: dsoltis@cimadevelopers.org
3. Record Owner Information:	Name: CIMA DEVELOPERS, LP	Phone: -SAME-
	Address: 30W180 BUTTERFIELD RD WARRENVILLE, IL 60555	Fax
		Email

Please check the type of application:

☑ **Special Use for Planned Unit Development - PUD Name:** THE PRIDE OF KANE COUNTY

- ☑ New PUD
- ☐ Amendment to existing PUD- Ordinance #: _____
- ☐ PUD Preliminary Plan filed concurrently

☐ **Other Special Use (from list in the Zoning Ordinance):** _____

- ☐ Newly established Special Use
- ☐ Amendment to an existing Special Use Ordinance #: _____

Information Regarding Special Use:

Comprehensive Plan designation of the property: Corridor / Regional Commercial

Is the property a designated Landmark or in a Historic District? No

What is the property's current zoning? F - Farming (Kane County)

What is the property currently used for? VACANT

If the proposed Special Use is approved, what improvements or construction are planned?

CONSTRUCTION OF FUELING FACILITY, CONVENIENCE STORE AND CARWASH.

For Special Use Amendments only:

Why is the proposed change necessary?

TO ALLOW FOR THE INTENDED USE AND DEVELOPMENT

What are the proposed amendments? (Attach proposed language if necessary)

Note for existing buildings:

If your project involves using an existing building, whether you plan to alter it or not, please contact the St. Charles Fire Department (630-377-4458) and the Building and Code Enforcement Division (630-377-4406) for information on building, life safety and other code requirements. Depending on the proposed use, size of structure and type of construction, these requirements can result in substantial costs.

Attachment Checklist:

If multiple zoning or subdivision applications will be submitted concurrently, do not submit duplicate checklist items or plans. Fee must be paid for each application.

☑ **APPLICATION FEE:**

Application fee in accordance with Appendix B of the Zoning Ordinance. (Special Use for PUD $1,000; all other Special Use requests $750)

☑ **REIMBURSEMENT OF FEES AGREEMENT:**

An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.

☑ **REIMBURSEMENT OF FEES INITIAL DEPOSIT:**

Deposit of funds in escrow with the City. Required deposit is based on review items (number of applications filed) and the size of the site:

Number of Review Items	Under 5 Acres	5-15 Acres	16-75 Acres	Over 75 Acres
1	$1,000	$2,000	$3,000	$4,000
2 or 3	$2,000	$4,000	$5,000	$7,000
4 or more	$3,000	$5,000	$7,000	$10,000

☑ **PROOF OF OWNERSHIP and DISCLOSURE:**

a) A current title policy report; or

b) A deed and a current title search.

If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

NOTE: Private covenants and deed restrictions can limit private property rights with respect to the use of land even though the City's Zoning Ordinance may authorize the use or a less restrictive use. We strongly advise that you perform a title search on the property to determine if there any private covenants containing use restrictions or other deed restrictions. As those private covenants and deed restrictions may conflict with the City's Zoning Ordinance, it is further recommended that you consult with an attorney to obtain an opinion with respect to whether your intended use is compatible with those restrictions.

☑ **LEGAL DESCRIPTION:** For entire subject property, on 8 1/2 x 11 inch paper

☑ **PLAT OF SURVEY:**

A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

☑ **FINDINGS OF FACT:**

Fill out the attached forms or submit responses on a separate sheet (*Submit "Criteria for PUD" for any PUD application; "Findings for Special Use" for all other Special Use applications.)*

☑ **LIST OF PROPERTY OWNERS WITHIN 250 FT.:**

Fill out the attached form or submit on a separate sheet. The form or the list must be signed and notarized.

☑ **SOIL AND WATER CONSERVATION DISTRICT APPLICATION:**

Copy of completed Land Use Opinion application as required by state law, as submitted to The Kane-Dupage Soil and Water Conservation District. http://www.kanedupageswcd.org/

Submit the application form and fee directly to the Kane-DuPage Soil and Water Conservation District. Provide a copy with this application.

☑ **ENDANGERED SPECIES REPORT:**

Copy of Endangered Species Consultation Agency Action to be filed with the Illinois Department of Natural Resources. http://dnr.illinois.gov/EcoPublic/

Fill out the online form, print the report and submit with this application.

☑ **TRAFFIC STUDY:** If requested by the Director of Community Development.

Staff will advise you whether a traffic study is recommended based on the project. Regardless, the Plan Commission or City Council may request a traffic study as a part of the review process.

☑ **PLANS:**

All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions.

Copies of Plans:

Initial Submittal - Ten (10) full size copies, Three (3) 11" by 17", and a PDF electronic file (On a CD-ROM or may be emailed to the Project Manager). For subsequent submittals, please contact the Project Manager to determine how many copies are required.

☑ **SITE PLAN (Note: For a Special Use for PUD, submit PUD Preliminary Plan Application in lieu of Site Plan)**

A plan or plans showing the following information:

1. Accurate boundary lines with dimensions
2. Streets on and adjacent to the tract: Name and right-of-way width
3. Location, size, shape, height, and use of existing and proposed structures
4. Location and description of streets, sidewalks, and fences
5. Surrounding land uses
6. Date, north point, and scale
7. Ground elevation contour lines
8. Building/use setback lines
9. Location of any significant natural features
10. Location of any 100-year recurrence interval floodplain and floodway boundaries
11. Location and classification of wetland areas as delineated in the National Wetlands Inventory
12. Existing zoning classification of property
13. Existing and proposed land use
14. Area of property in square feet and acres
15. Proposed off-street parking and loading areas
16. Number of parking spaces provided, and number required by ordinance
17. Angle of parking spaces
18. Parking space dimensions and aisle widths
19. Driveway radii at the street curb line
20. Width of driveways at sidewalk and street curb line

21. Provision of handicapped parking spaces
22. Dimensions of handicapped parking spaces
23. Depressed ramps available to handicapped parking spaces
24. Location, dimensions and elevations of freestanding signs
25. Location and elevations of trash enclosures
26. Provision for required screening, if applicable
27. Exterior lighting plans showing:
    a. Location, height, intensity and fixture type of all proposed exterior lighting
    b. Photometric information pertaining to locations of proposed lighting fixtures

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

4/1/20

Record Owner — Date

3-29-20

Applicant or Authorized Agent — Date

CRITERIA FOR PLANNED UNIT DEVELOPMENTS (PUDS)

ST. CHARLES
SINCE 1834

For Special Use for PUD or PUD Amendment applications.

The St. Charles Zoning Ordinance requires the Plan Commission to consider the criteria listed below in making a recommendation to the City Council on whether a proposed Planned Unit Development is in the public interest.

As the applicant, the "burden of proof" is on you to provide information that addresses the criteria below in order to demonstrate that the project is in the public interest.

(You may utilize this form or provide the responses on another sheet.)

THE PRIDE OF KANE COUNTY — 4-10-20

PUD Name — *Date*

From the St. Charles Zoning Ordinance, Section 17.04.410.3:
The Plan Commission shall not favorably recommend, and the City Council shall not approve, a Special Use for a PUD or an amendment to a Special Use for a PUD unless they each make findings of fact based on the application and the evidence presented at the public hearing that the PUD is in the public interest, based on the following criteria:

i. The proposed PUD advances one or more of the purposes of the Planned Unit Development procedure stated in Section 17.04.400.A:

1. To promote a creative approach to site improvements and building design that results in a distinctive, attractive development that has a strong sense of place, yet becomes an integral part of the community.
2. To create places oriented to the pedestrian that promote physical activity and social interaction, including but not limited to walkable neighborhoods, usable open space and recreational facilities for the enjoyment of all.
3. To encourage a harmonious mix of land uses and a variety of housing types and prices.
4. To preserve native vegetation, topographic and geological features, and environmentally sensitive areas.
5. To promote the economical development and efficient use of land, utilities, street improvements, drainage facilities, structures and other facilities.
6. To encourage redevelopment of sites containing obsolete or inappropriate buildings or uses.
7. To encourage a collaborative process among developers, neighboring property owners and residents, governmental bodies and the community

YES WE BELIEVE THAT THE PROPOSED DEVELOPMENT ADVANCES MANY OF THE PURPOSES OF THE PLANNED UNIT DEVELOPMENT AS OUTLINED AND STATED IN SECTION 17.04.400.A

THE ARCHITECTURAL BUILDING DESIGN WILL PROVIDE A UNIQUE AND DISTINCTIVE LOOK THAT WILL INCLUDE "BARN" LIKE FEATURES THAT WILL CAPTURE THE HISTORIC ESSENCE OF THE PROPERTY.

- NEW SIDEWALKS ARE PROPOSED ALONG THE ENTIRE WEST AND NORTH PROPERTY LINES TO CONNECT EXISTING SIDEWALK STRUCTURES ALONG KIRK RD AND MAIN ST. (IL RT 64) TO HELP PROMOTE PEDESTRIAN TRAFFIC AND PHYSICAL ACTIVITY
- THIS PROPERTY HAS REMAINED UNDEVELOPED FOR A VERY LONG TIME, AND THE PROPOSED DEVELOPMENT ALLOWS FOR AND ENCOURAGES AND PROMOTES ECONOMIC GROWTH & EFFICIENT LAND USE
- THIS DEVELOPMENT INCLUDES A RECIPROCAL EASEMENT AGREEMENT WITH THE NEIGHBORING PROPERTY OWNER (MAIN STREET COMMONS) WHICH ALLOWS FOR CROSS-ACCESS SERVICE ROADS AND SHARED STORMWATER DETENTION

ii. The proposed PUD and PUD Preliminary Plans conform to the requirements of the underlying zoning district or districts in which the PUD is located and to the applicable Design Review Standards contained in Chapter 17.06, except where:

A. Conforming to the requirements would inhibit creative design that serves community goals, or

B. Conforming to the requirements would be impractical and the proposed PUD will provide benefits that outweigh those that would have been realized by conforming to the applicable requirements.

Factors listed in Section 17.04.400.B shall be used to justify the relief from requirements:

1. The PUD will provide community amenities beyond those required by ordinance, such as recreational facilities, public plazas, gardens, public are, pedestrian and transit facilities.
2. The PUD will preserve open space, natural beauty and critical environmental areas in excess of what is required by ordinance or other regulation.
3. The PUD will provide superior landscaping, buffering or screening.
4. The buildings within the PUD offer high quality architectural design.
5. The PUD provides for energy efficient building and site design.
6. The PUD provides for the use of innovative stormwater management techniques.
7. The PUD provides accessible dwelling units in numbers or with features beyond what is required by the Americans with Disabilities Act (ADA) or other applicable codes.
8. The PUD provides affordable dwelling units in conformance with, or in excess of, City policies and ordinances.
9. The PUD preserves historic buildings, sites or neighborhoods.

THE FOLLOWING FACTORS BELOW PER SECTION 17.04.400.B ARE HIGHLIGHTED TO JUSTIFY THE RELIEF FROM THE ZONING REQUIREMENTS.

- THE PUD WILL PROVIDE SUPERIOR LANDSCAPING AND BUFFERING AS ALLOWED BY THE SITE PARAMETERS.
- THE BUILDINGS WITHIN THE PUD WILL BE UNIQUE AND DISTINCTIVE IN NATURE, CAPTURING HISTORIC FEATURES
- THE BUILDINGS WILL BE BUILT WITH ENERGY EFFICIENCY GUIDELINES AND SITE DESIGN
- THE DEVELOPMENT WILL BE DESIGNED WITH SHARED DETENTION WITH MAIN STREET COMMONS

ZONING DEVIATIONS FOR THE FOLLOWING IS BEING REQUESTED; PAVING SETBACKS, OFF-SITE SIGNAGE, CONVENIENCE STORE BUILDING SIGNAGE, FREESTANDING

SIGN SETBACK, BUILDING FOUNDATION LANDSCAPE, CARWASH STACKING REQUIREMENT

iii. The proposed PUD conforms with the standards applicable to Special Uses (section 17.04.330.C.2):

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

YES. THE PROPOSED DEVELOPMENT WILL SERVE AS A PUBLIC CONVENIENCE AND AN ADDED AMENITY. THE DEVELOPMENT WILL OFFER, FUELING, CONVENIENCE STORE, QUICK SERVICE RESTAURANT AND CARWASH

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

YES. THE PROPOSED DEVELOPMENT HAS SUFFICIENT INFRASTRUCTURE REQUIRED TO DEVELOP. UTILITES, ADDED SERVICE ROADS, AND ADEQUATE ON SITE AND OFF-SITE DETENTION ARE BEING PROVIDED

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

THE DEVELOPMENT IS CONSISTENT AND COMPATIBLE WITH SURROUNDING LAND USES AND WILL NOT EFFECT NEARBY PROPERTY IN ANY WAY.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

THE DEVELOPMENT WILL NOT IMPEDE THE NORMAL AND ORDERLY DEVELOPMENT AND IMPROVEMENT OF THE SURROUNDING PROPERTY AND WILL COMPLETE THE NEEDED DEVELOPMENT AT THAT PARTICULAR PROPERTY LOCATION IN A MANNER THAT IS CONSISTENT AND COMPATIBLE WITH SURROUNDING AND NEIGHBORING PROPERTY

E. Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.

NO. THE PROPOSED DEVELOPMENT WILL NOT POSE ANY DETRIMENT TO OR ENDANGER THE PUBLIC HEALTH, SAFETY, COMFORT OR GENERAL WELFARE.

F. Conformance with Codes: That the proposed Special Use conforms to all applicable provisions of the St. Charles Municipal Code and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.

YES. THE DEVELOPMENT WILL BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL, CITY, STATE, AND FEDERAL CODE & ORDINANCE AND MEETS ALL APPLICABLE PROVISIONS, EXCEPT AS MAY BE VARIED PURSUANT TO A SPECIAL USE FOR PUD.

iv. The proposed PUD will be beneficial to the physical development, diversity, tax base and economic well-being of the City.

YES. THE PROPOSED DEVELOPMENT WILL PROVIDE AN ADDED AND SUBSTANTIAL TAX BASE TO THE CITY, IMPROVING THE OVERALL ECONOMIC WELL-BEING OF THE CITY.

v. The proposed PUD conforms to the purposes and intent of the Comprehensive Plan.

YES THE PROPOSED DEVELOPMENT IS IN CONFORMANCE WITH THE GOALS, OBJECTIVES AND POLICIES OF THE ADOPTED CITY OF ST. CHARLES COMPREHENSIVE PLAN.

CIMA DEVELOPERS, LP

30W180 Butterfield Road
Warrenville, IL 60555
O: (630) 653-1700
F: (630) 791-8283

October 22, 2019

City of St. Charles
Community and Economic Development/Planning Division
Two East Main Street
St. Charles, IL 60174-1984

RE: Request for Relief to construct Public Sidewalks on Proposed SEC Main St & Kirk Road Development

To Whom It May Concern:

Please allow this correspondence to serve as CIMA Developers, LP's (Developer) formal request to have Public sidewalk costs associated with the proposed development to be incurred by the City of St. Charles.

On our current site plan dated April 3, 2019, we show approximately 700 LFT of sidewalk running the entire length of the frontages of the site.

We depict it on the plan, however our intent is to **not** have to incur the costs of that Public sidewalk. We feel this should be the responsibility of the City, especially since this development would be part of an Annexation. We are not asking for any type of TIF, we are not asking for any type of tax abatement, or any other type of relief. With the additional costs of all the other requirements on this property that we will need to incur, (stormwater, retaining walls, etc) we feel this is a very reasonable request.

Thank you and we will look forward to the City's overall review and Staff notes, and subsequent approval of this request.

Regards,

Dan Soltis
Vice President of Real Estate
CIMA Developers, LP.

WT Group

Engineering • Design • Consulting

April 20, 2020

CIMA Developers, LP
30W180 Butterfield Road
Warrenville, IL 60555

Attn: Mr. Dan Soltis

Re: Pride of Kane County
Tree Preservation Waiver Request

Dear Mr. Soltis:

It is our opinion that a Tree Preservation Plan is not required for the Pride of Kane County project as the existing site is being completely cleared and the existing grades are being substantially changed. Please note, per the Tree Preservation Requirements included within the ordinance, the Tree Preservation Requirement can be waived when "...the area of the parcel will be substantially modified such that any existing vegetation is unlikely to be successfully preserved." As a result of the proposed improvements and on site grading changes, the existing vegetation will not be able to be preserved and the Tree Preservation Plan requirement should therefore be waived.

Feel free to contact me if you have any questions or comments, or if you require any further information.

Regards,

The WT Group, LLC

Todd O. Abrams, P.E., CFM
Principal in Charge, Civil Engineering Division

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

ST. CHARLES
SINCE 1834

COMMUNITY DEVELOPMENT DIVISION PHONE: (630) 377-4443 EMAIL: cd@stcharlesil.gov

PUD PRELIMINARY PLAN APPLICATION

For City Use	
Project Name:	Pride of Kane County
Project Number:	2019 -PR- 007
Cityview Project Number:	PLPUD202000020

Received Date
RECEIVED
St. Charles, IL
APR 07 2020
CDD
Planning Division

To request approval of a PUD Preliminary Plan, complete this application and submit it with all required plans and attachments to the Planning Division. Normally this application will track with an application for Special Use for a PUD, unless a Special Use for a PUD has previously been granted and no amendment is necessary.

When the application is complete staff will distribute the plans to other City departments for review. When the staff has determined that the plans are ready for Plan Commission review, we will place the PUD Preliminary Plan on a Plan Commission meeting agenda.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Location: SEC KIRK ROAD AND MAIN ST. (IL STATE ROUTE 64)	
	Parcel Number (s): 09-25-100-036	
	Proposed PUD Name: THE PRIDE OF KANE COUNTY	
2. Applicant Information:	Name CIMA DEVELOPERS, LP	Phone 630.653.1700
	Address 30W180 BUTTERFIELD RD WARRENVILLE, IL 60555	Fax 630.791.8283
		Email dsoltis@cimadevelopers.org
3. Record Owner Information:	Name CIMA DEVELOPERS, LP	Phone -SAME-
	Address 30W180 BUTTERFIELD RD WARRENVILLE, IL 60555	Fax
		Email

Please check the type of application:

- ☑ **New proposed PUD- Planned Unit Development** (Special Use Application filed concurrently)
- ☐ **Existing PUD-Planned Unit Development**
  - ☐ PUD Amendment Required for proposed plan (Special Use Application filed concurrently)

Subdivision of land:

- ☐ Proposed lot has already been platted and a new subdivision is not required.
- ☑ New subdivision of property required:
  - ☐ Final Plat of Subdivision Application filed concurrently
  - ☑ Final Plat of Subdivision Application to be filed later

Attachment Checklist:

If multiple zoning or subdivision applications are being submitted concurrently, do not submit duplicate checklist items or plans. Fee must be paid for each application.

Note: The City Staff, Plan Commission, or City Council, may request other pertinent information during the review process.

☑ **APPLICATION FEE:** Application fee in accordance with Appendix B of the Zoning Ordinance. ($500)

☑ **REIMBURSEMENT OF FEES AGREEMENT:**

An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.

☑ **REIMBURSEMENT OF FEES INITIAL DEPOSIT:**

Deposit of funds in escrow with the City. Required deposit is based on review items (number of applications filed) and the size of the site:

Number of Review Items	Under 5 Acres	5-15 Acres	16-75 Acres	Over 75 Acres
1	$1,000	$2,000	$3,000	$4,000
2 or 3	$2,000	$4,000	$5,000	$7,000
4 or more	$3,000	$5,000	$7,000	$10,000

☑ **PROOF OF OWNERSHIP and DISCLOSURE:**

a) a current title policy report; or

b) a deed and a current title search.

If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

NOTE: Private covenants and deed restrictions can limit private property rights with respect to the use of land even though the City's Zoning Ordinance may authorize the use or a less restrictive use. We strongly advise that you perform a title search on the property to determine if there any private covenants containing use restrictions or other deed restrictions. As those private covenants and deed restrictions may conflict with the City's Zoning Ordinance, it is further recommended that you consult with an attorney to obtain an opinion with respect to whether your intended use is compatible with those restrictions.

☑ **LEGAL DESCRIPTION:** For entire subject property, on 8 ½ x 11 inch paper

☑ **PLAT OF SURVEY:**

A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

☑ **SOIL AND WATER CONSERVATION DISTRICT APPLICATION:**

Copy of completed Land Use Opinion application as required by state law, as submitted to The Kane-Dupage Soil and Water Conservation District. http://www.kanedupageswcd.org/

Submit the application form and fee directly to the Kane-DuPage Soil and Water Conservation District. Provide a copy with this application.

☑ **ENDANGERED SPECIES REPORT:**

Copy of Endangered Species Consultation Agency Action to be filed with the Illinois Department of Natural Resources. http://dnr.illinois.gov/EcoPublic/

Fill out the online form, print the report and submit with this application.

☑ **PLANS:**

All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions.

Copies of Plans:

Initial Submittal - Ten (10) full size copies for non-residential projects OR Twelve (12) full size copies for residential projects; Three (3) 11" by 17"; and a PDF electronic file (On a CD-ROM or may be emailed to the Project Manager). For subsequent submittals, please contact the Project Manager to determine how many copies are required.

☑ **SITE/ENGINEERING PLAN:**

PRELIMINARY ENGINNERING PLANS – DRAWING REQUIREMENTS/CHECKLIST:

Complete the attached checklist and ensure that all required information is included on the Preliminary Engineering Plans:

1. Accurate boundary lines with dimensions
2. Existing and proposed easements: location, width, purpose
3. Streets on and adjacent to the tract: Name and right-of-way width, center line elevation, and culverts
4. Location, size, shape, height, and use of existing and proposed structures
5. Location and description of streets, sidewalks, and fences
6. Surrounding land uses
7. Legal and common description
8. Date, north point, and scale
9. Existing and proposed topography
10. All parcels of land intended to be dedicated for public use or reserved for the use of all property owners with

the proposal indicated

11. Location of utilities
12. Building/use setback lines
13. Location of any significant natural features
14. Location of any 100-year recurrence interval floodplain and floodway boundaries
15. Location and classification of wetland areas as delineated in the National Wetlands Inventory
16. Existing zoning classification of property
17. Existing and proposed land use
18. Area of property in square feet and acres
19. Proposed off-street parking and loading areas
20. Number of parking spaces provided, and number required by ordinance
21. Angle of parking spaces
22. Parking space dimensions and aisle widths
23. Driveway radii at the street curb line
24. Width of driveways at sidewalk and street curb line
25. Provision of handicapped parking spaces
26. Dimensions of handicapped parking spaces
27. Depressed ramps available to handicapped parking spaces
28. Location, dimensions and elevations of freestanding signs
29. Location and elevations of trash enclosures
30. Provision for required screening, if applicable
31. Provision for required public sidewalks
32. Certification of site plan by a registered land surveyor or professional engineer
33. Geometric plan showing all necessary geometric data required for accurate layout of the site
34. Grading plans showing paving design, all storm sewers, and detention/retention facilities including detention/retention calculations) and erosion control measures
35. Utility plans showing all storm sewers, sanitary sewers, watermains, and appropriate appurtenant structures
36. Exterior lighting plans showing:
    - Location, height, intensity and fixture type of all proposed exterior lighting
    - Photometric information pertaining to locations of proposed lighting fixtures
37. Typical construction details and specifications
38. Certification of site engineering plans by a registered professional engineer
39. Proof of application for Stormwater Management Permit

☐ **SKETCH PLAN FOR LATER PHASES OF PUD:**

For phased PUD's, where a sketch plan is permitted, it shall include, at minimum, the following:

- General location of arterial and collector streets
- Location of any required landscape buffers
- Location of proposed access to the site from public streets
- Maximum number of square feet of floor area for nonresidential development
- Maximum number of dwelling units for residential development
- Open space and storm water management land

☑ **ARCHITECTURAL PLANS:**

Architectural plans and data for all principal buildings shall be submitted in sufficient detail to permit an understanding of the exterior appearance and architectural style of the proposed buildings, the number, size and type of dwelling units, the proposed uses of nonresidential and mixed use buildings, total floor area and total building coverage of each building.

☐ **TREE PRESERVATION PLAN:**

Tree Preservation Plan when required in accordance with Chapter 8.30 of the St. Charles Municipal Code. The information required for this plan may be included as part of the Landscape Plan set. See attachment, "Tree Preservation Requirements for Preliminary Plans".

☑ **LANDSCAPE PLAN:**

Landscape Plan showing the following information:

1. Delineation of the buildings, structures, and paved surfaces situated on the site and/or contemplated to be built thereon
2. Delineation of all areas to be graded and limits of land disturbance, including proposed contours as shown on the Site/Engineering Plan.
3. Accurate property boundary lines
4. Accurate location of proposed structures and other improvements, including paved areas, berms, lights, retention and detention areas, and landscaping
5. Site area proposed to be landscaped in square feet and as a percentage of the total site area
6. Percent of landscaped area provided as per code requirement
7. Dimensions of landscape islands
8. Setbacks of proposed impervious surfaces from property lines, street rights-of-way, and private drives
9. Location and identification of all planting beds and plant materials
10. Planting list including species of all plants, installation size (caliper, height, or spread as appropriate) and quantity of plants by species
11. Landscaping of ground signs and screening of dumpsters and other equipment

☑ **STORMWATER MANAGEMENT:**

Written information (reports, calculations, etc.) as described in the Stormwater Management Requirements for Preliminary Plans (attached)

☑ **SUBDIVISION PLAT DRAWING REQUIREMENTS/CHECKLIST:**

If the PUD Preliminary Plan involves the subdivision of land, a completed Subdivision Plat Drawing Requirements Checklist must be submitted.

- ❑ **PUBLIC BENEFITS, DEPARTURES FROM CODE:**

  A description of how the PUD meets the purposes and requirements set out in Section 17.04.400 of the Zoning Ordinance. Any requests for departures from the requirements of Title 16, "Subdivisions and Land Improvement," and Title 17, "Zoning," shall be listed and reasons for requesting each departure shall be given.

- ❑ **SCHEDULE:** Construction schedule indicating:

  a. Phases in which the project will be built with emphasis on area, density, use and public facilities, such as open space, to be developed with each phase. Overall design of each phase shall be shown on the plat and through supporting material.

  b. Approximate dates for beginning and completion of each phase.

  c. If different land use types are to be included within the PUD, the schedule must include the mix of uses to be built in each phase.

- ❑ **PARK AND SCHOOL LAND/CASH WORKSHEETS**

N/A For residential developments, Park and School land/cash worksheets in accordance with Title 16 of the St. Charles Municipal Code with population projections establishing anticipated population and student yields.

- ❑ **INCLUSIONARY HOUSING SUMMARY**

  For residential developments, submit information describing how the development will comply with the requirements of Title 19, "Inclusionary Housing" of the St. Charles Municipal Code.

N/A

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

	4/1/20
Record Owner	Date
	3-29-20
Applicant or Authorized Agent	Date

CIMA DEVELOPERS

CIMA DEVELOPERS
30W180 Butterfield Road
Warrenville, IL 60555
(630) 653-1700
Fax: (630) 791-8283

Ms. Ellen Johnson
City Planner
City of St. Charles Planning Department
2 E. Main Street
St. Charles, IL 60174-1984

RE: PUD Preliminary Plan Application- Request for Deviations

Dear Ellen,

In response to the request for information, I present the following points supporting deviations, (variances) respective to meeting the purpose for PUD's as described in Section 17.04.400 of the zoning ordinance.

1) Paving setbacks- We are requesting this deviation due to the limited site area that we have to work with on the plan as it relates to the overall site layout.

A) The paving setbacks depicted on the current site layout do not undermine the intent and purpose of the underlying zoning district.

B). The paving setbacks depicted on the current layout are not detrimental to the provision of municipal services and infrastructure as detailed.

C) The paving setbacks depicted on the current layout will contribute to the planned unit development and will offer a superior level of design, amenity enhancement to the development.

2) Off-Site Signage- Our request for the three (3) off-premise signs as shown on the site plan are the most strategic locations to maximize branding exposure as well as promote safe ingress/egress traffic maneuvering. The Convenience store business is an impulse decision and maximizing exposure and lead times allows for the safest and most sufficient traffic flow. The need for additional off-site signage is being requested due to the configuration of the site plan, and proposed access points.

A) The off-premise signs depicted on the current site layout do not undermine the intent and purpose of the underlying zoning district.

B). The off-premise signs depicted on the current layout are not detrimental to the provision of municipal services and infrastructure as detailed.

C) The off-premise sign depicted on the current layout will contribute to the planned unit development and will offer a superior level of design, amenity enhancement to the development.

CIMA DEVELOPERS

CIMA DEVELOPERS
30W180 Butterfield Road
Warrenville, IL 60555
(630) 653-1700
Fax: (630) 791-8283

3) Four (4) Wall signs are being requested for the Convenience Store – (two (2) wall signs are permitted) -(Section 17.28.050) We are requesting this deviation due to the overall configuration of the Convenience Store and the southbound configuration . Also our C-Store offers a Quick Service restaurant that requires separate branding requirement opportunity.

A) The Convenience Store wall signs depicted on the current elevation plan do not undermine the intent and purpose of the underlying zoning district.

B). The Convenience Store wall signs depicted on the current elevation plan are not detrimental to the provision of municipal services and infrastructure as detailed.

C) The Convenience Store wall signs depicted on the current elevation plan will contribute to the planned unit development and will offer a superior level of design, amenity enhancement to the development.

4) Freestanding sign 10' setback requirement- (Section 17.28.050) We are requesting a deviation for our corner Main ID sign at the corner to be 3'setback due to the site area constraints of the development.

A) The Main ID sign location depicted on the current site layout does not undermine the intent and purpose of the underlying zoning district.

B). The Main ID sign location depicted on the current layout is not detrimental to the provision of municipal services and infrastructure as detailed.

C) The Main ID sign location depicted on the current layout will contribute to the planned unit development and will offer a superior level of design, amenity enhancement to the development.

5) Minimum width of building foundation planting beds needs to be 5'. (Section 17.26.080) We are requesting a deviation to this to be a planting area of approximately 3' on our west building wall of the convenience store. This deviation is required due to site plan configuration and the need to keep the c-store building aligned with parking and other aspects of the plan.

A) The Landscape foundation planting depicted on the current site layout does not undermine the intent and purpose of the underlying zoning district.

B). The Landscape foundation planting depicted on the current layout is not detrimental to the provision of municipal services and infrastructure as detailed.

C) The Landscape foundation planting depicted on the current layout will contribute to the planned unit development and will offer a superior level of design, amenity enhancement to the development.

CIMA DEVELOPERS

CIMA DEVELOPERS
30W180 Butterfield Road
Warrenville, IL 60555
(630) 653-1700
Fax: (630) 791-8283

6) Ten stacking spaces are required for the car wash. Stacked vehicles shall be in a single lane up to the point of service. Proposed is a double lane. (Section 17.24.100). We are proposing a deviation to allow for a double lane car wash stacking lane to improve circulation and maximize car wash speed time. The dual stacking lane allows for and exceeds the required ten (10) car stacking requirement and takes advantage of a dual Point of Sale kiosk pay stations that control flow of vehicles. The Conveyor style carwash system allows for multiple cars in the wash bay at the same time for efficient and speedy wash cycle.

A) Contained within the property boundaries, and designed to minimize congestion, the dual-lane carwash layout does not undermine the intent and purpose of the underlying zoning district

B). The dual-lane car wash layout depicted on the current layout is not detrimental to the provision of municipal services and infrastructure as detailed.

C)The dual-lane carwash layout will contribute to the planned unit development and will offer a superior level of design, amenity enhancement to the center.

Regards,

Dan Soltis
Vice President of Real Estate
CIMA Developers, LP

THE PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS 60174

DRAWING INDEX		
SHEET	DESCRIPTION	DATE
T-1.0	TITLE SHEET	06-08-20
C-1.0	SITE DEMOLITION PLAN	06-08-20
C-2.0	SITE GEOMETRIC PLAN	06-08-20
C-3.0	SITE DEVELOPMENT PLAN	06-08-20
C-3.1 - C-3.3	SITE DEVELOPMENT DETAILS	06-08-20
C-4.0 - C-4.1	SITE GRADING PLAN	06-08-20
C-5.0	SITE UTILITY PLAN	06-08-20
C-5.1 - C-5.3	SITE UTILITY DETAILS	06-08-20
C-6.0	STORMWATER POLLUTION PREVENTION PLAN	06-08-20
C-6.1	STORMWATER POLLUTION PREVENTION DETAILS	06-08-20
C-7.0 - C-7.1	PROJECT SPECIFICATIONS	06-08-20
C-8.0	FIRE APPARATUS CIRCULATION PLAN	06-08-20

SURVEY DRAWING INDEX		
SHEET	DESCRIPTION	DATE
SUR-1	TOPOGRAPHIC SURVEY (PREPARED BY THE W-T GROUP)	03-12-19

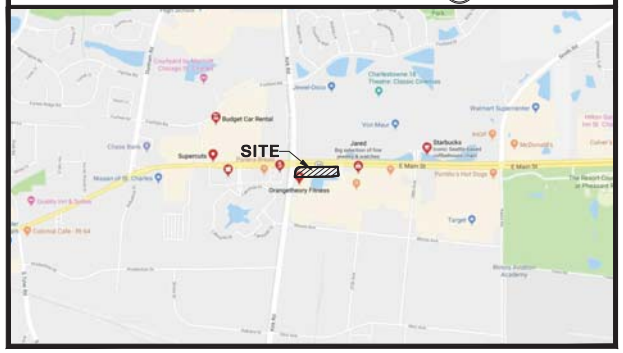
BENCHMARKS:

SITE BENCHMARK #1 - SET CROSS ON SSE BOLT OF HYDRANT LOCATED IN GRASS APPROXIMATELY 6.8' S OF EAST MAIN STREET AND 16.4' E OF MH #6, AS SHOWN ON SHEET SUR-2. ELEVATION=784.75' (NAVD88)

SITE BENCHMARK #2 - SET CROSS ON CONCRETE SIDEWALK LOCATED APPROXIMATELY 25.3' ESE OF KIRK ROAD AND 22.8' SSW OF ENTRANCE, AS SHOWN ON SHEET SUR-2. ELEVATION=774.03' (NAVD88)

SITE BENCHMARK #3 - SET CROSS IN WALK LOCATED 35' EAST OF POND AND 200 FEET SOUTH OF ROUTE 64 ON WEST SIDE OF DRIVE, AS SHOWN ON SHEET SUR-3. ELEVATION=784.72' (NAVD88)

SITE LOCATION MAP



SCALE 1"=1000'

MAP DATA © 2019 GOOGLE

SECTION 25
TOWNSHIP 40N
RANGE 8E

CIVIL ENGINEERING STATEMENT AND SEAL

I, TODD ABRAMS, P.E., DULY LICENSED IN THE STATE OF ILLINOIS BY THE DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION, DO HEREBY STATE THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF DOES CONFORM TO THE APPLICABLE BUILDING CODES AND ORDINANCES, AND ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT [410 ILCS 25] AND THE ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400).

DATE: 6-8-20

TODD ABRAMS - ILLINOIS P.E. # 062-061600
DATE OF EXPIRATION - NOVEMBER 30, 2021

NOTE: SIGNED AND SEALED FOR SHEETS T-1.0 THROUGH C-7.1

TODD ABRAMS LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS

CALL JULIE TOLL FREE
1(800)892-0123
OPERATES 24 HOURS A
DAY 365 DAYS A YEAR

WARNING
CALL BEFORE YOU DIG

CALL
1(800)892-0123
48 HOURS BEFORE
YOU DIG

CONTRACTOR MUST LOCATE PRIVATE UTILITIES IN AREA OF CONSTRUCTION PRIOR TO PROCEEDING WITH WORK.

NOTE: TOTAL PROPERTY AREA: 2.37 ACRES
NOTE: TOTAL DISTURBED AREA: 2.26 ACRES
NOTE: ALL SURROUNDING PROPERTIES ARE COMMERCIAL LAND USE

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

WT GROUP
Engineering with Precision, Pace and Passion.
2975 N Busch Avenue | Hoffman Estates, IL 60192
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THE PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS 60174

CIMA DEVELOPERS
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

ISSUE

TO	DATE
REV. SITE	8/19/19
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REV. SITE	1/13/20
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JOB:1910803C

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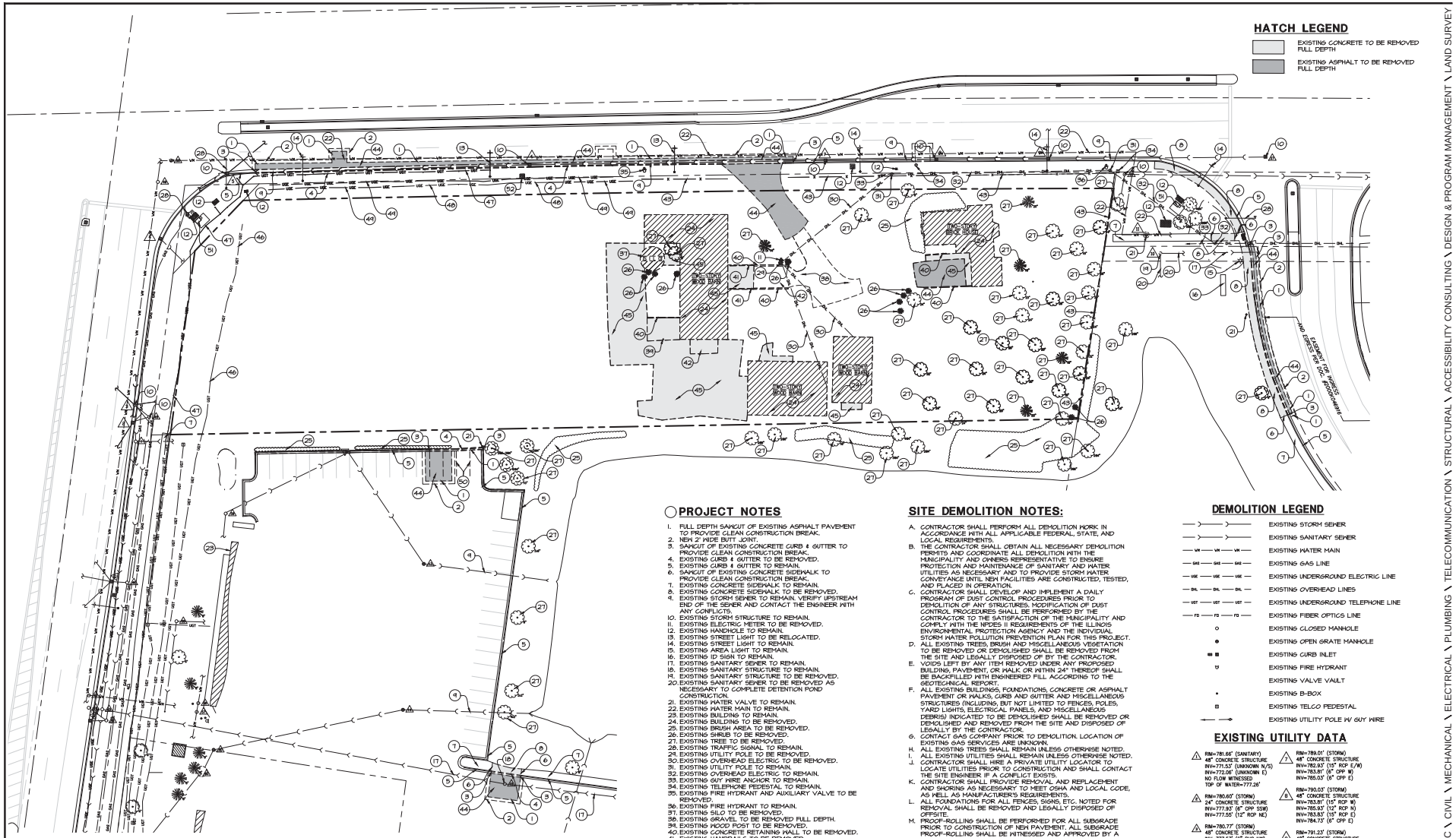
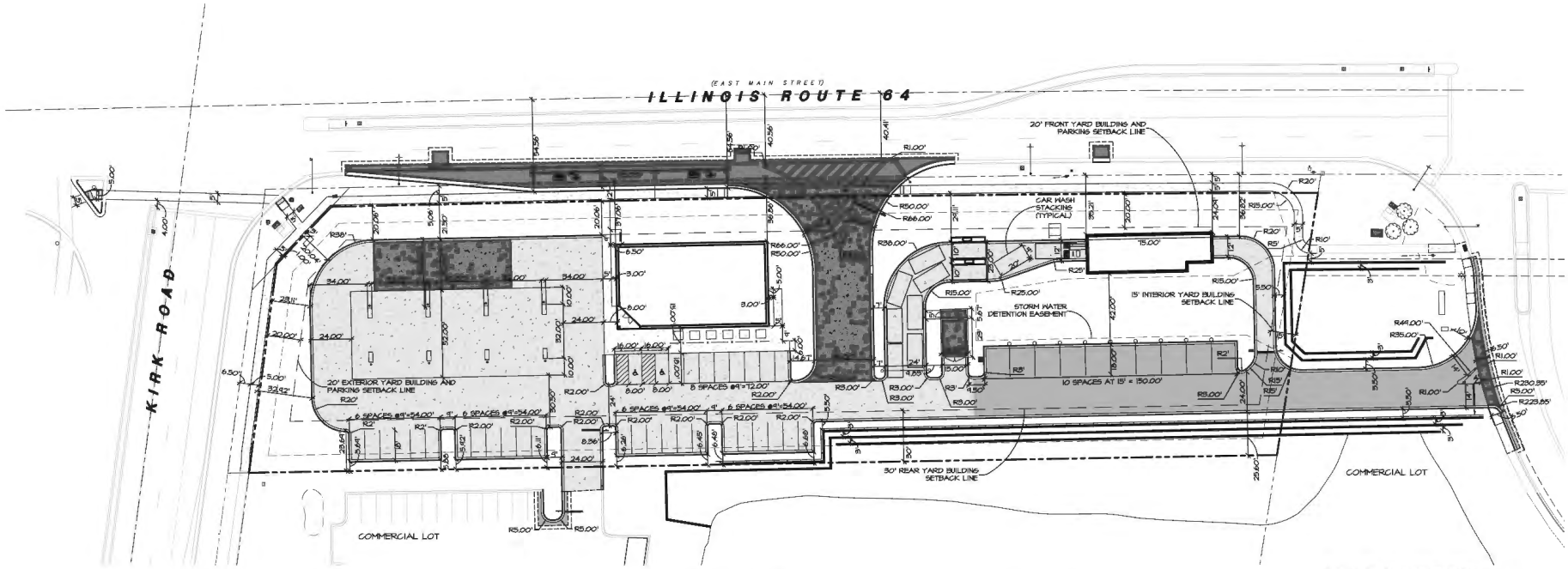
TITLE SHEET


EXISTING CONCRETE TO BE REMOVED FULL DEPTH
EXISTING ASPHALT TO BE REMOVED FULL DEPTH
EXISTING DUMPSTER ENCLOSURE
EXISTING DUMPSTER ENCLOSURE
EXISTING DUMPSTER ENCLOSURE

Revised- Presented to Plan Commission 8-4-20



HATCH LEGEND

- NEW ASPHALT PAVEMENT
- NEW IL ROUTE 64 ASPHALT PAVEMENT
- NEW 5" CONCRETE SIDEWALK
- NEW 6" CONCRETE PAVEMENT
- NEW 8" CONCRETE PAVEMENT

NONRESIDENTIAL ZONING COMPLIANCE TABLE

Name of Development: PRIDE OF KANE COUNTY

	Zoning District Requirement	Existing PUD Requirement (if applicable)	Proposed
	District: BR- REGIONAL BUSINESS	Ordinance #:	
Minimum Lot Area	1 ACRE		2.37 ACRES
Minimum Lot Width	NONE		NONE
Maximum Building Coverage	30%		13%
Maximum Gross Floor Area per Building	NONE		BUILDING 1= 4,500 S.F. BUILDING 2= 1,650 S.F.
Maximum Building Height	40 FEET		20 FEET
Front Yard	BUILDING = 20 FEET PARKING = 20 FEET		BLDG 1 = 25.86 FT, BLDG 2 = 23.09 FT PARKING 96.88 FEET, 87.86 FEET
Interior Side Yard	BUILDING = 15 FEET PARKING = NONE		BLDG 1 = 300.87 FT, BLDG 2 = 55.15 FT PARKING = 272.69 FT, PARKING = 30.93 FT
Exterior Side Yard	BUILDING = 20 FEET PARKING = 20 FEET		BLDG 1 = 205.66 FT, BLDG 2 = 481.20 FT PARKING = 61.16 FEET, 422.91 FEET
Minimum Rear Yard	BUILDING = 30 FEET PARKING = 0 FEET		BLDG 1 = 81.26 FT, BLDG 2 = 109.27 FT PARKING = 5.71 FT
Landscape Buffer Yard[2]	NOT REQUIRED		NOT REQUIRED
% Overall Landscaped Area	20% WITH ON SITE STORM		37% WITH ON SITE STORM
Building Foundation Landscaping	50% HORIZONTAL DIMENSIONS OF BUILDING WALL		BUILDING 1 = 50% BUILDING 2 = 100%
% Interior Parking Lot Landscaping	NOT AVAILABLE		NOT AVAILABLE
Interior Parking Lot Shade Trees	NOT AVAILABLE		NOT AVAILABLE
# of Parking spaces	CAR WASH = 2 PER BAY = 10 STACKING SPACES PER BAY RETAIL BUILDING = 4 PER 1,000 SF = 17 SPACES		CAR WASH = 10 SPACES + 10 STACKING RETAIL BUILDING = 34

SITE GEOMETRIC NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE TOPOGRAPHIC SURVEY LAST DATED 12-26-19, PREPARED BY THE H-T GROUP. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
C. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
D. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
G. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND/OR PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. ALL PAINTED CURB ON SITE TO BE REPAINTED FOLLOWING RESURFACING OF THE PARKING LOT. MATCH EXISTING COLOR, REPAINT WITH HIGH QUALITY PAINT.

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SIMPLY 811 OR TOLL FREE 1(800)892-0123 OPERATES
24 HOURS A DAY 365 DAYS A YEAR

WARNING
CALL BEFORE YOU DIG

CALL 1(800)892-0123
48 HOURS BEFORE YOU DIG

CONTRACTOR MUST LOCATE PRIVATE UTILITIES IN AREA OF CONSTRUCTION PRIOR TO PROCEEDING WITH WORK

NORTH
1" = 30'
00 15 30 60 120

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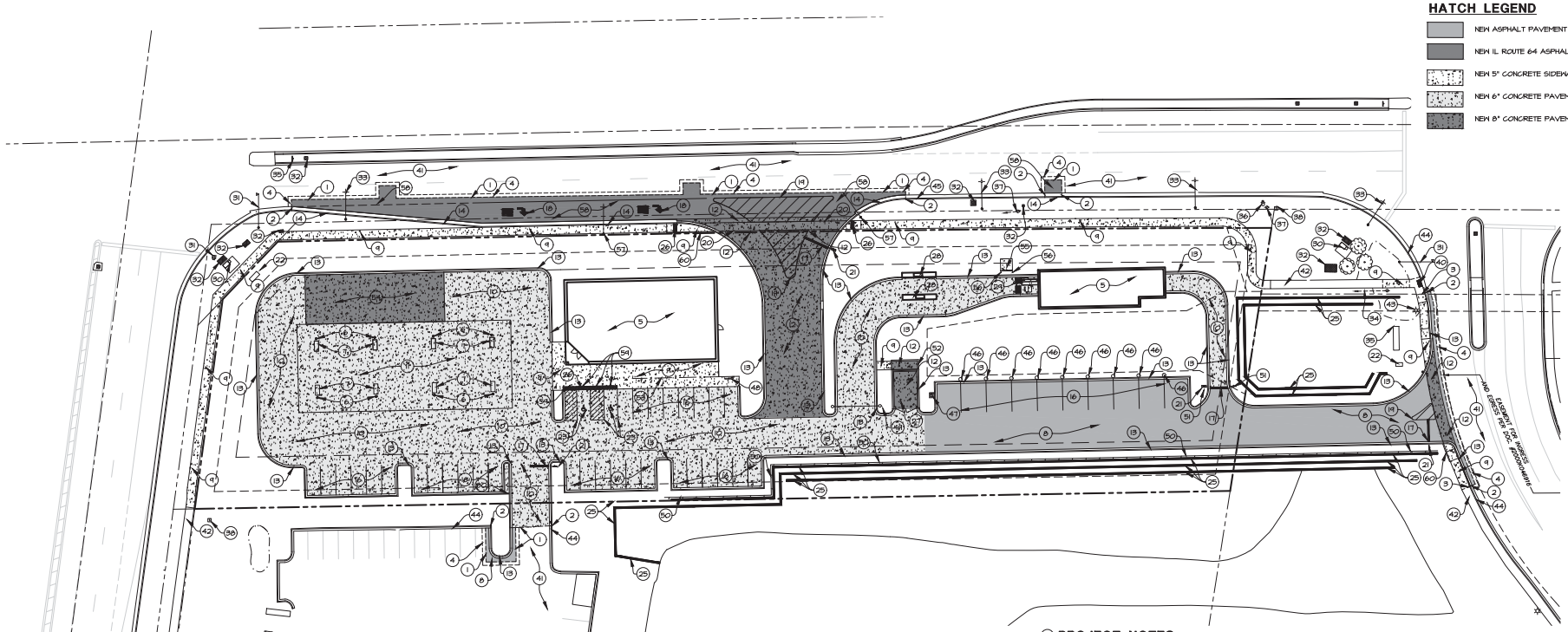
SITE GEOMETRIC PLAN



HATCH LEGEND

- NEW ASPHALT PAVEMENT
- NEW IL ROUTE 64 ASPHALT PAVEMENT
- NEW 5" CONCRETE SIDEWALK
- NEW 6" CONCRETE PAVEMENT
- NEW 8" CONCRETE PAVEMENT

PROJECT NOTES:

1. NEW FULL DEPTH SAWCUT OF EXISTING ASPHALT PAVEMENT TO PROVIDE CLEAN CONSTRUCTION BREAK.
2. NEW SAWCUT OF EXISTING CONCRETE CURB AND GUTTER TO PROVIDE CLEAN CONSTRUCTION BREAK.
3. NEW FULL DEPTH SAWCUT OF EXISTING CONCRETE SIDEWALK TO PROVIDE CLEAN CONSTRUCTION BREAK.
4. NEW 2' WIDE BUTT JOINT.
5. NEW BUILDING. (SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS).
6. NEW CANOPY COLUMN. (SEE ARCHITECTURAL PLANS FOR INFORMATION AND DETAILS).
7. NEW FUEL DISPENSER. (SEE ARCHITECTURAL PLANS FOR DETAILS).
8. NEW ASPHALT PAVEMENT.
9. NEW 5" CONCRETE SIDEWALK.
10. NEW 6" CONCRETE PAVEMENT.
11. NEW 6" CONCRETE CAR ISLAND SLAB.
12. NEW 8" CONCRETE PAVEMENT.
13. NEW B6.12 CONCRETE CURB AND GUTTER.
14. NEW B6.24 CONCRETE CURB AND GUTTER.
15. NEW DEPRESSED CONCRETE CURB.
16. NEW 4" YELLOW PAINTED STRIPING.
17. NEW 12" WIDE WHITE PAINTED STOP BAR.
18. NEW WHITE PAINTED TRAFFIC FLOW ARROW.
19. NEW URETHANE PAVEMENT MARKINGS FOR CHANNELIZED MEDIAN. WHITE STRIPING, 12" DIAGONALS AT A 45 DEGREE ANGLE, 8" OUTLINE.
20. NEW 6" WHITE CROSS WALK STRIPING.
21. NEW R1-1 STOP SIGN.
22. NEW MAIN ID SIGN.
23. NEW ACCESSIBLE PARKING SYMBOL AND STRIPING.
24. NEW ACCESSIBLE PARKING SIGN.
25. NEW RETAINING WALL.
26. NEW DETECTABLE WARNING PLATE.
27. NEW TRASH ENCLOSURE. (SEE ARCHITECTURAL PLANS FOR DETAILS).
28. NEW CARWASH PAY STATION. (SEE ARCHITECTURAL PLANS FOR DETAILS).
29. NEW CAR WASH EQUIPMENT. (SEE ARCHITECTURAL PLANS FOR DETAILS).
30. EXISTING TRAFFIC CONTROL BOX TO REMAIN.
31. EXISTING TRAFFIC SIGNAL TO REMAIN.
32. EXISTING ELECTRIC HANDHOLE TO REMAIN.
33. EXISTING STREET LIGHT TO REMAIN.
34. EXISTING GUY WIRE TO REMAIN.
35. EXISTING SIGN TO REMAIN.
36. EXISTING FIRE HYDRANT TO REMAIN.
37. EXISTING UTILITY POLE TO REMAIN.
38. EXISTING TELCO PEDESTAL TO REMAIN.
39. NOT USED.
40. EXISTING DETECTABLE WARNING PLATES TO REMAIN.
41. EXISTING ASPHALT PAVEMENT TO REMAIN.
42. EXISTING CONCRETE SIDEWALK TO REMAIN.
43. EXISTING AREA LIGHT TO REMAIN.
44. EXISTING B6.12 CONCRETE CURB AND GUTTER TO REMAIN.
45. EXISTING B6.24 CONCRETE CURB AND GUTTER TO REMAIN.
46. NEW VACUUMS. (SEE ARCHITECTURAL PLANS FOR DETAILS).
47. NEW AIR MACHINE.
48. NEW BIKE RACK.
49. NEW CAR WASH ENTRANCE SIGN.
50. NEW 31" GALVANIZED GUARDRAIL. (SEE LANDSCAPE ARCHITECTURAL PLANS FOR DETAILS).
51. NEW R5-1 "DO NOT ENTER" SIGN.
52. NEW ENCLOSURE. (SEE ARCHITECTURAL PLANS FOR DETAILS).
53. NEW FENCE FOR SEATING AREA.
54. NEW 8" CONCRETE TANK SLAB.
55. NEW TRANSFORMER PAD.
56. NEW CONCRETE BOLLARD.
57. RELOCATED STREET LIGHT.
58. NEW IL ROUTE 64 ASPHALT PAVEMENT.
59. NEW 6" POLISHED STAINLESS BOLLARD.
60. NEW 6" BARRIER CURB.

SITE DEVELOPMENT NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE TOPOGRAPHIC SURVEY LAST DATED 10-28-14, PREPARED BY THE W-T GROUP. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
B. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
C. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
D. CONTRACTOR SHALL COORDINATE ALL LANDSCAPING IMPROVEMENTS WITH LANDSCAPE PLANS.
E. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
F. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
G. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
H. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1095.02 OF THE IDOT STANDARD SPECIFICATIONS.
I. CONTRACTOR SHALL RESTORE ALL DISTURBED GREEN SPACES WITH (6" OF TOPSOIL, SEED, AND EROSION CONTROL BLANKET)
J. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT , CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
K. CONTRACTOR SHALL RE-STRIPE ALL STRIPING DISTURBED WITHIN THE EXISTING ROADWAYS/PARKING LOT TO MATCH EXISTING.
L. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
M. ALL ITEMS MARKED "EXISTING" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
N. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
O. DURING CONSTRUCTION, ALL ROADS AND DRIVEWAYS SHALL BE HARD SURFACED (TEMPORARY OR PERMANENT) AND IN PLACE, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS, PURSUANT TO THE 2015 INTERNATIONAL FIRE CODE, CHAPTER 5, CHAPTER 33, AND APPENDIX D. THE BINDER COAT SHALL BE AN ACCEPTABLE MATERIAL. ACCESS FOR FIRE DEPARTMENT VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

NORTH

1" = 30'

00 15 30 60 120

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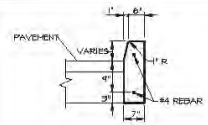
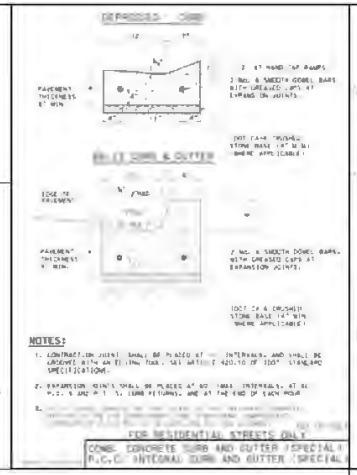
SITE DEVELOPMENT PLAN

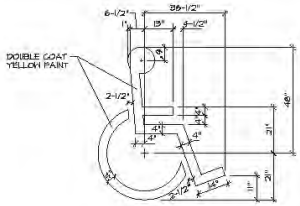


NOTES:
1. BARRIER CURB SHALL BE CONCRETE.
2. CONTRACTION JOINTS: 1/4" WIDE x 1" DEEP, SHALL BE LOCATED AT RADII TANGENTS
3. BASE MATERIAL SHALL MEET THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR GRADATION AND OTHER SPECIFIED MATERIAL REQUIREMENTS.

DETAIL - BARRIER CURB

NOT TO SCALE





NOTES:
1. SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL.

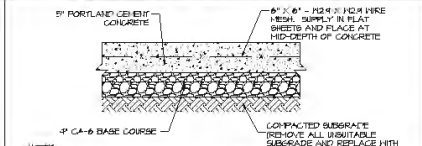
DETAIL - ACCESSIBLE SYMBOL

NOT TO SCALE

NOTES:
1. CENTER SIGN IN PARKING STALL AND INSTALL MINIMUM OF 5' AND MAXIMUM OF 8' ABOVE FINISHED PAVEMENT ELEVATION.
2. CONTRACTOR SHALL VERIFY FINE AMOUNT WITH MUNICIPALITY PRIOR TO INSTALLATION.

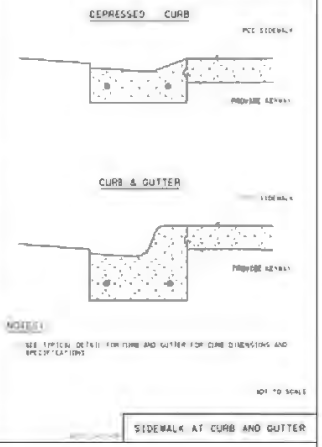
DETAIL - ACCESSIBLE PARKING SIGN

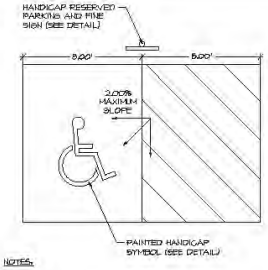
NOT TO SCALE



NOTES:
1. INSTALL THREE (3) CONTINUOUS NO. 4 STEEL REBAR PERPENDICULAR TO AND CENTERED OVER ALL UTILITY TRENCH CROSSINGS SO BARS EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE TRENCH.

DETAIL - 5" CONCRETE SIDEWALK



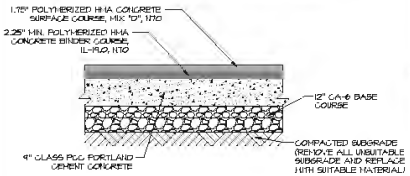


NOTES:
1. ALL PAVEMENT STRIPING SHALL BE YELLOW.
2. MAXIMUM SLOPE WITHIN ALL HANDICAP PARKING STALLS SHALL NOT EXCEED 2.00% IN ANY DIRECTION

DETAIL - HANDICAP PARKING STALL

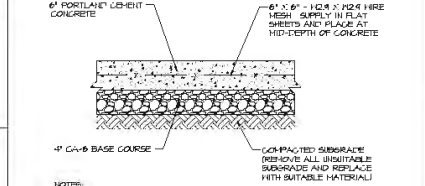
NOT TO SCALE

NOTE: MATCH EXISTING FULL DEPTH PAVEMENT CROSS SECTION. THIS DETAIL REPRESENTS THE MINIMUM PAVEMENT SECTION FOR THE NEW ASPHALT PAVEMENT ON IL ROUTE 64.



DETAIL - IL ROUTE 64 ASPHALT PAVEMENT

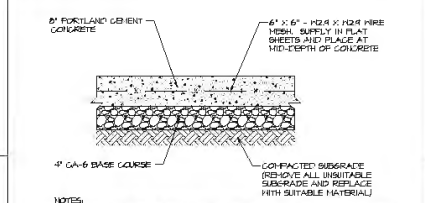
FOR USE ON IL ROUTE 64 ONLY
NOT TO SCALE



NOTES:
1. INSTALL THREE (3) CONTINUOUS NO. 4 STEEL REBAR PERPENDICULAR TO AND CENTERED OVER ALL UTILITY TRENCH CROSSINGS SO BARS EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE TRENCH.

DETAIL - 6" CONCRETE PAVEMENT

NOT TO SCALE



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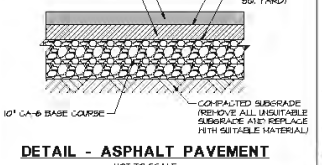
DETAIL - 8" CONCRETE PAVEMENT

NOT TO SCALE



DETAIL - ASPHALT PAVEMENT

NOT TO SCALE

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C-3.1
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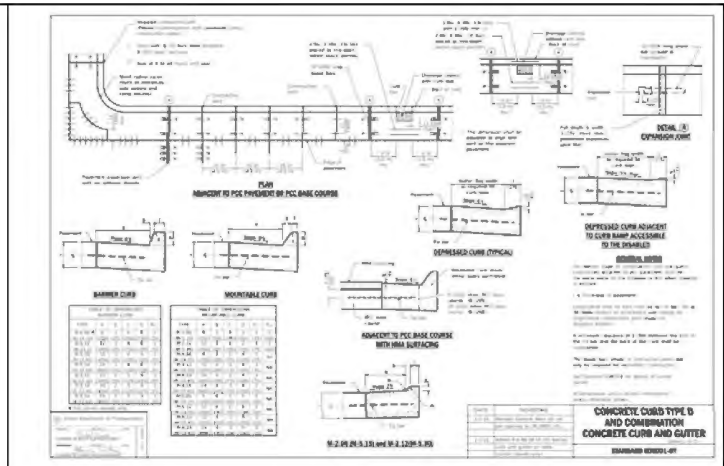
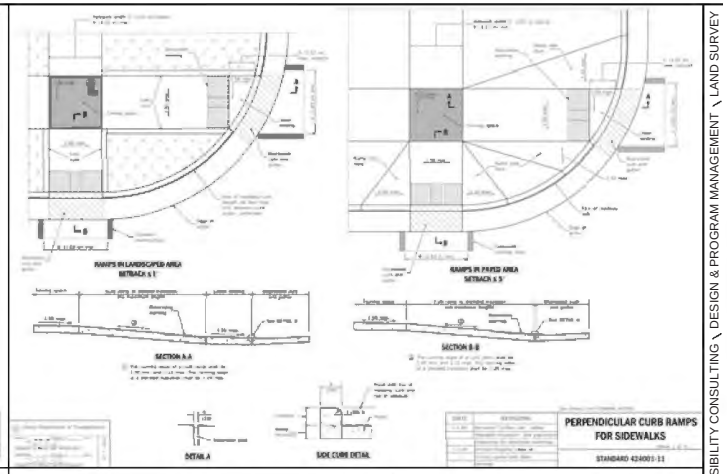
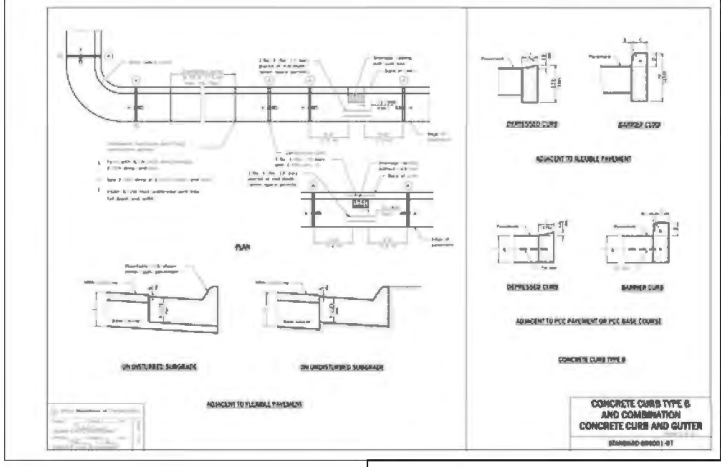
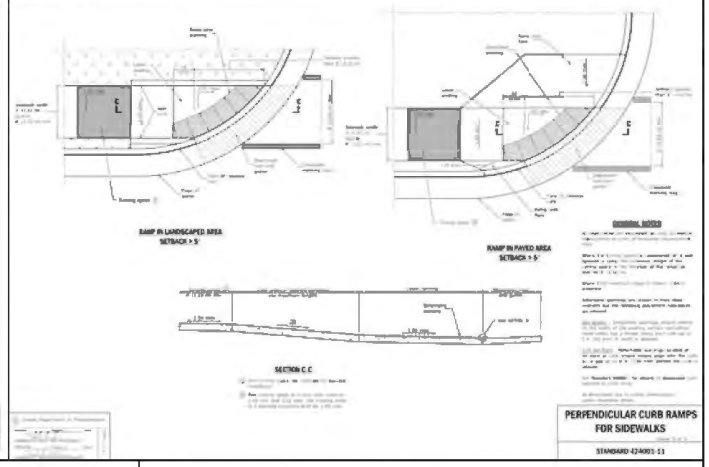
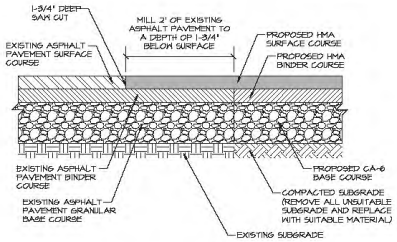








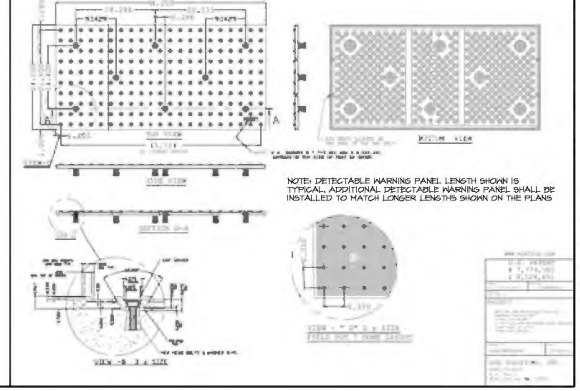


NOTES:

1. EXISTING PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY.
2. ALL ASPHALT PAVEMENT MILLINGS SHALL BE DISPOSED OF BY THE CONTRACTOR.
3. BITUMINOUS TACK COAT SHALL BE APPLIED AT A RATE OF 0.1 GALLONS PER SQUARE YARD TO BOTH THE EXISTING AND PROPOSED ASPHALT BINDER COURSE PRIOR TO NEW HMA SURFACE COURSE INSTALLATION.

DETAIL - BUTT JOINT

NOT TO SCALE



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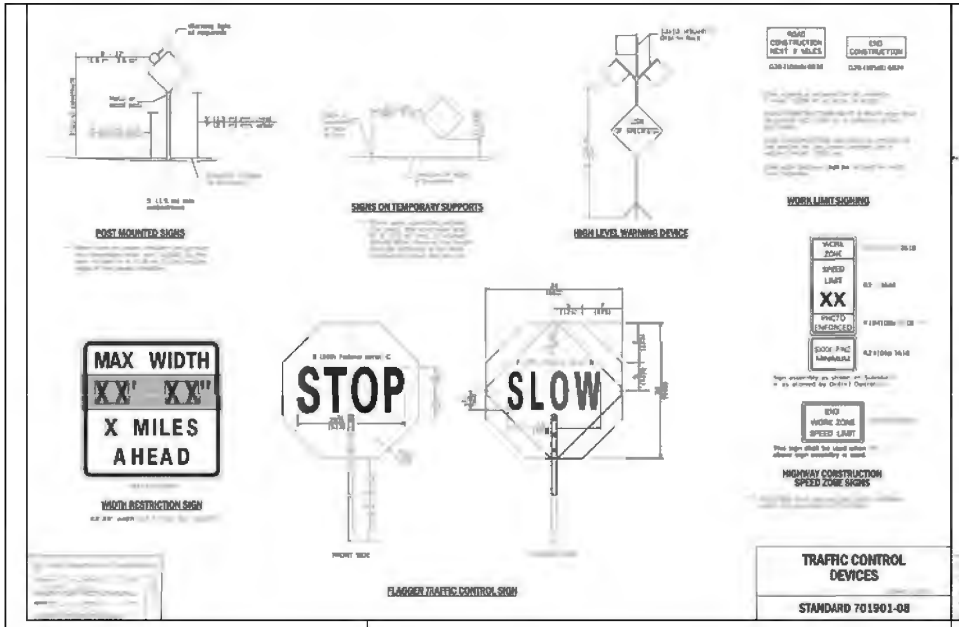
THE PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS 60174

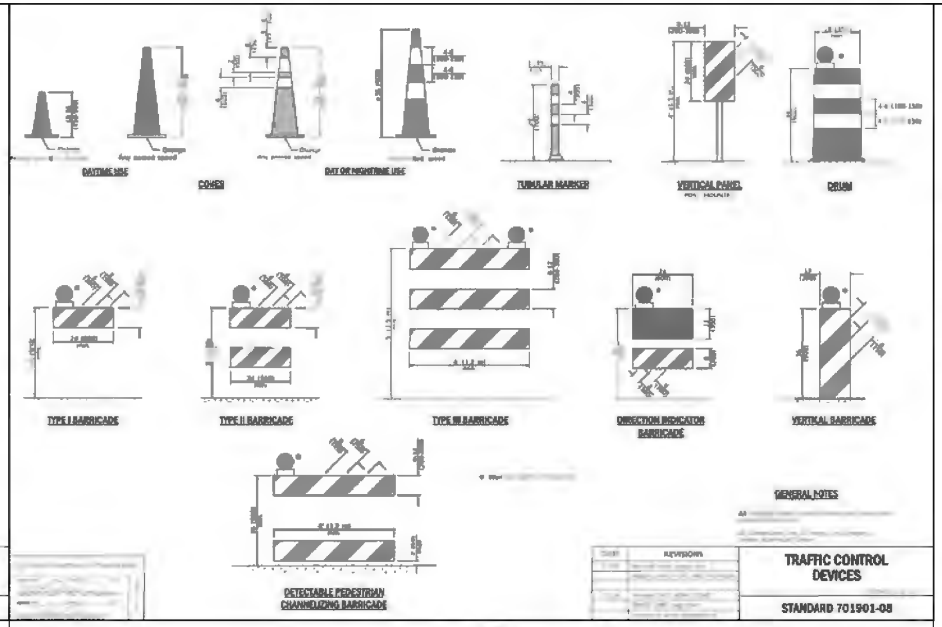
ISSUE

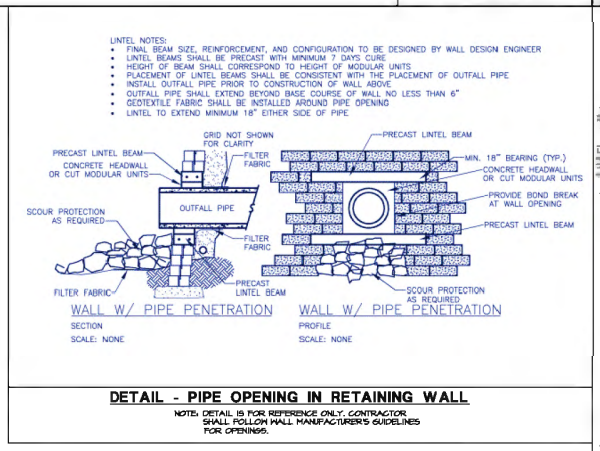
TO	DATE
REV. SITE	8/19/19
REV. SITE	8/26/19
REV. SITE	1/13/20
REV. SITE	2/4/20
REV. SITE	2/11/20
REV. SITE	2/19/20
REV. SITE	6/8/20

CHECK:TOA
DRAWN:TEP
JOB:1910803C

C-3.2
SITE DEVELOPMENT DETAILS

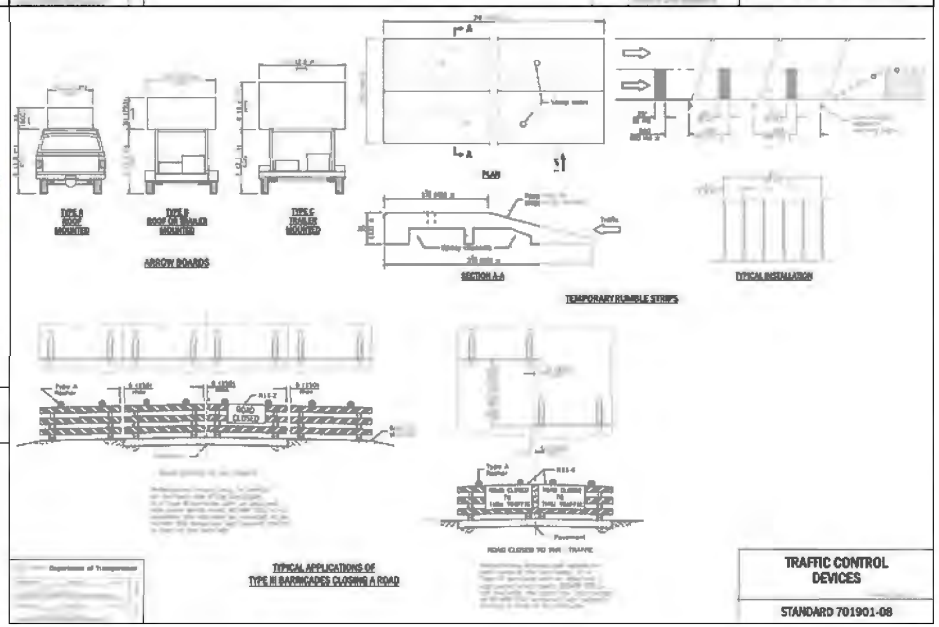






DETAIL - PIPE OPENING IN RETAINING WALL

NOTE: DETAIL IS FOR REFERENCE ONLY. CONTRACTOR SHALL FOLLOW WALL MANUFACTURER'S GUIDELINES FOR OPENINGS.



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CHECK:TOA
DRAWN:TEP
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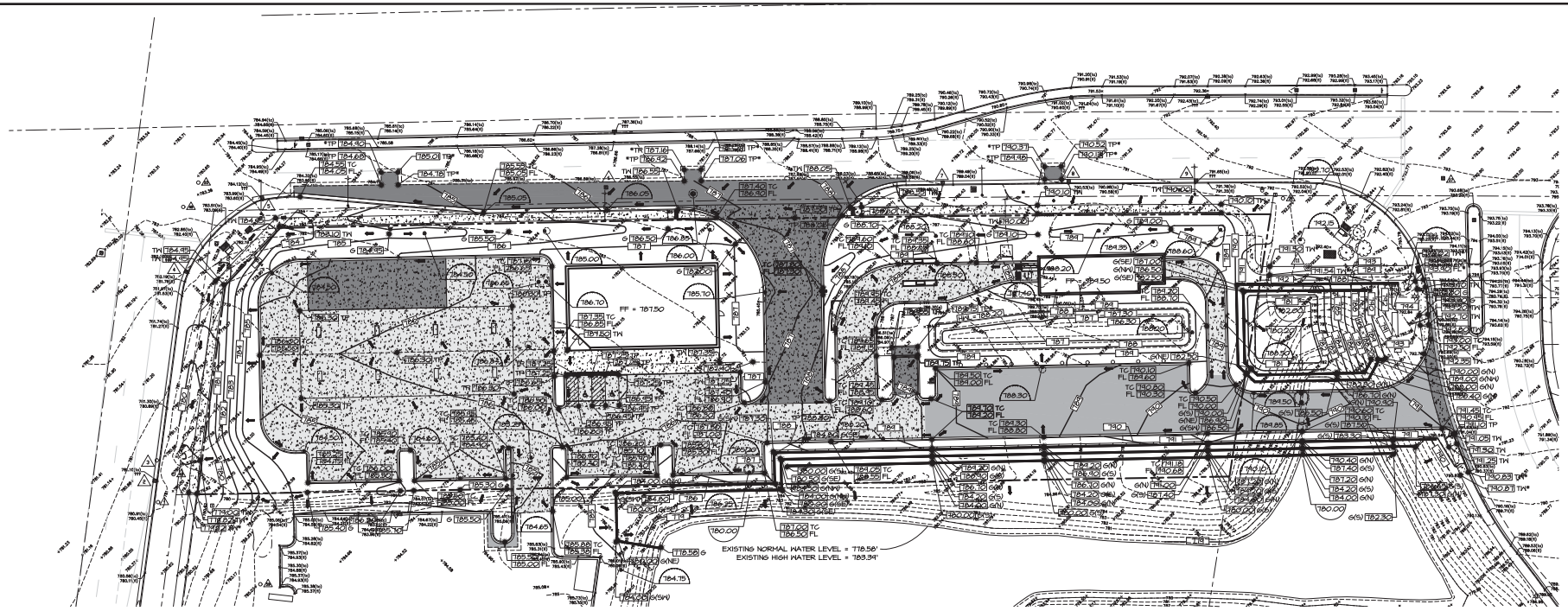
C-3.3
SITE DEVELOPMENT DETAILS



EXISTING UTILITY DATA

1. RIM=781.66' (SANITARY)
48" CONCRETE STRUCTURE
INV=771.53' (UNKNOWN N/S)
INV=772.06' (UNKNOWN E)
NO FLOW WITNESSED
TOP OF WATER=777.26'

2. RIM=780.60' (STORM)
24" CONCRETE STRUCTURE
INV=777.93' (6" CPP SSW)
INV=777.55' (12" RCP NE)

3. RIM=780.77' (STORM)
48" CONCRETE STRUCTURE
INV=777.57' (6" PVC NW)
INV=777.25' (18" RCP N)
INV=777.27' (12" RCP E)
INV=777.21' (18" RCP SE)
INV=777.08' (6" CPP S)

4. RIM=781.85' (STORM)
24" CONCRETE STRUCTURE
INV=778.05' (12" RCP SE)

5. RIM=783.66' (STORM)
48" CONCRETE STRUCTURE
INV=778.96' (12" RCP NE)
INV=778.31' (15" RCP SW)

6. RIM=786.11' (STORM)
48" CONCRETE STRUCTURE
INV=780.24' (12" RCP N)
INV=779.99' (15" RCP W)
INV=779.96' (15" RCP E)

7. RIM=789.01' (STORM)
48" CONCRETE STRUCTURE
INV=782.83' (15" RCP E/W)
INV=783.81' (6" CPP W)
INV=785.03' (6" CPP E)

8. RIM=790.03' (STORM)
48" CONCRETE STRUCTURE
INV=783.81' (15" RCP W)
INV=785.33' (12" RCP N)
INV=783.83' (15" RCP E)
INV=784.73' (6" CPP E)

9. RIM=791.23' (STORM)
48" CONCRETE STRUCTURE
INV=786.46' (12" RCP N/E)
INV=787.43' (6" CPP E)
INV=785.00' (15" RCP W)
INV=786.33' (6" CPP W)

10. RIM=793.28' (SANITARY)
48" CONCRETE STRUCTURE
INV=783.99' (8" CLAY E)
INV=785.13' (8" CLAY S)

11. RIM=792.25' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=785.88' (12" DIP E/W)

12. RIM=783.67' (STORM)
48" CONCRETE STRUCTURE
INV=780.41' (12" RCP W/SSE)

13. RIM=783.64' (STORM)
48" CONCRETE STRUCTURE
INV=780.31' (12" RCP NNW/E)

14. RIM=783.70' (STORM)
48" CONCRETE STRUCTURE
INV=778.16' (24" RCP E)
INV=778.06' (24" RCP WSW)

15. RIM=785.80' (SANITARY)
48" CONCRETE STRUCTURE
INV=774.47' (8" PVC E/W)

16. RIM=788.69' (STORM)
60" CONCRETE STRUCTURE
INV=779.04' (30" RCP W/ESE)

17. RIM=789.14' (SANITARY)
48" CONCRETE STRUCTURE
INV=775.82' (8" PVC N/W)

18. RIM=791.57' (STORM)
48" CONCRETE STRUCTURE
INV=786.79' (15" RCP E)
INV=787.24' (12" RCP SSW)

19. RIM=792.75' (STORM)
24" CONCRETE STRUCTURE
INV=788.48' (12" RCP W)

20. RIM=783.61' (STORM)
48" CONCRETE STRUCTURE
INV=777.52' (24" RCP SSW/ENE)

21. RIM=780.66' (STORM)
48" CONCRETE STRUCTURE
INV=776.54' (14"x23" RCP NW)
INV=776.61' (18" RCP N)
INV=776.61' (12" RCP SW)

22. RIM=779.04' (STORM)
24" CONCRETE STRUCTURE
INV=776.49' (12" RCP ENE)

23. RIM=779.28' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=775.63' (E/W)
UNABLE TO MEASURE PIPE
STRUCTURE FILLED WITH WATER

24. RIM=779.23' (STORM)
UNABLE TO OPEN STRUCTURE

25. RIM=780.40' (SANITARY)
48" CONCRETE STRUCTURE
INV=771.17' (10" CLAY N/S)
INV=771.87' (8" PVC E)

26. RIM=780.80' (STORM)
48" CONCRETE STRUCTURE
INV=776.95' (12" RCP W)
INV=776.90' (18" RCP N/S)

27. RIM=779.70' (STORM)
24" CONCRETE STRUCTURE
INV=777.05' (6" PVC W)
INV=777.21' (6" CPP NW/SW)
INV=776.84' (12" RCP E)

28. RIM=780.66' (STORM)
48" CONCRETE STRUCTURE
INV=777.13' (18" RCP NW)
INV=777.12' (18" RCP S)
INV=777.29' (12" RCP WSW)

29. RIM=783.18' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=777.36' (12" DIP N/S)

30. RIM=783.53'
TOP OF WATER=779.88'
STRUCTURE FILLED WITH WATER
NO LINES FOUND

31. RIM=785.27' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=778.39' (8" DIP N/S)

32. RIM=785.26' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=778.38' (8" DIP N/S)

33. RIM=783.91' (SANITARY)
48" CONCRETE STRUCTURE
INV=774.71' (6" PVC E/S)

34. RIM=785.04' (STORM)
48" CONCRETE STRUCTURE
INV=780.84' (12" RCP NE/S)

35. RIM (NORTH)=784.99' (STORM)
RIM (SOUTH)=785.38' (STORM)
72" CONCRETE STRUCTURE
INV=777.06' (24" RCP NE)
INV=777.09' (12" RCP SW)
INV=777.10' (7.2' RESTRICTOR)
INV=783.91' TOP OF SPILLWAY WALL

HATCH LEGEND

- NEW ASPHALT PAVEMENT
- NEW IL ROUTE 64 ASPHALT PAVEMENT
- NEW 5" CONCRETE SIDEWALK
- NEW 6" CONCRETE PAVEMENT
- NEW 8" CONCRETE PAVEMENT

GRADING LEGEND

- +000.00 EXISTING SPOT GRADE
- 000.00 PROPOSED SPOT GRADE
- *000.00 INTERPOLATED SPOT GRADE
- 000.00 PROPOSED RIM ELEVATION
- EXISTING CONTOUR LINE
- 000 PROPOSED CONTOUR LINE
- OVERLAND FLOW ARROW
- 100 YEAR OVERLAND FLOW ROUTE
- EMERGENCY OVERFLOW ARROW
- TP TOP OF PAVEMENT ELEVATION
- TW TOP OF SIDEWALK ELEVATION
- G FINISHED GRADE ELEVATION
- FF FINISHED FLOOR ELEVATION
- TC TOP OF CURB ELEVATION
- FL FLOW LINE ELEVATION
- ADJUST ADJUST EXISTING RIM ELEVATION
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- EXISTING B-BOX
- EXISTING TELCO PEDESTAL
- EXISTING UTILITY POLE W/ GUY WIRE
- PROPOSED FIRE HYDRANT
- PROPOSED VALVE WITH VAULT
- PROPOSED B-BOX
- PROPOSED INLET
- PROPOSED OPEN LID MANHOLE / CATCH BASIN
- PROPOSED CLOSED LID MANHOLE
- PROPOSED RESTRICTOR STRUCTURE
- PROPOSED NYLOPLAST DRAIN BASIN
- PROPOSED FLARED END SECTION
- PROPOSED GREASE TRAP

SITE GRADING NOTES:

A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE TOPOGRAPHIC SURVEY LAST DATED 03-12-19, PREPARED BY THE W-T GROUP. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

B. ALL PROPOSED GRADES ARE GIVEN TO FINISHED GRADE, I.E. TOP OF PROPOSED ASPHALT, CONCRETE, TOP OF PROPOSED CURB, ETC. SEE DETAILS FOR PAVEMENT THICKNESS.

C. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND/OR PRIVATE LOCATE SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.

D. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.

E. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.

F. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.

G. CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.

H. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.

I. ALL HANDICAP ACCESSIBLE ROUTES (SIDEWALKS, WALKWAYS, PAVEMENTS, ETC.) SHALL MAINTAIN A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00%. ACCESSIBLE PARKING STALLS SHALL MAINTAIN A MAXIMUM SLOPE OF 2.00% IN ALL DIRECTIONS.

J. VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24" THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.

K. ALL FIRE ACCESS LANES WITHIN THE PROJECT AREA SHALL REMAIN IN SERVICE, CLEAN OF DEBRIS, AND ACCESSIBLE FOR USE BY EMERGENCY VEHICLES.

L. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.

M. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.

N. ALL EXCESS SOILS THAT CANNOT BE USED AS SUITABLE FILL SHALL BE HAULED FROM THE SITE AND LEGALLY DISPOSED OF.

O. CONTRACTOR TO PROVIDE SOIL TESTING SERVICES FOR COMPLETION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S LPC-662 AND/OR LPC-663 FORMS AS PART OF THEIR CONTRACT.

P. PREPARE SUBGRADE AS SPECIFIED WITHIN THE GEOTECHNICAL REPORT DATED MONTH DAY, YEAR PREPARED BY GEOTECHNICAL ENGINEER.

Q. ALL TOPSOIL BENEATH PROPOSED STRUCTURES AND PAVEMENT SHALL BE REMOVED. REFER TO THE GEOTECHNICAL REPORT DATED MONTH DAY, YEAR PREPARED BY GEOTECHNICAL ENGINEER FOR EXISTING TOPSOIL DEPTHS.

