Traffic Impact Study
Proposed Mixed-Use Development

Naperville, Illinois

Prepared For:

VRUTTHI LLC

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

April 17, 2023

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed mixed-use development to be located in Naperville, Illinois. The site, which is currently vacant, is located on the south side of Diehl Road bounded by Mill Street on the east and West Street on the west. As proposed, the southern portion of the mixed-use development is to be developed with a residential development that is to contain 76 townhomes and the northern portion of the mixed-use development is to be developed with the Orion STEM school. The private school is proposed to have an enrollment of approximately 360 students in kindergarten through eighth grade and approximately 40 staff/faculty. Access to the mixed-use development will be provided via a full-movement access drive on West Street, a restricted right-turn in/right-turn out access drive on Mill Street, and via cross-access with the HarborChase Assisted Living and Memory Care facility (HarborChase) located south of the site.

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

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

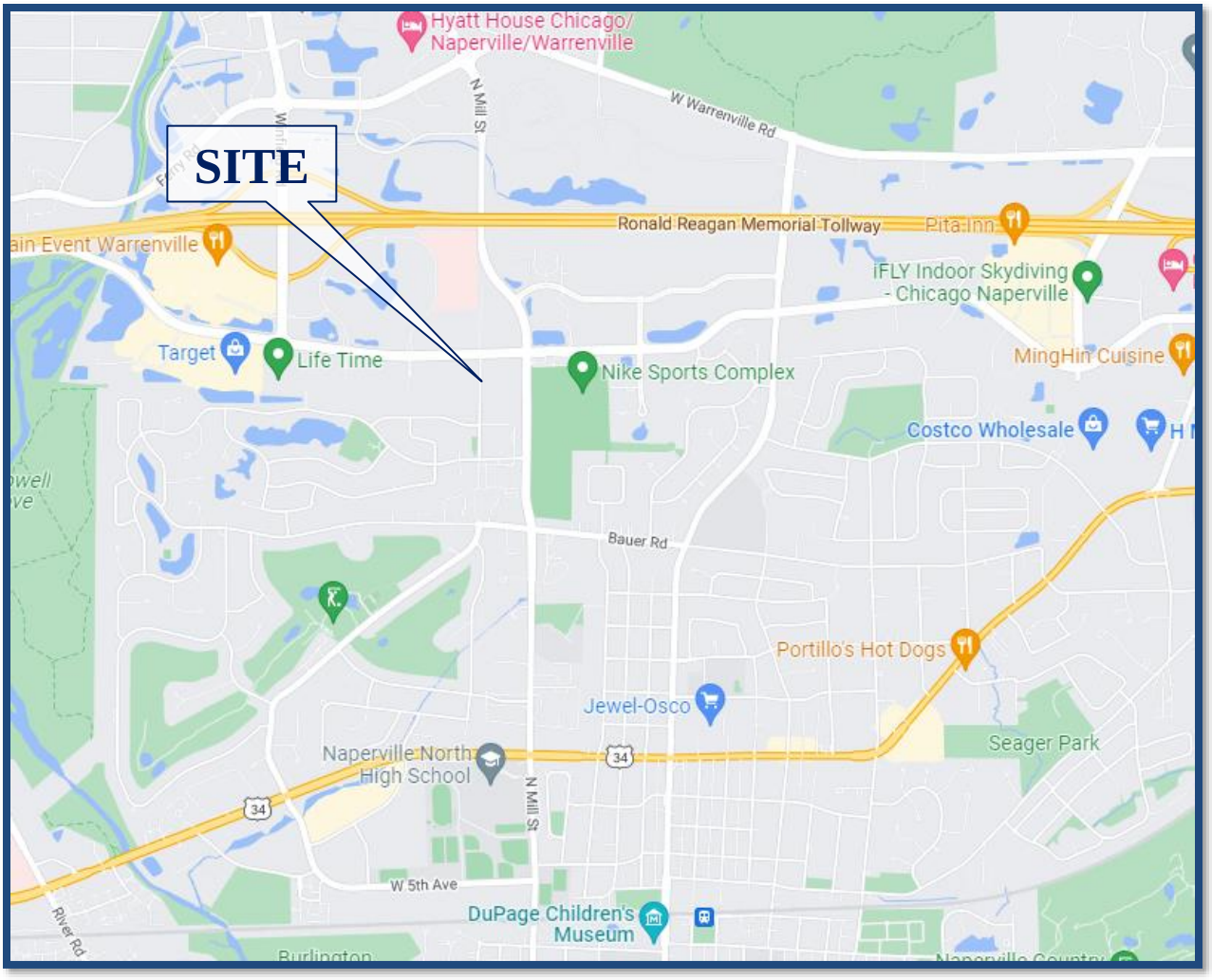
- Existing roadway conditions including vehicle, pedestrian, and bicycle traffic volumes for the weekday morning and weekday evening peak hours
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic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

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

1. Year 2022 Existing Conditions - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. Year 2029 No-Build Conditions – Analyzes the capacity of the existing roadway system using the existing traffic volumes increased by an ambient growth factor (growth not attributable to any particular development).

3. Year 2029 Total Projected Conditions – Analyzes the capacity of the existing roadway system using the total projected traffic volumes that include the existing traffic volumes increased by an ambient growth factor and the traffic estimated to be generated by the proposed subject development.



Site Location **Figure 1**

Aerial View of Site **Figure 2**

2. Existing Conditions

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

Site Location

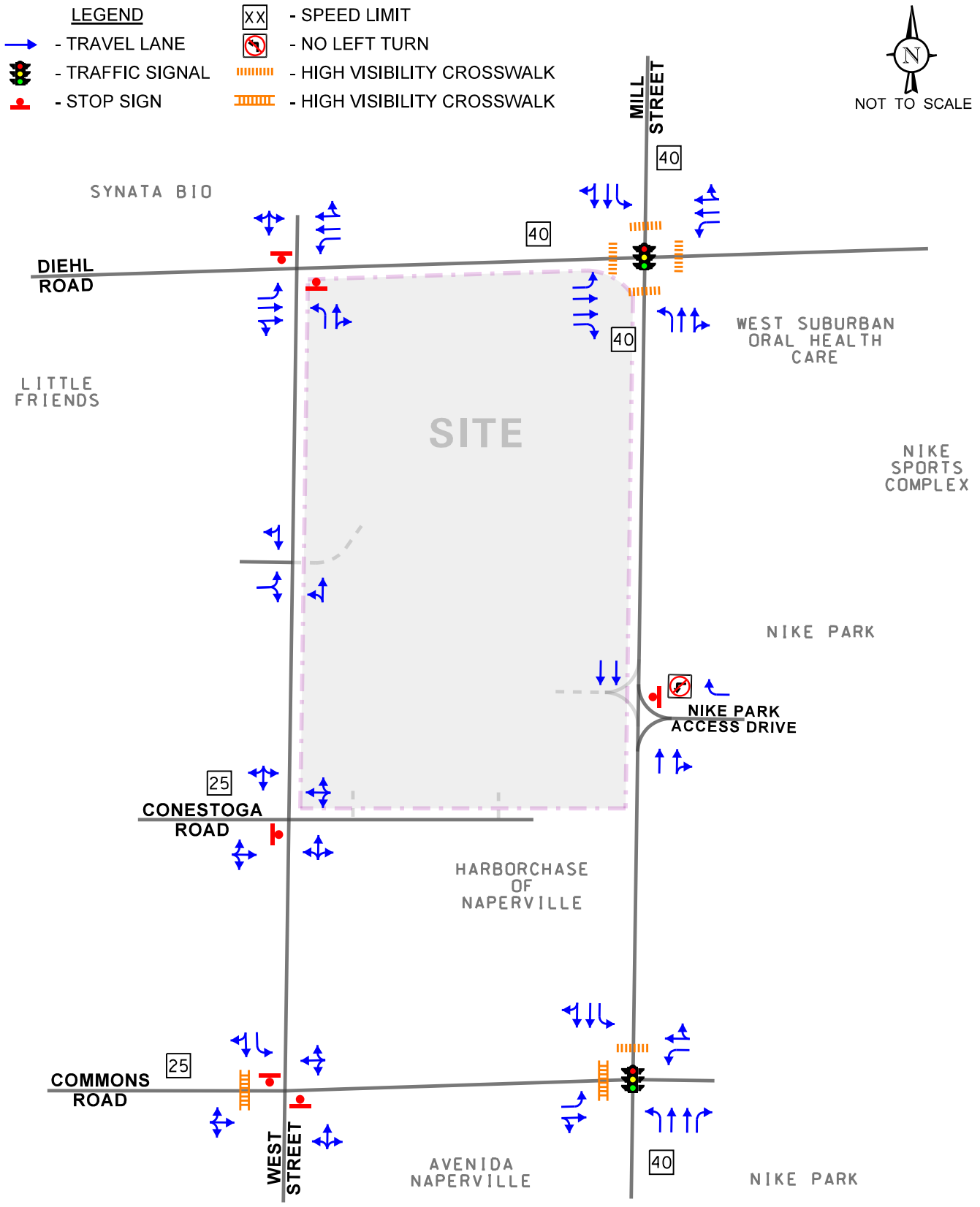
The site, which is currently vacant, is bounded by Diehl Road on the north, Mill Street on the east, HarborChase on the south, and West Street on the west. Land uses in the vicinity of the site include office and commercial uses to the north, the Nike Sports Complex to the east, residential uses to the south and southwest, and office uses to the west.

Existing Roadway System Characteristics

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

Diehl Road is generally an east-west, major collector roadway east of Mill Street and a minor arterial roadway west of Mill Street. The road provides two lanes in each direction divided by a median. At its signalized intersection with Mill Street, Diehl Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound approach and an exclusive left-turn lane, a though lane, and a shared through/right-turn lane on the westbound approach. High-visibility crosswalks and pedestrian countdown signals are provided on the east and west legs of this intersection. At its unsignalized intersection with West Street, Diehl Road provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on both approaches. Diehl Road carries an Annual Average Daily Traffic (AADT) volume of 6,550 vehicles east of Mill Street and 8,100 vehicles west of Mill Street (IDOT 2020), is under the jurisdiction of the DuPage County Division of Transportation (DuDOT), and has a posted speed limit of 40 miles per hour (mph). It should be noted that the Year 2020 AADT may be lower than normal conditions as it was performed during the Covid pandemic.

