

## NOTICE

A meeting of the City of Evansville Plan Commission will be held on the date and time stated below. Notice is further given that members of the City Council and Historic Preservation Commission may be in attendance. Requests for persons with disabilities who need assistance to participate in this meeting should be made by calling City Hall at (608)-882-2266 with as much notice as possible.

City of Evansville **Plan Commission**  
Regular Meeting  
City Hall, 31 S Madison St., Evansville, WI 53536  
Tuesday, November 5<sup>th</sup>, 2024, 6:00 pm

### REVISED AGENDA

1. Call to Order
2. Roll Call
3. Motion to Approve Agenda
4. Motion to waive the reading of the minutes from the October 1<sup>st</sup>, 2024 meeting and approve them as printed.
5. Civility Reminder
6. Citizen appearances other than agenda items listed.
7. Discussion Items
  - A. Review and Discussion on Site Plan Application SP-2024-04, Conditional Use Permit Application CUP-2024-06, and Rezoning Application RZ-2024-05 for a Kwik Trip Gas Station/Convenience Store on parcel 6-20-228.1
    1. Review Staff Memo and Applicant Comments
    2. Public Hearing
    3. Plan Commissioner Questions and Comments
  - ~~B. Public Hearing for Land Division Application LD-2024-11 for a preliminary subdivision plat (Settler's Grove) on parcel 6-27-970C.2~~
    - ~~1. Review Staff Report and Applicant Comments~~
    - ~~2. Public Hearing~~
    - ~~3. Plan Commissioner Questions and Comments~~
    - ~~4. Possible Motion with Conditions~~
  - C. Review and Discussion for Conditional Use Permit Application CUP-2024-05 for a duplex in the R-1 Residential District One on parcel 6-27-358 (16 Jackson Street)
    1. Review Staff Report and Applicant Comments
    2. Public Hearing
    3. Plan Commissioner Questions and Comments
  - D. Concept Plan Discussion – Capstone Ridge
8. Community Development Report
9. Upcoming Meeting: December 2nd, 2024 at 6:00pm

*-Mayor Dianne Duggan, Plan Commission Chair*

10. Adjourn

*-Mayor Dianne Duggan, Plan Commission Chair*

**City of Evansville Plan Commission  
Regular Meeting  
Tuesday, October 1<sup>st</sup>, 2024, 6:00 p.m.**

**MINUTES**

**1. Call to Order** at 6:00pm.

**2. Roll Call:**

Members	Present/Ab sent	Others Present
Mayor Dianne Duggan	P	Colette Spranger (Community Dev. Director)
Aldersperson Gene Lewis	P	Jason Sergeant, City Administrator
Aldersperson Abbey Barnes	P	Joe Geoffrion, Roger Berg, Ben Corridon,
Bill Lathrop	P	John& Sharon Thielenhouse, Joy Morrison,
John Gishnock	P	Kathleen&Troy Worrall, Steven Keller, Jeff Meyers,
Mike Scarmon	A	Candice Kasprezak, Makenzie Schonenberger,
Eric Klar	A	Will&Leslie Casey, Ron Mallon, Bill Hurtley, Jonathan Hollingsworth, Alvin Francis, Nick Haefs

**3. Motion to approve the agenda, by Lathrop, seconded by Gishnock. Suggestion to review item 7H first, in order to accommodate audience. Accepted. Approved unanimously.**

**4. Motion to waive the reading of the minutes from the September 3, 2024 meeting and approve them as printed, by Lathrop, seconded by Barnes. Approved unanimously.**

**5. Civility Reminder.** Duggan noted the City’s commitment to conducting meetings with civility.

**6. Citizen appearances other than agenda items listed.**

**7. Discussion Items.**

- A.** Public Hearing for Land Division Application LD-2024-11 for a preliminary subdivision plat (Settler’s Grove) on parcel 6-27-970C.2
  - i. Review Staff Report and Applicant Comments**  
Spranger advised that this application will be reviewed at the next meeting but an initial public hearing will be held today.
  - ii. Public Hearing**  
Opened at 6:31 pm. Paul Liesse asked about the paths shown on the plan and expressed that if we are going to have paths they should lead somewhere. Public hearing closed at 6:32 pm.
  
- B.** Review and Action for Land Division Application LD-2024-12 for a preliminary and final plat on parcels 6-27-862 (60 N Union), and Rezoning Application RZ-2024-04 to zone the entirety of Lot 1 of that plat to B-3 and Outlot 1 to C-1.
  - i. Review Staff Report and Applicant Comments**  
Spranger described the purpose of the application to delineate between the buildable and unbuildable areas of the lot.

**ii. Public Hearing**

Opened at 6:35 pm. Ben Corridon asked what guidelines there would be for the wetlands to be preserved. Spranger expressed that stormwater would not be put into the wetland and that it would be left wild, and that the wetland would still be on private property and Culver's would be responsible for it. Public hearing closed at 6:37 pm.

**iii. Plan Commissioner Questions and Comments**

None.

**iv. Motion with Conditions**

*Motion to recommend Common Council approve a certified survey map to divide parcel 6-27-862 into Lot 1 and Outlot 1, finding that the application is in the public interest and meets the objectives contained within Section 110-102(g) of city ordinances, with the condition that the final CSM is recorded with the Rock County Register of Deeds. Motion by Lathrop, seconded by Barnes. Motion carried unanimously.*

*Motion to recommend Common Council approve Ordinance 2024-12, Rezoning territory at 60 N Union St. Motion by Lathrop, seconded by Gishnock. Motion carried unanimously.*

**C. Review and Action for Land Division Application LD-2024-13 for a preliminary and final Certified Survey Map to combine parcels 6-27-661 and 6-27-541 (421 Almeron St)**

**i. Review Staff Report and Applicant Comments**

Spranger discussed the application to combine parcels under the same ownership. Spranger discussed that there was a gap in the parcels that appeared it may have originally been a public right of way but no evidence of any right of way ever being platted has been found.

**ii. Public Hearing**

Opened at 6:43 pm. Joy Morrison gave a brief history of the property and advised she has no objection to the merger. Public hearing closed at 6:45 pm.

**iii. Plan Commissioner Questions and Comments**

None.

**iv. Motion with Conditions**

*Motion to recommend Common Council approve a certified survey map to combine parcels 6-27-661 and 6-27-541 into one lot, finding that the application is in the public interest and meets the objectives contained within Section 110-4(5) of city ordinances, with the condition that the final CSM is recorded with the Rock County Register of Deeds. Motion by Lathrop, seconded by Gishnock. Motion carried unanimously.*

**D. Review and Action for Land Division Application LD-2024-14 for a preliminary and final Certified Survey Map on parcel 6-27-316.368 (649/651 Windsor Ln)**

**i. Review Staff Report and Applicant Comments**

Spranger stated that D and E are closely related. The applications had been previously approved but were never recorded with the Rock County Register of Deeds. The application is to split a duplex lot down the shared wall of an existing duplex.



**ii. Public Hearing**

Opened at 6:47 pm, no comments received, closed at 6:48 pm.

**iii. Plan Commissioner Questions and Comments**

Gishnock commented that he would like to know how to keep duplexes rentable for future developments. Barnes asked about renters being able to purchase the properties they reside in.

**iv. Motion with Conditions**

*Motion to recommend Common Council to approve a certified survey map to divide parcel 6-27-316.368 into two lots for a two-family twin residence, located at 621 and 623 Windsor Lane, finding that the application is in the public interest and meets the objectives contained within Section 110-102(g) of city ordinances, with the following conditions:*

*a. The final certified survey map is recorded with the Rock County Register of deeds.*

*b. A joint maintenance and cross access agreement is then made and recorded against both properties.*

*Motion by Barnes, seconded by Lathrop. Motion carried unanimously.*

**E. Review and Action for Land Division Application LD-2024-15 for a preliminary and final Certified Survey Map on parcel 6-27-559.5067 (601 Porter Rd/305 S Sixth St)**

**i. Review Staff Report and Applicant Comments**

Spranger advised this application was the same as D but on a different property.

**ii. Public Hearing**

Opened at 6:54 pm, no comments received, closed at 6:55 pm.

**iii. Plan Commissioner Questions and Comments**

None.

**iv. Motion with Conditions**

*Motion to recommend Common Council to approve a certified survey map to divide parcel 6-27-559.5067 into two lots for a two-family twin residence, located at 601 Porter Road and 305 S Sixth Street, finding that the application is in the public interest and meets the objectives contained within Section 110-102(g) of city ordinances, with the following conditions:*

*a. The final certified survey map is recorded with the Rock County Register of deeds.*

*b. A joint maintenance and cross access agreement is then made and recorded against both properties.*

*Motion by Lathrop, seconded by Barnes. Motion carried unanimously.*

**F. Review and Action for Conditional Use Application CUP-2024-04 for an Indoor Commercial Entertainment Use on parcel 6-27-20.2 (26 W Main St)**

**i. Review Staff Report and Applicant Comments**

This application is for a business for an indoor kid's play place which had previously been approved at a different location across the street. The business now wishes to move to a new location and therefore needs a new conditional use permit.

**ii. Public Hearing**

Opened at 6:58 pm, no comments received, closed at 6:59 pm.

**iii. Plan Commissioner Questions and Comments**

None.

**iv. Motion with Conditions**

**Motion to approve a Conditional Use Permit for Indoor Commercial Entertainment per section 130-408 on parcel 6-27-90 located at 33 W Main Street, finding that the benefits of the use outweigh any potential adverse impacts, and that the proposed use is consistent with the required standards and criteria for issuance of a CUP set forth in Section 130-104(3)(a) through € of the Zoning Ordinance, subject to the following conditions:**

- a. **Hours of operation shall be no earlier than 6am and no later than 10pm.**
- b. **The business operator shall obtain and maintain all City, State, and County permits and licenses as may be required.**
- c. **Any substantial changes to the business model shall require a review of the existing conditional use permit.**
- d. **Any changes to signage, outdoor lighting, and/or building façade are subject to approval from the Historic Preservation Commission.**
- e. **Use cannot create a public nuisance as defined by local and state law.**
- f. **The Conditional Use Permit is recorded with the Rock County Register of Deeds.**

*Motion by Barnes, seconded by Lathrop. Motion carried unanimously.*

**G. Review and Action for Site Plan Application SP-2024-03 for an office expansion on parcel 6-27-866 (340 Union St)****i. Review Staff Report and Applicant Comments**

Spranger advised that the parcel shares land with multiple uses, including the Mobil station and farmland. The application is to add office space onto a rear building on the property.

**ii. Plan Commissioner Questions and Comments**

Gishnock commented on the direction of the lighting. Spranger suggested adding a condition regarding dark sky compliant lighting.

**iii. Motion with Conditions**

**Motion to approve site plan application 2024-03 for improvements and building expansion on parcel 6-27-866, addressed at 340 N Union Street, finding that the proposed changes meet the required standards and criteria set forth in Section 130-131 of the City of Evansville Zoning Ordinance, and are in the public interest, subject to the following conditions:**

- a. **Applicant complies with any and all other local, state, or federal regulations pertaining to the site.**
- b. **Any major deviations from approved plans will require a resubmittal of application and any possible fees or enforcement action.**
- c. **Addition must connect to City sewer and water services.**
- d. **Applicant records the site plan with the Rock County Register of Deeds.**
- e. **All lighting shall be dark sky compliant.**

*Motion by Lathrop, second by Gishnock. Motion carried unanimously.*

**H.** Review and Possible Action for Annexation Application A-2024-01 to annex parcel 6-20-326.506 from the Town of Union to the City of Evansville

**i. Review Staff Report and Applicant Comments**

Spranger described the purpose for the application. Spranger discussed that this application would be consistent with the Comprehensive Plan. The site is adjacent to a stormwater pond, there will be stormwater management available on site. No known man-made constraints exist. The application will also need to be approved by the state Department of Administration.

**ii. Public Hearing**

Opened at 6:16 pm. John Thielenhouse who neighbors the property expressed that he would prefer that the property be residential and would not like to see a gas station there. Candice Kasprezak asked if a survey will be done, Spranger replied that one has been completed. Will Casey expressed that he is in favor of the annexation and would like to see a KwikTrip. Spranger had received written comments, one in favor and one with environmental concerns. Public hearing closed at 6:23 pm.

**iii. Plan Commissioner Questions and Comments**

Lathrop asked if there would be issues with high-capacity ATC lines going over a gas station. Haefs responded that they have been in contact with them. Gishnock asked about the current zoning of the property, which is Agricultural. Barnes asked about what contingencies are in the purchase agreement. Haefs advised that as long as the annexation and the site plan are approved, the purchase would go through.

**iv. Motion with Conditions**

*Finding that the annexation is consistent with the Comprehensive Plan, the Plan Commission recommends Common Council approval of Ordinance 2024-13 and the annexation agreement with the following conditions:*

*a. DOA deems annexation to be in the public interest.*

*b. The applicant signs and accepts the Annexation Agreement.*

*Motion by Barnes, seconded by Lathrop. Motion carried unanimously.*

**I.** Review and Possible Action for Annexation Application A-2024-02 to annex parcels 6-20-305, 6-20-305.01, and 6-20-219B from the Town of Union to the City of Evansville

**i. Review Staff Report and Applicant Comments**

This application is to annex parts of the right-of-way which were not included in the previous annexation for the CHS property.

**ii. Public Hearing**

Opened at 7:11 pm, no comments received, closed at 7:12 pm.

**iii. Plan Commissioner Questions and Comments**

None.

**iv. Motion with Conditions**

*Finding the annexation is consistent with the Comprehensive Plan, the Plan Commission recommends Common Council approve Ordinance 2024-09.*

*Motion by Lathrop, seconded by Gishnock. Motion carried unanimously.*

**8. Community Development Report**

- i. Spranger is still working on putting together an informative flyer regarding underutilized store fronts.
- ii. Lathrop brought up Settler's Grove and reiterated the desire to increase density in new developments. Gishnock added that he does not want to see increased density be pushed down the road for the future.

**9. Next Meeting Date:**

Tuesday, November 5, 2024 at 6:00 p.m.

**10. Adjourn.** 6:53 p.m.


**SITE PLAN/CONDITIONAL USE PERMIT, REZONING APPLICATION – STAFF REPORT**
**Applications:** SP-2024-04, CUP-2024-06, RZ-2024-05

**Applicants:** Kwik Trip (represented by Seth Wadell)

**Parcel:** 6-20-228.1 **Location:** 13828 W US HWY 14

**November 5, 2024**

Prepared by: Colette Spranger, Community Development Director  
**Direct questions and comments to: [c.spranger@evansvillewi.gov](mailto:c.spranger@evansvillewi.gov) or 608-882-2263**

**Description of request:** Applicant is seeking approval of a site plan and a conditional use permit to operate a gas station/convenience store, and rezoning of that property to the B-3 Community Business District pending approval of the annexation ordinance bringing it into the City.

**Current zoning district:** Agricultural (still in Town of Union)

**Proposed Zoning District:** B-3 Community Business upon approval of annexation

**Status of Annexation Application A-2024-01** – Applicant has not submitted the full annexation petition to the Department of Administration. Common Council has had a first reading of an ordinance for annexation of this property. Staff will not advance the second reading of the ordinance until a recommendation has been made by the Wisconsin Department of Administration.

**Staff Recommendation for November 5<sup>th</sup>:** Plan Commission should take no action on site plan, rezoning, or conditional use permit applications until City has received a recommendation from the Department of Administration regarding the appropriateness of the annexation.

For discussion at the November 5<sup>th</sup> meeting, staff is suggesting Plan Commission focus on the following topics:

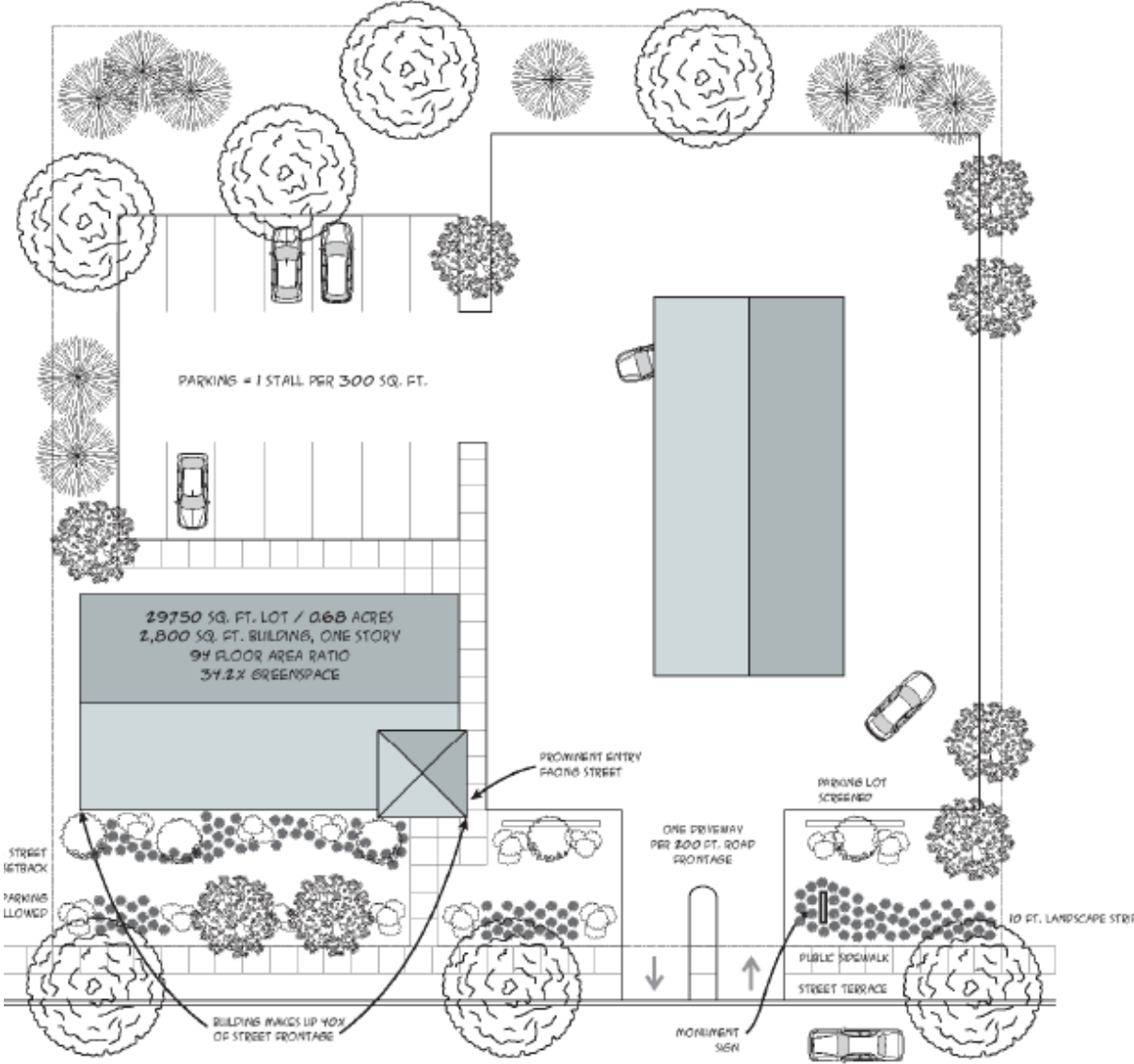
- Site design/layout with respect to recent zoning code updates
- Traffic considerations

### Site design/layout

The City recently passed updates to its zoning ordinance to improve building placement along streets and preferred site design with regard to gas stations. Recently this resulted in some success with shielding the parking area at the upcoming Culver's and ensuring the building itself is the prominent feature of the site. The City has long used the Allen Creek Corridor Plan to guide design for new development, and codifying it into the zoning ordinance is one tool the City can use to continue to improve streetscapes and prominent entrances to the City.

Below is the image City staff have used to convey this goal. It features a prominent entrance that faces the street, parking behind the building, and a canopy area that is set back into the property. Generous landscaping screens the gas canopy area from the street, especially for pedestrians.

SITE DEVELOPMENT STANDARDS - HIGHWAY COMMERCIAL AREAS



What the City aims to avoid with this ordinance is a site design similar to the one across the street.



*Corner lot featuring prominent pavement and parking on each street frontage with the building recessed to the back corner.*

Per the zoning code, the front yard for a corner lot is the shorter of the two street sides. Per the zoning code, gas pumps are not allowed in this area. Staff has not received a version of the site plan with the building featured toward the corner or gas pumps out of the front yard. Applicant sites traffic patterns for diesel, loading, and refueling. While the site is unusual in its long, triangular configuration, staff has several thoughts regarding how to change the site to achieve the spirit of intended ordinance:

- Reconfigure site to have building in corner, with one side featuring an entrance. The other side fronting the road could feature signage. Staff suggest placing the main fueling canopy in a way that it acts as a deterrent to anyone trying to use the 30' wide driveway running the length of the property as an unofficial thru street. (See comments below.)
- Applicant could remove the bank of parking along the side closest to County M and narrow the driveway between the curb and canopy. This would have the benefit of reducing pavement, removing points of congestion for both pedestrians and vehicles, and removing a parking area along street frontage. Parking space standards are flexible for gas stations, as fueling stations are not counted towards required parking although they often serve as parking.
- Seek a variance from the Board of Appeals for building siting.

#### **Traffic Considerations – Offsite**

The traffic study builds off that provided by CHS for its oilseed processing plant. Current conditions were measured in April 2023 and October 2023, and captures harvest traffic. Traffic studies assess the impact of new traffic generation on existing and proposed infrastructure and assign Level of Service (LOS) grades as a way to demonstrate congestion. LOS A is little to no delay or congestion; Level E is an intersection at capacity. Notably with this traffic report, a number of the turns analyzed at the County M/Highway 14 intersection drop from LOS B to LOS C. This indicates an increased delay of a few seconds. Staff is concerned about future development on the 25 undeveloped acres of land planned for mixed use at the southeast

corner of Highways M/14, and how more traffic could further impact the level of service for the entire intersection. While this particular development would not trigger more intense intersection improvements (i.e. dedicated turn lanes or a roundabout), the next development likely will. The City would like to understand that need, to the extent possible, well in advance.