NORTH

1" = 30'

00 15 30 60 120

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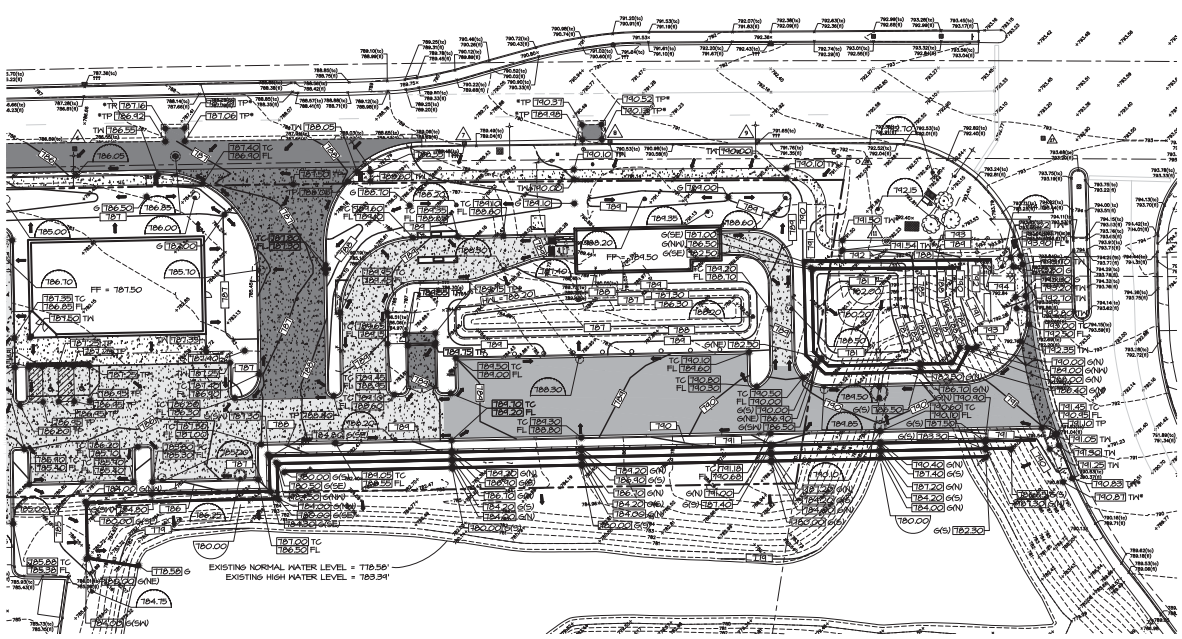
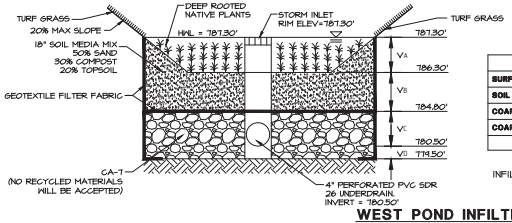
C-4.0
SITE GRADING PLAN





VOLUME TYPE	POROSITY	MEDIA VOLUME	STORAGE VOLUME	VOLUME PROVIDED
SURFACE STORAGE	1.00	VA = 1493 C.F.	1.00 X VA	1493 C.F.
SOIL MEDIA MIX	0.25	VB = 3152 C.F.	0.5 X 0.25 X VB	394 C.F.
COARSE AGG. (ABOVE INVERT)	0.36	VC = 6034 C.F.	0.5 X 0.36 X VC	1628 C.F.
COARSE AGG. (BELOW INVERT)	0.36	VD = 2101 C.F.	0.36 X VD	756 C.F.
			WEST RAIN GARDEN TOTAL	4269 C.F.
				= 0.098 AC-FT

INFILTRATION VOLUME REQUIRED = 1.416 AC. X 0.75" = 0.0885 ACRE - FEET
INFILTRATION VOLUME PROVIDED = 0.098 AC-FT > 0.0885 AC-FT

WEST POND INFILTRATION VOLUME

NOT TO SCALE

PROPOSED DETENTION POND VOLUME - EAST POND

ELEVATION		AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	
788.20	HWL	4,231 SQ. FT.			
			842 CU. FT.	20,626 CU. FT. OR	0.4735 AC-FT
788.00		4,191 SQ. FT.			
			4,085 CU. FT.	19,784 CU. FT. OR	0.4542 AC-FT
787.00		3,978 SQ. FT.			
			3,490 CU. FT.	15,699 CU. FT. OR	0.3604 AC-FT
786.00		3,002 SQ. FT.			
			2,904 CU. FT.	12,209 CU. FT. OR	0.2803 AC-FT
785.00		2,805 SQ. FT.			
			2,707 CU. FT.	9,306 CU. FT. OR	0.2136 AC-FT
784.00		2,608 SQ. FT.			
			2,509 CU. FT.	6,599 CU. FT. OR	0.1515 AC-FT
783.00		2,410 SQ. FT.			
			2,166 CU. FT.	4,090 CU. FT. OR	0.0939 AC-FT
782.00		1,921 SQ. FT.			
			1,590 CU. FT.	1,925 CU. FT. OR	0.0442 AC-FT
781.00		1,258 SQ. FT.			
			335 CU. FT.	335 CU. FT. OR	0.0077 AC-FT
780.20		0 SQ. FT.			

TOTAL POND $V_{788.20}$= 20,626 CU. FT.
OR 0.474 AC-FT

PROPOSED DETENTION POND VOLUME - WEST POND

ELEVATION		AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	
788.20	HWL	3,403 SQ. FT.			
			663 CU. FT.	2,527 CU. FT. OR	0.0580 AC-FT
788.00		3,226 SQ. FT.			
			1,864 CU. FT.	1,864 CU. FT. OR	0.0428 AC-FT
787.30	OUTLET ELEV.	2,101 SQ. FT.			
			1,493 CU. FT.	1,493 CU. FT. OR	0.0343 AC-FT
786.30		885 SQ. FT.			

TOTAL POND $V_{788.20}$= 2,527 CU. FT.
OR 0.058 AC-FT

PROPOSED DETENTION POND VOLUME - WEST & EAST PONDS

ELEVATION		AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	
788.20	HWL				
				23,154 CU. FT. OR	0.5315 AC-FT
788.00					
				21,648 CU. FT. OR	0.4970 AC-FT
787.00					
				17,192 CU. FT. OR	0.3947 AC-FT
786.00					
				12,209 CU. FT. OR	0.2803 AC-FT
785.00					
				9,306 CU. FT. OR	0.2136 AC-FT
784.00					
				6,599 CU. FT. OR	0.1515 AC-FT
783.00					
				4,090 CU. FT. OR	0.0939 AC-FT
782.00					
				1,925 CU. FT. OR	0.0442 AC-FT
781.00					
				335 CU. FT. OR	0.0077 AC-FT
780.20					

TOTAL POND $V_{788.20}$= 23,154 CU. FT.
OR 0.532 AC-FT

EXISTING POND - DETENTION STORAGE VOLUME ADDED

ELEVATION		AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	
783.95		8,235 SQ. FT.			
			1,674 CU. FT.	48,440 CU. FT. OR	1.1120 AC-FT
783.75		8,505 SQ. FT.			
			2,167 CU. FT.	46,766 CU. FT. OR	1.0736 AC-FT
783.50		8,832 SQ. FT.			
			979 CU. FT.	44,599 CU. FT. OR	1.0238 AC-FT
783.39	HWL	8,974 SQ. FT.			
			1,728 CU. FT.	43,619 CU. FT. OR	1.0014 AC-FT
783.20		9,220 SQ. FT.			
			2,726 CU. FT.	41,891 CU. FT. OR	0.9617 AC-FT
782.91	WEIR	9,582 SQ. FT.			
			9,172 CU. FT.	39,165 CU. FT. OR	0.8991 AC-FT
782.00		10,576 SQ. FT.			
			11,116 CU. FT.	29,993 CU. FT. OR	0.6885 AC-FT
781.00		11,655 SQ. FT.			
			12,234 CU. FT.	18,877 CU. FT. OR	0.4334 AC-FT
780.00		12,812 SQ. FT.			
			6,574 CU. FT.	6,644 CU. FT. OR	0.1525 AC-FT
779.00		335 SQ. FT.			
			70 CU. FT.	70 CU. FT. OR	0.0016 AC-FT
778.58		0 SQ. FT.			

TOTAL POND $V_{783.39}$= 43,619 CU. FT.
OR 1.001 AC-FT

EXISTING POND - DETENTION STORAGE VOLUME LOST

ELEVATION		AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	
783.95		3,231 SQ. FT.			
			637 CU. FT.	11,630 CU. FT. OR	0.2670 AC-FT
783.75		3,137 SQ. FT.			
			770 CU. FT.	10,993 CU. FT. OR	0.2524 AC-FT
783.50		3,022 SQ. FT.			
			330 CU. FT.	10,223 CU. FT. OR	0.2347 AC-FT
783.39	HWL	2,972 SQ. FT.			
			557 CU. FT.	9,893 CU. FT. OR	0.2271 AC-FT
783.20		2,887 SQ. FT.			
			819 CU. FT.	9,336 CU. FT. OR	0.2143 AC-FT
782.91	WEIR	2,761 SQ. FT.			
			2,348 CU. FT.	8,518 CU. FT. OR	0.1955 AC-FT
782.00		2,400 SQ. FT.			
			2,210 CU. FT.	6,169 CU. FT. OR	0.1416 AC-FT
781.00		2,020 SQ. FT.			
			1,866 CU. FT.	3,959 CU. FT. OR	0.0909 AC-FT
780.00		1,712 SQ. FT.			
			1,544 CU. FT.	2,093 CU. FT. OR	0.0481 AC-FT
779.00		1,375 SQ. FT.			
			550 CU. FT.	550 CU. FT. OR	0.0126 AC-FT
778.58		1,243 SQ. FT.			

TOTAL POND $V_{783.39}$= 9,893 CU. FT.
OR 0.227 AC-FT

VOLUME REQUIRED = 1.200 ACRE - FEET

VOLUME ADDED EXISTING POND = 1.001 ACRE - FEET
VOLUME LOST EXISTING POND = 0.227 ACRE - FEET
VOLUME PROVIDED NEW PONDS = 0.532 ACRE - FEET
VOLUME PROVIDED = 1.306 ACRE - FEET

NORTH
1" = 30'
00 15 30 60 120

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

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33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS 60174

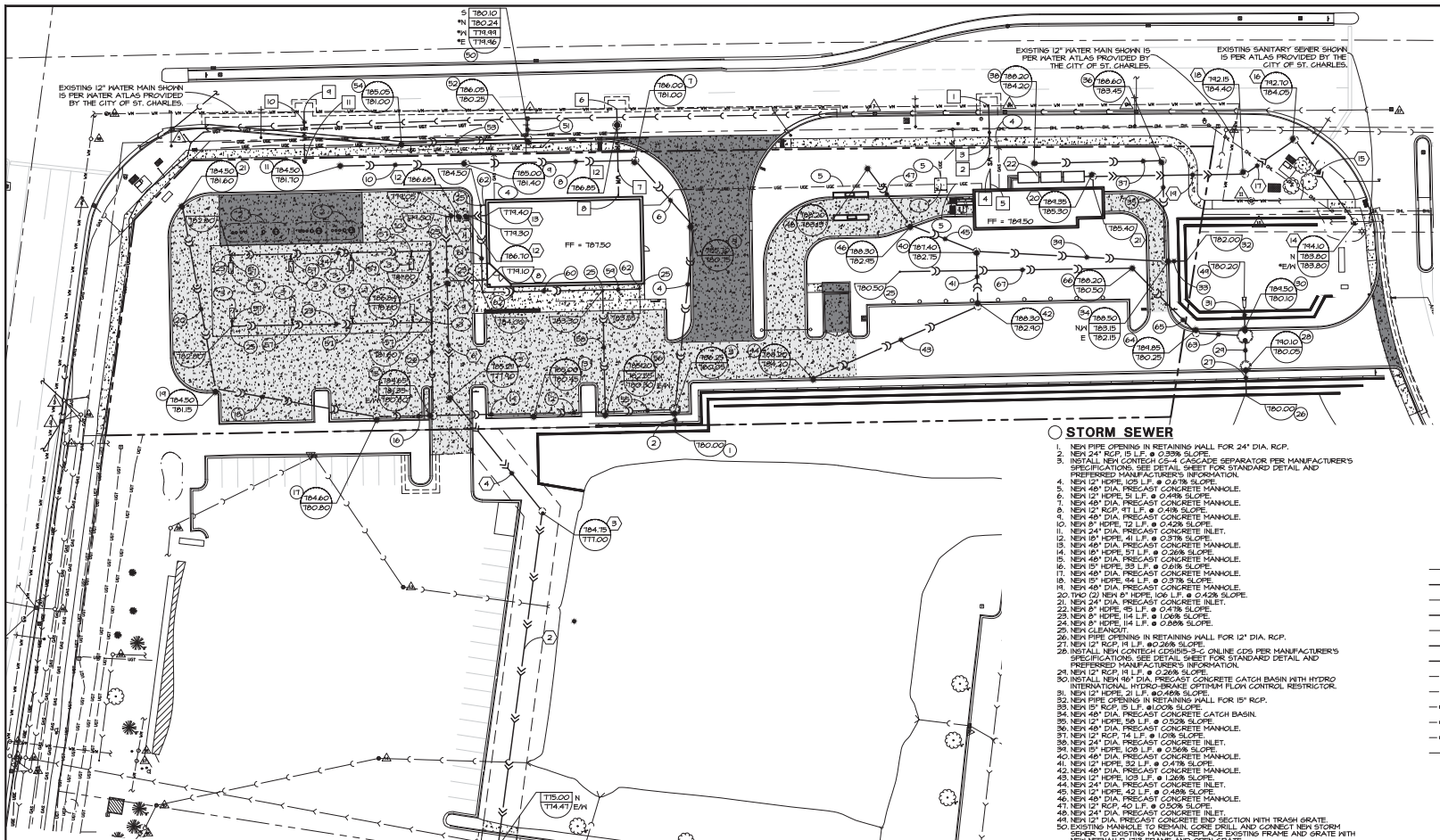
CIMA DEVELOPERS
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

ISSUE

TO	DATE
REV. SITE	8/19/19
REV. SITE	8/26/19
REV. SITE	1/13/20
REV. SITE	2/4/20
REV. SITE	2/11/20
REV. SITE	2/19/20
REV. SITE	6/8/20

CHECK:TOA
DRAWN:TEP
JOB:1910803C

C-4.1
SITE GRADING PLAN



SITE UTILITY NOTES:

A. CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-892-0123) AND/OR PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
B. CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
C. CONTRACTOR SHALL EXCAVATE AND VERIFY IN FIELD ALL EXISTING UTILITY LOCATIONS, SIZES, CONDITIONS AND ELEVATIONS AT PROPOSED POINTS OF CONNECTION PRIOR TO ANY UNDERGROUND CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
D. REFER TO THE GENERAL NOTES AND SPECIFICATION SHEETS FOR ALL PIPE MATERIAL AND JOINT SPECIFICATIONS.
E. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
F. CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE, MATERIAL, INVERT, PIPE ROUTING, AND SLOPE OF ALL EXISTING UTILITIES AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
G. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF UTILITY TRENCHES DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING AND BRACING AS NECESSARY TO MAINTAIN STABILITY UNTIL CONSTRUCTION OF THE UTILITY IS COMPLETE IN ORDER TO MEET OSHA AND LOCAL CODES, AS WELL AS MANUFACTURER'S REQUIREMENTS.
H. ALL RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS IV, PER ASTM C-76 WITH FLEXIBLE (O-RING) GASKET JOINTS IN CONFORMANCE WITH ASTM C-443 AND SECTION 31-1.08 OF THE "STANDARD SPECIFICATIONS".
I. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY (ASTM D-1557) OVER ALL UNDERGROUND UTILITIES WHICH ARE CONSTRUCTED UNDER OR WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT OR SIDEWALKS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
J. ADJUST RIM ELEVATIONS OF EXISTING STRUCTURES IN PAVEMENT AS NECESSARY TO MEET PROPOSED FINISHED GRADE.
K. CONTRACTOR TO COORDINATE ALL CONNECTIONS TO CITY UTILITIES AND STORM SEWERS WITH THE PUBLIC WORKS DEPARTMENT.
L. CONTRACTOR TO USE CAUTION WHEN EXCAVATING AT EXISTING UTILITY LINES.
M. ALL STORM MANHOLES SHALL HAVE OPEN LIDS UNLESS OTHERWISE SPECIFIED.
N. ALL EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL BE CAPPED WITH 2' LONG (MIN) NON-SHRINK CONCRETE MORTAR PLUGS AT BOTH ENDS.
O. ALL NEW STORM SEWER WITHIN 10'OT RIGHT-OF-WAY TO BE PUBLIC. ALL OTHER NEW STORM SEWER TO BE PRIVATE.
P. ALL NEW SANITARY SEWER SERVICES TO BE PRIVATE.
Q. ALL STORM SEWERS AND INLETS HAVE BEEN DESIGNED TO PASS THE 100-YEAR STORM EVENT.

UTILITY LEGEND

	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
WM	EXISTING WATER MAIN
WM	PROPOSED WATER MAIN
WS	PROPOSED WATER SERVICE
GAS	EXISTING GAS LINE
GAS	PROPOSED GAS SERVICE LINE
OHL	EXISTING OVERHEAD LINES
UGE	EXISTING UNDERGROUND ELECTRIC LINE
UGT	EXISTING UNDERGROUND TELEPHONE LINE
FO	EXISTING FIBER OPTICS LINE
000.00	PROPOSED RIM ELEVATION
000.00	PROPOSED INVERT ELEVATION
FF	FINISHED FLOOR ELEVATION
ADJUST	ADJUST EXISTING RIM ELEVATION
	EXISTING CLOSED MANHOLE
	EXISTING OPEN GRATE MANHOLE
	EXISTING CURB INLET
	EXISTING FIRE HYDRANT
	EXISTING VALVE VAULT
	EXISTING B-BOX
	EXISTING TELCO PEDESTAL
	EXISTING UTILITY POLE W/ GUY WIRE
	PROPOSED FIRE HYDRANT
	PROPOSED VALVE WITH VAULT
	PROPOSED B-BOX
	PROPOSED INLET
	PROPOSED OPEN LID MANHOLE / CATCH BASIN
	PROPOSED CLOSED LID MANHOLE
	PROPOSED RESTRICTOR STRUCTURE
	PROPOSED FLARED END SECTION
	PROPOSED GREASE TRAP

NORTH

1" = 30'

00 15 30 60 120

STORM SEWER

1. NEW PIPE OPENING IN RETAINING WALL FOR 24" DIA. RCP.
2. NEW 24" RCP, 15 L.F. @ 0.33% SLOPE.
3. INSTALL NEW CONTECH CS-4 CASCADE SEPARATOR PER MANUFACTURER'S SPECIFICATIONS. SEE DETAIL SHEET FOR STANDARD DETAIL AND PREFERRED MANUFACTURER'S INFORMATION.
4. NEW 12" HDPE, 105 L.F. @ 0.67% SLOPE.
5. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
6. NEW 12" HDPE, 51 L.F. @ 0.49% SLOPE.
7. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
8. NEW 12" RCP, 47 L.F. @ 0.41% SLOPE.
9. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
10. NEW 8" HDPE, 12 L.F. @ 0.42% SLOPE.
11. NEW 24" DIA. PRECAST CONCRETE INLET.
12. NEW 18" HDPE, 41 L.F. @ 0.37% SLOPE.
13. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
14. NEW 18" HDPE, 57 L.F. @ 0.26% SLOPE.
15. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
16. NEW 15" HDPE, 83 L.F. @ 0.61% SLOPE.
17. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
18. NEW 15" HDPE, 44 L.F. @ 0.37% SLOPE.
19. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
20. TWO (2) NEW 8" HDPE, 106 L.F. @ 0.42% SLOPE.
21. NEW 24" DIA. PRECAST CONCRETE INLET.
22. NEW 8" HDPE, 45 L.F. @ 0.47% SLOPE.
23. NEW 8" HDPE, 114 L.F. @ 1.06% SLOPE.
24. NEW 8" HDPE, 114 L.F. @ 0.88% SLOPE.
25. NEW CLEANOUT.
26. NEW PIPE OPENING IN RETAINING WALL FOR 12" DIA. RCP.
27. NEW 12" RCP, 14 L.F. @0.26% SLOPE.
28. INSTALL NEW CONTECH CDS15-3-C ONLINE CDS PER MANUFACTURER'S SPECIFICATIONS. SEE DETAIL SHEET FOR STANDARD DETAIL AND PREFERRED MANUFACTURER'S INFORMATION.
29. NEW 12" RCP, 14 L.F. @ 0.26% SLOPE.
30. INSTALL NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH HYDRO INTERNATIONAL, HYDRO-BRAKE OPTIMUM FLOW CONTROL RESTRICTOR.
31. NEW 12" HDPE, 21 L.F. @0.48% SLOPE.
32. NEW PIPE OPENING IN RETAINING WALL FOR 15" RCP.
33. NEW 15" RCP, 15 L.F. @1.00% SLOPE.
34. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
35. NEW 12" HDPE, 58 L.F. @ 0.52% SLOPE.
36. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
37. NEW 12" RCP, 74 L.F. @ 1.01% SLOPE.
38. NEW 24" DIA. PRECAST CONCRETE INLET.
39. NEW 15" HDPE, 109 L.F. @ 0.56% SLOPE.
40. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
41. NEW 12" HDPE, 32 L.F. @ 0.47% SLOPE.
42. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
43. NEW 12" HDPE, 103 L.F. @ 1.26% SLOPE.
44. NEW 24" DIA. PRECAST CONCRETE INLET.
45. NEW 12" HDPE, 42 L.F. @ 0.48% SLOPE.
46. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
47. NEW 12" RCP, 40 L.F. @ 0.50% SLOPE.
48. NEW 24" DIA. PRECAST CONCRETE INLET.
49. NEW 12" DIA. PRECAST CONCRETE END SECTION WITH TRASH GRATE.
50. EXISTING MANHOLE TO REMAIN. CORE DRILL AND CONNECT NEW STORM SEWER TO EXISTING MANHOLE. REPLACE EXISTING FRAME AND GRATE WITH NEENAH R-1719 FRAME AND OPEN GRATE.
51. NEW 12" RCP, 12 L.F. @ 1.25% SLOPE.
52. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
53. NEW 12" RCP, 73 L.F. @1.05% SLOPE.
54. NEW 24" DIA. PRECAST CONCRETE INLET.
55. NEW 18" HDPE, 40 L.F. @ 0.63% SLOPE.
56. NEW 48" DIA. PRECAST CONCRETE CATCH BASIN.
57. NEW 6" PVC SDR 26 PIPING, 5 L.F. @1.00% SLOPE.
58. NEW 6" PVC SDR 26 PIPING, 72 L.F. @ 1.04% SLOPE.
59. NEW 6" PVC SDR 26 PIPING, 21 L.F. @ 1.11% SLOPE.
60. NEW 6" PVC SDR 26 PIPING, 641 L.F. @ 1.01% SLOPE.
61. NEW 6" PVC SDR 26 PIPING, 50 L.F. @ 1.00% SLOPE.
62. NEW BUILDING DOWNSPOUT.
63. NEW 8" HDPE, 28 L.F. @ 0.54% SLOPE.
64. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
65. NEW 8" HDPE, 52 L.F. @ 0.48% SLOPE.
66. NEW 24" DIA. PRECAST TYPE 'C' CATCH BASIN.
67. NEW 4" PERFORATED PVC UNDERDRAIN, 193 L.F. @ 0.00% SLOPE.

SANITARY SEWER

1. EXISTING MANHOLE TO REMAIN. CORE DRILL BOOT AND CONNECT NEW SANITARY SEWER TO EXISTING MANHOLE. PROVIDE EXTERNAL CHIMNEY SEAL FOR PROPOSED CONNECTION. PROVIDE A RESILIENT WATERTIGHT CONNECTION AS PER ASTM C-923.
2. NEW 6" PVC SDR 26, 193 L.F. @ 1.04% SLOPE.
3. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
4. NEW 6" PVC SDR 26, 85 L.F. @ 1.06% SLOPE.
5. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
6. NEW 6" PVC SDR 26, 68 L.F. @ 1.06% SLOPE.
7. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
8. NEW 6" PVC SDR 26, 23 L.F. @ 2.17% SLOPE.
9. NEW 6" PVC SDR 26, 37 L.F. @ 1.08% SLOPE.
10. NEW CLEANOUT. CLEANOUT RISERS SHALL BE ENCLOSED IN A CLEANOUT BOX, EJIWI 1566 OR APPROVED EQUAL.
11. NEW 6" PVC SDR 26, 5 L.F. @ 1.00% SLOPE.
12. NEW CLEANOUT.
13. NEW 6" PVC SDR 26, 10 L.F. @ 1.00% SLOPE.
14. INSTALL NEW 48" DIA. PRECAST CONCRETE MANHOLE ON EXISTING SANITARY SEWER. VERIFY EXISTING INVERT IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF PROPOSED STRUCTURE.
15. NEW 8" PVC SDR 26, 58 L.F. @ 0.43% SLOPE.
16. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
17. NEW 6" PVC SDR 26, 35 L.F. @ 1.00% SLOPE.
18. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
19. NEW 6" PVC SDR 26, 87 L.F. @ 1.09% SLOPE.
20. NEW 48" DIA. PRECAST CONCRETE MANHOLE.
21. NEW 6" PVC SDR 26, 7 L.F. @ 1.43% SLOPE.
22. NEW REGLAIM TANK. CONTRACTOR TO CONNECT SEWER AND ALL NECESSARY PIPING FROM BUILDING PER MANUFACTURER'S SPECIFICATIONS. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

EXISTING UTILITY DATA

1. RIM=781.66' (SANITARY) 48" CONCRETE STRUCTURE INV=771.53' (UNKNOWN N/S) INV=772.06' (UNKNOWN E) NO FLOW WITNESSED TOP OF WATER=777.26'
2. RIM=780.60' (STORM) 24" CONCRETE STRUCTURE INV=777.93' (6" CPP SSW) INV=777.55' (12" RCP NE)
3. RIM=780.77' (STORM) 48" CONCRETE STRUCTURE INV=777.57' (6" PVC NW) INV=777.25' (18" RCP N) INV=777.37' (12" RCP E) INV=777.21' (18" RCP SE) INV=777.08' (6" CPP S)
4. RIM=781.85' (STORM) 24" CONCRETE STRUCTURE INV=778.05' (12" RCP SE)
5. RIM=783.66' (STORM) 48" CONCRETE STRUCTURE INV=778.96' (12" RCP NE) INV=778.31' (15" RCP SW)
6. RIM=786.11' (STORM) 48" CONCRETE STRUCTURE INV=780.24' (12" RCP N) INV=779.89' (15" RCP W) INV=779.96' (15" RCP E)
7. RIM=789.01' (STORM) 48" CONCRETE STRUCTURE INV=782.83' (15" RCP E/W) INV=783.81' (6" CPP W) INV=785.03' (6" CPP E)
8. RIM=790.03' (STORM) 48" CONCRETE STRUCTURE INV=783.81' (15" RCP W) INV=785.93' (12" RCP W) INV=783.83' (15" RCP E) INV=784.73' (6" CPP E)
9. RIM=791.23' (STORM) 48" CONCRETE STRUCTURE INV=786.46' (12" RCP N/E) INV=787.43' (6" CPP E) INV=785.00' (15" RCP W) INV=786.33' (6" CPP W)
10. RIM=793.28' (SANITARY) 48" CONCRETE STRUCTURE INV=783.99' (8" CLAY E) INV=783.13' (8" CLAY S)
11. RIM=792.25' (WATER) 48" CONCRETE STRUCTURE TOP OF PIPE=785.88' (12" DIP E/W)
12. RIM=783.67' (STORM) 48" CONCRETE STRUCTURE INV=780.41' (12" RCP W/SSE)
13. RIM=783.64' (STORM) 48" CONCRETE STRUCTURE INV=780.31' (12" RCP NWW/E)
14. RIM=783.70' (STORM) 48" CONCRETE STRUCTURE INV=778.16' (24" RCP E) INV=778.06' (24" RCP WSW)
15. RIM=785.80' (SANITARY) 48" CONCRETE STRUCTURE INV=774.47' (8" PVC E/W)
16. RIM=788.69' (STORM) 60" CONCRETE STRUCTURE INV=779.04' (12" RCP W/ESE)
17. RIM=789.14' (SANITARY) 48" CONCRETE STRUCTURE INV=775.82' (8" PVC N/W)
18. RIM=791.57' (STORM) 48" CONCRETE STRUCTURE INV=786.79' (15" RCP E) INV=787.24' (12" RCP SSW)
19. RIM=792.75' (STORM) 24" CONCRETE STRUCTURE INV=788.48' (12" RCP W)
20. RIM=783.61' (STORM) 48" CONCRETE STRUCTURE INV=777.52' (24" RCP SSW/ENE)
21. RIM=780.66' (STORM) 48" CONCRETE STRUCTURE INV=776.54' (14"x23" RCP NW) INV=776.61' (18" RCP N) INV=776.61' (12" RCP SW)
22. RIM=779.04' (STORM) 24" CONCRETE STRUCTURE INV=776.49' (12" RCP ENE)
23. RIM=779.28' (WATER) 48" CONCRETE STRUCTURE TOP OF PIPE=775.63' (E/W) UNABLE TO MEASURE PIPE STRUCTURE FILLED WITH WATER
24. RIM=779.23' (STORM) UNABLE TO OPEN STRUCTURE
25. RIM=780.40' (SANITARY) 48" CONCRETE STRUCTURE INV=771.17' (10" CLAY N/S) INV=771.87' (8" PVC E)
26. RIM=780.80' (STORM) 48" CONCRETE STRUCTURE INV=776.80' (12" RCP W) INV=776.90' (18" RCP N/S)
27. RIM=779.70' (STORM) 24" CONCRETE STRUCTURE INV=777.00' (6" PVC W) INV=777.21' (6" CPP NW/SW) INV=776.84' (12" RCP E)
28. RIM=780.66' (STORM) 48" CONCRETE STRUCTURE INV=777.12' (18" RCP NW) INV=777.12' (18" RCP S) INV=777.29' (12" RCP WSW)
29. RIM=783.18' (WATER) 48" CONCRETE STRUCTURE TOP OF PIPE=777.36' (12" DIP N/S)
30. RIM=783.53' TOP OF WATER=779.88' STRUCTURE FILLED WITH WATER NO LINES FOUND
31. RIM=785.27' (WATER) 48" CONCRETE STRUCTURE TOP OF PIPE=778.39' (8" DIP N/S)
32. RIM=785.26' (WATER) 48" CONCRETE STRUCTURE TOP OF PIPE=778.38' (8" DIP N/S)
33. RIM=783.91' (SANITARY) 48" CONCRETE STRUCTURE INV=774.71' (6" PVC E/S)
34. RIM=785.04' (STORM) 48" CONCRETE STRUCTURE INV=780.84' (12" RCP NE/S)
35. RIM (NORTH)=784.99' (STORM) RIM (SOUTH)=785.38' (STORM) 72" CONCRETE STRUCTURE INV=777.06' (24" RCP NE) INV=777.09' (12" RCP SW) INV=777.10' (7.2" RESTRICTOR) INV=782.91' TOP OF SPILLWAY WALL

WATER:

1. CONNECT NEW 2" WATER SERVICE TO EXISTING 12" WATER MAIN. METHOD OF CONNECTION SHALL BE BY CUT-IN TEE.
2. NEW 2" COPPER WATER SERVICE LINE, 26 L.F.
3. NEW B-BOX.
4. NEW 2" COPPER WATER SERVICE LINE, 22 L.F.
5. NEW WATER SERVICE TO BE EXTENDED INTO NEW BUILDING. (SEE ARCHITECTURAL PLANS FOR DETAILS AND CONTINUATION).
6. CONNECT NEW 6" WATER SERVICE TO EXISTING 12" WATER MAIN. METHOD OF CONNECTION SHALL BE BY CUT-IN TEE.
7. NEW 6" CLASS 52 D.I.P. WATER SERVICE WITH FITTINGS, 51 L.F.
8. NEW WATER SERVICE TO BE EXTENDED INTO NEW BUILDING. (SEE ARCHITECTURAL PLANS FOR DETAILS AND CONTINUATION).
9. CONNECT NEW 6" WATER SERVICE TO EXISTING 12" WATER MAIN. METHOD OF CONNECTION SHALL BE BY CUT-IN TEE.
10. NEW 6" CLASS 52 D.I.P. WATER LINE WITH FITTINGS, 24 L.F.
11. NEW FIRE HYDRANT.
12. NEW 48" DIA. PRECAST CONCRETE VALVE VAULT.

MISCELLANEOUS NOTES

1. NEW TRANSFORMER PAD. COORDINATE WITH LOCAL UTILITY PROVIDER FOR LOCATION AND UNDERGROUND SERVICE LOCATION.
2. NEW FUEL TANKS. (SEE ARCHITECTURAL PLANS FOR DETAILS AND PRODUCT PIPING).
3. NEW FUEL DISPENSER. (SEE ARCHITECTURAL PLANS FOR MORE INFORMATION).
4. CONTRACTOR SHALL LOCATE GAS MAIN AND COORDINATE NEW GAS HOOKUP WITH GAS COMPANY.
5. NEW ELECTRIC SERVICE LINE. CONTRACTOR SHALL COORDINATE INSTALLATION WITH ELECTRIC COMPANY.

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30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

THE PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS 60174

ISSUE

TO	DATE
REV. SITE	8/19/19
REV. SITE	8/26/19
REV. SITE	1/13/20
REV. SITE	2/4/20
REV. SITE	2/11/20
REV. SITE	2/19/20
REV. SITE	6/8/20

CHECK:TOA
DRAWN:TEP
JOB:1910803C

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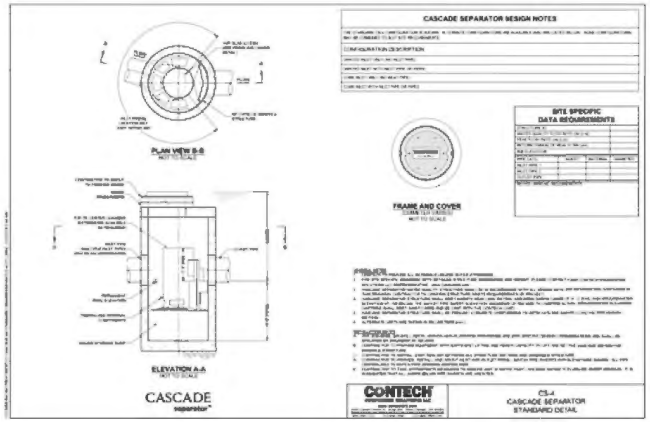
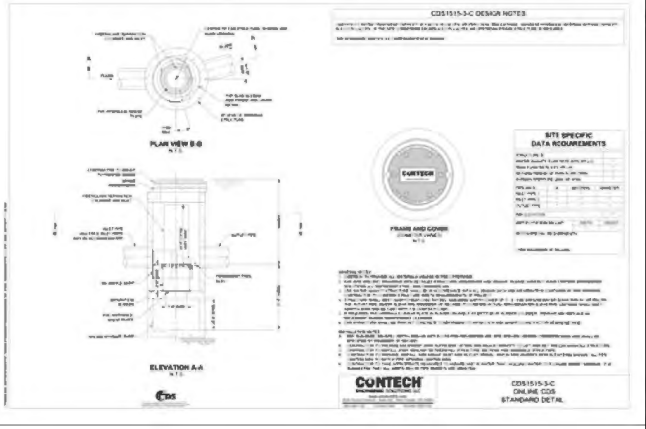
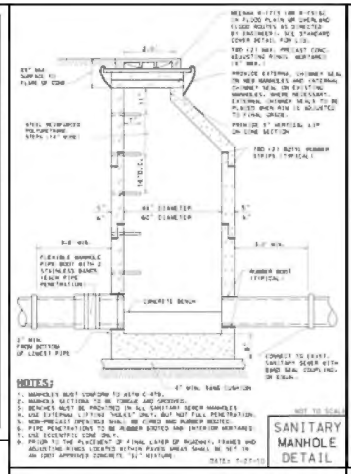
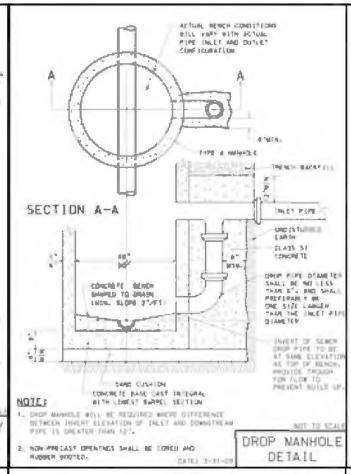
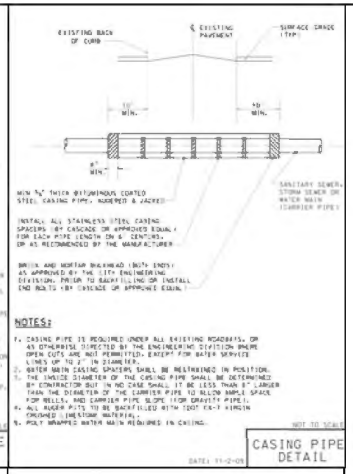
SITE UTILITY PLAN

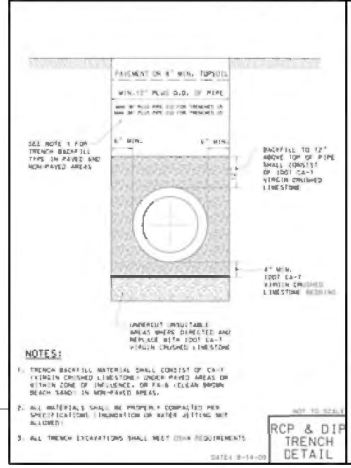


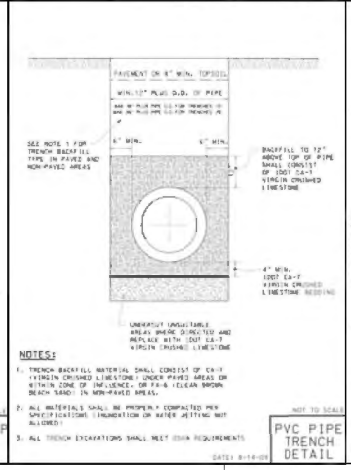


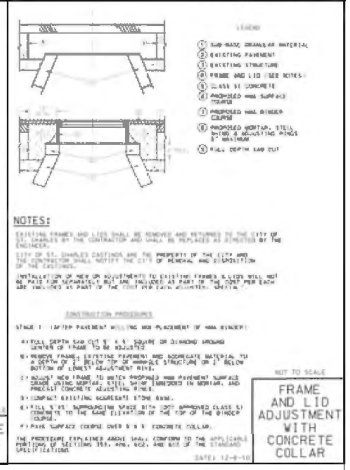


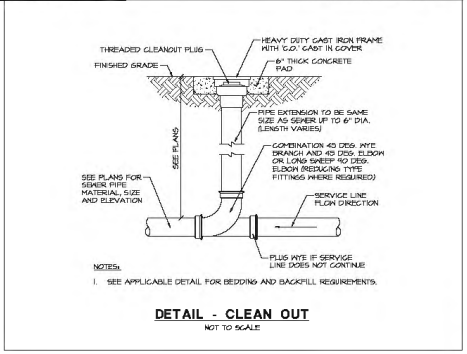












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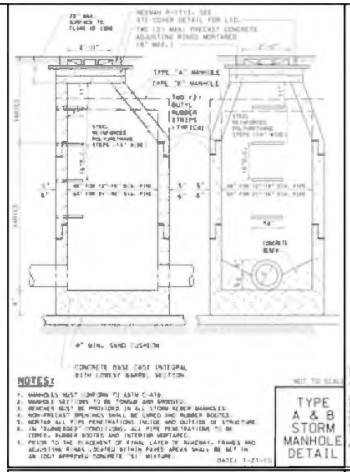
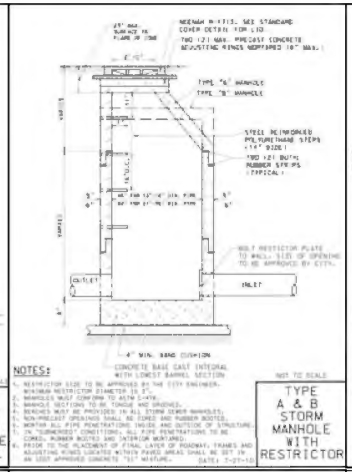
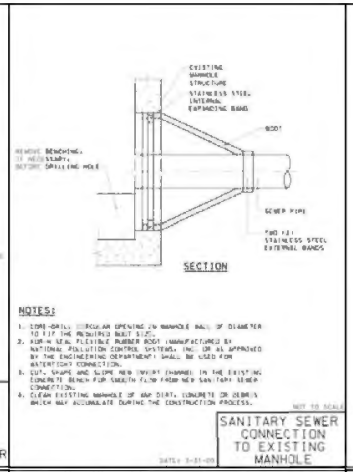
REV. SITE	6/8/20

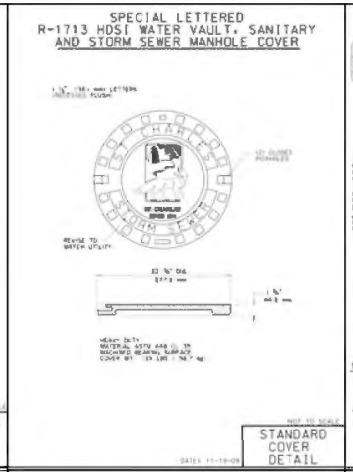
CHECK:TOA
DRAWN:TEP
JOB:1910803C

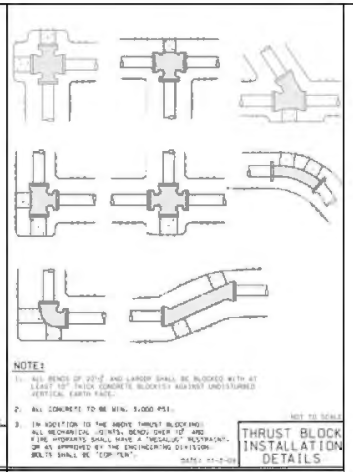
C-5.1
SITE UTILITY DETAILS

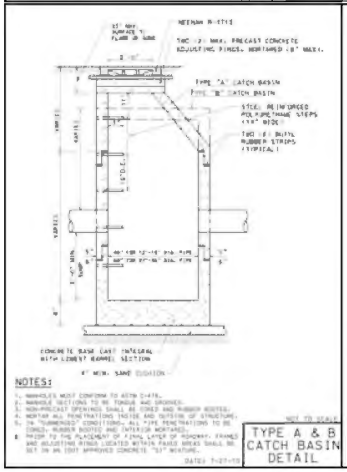


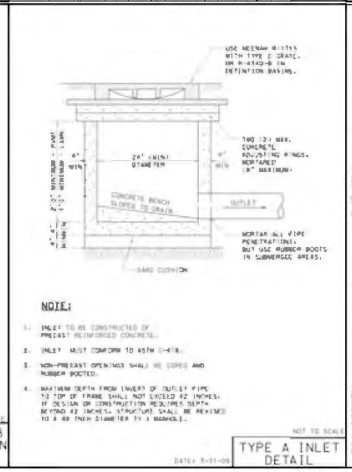


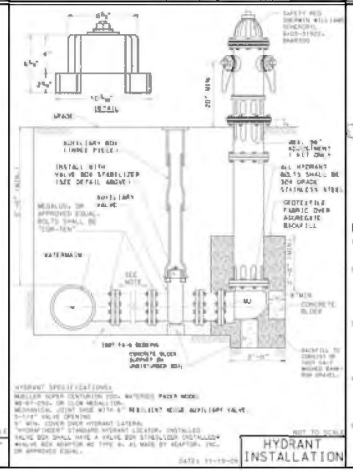


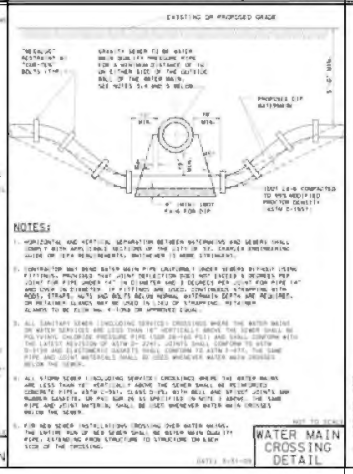


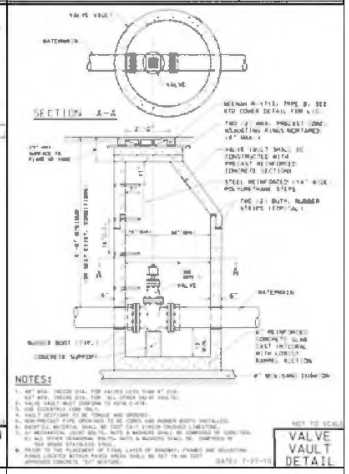


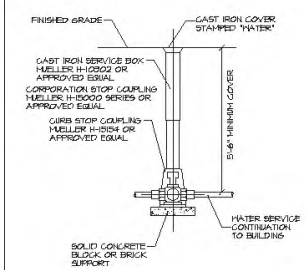












DETAIL - WATER VALVE IN BOX

NOT TO SCALE

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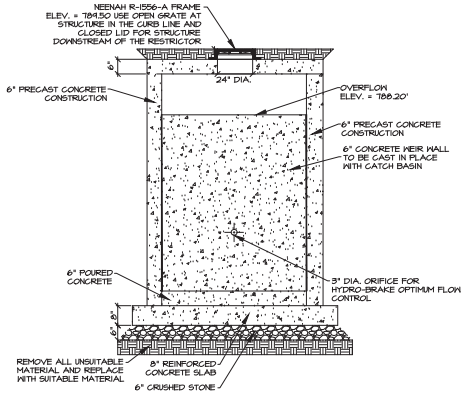
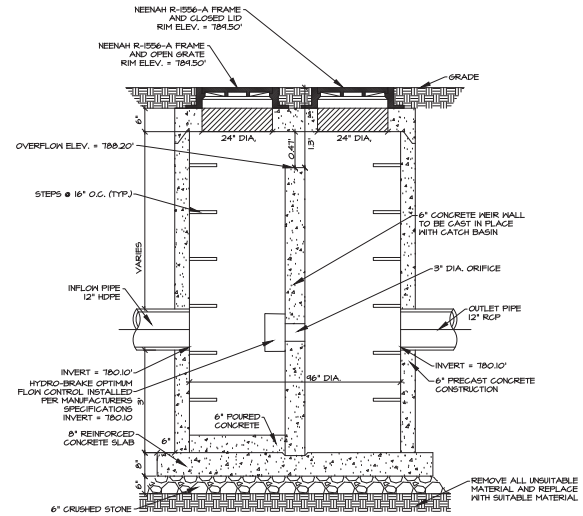
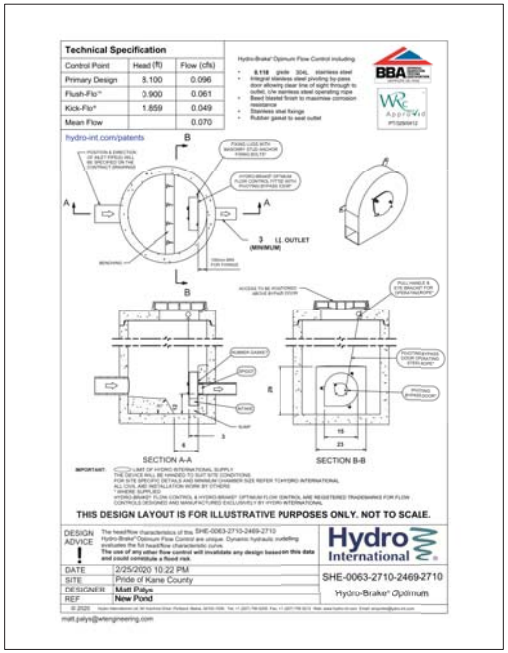
JOB:1910803C

C-5.2
SITE UTILITY DETAILS





DETAIL - 96" CATCH BASIN #30
WITH RESTRICTOR



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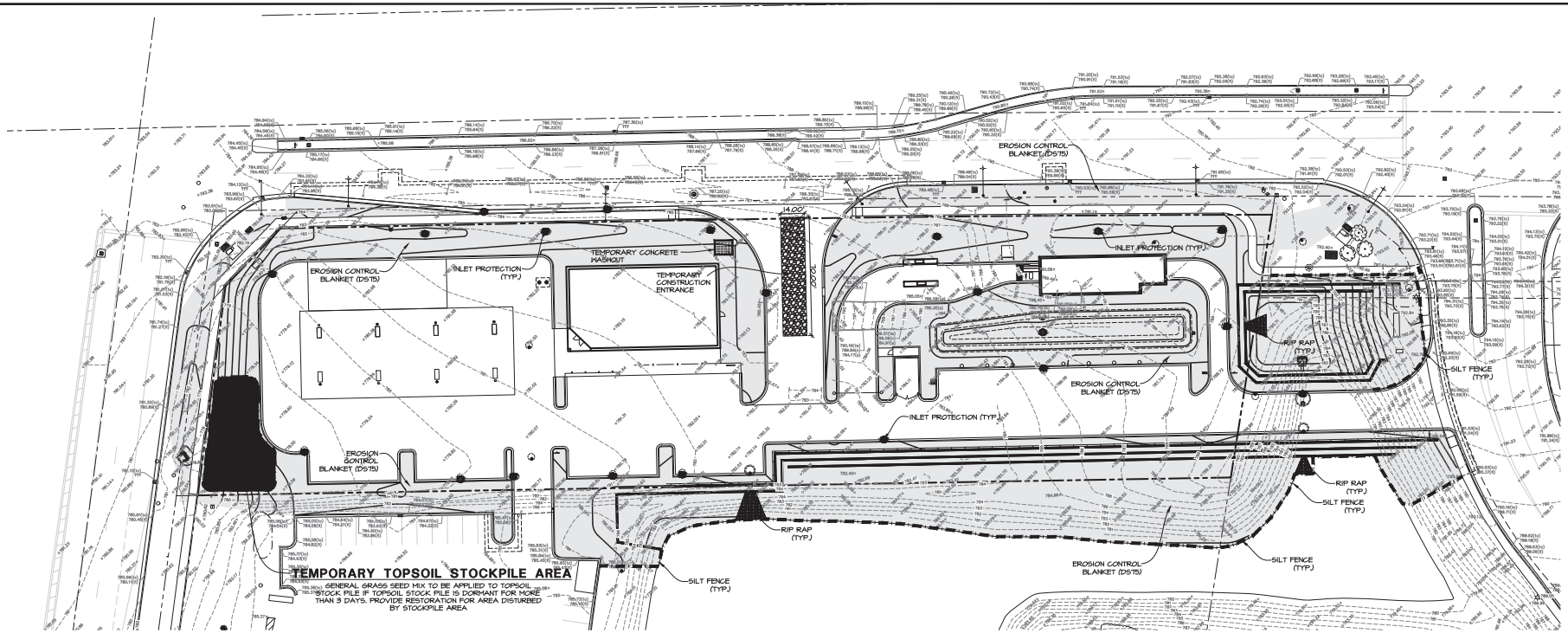
C-5.3
SITE UTILITY DETAILS



SWPPP LEGEND

- 1+00.00 — EXISTING SPOT GRADE
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- OVERLAND FLOW ARROW
- 100 YEAR OVERLAND FLOW ROUTE
- EMERGENCY OVERFLOW ARROW
- ADJUST — ADJUST EXISTING RIM ELEVATION
- EXISTING CLOSED MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING VALVE VAULT
- EXISTING B-BOX
- EXISTING TELCO PEDESTAL
- EXISTING UTILITY POLE WITH GUY WIRE
- PROPOSED FIRE HYDRANT
- PROPOSED VALVE WITH VAULT
- PROPOSED B-BOX
- PROPOSED INLET
- PROPOSED OPEN LID MANHOLE / CATCH BASIN
- PROPOSED CLOSED LID MANHOLE
- PROPOSED RESTRICTOR STRUCTURE
- PROPOSED NYLOPLAST DRAIN BASIN
- PROPOSED FLARED END SECTION
- PROPOSED GREASE TRAP
- SILT FENCE
- FLEXSTORM CATCH-IT INLET PROTECTION
- SILT FENCE INLET PROTECTION WITH STONE COLLAR
- RIP RAP
- FINE GRADE, FERTILIZE, AND SEED. INSTALL DS75 EROSION CONTROL BLANKET WITH 6" BIO-STAKES AS MANUFACTURED BY NORTH AMERICAN GREEN. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- TEMPORARY CONCRETE WASHOUT FACILITY

SWPPP NOTES:

A. ALL DISTURBED GREEN SPACES ON THE SITE SHALL BE RESTORED ACCORDING TO THE SEED BED PREPARATION SPECIFICATIONS BELOW AND BLANKETED OR MATTED AS SHOWN ON THE PLANS.

B. TEMPORARY OR PERMANENT STABILIZATION SHALL OCCUR IMMEDIATELY WHENEVER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL CONSIST OF THE INSTALLATION OF TEMPORARY SEEDING.

C. CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION ENTRANCES AS NECESSARY TO EXCAVATE AREAS AND HAUL SOILS ON-SITE. TRACKING OF DEBRIS ON SITE WILL NOT BE TOLERATED. ANY DEBRIS LEFT OUTSIDE OF THE PROJECT LIMITS MUST BE CLEANED IMMEDIATELY.

D. EROSION CONTROL BLANKETS AND TURF REINFORCEMENT MATS SHALL BE INSTALLED USING 6" BIO-STAKES AS MANUFACTURED BY NORTH AMERICAN GREEN. METAL STAKES AND STAPLES ARE PROHIBITED.

E. CONTRACTOR SHALL PROVIDE ALL NECESSARY MAINTENANCE FOR THE SEDIMENT AND EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT.

F. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.

G. CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO M-T CIVIL ENGINEERING ONCE THE SITE HAS BEEN STABILIZED. THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.

H. FOLLOWING THE REMOVAL OF THE SILT FENCE, THE CONTRACTOR SHALL RESTORE THE THE SILT FENCE TRENCH WITH SOD.

I. SEED BED PREPARATION.

I.A. ALL STONES, ROCKS, DEBRIS LARGER THAN 1" IN DIAMETER SHALL BE REMOVED.

I.B. DISK OR TILL TOPSOIL TO A DEPTH OF 3" AND REDUCE ALL SOIL PARTICLES TO NO LARGER THAN 2". THE SURFACE SHALL BE FREE OF WEEDS, STONES, ROCKS, STICKS, GULLIES, CLODS, AND DEBRIS.

I.C. THE AREA SHALL BE FINE GRADED.

I.D. THE SEED SHALL BE PLACED INTO THE SOIL WITH A MACHINE THAT MECHANICALLY PLACES THE SEED IN DIRECT CONTACT WITH THE SOIL AND COVERS THE SEED WITH THE SOIL.

I.E. BROADCAST AND HYDROSEED WILL NOT BE ALLOWED.

I.F. SEEDED AREAS SHALL BE COVERED WITH THE EROSION BLANKET RIGHT AFTER THE SEED HAS BEEN SOWN.

I.G. ANY SOIL AMENDMENTS NEEDED TO ACHIEVE A 90% HEALTHY STAND OF VEGETATION WILL BE ADDED TO THE SOIL AT NO EXTRA CHARGE TO THE OWNER. THE STAND OF VEGETATION WILL NEED TO BE ACCEPTED BY THE ENGINEER.

I.H. THE SEED MIX SHALL BE KENTUCKY BLUEGRASS 100LBS/ACRE, REVENGE PERENNIAL RYEGRASS 60 LBS/ACRE, ANNUAL RYE 40 LBS/ACRE AND CREEPING RED FESCUE 40 LBS/ACRE TOTAL.

NORTH

1" = 30'

00 15 30 60 120

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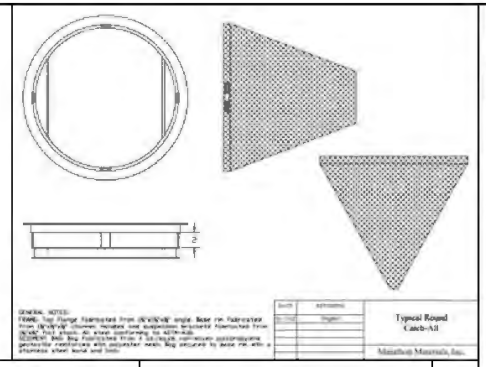
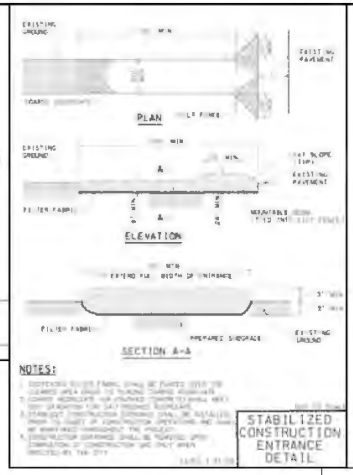
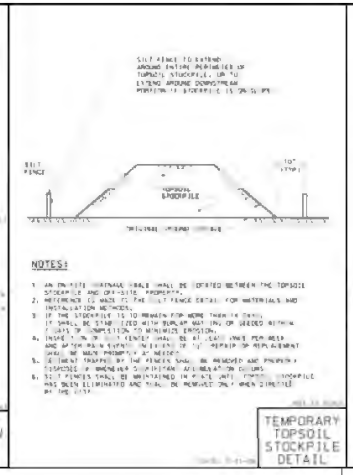
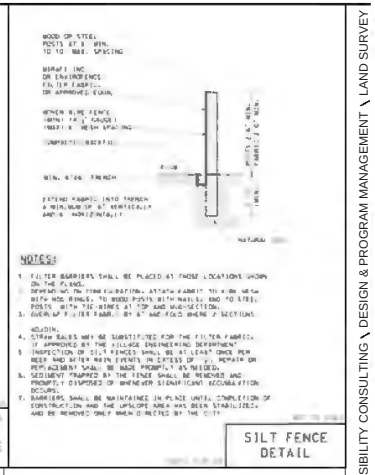
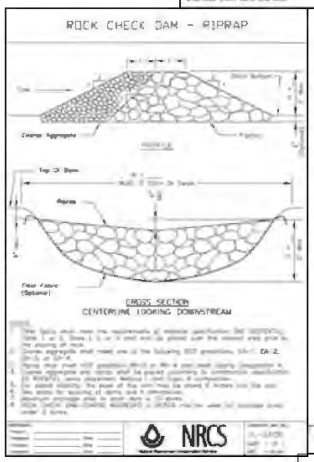
C-6.0
STORMWATER POLLUTION PREVENTION PLAN

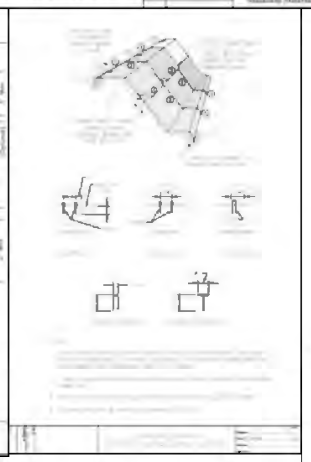


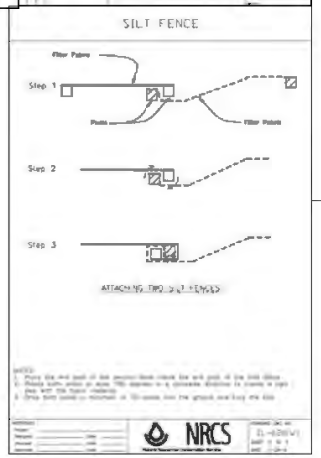


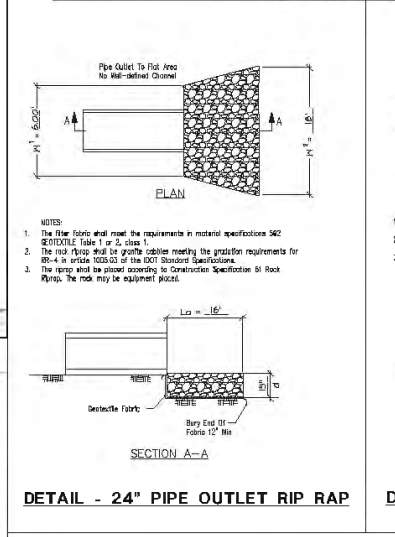




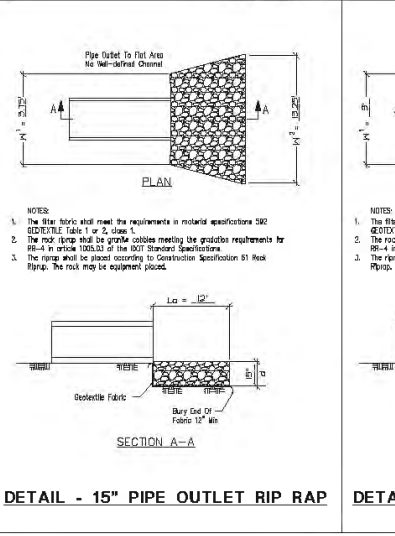




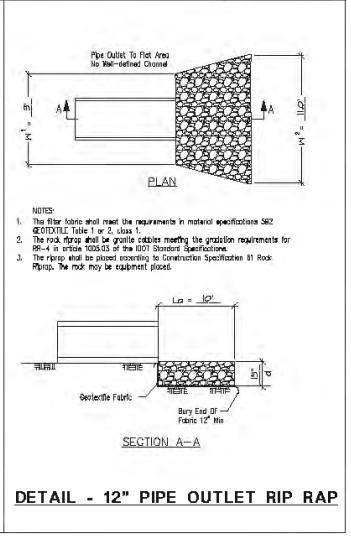




DETAIL - 24" PIPE OUTLET RIP RAP



DETAIL - 15" PIPE OUTLET RIP RAP



DETAIL - 12" PIPE OUTLET RIP RAP

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REV. SITE	6/8/20

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DRAWN:TEP
JOB:1910803C

C-6.1
STORMWATER POLLUTION PREVENTION DETAILS

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING:
   1.1. ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
   1.2. "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" LATEST EDITION.
   1.3. "ILLINOIS URBAN MANUAL," LATEST EDITION.
   1.4. BUILDING CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES.
   1.5. UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, 29 CFR PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."
   1.6. ILLINOIS DRAINAGE LAW.
   1.7. ILLINOIS ENVIRONMENTAL BARRIERS ACT.
   1.8. ILLINOIS ACCESSIBILITY CODE.
   1.9. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.
   1.10. TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE.
2. ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNING AGENCY(S) SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE ALL NECESSARY REPAIRS AT HIS EXPENSE AND TO THE SATISFACTION OF THE GOVERNING AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNAGE AND TRAFFIC CONTROL DEVICES TO INFORM AND PROTECT THE PUBLIC.
3. CONTRACTOR SHALL NOTIFY THE LOCAL ENGINEERING OR PUBLIC WORKS DEPARTMENT AND/OR OTHER GOVERNING AUTHORITY(S) 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ON EACH MAJOR CATEGORY OF WORK, INCLUDING BUT NOT LIMITED TO, ANY PUBLIC IMPROVEMENTS, ROADWAY CLOSURES OR UTILITY INSTALLATIONS. 72 HOUR NOTICE SHALL BE GIVEN FOR ANY WORK ITEM THAT REQUIRES INSPECTION AND TESTING SUCH AS SANITARY SEWER OR WATER MAIN INSTALLATION.
4. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, ETC.) AND THE LOCAL MUNICIPALITY TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ORDER TO AVOID POTENTIAL CONFLICTS. CONTRACTOR SHALL CALL THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J.U.L.I.E.) AT 1-800-892-0123 OR BY DIALING 811. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER INDICATED ON THE PLANS OR NOT AND TO HAVE THESE UTILITIES STAKED PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER.
6. ALL EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS PREPARED BY THE ENGINEER ACCORDING TO INFORMATION AVAILABLE FROM PUBLIC RECORDS OR VISIBLE FIELD MARKINGS. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND FOR THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THE CONFLICT MAY BE RESOLVED.
7. ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES AND REGULATIONS AND TO THE SATISFACTION OF THE APPLICABLE UTILITY OWNER(S).
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.
9. ALL PROPERTY MARKERS AND REFERENCE MARKERS SHALL BE CAREFULLY PRESERVED DURING CONSTRUCTION UNTIL THEIR LOCATION HAS BEEN WITNESSED OR OTHERWISE TIED IN BY AN AUTHORIZED AGENT OR PROFESSIONALLY LICENSED SURVEYOR.
10. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE PROVIDED WHERE CONSTRUCTION OPERATIONS ABUT PUBLIC THROUGH-FARES AND ADJACENT PROPERTY.
11. ALL AREAS DISTURBED BY THE GENERAL CONTRACTOR OR SUB-CONTRACTORS SHALL BE RETURNED TO THE ORIGINAL CONDITIONS OR BETTER, EXCEPT WHERE PROPOSED CONSTRUCTION IS INDICATED ON THE PLANS.
12. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
13. PRIOR TO INITIAL ACCEPTANCE BY THE OWNER(S) AND/OR GOVERNING AUTHORITY, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND MUNICIPALITY ENGINEER OR HIS REPRESENTATIVE(S). THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF ONE (1) EIGHTEEN (18) MONTHS FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE WORKING CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
15. CONTRACTOR SHALL KEEP THE PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS AT THE END OF EACH WORKING DAY.
16. ALL CONSTRUCTION STAKING, SCHEDULING AND PAYMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
17. THREE (3) ORIGINAL COPIES OF ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR (BUT NOT LIMITED TO) THE FOLLOWING ITEMS:
   17.1. ASPHALT PAVEMENT MIX DESIGN
   17.2. CONCRETE MIX DESIGN
   17.3. GRANULAR MATERIAL GRADATION
   17.4. PRECAST CONCRETE STRUCTURES (MANHOLES, INLETS, CATCH BASINS, VAULTS, ETC.)
   17.5. WATER MAIN MATERIALS (VALVES, FIRE HYDRANTS, ETC.)
18. AFTER COMPLETION OF THE PROPOSED IMPROVEMENTS AND WHEN REQUIRED BY THE GOVERNING AUTHORITY(S) CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH AS-BUILT AND/OR RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONALLY LICENSED ENGINEER OR SURVEYOR AND SHALL INCLUDE AT A MINIMUM (WHERE APPLICABLE TO THE SCOPE OF WORK) THE FOLLOWING ITEMS:
   18.1 TOPOGRAPHY AND SPOT GRADE ELEVATIONS OF ALL PROPOSED PERMANENT SITE FEATURES INCLUDING ANY STORM WATER FACILITIES OR MODIFICATIONS TO EXISTING STORM WATER FACILITIES.
   18.2 HORIZONTAL AND VERTICAL LOCATION AND ALIGNMENT OF ALL PROPOSED ROADWAYS, PARKING LOTS, UTILITIES, BUILDINGS OR OTHER PERMANENT SITE FEATURES.
   18.3 RIM AND INVERT AND/OR TOP OF PIPE ELEVATIONS FOR ALL PROPOSED UTILITIES.
   18.4 AS-BUILT AND/OR RECORD DRAWING INFORMATION SHALL BE SHOWN ON THE APPROVED ENGINEERING PLANS ISSUED FOR CONSTRUCTION. ANY AND ALL DEVIATIONS FROM THESE APPROVED PLANS SHALL BE SHOWN BY MEANS OF STRIKING THROUGH THE PROPOSED INFORMATION AND CLEARLY INDICATING THE AS-BUILT LOCATIONS AND ELEVATIONS ON THE APPLICABLE PLAN SHEET.

SITE GRADING AND PAVING

1. ALL SITE WORK, GRADING, AND PAVING OPERATIONS WITHIN THE LIMITS OF THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES IN THE PLANS AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. EARTH EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, CONSTRUCTION OF EMBANKMENTS, NON-STRUCTURAL FILLS, FINAL SHAPING AND TRIMMING TO THE LINES, GRADES AND CROSS SECTIONS SHOWN ON THE PLANS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 200 OF THE "STANDARD SPECIFICATIONS." ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR AS DIRECTED BY THE PROJECT REPRESENTATIVE IN THE FIELD.
3. EXCAVATED TOPSOIL SHALL BE STOCKPILED ON THE SITE IN AREAS DESIGNATED BY THE PROJECT ENGINEER UNTIL SUCH TIME THAT THIS TOPSOIL CAN BE USED FOR FINAL GRADING. UNLESS OTHERWISE NOTED ON THE PLANS, A MINIMUM OF 6" TOPSOIL RE-SPREAD AND SEEDING FOR ALL DISTURBED AREAS IS REQUIRED.
4. THE SOILS INVESTIGATION REPORT FOR THE SITE AND ALL ADDENDA THERETO ARE SUPPORTING DOCUMENTS FOR THIS PROJECT. THE RECOMMENDATIONS AS STATED IN SAID REPORT ARE HEREBY INCORPORATED INTO THESE CONSTRUCTION NOTES BY REFERENCE AND SHALL BE FOLLOWED BY ALL CONTRACTORS. THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY A SOILS ENGINEER OR HIS REPRESENTATIVE. FURTHER CONSTRUCTION OPERATIONS WILL NOT BE PERMITTED UNTIL THE SOILS ENGINEER ISSUES A WRITTEN STATEMENT THAT THE AREA IN QUESTION HAS BEEN SATISFACTORILY PREPARED AND IS READY FOR CONSTRUCTION.
5. ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE SOIL REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO THESE EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT HIS OWN EXPENSE.
8. REMOVED DRIVEWAY PAVEMENT, SIDEWALK, CURBS, TREES AND STUMPS SHALL BE DISPOSED OF LEGALLY OFF-SITE AT LOCATIONS DETERMINED BY THE CONTRACTOR.
9. ON AND OFF SITE PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY TO MEET STATE AND LOCAL STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
10. PROPOSED ELEVATIONS INDICATE FINISHED GRADE CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THE THICKNESS OF THE PROPOSED PAVING (ROADS, WALKS, DRIVE, ETC.) SECTION OR TOPSOIL AS INDICATED ON THE PLANS.
11. CONTRACTOR SHALL PROVIDE SMOOTH VERTICAL CURVES THROUGH THE HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS ON THE PLANS. CONTRACTOR SHALL PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES AND AVOID ANY RIDGES AND/OR DEPRESSIONS.
12. ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.
13. ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.
14. ALL CONCRETE POURED SHALL BE:
   14.1. MINIMUM COMPRESSIVE STRENGTH:
      14.1.1. 3,500 P.S.I. AT 14 DAYS (PER I.D.O.T.)
      14.1.2. 4,500 P.S.I. AT 28 DAYS (PER A.C.I.)
   14.2. MAX WATER-CEMENTITIOUS MATERIALS RATIO: 0.44 (AIR-ENTRAINED)
   14.3. AIR CONTENT: 6%, +/- 1.5% AT POINT OF DELIVERY FOR EXPOSED CONCRETE
15. WHEN FIBER MESH REINFORCEMENT IS SPECIFIED, IT SHALL CONSIST OF FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE PAVEMENT, COMPLYING WITH ASTM C 116, TYPE III, 3/4 TO 3 INCHES LONG. FIBERS SHALL BE UNIFORMLY DISPERSED IN THE CONCRETE MIXTURE AT THE MANUFACTURER'S RECOMMENDED RATE, BUT NOT LESS THAN 1.5 LBS / CU. YD.
16. THE GRADING AND CONSTRUCTION OF THE PROPOSED PAVEMENT IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE AND MATCH EXISTING GRADES FLUSH.
17. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
18. DRIVEWAYS SHALL BE CONSTRUCTED SO AS NOT TO IMPEDE THE SURFACE DRAINAGE SYSTEM.
19. TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS AND SHALL BE INSTALLED AND PROVIDED WHENEVER CONSTRUCTION FOR UTILITIES ARE WITHIN STREET AREAS. APPLICABLE ORDINANCES OF THE MUNICIPALITY, COUNTY OR STATE SHALL ALSO GOVERN THE TRAFFIC CONTROL REQUIREMENTS.

WATER MAINS AND SEWERS HORIZONTAL SEPARATION REQUIREMENTS

1. WATER MAINS SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER, OR SANITARY SERVICE CONNECTION.
2. WATER MAINS MAY BE LOCATED CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:
   2.1. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET; AND
   2.2. THE WATER MAIN INVERT IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE SEWER; AND
   2.3. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
3. WHEN IT IS IMPOSSIBLE TO MEET 1) OR 2) ABOVE, BOTH THE WATER MAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED FOR THE MAXIMUM EXPECTED SURCHARGE HEAD PRIOR TO BACKFILLING.

SANITARY SEWERS

1. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION, AND ALL SUBSEQUENT REVISIONS THERETO ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. ALL SANITARY SEWER PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION III OF THE "STANDARD SPECIFICATIONS."
3. ALL SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 PIPE PER ASTM D-3034 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D-3212, UNLESS OTHERWISE NOTED.
   3.1. WHERE SANITARY SEWER PIPE IS NOTED AS PVC C-900, THE PIPE SHALL BE IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) C-900 WITH WATERTIGHT, PRESSURE RATED JOINTS CONFORMING TO ASTM D-3139.
4. SANITARY SEWER CONSTRUCTION SHALL COMMENCE AT THE EXISTING MANHOLE(S) AND/OR CONNECTION POINT(S) INDICATED ON THE PLANS.
   4.1. A WATERTIGHT PLUG SHALL BE INSTALLED AND LEFT IN PLACE AT THE POINT OF COMMENCEMENT UNTIL THE REMAINDER OF THE PROPOSED SEWERS HAVE BEEN CONSTRUCTED, PROPERLY TESTED AND DEEMED READY FOR FINAL ACCEPTANCE.
5. ALL SANITARY SEWER TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF DIVISION II OF THE "STANDARD SPECIFICATIONS."
   5.1. ALL SANITARY SEWERS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE, MATERIAL SHALL BE EXTENDED A MINIMUM OF 12" OVER THE TOP OF THE PIPE PER ASTM D-2321. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING IDOT GRADATION CA-11 OR CA-13.
   5.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY, PER ASTM D-1557, OVER ALL SANITARY SEWERS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS.
6. THE CONTRACTOR IS REQUIRED TO RECORD THE LOCATION OF ALL SEWERS AND FURNISH THE INFORMATION TO THE PROJECT ENGINEER AND/OR OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL LOCATE ALL SEWERS BY MEASUREMENTS TO LOT CORNERS OR OTHER PERMANENT SITE FEATURE AND SHALL FURNISH A COPY OF SUCH LOCATIONS TO THE PROJECT ENGINEER AND/OR OWNER'S REPRESENTATIVE UPON PROJECT COMPLETION. THIS INFORMATION SHALL ALSO INCLUDE THE DEPTH OF EACH SEWER. IF THE CONTRACTOR FAILS TO PROPERLY LOCATE ANY SEWER, HE SHALL BE RESPONSIBLE FOR ALL COSTS WHICH ARE INCURRED AS A RESULT OF THE IMPROPERLY LOCATED UTILITIES.
7. ALL SANITARY SEWER MANHOLES SHALL BE PRECAST CONCRETE AND SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF DIVISION III, SECTION 32 OF THE "STANDARD SPECIFICATIONS" AND THE DETAILS IN THE PLANS.
   7.1. A FLEXIBLE TYPE JOINT SHALL BE FURNISHED AT POINTS OF ENTRY INTO AND EXITING FROM MANHOLE STRUCTURES AND SHALL BE OF A DESIGN APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. THIS FLEXIBLE JOINT MAY CONSIST OF A SLEEVE OF HIGH QUALITY SYNTHETIC RUBBER WITH A SUBSTANTIAL SERRATED FLANGE WHICH IS CAST DIRECTLY INTO THE WALL OF THE MANHOLE TO FORM A WATERTIGHT SEAL AND PROTRUDES OUTSIDE OF THE MANHOLE WALL TO CONNECT WITH THE PIPE ENTERING/EXITING THE MANHOLE. WHEN THIS TYPE OF FLEXIBLE JOINT IS USED, THE SLEEVE SHALL SLIP OVER THE END OF THE PIPE ADJACENT TO THE MANHOLE BASE AND SHALL BE SECURED BY MEANS OF A STAINLESS STEEL STRAP CLAMP EQUIPPED WITH A DRAIN BOLT AND NUT.
8. ALL REQUIRED MANHOLE AND ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYLROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS.
9. AFTER FINAL ADJUSTMENTS HAVE BEEN MADE, ALL JOINTS IN PRECAST STRUCTURES SHALL BE MORTARED. THE MORTAR SHALL BE COMPOSED OF ONE (1) PART CEMENT TO THREE (3) PARTS SAND, BY VOLUME, BASED ON DRY MATERIALS, AND SHALL BE PROPERLY WETTED BEFORE LAYING.
10. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR MANHOLE, THE FOLLOWING METHOD SHALL BE USED:
   10.1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
11. ALL FLOOR DRAINS SHALL BE CONNECTED TO THE SANITARY SEWER. ALL FOOTING DRAINS AND DOWNSPOUTS SHALL DISCHARGE ONTO THE GROUND OR INTO THE STORM SEWER SYSTEM AS INDICATED ON THE DRAWINGS.
12. UPON COMPLETION OF THE SANITARY SEWER CONSTRUCTION, INCLUDING THE SERVICE LINES, ALL SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTIONS 31-1.12 AND 31-1.13(B) OF THE "STANDARD SPECIFICATIONS" AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY OR AUTHORIZED REPRESENTATIVE.

WATER MAINS

1. ALL WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. ALL WATER MAIN PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION IV OF THE "STANDARD SPECIFICATIONS."
3. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE, CLASS 52 IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS C-151, C-111 AND C-104, UNLESS OTHERWISE NOTED.
4. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATER MAIN PIPE SHALL BE LAID WITH A MINIMUM COVER OF 5-1/2 FEET FROM THE PROPOSED FINISH GRADE INDICATED ON THE PLANS OR TO THE SPECIFIC TOP OF PIPE ELEVATION INDICATED ON THE PLANS FOR THE WATER MAIN. NO BERMS ARE ALLOWED OVER WATER MAINS EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ADEQUATE GROUND COVER.
5. ALL DUCTILE IRON WATER MAIN PIPE SHALL BE CONSTRUCTED WITH A MINIMUM OF 8-MIL POLYETHYLENE ENCASEMENT TO PREVENT CORROSION.
6. ALL WATER MAIN TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF DIVISION II OF THE "STANDARD SPECIFICATIONS."
   6.1. ALL WATER MAINS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING IDOT GRADATION CA-7, CA-11 OR CA-13.
   6.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY, PER ASTM D-1557, OVER ALL WATER MAINS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS.
7. A WATERTIGHT PLUG SHALL BE PLACED IN THE END OF THE WATER MAIN PIPE AT THE END OF EACH CONSTRUCTION DAY.
8. UPON COMPLETION OF THE WATERMAIN CONSTRUCTION, ALL WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS:
   8.1. HYDROSTATIC PRESSURE AND LEAKAGE TESTS IN ACCORDANCE WITH SECTION 41-2.14 OF THE "STANDARD SPECIFICATIONS" AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY.
   8.2. DISINFECTION IN ACCORDANCE WITH SECTION 41-2.15 OF THE "STANDARD SPECIFICATIONS" AND THE METHODS STATED IN AWWA STANDARD C651 AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY.

WATER SERVICES AND CONNECTIONS

1. ALL WATER SERVICE PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION IV OF THE "STANDARD SPECIFICATIONS."
2. ALL WATER SERVICE LINES 2" IN DIAMETER OR SMALLER SHALL BE TYPE 'K' COPPER TUBING CONFORMING TO ASTM B-88-56. NO COUPLINGS SHALL BE PERMITTED BETWEEN THE CORPORATION AND CURB STOPS OR BETWEEN THE CURB STOP AND THE BUILDING.
3. ALL WATER SERVICE FITTINGS INCLUDING CORPORATION STOPS, SERVICE BOXES AND BUFFALO BOXES SHALL BE AS MANUFACTURED BY THE MUELLER COMPANY OR APPROVED EQUAL.
4. SERVICE BOXES SHALL BE OF SUFFICIENT LENGTH TO PERMIT THE TOP TO BE INSTALLED FLUSH WITH THE FINISHED GRADE. EACH SERVICE BOX SHALL BE PROVIDED WITH A CAP WITH THE WORD "WATER" CAST IN THE TOP.
5. ALL VALVES, VALVE BOXES OR VAULTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF DIVISION IV, SECTION 44 OF "THE STANDARD SPECIFICATIONS."
6. VALVES SHALL BE AMERICAN FLOW CONTROL SERIES 2500 DUCTILE IRON RESILIENT SEAT EPOXY COATED WEDGE VALVES OR APPROVED EQUAL.
7. ALL PRESSURE CONNECTIONS TO THE EXISTING WATER MAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 46 OF THE "STANDARD SPECIFICATIONS" AND SHALL INCLUDE THE INSTALLATION OF A FULL STAINLESS STEEL TAPPING SADDLE.
8. ALL VALVES SHALL BE INSTALLED IN VALVE VAULTS HAVING A MINIMUM DIAMETER OF FIVE (5) FEET BELOW THE PRECAST CONCRETE CONE SECTION. THE VAULTS SHALL BE CONSTRUCTED OF PRECAST CONCRETE SECTIONS AND SHALL CONFORM TO THE DETAILS SPECIFIED ON THE PLANS. ALL VALVE VAULTS SHALL BE LEAK PROOF.
9. ALL TEMPORARY CONNECTIONS FOR CONSTRUCTION PURPOSES TO NEWLY INSTALLED OR EXISTING WATER MAINS SHALL BE MADE AND METERED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
10. ALL REQUIRED RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYLROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS.

WATER MAINS AND SEWERS VERTICAL SEPARATION REQUIREMENTS

1. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
2. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN:
   2.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN 1 ABOVE; OR
   2.2. THE WATER MAIN PASSES UNDER A SEWER OR DRAIN
3. A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. THE SEWER OR DRAIN LINES SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING OF THE WATER MAIN, AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER.
4. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.

STORM SEWERS

1. ALL STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION ("STANDARD SPECIFICATIONS"), THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("IDOT STANDARD SPECIFICATIONS"), ANY SPECIAL PROV

STORMWATER POLLUTION PREVENTION NOTES

1. COPIES OF THE APPROVED STORM WATER POLLUTION PREVENTION PLANS SHALL BE MAINTAINED ON THE SITE AT ALL TIMES ALONG WITH THE PERMIT, INCIDENT OF NON-COMPLIANCE (I.O.N.) FORM AND INSPECTION FORMS.
2. CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO M-T CIVIL ENGINEERING ONCE THE SITE HAS BEEN STABILIZED. THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.
   - 3.1. ILLINOIS QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). REQUIRED REPAIRS SHOULD BE COMPLETED WITHIN FORTY-EIGHT (48) HOURS OF THE INSPECTION.
   - 3.2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFORM ANY SUBCONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.
4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. THEY SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SITE STABILIZATION HAS BEEN ACHIEVED.
5. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAT INDICATED ON THESE PLANS (INCLUDING BUT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED FOR REVIEW.
6. THE GOVERNING AUTHORITIES HAVING JURISDICTION OVER THE PROJECT SITE MUST BE NOTIFIED ONE (1) WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE (1) WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE (1) WEEK PRIOR TO THE FINAL INSPECTION.
7. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE GOVERNING AUTHORITY.
8. IF AFTER REPEATED FAILURE ON THE PART OF THE CONTRACTOR TO PROPERLY CONTROL EROSION, POLLUTION, AND/OR SILTATION, THE GOVERNING AUTHORITIES RESERVE THE RIGHT TO EFFECT NECESSARY CORRECTIVE MEASURES AND CHARGE ANY COSTS TO THE CONTRACTOR.
9. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL LATEST EDITION.
10. INLET PROTECTION SHALL BE INSTALLED AROUND EACH INLET OR CATCH BASIN. THESE SHALL BE MAINTAINED UNTIL THE TRIBUTARY DRAINAGE AREAS HAVE ADEQUATE GRASS COVER OR APPROPRIATE GROUND STABILIZATION.
11. ALL STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS.
12. CONTRACTORS SHALL MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION.
13. ALL DISTURBED AREAS SHOULD BE SEEDED OR SODDED WITHIN THREE (3) DAYS OF FINAL DISTURBANCE.
14. WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIALS ARE DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
15. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF INLET PROTECTION OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
16. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
17. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE FROM THE PROPOSED CONSTRUCTION ENTRANCE. THE USE OF ANY OTHER ACCESSES IS PROHIBITED.
18. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED OR OTHERWISE DISCHARGED FROM THE SITE INTO SEDIMENT BASINS, SILT TRAPS, DEWATERING BAGS OR POLYMER MIXING SWALE. DEWATERING DIRECTLY INTO FIELD TILES, WETLANDS, ADJACENT PROPERTIES, PUBLIC RIGHTS-OF-WAY, STREAMS, LAKES, PONDS, RIVERS, OR STORMWATER SYSTEMS IS PROHIBITED.
19. ALL STOCKPILES SHOULD BE STABILIZED WITHIN THREE (3) DAYS OF FORMING THE STOCKPILE.
20. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED AS FOLLOWS:
   - 20.1. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
   - 20.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (I.E. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASES.
21. EROSION CONTROL BLANKETS SHALL BE USED IN AREAS OF 6:1 SLOPE OR STEEPER AND AS SHOWN ON THE PLANS.
22. ALL DISTURBED GREEN SPACES WITHIN THE R.O.W. SHALL BE RESTORED WITH 6" OF TOPSOIL AND CLASS 2A SEEDING.
23. THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT THE SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.
24. ONCE ALL UPSTREAM AREAS ARE STABILIZED WITH SEED AND BLANKET OR SOD AS SHOWN IN THE PLANS, SILT FENCING SHALL BE REMOVED AND THE TRENCH SHALL BE RESTORED WITH TOPSOIL, SEED, FERTILIZER AND BLANKETING. RESTORATION SHALL OCCUR IMMEDIATELY FOLLOWING THE REMOVAL OF THE SILT FENCE. RESTORATION SHALL BE COMPLETED THE SAME WORKING DAY AS ANY SILT FENCING REMOVAL AND AT LEAST 2 HOURS BEFORE ANY FORECASTED PRECIPITATION.
25. ALL TEMPORARY EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PROPERLY STABILIZED OR DISPOSED OFF BY THE CONTRACTOR.

SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION SCHEDULE

1. OBTAIN NPDES AND OTHER APPLICABLE SITE PERMITS AND REVIEW PROJECT'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP). CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND UPDATING THE SWPPP THROUGHOUT THE DURATION OF CONSTRUCTION AS NECESSARY UNTIL FINAL SITE STABILIZATION IS ACHIEVED.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. INSTALL PERIMETER SEDIMENT CONTROL MEASURES (E.G. SILT FENCE).
4. INSTALL PROTECTION DEVICES FOR EXISTING DRAINAGE INLET AND OUTLET STRUCTURES, IF APPLICABLE.
5. PERFORM STORMWATER POLLUTION PREVENTION SITE INSPECTIONS ON A WEEKLY BASIS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). AT A MINIMUM, THE INSPECTIONS SHALL INCLUDE THE DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, ALL STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ANY ADDITIONAL BEST MANAGEMENT PRACTICES IDENTIFIED IN THE SWPPP.
   - 5.1. ALL SITE EROSION AND SEDIMENT CONTROL MEASURES AND BEST MANAGEMENT PRACTICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL BE CONTINUOUSLY MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION (SEE THE STORMWATER POLLUTION PREVENTION NOTES AND STORMWATER POLLUTION PREVENTION MAINTENANCE SCHEDULE FOR ADDITIONAL INFORMATION). CONTRACTOR SHALL MAKE AND COMPLETE THE REQUIRED REPAIRS WITHIN FORTY-EIGHT (48) HOURS OF THE INSPECTION.
   - 5.2. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL STRUCTURAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE SITE INSPECTIONS.
   - 5.3. PERFORM STREET CLEANING OPERATIONS AND OTHER BEST MANAGEMENT PRACTICES AS NEEDED.
6. PERFORM SITE CLEARING AND GRUBBING AND REMOVE EXISTING VEGETATION AS NEEDED FOR INITIAL SITE GRADING OPERATIONS. VEGETATED SITE AREAS THAT ARE NOT INCLUDED WITH THE INITIAL GRADING SHALL REMAIN UNDISTURBED. ALL TOPSOIL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE AND STABILIZED WITHIN THREE (3) DAYS OF FORMING THE STOCKPILE.
7. REMOVE ALL ITEMS NOTED FOR REMOVAL IN THE DEMOLITION PLAN.
8. PERFORM ROUGH GRADING OPERATIONS, CONSTRUCT OVERFLOW ROUTES, AND STABILIZE ALL DISTURBED AREAS, INCLUDING BUT NOT LIMITED TO STEEP SLOPES, DRAINAGE CHANNELS AND SWALES (I.E. TEMPORARY AND PERMANENT SEEDING, EROSION CONTROL BLANKETS, RIP-RAP, CHECK DAMS, TEMPORARY DRAINAGE DIVERSIONS, ETC.).
9. INSTALL TEMPORARY CONCRETE WASHOUT FACILITY.
10. INSTALL BUILDING FOUNDATIONS AND BEGIN BUILDING CONSTRUCTION.
11. INSTALL DETENTION SYSTEMS, STORM SEWERS AND OTHER SITE UTILITIES AND IMMEDIATELY INSTALL DRAINAGE INLET AND OUTLET PROTECTION DEVICES AS INDICATED ON THE PLANS.
12. PROVIDE TEMPORARY SEEDING AND/OR MULCHING FOR ALL DISTURBED SITE AREAS THAT WILL NOT BE WORKED ON FOR MORE THAN FOURTEEN (14) DAYS.
13. INSTALL CURBS AND BEGIN SITE PAVING OPERATIONS (I.E. DRIVEWAYS, SIDEWALKS, ETC.).
14. COMPLETE BUILDING CONSTRUCTION AND REMAINING SITE IMPROVEMENTS.
15. REMOVE TEMPORARY SITE EROSION AND SEDIMENT CONTROL MEASURES WITHIN THIRTY (30) DAYS OF FINAL SITE STABILIZATION.
16. SUBMIT A NOTICE OF TERMINATION (N.O.T.) TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY UPON COMPLETION OF ALL SITE CONSTRUCTION AND FINAL SITE STABILIZATION (I.E. OVER 70% VEGETATIVE COVER).

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WARRENVILLE, IL 60555

THE PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS 60174

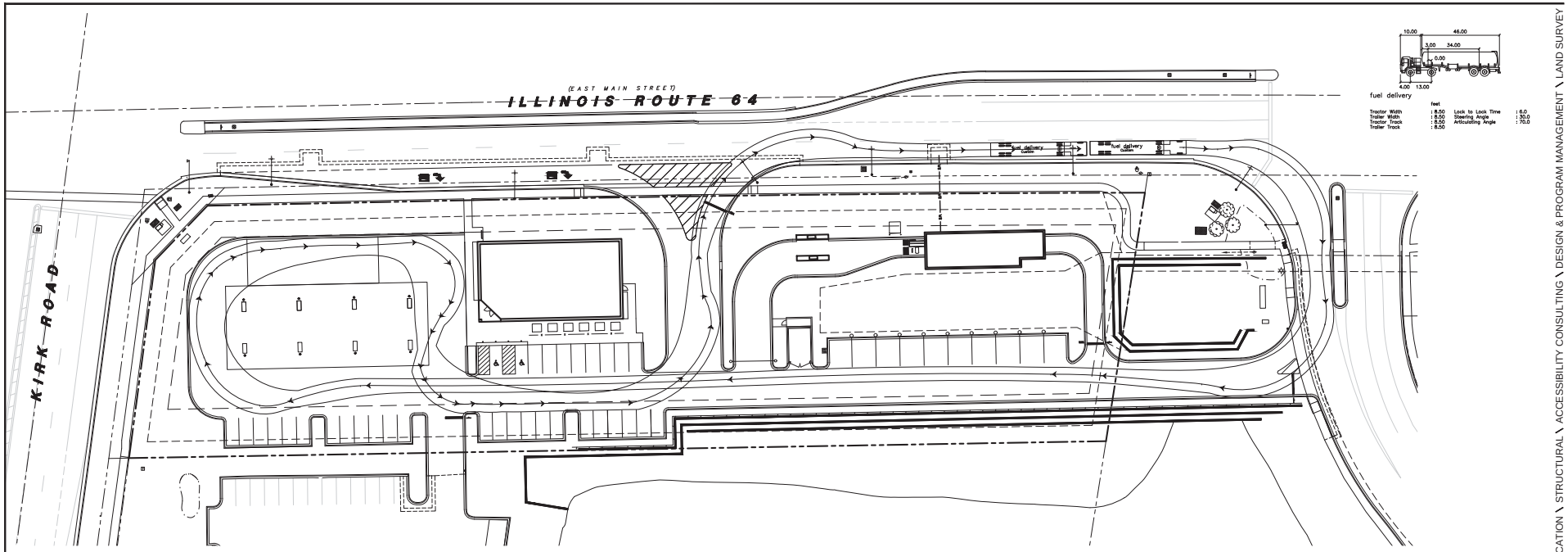
ISSUE

TO	DATE
REV. SITE	8/19/19
REV. SITE	8/26/19
REV. SITE	1/13/20
REV. SITE	2/4/20
REV. SITE	2/11/20
REV. SITE	2/19/20
REV. SITE	6/8/20

CHECK:TOA
DRAWN:TEP
JOB:1910803C

C-7.1
PROJECT SPECIFICATIONS

Revised- Presented to Plan Commission 8-4-20



NORTH

1" = 30'

00 15 30 60 120

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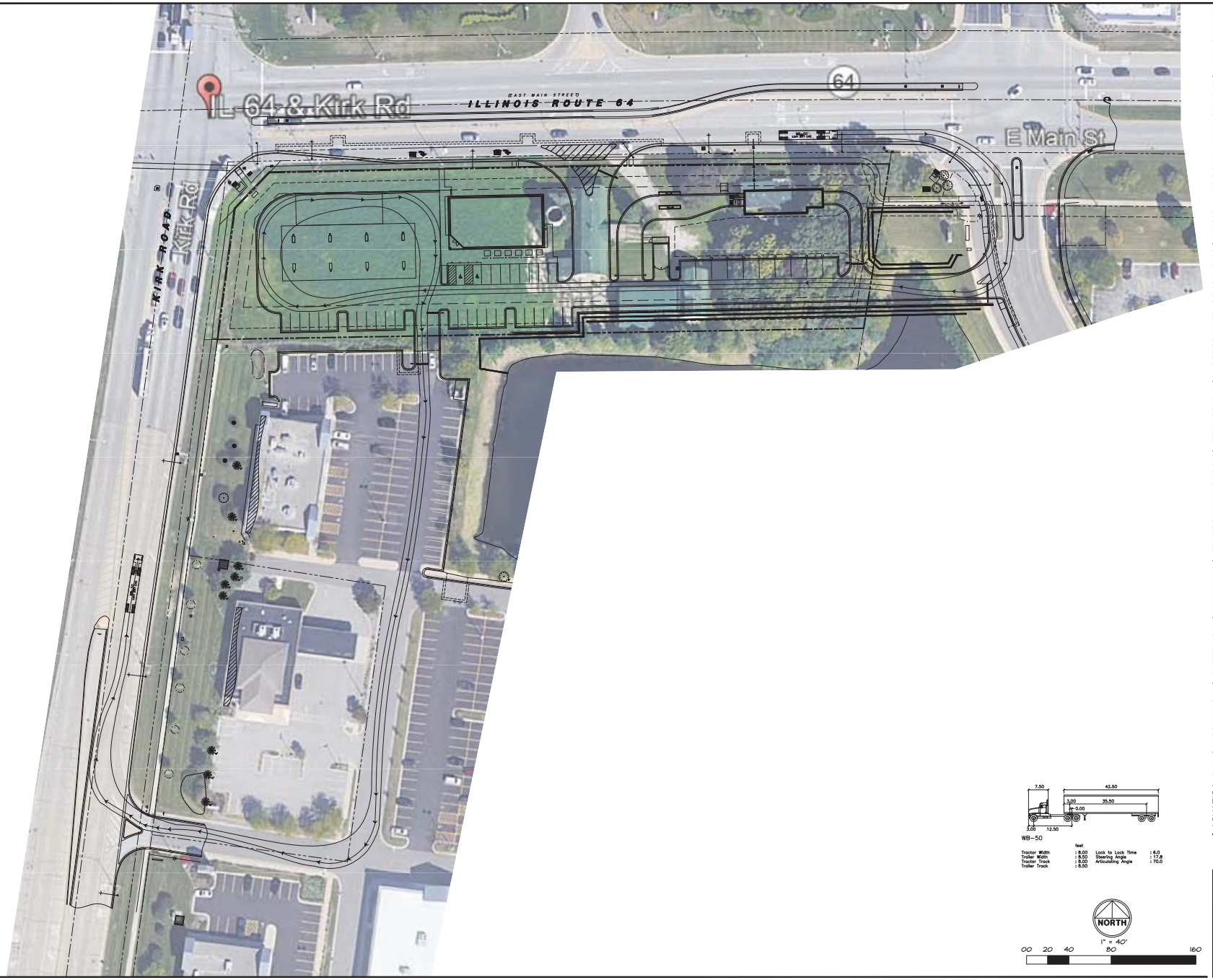
REV. SITE	2/19/20
REV. SITE	6/8/20
REV. SITE	6/29/20

CHECK:TOA
DRAWN:TEP
JOB:1910803C

C-8.0
TRUCK CIRCULATION PLAN

Revised- Presented to Plan Commission 8-4-20



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ISSUE

TO	DATE
REV. SITE	8/26/19
REV. SITE	1/13/20
REV. SITE	2/4/20
REV. SITE	2/11/20
REV. SITE	2/19/20
REV. SITE	6/8/20
REV. SITE	6/29/20

CHECK:TOA
DRAWN:TEP
JOB:1910803C

C-9.0
FIRE APPARATUS CIRCULATION PLAN

TOPOGRAPHIC SURVEY

LOCATION MAP

NOTES:

1. SITE BENCHMARK – SET CROSS ON SSE BOLT OF HYDRANT LOCATED APPROXIMATELY 4.3' S OF EAST MAIN STREET AND 290' E OF KIRK ROAD, AS SHOWN. ELEVATION=789.75' (NAVD88)
2. THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION AND VISIBLE MARKINGS ONLY.
3. FIELD WORK COMPLETED ON 3/5/2019
4. SURVEY PREPARED FOR: CIMA DEVELOPERS, INC.
5. ANY DISCREPANCIES FOUND WITHIN THIS DOCUMENT NEED TO BE REPORTED TO THE SURVEYOR AS SOON AS POSSIBLE.

1. RIM=781.66' (SANITARY)
48" CONCRETE STRUCTURE
INV=771.53' (UNKNOWN N/S)
INV=772.06' (UNKNOWN E)
NO FLOW WITNESSED
TOP OF WATER=777.26'

2. RIM=780.60' (STORM)
24" CONCRETE STRUCTURE
INV=777.83' (8" CPP SSW)
INV=777.55' (12" RCP NE)

3. RIM=780.77' (STORM)
48" CONCRETE STRUCTURE
INV=777.57' (8" PVC NW)
INV=777.25' (18" RCP N)
INV=777.37' (12" RCP E)
INV=777.27' (18" RCP SE)
INV=777.06' (8" CPP S)

4. RIM=781.85' (STORM)
24" CONCRETE STRUCTURE
INV=778.05' (12" RCP SE)

5. RIM=783.66' (STORM)
48" CONCRETE STRUCTURE
INV=778.96' (12" RCP NE)
INV=778.31' (15" RCP SW)

6. RIM=786.11' (STORM)
48" CONCRETE STRUCTURE
INV=780.24' (12" RCP N)
INV=779.89' (15" RCP W)
INV=779.96' (15" RCP E)

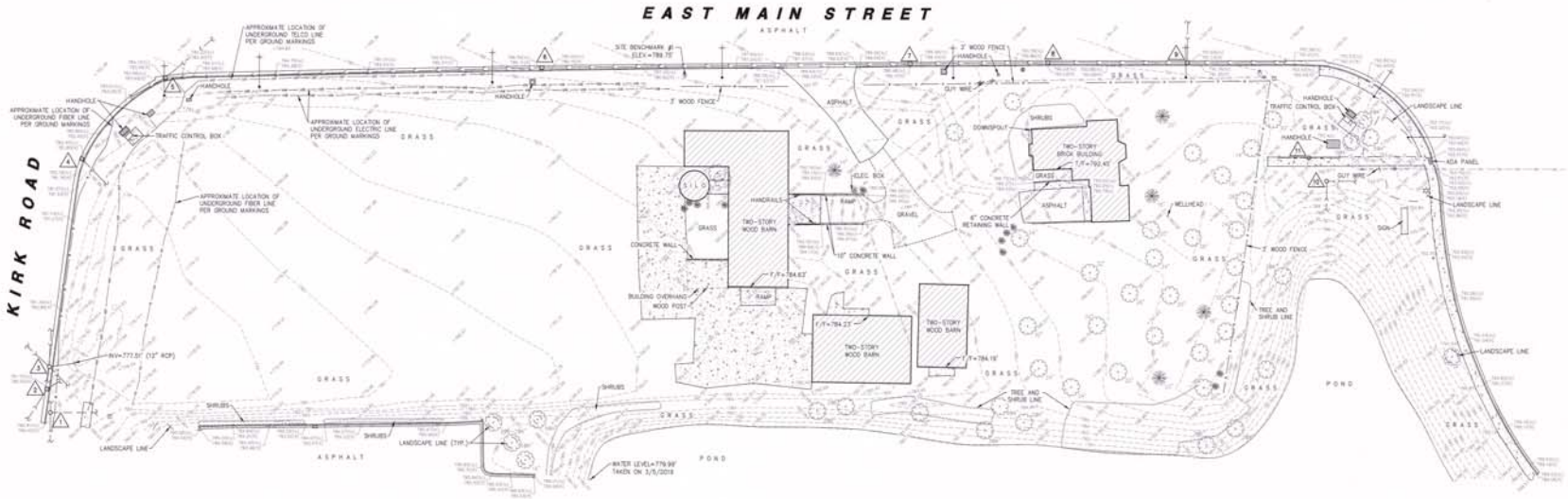
7. RIM=789.01' (STORM)
48" CONCRETE STRUCTURE
INV=783.62' (15" RCP E/W)
INV=783.81' (6" CPP W)
INV=785.03' (6" CPP E)

8. RIM=790.03' (STORM)
48" CONCRETE STRUCTURE
INV=783.81' (15" RCP W)
INV=785.63' (12" RCP N)
INV=783.63' (15" RCP E)
INV=784.73' (6" CPP E)

9. RIM=791.23' (STORM)
48" CONCRETE STRUCTURE
INV=786.46' (12" RCP N/E)
INV=787.43' (6" CPP E)
INV=785.00' (15" RCP W)
INV=786.33' (6" CPP W)

10. RIM=793.28' (SANITARY)
48" CONCRETE STRUCTURE
INV=783.99' (8" METAL E)
INV=785.13' (8" METAL S)

11. RIM=792.25' (WATER)
48" CONCRETE STRUCTURE
TOP OF PIPE=785.88' (12" DIP E/W)



LEGEND

PROPERTY LINE	UTILITY POLE	SOIL BORING
CENTER LINE	TYPICAL SIGN	TELEPHONE MANHOLE
EASEMENT LINE	FLARED END SECTION	PARKING METER
BUILDING SETBACK	CLOSED MANHOLE	GUARDRAIL
(000') RECORD DATA	OPEN GRATE MANHOLE	GUY WIRE ANCHOR
(N) (S) (E) (W)	BEEHIVE GRATE MANHOLE	CONTOUR LINE
775 CONCRETE	GUTTER FRAME MANHOLE	TREE LINE / HEDGE LINE
	VALVE VAULT	EDGE GRAVEL/STONE
	FIRE HYDRANT	FENCE LINE
EVERGREEN/DECIDUOUS	S-BOX / SERVICE VALVE	STORM SEWER
	POST LIGHT/GROUND LIGHT	SANITARY SEWER
SHRUB/SHRUB LINE	AREA LIGHT/LIGHT POLE	COMBO SEWER
MONITOR WELL	STREET LIGHT	WATER SERVICE LINE
GAS VALVE	TRAFFIC SIGNAL	WATER MAIN
UTILITY MARKINGS (cable,gas,fiber) (telephone,gas)	MAST ARM SIGNAL	OVERHEAD LINE
MAILBOX	HANDHOLE (electric/traffic)	FIBER OPTIC LINE
	GAS METER	GAS LINE
	ELECTRIC METER	U.G. TELCO LINE
	PEDESTAL(TELCO,ELEC,CABLE)	U.G. ELECTRIC LINE

N

SCALE: 1" = 30'

00 15 30 60

BAR SCALE

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

WE THE W-T GROUP DO HEREBY DECLARE THAT THIS TOPOGRAPHIC SURVEY WAS MADE UNDER OUR DIRECTION AND SUPERVISION. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYS.

GIVEN UNDER OUR HAND AND SEAL THIS 12TH DAY OF MARCH A.D. 2019 AT HOFFMAN ESTATES, ILLINOIS.

THE W-T GROUP, LLC

FRANJO I. MATICIC - PLS #35-2035556 EXPIRES 11/30/2020
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184.007570-0001

PROFESSIONAL LAND SURVEYOR FRANJO I. MATICIC 035-2035556 HOFFMAN ESTATES ILLINOIS

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IL Corporation No. | IT 2018 | 184.007570-0001 Expires 04.30.2019
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PRIDE OF SAINT CHARLES
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS

ISSUE

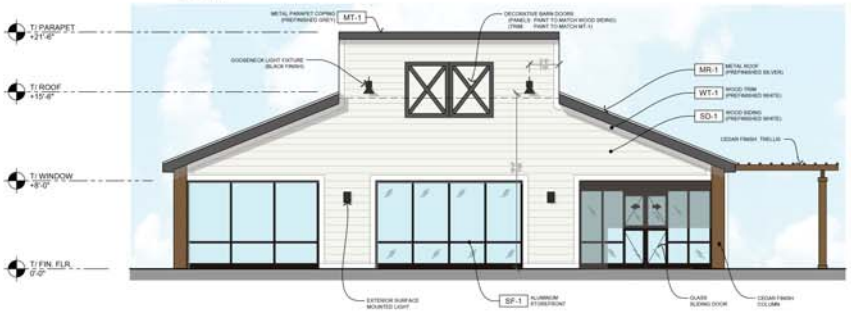
TO	DATE
CLIENT	3/12/19

CHECK:FIM
DRAWN:BMB
JOB: 1910803C

SUR-1
TOPOGRAPHIC SURVEY

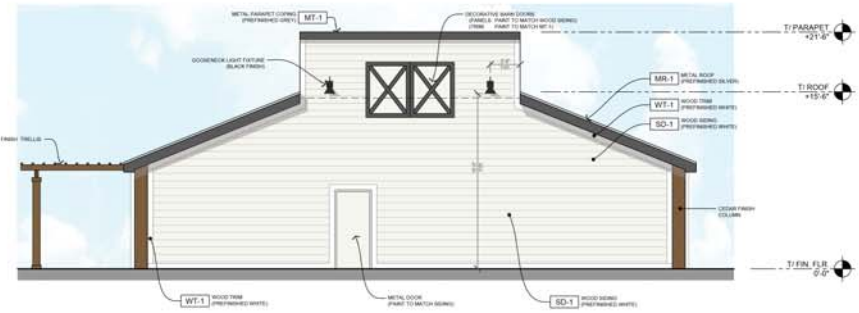
01 - SOUTH ELEVATION

3/16" = 1'-0"



02 - WEST ELEVATION

3/16" = 1'-0"



03 - EAST ELEVATION

3/16" = 1'-0"

04 - NORTH ELEVATION

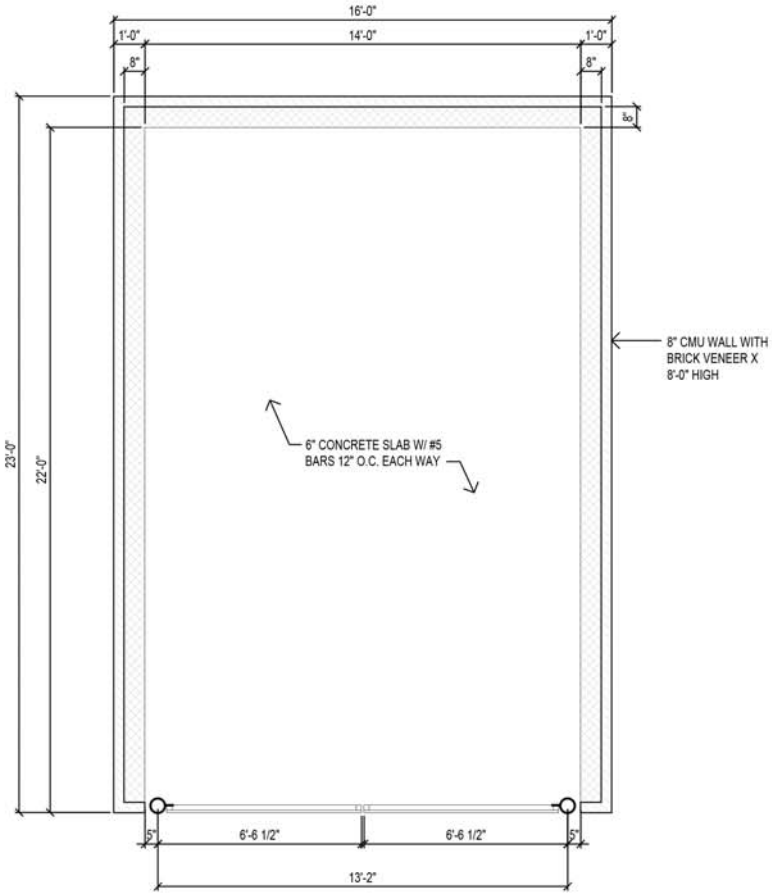
3/16" = 1'-0"

01 - NORTH ELEVATION
3/16" = 1'-0"

02 - WEST ELEVATION
3/16" = 1'-0"

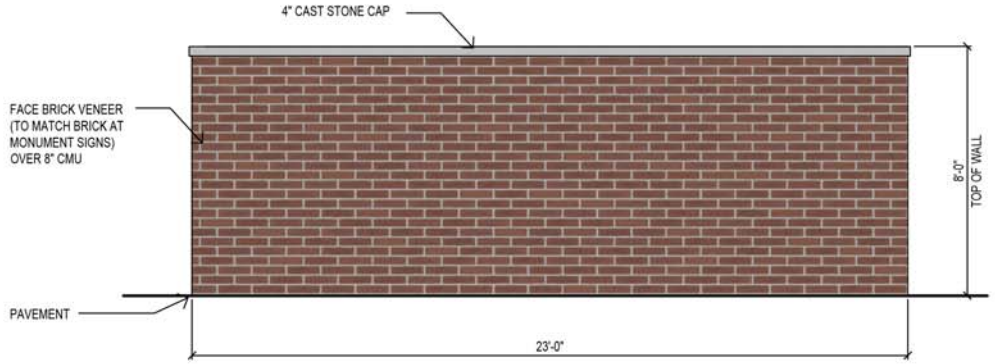
03 - EAST ELEVATION
3/16" = 1'-0"

04 - SOUTH ELEVATION
3/16" = 1'-0"



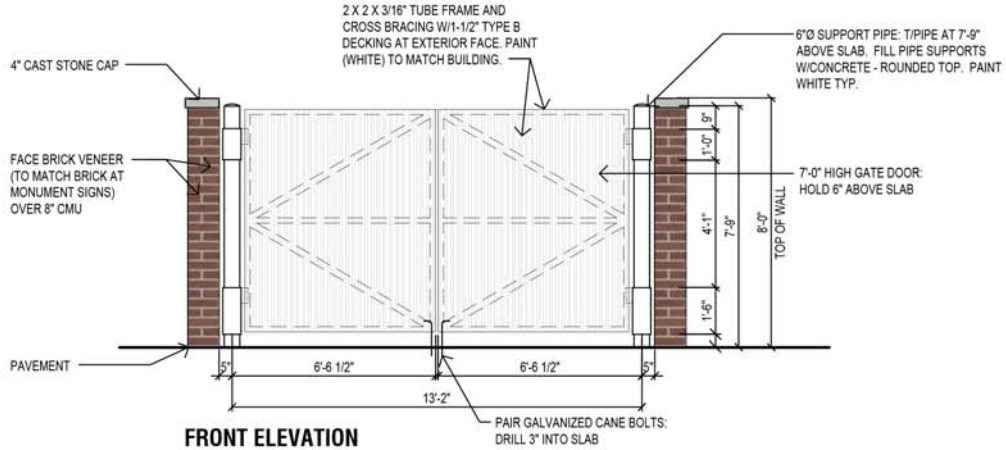
DUMPSTER PLAN

SCALE: 1/4" = 1'-0"



TYPICAL ELEVATION

SCALE: 1/4" = 1'-0"



FRONT ELEVATION

SCALE: 1/4" = 1'-0"

The PRIDE

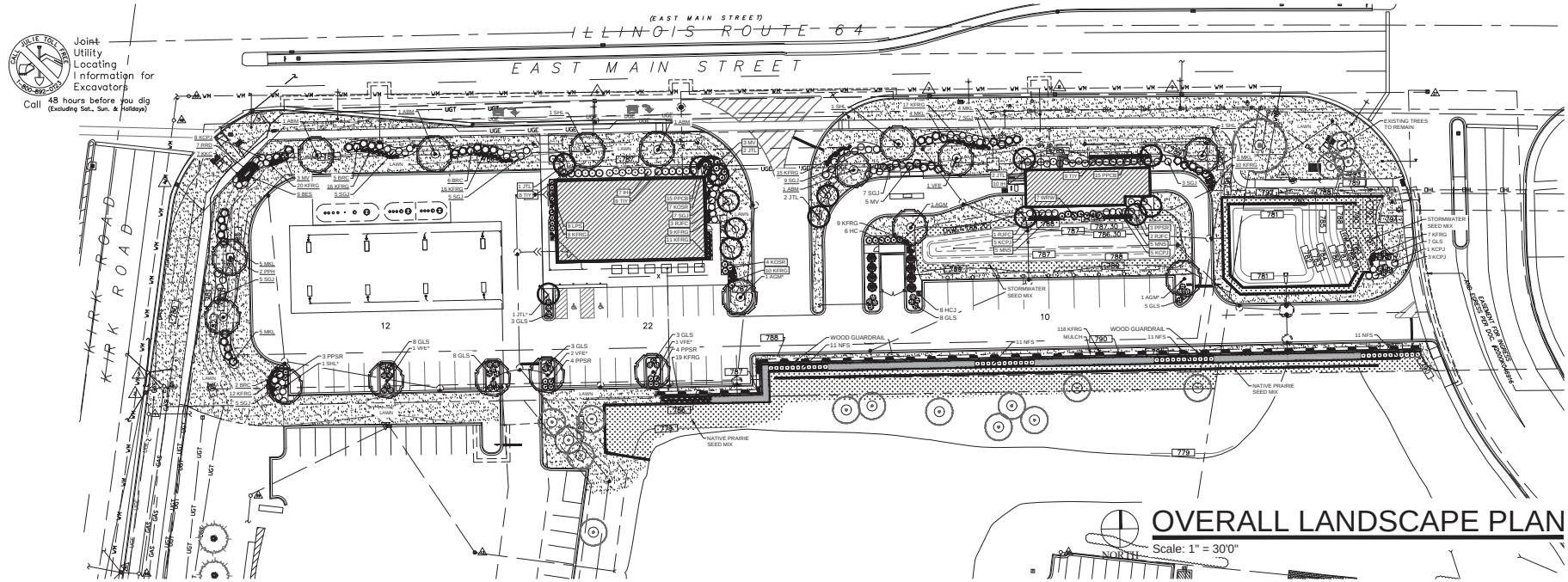
DUMPSTER - PLAN / ELEVATIONS

THE PRIDE OF ST. CHARLES, ILLINOIS

arch7

www.arch7design.com

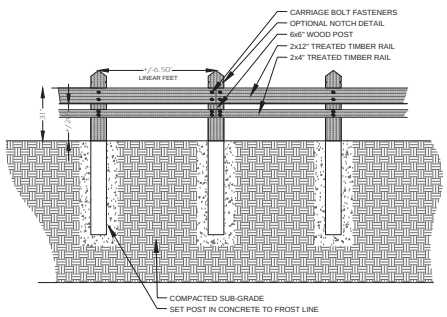
Revised- Presented to Plan Commission 8-4-20



OVERALL LANDSCAPE PLAN

Scale: 1" = 30'0"

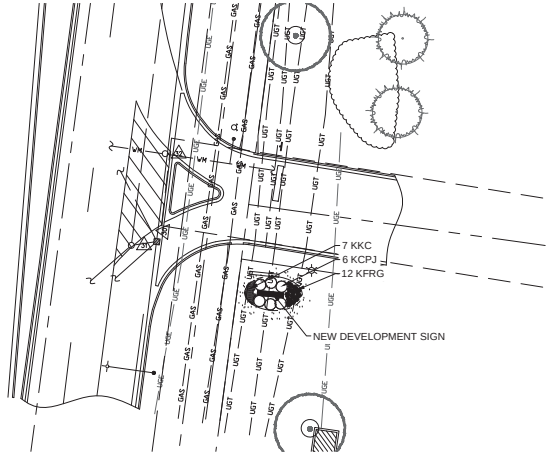
NORTH



1 **DETAIL** WOOD GUARDRAIL

N.T.S. SECTION

EXAMPLE OF WOOD GUARDRAIL



NORTH

KIRK ROAD MONUMENT SIGN LANDSCAPE

Scale: 1" = 10'0"

PLANT ABBREVIATIONS

SHADE TREES (DECIDUOUS)

ABM	Autumn Blaze Maple
PPH	Prairie Pride Hackberry
SHL	Skyline Honeylocust
AGM	Autumn Gold Maidenhair
VFE	Valley Forge American Elm

ORNAMENTAL TREES (DECIDUOUS)

RPH	Rising Fire American Hornbeam
RJFC	Red Jewel Flowering Crabapple
JTL	Ivory Silk Japanese Tree Lilac

EVERGREEN TREES

HCJ	Hetzi Columnar Juniper (upright)

EVERGREEN SHURBS

SGJ	Sea Green Juniper
KCPJ	Kallay Compact Pfitzer Juniper
TYY	Taunton Intermediate Yew

DECIDUOUS SHRUBS

BRC	Brilliant Red Chokeberry
HC	Peking (Hedge) Cotoneaster
IH	Incrediball Hydrangea
GLS	Gro Low Fragrant Sumac
KOSR	Knock Out Shrub Rose
PPSR	Pink Pavement Series Rose
NFS	Neon Flash Spirea
MKL	Miss Kim Dwarf Lilac
MV	Mohican Viburnum
WKW	Wine & Roses Compact Weigela

ORNAMENTAL GRASSES

KFRG	Karl Foerster Feather Reed Grass

HERBACEOUS PERENNIALS

RRD	Rosy Returns Daylilly
PPCB	Palace Purple Coralbells
KXC	Dwarf Catmint
BES	Black-eyed Susan
MNS	May Night Salvia

BUILDING FOUNDATION

STREET FRONTAGE

PARKING ISLAND TREE*

Cardno Native Plant Nursery
www.cardnonativeplantnursery.com
128 Sunset Drive
Walkerton, Indiana 46574
Ph: 574-586-2412

Stormwater Seed Mix

For Use on Stormwater Management Ponds (SMP) side slopes to Normal Water Line (NWL)

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
Carex cristatella	Crested Oval Sedge	1.00
Carex frankii	Bristly Cattail Sedge	1.00
Carex lurida	Bottlebrush Sedge	2.00
Carex sparganioidex v. cephaloidea	Rough-Clustered Sedge	2.00
Carex vulpinoidea	Brown Fox Sedge	6.00
Eleocharis ovata	Blunt Spike Rush	0.50
Elymus virginicus	Virginia Wild Rye	12.00
Glyceria striata	Fowl Manna Grass	1.25
Juncus effusus	Common Rush	1.00
Juncus torreyi	Torrey's Rush	0.25
Leersia oryzoides	Rice Cut Grass	1.00
Panicum virgatum	Switch Grass	2.00
Scirpus atrovirens	Dark Green Rush	1.00
Scirpus cyperinus	Wool Grass	0.50
Scirpus fluviatilis	River Bulrush	0.25
Scirpus validus	Great Bulrush	6.00
	Total	**45.75**
Temporary Cover:		
Avena sativa	Common Oat	360.00
Lolium multiflorum	Annual Rye	116.00
	Total	**476.00**
Forbs:		
Alisma spp.	Water Plantain (Various Mix)	4.25
Asclepias incarnata	Swamp Milkweed	1.50
Bidens spp.	Bidens (Various Mix)	2.00
Helenium autumnale	Sneezeweed	3.00
Mimulus ringens	Monkey Flower	1.00
Pentheorum sedoides	Ditch Stonecrop	0.50
Polygonum pensylvanicum	Pinkweed	4.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Sagittaria latifolia	Broad-Leaf Arrowhead	1.00
Senna hebecarpa	Wild Senna	1.00
Thalictrum dasycarpum	Purple Meadow Rue	2.00
	Total	**21.25**

Approximate area of coverage:	
Total area (SF) of coverage surrounding SWM ponds:	2,690
Total area (acres) of coverage surrounding SWM ponds:	**0.06**

STORMWATER SEED MIX

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

CIMA DEVELOPERS

THE PRIDE OF KANE COUNTY

Southeast Corner of Main St. & Kirk Rd.
St. Charles, IL

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
10.3.19	ISSUE TO OWNER
10.25.19	REVISIONS
03.03.20	REVISIONS
05.15.20	CITY COMMENTS
05.20.20	CITY COMMENTS
05.28.20	REV. MONUMENT SIGN
06.22.20	REVISED CIVIL
07.21.20	REVISED CIVIL
08.03.20	REVISED CIVIL

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

OVERALL LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	19-066
DATE	08.03.20

SHEET NUMBER

L 1.0

Revised- Presented to Plan Commission 8-4-20

Joint Utility Locating Information for Excavators
Call 48 hours before you dig (Excluding Sat., Sun. & Holidays)

SHADE TREES (DECIDUOUS)

ABM	Autumn Blaze Maple
PPH	Prairie Pride Hackberry
SHL	Skyline Honeylocust
AGM	Autumn Gold Maidenhair
VFE	Valley Forge American Elm

ORNAMENTAL TREES (DECIDUOUS)

RFH	Rising Fire American Hornbeam
RJFC	Red Jewel Flowering Crabapple
JTL	Ivory Silk Japanese Tree Lilac

EVERGREEN TREES

HCJ	Hetzi Columnar Juniper (upright)

EVERGREEN SHURBS

SGJ	Sea Green Juniper
KCPJ	Kallay Compact Pfitzer Juniper
TIY	Taunton Intermediate Yew

DECIDUOUS SHRUBS

BRC	Brilliant Red Chokeberry
HC	Peking (Hedge) Cotoneaster
IH	Incrediball Hydrangea
GLS	Gro Low Fragrant Sumac
KOSR	Knock Out Shrub Rose
PPSR	Pink Pavement Series Rose
NFS	Neon Flash Spirea
MKL	Miss Kim Dwarf Lilac
MV	Mohican Viburnum
WRW	Wine & Roses Compact Wiegela

ORNAMENTAL GRASSES

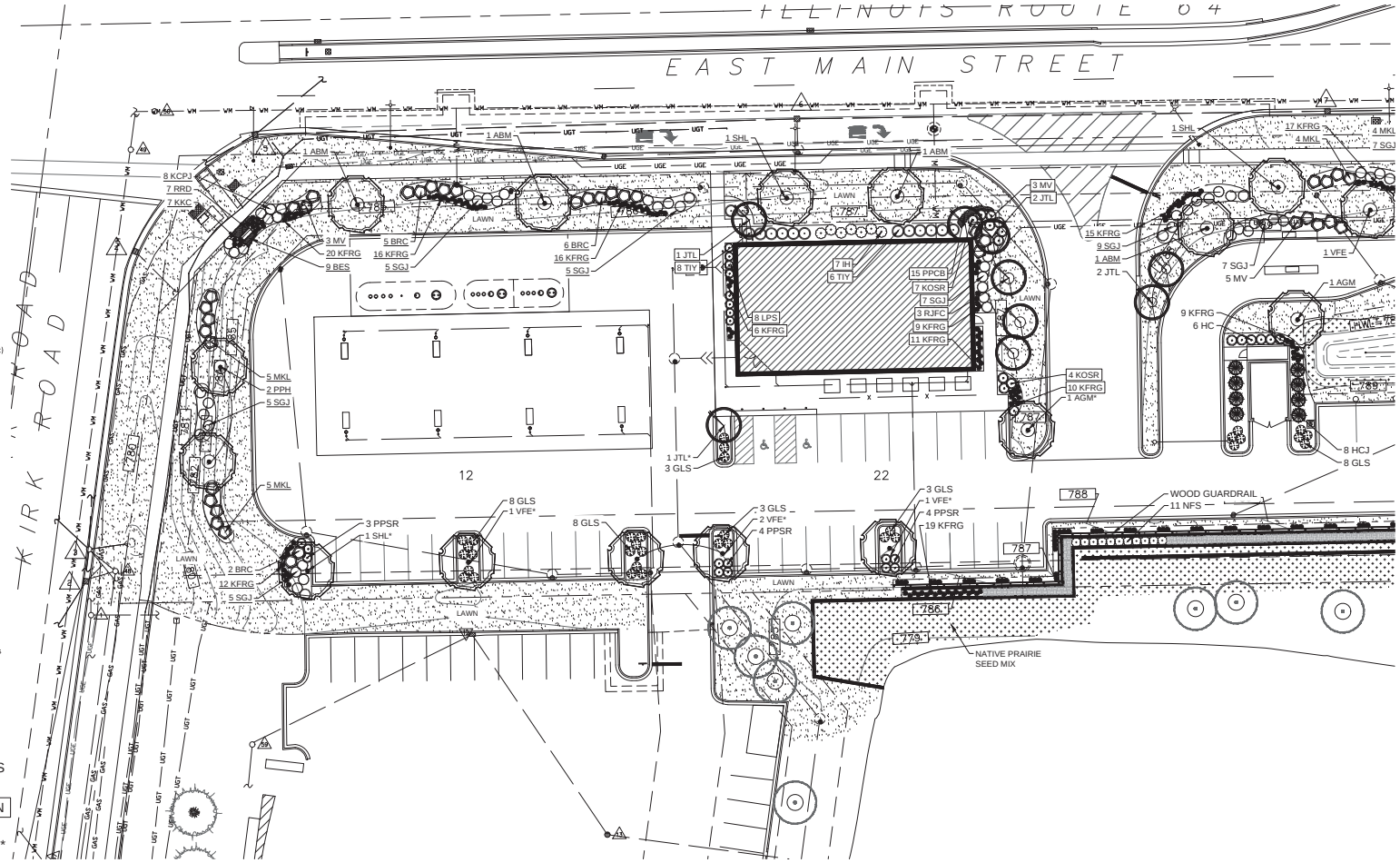
KFRG	Karl Foerster Feather Reed Grass

HERBACEOUS PERENNIALS

RRD	Rosy Returns Daylilly
PPCB	Palace Purple Coralbells
KKC	Dwarf Catmint
BES	Black-eyed Susan
MNS	May Night Salvia

PLANT ABBREVIATIONS

BUILDING FOUNDATION
STREET FRONTAGE
PARKING ISLAND TREE*



NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
davel@wdavidheller.com
www.wdavidheller.com

PROJECT

CIMA DEVELOPERS

THE PRIDE OF KANE COUNTY

Southeast Corner of Main St. & Kirk Rd.
St. Charles, IL

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
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10.25.19	REVISIONS
03.03.20	REVISIONS
05.15.20	CITY COMMENTS
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08.03.20	REVISED CIVIL

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SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	19-066
DATE	08.03.20
SHEET NUMBER	L 1.1

Revised- Presented to Plan Commission 8-4-20

Joint Utility Locating Information for Excavators
Call 48 hours before you dig (Excluding Sat., Sun. & Holidays)

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EVERGREEN TREES

HCJ	Hetzi Columnar Juniper (upright)

EVERGREEN SHURBS

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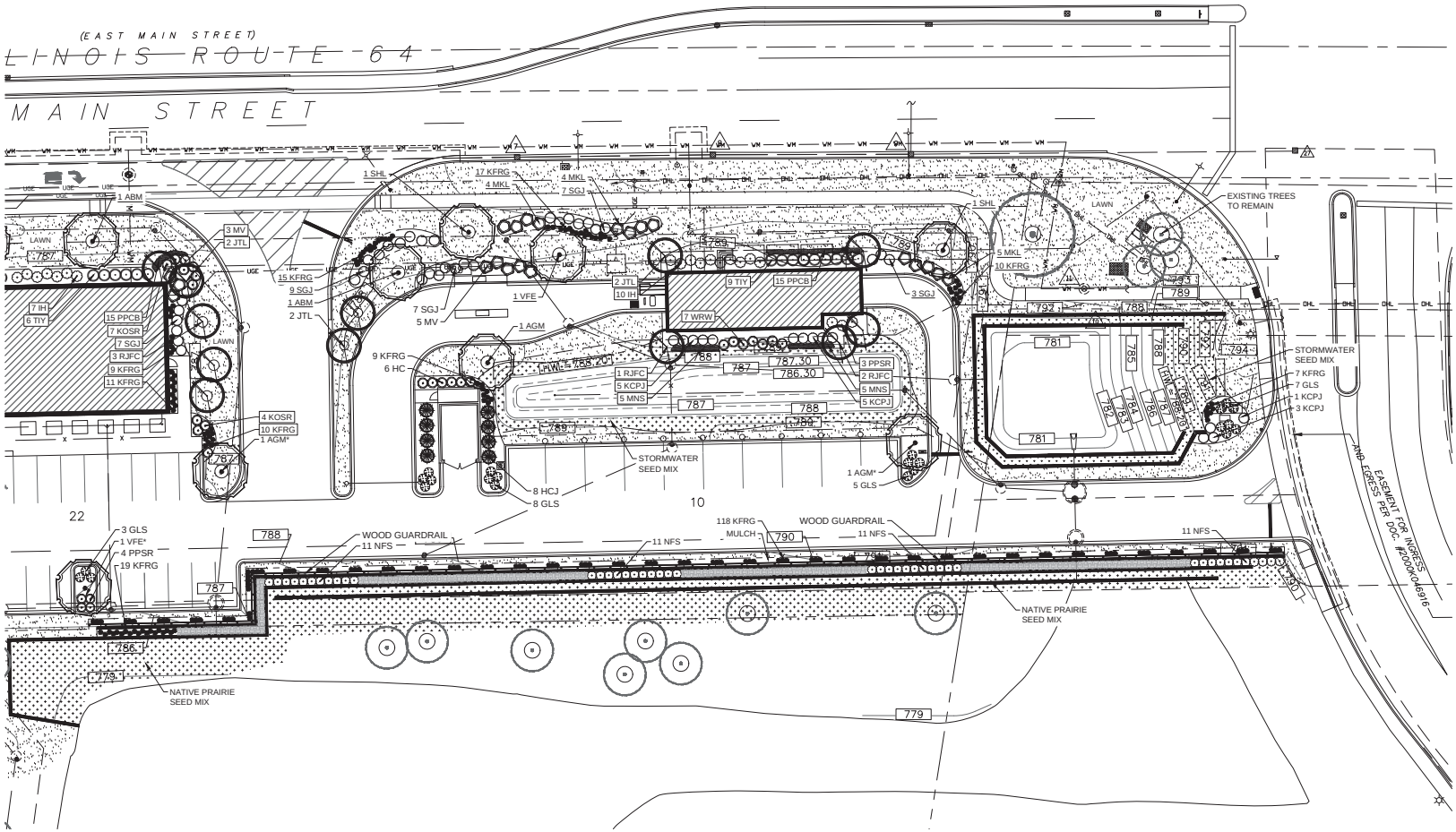
PLANT ABBREVIATIONS

BUILDING FOUNDATION
STREET FRONTAGE
PARKING ISLAND TREE*



NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
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PROJECT

CIMA DEVELOPERS

THE PRIDE OF KANE COUNTY

Southeast Corner of Main St. & Kirk Rd.
St. Charles, IL

ISSUANCE AND REVISIONS

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07.21.20	REVISED CIVIL
08.03.20	REVISED CIVIL

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SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	19-066
DATE	08.03.20
SHEET NUMBER	L 1.2

Revised- Presented to Plan Commission 8-4-20

1. Contractor responsible for contacting JULIE - Utility Locators (811 or 800-892-0123) to have site marked prior to excavation or planting.

2. Contractor to verify all plant quantities shown on Plant & Material List and landscape planting symbols and report any discrepancies to Landscape Architect or General Contractor.

3. All plantings shall comply with standards as described in American Standard of Nursery Stock - Z60.1 ANSI (latest version). Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged. No sub-standard "B Grade" or "Park Grade" plant material shall be accepted. Plant material shall originate from nursery(ies) with a similar climate as the planting site.

4. Any potential plant substitutions must be approved by Landscape Architect or Owner. All plants must be installed as per sizes indicated on Plant & Material Schedule, unless approved by Landscape Architect. Any changes to sizes shown on plan must be submitted in writing to the Landscape Architect prior to installation.

5. Topsoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 18" to insure long-term plant health. Topsoil should be placed within 3" of finish grade by General Contractor / Excavation Contractor during rough grading operations/activity. The landscape contractor shall be responsible for the fine grading of all disturbed areas, planting bed areas, and lawn areas. Crown all parking lot islands a minimum of 6" to provide proper drainage, unless otherwise specified.

6. Tree Planting: Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from the top of the root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Removed biodegradable burlap and wire cage (if present) from the top ⅔ of the rootball and carefully bend remaining wire down to the bottom of the hole. Once the tree has been placed into the hole and will no longer be moved, score the remaining ⅓ of the burlap and remove the twine. Provide three slow release fertilizer for each tree planted.

7. Tree Planting: Backfill tree planting holes 80% existing soils removed from excavation and 20% plant starter mix. Avoid air pockets and do not tamp soil down. Discard any gravel, rocks, heavy clay, or concrete pieces. When hole is ⅔ full, trees shall be watered thoroughly, and water left to soak in before proceeding to fill the remainder of the hole. Water again to full soak in the new planting. Each tree shall receive a 3" deep, 4-5' diameter (see planting details or planting plan) shredded hardwood bark mulch ring around all trees planted in lawn areas. Do not build up any mulch onto the trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the Landscape Contractor.

8. Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a 50/50 mix of plant starter with topsoil. Install topsoil into all plant beds as needed to achieve proper grade and displace undesirable soil (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole(s) are ⅔ full, shrubs shall be watered thoroughly, and water left to soak in before proceeding. Provide slow-release fertilizer packets at the rater of 1 per 24" height/diameter of shrub at planting.

9. Mulching: All tree and shrub planting beds to receive a 3" deep layer of high quality shredded hardwood bark mulch (not pigment dyed or enviro-mulch). All perennial planting areas (groupings) shall receive a 2" layer of shredded hardwood bark mulch, and groundcover areas a 1-2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.

10. Edging: All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. Bedlines are to be cut crisp, smooth as per plan. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.

11. Plant bed preparation: All perennial, groundcover and annual areas (if applicable) are required to receive a blend of organic soil (Soil Amendments) amendments prior to installation. Roto-till the following materials at the following ratio, into existing soil beds or installed topsoil beds to a depth of approximately 8"-10"

Per 100 SF of bed area:
- ¼ CY Peat Moss or Mushroom Compost
- ¼ CY blended/pulverized Topsoil
- 2 pounds starter fertilizer
- ¼ CY composted manure

12. Lawn Installation for all sodded turfgrass areas: Contractor to furnish and prepare blended topsoil (2" minimum) and sod bed, removing all debris and stones ½" and larger. Apply a 10-10-10 starter lawn fertilizer uniformly throughout areas prior to laying sod. Use only premium sod blend according to TPI (revised 1995) and ASPA Standards. Install sod uniformly with staggered joints, laid tightly end to end and side to side. Roll sod with a walk behind roller and water immediately upon installation to a 3" depth. Stake any sod installed on slopes steeper than 1:3, and in all swale applications. Contractor is responsible to provide a smooth, uniform, healthy turf, and is responsible for the first two mowings of the newly installed turf, and is also responsible for watering during this period.

13. Installation preparation for all seeded areas: remove/kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil (if adequate or provide as in item #6 above) and seed bed by removing all surface stones 1" or larger. Apply a starter fertilizer and specified seed uniformly at the specified rate, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer specifications to Landscape Architect and Owner prior to installation. Erosion control measures are to be used in swales and on slopes in excess of 1:3 and where applicable (see Civil Engineering Drawings). Methods of installation may vary are the discretion of the Landscape Contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind dispersal of mulch covering. Marsh hay containing reed canary grass is NOT acceptable as a mulch covering.

An acceptable quality seed installation is defined as having:
No bare spots larger than one (1) square foot
No more than 10% of the total area with bare areas larger than one (1) square foot
A uniform coverage through all turf areas

14. No-Mow seed areas: "No-Mow" fine fescue seed mix with annual rye nurse crop (available at Cedar Creek Seed Farm 888-313-6807; or Prairie Nursery 608-296-3679) or approved equivalent mix from a reputable seed mix provider. Apply at 220 lbs per acre or at rate recommended by supplier. Prepare seed bed and soil as specified in item #13 above.

15. Native Prairie Seed Mix / Stormwater Seed Mix: Native seed mixes as listed on the Plant and Material List or other seeding schedules outlined on the landscape plan set. Seed mixes available from Prairie Nursery 608-296-3679 or JF New 608-848-1789 or approved equivalent mix from a reputable seed mix provider. Apply at rates specified herein, or per supplier recommendation. Prepare soil and seed bed as in item #13 above.

16. Warranty and Replacements: All plantings are to be watered thoroughly at the time of planting, through construction and upon completion of project as required. Trees, Evergreens, and Shrubs (deciduous and evergreen) shall be guaranteed (100% replacement) for a minimum of one (1) year from the date of project completion. Perennials, groundcovers, and ornamental grasses shall be guaranteed for a minimum of one (1) growing season. Perennials, groundcovers, and ornamental grasses planted after September 15th shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements. Watering and general ongoing maintenance instructions are to be supplied by the Landscape Contractor to the Owner upon completion of the project.

17. The Landscape Contractor is responsible for the watering and maintenance of all landscape areas for a period of 45 days after the substantial completion of the landscape installation. This shall include all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, no-mow grass, and native prairie seed mix / stormwater seed mix. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.

18. Project Completion: Landscape Contractor is responsible to conduct a final review of the project, upon completion, with the Landscape Architect, Client or Owner / Client Representative, and the General Contractor to answer questions, provide written care instructions for new plantings and turf, and insure that all specifications have been met.

LANDSCAPE GENERAL NOTES

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
Proposed Landscape Materials							
SHADE TREES (DECIDUOUS)							
ABM	4	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Maple	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
PPH	2	Celtis occidentalis 'Prairie Pride'	Prairie Pride Hackberry	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
SHL	4	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
AGM	3	Ginkgo biloba 'Autumn Gold'	Autumn Gold Maidenhair	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
VFE	5	Ulmus americana 'Valley Forge'	Valley Forge American Elm	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
ORNAMENTAL TREES (DECIDUOUS)							
RJFC	6	Malus x 'Jewelcole'	Red Jewel Flowering Crabapple	2.25"	B&B	Straight central leader, full and even crown. Prune only after planting	
JTL	8	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2.25"	B&B	Straight central leader, full and even crown. Prune only after planting	

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
EVERGREEN TREES							
HCJ	6	Juniperus chinensis 'Hetzii Columnaris'	Hetzi Columnar Juniper (upright)	54"	B&B	Evenly shaped tree with branching to the ground	42"

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/ CONT.	SPECIFICATION / NOTES	PLANT SPACING
EVERGREEN SHRUBS							
SGJ	53	Juniperus chinensis 'Sea Green'	Sea Green Juniper	#5	Cont.	Full rounded well branched shrub	54"
KCPJ	28	Juniperus chinensis 'Kallay'	Kallay Compact Pfitzer Juniper	#5	Cont.	Full rounded well branched shrub	48"
TIY	23	Taxus x media 'Taunton'	Taunton Intermediate Yew	24"	B&B	Full rounded well branched shrub	42"

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/ CONT.	SPECIFICATION / NOTES	PLANT SPACING
DECIDUOUS SHRUBS							
BRC	13	Aronia arbutifolia 'Brilliantissima'	Brilliant Red Chokeberry	42"	Cont.	Full, well rooted plant, evenly shaped	48"
HC	8	Cotoneaster acutifolia	Peking (Hedge) Cotoneaster	42"	B&B	Full, well rounded plant with moist rootball and healthy appearance	30-42"
IH	17	Hydrangea arborescens 'Abetwo'	Incredibal! Hydrangea	#5	Cont.	Full, well rooted plant, evenly shaped	48"
GLS	45	Rhus aromatica 'Gro-Low'	Gro Low Fragrant Sumac	#5	Cont.	Full, well rooted plant, evenly shaped	42"
KOSR	11	Rosa 'Knock Out'	Knock Out Shrub Rose	24"	Cont.	Full, well rooted plant, evenly shaped	48"
PPSR	14	Rosa ragosa 'Pink Pavement'	Pink Pavement Series Rose	24"	Cont.	Full, well rooted plant, evenly shaped	42"
NFS	44	Spirea abumalda 'Neon Flash'	Neon Flash Spirea	24"	Cont.	Full, well rooted plant, evenly shaped	60"
MKL	23	Syringa patula 'Miss Kim'	Miss Kim Dwarf Lilac	24"	Cont.	Full, well rooted plant, evenly shaped	60"
MV	11	Viburnum lantana 'Mohican'	Mohican Viburnum	42"	B&B	Full, well rounded plant with moist rootball and healthy appearance	60"
WRW	7	Weigela florida 'Wine & Roses'	Wine & Roses Compact Weigela	24"	Cont.	Full, well rooted plant, evenly shaped	42"

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CONTAINER SIZE		SPECIFICATION / NOTES	PLANT SPACING
ORNAMENTAL GRASSES							
KFRG	307	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	#1	Cont.	Full, well rooted plant	15-18"

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CONTAINER SIZE		SPECIFICATION / NOTES	PLANT SPACING
HERBACEOUS PERENNIALS							
RRD	7	Hemerocallis 'Rosy Returns'	Rosy Returns Daylilly	#1	Cont.	Full, well rooted plant, evenly shaped	18"
PPCB	30	Heuchera micrantha 'Palace Purple'	Palace Purple Coralbells	#1	Cont.	Full, well rooted plant, evenly shaped	18"
KKC	14	Nepeta faassenii 'Kit Cat'	Dwarf Catmint	#1	Pot	Full, well rooted plant, evenly shaped	24"
BES	9	Rudbeckia fulgida 'Goldsturm'	Black-eyed Susan	#1	Cont.	Full, well rooted plant, evenly shaped	18"
MNS	10	Salvia x superba 'May Night'	May Night Salvia	#1	Cont.	Full, well rooted plant, evenly shaped	18"

PLAN KEY	QUANTITY	PLANT MATERIAL PROPOSED SPECIFIED SEED MIX / SOD	CONTAINER SIZE		SPECIFICATION / NOTES	PLANT SPACING
LAWN	3875	Lawn Establishment Area / Grading Area		SY	Reinder's Deluxe 50 Seed Mix (800-785-3301)	
	44390	Erosion Matting for sloped seeded areas	*see plan for area delineation*	SF	EroTex D575 Erosion Control Blanket (or approved equal)	
	310	Stormwater Seed Mix	*see plan for area delineation*	SY	Cardno/JFNew Stormwater Seed Mix	
	775	Native Prairie Seed Mix	*see plan for area delineation*	SY	Cardno/JFNew Native Prairie Seed Mix	

Hardscape Materials				
	101	Shredded Hardwood Mulch (3" depth)	*Area: 10,850 SF*	CY Bark Mulch; apply Preemergent after installation of mulch
	67	Soil Amendments (2" depth)	*Area: 10,850 SF*	CY
	137	Pulverized Topsoil (Seeded Areas)	*Area: 44,390 SF*	CY
	67	Pulverized Topsoil (2" over bed areas)	*Area: 10,850 SF*	CY

* Landscape counts & quantities are provided as a service to the Landscape Contractor; Landscape Contractor is responsible for verifying these counts and quantities in order to provide a complete landscape installation as outlined on this Landscape Master Plan. In the event that a discrepancy occurs between this schedule and the Landscape Master Plan, the Landscape Master Plan including the graphics and notations depicted thereto shall govern.

Seed Compositions:

Reinder's Deluxe 50 Seed Mix (800-785-3301): Seed at rate of 150-200# per acre
- 20% Kentucky Bluegrass (Sod Quality)
- 15% Newport Kentucky Bluegrass
- 15% Kim Blue Kentucky Bluegrass
- 25% Creeping Red Fescue
- 15% Quebec Perennial Ryegrass
- 10% Fiesta III Perennial Ryegrass

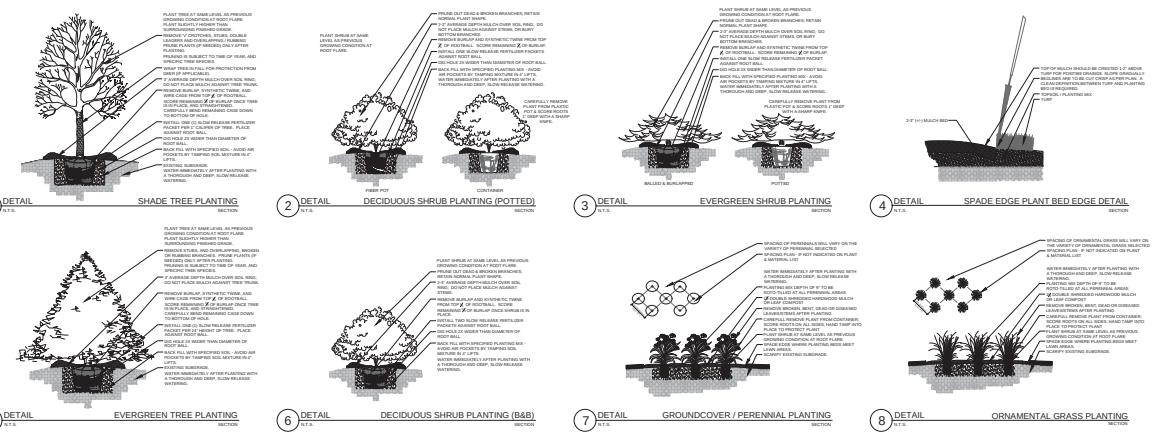
PLANT & MATERIAL SCHEDULE

Cardno Native Plant Nursery
www.cardnonativeplantnursery.com
128 Sunset Drive
Walkerton, Indiana 46574
Ph: 574-586-2412

Economy Prairie Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses:		
Andropogon gerardii	Big Bluestem	16.00
Bouteloua curtipendula	Side-Oats Gramma	18.00
Carex bicknellii / Carex brevior	Prairie Sedge Mix	1.00
Elymus canadensis	Canada Wild Rye	16.00
Panicum virgatum	Switch Grass	2.50
Schizachyrium scoparium	Little Bluestem	24.00
Sorghastrum nutans	Indian Grass	18.00
	Total	95.50
Temporary Cover:		
Avena sativa	Common Oat	360.00
Lolium multiflorum	Annual Rye	100.00
	Total	460.00
Forbs:		
Asclepias syriaca	Common Milkweed	0.50
Asclepias tuberosa	Butterfly Milkweed	1.00
Aster laevis	Smooth Blue Aster	0.25
Aster novae-angliae	New England Aster	0.75
Chamaecrista fasciculata	Partridge Pea	12.00
Coreopsis lanceolata	Sand Coreopsis	5.00
Echinacea purpurea	Broad-Leaved Purple Coneflower	7.50
Helianthus helianthoides	False Sunflower	0.25
Lupinus perennis	Wild Lupine	0.50
Monarda fistulosa	Wild Bergamot	0.25
Pycanthemum tenuifolium	Common Mountain Mint	0.50
Ratibida pinnata	Yellow Coneflower	3.50
Rudbeckia hirta	Black-Eyed Susan	8.00
	Total	40.00

NATIVE PRAIRIE SEED MIX



PLANTING & HARDSCAPE DETAILS

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

CIMA DEVELOPERS

THE PRIDE OF KANE COUNTY

Southeast Corner of Main St. & Kirk Rd.
St. Charles, IL

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
10.3.19	ISSUE TO OWNER
10.25.19	REVISIONS
03.03.20	REVISIONS
05.15.20	CITY COMMENTS
05.20.20	CITY COMMENTS
05.28.20	REV. MONUMENT SIGN
06.22.20	REVISED CIVIL
07.21.20	REVISED CIVIL
08.03.20	REVISED CIVIL

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

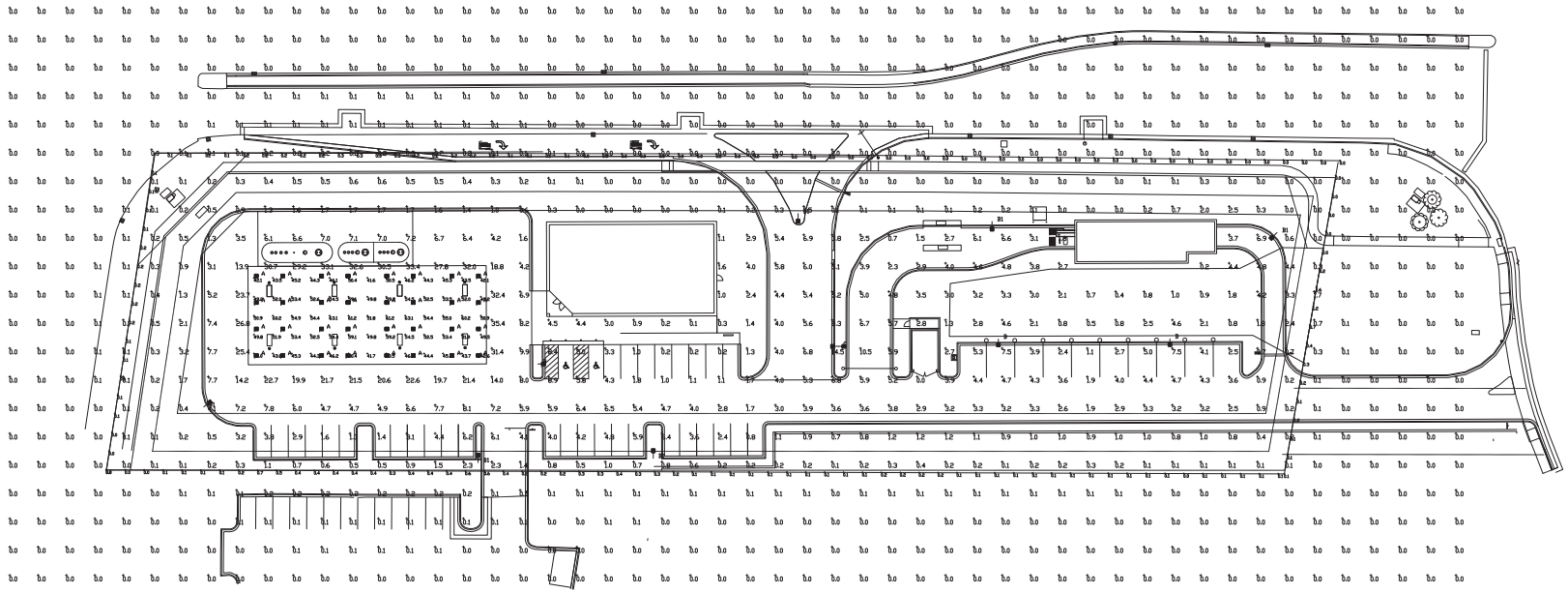
LANDSCAPE DETAILS, NOTES, & SCHEDULES

PROJECT MANAGER	WDH
PROJECT NUMBER	19-066
DATE	08.03.20

SHEET NUMBER

L 1.3

Example Retaining Wall- Presented to Plan Commission 8-4-20



Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	LLD	UDF	LLF	Arr. Lum. Lumens	Arr. Watts
	32	A	SINGLE	SCV-LED-15L-SC-50 MTD @ 15'	1.000	1.000	1.000	15410	103
	3	B	SINGLE	SLM-LED-18L-SIL-FT-50-70CRI-SINGLE-16'POLE+2'BASE	1.000	1.000	1.000	19664	148.5
	6	B1	SINGLE	SLM-LED-18L-SIL-FT-50-70CRI-IL-SINGLE-16'POLE+2'BASE	1.000	1.000	1.000	12568	148.5
	1	C	D180	SLM-LED-18L-SIL-FT-50-70CRI-D180-16'POLE+2'BASE	1.000	1.000	1.000	39328	297

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS	Illuminance	Fc	1.52	35.4	0.0	N.A.	N.A.
CANOPY	Illuminance	Fc	50.74	63.1	41.6	1.22	1.52
EAST PROPERTY LINE	Illuminance	Fc	0.31	1.6	0.0	N.A.	N.A.
NORTH PROPERTY LINE	Illuminance	Fc	0.07	0.3	0.0	N.A.	N.A.
SOUTH PROPERTY LINE	Illuminance	Fc	0.20	0.7	0.0	N.A.	N.A.
WEST PROPERTY LINE	Illuminance	Fc	0.11	0.2	0.0	N.A.	N.A.
INSIDE CURB	Illuminance	Fc	7.21	35.4	0.0	N.A.	N.A.

Click image to open Product Page

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Total Project Watts
Total Watts = 49295

LIGHTING PROPOSAL LD-148828-3

PRIDE
KIRK ROAD & IL RTE 64
ST CHARLES,IL

BY:MHK	DATE:8-26-19	REV:6-16-20	SHEET 1 OF 1

SCALE: 1"=30'

0 30

PLAT OF ANNEXATION TO THE CITY OF ST. CHARLES

LEGEND

CITY OF ST. CHARLES CORPORATE LIMITS

PROPERTY TO BE ANNEXED TO ST. CHARLES

SECTION LINE

PROPERTY LINES

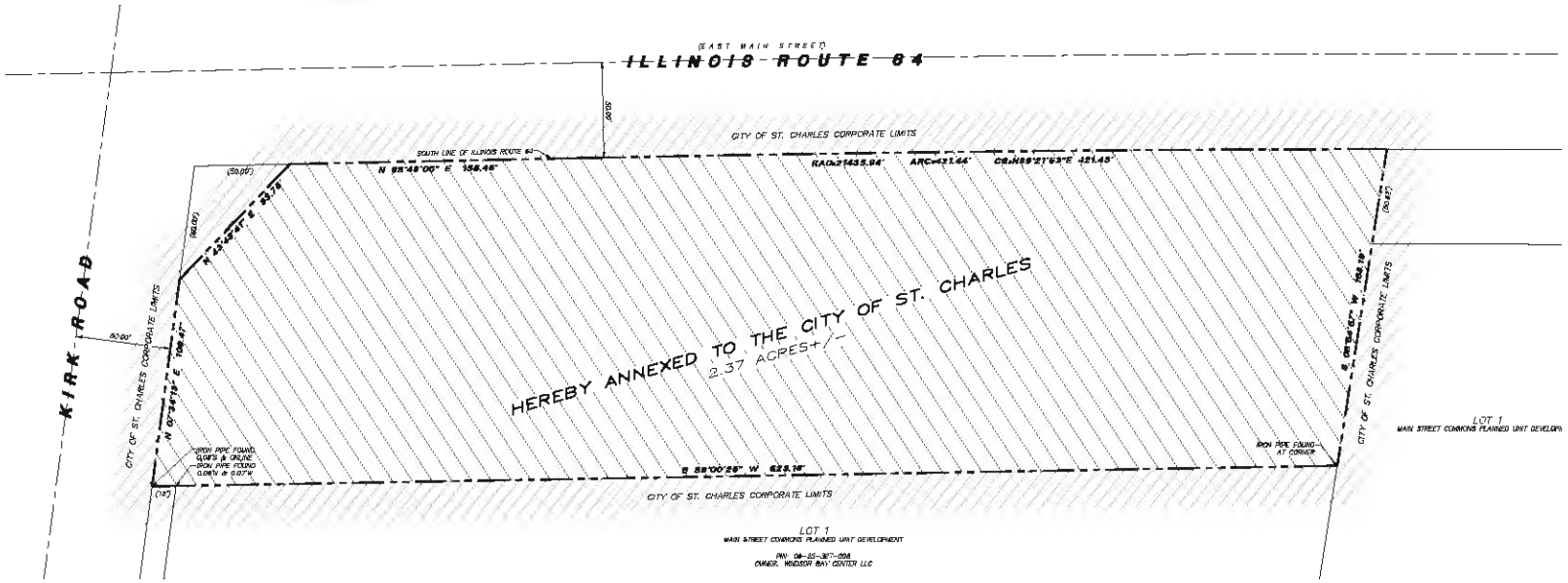
N

SCALE: 1" = 30'

0 15 30 60

BAR SCALE

THAT PART OF THE NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE SOUTH LINE OF SAID QUARTER SECTION, 3.49 CHAINS WEST OF THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER THEREOF; THENCE NORTH 8 DEGREES EAST 20.64 CHAINS; THENCE NORTH 77 DEGREES WEST 14.23 CHAINS; THENCE SOUTH 6 DEGREES WEST 20.58 CHAINS; THENCE NORTH 89 DEGREES EAST 3.39 CHAINS; THENCE SOUTH 3.68 CHAINS TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 25; THENCE EAST ON SAID SOUTH LINE 10.52 CHAINS TO THE POINT OF BEGINNING (EXCEPT THAT PART NORTH OF THE CENTER LINE OF ROUTE 64 AND EXCEPT THAT PART WEST OF THE EAST LINE OF KIRK ROAD AND ALSO EXCEPT THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE EASTERLY LINE OF KIRK ROAD (COUNTY HIGHWAY NO. 77) AS DESCRIBED IN DOCUMENT 1107922 WITH A LINE DRAWN PARALLEL WITH AND 50.0 FEET SOUTHERLY OF THE CENTER LINE OF ILLINOIS STATE ROUTE NO. 64 (MEASURED AT RIGHT ANGLES THERETO); THENCE ON AN ASSUMED BEARING OF SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE 60.0 FEET; THENCE NORTH 43 DEGREES, 53 MINUTES, 42 SECONDS EAST 83.76 FEET TO SAID PARALLEL LINE; THENCE NORTH 1 DEGREE, 01 MINUTES, 58 SECONDS WEST 50.0 FEET TO SAID CENTER LINE; THENCE SOUTH 88 DEGREES, 58 MINUTES, 02 SECONDS WEST ALONG SAID CENTER LINE 42.29 FEET TO SAID EASTERLY LINE EXTENDED; THENCE SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE EXTENDED 59.59 FEET TO THE POINT OF BEGINNING. ALSO EXCEPT THAT PART OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 25 TOWNSHIP 40 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 5, UNIT 1, THE "ST. CHARLES" ILLINOIS INDUSTRIAL DEVELOPMENT OF THE CENTRAL MANUFACTURING DISTRICT; PROCEED NORTHERLY ON THE NORTHERLY EXTENSION OF THE WEST LINE OF SAID LOT 5, 109.41 FEET, TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF NORTH AVENUE (RT. 64); THENCE NORTHEASTERLY ON SAID RIGHT OF WAY LINE WHICH FORMS AN EXTERIOR ANGLE OF 218 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 21.19 FEET TO A POINT ON A LINE 12.50 FEET EASTERLY OF AND PARALLEL WITH THE NORTHERLY EXTENSION OF THE WEST LINE OF SAID LOT 5; THENCE SOUTHERLY ON SAID PARALLEL LINE WHICH FORMS AN INTERIOR ANGLE OF 36 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 124.63 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 5; THENCE WESTERLY ON SAID NORTH LINE, WHICH FORMS AN INTERIOR ANGLE OF 98 DEGREES 33 MINUTE 49 SECONDS WITH THE LAST DESCRIBED LINE, 12.64 FEET, TO THE POINT OF BEGINNING), IN KANE COUNTY, ILLINOIS.



CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

THIS IS TO CERTIFY THAT THIS ACCURATE MAP OF TERRITORY ANNEXED IS IDENTIFIED AS THAT INCORPORATED INTO AND MADE PART OF THE CITY OF ST. CHARLES ORDINANCE NO _____ ADOPTED BY THE CITY COUNCIL OF SAID CITY ON THE DAY OF _____, A.D.,20____.

BY: _____ ATTEST: _____
MAYOR CITY CLERK

KANE COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

I, _____, COUNTY CLERK OF KANE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THIS PLAT.

I, FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THIS PLAT

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK OF KANE COUNTY, ILLINOIS,

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

_____
COUNTY CLERK

OWNER'S CERTIFICATE

STATE OF _____)
SS
COUNTY OF _____)

THIS IS TO CERTIFY THAT CIMA DEVELOPERS, LP IS THE OWNER OF THE LAND SHOWN AND DESCRIBED ON THE ANNEXED PLAT AND BY ITS DULY AUTHORIZED MANAGER HAS AS SUCH OWNER CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN THEREON FOR THE USES AND PURPOSES THEREIN SET FORTH AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE THEREON SHOWN.

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

BY: _____

PRINT NAME: _____

ADDRESS: _____

NOTARY CERTIFICATE

STATE OF _____)
SS
COUNTY OF _____)

I HEREBY CERTIFY THAT THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING CERTIFICATE ARE KNOWN TO ME AS SUCH OWNERS.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, A.D. _____.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

NOTES:

1. PERMANENT INDEX NUMBER (P.I.N. #) 09-25-307-006
2. PROPERTY AREA: 103,407 SQUARE FEET / 2.37 ACRES MORE OR LESS
3. BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1302 ZONE.
4. ANY DISCREPANCIES FOUND WITHIN THIS DOCUMENT NEED TO BE REPORTED TO THE SURVEYOR AS SOON AS POSSIBLE.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS
SS
COUNTY OF COOK

THIS IS TO CERTIFY THAT I, FRANJO I. MATICIC, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3558, HAVE PREPARED THIS PLAT FROM EXISTING PLATS AND RECORDS FOR THE PURPOSE OF ANNEXATION TO THE CITY OF ST. CHARLES, ILLINOIS, AS SHOWN BY THE PLAT HEREON DRAWN. DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.

GIVEN UNDER OUR HAND AND SEAL THIS _____ DAY OF _____ A.D._____ AT HOFFMAN ESTATES, ILLINOIS.

THE W-T GROUP, LLC.

FOR REVIEW 06/02/20

FRANJO I MATICIC – PLS #035-003558 EXPIRES 11/30/2016
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004357

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

WT GROUP
Engineering with Precision, Place and Passion.
5575 Nelson Avenue | Northfield Estates, IL 60093
T: 224.293.6333 | F: 224.293.6444
www.wtgroup.com
IL License No. 184-003703-0013 Expires 04.30.2020

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WT Group
Engineering • Design • Consulting

PLAT OF ANNEXATION
PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS

CIMA DEVELOPERS
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

ISSUE

TO	DATE
CLIENT	1/13/20
CLIENT	2/11/20
CLIENT	2/14/20
CLIENT	6/02/20

CHECK:FIM
DRAWN:KCH
JOB: 1910803C

ANNEX-1
SHEET 1 OF 1
PLAT OF ANNEXATION

PRELIMINARY PLAT OF SUBDIVISION
PRIDE OF KANE COUNTY

BEING A SUBDIVISION IN THAT PART OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE TOWNSHIP AND CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

LEGEND

- PROPERTY LINE
- CENTERLINE OF RIGHT OF WAY
- UNDERLYING PROPERTY LINES
- SET CONCRETE MONUMENT / SET IRON PIPE
- (XXX') RECORD PROPERTY DIMENSIONS
- RIGHT OF WAY (HEREBY DEDICATED)

NOTES:

1. BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.

2. ANY DISCREPANCIES FOUND WITHIN THIS DOCUMENT NEED TO BE REPORTED TO THE SURVEYOR AS SOON AS POSSIBLE.

LOCATION MAP

N

SCALE: 1" = 30'

00 15 30 60

BAR SCALE

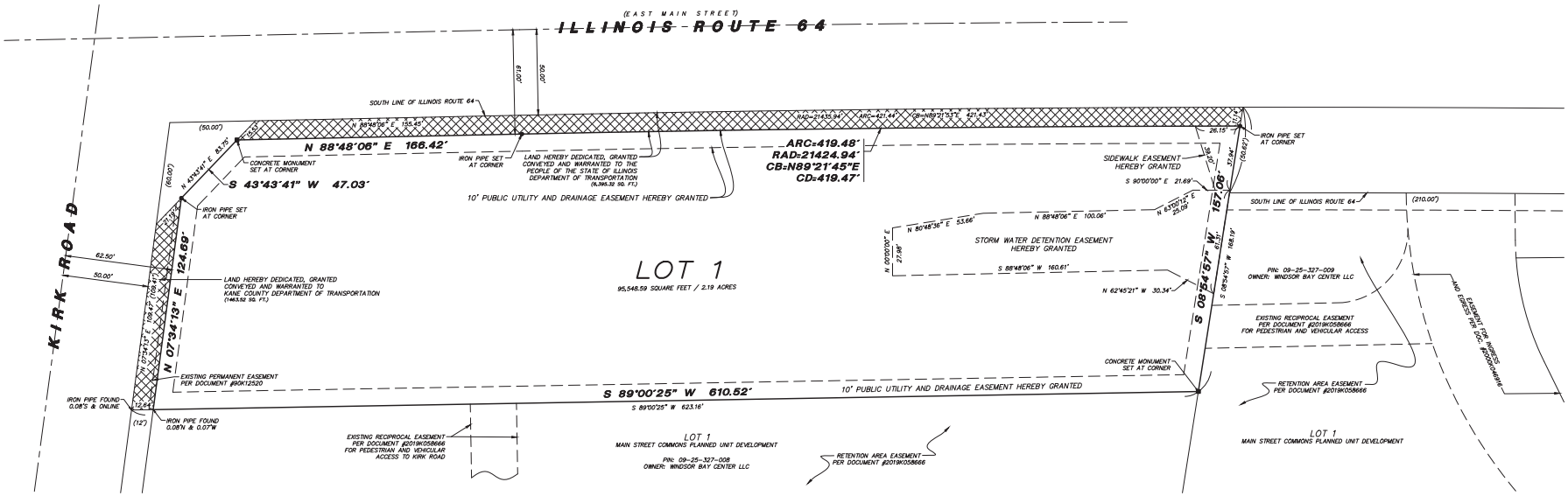
PIN NUMBER:
09-25-100-036

AFTER RECORDING RETURN TO:
CITY OF ST. CHARLES
2 E. MAIN STREET
ST. CHARLES, IL 60174

PROPERTY OWNER:
CIMA DEVELOPERS, LP
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

SUBDIVIDER
THE W-T GROUP, LLC
2675 PRATUM AVE
HOFFMAN EST, IL 60192
224-293-6333

DESIGNER/ENGINEER
THE W-T GROUP, LLC
2675 PRATUM AVE
HOFFMAN EST, IL 60192
224-293-6333



OWNER'S CERTIFICATE

STATE OF _____)
SS
COUNTY OF _____)

THIS IS TO CERTIFY THAT CIMA DEVELOPERS, LP IS THE OWNER OF THE LAND SHOWN AND DESCRIBED ON THE ANNEXED PLAT AND BY ITS DULY AUTHORIZED MANAGER HAS AS SUCH OWNER CAUSED THE SAME TO BE SURVEYED, SUBDIVIDED AND PLATTED AS SHOWN THEREON FOR THE USES AND PURPOSES THEREIN SET FORTH AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE THEREON SHOWN.

THE UNDERSIGNED DO HEREBY CERTIFY THAT, AS OWNERS OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE, TO THE BEST OF THEIR KNOWLEDGE, IS LOCATED WITHIN THE BOUNDARIES OF ST. CHARLES COMMUNITY UNIT SCHOOL DISTRICT 303.

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

BY: _____

PRINT NAME: _____

ADDRESS: _____

NOTARY CERTIFICATE

STATE OF _____)
SS
COUNTY OF _____)

I, _____, A NOTARY PUBLIC, IN AND FOR SAID COUNTY, IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____, PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNERS, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE ANNEXED PLAT AS THEIR OWN FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, A.D. _____.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

APPROVED THIS _____ DAY OF _____, A.D. _____. BY THE COUNCIL OF THE CITY OF ST. CHARLES.

_____
MAYOR

_____
CITY CLERK

DIRECTOR OF COMMUNITY DEVELOPMENT CERTIFICATE

STATE OF _____)
SS
COUNTY OF _____)

I, _____ DO HEREBY CERTIFY THAT THE REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED, OR THE REQUIRED GUARANTEE BOND HAS BEEN POSTED FOR THE COMPLETION OF ALL REQUIRED LAND IMPROVEMENTS.

_____
DIRECTOR OF COMMUNITY DEVELOPMENT

DATED AT _____, ILLINOIS, THIS _____ DAY OF _____, .D. 20___.

SPECIAL ASSESSMENT CERTIFICATE

STATE OF _____)
SS
COUNTY OF _____)

I, _____, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT OR UNPAID CURRENT OR FORFEITED SPECIAL ASSESSMENTS OR ANY DEFERRED INSTALLMENTS THEREOF THAT HAVE BEEN APPORTIONED AGAINST THE TRACT OF LAND INCLUDED IN THE PLAT.

_____
COLLECTOR OF SPECIAL ASSESSMENTS

DATED AT ST. CHARLES, ILLINOIS, THIS _____ DAY OF _____, A.D. _____.

PLAN COMMISSION CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

APPROVED BY THE PLAN COMMISSION OF THE CITY OF ST. CHARLES.

THIS _____ DAY OF _____, A.D. _____.

_____
CHAIRMAN

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT OF §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.

_____
ANTHONY J. QUIGLEY P.E.
REGION ONE ENGINEER

ILLINOIS DEPARTMENT OF TRANSPORTATION DEDICATION DESCRIPTION

TO BE CREATED AFTER REVIEW

ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

THE PROPOSED DEDICATION TO THE PEOPLE OF THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION IS HEREBY ACCEPTED.

BY: _____ DATE: _____, 20___.
ANTHONY J. QUIGLEY P.E.
REGION ONE ENGINEER

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

WT GROUP
Engineering with Precision, Pace and Passion.
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www.wtgroupinc.com
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WT Group
Engineering • Design • Consulting

PLAT OF SUBDIVISION
PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS

CIMA DEVELOPERS
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

ISSUE

TO	DATE
CLIENT	1/10/20
CLIENT	2/11/20
CLIENT	2/14/20
CLIENT	3/9/20
CLIENT	3/16/20
CLIENT	6/03/20

CHECK:FIM

DRAWN:KCH

JOB: 1910803C

SUB-1
SHEET 1 OF 2
PLAT OF SUBDIVISION

LEGEND

- PROPERTY LINE
- CENTERLINE OF RIGHT OF WAY
- UNDERLYING PROPERTY LINES
- SET CONCRETE MONUMENT / SET IRON PIPE
- (XXX) RECORD PROPERTY DIMENSIONS
- RIGHT OF WAY (HEREBY DEDICATED)

PRELIMINARY PLAT OF SUBDIVISION
PRIDE OF KANE COUNTY

BEING A SUBDIVISION IN THAT PART OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE TOWNSHIP AND CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

PIN NUMBER:
09-25-100-036

AFTER RECORDING RETURN TO:
CITY OF ST. CHARLES
2 E. MAIN STREET
ST. CHARLES, IL 60174

PROPERTY OWNER:
CIMA DEVELOPERS, LP
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

SUBDIVIDER
THE W-T GROUP, LLC
2675 PRATUM AVE
HOFFMAN EST, IL 60192
224-293-6333

DESIGNER/ENGINEER
THE W-T GROUP, LLC
2675 PRATUM AVE
HOFFMAN EST, IL 60192
224-293-6333

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

THE UNDERSIGNED AS THE RECORDER OF DEEDS FOR KANE COUNTY DO HEREBY CERTIFY THAT INSTRUMENT NUMBER _____ WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF KANE COUNTY, ILLINOIS ON THE _____ DAY OF _____ A.D. 20___ AT _____ O'CLOCK _M.