Mill Street is a north-south, minor arterial roadway that provides two lanes in each direction divided by a striped median. At its signalized intersection with Diehl Road, Mill Street provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on both approaches. High-visibility crosswalks and pedestrian countdown signals are provided on the north and south legs of this intersection. At its unsignalized intersection with the Nike Sports Complex access drive, Mill Street provides two through lanes on the southbound approach and a through lane and a shared through/right-turn lane on the northbound approach. At its signalized intersection with Commons Road/Nike Sports Complex access drive, Mill Street provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the southbound approach and an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the northbound approach. High-visibility crosswalks and pedestrian countdown signals are provided on the north leg of this intersection. Mill Street carries an AADT volume of 20,000 vehicles south of Diehl Road (DuDOT 2016), is under the jurisdiction of DuDOT, and has a posted speed limit of 40 mph.



Mixed-Use Development
Naperville, Illinois

Existing Roadway Characteristics

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West Street is a north-south, local roadway that provides one lane in each direction. At its unsignalized intersection with Diehl Road, West Street provides an exclusive left-turn lane and a shared through/right-turn lane on the northbound approach and a combined left-turn/through/right-turn lane on the southbound approach with both approaches under stop sign control. At its intersections with the office development access drive and Conestoga Road/HarborChase access road, West Street provides single-lane approaches. At intersection with Commons Road, West Street provides an exclusive left-turn lane and a shared through/right-turn lane on the southbound approach and a shared left-turn/through/right-turn lane on the northbound approach with both approaches under stop sign control. West Street is under the jurisdiction of the City of Naperville.

Conestoga Road is an east-west local roadway that provides one lane in each direction and is aligned opposite the HarborChase access road at its intersection with West Street. At its unsignalized intersection with West Street, both the Conestoga Road and the HarborChase access road approaches provide a combined left-turn/through/right-turn lane with the Conestoga Road approach under stop sign control. Conestoga Road is under the jurisdiction of the City of Naperville and has a posted speed limit of 25 mph.

Commons Road is an east-west, local roadway that provides one lane in each direction and is aligned opposite the Nike Sport Complex access drive at its intersection with Mill Street. At its unsignalized intersection with West Street, Commons Road provides a combined left-turn/through/right-turn lane on both approaches. A high visibility crosswalk is provided on the east leg of this intersection. At its signalized intersection with Mill Street, the Commons Road and Nike Sports Complex access drive approaches provide an exclusive left-turn lane and a shared through/right-turn lane. A high visibility crosswalk and pedestrian countdown traffic signals are provided on the west leg of this intersection. Commons Road is under the jurisdiction of the City of Naperville and has a posted speed limit of 25 mph.

Existing Traffic Volumes

In order to determine current vehicle, pedestrian, and bicycle conditions within the study area, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

- Diehl Road with West Street (Thursday, December 8, 2022)
- Diehl Road with Mill Street (Thursday, December 8, 2022)
- Mill Street with Nike Sports Complex access drive (Thursday, July 12, 2022)
- Mill Street with Commons Road/Nike Sports Complex access drive (Thursday, December 8, 2022)
- West Street with Commons Road (Monday, January 9, 2023)
- West Street with Conestoga Road/HarborChase access road (Thursday, December 8, 2022)
- West Street with office development access drive (Thursday, December 8, 2022)

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:30 A.M. to 8:30 A.M. and the weekday evening peak hour of traffic occurs from 4:30 P.M. to 5:30 P.M. **Figure 4** illustrates the Year 2022/2023 existing peak hour traffic volumes. Summaries of the traffic counts are included in the Appendix.

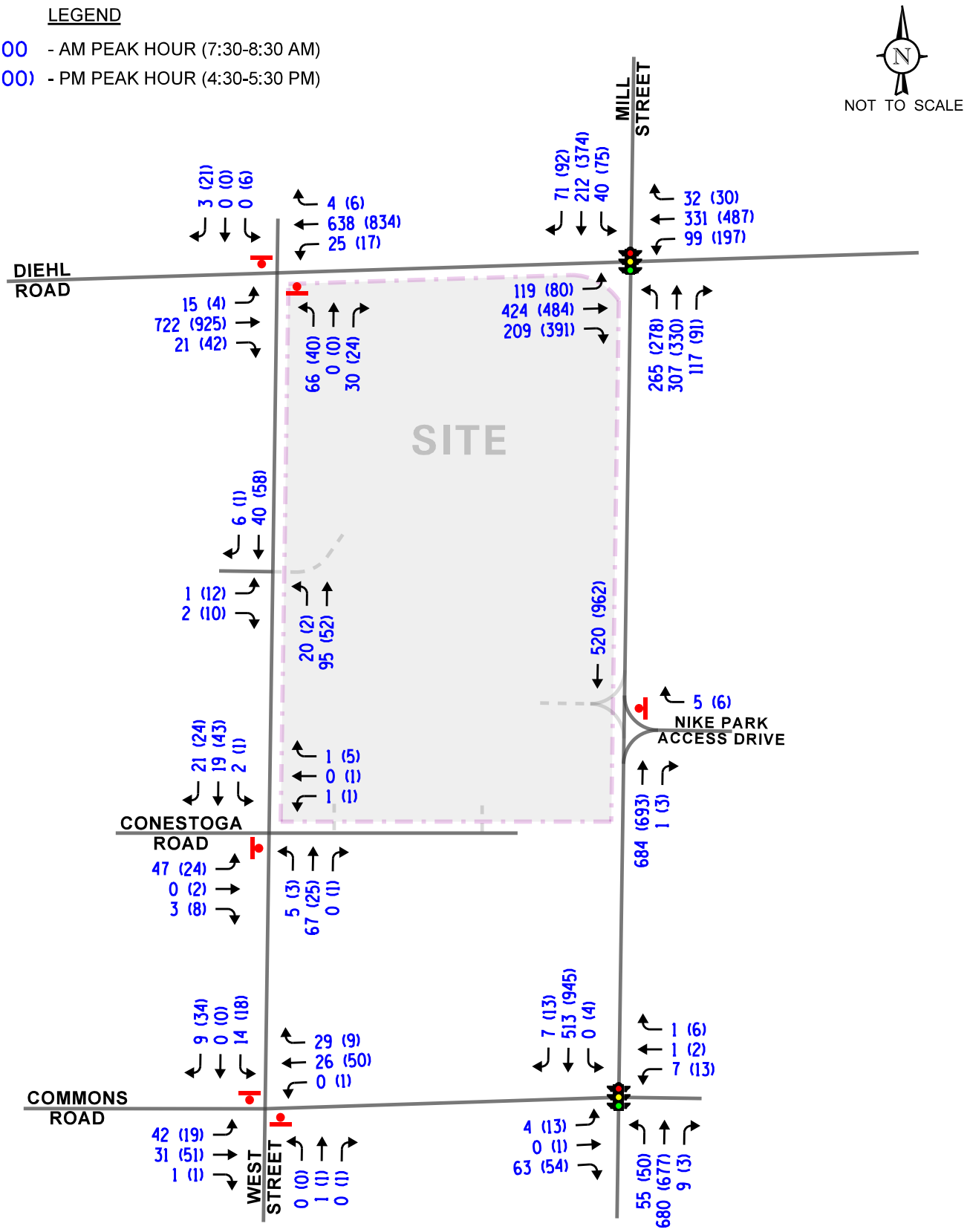
Crash Data Summary

KLOA, Inc. obtained crash data[1] from IDOT for the most recent available five years (2017 to 2021) for the intersections of Diehl Road with West Street and Mill Street, Mill Street with the Nike Sports Complex access drive and Commons Road, and West Street with Commons Road and Conestoga Road/office development access drive. No crashes were reported at the intersections of West Street with Commons Road and Conestoga Road/office development access drive or Mill Street with the Nike Sports Complex access drive. The crash data for the intersections of Diehl Road with West Street, Diehl Road with Mill Street, and Mill Street with Commons Road are summarized in **Tables 1** through **3**. A review of the crash data indicated that no fatalities were reported at these intersections during the surveyed period.

Table 1
DIEHL ROAD WITH MILL STREET – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2017	1	0	0	1	0	4	0	6
2018	1	0	0	3	1	4	0	9
2019	0	0	1	7	0	10	0	18
2020	0	0	0	2	0	2	0	4
2021	4	0	0	1	0	4	0	9
Total	**6**	**0**	**1**	**14**	**1**	**24**	**0**	**46**
Average	**1.2**	**--**	**<1.0**	**2.8**	**<1.0**	**4.8**	**--**	**9.2**

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



Mixed-Use Development
Naperville, Illinois

Existing Traffic Volumes

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Table 2
DIEHL ROAD WITH WEST STREET – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	1	0	1
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
Average	**--**	**--**	**--**	**--**	**--**	**<1.0**	**--**	**<1.0**

Table 3
MILL STREET WITH COMMONS ROAD– CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2017	0	0	0	0	0	0	0	0
2018	0	0	0	1	0	0	0	1
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
Average	**--**	**--**	**--**	**<1.0**	**--**	**--**	**--**	**<1.0**
The traffic signal at this intersection was activated on April 16, 2019.								

3. Traffic Characteristics of the Proposed Development

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

Proposed Site and Development Plan

As proposed, the mixed-use development is to be located on a site bounded by Diehl Road on the north, Mill Street on the east, HarborChase on the south, and West Street on the west. As proposed, the northern portion of the site will be developed with a two-story building for the Orion STEM private school and the southern portion of the site will be developed with a residential development containing 76 townhomes. The school parking lot will serve both staff/faculty and visitors and provide a total of 50 perpendicular parking spaces with residential parking provided via 152 garage parking spaces, 152 driveway parking spaces, and 44 surface parking spaces for a total of 348 residential parking spaces.

Access to the mixed-use development will be provided via the following access drives:

- A restricted right-turn in/right-turn out access drive located on the west side of Mill Street approximately 700 feet south of Diehl Road that will serve both the residential and school portions of the development. This access drive will provide one inbound lane and one outbound lane that will be channelized and signed to restrict left-turn movements. The outbound lane will be under stop sign control. In addition, a 110-foot separate right-turn lane with 130-foot taper will be provided on Mill Road serving the access drive.

- A full access drive to be located on the east side of West Street approximately 550 feet south of Diehl Road opposite the office development access drive that will serve both the residential and school portions of the development. This access drive will provide one inbound lane and two outbound lanes with the outbound lanes striped for a separate left-turn lane and a separate right-turn lane. Outbound through movements will be prohibited via a channelized mountable median, signage, and striping. The outbound lanes will be under stop sign control.

- Cross-access with the HarborChase northern east-west access road that extends along the south side of the site. Three access drives are proposed to be provided on the HarborChase access road that will primarily serve the residential development. The access drives will provide one inbound lane and one outbound lane with the outbound lanes under stop sign control.