**Traffic Considerations – Onsite**

Along the northern edge of the property there is a stretch of pavement over 600' long and at least 30' wide with no barriers to thru traffic. In some instances, this pavement is almost 70' wide and leads to two parking areas and the diesel canopy. Traffic would be coming from both directions and would be unrestricted as cars and trucks navigate where to park. For reference, East Main Street is 36' from curb to curb. Staff suggests either traffic calming devices (i.e. bump outs or landscape islands) or a drastic reduction or redirection of pavement. The odds of this corridor acting as a quasi street to avoid the County M/US Highway 14 intersection is high.

**Chapter 130 Review Criteria and Standards**

The following section compares the site plan with the basic provisions of the base zoning district and other considerations of how the site functions, both internally and within its environs.

**Site Plan Criteria Evaluation**

Section 130-131 of the Municipal Code, includes factors for evaluating site plans.

Criteria	Staff Comment
1. Site Design and Physical Characteristics	<ul style="list-style-type: none"> <li>• City has made recent changes to its zoning code to encourage site design that promotes focuses on the building and streetscape versus autocentric. This plan currently does not meet the new standards.</li> <li>• Site features a quasi road along the northern boundary of the property. There is little in the way of traffic control for truck and vehicle traffic. Staff is concerned this will function as a through lane for those looking to bypass the County M/Highway 14 intersection.</li> </ul>
2. Site location relative to public road network	<ul style="list-style-type: none"> <li>• Site has frontage along County Highway M and US Highway 14/Main Street.</li> <li>• WisDOT is requiring a left turn lane for eastbound traffic on US Highway 14/Main Street.</li> </ul>
3. Land Use	<ul style="list-style-type: none"> <li>• Comprehensive Plan Future Land Use Category: Walkable Business</li> <li>• B-3 Community Business is a district that accommodates and encourages walkable features.</li> </ul>
4. Traffic Generation	<ul style="list-style-type: none"> <li>• Site anticipated to generate over 3,000 trips per day, with a peak of 110-120 trips/hour during rush hours.</li> <li>• Traffic study builds off that provided by CHS for its oilseed processing plant. Current conditions were measured in April 2023 and October 2023, and capture harvest traffic</li> <li>• Southbound traffic on County Highway M decreases its Level of Service from B to C, indicating that traffic backing up will</li> </ul>



Criteria	Staff Comment
	become an occasional occurrence because of this development.
5. Community Effects	<ul style="list-style-type: none"> <li>24 hour convenience store would provide options for residents, especially those who work shifts with non-traditional hours</li> <li>Increases non-residential portion of City's tax base</li> </ul>
6. Other Relevant Factors	<p>Off Site improvements that will be required as part of approval include:</p> <ul style="list-style-type: none"> <li>A dedicated left turn lane on eastbound Main Street/US Highway 14</li> <li>Applicant to work with City to coordinate continuation of the public sidewalk north from 14/M intersection to the connected path north of the stormwater pond</li> </ul>

### B-3 Zoning District Bulk Requirements

Sec. 130-827. Requirements for non-residential uses.	B-3 Community Business	Kwik Trip	Met?
<b>1. Non-Residential Intensity</b>			
a. Max # of Floors	4	1	
b. Min Landscape Surface Ratio	15%	57%	
c. Max Building Coverage	60%	6%	
d. Max Floor Area Ratio	1.5	0.56	
e. Minimum lot area	9,000 square feet	165,553 square feet	
f. Max Building Size	20,000 square feet	9,195 square feet	
g. Max Parking Lot Street Frontage	50%	61% on front yard (County M side)	
<b>2. Non Residential bulk and lot dimensions</b>			
a. Minimum lot area	9,000 square feet	165,553 square feet	
b. Min Lot Width	70 feet	OK	
c. Min Street Frontage	50 feet	OK	
<b>3. Minimum setbacks and building separation</b>			
a. Building to Front Lot Line Building to Street Side Lot Line Either of above next to ROW of 100+ feet	10 feet  35 feet	OK	

Sec. 130-827. Requirements for non-residential uses.	B-3 Community Business	Kwik Trip	Met?
b. Building to resident. side lot line	10 feet	OK	
c. Building to resident. rear lot line	25 feet	n/a	
d. Building to nonres. side lot line	10 feet or zero feet on zero lot line side	n/a	
e. Building to nonres. rear lot line	25 feet	n/a	
f. Min paved surface setback- Side/rear	5 feet	OK	
g. Min paved surface setback - Street	10 feet	OK	
h. Min building separation	12 feet, or zero feet on zero lot line side	n/a	
<b>4. Max building height</b>	40 feet	Applicant to verify building height	
<b>5. Driveways and Access</b>			
a. Max width at sidewalk	25 feet	Plans show 35' at both driveways.  Pedestrian crosswalks should also be clearly painted going across driveways.	
b. One driveway allowed per street on which lot has frontage	1		

#### Site Plan/Conditional Use Standards

Sec. 130-418. Gas station/convenience store/food counter.	Kwik Trip	
a. Clearly marked pedestrian crosswalks shall be provided for each walk-in customer access to the facility adjacent to the gas pumps and driving lanes	None shown for diesel or gasoline areas. Should be marked on pavement, especially for pumps marked as accessible.	
b. Any convenience store/food counter building shall be located within the building envelope closest to the street side or occupy the corner area of any lot it occupies. Gas pump areas shall not be located in any front yard area.		
c. The gas pump areas shall be designed so as to not impede or impair vehicular traffic movement, or exacerbate the potential for pedestrian/vehicle conflicts.	This site features a large amount of pavement and little internal traffic control. Along the northern edge of the property there is a stretch of pavement over 600' long and at least 30' wide with no barriers to thru traffic.	

Sec. 130-418. Gas station/convenience store/food counter.	Kwik Trip	
d. In no instance shall a gas pump area be permitted to operate (in a manner) which endangers the public safety, even if such a land use has been permitted under the provisions of this article.	This gives the City the ability to address dangerous conditions after the business is built and operating.	Green
e. The setback of any overhead canopy or similar structure shall be a minimum of 10 feet from all street right-of-way lines and a minimum of 20 feet from all residentially zoned property lines, and shall be a minimum of 5 feet from other property lines. The total height of any overhead canopy or similar structure shall not exceed 20 feet as measured to the highest part of the structure.	Setbacks of canopy areas are OK.  Applicant to verify height of canopies.	Yellow
f. All vehicular areas of the facility shall provide a surface paved with concrete or bituminous material which is designed to meet the requirements of a minimum four-ton axle.		Green
g. The facility shall provide a bufferyard along all property borders abutting residentially zoned property with a minimum opacity per section 130-270.	Submitted landscape plan shows good screening for this area but conflict with easement requirements.	Red
h. Interior curbs shall be used to separate driving areas from exterior fixtures such as fuel pumps, vacuums, menu boards, canopy supports, and landscaped islands. The curbs shall be a minimum of six inches high and be of a nonmountable design. No curb protecting an exterior fixture shall be located closer than 25 feet to any property line.		Green
i. Such uses shall comply with article II, division 4 of this chapter, pertaining to standards and procedures applicable to all conditional uses.	Standard condition to ensure any uses to not become nuisances.	Green

Key:

Green = compliant

Yellow = legal but may require further inspection

Red = non-compliant

“OK” denotes a condition that is currently existing and conforming the zoning district.

### Landscape Regulations (Article IV, Ch. 130)

Total needed: 3,776 points.

Kwik Trip: 4,916 points (submitted)/1,666 approvable

#### Comments:

- The current sight is home to a number of mature trees. Staff requested that trees in good condition be kept to the extent practically possible. The current plan protects and keeps 8 mature trees on site.
- Good pedestrian linkages to public sidewalk and around building.
- 850 points are street trees located off property between the curb and sidewalk next to the westbound lane of Main Street/US Highway 14. Staff would like to see these relocated to the opposite side of the sidewalk to improve visibility of pedestrians/bicyclists.
- 2,400 points are evergreens planted in an area subject to an easement with the American Transmission Company (ATC). The easement in place grants rights to ATC to remove any plant growth in the area that could interfere with the operation of the power line. *Landscaping is met to be a permanent feature of the site.*
- No landscape islands in the parking lot are shown. Landscape islands are required per Section 130-265(6) for parking areas over 10,000 square feet. Landscape islands could be used to separate and direct traffic throughout the site.

### Other Relevant Zoning Code Standards

#### Performance Standards (Article III, Ch. 130)

Plan Commission to consider nuisances or adverse impacts related to air pollution, fire/explosive hazards, glare/heat, liquid/solid wastes, noise, odors, radioactivity, electrical disturbances, vibration, or water quality.

Staff comments that diesel canopy is close to a residential neighborhood with little in the way of shielding noises. Per the sign ordinance, the canopy will not have backlit signage. There will still be the issue of light emitting from the canopy, which should not cross property lines or measure more than 0.5 footcandles at the property line.

Staff has also received comments from neighbors concerned about negative health impacts from living so close to a gas station.

#### Signs (Article X, Ch. 130)

Sheet C100 from the Civil Set shows a pylon sign at the Highway 14/Main Street Entrance. Sheet SP1 from the Sign Plan detail sheets shows a monument sign at western edge of Pond 2. The details for signs include one for a pylon sign but not a monument. Only one will be allowed. Staff suggests a monument sign as backlit signage is not allowed. One sign featuring fuel prices is allowed.

No LED strips or backlit illumination allowed on canopies. Halo lighting OK.

Logo signage on building will need to be illuminated from a top-down light source.

All lighting must be dark sky compliant.

<b>Parking</b> <b>(Article XI, Ch. 130)</b>	
<b>Section 130-419(3)</b> <i>One space per 300 square feet of gross floor area for convenience store // Needs 31</i> <i>One space per 3 seats of food counter seating // n/a</i> <i>One Space per employee on the largest work shift of the food counter // Needs 3</i> <i>Total parking not to exceed 15% of minimum needed</i> <b>Total needed:</b> 34 total, 2 accessible (39 max)  <b>Kwik Trip:</b> 36 total, 2 accessible <b>Comments:</b> Zoning code does not indicate if fueling stations are considered parking spaces. If fueling stations are included, 20 additional spots could be considered parking areas. Staff is aware not all customers come to this location for fuel. This could be an argument for some flexibility if the site design needs to change at the expense of parking spaces.	

<b>Lighting</b> <b>(Article XI, Ch. 130)</b>	
Lighting plan needed to ensure lighting does not trespass onto neighboring residential properties. Max illumination at property line shared with residences cannot exceed 0.5 footcandles.	







E MAIN ST

N COUNTY RD M





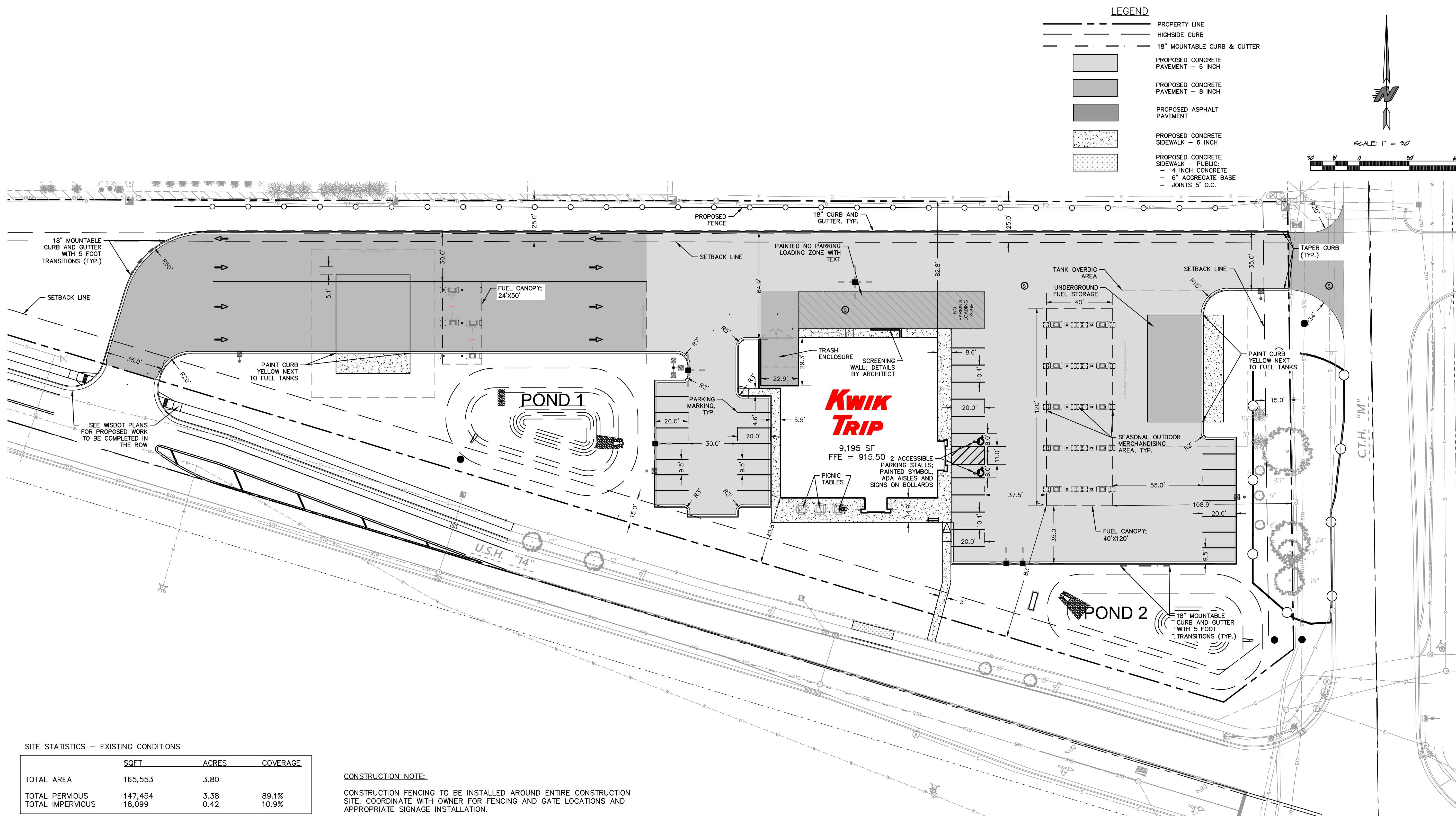












KWIK TRIP, Inc.  
P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
FAX (608) 781-8960

**raSmith**  
CREATIVITY BEYOND ENGINEERING  
16745 W. Blueround Road  
Brookfield, WI 53005-5938  
(262) 781-1000  
rasmith.com



**SITE DIMENSION PLAN**

**CONVENIENCE STORE #1750 WITH 10 MPD & 2-LN DIESEL**

HIGHWAY 14 & COUNTY ROAD W  
EVANSVILLE, WI

#	DATE	DESCRIPTION

DRAWN BY	MAC
SCALE	GRAPHIC
PROJ. NO.	3240196
DATE	10/08/2024
SHEET	C181

**SITE STATISTICS - EXISTING CONDITIONS**

	SQFT	ACRES	COVERAGE
TOTAL AREA	165,553	3.80	
TOTAL PERVIOUS	147,454	3.38	89.1%
TOTAL IMPERVIOUS	18,099	0.42	10.9%

**SITE STATISTICS - PROPOSED CONDITIONS**

	SQFT	ACRES	COVERAGE
TOTAL AREA	165,553	3.80	
TOTAL PERVIOUS	74,692	1.71	45.1%
TOTAL IMPERVIOUS	90,861	2.09	54.9%

**PARKING STATISTICS**

STANDARD PARKING STALLS	34
ACCESSIBLE STALLS	2
STANDARD FUELING STALLS	18
ACCESSIBLE FUELING STALLS	2
DIESEL FUELING STALLS	2
TOTAL PARKING SPACES	58

**CONSTRUCTION NOTE:**  
CONSTRUCTION FENCING TO BE INSTALLED AROUND ENTIRE CONSTRUCTION SITE. COORDINATE WITH OWNER FOR FENCING AND GATE LOCATIONS AND APPROPRIATE SIGNAGE INSTALLATION.

- LAYOUT NOTES:**
- PLAN PREPARED FROM BATTERMAN ALTA/NSPS LAND TITLE SURVEY, DATED 04/09/2024.
  - CURBS ARE DIMENSIONED TO FACE OF CURB.
  - CONCRETE IN ISLAND COMPLEX AND UNDER CANOPY TO BE ROUGH BROOM FINISHED. SIDEWALKS ADJACENT TO BUILDING SHALL BE SMOOTH BROOM FINISHED.
  - EXTERIOR CONCRETE SURFACES TO BE SEALED. CONCRETE SEALER: APR 15- OCT 31 USE: TK-26UV NOV 1- DEC 31 USE: TK-290
  - EXPANSION JOINTS SHALL BE DECK-O-FOAMED AND CAULKED WITH SL1
  - ALL WORK WITHIN THE CITY RIGHT OF WAY AND CITY EASEMENTS TO BE IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS AND DETAILS. NOTIFY CITY ENGINEERING DEPT. 5 DAYS PRIOR TO WORK IN THE RIGHT OF WAY.

P:\3240196\Draws\Sheets\3240196-SFD02.dwg, SITE DIMENSION PLAN, 10/08/2024 1:52:53 PM, mof2



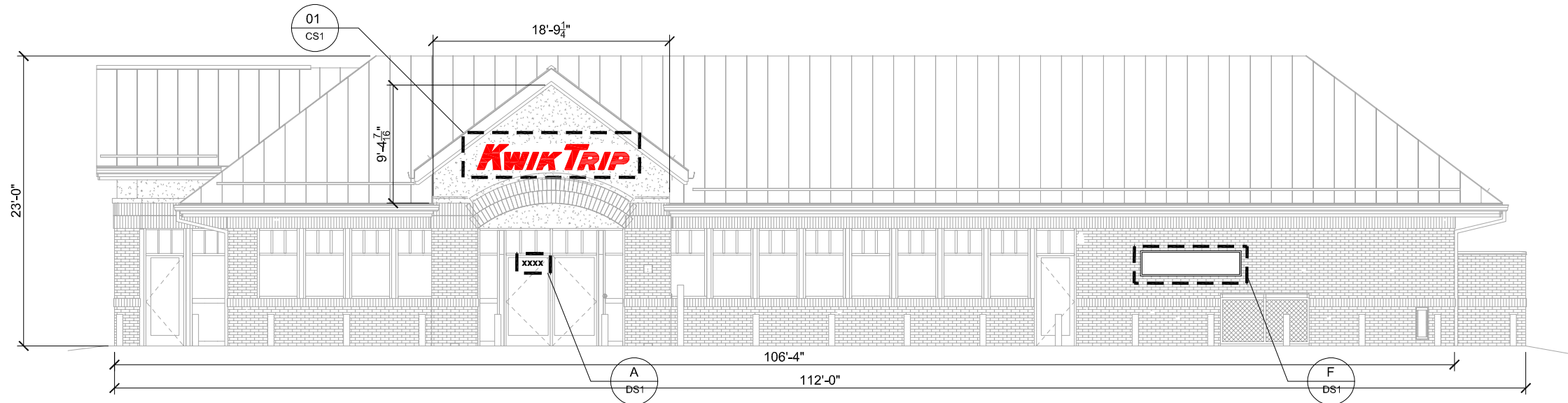






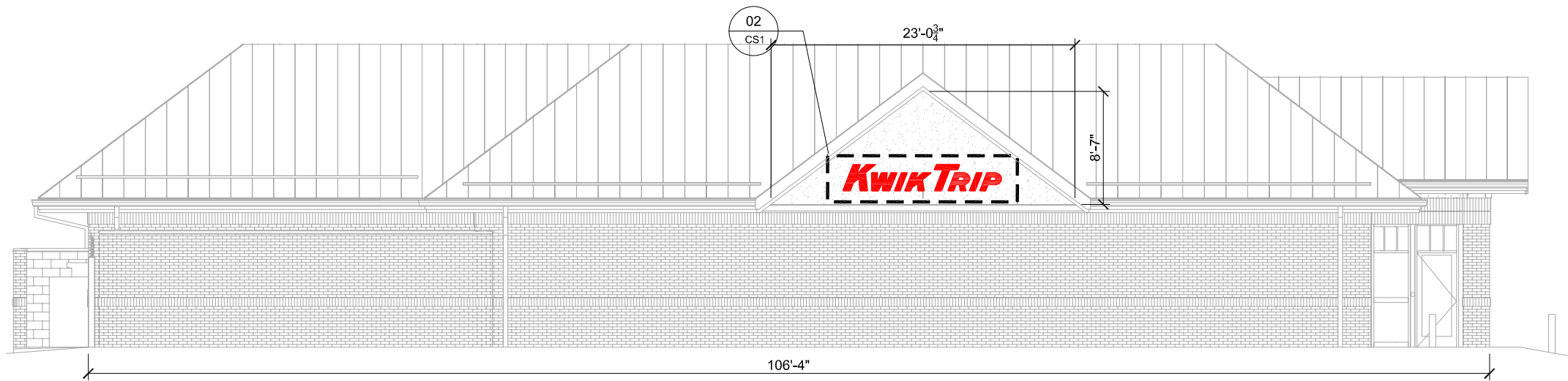






**STORE ELEVATION**

SCALE: 3/32" = 1'-0"



**STORE ELEVATION**

SCALE: 3/32" = 1'-0"



**LOGO DETAIL - SIGNS #01 & #02**

SCALE: 1/2" = 1'-0"

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TRIP**

**Kwik  
STAR**

KWIK TRIP, Inc.  
P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
FAX (608) 781-8960