_____
RECORDER OF DEEDS

_____
PLEASE PRINT/TYPE NAME

COUNTY ENGINEER'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

THIS PLAT HAS BEEN APPROVED BY THE KANE COUNTY ENGINEER WITH RESPECT TO ROADWAY ACCESS TO_____, PURSUANT TO ILCS CHAPTER 765 PARAGRAPH 205/2. DATED THIS_____ DAY OF _____, A.D. 20___.

_____
COUNTY ENGINEER

DATED AT _____, ILLINOIS, THIS _____ DAY OF _____, .D. 20___.

COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

I, _____, COUNTY CLERK OF KANE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THIS PLAT.

I, FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THIS PLAT.

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK OF KANE COUNTY, ILLINOIS,

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

_____
COUNTY CLERK

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF KANE)

THE UNDERSIGNED AS THE RECORDER OF DEEDS FOR KANE COUNTY DO HEREBY CERTIFY THAT INSTRUMENT NUMBER _____ WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF KANE COUNTY, ILLINOIS ON THE _____ DAY OF _____ A.D. 20___ AT _____ O'CLOCK _M.

_____
RECORDER OF DEEDS

_____
PLEASE PRINT/TYPE NAME

PUBLIC UTILITY AND DRAINAGE EASEMENT PROVISIONS

A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY GRANTED TO THE CITY OF ST. CHARLES AND TO ALL PUBLIC UTILITY COMPANIES OF ANY KIND OPERATING UNDER FRANCHISE GRANTING THEM EASEMENT RIGHTS FROM SAID CITY OF ST. CHARLES, INCLUDING BUT NOT LIMITED TO, AMERITECH AND NICOR AND TO THEIR SUCCESSORS AND ASSIGNS (HEREIN COLLECTIVELY REFERRED TO AS "GRANTEES"), IN, UPON, ACROSS, OVER, UNDER, AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "PUBLIC UTILITY AND DRAINAGE EASEMENT" ON THE PLAT OF SUBDIVISION HEREON DRAWN FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING, CLEANING, AND MAINTAINING ABOVE GROUND AND UNDERGROUND ELECTRICAL SYSTEMS, CABLE TELEVISION, COMMUNICATION, GAS, TELEPHONE OR OTHER UTILITY LINES OR APPURTENANCES, SANITARY AND STORM SEWERS, DRAINAGE WAYS, STORM WATER DETENTION AND RETENTION, WATER MAINS AND ANY AND ALL MANHOLES, HYDRANTS, PIPES, CONNECTIONS, CATCH BASINS, BUFFALO BOXES AND WITHOUT LIMITATION, SUCH OTHER INSTALLATIONS AS MAY BE REQUIRED TO FURNISH PUBLIC UTILITY SERVICE TO ADJACENT AREAS TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREIN FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO MAKE ANY OR ALL OF THE ABOVE WORK. THE PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE CITY OF ST. CHARLES AND THE RESPECTIVE SUCCESSORS AND ASSIGNS FOR MAINTAINING THE UNINTERRUPTED AND UNIMPEDED CONVEYANCE, FLOW AND RUNOFF OF SURFACE STORM WATER ACROSS AND UPON THE AREAS DESIGNATED ON THIS PLAT AS DRAINAGE EASEMENT. THE RIGHT IS HEREBY GRANTED TO SAID GRANTEES TO CUT DOWN, TRIM, OR REMOVE ANY TREES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE DRAINAGE WAYS AND OPERATION OF OR ACCESS TO SAID UTILITY INSTALLATIONS, WITHOUT LIMITATION, IN, ON, UPON OR ACROSS, UNDER, OR THROUGH SAID EASEMENTS. NO PERMANENT BUILDINGS, TREES, GARDENS, SHRUBS, OR BERMING SHALL BE PLACED ON OR IN SAID EASEMENTS, BUT THE EASEMENT AREAS MAY BE USED FOR PAVING, FENCES, SIDEWALKS, AND OTHER PURPOSES THAT DO NOT INTERFERE WITH THE AFORESAID USES AND RIGHTS. WHERE AN EASEMENT IS USED FOR STORM OR SANITARY SEWERS, OTHER UTILITY INSTALLATIONS SHALL BE SUBJECT TO THE PRIOR APPROVAL OF SAID CITY OF ST. CHARLES SO AS NOT TO INTERFERE WITH THE GRAVITY FLOW IN SAID SEWER OR SEWERS. UTILITY INSTALLATIONS, OTHER THAN THOSE MANAGED BY THE CITY OF ST. CHARLES, SHALL BE SUBJECT TO THE APPROVAL OF THE CITY OF ST. CHARLES, AS TO DESIGN AND LOCATION, AND ALL OTHER INSTALLATIONS ARE SUBJECT TO THE ORDINANCES OF THE CITY OF ST. CHARLES. FOLLOWING ANY WORK TO BE PERFORMED BY THE GRANTEES IN THE EXERCISE OF ITS EASEMENT RIGHTS GRANTED HEREIN, THE GRANTEES SHALL HAVE NO OBLIGATION WITH RESPECT TO SURFACE RESTORATION INCLUDING, BUT NOT LIMITED TO, THE RESTORATION, REPAIR, OR REPLACEMENT OF ANY LANDSCAPING PROVIDED, HOWEVER, THE GRANTEES SHALL BE OBLIGATED FOLLOWING ANY SUCH WORK, TO BACKFILL AND MOUND SO AS TO RETAIN SUITABLE DRAINAGE, REMOVE DEBRIS, AND LEAVE THE AREA IN GENERALLY CLEAN AND WORKMANLIKE CONDITION.

STORM WATER MANAGEMENT EASEMENT PROVISIONS

A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY GRANTED TO THE CITY OF ST. CHARLES AND TO THEIR SUCCESSORS AND ASSIGNS, IN, UPON, ACROSS, OVER, UNDER, AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "STORMWATER DETENTION EASEMENT" ON THE PLAT OF SUBDIVISION HEREON DRAWN FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING, CLEANING, AND MAINTAINING STORM SEWERS, DRAINAGE WAYS, STORM WATER DETENTION AND RETENTION AND ANY AND ALL MANHOLES, PIPES, CONNECTIONS, CATCH BASINS, AND WITHOUT LIMITATION, SUCH OTHER INSTALLATIONS AS MAY BE REQUIRED TO FURNISH STORMWATER DETENTION. THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREIN FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO MAKE ANY OR ALL OF THE ABOVE WORK. NO BUILDING SHALL BE PLACED ON SAID EASEMENT PREMISES WITHOUT PRIOR WRITTEN CONSENT FROM THE CITY OF ST. CHARLES. THE RESPONSIBILITY OF MAINTAINING THE DETENTION AREA EASEMENT SHALL BE BINDING ON THE HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS AND ASSIGNS OF THE LANDOWNERS. NO PERSON SHALL DESTROY OR MODIFY SLOPES OR OTHERWISE AFFECT THE DETENTION VOLUME WITHOUT HAVING FIRST RECEIVED WRITTEN APPROVAL FROM THE CITY OF ST. CHARLES. THE CITY SHALL HAVE THE RIGHT BUT NOT THE OBLIGATION TO RESTORE ANY DETENTION VOLUME LOST THROUGH UNAUTHORIZED ACTIVITIES.

SURVEYORS CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF COOK)

THIS IS TO STATE THAT I, FRANJO I. MATICIC, ILLINOIS PROFESSIONAL LAND SURVEYORS #035-003556, HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE SOUTH LINE OF SAID QUARTER SECTION, 3.49 CHAINS WEST OF THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER THEREOF; THENCE NORTH 8 DEGREES EAST 20.94 CHAINS; THENCE NORTH 77 DEGREES WEST 14.23 CHAINS; THENCE SOUTH 8 DEGREES WEST 20.58 CHAINS; THENCE NORTH 89 DEGREES EAST 3.35 CHAINS; THENCE SOUTH 3.66 CHAINS TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 25; THENCE EAST ON SAID SOUTH LINE 10.52 CHAINS TO THE POINT OF BEGINNING (EXCEPT THAT PART NORTH OF THE CENTER LINE OF ROUTE 64 AND EXCEPT THAT PART WEST OF THE EAST LINE OF KIRK ROAD AND ALSO EXCEPT THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE EASTERLY LINE OF KIRK ROAD (COUNTY HIGHWAY NO. 77) AS DESCRIBED IN DOCUMENT 1107922 WITH A LINE DRAWN PARALLEL WITH AND 50.0 FEET SOUTHERLY OF THE CENTER LINE OF ILLINOIS STATE ROUTE NO. 64 (MEASURED AT RIGHT ANGLES THERETO); THENCE ON AN ASSUMED BEARING OF SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE 60.0 FEET; THENCE NORTH 43 DEGREES, 53 MINUTES, 42 SECONDS EAST 83.76 FEET TO SAID PARALLEL LINE; THENCE NORTH 1 DEGREE, 01 MINUTES, 58 SECONDS WEST 50.0 FEET TO SAID CENTER LINE; THENCE SOUTH 88 DEGREES, 58 MINUTES, 02 SECONDS WEST ALONG SAID CENTER LINE 42.29 FEET TO SAID EASTERLY LINE EXTENDED; THENCE SOUTH 7 DEGREES, 44 MINUTES, 17 SECONDS WEST ALONG SAID EASTERLY LINE EXTENDED 50.59 FEET TO THE POINT OF BEGINNING, ALSO EXCEPT THAT PART OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 25 TOWNSHIP 40 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 5, UNIT 1, THE "ST. CHARLES" ILLINOIS INDUSTRIAL DEVELOPMENT OF THE CENTRAL MANUFACTURING DISTRICT; PROCEED NORTHERLY ON THE NORTHERLY EXTENSION OF THE WEST LINE OF SAID LOT 5, 109.41 FEET, TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF NORTH AVENUE (RT. 64); THENCE NORTHEASTERLY ON SAID RIGHT OF WAY LINE WHICH FORMS AN EXTERIOR ANGLE OF 216 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 21.19 FEET TO A POINT ON A LINE 12.50 FEET EASTERLY OF AND PARALLEL WITH THE NORTHERLY EXTENSION OF THE WEST LINE OF SAID LOT 5; THENCE SOUTHERLY ON SAID PARALLEL LINE WHICH FORMS AN INTERIOR ANGLE OF 36 DEGREES 09 MINUTES 25 SECONDS WITH THE LAST DESCRIBED LINE, 124.63 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 5; THENCE WESTERLY ON SAID NORTH LINE, WHICH FORMS AN INTERIOR ANGLE OF 98 DEGREES 33 MINUTE 48 SECONDS WITH THE LAST DESCRIBED LINE, 12.64 FEET, TO THE POINT OF BEGINNING), IN THE TOWNSHIP AND CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

I FURTHER CERTIFY THAT THE PLAT HEREON DRAWN IS A CORRECT AND ACCURATE REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.

I FURTHER CERTIFY THAT I WILL SET ALL SUBDIVISION MONUMENTS AND HAVE DESCRIBED THEM ON THIS FINAL PLAT AS REQUIRED BY THE PLAT ACT (765 ILCS 205/). THE EXTERIOR SUBDIVISION MONUMENTS HAVE BEEN SET AND INTERIOR MONUMENTS WILL BE SET WITHIN 12 MONTHS OF THE RECORDING OF THIS PLAT (SECTION 1270-56 OF THE ILLINOIS PROFESSIONAL LAND SURVEYOR ACT OF 1989)

ACCORDING TO OUR INTERPOLATION OF THE FLOOD INSURANCE RATE MAP THIS SITE FALLS WITHIN PANEL NO. 17089C0270H DATED 8/3/2009, THIS PANEL IS NOT PRINTED.

GIVEN UNDER OUR HAND AND SEAL THIS _____ DAY OF _____ A.D._____, AT HOFFMAN ESTATES, ILLINOIS.

THE W-T GROUP, LLC

FOR REVIEW 06/03/20

FRANJO I. MATICIC — PLS #035-003556 EXPIRES 11/30/2020
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184.007570-0015

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

WT GROUP
Engineering with Precision, Peace and Passion.
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WT Group
Engineering • Design • Consulting

PLAT OF SUBDIVISION
PRIDE OF KANE COUNTY
33W573 EAST MAIN STREET
SAINT CHARLES, ILLINOIS

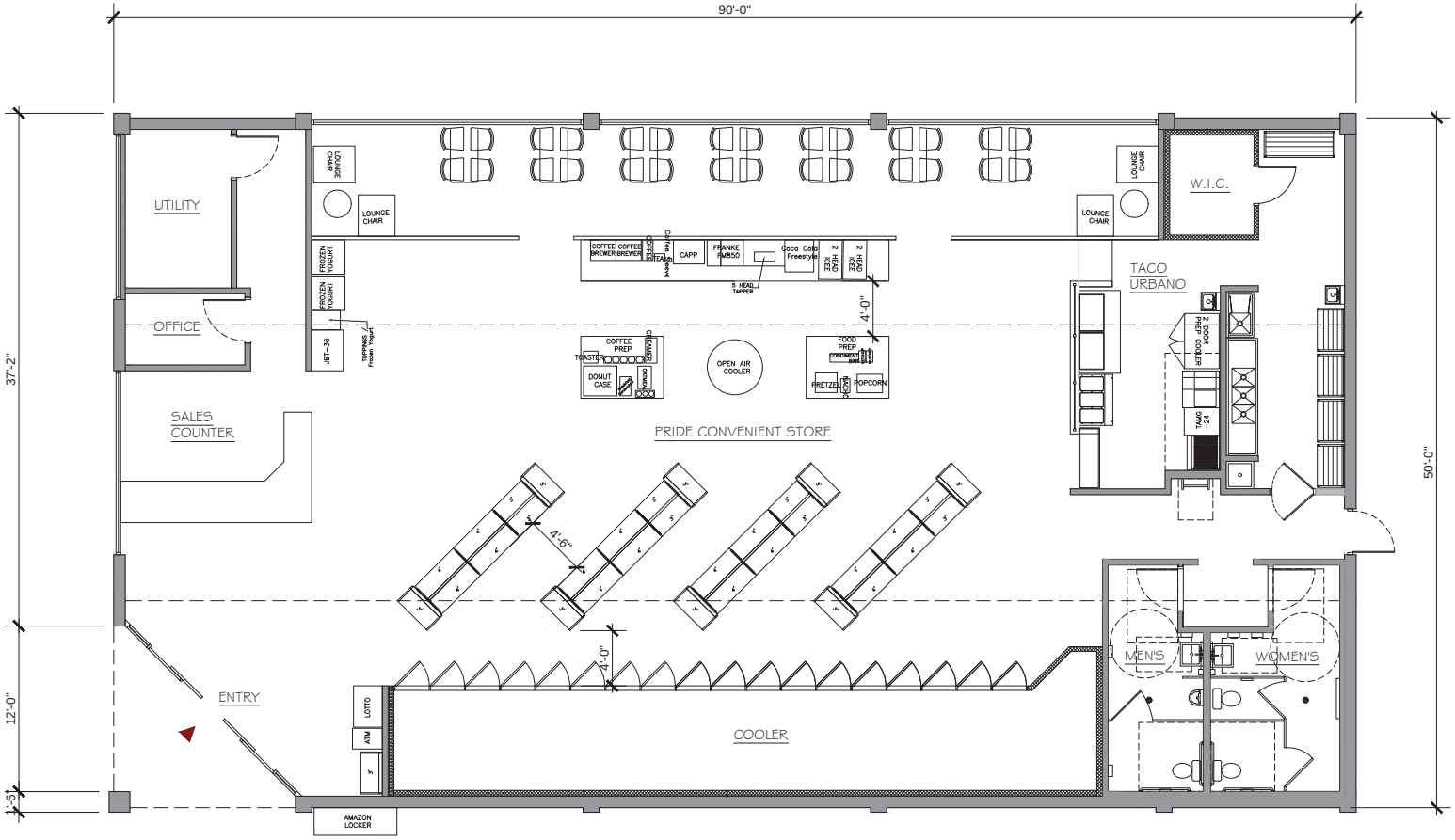
CIMA DEVELOPERS
30W180 BUTTERFIELD ROAD
WARRENVILLE, IL 60555

ISSUE

TO	DATE
CLIENT	1/10/20
CLIENT	2/11/20
CLIENT	2/14/20
CLIENT	3/9/20
CLIENT	3/16/20
CLIENT	6/03/20

CHECK:FIM
DRAWN:KCH
JOB: 1910803C

SUB-2
SHEET 2 OF 2
PLAT OF SUBDIVISION



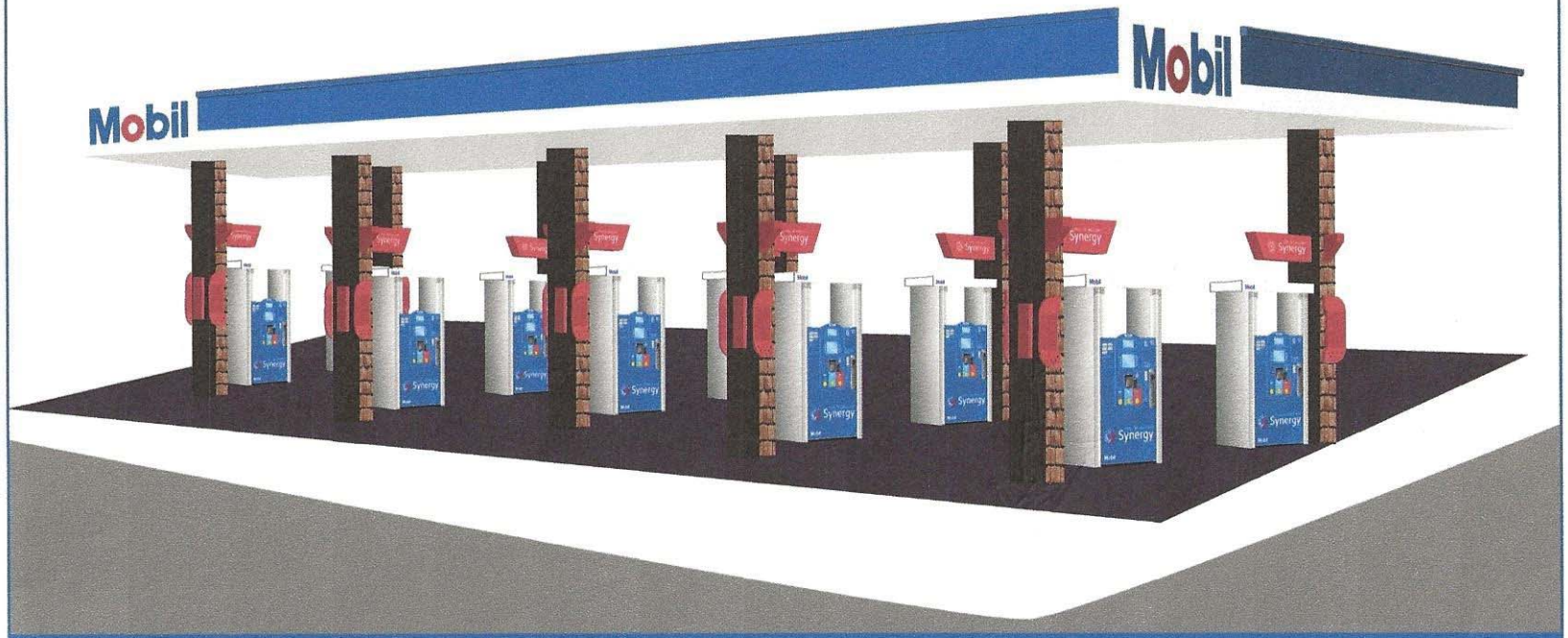
C-STORE PLAN

1/4" = 1'-0"

B RETAIL CANOPY

SITE IMAGE MATERIALS MAINTENANCE

ExxonMobil



Conceptual Site Visual

Project Name	PBL #	Customer	Created by
ExxonMobil	-	ExxonMobil	B.Dighero
Revision #	**Date**	**Scale**	**Page #**
R2	05/ 26/ 2020	NA	5 OF 16

Brand Book
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Northfield, IL 60093
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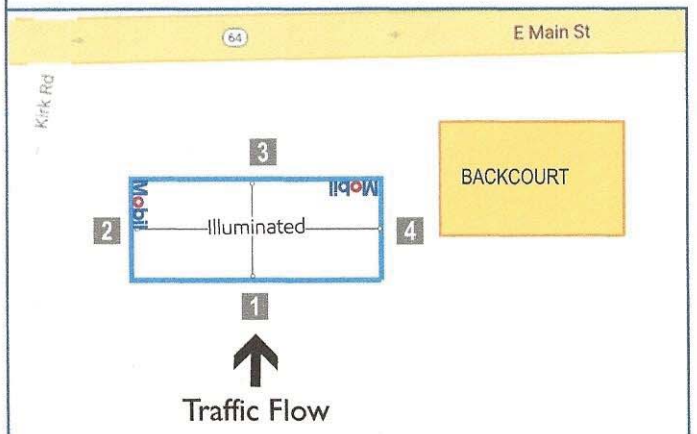
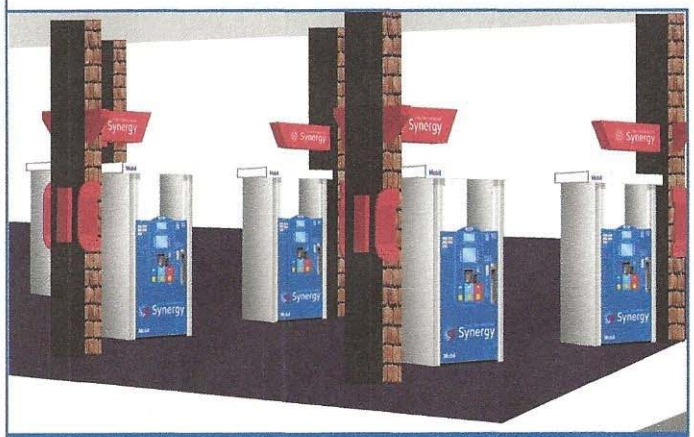
B SITE CONFIGURATIONS

Canopy fascia artwork for visualization purposes only

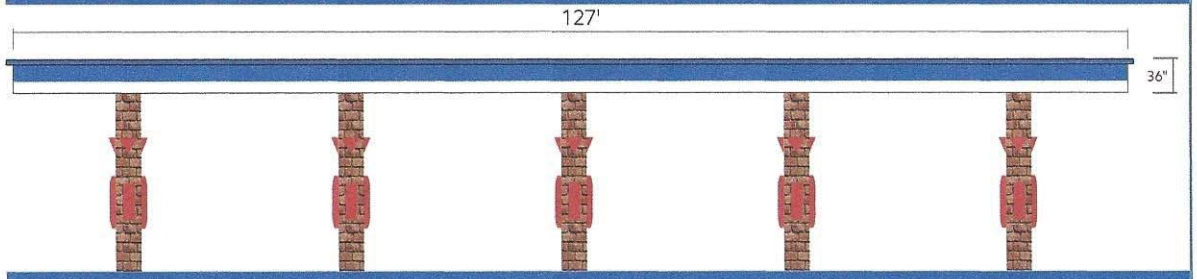


Overhead Map

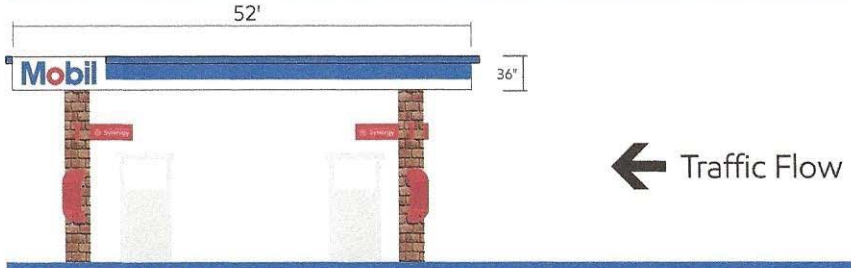


Canopy Perspective

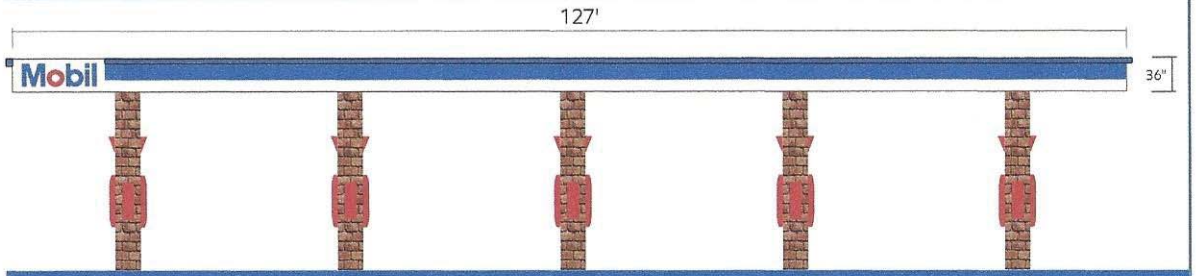
1 | BACK ELEVATION



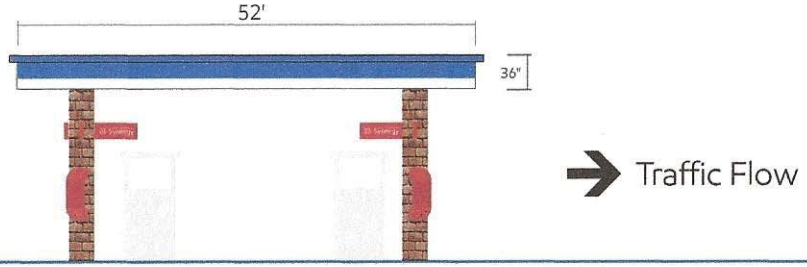
2 | RIGHT ELEVATION



3 | FRONT ELEVATION



4 | LEFT ELEVATION



Project Name	PBL #	Customer	Created by
ExxonMobil	-	ExxonMobil	B.Dighero
Revision #	**Date**	**Scale**	**Page #**
R3	06_18_2020	NA	4 OF 13

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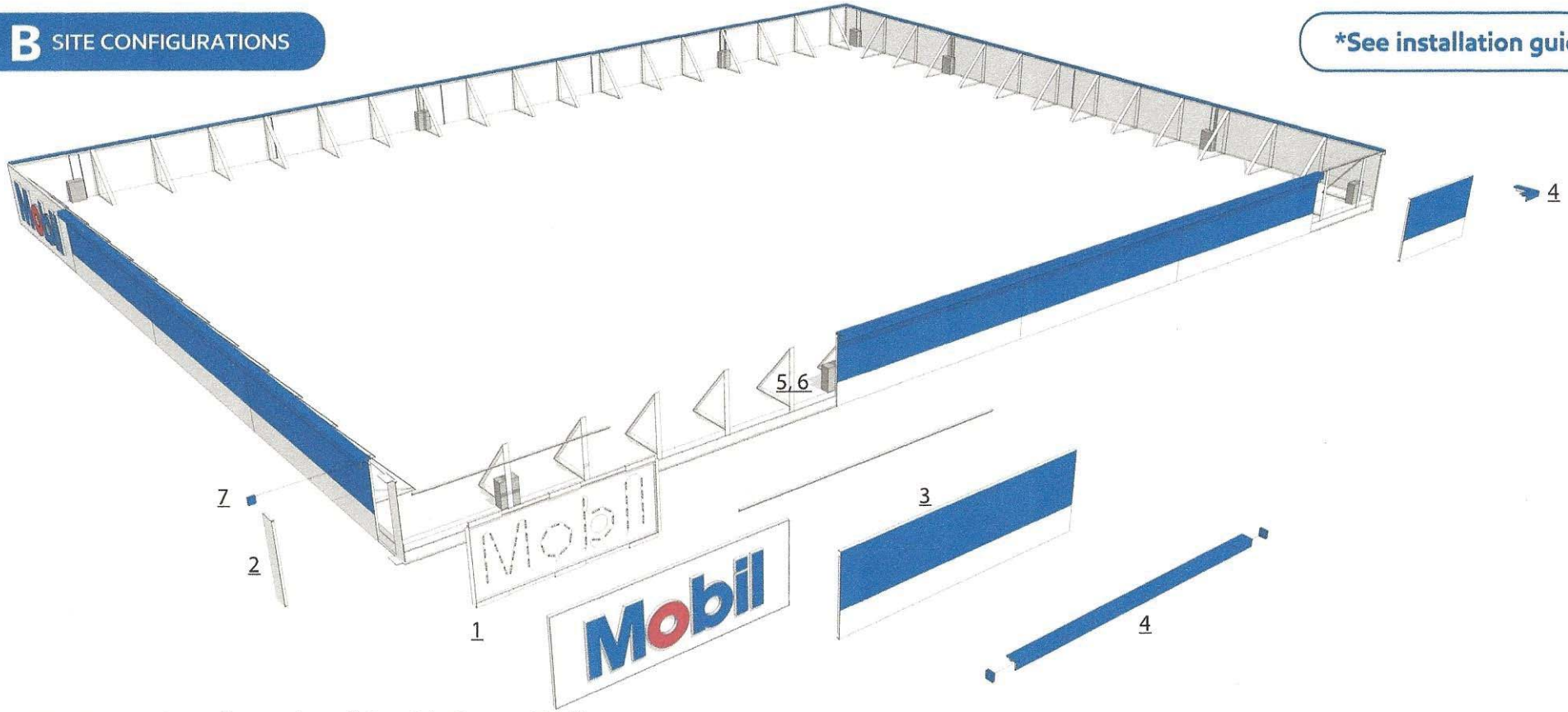
B SITE CONFIGURATIONS

*See installation guide



Step 1. Begin with installing any logos (left or right Exxon or Mobil):
back skin, side return, LED tray, power supplies and face.
Step 2. Install logo corner panels on either side of the logo and the ends of each run.
Step 3. Install mounting brackets and 120" ACM panels, cutting one panel per side to fit.
Step 4. Install LED corners first, then install 118" LED downlignt starting with ACM panel next to the logo. Install short downlight, cut to length or overlap as required on each side for site conditions.
Step 5. Install (1) power supplies every other panel and connect to LEDs. Each corner downlight comes with their own power supply.
Step 6. Install junction box power circuits every 200 feet for each side as required by site layout. Electrician to connect to 120VAC.
Step 7. Install end caps.

Project Name	PBL #	Customer	Created by
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B SITE CONFIGURATIONS

*See installation guide

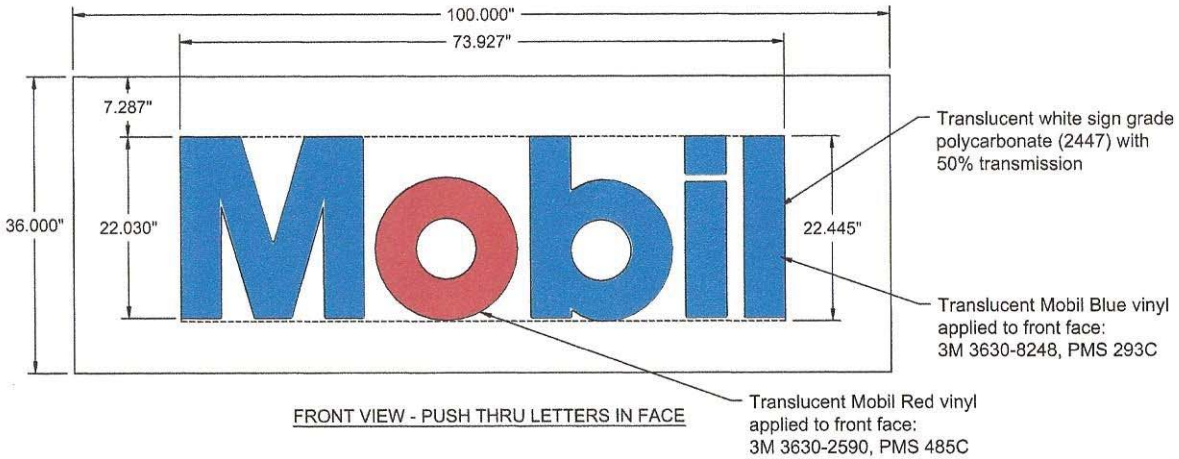
SINGLE LETTER SPECS:
"M" = 2.88 sq ft
"o" = 1.44 sq ft
"b" = 1.83 sq ft
"i" = .80 sq ft
"l" = .83 sq ft
TOTAL = 7.78 sq ft

LETTER SPECS:
22.445" X 73.927" = 11.5 SF

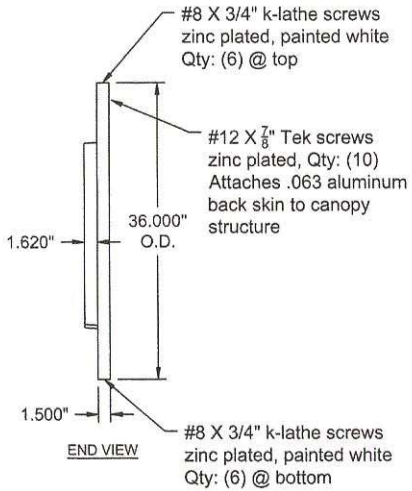
SIGN SPECS:
36" X 100" = 25 SF

UL NUMBER:
E84811

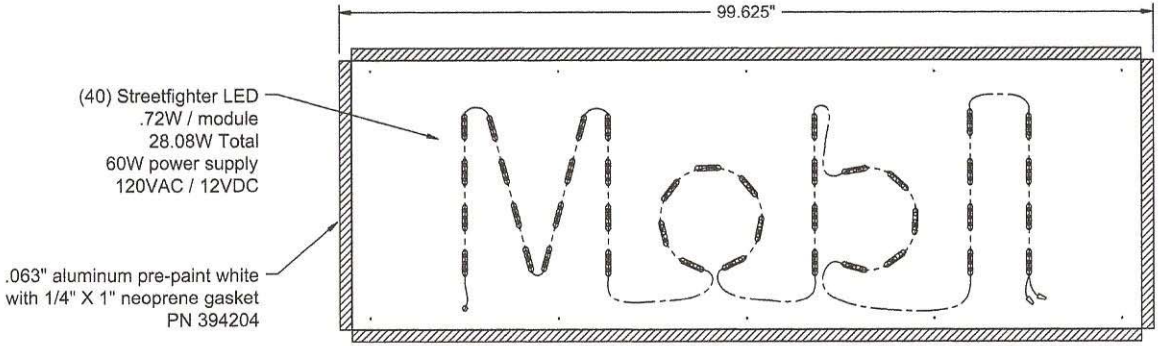
Appx weight of sign = 75lbs



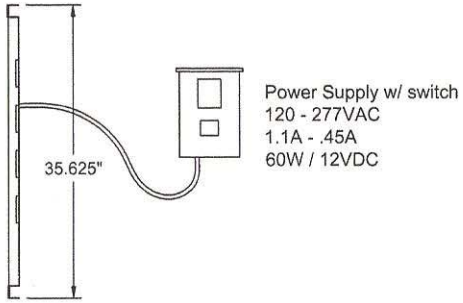
FRONT VIEW - PUSH THRU LETTERS IN FACE



END VIEW



INTERNAL DETAILS



END VIEW

NIGHT VIEW

Project Name	PBL #	Customer	Created by
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Revision #	**Date**	**Scale**	**Page #**
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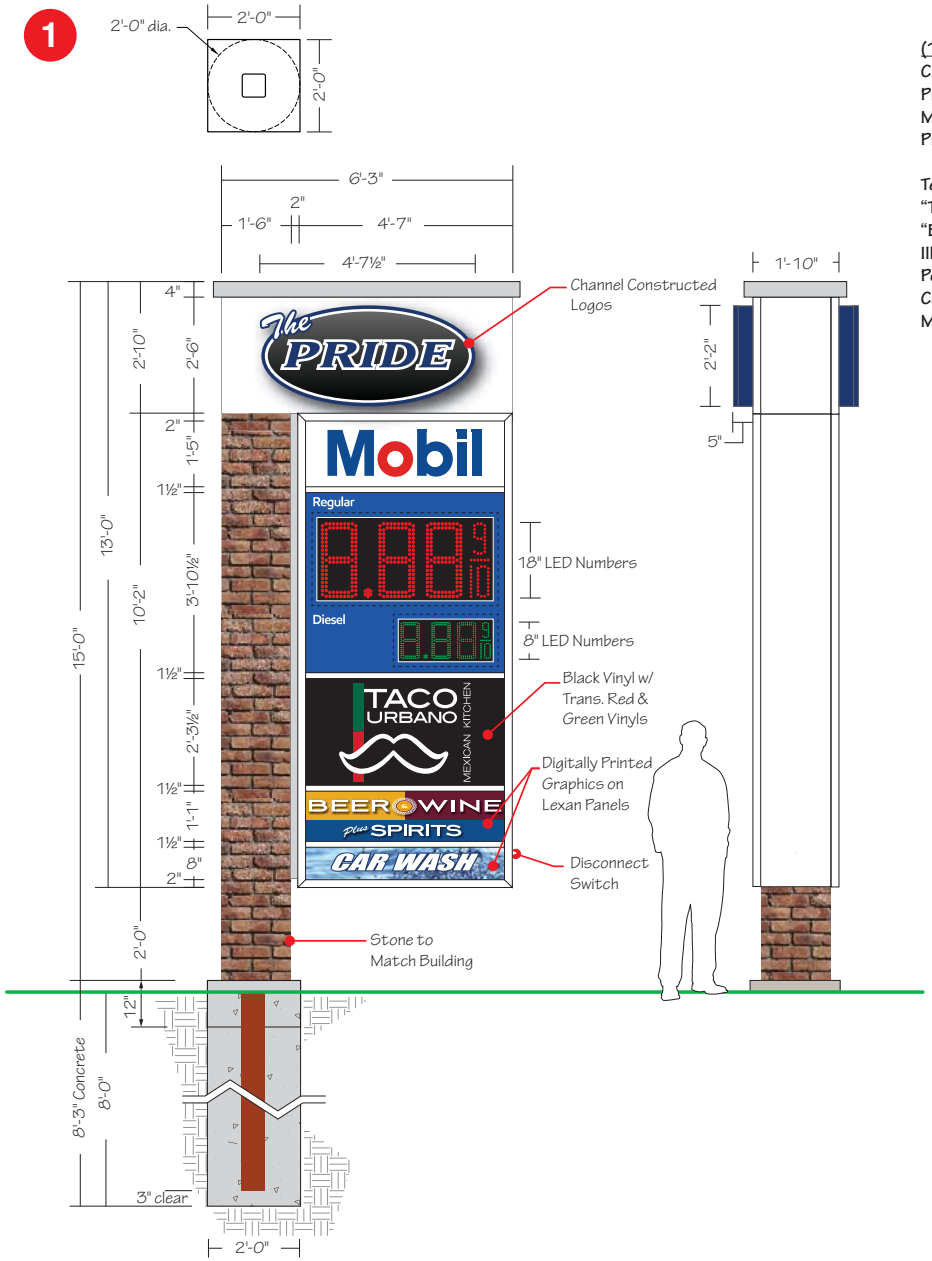
1



(1) 13'-0" x 6'-3" Double Face Illuminated Flag Mounted Sign - 81.25 SF

Cabinet: Fabricated Aluminum Painted White - Satin Finish
Pride Logos: 5" Deep Fabricated Channel Letter - Decorated White Acrylic Face - White LED Illumination
Mobile Logos: 3M 3630-97 Bristol Blue & 143 Poppy Red Translucent Vinyls
Pricer Panel: 3M 3630-97 Bristol BlueTranslucent Vinyl - Copy Reversed Out White
- Pricer Units: 16" LED & 12" LED
Tenant Panels: White Polycarbonate
"Taco Urbano" Graphics: 3M 7725-12 Black / 3630-76 Holly Green / 3630-33 Red Vinyls
"Beer Wine Liquor" & Car Wash Panels: White Polycarbonate w/ Digitally Printed Graphics
Illumination: White LEDs
Power: (2) 20Amp @ 120Volts Electrical Circuits Run to Site by Others
Column: CMU Block w/ Brick to Match Building
Mounting: (1) HSS 6" x 6" x 3/8" ASTM A-500 Gr. B with
(3) 4" x 4" x 3/16" ASTM A-500 Gr. B Steel Mounting Plates
- (1) 2'-0" dia. x 8'-0" deep Concrete Foundation w/
2'-0" W x 2'-0" L x 12" D Square Concrete Pad for Masonry

NIGHT ILLUMINATION VIEW

Parvin-Clauss
SIGN COMPANY
Design • Fabrication • Installation • Maintenance
165TubewayDrive • CarolStream • Illinois60188
Tel/630-510-2020 • Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

The PRIDE

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 3/8" = 1'

SHEET NO.: 1 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19 - center sundry cab.
2 5.18.20 - new layout
3 5.19.20 - size adjustments
4 5.26.20 - Taco Urbano Logo
5 6.19.20
6
7
8

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

This sign is built to UL Standards for operation in North America.

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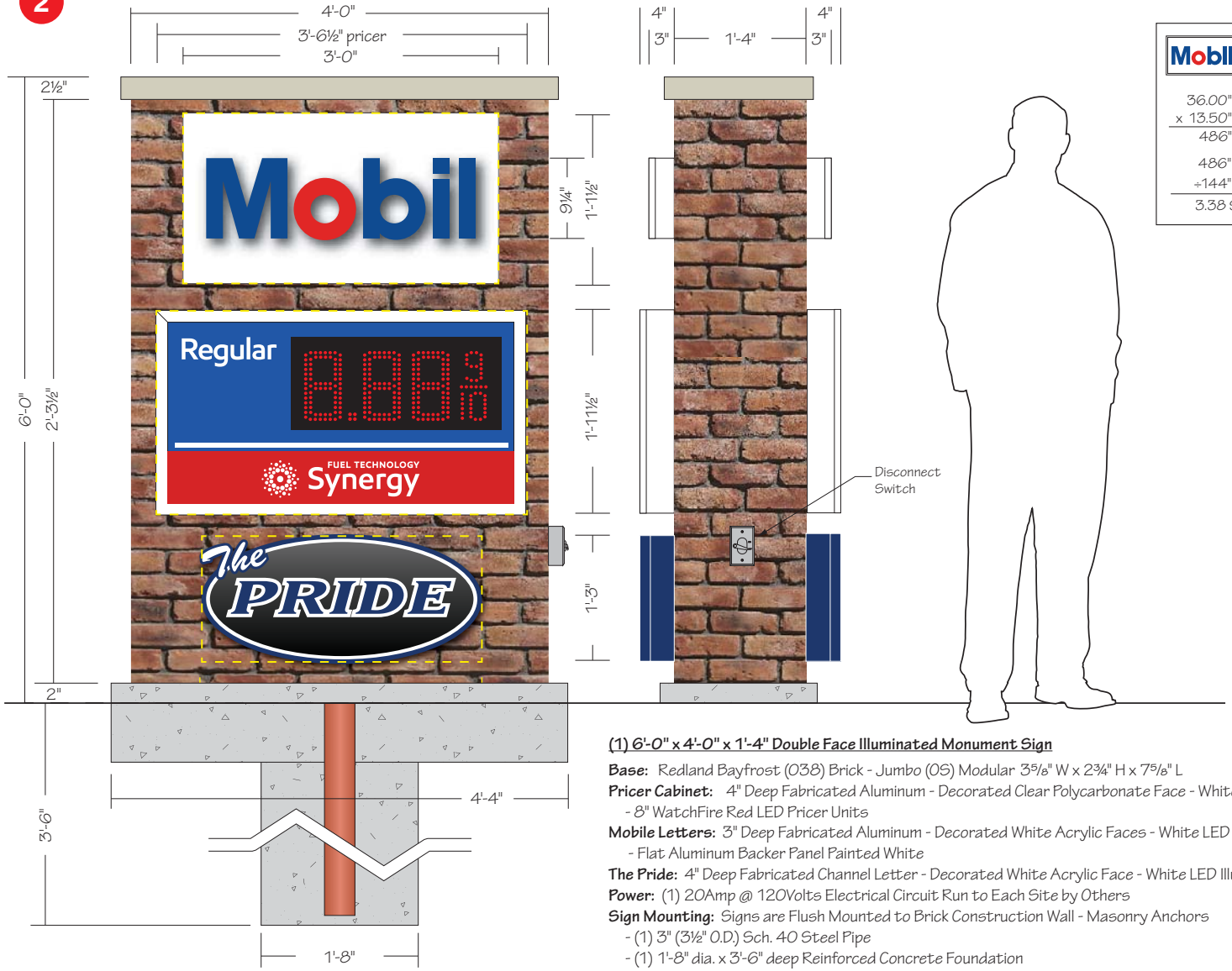
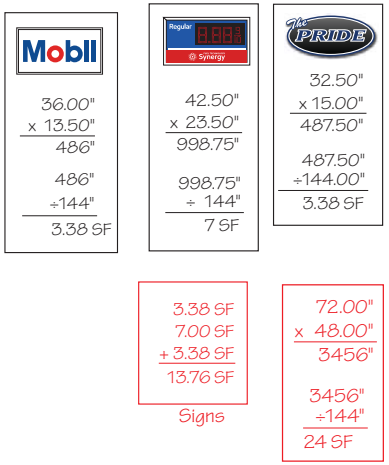
2





(1) 6'-0" x 4'-0" x 1'-4" Double Face Illuminated Monument Sign

Base: Redland Bayfrost (038) Brick - Jumbo (OS) Modular 3⁵⁄₈" W x 2¾" H x 7⁵⁄₈" L
Pricer Cabinet: 4" Deep Fabricated Aluminum - Decorated Clear Polycarbonate Face - White LED Illumination
- 8" WatchFire Red LED Pricer Units
Mobile Letters: 3" Deep Fabricated Aluminum - Decorated White Acrylic Faces - White LED Illumination
- Flat Aluminum Backer Panel Painted White
The Pride: 4" Deep Fabricated Channel Letter - Decorated White Acrylic Face - White LED Illumination
Power: (1) 20Amp @ 120Volts Electrical Circuit Run to Each Site by Others
Sign Mounting: Signs are Flush Mounted to Brick Construction Wall - Masonry Anchors
- (1) 3" (3½" O.D.) Sch. 40 Steel Pipe
- (1) 1'-8" dia. x 3'-6" deep Reinforced Concrete Foundation
- (1) 8" D x 4'-4" L x 1'-8" W Reinforced Concrete Pad for Masonry

Parvin-Clauss
SIGN COMPANY
Design • Fabrication • Installation • Maintenance
165TubewayDrive • CarolStream • Illinois60188
Tel/630-510-2020 • Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 1" = 1'

SHEET NO.: 2 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19 - all cabs. on brick area
2 5.18.20
3 5.19.20
4 5.26.20 - Mobil letters / cab. depth
5 6.19.20
6
7
8

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

This sign is built to UL Standards for operation in North America.

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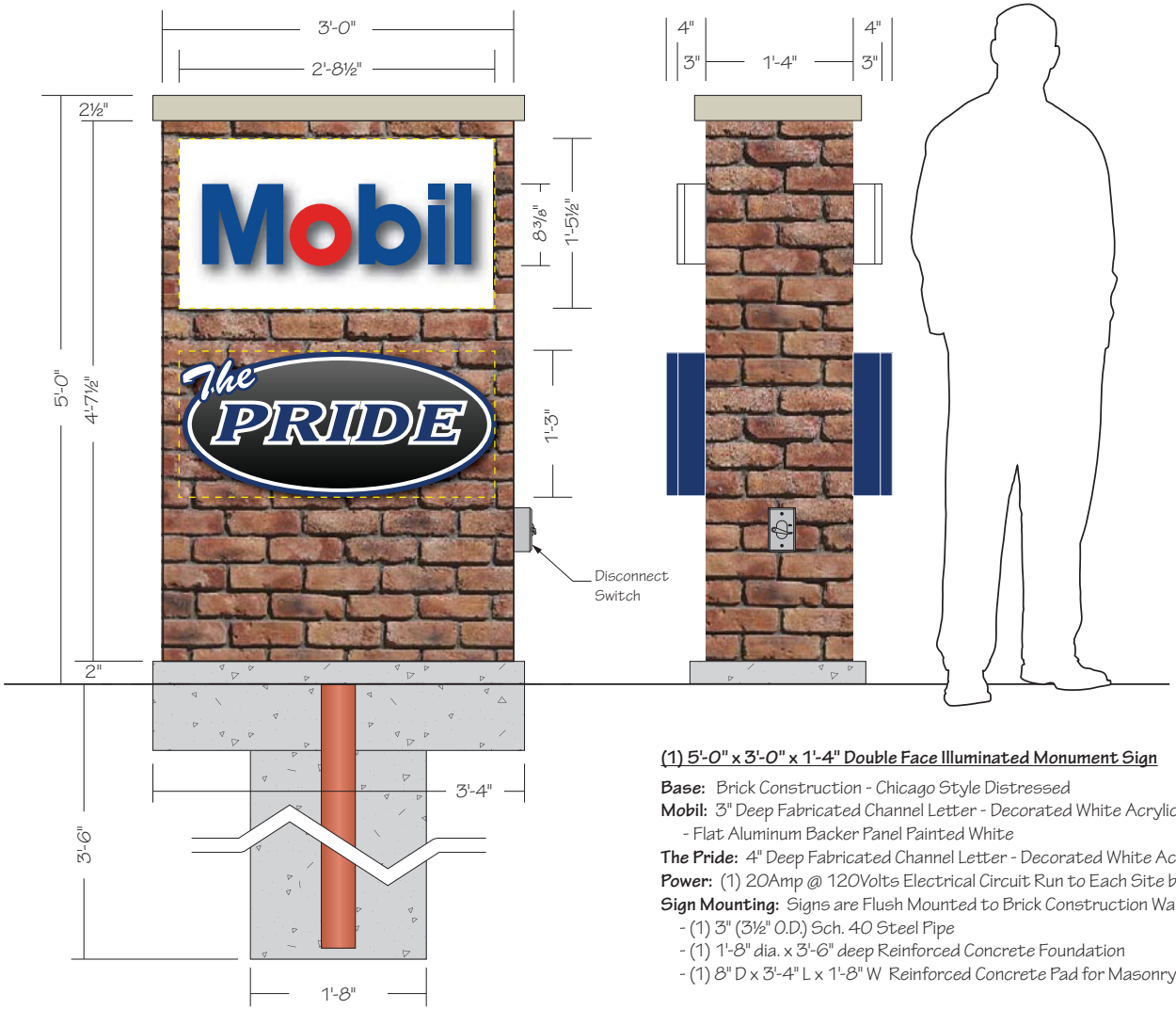
3



32.50" x 17.50" = 568.75"	32.50" x 15.00" = 487.50"
568.75" ÷144" = 4 SF	487.50" ÷144" = 3.38 SF
4.00 SF + 3.38 SF = 7.38 SF	60" x 36" = 2160"
Signs	2160" ÷ 144" = 15 SF
	Base

(1) 5'-0" x 3'-0" x 1'-4" Double Face Illuminated Monument Sign

Base: Brick Construction - Chicago Style Distressed
Mobil: 3" Deep Fabricated Channel Letter - Decorated White Acrylic Faces - White LED Illumination
- Flat Aluminum Backer Panel Painted White
The Pride: 4" Deep Fabricated Channel Letter - Decorated White Acrylic Face - White LED Illumination
Power: (1) 20Amp @ 120Volts Electrical Circuit Run to Each Site by Others
Sign Mounting: Signs are Flush Mounted to Brick Construction Wall - Masonry Anchors
- (1) 3" (3½" O.D.) Sch. 40 Steel Pipe
- (1) 1'-8" dia. x 3'-6" deep Reinforced Concrete Foundation
- (1) 8" D x 3'-4" L x 1'-8" W Reinforced Concrete Pad for Masonry

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www.parvinclauss.com

PROJECT:

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 1" = 1'

SHEET NO.: 3 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20 - Mobil letters / cab. depth
5 6.19.20
6
7
8

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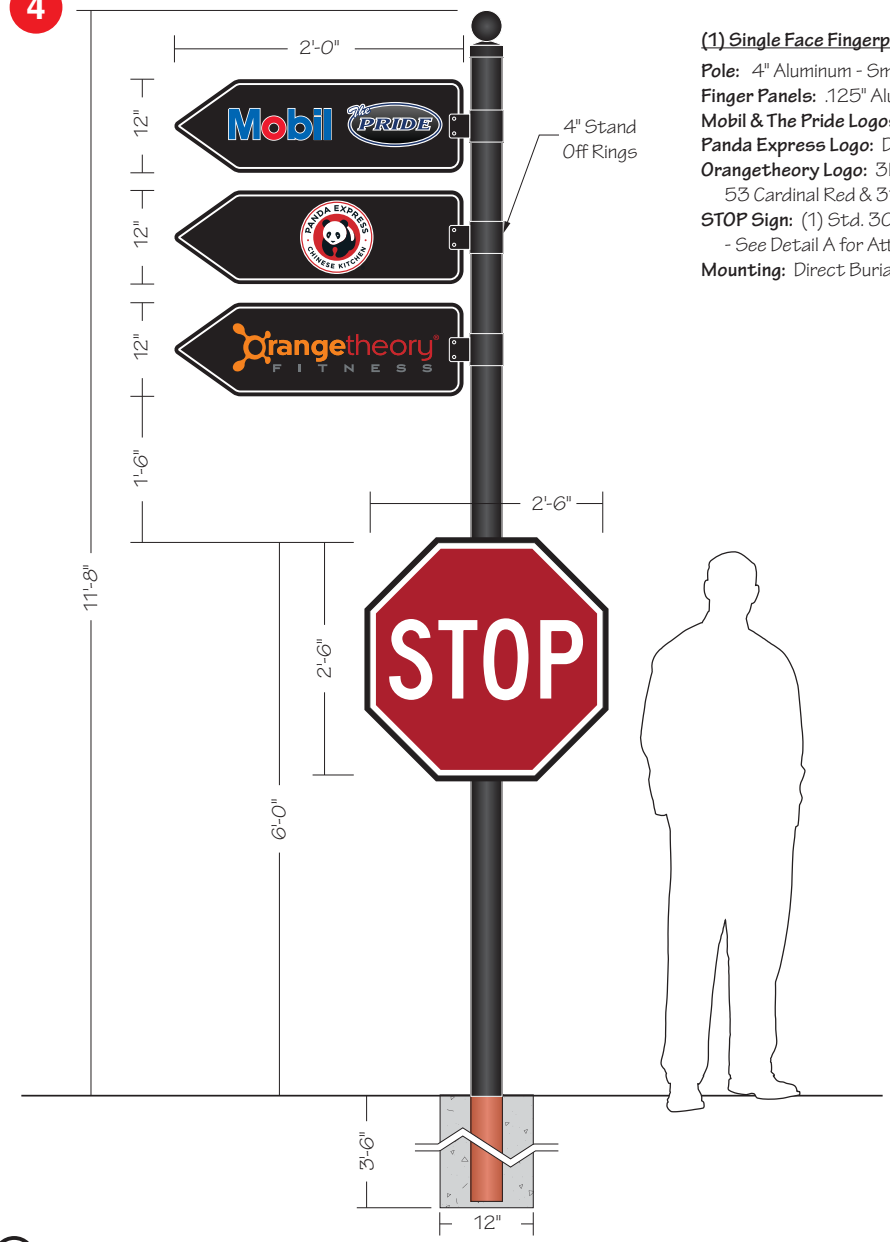
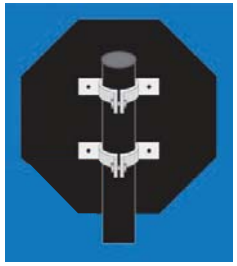
4



(1) Single Face Fingerpost Directional Sign

Pole: 4" Aluminum - Smooth - Painted Black - Ball Cap
Finger Panels: .125" Aluminum Painted Black w/ Reflective White Vinyl In-line Border
Mobil & The Pride Logos: Digitally Printed on White Vinyl Applied
Panda Express Logo: Digitally Printed on White Vinyl Applied
Orangetheory Logo: 3M 7725-14 Bright Orange,
53 Cardinal Red & 31 Medium Gray Vinyls Applied
STOP Sign: (1) Std. 30" x 30" Applied to .125" thick Black Aluminum Backer Panel
- See Detail A for Attachment Hardware
Mounting: Direct Burial in 1'-0" dia. x 3'-6" deep Concrete Foundation



DETAIL A - Post Brackets

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www.parvinclauss.com

PROJECT:

The PRIDE

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 3/4" = 1'

SHEET NO.: 4 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20
6
7
8

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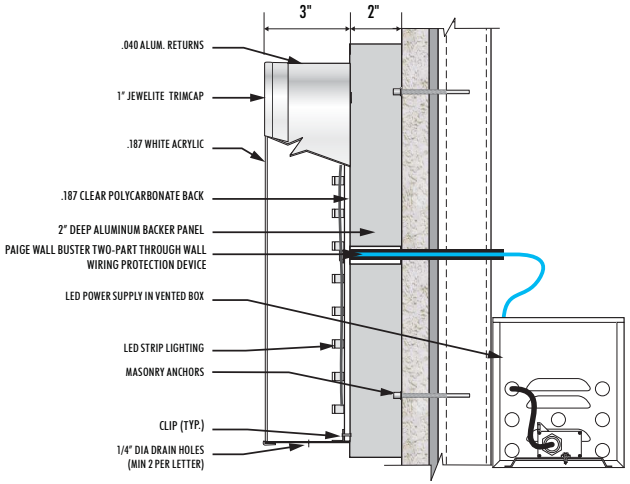
5



3" DEEP U/L APPROVED LED-ILLUMINATED CHANNEL LETTER - WIREWAY MOUNT

(1) 5'-4⅝" x 11'-8½" x 2" Deep SF Wall Sign w/ Illuminated Channel Letters

Panel: 2" Deep Fabricated Aluminum Painted PMS 288 Blue - Smooth Satin Finish
Faces: .125" Aluminum Painted PMS 288 Blue
Inline Strip: 3M 7725-10 White Vinyl
Black/Grey Gradient: Digitally Printed on Orajet 3751 RA White Vinyl Applied to Face
Letters & White In-line: Fabricated 3" Deep Channel Letters
"The" Returns: .040" Aluminum Painted PMS 288 Blue- 1" White Trimcap
"PRIDE" & In-line Returns: .040" Pre-finished White Aluminum - 1" White Trimcap
Faces: 7328 White Acrylic w/ Avery UC 900-684T PMS 288 Blue Translucent Vinyl Applied to Faces
Illumination: White LEDs with Remote 60Watt Power Supplies
Power: Use Existing at Site
Mounting: Flush to Building with Anchors Appropriate for Wall Construction

01 - SOUTH ELEVATION

Scale: 1/8" = 1'-0"

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PROJECT:

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 1/2" = 1'

SHEET NO.: 5 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20 - New Elevation
6
7
8

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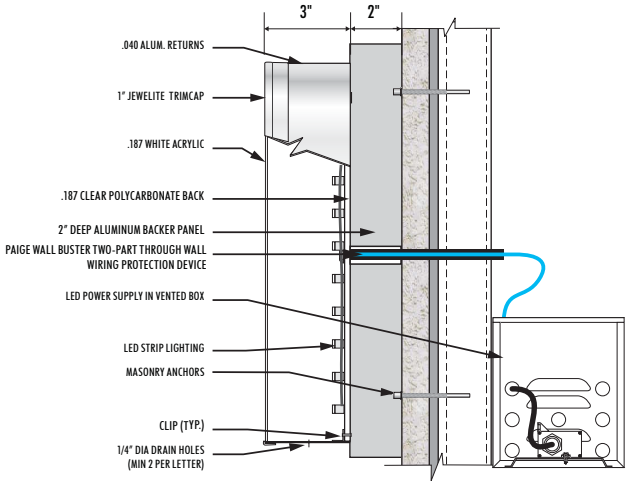
6



3" DEEP U/L APPROVED LED-ILLUMINATED CHANNEL LETTER - WIREWAY MOUNT

(1) 5'-4⅝" x 11'-8½" x 2" Deep SF Wall Sign w/ Illuminated Channel Letters

Panel: 2" Deep Fabricated Aluminum Painted PMS 288 Blue - Smooth Satin Finish
Faces: .125" Aluminum Painted PMS 288 Blue
Inline Strip: 3M 7725-10 White Vinyl
Black/Grey Gradient: Digitally Printed on Orajet 3751 RA White Vinyl Applied to Face
Letters & White In-line: Fabricated 3" Deep Channel Letters
"The" Returns: .040" Aluminum Painted PMS 288 Blue- 1" White Trimcap
"PRIDE" & In-line Returns: .040" Pre-finished White Aluminum - 1" White Trimcap
Faces: 7328 White Acrylic w/ Avery UC 900-684T PMS 288 Blue Translucent Vinyl Applied to Faces
Illumination: White LEDs with Remote 60Watt Power Supplies
Power: Use Existing at Site
Mounting: Flush to Building with Anchors Appropriate for Wall Construction

04 - NORTH ELEVATION
Scale: 1/8" = 1'-0"

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PROJECT:

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE House / RM / KZ

DRAWN BY Bill Marlow

DATE 10.23.19

SCALE 1/2" = 1'

SHEET NO. 6 of 12

WORK ORDER 82989

FILE NAME PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20 - New Elevation
6
7
8

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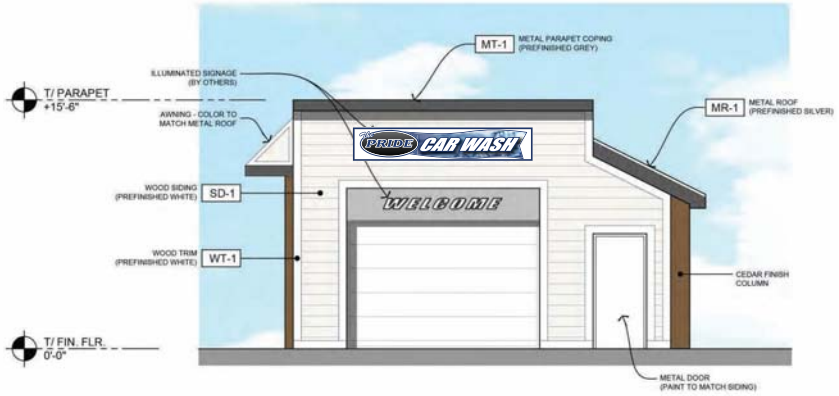
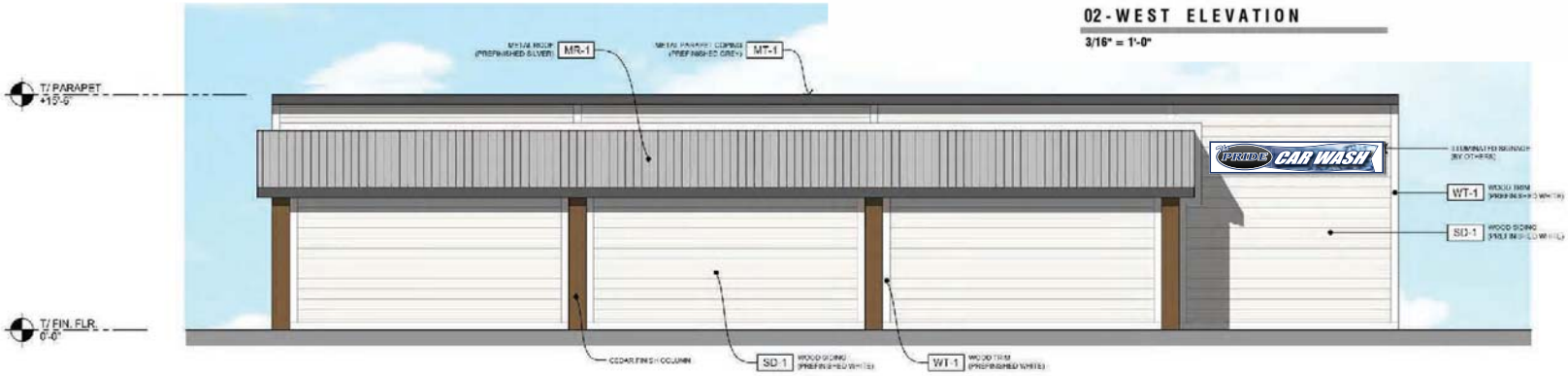
7

(2) 2'-1½" x 11'-6" x 5" Deep SF Wall Sign

Cabinet: 5" Deep Fabricated Aluminum Painted PMS 288 Blue - Smooth Satin Finish
Faces: 3/16" White Poltcarbonate
Graphics: Digitally Printed on Translucent White Vinyl
Illumination: White LEDs with 12V 60W 120/277V Power Supplies
Power: Use Existing at Site
Mounting: Flush to Building with Anchors Appropriate for Wall Construction



02 - WEST ELEVATION
3/16" = 1'-0"



04 - SOUTH ELEVATION
Scale: 1/8" = 1'-0"

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PROJECT:

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ
DRAWN BY: Bill Marlow
DATE: 10.23.19
SCALE: 1" = 1'
SHEET NO.: 7 of 12
WORK ORDER: 82989
FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20 - New Sign
6
7
8

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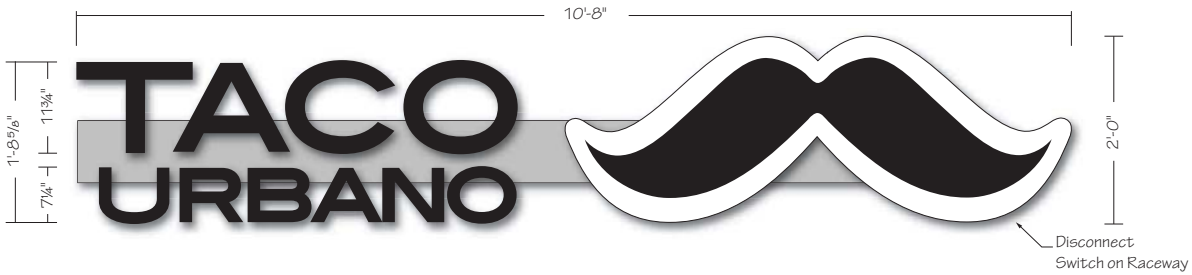
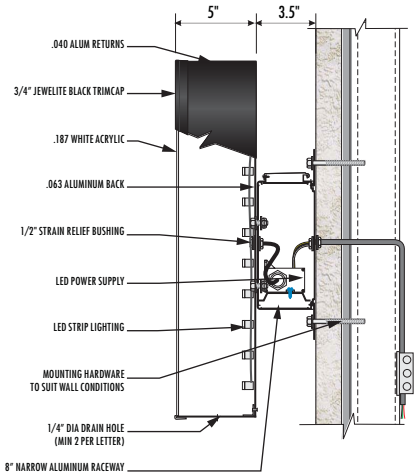
8





(1 set) 5" Deep Illuminated Channel Letters & Logo on Raceway

Letter & Logo Returns: .040" Fabricated Aluminum Prefinished Black
Letter Faces: White Acrylic w/ 3M 3635-222 Black Perforated Vinyl Applied - 3/4" Black Trimcap
Logo Face: White Acrylic w/ 3M 7725-12 Black Vinyl Applied - 3/4" Black Trimcap
Raceway: Std. 8" Narrow - Extruded Aluminum Painted to Match Wall Color
Illumination: White LEDs with 60Watt Power Supplies in Raceway
Power: (1) 20Amp @ 120Volt Electrical Circuit Run to Site by Others
Mounting: Flush to Building with Anchors Appropriate for Wall Construction

01 - SOUTH ELEVATION

Scale: 1/8" = 1'-0"

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PROJECT:

The PRIDE

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE House / RM / KZ

DRAWN BY Bill Marlow

DATE 10.23.19

SCALE 3/4 " = 1'

SHEET NO. 8 of 12

WORK ORDER 82989

FILE NAME PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20 - New Elevation
6
7
8

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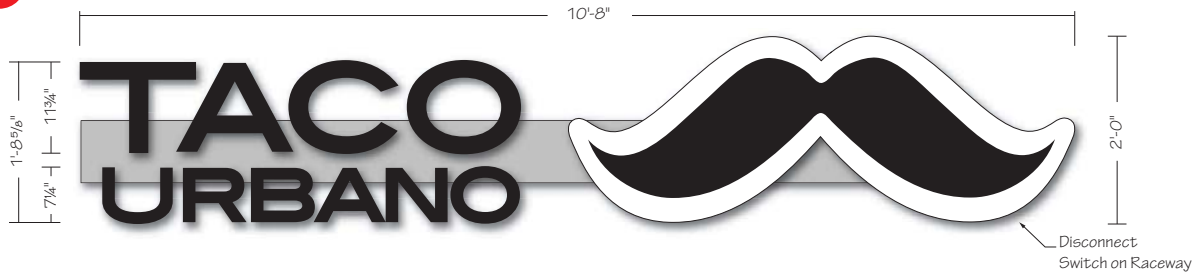
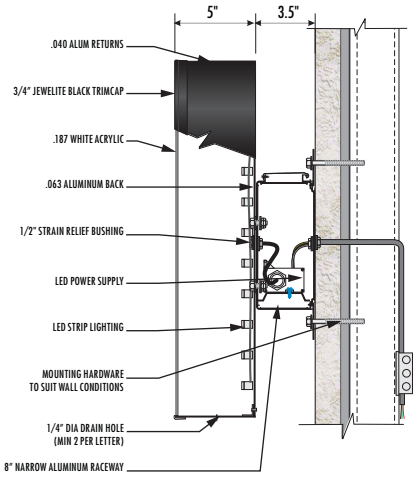
9





(1 set) 5" Deep Illuminated Channel Letters & Logo on Raceway

Letter & Logo Returns: .040" Fabricated Aluminum Prefinished Black
Letter Faces: White Acrylic w/ 3M 3635-222 Black Perforated Vinyl Applied - 3/4" Black Trimcap
Logo Face: White Acrylic w/ 3M 7725-12 Black Vinyl Applied - 3/4" Black Trimcap
Raceway: Std. 8" Narrow - Extruded Aluminum Painted to Match Wall Color
Illumination: White LEDs with 60Watt Power Supplies in Raceway
Power: (1) 20Amp @ 120Volt Electrical Circuit Run to Site by Others
Mounting: Flush to Building with Anchors Appropriate for Wall Construction

04-NORTH ELEVATION

Scale: 1/8" = 1'-0"

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www.parvinclauss.com

PROJECT:

The PRIDE

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 1/2" = 1'

SHEET NO.: 9 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20 - New Elevation
6
7
8

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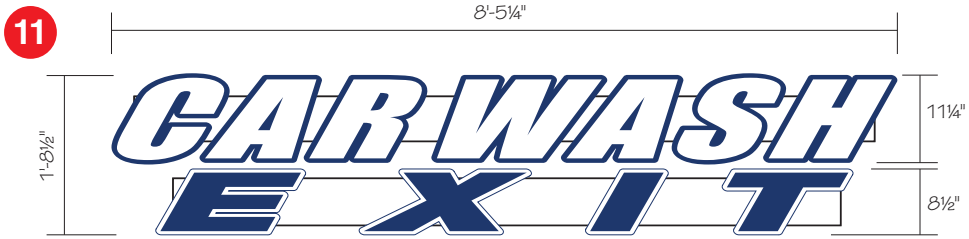
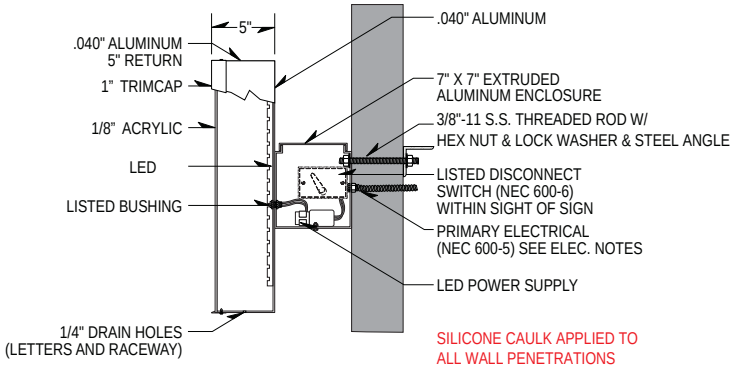
10

11



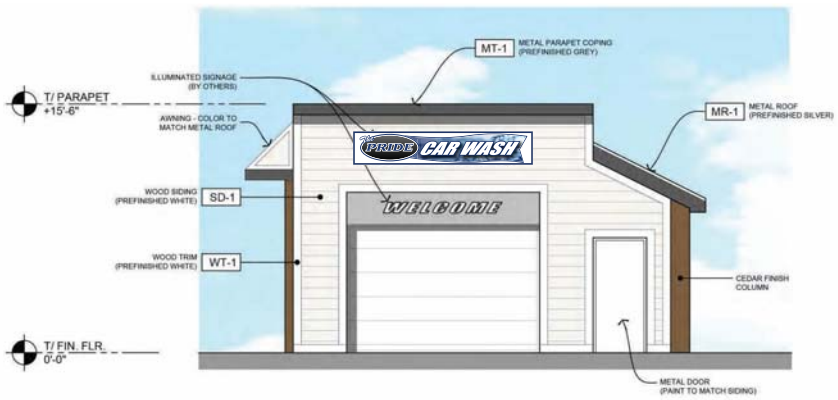


Bottom Raceway Mount
Upside Down

(1 set each) 5" Deep Illuminated Channel Letters on Raceways - 8.45 SF / 14.40 SF

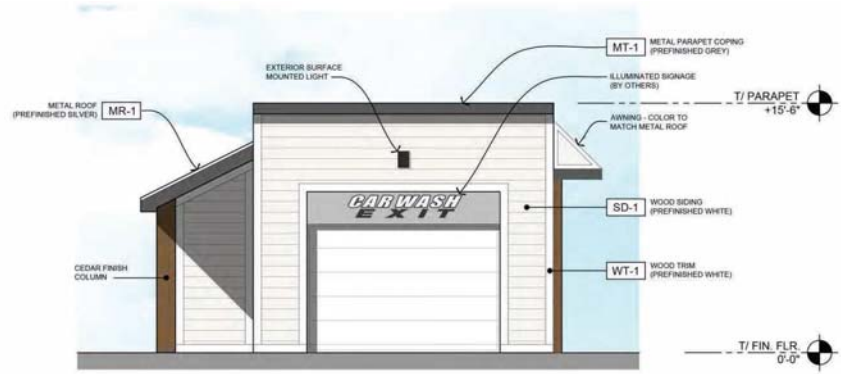
Returns: Fabricated Aluminum Painted PMS 288 Blue
Faces: #7328 White Acrylic w/ 1" Jewelite White trimcap
Vinyl: 3M 3630-157 Sultan Blue Translucent Vinyl
Raceways: Std. 7" x 7" Aluminum Painted to Match Wall Color - SW 7063 Nebulous White
Illumination: White LED
Power: (1) 20Amp @ 120Volts Electrical Circuit Run to Site by Others
Mounting: Raceways Flush Mounted to Building - Appropriate Hardware for Wall Construction

NOTE: FIELD SURVEY REQUIRED PRIOR TO FABRICATION



02 - WEST ELEVATION

Scale: 1/8" = 1'-0"



03 - EAST ELEVATION

Scale: 1/8" = 1'-0"

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PROJECT:

The PRIDE

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE House / RM / KZ

DRAWN BY Bill Marlow

DATE 10.23.19

SCALE 3/4" = 1'

SHEET NO. 10 of 12

WORK ORDER 82989

FILE NAME PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20 - New Elevation
6
7
8

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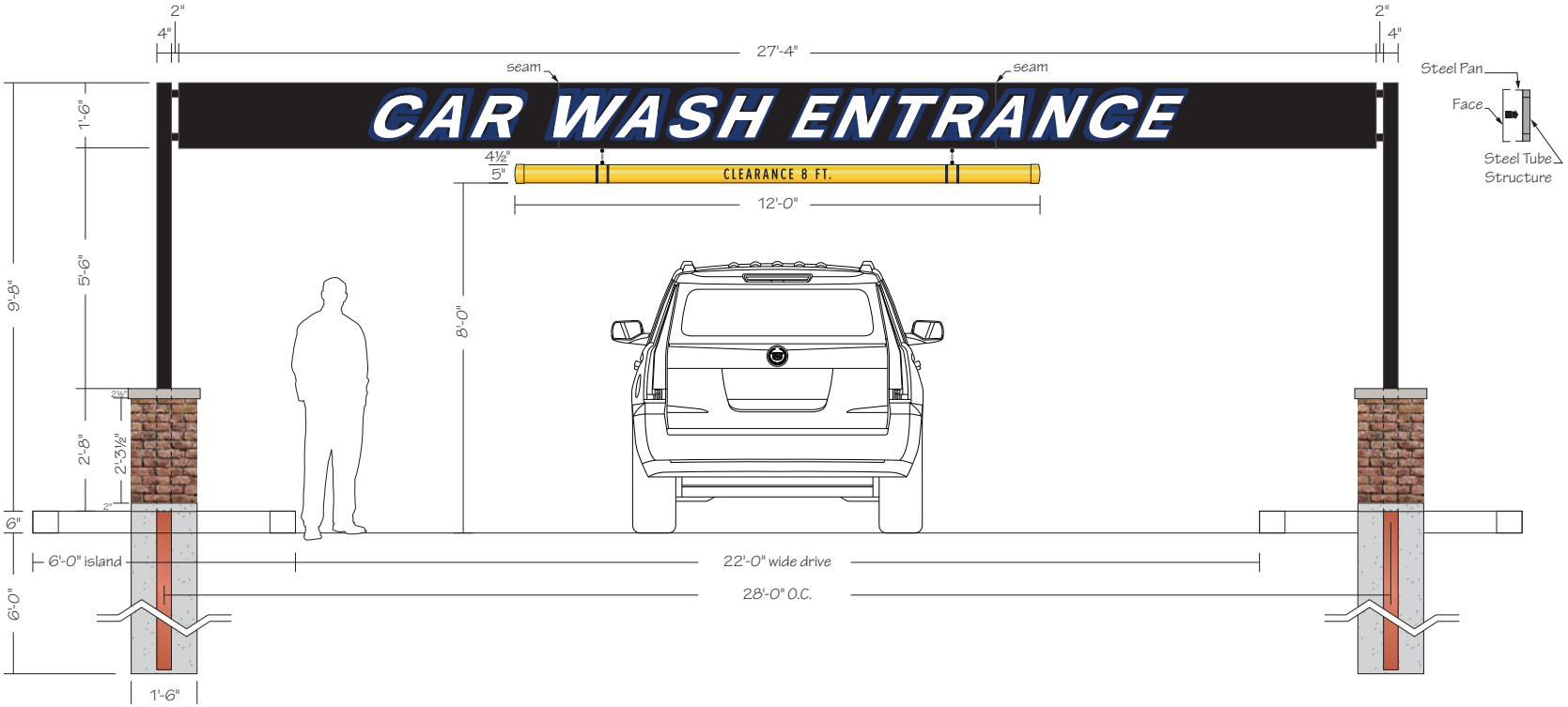
12



(1) 1'-6" x 27'-4" x 2" Single Face Non-Illuminated Entrance Gateway

Cabinet: Fabricated Aluminum Painted Black - Suede Satin Finish
- 2" x 2" Tube Internal Structure

Graphics: 3M 7725-37 Sapphire Blue & 7725-10 White Vinyls
Clearance Bar: 5" PVC Pipe w/ Caps Painted MAP 42248 Sundance Yellow
Clearance Ht. Copy & Stripes: 3M 680-85 Black Reflective Vinyl
Bases: Masonry to Match Building - Redland Bayfrost (038) Brick
- Jumbo (OS) Modular: 35/8" W x 2¾" H x 75/8" L

Mounting: (2) 4" x 4" Tube Steel set into (2) 1'-6" dia. x 6'-0" deep Concrete Foundations

NOTE: FIELD SURVEY REQUIRED PRIOR TO FABRICATION

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DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: 3/8" = 1'

SHEET NO.: 11 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
4 5.26.20
5 6.19.20
6
7
8

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

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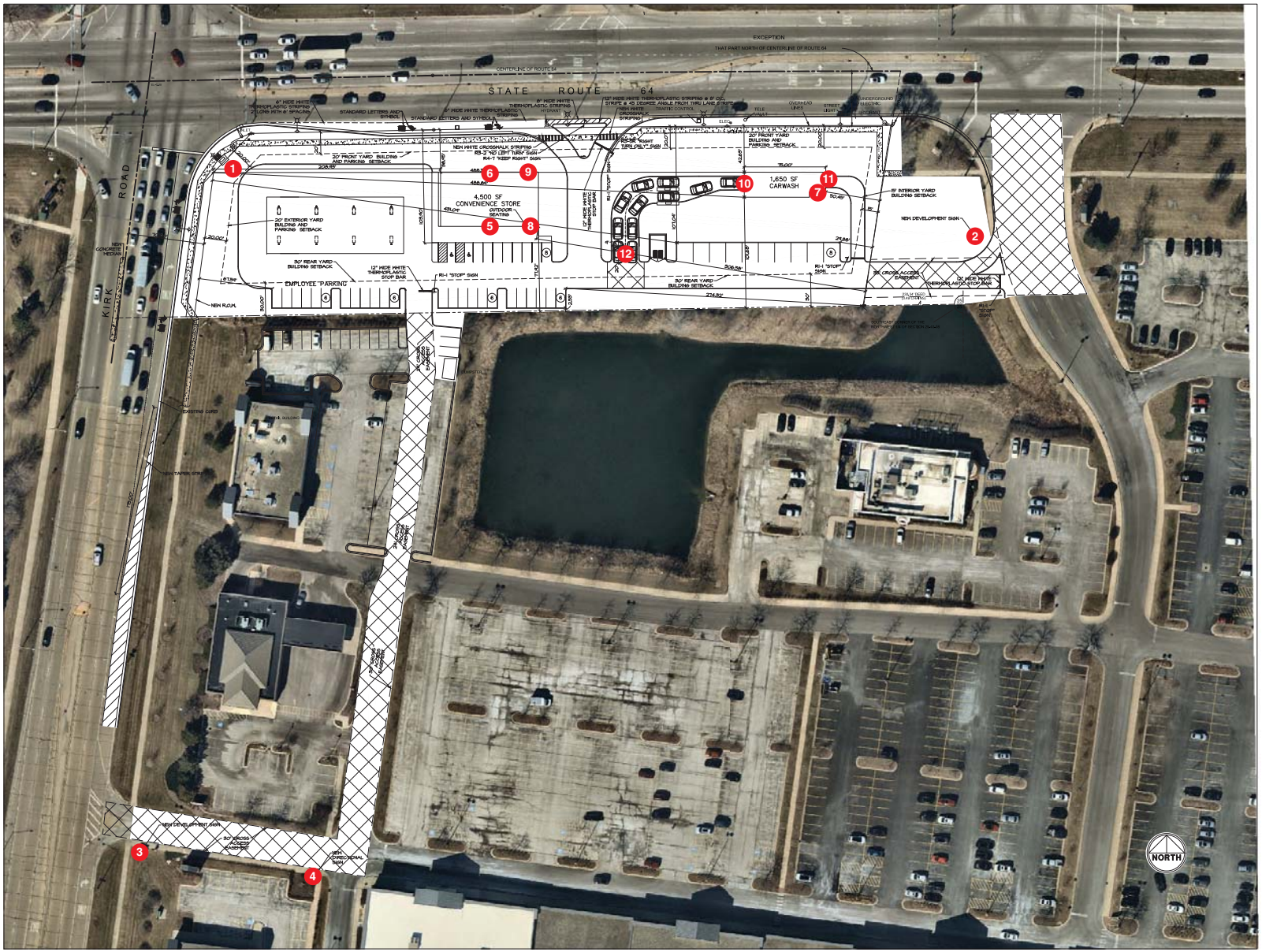

Parvin-Clauss
SIGN COMPANY

Design ▪ Fabrication ▪ Installation ▪ Maintenance

165TubewayDrive▪CarolStream▪Illinois60188
Tel/630-510-2020 ▪ Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

The PRIDE

SEC Kirk Road & Main Street (Rt. 64)
St. Charles, IL

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE: House / RM / KZ

DRAWN BY: Bill Marlow

DATE: 10.23.19

SCALE: nts

SHEET NO.: 12 of 12

WORK ORDER: 82989

FILE NAME: PRD82989

REVISIONS:

1 11.04.19
2 5.18.20
3 5.19.20
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This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

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Hampton, Lenzini and Renwick, Inc.
Civil Engineering • Structural Engineering • Environmental Services • Land Surveying
www.hlrengineering.com

July 8, 2020

Attn: Ellen Johnson
City Planner
City of St. Charles
2 E. Main Street
St. Charles, IL 60174

Re: PRIDE of Kane County Gas Station
St. Charles, IL
Traffic Study Memorandum

Dear Ms. Johnson:

Per your request we reviewed the revised Traffic Study and response letter submitted by Eriksson Engineering Associates, Ltd. on June 25, 2020 for the referenced project. We concur with the findings of the study and have one additional minor comment on the Traffic Study.

1. On Table 4, the analysis year headings currently show 2017 and 2029, but should read 2017 and 2025.

If you have any questions or need additional information regarding the above comments, please contact HLR at 847-697-6700.

Yours truly,

HAMPTON, LENZINI AND RENWICK, INC.