School Operations

As proposed, the private school will have an enrollment of approximately 360 students in kindergarten through eighth grade and approximately 40 staff/faculty (approximately 22 teachers, 12 support teachers, and six administrative staff). The school will provide both a lower school (kindergarten through fifth grade) and an upper school (sixth to eighth grade). In addition, approximately 144 students will attend before-school programs and approximately 270 students will attend after-school programs. **Table 4** summarizes the start and end times of the school day and the numbers of students for various grades.

Table 4
START AND END OF TIMES OF THE SCHOOL DAY AND ENROLLMENT

Classes	Enrollment	Start and End Times
Lower School (Grades K, 1, and 2)	120 students	8:10 A.M. to 2:45 P.M.
Lower School (Grades 3, 4, and 5)	120 students	8:20 A.M. to 3:00 P.M.
Upper School (Grades 6, 7, and 8)	120 students	8:30 A.M. to 3:15 P.M.

Further, the before-school programs will extend from 7:30 A.M. to 8:10 A.M. and the after-school programs will extend from 2:45 P.M. to 6:00 P.M. The provision of the before- and after-school programs and the staggered start and end times of the various classes will distribute the drop-off traffic over approximately 1.5 hours in the morning and the pick-up traffic over approximately 4.0 hours in the afternoon/evening. As such, the surging of traffic often associated with the fixed start and end times of many schools will be minimized, which will reduce the impact of the school traffic on the area roadway system and along the internal circulation system.

School Parking

Parking for the school will be provided in the northeast and west portions of the school campus. The parking lot will serve both staff/faculty and visitors and provide a total of 50 perpendicular parking spaces with two-way circulation. A dedicated loading lane is proposed to be provided along the north, west, and south sides of the main parking lot that will be used for student drop-off/pick-up. In addition, a sidewalk will be provided along the east and south sides of the main parking lot.

Student Drop-Off/Pick-Up Operations

As discussed above, student drop-off and pick-up will occur in the school parking lot. During the morning drop-off period (approximately 7:30 A.M. to 8:30 A.M.) and afternoon pick-up period (approximately 2:30 P.M. to 3:30 P.M.), parents/caregivers will stack in the loading lane that will extend along the north, west, and south sides of the main parking lot. To better facilitate the drop-off/pick-up activity, the parking lot will operate with one-way counterclockwise circulation. Appropriate signage will be installed in the parking lot to indicate the one-way counterclockwise circulation. It should be noted that parents/caregivers picking up students from the after-school programs will be required to park and enter the school to sign out their students from the school office. The following summarizes the morning drop-off and afternoon pick-up operations.

Drop-Off Operations

The morning student drop-off activity will occur along the sidewalk/loading zone in the southwest corner of the main parking lot. Vehicles will stack/queue in a single line along the west and north sides of the parking lot and, if necessary, along the east side of the parking lot circulation road. As shown in **Figure 5**, a total of approximately 18 vehicles can be stacked/queued in the parking lot and an additional 16 vehicles can be stacked/queued along the east side of the north-south circulation road. Further, several staff members will be located in the loading zone and parking lot to assist with the unloading of students, to manage the drop-off operations, and to direct traffic through the parking lot.

Pick-Up Operations – End of School Day

The end of school day student pick-up activity will occur along the entire sidewalk/loading zone located on the south and west sides of the parking lot which can accommodate approximately 13 vehicles in a single line. Vehicles will stack/queue in a single line along the north side of the parking lot and, if necessary, along the east side of the circulation road. As shown in **Figure 6**, a total of approximately 26 vehicles can be stacked/queued along the south, west, and north sides of the main parking lot and an additional 16 vehicles can be stacked/queued along the east side of the north-south circulation road. Further, multiple staff members will be located in the loading zone and parking lot to assist with the loading of students, to manage the pick-up operations, and to direct traffic through the parking lot.

It is important to note that the projected stacking/queueing associated with the drop-off/pick-up operations will be minimized due to the following:

- Given the before- and after-school programs and the staggered start and end times of the various classes, the drop-off/pick-up traffic will be distributed over approximately 1.5 hours in the morning and 4.0 hours in the afternoon/evening, which will minimize the surging of traffic associated with the fixed start and end times of the school day. The total volume of drop-off/pick-up traffic will be reduced due to carpooling and that a percentage of students will ride the bus to and from school.

- The number of staff members the school has committed to assist with the unloading/loading of students and to manage the operations.

DIEHL ROAD

Grass Median

MILL STREET

STREET

FIRE TRUCK DRIVE

Mechanical Room

SCALE: 1" = 60'

LEGEND

- PRIMARY DROP-OFF STACKING = 18 PASSENGER VEHICLES
- OVERFLOW DROP-OFF STACKING = 16 PASSENGER VEHICLES
- BUS DROP-OFF STACKING = 2 FULL SIZE BUSES

MIXED-USE DEVELOPMENT
NAPERVILLE, ILLINOIS

MORNING STUDENT DROP-OFF AND BUS UNLOADING PLAN

DRAWN: MD CHECKED: MW
DATE: 09-30-22 REV: 01-16-23
PROJECT # 22-218
FIGURE: 5

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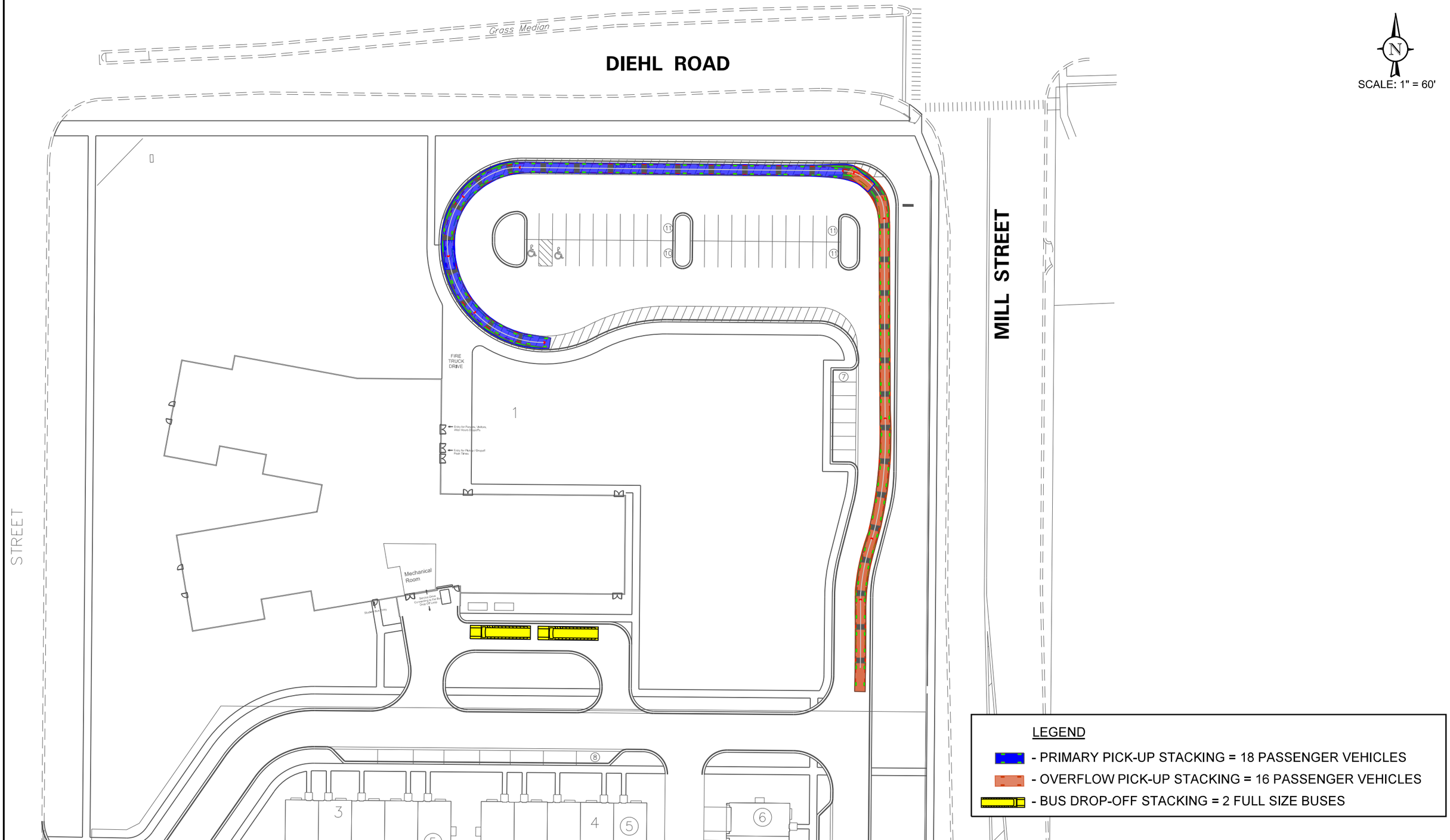

MIXED-USE DEVELOPMENT NAPERVILLE, ILLINOIS

AFTERNOON STUDENT PICK-UP AND BUS UNLOADING PLAN

DRAWN: MD CHECKED: MW
DATE: 09-30-22 REV: 01-16-23
PROJECT # 22-218
FIGURE: 6

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According to the school officials, the number of siblings at their existing schools range from approximately 18 to 27 percent. Further, siblings who have different drop-off/pick-up times will be able to participate in the before-school programs if a sibling is dropped off before his/her class starts or participate in the after-school program if a sibling's class is dismissed before the other sibling.

Pick-Up Operations – After-School Programs

Parents/caregivers picking up students from the after-school programs will be required to enter the school to sign out their students from the school office. As such, all parents/caregivers will be required to park within the parking lot and no curbside pick-up will be provided. Given the following, the 50 parking spaces to be provided by the school will be sufficient to accommodate the pick-up activity associated with the after-school programs:

- School officials estimate that only approximately 11 staff will be required to run the after-school programs.
- The after-school programs are offered from 2:45 P.M. to 6:00 P.M. with no fixed end time. As such, the pick-up activity is distributed over approximately 2.5 to 3.0 hours in the afternoon/evening.
- It will only take parents/caregivers approximately five minutes to pick up their students.