CONVENIENCE STORE SIGNAGE

CONVENIENCE STORE #1750  
WITH SIDE DIESEL

HWY 14 & CTY RD M  
EVANSVILLE WI

#	DATE	DESCRIPTION

DRAWN BY	X.XXXXX
SCALE	MULTIPLE
PROJ. NO.	0001
DATE	2024 10/09
SHEET	CS1





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P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
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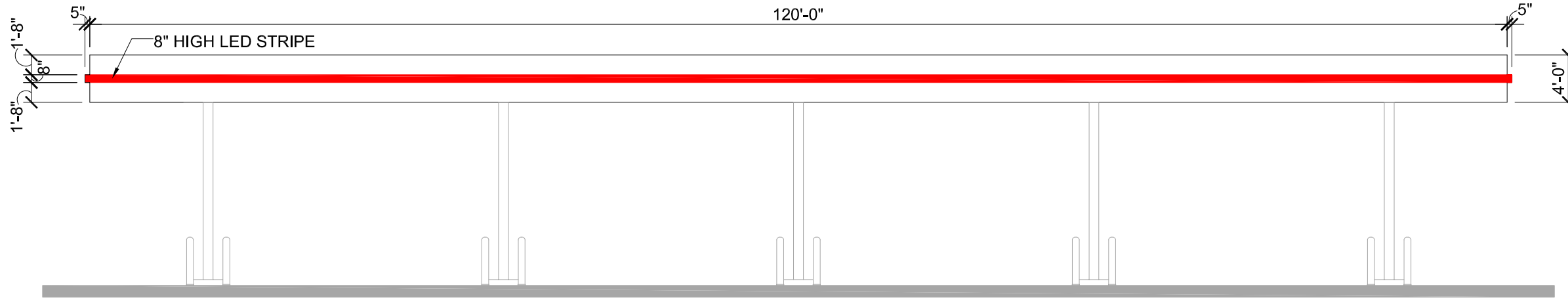
CANOPY SIGNAGE

CONVENIENCE STORE #1750  
WITH SIDE DIESEL

HWY 14 & CTY RD M  
EVANSVILLE WI

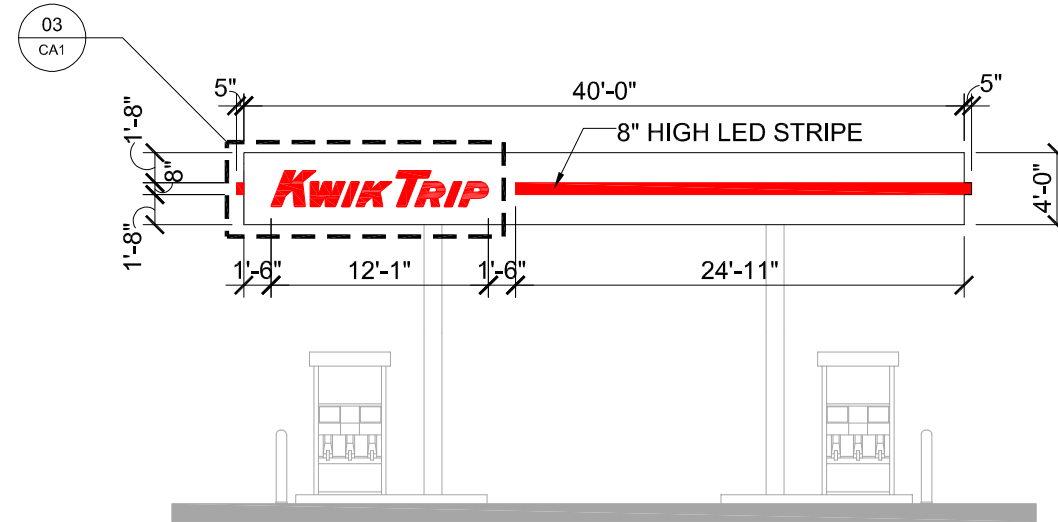
#	DATE	DESCRIPTION

DRAWN BY	X.XXXXX
SCALE	MULTIPLE
PROJ. NO.	0001
DATE	2024 10/09
SHEET	CA1



**CANOPY ELEVATION**

SCALE: 3/32" = 1'-0"



**CANOPY ELEVATION**

SCALE: 3/32" = 1'-0"



**LOGO DETAIL - SIGN #03**

SCALE: 1/2" = 1'-0"

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**Kwik  
STAR**

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P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
FAX (608) 781-8960

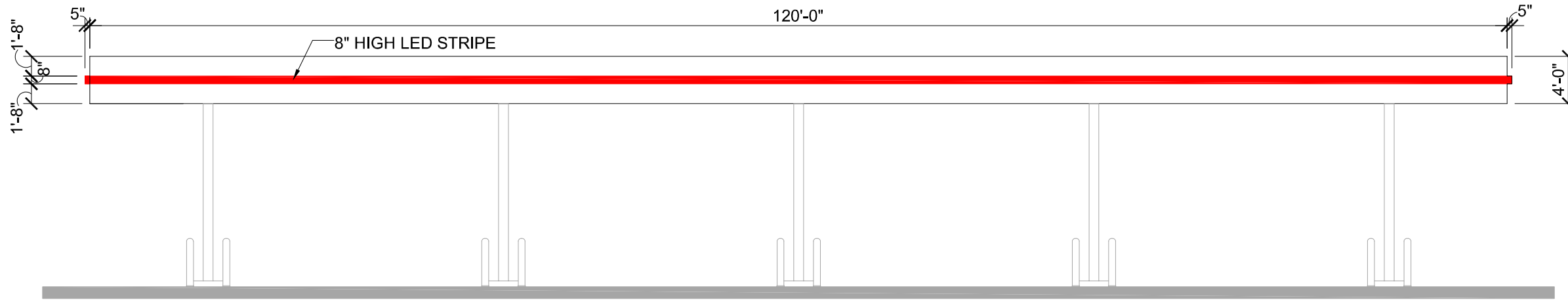
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CONVENIENCE STORE #1750  
WITH SIDE DIESEL

HWY 14 & CTY RD M  
EVANSVILLE WI

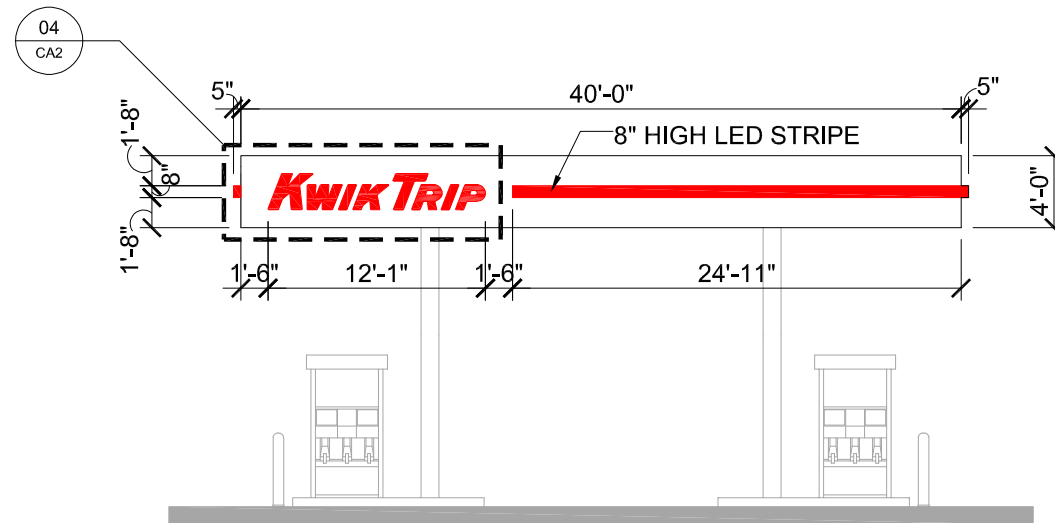
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DRAWN BY X.XXXXX  
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PROJ. NO. 0001  
DATE 2024 10/09  
SHEET CA2



**CANOPY ELEVATION**

SCALE: 3/32" = 1'-0"



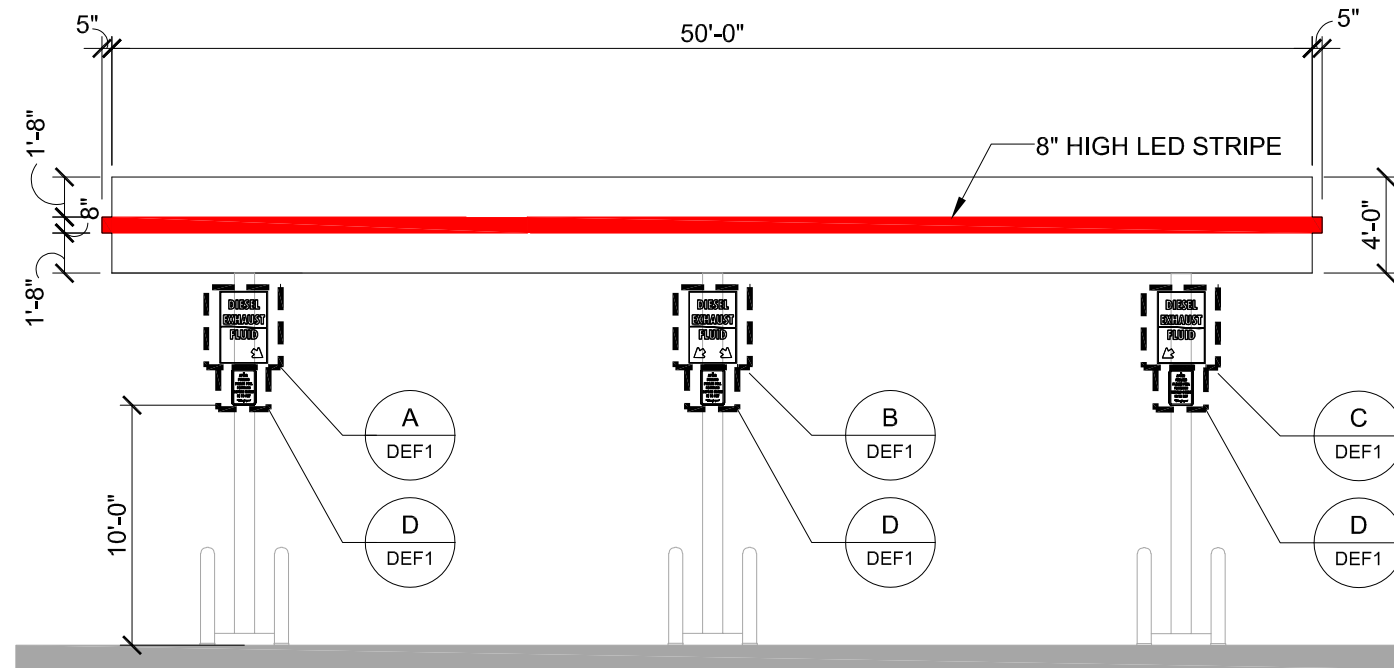
**CANOPY ELEVATION**

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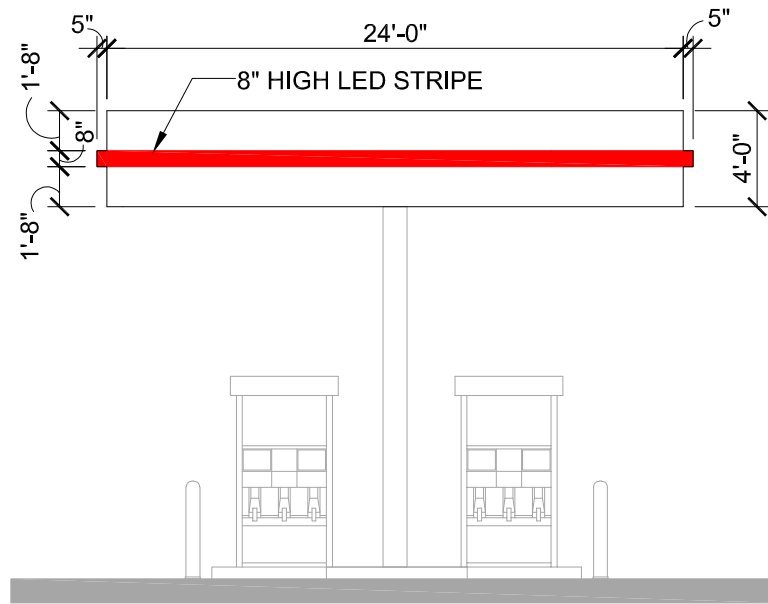
**LOGO DETAIL - SIGN #04**

SCALE: 1/2" = 1'-0"



**CANOPY ELEVATION**

SCALE: 1/8" = 1'-0"



**CANOPY ELEVATION**

SCALE: 1/8" = 1'-0"

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TRIP**

**KWIK  
STAR**

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P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
FAX (608) 781-8960

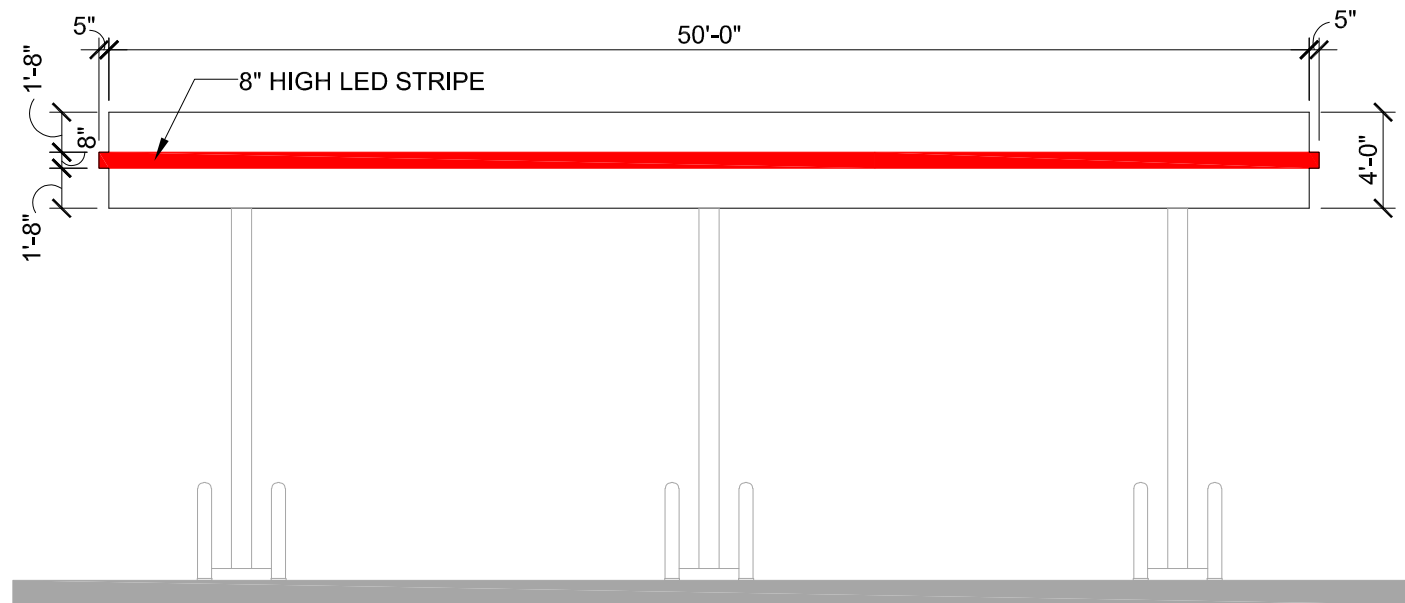
CANOPY SIGNAGE

CONVENIENCE STORE #1750  
WITH SIDE DIESEL

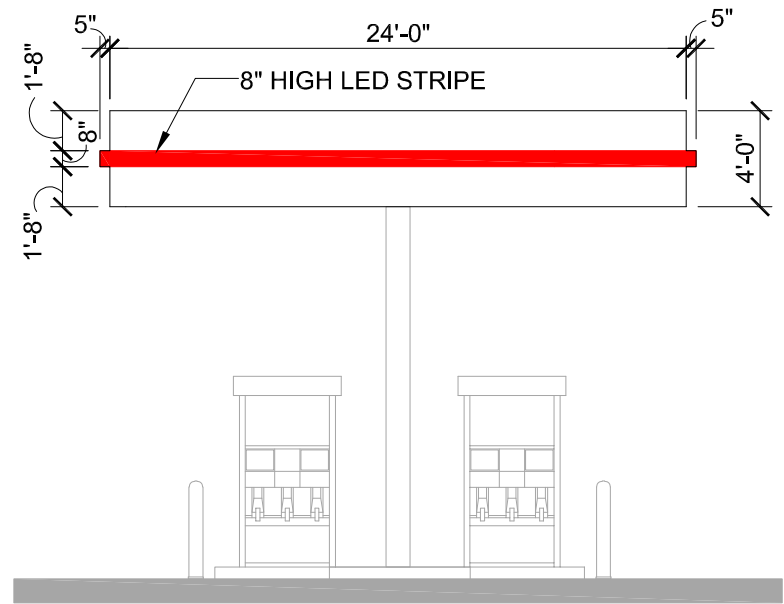
HWY 14 & CTY RD M  
EVANSVILLE WI

#	DATE	DESCRIPTION

DRAWN BY X.XXXXX  
SCALE MULTIPLE  
PROJ. NO. 0001  
DATE 2024 10/09  
SHEET CA3



**CANOPY ELEVATION**  
SCALE: 1/8" = 1'-0"



**CANOPY ELEVATION**  
SCALE: 1/8" = 1'-0"



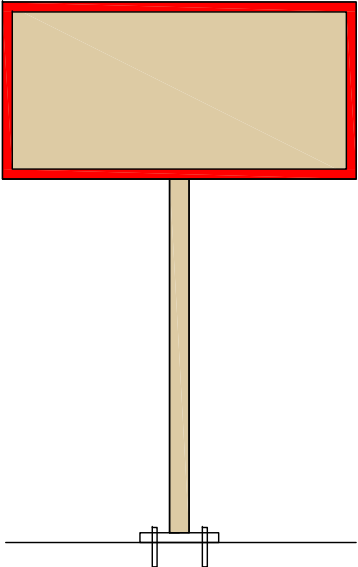
KWIK TRIP, Inc.  
P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
FAX (608) 781-8960

CANOPY SIGNAGE  
CONVENIENCE STORE #1750  
WITH SIDE DIESEL  
HWY 14 & CTY RD M  
EVANSVILLE WI

#	DATE	DESCRIPTION

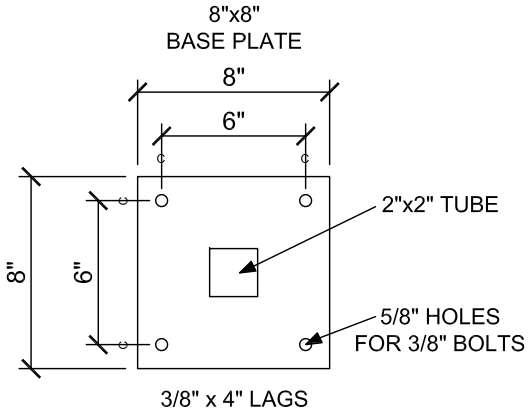
DRAWN BY X.XXXXX  
SCALE MULTIPLE  
PROJ. NO. 0001  
DATE 2024 10/09  
SHEET CA4

SINGLE SIDED NON-LIT DIRECTIONAL SIGN



**DIRECTIONAL SIGN EXAMPLE**

SCALE: NTS



**NOTES:**

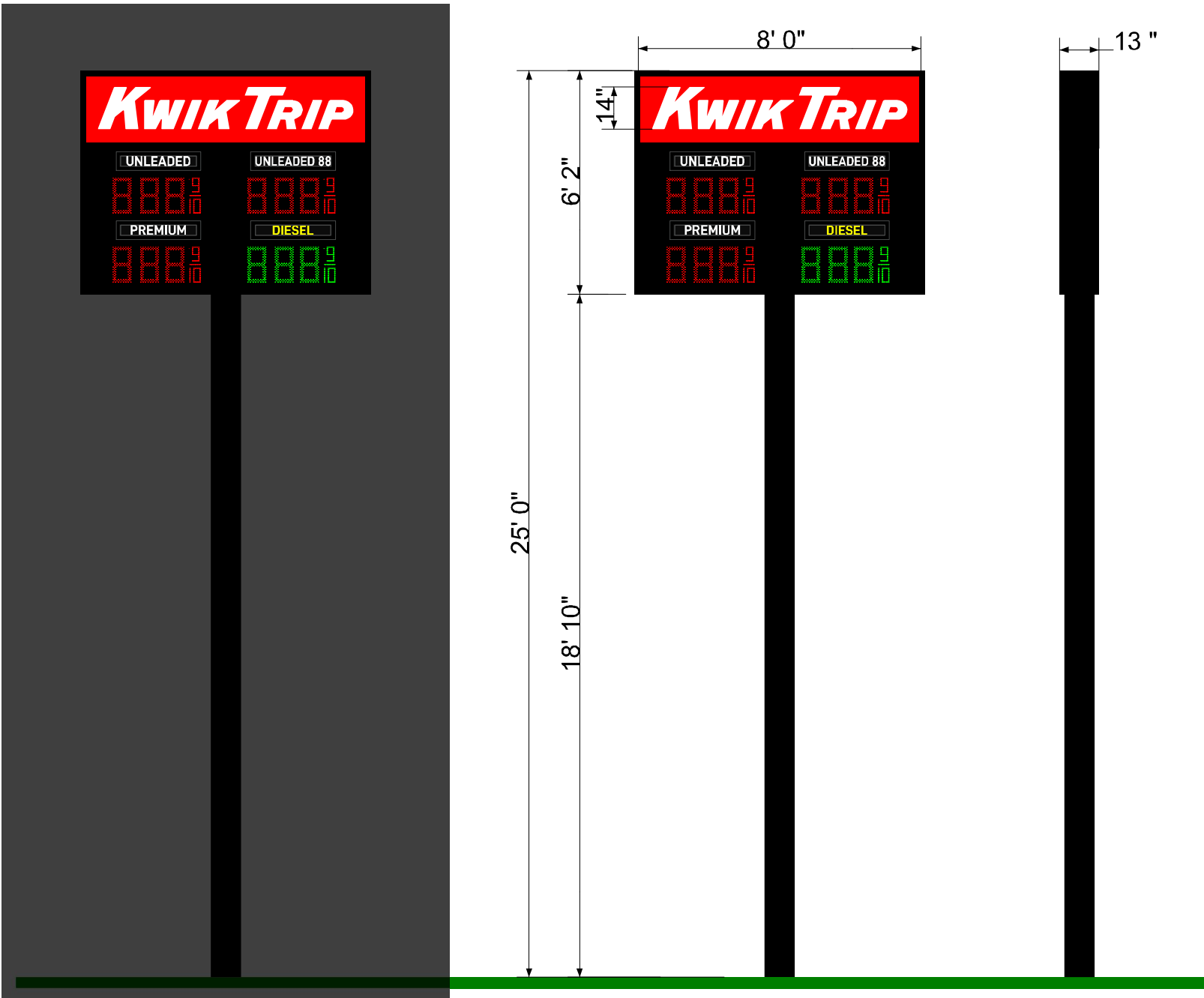
- Sign vendor to anchor sign/s to concrete pad
- Sign vendor to anchor signs with (4) 3/8" x 4" lags & shield anchors. Use stainless steel hardware
- Stainless steel flat washers may be used under base plate as needed to shim sign to be plumb
- Concrete Pad installed by others (Kwik Trip/Kwik Star Concrete Vendor)
  - Concrete Pad to be 5"x 36"x 36"
  - Center of footing to be installed 48" from face of curb



**DIRECTIONAL SIGN BASE PLATE**

SCALE: 1 1/2" = 1'-0"

	KWIK TRIP, Inc. P.O. BOX 2107 1626 OAK STREET LA CROSSE, WI 54602-2107 PH. (608) 781-8988 FAX (608) 781-8960	PROJECT: Store- All Stores Date - 08/31/2023  DESCRIPTION: All Directional signs will have a single post per the detail above	SCB #1



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**Client**

Kwik Trip #1750  
 Evansville, WI

**Project**

A - Pylon

Consultant

Carlee Strong

Design Art

Danielle Hadley

**Pylon Sign Specifications**

- Fabricated Aluminum KT Cabinet w/ White LED Illuminated Faces
- Fuel Products Have Opaque Background w/ Illuminated Copy & 12" Pricers

**Area**

49.33 Total sqft

**Color Key**

- ① ■ Black S/G
- ② ■ PMS 186c Red
- ③ □ White Lexan
- ④ ■ Black (3630-22)
- ⑤ ■ Yellow (3630-015)
- ⑥ □

**Job Number**

127040 A

**Creation Date**

10/15/2024

**Revision Date**

**Revision Number**

**File Path**

1 - Kwik Trip\Evansville, WI 1750\127040-Artwork for  
 KT1750 Evansville\Design\1750 Evansville Art  
 127040 Pylon A

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_ Landlord: \_\_\_\_\_ Date: \_\_\_\_\_

\*Colors on sketch are only a representation, actual color of finished product may differ from this sketch.