By: Callie Allbright

Callie Allbright, PE
Traffic Engineer

Amy McSwane, PE, PTOE
Preliminary/Traffic Engineering Manager

Memorandum

TO: Daniel Soltis
CIMA Developers, LP

FROM: Stephen B. Corcoran, P.E., PTOE
Director of Traffic Engineering

DATE: April 27, 2020 **Revised June 25, 2020**

RE: PRIDE of Kane County
On-site Circulation
St. Charles, Illinois

This memorandum summarizes a review of the on-site circulation, site access, and car wash stacking requirements for the proposed PRIDE of Kane County gas station with a convenience store and tunnel carwash in St. Charles, Illinois. It is located on the southeast corner of North Avenue (IL 64) and Kirk Road. Three access drives are provided with a right-in and -out only drive on North Avenue and two internal drive connections with the adjacent Main Street Commons shopping center.

This memorandum provides supplemental information to original traffic study dated March 3, 2020 for the PRIDE of Kane County.

Existing and Total Traffic Volumes

For reference, the existing traffic volumes on the roads near the site are attached in **Figure 3** from the original report. The total traffic volumes are a combination of the existing traffic volumes, projected non-site growth in those volumes, and the site related traffic. These were combined with the gas station traffic volumes to generate the Year 2025 total traffic volumes which are shown on **Figure 8**.

Site Driveways

Capacity analyses were conducted for the three site driveways servicing the site to determine how well they will operate and the stacking at the stop signs. **Table 1** summarizes the results of the analyses. A copy of the capacity analyses is attached. Overall, each site driveway will operate at LOS D or better.

Right-In and –Out Drive on North Avenue

The proposed right-in and out driveway for the gas station will be located on the south side of North Avenue and designed with a pork chop island,16-foot inbound and outbound lanes, an eastbound right-turn lane, and an outbound stop sign. An additional 11.8 feet of the site along North Avenue will be dedicated to IDOT to accommodate the right-turn lane. The current median break for the existing driveway will need to be reconstructed as a barrier median. The outbound right-turn will operate well with up to two vehicles stacking at one time. The entry road between North Avenue and the east-west internal roadway is 105 feet long so outbound vehicles stacking at the stop sign will not impact internal site traffic.

Right-In and Left-Out Drive on the Main Street Commons Entrance Road

The gas station proposes to have a right-in and left-out only driveway on the Main Street Commons Entrance Road to allow site traffic to have access to the traffic signal on North Avenue. It will have 14-foot a right-turn inbound and left-out outbound lanes with paint striping and signage to prohibit right-turns out and left-turns in. Traffic exiting the gas station will operate at a level of service A or B with one vehicle stopped at the stop sign.

Table 1
Driveway Level of Service and Total Delay

Intersection	Movement	AM Peak		PM Peak		Saturday Peak	
		2017	2025	2017	2025	2017	2025
North Avenue Right-In and Out Drives	Sb Right	B-12.7	B-13.5	C-22.0	D-25.5	C-17.0	C-17.7
	Nb Right		C-25.0		C-17.8		C-19.0
Main Street Commons Access Drive	Wb Left		A-10.0		B-10.5		B-10.6
Internal Drive Connection by Pandya Express and Bank	Eb Approach	A-0.0	A-0.0	A-0.0	A-0.0	A-0.0	A-0.0
	Wb Approach	A-1.5	A-0.3	A-1.3	A-0.6	A-4.1	A-1.4
	Nb Approach	A-9.0	B-10.1	A-9.3	B-10.1	A-9.1	B-10.0
	Sb Approach	A-9.2	B-10.0	A-9.1	A-9.9	A-9.4	B-10.1

Panda Express/Bank/Main Street Commons Intersection

Within the Main Street Commons shopping center, there are two internal circulation roads to the north and west of their main parking fields that also provide access to a bank site and Panda Express restaurant site. Each approach has one lane for left-turns, throughs, and right-turns. Currently it is uncontrolled with no yield or stop signs. With the development of the gas station, it is recommended that the north and south legs be controlled by stop signs in order to establish the right of way for the drivers approaching the intersection. With the additional gas station traffic, the intersection will continue to work well with minimal delays and stacking.

Internal Circulation

The fuel pumps are located on the west side of the site. The pumps are 32-feet apart (east-west) to allow a fueling vehicle on each side (10 foot each) and a 22-foot center lane to allow vehicles to maneuver around other fueling vehicles when they are finished. In the north-south direction, there is 40 feet of pavement from the north curb line to the first pump, then 32-feet to the second pump, and 42-feet to a row of parking. This is sufficient space to allow a vehicle to fuel at each pump and have another vehicle waiting or a vehicle with a trailer while maintaining two-way traffic around the canopy.

Traffic entering from North Avenue will turn right at the east-west internal roadway to the fuel pumps and/or convenience store. A minimal amount of traffic will turn left to go directly to the car wash. Most customers will fuel their vehicles first and pay for the car wash at the same time to receive a PIN code for the wash. If an inbound vehicle turns left to go directly to the car wash, there is sufficient distance to turn left onto the circulation road and then turn left into the car wash.

The cross-easement connection between the gas station and Panda Express parking lot is 24-foot wide and should have a stop sign northbound where it meets the internal east-west road and a stop sign southbound where it enters the Panda Express parking lot.

Car Wash Stacking Requirements

The City of St. Charles Zoning Code required vehicle stacking for an automatic car wash is two vehicles per bay plus ten stacking spaces per bay (see **Appendix**). For the proposed tunnel car wash, there is one bay which will require a minimum stacking for 12 vehicles. The code's definition of stacking spaces shall begin behind the last vehicle being washed.

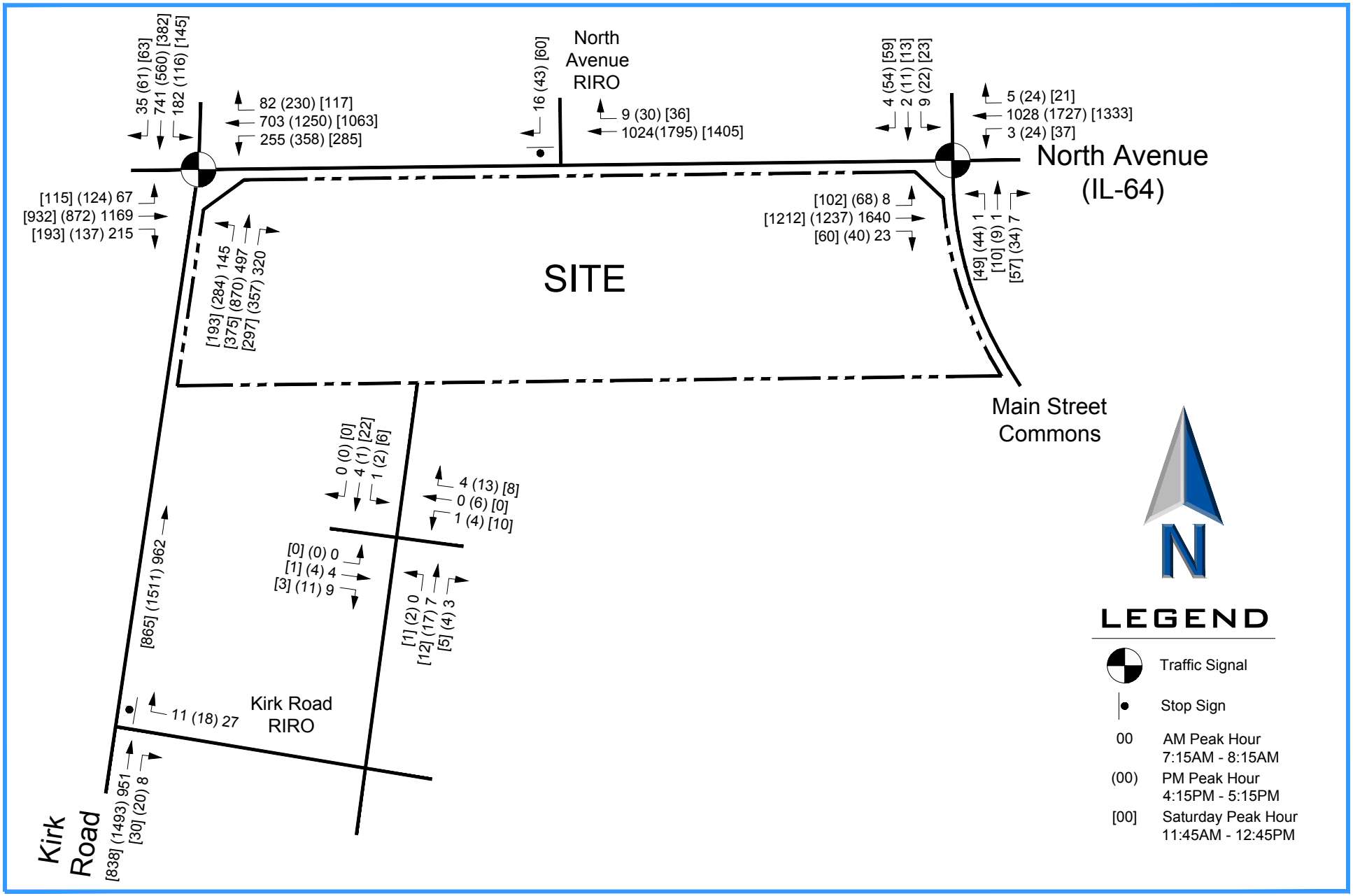
The car wash is a tunnel that pulls the vehicle thru the wash area. Vehicles enter on the west side traveling eastbound and exits the east side of the building and site. Ten spaces are provided south of the building for patrons to vacuum their vehicles. The car wash stacking consists of three vehicles in the car wash building, two single-file vehicles about to enter the building after the payment gates, two vehicles side by side paying for their car wash, and two lines of three vehicles each waiting to pay. That is a total of 13 stacking spaces minus the last one being washed for a total of 12 spaces which meets the zoning code requirement.

Studies of car washes at a gas station indicate that the typical maximum queue is six vehicles not including the vehicles in the car wash building. EEA's experience at other gas stations with car washes supports the study's findings. The proposed site plan provides queuing for 13 vehicles and satisfies the requirement.

Please note that a car wash at a gas station is an ancillary service available to the users of a gas station and not the primary use. They do not offer the additional services or products a full-service car wash would and do not spend as much time on-site. The overall processing time is less for the proposed gas station car wash because the driver receives a code at the pump, waits in line, and then their car is washed and dried. A full-service car wash typically takes cash payments and provides towel drying which lengthens the overall processing time.

APPENDIX

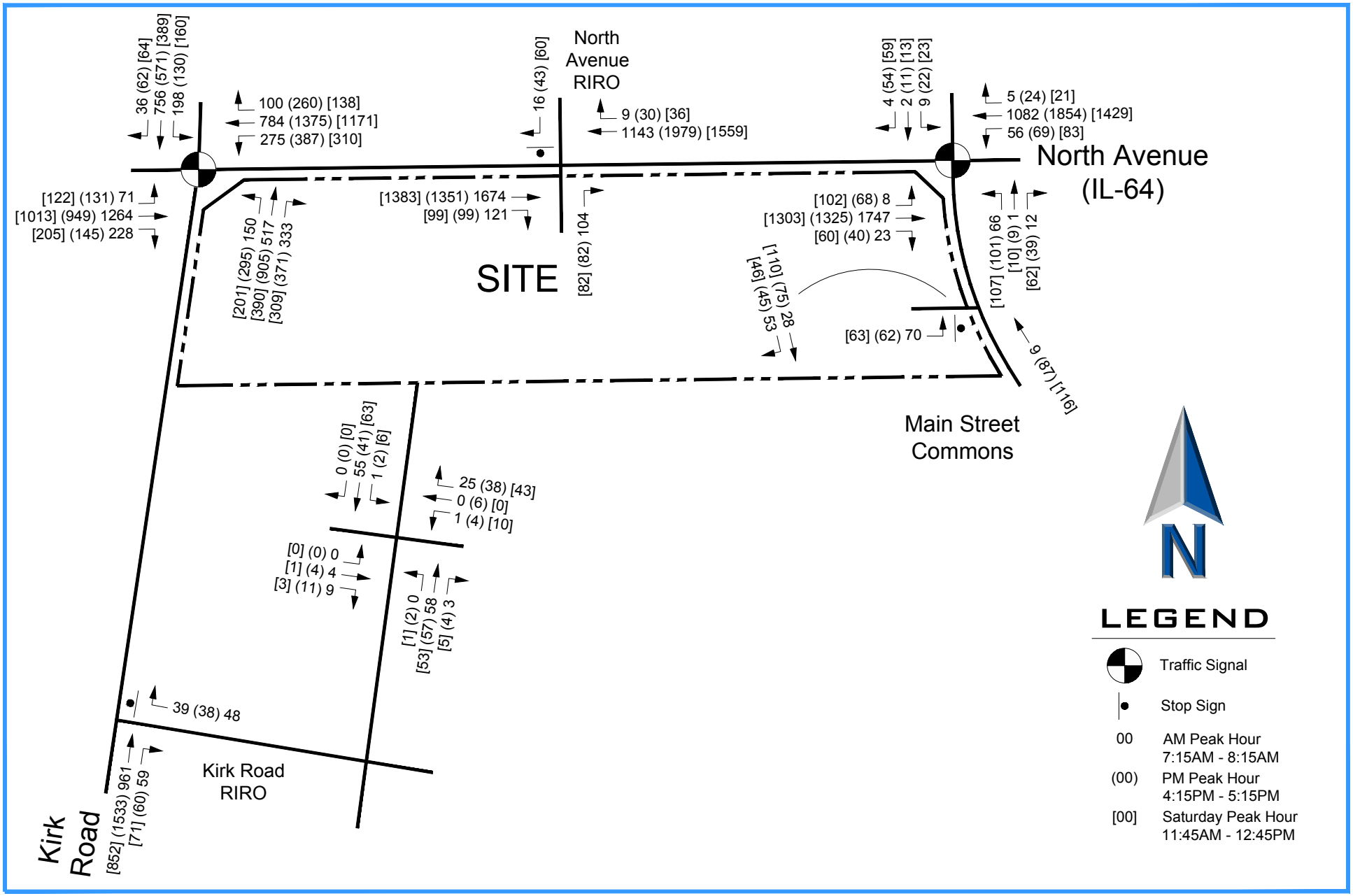
- **Figures 3 and 8**
- **Car Turning Path into Car Wash**
- **Driveway Capacity Analyses**
- **Zoning Code**



ERIKSSON ENGINEERING ASSOCIATES, LTD.

2017 Existing Traffic Volumes

Figure 3



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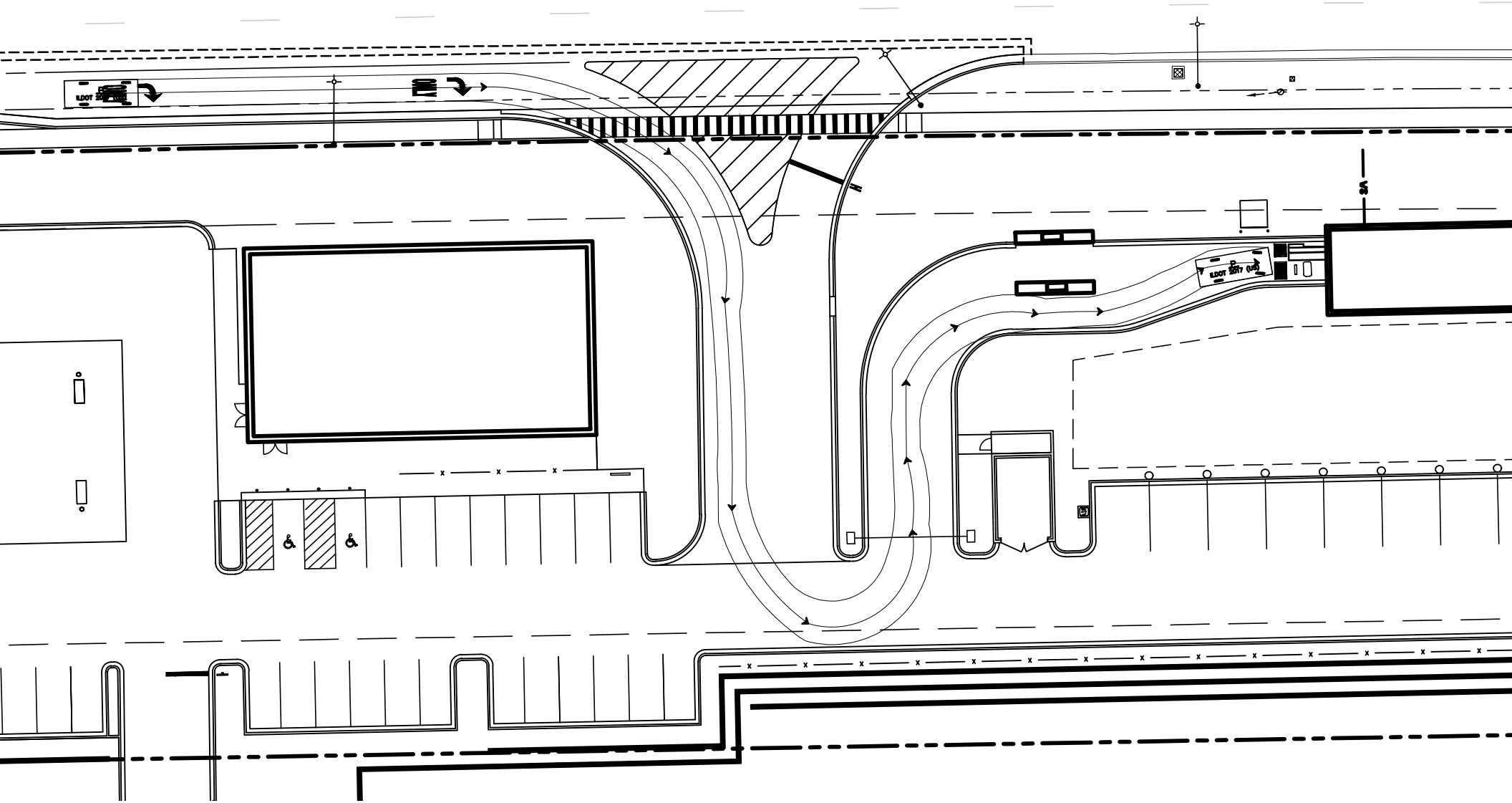
2025 Total Traffic Volumes

Figure 8


ILDOT 2017 (UP)

HCS7 Two-Way Stop-Control Report

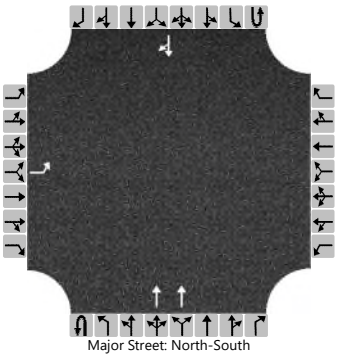
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	PRIDE of Kane County

Site Information

Intersection	Main St Commons/Gas Dr
Jurisdiction	St Charles
East/West Street	PRIDE Driveway
North/South Street	Main Street Commons Entr
Peak Hour Factor	0.50
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	0		0	0	0	0	0	2	0	0	0	1	0
Configuration		L									T					TR
Volume (veh/h)		70									9				28	53
Percent Heavy Vehicles (%)		3														
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5														
Critical Headway (sec)		6.86														
Base Follow-Up Headway (sec)		3.5														
Follow-Up Headway (sec)		3.53														

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		140														
Capacity, c (veh/h)		862														
v/c Ratio		0.16														
95% Queue Length, Q_{95} (veh)		0.6														
Control Delay (s/veh)		10.0														
Level of Service (LOS)		A														
Approach Delay (s/veh)	10.0															
Approach LOS	A															

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HCS7 Two-Way Stop-Control Report

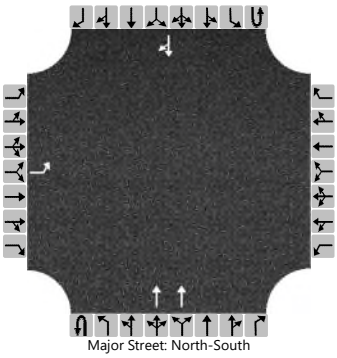
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	PRIDE of Kane County

Site Information

Intersection	Main St Commons/Gas Dr
Jurisdiction	St Charles
East/West Street	PRIDE Driveway
North/South Street	Main Street Commons Entr
Peak Hour Factor	0.65
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	0		0	0	0	0	0	2	0	0	0	1	0
Configuration		L									T					TR
Volume (veh/h)		62									87				75	45
Percent Heavy Vehicles (%)		3														
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5														
Critical Headway (sec)		6.86														
Base Follow-Up Headway (sec)		3.5														
Follow-Up Headway (sec)		3.53														

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		95														
Capacity, c (veh/h)		749														
v/c Ratio		0.13														
95% Queue Length, Q_{95} (veh)		0.4														
Control Delay (s/veh)		10.5														
Level of Service (LOS)		B														
Approach Delay (s/veh)	10.5															
Approach LOS	B															

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HCS7 Two-Way Stop-Control Report

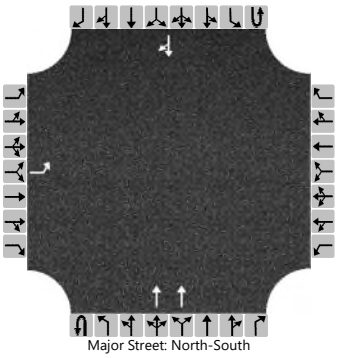
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	Sat. Peak Hour
Intersection Orientation	North-South
Project Description	PRIDE of Kane County

Site Information

Intersection	Main St Commons/Gas Dr
Jurisdiction	St Charles
East/West Street	PRIDE Driveway
North/South Street	Main Street Commons Entr
Peak Hour Factor	0.80
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	0		0	0	0	0	0	2	0	0	0	1	0
Configuration		L									T					TR
Volume (veh/h)		63									116				110	48
Percent Heavy Vehicles (%)		3														
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5														
Critical Headway (sec)		6.86														
Base Follow-Up Headway (sec)		3.5														
Follow-Up Headway (sec)		3.53														

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		79														
Capacity, c (veh/h)		724														
v/c Ratio		0.11														
95% Queue Length, Q_{95} (veh)		0.4														
Control Delay (s/veh)		10.6														
Level of Service (LOS)		B														
Approach Delay (s/veh)	10.6															
Approach LOS	B															

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HCS7 Two-Way Stop-Control Report

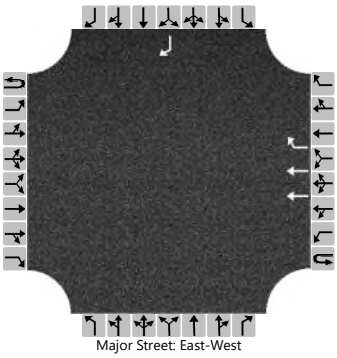
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1024	9								16
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																17
Capacity, c (veh/h)																484
v/c Ratio																0.03
95% Queue Length, Q_{95} (veh)																0.1
Control Delay (s/veh)																12.7
Level of Service (LOS)																B
Approach Delay (s/veh)													12.7			
Approach LOS													B			

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HCS7 Two-Way Stop-Control Report

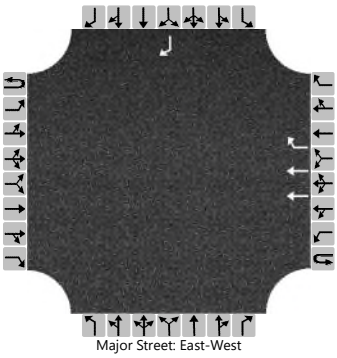
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1795	30								43
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																46
Capacity, c (veh/h)																257
v/c Ratio																0.18
95% Queue Length, Q_{95} (veh)																0.6
Control Delay (s/veh)																22.0
Level of Service (LOS)																C
Approach Delay (s/veh)													22.0			
Approach LOS													C			

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HCS7 Two-Way Stop-Control Report

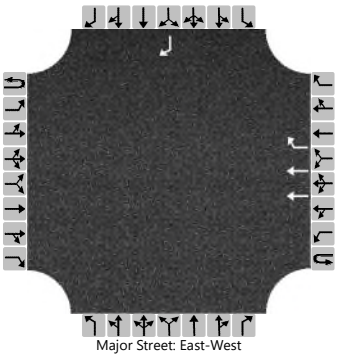
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	Saturday Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1405	36								60
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																63
Capacity, c (veh/h)																362
v/c Ratio																0.17
95% Queue Length, Q_{95} (veh)																0.6
Control Delay (s/veh)																17.0
Level of Service (LOS)																C
Approach Delay (s/veh)													17.0			
Approach LOS													C			

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HCS7 Two-Way Stop-Control Report

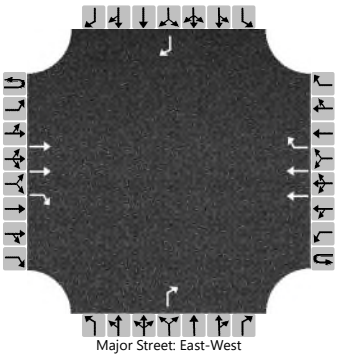
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+ Bank/PoSC Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1674	121			1143	9				104				16
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												109				17
Capacity, c (veh/h)												288				441
v/c Ratio												0.38				0.04
95% Queue Length, Q_{95} (veh)												1.7				0.1
Control Delay (s/veh)												25.0				13.5
Level of Service (LOS)												C				B
Approach Delay (s/veh)									25.0				13.5			
Approach LOS									C				B			

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HCS7 Two-Way Stop-Control Report

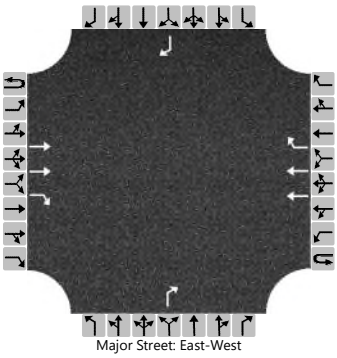
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	IDOT/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+ Bank/PoSC Drives
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1351	99			1979	9				82				43
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												87				46
Capacity, c (veh/h)												369				221
v/c Ratio												0.24				0.21
95% Queue Length, Q_{95} (veh)												0.9				0.8
Control Delay (s/veh)												17.8				25.5
Level of Service (LOS)												C				D
Approach Delay (s/veh)									17.8				25.5			
Approach LOS									C				D			

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HCS7 Two-Way Stop-Control Report

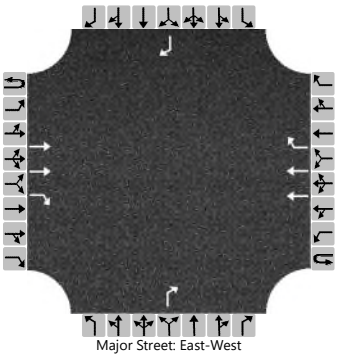
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	Saturday Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+Bank/PoSC Drives
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1383	99			1559	36				82				60
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												85				63
Capacity, c (veh/h)												368				320
v/c Ratio												0.23				0.20
95% Queue Length, Q_{95} (veh)												0.9				0.7
Control Delay (s/veh)												17.7				19.0
Level of Service (LOS)												C				C
Approach Delay (s/veh)									17.7				19.0			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

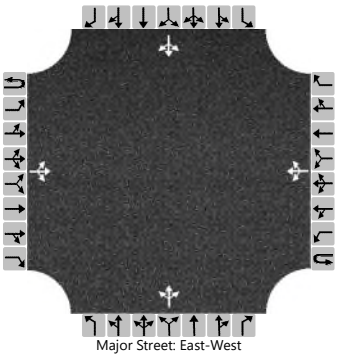
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2017
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.52
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	9		1	0	4		0	7	3		1	4	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				2					19				10	
Capacity, c (veh/h)		1606				1583					913				875	
v/c Ratio		0.00				0.00					0.02				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		7.2				7.3					9.0				9.2	
Level of Service (LOS)		A				A					A				A	
Approach Delay (s/veh)	0.0				1.5				9.0				9.2			
Approach LOS									A				A			

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HCS7 Two-Way Stop-Control Report

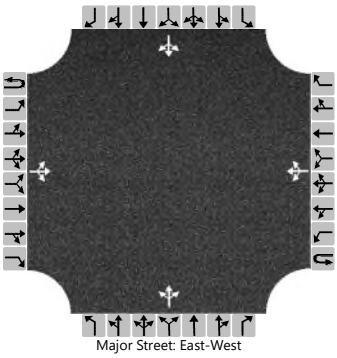
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.52
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	9		1	0	25		0	58	3		1	55	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				2					117				108	
Capacity, c (veh/h)		1553				1583					829				834	
v/c Ratio		0.00				0.00					0.14				0.13	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.5				0.4	
Control Delay (s/veh)		7.3				7.3					10.1				10.0	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)	0.0				0.3				10.1				10.0			
Approach LOS									B				A			

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HCS7 Two-Way Stop-Control Report

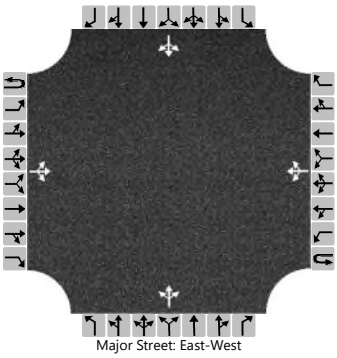
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2017
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.64
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	11		4	6	13		2	17	4		2	1	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					36				5	
Capacity, c (veh/h)		1577				1585					871				874	
v/c Ratio		0.00				0.00					0.04				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		7.3				7.3					9.3				9.1	
Level of Service (LOS)		A				A					A				A	
Approach Delay (s/veh)	0.0				1.3				9.3				9.1			
Approach LOS									A				A			

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HCS7 Two-Way Stop-Control Report

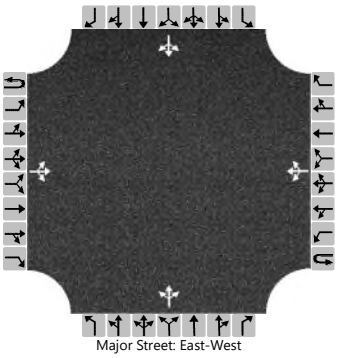
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.64
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	11		4	6	38		2	57	4		2	41	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					98				67	
Capacity, c (veh/h)		1526				1585					803				809	
v/c Ratio		0.00				0.00					0.12				0.08	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.4				0.3	
Control Delay (s/veh)		7.4				7.3					10.1				9.9	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)	0.0				0.6				10.1				9.9			
Approach LOS									B				A			

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HCS7 Two-Way Stop-Control Report

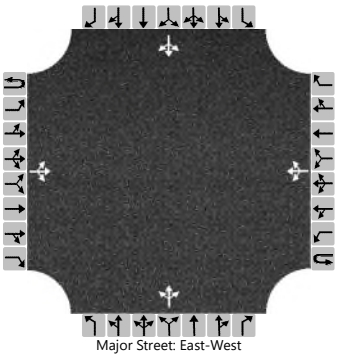
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2017
Time Analyzed	Sat Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.68
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	3		10	0	8		1	12	5		6	22	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				15					26				41	
Capacity, c (veh/h)		1601				1609					896				856	
v/c Ratio		0.00				0.01					0.03				0.05	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.2				7.3					9.1				9.4	
Level of Service (LOS)		A				A					A				A	
Approach Delay (s/veh)	0.0				4.1				9.1				9.4			
Approach LOS									A				A			

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HCS7 Two-Way Stop-Control Report

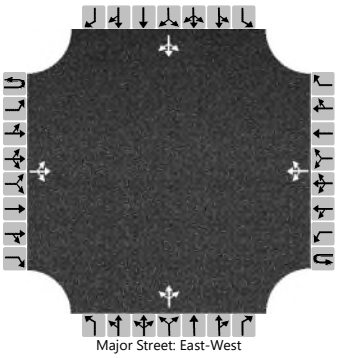
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	Sat Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.68
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	3		10	0	43		1	53	5		6	63	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				15					87				101	
Capacity, c (veh/h)		1533				1609					803				812	
v/c Ratio		0.00				0.01					0.11				0.12	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.4				0.4	
Control Delay (s/veh)		7.3				7.3					10.0				10.1	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.0				1.4				10.0				10.1			
Approach LOS									B				B			

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TABLE 17.24-3
REQUIRED OFF-STREET PARKING

USE	PARKING REQUIREMENT
Bank	4 per 1,000sf of GFA + 5 stacking per drive-in lane & ATM lane when there are 3 or less such lanes, or 4 stacking spaces per drive-in lane & ATM lane when there are 4 or more such lanes
Carpet Store	3 per 1000 sf of GFA
Car Wash, Automatic	2 per bay + 10 stacking spaces per bay
Car Wash, Manual/Hand Wash	1 per 2 bays + 2 stacking spaces per bay Where employees operate the vehicle in and out of the bay, and wash the vehicle in the bay, (hand-wash), no stacking is required, but the number of required parking spaces shall be increased by 1 per bay
Coffee or Tea Room	5 per 1,000sf of GFA
Day Care Center	3.5 per 1000 sf of GFA
Drive-Through Facility, except as specifically listed elsewhere	5 stacking spaces per drive-in service lane
Electronics Superstore	3 per 1000 sf of GFA
Financial Institution	4 per 1,000sf of GFA
Furniture Store	3 per 1000 sf of GFA
Gas Station (with or without retail sales of goods other than motor vehicle fuels)	1 per service bay + 4 per 1,000sf of GFA, provided that the number of required spaces may be reduced by the number of fuel pumps that can be accessed at any one time
Greenhouse/Plant Nursery	1 per 1,000sf of GFA + 3 per 1,000sf of outdoor sales area
Heavy Retail and Service	3 per 1,000sf of GFA + 3 per 1,000sf of outdoor sales area
Home Improvement Center	3 per 1,000sf of GFA + 4 per 1,000sf of outdoor sales area
Hotel/Motel	1 per room In CBD-1 & CBD-2, 1 per 4 lodging rooms
Kennel	1 per 1,000sf of GFA
Laundromat	2 per 1,000sf of GFA
Live Entertainment	10 per 1,000sf of GFA
Medical Cannabis Dispensing Organization	3 per 1,000 of GFA
Motor Vehicle Rental	3 per 1,000sf of GFA
Motor Vehicle Sales and Leasing	3 per 1,000sf of GFA (no required parking spaces shall be used for the display or storage of vehicles for sale or lease)
Motor Vehicle Service and Repair, Major or Minor	2 per service bay + 2 per 1,000sf of GFA

PRIDE of Kane County

Traffic Study

St. Charles, Illinois

Prepared For:

CIMA Developers LP

Prepared by:

Eriksson Engineering Associates, Ltd.

ERIKSSON ENGINEERING ASSOCIATES, LTD.

145 Commerce Drive, Ste A, Grayslake, IL 60030

847.223.8404

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1 – INTRODUCTION

Eriksson Engineering Associates, Ltd. (EEA) was retained by CIMA Developers LP to conduct a traffic study for a new gas station with a convenience store and car wash in St. Charles, Illinois. It is located on the southeast corner of the North Avenue (IL 64) and Kirk Road on a site with three farm structures. Access to the site is currently provided on North Avenue by a full access driveway with a median break in the existing westbound left-turn lane.

EEA was asked to review the existing and future traffic conditions around the gas station and to recommended improvements to its transportation network. The study area included North Avenue at Kirk Road, Main Street Commons, and the existing site access and at Kirk Road at the Main Street Commons driveway.

Data was collected of the existing traffic volumes along with traffic control devices, sidewalks, bike routes, and traffic lanes. Traffic projections were made for the Year 2025, after project completion, for the anticipated site traffic and regional traffic growth using data provided by the Institute of Transportation Engineers (ITE) and the Chicago Metropolitan Agency for Planning (CMAP). Capacity analyses were conducted and the recommendations developed for the site's transportation system. A review was conducted of the site circulation and the storage requirements for the car wash.

The traffic analysis developed the following conclusions:

- The development of the site as proposed will not adversely impact the level-of-service of study area intersections.
- Right-of-way will be dedicated to the Kane County Division of Transportation (10 additional feet) and the Illinois Department of Transportation (11.8 feet or more) along both roads for future regional roadway improvements.
- North Avenue access will be a right-in and –out only driveway with a pork chop island and an eastbound right-turn lane. The existing median break in the center median will be closed.
- Two cross easements will be provided to the Panda Express lot to the south and to the Main Street Center access road to the east with one inbound and one outbound lane.
- Sidewalks will be provided on the site frontage.
- The carwash storage meets the city code requirement of 12 vehicles.
- Site circulation is good with adequate distance around each fueling position to allow traffic to maneuver on-site.
- With the projected increases in regional traffic volumes, the intersection will need to consider the long-term improvements:
    - Southbound right-turn lane
    - North/South dual left-turn lanes

2 – EXISTING TRANSPORTATION NETWORK

Site Location and Area Land-Use

The site of the proposed gas station is located on the southeast corner of North Avenue and Kirk Road in St. Charles, Illinois. It has three vacant farm structures on approximately three acres of land. Charlestowne Mall, the West Suburban Bank, and On The Border restaurant are located to the north across North Avenue. Its eastern and southern borders are formed by the Main Street Shopping Center, and a Panda Express restaurant. St. John Neumann Church is on the opposite (northwest) corner of the intersection. First American Bank is to the west across Kirk Road. Access to the site is currently provided on North Avenue by a full access driveway with a median break in the existing left-turn lane. **Figure 1** illustrates the site's location and area roadways.

Bicycle/Pedestrian Routes

A multi-use path is located along the west side of Kirk Road extending thru the study area. Sidewalks are provided on the east side of Kirk Road south of the site. North Avenue has sidewalks along the south side of the road except for the site frontage. The north side of North Avenue has public sidewalk west of Kirk Road. The signalized intersection on North Avenue with Charlestowne Mall and Main Street Center has sidewalks on both sides of their entrance drives. Pedestrian signals and crosswalks are located on North Avenue west of Kirk Road and east of the Charlestowne Mall/Main Street signals.

Existing Roadway System

North Avenue (IL 64) is an east-west Strategic Regional Arterial (SRA) extending thru Kane County from the City of Chicago. It has two travel lanes in each direction with a barrier median. At its signalized intersection with Kirk Road, each approach has dual left-turn lanes, two thru lanes, and a right-turn lane. At the Charlestowne Mall/Main Street traffic signal, there are dual-left-turn lanes eastbound and single right- and left-turn lanes westbound. It is under the jurisdiction of the Illinois Department of Transportation and has a 45-mph posted speed limit west of Kirk Road and 35-mph east of Kirk Road.

Kirk Road **(Route 77)** is a north-south County Freeway extending north from Butterfield Road to Dunham Road. It has two travel lanes in each direction and a center median. At the North Avenue signalized intersection, Kirk Road has single left-turn lanes and two thru lanes. The northbound approach has a single right-turn lane. It is under the jurisdiction of the Kane County Division of Transportation and has a 40-mph posted speed limit.

Figure 2 illustrates the existing study area, travel lanes, and traffic control.

Existing Traffic Volumes

Weekday morning (6:00 to 9:00 AM) and afternoon (3:00 to 5:00 PM) and Saturday counts (11:00 AM to 2:00 PM) manual traffic counts were conducted at the study area intersections in 2017. The counts were collected over several days on Tuesday October 3rd and 10th, Thursday October 5th, and Wednesday October 11th, 2017 and on Saturday September 30th and October 7th and 14th.

These counts showed the peak-hours of traffic occurring from 7:15 to 8:15 AM and 4:15 to 5:15 PM on a weekday and from 11:45 AM to 12:45 PM on Saturday. **Figure 3** summarizes the existing traffic volumes with copies of the counts in the **Appendix**. North Avenue two-way traffic volumes varied from 2,700 to 3,200 vehicles per hour. Kirk Road carries less traffic with 1,700 to 2,200 vehicles per hour.

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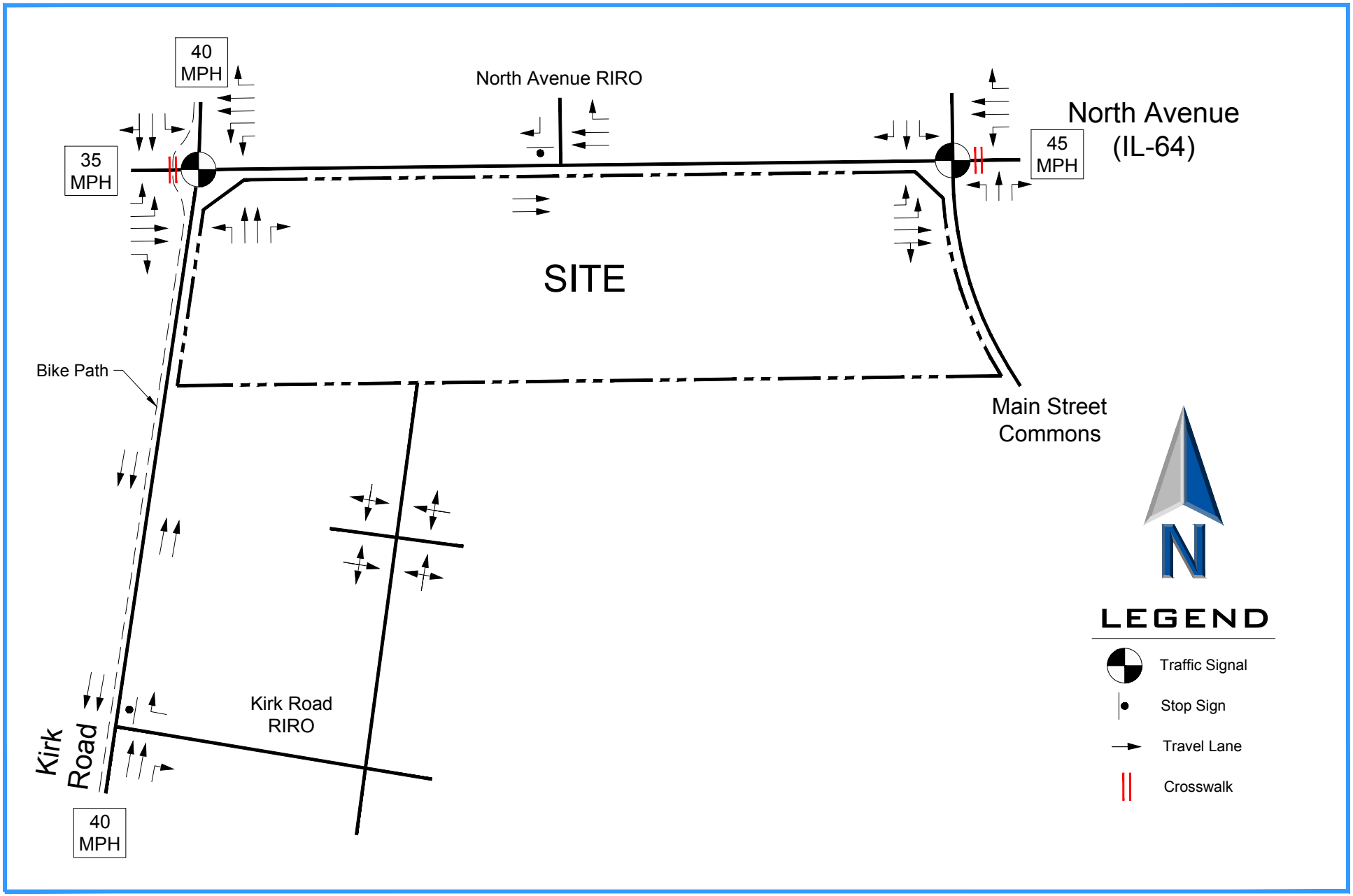
Site Location & Area Roadways

Figure 1



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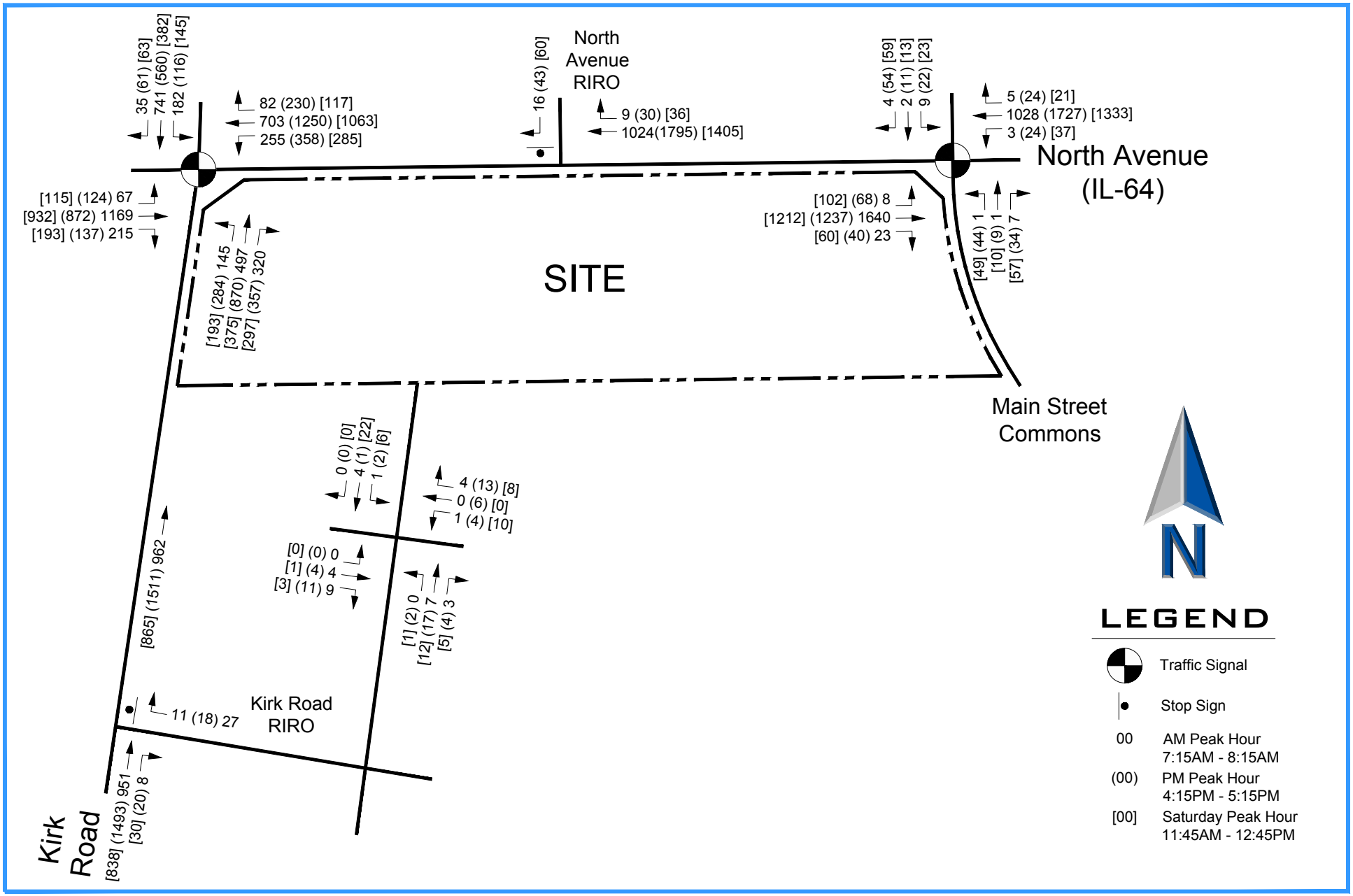
Existing Roadway Geometrics

Figure 2



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2017 Existing Traffic Volumes

Figure 3

3 – SITE TRANSPORTATION CHARACTERISTICS

Development Plan

The proposed development plan calls for a gas station with 16 fueling positions, a 3,600 square foot convenience center, and a tunnel car wash. Access is proposed from a right-in and-out drive on North Avenue, a right-in and out/left-out drive on the Main Street Commons access drive, and an internal driveway connection to the Panda Express parking lot.

Site Trip Generation

Gas station trip generation estimates were made using data provided by the Institute of Transportation Engineers (ITE) from its publication Trip Generation, 10th Edition for the weekday and Saturday peak-periods (see **Appendix**). Gas station trips are a combination of new trips attracted to the area and existing vehicles that travel by the site today that will stop at the station. These are called pass-by trips. **Table 1** summarizes the total site generated traffic volumes.

Table 1
PRIDE of Kane County Site Traffic Volumes

Use	Morning Peak Hour			Evening Peak Hour			Saturday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Pass-By Trips	140	140	280	102	102	204	104	104	208
New Trips	85	85	170	82	82	164	82	82	164
Total Site Trips	**225**	**225**	**450**	**184**	**184**	**368**	**186**	**186**	**372**

(1) ITE Land Use Code 960 – Super Convenience Market/Service Station

Directional Distribution

The directional distribution of gas station traffic on the street system was determined from the existing roadway system and traffic volumes. The traffic distribution is shown on **Table 2** and **Figure 4**.

Table 2
Directional Distribution on Adjacent Roadways

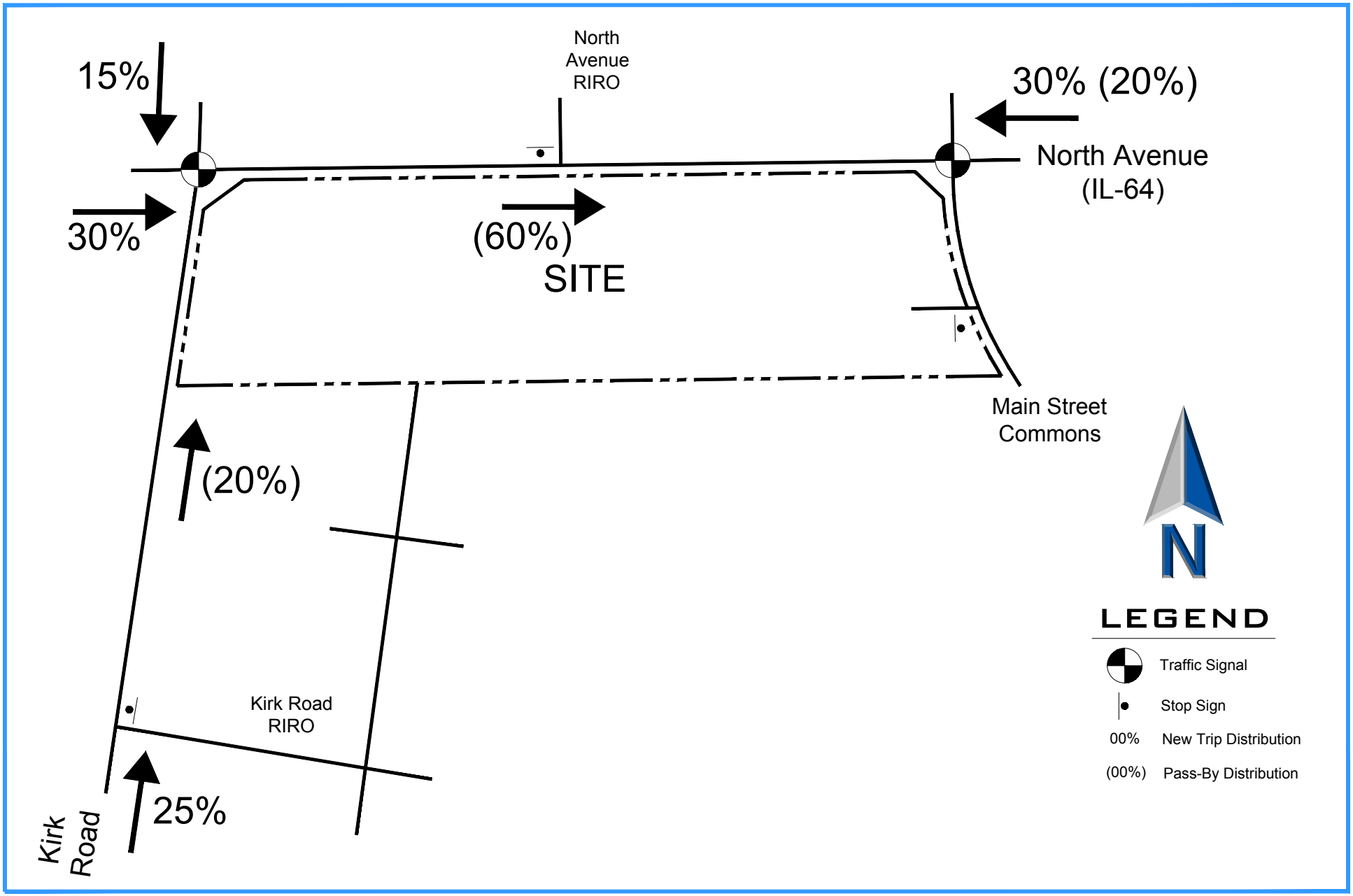
Direction	Distribution
North on Kirk Road	15%
South on Kirk Road	25%
East on North Avenue	30%
West on North Avenue	30%
Total	**100%**

Site Traffic Assignment

The total new and pass-by traffic was assigned to the access drives based on the directional distribution patterns and the proposed access system. **Figures 5** and **6** illustrates the proposed traffic assignments for pass-by and new trips.

Regional Traffic Growth

Total traffic volumes are a combination of the existing traffic volumes, projected non-site growth in those volumes, and the site related traffic. The total traffic volumes are estimated for a period five years in the future (Year 2025). Data provided by the Chicago Metropolitan Agency for Planning (see **Appendix**) shows regional growth in traffic volumes along North Avenue at 0.75 (west) to 0.95% (east) per year and along Kirk Road at 0.27 (north) to 0.5% (south) per year. These growth rates were applied to the existing traffic volumes to obtain the Year 2025 (**Figure 7**) future base traffic volumes without the gas station. These were combined with the gas station traffic volumes to generate the Year 2025 total traffic volumes which are shown on **Figure 8**.



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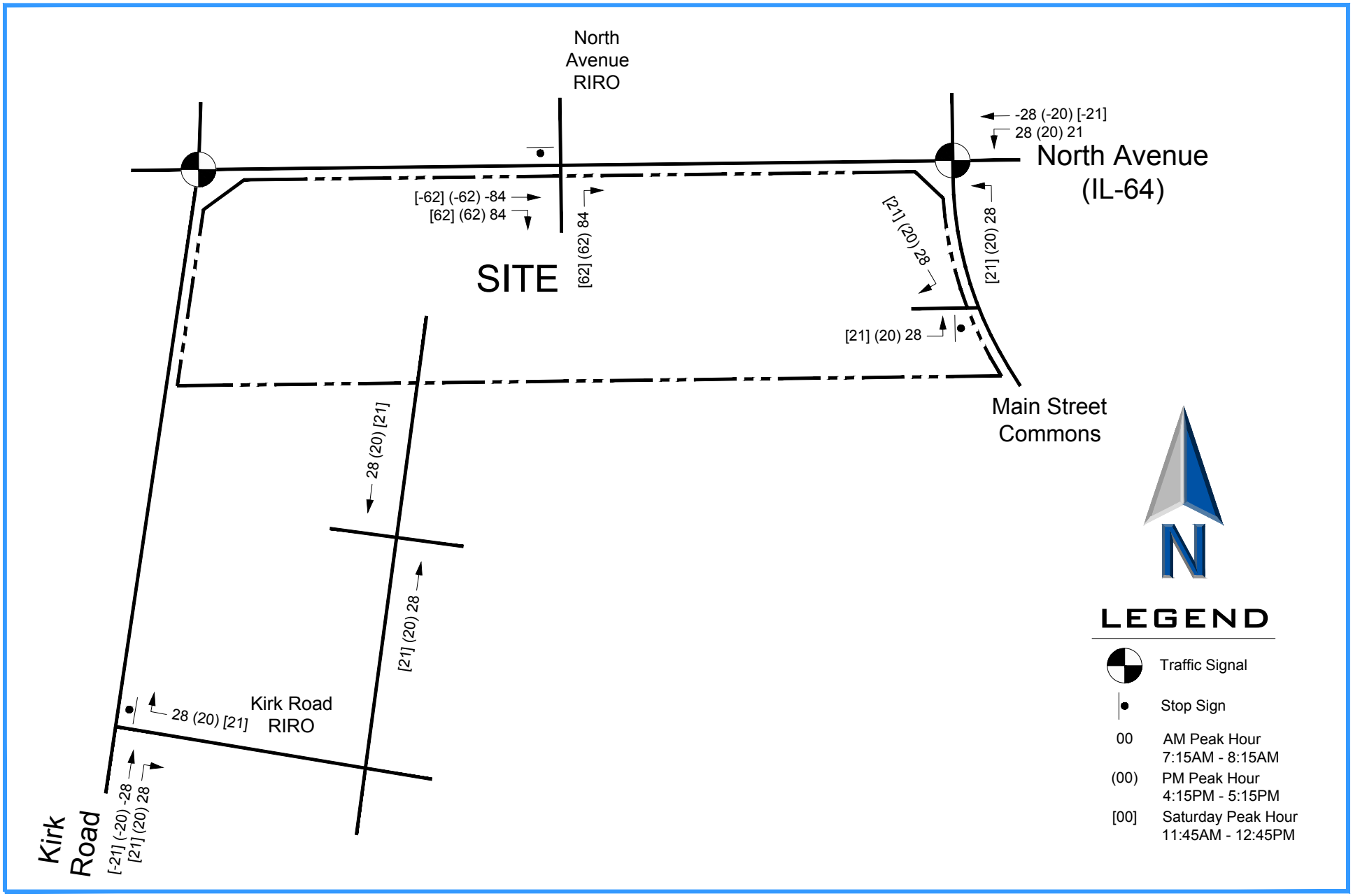
Directional Distribution

Figure 4



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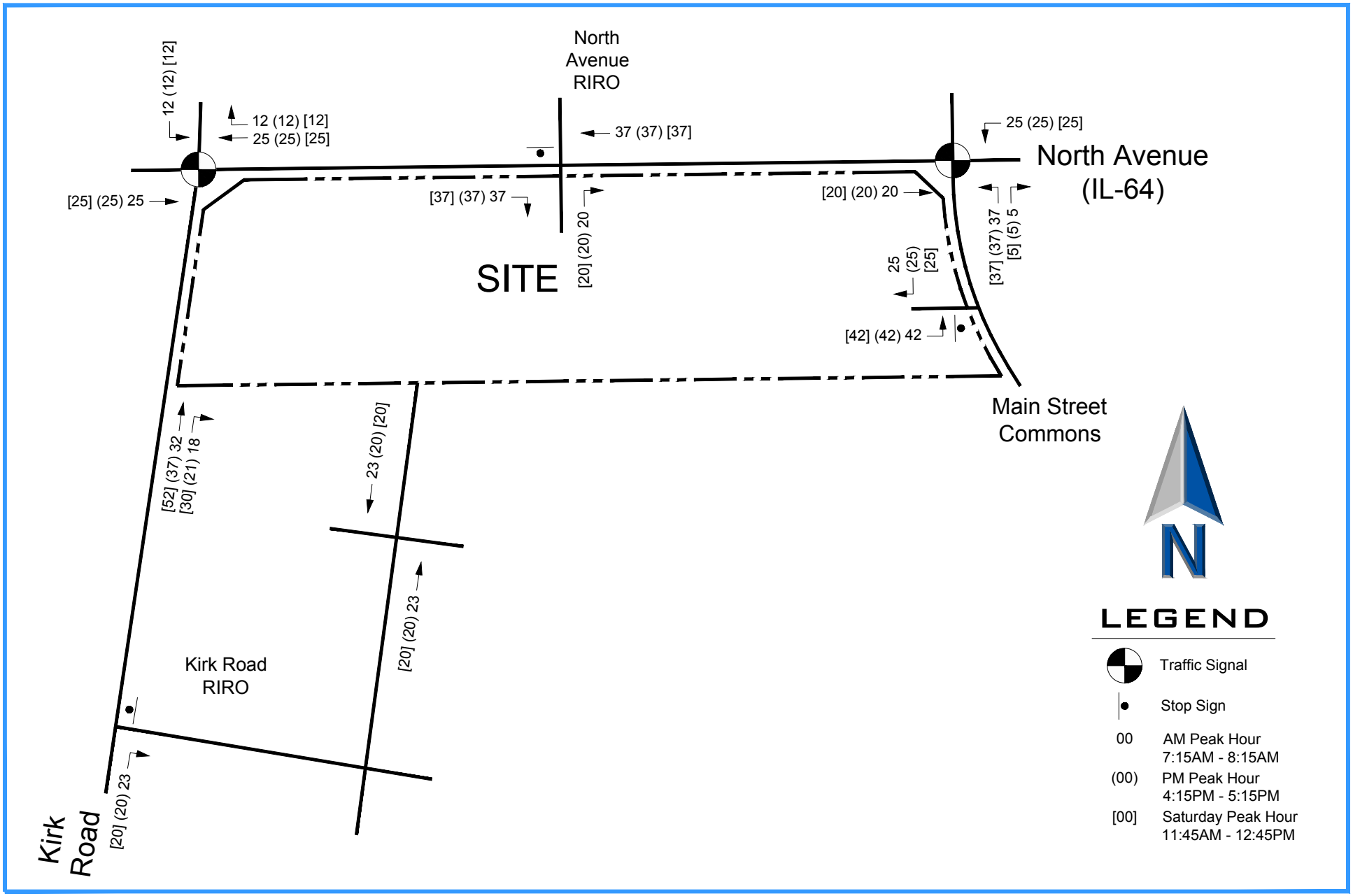
Pass-By Trip Assignment

Figure 5



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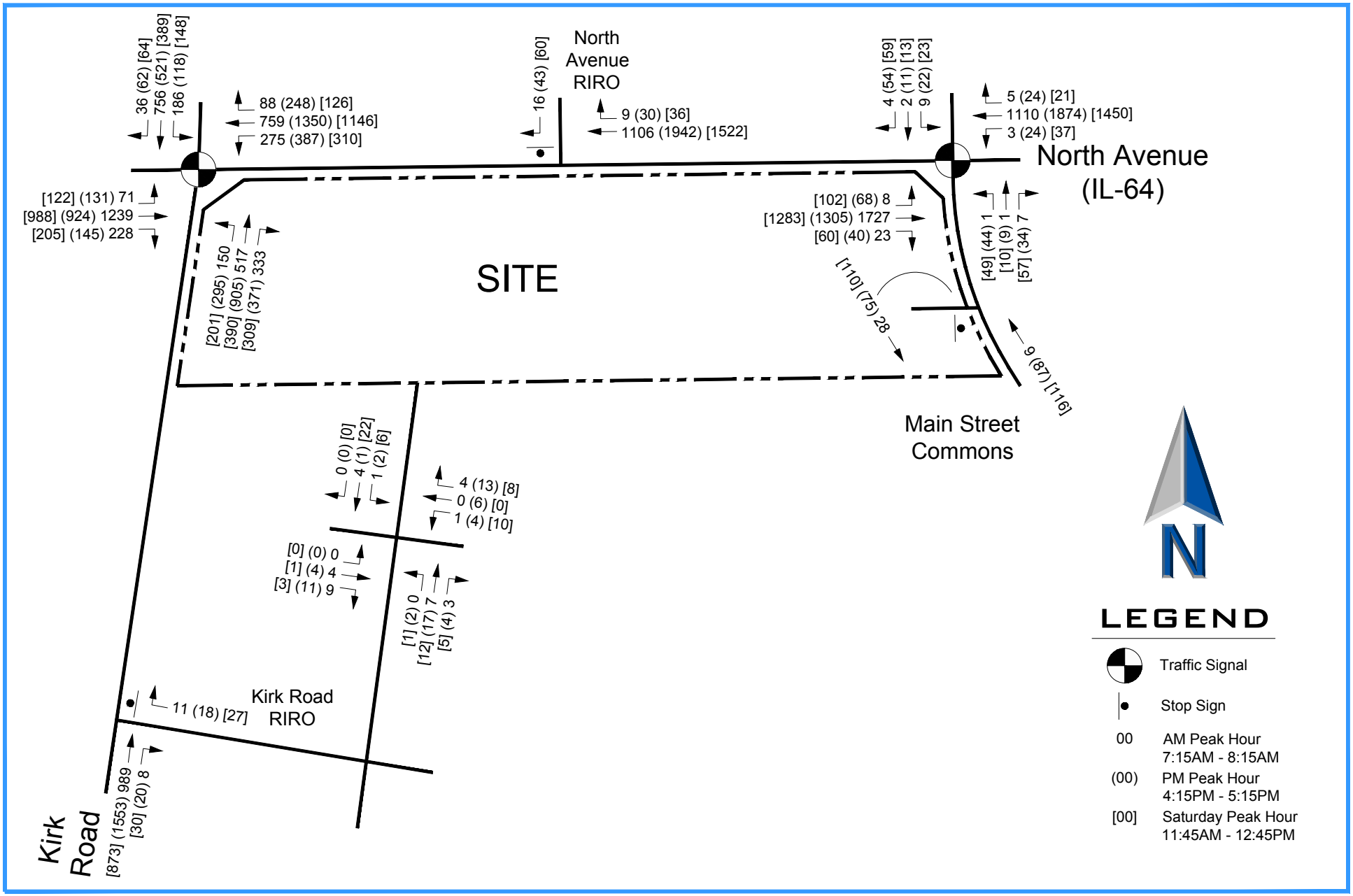
New Trip Assignment

Figure 6



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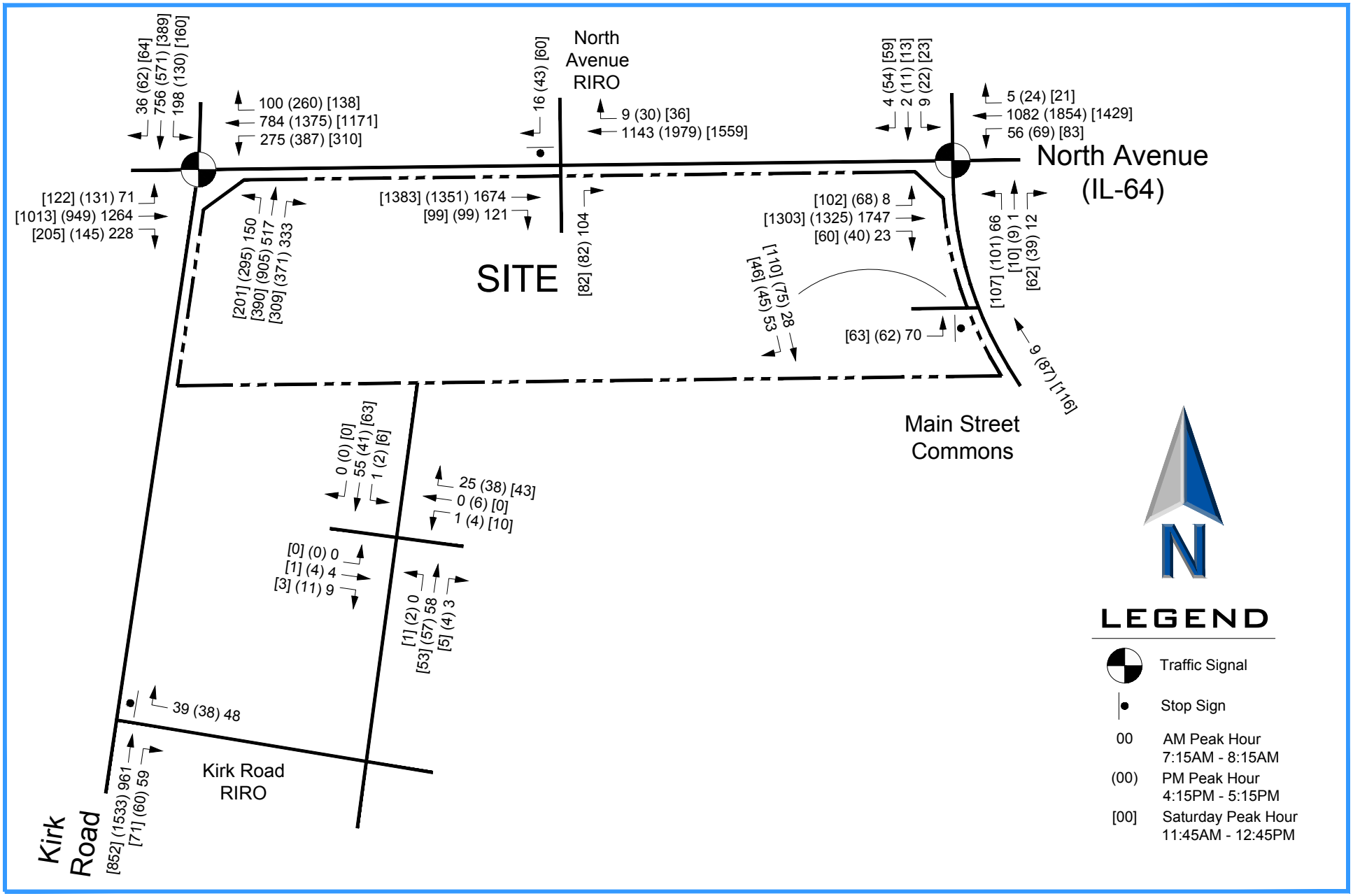
2025 Base Traffic Volumes

Figure 7



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2025 Total Traffic Volumes

Figure 8

4 – ANALYSES

Intersection Capacity Analyses

In order to determine the operation of the study area intersections and the access drives, intersection capacity analyses were conducted for the existing and projected traffic volumes. An intersection's ability to accommodate traffic flow is based on the average control delay experienced by vehicles passing through the intersection. The intersection and individual traffic movements are assigned a level of service (LOS), ranging from A to F based on the control delay created by a traffic signal or stop sign. Control delay consists of the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS A has the best traffic flow and least delay. LOS E represents saturated or at capacity conditions. LOS F experiences oversaturated conditions and extensive delays. The Highway Capacity Manual definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are shown in **Table 3**.

Table 3
Level of Service Criteria for Intersections

Level of Service	Description	Control Delay (seconds/vehicle)	
		Signals	Stop Signs
A	Minimal delay and few stops	<10	<10
B	Low delay with more stops	>10-20	>10-15
C	Light congestion	>20-35	>15-25
D	Congestion is more noticeable with longer delays	>35-55	>25-35
E	High delays and number of stops	>55-80	>35-50
F	Unacceptable delays and over capacity	>80	>50

Source: Highway Capacity Manual

Capacity analyses were conducted for each intersection using the Highway Capacity Software (Version 7.8.5) to determine the operations of the road system. These analyses were performed for the weekday peak-hours at the current intersections (2017) and in the future (2025). The capacity analyses are summarized in **Table 4** and included in the **Appendix**.

Right-In and –Out Drive on Kirk Road

The existing right-in and –out driveway south of the site on northbound Kirk Road operates well now and in the future with Level of Service B or Cs. No additional improvements are required.

North Avenue at Charlestowne Mall/Main Street Center

This signalized intersection will continue to have acceptable levels of service and delay during the peak-hours in the Year 2025. However, the traffic exiting either mall will experience higher delays due to North Avenue being given the priority in the allocation of green time for traffic progression. The Year 2025 intersection delays do increase slightly from existing conditions more as a result of regional traffic growth rather than from the proposed gas station.

North Avenue and Kirk Road

Currently, the overall intersection operates at an acceptable Level of Service D/E during the weekday peak hours. Kirk Road gets less green time and the north-south movements operate at LOS E or F which indicates the need for additional green time or road improvements. With the projected increases in regional traffic volumes, the intersection will need to consider the long-term improvements:

- Southbound right-turn lane
- North/South dual left-turn lanes

Table 4
Intersection Level of Service and Total Delay

Intersection	Movement	AM Peak		PM Peak		Saturday Peak	
		2017	2029	2017	2029	2017	2029
North Avenue at Kirk Road (Traffic Signal)	Eb Appr.	C-23.5	C-26.1	C-32.7	D-35.1	C-23.5	C-26.4
	Wb Appr.	C-25.6	C-26.0	C-34.6	D-37.6	C-23.7	C-26.4
	Nb Appr.	D-50.4	D-51.3	E-71.4	F-84.9	D-39.1	D-38.7
	Sb Appr.	F-100+	F-100+	F-93.0	F-97.5	D-45.0	D-44.6
	Intersection	D-51.2	D-54.1	D-53.1	E-58.6	C-30.0	C-31.4
North Avenue at Charlestown/Main (Traffic Signal)	Eb Appr.	A-2.7	A-6.2	A-5.2	A-7.9	A-7.9	B-11.7
	Wb Appr.	A-0.6	A-4.0	A-2.7	A-6.5	A-4.9	A-8.4
	Nb Appr.	E-57.7	D-53.7	E-63.5	E-58.8	D-48.7	D-44.6
	Sb Appr.	E-59.1	E-57.7	E-65.5	E-65.5	D-49.8	D-49.8
	Intersection	A-2.4	A-6.9	A-7.0	B-10.6	A-9.4	B-13.0
Kirk Avenue Right-In and Out Drive	Wb Right	B-12.2	B-12.7	C-16.6	C-18.0	B-11.7	B-12.1

Sidewalks

The development plan incorporates sidewalks along its North Avenue and Kirk Road frontages

Right-of-Way

The Kane County Access Ordinance requires developments along County Freeways, such as Kirk Road, to dedicate 75 to 100 feet of half right-of-way along their frontage. Currently, the site has a 60-foot half right-of-way with a corner cut. Discussions with KDOT indicated that this site should match the dedication of the properties to the south which have 70-foot half right-of-way. This west side of the site would require an additional 10-foot dedication and an adjustment of the corner cut.

Site Driveways

Capacity analyses were conducted for the three site driveways servicing the site to determine how well they will operate and the stacking at the stop signs. **Table 5** summarizes the results of the analyses. A copy of the capacity analyses is attached. Overall, each site driveway will operate at LOS D or better.

Table 5
Driveway Level of Service and Total Delay

Intersection	Movement	AM Peak		PM Peak		Saturday Peak	
		2017	2025	2017	2025	2017	2025
North Avenue Right-In and Out Drives	Sb Right	B-12.7	B-13.5	C-22.0	D-25.5	C-17.0	C-17.7
	Nb Right		C-25.0		C-17.8		C-19.0
Main Street Commons Access Drive	Wb Left		A-10.0		B-10.5		B-10.6
Internal Drive Connection by Panda Express and Bank	Eb Approach	A-0.0	A-0.0	A-0.0	A-0.0	A-0.0	A-0.0
	Wb Approach	A-1.5	A-0.3	A-1.3	A-0.6	A-4.1	A-1.4
	Nb Approach	A-9.0	B-10.1	A-9.3	B-10.1	A-9.1	B-10.0
	Sb Approach	A-9.2	B-10.0	A-9.1	A-9.9	A-9.4	B-10.1

Right-In and –Out Drive on North Avenue

The proposed right-in and out driveway for the gas station will be located on the south side of North Avenue and designed with a pork chop island,16-foot inbound and outbound lanes, an eastbound right-turn lane, and an outbound stop sign. An additional 11.8 feet of the site along North Avenue will be dedicated to IDOT to accommodate the right-turn lane. The current median break for the existing driveway will need to be reconstructed as a barrier median. The outbound right-turn will operate well with up to two vehicles stacking at one time. The entry road between North Avenue and the east-west internal roadway is 105 feet long so outbound vehicles stacking at the stop sign will not impact internal site traffic.

Right-In and Left-Out Drive on the Main Street Commons Entrance Road

The gas station proposes to have a right-in and left-out only driveway on the Main Street Commons Entrance Road to allow site traffic to have access to the traffic signal on North Avenue. It will have 14-foot a right-turn inbound and left-out outbound lanes with paint striping and signage to prohibit right-turns out and left-turns in. Traffic exiting the gas station will operate at a level of service A or B with one vehicle stopped at the stop sign.

Panda Express/Bank/Main Street Commons Intersection

Within the Main Street Commons shopping center, there are two internal circulation roads to the north and west of their main parking fields that also provide access to a bank site and Panda Express restaurant site. Each approach has one lane for left-turns, throughs, and right-turns. Currently it is uncontrolled with no yield or stop signs. With the development of the gas station, it is recommended that the north and south legs be controlled by stop signs in order to establish the right of way for the drivers approaching the intersection. With the additional gas station traffic, the intersection will continue to work well with minimal delays and stacking.

Internal Circulation

The fuel pumps are located on the west side of the site. The pumps are 32-feet apart (east-west) to allow a fueling vehicle on each side (10 foot each) and a 22-foot center lane to allow vehicles to maneuver around other fueling vehicles when they are finished. In the north-south direction, there is 40 feet of pavement from the north curb line to the first pump, then 32-feet to the second pump, and 42-feet to a row of parking. This is sufficient space to allow a vehicle to fuel at each pump and have another vehicle waiting or a vehicle with a trailer while maintaining two-way traffic around the canopy.

Traffic entering from North Avenue will turn right at the east-west internal roadway to the fuel pumps and/or convenience store. A minimal amount of traffic will turn left to go directly to the car wash. Most customers will fuel their vehicles first and pay for the car wash at the same time to receive a PIN code for the wash. If an inbound vehicle turns left to go directly to the car wash, there is sufficient distance to turn left onto the circulation road and then turn left into the car wash.

The cross-easement connection between the gas station and Panda Express parking lot is 24-foot wide and should have a stop sign northbound where it meets the internal east-west road and a stop sign southbound where it enters the Panda Express parking lot.

Car Wash Stacking Requirements

The City of St. Charles Zoning Code required vehicle stacking for an automatic car wash is two vehicles per bay plus ten stacking spaces per bay (see **Appendix**). For the proposed tunnel car wash, there is one bay which will require a minimum stacking for 12 vehicles. The code's definition of stacking spaces shall begin behind the last vehicle being washed.

6 - CONCLUSION

The preceding traffic analysis analyzed the propose PRIDE of Kane County gas station with a convenience store and car wash site and developed the following conclusions:

- The development of the site as proposed will not adversely impact the level-of-service of study area intersections.
- Right-of-way will be dedicated to the Kane County Division of Transportation (10 additional feet) and the Illinois Department of Transportation (11.8 feet or more) along both roads for future regional roadway improvements.
- North Avenue access will be a right-in and –out only driveway with a pork chop island and an eastbound right-turn lane. The existing median break in the center median will be closed.
- Two cross easements will be provided to the Panda Express lot to the south and to the Main Street Center access road to the east with one inbound and one outbound lane.
- Sidewalks will be provided on the site frontage.
- The carwash storage meets the city code requirement of 12 vehicles.
- Site circulation is good with adequate distance around each fueling position to allow traffic to maneuver on-site.
- With the projected increases in regional traffic volumes, the intersection will need to consider the long-term improvements:
    - Southbound right-turn lane
    - North/South dual left-turn lanes

APPENDIX

- **Existing Traffic Counts**
- **CMAP Letter**
- **ITE Trip Generation Calculations**
- **Intersection Capacity Analyses**
- **Zoning Code**

Kirk Road and North Avenue (IL 64)

St. Chalres, Illinois															
	Kirk Road Southbound			North Avenue Westbound			Kirk Road Northbound			North Avenue Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Tuesday October 3, 2017														
6:00 AM	3	140	32	7	75	48	58	89	22	26	197	7	704	3407	0.86
6:15 AM	4	151	35	12	92	60	63	90	29	32	219	8	795	3690	0.93
6:30 AM	3	180	42	22	105	62	63	117	21	36	249	15	915	3962	0.93
6:45 AM	5	201	38	21	147	81	60	116	26	47	238	13	993	4127	0.96
7:00 AM	15	168	31	15	138	55	87	156	27	29	244	22	987	4267	0.94
7:15 AM	9	184	37	18	159	57	80	129	33	49	295	17	1067	**4316**	**0.95**
7:30 AM	7	181	51	22	155	55	91	134	34	47	283	20	1080	4236	0.93
7:45 AM	10	209	48	17	168	75	72	116	43	64	293	18	1133	4010	0.88
8:00 AM	9	167	46	25	152	68	77	118	35	55	272	12	1036	3655	0.88
8:15 AM	8	172	46	22	149	64	72	105	36	48	254	11	987		
8:30 AM	9	148	29	24	148	52	68	104	34	40	184	14	854		
8:45 AM	8	107	23	22	168	62	45	89	29	33	181	11	778		
Total	90	2008	458	227	1656	739	836	1363	369	506	2909	168			
7:15-8:15 AM	**35**	**741**	**182**	**82**	**634**	**255**	**320**	**497**	**145**	**215**	**1143**	**67**	**4316**		
	Tuesday October 3, 2017														
3:00 PM	6	88	29	29	249	76	90	168	47	33	199	27	1041	4383	0.91
3:15 PM	14	98	29	34	245	74	72	174	58	44	171	19	1032	4581	0.92
3:30 PM	21	92	50	46	276	64	72	181	58	78	236	28	1202	4777	0.96
3:45 PM	15	132	40	38	272	64	63	163	57	48	195	21	1108	4837	0.96
4:00 PM	13	134	28	41	319	90	80	186	72	40	208	28	1239	5114	0.92
4:15 PM	13	136	21	47	310	85	66	211	73	33	197	36	1228	**5203**	**0.94**
4:30 PM	12	127	28	58	305	87	87	203	67	29	224	35	1262	5150	0.93
4:45 PM	19	155	36	65	314	95	114	241	66	39	212	29	1385	5131	0.93
5:00 PM	17	142	31	60	305	91	90	215	78	36	239	24	1328	4970	0.94
5:15 PM	11	136	32	49	281	85	81	189	79	41	165	26	1175		
5:30 PM	14	150	37	49	306	102	81	174	62	40	194	34	1243		
5:45 PM	15	174	40	42	291	87	80	169	82	39	180	25	1224		
Total	170	1564	401	558	3473	1000	976	2274	799	500	2420	332			
4:15-5:15 PM	**61**	**560**	**116**	**230**	**1234**	**358**	**357**	**870**	**284**	**137**	**872**	**124**	**5203**		
	Saturday September 30, 2017														
11:00 AM	14	94	32	29	231	61	63	101	44	45	228	24	966	3978	0.92
11:15 AM	14	77	43	18	254	60	56	72	40	42	217	23	916	4024	0.93
11:30 AM	9	109	36	33	275	61	58	104	59	33	219	21	1017	4131	0.96
11:45 AM	20	83	44	31	280	78	81	97	56	45	232	32	1079	**4137**	**0.96**
Noon	11	100	39	22	245	68	76	90	59	51	225	26	1012	4012	0.98
12:15 PM	22	91	34	32	263	76	74	81	43	51	231	25	1023	3905	0.95
12:30 PM	10	108	28	32	252	63	66	107	35	46	244	32	1023	3910	0.95
12:45 PM	19	98	32	35	265	74	53	85	39	47	183	24	954	3870	0.94
1:00 PM	13	93	20	34	210	62	67	103	36	42	202	23	905	3904	0.95
1:15 PM	18	129	36	31	243	74	90	105	42	41	199	20	1028		
1:30 PM	21	96	21	30	254	62	78	97	44	45	212	23	983		
1:45 PM	21	118	28	29	206	70	69	117	48	29	218	35	988		
Total	192	1196	393	356	2978	809	831	1159	545	517	2610	308			
11:45AM-12:45PM	**63**	**382**	**145**	**117**	**1040**	**285**	**297**	**375**	**193**	**193**	**932**	**115**	**4137**		

North Avenue (IL 64) at West Charles Towne Mall

St Charles, Illinois															
	Charles Towne Mall Southbound			North Avenue Westbound			Mall Entrance Northbound			North Avenue Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Thursday October 5, 2017														
6:00 AM	0	0	1	0	124	0	3	1	0	0	239	1	369	2037	0.85
6:15 AM	1	0	2	1	163	2	4	0	1	3	297	1	475	2247	0.94
6:30 AM	2	0	2	0	204	4	1	0	1	2	374	5	595	2463	0.89
6:45 AM	1	0	5	0	254	6	0	0	1	2	323	6	598	2608	0.88
7:00 AM	2	1	2	1	183	1	0	0	1	6	378	4	579	2667	0.90
7:15 AM	0	0	3	1	246	3	3	1	1	7	425	1	691	**2731**	**0.92**
7:30 AM	3	1	0	1	252	0	3	0	0	4	472	4	740	2645	0.89
7:45 AM	1	0	5	2	256	0	1	0	0	7	382	3	657	2582	0.95
8:00 AM	0	1	1	1	274	0	0	0	0	5	361	0	643	2505	0.93
8:15 AM	3	0	3	1	224	1	0	0	0	6	363	4	605		
8:30 AM	5	3	1	1	254	3	2	1	3	8	392	4	677		
8:45 AM	6	1	3	0	278	1	0	2	1	9	273	6	580		
Total	24	7	28	9	2712	21	17	5	9	59	4279	39			
7:15-8:15 AM	**4**	**2**	**9**	**5**	**1028**	**3**	**7**	**1**	**1**	**23**	**1640**	**8**	**2731**		
	Thursday October 5, 2017														
3:00 PM	11	2	3	5	335	8	6	1	9	8	282	12	682	2864	0.92
3:15 PM	12	1	2	6	367	9	3	2	8	12	272	17	711	2969	0.94
3:30 PM	9	0	3	5	355	2	10	0	13	7	277	9	690	3038	0.97
3:45 PM	23	3	10	4	392	7	5	3	10	5	303	16	781	3118	0.99
4:00 PM	15	0	2	8	421	11	10	4	12	12	279	13	787	3120	0.99
4:15 PM	12	6	6	4	418	9	6	0	4	12	287	16	780	**3197**	**0.93**
4:30 PM	17	2	6	3	428	4	12	6	14	10	262	6	770	3321	0.92
4:45 PM	13	0	3	6	437	4	9	0	11	8	270	22	783	3383	0.94
5:00 PM	12	3	7	11	444	7	7	3	15	10	321	24	864	3337	0.92
5:15 PM	11	3	10	16	453	4	10	7	9	20	337	24	904		
5:30 PM	20	5	12	7	440	6	17	7	11	15	276	16	832		
5:45 PM	18	2	10	7	387	4	7	1	9	6	272	14	737		
Total	173	27	74	82	4877	75	102	34	125	125	3438	189			
4:15-5:15 PM	**54**	**11**	**22**	**24**	**1727**	**24**	**34**	**9**	**44**	**40**	**1140**	**68**	**3197**		
	Saturday October 7, 2017														
11:00 AM	13	0	4	3	315	9	8	0	6	16	261	19	654	2690	0.94
11:15 AM	11	4	4	4	324	4	11	4	11	10	238	17	642	2763	0.95
11:30 AM	14	2	2	4	329	6	10	0	9	17	262	25	680	2802	0.96
11:45 AM	11	2	8	4	335	10	19	2	11	17	261	34	714	**2892**	**0.94**
Noon	13	2	5	6	326	10	17	2	16	15	297	18	727	2890	0.94
12:15 PM	24	2	5	3	294	7	11	2	14	15	274	30	681	2882	0.94
12:30 PM	11	7	5	8	378	10	10	4	8	13	296	20	770	2980	0.96
12:45 PM	19	5	7	6	335	8	20	3	7	15	256	31	712	2975	0.95
1:00 PM	21	1	7	9	307	4	19	3	4	19	308	17	719	2934	0.94
1:15 PM	28	2	6	9	325	10	14	3	8	17	312	45	779		
1:30 PM	23	2	3	3	305	12	13	2	7	12	344	39	765		
1:45 PM	24	2	5	4	274	8	12	3	12	17	289	21	671		
Total	212	31	61	63	3847	98	164	28	113	183	3398	316			
11:45AM-12:45PM	**59**	**13**	**23**	**21**	**1333**	**37**	**57**	**10**	**49**	**60**	**1128**	**102**	**2892**		

Right-in and Out Driveways

St Charles, Illinois				
	Northbound Kirk Road Retail RIRO		Westbound North Avenue Bank/On the Border	
Begin Time	Right IN	Right OUT	Right IN	Right OUT
	Tues Oct. 3, 2017		**Thurs Oct. 5, 2017**	
6:00 AM	2	11	2	2
6:15 AM	0	3	2	3
6:30 AM	1	1	0	4
6:45 AM	4	1	0	2
7:00 AM	1	1	5	3
7:15 AM	1	5	0	6
7:30 AM	3	5	2	1
7:45 AM	4	1	4	3
8:00 AM	0	0	3	6
8:15 AM	2	0	1	7
8:30 AM	0	5	2	4
8:45 AM	5	4	2	4
Total	23	37	23	45
7:15-8:15 AM	**8**	**11**	**9**	**16**
	Tues Oct. 3, 2017		**Thurs Oct. 5, 2017**	
3:00 PM	2	4	7	5
3:15 PM	3	9	4	13
3:30 PM	7	8	5	8
3:45 PM	6	3	10	18
4:00 PM	5	8	10	8
4:15 PM	2	3	2	8
4:30 PM	1	8	11	13
4:45 PM	5	1	6	14
5:00 PM	12	6	11	8
5:15 PM	11	10	9	16
5:30 PM	3	16	9	24
5:45 PM	3	15	13	10
Total	60	91	97	145
4:15-5:15 PM	**20**	**18**	**30**	**43**
	Saturday Sept. 30, 2017		**Saturday Oct. 7, 2017**	
11:00 AM	10	7	9	14
11:15 AM	12	9	7	7
11:30 AM	6	6	8	10
11:45 AM	8	10	5	15
Noon	6	2	10	21
12:15 PM	12	6	10	14
12:30 PM	4	9	11	10
12:45 PM	5	7	7	17
1:00 PM	9	6	11	13
1:15 PM	5	7	10	9
1:30 PM	2	8	7	14
1:45 PM	6	3	4	11
Total	85	80	99	155
11:45AM-12:45PM	**30**	**27**	**36**	**60**

Eastside of Kird Road
670 feet south of North Ave.