Bus Loading

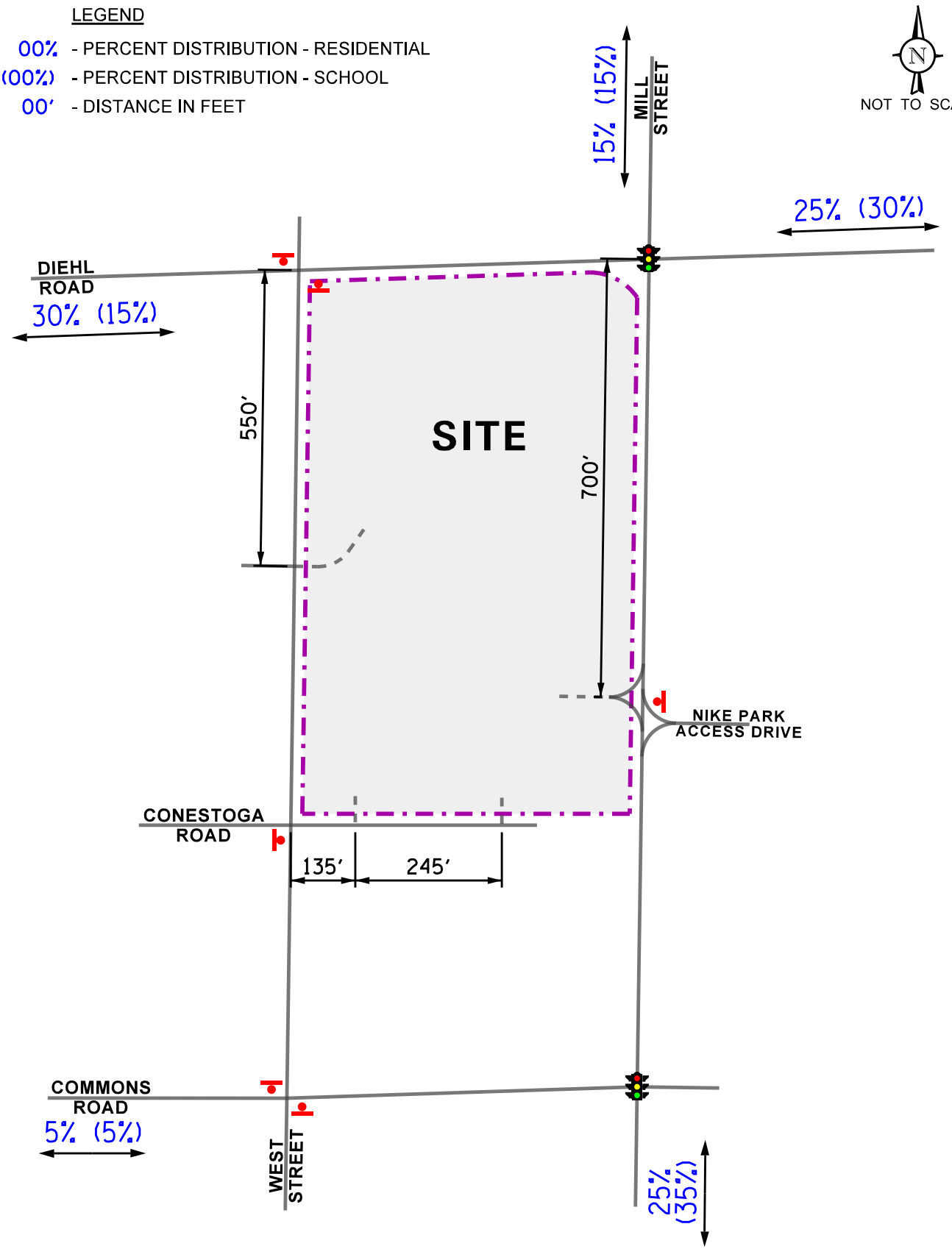
Bus loading is to occur in a loading zone to be provided on the south side of the school. The loading zone will provide one-way counterclockwise circulation with access provided via two one-way access drives located on the main east-west circulation road serving the residential portion of the development and the school. Approximately two large school buses and several small buses can be accommodated in the loading zone, which the school has indicated will be sufficient to meet the peak bus activity. One to two staff members will be stationed at the drop-off/pick-up zone to assist with the unloading/loading of students and to manage the operations.

Staff Members

As previously indicated, the school will station staff members throughout the campus to assist with the unloading/unloading of students, to manage the operations, and to direct traffic. Staff will/should be located at the student drop-off/pick-up zone in the parking lot, the bus loading lane, and at the intersection of the north-south circulation road and east-west circulation road.

Directional Distribution

The directions from which the students, parents/caregivers, and faculty/staff of the proposed school and residents and guests of the proposed residential development will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 7** illustrates the directional distribution of the development-generated traffic.



Mixed-Use Development
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Directional Distribution

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Estimated Site Traffic Generation

Residential Trip Generation

The volume of traffic estimated to be generated by the proposed residential portion of the development was estimated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition. The "Multifamily Housing (Low Rise)" Land Use Code 220 rates were used to estimate the residential trips. The ITE trip generation sheets are included in the Appendix.

School Trip Generation Estimates

The volume of traffic projected to be generated by the proposed school was based on its operation as provided by school officials. **Table 5** shows the projected arrival and departure of the students as provided by school officials:

Table 5
ARRIVAL AND DEPARTURE OF STUDENTS

Time of Day	Approximate Students
Before-School Programs (7:30 A.M. to 8:00 A.M.)	144
Before School Day Drop-Off (8:00 A.M. to 8:30 A.M.)	216
After School Day Pick-Up (2:30 P.M. to 3:30 P.M.)	90
After-School Programs (3:00 P.M. to 6:00 P.M.)	270

In addition, based on information provided by school officials, it was assumed that approximately 15 percent of the students will ride the bus to/from school and approximately 20 percent of the students will carpool. According to the school officials, the number of siblings in their existing schools range from approximately 18 to 27 percent. Further, it is important to note that the number of students per day will also be reduced due to students that are absent. **Table 6** shows the estimated morning and evening peak hour traffic volumes that will be generated by the mixed-use development.

Table 6
ESTIMATED SITE-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
		In	Out	Total	In	Out	Total
220	Multifamily Housing (Low-Rise) - 76 Townhomes	11	35	46	33	20	53
	School	265	245	510	90	110	200
	Total	**276**	**280**	**556**	**123**	**130**	**253**

4. Projected Traffic Conditions

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

Development Traffic Assignment

The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 7). The new traffic assignment for the residential development is illustrated in **Figure 8** and the new traffic assignment for the school is illustrated in **Figure 9**.

Background (No-Build) Traffic Conditions

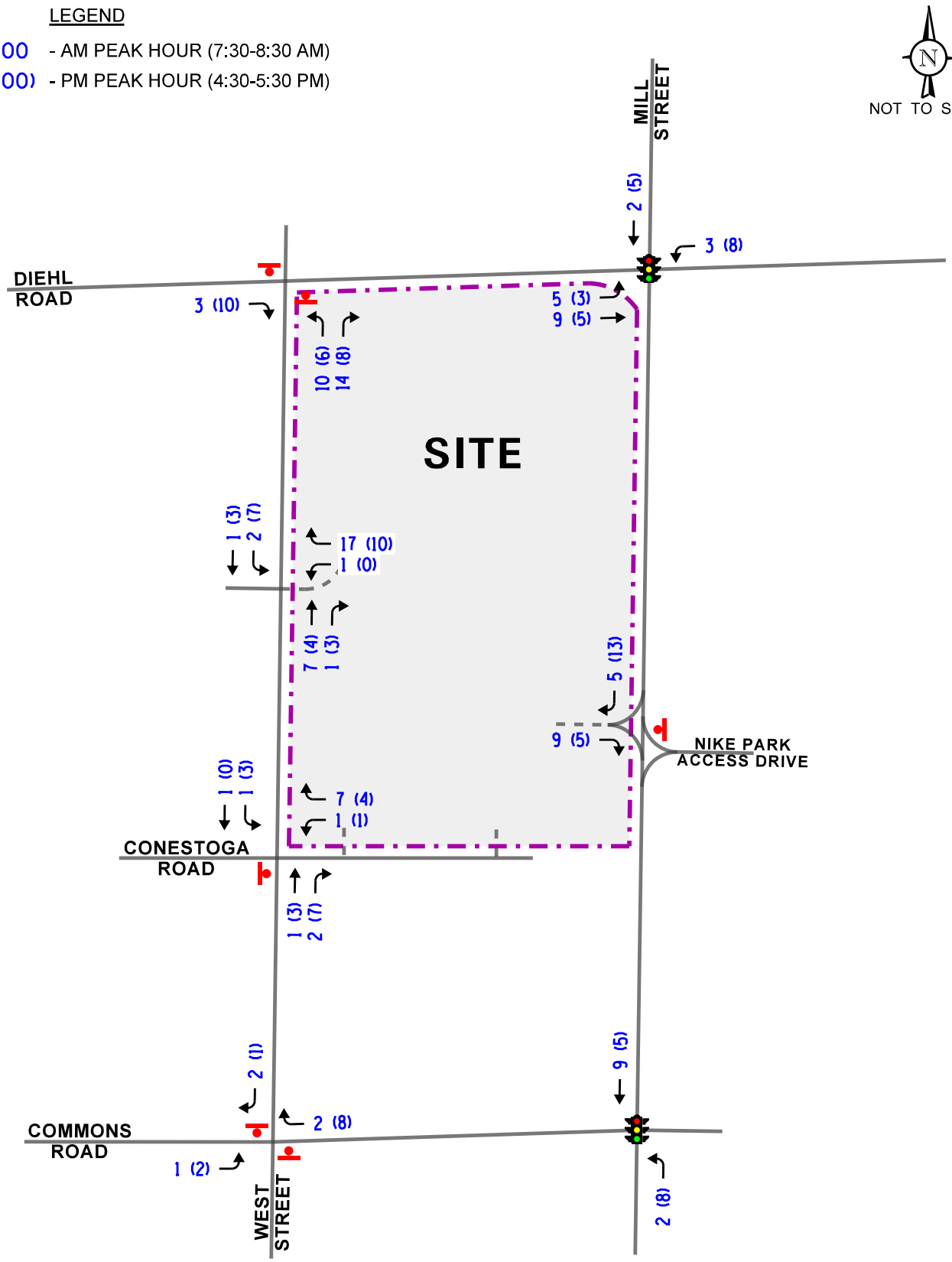
The existing traffic volumes were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on AADT projections provided by CMAP in a letter dated August 12, 2022, the existing traffic volumes are projected to increase by a compounded annual growth rate of 1.29 percent per year. As such, the existing traffic volumes were increased by a total of approximately eight percent over six years (buildout year plus five years) to project Year 2029 traffic volumes. A copy of the CMAP letter is included in the Appendix.