\*To make the best use of standard sized materials and control costs the size of the finished product may vary slightly.



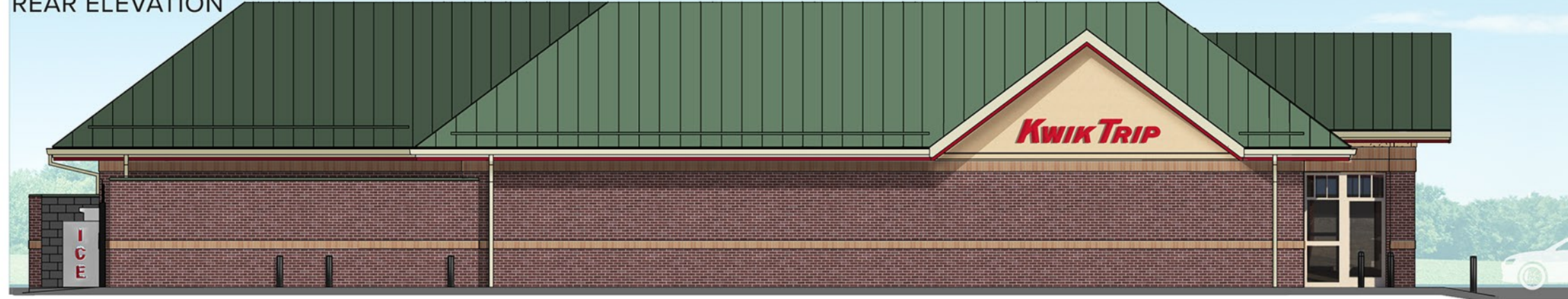
FRONT ELEVATION



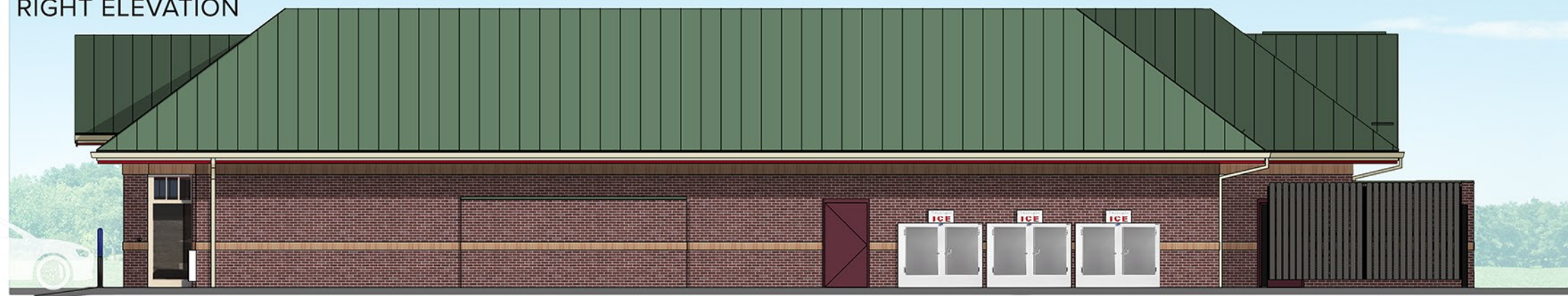
LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



A NEW CONVENIENCE STORE FOR  
Evansville, WI



KWIK TRIP, Inc.  
P.O. Box 2107  
1626 Oak Street  
La Crosse, WI 54602  
PH. (608) 781-8988





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P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
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DIESEL





***Kwik  
TRIP***

***Kwik  
STAR***

KWIK TRIP, Inc.  
P.O. BOX 2107  
1626 OAK STREET  
LA CROSSE, WI 54602-2107  
PH. (608) 781-8988  
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10 MPD





Building a Better World  
for All of Us®

## MEMORANDUM

TO: Seth Waddell, Development Manager, Kwik Trip, Inc.

FROM: Josh Woller, PE (Lic. WI, IN, & IL)

DATE: September 9, 2024

RE: Evansville Kwik Trip Abbreviated Traffic Impact Analysis  
SEH No. 178119 14.00

Kwik Trip is proposing a new fuel station / convenience store in the northwest quadrant of USH 14 & CTH M in the City of Evansville. The proposed development site is a 4-acre site which is currently occupied by a residential parcel. As part of the development and permitting process, the City of Evansville has requested an abbreviated traffic impact analysis to be conducted to determine the impacts the new development will have on the adjacent roadway network. Short Elliott Hendrickson, Inc (SEH) conducted an abbreviated traffic impact analysis to identify existing traffic volumes on the adjacent street system, the traffic expected to be generated by the proposed development, and the operational impacts on the local roadway network.

The proposed development will have two full access driveways. One access point will be located at the west end of the site on USH 14 and one access point will be located along CTH M, directly across from the existing Piggly Wiggly Driveway. Each driveway is proposed to provide full access to the site and will be utilized by all vehicle types. A project location map and the site plan are included with Attachment A to this memorandum.

This memorandum documents the procedures, findings, and conclusions of the abbreviated traffic impact analysis.

### Study Area / Data Collection

The traffic study area is along USH 14 and CTH M in the immediate vicinity of the proposed site. SEH completed AM and PM peak hour turning movement traffic counts, utilizing video camera equipment, at the following intersections that are located adjacent to the proposed development:

- USH 14 & CTH M (Traffic Signal Control)
- CTH M & Piggly Wiggly Driveway (Stop Control)

The USH 14 & CTH M intersection was counted on October 19, 2023. The weekday AM peak hour was identified as 7:00 am to 8:00 am and the weekday PM peak traffic hour was identified as 4:15 pm to 5:15 pm. The CTH M & Piggly Wiggly Driveway was counted on June 27, 2024. The weekday AM peak hour was identified as 7:00 am to 8:00 am and the weekday PM peak hour was identified as 4:00 pm to 5:00 pm. Because the Piggly Wiggly Driveway was counted while school was not in session and outside of harvest season the CTH M through volumes were increased to balance traffic with the USH 14 & CTH M intersection. The existing traffic volumes for the study area are included with Attachment B.

There is currently existing sidewalk along both sides of USH 14, west of CTH M and sidewalk on the north side of the road east of CTH M. CTH M has sidewalk on the east side of the road. Minimal pedestrian

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 6808 Odana Road, Suite 200, Madison, WI 53719-1137

SEH is 100% employee-owned | [sehinc.com](http://sehinc.com) | 608.620.6199 | 800.732.4362 | 888.908.8166 fax





All the intersection movements at the study area intersections operate acceptably with LOS C or better during the AM and PM peak hours. Overall, the intersection operates at LOS B during both the AM and PM peak periods.

### **Off-Site Development Traffic**

The City of Evansville has approved plans for a processing center located in the SE quadrant of the intersection. A discussion on the number of trips anticipated to be generated by this site is provided below. In order to determine off-site development traffic operations, the proposed trips from this facility were added to the existing count data.

#### Trip Generation

For final build operations a typical week, the development is anticipated to generate 3,036 truck per week with 95% of these trucks operating between Monday and Friday. Furthermore 95% of those trips are expected to occur over a 12-hour period with those trips being evenly distributed over that time. The remaining 5% of trips will occur during off-peak times. During a typical weekday hour, the development is anticipated to generate 90 truck trips (45 entering / 45 exiting).

Employee counts at the facility are expected to be minimal and the proposed shift changes at 6:00 AM and 6:00 PM do not align with the current roadway peak hours. For the purpose of this study, it is assumed that 40 employees (20 entering / 20 exiting) will be generated at shift changes, but since they are outside of the existing roadway peaks they were not included in the analysis.

#### Mode Split

The development area currently has no pedestrian accommodations and is in a rural area. Given this, no reduction in the number of vehicle trips to include walking and bicycle trips was applied.

#### Linked and Pass-by Trip Traffic

Due to the development type no reductions were applied for Linked Trips or Pass-by Trips.

#### Trip Distribution

Trip distribution was based on the existing traffic patterns, the proposed land use, and the location of population centers, as well as site access. Trips were assigned to the study area roadways in accordance with the following trip distribution:

- 33.3% to/from east on USH 14
- 33.3% to/from west on USH 14
- 33.3% to/from south on CTH M

In order to evaluate the off-site development operations of the study intersections the anticipated trips were added to the existing traffic counts. The off-site development traffic operations capacity analysis is based on existing geometrics and traffic control. Table 2 summarizes the weekday AM and PM peak hour traffic operating conditions for the off-site development traffic. Synchro Version 11, HCM outputs are included in Attachment C.

**Table 2**  
**Off-Site Development Volumes / Existing Conditions LOS, by Movement**

Intersection	Traffic Control	Peak Hour	Level of Service (Delay, sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH M & Piggly Wiggly Driveway	Two-Way Stop Control	AM	--			B (10.0)			A (0.0)			A (7.5)		A (0.0)
		PM	--			B (12.8)			A (0.0)			A (7.9)		A (0.0)
USH 14 & CTH M	Traffic Signal Control	AM	A (9.1)	A (6.1)	B (11.5)	B (15.9)	B (18.1)	B (16.3)	B (17.4)	B (16.5)				
		PM	A (9.3)	A (6.9)	B (13.4)	B (16.1)	C (21.6)	B (17.3)	B (19.2)	B (19.3)				

All the intersection movements at the study area intersections continue to operate acceptably with LOS C or better during the AM and PM peak hours. Overall, the intersection operations at LOS B during both the AM and PM peak periods.

### Site Traffic Forecasting

To address any potential future traffic impacts at the study area intersections, it is necessary to identify the hourly volume of traffic generated by the anticipated development. The Wisconsin Department of Transportation (WisDOT) has developed specific formulas that are used to generate these numbers.

### Trip Generation

Expected peak hour trips were determined by using the WisDOT formula noted above. The formula is based on population, the number of vehicle fueling positions (20, vehicle, 2 diesel) and the size of the convenience store (9,000 sf).

During a typical weekday morning peak hour, the development is anticipated to generate 276 trips (140 entering / 136 exiting). Of those trips, 56 are expected to be pass-by trips (discussed below), resulting in 220 new trips during the weekday AM peak. During a typical weekday PM peak hour, the development is anticipated to generate 276 (138 entering / 138 exiting). Of those trips, 56 are expected to be pass-by trips, resulting in 220 new trips during the weekday PM peak.

**Table 3**  
**Evansville Kwik Trip, Trip Generation**

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak			PM Peak		
				In	Out	Total	In	Out	Total
Gasoline/Service Station with Convenience Market	--	22 x Vehicle Fueling Positions	4113	140	136	276	149	149	298
			--	51%	49%	--	50%	50%	--
<b>Subtotal</b>			<b>4113</b>	<b>140</b>	<b>136</b>	<b>276</b>	<b>149</b>	<b>149</b>	<b>298</b>
<b>Total Pass-by Trips (Minus)</b>			<b>823</b>	<b>28</b>	<b>28</b>	<b>56</b>	<b>30</b>	<b>30</b>	<b>60</b>
<b>Total Linked Trips (Minus)</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total New Trips</b>			<b>3291</b>	<b>112</b>	<b>108</b>	<b>220</b>	<b>119</b>	<b>119</b>	<b>238</b>

Notes: 20% of Proposed Trips assumed to be Pass-by Trips

### Mode Split

Due to the minimal amount of pedestrian activity no mode splits were applied for this analysis.

### Linked and Pass-by Trip Traffic

The proposed development does not have any linked (internal) trips because the site operates as a single land use. However, the proposed site will include pass-by trips. Pass-by trips occur when motorists already on the highway system stop at the development site prior to continuing their intended route. Based on the surrounding roadway network, it is assumed that approximately 20 percent of development trips are considered pass-by trips. This value corresponds to approximately 10 percent of the existing daily traffic for the adjacent roadway network. Furthermore, this value corresponds with the current ITE and WisDOT recommended practice of pass-by trips not exceeding 10 percent of adjacent roadway volumes.

### Trip Distribution

Trip distribution was based on the existing traffic patterns, the proposed land use, and the location of population centers. Trips were assigned to the study area roadways in accordance with the following trip distribution:

- 50% enter/exit at CTH M Driveway
  - 40% to/from east
  - 40% to/from west
  - 15% to/from north
  - 5% to/from south
- 50% enter/exit at USH 14 Driveway
  - 40% to/from east
  - 40% to/from west
  - 15% to/from north
  - 5% to/from south

### Trip Assignment

Traffic generated by the Kwik Trip development was assigned to the existing roadway system based on the trip generation and distribution above. New development trips and pass-by trips were assigned and reflect the above directional distributions accordingly. The new development trips and pass-by trips are shown in Attachment B. The existing traffic volumes, site generated traffic, and pass-by traffic were added together to generate the build total traffic volumes, which are also included in Attachment B.

### **Evaluation of Proposed Conditions**

The total build traffic (including background traffic and Kwik Trip generated traffic) peak hour operating conditions based on the existing transportation system are summarized in Table 4 below. The total traffic analysis was completed using existing intersection configurations and traffic control. All development driveways were modeled as single lane approaches.

**Table 4  
 Existing Conditions (Build Traffic) LOS, by Movement**

Intersection	Traffic Control	Peak Hour	Level of Service (Delay, sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
CTH M & Piggly Wiggly Driveway / Kwik Trip Driveway*	Two-way Strop Control	AM	B (10.4)			B (11.9)			A (7.6)	A (0.0)		A (7.5)	A (0.0)	
		PM	B (12.5)			C (18.5)			A (7.9)	A (0.0)		A (7.9)	A (0.0)	
USH 14 & CTH M	Traffic Signal Control	AM	A (9.5)	A (5.9)		B (11.1)	B (16.7)		C (21.5)	B (19.7)		C (21.5)	B (19.3)	
		PM	B (11.0)	A (7.9)		B (14.2)	B (19.0)		C (22.8)	B (18.2)		C (21.2)	B (19.7)	
USH 14 & Kwik Trip West Driveway*	One-way Strop Control	AM	A (8.6)	A (0.0)		A (0.0)			--			B (14.7)		
		PM	A (8.5)	A (0.0)		A (0.0)			--			C (16.7)		

\*All development driveway approaches modeled as single lane approaches.

All the intersection movements at the study area intersections continue to operate acceptably with LOS C or better during the AM and PM peak hours. Overall, the intersection of USH 14 & CTH M continues to operate at LOS B during both the AM and PM peak periods. All development driveways operate at overall LOS A during the AM and PM peak periods.

A queuing analysis was completed utilizing SimTraffic to determine if any potential blocking conditions would occur during the peak hour periods or if anticipated queues would exceed the existing turn lane lengths. During the AM peak all queues are expected to be contained within the existing turn lanes and no driveway blockages are anticipated. During the PM peak the EB left turn 95<sup>th</sup> percentile queue is expected to be 132 feet which slightly exceeds the existing 125 feet of storage. The SB left turn queue is expected to be 102 feet which slightly exceeds the existing 100 feet of storage. No functional blockage is expected from the development driveways during the PM peak.

**Conclusion**

The existing roadway network and the proposed site's access driveways adequately accommodate the build out of the Kwik Trip development under existing traffic conditions. All movements at the study area intersections are expected to operate in an efficient manner as identified in this abbreviated traffic impact analysis. Consideration should be given to extending the EB and SB left turn lanes to account for additional queuing after the development is completed. Extensions should be a minimum of 50 feet.

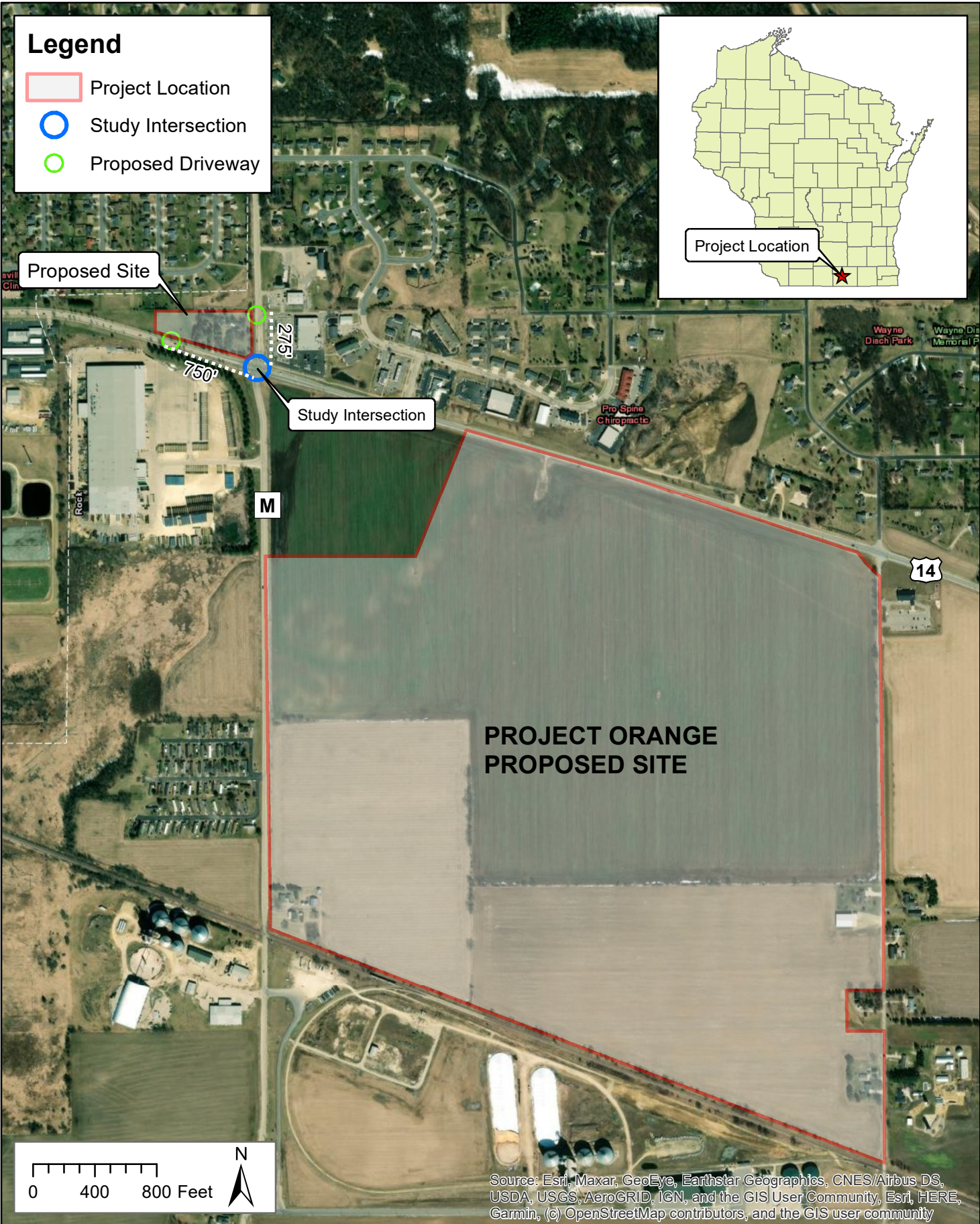
jmw

**Attachments**

- Attachment A – Project Location Map / Proposed Site Plan
- Attachment B – Traffic Volume Exhibits
- Attachment C – Synchro HCM 6 Operational Outputs