Northside of North Ave.
400 feet east of Kirk Road

Internal Intersection: Pandya Express/Bank of America/Shopping Center

St. Charles, Illinois															
	Panda Epress Drive Southbound			North Circulation Road Westbound			West Circulation Road Northbound			Panda/BOA Access Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Tuesday October 3, 2017														
6:00 AM	0	7	2	1	0	0	1	1	0	7	0	0	19	49	0.53
6:15 AM	0	2	3	7	0	0	0	5	2	4	0	0	23	31	0.34
6:30 AM	0	0	0	0	0	0	0	2	0	0	1	0	3	21	0.40
6:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	4	34	0.53
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	33	0.52
7:15 AM	0	0	0	3	0	1	1	0	0	5	3	0	13	**33**	**0.52**
7:30 AM	0	4	1	1	0	0	0	6	0	4	0	0	16	23	0.36
7:45 AM	0	0	0	0	0	0	2	0	0	0	1	0	3	37	0.31
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	38	0.32
8:15 AM	0	0	0	0	0	0	2	0	1	0	0	0	3		
8:30 AM	0	1	3	3	2	0	0	10	2	8	1	0	30		
8:45 AM	0	0	0	1	0	1	0	1	0	1	0	0	4		
Total	0	15	10	17	2	3	6	27	5	29	6	0			
7:15-8:15 AM	**0**	**4**	**1**	**4**	**0**	**1**	**3**	**7**	**0**	**9**	**4**	**0**	**33**		
	Tuesday October 3, 2017														
3:00 PM	0	0	0	4	0	2	4	1	0	1	1	0	13	52	0.68
3:15 PM	0	0	0	0	1	2	0	0	0	4	0	0	7	55	0.72
3:30 PM	0	2	1	2	0	2	5	3	0	2	2	0	19	73	0.73
3:45 PM	0	0	0	3	0	1	3	5	0	0	1	0	13	66	0.66
4:00 PM	0	0	0	3	0	2	2	4	1	4	0	0	16	62	0.62
4:15 PM	0	0	1	6	1	0	1	11	0	3	2	0	25	**64**	**0.64**
4:30 PM	0	0	0	4	0	1	1	0	1	5	0	0	12	64	0.64
4:45 PM	0	0	1	1	2	0	2	1	0	1	1	0	9	100	0.52
5:00 PM	0	1	0	2	3	3	0	5	1	2	1	0	18	117	0.61
5:15 PM	0	3	1	4	1	1	0	10	0	2	2	1	25		
5:30 PM	0	7	1	8	3	1	1	8	0	13	6	0	48		
5:45 PM	0	5	2	1	0	1	0	3	1	8	5	0	26		
Total	0	18	7	38	11	16	19	51	4	45	21	1			
4:15-5:15 PM	**0**	**1**	**2**	**13**	**6**	**4**	**4**	**17**	**2**	**11**	**4**	**0**	**64**		
	Saturday September 30, 2017														
11:00 AM	0	2	3	3	5	2	2	7	2	0	2	0	28	89	0.79
11:15 AM	0	5	2	0	3	1	0	3	1	1	7	0	23	71	0.66
11:30 AM	0	7	4	4	1	1	1	6	0	0	3	0	27	73	0.68
11:45 AM	0	5	2	0	0	0	1	2	0	1	0	0	11	**68**	**0.68**
Noon	0	3	0	2	0	2	0	2	0	1	0	0	10	69	0.69
12:15 PM	0	4	2	5	0	6	3	4	0	0	1	0	25	75	0.75
12:30 PM	0	10	2	1	0	2	1	4	1	1	0	0	22	60	0.68
12:45 PM	0	4	3	1	0	0	2	2	0	0	0	0	12	53	0.83
1:00 PM	0	4	2	4	0	1	1	4	0	0	0	0	16	59	0.82
1:15 PM	0	3	2	1	0	2	0	1	0	1	0	0	10		
1:30 PM	0	2	2	5	0	2	0	4	0	0	0	0	15		
1:45 PM	0	4	1	6	0	2	2	3	0	0	0	0	18		
Total	0	53	25	32	9	21	13	42	4	5	13	0			
11:45AM-12:45PM	**0**	**22**	**6**	**8**	**0**	**10**	**5**	**12**	**1**	**3**	**1**	**0**	**68**		

Butterfield Road (IL 56) Right-Turns

Aurora, Illinois						
	Pride Access Drive Northbound		Butterfield Road Eastbound	15 Minute Totals	60 Minute Totals	Peak Hour Factor
Begin Time	Right IN	Right OUT	Right Turn			
	Tuesday October 10, 2017					
7:00 AM	10	8	41	59	251	0.87
7:15 AM	8	6	36	50	251	0.87
7:30 AM	16	9	45	70	**255**	**0.89**
7:45 AM	13	10	49	72	249	0.86
8:00 AM	14	7	38	59	224	0.88
8:15 AM	11	7	36	54		
8:30 AM	12	9	43	64		
8:45 AM	12	6	29	47		
Total	96	62	317			
7:30-8:30 AM	**54**	**33**	**168**	**255**		
	Tuesday October 10, 2017					
4:00 PM	13	5	25	43	**167**	**0.85**
4:15 PM	10	8	31	49	156	0.80
4:30 PM	8	4	25	37	143	0.94
4:45 PM	11	8	19	38	138	0.91
5:00 PM	9	8	15	32	133	0.92
5:15 PM	12	5	19	36		
5:30 PM	5	6	21	32		
5:45 PM	10	2	21	33		
Total	78	46	176			
4:00-5:00 PM	**42**	**25**	**100**	**167**		
	Saturday October 14, 2017					
11:00 AM	8	3	30	41	**175**	**0.88**
11:15 AM	5	5	40	50	171	0.86
11:30 AM	11	9	21	41	171	0.86
11:45 AM	9	7	27	43	174	0.87
Noon	4	6	27	37	171	0.86
12:15 PM	10	6	34	50	134	0.67
12:30 PM	7	5	32	44	84	0.48
12:45 PM	10	4	26	40	40	0.25
Total	64	45	237			
11:00 AM - Noon	**33**	**24**	**118**	**175**		

Rand Road (US 12) Right-turn Volumes and Driveway Volumes

Lake County, Illinois												
	West Pride Access		East Pride Access				Self-Storage Access		Rand Road Westbound Right	15 Minute Totals	60 Minute Totals	Peak Hour Factor
Begin Time	Right IN	Right OUT	Right IN	Left IN	Right OUT	Left OUT	Right IN	Right OUT	Right Turn			
	Wednesday October 11, 2017											
7:00 AM	0	0	16	2	4	0	0	0	77	77	375	0.81
7:15 AM	0	2	17	1	6	0	0	0	92	92	**390**	**0.84**
7:30 AM	0	2	21	0	6	0	2	1	87	90	385	0.83
7:45 AM	0	2	21	0	7	0	0	0	116	116	385	0.83
8:00 AM	1	0	22	0	6	0	0	1	91	92	349	0.95
8:15 AM	0	0	20	0	7	0	0	0	87	87		
8:30 AM	0	0	22	0	12	0	1	0	89	90		
8:45 AM	1	0	21	0	7	0	0	0	80	80		
Total	2	6	160	3	55	0	3	2	719			
7:15-8:15 AM	**1**	**6**	**81**	**1**	**25**	**0**	**2**	**2**	**386**	**390**		
	Wednesday October 11, 2017											
4:00 PM	0	0	19	0	8	0	0	0	125	125	525	0.92
4:15 PM	0	1	26	0	13	0	1	2	133	136	**543**	**0.95**
4:30 PM	0	3	29	0	5	1	2	0	140	142	510	0.89
4:45 PM	0	0	21	1	16	1	3	1	118	122	498	0.87
5:00 PM	0	0	32	1	5	0	0	1	142	143	494	0.86
5:15 PM	1	1	22	0	8	0	0	0	103	103		
5:30 PM	0	0	25	2	9	0	1	3	126	130		
5:45 PM	0	1	19	2	7	1	0	0	118	118		
Total	1	6	193	6	71	3	7	7	1005			
4:15-5:15 PM	**0**	**4**	**108**	**2**	**39**	**2**	**6**	**4**	**533**	**543**		
	Saturday October 7, 2017											
11:00 AM	0	1	24	4	12	0	1	0	57	99	433	0.89
11:15 AM	1	0	22	1	13	0	0	2	75	114	435	0.89
11:30 AM	0	0	22	1	12	4	0	0	59	98	429	0.88
11:45 AM	2	1	27	0	9	5	1	2	75	122	**443**	**0.91**
Noon	0	2	18	0	13	2	0	0	66	101	422	0.94
12:15 PM	1	3	20	2	5	2	3	1	71	108	321	0.72
12:30 PM	0	5	31	0	6	0	1	1	68	112	213	0.48
12:45 PM	1	2	19	1	9	2	0	0	67	101	101	0.25
Total	5	14	183	9	79	15	6	6	538			
11:45 AM-12:45 PM	**3**	**11**	**96**	**2**	**33**	**9**	**5**	**4**	**280**	**443**		

Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

August 22, 2019

Stephen B. Corcoran, P.E., PTOE
Director of Traffic Engineering
Eriksson Engineering Associates
145 Commerce Drive
Suite A
Grayslake, IL 60030

Subject: North Avenue (IL 64) @ Kirk Road
IDOT

Dear Mr. Corcoran:

In response to a request made on your behalf and dated August 21, 2019, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Kirk Rd north of North Ave (IL 64)	18,800	20,400
Kirk Rd south of North Ave (IL 64)	24,800	28,800
North Ave (IL 64) west of Kirk Rd	32,900	41,000
North Ave (IL 64) east of Kirk Rd	33,500	44,000

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2019 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.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2019_ForecastsTraffic\StCharles\ka-18-19\ka-18-19.docx

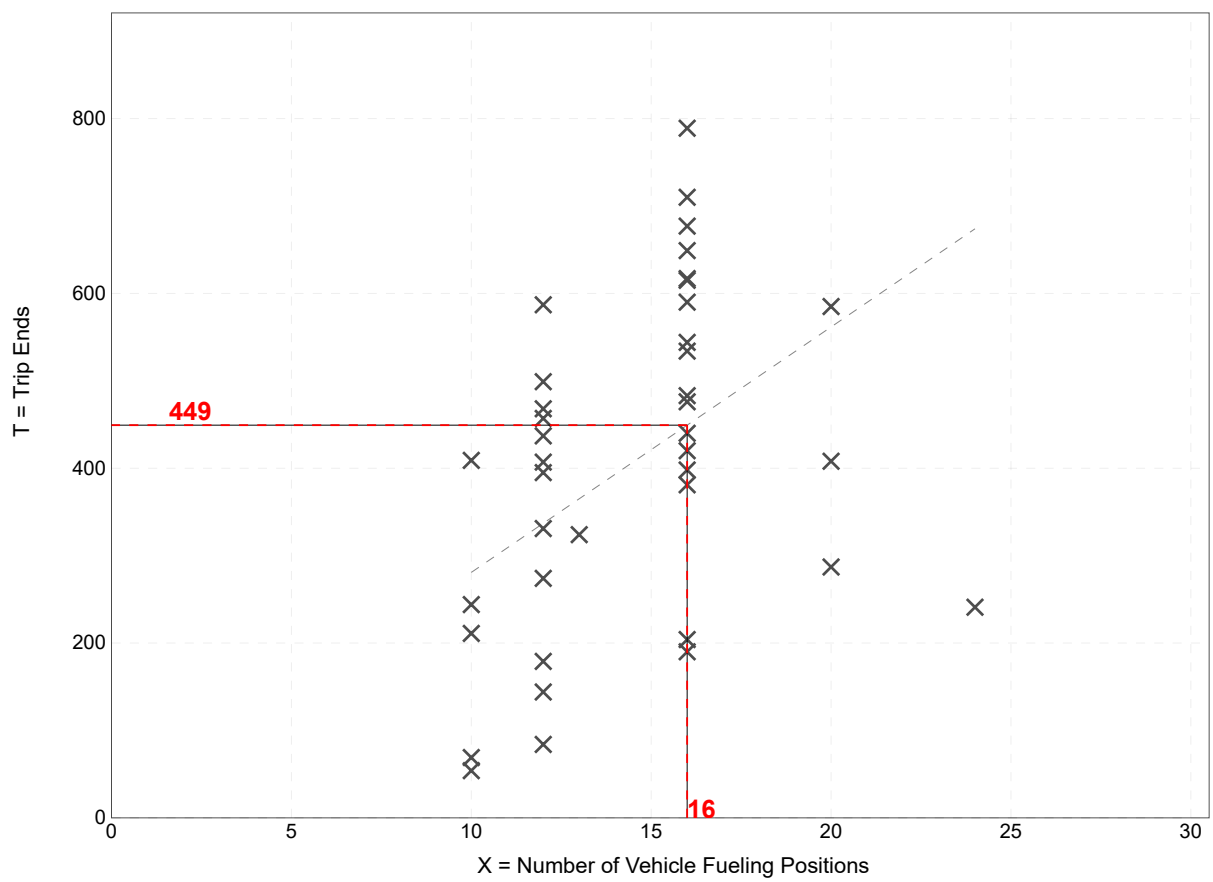
Super Convenience Market/Gas Station
(960)

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:	39
Avg. Num. of Vehicle Fueling Positions:	14
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
28.08	5.40 - 49.31	11.98

Data Plot and Equation



× **Study Site** - - - - **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

Trip Generation Manual, 10th Edition ● Institute of Transportation Engineers

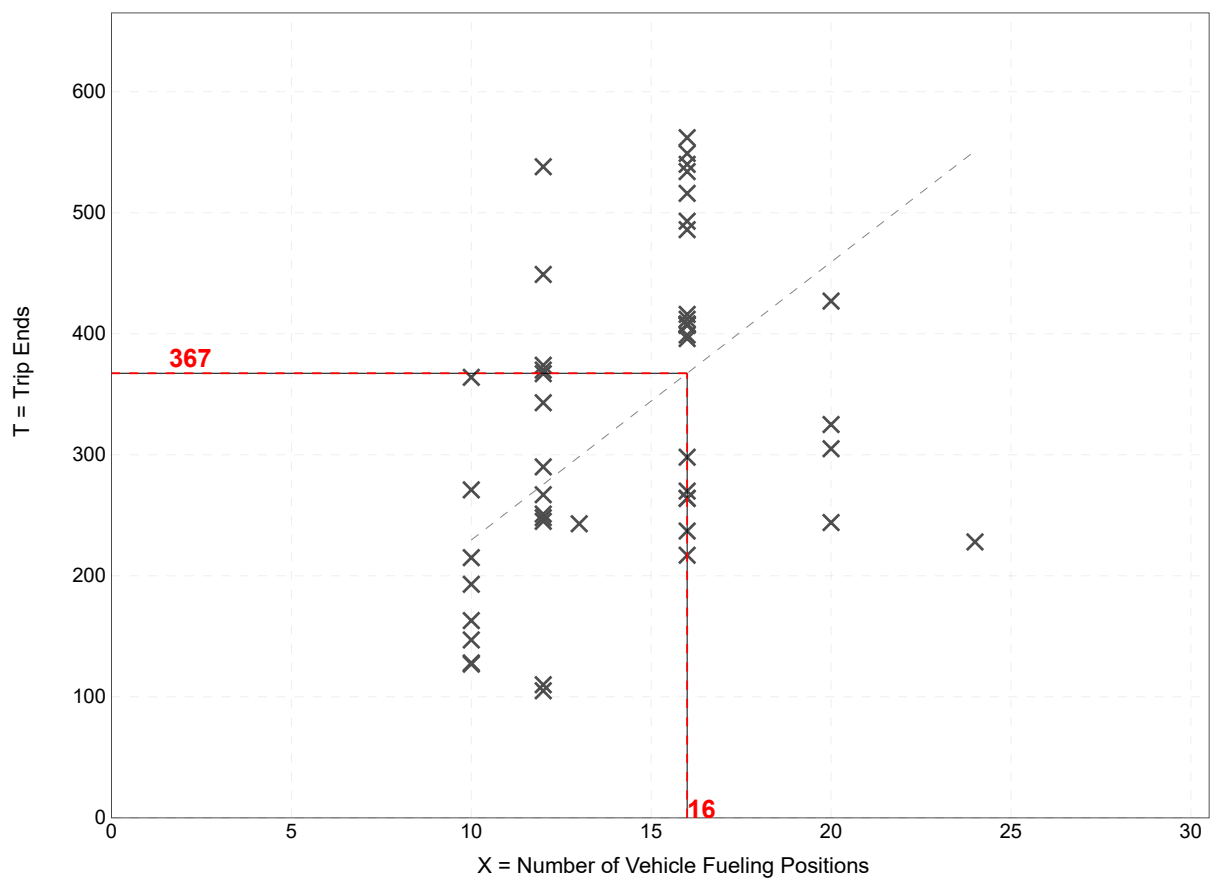
Super Convenience Market/Gas Station
(960)

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:	48
Avg. Num. of Vehicle Fueling Positions:	14
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
22.96	8.75 - 44.83	8.34

Data Plot and Equation



Study Site **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

Trip Generation Manual, 10th Edition ● Institute of Transportation Engineers

Super Convenience Market/Gas Station
(960)

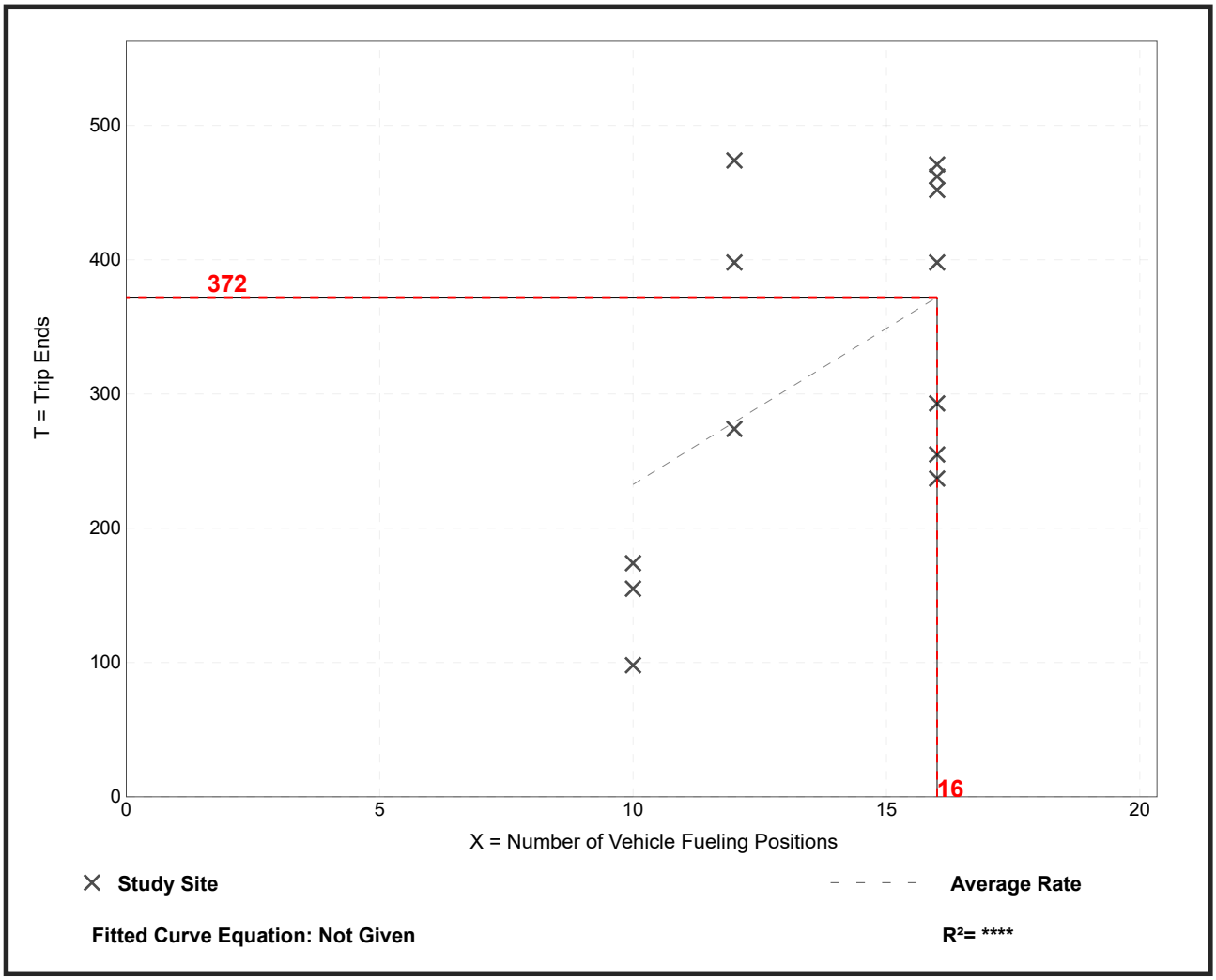
Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 13
Avg. Num. of Vehicle Fueling Positions: 14
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
23.26	9.80 - 39.50	8.20

Data Plot and Equation



Trip Generation Manual, 10th Edition ● Institute of Transportation Engineers

HCS7 Two-Way Stop-Control Report

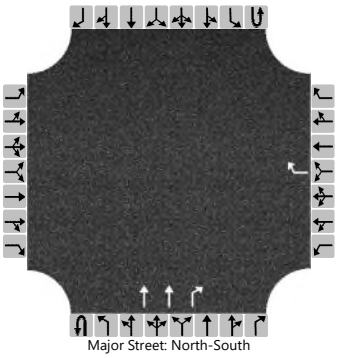
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Pride of St. Charles

Site Information

Intersection	Northbound Kirk Road RIRO
Jurisdiction	KDOT/St Charles
East/West Street	Retail RIRO Drive
North/South Street	Kirk Road
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	0	0	0
Configuration								R			T	R				
Volume (veh/h)								11			951	8				
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No				No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								12								
Capacity, c (veh/h)								513								
v/c Ratio								0.02								
95% Queue Length, Q_{95} (veh)								0.1								
Control Delay (s/veh)								12.2								
Level of Service (LOS)								B								
Approach Delay (s/veh)					12.2											
Approach LOS					B											

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HCS7 Two-Way Stop-Control Report

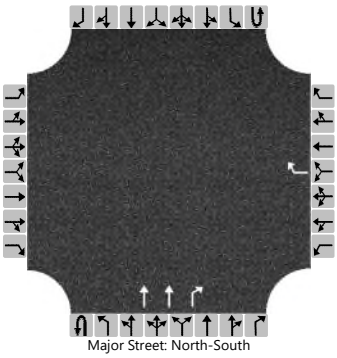
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Pride of St. Charles

Site Information

Intersection	Northbound Kirk Road RIRO
Jurisdiction	KDOT/St Charles
East/West Street	Retail RIRO Drive
North/South Street	Kirk Road
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	0	0	0
Configuration								R			T	R				
Volume (veh/h)								18			1493	20				
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No				No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								19								
Capacity, c (veh/h)								329								
v/c Ratio								0.06								
95% Queue Length, Q_{95} (veh)								0.2								
Control Delay (s/veh)								16.6								
Level of Service (LOS)								C								
Approach Delay (s/veh)					16.6											
Approach LOS					C											

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HCS7 Two-Way Stop-Control Report

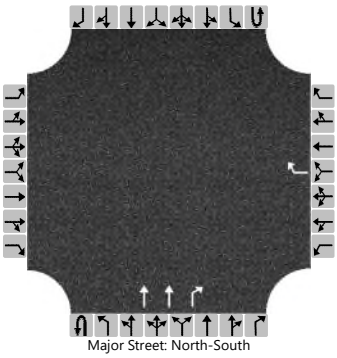
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	Saturday Peak Hour
Intersection Orientation	North-South
Project Description	Pride of St. Charles

Site Information

Intersection	Northbound Kirk Road RIRO
Jurisdiction	KDOT/St Charles
East/West Street	Retail RIRO Drive
North/South Street	Kirk Road
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	0	0	0
Configuration								R			T	R				
Volume (veh/h)								27			838	30				
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No				No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								28								
Capacity, c (veh/h)								565								
v/c Ratio								0.05								
95% Queue Length, Q_{95} (veh)								0.2								
Control Delay (s/veh)								11.7								
Level of Service (LOS)								B								
Approach Delay (s/veh)					11.7											
Approach LOS					B											

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HCS7 Two-Way Stop-Control Report

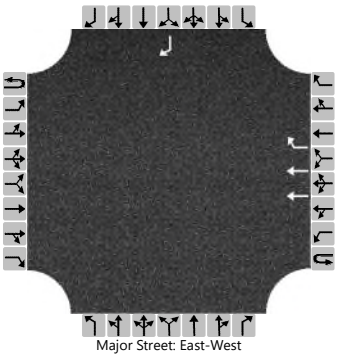
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1024	9								16
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																17
Capacity, c (veh/h)																484
v/c Ratio																0.03
95% Queue Length, Q_{95} (veh)																0.1
Control Delay (s/veh)																12.7
Level of Service (LOS)																B
Approach Delay (s/veh)													12.7			
Approach LOS													B			

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HCS7 Two-Way Stop-Control Report

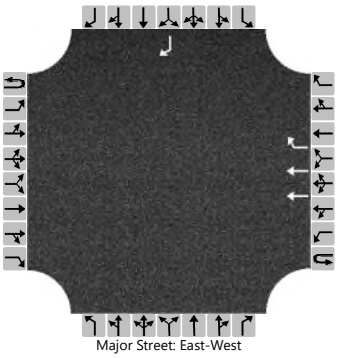
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1795	30								43
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																46
Capacity, c (veh/h)																257
v/c Ratio																0.18
95% Queue Length, Q_{95} (veh)																0.6
Control Delay (s/veh)																22.0
Level of Service (LOS)																C
Approach Delay (s/veh)													22.0			
Approach LOS													C			

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HCS7 Two-Way Stop-Control Report

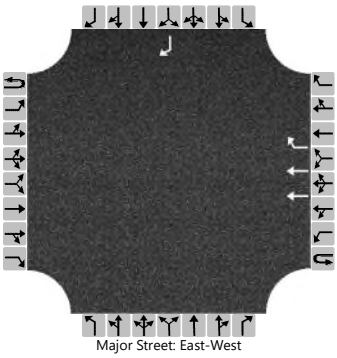
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	Saturday Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1405	36								60
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																63
Capacity, c (veh/h)																362
v/c Ratio																0.17
95% Queue Length, Q_{95} (veh)																0.6
Control Delay (s/veh)																17.0
Level of Service (LOS)																C
Approach Delay (s/veh)													17.0			
Approach LOS													C			

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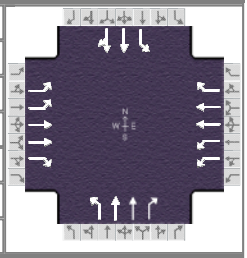
HCS7 Signalized Intersection Input Data

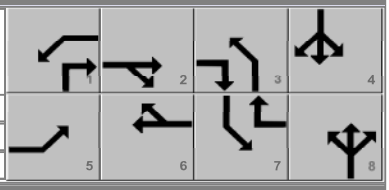
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	67	1169	215	255	703	82	145	497	320	182	741	35

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.3	60.0	11.1	0.4	26.0
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	67	1169	215	255	703	82	145	497	320	182	741	35
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7	7	7	7	7	7	7	7	7	7	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft	170	0	125	325	0	160	145	0	145	135	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	45	45	45	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	16.0	63.0	20.0	67.0	15.0	32.0	15.0	32.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	1.0	1.5	1.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	15	3	15	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		9.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		38.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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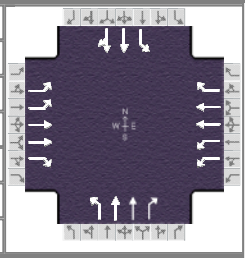
HCS7 Signalized Intersection Results Summary

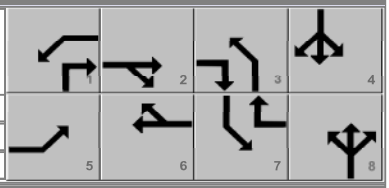
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	67	1169	215	255	703	82	145	497	320	182	741	35

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.3	60.0	11.1	0.4	26.0
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.3	66.0	17.0	73.7	14.6	32.0	15.0	32.4
Change Period, ($Y+R_c$), s	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.0	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	4.7		12.3		11.1	28.0	13.5	28.4
Green Extension Time (g_e), s	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.85		1.00	1.00	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	71	1231	226	268	740	86	153	523	337	192	412	405
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1800	1522	1661	1800	1522	1711	1800	1522	1711	1796	1767
Queue Service Time (g_s), s	2.7	31.4	10.3	10.3	11.2	3.1	9.1	17.7	26.0	11.5	26.4	26.4
Cycle Queue Clearance Time (g_c), s	2.7	31.4	10.3	10.3	11.2	3.1	9.1	17.7	26.0	11.5	26.4	26.4
Green Ratio (g/C)	0.04	0.46	0.55	0.10	0.52	0.61	0.29	0.20	0.30	0.29	0.20	0.20
Capacity (c), veh/h	122	1661	832	320	1876	928	202	720	451	261	365	359
Volume-to-Capacity Ratio (X)	0.579	0.741	0.272	0.839	0.395	0.093	0.757	0.727	0.747	0.735	1.129	1.129
Back of Queue (Q), ft/ln (95 th percentile)	55.5	457.5	176.2	218.2	184.6	48.1	210.1	338.2	410.6	245.9	784.3	734.3
Back of Queue (Q), veh/ln (95 th percentile)	2.1	17.3	6.7	8.3	7.0	1.8	8.0	12.8	15.6	9.3	29.7	29.4
Queue Storage Ratio (RQ) (95 th percentile)	0.33	0.00	1.41	0.67	0.00	0.30	1.45	0.00	2.83	1.82	0.00	0.00
Uniform Delay (d_1), s/veh	61.6	19.5	15.7	57.7	11.2	10.5	39.0	48.7	41.3	38.8	51.8	51.8
Incremental Delay (d_2), s/veh	1.6	3.0	0.8	10.4	0.6	0.2	12.9	3.2	6.0	9.1	86.9	87.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.2	22.5	16.5	68.2	11.8	10.7	52.0	51.9	47.3	47.9	138.7	139.2
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	D	F	F
Approach Delay, s/veh / LOS	23.5	C		25.6	C		50.4	D		121.6	F	
Intersection Delay, s/veh / LOS	51.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.27	B	2.60	C	2.60	C
Bicycle LOS Score / LOS	1.75	B	1.39	A	1.32	A	1.32	A

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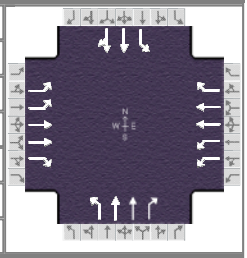
HCS7 Signalized Intersection Intermediate Values

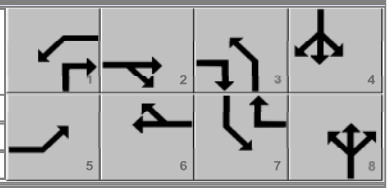
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	67	1169	215	255	703	82	145	497	320	182	741	35

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.3	60.0	11.1	0.4	26.0
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.847		0.000	0.847		0.000	0.847		0.984	0.984
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3600	1522	3322	3600	1522	1711	3600	1522	1711	3403	161
Proportion of Vehicles Arriving on Green (P)	0.04	0.62	0.46	0.10	0.69	0.52	0.09	0.20	0.20	0.09	0.20	0.20
Incremental Delay Factor (k)	0.04	0.50	0.50	0.20	0.50	0.50	0.26	0.25	0.27	0.26	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.04	0.46	0.10	0.52	0.29	0.20	0.29	0.20
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	643	0	844	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	26.0	0.0	26.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		5.6	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		1522		1522		1522		
Protected Right Effective Green Time (g_R), s		11.1		11.5		12.5		

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.710	0.000	1.557	0.000	1.852	0.000	1.852	0.000
Pedestrian F_s / F_{delay}	0.000	0.118	0.000	0.108	0.000	0.149	0.000	0.149
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	922.78	18.86	1042.02	14.91	400.00	41.60	406.00	41.29
Bicycle F_w / F_v	-3.64	1.26	-3.64	0.90	-3.64	0.84	-3.64	0.83

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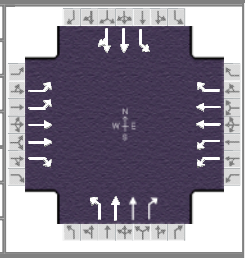
HCS7 Signalized Intersection Results Graphical Summary

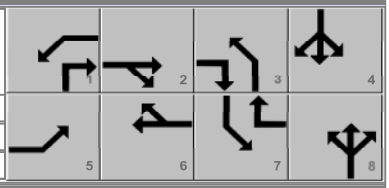
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 AM.xus		
Project Description	Pride of St. Charles				



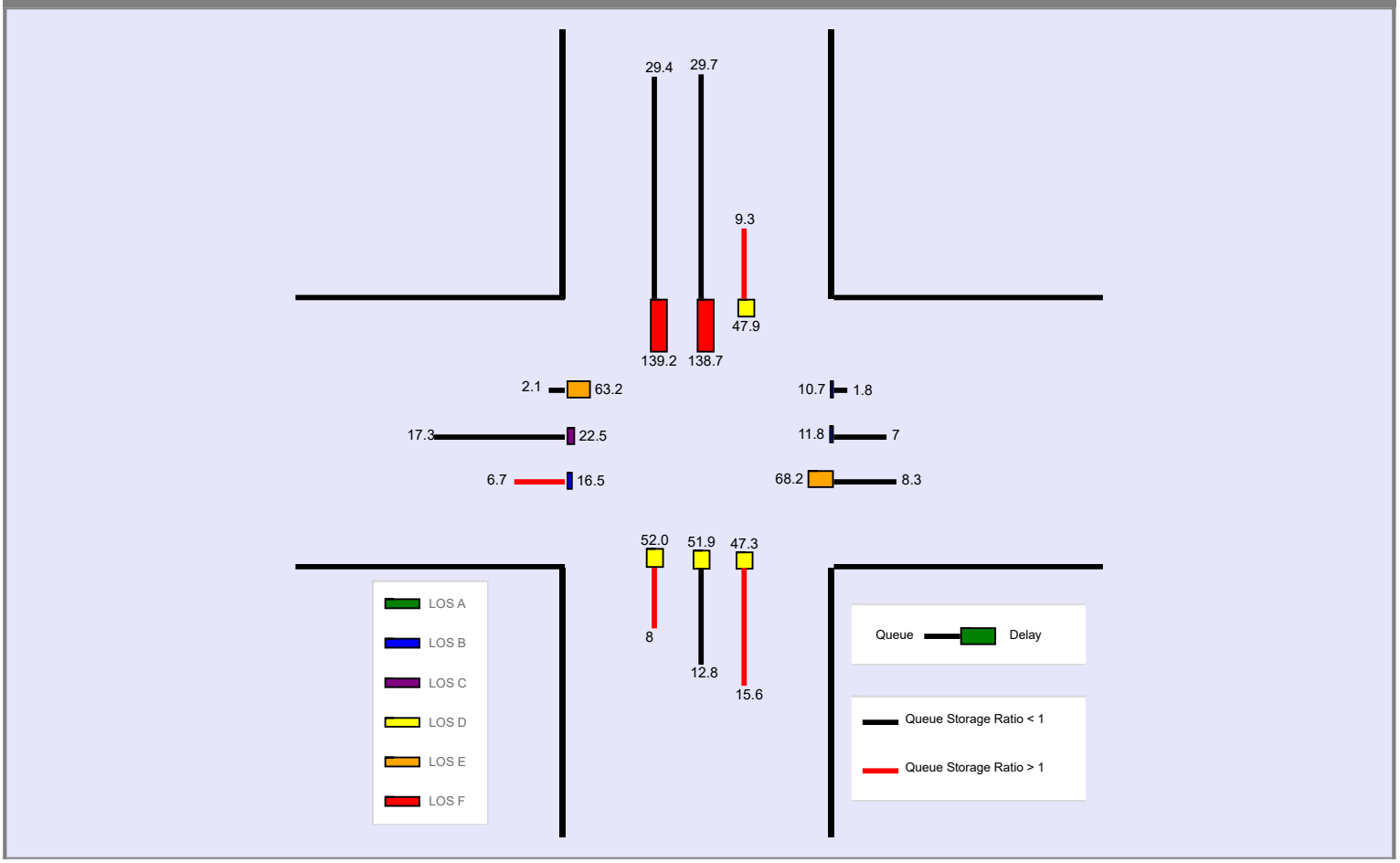
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	67	1169	215	255	703	82	145	497	320	182	741	35

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.3	60.0	11.1	0.4	26.0
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	55.5	457.5	176.2	218.2	184.6	48.1	210.1	338.2	410.6	245.9	784.3	734.3
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	17.3	6.7	8.3	7.0	1.8	8.0	12.8	15.6	9.3	29.7	29.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.33	0.00	1.41	0.67	0.00	0.30	1.45	0.00	2.83	1.82	0.00	0.00
Control Delay (*d*), s/veh	63.2	22.5	16.5	68.2	11.8	10.7	52.0	51.9	47.3	47.9	138.7	139.2
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	D	F	F
Approach Delay, s/veh / LOS	23.5	C		25.6	C		50.4	D		121.6	F	
Intersection Delay, s/veh / LOS	51.2						D					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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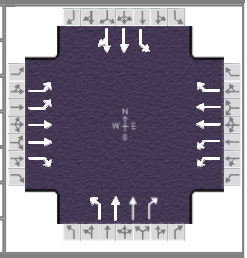
HCS7 Signalized Intersection Input Data

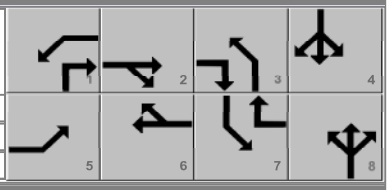
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	124	872	137	358	1250	230	284	870	357	116	560	61

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	6.8	60.2	10.6	7.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	124	872	137	358	1250	230	284	870	357	116	560	61
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7	7	7	7	7	7	7	7	7	7	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft	170	0	125	325	0	160	145	0	145	135	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	45	45	45	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	18.0	62.0	28.0	72.0	25.0	44.0	16.0	35.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	1.0	1.5	1.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	15	3	15	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		9.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		38.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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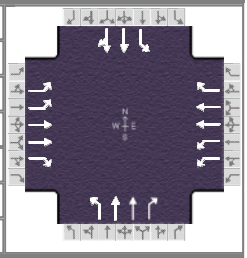
HCS7 Signalized Intersection Results Summary

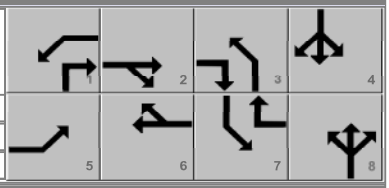
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	124	872	137	358	1250	230	284	870	357	116	560	61

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	6.8	60.2	10.6	7.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.5	66.2	23.8	77.5	25.0	45.9	14.1	35.0
Change Period, ($Y+R_c$), s	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.0	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	7.9		18.9		23.5	40.1	10.6	29.9
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.03		0.26		1.00	1.00	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	132	928	146	381	1330	245	302	926	380	123	336	325
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1800	1522	1661	1800	1522	1711	1800	1522	1711	1796	1734
Queue Service Time (g_s), s	5.9	27.4	7.2	16.9	39.8	13.0	21.5	38.1	30.2	8.6	27.8	27.9
Cycle Queue Clearance Time (g_c), s	5.9	27.4	7.2	16.9	39.8	13.0	21.5	38.1	30.2	8.6	27.8	27.9
Green Ratio (g/C)	0.05	0.40	0.54	0.13	0.48	0.55	0.35	0.27	0.39	0.26	0.19	0.19
Capacity (c), veh/h	177	1444	829	428	1716	833	299	957	601	169	347	335
Volume-to-Capacity Ratio (X)	0.746	0.642	0.176	0.890	0.775	0.294	1.012	0.967	0.632	0.730	0.966	0.970
Back of Queue (Q), ft/ln (95 th percentile)	121.4	440.9	126.5	328.1	547.2	216.6	521.6	715.5	445.2	193.5	603.3	560.7
Back of Queue (Q), veh/ln (95 th percentile)	4.6	16.7	4.8	12.4	20.7	8.2	19.8	27.1	16.9	7.3	22.9	22.4
Queue Storage Ratio (RQ) (95 th percentile)	0.71	0.00	1.01	1.01	0.00	1.35	3.60	0.00	3.07	1.43	0.00	0.00
Uniform Delay (d_1), s/veh	70.0	27.3	17.2	64.3	21.5	18.3	44.9	54.4	36.6	46.6	60.0	60.1
Incremental Delay (d_2), s/veh	2.3	2.2	0.5	13.5	3.5	0.9	55.2	21.2	1.6	9.4	39.0	40.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.3	29.5	17.7	77.8	25.0	19.2	100.0	75.6	38.2	56.0	99.0	100.8
Level of Service (LOS)	E	C	B	E	C	B	F	E	D	E	F	F
Approach Delay, s/veh / LOS	32.7	C		34.6	C		71.4	E		93.0	F	
Intersection Delay, s/veh / LOS	53.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.28	B	2.60	C	2.61	C
Bicycle LOS Score / LOS	1.48	A	2.10	B	1.81	B	1.13	A

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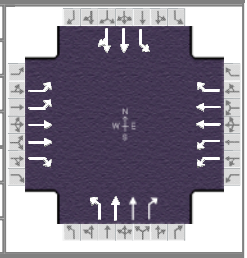
HCS7 Signalized Intersection Intermediate Values

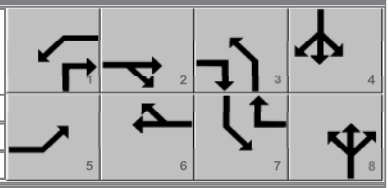
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	124	872	137	358	1250	230	284	870	357	116	560	61

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	6.8	60.2	10.6	7.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.847		0.000	0.847		0.000	0.847		0.965	0.965
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3600	1522	3322	3600	1522	1711	3600	1522	1711	3184	346
Proportion of Vehicles Arriving on Green (P)	0.05	0.53	0.40	0.13	0.64	0.48	0.14	0.27	0.27	0.07	0.19	0.19
Incremental Delay Factor (k)	0.04	0.50	0.50	0.25	0.50	0.50	0.50	0.47	0.16	0.18	0.47	0.47

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.05	0.40	0.13	0.48	0.35	0.27	0.26	0.19
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	743	0	580	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	31.0	0.0	29.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Permitted Queue Service Time (g_{ps}), s					1.1		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		1522		1522		1522		
Protected Right Effective Green Time (g_R), s		21.5		10.6		19.3		

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.710	0.000	1.557	0.000	1.852	0.000	1.852	0.000
Pedestrian F_s / F_{delay}	0.000	0.132	0.000	0.121	0.000	0.148	0.000	0.156
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	802.25	26.90	953.49	20.53	531.81	40.42	386.67	48.80
Bicycle F_w / F_v	-3.64	0.99	-3.64	1.61	-3.64	1.33	-3.64	0.65

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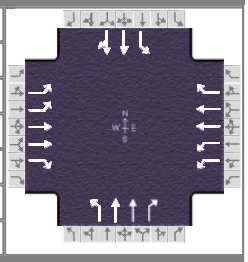
HCS7 Signalized Intersection Results Graphical Summary

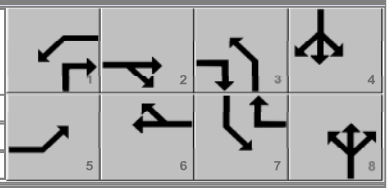
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 PM.xus		
Project Description	Pride of St. Charles				



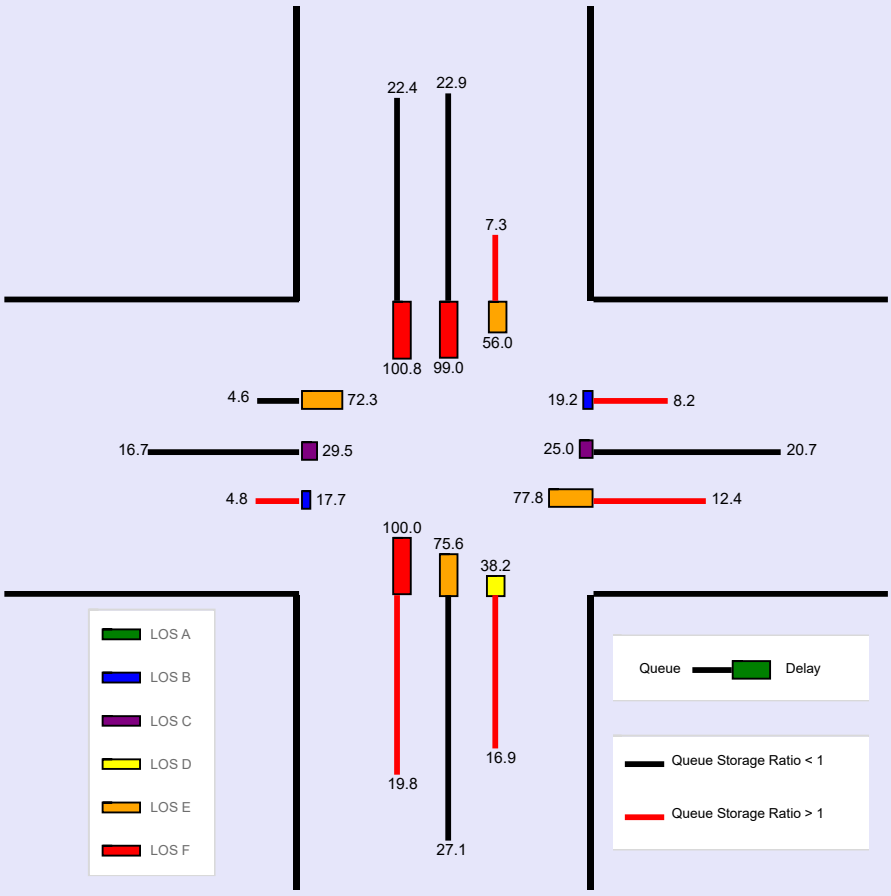
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	124	872	137	358	1250	230	284	870	357	116	560	61

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.0	6.8	60.2	10.6	7.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	121.4	440.9	126.5	328.1	547.2	216.6	521.6	715.5	445.2	193.5	603.3	560.7
Back of Queue (*Q*), veh/ln (95 th percentile)	4.6	16.7	4.8	12.4	20.7	8.2	19.8	27.1	16.9	7.3	22.9	22.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.71	0.00	1.01	1.01	0.00	1.35	3.60	0.00	3.07	1.43	0.00	0.00
Control Delay (*d*), s/veh	72.3	29.5	17.7	77.8	25.0	19.2	100.0	75.6	38.2	56.0	99.0	100.8
Level of Service (LOS)	E	C	B	E	C	B	F	E	D	E	F	F
Approach Delay, s/veh / LOS	32.7	C		34.6	C		71.4	E		93.0	F	
Intersection Delay, s/veh / LOS	53.1						D					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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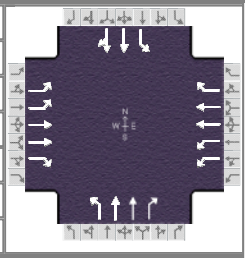
HCS7 Signalized Intersection Input Data

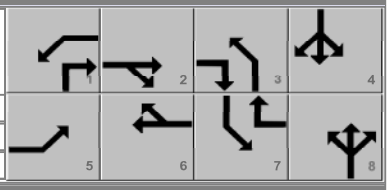
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	115	932	193	285	1063	117	193	375	297	145	382	63

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.4	2.0	51.7	10.5	2.7	22.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	115	932	193	285	1063	117	193	375	297	145	382	63
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7	7	7	7	7	7	7	7	7	7	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft	170	0	125	325	0	160	145	0	145	135	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	45	45	45	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	50.0	19.0	55.0	21.0	33.0	18.0	30.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	1.0	1.5	1.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	15	3	15	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		9.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		38.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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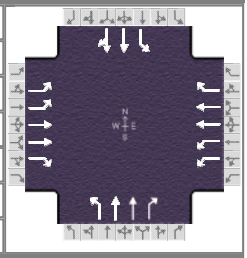
HCS7 Signalized Intersection Results Summary

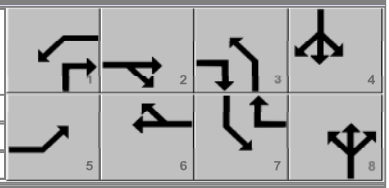
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	115	932	193	285	1063	117	193	375	297	145	382	63

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.4	2.0	51.7	10.5	2.7	22.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	10.9	57.7	17.4	64.2	16.7	30.8	14.0	28.1
Change Period, ($Y+R_c$), s	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.0	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	6.2		12.5		13.1	23.0	10.5	17.0
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0	0.1	1.9	0.1	2.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.01		0.26	0.21	0.32	0.08

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	120	971	201	297	1107	122	201	391	309	151	236	227
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1661	1800	1522	1661	1800	1522	1711	1800	1522	1711	1796	1708
Queue Service Time (g_s), s	4.2	21.5	8.4	10.5	22.1	4.5	11.1	11.6	21.0	8.5	14.8	15.0
Cycle Queue Clearance Time (g_c), s	4.2	21.5	8.4	10.5	22.1	4.5	11.1	11.6	21.0	8.5	14.8	15.0
Green Ratio (*g/C*)	0.05	0.43	0.54	0.11	0.49	0.57	0.30	0.21	0.31	0.27	0.18	0.18
Capacity (*c*), veh/h	177	1550	824	358	1747	872	302	745	479	300	331	315
Volume-to-Capacity Ratio (*X*)	0.676	0.626	0.244	0.829	0.634	0.140	0.667	0.524	0.646	0.504	0.712	0.722
Back of Queue (*Q*), ft/ln (95 th percentile)	86	334.7	141.6	207.2	300	70.9	217.4	231.8	324.7	166.2	288.9	267.6
Back of Queue (*Q*), veh/ln (95 th percentile)	3.3	12.7	5.4	7.8	11.4	2.7	8.2	8.8	12.3	6.3	10.9	10.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.51	0.00	1.13	0.64	0.00	0.44	1.50	0.00	2.24	1.23	0.00	0.00
Uniform Delay (d_1), s/veh	55.8	19.1	14.6	52.4	14.8	11.9	34.3	42.3	35.4	35.4	45.9	46.0
Incremental Delay (d_2), s/veh	1.7	1.9	0.7	2.8	1.8	0.3	2.1	0.2	1.2	0.5	2.5	2.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	57.5	21.0	15.3	55.2	16.6	12.2	36.4	42.5	36.6	35.9	48.4	49.0
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	D	D	D
Approach Delay, s/veh / LOS	23.5	C		23.7	C		39.1	D		45.5	D	
Intersection Delay, s/veh / LOS	30.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.27	B	2.60	C	2.60	C
Bicycle LOS Score / LOS	1.55	B	1.75	B	1.23	A	0.99	A

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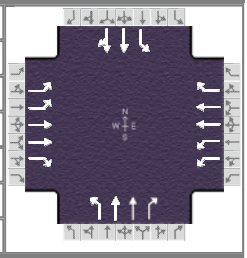
HCS7 Signalized Intersection Intermediate Values

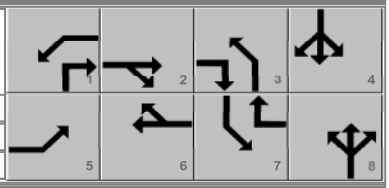
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	115	932	193	285	1063	117	193	375	297	145	382	63

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.4	2.0	51.7	10.5	2.7	22.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.847		0.000	0.847		0.000	0.847		0.951	0.951
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3600	1522	3322	3600	1522	1711	3600	1522	1711	3011	493
Proportion of Vehicles Arriving on Green (P)	0.05	0.57	0.43	0.11	0.65	0.49	0.11	0.21	0.21	0.09	0.18	0.18
Incremental Delay Factor (k)	0.04	0.50	0.50	0.06	0.50	0.50	0.09	0.04	0.09	0.04	0.09	0.10

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.05	0.43	0.11	0.49	0.30	0.21	0.27	0.18
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	892	0	954	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	23.3	0.0	22.1	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	7.1	0.0	11.3	0.0
Permitted Queue Service Time (g_{ps}), s					4.7		2.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		1522		1522		1522		
Protected Right Effective Green Time (g_R), s		13.2		10.5		12.9		

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.710	0.000	1.557	0.000	1.852	0.000	1.852	0.000
Pedestrian F_s / F_{delay}	0.000	0.119	0.000	0.111	0.000	0.146	0.000	0.148
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	861.36	19.45	970.35	15.90	414.01	37.73	368.92	39.91
Bicycle F_w / F_v	-3.64	1.07	-3.64	1.26	-3.64	0.74	-3.64	0.51

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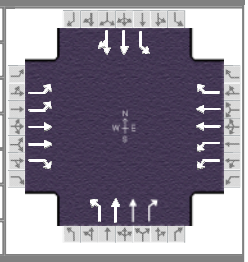
HCS7 Signalized Intersection Results Graphical Summary

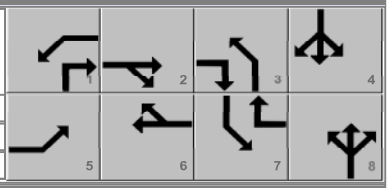
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	AJB	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2017 SAT.xus		
Project Description	Pride of St. Charles				



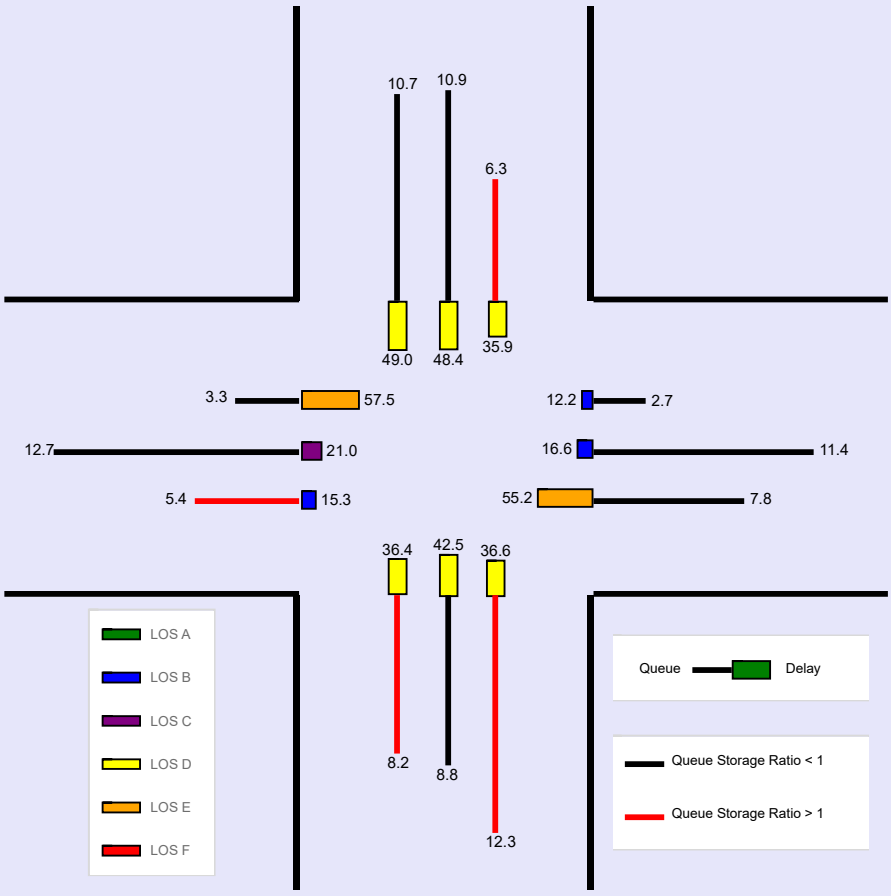
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	115	932	193	285	1063	117	193	375	297	145	382	63

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.4	2.0	51.7	10.5	2.7	22.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	86	334.7	141.6	207.2	300	70.9	217.4	231.8	324.7	166.2	288.9	267.6
Back of Queue (*Q*), veh/ln (95 th percentile)	3.3	12.7	5.4	7.8	11.4	2.7	8.2	8.8	12.3	6.3	10.9	10.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.51	0.00	1.13	0.64	0.00	0.44	1.50	0.00	2.24	1.23	0.00	0.00
Control Delay (*d*), s/veh	57.5	21.0	15.3	55.2	16.6	12.2	36.4	42.5	36.6	35.9	48.4	49.0
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	D	D	D
Approach Delay, s/veh / LOS	23.5	C		23.7	C		39.1	D		45.5	D	
Intersection Delay, s/veh / LOS	30.0						C					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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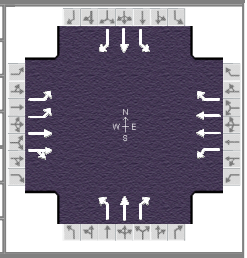
HCS7 Signalized Intersection Input Data

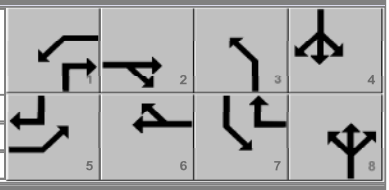
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1640	23	3	1028	5	1	1	7	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	101.2	1.4	0.6	4.8	0.0
Yellow	3.5	4.5	3.5	0.0	4.5	0.0
Red	0.0	1.5	0.0	0.0	1.5	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1640	23	3	1028	5	1	1	7	9	2	4
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h	0	L			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7		7	7	7	3	3	3	3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	180	0		200	0	200	160	0	160	160	0	160
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	84.0	13.0	84.0	13.0	20.0	13.0	20.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	4.0	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	21	3	21	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		9.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		38.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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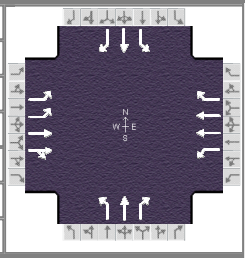
HCS7 Signalized Intersection Results Summary

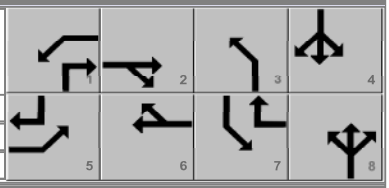
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1640	23	3	1028	5	1	1	7	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	101.2	1.4	0.6	4.8	0.0
Yellow	3.5	4.5	3.5	0.0	4.5	0.0
Red	0.0	1.5	0.0	0.0	1.5	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	6.5	107.2	6.5	107.2	5.5	11.4	4.9	10.8
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.0	0.0	3.0	0.0	3.3	3.4	3.3	3.4
Queue Clearance Time (g_s), s	2.3		2.2		2.1	2.6	2.7	2.3
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		0.51	0.44	0.47	0.59
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	9	904	903	3	1117	5	1	1	8	10	2	4
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1661	1796	1787	1711	1800	1522	1767	1953	1572	1767	1953	1572
Queue Service Time (g_s), s	0.3	0.0	1.1	0.2	0.0	0.1	0.1	0.1	0.6	0.7	0.1	0.3
Cycle Queue Clearance Time (g_c), s	0.3	0.0	1.1	0.2	0.0	0.1	0.1	0.1	0.6	0.7	0.1	0.3
Green Ratio (*g/C*)	0.02	0.78	0.78	0.02	0.78	0.79	0.05	0.04	0.06	0.05	0.04	0.06
Capacity (*c*), veh/h	77	1399	1392	39	2803	1202	126	81	101	110	71	94
Volume-to-Capacity Ratio (*X*)	0.113	0.647	0.649	0.083	0.399	0.005	0.009	0.013	0.075	0.089	0.030	0.046
Back of Queue (*Q*), ft/ln (95 th percentile)	6.7	42.9	46	5.1	7.9	1.1	1.6	1.6	11.1	14.6	3.3	6.4
Back of Queue (*Q*), veh/ln (95 th percentile)	0.3	1.6	1.8	0.2	0.3	0.0	0.1	0.1	0.4	0.6	0.1	0.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.04	0.00	0.00	0.03	0.00	0.01	0.01	0.00	0.07	0.09	0.00	0.04
Uniform Delay (d_1), s/veh	62.2	0.0	0.1	62.2	0.0	2.9	58.9	59.8	57.2	59.3	60.4	57.6
Incremental Delay (d_2), s/veh	0.2	2.3	2.4	0.3	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	62.4	2.3	2.4	62.5	0.4	2.9	58.9	59.8	57.3	59.5	60.5	57.7
Level of Service (LOS)	E	A	A	E	A	A	E	E	E	E	E	E
Approach Delay, s/veh / LOS	2.7	A		0.6	A		57.7	E		59.1	E	
Intersection Delay, s/veh / LOS	2.4						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.03	B	2.20	B	2.47	B	2.47	B
Bicycle LOS Score / LOS	1.99	B	1.42	A	0.50	A	0.51	A

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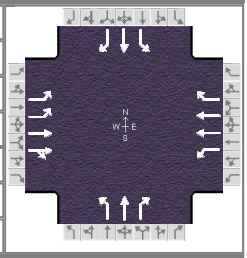
HCS7 Signalized Intersection Intermediate Values

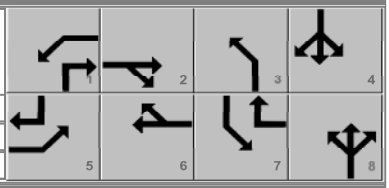
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	8	1640	23	3	1028	5	1	1	7	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	101.2	1.4	0.6	4.8	0.0
Yellow	3.5	4.5	3.5	0.0	4.5	0.0
Red	0.0	1.5	0.0	0.0	1.5	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	1.000	0.945	0.945	0.945	0.977	0.977	0.977	0.977	0.977	0.977
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	1.000	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.995	0.995		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3534	49	1711	3600	1522	1767	1953	1572	1767	1953	1572
Proportion of Vehicles Arriving on Green (P)	0.02	1.00	0.78	0.02	1.00	0.78	0.01	0.04	0.04	0.01	0.04	0.04
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Green Ratio (g/C)	0.02	0.78	0.02	0.78	0.05	0.04	0.05	0.04
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	1404	0	1405	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	4.8	0.0	4.8	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	4.6	0.0	3.3	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				1522		1572		1572
Protected Right Effective Green Time (g_R), s				1.4		3.0		3.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.000	1.557	0.000	1.710	0.000	1.710	0.000
Pedestrian F_s / F_{delay}	0.000	0.046	0.000	0.046	0.000	0.164	0.000	0.164
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1557.28	3.19	1557.28	3.19	82.73	59.73	73.18	60.33
Bicycle F_w / F_v	-3.64	1.50	-3.64	0.93	-3.64	0.02	-3.64	0.03

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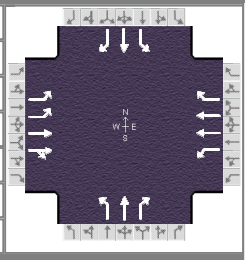
HCS7 Signalized Intersection Results Graphical Summary

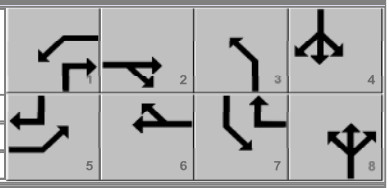
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 AM.xus		
Project Description	Pride of St. Charles				



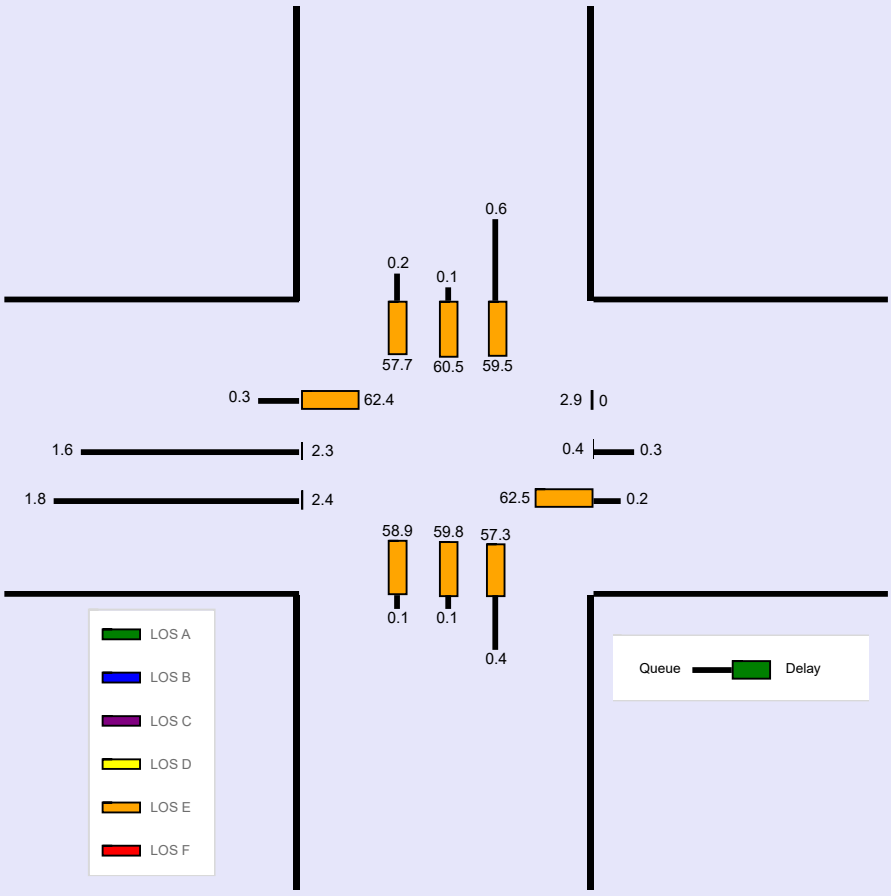
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1640	23	3	1028	5	1	1	7	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	101.2	1.4	0.6	4.8	0.0
Yellow	3.5	4.5	3.5	0.0	4.5	0.0
Red	0.0	1.5	0.0	0.0	1.5	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	6.7	42.9	46	5.1	7.9	1.1	1.6	1.6	11.1	14.6	3.3	6.4
Back of Queue (*Q*), veh/ln (95 th percentile)	0.3	1.6	1.8	0.2	0.3	0.0	0.1	0.1	0.4	0.6	0.1	0.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.04	0.00	0.00	0.03	0.00	0.01	0.01	0.00	0.07	0.09	0.00	0.04
Control Delay (*d*), s/veh	62.4	2.3	2.4	62.5	0.4	2.9	58.9	59.8	57.3	59.5	60.5	57.7
Level of Service (LOS)	E	A	A	E	A	A	E	E	E	E	E	E
Approach Delay, s/veh / LOS	2.7	A		0.6	A		57.7	E		59.1	E	
Intersection Delay, s/veh / LOS	2.4						A					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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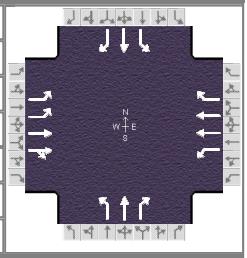
HCS7 Signalized Intersection Input Data

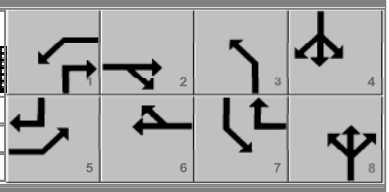
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	1237	40	24	1727	24	44	9	34	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.3	1.1	111.4	3.9	2.3	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	1237	40	24	1727	24	44	9	34	22	11	54
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7		7	7	7	3	3	3	3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	180	0		200	0	200	160	0	160	160	0	160
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	16.0	93.0	16.0	93.0	16.0	25.0	16.0	25.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	4.0	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	21	3	21	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		9.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		38.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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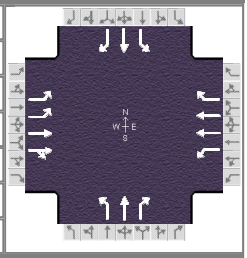
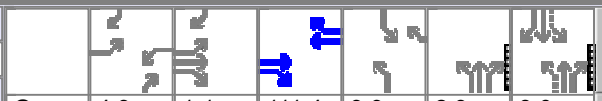
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 PM.xus		
Project Description	Pride of St. Charles				

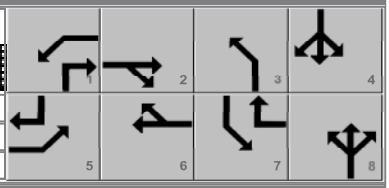


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	68	1237	40	24	1727	24	44	9	34	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.3	1.1	111.4	3.9	2.3	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	8.9	118.5	7.8	117.4	9.7	16.3	7.4	14.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.0	0.0	3.0	0.0	3.3	3.4	3.3	3.4
Queue Clearance Time (g_s), s	5.3		4.2		5.7	5.2	3.9	7.2
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Phase Call Probability	1.00		1.00		0.99	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.01	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	73	690	683	26	1857	26	47	10	37	24	12	58
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1796	1776	1711	1800	1522	1767	1953	1572	1767	1953	1572
Queue Service Time (g_s), s	3.3	0.0	1.8	2.2	2.4	0.6	3.7	0.7	3.2	1.9	0.9	5.2
Cycle Queue Clearance Time (g_c), s	3.3	0.0	1.8	2.2	2.4	0.6	3.7	0.7	3.2	1.9	0.9	5.2
Green Ratio (g/C)	0.04	0.75	0.75	0.03	0.74	0.77	0.09	0.07	0.10	0.08	0.05	0.09
Capacity (c), veh/h	119	1348	1333	49	2674	1170	181	134	153	165	104	140
Volume-to-Capacity Ratio (X)	0.614	0.512	0.513	0.532	0.694	0.022	0.261	0.072	0.239	0.144	0.114	0.415
Back of Queue (Q), ft/ln (95 th percentile)	66.6	24.8	37.1	48.1	38.6	8.1	79.1	16.3	60.8	39.7	20.4	1.3
Back of Queue (Q), veh/ln (95 th percentile)	2.5	0.9	1.5	1.8	1.5	0.3	3.1	0.6	2.4	1.6	0.8	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.37	0.00	0.00	0.24	0.00	0.04	0.49	0.00	0.38	0.25	0.00	0.01
Uniform Delay (d_1), s/veh	71.3	0.0	0.3	71.9	0.2	4.1	63.3	65.4	62.6	64.5	67.6	64.6
Incremental Delay (d_2), s/veh	1.9	1.4	1.4	3.3	1.5	0.0	0.3	0.1	0.3	0.1	0.2	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.2	1.4	1.7	75.2	1.7	4.1	63.6	65.4	62.9	64.6	67.8	65.4
Level of Service (LOS)	E	A	A	E	A	A	E	E	E	E	E	E
Approach Delay, s/veh / LOS	5.2	A		2.7	A		63.5	E		65.5	E	
Intersection Delay, s/veh / LOS	7.0						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.05	B	2.22	B	2.48	B	2.48	B
Bicycle LOS Score / LOS	1.68	B	2.06	B	0.64	A	0.64	A

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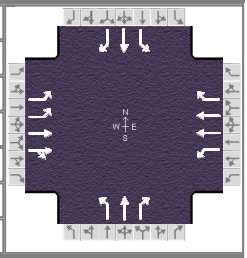
HCS7 Signalized Intersection Intermediate Values

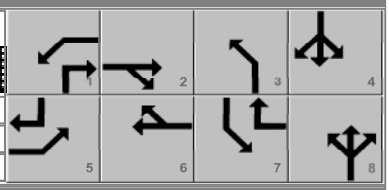
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	68	1237	40	24	1727	24	44	9	34	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.3	1.1	111.4	3.9	2.3	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	1.000	0.945	0.945	0.945	0.977	0.977	0.977	0.977	0.977	0.977
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	1.000	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.989	0.989		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3461	112	1711	3600	1522	1767	1953	1572	1767	1953	1572
Proportion of Vehicles Arriving on Green (P)	0.04	1.00	0.75	0.03	0.99	0.74	0.04	0.07	0.07	0.03	0.05	0.05
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Green Ratio (g/C)	0.04	0.75	0.03	0.74	0.09	0.07	0.08	0.05
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	1391	0	1394	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	8.3	0.0	8.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	7.1	0.0	7.6	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				1522		1572		1572
Protected Right Effective Green Time (g_R), s				3.9		4.3		5.4

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.000	1.557	0.000	1.710	0.000	1.710	0.000
Pedestrian F_s / F_{delay}	0.000	0.062	0.000	0.064	0.000	0.167	0.000	0.169
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1500.66	4.68	1485.72	4.96	137.64	65.03	106.36	67.24
Bicycle F_w / F_v	-3.64	1.19	-3.64	1.57	-3.64	0.15	-3.64	0.15

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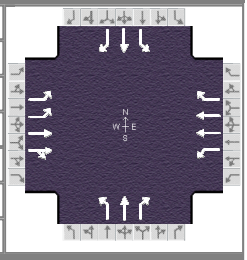
HCS7 Signalized Intersection Results Graphical Summary

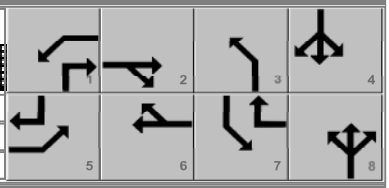
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 PM.xus		
Project Description	Pride of St. Charles				



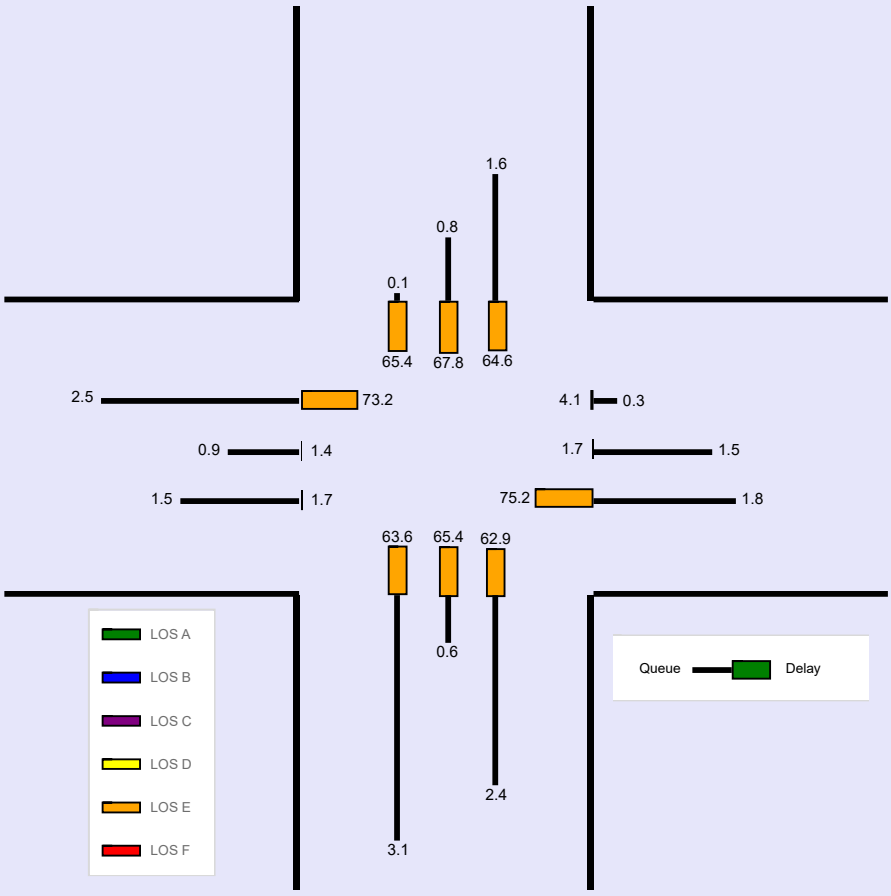
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	1237	40	24	1727	24	44	9	34	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.3	1.1	111.4	3.9	2.3	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	66.6	24.8	37.1	48.1	38.6	8.1	79.1	16.3	60.8	39.7	20.4	1.3
Back of Queue (*Q*), veh/ln (95 th percentile)	2.5	0.9	1.5	1.8	1.5	0.3	3.1	0.6	2.4	1.6	0.8	0.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.37	0.00	0.00	0.24	0.00	0.04	0.49	0.00	0.38	0.25	0.00	0.01
Control Delay (*d*), s/veh	73.2	1.4	1.7	75.2	1.7	4.1	63.6	65.4	62.9	64.6	67.8	65.4
Level of Service (LOS)	E	A	A	E	A	A	E	E	E	E	E	E
Approach Delay, s/veh / LOS	5.2	A		2.7	A		63.5	E		65.5	E	
Intersection Delay, s/veh / LOS	7.0						A					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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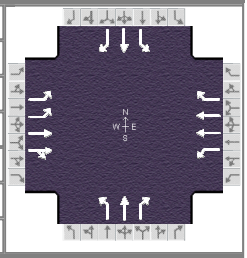
HCS7 Signalized Intersection Input Data

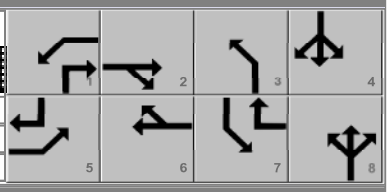
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1212	60	37	1333	21	49	10	57	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	1.3	81.3	3.5	2.2	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1212	60	37	1333	21	49	10	57	23	13	59
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7		7	7	7	3	3	3	3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	180	0		200	0	200	160	0	160	160	0	160
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	15.0	72.0	15.0	72.0	13.0	20.0	13.0	20.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	4.0	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	21	3	21	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		9.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		38.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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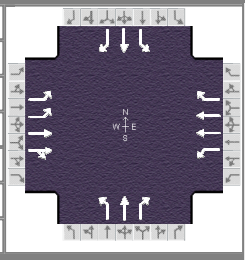
HCS7 Signalized Intersection Results Summary

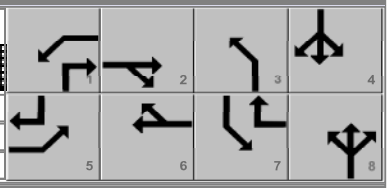
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1212	60	37	1333	21	49	10	57	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	1.3	81.3	3.5	2.2	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	9.5	88.6	8.2	87.3	9.2	16.2	7.0	14.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.0	0.0	3.0	0.0	3.3	3.4	3.3	3.4
Queue Clearance Time (g_s), s	5.8		4.7		5.2	6.2	3.5	6.4
Green Extension Time (g_e), s	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Phase Call Probability	1.00		1.00		0.99	1.00	0.99	1.00
Max Out Probability	0.00		0.00		0.45	0.00	0.01	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	109	681	672	39	1418	22	52	11	61	24	14	63
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1661	1796	1766	1711	1800	1522	1767	1953	1572	1767	1953	1572
Queue Service Time (g_s), s	3.8	7.6	9.4	2.7	9.6	0.5	3.2	0.6	4.2	1.5	0.8	4.4
Cycle Queue Clearance Time (g_c), s	3.8	7.6	9.4	2.7	9.6	0.5	3.2	0.6	4.2	1.5	0.8	4.4
Green Ratio (*g/C*)	0.05	0.69	0.69	0.04	0.68	0.71	0.11	0.08	0.12	0.10	0.07	0.12
Capacity (*c*), veh/h	166	1236	1215	68	2439	1076	220	166	196	200	130	183
Volume-to-Capacity Ratio (*X*)	0.652	0.551	0.553	0.582	0.581	0.021	0.237	0.064	0.310	0.123	0.107	0.342
Back of Queue (*Q*), ft/ln (95 th percentile)	76.7	94	106.8	57.1	98.6	7.2	67.2	13.9	77.8	31.6	18.5	81.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	3.6	4.3	2.2	3.7	0.3	2.6	0.5	3.0	1.2	0.7	3.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.43	0.00	0.00	0.29	0.00	0.04	0.42	0.00	0.49	0.20	0.00	0.51
Uniform Delay (d_1), s/veh	56.0	1.9	2.4	56.7	2.3	5.2	48.8	50.5	47.8	49.8	52.7	48.8
Incremental Delay (d_2), s/veh	1.6	1.8	1.8	2.9	1.0	0.0	0.2	0.1	0.3	0.1	0.1	0.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	57.6	3.6	4.3	59.6	3.4	5.3	49.0	50.6	48.2	49.9	52.8	49.2
Level of Service (LOS)	E	A	A	E	A	A	D	D	D	D	D	D
Approach Delay, s/veh / LOS	7.9	A		4.9	A		48.7	D		49.8	D	
Intersection Delay, s/veh / LOS	9.4						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	2.23	B	2.47	B	2.47	B
Bicycle LOS Score / LOS	1.69	B	1.71	B	0.69	A	0.65	A

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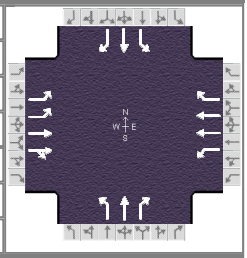
HCS7 Signalized Intersection Intermediate Values

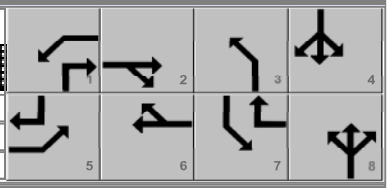
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	102	1212	60	37	1333	21	49	10	57	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	1.3	81.3	3.5	2.2	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	1.000	0.945	0.945	0.945	0.977	0.977	0.977	0.977	0.977	0.977
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	1.000	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.983	0.983		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3394	168	1711	3600	1522	1767	1953	1572	1767	1953	1572
Proportion of Vehicles Arriving on Green (P)	0.05	0.92	0.69	0.04	0.90	0.68	0.04	0.08	0.08	0.03	0.07	0.07
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Green Ratio (g/C)	0.05	0.69	0.04	0.68	0.11	0.08	0.10	0.07
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	1389	0	1393	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	8.2	0.0	8.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	7.2	0.0	7.6	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				1522		1572		1572
Protected Right Effective Green Time (g_R), s				3.5		4.7		6.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.000	1.557	0.000	1.710	0.000	1.710	0.000
Pedestrian F_s / F_{delay}	0.000	0.071	0.000	0.073	0.000	0.157	0.000	0.159
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1376.02	5.84	1354.93	6.24	169.73	50.25	132.91	52.29
Bicycle F_w / F_v	-3.64	1.21	-3.64	1.22	-3.64	0.20	-3.64	0.17

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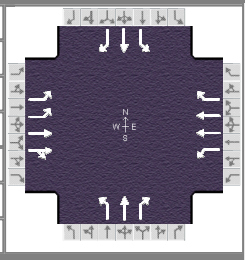
HCS7 Signalized Intersection Results Graphical Summary

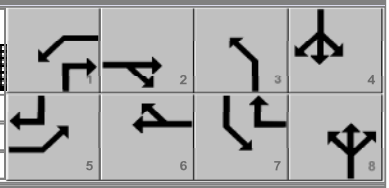
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 12, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2017	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2017 SAT.xus		
Project Description	Pride of St. Charles				