In addition, the study also included the traffic to be generated by the full occupancy of the office building located in the southwest quadrant of the Diehl Road/West Street intersection. The traffic to be generated by the approximately 63,000 square feet of vacant space was based on the trip rates provided in the ITE *Trip Generation Manual*, 11th Edition and assigned to the roadway system based on the existing traffic volumes.

Figure 10 illustrates the Year 2029 no-build traffic volumes.

Total Projected Traffic Volumes

The development-generated traffic (Figure 8 and 9) was added to the existing traffic volumes increased by a regional growth factor (Figure 10) to determine the Year 2029 total projected traffic volumes, as illustrated in **Figure 11**.



Mixed-Use Development
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Residential-Generated Traffic Volumes

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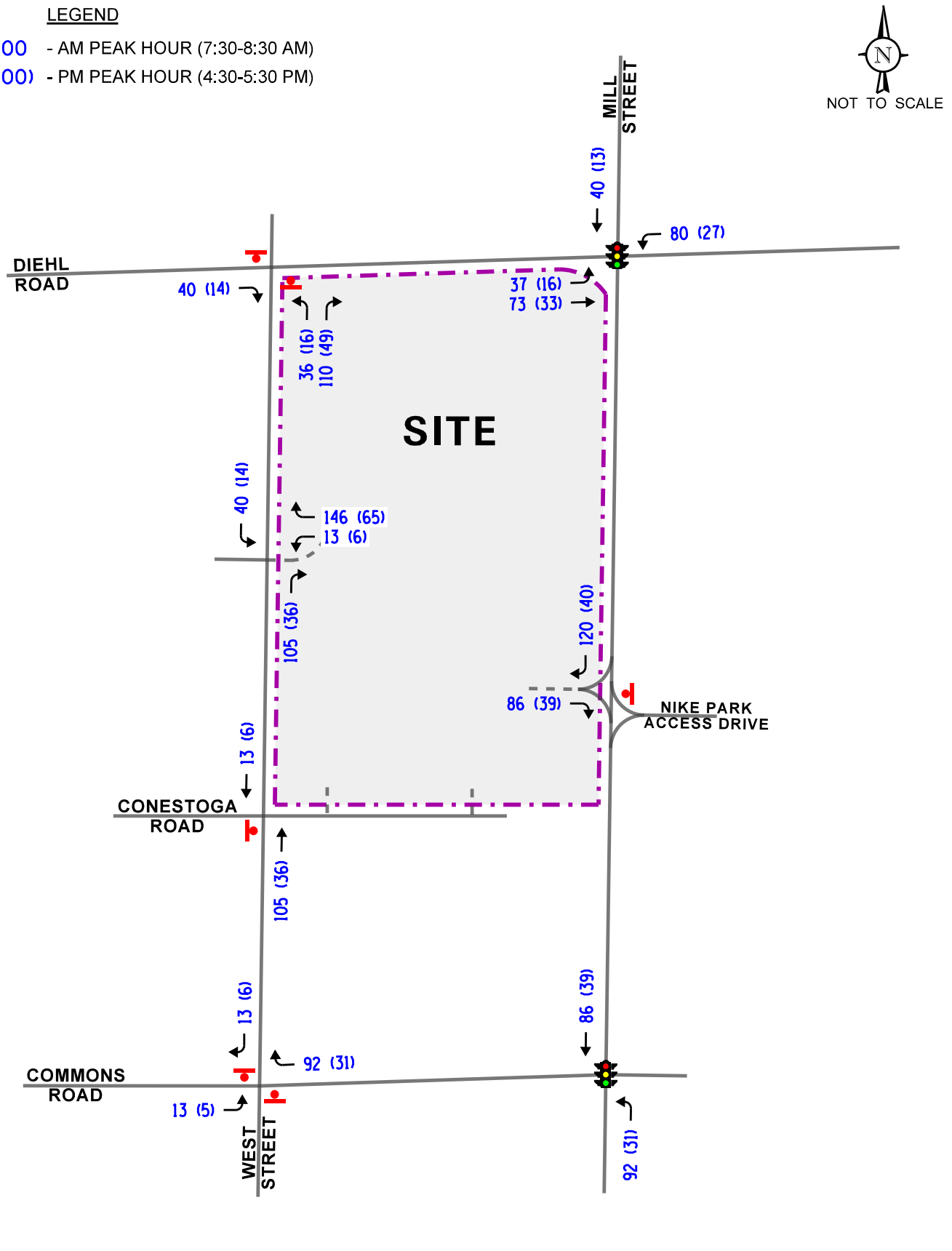

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School-Generated Traffic Volumes

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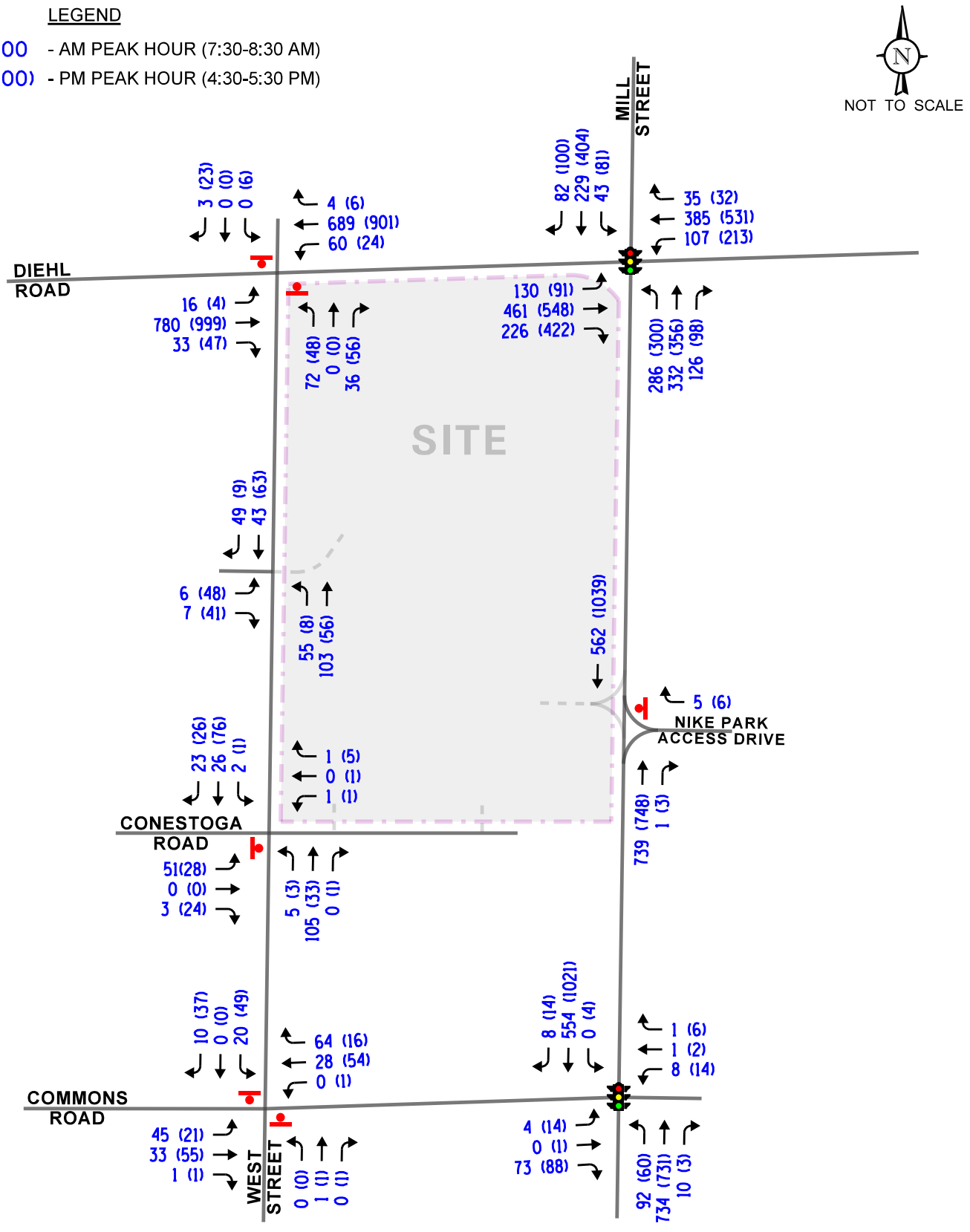

Mixed-Use Development
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Year 2029 No-Build Traffic Volumes

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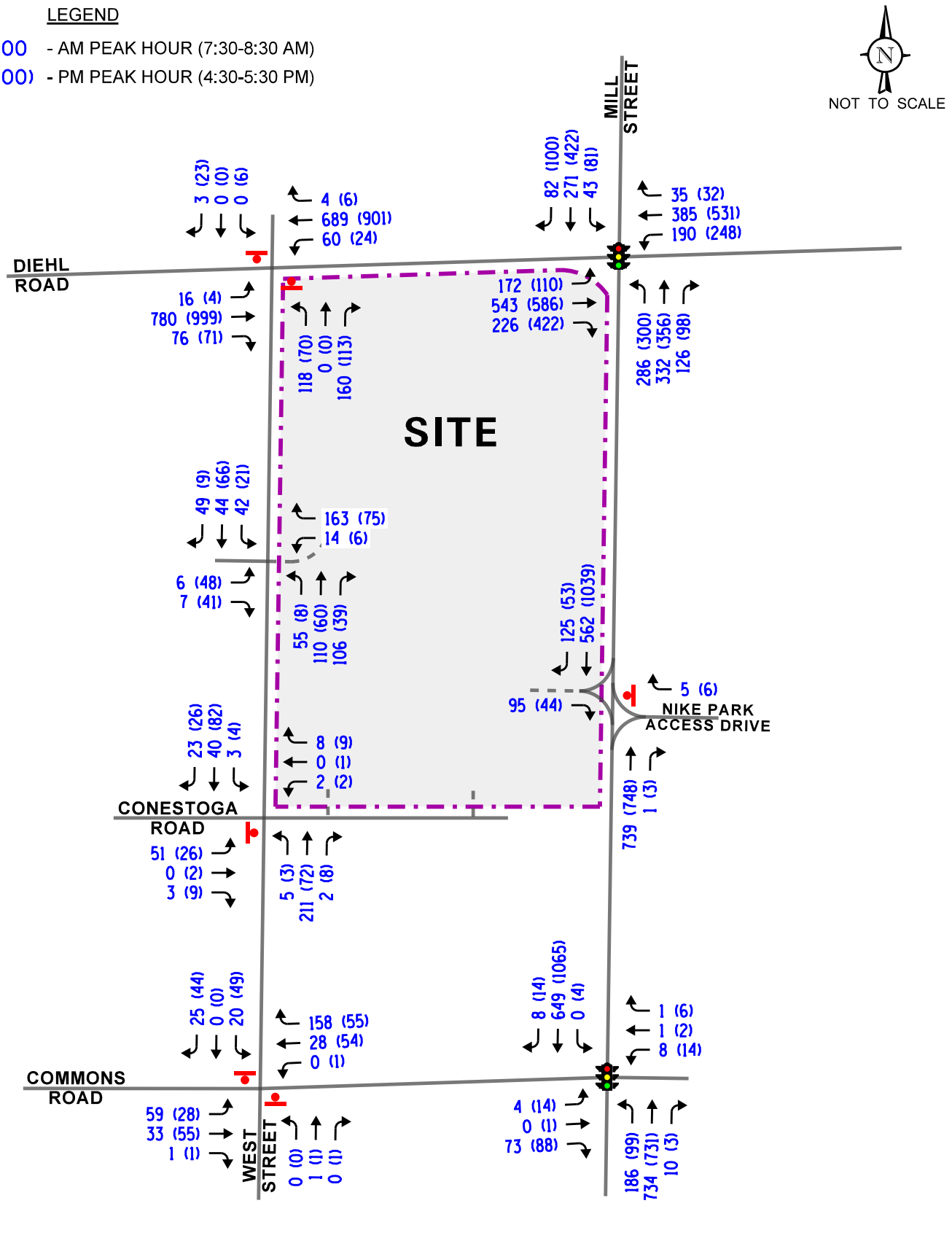
Job No: 22-218 Figure: 10