# ATTACHMENT A

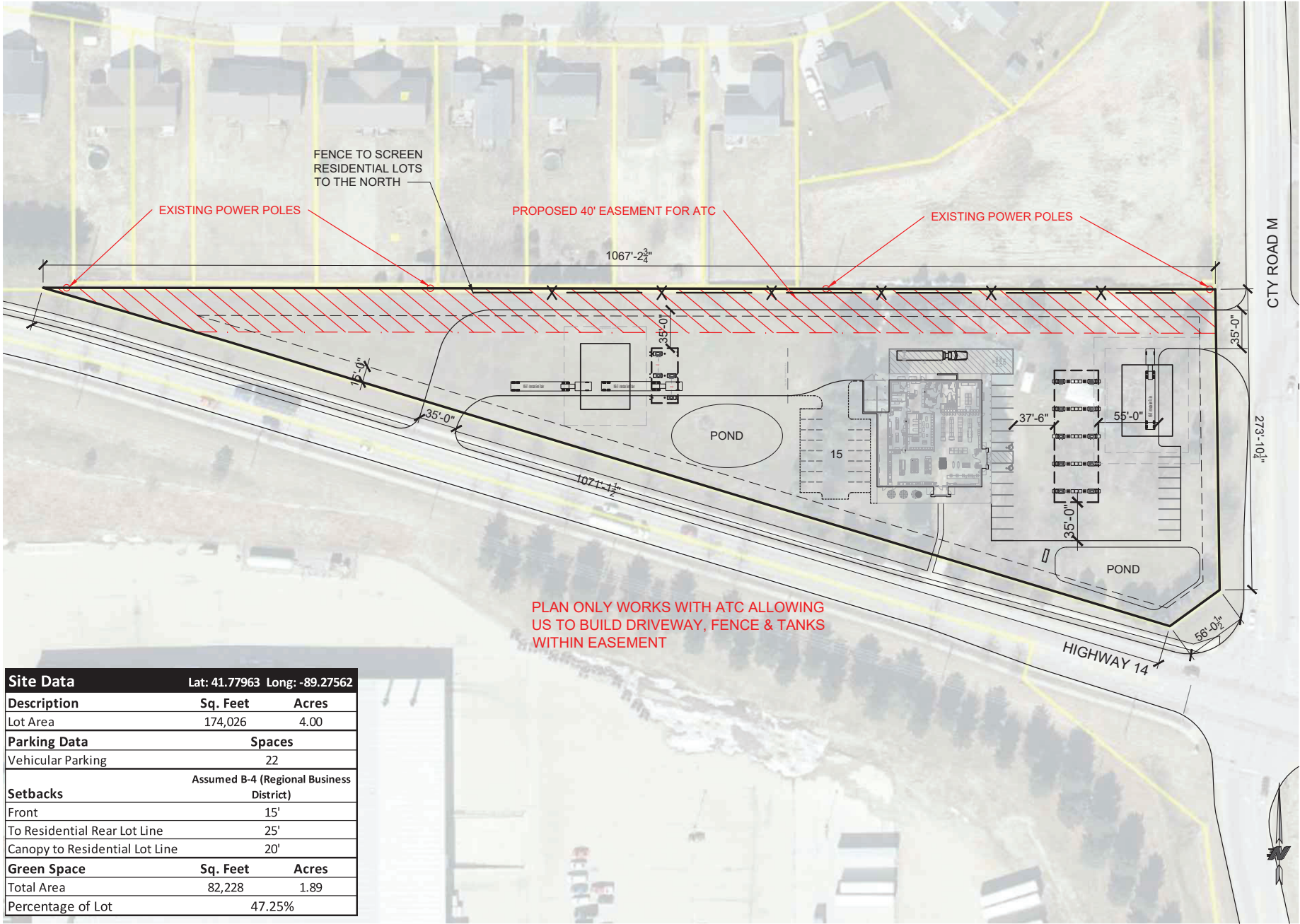


6808 Odana Road  
Suite 200  
Madison, WI 53719  
(608) 620-6199

Project: KWIKT 178119  
Print Date: 3/29/2024  
Map by: Jgreen  
Projection: WISCRS,  
Wood County (ft)

**Exhibit 1 - Project Location Map**  
**Kwik Trip**  
**City of Evansville, Rock County, WI**





KWIK TRIP, Inc.  
 P.O. BOX 2107  
 1626 OAK STREET  
 LA CROSSE, WI 54602-2107  
 PH. (608) 781-8988  
 FAX (608) 781-8960



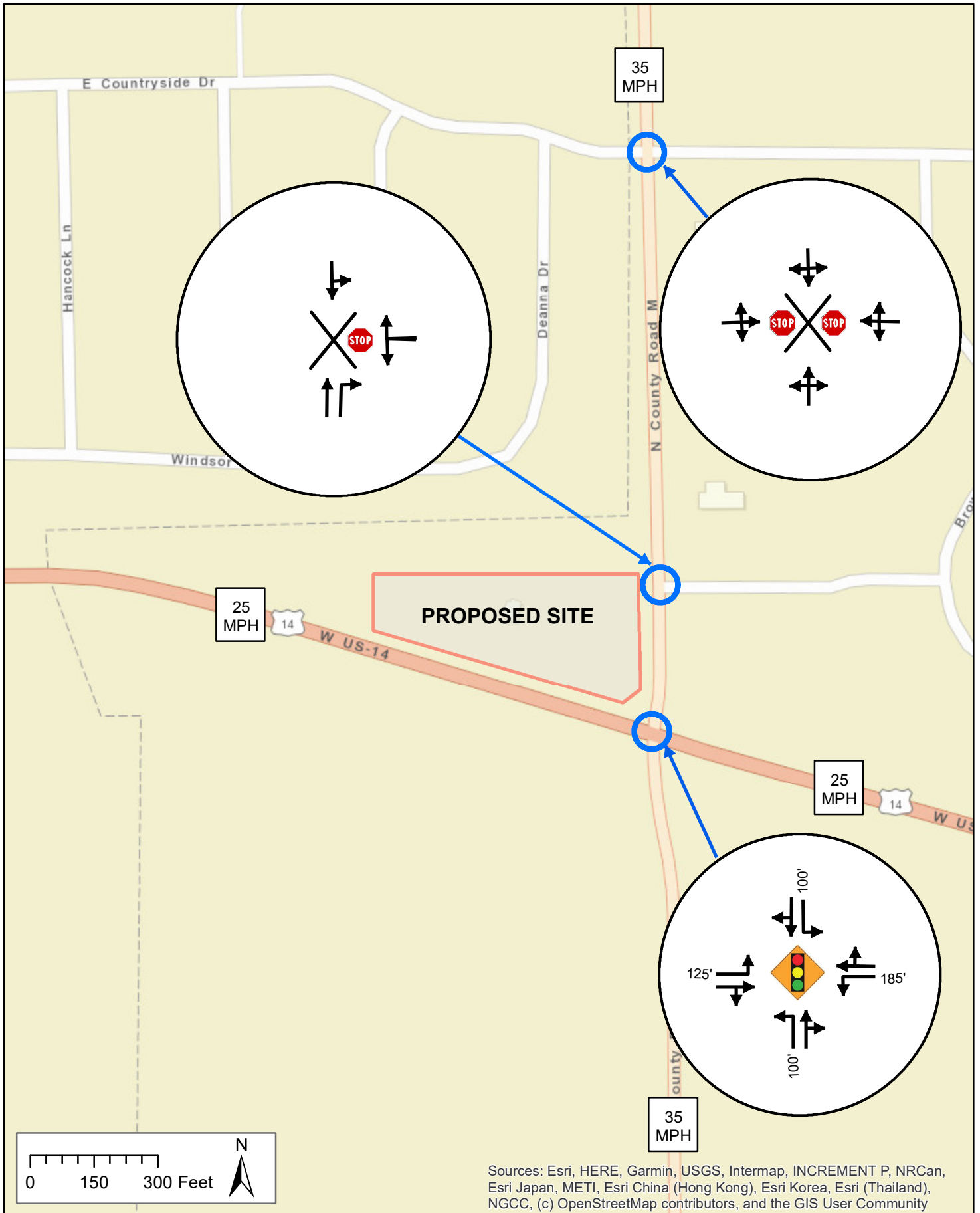
**SITE PLAN**  
**GEN 3 CONVENIENCE STORE**  
**WITH 10 MPD AND 2 LANES DIESEL**  
**HIGHWAY 14 & COUNTY ROAD M**  
**EVANSVILLE, WI**

#	DATE	DESCRIPTION

DRAWN BY: MJM  
 SCALE: 1" = 80'-0"  
 REAL ESTATE REP: N. HAEFS  
 DATE: 2024-05-31  
 SHEET: **SP11**

Site Data		
	Lat: 41.77963 Long: -89.27562	
Description	Sq. Feet	Acres
Lot Area	174,026	4.00
Parking Data		
		Spaces
Vehicular Parking		22
Assumed B-4 (Regional Business District)		
Setbacks		
Front	15'	
To Residential Rear Lot Line	25'	
Canopy to Residential Lot Line	20'	
Green Space		
		Sq. Feet
		Acres
Total Area	82,228	1.89
Percentage of Lot	47.25%	

K:\Retail\drp\Perkins\_SilverStone\_Engineering\_SilverStone\_Development\Potential Star\Evansville, WI ( Hwy 14 & Cty Rd M) (2023) 1750\p\c\0000\Perkins\_SilverStone\_Site\_Plan\SP11.dwg, 5/31/2024 9:25:08 AM

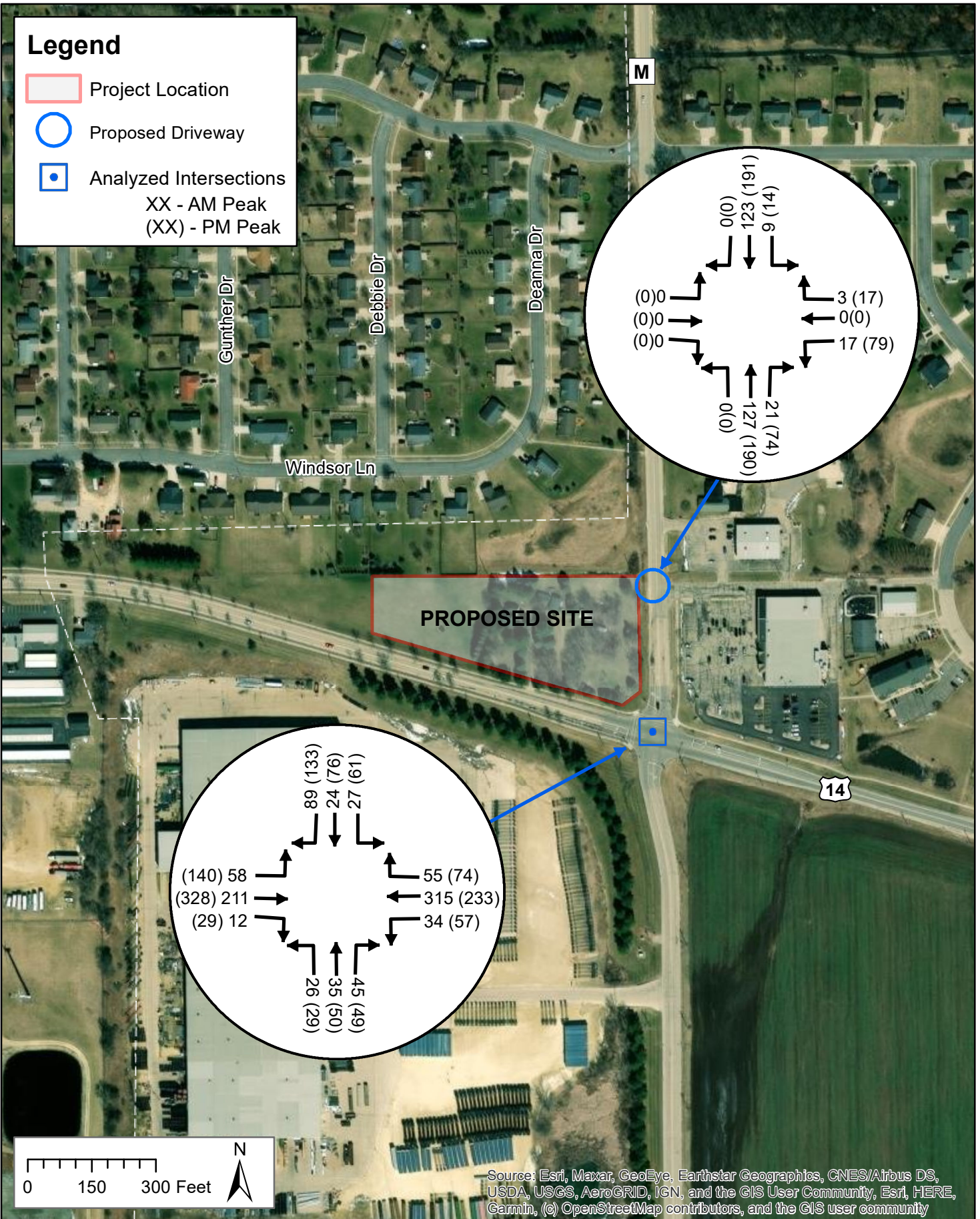


# ATTACHMENT B



# Legend

- Project Location
- Proposed Driveway
- Analyzed Intersections
  - XX - AM Peak
  - (XX) - PM Peak



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



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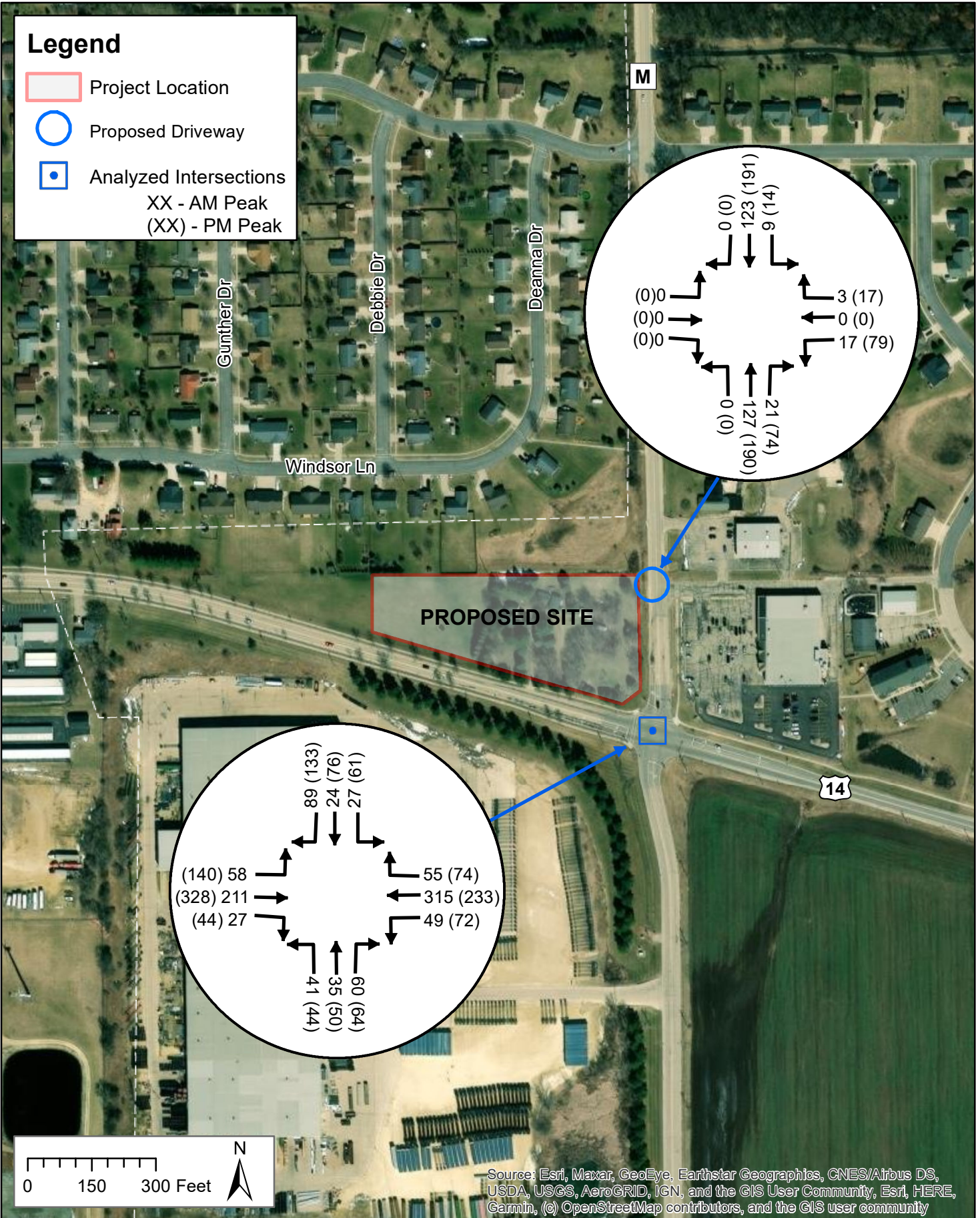
Project: KWIKT 178119  
Print Date: 9/5/2024  
Map by: Jgreen  
Projection: WISCRS,  
Wood County (ft)

## Exhibit 3 - Existing Counts (2023) Kwik Trip Abbreviated TIA City of Evansville, Rock County, WI



# Legend

- Project Location
- Proposed Driveway
- Analyzed Intersections  
 XX - AM Peak  
 (XX) - PM Peak



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



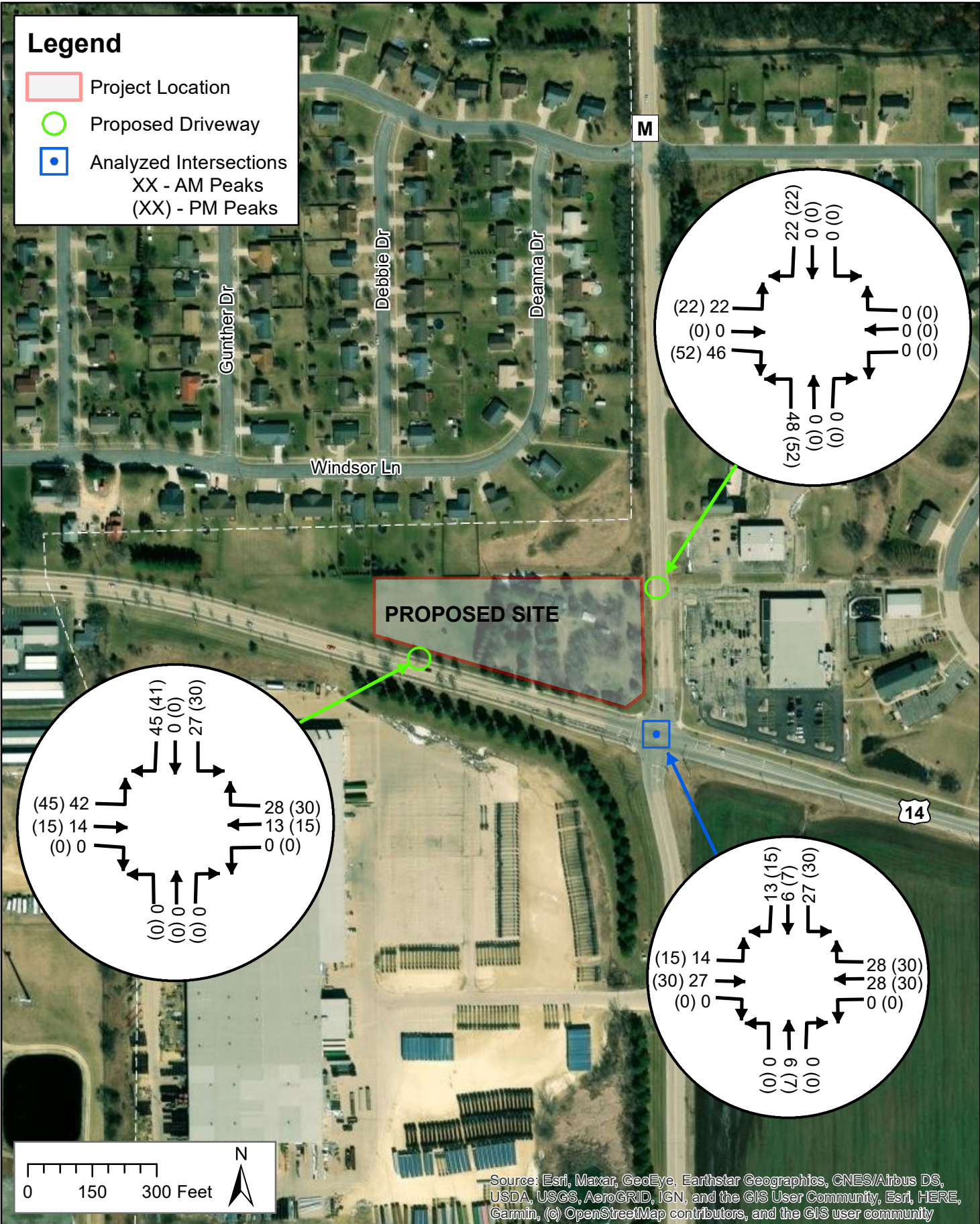
6808 Odana Road  
Suite 200  
Madison, WI 53719  
(608) 620-6199

Project: KWIKT 178119  
Print Date: 9/5/2024

Map by: Jgreen  
Projection: WISCRS,  
Wood County (ft)