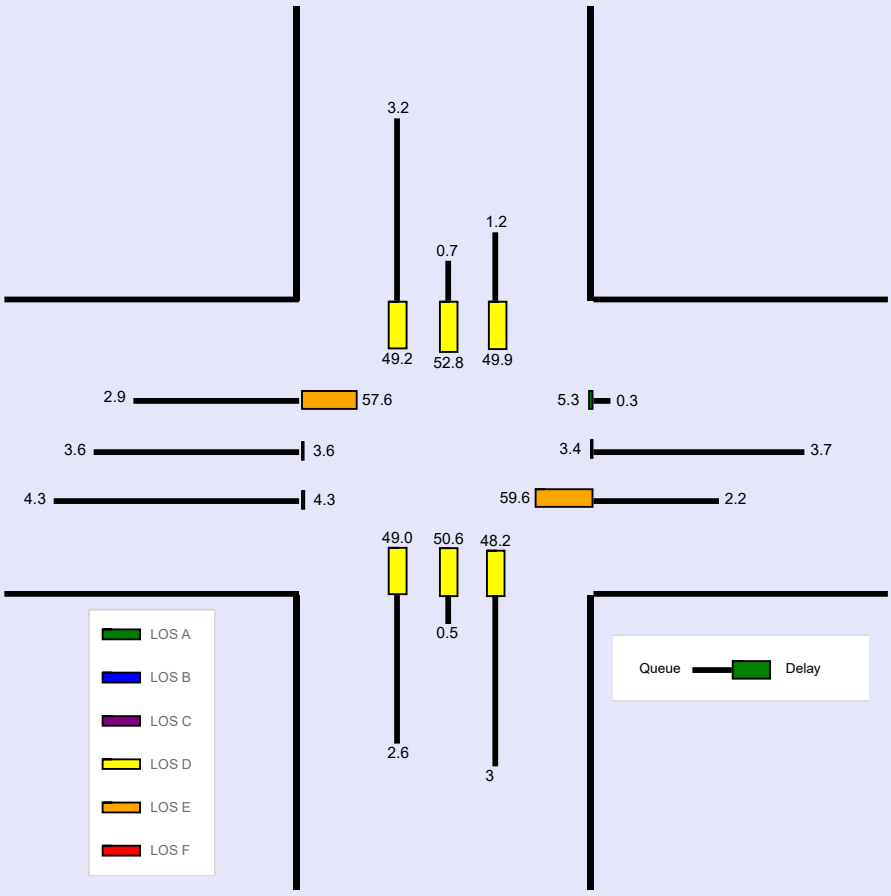
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1212	60	37	1333	21	49	10	57	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	1.3	81.3	3.5	2.2	8.0
Yellow	3.5	0.0	4.5	3.5	0.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	76.7	94	106.8	57.1	98.6	7.2	67.2	13.9	77.8	31.6	18.5	81.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	3.6	4.3	2.2	3.7	0.3	2.6	0.5	3.0	1.2	0.7	3.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.43	0.00	0.00	0.29	0.00	0.04	0.42	0.00	0.49	0.20	0.00	0.51
Control Delay (*d*), s/veh	57.6	3.6	4.3	59.6	3.4	5.3	49.0	50.6	48.2	49.9	52.8	49.2
Level of Service (LOS)	E	A	A	E	A	A	D	D	D	D	D	D
Approach Delay, s/veh / LOS	7.9	A		4.9	A		48.7	D		49.8	D	
Intersection Delay, s/veh / LOS	9.4						A					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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HCS7 Two-Way Stop-Control Report

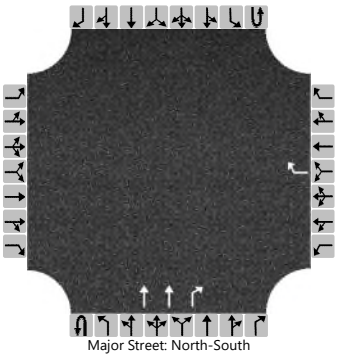
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Pride of St. Charles

Site Information

Intersection	Northbound Kirk Road RIRO
Jurisdiction	KDOT/St Charles
East/West Street	Retail RIRO Drive
North/South Street	Kirk Road
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	0	0	0
Configuration								R			T	R				
Volume (veh/h)								39			961	59				
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No				No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								41								
Capacity, c (veh/h)								509								
v/c Ratio								0.08								
95% Queue Length, Q_{95} (veh)								0.3								
Control Delay (s/veh)								12.7								
Level of Service (LOS)								B								
Approach Delay (s/veh)					12.7											
Approach LOS					B											

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HCS7 Two-Way Stop-Control Report

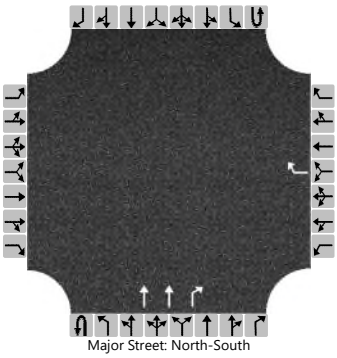
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Pride of St. Charles

Site Information

Intersection	Northbound Kirk Road RIRO
Jurisdiction	KDOT/St Charles
East/West Street	Retail RIRO Drive
North/South Street	Kirk Road
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	0	0	0
Configuration								R			T	R				
Volume (veh/h)								38			1533	60				
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No				No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								40								
Capacity, c (veh/h)								318								
v/c Ratio								0.13								
95% Queue Length, Q_{95} (veh)								0.4								
Control Delay (s/veh)								18.0								
Level of Service (LOS)								C								
Approach Delay (s/veh)					18.0											
Approach LOS					C											

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HCS7 Two-Way Stop-Control Report

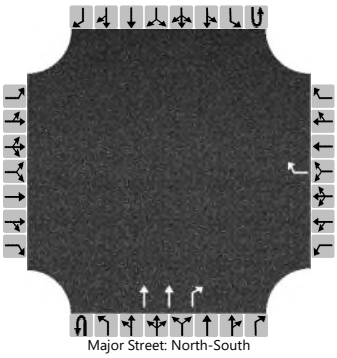
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	Saturday Peak Hour
Intersection Orientation	North-South
Project Description	Pride of St. Charles

Site Information

Intersection	Northbound Kirk Road RIRO
Jurisdiction	KDOT/St Charles
East/West Street	Retail RIRO Drive
North/South Street	Kirk Road
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	1	0	0	0	0
Configuration								R			T	R				
Volume (veh/h)								48			852	71				
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No				No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								50								
Capacity, c (veh/h)								559								
v/c Ratio								0.09								
95% Queue Length, Q_{95} (veh)								0.3								
Control Delay (s/veh)								12.1								
Level of Service (LOS)								B								
Approach Delay (s/veh)					12.1											
Approach LOS					B											

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HCS7 Two-Way Stop-Control Report

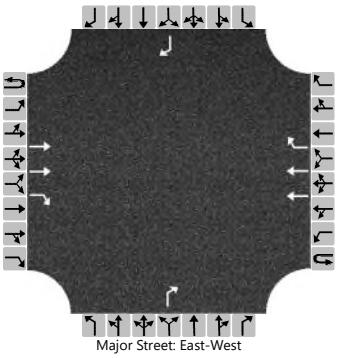
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+ Bank/PoSC Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1674	121			1143	9				104				16
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												109				17
Capacity, c (veh/h)												288				441
v/c Ratio												0.38				0.04
95% Queue Length, Q_{95} (veh)												1.7				0.1
Control Delay (s/veh)												25.0				13.5
Level of Service (LOS)												C				B
Approach Delay (s/veh)									25.0				13.5			
Approach LOS									C				B			

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HCS7 Two-Way Stop-Control Report

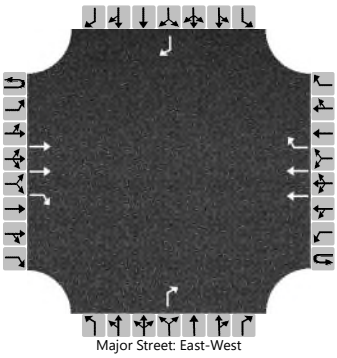
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	IDOT/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+ Bank/PoSC Drives
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1351	99			1979	9				82				43
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												87				46
Capacity, c (veh/h)												369				221
v/c Ratio												0.24				0.21
95% Queue Length, Q_{95} (veh)												0.9				0.8
Control Delay (s/veh)												17.8				25.5
Level of Service (LOS)												C				D
Approach Delay (s/veh)									17.8				25.5			
Approach LOS									C				D			

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HCS7 Two-Way Stop-Control Report

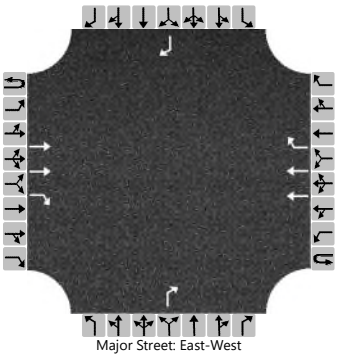
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	Saturday Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+Bank/PoSC Drives
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1383	99			1559	36				82				60
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												85				63
Capacity, c (veh/h)												368				320
v/c Ratio												0.23				0.20
95% Queue Length, Q_{95} (veh)												0.9				0.7
Control Delay (s/veh)												17.7				19.0
Level of Service (LOS)												C				C
Approach Delay (s/veh)									17.7				19.0			
Approach LOS									C				C			

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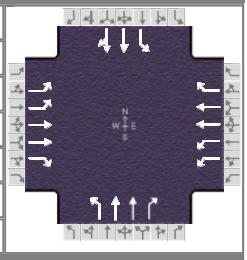
HCS7 Signalized Intersection Input Data

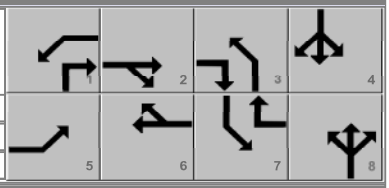
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	71	1264	228	275	784	100	150	517	333	198	756	36

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.9	3.9	59.2	11.4	26.1	0.0
Yellow	3.5	3.5	4.5	3.5	4.5	0.0
Red	1.0	1.0	1.5	0.0	1.5	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	71	1264	228	275	784	100	150	517	333	198	756	36
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7	7	7	7	7	7	7	7	7	7	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft	170	0	125	325	0	160	145	0	145	135	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	45	45	45	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	16.0	63.0	20.0	67.0	15.0	32.0	15.0	32.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	1.0	1.5	1.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	15	3	15	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		9.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		38.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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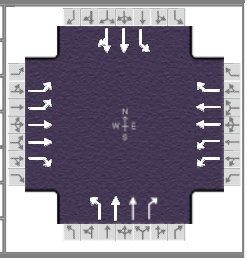
HCS7 Signalized Intersection Results Summary

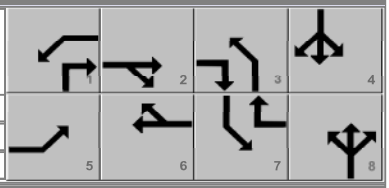
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	71	1264	228	275	784	100	150	517	333	198	756	36

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.9	3.9	59.2	11.4	26.1	0.0
Yellow	3.5	3.5	4.5	3.5	4.5	0.0
Red	1.0	1.0	1.5	0.0	1.5	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.4	65.2	17.8	73.6	14.9	32.0	15.0	32.1
Change Period, ($Y+R_c$), s	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.0	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	4.9		13.1		11.4	28.0	13.5	28.1
Green Extension Time (g_e), s	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		1.00		1.00	1.00	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	75	1331	240	289	825	105	158	544	351	208	420	414
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1800	1522	1661	1800	1522	1711	1800	1522	1711	1796	1767
Queue Service Time (g_s), s	2.9	37.2	11.1	11.1	13.2	3.8	9.4	18.5	26.0	11.5	26.1	26.1
Cycle Queue Clearance Time (g_c), s	2.9	37.2	11.1	11.1	13.2	3.8	9.4	18.5	26.0	11.5	26.1	26.1
Green Ratio (g/C)	0.04	0.46	0.54	0.10	0.52	0.61	0.29	0.20	0.30	0.29	0.20	0.20
Capacity (c), veh/h	126	1639	827	340	1871	926	206	720	460	254	360	355
Volume-to-Capacity Ratio (X)	0.593	0.812	0.290	0.851	0.441	0.114	0.768	0.756	0.762	0.819	1.166	1.166
Back of Queue (Q), ft/ln (95 th percentile)	58.8	537.9	190.9	235.3	209	59.9	218.2	353.9	427.2	283.5	835.2	781.2
Back of Queue (Q), veh/ln (95 th percentile)	2.2	20.4	7.2	8.9	7.9	2.3	8.3	13.4	16.2	10.7	31.6	31.2
Queue Storage Ratio (RQ) (95 th percentile)	0.35	0.00	1.53	0.72	0.00	0.37	1.51	0.00	2.95	2.10	0.00	0.00
Uniform Delay (d_1), s/veh	61.5	21.2	16.1	57.4	11.6	10.7	38.9	49.0	41.1	41.1	52.0	52.0
Incremental Delay (d_2), s/veh	1.7	4.5	0.9	12.8	0.8	0.2	14.4	4.1	6.6	17.6	100.7	101.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.2	25.7	17.0	70.2	12.4	11.0	53.3	53.1	47.7	58.7	152.6	153.1
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	E	F	F
Approach Delay, s/veh / LOS	26.1	C		26.0	C		51.3	D		134.0	F	
Intersection Delay, s/veh / LOS	54.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.27	B	2.60	C	2.60	C
Bicycle LOS Score / LOS	1.84	B	1.49	A	1.36	A	1.35	A

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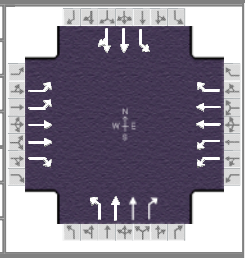
HCS7 Signalized Intersection Intermediate Values

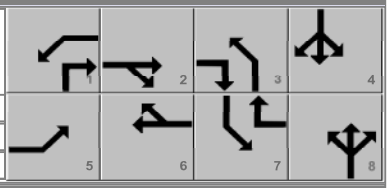
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	71	1264	228	275	784	100	150	517	333	198	756	36

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.9	3.9	59.2	11.4	26.1	0.0
Yellow	3.5	3.5	4.5	3.5	4.5	0.0
Red	1.0	1.0	1.5	0.0	1.5	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.847		0.000	0.847		0.000	0.847		0.984	0.984
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3600	1522	3322	3600	1522	1711	3600	1522	1711	3401	162
Proportion of Vehicles Arriving on Green (P)	0.04	0.61	0.46	0.10	0.69	0.52	0.09	0.20	0.20	0.09	0.20	0.20
Incremental Delay Factor (k)	0.04	0.50	0.50	0.25	0.50	0.50	0.28	0.28	0.28	0.33	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.04	0.46	0.10	0.52	0.29	0.20	0.29	0.20
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	633	0	828	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	26.0	0.0	26.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		7.5	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		1522		1522		1522		
Protected Right Effective Green Time (g_R), s		11.4		11.5		13.3		

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.710	0.000	1.557	0.000	1.852	0.000	1.852	0.000
Pedestrian F_s / F_{delay}	0.000	0.119	0.000	0.109	0.000	0.149	0.000	0.149
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	910.67	19.28	1039.47	14.99	400.00	41.60	401.29	41.53
Bicycle F_w / F_v	-3.64	1.36	-3.64	1.01	-3.64	0.87	-3.64	0.86

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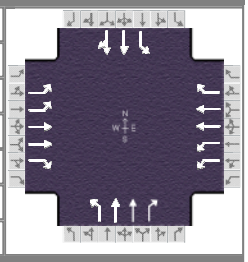
HCS7 Signalized Intersection Results Graphical Summary

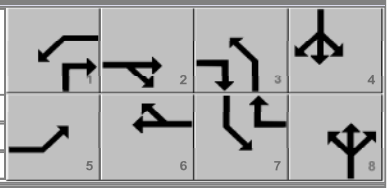
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	AM Peak Hour	PHF	0.95
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 AM.xus		
Project Description	Pride of St. Charles				



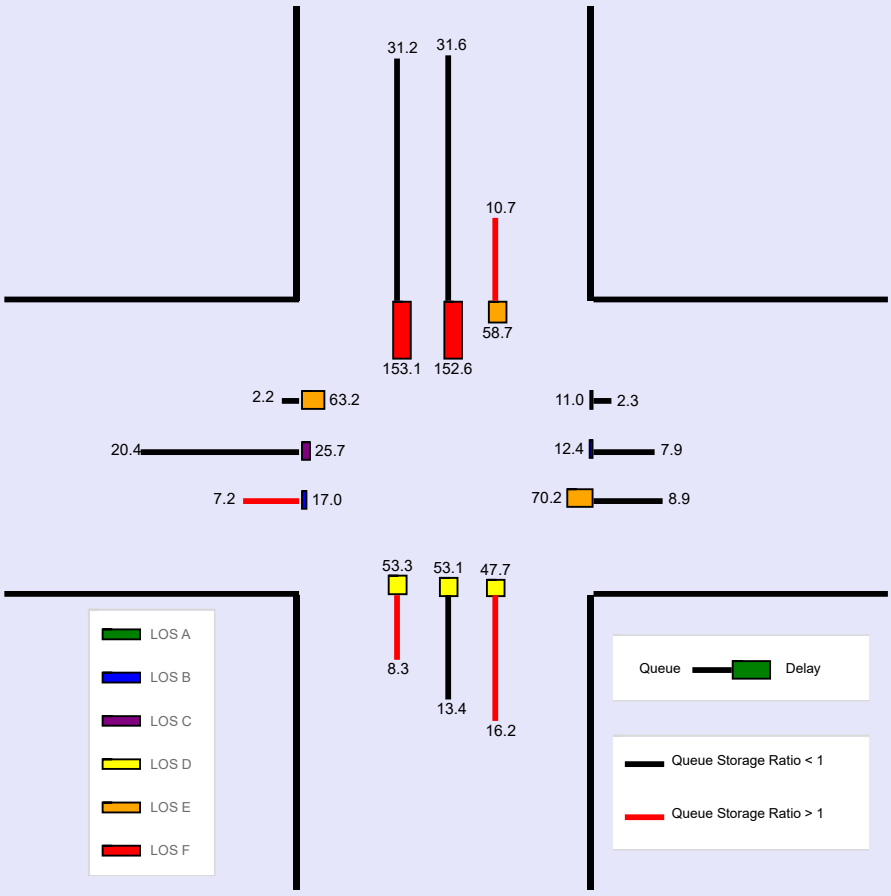
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	71	1264	228	275	784	100	150	517	333	198	756	36

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.9	3.9	59.2	11.4	26.1	0.0
Yellow	3.5	3.5	4.5	3.5	4.5	0.0
Red	1.0	1.0	1.5	0.0	1.5	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	58.8	537.9	190.9	235.3	209	59.9	218.2	353.9	427.2	283.5	835.2	781.2
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	20.4	7.2	8.9	7.9	2.3	8.3	13.4	16.2	10.7	31.6	31.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.35	0.00	1.53	0.72	0.00	0.37	1.51	0.00	2.95	2.10	0.00	0.00
Control Delay (*d*), s/veh	63.2	25.7	17.0	70.2	12.4	11.0	53.3	53.1	47.7	58.7	152.6	153.1
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	E	F	F
Approach Delay, s/veh / LOS	26.1	C		26.0	C		51.3	D		134.0	F	
Intersection Delay, s/veh / LOS	54.1						D					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

WARNING: If demand exceeds capacity, a multiple-period analysis should be conducted.

--- Comments ---

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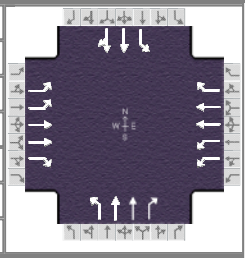
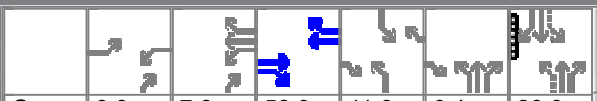
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 PM.xus		
Project Description	Pride of St. Charles				

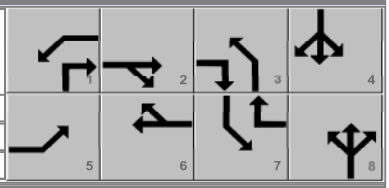


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	131	949	145	387	1375	260	295	905	371	130	571	62

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	8.3	7.8	58.9	11.6	6.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	131	949	145	387	1375	260	295	905	371	130	571	62
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7	7	7	7	7	7	7	7	7	7	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft	170	0	125	325	0	160	145	0	145	135	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	45	45	45	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	18.0	62.0	28.0	72.0	25.0	44.0	16.0	35.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	1.0	1.5	1.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	15	3	15	3	15	3	15
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		0.0		9.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		38.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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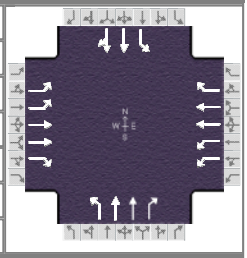
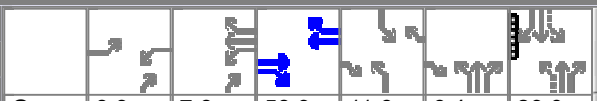
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 PM.xus		
Project Description	Pride of St. Charles				

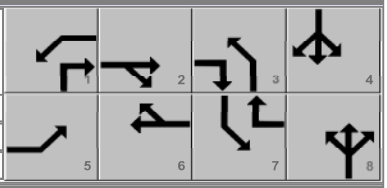


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	131	949	145	387	1375	260	295	905	371	130	571	62

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	8.3	7.8	58.9	11.6	6.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.8	64.9	25.1	77.2	25.0	44.9	15.1	35.0
Change Period, ($Y+R_c$), s	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.0	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	8.2		20.3		23.5	40.9	11.6	30.6
Green Extension Time (g_e), s	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.05		0.86		1.00	1.00	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	139	1010	154	412	1463	277	314	963	395	138	342	331
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1800	1522	1661	1800	1522	1711	1800	1522	1711	1796	1734
Queue Service Time (g_s), s	6.2	32.0	7.9	18.3	48.9	14.9	21.5	38.9	31.7	9.6	28.5	28.6
Cycle Queue Clearance Time (g_c), s	6.2	32.0	7.9	18.3	48.9	14.9	21.5	38.9	31.7	9.6	28.5	28.6
Green Ratio (g/C)	0.06	0.39	0.54	0.14	0.47	0.55	0.35	0.26	0.40	0.27	0.19	0.19
Capacity (c), veh/h	184	1412	815	457	1708	840	295	933	604	181	347	335
Volume-to-Capacity Ratio (X)	0.756	0.715	0.189	0.900	0.856	0.329	1.063	1.032	0.654	0.765	0.985	0.988
Back of Queue (Q), ft/ln (95 th percentile)	128.2	508.5	137.8	354.9	665.8	241.2	572.7	807.5	465	220.7	628.5	583.8
Back of Queue (Q), veh/ln (95 th percentile)	4.9	19.3	5.2	13.4	25.2	9.1	21.7	30.6	17.6	8.4	23.8	23.4
Queue Storage Ratio (RQ) (95 th percentile)	0.75	0.00	1.10	1.09	0.00	1.51	3.95	0.00	3.21	1.63	0.00	0.00
Uniform Delay (d_1), s/veh	69.8	29.4	18.0	63.7	23.4	18.4	45.9	55.6	36.8	46.2	60.3	60.3
Incremental Delay (d_2), s/veh	2.4	3.1	0.5	16.1	5.8	1.0	70.0	38.1	2.0	14.2	44.0	45.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.2	32.5	18.5	79.8	29.2	19.4	115.9	93.6	38.9	60.4	104.3	106.1
Level of Service (LOS)	E	C	B	E	C	B	F	F	D	E	F	F
Approach Delay, s/veh / LOS	35.1	D		37.6	D		84.9	F		97.5	F	
Intersection Delay, s/veh / LOS	58.6						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.28	B	2.60	C	2.61	C
Bicycle LOS Score / LOS	1.56	B	2.26	B	1.87	B	1.16	A

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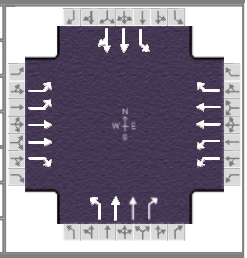
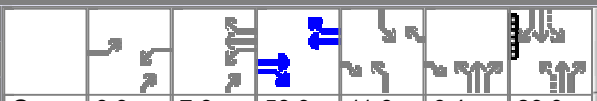
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 PM.xus		
Project Description	Pride of St. Charles				

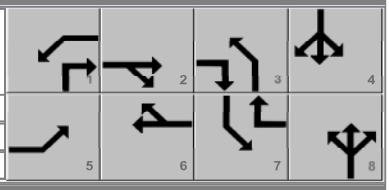


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	131	949	145	387	1375	260	295	905	371	130	571	62

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	8.3	7.8	58.9	11.6	6.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.847		0.000	0.847		0.000	0.847		0.965	0.965
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3600	1522	3322	3600	1522	1711	3600	1522	1711	3185	345
Proportion of Vehicles Arriving on Green (P)	0.06	0.52	0.39	0.14	0.63	0.47	0.14	0.26	0.26	0.08	0.19	0.19
Incremental Delay Factor (k)	0.04	0.50	0.50	0.31	0.50	0.50	0.50	0.50	0.18	0.25	0.49	0.49

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.06	0.39	0.14	0.47	0.35	0.26	0.27	0.19
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	735	0	560	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	31.0	0.0	29.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Permitted Queue Service Time (g_{ps}), s					0.4		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		1522		1522		1522		
Protected Right Effective Green Time (g_R), s		21.5		11.6		20.6		

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.710	0.000	1.557	0.000	1.852	0.000	1.852	0.000
Pedestrian F_s / F_{delay}	0.000	0.133	0.000	0.122	0.000	0.149	0.000	0.156
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	784.70	27.69	949.02	20.71	518.17	41.17	386.67	48.80
Bicycle F_w / F_v	-3.64	1.08	-3.64	1.77	-3.64	1.38	-3.64	0.67

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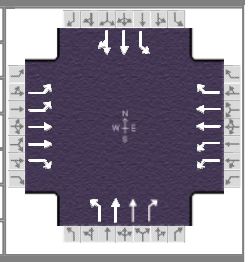
HCS7 Signalized Intersection Results Graphical Summary

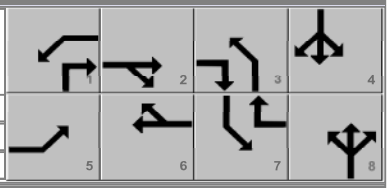
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	PM Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 PM.xus		
Project Description	Pride of St. Charles				



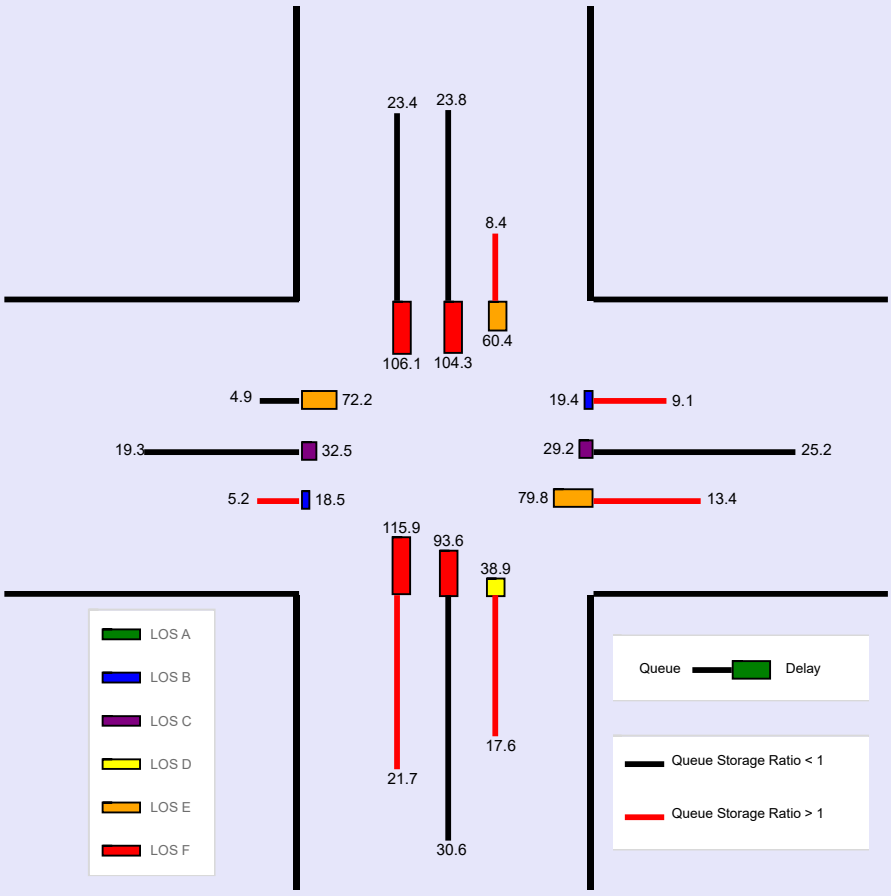
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	131	949	145	387	1375	260	295	905	371	130	571	62

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.3	7.8	58.9	11.6	6.4	29.0
Yellow	3.5	3.5	4.5	3.5	3.5	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	128.2	508.5	137.8	354.9	665.8	241.2	572.7	807.5	465	220.7	628.5	583.8
Back of Queue (*Q*), veh/ln (95 th percentile)	4.9	19.3	5.2	13.4	25.2	9.1	21.7	30.6	17.6	8.4	23.8	23.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.75	0.00	1.10	1.09	0.00	1.51	3.95	0.00	3.21	1.63	0.00	0.00
Control Delay (*d*), s/veh	72.2	32.5	18.5	79.8	29.2	19.4	115.9	93.6	38.9	60.4	104.3	106.1
Level of Service (LOS)	E	C	B	E	C	B	F	F	D	E	F	F
Approach Delay, s/veh / LOS	35.1	D		37.6	D		84.9	F		97.5	F	
Intersection Delay, s/veh / LOS	58.6						E					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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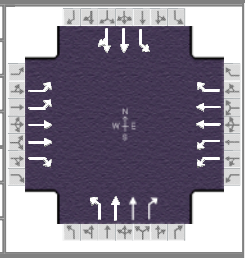
HCS7 Signalized Intersection Input Data

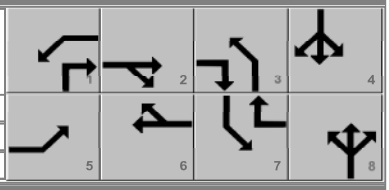
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122	1013	205	310	1171	138	201	390	309	160	389	64

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.6	2.7	49.4	11.3	2.3	23.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122	1013	205	310	1171	138	201	390	309	160	389	64
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7	7	7	7	7	7	7	7	7	7	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft	170	0	125	325	0	160	145	0	145	135	0	
Grade (Pg), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	45	45	45	40	40	40	40	40	40

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	14.0	50.0	19.0	55.0	21.0	33.0	18.0	30.0
Yellow Change Interval (Y), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Red Clearance Interval (R_c), s	1.0	1.5	1.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	15	3	15	3	15	3	15
Start-Up Lost Time (lt), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk ($Walk$), s		0.0		0.0		0.0		9.0
Pedestrian Clearance Time (PC), s		0.0		0.0		0.0		38.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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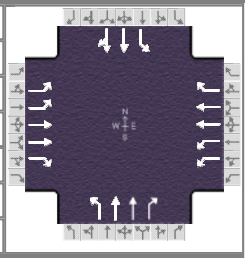
HCS7 Signalized Intersection Results Summary

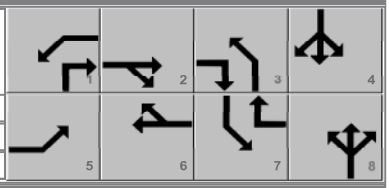
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122	1013	205	310	1171	138	201	390	309	160	389	64

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.6	2.7	49.4	11.3	2.3	23.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	11.1	55.4	18.3	62.6	17.1	31.4	14.8	29.1
Change Period, ($Y+R_c$), s	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.0	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	6.5		13.4		13.5	23.7	11.2	17.2
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0	0.1	1.7	0.1	2.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.07		0.39	0.35	0.81	0.10

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	127	1055	214	323	1220	144	209	406	322	167	240	232
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1800	1522	1661	1800	1522	1711	1800	1522	1711	1796	1708
Queue Service Time (g_s), s	4.5	26.0	9.3	11.4	27.5	5.4	11.5	12.0	21.7	9.2	15.0	15.2
Cycle Queue Clearance Time (g_c), s	4.5	26.0	9.3	11.4	27.5	5.4	11.5	12.0	21.7	9.2	15.0	15.2
Green Ratio (g/C)	0.06	0.41	0.53	0.12	0.47	0.57	0.31	0.21	0.33	0.29	0.19	0.19
Capacity (c), veh/h	184	1483	800	383	1699	862	313	762	498	311	346	329
Volume-to-Capacity Ratio (X)	0.690	0.711	0.267	0.844	0.718	0.167	0.670	0.533	0.647	0.537	0.695	0.705
Back of Queue (Q), ft/ln (95 th percentile)	91.2	401.5	158.3	227.8	370.2	86.7	224	238.5	333.5	181.3	292.1	270.2
Back of Queue (Q), veh/ln (95 th percentile)	3.5	15.2	6.0	8.6	14.0	3.3	8.5	9.0	12.6	6.9	11.1	10.8
Queue Storage Ratio (RQ) (95 th percentile)	0.54	0.00	1.27	0.70	0.00	0.54	1.54	0.00	2.30	1.34	0.00	0.00
Uniform Delay (d_1), s/veh	55.7	21.8	15.7	52.0	16.9	12.5	33.7	42.0	34.5	34.5	45.2	45.3
Incremental Delay (d_2), s/veh	1.7	2.9	0.8	6.4	2.6	0.4	2.4	0.2	1.5	0.5	2.6	3.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.4	24.7	16.5	58.4	19.5	12.9	36.1	42.2	35.9	35.0	47.7	48.3
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	D	D	D
Approach Delay, s/veh / LOS	26.4	C		26.4	C		38.7	D		44.6	D	
Intersection Delay, s/veh / LOS	31.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.27	B	2.60	C	2.60	C
Bicycle LOS Score / LOS	1.64	B	1.88	B	1.26	A	1.01	A

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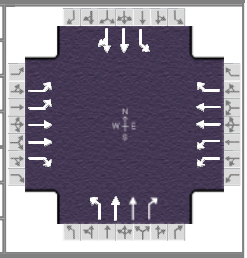
HCS7 Signalized Intersection Intermediate Values

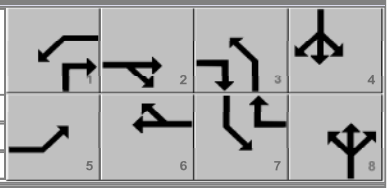
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122	1013	205	310	1171	138	201	390	309	160	389	64

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.6	2.7	49.4	11.3	2.3	23.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000	0.847		0.000	0.847		0.000	0.847		0.951	0.951
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3600	1522	3322	3600	1522	1711	3600	1522	1711	3012	492
Proportion of Vehicles Arriving on Green (P)	0.06	0.55	0.41	0.12	0.63	0.47	0.11	0.21	0.21	0.09	0.19	0.19
Incremental Delay Factor (k)	0.04	0.50	0.50	0.14	0.50	0.50	0.10	0.04	0.11	0.04	0.11	0.12

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	4.5	6.0	4.5	6.0	3.5	6.0	3.5	6.0
Green Ratio (g/C)	0.06	0.41	0.12	0.47	0.31	0.21	0.29	0.19
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	885	0	940	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	23.9	0.0	23.1	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	7.9	0.0	11.4	0.0
Permitted Queue Service Time (g_{ps}), s					5.0		2.5	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		1522		1522		1522		
Protected Right Effective Green Time (g_R), s		13.6		11.3		13.8		

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.710	0.000	1.557	0.000	1.852	0.000	1.852	0.000
Pedestrian F_s / F_{delay}	0.000	0.122	0.000	0.113	0.000	0.145	0.000	0.147
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	824.14	20.74	943.72	16.74	423.45	37.28	384.85	39.13
Bicycle F_w / F_v	-3.64	1.15	-3.64	1.39	-3.64	0.77	-3.64	0.53

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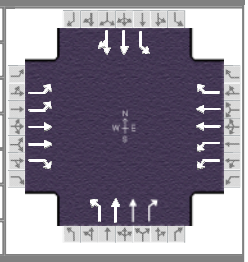
HCS7 Signalized Intersection Results Graphical Summary

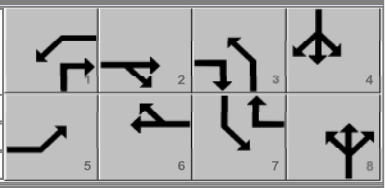
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/Kane County	Time Period	SAT Peak Hour	PHF	0.96
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Kirk Road	File Name	North-Kirk 2025 SAT.xus		
Project Description	Pride of St. Charles				



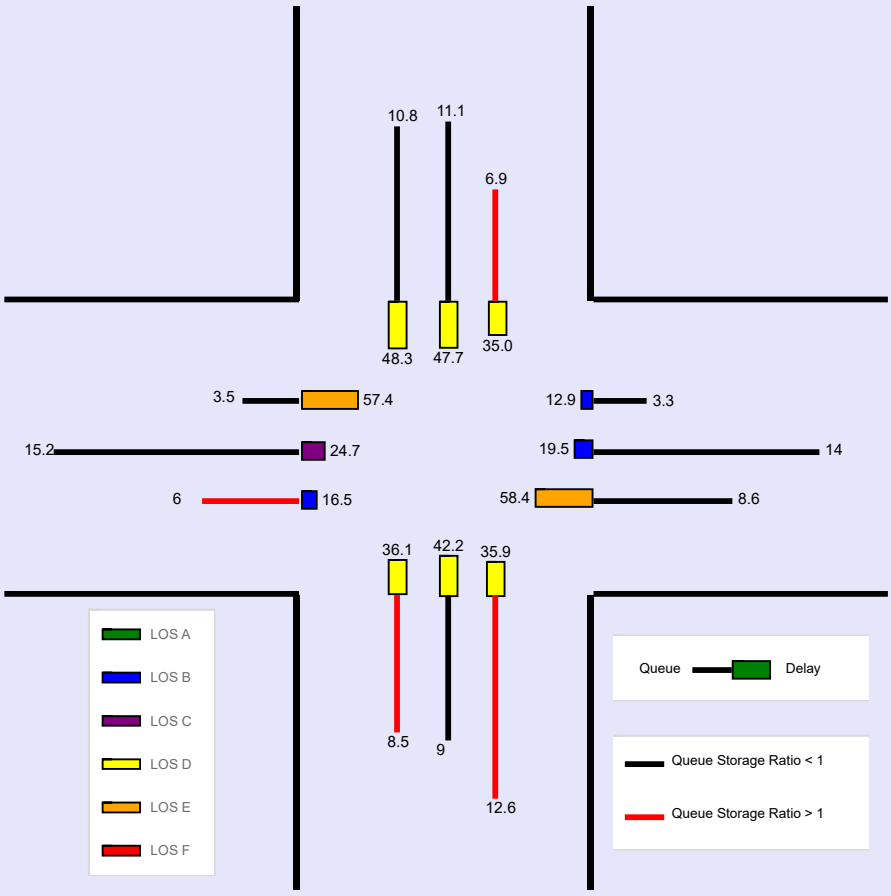
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	122	1013	205	310	1171	138	201	390	309	160	389	64

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.6	2.7	49.4	11.3	2.3	23.1
Yellow	3.5	3.5	4.5	3.5	0.0	4.5
Red	1.0	1.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	91.2	401.5	158.3	227.8	370.2	86.7	224	238.5	333.5	181.3	292.1	270.2
Back of Queue (*Q*), veh/ln (95 th percentile)	3.5	15.2	6.0	8.6	14.0	3.3	8.5	9.0	12.6	6.9	11.1	10.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.54	0.00	1.27	0.70	0.00	0.54	1.54	0.00	2.30	1.34	0.00	0.00
Control Delay (*d*), s/veh	57.4	24.7	16.5	58.4	19.5	12.9	36.1	42.2	35.9	35.0	47.7	48.3
Level of Service (LOS)	E	C	B	E	B	B	D	D	D	D	D	D
Approach Delay, s/veh / LOS	26.4	C		26.4	C		38.7	D		44.6	D	
Intersection Delay, s/veh / LOS	31.4						C					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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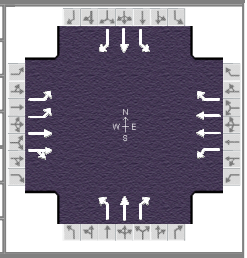
HCS7 Signalized Intersection Input Data

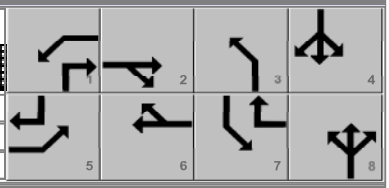
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1747	23	56	1082	5	66	1	12	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	0.1	91.9	2.9	0.3	5.3
Yellow	3.5	3.5	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1747	23	56	1082	5	66	1	12	9	2	4
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7		7	7	7	3	3	3	3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	180	0		200	0	200	160	0	160	160	0	160
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	84.0	13.0	84.0	13.0	20.0	13.0	20.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	4.0	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	21	3	21	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		9.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		38.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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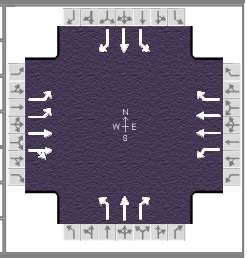
HCS7 Signalized Intersection Results Summary

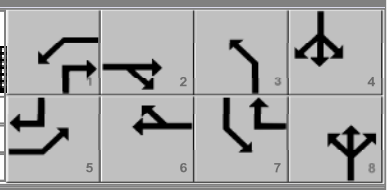
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	8	1747	23	56	1082	5	66	1	12	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	0.1	91.9	2.9	0.3	5.3
Yellow	3.5	3.5	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	6.5	97.9	10.1	101.5	10.7	15.7	6.4	11.3
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.0	0.0	3.0	0.0	3.3	3.4	3.3	3.4
Queue Clearance Time (g_s), s	2.3		6.6		6.9	3.0	2.7	2.3
Green Extension Time (g_e), s	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		0.97	0.96	0.96	0.67
Max Out Probability	0.00		0.00		1.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	9	962	962	61	1176	5	72	1	13	10	2	4
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1796	1788	1711	1800	1522	1767	1953	1572	1767	1953	1572
Queue Service Time (g_s), s	0.3	14.1	15.6	4.6	1.6	0.1	4.9	0.1	1.0	0.7	0.1	0.3
Cycle Queue Clearance Time (g_c), s	0.3	14.1	15.6	4.6	1.6	0.1	4.9	0.1	1.0	0.7	0.1	0.3
Green Ratio (g/C)	0.02	0.71	0.71	0.05	0.73	0.76	0.11	0.07	0.13	0.06	0.04	0.06
Capacity (c), veh/h	77	1269	1263	87	2644	1151	203	145	197	152	80	101
Volume-to-Capacity Ratio (X)	0.113	0.758	0.761	0.700	0.445	0.005	0.354	0.007	0.066	0.064	0.027	0.043
Back of Queue (Q), ft/ln (95 th percentile)	6.7	142.5	144	96.4	23.1	1.5	102.6	1.6	17.6	14.2	3.3	6.3
Back of Queue (Q), veh/ln (95 th percentile)	0.3	5.4	5.8	3.7	0.9	0.1	4.0	0.1	0.7	0.6	0.1	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.04	0.00	0.00	0.48	0.00	0.01	0.64	0.00	0.11	0.09	0.00	0.04
Uniform Delay (d_1), s/veh	62.2	1.5	1.7	60.7	0.4	3.9	53.9	55.7	50.2	57.4	59.8	57.1
Incremental Delay (d_2), s/veh	0.2	4.3	4.4	3.8	0.5	0.0	0.4	0.0	0.1	0.1	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	62.4	5.8	6.1	64.5	0.9	3.9	54.3	55.7	50.2	57.4	59.9	57.2
Level of Service (LOS)	E	A	A	E	A	A	D	E	D	E	E	E
Approach Delay, s/veh / LOS	6.2	A		4.0	A		53.7	D		57.7	E	
Intersection Delay, s/veh / LOS	6.9						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	2.22	B	2.47	B	2.47	B
Bicycle LOS Score / LOS	2.08	B	1.51	B	0.63	A	0.51	A

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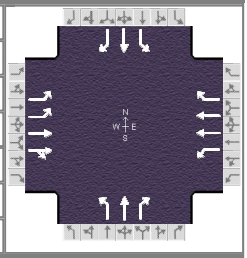
HCS7 Signalized Intersection Intermediate Values

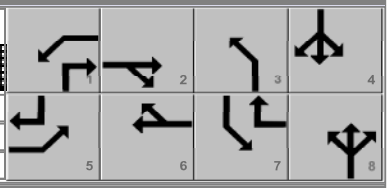
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 AM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	8	1747	23	56	1082	5	66	1	12	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	0.1	91.9	2.9	0.3	5.3
Yellow	3.5	3.5	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	1.000	0.945	0.945	0.945	0.977	0.977	0.977	0.977	0.977	0.977
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	1.000	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.995	0.995		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3538	46	1711	3600	1522	1767	1953	1572	1767	1953	1572
Proportion of Vehicles Arriving on Green (P)	0.02	0.94	0.71	0.05	0.98	0.73	0.05	0.07	0.07	0.02	0.04	0.04
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Green Ratio (g/C)	0.02	0.71	0.05	0.73	0.11	0.07	0.06	0.04
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	1404	0	1405	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	7.3	0.0	5.3	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	5.2	0.0	5.3	0.0
Permitted Queue Service Time (g_{ps}), s					0.1		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				1522		1572		1572
Protected Right Effective Green Time (g_R), s				2.9		6.6		3.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.000	1.557	0.000	1.710	0.000	1.710	0.000
Pedestrian F_s / F_{delay}	0.000	0.069	0.000	0.061	0.000	0.161	0.000	0.164
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1413.16	5.60	1468.63	4.59	148.67	55.70	82.07	59.77
Bicycle F_w / F_v	-3.64	1.59	-3.64	1.02	-3.64	0.14	-3.64	0.03

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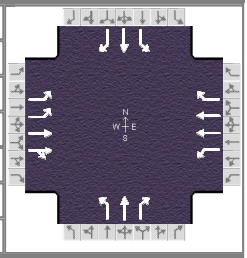
HCS7 Signalized Intersection Results Graphical Summary

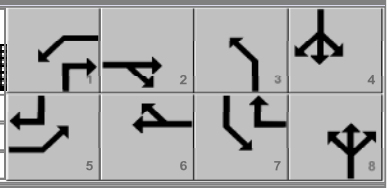
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	AM Peak Hour	PHF	0.92
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 7:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 AM.xus		
Project Description	Pride of St. Charles				



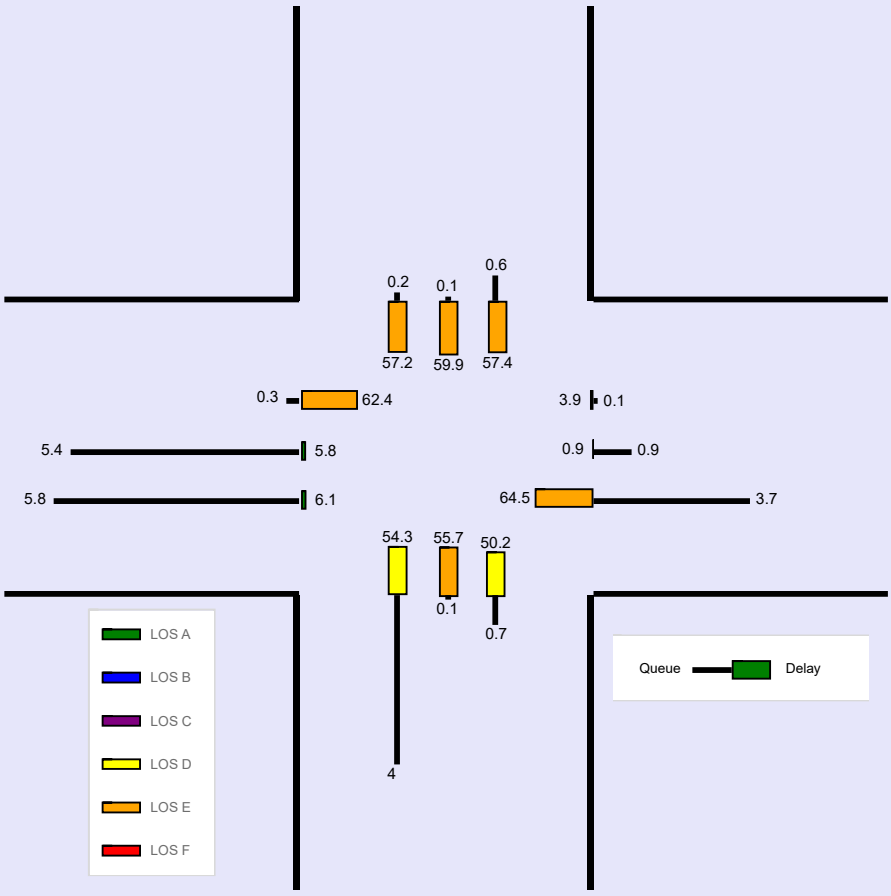
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	8	1747	23	56	1082	5	66	1	12	9	2	4

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	0.1	91.9	2.9	0.3	5.3
Yellow	3.5	3.5	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	6.7	142.5	144	96.4	23.1	1.5	102.6	1.6	17.6	14.2	3.3	6.3
Back of Queue (*Q*), veh/ln (95 th percentile)	0.3	5.4	5.8	3.7	0.9	0.1	4.0	0.1	0.7	0.6	0.1	0.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.04	0.00	0.00	0.48	0.00	0.01	0.64	0.00	0.11	0.09	0.00	0.04
Control Delay (*d*), s/veh	62.4	5.8	6.1	64.5	0.9	3.9	54.3	55.7	50.2	57.4	59.9	57.2
Level of Service (LOS)	E	A	A	E	A	A	D	E	D	E	E	E
Approach Delay, s/veh / LOS	6.2	A		4.0	A		53.7	D		57.7	E	
Intersection Delay, s/veh / LOS	6.9						A					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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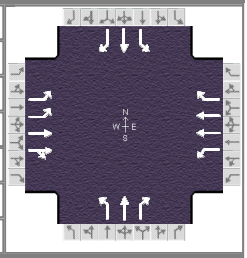
HCS7 Signalized Intersection Input Data

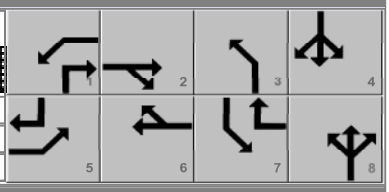
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	1325	40	69	1859	21	101	9	39	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.4	3.1	103.5	3.9	3.1	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	1325	40	69	1859	21	101	9	39	22	11	54
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h	0	L			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7		7	7	7	3	3	3	3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	180	0		200	0	200	160	0	160	160	0	160
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	16.0	93.0	16.0	93.0	16.0	25.0	16.0	25.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	4.0	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	21	3	21	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		9.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		38.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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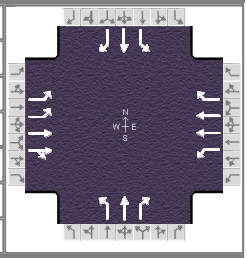
HCS7 Signalized Intersection Results Summary

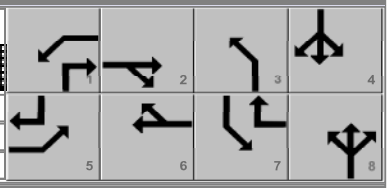
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	68	1325	40	69	1859	21	101	9	39	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.4	3.1	103.5	3.9	3.1	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	8.9	109.5	12.0	112.7	14.5	21.1	7.4	14.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.0	0.0	3.0	0.0	3.3	3.4	3.3	3.4
Queue Clearance Time (g_s), s	5.3		8.4		10.5	5.5	3.9	7.2
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	73	737	731	74	1999	23	109	10	42	24	12	58
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1796	1777	1711	1800	1522	1767	1953	1572	1767	1953	1572
Queue Service Time (g_s), s	3.3	10.8	12.5	6.4	16.7	0.6	8.5	0.7	3.5	1.9	0.9	5.2
Cycle Queue Clearance Time (g_c), s	3.3	10.8	12.5	6.4	16.7	0.6	8.5	0.7	3.5	1.9	0.9	5.2
Green Ratio (g/C)	0.04	0.69	0.69	0.06	0.71	0.74	0.14	0.10	0.16	0.08	0.05	0.09
Capacity (c), veh/h	119	1240	1227	97	2560	1122	238	197	247	168	104	140
Volume-to-Capacity Ratio (X)	0.616	0.594	0.596	0.766	0.781	0.020	0.457	0.049	0.170	0.141	0.114	0.415
Back of Queue (Q), ft/ln (95 th percentile)	66.6	128.3	138.2	137.8	121.5	8.5	179.1	15.7	64.8	39.7	20.4	1.3
Back of Queue (Q), veh/ln (95 th percentile)	2.5	4.9	5.5	5.2	4.6	0.3	7.0	0.6	2.5	1.6	0.8	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.37	0.00	0.00	0.69	0.00	0.04	1.12	0.00	0.40	0.25	0.00	0.01
Uniform Delay (d_1), s/veh	71.3	2.3	2.8	69.8	1.6	5.3	59.6	61.0	54.7	64.5	67.6	64.6
Incremental Delay (d_2), s/veh	1.9	2.1	2.1	4.7	2.4	0.0	0.5	0.0	0.1	0.1	0.2	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.2	4.4	4.9	74.4	4.0	5.3	60.1	61.0	54.8	64.6	67.8	65.4
Level of Service (LOS)	E	A	A	E	A	A	E	E	D	E	E	E
Approach Delay, s/veh / LOS	7.9	A		6.5	A		58.8	E		65.5	E	
Intersection Delay, s/veh / LOS	10.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	2.23	B	2.47	B	2.48	B
Bicycle LOS Score / LOS	1.76	B	2.22	B	0.75	A	0.64	A

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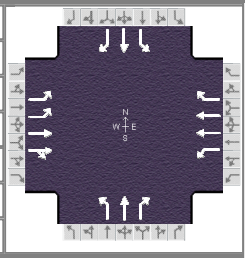
HCS7 Signalized Intersection Intermediate Values

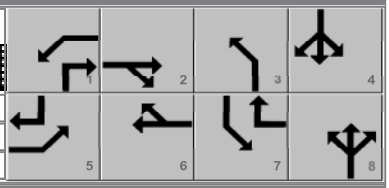
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 PM.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	68	1325	40	69	1859	21	101	9	39	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.4	3.1	103.5	3.9	3.1	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	1.000	0.945	0.945	0.945	0.977	0.977	0.977	0.977	0.977	0.977
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	1.000	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.990	0.990		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3469	105	1711	3600	1522	1767	1953	1572	1767	1953	1572
Proportion of Vehicles Arriving on Green (P)	0.04	0.92	0.69	0.06	0.95	0.71	0.07	0.10	0.10	0.03	0.05	0.05
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Green Ratio (g/C)	0.04	0.69	0.06	0.71	0.14	0.10	0.08	0.05
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	1391	0	1394	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	10.0	0.0	8.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	7.1	0.0	8.0	0.0
Permitted Queue Service Time (g_{ps}), s					0.2		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				1522		1572		1572
Protected Right Effective Green Time (g_R), s				3.9		8.5		5.4

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.000	1.557	0.000	1.710	0.000	1.710	0.000
Pedestrian F_s / F_{delay}	0.000	0.079	0.000	0.074	0.000	0.165	0.000	0.169
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1380.33	7.20	1422.08	6.26	201.31	60.66	106.42	67.23
Bicycle F_w / F_v	-3.64	1.27	-3.64	1.73	-3.64	0.26	-3.64	0.15

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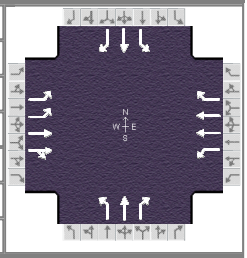
HCS7 Signalized Intersection Results Graphical Summary

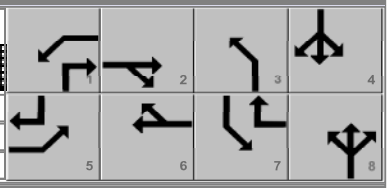
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	PM Peak Hour	PHF	0.93
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 16:15
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 PM.xus		
Project Description	Pride of St. Charles				



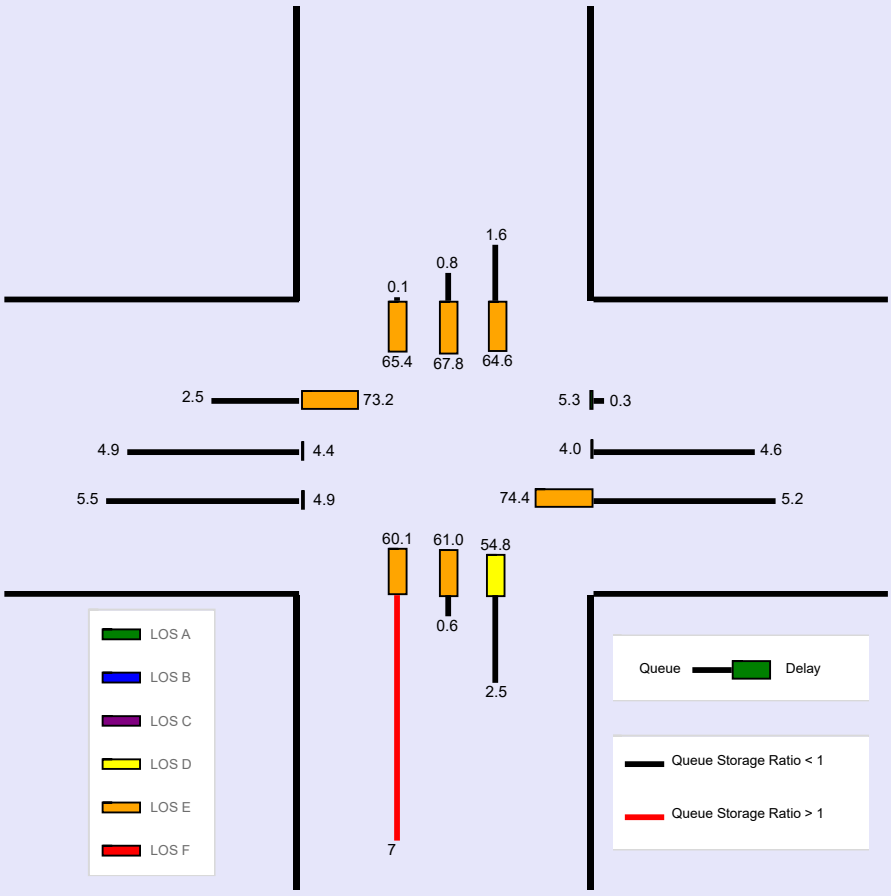
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	1325	40	69	1859	21	101	9	39	22	11	54

Signal Information			
Cycle, s	150.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.4	3.1	103.5	3.9	3.1	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	66.6	128.3	138.2	137.8	121.5	8.5	179.1	15.7	64.8	39.7	20.4	1.3
Back of Queue (*Q*), veh/ln (95 th percentile)	2.5	4.9	5.5	5.2	4.6	0.3	7.0	0.6	2.5	1.6	0.8	0.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.37	0.00	0.00	0.69	0.00	0.04	1.12	0.00	0.40	0.25	0.00	0.01
Control Delay (*d*), s/veh	73.2	4.4	4.9	74.4	4.0	5.3	60.1	61.0	54.8	64.6	67.8	65.4
Level of Service (LOS)	E	A	A	E	A	A	E	E	D	E	E	E
Approach Delay, s/veh / LOS	7.9	A		6.5	A		58.8	E		65.5	E	
Intersection Delay, s/veh / LOS	10.6						B					



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--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

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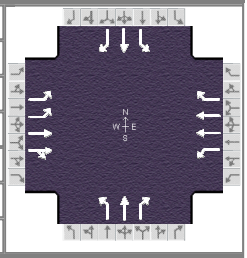
HCS7 Signalized Intersection Input Data

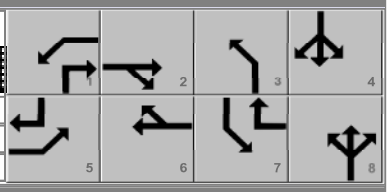
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1303	60	83	1429	21	107	10	62	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	2.2	75.4	3.5	1.9	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1303	60	83	1429	21	107	10	62	23	13	59
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	7	7		7	7	7	3	3	3	3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	4	3	3	4	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	180	0		200	0	200	160	0	160	160	0	160
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	15.0	72.0	15.0	72.0	13.0	20.0	13.0	20.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5	4.0	4.5	3.5	4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
Minimum Green (G_{min}), s	3	21	3	21	3	8	3	8
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk (*Walk*), s		0.0		0.0		9.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		38.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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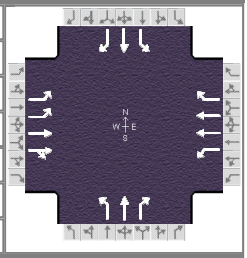
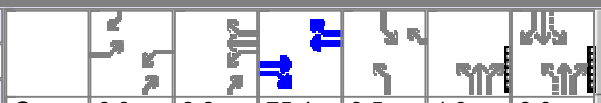
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 SAT.xus		
Project Description	Pride of St. Charles				

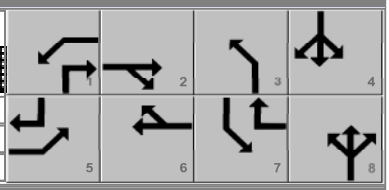


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	102	1303	60	83	1429	21	107	10	62	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.0	2.2	75.4	3.5	1.9	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	9.5	81.4	11.7	83.6	13.0	19.9	7.0	14.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Max Allow Headway (MAH), s	3.0	0.0	3.0	0.0	3.3	3.4	3.3	3.4
Queue Clearance Time (g_s), s	5.8		8.1		9.0	6.3	3.5	6.4
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0	0.0	0.3	0.0	0.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.01	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	109	729	721	88	1520	22	114	11	66	24	14	63
Adjusted Saturation Flow Rate (s), veh/h/ln	1661	1796	1768	1711	1800	1522	1767	1953	1572	1767	1953	1572
Queue Service Time (g_s), s	3.8	17.2	18.9	6.1	16.0	0.6	7.0	0.6	4.3	1.5	0.8	4.4
Cycle Queue Clearance Time (g_c), s	3.8	17.2	18.9	6.1	16.0	0.6	7.0	0.6	4.3	1.5	0.8	4.4
Green Ratio (g/C)	0.05	0.63	0.63	0.07	0.65	0.68	0.16	0.12	0.18	0.10	0.07	0.12
Capacity (c), veh/h	166	1129	1111	116	2327	1029	275	226	289	205	130	183
Volume-to-Capacity Ratio (X)	0.655	0.646	0.649	0.759	0.653	0.022	0.414	0.047	0.228	0.120	0.106	0.343
Back of Queue (Q), ft/ln (95 th percentile)	76.8	203.3	208.1	127.5	160.8	8.3	143.5	13.3	78.3	31.6	18.5	81.6
Back of Queue (Q), veh/ln (95 th percentile)	2.9	7.7	8.3	4.8	6.1	0.3	5.6	0.5	3.1	1.2	0.7	3.2
Queue Storage Ratio (RQ) (95 th percentile)	0.43	0.00	0.00	0.64	0.00	0.04	0.90	0.00	0.49	0.20	0.00	0.51
Uniform Delay (d_1), s/veh	56.0	5.0	5.7	55.0	4.0	6.4	45.5	47.2	41.7	49.7	52.7	48.8
Incremental Delay (d_2), s/veh	1.6	2.9	2.9	3.8	1.4	0.0	0.4	0.0	0.1	0.1	0.1	0.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.6	7.9	8.7	58.7	5.5	6.4	45.9	47.2	41.9	49.8	52.8	49.2
Level of Service (LOS)	E	A	A	E	A	A	D	D	D	D	D	D
Approach Delay, s/veh / LOS	11.7	B		8.4	A		44.6	D		49.8	D	
Intersection Delay, s/veh / LOS	13.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	2.24	B	2.46	B	2.47	B
Bicycle LOS Score / LOS	1.77	B	1.83	B	0.80	A	0.65	A

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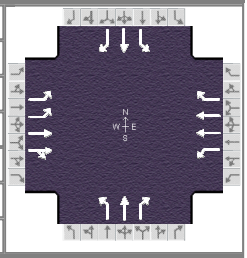
HCS7 Signalized Intersection Intermediate Values

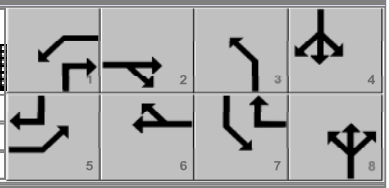
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 SAT.xus		
Project Description	Pride of St. Charles				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	102	1303	60	83	1429	21	107	10	62	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	2.2	75.4	3.5	1.9	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.945	0.945	1.000	0.945	0.945	0.945	0.977	0.977	0.977	0.977	0.977	0.977
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	1.000	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.984	0.984		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	3322	3408	157	1711	3600	1522	1767	1953	1572	1767	1953	1572
Proportion of Vehicles Arriving on Green (P)	0.05	0.84	0.63	0.07	0.86	0.65	0.07	0.12	0.12	0.03	0.07	0.07
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0	4.0	6.0	3.5	6.0
Green Ratio (g/C)	0.05	0.63	0.07	0.65	0.16	0.12	0.10	0.07
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	1389	0	1393	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	10.0	0.0	8.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	7.2	0.0	8.0	0.0
Permitted Queue Service Time (g_{ps}), s					0.2		0.0	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				1522		1572		1572
Protected Right Effective Green Time (g_R), s				3.5		8.2		6.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.389	0.000	1.557	0.000	1.710	0.000	1.710	0.000
Pedestrian F_s / F_{delay}	0.000	0.085	0.000	0.081	0.000	0.154	0.000	0.159
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	1256.86	8.28	1293.02	7.50	231.72	46.90	132.98	52.29
Bicycle F_w / F_v	-3.64	1.29	-3.64	1.35	-3.64	0.31	-3.64	0.17

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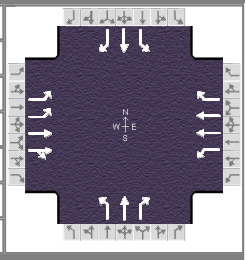
HCS7 Signalized Intersection Results Graphical Summary

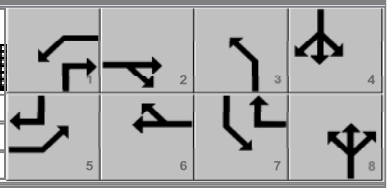
General Information				Intersection Information	
Agency	Eriksson Engineering			Duration, h	0.250
Analyst	SBC	Analysis Date	Nov 11, 2019	Area Type	Other
Jurisdiction	IDOT/St. Charles	Time Period	SAT Peak Hour	PHF	0.94
Urban Street	North Avenue (IL-64)	Analysis Year	2025	Analysis Period	1> 11:45
Intersection	North Avenue at Charles…	File Name	North-Mall 2025 SAT.xus		
Project Description	Pride of St. Charles				



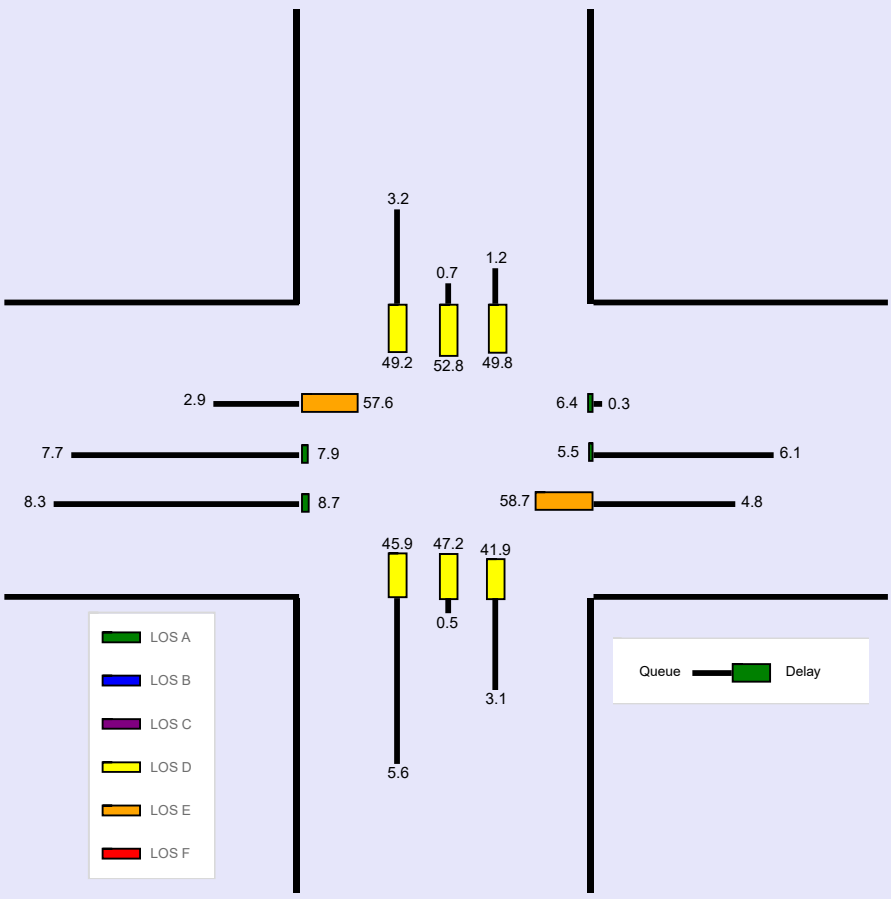
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	1303	60	83	1429	21	107	10	62	23	13	59

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	2.2	75.4	3.5	1.9	8.0
Yellow	3.5	0.0	4.5	3.5	4.0	4.5
Red	0.0	0.0	1.5	0.0	0.0	1.5



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	76.8	203.3	208.1	127.5	160.8	8.3	143.5	13.3	78.3	31.6	18.5	81.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	7.7	8.3	4.8	6.1	0.3	5.6	0.5	3.1	1.2	0.7	3.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.43	0.00	0.00	0.64	0.00	0.04	0.90	0.00	0.49	0.20	0.00	0.51
Control Delay (*d*), s/veh	57.6	7.9	8.7	58.7	5.5	6.4	45.9	47.2	41.9	49.8	52.8	49.2
Level of Service (LOS)	E	A	A	E	A	A	D	D	D	D	D	D
Approach Delay, s/veh / LOS	11.7	B		8.4	A		44.6	D		49.8	D	
Intersection Delay, s/veh / LOS	13.0						B					



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--- Messages ---

No errors or warnings exist.

--- Comments ---

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Memorandum

TO: Daniel Soltis
CIMA Developers, LP

FROM: Stephen B. Corcoran, P.E., PTOE
Director of Traffic Engineering

DATE: April 27, 2020 **Revised June 25, 2020**

RE: PRIDE of Kane County
On-site Circulation
St. Charles, Illinois

This memorandum summarizes a review of the on-site circulation, site access, and car wash stacking requirements for the proposed PRIDE of Kane County gas station with a convenience store and tunnel carwash in St. Charles, Illinois. It is located on the southeast corner of North Avenue (IL 64) and Kirk Road. Three access drives are provided with a right-in and -out only drive on North Avenue and two internal drive connections with the adjacent Main Street Commons shopping center.

This memorandum provides supplemental information to original traffic study dated March 3, 2020 for the PRIDE of Kane County.

Existing and Total Traffic Volumes

For reference, the existing traffic volumes on the roads near the site are attached in **Figure 3** from the original report. The total traffic volumes are a combination of the existing traffic volumes, projected non-site growth in those volumes, and the site related traffic. These were combined with the gas station traffic volumes to generate the Year 2025 total traffic volumes which are shown on **Figure 8**.

Site Driveways

Capacity analyses were conducted for the three site driveways servicing the site to determine how well they will operate and the stacking at the stop signs. **Table 1** summarizes the results of the analyses. A copy of the capacity analyses is attached. Overall, each site driveway will operate at LOS D or better.

Right-In and –Out Drive on North Avenue

The proposed right-in and out driveway for the gas station will be located on the south side of North Avenue and designed with a pork chop island,16-foot inbound and outbound lanes, an eastbound right-turn lane, and an outbound stop sign. An additional 11.8 feet of the site along North Avenue will be dedicated to IDOT to accommodate the right-turn lane. The current median break for the existing driveway will need to be reconstructed as a barrier median. The outbound right-turn will operate well with up to two vehicles stacking at one time. The entry road between North Avenue and the east-west internal roadway is 105 feet long so outbound vehicles stacking at the stop sign will not impact internal site traffic.

Right-In and Left-Out Drive on the Main Street Commons Entrance Road

The gas station proposes to have a right-in and left-out only driveway on the Main Street Commons Entrance Road to allow site traffic to have access to the traffic signal on North Avenue. It will have 14-foot a right-turn inbound and left-out outbound lanes with paint striping and signage to prohibit right-turns out and left-turns in. Traffic exiting the gas station will operate at a level of service A or B with one vehicle stopped at the stop sign.

HCS7 Two-Way Stop-Control Report

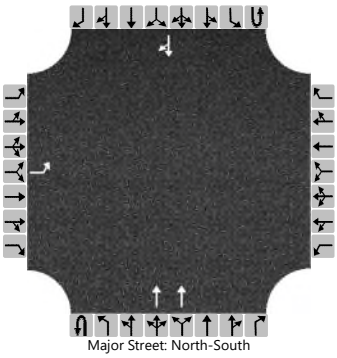
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	PRIDE of Kane County

Site Information

Intersection	Main St Commons/Gas Dr
Jurisdiction	St Charles
East/West Street	PRIDE Driveway
North/South Street	Main Street Commons Entr
Peak Hour Factor	0.50
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	0		0	0	0	0	0	2	0	0	0	1	0
Configuration		L									T					TR
Volume (veh/h)		70									9				28	53
Percent Heavy Vehicles (%)		3														
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5														
Critical Headway (sec)		6.86														
Base Follow-Up Headway (sec)		3.5														
Follow-Up Headway (sec)		3.53														

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		140														
Capacity, c (veh/h)		862														
v/c Ratio		0.16														
95% Queue Length, Q_{95} (veh)		0.6														
Control Delay (s/veh)		10.0														
Level of Service (LOS)		A														
Approach Delay (s/veh)	10.0															
Approach LOS	A															

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HCS7 Two-Way Stop-Control Report

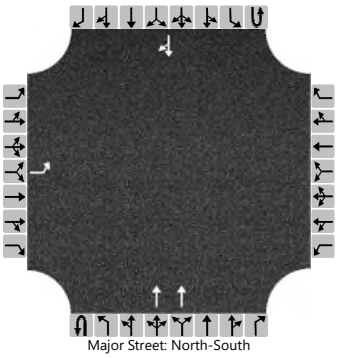
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	PRIDE of Kane County

Site Information

Intersection	Main St Commons/Gas Dr
Jurisdiction	St Charles
East/West Street	PRIDE Driveway
North/South Street	Main Street Commons Entr
Peak Hour Factor	0.65
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	0		0	0	0	0	0	2	0	0	0	1	0
Configuration		L									T					TR
Volume (veh/h)		62									87				75	45
Percent Heavy Vehicles (%)		3														
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5														
Critical Headway (sec)		6.86														
Base Follow-Up Headway (sec)		3.5														
Follow-Up Headway (sec)		3.53														

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		95														
Capacity, c (veh/h)		749														
v/c Ratio		0.13														
95% Queue Length, Q_{95} (veh)		0.4														
Control Delay (s/veh)		10.5														
Level of Service (LOS)		B														
Approach Delay (s/veh)	10.5															
Approach LOS	B															

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HCS7 Two-Way Stop-Control Report

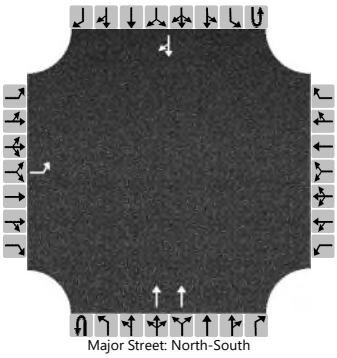
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	Sat. Peak Hour
Intersection Orientation	North-South
Project Description	PRIDE of Kane County

Site Information

Intersection	Main St Commons/Gas Dr
Jurisdiction	St Charles
East/West Street	PRIDE Driveway
North/South Street	Main Street Commons Entr
Peak Hour Factor	0.80
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	0		0	0	0	0	0	2	0	0	0	1	0
Configuration		L									T					TR
Volume (veh/h)		63									116				110	48
Percent Heavy Vehicles (%)		3														
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5														
Critical Headway (sec)		6.86														
Base Follow-Up Headway (sec)		3.5														
Follow-Up Headway (sec)		3.53														

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		79														
Capacity, c (veh/h)		724														
v/c Ratio		0.11														
95% Queue Length, Q_{95} (veh)		0.4														
Control Delay (s/veh)		10.6														
Level of Service (LOS)		B														
Approach Delay (s/veh)	10.6															
Approach LOS	B															

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HCS7 Two-Way Stop-Control Report

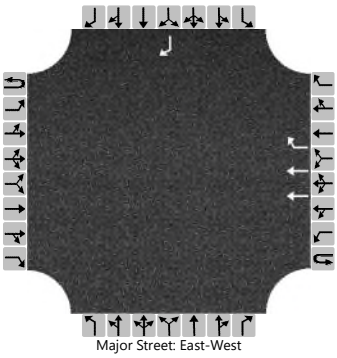
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1024	9								16
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																17
Capacity, c (veh/h)																484
v/c Ratio																0.03
95% Queue Length, Q_{95} (veh)																0.1
Control Delay (s/veh)																12.7
Level of Service (LOS)																B
Approach Delay (s/veh)													12.7			
Approach LOS													B			

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HCS7 Two-Way Stop-Control Report

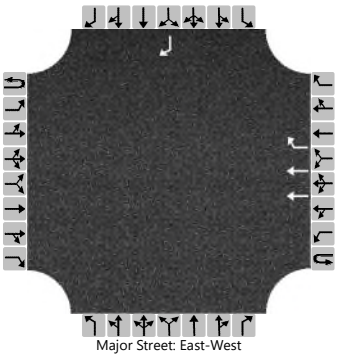
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1795	30								43
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																46
Capacity, c (veh/h)																257
v/c Ratio																0.18
95% Queue Length, Q_{95} (veh)																0.6
Control Delay (s/veh)																22.0
Level of Service (LOS)																C
Approach Delay (s/veh)													22.0			
Approach LOS													C			

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HCS7 Two-Way Stop-Control Report

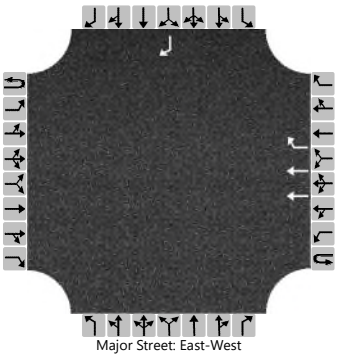
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/12/2019
Analysis Year	2017
Time Analyzed	Saturday Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	RIRO -Bank-On the Border
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	0	0	0	2	1		0	0	0		0	0	1
Configuration							T	R								R
Volume (veh/h)							1405	36								60
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							No						No			
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																63
Capacity, c (veh/h)																362
v/c Ratio																0.17
95% Queue Length, Q_{95} (veh)																0.6
Control Delay (s/veh)																17.0
Level of Service (LOS)																C
Approach Delay (s/veh)													17.0			
Approach LOS													C			

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HCS7 Two-Way Stop-Control Report

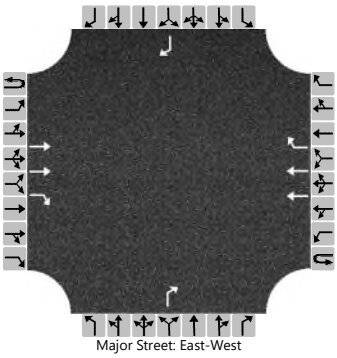
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+ Bank/PoSC Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1674	121			1143	9				104				16
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												109				17
Capacity, c (veh/h)												288				441
v/c Ratio												0.38				0.04
95% Queue Length, Q_{95} (veh)												1.7				0.1
Control Delay (s/veh)												25.0				13.5
Level of Service (LOS)												C				B
Approach Delay (s/veh)									25.0				13.5			
Approach LOS									C				B			

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HCS7 Two-Way Stop-Control Report

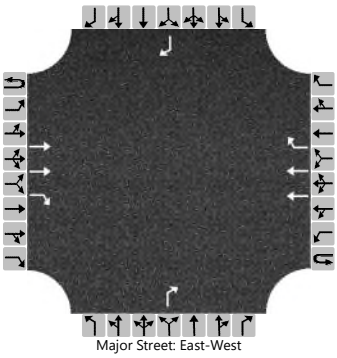
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	IDOT/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+ Bank/PoSC Drives
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1351	99			1979	9				82				43
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												87				46
Capacity, c (veh/h)												369				221
v/c Ratio												0.24				0.21
95% Queue Length, Q_{95} (veh)												0.9				0.8
Control Delay (s/veh)												17.8				25.5
Level of Service (LOS)												C				D
Approach Delay (s/veh)									17.8				25.5			
Approach LOS									C				D			

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HCS7 Two-Way Stop-Control Report

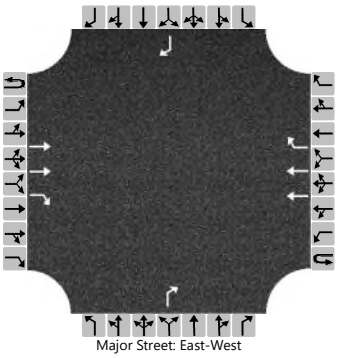
General Information

Analyst	SBC
Agency/Co.	EEA
Date Performed	11/11/2019
Analysis Year	2025
Time Analyzed	Saturday Peak Hour
Intersection Orientation	East-West
Project Description	Pride of St Charles

Site Information

Intersection	North Ave at RIRO
Jurisdiction	ID0T/St Charles
East/West Street	North Avenue (Rt 64)
North/South Street	Pride+Bank/PoSC Drives
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	1		0	0	1		0	0	1
Configuration			T	R			T	R				R				R
Volume (veh/h)			1383	99			1559	36				82				60
Percent Heavy Vehicles (%)												3				3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				6.9
Critical Headway (sec)												6.96				6.96
Base Follow-Up Headway (sec)												3.3				3.3
Follow-Up Headway (sec)												3.33				3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												85				63
Capacity, c (veh/h)												368				320
v/c Ratio												0.23				0.20
95% Queue Length, Q_{95} (veh)												0.9				0.7
Control Delay (s/veh)												17.7				19.0
Level of Service (LOS)												C				C
Approach Delay (s/veh)									17.7				19.0			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

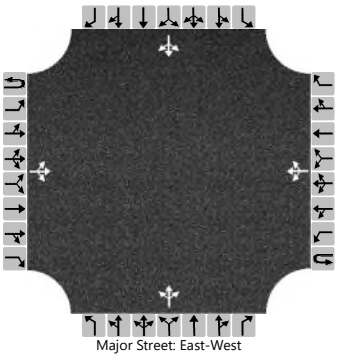
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2017
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.52
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	9		1	0	4		0	7	3		1	4	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				2					19				10	
Capacity, c (veh/h)		1606				1583					913				875	
v/c Ratio		0.00				0.00					0.02				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		7.2				7.3					9.0				9.2	
Level of Service (LOS)		A				A					A				A	
Approach Delay (s/veh)	0.0				1.5				9.0				9.2			
Approach LOS									A				A			

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HCS7 Two-Way Stop-Control Report

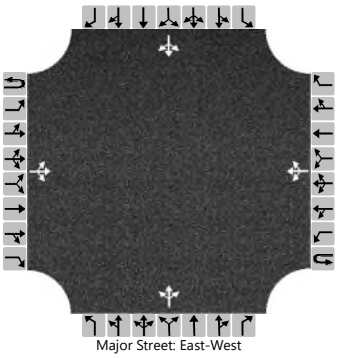
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.52
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	9		1	0	25		0	58	3		1	55	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				2					117				108	
Capacity, c (veh/h)		1553				1583					829				834	
v/c Ratio		0.00				0.00					0.14				0.13	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.5				0.4	
Control Delay (s/veh)		7.3				7.3					10.1				10.0	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)	0.0				0.3				10.1				10.0			
Approach LOS									B				A			

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HCS7 Two-Way Stop-Control Report

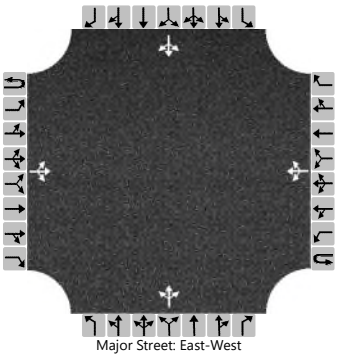
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2017
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.64
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	11		4	6	13		2	17	4		2	1	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					36				5	
Capacity, c (veh/h)		1577				1585					871				874	
v/c Ratio		0.00				0.00					0.04				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		7.3				7.3					9.3				9.1	
Level of Service (LOS)		A				A					A				A	
Approach Delay (s/veh)	0.0				1.3				9.3				9.1			
Approach LOS									A				A			

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HCS7 Two-Way Stop-Control Report

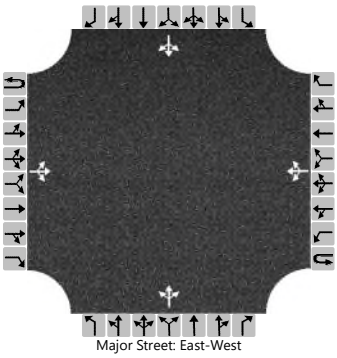
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.64
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	4	11		4	6	38		2	57	4		2	41	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				6					98				67	
Capacity, c (veh/h)		1526				1585					803				809	
v/c Ratio		0.00				0.00					0.12				0.08	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.4				0.3	
Control Delay (s/veh)		7.4				7.3					10.1				9.9	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)	0.0				0.6				10.1				9.9			
Approach LOS									B				A			

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HCS7 Two-Way Stop-Control Report

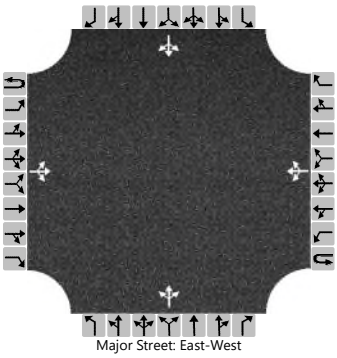
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2017
Time Analyzed	Sat Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.68
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	3		10	0	8		1	12	5		6	22	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				15					26				41	
Capacity, c (veh/h)		1601				1609					896				856	
v/c Ratio		0.00				0.01					0.03				0.05	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.2				7.3					9.1				9.4	
Level of Service (LOS)		A				A					A				A	
Approach Delay (s/veh)	0.0				4.1				9.1				9.4			
Approach LOS									A				A			

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HCS7 Two-Way Stop-Control Report

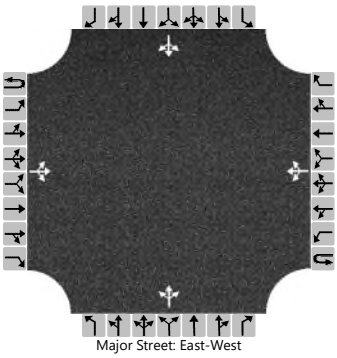
General Information

Analyst	SBC
Agency/Co.	Eriksson Engineering
Date Performed	4/21/2020
Analysis Year	2025
Time Analyzed	Sat Peak
Intersection Orientation	East-West
Project Description	PRIDE of Kane County

Site Information

Intersection	Panda/Bank/ Main St
Jurisdiction	St Charles
East/West Street	Bank/Main St East
North/South Street	Panda/Main St South
Peak Hour Factor	0.68
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	3		10	0	43		1	53	5		6	63	0
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				15					87				101	
Capacity, c (veh/h)		1533				1609					803				812	
v/c Ratio		0.00				0.01					0.11				0.12	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.4				0.4	
Control Delay (s/veh)		7.3				7.3					10.0				10.1	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.0				1.4				10.0				10.1			
Approach LOS									B				B			

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TABLE 17.24-3
REQUIRED OFF-STREET PARKING

USE	PARKING REQUIREMENT
Bank	4 per 1,000sf of GFA + 5 stacking per drive-in lane & ATM lane when there are 3 or less such lanes, or 4 stacking spaces per drive-in lane & ATM lane when there are 4 or more such lanes
Carpet Store	3 per 1000 sf of GFA
Car Wash, Automatic	2 per bay + 10 stacking spaces per bay
Car Wash, Manual/Hand Wash	1 per 2 bays + 2 stacking spaces per bay Where employees operate the vehicle in and out of the bay, and wash the vehicle in the bay, (hand-wash), no stacking is required, but the number of required parking spaces shall be increased by 1 per bay
Coffee or Tea Room	5 per 1,000sf of GFA
Day Care Center	3.5 per 1000 sf of GFA
Drive-Through Facility, except as specifically listed elsewhere	5 stacking spaces per drive-in service lane
Electronics Superstore	3 per 1000 sf of GFA
Financial Institution	4 per 1,000sf of GFA
Furniture Store	3 per 1000 sf of GFA
Gas Station (with or without retail sales of goods other than motor vehicle fuels)	1 per service bay + 4 per 1,000sf of GFA, provided that the number of required spaces may be reduced by the number of fuel pumps that can be accessed at any one time
Greenhouse/Plant Nursery	1 per 1,000sf of GFA + 3 per 1,000sf of outdoor sales area
Heavy Retail and Service	3 per 1,000sf of GFA + 3 per 1,000sf of outdoor sales area
Home Improvement Center	3 per 1,000sf of GFA + 4 per 1,000sf of outdoor sales area
Hotel/Motel	1 per room In CBD-1 & CBD-2, 1 per 4 lodging rooms
Kennel	1 per 1,000sf of GFA
Laundromat	2 per 1,000sf of GFA
Live Entertainment	10 per 1,000sf of GFA
Medical Cannabis Dispensing Organization	3 per 1,000 of GFA
Motor Vehicle Rental	3 per 1,000sf of GFA
Motor Vehicle Sales and Leasing	3 per 1,000sf of GFA (no required parking spaces shall be used for the display or storage of vehicles for sale or lease)
Motor Vehicle Service and Repair, Major or Minor	2 per service bay + 2 per 1,000sf of GFA

CITY OF ST. CHARLES ILLINOIS • 1834	**AGENDA ITEM EXECUTIVE SUMMARY**	**Agenda Item Number: 4d**
	Title:	Plan Commission recommendation to approve an Amendment to the Kirk Trace PUD (Cumberland Green Electronic Changeable Copy Sign)
	Presenter:	Rachel Hitzemann

Meeting: Planning & Development Committee **Date**: November 9, 2020

Proposed Cost: N/A	Budgeted Amount: N/A	Not Budgeted: ☐

Executive Summary (*if not budgeted please explain*)**:**

The Cumberland Green Cooperative submitted a Special Use application requesting to amend the existing Kirk Trace PUD to permit an Electronic Changeable Copy Sign at the southwest corner of S. Kirk Rd. and Cumberland Parkway. The subject property is currently owned by the Cooperative and the parcel is vacant.