Mixed-Use Development
Naperville, Illinois

Year 2029 Total Projected Traffic Volumes

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

Job No: 22-218 Figure: 11

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and weekday evening peak hours for the existing, Year 2029 no-build, and Year 2029 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM),* 6th Edition and analyzed using Synchro/SimTraffic 11 computer software. The analyses for signalized intersections were accomplished utilizing actual cycle lengths, phasings, and offsets.

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

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

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, no-build, and Year 2029 total projected conditions are presented in **Tables 7** through **11**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 7
DIEHL ROAD WITH MILL STREET– SIGNALIZED

	Peak Hour	Eastbound			Westbound		Northbound		Southbound		Overall
		L	T	R	L	T/R	L	T/R	L	T/R	
Base Conditions	Weekday Morning	C 23.6	C 34.4	A 2.2.2	C 23.6	D 36.0	C 22.6	C 24.6	C 20.6	C 33.0	C 26.9
		C – 23.8			C – 33.4		C – 23.8		C – 31.4		
	Weekday Evening	B 17.7	C 31.2	A 6.4	C 20.1	C 26.8	E 69.0	D 42.7	C 33.5	E 63.9	D 36.5
		B – 19.9			C – 24.9		D – 53.2		E – 59.7		
No-Build Conditions	Weekday Morning	C 22.3	C 32.5	A 2.1	C 22.2	C 34.8	C 26.9	C 27.2	C 22.9	D 35.5	C 27.7
		C – 22.5			C – 32.2		C – 27.1		C – 34.0		
	Weekday Evening	B 19.8	D 35.2	B 10.2	C 23.4	C 29.6	F 85.8	D 46.7	C 33.0	E 64.6	D 40.7
		C – 24.0			C – 27.9		E – 62.3		E – 60.2		
Projected Conditions	Weekday Morning	C 23.9	C 33.7	A 3.4	C 33.1	D 36.5	C 28.2	C 27.2	C 22.7	D 37.6	C 29.6
		C – 24.6			D – 35.4		C – 27.5		D – 36.0		
	Weekday Evening	B 19.9	D 36.7	B 11.8	C 25.1	C 28.7	F 96.4	D 42.2	C 33.2	E 67.6	D 41.7
		C – 25.7			C – 27.6		E – 63.8		E – 63.0		

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

Table 8
COMMONS ROAD WITH MILL STREET – SIGNALIZED

	Peak Hour	Eastbound		Westbound		Northbound			Southbound		Overall
		L	T/R	L	T/R	L	T	R	L	T/R	
Base Conditions	Weekday Morning	E 56.8	A 0.6	E 59.7	D 47.5	A 1.8	A 2.1	A 0.1	A 0.1	A 4.2	A 3.3
		A – 3.6		E – 57.3		A – 2.0			A – 4.2		
	Weekday Evening	E 69.7	C 22.7	E 70.2	D 41.4	A 2.0	A 2.5	A 0.1	A 1.5	A 4.8	A 5.5
		C – 31.7		E – 59.7		A – 2.5			A – 4.8		
No-Build Conditions	Weekday Morning	E 56.5	A 0.8	E 60.1	D 47.0	A 2.2	A 2.4	A 0.1	A 0.1	A 5.1	A 3.8
		A – 3.4		E – 57.7		A – 2.4			A – 5.1		
	Weekday Evening	E 69.0	C 21.0	E 72.9	D 40.7	A 2.4	A 3.0	A 0.1	A 1.8	A 5.4	A 6.2
		C – 27.5		E – 61.7		A – 2.9			A – 5.4		
Projected Conditions	Weekday Morning	E 56.5	A 1.1	E 60.1	D 47.0	A 3.3	A 2.4	A 0.1	A 0.1	A 5.7	A 4.2
		A – 3.7		E – 57.7		A – 2.6			A – 5.7		
	Weekday Evening	E 69.0	C 21.0	E 72.9	D 40.7	A 3.1	A 3.0	A 0.1	A 1.8	A 5.0	A 5.9
		C – 27.5		E – 61.7		A – 3.0			A – 5.0		

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

Table 9
YEAR 2023 EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
West Street with Diehl Road				
Southbound Approach	A	9.3	B	14.3
Northbound Left Turn	C	22.4	E	41.7
Northbound Through/Right Turn	B	11.1	B	12.8
Eastbound Left Turn	A	8.0	A	8.3
Westbound Left Turn	A	9.4	B	10.7
West Street with Commons Road				
Northbound Approach	B	10.3	A	9.3
Southbound Left Turn	A	9.8	A	9.6
Southbound Through/Right Turn	A	8.5	A	8.6
Eastbound Left Turn	A	7.4	A	7.3
Westbound Left Turn	A	0.1	A	7.3
West Street with Conestoga Road				
Eastbound Approach	A	9.6	A	9.3
Westbound Approach	B	10.1	A	8.8
Northbound Left Turn	A	7.3	A	7.4
Southbound Left Turn	A	7.9	A	7.3
West Street with Office Development Access Drive				
Eastbound Approach	A	9.0	A	9.0
Northbound Left Turn	A	7.4	A	7.3
Mill Street with Nike Access Drive				
Westbound Approach	A	9.4	A	9.4

LOS = Level of Service
Delay is measured in seconds.

Table 10
YEAR 2029 NO-BUILD CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
West Street with Diehl Road				
Southbound Approach	A	9.4	C	15.9
Northbound Left Turn	D	32.9	F	61.3
Northbound Through/Right Turn	B	11.5	B	14.1
Eastbound Left Turn	A	8.0	A	8.4
Westbound Left Turn	A	10.0	B	11.3
West Street with Commons Road				
Northbound Approach	B	10.6	A	9.4
Southbound Left Turn	B	10.1	B	10.0
Southbound Through/Right Turn	A	8.6	A	8.7
Eastbound Left Turn	A	7.5	A	7.4
Westbound Left Turn	A	0.1	A	7.3
West Street with Conestoga Road				
Eastbound Approach	B	10.0	A	9.6
Westbound Approach	B	10.6	A	8.9
Northbound Left Turn	A	7.3	A	7.5
Southbound Left Turn	A	8.0	A	7.3
West Street with Office Development Access Drive				
Eastbound Approach	A	9.9	A	9.5
Northbound Left Turn	A	7.6	A	7.4
Mill Street with Nike Access Drive				
Westbound Approach	A	9.5	A	9.7

LOS = Level of Service
Delay is measured in seconds.

Table 11
YEAR 2029 TOTAL PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
West Street with Diehl Road				
Southbound Approach	A	9.4	C	17.6
Northbound Left Turn	F	50.9	F	96.4
Northbound Through/Right Turn	B	13.8	C	16.2
Eastbound Left Turn	A	8.0	A	8.4
Westbound Left Turn	B	10.2	B	11.4
West Street with Commons Road				
Northbound Approach	B	11.9	A	9.6
Southbound Left Turn	B	10.9	B	10.3
Southbound Through/Right Turn	A	9.0	A	8.8
Eastbound Left Turn	A	7.8	A	7.5
Westbound Left Turn	A	0.1	A	7.3
West Street with Conestoga Road				
Eastbound Approach	B	11.4	B	10.1
Westbound Approach	B	10.2	A	9.2
Northbound Left Turn	A	7.3	A	7.5
Southbound Left Turn	A	8.1	A	7.5
West Street with Proposed Full Access Drive/Office Development Access Drive				
Eastbound Approach	B	14.2	B	10.5
Westbound Left Turn	B	14.7	B	10.5
Westbound Right Turn	B	11.0	A	9.0
Northbound Left Turn	A	7.6	A	7.4
Southbound Left Turn	A	7.9	A	7.4
Mill Street with Proposed RI/RO Access Drive/Nike Access Drive				
Eastbound Approach	A	9.7	B	11.1
Westbound Approach	A	9.5	A	9.7

LOS = Level of Service
Delay is measured in seconds.

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development traffic.

Diehl Road with Mill Street

The results of the capacity analyses indicate that the intersection currently operates at Level of Service (LOS) C during the weekday morning peak hour and LOS D during the weekday evening peak hour. All the intersection movements operate at LOS D or better during both peak hours except the northbound left-turn movement and the southbound through/right-turn movement. The southbound through/right-turn movement currently operates at LOS E and the northbound left-turn movement currently operates at LOS F during the weekday evening peak hour. This is due to the higher volume of traffic along these movements and the amount of green time they receive. Consideration should be given to reoptimizing the traffic signal timings at this intersection to better accommodate the evening peak hour traffic volumes.

Under Year 2029 no-build conditions, the intersection is projected to continue operating at LOS C during the weekday morning peak hour and LOS D during the evening peak hour. All the intersection movements are projected to continue to operate at LOS D or better during both peak hours except the northbound left-turn movement and the southbound through/right-turn movement.