## Exhibit 4 - Off Site Development Volumes (2024) Kwik Trip Abbreviated TIA City of Evansville, Rock County, WI





6808 Odana Road  
Suite 200  
Madison, WI 53719  
(608) 620-6199

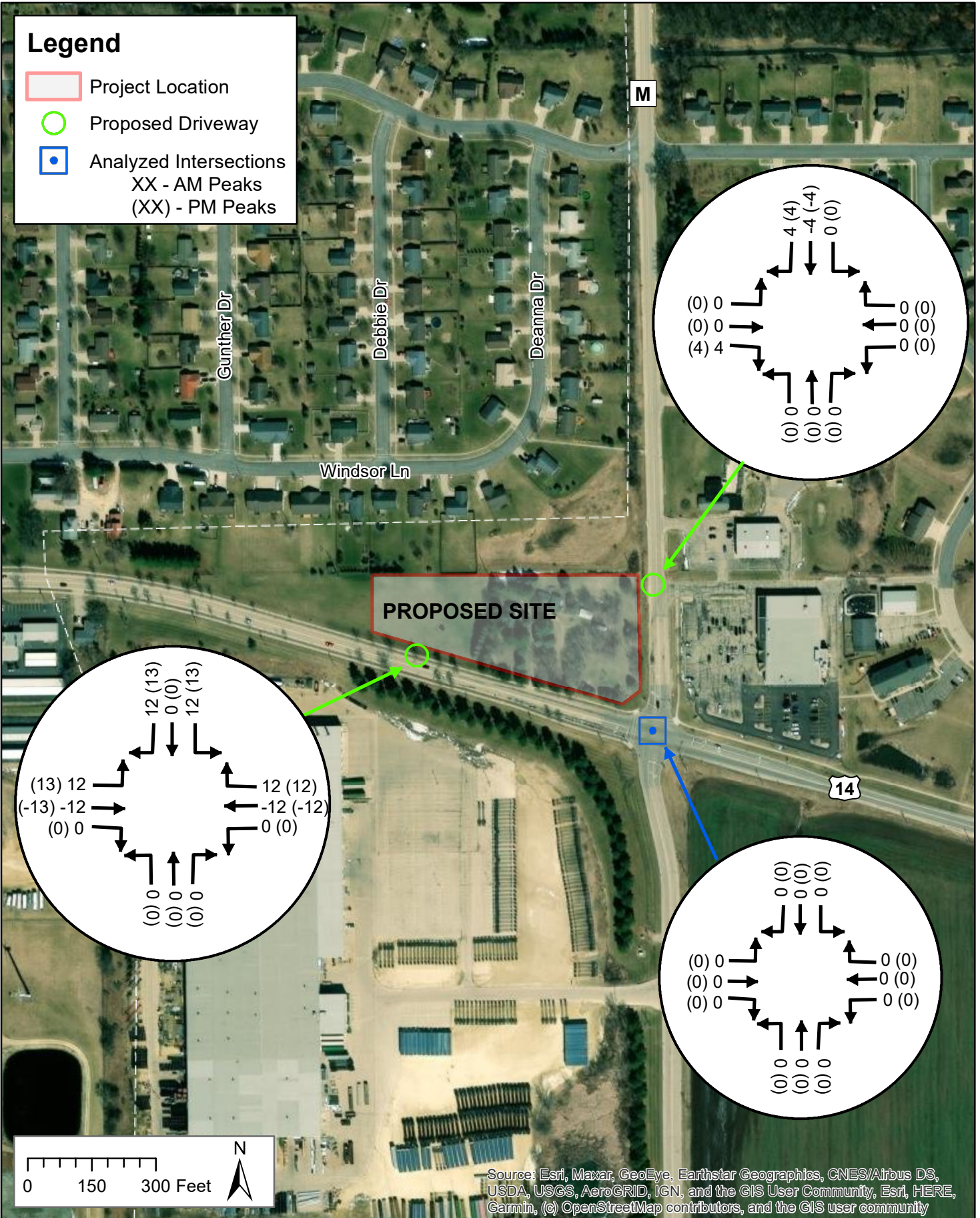
Project: KWIKT 178119  
Print Date: 9/5/2024  
Map by: Jgreen  
Projection: WISCRS,  
Wood County (ft)

**Exhibit 5 - Driveway Trips (2024)**  
**Kwik Trip Abbreviated TIA**  
**City of Evansville, Rock County, WI**



# Legend

- Project Location
- Proposed Driveway
- Analyzed Intersections
  - XX - AM Peaks
  - (XX) - PM Peaks



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



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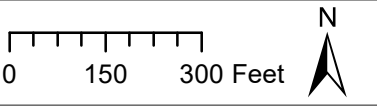
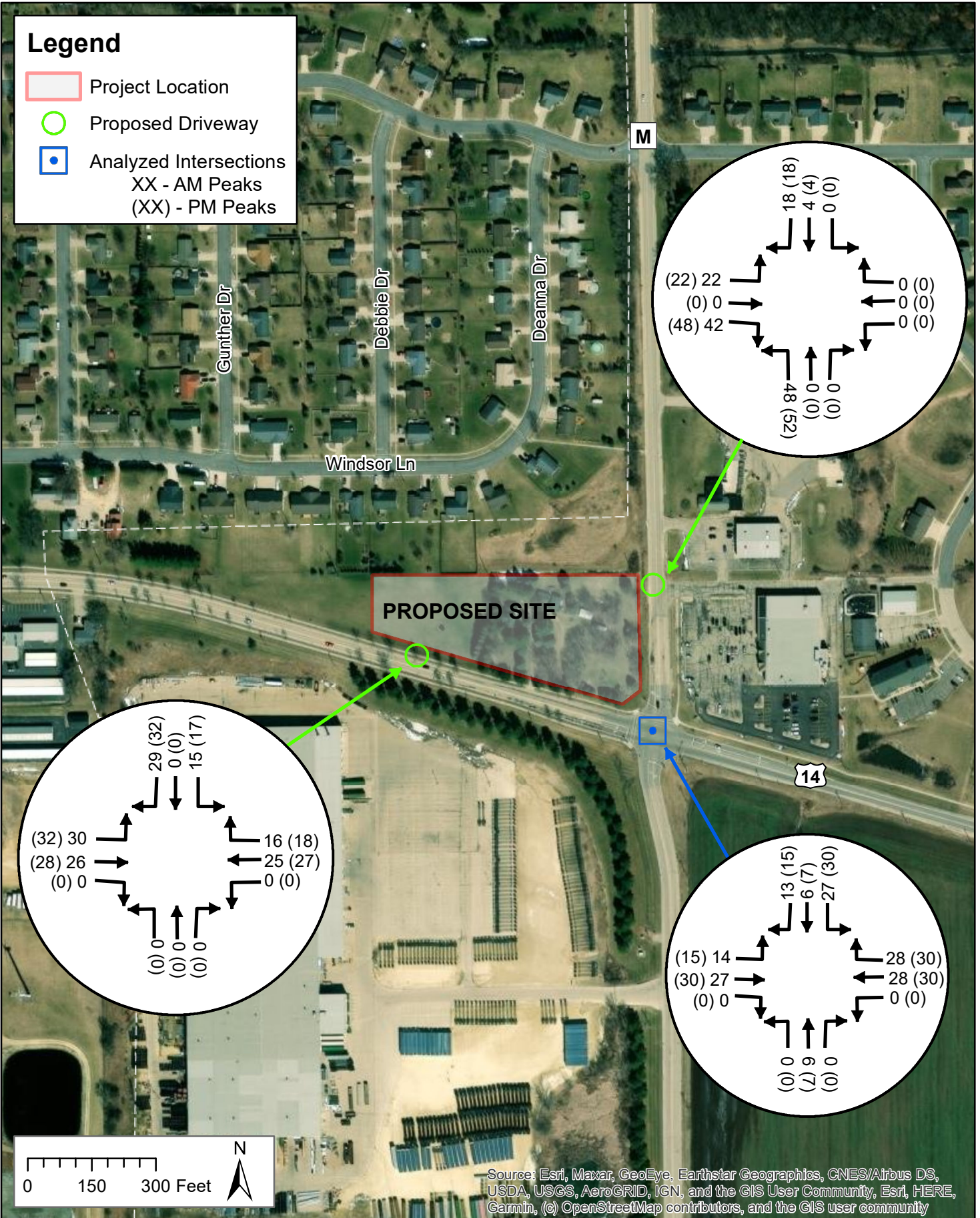
Project: KWIKT 178119  
Print Date: 9/5/2024  
Map by: Jgreen  
Projection: WISCRS,  
Wood County (ft)

## Exhibit 6 - Pass-by Trips (2024) Kwik Trip Abbreviated TIA City of Evansville, Rock County, WI



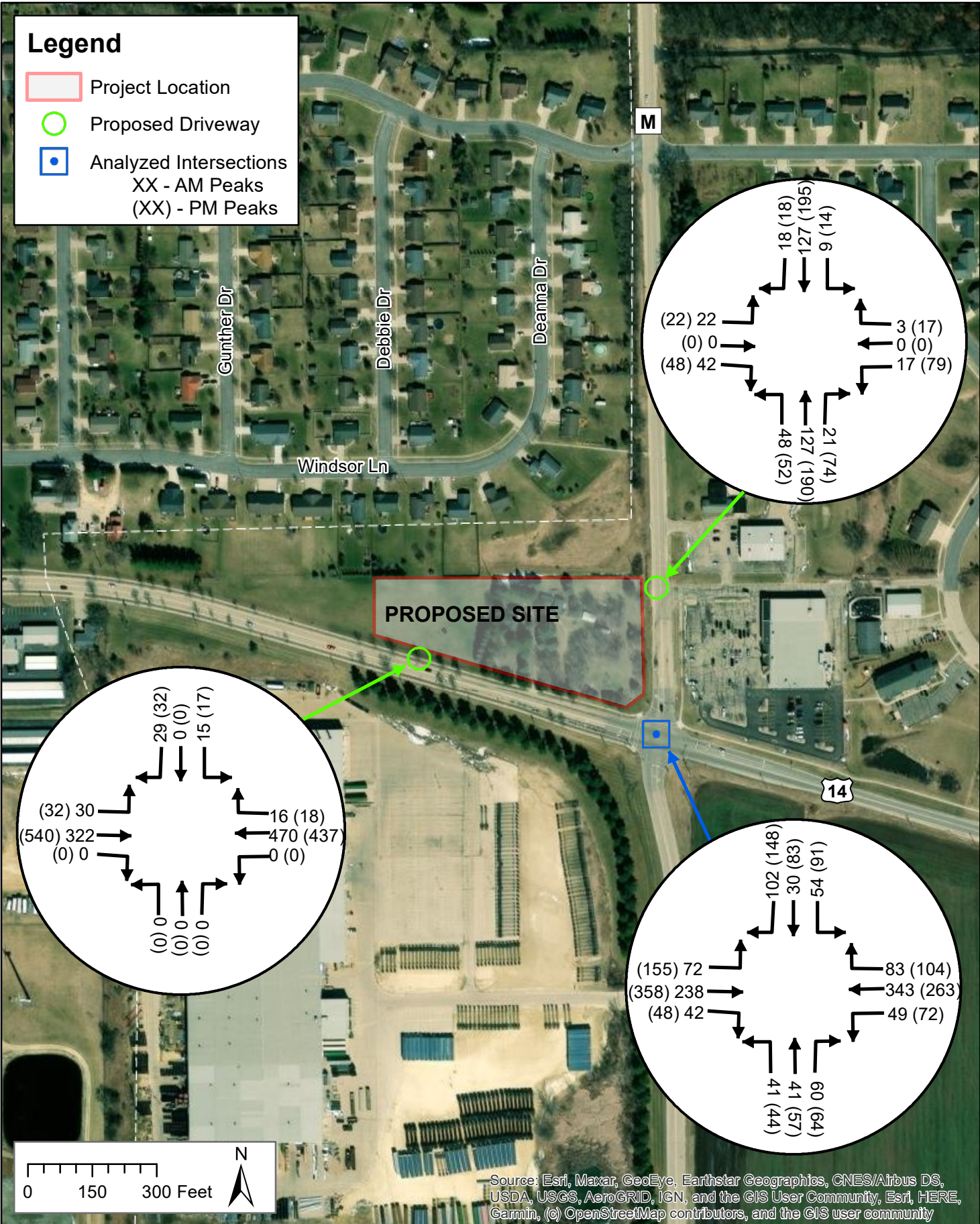
# Legend

- Project Location
- Proposed Driveway
- Analyzed Intersections  
 XX - AM Peaks  
 (XX) - PM Peaks



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community





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Project: KWIKT 178119  
Print Date: 9/5/2024  
Map by: Jgreen  
Projection: WISCRS,  
Wood County (ft)

**Exhibit 8 - Build Traffic (2024)**  
**Kwik Trip Abbreviated TIA**  
**City of Evansville, Rock County, WI**



# Evansville Kwik Trip

City of Evansville  
Evansville, Wisconsin



Land Use	ITE Code	Proposed Size	Vehicle Fueling Positions	Weekday Daily	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
				4113	140	136	276	149	149	298
Gasoline/Service Station with Convenience Market	945	22	x	--	51%	49%	--	50%	50%	--
<b>Subtotal</b>				<b>4113</b>	<b>140</b>	<b>136</b>	<b>276</b>	<b>149</b>	<b>149</b>	<b>298</b>
<b>Total Pass-by Trips (Minus)</b>	945		20%	<b>823</b>	<b>28</b>	<b>28</b>	<b>54</b>	<b>30</b>	<b>30</b>	<b>60</b>
<b>Total Linked Trips (Minus) (0%)</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total New Trips</b>				<b>3291</b>	<b>112</b>	<b>108</b>	<b>222</b>	<b>119</b>	<b>119</b>	<b>238</b>

NOTES:  
CTH M Driveway - 50% in/out  
USH 14 Driveway - 50% in/out

Driveway Trip Distribution										
To/From East 40%				1645	56	54	110	60	60	112
To/From West 40%				1645	56	54	110	60	60	112
To/From North 15%				617	22	22	44	22	22	40
To/From South 5%				206	6	6	12	7	7	12

Pass-by Trip Distribution										
To/From East 40%				329	12	12	24	13	13	26
To/From West 40%				329	12	12	24	13	13	26
To/From North 15%				123	4	4	8	4	4	8
To/From South 5%				41	0	0	0	0	0	0

New Trip Distribution										
To/From East 40%				1316	46	44	90	47	47	94
To/From West 40%				1316	46	44	90	47	47	94
To/From North 15%				494	16	16	32	18	18	36
To/From South 5%				165	4	4	8	7	7	14

# ATTACHMENT C

HCM 6th TWSC  
2: CTH M & Piggly Wiggly Driveway

07/24/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↙		↑	↑		↘↙
Traffic Vol, veh/h	17	3	127	21	9	123
Future Vol, veh/h	17	3	127	21	9	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	92
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	18	3	132	22	9	134

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	284	132	0	0	154
Stage 1	132	-	-	-	-
Stage 2	152	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218
Pot Cap-1 Maneuver	710	923	-	-	1426
Stage 1	899	-	-	-	-
Stage 2	881	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	705	923	-	-	1426
Mov Cap-2 Maneuver	705	-	-	-	-
Stage 1	899	-	-	-	-
Stage 2	875	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	731	1426
HCM Lane V/C Ratio	-	-	0.028	0.007
HCM Control Delay (s)	-	-	10.1	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0



# HCM 6th Signalized Intersection Summary

## 6: CTH M & USH 14

07/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	58	211	12	34	315	55	26	35	45	27	24	89
Future Volume (veh/h)	58	211	12	34	315	55	26	35	45	27	24	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1811	1811	1811	1693	1693	1693	1856	1856	1856
Adj Flow Rate, veh/h	64	234	13	38	350	61	29	39	50	30	27	99
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	6	6	6	14	14	14	3	3	3
Cap, veh/h	407	901	50	507	483	84	316	140	180	361	73	266
Arrive On Green	0.08	0.53	0.53	0.32	0.32	0.32	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1711	1686	94	1097	1502	262	1144	674	864	1298	348	1277
Grp Volume(v), veh/h	64	0	247	38	0	411	29	0	89	30	0	126
Grp Sat Flow(s),veh/h/ln	1711	0	1779	1097	0	1764	1144	0	1537	1298	0	1626
Q Serve(g_s), s	1.0	0.0	3.5	1.1	0.0	9.6	1.0	0.0	2.3	0.9	0.0	3.1
Cycle Q Clear(g_c), s	1.0	0.0	3.5	1.1	0.0	9.6	4.1	0.0	2.3	3.2	0.0	3.1
Prop In Lane	1.00		0.05	1.00		0.15	1.00		0.56	1.00		0.79
Lane Grp Cap(c), veh/h	407	0	951	507	0	567	316	0	320	361	0	338
V/C Ratio(X)	0.16	0.00	0.26	0.07	0.00	0.72	0.09	0.00	0.28	0.08	0.00	0.37
Avail Cap(c_a), veh/h	996	0	1716	1212	0	1701	937	0	1153	1064	0	1219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.9	0.0	5.9	11.1	0.0	14.0	17.6	0.0	15.5	16.9	0.0	15.9
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1	0.0	1.8	0.1	0.0	0.5	0.1	0.0	0.7
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.9	0.2	0.0	3.4	0.2	0.0	0.7	0.2	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	0.0	6.0	11.2	0.0	15.8	17.8	0.0	16.0	17.0	0.0	16.5
LnGrp LOS	A	A	A	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		311			449			118				156
Approach Delay, s/veh		6.6			15.4			16.4				16.6
Approach LOS		A			B			B				B
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.9	21.0		15.7		30.9		15.7				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	20.0	45.0		35.0		45.0		35.0				
Max Q Clear Time (g_c+I1), s	3.0	11.6		5.2		5.5		6.1				
Green Ext Time (p_c), s	0.1	3.0		0.8		1.6		0.6				

### Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

HCM 6th TWSC  
2: CTH M & Piggly Wiggly Driveway

07/24/2024

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑		↑
Traffic Vol, veh/h	79	17	190	74	14	191
Future Vol, veh/h	79	17	190	74	14	191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	93	20	224	87	16	225

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	481	224	0	0	311	0
Stage 1	224	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218	-
Pot Cap-1 Maneuver	548	820	-	-	1249	-
Stage 1	818	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	540	820	-	-	1249	-
Mov Cap-2 Maneuver	540	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	575	1249
HCM Lane V/C Ratio	-	-	0.196	0.013
HCM Control Delay (s)	-	-	12.8	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.7	0

HCM 6th Signalized Intersection Summary  
6: CTH M & USH 14

07/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	140	328	29	57	233	74	29	50	49	61	76	133
Future Volume (veh/h)	140	328	29	57	233	74	29	50	49	61	76	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1811	1811	1811	1693	1693	1693	1856	1856	1856
Adj Flow Rate, veh/h	146	342	30	59	243	77	30	52	51	64	79	139
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	7	7	7	6	6	6	14	14	14	3	3	3
Cap, veh/h	510	898	79	446	403	128	235	160	156	335	123	216
Arrive On Green	0.12	0.55	0.55	0.31	0.31	0.31	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1711	1628	143	978	1318	418	1053	785	769	1281	603	1061
Grp Volume(v), veh/h	146	0	372	59	0	320	30	0	103	64	0	218
Grp Sat Flow(s),veh/h/ln	1711	0	1771	978	0	1736	1053	0	1554	1281	0	1665
Q Serve(g_s), s	2.4	0.0	5.8	2.2	0.0	7.7	1.3	0.0	2.8	2.2	0.0	5.9
Cycle Q Clear(g_c), s	2.4	0.0	5.8	2.2	0.0	7.7	7.2	0.0	2.8	5.0	0.0	5.9
Prop In Lane	1.00		0.08	1.00		0.24	1.00		0.50	1.00		0.64
Lane Grp Cap(c), veh/h	510	0	977	446	0	531	235	0	316	335	0	338
V/C Ratio(X)	0.29	0.00	0.38	0.13	0.00	0.60	0.13	0.00	0.33	0.19	0.00	0.64
Avail Cap(c_a), veh/h	997	0	1626	1045	0	1594	772	0	1110	989	0	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.6	0.0	6.2	12.6	0.0	14.5	21.2	0.0	16.7	18.8	0.0	17.9
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.1	0.0	1.1	0.2	0.0	0.6	0.3	0.0	2.1
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.6	0.4	0.0	2.7	0.3	0.0	0.9	0.6	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.9	0.0	6.5	12.7	0.0	15.6	21.4	0.0	17.2	19.0	0.0	19.9
LnGrp LOS	A	A	A	B	A	B	C	A	B	B	A	B
Approach Vol, veh/h		518			379			133				282
Approach Delay, s/veh		7.2			15.1			18.2				19.7
Approach LOS		A			B			B				B
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.0	21.0		16.0		33.0		16.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	20.0	45.0		35.0		45.0		35.0				
Max Q Clear Time (g_c+I1), s	4.4	9.7		7.9		7.8		9.2				
Green Ext Time (p_c), s	0.3	2.5		1.5		2.5		0.7				

Intersection Summary

HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B



HCM 6th TWSC  
2: CTH M & Piggly Wiggly Driveway

07/24/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑	↑		↔
Traffic Vol, veh/h	17	3	127	21	9	123
Future Vol, veh/h	17	3	127	21	9	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	18	3	132	22	9	128

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	278	132	0	0	154
Stage 1	132	-	-	-	-
Stage 2	146	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218
Pot Cap-1 Maneuver	716	923	-	-	1426
Stage 1	899	-	-	-	-
Stage 2	886	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	711	923	-	-	1426
Mov Cap-2 Maneuver	711	-	-	-	-
Stage 1	899	-	-	-	-
Stage 2	880	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	736	1426
HCM Lane V/C Ratio	-	-	0.028	0.007
HCM Control Delay (s)	-	-	10	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th Signalized Intersection Summary  
6: CTH M & USH 14