The details of the Special Use are as follows:

- Install new Electronic Changeable Copy Sign (a/k/a electronic reader board sign)
- Install landscaping around sign

<u>Plan Commission Recommendation</u>

Plan Commission held a public hearing on 10/20/20. The Commission unanimously voted to recommend approval of the Special Use.

Attachments (*please list*)**:**
Plan Commission Resolution, Staff Report, Application, Correspondence from neighboring property owner, Kirk Trace PUD Ordinance

Recommendation/Suggested Action (*briefly explain*)**:**
Plan Commission recommendation to approve an Amendment to the Kirk Trace PUD (Cumberland Green Electronic Changeable Copy Sign)

City of St. Charles, Illinois
Plan Commission Resolution No. 18-2020

A Resolution Recommending Approval of an Application for Special Use to amend the Kirk Trace PUD to allow an Electronic Readerboard sign. (Cumberland Green Cooperative)

Passed by Plan Commission on October 20, 2020

WHEREAS**,** it is the responsibility of the St. Charles Plan Commission to hold public hearings and review requests for Special Use; and,

WHEREAS, the Plan Commission held a public hearing and reviewed the application for Special Use to amend the Kirk Trace PUD to allow for an Electronic Readerboard sign (Cumberland Green Cooperative) and,

WHEREAS, the Plan Commission adopts the following Findings of Fact for Special Use provided by the Applicant, in accordance Section 17.04.330.C of the Zoning Ordinance:

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

The sign will assist and serve the public. The sign will serve the public as we are encouraging the city to use our sign to notify the public about special events and festivals. The co-op will use the sign to notify the public about availabilities and Board meetings.

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

The infrastructure is present.

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

We do not feel that it would impair the values. All the businesses around here have signs.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

Cumberland Green previously had a sign on Kirk Rd. but was removed when Kensington School was installing their sign. The previous sign was there for almost 40 years.

E. Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.

It wouldn't affect any general safety issues.

F. Conformance with Codes: That the proposed Special Use conforms to all applicable provisions of the St. Charles Municipal Code and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.

The sign will comply to all City codes.

NOW, THEREFORE, be it resolved by the St. Charles Plan Commission to recommend to City Council approval of a Special Use to amend the Kirk Trace PUD to allow for an Electronic Readerboard sign for the Cumberland Green Cooperative.

Roll Call Vote:
Ayes: Wallace, Becker, Holderfield, Kessler, Melton, Funke, Pretz, Purdy, Vargulich
Nays: Absent: 0
Recused: 0
Motion carried: 9-0

PASSED, this 20th day of October 2020.

_____
Chairman
St. Charles Plan Commission

Community & Economic Development

Staff Report

TO: Chairman Rita Payleitner
And Members of the Planning & Development Committee

FROM: Rachel Hitzemann
Planner

RE: Cumberland Green – PUD Amendment for an Electronic Changeable Copy Sign (a/k/a electronic readerboard)

DATE: November 4, 2020

I. APPLICATION INFORMATION:

Project Name: Cumberland Green Cooperative Sign

Applicant: Cumberland Green Cooperative

Purpose: Amend an existing PUD to allow for Electronic Changeable Copy Sign to be placed on the property.

General Information:

Site Information	
Location	Southeast corner of S. Kirk Rd. and Cumberland Pkwy.
Acres	0.390

Applications	**Special Use for an electronic reader board**
Applicable Code Sections	17.28 "Signs"

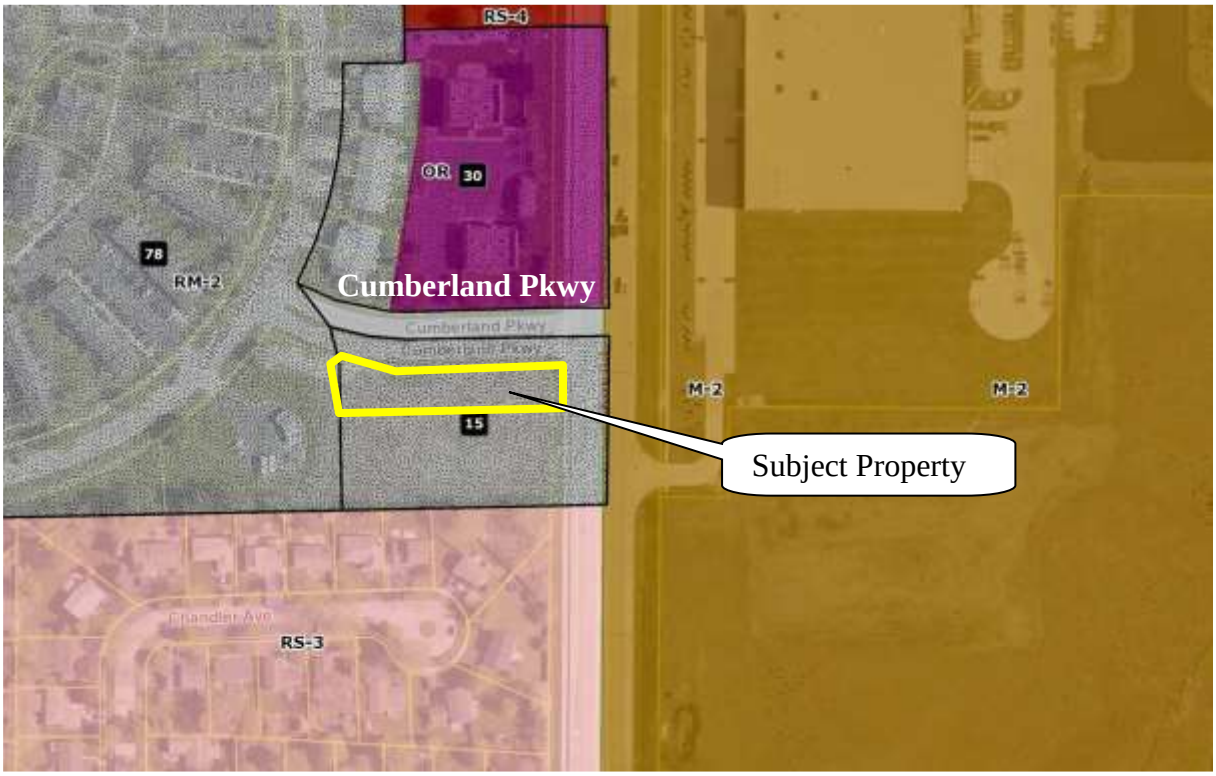
Existing Conditions	
Land Use	Vacant
Zoning	RM-2- Medium Density Multi-Family District Kirk Trace PUD, Ord. 1988-Z-14

Zoning Summary		
North	O-R – Office Research PUD	Pre-School
East	M-2- Limited Manufacturing	Manufacturing/ Vacant
South	RS-3- Suburban Single Family Residential	Residential
West	RM-2- Medium Density Multi-Family & Cumberland Green PUD	Residential

Comprehensive Plan Designation
Neighborhood Commercial

Aerial Photograph

Zoning Map



II. BACKGROUND

The Cumberland Green Cooperative submitted a Special Use application requesting to amend the Kirk Trace PUD to permit an Electronic Changeable Copy Sign at the southwest corner of S. Kirk Rd. and Cumberland Parkway. The subject property is currently owned by the Cooperative and the parcel is vacant.

The existing Kirk Trace PUD does not contain sign regulations, therefore the sign regulations of the underlying RM-2 zoning district apply. Entryway Signs for residential developments are not permitted to be internally illuminated under the Sign regulations in the Zoning Ordinance.

Kirk Trace PUD:

The property is located within the Kirk Trace PUD, which was created in Nov. 1988 by Ordinance No. 1988-Z-14. The approved PUD plan from 1988 was for 12 Townhome units on the parcel. That project was never constructed and no other projects on this property have been proposed since the original approval. The adjacent development to the west, Cumberland Green Cooperative, has now purchased the property with the intent to install a sign that will be visible from Kirk Rd.

III. PROPOSAL

The details of the Special Use are as follows:

- Install an Electronic Changeable Copy Sign on southwest corner of S. Kirk Rd. and Cumberland Pkwy.
- Provide landscaping around the sign

IV. STAFF ANALYSIS

A. ZONING

The site is zoned RM-2 Medium Density Multi-Family and is located within the Kirk Trace PUD. Both the underlying zoning and the Kirk Trace PUD do not permit illuminated entryway signs.

B. APPLICABLE SIGN STANDARDS

The requirements for Entryway Signs and general requirements for Electronic Changeable Copy Signs are listed below.

A sign design was submitted with the Special Use application. The overall sign size (30 sf. face area, 6 ft. tall) complies with the general standards for entryway signs.

The Electronic Changeable Copy Section is approximately 15 sf., which is equal to 50% of the total sign face area. This is the maximum percentage of a sign face that can be used for Electronic Changeable Copy in the business zoning districts located outside of downtown.

The sign will need to comply with all other general regulations for Electronic Changeable Copy signs, including limitations on changing display images and hours of illumination.

From Table 17.28-1:

Type	Maximum Number	Minimum ROW setback	Maximum Area	Maximum Height	Other Requirements
Residential Uses:					
Entryway Signs for Residential Development of 10 or more units	Two, plus one for each additional external street frontage for developments of more than ten acres	5 ft	10-30 units: 50 sf 30+ units: 75 sf	8 ft	Monument signs only; Shall not be internally illuminated

Section 17.28.060 – Illumination:

A. Electronic Changeable Copy Signs

Electronic Changeable Copy Signs are permitted in all Zoning Districts where internally illuminated signs are permitted as follows:

1. *In the CBD-1 and CBD-2 Districts, Electronic Changeable Copy Signs shall not exceed 30% of the total sign area of the sign on which it is located, or 30 square feet, whichever is less. Sign images shall change no more frequently than once every 30 seconds.*

2. *In all other zoning districts, Electronic Changeable Copy Signs shall not exceed 50% of the total sign area of the sign on which it is located, or 50 square feet, whichever is less. Sign images shall change no more frequently than once every 15 seconds.*

3. *Electronic Changeable Copy Signs may display both text and images, but the display shall remain static. The duration of the change of image, copy or illustration shall not exceed one second. Use of moving images or transitions between static images are prohibited.*

B. ***Hours of Illumination***

Exterior signs shall be illuminated only during business hours or between the hours of 7:00am and 11:00pm, whichever is later.

C. ***Direction of Illumination***

All sign illumination shall be designed, located, shielded and directed so as to prevent the casting of glare or direct light upon adjacent streets and surrounding properties.

C. LANDSCAPING AND SCREENING

Freestanding signs are required to be landscaped at the base of the sign in accordance with the following:

<u>From Section 17.26.110- Sign Landscaping:</u>

A. The landscaping shall extend a minimum of three (3) feet from the outer edge of the sign base on all sides. Where the area around the base of a sign is insufficient in size to accommodate landscaping, the Director of Community Development may permit installation of a portion of the required landscaping at an alternate location on the site.

B. Freestanding signs shall be landscaped with small shrubs, ornamental grasses, and/or perennials to a height of twelve inches (12") to three feet (3') at planting, depending on the height of the sign.

The proposed landscape plan meets the landscaping requirements.

V. PLAN COMMISSION RECOMMENDATION

Plan Commission held a public hearing on 10/20/20. No members of the public spoke at the public hearing. One email was received from a neighboring property owner citing concerns of lighting. The email is attached to the packet.

The Commission voted 9-0 to recommend approval.

VI. ATTACHMENTS

- Application for Special Use, received 9/18/2020
- Email from neighbor

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

ST. CHARLES SINCE 1834

COMMUNITY & ECONOMIC DEV./PLANNING DIVISION PHONE: (630) 377-4443 FAX: (630) 377-4062

SPECIAL USE APPLICATION

(To request a Special Use or Amendment, or a Special Use for PUD or Amendment)

For City Use
Project Name: Cumberland Green Cooperative
Project Number: 2020 -PR- 014
Application Number: PLSU2020000045

Received Date
RECEIVED
St. Charles, IL
SEP 18 2020
CDD
Planning Division

To request a Special Use for a property, or to request to amend an existing Special Use Ordinance for a property, complete this application and submit it with all required attachments to the Planning Division.

City staff will review submittals for completeness and for compliance with applicable requirements prior to establishing a public hearing date for an application.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Location: 2N114 Kirk Road, St. Charles, IL 60174	
	Parcel Number (s): 09 36 300 017	
	Proposed Name:	
2. Applicant Information:	Name: Cumberland Green Cooperative	Phone: 630-584-5150
	Address: 1798 Cumberland Green Dr. St. Charles, IL 60174	Fax: 630-584-5297
		Email: cumbergreen@yahoo.com
3. Record Owner Information:	Name: See above	Phone: Same
	Address: Same	Fax: Same
		Email: Same

Please check the type of application:

☒ **Special Use for Planned Unit Development - PUD Name:** Kirk Trace

- ☐ New PUD
- ☒ Amendment to existing PUD- Ordinance #: 1988-Z-14
- ☐ PUD Preliminary Plan filed concurrently

☐ **Other Special Use (from list in the Zoning Ordinance):** _____

- ☐ Newly established Special Use
- ☐ Amendment to an existing Special Use Ordinance #: _____

Information Regarding Special Use:

Comprehensive Plan designation of the property: Neighborhood Commercial

Is the property a designated Landmark or in a Historic District? No

What is the property's current zoning? RM-1 PUD

What is the property currently used for? Vacant

If the proposed Special Use is approved, what improvements or construction are planned?

Installation of Entryway Sign for Cumberland Green

For Special Use Amendments only:

Why is the proposed change necessary?

Incorporation of an electronic readerboard with the entryway sign

What are the proposed amendments? (Attach proposed language if necessary)

Amend PUD to permit internally illuminated signs (including readerboards)

Note for existing buildings:

If your project involves using an existing building, whether you plan to alter it or not, please contact the St. Charles Fire Department (630-377-4458) and the Building and Code Enforcement Division (630-377-4406) for information on building, life safety and other code requirements. Depending on the proposed use, size of structure and type of construction, these requirements can result in substantial costs.

Attachment Checklist:

If multiple zoning or subdivision applications will be submitted concurrently, do not submit duplicate checklist items or plans. Fee must be paid for each application.

- ☐ **APPLICATION FEE:**

  Application fee in accordance with Appendix B of the Zoning Ordinance. (Special Use for PUD $1,000; all other Special Use requests $750)

- ☐ **REIMBURSEMENT OF FEES AGREEMENT:**

  An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.

- ☐ **REIMBURSEMENT OF FEES INITIAL DEPOSIT:**

  Deposit of funds in escrow with the City. Required deposit is based on review items (number of applications filed) and the size of the site:

Number of Review Items	Under 5 Acres	5-15 Acres	16-75 Acres	Over 75 Acres
1	$1,000	$2,000	$3,000	$4,000
2 or 3	$2,000	$4,000	$5,000	$7,000
4 or more	$3,000	$5,000	$7,000	$10,000

? ?

- ☐ **PROOF OF OWNERSHIP and DISCLOSURE:**

  a) A current title policy report; or

  b) A deed and a current title search.

  If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

  NOTE: Private covenants and deed restrictions can limit private property rights with respect to the use of land even though the City's Zoning Ordinance may authorize the use or a less restrictive use. We strongly advise that you perform a title search on the property to determine if there any private covenants containing use restrictions or other deed restrictions. As those private covenants and deed restrictions may conflict with the City's Zoning Ordinance, it is further recommended that you consult with an attorney to obtain an opinion with respect to whether your intended use is compatible with those restrictions.

- ☐ **LEGAL DESCRIPTION:** For entire subject property, on 8 1/2 x 11 inch paper

- ☑ **PLAT OF SURVEY:**

  A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

- ☐ **FINDINGS OF FACT:**

  Fill out the attached forms or submit responses on a separate sheet (*Submit "Criteria for PUD" for any PUD application; "Findings for Special Use" for all other Special Use applications.)*

- ☑ **LIST OF PROPERTY OWNERS WITHIN 250 FT.:**

  Fill out the attached form or submit on a separate sheet. The form or the list must be signed and notarized.

- ❑ **SOIL AND WATER CONSERVATION DISTRICT APPLICATION:** Not required

  Copy of completed Land Use Opinion application as required by state law, as submitted to The Kane-Dupage Soil and Water Conservation District. http://www.kanedupageswcd.org/

  Submit the application form and fee directly to the Kane-DuPage Soil and Water Conservation District. Provide a copy with this application.

- ❑ **ENDANGERED SPECIES REPORT:** Not required

  Copy of Endangered Species Consultation Agency Action to be filed with the Illinois Department of Natural Resources. http://dnr.illinois.gov/EcoPublic/

  Fill out the online form, print the report and submit with this application.

- ❑ **TRAFFIC STUDY:** If requested by the Director of Community Development. Not required

  Staff will advise you whether a traffic study is recommended based on the project. Regardless, the Plan Commission or City Council may request a traffic study as a part of the review process.

- ❑ **PLANS:**

  All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions.

  Copies of Plans: Full size copies not necessary for this application

  Initial Submittal - Ten (10) full size copies, Three (3) 11" by 17", and a PDF electronic file (On a CD-ROM or may be emailed to the Project Manager). For subsequent submittals, please contact the Project Manager to determine how many copies are required.

- ❑ **SITE PLAN (Note: For a Special Use for PUD, submit PUD Preliminary Plan Application in lieu of Site Plan)**

A plan or plans showing the following information:

1. Accurate boundary lines with dimensions
2. Streets on and adjacent to the tract: Name and right-of-way width
3. Location, size, shape, height, and use of existing and proposed structures
4. Location and description of streets, sidewalks, and fences
5. Surrounding land uses
6. Date, north point, and scale
7. Ground elevation contour lines
8. Building/use setback lines
9. Location of any significant natural features
10. Location of any 100-year recurrence interval floodplain and floodway boundaries
11. Location and classification of wetland areas as delineated in the National Wetlands Inventory
12. Existing zoning classification of property
13. Existing and proposed land use
14. Area of property in square feet and acres
15. Proposed off-street parking and loading areas
16. Number of parking spaces provided, and number required by ordinance
17. Angle of parking spaces
18. Parking space dimensions and aisle widths
19. Driveway radii at the street curb line
20. Width of driveways at sidewalk and street curb line

21. Provision of handicapped parking spaces
22. Dimensions of handicapped parking spaces
23. Depressed ramps available to handicapped parking spaces
24. Location, dimensions and elevations of freestanding signs
25. Location and elevations of trash enclosures
26. Provision for required screening, if applicable
27. Exterior lighting plans showing:
    a. Location, height, intensity and fixture type of all proposed exterior lighting
    b. Photometric information pertaining to locations of proposed lighting fixtures

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

9/1/20

Record Owner — Date

9/1/20

Applicant or Authorized Agent — Date

*

OWNERSHIP DISCLOSURE FORM
CORPORATION

STATE OF ILLINOIS)
) SS.
KANE COUNTY)

I, Dale Janke, being first duly sworn on oath depose and say that I am the Manager of Cumberland Green Cooperative, an (Illinois) (Not for Profit) Corporation and that the following persons are all of the shareholders of 7% or more of the common stock of said Corporation:

BY: _____

TITLE: Manager

Subscribed and Sworn before me this 2nd day of September, 2020.

Vera E. Haas
Notary Public

OFFICIAL SEAL
VERA E HAAS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:01/10/24

Cumberland Green Cooperative

1798 Cumberland Green Drive, St. Charles, IL 60174
(630) 584-5150 • Fax (630) 584-5297
TDD/1-800-526-0844

CITY OF ST CHARLES
2 E. MAIN STREET
ST CHARLES, IL 60174-1984

To Whom It May Concern:

Cumberland Green Cooperative is seeking permission to install a sign on Kirk Road. With regards to this proposal I am designating the Property Manager namely Dale Janke be my representative for signatures as necessary and present all items related to this project.

Dale Janke can be reached at the numbers indicated on this letter head.

Thank you for your time and consideration with this matter.

Sincerely,

Richard Berendson
President/ Cumberland Green Cooperative

EQUAL HOUSING OPPORTUNITIES

CRITERIA FOR PLANNED UNIT DEVELOPMENTS (PUDS)

For Special Use for PUD or PUD Amendment applications.

The St. Charles Zoning Ordinance requires the Plan Commission to consider the criteria listed below in making a recommendation to the City Council on whether a proposed Planned Unit Development is in the public interest.

As the applicant, the "burden of proof" is on you to provide information that addresses the criteria below in order to demonstrate that the project is in the public interest.

(You may utilize this form or provide the responses on another sheet.)

Kirk Trace
PUD Name

9/15/2020
Date

From the St. Charles Zoning Ordinance, Section 17.04.410.3:
The Plan Commission shall not favorably recommend, and the City Council shall not approve, a Special Use for a PUD or an amendment to a Special Use for a PUD unless they each make findings of fact based on the application and the evidence presented at the public hearing that the PUD is in the public interest, based on the following criteria:

i. The proposed PUD advances one or more of the purposes of the Planned Unit Development procedure stated in Section 17.04.400.A:

1. To promote a creative approach to site improvements and building design that results in a distinctive, attractive development that has a strong sense of place, yet becomes an integral part of the community.
2. To create places oriented to the pedestrian that promote physical activity and social interaction, including but not limited to walkable neighborhoods, usable open space and recreational facilities for the enjoyment of all.
3. To encourage a harmonious mix of land uses and a variety of housing types and prices.
4. To preserve native vegetation, topographic and geological features, and environmentally sensitive areas.
5. To promote the economical development and efficient use of land, utilities, street improvements, drainage facilities, structures and other facilities.
6. To encourage redevelopment of sites containing obsolete or inappropriate buildings or uses.
7. To encourage a collaborative process among developers, neighboring property owners and residents, governmental bodies and the community

When we purchased the parcel we cleared the lot of debris and dead tree's already improving the appearance.

ii. **The proposed PUD and PUD Preliminary Plans conform to the requirements of the underlying zoning district or districts in which the PUD is located and to the applicable Design Review Standards contained in Chapter 17.06, except where:**

A. **Conforming to the requirements would inhibit creative design that serves community goals, or**
B. **Conforming to the requirements would be impractical and the proposed PUD will provide benefits that outweigh those that would have been realized by conforming to the applicable requirements.**

Factors listed in Section 17.04.400.B shall be used to justify the relief from requirements:

1. The PUD will provide community amenities beyond those required by ordinance, such as recreational facilities, public plazas, gardens, public are, pedestrian and transit facilities.
2. The PUD will preserve open space, natural beauty and critical environmental areas in excess of what is required by ordinance or other regulation.
3. The PUD will provide superior landscaping, buffering or screening.
4. The buildings within the PUD offer high quality architectural design.
5. The PUD provides for energy efficient building and site design.
6. The PUD provides for the use of innovative stormwater management techniques.
7. The PUD provides accessible dwelling units in numbers or with features beyond what is required by the Americans with Disabilities Act (ADA) or other applicable codes.
8. The PUD provides affordable dwelling units in conformance with, or in excess of, City policies and ordinances.
9. The PUD preserves historic buildings, sites or neighborhoods.

We will install landscaping that will contribute to the health and safety of the city by enhancing its character and scenic beauty, providing clean air, reducing noise, preventing erosion of topsoil, reduce stormwater runoff, and provide windbreaks.
We will provide aesthetic benefits by installing landscaping at least 3 feet from the outer edge of the sign base on all sides and for a height of 1'5" maximum so as not to block the sign.

iii. The proposed PUD conforms with the standards applicable to Special Uses (section 17.04.330.C.2):

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

The sign will assist + serve the public.
The sign will serve the public as we are encouraging the city to use our sign to notify the public about special events and festivals. The co-op will use the sign to notify the public about availabilities and Board meetings.

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

They are present.

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

We do not feel that it would [redacted] impair the values. All the businesses around here have signs.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

Cumberland Green Previously had a sign on Kirk Rd but was removed when Kensington School was installing their sign. it was their for almost 40 years.

E. Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.

It wouldn't effect any general safety issue.

F. Conformance with Codes: That the proposed Special Use conforms to all existing Federal, State and local legislation and regulation and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.

We would comply to all Codes.

iv. The proposed PUD will be beneficial to the physical development, diversity, tax base and economic well-being of the City.

It will benefit our 204 plus members. We feel that the public will know that Cumberland Green is located less than a block off Kirk Rd. It will assist our outgoing members with selling their share. Our informational board could also be used to send out messages to the public for example events happening in St. Charles - the date & time thing like that if that is acceptable with the City.

v. The proposed PUD conforms to the purposes and intent of the Comprehensive Plan.

Change in PUD.

EXHIBIT "A"

PARCEL 1: THAT PART OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 40 NORTH. RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF THE WEST HALF OF SAID SOUTHWEST QUARTER 522.06 FEET NORTH OF THE SOUTH LINE OF SAID SOUTHWEST QUARTER THENCE NORTH ALONG SAID EAST LINE 130 FEET; THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION. 335 FEET; THENCE SOUTH PARALLEL WITH THE EAST LINE OF THE WEST HALF OF SAID SOUTHWEST QUARTER 130 FEET; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION, 335 FEET TO THE POINT OF BEGINNING, (EXCEPT THAT PART CONVENED TO COUNTY OF KANE BY WARRANTY DEED RECORDED DECEMBER 11.1967 AS DOCUMENT 1103794) IN THE CITY OF ST. CHARLES. KANE COUNTY, ILLINOIS.

PARCEL 2: LOT 4 OF CUMBERLAND GREEN P.U.D. PHASE 1. IN THE CITY OF ST. CHARLES. KANE COUNTY, ILLINOIS.

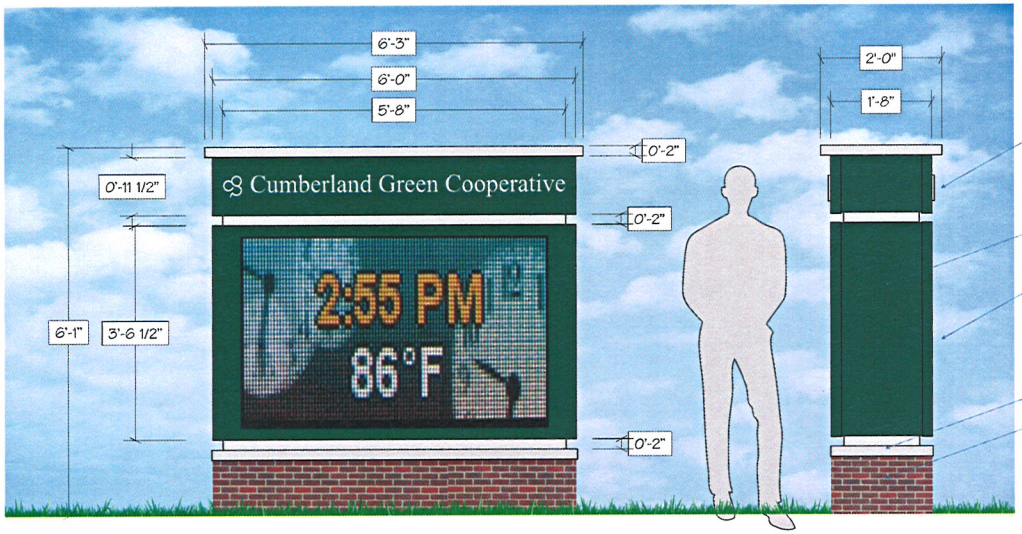
© Aurora Sign Co.,Inc 2020

SIGN TO BE UL LISTED

AURORA SIGN CO.

All Signs Shall Be Installed In Accordance With N.E.C. Article 600

Engineering Specifications	Electrical Specifications
All Signs Fabricated as per A.S.A Specifications & 2014 I.B.C	All Signs Fabricated as per 2015 N.E.C. Specifications



SCHEDULE A

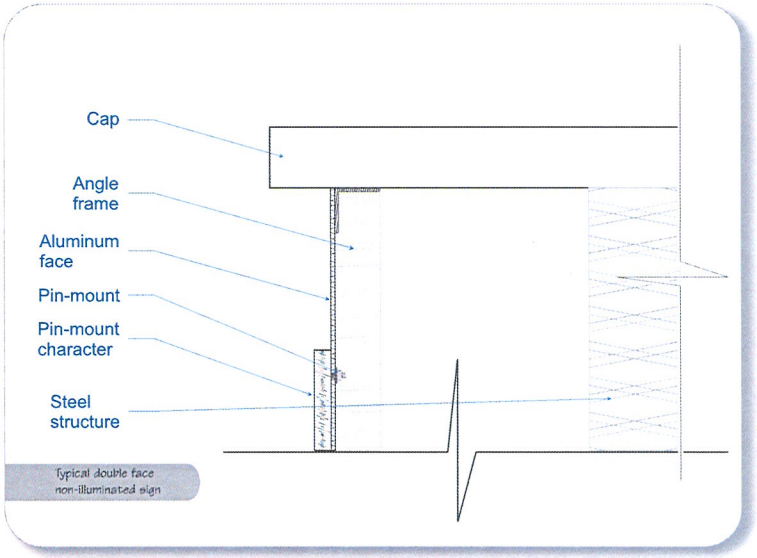
W10MM COLOR
PIXEL MATRIX 36X126
CABINET SIZE 40" H X 5' 3" L
VIEWING ARE 36" H X 5' L
DOUBLE FACE
CHARACTER SIZE 4 LINES
/25 CHARACTERS AT A 4" TYPE

DOUBLE FACE ILLUMINATED SIGN

FABRICATE AND INSTALL SIGN OF ALUMINUM AND ACRYLIC.
HEADER TO BE NON-ILLUMINATED. FACE TO BE ALUMINUM WITH
PIN-MOUNT CHARACTERS TO BE 1/2" ACRYLIC.
ALL EXPOSED METAL SURFACES TO BE COATED WITH ACRYLIC POLYURETHANE.
SEE SCHEDULE A FOR MESSAGE UNIT.
SCALE 1/2"=1'

INSTALLATION INSTRUCTIONS

SET 3" STEEL PIPE IN CONCRETE FOOTING TO BE
24" ROUND BY 4' DEEP. CONNECT TO
ELECTRICAL SERVICE TO BE PROVIDED BY
OTHERS PRIOR TO INSTALL.



Suggested color.
To be verified

Pantone 7734 C

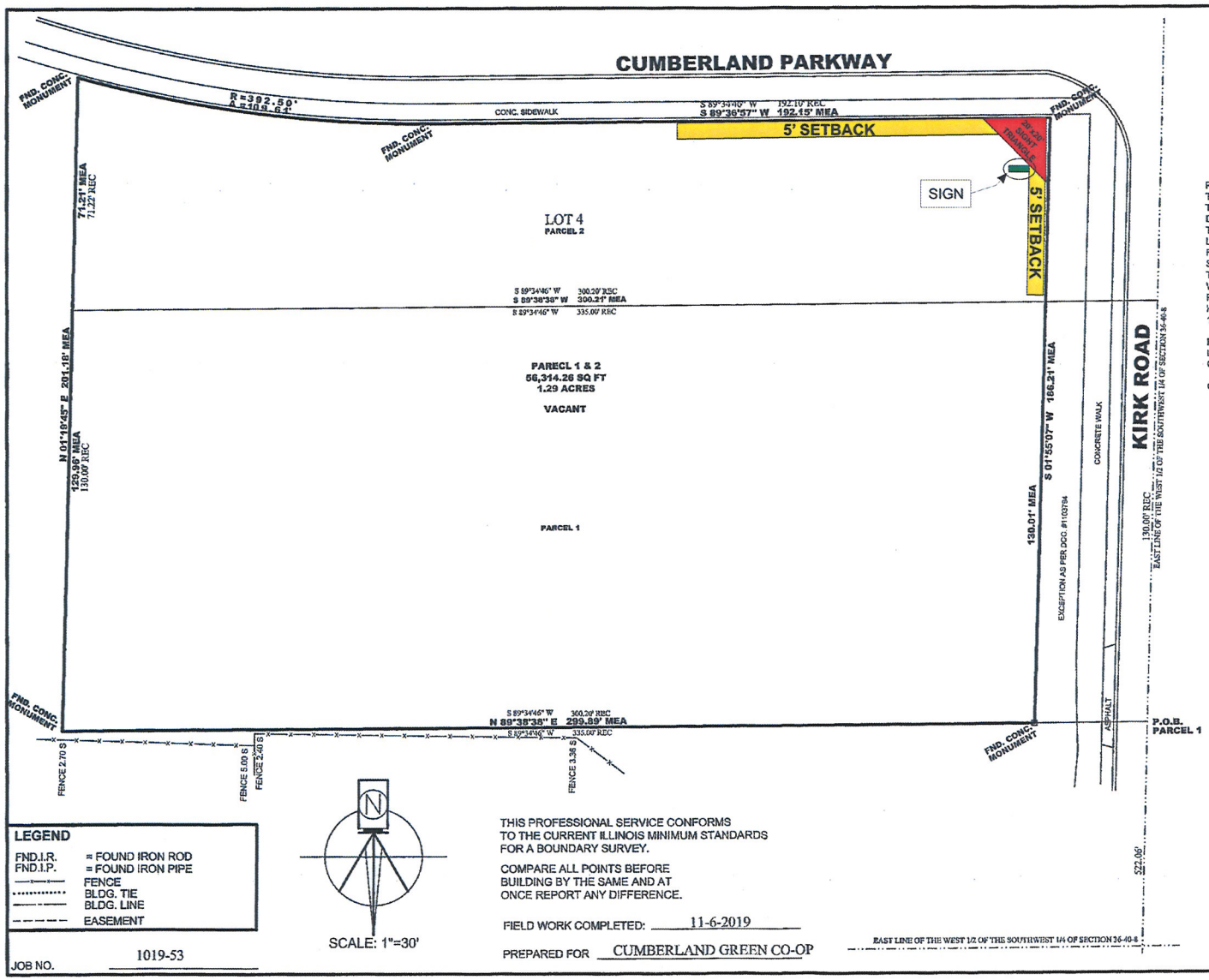
Computer generated colors are not a true match to any PMS, vinyl or paint.
Rendering shown is for concept only. Actual scale and placement shown are approximate.

1100 Route 34
Aurora, Illinois 60503
JC 630 898 5900 office
630 898 6091 fax

Prepared For: CUMBERLAND GREEN	Address: 2N114 KIRK RD	Drwg: 200293	Sheet: 1	Design Date: 3/3/20	LANDLORD APPROVAL SIGNATURE / TITLE:
Location Name:	City/State: ST CHARLES, IL	Rev 1: / Rev 2:			PRINT / DATE:

NOTE: THIS DRAWING IS THE PROPERTY OF AURORA SIGN CO. IT IS NOT TO BE REPRODUCED, COPIED, OR EXHIBITED IN ANY FASHION WITHOUT WRITTEN CONSENT FROM AURORA SIGN CO. CHARGES OF UP TO $2000.00 WILL BE ASSESSED FOR ANY MIS-USE OF THESE DRAWINGS.

© Aurora Sign



PLAT OF SURVEY

D.F.L.S.

DALE FLOYD LAND SURVEYING L.L.C.
2600 KESLINGER ROAD SUITE A
GENEVA, ILLINOIS 60134
PHONE:630-232-7705 FAX:630-232-7725
E-MAIL: DFLS @SBCGLOBAL.NET

PARCEL ONE:
THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 36, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF THE WEST 1/2 OF SAID SOUTHWEST 1/4 522.06 FEET NORTH OF THE SOUTH LINE OF SAID SOUTHWEST 1/4; THENCE NORTH ALONG SAID EAST LINE 130 FEET; THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION, 335 FEET; THENCE SOUTH PARALLEL WITH THE EAST LINE OF THE WEST 1/2 OF SAID SOUTHWEST 1/4 130 FEET; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION, 335 FEET TO THE POINT OF BEGINNING, (EXCEPT THAT PART CONVEYED TO COUNTY OF KANE BY WARRANTY DEED RECORDED DECEMBER 11, 1967 AS DOCUMENT 1103794), IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS

PARCEL TWO:
LOT 4 OF CUMBERLAND GREEN P.U.D. PHASE 1, IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS

COMMONLY KNOWN AS: 2N114 KIRK ROAD, ST. CHARLES, ILLINOIS

THOMAS J. SIECK, JR.
035-003908
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
ST. CHARLES, ILLINOIS

License expiration date 11-30-2020

LEGEND

FND.I.R.	= FOUND IRON ROD
FND.I.P.	= FOUND IRON PIPE
—x—x—	FENCE
·····	BLDG. TIE
—/—/—	BLDG. LINE
- - - - -	EASEMENT

SCALE: 1"=30'

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

COMPARE ALL POINTS BEFORE BUILDING BY THE SAME AND AT ONCE REPORT ANY DIFFERENCE.

FIELD WORK COMPLETED: 11-6-2019

PREPARED FOR CUMBERLAND GREEN CO-OP

JOB NO. 1019-53

STATE OF ILLINOIS
S.S.
COUNTY OF KANE
WE, DALE FLOYD LAND SURVEYING L.L.C., A PROFESSIONAL DESIGN FIRM, LICENSE NO. 184-007094 DO HEREBY CERTIFY THAT THE ABOVE DESCRIBED PROPERTY HAS BEEN SURVEYED IN THE MANNER REPRESENTED ON THE PLAT HEREON DRAWN.

DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.

GENEVA, ILLINOIS 11-7 A.D. 2019

ILLINOIS PROFESSIONAL LAND SURVEYOR
NO. 035-003908

1100 Route 34
Aurora, Illinois 60503
JC 630 898 5900 office
630 898 6091 fax

Prepared For: CUMBERLAND GREEN	Address: 2N114 KIRK RD	Drwg: 200293	Sheet: 2	Design Date: 3/3/20	LANDLORD APPROVAL SIGNATURE	TITLE:
Location Name:	City/State: ST CHARLES, IL	Rev 1:			PRINT	DATE:
		Rev 2:				

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© Aurora Sign Co.,Inc

1100 Route 34 Aurora, Illinois 60503 JC 630 898 5900 office 630 898 6091 fax	Prepared For: CUMBERLAND GREEN	Address: 2N114 KIRK RD	Drwg: 200293	Sheet: 3	Design Date: 3/3/20	LANDLORD APPROVAL SIGNATURE / TITLE:
	Location Name:	City/State: ST CHARLES, IL	Rev 1:			PRINT / DATE:
			Rev 2:			

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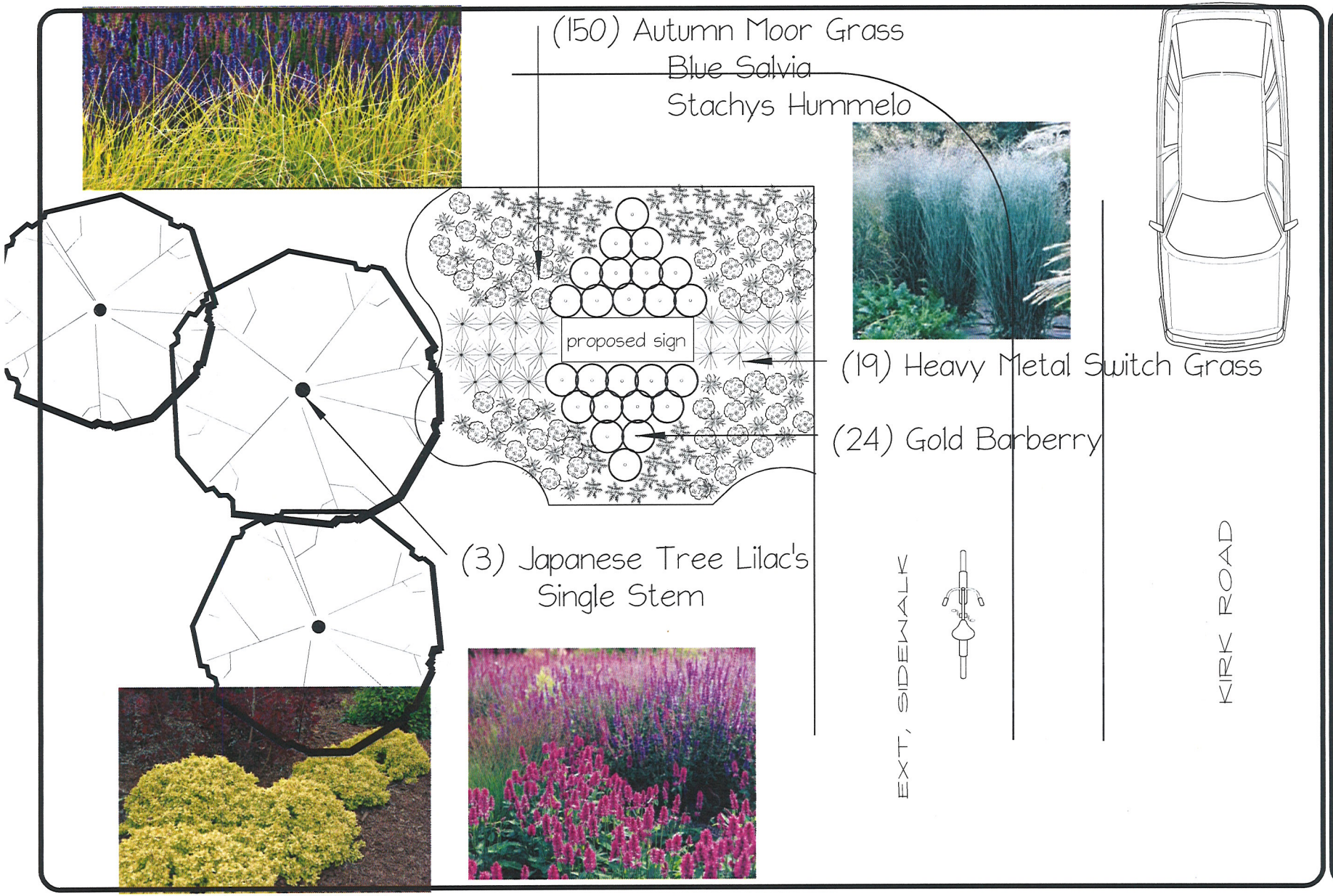


N

ALAN
LANDSCAPE MAINTENANCE

CUMBERLAND GREEN SIGN
KIRK RD & CUMBERLAND GREEN DR
ST. CHARLES IL, 60174

SCALE 1"=4'
DRAWING # 04/28/20
DATE

Powered by DynaSCAPE®

PROPOSAL FOR: Cumberland Green Sign Plantings

Prepared for: Dale Janke By: Anna Smailus, Account Manager

Send To:
Dale Janke
14798 Cumberland Green Dr

St. Charles, IL 60174

Project Name:
Cumberland Green Sign Plantings
14798 Cumberland Green Dr

St. Charles, IL 60174

Estimate #: **39949**
Phone
Date: 4/28/2020

Sesleria autumnalis #1 Autumn Moor Grass	50.00	EA
Salvia nemorosa 'Wesuwe' #1 Sage	50.00	EA
Stachys monnieri 'Hummelo' #1 Common Betony	50.00	EA
Berberis LIMITED Sunjoy Citrus® #3 Barberry thunbergii 'Koren'	24.00	EA
Panicum virgatum 'Heavy Metal' #1 Switchgrass	19.00	EA
Pulverized Topsoil	4.00	CY
Mulch-Standard Shredded Hardwood	4.00	CY
Syringa reticulata 'Ivory Silk' 2"	3.00	EA

Total Price: $6,998.00

All proposals are subject to the terms and conditions set forth in the contract terms. Proposal is valid for a period of thirty (30) days from proposal date. Proposals contracted after thirty (30) days may or may not be subject to a price increase. Material is subject to availability at time of project installation.

39949 4/28/2020 $6,998.00

1103 E Fabyan Parkway, Batavia, IL 60510 | P: 630-232-7050 | F: 630-232-4826

This proposal is based on the landscape drawing by Alan Horticulture. The price includes watering (1) time after installation. Additional watering per event is $90 per hr. We wave the 3 hr minum because you are so close to our Batavia shop.

ACCEPTANCE of PROPOSAL. Any alterations or notations to this proposal will not be binding until both Alan Horticulture, LLC, and I have initialed and dated each alteration or notation indicating mutual acceptance. I understand that this proposal constitutes a binding contract upon acceptance. I approve the design and authorize you to do the work as quoted.
I agree to pay Alan Horticulture, LLC, the contract price of: $6,998.00

Sign and date this proposal where indicated below. Submit the signed and dated proposal with a 50% deposit in the amount of: $3,499.00 to Alan Horticulture, LLC.

Submitted by:

_____
Anna Smailus, Account Manager

Proposal Accepted by:

_____ **Date:** _____

1103 E Fabyan Parkway, Batavia, IL 60510 | P: 630-232-7050 | F: 630-232-4826

Received: 9/30/2020

I would like to ask a question but I will not be able to attend the meeting, in person or virtually.

I'm opposed to this sign going in for the following reasons:

Cumberland Green removed all the trees on the property and didn't communicate in any way to the residents who back to the property which were directly impacted by this. The increased street noise from Kirk, the garbage and debris that has been moved up against our fences, the burial of our sump lines, fence posts that have been compromised by soil and root removal, the flooding/standing water that is attracting bugs and the increased light pollution.

The few times someone from Cumberland Green has been spoken to and it's only when they are walking the property, they have said trees will be planted, in a row, behind the houses that border the property and to date, that has not been done and they do not return calls to the residents when we call there.

They have not followed through with what they have told us and yet they want to install an electronic sign that will produce more light pollution that the residents backing to the property will see.

I feel they should follow through with what they have said they will do, plant trees, correct the flooding, remove the garbage and plant grass before they are allowed to put up a sign.

Sincerely,

Todd Elenberger

Received: 10/1/2020

Guess I wrote a little too soon.

Yesterday the trees were planted, although according to the planting instructions that were attached to the tree, there should be a water basin, mulch and they should be watered thoroughly, the watering part I don't mind doing until I put my hoses away, but no one watered the ones they planted earlier in the year and I'd say they are dead.

Also, according to Rob at Cumberland Green, the flooding happening here is a direct result from the properties that have their sump line going behind the fence which is absolutely ludericus, but that would require someone to actually watch were the water comes from and you can clearly see the massive path eroded away around the fence surrounding their storage area.

Regardless, we are trying to be good neighbors but what they did to this property is nothing but an eyesore.

Todd Elenberger

CITY OF ST. CHARLES

ORDINANCE NO. 1988-Z-14

AN ORDINANCE GRANTING A SPECIAL USE AS
A PLANNED UNIT DEVELOPMENT FOR KIRK TRACE PUD

ADOPTED BY THE

CITY COUNCIL

OF THE

CITY OF ST. CHARLES

THIS 7th DAY OF NOVEMBER, 1988

PUBLISHED IN PAMPHLET FORM BY
AUTHORITY OF THE CITY COUNCIL
OF THE CITY OF ST. CHARLES,
KANE AND DU PAGE COUNTIES,
ILLINOIS, THIS 10th DAY OF
~~OCTOBER,~~ 1988.
NOVEMBER

Jane M. Conner

CITY CLERK

(S E A L)

Ordinance No. 1988-Z-14

DATE OF PUBLICATION 11/10/88
NEWSPAPER Pamphlet form

ORDINANCE NO. 1988-Z-14

REFER TO:
MINUTES 11-7-88
PAGE

AN ORDINANCE GRANTING A SPECIAL USE AS A PLANNED UNIT DEVELOPMENT FOR KIRK TRACE PUD

WHEREAS, a petition for a Special Use as a Planned Unit Development in the R-4 Multi-Family Residential District for the real estate described in Exhibit "A" attached hereto and made a part hereof (hereinafter sometimes referred to as "Subject Realty") has been filed by K-Pen Development Group (hereinafter sometimes referred to as the "Developer"), and First National Bank of Geneva, Illinois, as Trustee under Trust Agreement dated June 7, 1988 (hereinafter sometimes referred to as the "Trust"), and known as Trust No. 2707 (hereinafter "Developer" and "Trust" sometimes collectively referred to as the "Owner"); and

WHEREAS, the Plan Commission has held a public hearing on said petition in accordance with law; and

WHEREAS, the City Council of the City of St. Charles has received the recommendation of the Plan Commission and has considered same;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CHARLES, KANE AND DUPAGE COUNTIES, ILLINOIS, as follows:

SECTION 1. That Section 17.02.180 of Title 17 of the St. Charles Municipal Code, as amended, and as set forth in the Zoning District Map as described therein and on file in the Office of the City Clerk, is hereby amended by granting a Special Use as a Planned Unit Development in the R-4 Residential

EXHIBIT "B"

District for the Subject Realty, subject to the additional requirements, variations, and restrictions provided herein.

SECTION 2. That the Subject Realty may be developed only in accordance with all ordinances of the City as now in effect or hereafter amended (except as specifically varied herein), and in accordance with the following added definitions, uses, procedures and restrictions:

A. Zoning Requirements

The development and use of the Subject Realty shall comply with the provisions of the R-4 Residential District of Title 17 of the St. Charles Municipal Code except as modified herein.

B. Number of Units and Lot Area

There shall be not more than twelve (12) dwelling units on the Subject Realty, constructed as follows:

As identified on Exhibit "C" attached hereto and made a part hereof, to be constructed in one phase containing a total of 12 dwelling units, within two (2) buildings. The following bulk regulations shall apply:

Front Yard Setback (Cumberland)	30'
Front Yard Setback (Kirk D.)	50'
Interior Side Yard	20'
Rear Yard	30'

C. Preliminary Plan

No engineering plans or final plat for any part of the Subject Realty shall be approved prior to City Council approval of a preliminary plan for the entire Subject Realty, notwithstanding a negative vote or recommendation of the Plan Commission. The preliminary plan shall include those matters described in Titles 16, 17 and 18 of the St. Charles Municipal Code pertaining to preliminary plans and prelminary plats. Following City Council approval of a preliminary plan, City may approve engineering plans and a final plat for a unit or phase, in accordance with the procedures and provisions for Planned Unit Developments set forth in the St. Charles Municipal Code, as amended, in effect at the time of submittal of such plans and plat. In no event shall City be required to review the first submittal of engineering plans and a final plat faster than as described in Chapter 24, Paragraph 11-12-8 of the Illinois Revised Statutes, 1987 Edition, as amended, for preliminary plat approval. Review of the preliminary plan or plat by the Plan Commission shall have for its purpose to provide the City Council with a recommendation only (not a decision) as to the review described in said Paragraph 11-12-8, and a negative recommendation by the Plan Commission shall not prevent the City Council from approving a preliminary plan or final plan or plat over the objection or contrary vote of the Plan Commission. The City Council hereby approves the resolution incorporating the preliminary plan as depicted and set forth at Exhibit "D", which is attached hereto and made a part hereof (the "Resolution")

which may be amended pursuant to the procedures of the St. Charles Municipal Code, except as those provisions have been modified or varied herein.

D. Building Code

Developer shall comply in all respects with the applicable provisions of Title 15 of the St. Charles Municipal Code and other City ordinances pertaining to building in effect at the time Owner makes application to the City for a building permit or permits in connection with the construction of buildings and structures on the Subject Realty, whether or not any of such ordinances are amended after the date hereof.

E. Building Permits

No building permit shall be issued for construction of any structure on the Subject Realty until after engineering plans and a final plat have been approved and a final plat has been recorded for the unit or phase in which the building permit or permits are requested.

F. Occupancy Permits

With the exception of acceptance of the final surface course of streets, sidewalks, street lighting, parkway seeding, and street trees, no temporary or permanent occupancy permit shall be issued for any building on the Subject Realty until after City Council acceptance of the land improvements as defined in Title 16 of the St. Charles Municipal Code, as amended.

G. Parkway Trees and Landscaping

Developer agrees to construct and install the entrance

landscaping as shown on Exhibit "E" attached hereto, and to install the parkway trees in accordance with the Landscape Plan attached hereto as Exhibit "E", all of which shall be collateralized as provided in paragraph H below.

H. Guaranty for Public Improvements

After approval of the final plat and prior to signature by the Mayor and City Engineer, the Developer shall present a guarantee for completion of the land improvements in a form and format as required by Chapter 16.12 of the St. Charles Municipal Code, whether or not amended after the date hereof.

I. Utilities and Communications Facilities

Developer shall provide that all existing and new utilities and communications facilities, including telephone, electric and cable television, to serve the Subject Realty shall be underground, and this requirement shall be affixed to all final plats. Developer shall notify all utility and communications companies of the need for installations and services, if such notification is required by such companies, prior to the construction of the land improvements in each unit or phase of the Subject Realty, and Developer shall provide City with a copy of each such notice.

J. Soil Erosion

Developer shall adhere to measures for the prevention of soil erosion during the various phases of construction of the development, pursuant to the ordinances and any other applicable rules and regulations of the City, the "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois",

published in October 1981, as amended, and the recommended procedures of the Kane-DuPage Soil and Water Conservation District and any other applicable regulatory agency, whichever is more restrictive. An erosion control plan shall be submitted by Developer to City with the engineering plan for each unit or phase, and shall be subject to review and approval of the City Engineer and Director of City Planning.

K. Maintenance of Storm Water Storage Facilities

The storm water storage facilities described in Exhibit "C" shall be owned and maintained by Owners or by a condominium homeowners association to be created by the Owners. In the event that the homeowners association fails to adequately maintain the storm water storage facilities, including, but not limited to, storm water storage capacity as designed, the City may, but shall not be obligated to do so, and the costs thereof may be recorded in equal shares as a lien on the title to all the lots or units in the development, which liens may be foreclosed by court action initiated by the City, and in addition, the City may bring an action at law against the owner or owners of record of such lots, or in the alternative, Developer and City may establish a Special Service District to maintain said storm water storage facilities.

L. Special Service Areas

Owners shall not object to the formation of and any amendment to one or more Special Service Areas including all or part of the Subject Realty, said areas being formed for the purpose of maintaining any or all of the following: Storm water

detention and retention facilities, drainage ways, private streets, snow removal, and landscaping on the Subject Realty for a perpetual duration with a maximum rate of 0.3% per year (or $0.30 per $100.00) of the assessed value, as equalized, of the taxable property, excluding all taxable personal property. Owners shall cooperate in the formation thereof in such manner as City shall deem reasonably necessary at whatever time City proposes such Special Service Area. Formation of such Special Service Area shall not constitute a condition precedent to City's approval of engineering plans or final approval of any part of the Subject Realty unless as to any phase thereof the Owners of part of that phase of Subject Realty and/or electors therein object to and preclude the formation of the Special Service Area.

M. Contribution to School District and Park District

Owners shall contribute cash in lieu of land for school and park purposes. The contribution shall be made in the amount and paid in the manner set forth in Chapter 16.32 of the St. Charles Municipal Code, as amended to the date of approval of the final plat for which the contribution is due and shall be contributed on or before recording of the plat.

N. Water and Sanitary Sewer Service

(1) The Owners will be permitted to connect to a twelve (12) inch City water main owned and operated by the City on Cumberland Parkway, adjacent to the Subject Realty and within the City for the immediate purpose of extending or connecting water service to the Subject Realty. Owners

shall collateralize all such improvements and complete all restoration in a manner approved by the City Engineer.

(2) The Owners will be permitted to connect to an eight (8) inch City sanitary sewer main owned and operated by the City on Cumberland Parkway within the City for the purpose of extending or connecting sewer service to the Subject Realty. Owners shall collateralize all such improvements and complete all restoration in a manner approved by the City Engineer.

O. Resubdivision

City shall not be required to approve any resubdivision of any part of the Subject Realty after a final plat including such part of the Subject Realty is approved and recorded. The foregoing conditions shall be affixed to or referenced on the appropriate final plats.

P. Public Water and Sanitary Sewer Required

Upon development, all of the Subject Realty shall be served by the City of St. Charles water and sanitary sewer system. The construction and maintenance of individual, private on-site water and sewage treatment systems, including but not limited to water wells, septic tanks, septic absorption fields, and aerobic digesters is not permitted. The foregoing conditions shall be affixed to or referenced on the appropriate final plats. Prior to City Council acceptance of any water mains on the Subject Realty, Owners shall plug any existing wells on the Subject Realty in conformity with the regulations of the Illinois Department of Mines and Minerals and shall

provide documentation to the City that such plugging has been accomplished, all in form and substance acceptable to the City Council.

Q. Payment for Street Lighting

Owners shall pay the City for the installation of street lights as required for each unit or phase, in an amount determined by the Director of the Electric Utility. Payment to the City shall be made prior to the installation of street lights by the City. Such street lights shall be collateralized as part of the required land improvements.

SECTION 3. ADDITIONAL CONDITIONS.

The provisions of paragraphs 5, 6, 7, 8, 10, 12, 14, 16, 17 and 19 of that certain Annexation Agreement entitled, "ANNEXATION AGREEMENT CITY OF ST. CHARLES AND FIRST NATIONAL BANK OF GENEVA, ILLINOIS, AS TRUSTEE UNDER TRUST AGREEMENT DATED JUNE 7, 1988 AND KNOWN AS TRUST NO. 2707 AND K-PEN DEVELOPMENT GROUP, and dated November 7, 1988 are incorporated herein as if fully set forth herein, a copy of such paragraphs being attached hereto and made a part hereof as Exhibit "_".

SECTION 4. HOLD HARMLESS AND INDEMNIFICATION.

In the event a claim is made against the City, its officers, other officials, agents and employees, or any of them or if the City, its officers, other officials, agents and employees, or any of them, is made a party defendant in any proceeding arising out of or in connection with this Ordinance, the approval and issuance of a Special Use Permit for a Planned Unit Development for the Subject Realty, or the development of

the Subject Realty, the Owners shall, except as may be required by Chapter 29, Section 61 and Chapter 80, Section 91 of the Illinois Revised Statutes for the negligent acts or omissions of the City, its officers, other officials, agents and employees or any of them, defend and hold the City and such officers, other officials, agents and employees harmless from all claims, liabilities, losses, taxes, judgments, costs, fees, including expenses and reasonable attorney fees, in connection therewith in excess of the proceeds of any insurance or indemnification held by the City and actually received. Any such indemnified person may obtain separate counsel to participate in the defense thereof at his own expense. However, if the Canons of Legal Ethics require such indemnified person to be separately defended where there is no consent to a conflict of interest, then Owners shall bear such expense. The City and such officers, other officials, agents and employees shall cooperate in the defense of such proceedings and be available for any litigation-related appearances which may be required. Further, Owners shall be entitled to settle any and all claims for money, in such amounts and upon such terms as to payment as they may deem appropriate, without the prior approval or consent of the City, its officers, other officials, agents and employees as the case may be. Further, Owners may be entitled to settle all non-monetary claims upon such terms as they may deem appropriate after receiving approval or consent of the City, which approval or consent shall not be unreasonably withheld. In the event City unreasonably withholds such approval or consent Owners'

obligation to indemnify and defend shall terminate. The Owners release from and agree that the City, its officers, other officials, agents and employees shall not be liable for any liability, losses, judgments, costs, fees, including reasonable attorney's fees and expenses arising out of or in connection with the City's failure to approve final plans, provided, however, the Owners do not relinquish their right to receive approval of their final plans, including final plats of subdivision under this Ordinance as amended from time to time, building and occupancy permits and other permits, approvals and licenses and to such extent the Owners retain the right to legal or equitable action against the City for declaratory judgment, injunctive relief and mandamus.

SECTION 5. That this Ordinance shall become effective from and after its passage and approval in accordance with law.

PRESENTED to the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois, this 7th day of November, 1988.

PASSED by the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois, this 7th day of November, 1988.

APPROVED by the Mayor of the City of St. Charles, Kane and

DuPage Counties, Illinois, this 7th day of November, 1988.

Mayor

ATTEST:

City Clerk

COUNCIL VOTE:

Ayes: 10
Nays: 0
Absent: 0

PARCEL ONE

THAT PART OF THE WEST 1/2 OF THE SOUTH WEST 1/4 OF SECTION 36, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF THE WEST 1/2 OF SAID SOUTH WEST 1/4 522.06 FEET NORTH OF THE SOUTH LINE OF SAID SOUTH WEST 1/4; THENCE NORTH ALONG SAID EAST LINE 130 FEET; THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION, 335 FEET; THENCE SOUTH PARALLEL WITH THE EAST LINE OF THE WEST 1/2 OF SAID SOUTH WEST 1/4 130 FEET; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION, 335 FEET TO THE POINT OF BEGINNING, (EXCEPT THAT PART CONVEYED TO COUNTY OF KANE BY WARRANTY DEED RECORDED DECEMBER 11, 1967 AS DOCUMENT

PARCEL TWO

LOT 4 OF CUMBERLAND GREEN P. U. D. PHASE 1, IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

EXHIBIT "A"

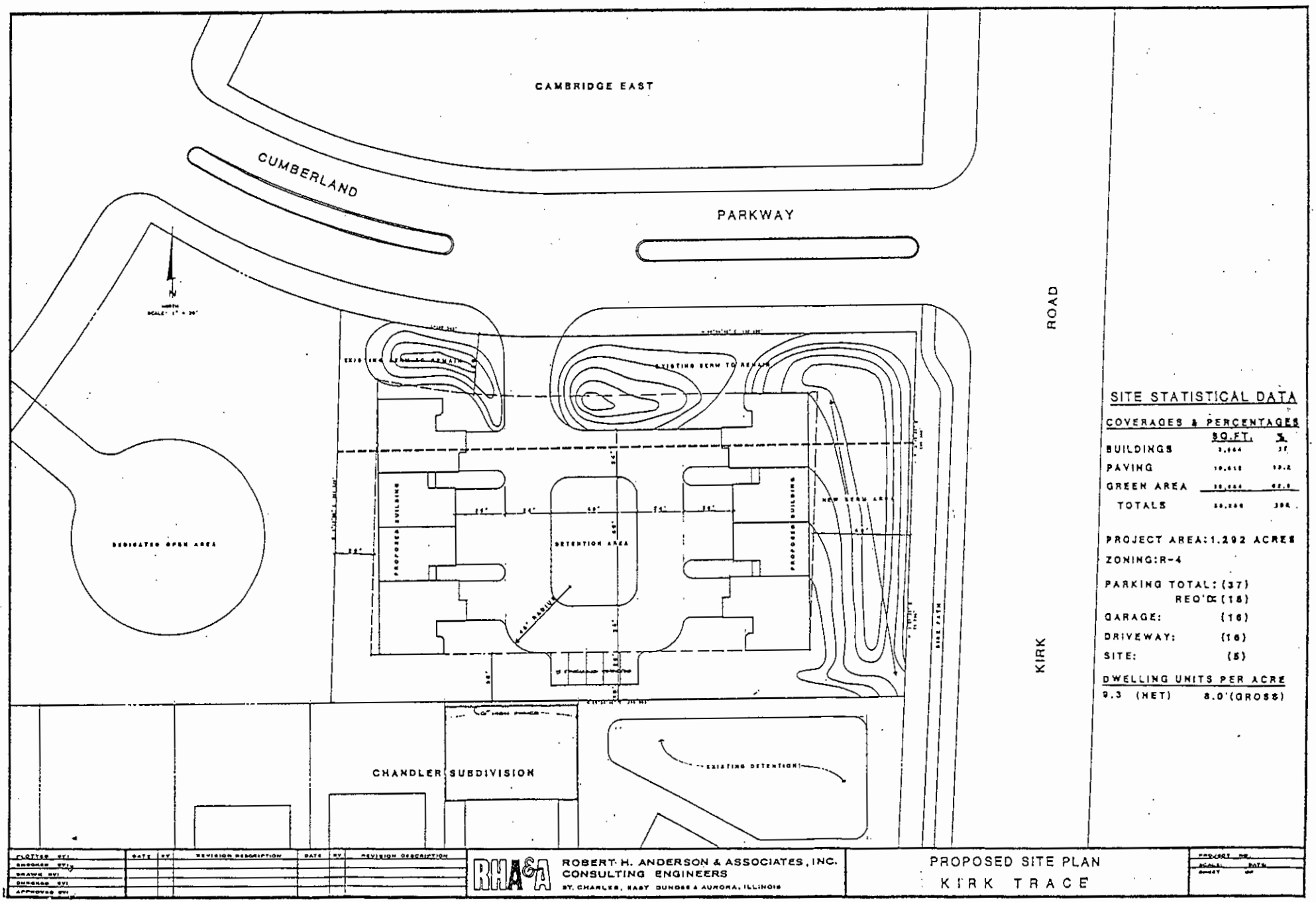

CAMBRIDGE EAST
CUMBERLAND
PARKWAY
ROAD
KIRK
DEDICATED OPEN AREA
EXISTING BERM TO REMAIN
PROPOSED BUILDING
DETENTION AREA
PROPOSED BUILDING
NEW BERM AREA
BIKE PATH
CHANDLER SUBDIVISION
EXISTING DETENTION
SITE STATISTICAL DATA
COVERAGES & PERCENTAGES
SQ.FT. %
BUILDINGS
PAVING
GREEN AREA
TOTALS
PROJECT AREA: 1.292 ACRES
ZONING: R-4
PARKING TOTAL: (37)
REQ'D: (18)
GARAGE: (16)
DRIVEWAY: (16)
SITE: (5)
DWELLING UNITS PER ACRE
9.3 (NET) 8.0 (GROSS)
ROBERT H. ANDERSON & ASSOCIATES, INC.
CONSULTING ENGINEERS
ST. CHARLES, EAST DUNDEE & AURORA, ILLINOIS
PROPOSED SITE PLAN
KIRK TRACE

EXHIBIT " C"

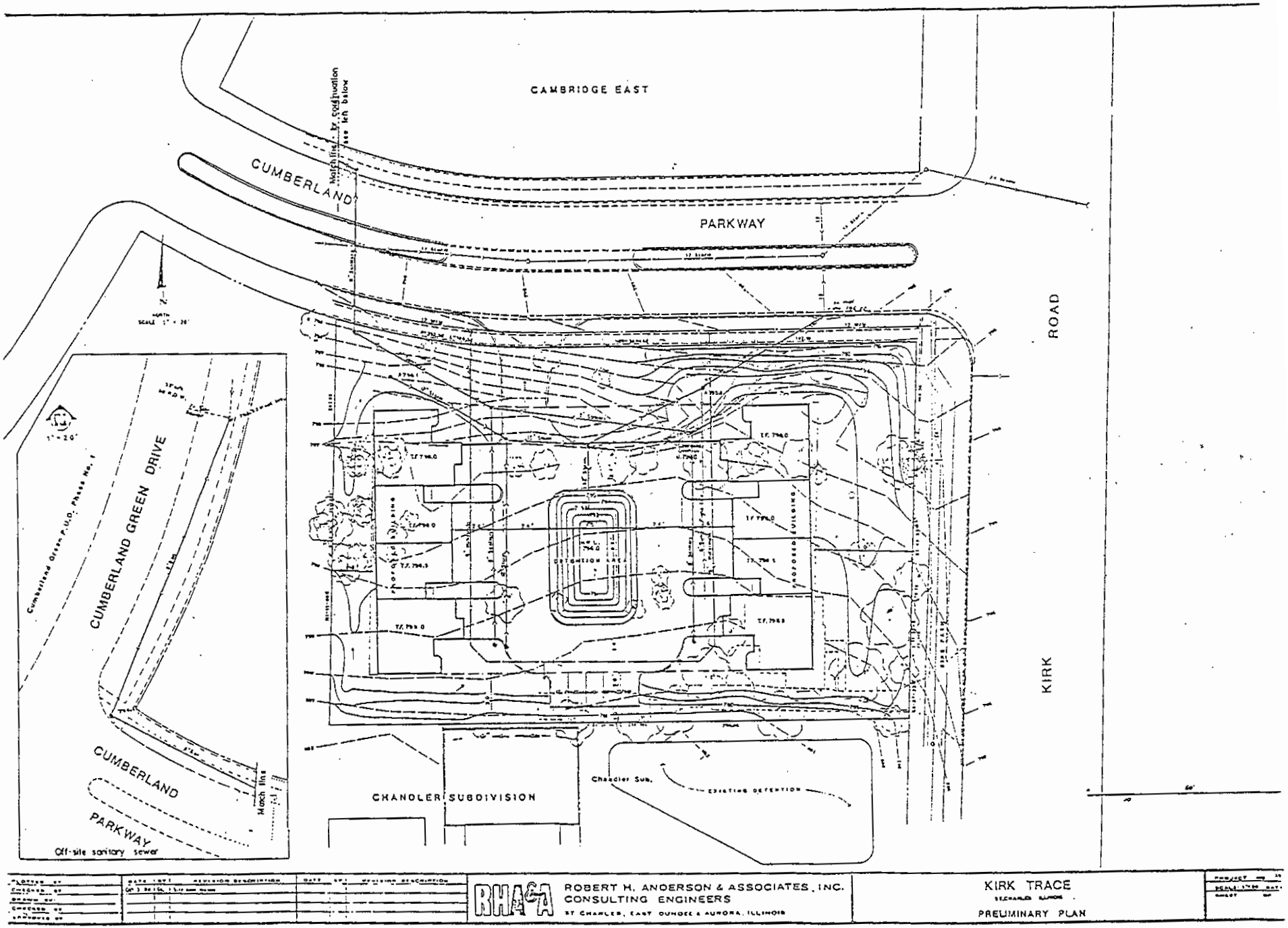

CAMBRIDGE EAST
CUMBERLAND
PARKWAY
Match line - by continuation see left below
KIRK
ROAD
CUMBERLAND GREEN DRIVE
Cumberland Green P.U.D. Phase No. 1
CUMBERLAND
PARKWAY
Off-site sanitary sewer
Match line
CHANDLER SUBDIVISION
Chandler Sub.
EXISTING DETENTION
DETENTION AREA
PROPOSED BUILDING
PROPOSED BUILDING
ROBERT H. ANDERSON & ASSOCIATES, INC.
CONSULTING ENGINEERS
ST CHARLES, EAST DUNDEE & AURORA, ILLINOIS
KIRK TRACE
PRELIMINARY PLAN

EXHIBIT "D"

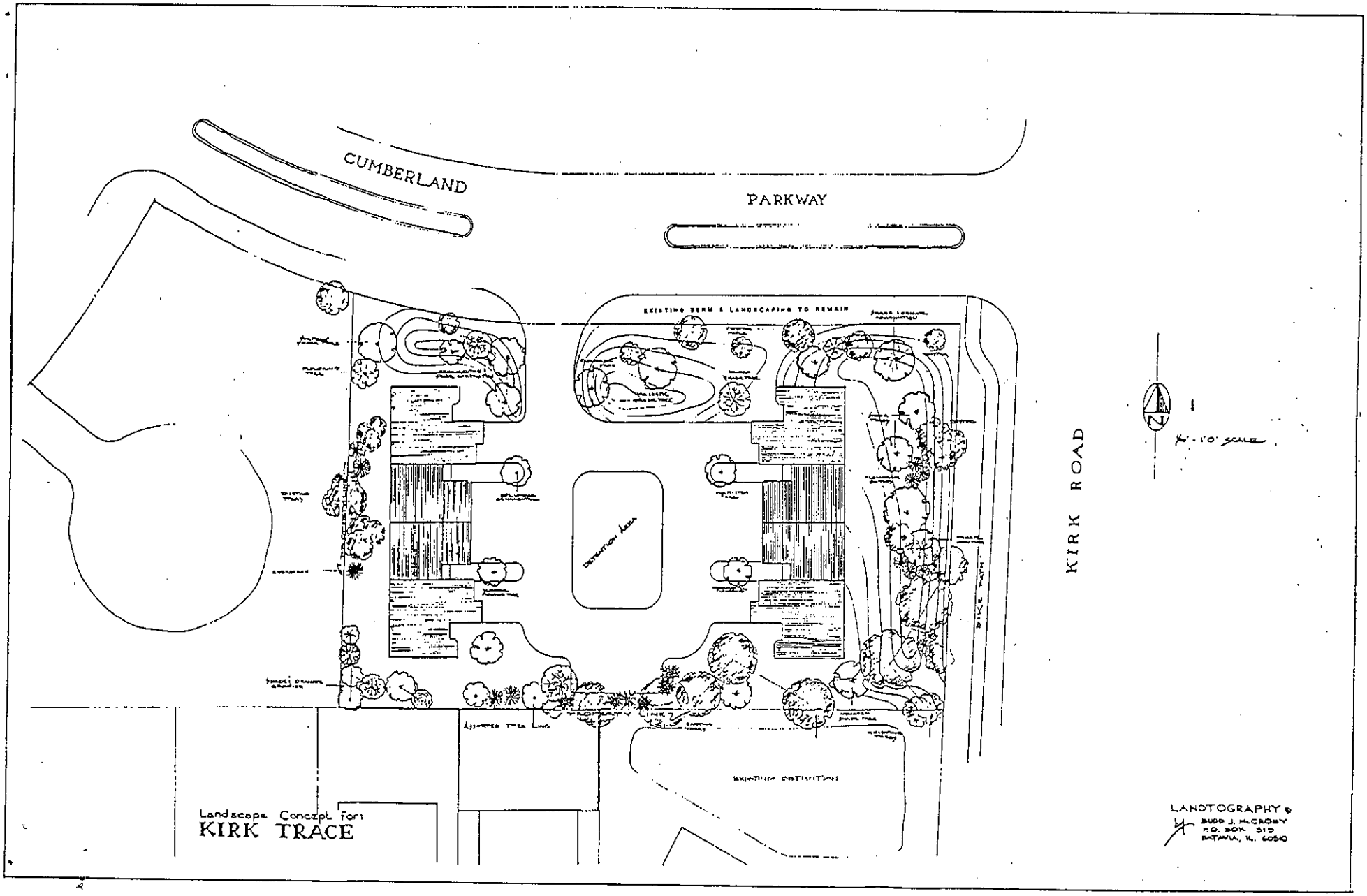

CUMBERLAND
PARKWAY
KIRK ROAD
EXISTING BERM & LANDSCAPING TO REMAIN
DETENTION AREA
BIKE PATH
Landscape Concept for:
KIRK TRACE
LANDTOGRAPHY ©
BUDD J. McCROSKY
P.O. BOX 313
BATAVIA, IL. 60510

EXHIBIT "E"

STATE OF ILLINOIS)
) SS.
COUNTIES OF KANE AND DU PAGE)

C E R T I F I C A T E

I, Jean M. Connors, certify that I am the duly elected and acting municipal clerk of the City of St. Charles, Kane and DuPage Counties, Illinois.

I further certify that on November 7, 1988 the Corporate Authorities of such municipality passed and approved Ordinance No. 1988-Z-14, entitled AN ORDINANCE GRANTING A SPECIAL USE AS A PLANNED UNIT DEVELOPMENT FOR KIRK TRACE PUD

which provided by its terms that it should be published in pamphlet form.

The pamphlet form of Ordinance No. 1988-Z-14, including the Ordinance and a cover sheet thereof was prepared, and a copy of such Ordinance was posted in the municipal building, commencing on November 10, 1988, and continuing for at least ten days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the municipal clerk.

DATED at St. Charles, Illinois, this 10th day of November, 1988.

Jean M. Connors
Municipal Clerk

(S E A L)

ST. CHARLES SINCE 1834	**AGENDA ITEM EXECUTIVE SUMMARY**	Agenda Item number: *4e
	Title:	Recommendation to Approve and Execute an Acceptance Resolution for Public Utilities for Baker Field Subdivision (912 S. 5th St.)
	Presenter:	Monica Hawk

Meeting: Planning & Development Committee	Date: November 9, 2020	
Proposed Cost: N/A	Budgeted Amount: N/A	Not Budgeted: ☐

Executive Summary (*if not budgeted please explain*)**:**

Public sanitary sewer and appurtenances were constructed by the developer to service the improvements for the Baker Field Subdivision (912 S. 5th St.)

Said utilities have undergone and passed all required testing. The City has performed inspections and all punchlist items have been resolved.

Attachments (*please list*)**:**
Acceptance Resolution
Bill of Sale
Exhibit

Recommendation/Suggested Action (*briefly explain*)**:**
Staff recommends approval and execution of an acceptance resolution

(Sanitary Sewer)

City of St. Charles
Kane and DuPage Counties

ACCEPTANCE RESOLUTION

Subdivision Name: Baker Field Subdivision (912 S. 5th St.)

Whereas Ryan Corcoran, the Developer of Baker Field Subdivision (912 S. 5th St.), constructed public sanitary sewer and appurtenances in easements as described in the attached exhibits in the aforesaid Subdivision; and

Whereas, the Developer has constructed public sanitary sewer and appurtenances in accord with the plans and specifications, heretofore approved by the City of St. Charles; and

Whereas, the constructed public sanitary sewer and appurtenances have been inspected by the Engineer for the sub divider and by a representative for the City of St. Charles and are found to be satisfactory;

Now, Therefore, Be It Resolved by the City Council of St. Charles, that said Council hereby approves and accepts the constructed public sanitary sewer and appurtenances. It being understood that this acceptance and/or approval in no way relieves the Developer of his Surety of any obligation for maintenance for a period of one (1) year as provided for in said Contract.

Passed by the City Council of the City of St. Charles, this _____day of _____, 2020, and APPROVED by the Mayor of said City of St. Charles, this ___ day of _____, 2020.

_____
MAYOR

ATTEST:

_____
CITY CLERK

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS, that Ryan Corcoran ("Seller"), in consideration of One ($1.00) Dollar and other good and valuable consideration, does hereby grant, sell, transfer and deliver unto the CITY OF ST. CHARLES, an Illinois municipal corporation in Kane County, Illinois, ("City") the following goods, chattels or other items of personal property, to wit:

ONE: Each and every part of a Public Sanitary Sewer Systems and appurtenances, as fully described in a certain set of plans and specifications attached hereto and incorporated herein as Exhibit "A".

TWO: The object of this Bill of Sale is to grant, sell, transfer and deliver to the CITY, with the exceptions noted, the ownership in all items of personalty, which comprise the Public Sanitary Sewer Systems and appurtenances by SELLER to date within the CITY.

SELLER does hereby covenant and warrant to the CITY that SELLER is the lawful owner of the aforedescribed goods, chattels and personalty; that such items are free and clear from all encumbrances; that SELLER has the absolute right to sell the same as aforesaid; and that SELLER warrants and will defend the same against the claims and demands of all persons; and that the execution of this Bill of Sale is an authorized act of said SELLER.

IN WITNESS WHEREOF, SELLER has signed and sealed this Bill of Sale at

912 S. 5th St., St. Charles, IL 60174, this 22 day of July, 2020.

(SELLER)

BY: Ryan Corcoran

ITS: Owner

ATTEST:

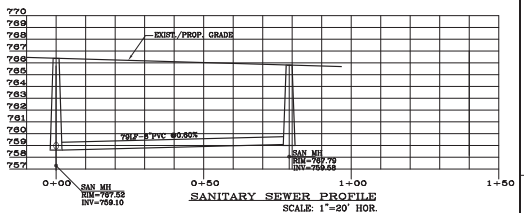
BENCHMARK INFO
SOURCE BENCHMARK:NGS MONUMENT
DESIGNATION-STC 16
PID-DK7218
STATE / COUNTY-IL / KANE
USGS QUAD-GENEVA (1993)

ELEVATION=709.58 (NAVD88)

BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY:
Johnson-Western Surveying, dba, ASM Consultants, Inc.
Batavia, Illinois 60510

LEGEND

Sanitary Sewer



SANITARY SEWER PROFILE
SCALE: 1"=20' HOR.
1"=5' VER.

IMPERVIOUS AREAS (LOT 2):

HOUSE	4,242.8 sf
DRIVEWAY	1,471.2 sf
GARAGE (2ND STRUCTURE)	498.5 sf
PATIO (FURTURE)	300.0 sf
STOOP/WALK/PORCH/ETC.	316.5 sf
TOTAL ADDITION	6,817.0 sf
REMOVE EXIST. CONC. SLAB	1,498.3 sf
NET INCREASE	5,318.7 sf

IMPERVIOUS AREAS (LOT 3):

FUTURE HOUSE/DRIVE/PATIO/ETC.	2,000.0 sf

NET ADDITION IMPERVIOUS AREAS = 7,318.7 sf

BRANDON JAFARI 062-050585 REGISTERED PROFESSIONAL ENGINEER STATE OF ILLINOIS
Brandon Jafari 10/29/20
BRANDON JAFARI
REGISTERED PROFESSIONAL ENGINEER
RENEWAL DATE: 11/30/21

AUGUST 17, 2020

FIELD MEASUREMENT ON 8/17/2020

REVISION			
1	10/29/20	SAN. MANHOLE	4
2			5
3			6

AS-BUILT

SHEET 1 OF 1

COUNTY ENGINEERS INC.
ENGINEERING CONSTRUCTION MANAGEMENT
0N406 DOOLEY DRIVE, GENEVA, ILLINOIS 60134 630-384-8976

BAKER FIELD SUBDIVISION-LOT 2
900 S. 5TH STREET, ST CHARLES
MIDWEST CUSTOM HOMES
Scale :1"=10'