Under Year 2029 total projected conditions, the intersection is projected to continue to operate at LOS C during the weekday morning peak hour and at LOS D during the weekday evening peak hour. All the intersection movements are projected to continue to operate at LOS D or better during both peak hours except the northbound left-turn movement and the southbound through/right-turn movement. It is important to note that the development is not anticipated to add any additional northbound left-turn movements and only a limited volume of additional southbound through movements at this intersection during the evening peak hour. As such, the intersection has the reserve capacity to accommodate the traffic estimated to be generated by the proposed development. As discussed previously, consideration should be given to reoptimizing the traffic signal timings at this intersection to better accommodate the evening peak hour traffic volumes.

Mill Street with Commons Road

The results of the capacity analyses indicate that the intersection currently operates at LOS A during the weekday morning and weekday evening peak hours. All the intersection movements operate at LOS C or better during both peak hours except the eastbound and westbound left-turn movements, which operate at LOS E. The lower level of service for the left-turn movements is due in part to the long cycle length at this intersection and the limited green time that the eastbound and westbound left-turn movements receive.

Under Year 2029 no-build conditions, the intersection is projected to continue operating at LOS A during both peak hours. All the intersection movements are projected to continue to operate at LOS C or better during both peak hours except the eastbound and westbound left-turn movements, which are projected to continue to operate at LOS E.

Under Year 2029 total conditions, the intersection is projected to continue operating at the same existing levels of service during both peak hours. All the movements are projected to continue to operate at LOS C or better during both peak hours except the eastbound and westbound left-turn movements, which are projected to continue to operate at LOS E. It should be noted that the eastbound approach of Commons Road is projected to have a maximum 95th percentile queue of approximately 59 feet which will not block the HarborChase access drive located on Commons Drive just west of Mill Road. As such, this intersection has sufficient reserve capacity to accommodate the traffic that will be generated by the proposed development and no roadway or traffic control improvements in conjunction with the development are needed.

West Street with Diehl Road

The results of the capacity analyses indicate that all the critical movements and approaches at this intersection currently operate at LOS C or better during the weekday morning and evening peak hours except the northbound left-turn movement, which currently operates at LOS E during both weekday evening peak hour. This traffic is able to exit onto Diehl Road. However, during the peak periods, this traffic experiences some additional delay. This is common for a stop sign-controlled approach along a major road such as Diehl Road. Further, it is important to note that field observations have shown that the northbound left-turn movement operates better than the capacity analyses indicate due to the following:

- The capacity analyses do not take into consideration the additional gaps created in the Diehl Road traffic stream due to the traffic signals at Mill Street and Bulger Court/Weaver Parkway, located just east and west of West Street.

- The capacity analyses do not take into account drivers who may make a two-stage left turn where vehicles will cross the eastbound direction of traffic and then wait in the Diehl Road median for a gap in the westbound direction of Diehl Road.

Further, per discussions with DuDOT, a traffic signal is not anticipated at this intersection due to (1) the limited spacing between the intersection and the signalized intersections of Diehl Road/Mill Street to the east and Diehl Road/Bulger Court/Weaver Parkway to the west and (2) that the development traffic can use the signalized intersection of Mill Street/Commons Road, if necessary.

Under Year 2029 no-build conditions, all the critical movements are projected to operate at LOS D or better during both peak hours except the northbound left-turn movement, which is projected to operate at LOS F during the weekday evening peak hour. However, as discussed above, the left-turn movement is projected to operate better than the capacity analyses indicate.

Under Year 2029 no-build conditions, all the critical movements are projected to continue to operate at LOS C or better during both peak hours except the northbound left-turn movement. The northbound left-turn movement is projected to continue to operate at LOS F during both peak hours. However, as discussed above, the left-turn movement are projected to operate better than the capacity analyses indicate.

West Street with Commons Road

The results of the capacity analyses indicate that all the critical approaches and movements currently operate at LOS B or better during the weekday morning and weekday evening peak hours. Under Year 2029 no-build and total projected conditions, all the critical approaches and movements are projected to continue operating at LOS B or better during both peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic that will be generated by the proposed development and no roadway or traffic control improvements in conjunction with the development are needed.

West Street with Conestoga Road/HarborChase Access Road

The results of the capacity analyses indicate that the eastbound approach currently operates at LOS A during both peak hours. The westbound approach currently operates at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour. The northbound and southbound left-turn movements currently operate at LOS A during both peak hours. Under Year 2029 no-build and total projected conditions, all the approaches and movements at this intersection are projected to continue operating at LOS B or better with increases in delay of approximately two seconds or less. As such, this intersection has sufficient reserve capacity to accommodate the traffic that will be generated by the proposed development and no roadway or traffic control improvements in conjunction with the development are needed.

West Street with Proposed Full Access Drive/Office Development Access Drive

The results of the capacity analyses indicate that the eastbound approach and the northbound left-turn movement currently operate at LOS A during both peak hours. Under Year 2029 no-build conditions, the eastbound approach and the northbound left-turn movement will continue operating at LOS A during both peak hours.

Access to the development will be provided via a full access drive to be located on the east side of West Street approximately 550 feet south of Diehl Road opposite the access drive to the office development which will serve both the residential and school portions of the development. This access drive will provide one inbound lane and one outbound lanes striped for a separate left-turn lane and a right-turn lane. under stop sign control. Outbound through movement will be prohibited via a channelized mountable median, signage and striping. The outbound lanes will be under stop sign control.

Under Year 2029 total projected conditions, the eastbound approach will operate at LOSB during the weekday morning and weekday evening peak hours. The westbound left turn movement is projected to operate at LOS B during both peak hours and the westbound right-turn movement is projected to operate at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour. The northbound and southbound left-turn movements will operate at LOS A during both peak hours. As such, the access drive is projected to provide flexible and efficient access with limited impact on the operation of the existing intersection.

Mill Street with Right-In/Right-Out Access Drive/Nike Sports Complex Access Drive

The results of the capacity analyses indicate that the westbound approach currently operates at LOS A during both peak hours. Under Year 2029 no-build conditions, the westbound approach will continue to operate at LOS A during both peak hours with increases in delay of less than one second.

A restricted right-turn in/right-turn access drive is proposed to be located on the west side of Mill Street approximately 700 feet south of Diehl Road that will serve both the residential and school portions of the development. This access drive will provide one inbound lane and one outbound lane that will be channelized and signed to restrict left-turn movements. The outbound lane will be under stop sign control. In addition, a 110-foot separate right-turn lane with 130-foot taper will be provided on Mill Road serving the access drive.

Under Year 2029 total projected conditions with the development of the right-in/right-out access drive, the eastbound approach will operate at LOS B during the weekday morning and weekday evening peak hours. The westbound approach will continue to operate at LOS A during both peak hours. As such, the access drive is projected to provide flexible and efficient access and with limited impact on the operation of the Mill Street through traffic.

Parking Requirements

As proposed, the school is to provide a total of 50 parking spaces and the residential development is to provide a total of 345 parking spaces with 152 garage parking spaces, 152 driveway parking spaces, and 44 surface parking spaces. The City of Naperville zoning ordinance requires the following number of parking spaces for each use:

- The residential development requires 2.25 parking spaces per unit. With a total of 76 units, the residential development requires 171 parking spaces. As such, the 348 parking spaces to be provided exceeds the parking requirements of the City of Naperville.

- The school requires one parking space per employee. With a total of approximately 40 staff/faculty (approximately 22 teachers, 12 support teachers, and six administrative staff), the school requires 40 parking spaces. As such, the 50 parking spaces to be provided exceeds the parking requirements of the City of Naperville.

Parents/caregivers picking up students from the after-school programs will be required to enter the school to sign out their students from the school office. Given the following, the 50 parking spaces to be provided by the school will be sufficient to accommodate the pick-up activity associated with the after-school programs:

- School officials estimate that only approximately 11 staff will be required to run the after-school programs.
- The after-school programs are offered from 2:45 P.M. to 6:00 P.M. with no fixed end time. As such, the pick-up activity is distributed over approximately 2.5 to 3.0 hours in the afternoon/evening.
- It will only take parents/caregivers approximately five minutes to pick up their students.

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- Access to the mixed-use development will be provided via the following access drives:
  - A restricted right-turn in/right-turn access drive located on the west side of Mill Street approximately 700 feet south of Diehl Road that will serve both the residential and school portions of the development. This access drive will provide one inbound lane and one outbound lane that will be channelized and signed to restrict left-turn movements. The outbound lane will be under stop sign control. In addition, a 110-foot separate right-turn lane with 130-foot taper will be provided on Mill Road serving the access drive.
  - A full access drive to be located on the east side of West Street approximately 550 feet south of Diehl Road opposite the access drive to the office development that will serve both the residential and school portions of the development. This access drive will provide one inbound lane and two outbound lane striped for a separate left-turn lane and a separate right-turn lane. Outbound through movements will be prohibited via a channelized mountable median, signage, and striping. The outbound lanes will be under stop sign control.
  - Cross-access with the HarborChase northern east-west access road that extends along the south side of the site. Three access drives are proposed to be provided on the HarborChase access road that will only serve a portion of the residential development. The access drive will provide one inbound lane and one outbound lane with the outbound lanes under stop sign control.
- The proposed access system will be adequate and efficient in serving the proposed mixed-use development traffic.
- The existing roadway system generally has sufficient reserve capacity to accommodate the additional traffic to be generated by the proposed development and no roadway improvements are required to accommodate the development-generated traffic. Consideration should be given to reoptimizing the traffic signal timings at the Diehl Road/Mill Street intersection to better accommodate the evening peak hour traffic volumes.
- The proposed school is anticipated to have highly attended before- and after-school programs and will have staggered start and end times for the various classes. As such, the drop-off/pick-up traffic will be distributed over approximately 1.5 hours in the morning and 4.0 hours in the afternoon/evening. As such, the surging of traffic associated with the fixed start and end times of many schools will be minimized, which will reduce the impact of the school traffic on the area roadway system and along the internal circulation system.

- The projected stacking/queueing associated with the drop-off/pick-up operations will be minimized due to the following:
    - As discussed above, the reduced surging of traffic associated with the proposed school.
    - The total volume of drop-off/pick-up traffic will be reduced due to carpooling and the fact that a percentage of students will ride the bus to and from school.
    - The number of staff members the school has committed to assist with the unloading/loading of students and to manage the operations.