07/24/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	211	27	49	315	55	41	35	60	27	24	89
Future Volume (veh/h)	58	211	27	49	315	55	41	35	60	27	24	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1811	1811	1811	1693	1693	1693	1856	1856	1856
Adj Flow Rate, veh/h	64	234	30	54	350	61	46	39	67	30	27	99
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	6	6	6	14	14	14	3	3	3
Cap, veh/h	406	832	107	500	482	84	318	117	202	346	73	268
Arrive On Green	0.08	0.53	0.53	0.32	0.32	0.32	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1711	1560	200	1080	1502	262	1144	559	961	1278	348	1277
Grp Volume(v), veh/h	64	0	264	54	0	411	46	0	106	30	0	126
Grp Sat Flow(s),veh/h/ln	1711	0	1760	1080	0	1764	1144	0	1520	1278	0	1626
Q Serve(g_s), s	1.0	0.0	3.8	1.7	0.0	9.7	1.7	0.0	2.8	1.0	0.0	3.1
Cycle Q Clear(g_c), s	1.0	0.0	3.8	1.7	0.0	9.7	4.8	0.0	2.8	3.7	0.0	3.1
Prop In Lane	1.00		0.11	1.00		0.15	1.00		0.63	1.00		0.79
Lane Grp Cap(c), veh/h	406	0	939	500	0	566	318	0	319	346	0	341
V/C Ratio(X)	0.16	0.00	0.28	0.11	0.00	0.73	0.14	0.00	0.33	0.09	0.00	0.37
Avail Cap(c_a), veh/h	993	0	1694	1193	0	1697	934	0	1137	1034	0	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.0	0.0	6.0	11.4	0.0	14.1	17.9	0.0	15.7	17.3	0.0	15.8
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.0	1.8	0.2	0.0	0.6	0.1	0.0	0.7
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.0	0.4	0.0	3.5	0.4	0.0	0.9	0.3	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	0.0	6.1	11.5	0.0	15.9	18.1	0.0	16.3	17.4	0.0	16.5
LnGrp LOS	A	A	A	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		328			465			152				156
Approach Delay, s/veh		6.7			15.4			16.8				16.7
Approach LOS		A			B			B				B
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	21.0		15.8		31.0		15.8				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	20.0	45.0		35.0		45.0		35.0				
Max Q Clear Time (g_c+I1), s	3.0	11.7		5.7		5.8		6.8				
Green Ext Time (p_c), s	0.1	3.1		0.8		1.7		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				13.2								
HCM 6th LOS				B								

HCM 6th TWSC  
2: CTH M & Piggly Wiggly Driveway

07/24/2024

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑		↑
Traffic Vol, veh/h	79	17	190	74	14	191
Future Vol, veh/h	79	17	190	74	14	191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	93	20	224	87	16	225

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	481	224	0	0	311	0
Stage 1	224	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218	-
Pot Cap-1 Maneuver	548	820	-	-	1249	-
Stage 1	818	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	540	820	-	-	1249	-
Mov Cap-2 Maneuver	540	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	779	-	-	-	-	-






















Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	575	1249
HCM Lane V/C Ratio	-	-	0.196	0.013
HCM Control Delay (s)	-	-	12.8	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.7	0



HCM 6th Signalized Intersection Summary  
6: CTH M & USH 14

07/24/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	328	44	72	233	74	44	50	64	61	76	133
Future Volume (veh/h)	140	328	44	72	233	74	44	50	64	61	76	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1811	1811	1811	1693	1693	1693	1856	1856	1856
Adj Flow Rate, veh/h	146	342	46	75	243	77	46	52	67	64	79	139
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	7	7	7	6	6	6	14	14	14	3	3	3
Cap, veh/h	499	842	113	435	397	126	247	145	187	334	130	229
Arrive On Green	0.12	0.54	0.54	0.30	0.30	0.30	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1711	1550	209	964	1318	418	1053	672	865	1263	603	1061
Grp Volume(v), veh/h	146	0	388	75	0	320	46	0	119	64	0	218
Grp Sat Flow(s),veh/h/ln	1711	0	1759	964	0	1736	1053	0	1537	1263	0	1665
Q Serve(g_s), s	2.5	0.0	6.4	2.9	0.0	7.9	2.1	0.0	3.3	2.3	0.0	5.9
Cycle Q Clear(g_c), s	2.5	0.0	6.4	2.9	0.0	7.9	7.9	0.0	3.3	5.5	0.0	5.9
Prop In Lane	1.00		0.12	1.00		0.24	1.00		0.56	1.00		0.64
Lane Grp Cap(c), veh/h	499	0	956	435	0	523	247	0	332	334	0	359
V/C Ratio(X)	0.29	0.00	0.41	0.17	0.00	0.61	0.19	0.00	0.36	0.19	0.00	0.61
Avail Cap(c_a), veh/h	977	0	1588	1015	0	1568	759	0	1079	948	0	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.0	0.0	6.7	13.2	0.0	14.9	21.2	0.0	16.6	19.0	0.0	17.6
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.2	0.0	1.2	0.4	0.0	0.7	0.3	0.0	1.7
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.8	0.6	0.0	2.8	0.5	0.0	1.1	0.6	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.3	0.0	6.9	13.4	0.0	16.1	21.6	0.0	17.3	19.2	0.0	19.3
LnGrp LOS	A	A	A	B	A	B	C	A	B	B	A	B
Approach Vol, veh/h		534			395			165			282	
Approach Delay, s/veh		7.6			15.6			18.5			19.3	
Approach LOS		A			B			B			B	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.1	21.0		16.8		33.1		16.8				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	20.0	45.0		35.0		45.0		35.0				
Max Q Clear Time (g_c+I1), s	4.5	9.9		7.9		8.4		9.9				
Green Ext Time (p_c), s	0.3	2.6		1.5		2.7		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				13.6								
HCM 6th LOS				B								

HCM 6th TWSC  
 2: CTH M & Kwik Trip Driveway/Piggly Wiggly Driveway

09/09/2024

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	22	0	42	17	0	3	48	127	21	9	127	18
Future Vol, veh/h	22	0	42	17	0	3	48	127	21	9	127	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	0	0	0	1	1	1	2	2	2
Mvmt Flow	23	0	44	18	0	3	50	132	22	9	132	19






















Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	405	414	142	414	401	132	151	0	0	154	0	0
Stage 1	160	160	-	232	232	-	-	-	-	-	-	-
Stage 2	245	254	-	182	169	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	556	529	906	552	541	923	1436	-	-	1426	-	-
Stage 1	842	766	-	775	716	-	-	-	-	-	-	-
Stage 2	759	697	-	824	763	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	535	505	906	507	517	923	1436	-	-	1426	-	-
Mov Cap-2 Maneuver	535	505	-	507	517	-	-	-	-	-	-	-
Stage 1	810	761	-	746	689	-	-	-	-	-	-	-
Stage 2	728	671	-	779	758	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.4		11.9		1.9		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1436	-	-	732	544	1426	-	-
HCM Lane V/C Ratio	0.035	-	-	0.091	0.038	0.007	-	-
HCM Control Delay (s)	7.6	0	-	10.4	11.9	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-

HCM 6th Signalized Intersection Summary  
6: CTH M & USH 14

09/09/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	238	27	49	343	83	41	41	60	54	30	102
Future Volume (veh/h)	72	238	27	49	343	83	41	41	60	54	30	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737	1381	1381	1381	1856	1856	1856
Adj Flow Rate, veh/h	80	264	30	54	381	92	46	46	67	60	33	113
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	11	11	11	11	11	35	35	35	3	3	3
Cap, veh/h	389	876	99	505	489	118	246	99	144	285	71	245
Arrive On Green	0.09	0.57	0.57	0.36	0.36	0.36	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1654	1532	174	1008	1352	326	917	508	740	1270	368	1261
Grp Volume(v), veh/h	80	0	294	54	0	473	46	0	113	60	0	146
Grp Sat Flow(s),veh/h/ln	1654	0	1706	1008	0	1678	917	0	1248	1270	0	1629
Q Serve(g_s), s	1.3	0.0	4.6	1.9	0.0	12.8	2.4	0.0	4.1	2.3	0.0	4.1
Cycle Q Clear(g_c), s	1.3	0.0	4.6	1.9	0.0	12.8	6.5	0.0	4.1	6.4	0.0	4.1
Prop In Lane	1.00		0.10	1.00		0.19	1.00		0.59	1.00		0.77
Lane Grp Cap(c), veh/h	389	0	975	505	0	607	246	0	242	285	0	316
V/C Ratio(X)	0.21	0.00	0.30	0.11	0.00	0.78	0.19	0.00	0.47	0.21	0.00	0.46
Avail Cap(c_a), veh/h	881	0	1498	1026	0	1474	694	0	853	906	0	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.3	0.0	5.7	11.0	0.0	14.5	21.1	0.0	18.3	21.1	0.0	18.3
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.1	0.0	2.2	0.4	0.0	1.4	0.4	0.0	1.1
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.2	0.4	0.0	4.5	0.5	0.0	1.1	0.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.5	0.0	5.9	11.1	0.0	16.7	21.5	0.0	19.7	21.5	0.0	19.3
LnGrp LOS	A	A	A	B	A	B	C	A	B	C	A	B
Approach Vol, veh/h		374			527			159			206	
Approach Delay, s/veh		6.6			16.2			20.2			20.0	
Approach LOS		A			B			C			B	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.8	24.5		15.9		35.3		15.9				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	20.0	45.0		35.0		45.0		35.0				
Max Q Clear Time (g_c+I1), s	3.3	14.8		8.4		6.6		8.5				
Green Ext Time (p_c), s	0.1	3.7		1.0		2.0		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				14.5								
HCM 6th LOS				B								



HCM 6th TWSC  
 9: USH 14 & Kwik Trip West Driveway

09/09/2024

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	30	322	470	16	15	29
Future Vol, veh/h	30	322	470	16	15	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	350	511	17	16	32

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	528	0	-	0	936 520
Stage 1	-	-	-	-	520 -
Stage 2	-	-	-	-	416 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1039	-	-	-	294 556
Stage 1	-	-	-	-	597 -
Stage 2	-	-	-	-	666 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1039	-	-	-	283 556
Mov Cap-2 Maneuver	-	-	-	-	283 -
Stage 1	-	-	-	-	574 -
Stage 2	-	-	-	-	666 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1039	-	-	-	418
HCM Lane V/C Ratio	0.031	-	-	-	0.114
HCM Control Delay (s)	8.6	0	-	-	14.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

HCM 6th TWSC  
 2: CTH M & Kwik Trip Driveway/Piggly Wiggly Driveway

09/09/2024

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	22	0	48	79	0	17	52	190	74	14	195	18
Future Vol, veh/h	22	0	48	79	0	17	52	190	74	14	195	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	0	0	0	1	1	1	2	2	2
Mvmt Flow	26	0	56	93	0	20	61	224	87	16	229	21

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	672	705	240	646	628	224	250	0	0	311	0	0
Stage 1	272	272	-	346	346	-	-	-	-	-	-	-
Stage 2	400	433	-	300	282	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	370	361	799	387	402	820	1321	-	-	1249	-	-
Stage 1	734	685	-	674	639	-	-	-	-	-	-	-
Stage 2	626	582	-	713	681	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	342	336	799	340	374	820	1321	-	-	1249	-	-
Mov Cap-2 Maneuver	342	336	-	340	374	-	-	-	-	-	-	-
Stage 1	693	675	-	636	603	-	-	-	-	-	-	-
Stage 2	577	549	-	653	671	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.5		18.5		1.3		0.5	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1321	-	-	563	379	1249	-	-
HCM Lane V/C Ratio	0.046	-	-	0.146	0.298	0.013	-	-
HCM Control Delay (s)	7.9	0	-	12.5	18.5	7.9	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	1.2	0	-	-

HCM 6th Signalized Intersection Summary  
6: CTH M & USH 14

09/09/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	155	358	44	72	263	104	44	57	64	91	83	148
Future Volume (veh/h)	155	358	44	72	263	104	44	57	64	91	83	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737	1381	1381	1381	1856	1856	1856
Adj Flow Rate, veh/h	161	373	46	75	274	108	46	59	67	95	86	154
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11	35	35	35	3	3	3
Cap, veh/h	423	816	101	410	362	143	226	139	158	325	141	252
Arrive On Green	0.12	0.54	0.54	0.31	0.31	0.31	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1654	1516	187	899	1186	467	842	590	670	1255	596	1067
Grp Volume(v), veh/h	161	0	419	75	0	382	46	0	126	95	0	240
Grp Sat Flow(s),veh/h/ln	1654	0	1703	899	0	1653	842	0	1261	1255	0	1663
Q Serve(g_s), s	3.1	0.0	8.0	3.4	0.0	11.1	2.7	0.0	4.5	3.7	0.0	6.8
Cycle Q Clear(g_c), s	3.1	0.0	8.0	3.4	0.0	11.1	9.6	0.0	4.5	8.2	0.0	6.8
Prop In Lane	1.00		0.11	1.00		0.28	1.00		0.53	1.00		0.64
Lane Grp Cap(c), veh/h	423	0	917	410	0	505	226	0	298	325	0	393
V/C Ratio(X)	0.38	0.00	0.46	0.18	0.00	0.76	0.20	0.00	0.42	0.29	0.00	0.61
Avail Cap(c_a), veh/h	848	0	1443	897	0	1400	582	0	830	856	0	1096
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	0.0	7.5	14.0	0.0	16.7	22.4	0.0	17.2	20.7	0.0	18.1
Incr Delay (d2), s/veh	0.6	0.0	0.4	0.2	0.0	2.3	0.4	0.0	1.0	0.5	0.0	1.5
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.3	0.6	0.0	4.0	0.5	0.0	1.2	1.0	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.0	0.0	7.9	14.2	0.0	19.0	22.8	0.0	18.2	21.2	0.0	19.7
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	B
Approach Vol, veh/h		580			457			172				335
Approach Delay, s/veh		8.7			18.2			19.4				20.1
Approach LOS		A			B			B				C
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.3	22.2		18.5		34.6		18.5				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	20.0	45.0		35.0		45.0		35.0				
Max Q Clear Time (g_c+I1), s	5.1	13.1		10.2		10.0		11.6				
Green Ext Time (p_c), s	0.4	3.2		1.8		3.0		1.0				

Intersection Summary

HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B



HCM 6th TWSC  
 9: USH 14 & Kwik Trip West Driveway

09/09/2024

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	32	540	437	18	17	32
Future Vol, veh/h	32	540	437	18	17	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	587	475	20	18	35

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	495	0	-	0	1142 485
Stage 1	-	-	-	-	485 -
Stage 2	-	-	-	-	657 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1069	-	-	-	222 582
Stage 1	-	-	-	-	619 -
Stage 2	-	-	-	-	516 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1069	-	-	-	211 582
Mov Cap-2 Maneuver	-	-	-	-	211 -
Stage 1	-	-	-	-	589 -
Stage 2	-	-	-	-	516 -

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1069	-	-	-	361
HCM Lane V/C Ratio	0.033	-	-	-	0.148
HCM Control Delay (s)	8.5	0	-	-	16.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection: 2: CTH M & Kwik Trip Driveway/Piggly Wiggly Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LTR
Maximum Queue (ft)	60	33	43	23
Average Queue (ft)	29	11	7	2
95th Queue (ft)	52	31	31	13
Link Distance (ft)	544	346	251	537
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: CTH M & USH 14

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	100	148	189	355	87	109	105	121
Average Queue (ft)	36	56	36	141	28	47	30	47
95th Queue (ft)	79	122	105	262	68	93	71	87
Link Distance (ft)		699		2051		1284		251
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	125		185		100		100	
Storage Blk Time (%)	0	1	0	3	0	1	0	0
Queuing Penalty (veh)	0	1	0	2	0	0	0	0

Intersection: 9: USH 14 & Kwik Trip West Driveway

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	95	4	78
Average Queue (ft)	15	0	24
95th Queue (ft)	57	3	54
Link Distance (ft)	497	699	252
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 3
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Intersection: 2: CTH M & Kwik Trip Driveway/Piggly Wiggly Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LTR
Maximum Queue (ft)	62	67	57	52
Average Queue (ft)	31	31	11	3
95th Queue (ft)	53	53	42	25
Link Distance (ft)	544	346	251	537
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: CTH M & USH 14

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	150	321	155	350	122	166	123	204
Average Queue (ft)	67	110	51	144	41	66	50	83
95th Queue (ft)	132	236	118	255	100	136	102	162
Link Distance (ft)		699		2051		1284		251
Upstream Blk Time (%)								0
Queuing Penalty (veh)								0
Storage Bay Dist (ft)	125		185		100		100	
Storage Blk Time (%)	1	3	0	3	2	3	0	4
Queuing Penalty (veh)	4	5	0	2	3	1	1	4

Intersection: 9: USH 14 & Kwik Trip West Driveway

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	122	4	53
Average Queue (ft)	17	0	24
95th Queue (ft)	68	3	48
Link Distance (ft)	497	699	252
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 21
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**US 14 at CTH M**  
**Thursday, October 19, 2023**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
6:00 AM	0	0	1	4	0	5	0	2	34	8	0	44	0	4	8	3	0	15	0	3	22	1	0	26	90
6:15 AM	0	10	6	5	2	21	0	4	45	15	0	64	0	2	8	6	0	16	0	3	24	3	0	30	131
6:30 AM	0	6	5	2	0	13	0	8	38	17	0	63	0	2	4	7	0	13	0	3	31	7	0	41	130
6:45 AM	0	5	2	16	0	23	0	7	58	8	0	73	0	5	11	7	0	23	0	5	31	6	0	42	161
Hourly Total	0	21	14	27	2	62	0	21	175	48	0	244	0	13	31	23	0	67	0	14	108	17	0	139	512
7:00 AM	0	9	5	19	0	33	0	6	56	13	0	75	0	4	8	9	0	21	0	7	48	5	0	60	189
7:15 AM	0	4	9	22	0	35	0	8	108	16	0	132	0	9	8	16	0	33	0	8	49	3	0	60	260
7:30 AM	0	10	4	29	0	43	0	11	81	10	0	102	0	9	10	11	0	30	0	11	55	2	0	68	243
7:45 AM	0	4	6	19	0	29	0	9	70	16	0	95	0	4	9	9	0	22	0	32	59	2	0	93	239
Hourly Total	0	27	24	89	0	140	0	34	315	55	0	404	0	26	35	45	0	106	0	58	211	12	0	281	931
8:00 AM	0	5	9	3	0	17	0	6	52	5	0	63	0	5	6	10	0	21	0	11	54	9	0	74	175
8:15 AM	0	10	2	13	1	25	0	12	41	6	0	59	0	4	13	7	0	24	0	9	36	5	0	50	158
8:30 AM	0	7	7	13	2	27	0	4	43	10	0	57	0	2	5	11	0	18	0	11	34	4	0	49	151
8:45 AM	0	3	8	12	2	23	0	6	47	5	0	58	0	6	8	5	0	19	0	6	39	3	0	48	148
Hourly Total	0	25	26	41	5	92	0	28	183	26	0	237	0	17	32	33	0	82	0	37	163	21	0	221	632
9:00 AM	0	8	0	14	0	22	0	8	40	8	0	56	0	3	3	10	0	16	0	14	33	3	0	50	144
9:15 AM	0	3	8	4	1	15	0	7	29	16	0	52	0	8	2	12	0	22	0	10	42	4	0	56	145
9:30 AM	0	5	6	10	1	21	0	4	46	6	0	56	0	7	6	13	0	26	0	15	40	6	0	61	164
9:45 AM	0	3	0	15	0	18	0	16	34	8	0	58	0	1	3	7	0	11	0	10	45	1	0	56	143
Hourly Total	0	19	14	43	2	76	0	35	149	38	0	222	0	19	14	42	0	75	0	49	160	14	0	223	596
10:00 AM	0	4	3	14	0	21	0	6	33	11	0	50	0	9	4	6	0	19	0	13	42	4	0	59	149
10:15 AM	0	3	5	9	0	17	0	6	30	5	0	41	0	6	7	9	0	22	0	9	44	7	0	60	140
10:30 AM	0	6	5	11	0	22	0	7	38	11	0	56	0	11	3	12	0	26	0	11	38	8	0	57	161
10:45 AM	0	7	11	13	0	31	0	3	48	13	0	64	0	7	2	15	0	24	0	17	33	6	0	56	175
Hourly Total	0	20	24	47	0	91	0	22	149	40	0	211	0	33	16	42	0	91	0	50	157	25	0	232	625
11:00 AM	0	4	5	18	0	27	0	6	37	10	0	53	0	3	7	11	0	21	0	18	26	6	0	50	151
11:15 AM	0	9	9	20	1	38	0	5	50	14	0	69	0	4	9	6	0	19	0	18	49	4	1	71	197
11:30 AM	0	5	4	13	0	22	0	11	37	8	0	56	0	10	9	4	0	23	0	20	52	5	0	77	178
11:45 AM	0	11	11	25	0	47	0	9	40	11	0	60	0	13	5	8	0	26	0	14	49	2	0	65	198
Hourly Total	0	29	29	76	1	134	0	31	164	43	0	238	0	30	30	29	0	89	0	70	176	17	1	263	724
12:00 PM	0	5	6	16	0	27	0	7	40	8	0	55	0	12	6	4	0	22	0	18	51	7	0	76	180
12:15 PM	0	7	9	18	1	34	0	18	56	10	0	84	0	9	7	5	0	21	0	17	49	12	0	78	217
12:30 PM	0	7	5	13	0	25	0	9	50	4	0	63	0	7	11	11	0	29	0	18	49	7	0	74	191
12:45 PM	0	4	12	15	1	31	0	8	45	10	0	63	0	5	4	5	0	14	0	14	47	8	0	69	177
Hourly Total	0	23	32	62	2	117	0	42	191	32	0	265	0	33	28	25	0	86	0	67	196	34	0	297	765
1:00 PM	0	8	8	23	0	39	0	6	41	18	0	65	0	4	8	4	0	16	0	11	50	4	0	65	185
1:15 PM	0	6	9	15	0	30	0	12	39	12	0	63	0	10	5	7	0	22	0	20	48	5	0	73	188
1:30 PM	0	8	6	16	0	30	0	4	37	9	0	50	0	8	6	5	0	19	0	20	45	2	0	67	166
1:45 PM	0	4	8	12	0	24	0	12	35	11	0	58	0	2	2	6	0	10	0	16	51	6	0	73	165
Hourly Total	0	26	31	66	0	123	0	34	152	50	0	236	0	24	21	22	0	67	0	67	194	17	0	278	704
2:00 PM	0	8	7	21	2	36	0	7	29	15	0	51	0	6	5	4	0	15	0	34	71	14	0	119	221
2:15 PM	0	3	9	23	1	35	0	10	47	7	0	64	0	5	9	8	0	22	0	19	53	9	0	81	202
2:30 PM	0	5	6	31	0	42	0	13	58	9	0	80	0	11	7	8	0	26	0	24	59	13	0	96	244
2:45 PM	0	8	1	28	2	37	0	12	71	9	0	92	0	7	7	6	0	20	0	20	57	8	0	85	234
Hourly Total	0	24	23	103	5	150	0	42	205	40	0	287	0	29	28	26	0	83	0	97	240	44	0	381	901
3:00 PM	0	7	14	36	0	57	0	11	41	15	0	67	0	8	11	6	0	25	0	36	73	6	0	115	264
3:15 PM	0	10	18	18	0	46	0	12	39	11	0	62	0	3	13	22	0	38	0	50	93	12	0	155	301
3:30 PM	0	14	16	34	0	64	0	14	49	21	0	84	0	4	11	11	0	26	0	43	76	5	0	124	298
3:45 PM	0	10	13	24	0	47	0	17	53	6	0	76	0	3	13	7	0	23	0	35	74	11	0	120	266
Hourly Total	0	41	61	112	0	214	0	54	182	53	0	289	0	18	48	46	0	112	0	164	316	34	0	514	1129
4:00 PM	0	13	8	29	0	50	0	23	50	15	0	88	0	10	13	42	0	65	0	25	84	9	0	118	321
4:15 PM	0	9	24	30	0	63	0	22	56	19	0	97	0	8	9	14	0	31	0	35	66	9	0	110	301
4:30 PM	0	12	22	36	0	70	0	11	52	17	0	80	0	6	12	18	0	36	0	32	79	9	0	120	306
4:45 PM	0	16	18	27	2	61	0	12	61	21	0	94	0	6	14	10	0	30	0	32	100	8	0	140	325

Hourly Total	0	50	72	122	2	244	0	68	219	72	0	359	0	30	48	84	0	162	0	124	329	35	0	488	1253
5:00 PM	0	24	12	40	0	76	0	12	64	17	0	93	0	9	15	7	0	31	0	41	83	3	0	127	327
5:15 PM	0	12	22	37	0	71	0	6	67	13	0	86	0	5	8	11	0	24	0	35	71	6	0	112	293
5:30 PM	0	15	9	33	0	57	0	12	41	14	0	67	0	7	7	6	0	20	0	20	69	3	0	92	236
5:45 PM	0	7	10	23	0	40	0	13	40	15	0	68	0	8	11	10	0	29	0	22	52	7	0	81	218
Hourly Total	0	58	53	133	0	244	0	43	212	59	0	314	0	29	41	34	0	104	0	118	275	19	0	412	1074
6:00 PM	0	7	11	23	0	41	0	13	45	12	0	70	0	4	11	9	0	24	0	24	46	6	0	76	211
6:15 PM	0	7	12	24	0	43	0	4	56	7	0	67	0	0	5	6	0	11	0	13	45	8	0	66	187
6:30 PM	0	7	6	28	0	41	0	10	38	5	0	53	0	4	8	2	0	14	0	23	31	4	0	58	166
6:45 PM	0	2	8	13	0	23	0	5	41	12	0	58	0	5	5	4	0	14	0	15	32	3	0	50	145
Hourly Total	0	23	37	88	0	148	0	32	180	36	0	248	0	13	29	21	0	63	0	75	154	21	0	250	709
DAILY TOTAL	0	386	440	1009	19	1835	0	486	2476	592	0	3554	0	314	401	472	0	1187	0	990	2679	310	1	3979	10555
Cars	0	381	415	989	16	1785	0	429	2345	580	0	3354	0	230	363	425	0	1018	0	970	2519	227	1	3716	9873
Heavy Vehicles	0	5	25	20	3	50	0	57	131	12	0	200	0	84	38	47	0	169	0	20	160	83	0	263	682
Heavy Vehicle %	0.00%	1.30%	5.68%	1.98%	15.79%	2.72%	0.00%	11.73%	5.29%	2.03%	0.00%	5.63%	0.00%	26.75%	9.48%	9.96%	0.00%	14.24%	0.00%	2.02%	5.97%	26.77%	0.00%	6.61%	6.46%

**US 14 at CTH M**  
**Thursday, October 19, 2023**

**AM Peak Hour**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
7:00 AM	0	9	5	19	0	33	0	6	56	13	0	75	0	4	8	9	0	21	0	7	48	5	0	60	189
7:15 AM	0	4	9	22	0	35	0	8	108	16	0	132	0	9	8	16	0	33	0	8	49	3	0	60	260
7:30 AM	0	10	4	29	0	43	0	11	81	10	0	102	0	9	10	11	0	30	0	11	55	2	0	68	243
7:45 AM	0	4	6	19	0	29	0	9	70	16	0	95	0	4	9	9	0	22	0	32	59	2	0	93	239
Peak Hour Total	0	27	24	89	0	140	0	34	315	55	0	404	0	26	35	45	0	106	0	58	211	12	0	281	931
PHF	0.000	0.675	0.667	0.767	0.000	0.814	0.000	0.773	0.729	0.859	0.000	0.765	0.000	0.722	0.875	0.703	0.000	0.803	0.000	0.453	0.894	0.600	0.000	0.755	0.895

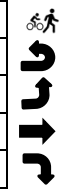
**PM Peak Hour**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:15 PM	0	9	24	30	0	63	0	22	56	19	0	97	0	8	9	14	0	31	0	35	66	9	0	110	301
4:30 PM	0	12	22	36	0	70	0	11	52	17	0	80	0	6	12	18	0	36	0	32	79	9	0	120	306
4:45 PM	0	16	18	27	2	61	0	12	61	21	0	94	0	6	14	10	0	30	0	32	100	8	0	140	325
5:00 PM	0	24	12	40	0	76	0	12	64	17	0	93	0	9	15	7	0	31	0	41	83	3	0	127	327
Peak Hour Total	0	61	76	133	2	270	0	57	233	74	0	364	0	29	50	49	0	128	0	140	328	29	0	497	1259
PHF	0.000	0.635	0.792	0.831	0.250	0.888	0.000	0.648	0.910	0.881	0.000	0.938	0.000	0.806	0.833	0.681	0.000	0.889	0.000	0.854	0.820	0.806	0.000	0.888	0.963

Total Vehicles On Leg					3818				
Vehicles Entering Intersection			1835		Vehicles Exiting Intersection			1983	
<b>Southbound</b>									
Cars	989	415	381	0	16				
Heavy	20	25	5	0	3				
<b>Total</b>	<b>1009</b>	<b>440</b>	<b>386</b>	<b>0</b>	<b>19</b>				



Total Vehicles on Leg 7778	Vehicles Entering Intersection 3979	Eastbound	Cars	Heavy	Total
			1	0	1
			0	0	0
			970	20	990
			2519	160	2679
			227	83	310



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 3554	Total Vehicles on Leg 7091
580	12	592			
2345	131	2476			
429	57	486			
0	0	0			
0	0	0		Vehicles Exiting Intersection 3537	



Daily Volumes

Cars	0	0	230	363	425
Heavy	0	0	84	38	47
<b>Total</b>	<b>0</b>	<b>0</b>	<b>314</b>	<b>401</b>	<b>472</b>
<b>Northbound</b>					
Vehicles Entering Intersection			1187		
Vehicles Exiting Intersection			1236		
Total Vehicles On Leg			2423		







Total Vehicles On Leg				537	
Vehicles Entering Intersection			244	Vehicles Exiting Intersection 293	
<b>Southbound</b>					
Cars	0	218	14	0	0
Heavy	0	12	0	0	0
<b>Total</b>	<b>0</b>	<b>230</b>	<b>14</b>	<b>0</b>	<b>0</b>



Total Vehicles on Leg 0	Vehicles Entering Intersection	Eastbound	Cars	Heavy	Total
	0		0	0	
	0		0	0	
	0		0	0	
	Vehicles Exiting Intersection		0	0	0
	0		0	0	



Daily Volumes



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection	Total Vehicles on Leg 118
9	0	9		48	
0	0	0			
37	2	39			
0	0	0		Vehicles Exiting Intersection	
1	1	2		70	



Cars	0	2	0	275	54
Heavy	0	0	0	9	2
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>284</b>	<b>56</b>
<b>Northbound</b>					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
342			271		
Total Vehicles On Leg			613		





Total Vehicles On Leg				789	
Vehicles Entering Intersection			432	Vehicles Exiting Intersection 357	
<b>Southbound</b>					
Cars	0	382	43	0	0
Heavy	0	7	0	0	0
<b>Total</b>	<b>0</b>	<b>389</b>	<b>43</b>	<b>0</b>	<b>0</b>



Total Vehicles on Leg 0	Vehicles Entering Intersection	Eastbound	Cars	Heavy	Total
	0		0	0	
	0		0	0	
	0		0	0	
	Vehicles Exiting Intersection		0	0	0
	0		0	0	



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection	Total Vehicles on Leg 512
49	0	49		263	
0	0	0			
214	0	214			
Vehicles Exiting Intersection	0	0		249	
0	0	0			



Daily Volumes

Cars	0	0	0	303	206
Heavy	0	0	0	5	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>308</b>	<b>206</b>
<b>Northbound</b>					
Vehicles Entering Intersection			514	Vehicles Exiting Intersection 603	
Total Vehicles On Leg			1117		





## CONDITIONAL USE PERMIT APPLICATION – STAFF REPORT

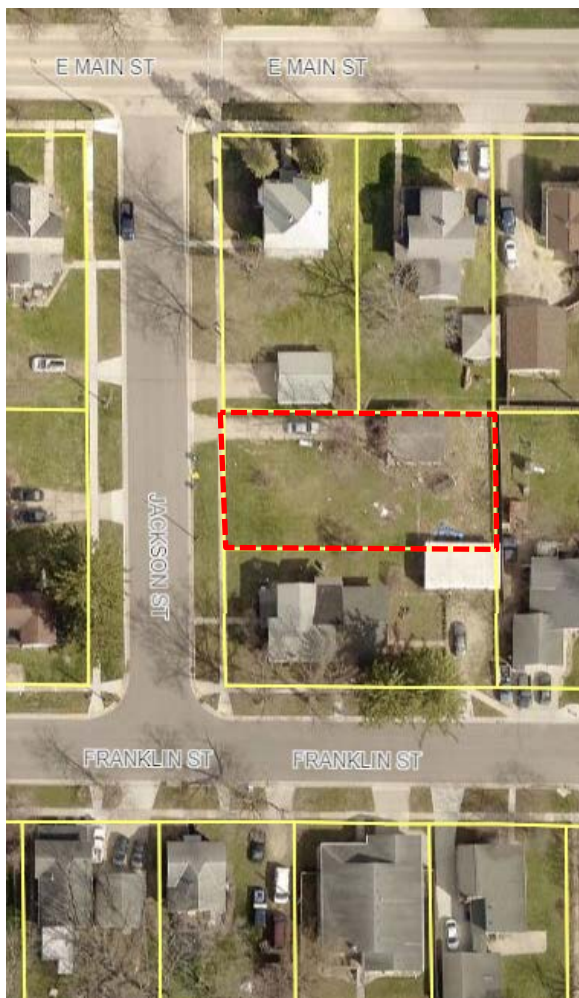
**Applicant:** Tim Porter

**Parcel:** 6-27-358

**Location:** 16 Jackson Street

**November 5, 2024**

Prepared by: Colette Spranger, Community Development Director  
 Prepared for: **City of Evansville Plan Commission**



**Description of request:** The applicant has submitted an application for a conditional use permit to allow a duplex in the R-1 zoning district per section 130-324 of the Evansville Zoning Ordinance.

### Staff Analysis of Request:

The existing lot is 8,712 square feet and meets the requirements of the R-1 zoning district that a two-family dwelling should have at least 8,000 square feet. The lot has an existing garage but is otherwise vacant.

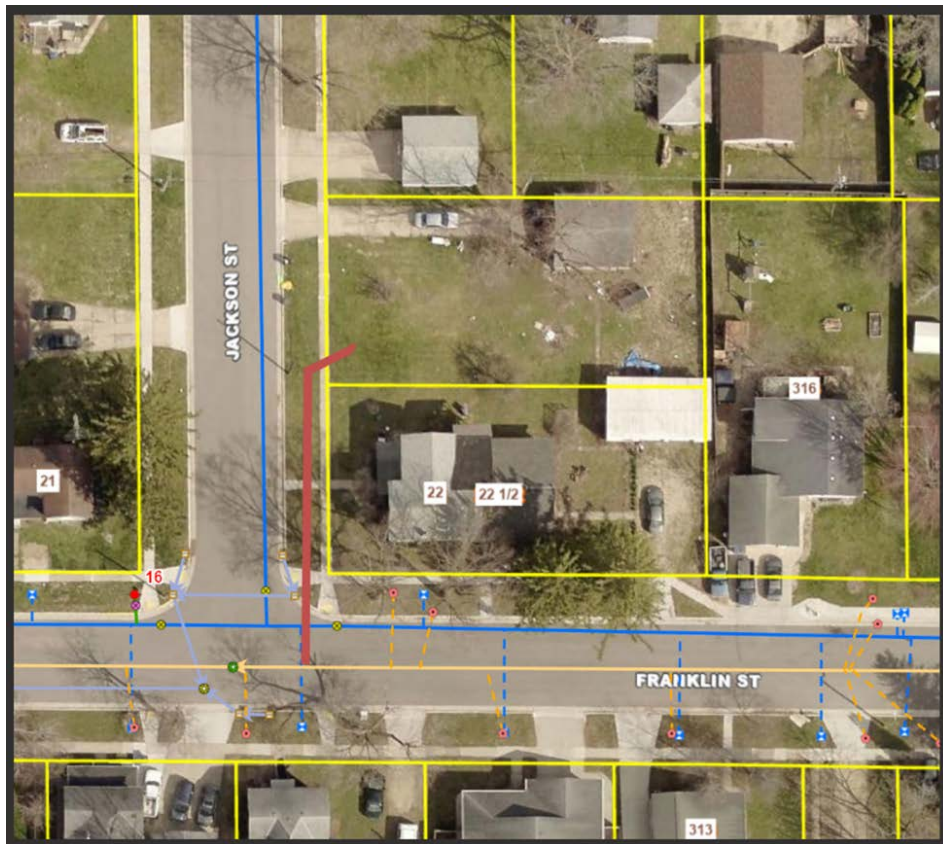
Any duplex that is built will need to conform to the standard setbacks that apply to every newly built house in the City's R-1 zoning district. A driveway could be shared between the two units to allow for the building to utilize the length of the lot.

The current owner is not planning to build the duplex but is aiming to sell the lot and wants to assure any potential buyer with the approval to build a duplex. As with all conditional use permits in Evansville, if the permit is not used within 365 days of being issued, it will expire.

Unique to this lot, is that sanitary sewer mains do not run underneath Jackson Street. In order to serve this property, an alternative connection must be made. The closest hook up would be from Franklin Street to

the south. The City engineer has been consulted about this and a workaround has been identified. An image below shows a proposed linkage through the sidewalk/terrace, which would circumvent having to rip up and rebuild parts of Jackson Street, which was reconstructed in 2018.

However, when extending a long lateral was first considered, it was to construct a single family home. City policy and state building code mandate that newly built duplexes must have separate water and sewer laterals to serve each unit. Additionally, allowing a lateral to be built in the right-of-way would be setting a precedent for other similar situations, such as if other properties on Jackson Street were to subdivide and request new services. This is a question that should be left up for consideration by Municipal Services staff and will be reviewed at its next meeting.



**Required Plan Commission findings for Conditional Use Permit request:** Section 130-104 (3) of the Municipal Code, includes criteria that should be considered in making this decision:

1. **Consistency of the use with the comprehensive plan.** The proposed use in general and in this specific location is consistent with the city's comprehensive plan of September 2022.

*Staff Comment: The Comprehensive plan indicates a desire to promote infill development where City services are available and to provide a variety of housing types.*

2. **Consistency with the City's zoning code, or any other plan, program, or ordinance.** The proposed use in general and in this specific location is consistent with City's zoning code, or any other plan, program, or ordinance, whether adopted or under consideration pursuant to official notice of the city.

*Staff comment: The proposed construction is consistent with the City's zoning code and other plans, programs, and ordinances.*



3. **Effect on nearby property.** The use will not result in a substantial or undue adverse impact on nearby property, the character of the neighborhood, environmental factors, traffic factors, parking, public improvements, public property or rights-of-way, or other matters affecting the public health, safety, or general welfare, either as they now exist or as they may in the future be developed as a result of the implementation of the City's zoning code, the comprehensive plan, or any other plan, program, map, or ordinance adopted or under consideration pursuant to official notice by the city.

*Staff Comment: No adverse effect is anticipated on nearby property.*

4. **Appropriateness of use.** The use maintains the desired consistency of land uses, land use intensities, and land use impacts as related to the environs of the subject property.

*Staff Comment: Two family twin dwellings are an appropriate use in the R-1 district.*

5. **Utilities and public services.** The use will be adequately served by, and will not impose an undue burden on, any of the improvements, facilities, utilities, or services provided by the City or any other public agency serving the subject property.

*Staff Comment: Water is available to this location under Jackson Street and a plan is in place to service the site with sanitary sewer from Frankling Street.*

**Required Plan Commission conclusion:** Section 130-104(3)(f) of the Municipal Code requires the Plan Commission to determine whether the potential public benefits of the conditional use do or do not outweigh any and all potential adverse impacts.

**Staff recommendation:** hold a public hearing and take no action tonight until Municipal Services can review its policy on extending mains/laterals in public right-of-way



# Agenda Item 7D



## City of Evansville

### Community Development Department

www.ci.evansville.wi.gov  
31 S Madison St  
PO Box 529  
Evansville, WI 53536  
(608) 882-2266

November 4, 2024

To: Plan Commission  
From: Colette Spranger, Community Development Director  
Subject: Concept Plan for Capstone Ridge Replat/Planned Unit Development

A concept plan for Planned Unit Development (PUD) for the remainder of the Capstone Ridge subdivision was submitted to and discussed with staff. Per the procedures in the zoning code, conceptual review by Plan Commission precedes a formal application.

Initial review of the plat showed promise, given that the Capstone Ridge plat has long sat dormant due to stormwater concerns. Essentially, the unimproved part of the plat is a natural bowl that does not easily drain. There are existing stormwater ponds on site, but the City Engineer's policy for adequately stormwater storage has been to accommodate two back-to-back 100 year flood events. Recent meteorological events both worldwide and regionally have resulted in torrential flooding in places that do not normally experience it. Staff would agree that, while not required by the State, planning for back to back storm events is prudent.

Of note with the submitted concept plan:

- ~94 units of duplex/multiple family housing
- ~21 units of single family housing
- Removal (vacation) of existing City right-of-way of Genesis Drive and Abraham Drive, opting instead for private streets through parts of the PUD
- Expansion of the existing stormwater ponds to accommodate back-to-back storm events

Staff was initially intrigued by the amount and variety of housing this concept plan suggested. However, with further review, staff is not certain a Planned Unit Development (PUD) is the appropriate tool to quickly enable housing in this location.

- The last PUD issued for market rate housing in the City was for Prairie Crossing. That development was to include walking trails and extensive landscaping which was never installed.
- PUD plans can take a significant amount of time to create and must be referenced every time a unit is built. Essentially, a PUD creates its own zoning district. The reason a City would allow such a development to occur is if it gained something (housing density, architectural/design standards) that its existing residential zoning districts lack. In return, the PUD is allowed some



## Agenda Item 7D

leniency for things like building setbacks and other minor standards observed elsewhere in the City.

- PUDs expire after 10 years per Evansville code, making future redevelopment harder to manage.
- Vacating Genesis Drive creates an inconsistency with the Transportation Plan Map of the Comprehensive Plan. Vacating Abraham Drive in place of a private road would create a quasi-public street connecting Exodus Pass and Salvation Way.
- Park land is still not considered in this plan; per the Park and Open Space Plan, a parklet (neighborhood park) should be created somewhere in the location.

Furthermore, the same density of units can be achieved without replatting the area or vacating streets. A handful of the lots would need to be converted to stormwater ponds to accommodate runoff/drainage.

Most of the lots that were proposed to be part of the PUD are wide enough to accommodate duplexes. If the developers are able to find/create 2-3 housing designs that work for those lots, all that would need to be done to get shovels in the ground would be rezoning from R-1 to R-2 and a land divider's agreement that specified requirements for streets, sidewalks, stormwater, parkland, and utilities. Some of these lots could then be zero lot lined, if desired. If townhouses were desired, particularly on the side of Exodus Pass closest to the cemetery, lots could be created by combining existing lots. A PUD would also need to provide its own trash/recycling service; utilizing the plat as is would eliminate that need. From a perspective of long-term maintenance, this would be the City's preference.

Other items to consider include the expired development agreement. There is no letter of credit on file for the development and no amendment or update has been made to the original agreement that was created in 2005.

Plan Commission is asked to provide comment on the proposed concept plan.



# CAPSTONE PUD CONCEPT





# CAPSTONE RIDGE - LEAVE AS IS, REZONE



REZONE TO R-2

# SF units

25 single family homes



STORMWATER

# 2F units

(47 x 2 = 94 duplexes)

CMS  
11/4/24