Appendix

Traffic Count Summary Sheets
Site Plan
ITE Trip Generation Summary Sheets
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets

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Count Name: Mill St with Diehl Rd
Site Code:
Start Date: 12/08/2022

Turning Movement Data

Start Time	Diehl Rd Eastbound						Diehl Rd Westbound						Mill St Northbound						Mill St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	28	44	37	0	109	0	15	50	9	0	74	0	54	84	10	0	148	0	5	40	12	0	57	388
7:15 AM	0	33	67	54	0	154	0	25	66	5	0	96	0	44	73	19	0	136	0	5	56	23	1	84	470
7:30 AM	0	24	87	65	0	176	0	37	90	8	0	135	0	55	71	28	0	154	0	6	72	20	0	98	563
7:45 AM	0	31	120	67	1	218	0	21	89	7	0	117	0	61	94	27	0	182	0	15	56	16	0	87	604
Hourly Total	0	116	318	223	1	657	0	98	295	29	0	422	0	214	322	84	0	620	0	31	224	71	1	326	2025
8:00 AM	1	33	96	38	0	168	0	19	71	7	0	97	0	80	65	35	0	180	0	8	49	15	0	72	517
8:15 AM	0	30	99	39	0	168	0	22	81	10	0	113	0	69	77	27	0	173	0	11	35	20	0	66	520
8:30 AM	0	24	73	57	0	154	0	22	85	10	0	117	0	42	56	22	0	120	0	13	38	15	0	66	457
8:45 AM	0	19	82	57	0	158	0	21	78	3	0	102	0	51	54	19	0	124	0	5	49	10	0	64	448
Hourly Total	1	106	350	191	0	648	0	84	315	30	0	429	0	242	252	103	0	597	0	37	171	60	0	268	1942
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	11	111	91	0	213	0	45	142	16	0	203	0	69	66	15	0	150	0	19	96	52	0	167	733
4:15 PM	0	15	91	82	0	188	0	30	119	7	0	156	0	70	73	18	0	161	0	7	95	24	0	126	631
4:30 PM	0	14	120	89	0	223	0	37	122	10	0	169	0	63	67	18	0	148	0	20	102	22	0	144	684
4:45 PM	0	21	120	91	0	232	0	34	116	6	0	156	0	69	71	21	0	161	0	22	106	26	0	154	703
Hourly Total	0	61	442	353	0	856	0	146	499	39	0	684	0	271	277	72	0	620	0	68	399	124	0	591	2751
5:00 PM	0	26	129	106	0	261	0	72	149	10	0	231	0	60	89	26	0	175	0	20	86	29	0	135	802
5:15 PM	0	19	113	105	0	237	0	54	100	4	0	158	1	85	85	26	0	197	0	13	79	15	0	107	699
5:30 PM	1	8	122	92	0	223	0	52	133	8	0	193	0	70	61	18	0	149	0	9	76	25	0	110	675
5:45 PM	0	13	86	78	0	177	0	35	116	6	0	157	0	54	57	11	0	122	0	11	73	12	0	96	552
Hourly Total	1	66	450	381	0	898	0	213	498	28	0	739	1	269	292	81	0	643	0	53	314	81	0	448	2728
Grand Total	2	349	1560	1148	1	3059	0	541	1607	126	0	2274	1	996	1143	340	0	2480	0	189	1108	336	1	1633	9446
Approach %	0.1	11.4	51.0	37.5	-	-	0.0	23.8	70.7	5.5	-	-	0.0	40.2	46.1	13.7	-	-	0.0	11.6	67.9	20.6	-	-	-
Total %	0.0	3.7	16.5	12.2	-	32.4	0.0	5.7	17.0	1.3	-	24.1	0.0	10.5	12.1	3.6	-	26.3	0.0	2.0	11.7	3.6	-	17.3	-
Lights	2	337	1550	1139	-	3028	0	532	1591	125	-	2248	1	980	1122	338	-	2441	0	189	1094	320	-	1603	9320
% Lights	100.0	96.6	99.4	99.2	-	99.0	-	98.3	99.0	99.2	-	98.9	100.0	98.4	98.2	99.4	-	98.4	-	100.0	98.7	95.2	-	98.2	98.7
Buses	0	10	4	5	-	19	0	3	7	1	-	11	0	3	13	1	-	17	0	0	9	14	-	23	70
% Buses	0.0	2.9	0.3	0.4	-	0.6	-	0.6	0.4	0.8	-	0.5	0.0	0.3	1.1	0.3	-	0.7	-	0.0	0.8	4.2	-	1.4	0.7
Single-Unit Trucks	0	2	5	3	-	10	0	5	7	0	-	12	0	9	6	1	-	16	0	0	5	2	-	7	45
% Single-Unit Trucks	0.0	0.6	0.3	0.3	-	0.3	-	0.9	0.4	0.0	-	0.5	0.0	0.9	0.5	0.3	-	0.6	-	0.0	0.5	0.6	-	0.4	0.5
Articulated Trucks	0	0	1	1	-	2	0	1	2	0	-	3	0	4	2	0	-	6	0	0	0	0	-	0	11
% Articulated Trucks	0.0	0.0	0.1	0.1	-	0.1	-	0.2	0.1	0.0	-	0.1	0.0	0.4	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: Mill St with Diehl Rd
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Diehl Rd Eastbound						Diehl Rd Westbound						Mill St Northbound						Mill St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	24	87	65	0	176	0	37	90	8	0	135	0	55	71	28	0	154	0	6	72	20	0	98	563
7:45 AM	0	31	120	67	1	218	0	21	89	7	0	117	0	61	94	27	0	182	0	15	56	16	0	87	604
8:00 AM	1	33	96	38	0	168	0	19	71	7	0	97	0	80	65	35	0	180	0	8	49	15	0	72	517
8:15 AM	0	30	99	39	0	168	0	22	81	10	0	113	0	69	77	27	0	173	0	11	35	20	0	66	520
Total	1	118	402	209	1	730	0	99	331	32	0	462	0	265	307	117	0	689	0	40	212	71	0	323	2204
Approach %	0.1	16.2	55.1	28.6	-	-	0.0	21.4	71.6	6.9	-	-	0.0	38.5	44.6	17.0	-	-	0.0	12.4	65.6	22.0	-	-	-
Total %	0.0	5.4	18.2	9.5	-	33.1	0.0	4.5	15.0	1.5	-	21.0	0.0	12.0	13.9	5.3	-	31.3	0.0	1.8	9.6	3.2	-	14.7	-
PHF	0.250	0.894	0.838	0.780	-	0.837	0.000	0.669	0.919	0.800	-	0.856	0.000	0.828	0.816	0.836	-	0.946	0.000	0.667	0.736	0.888	-	0.824	0.912
Lights	1	116	401	207	-	725	0	96	326	32	-	454	0	262	303	116	-	681	0	40	207	64	-	311	2171
% Lights	100.0	98.3	99.8	99.0	-	99.3	-	97.0	98.5	100.0	-	98.3	-	98.9	98.7	99.1	-	98.8	-	100.0	97.6	90.1	-	96.3	98.5
Buses	0	2	1	1	-	4	0	2	2	0	-	4	0	1	2	0	-	3	0	0	4	7	-	11	22
% Buses	0.0	1.7	0.2	0.5	-	0.5	-	2.0	0.6	0.0	-	0.9	-	0.4	0.7	0.0	-	0.4	-	0.0	1.9	9.9	-	3.4	1.0
Single-Unit Trucks	0	0	0	1	-	1	0	1	3	0	-	4	0	2	2	1	-	5	0	0	1	0	-	1	11
% Single-Unit Trucks	0.0	0.0	0.0	0.5	-	0.1	-	1.0	0.9	0.0	-	0.9	-	0.8	0.7	0.9	-	0.7	-	0.0	0.5	0.0	-	0.3	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: Mill St with Diehl Rd
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Diehl Rd Eastbound						Diehl Rd Westbound						Mill St Northbound						Mill St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	14	120	89	0	223	0	37	122	10	0	169	0	63	67	18	0	148	0	20	102	22	0	144	684
4:45 PM	0	21	120	91	0	232	0	34	116	6	0	156	0	69	71	21	0	161	0	22	106	26	0	154	703
5:00 PM	0	26	129	106	0	261	0	72	149	10	0	231	0	60	89	26	0	175	0	20	86	29	0	135	802
5:15 PM	0	19	113	105	0	237	0	54	100	4	0	158	1	85	85	26	0	197	0	13	79	15	0	107	699
Total	0	80	482	391	0	953	0	197	487	30	0	714	1	277	312	91	0	681	0	75	373	92	0	540	2888
Approach %	0.0	8.4	50.6	41.0	-	-	0.0	27.6	68.2	4.2	-	-	0.1	40.7	45.8	13.4	-	-	0.0	13.9	69.1	17.0	-	-	-
Total %	0.0	2.8	16.7	13.5	-	33.0	0.0	6.8	16.9	1.0	-	24.7	0.0	9.6	10.8	3.2	-	23.6	0.0	2.6	12.9	3.2	-	18.7	-
PHF	0.000	0.769	0.934	0.922	-	0.913	0.000	0.684	0.817	0.750	-	0.773	0.250	0.815	0.876	0.875	-	0.864	0.000	0.852	0.880	0.793	-	0.877	0.900
Lights	0	80	482	391	-	953	0	196	484	30	-	710	1	273	308	91	-	673	0	75	370	91	-	536	2872
% Lights	-	100.0	100.0	100.0	-	100.0	-	99.5	99.4	100.0	-	99.4	100.0	98.6	98.7	100.0	-	98.8	-	100.0	99.2	98.9	-	99.3	99.4
Buses	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	0	0	1	0	-	1	3
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.1	0.0	0.0	0.3	0.0	-	0.1	-	0.0	0.3	0.0	-	0.2	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	1	1	0	-	2	0	4	2	0	-	6	0	0	2	1	-	3	11
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.5	0.2	0.0	-	0.3	0.0	1.4	0.6	0.0	-	0.9	-	0.0	0.5	1.1	-	0.6	0.4
Articulated Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.1	0.0	0.0	0.3	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
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Count Name: Mill St with Commons Rd
Site Code:
Start Date: 12/08/2022

Turning Movement Data

Start Time	Commons Rd Eastbound						Access Dr Westbound						Mill St Northbound						Mill St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	0	7	0	7	0	0	0	0	0	0	0	6	138	0	0	144	0	1	92	0	1	93	244
7:15 AM	0	1	0	14	0	15	0	0	0	0	0	0	0	15	135	0	0	150	0	0	136	1	0	137	302
7:30 AM	0	2	0	22	0	24	0	2	0	0	0	2	0	8	145	1	0	154	0	0	169	1	0	170	350
7:45 AM	0	0	0	17	1	17	0	3	0	1	0	4	0	18	186	3	0	207	0	0	147	1	1	148	376
Hourly Total	0	3	0	60	1	63	0	5	0	1	0	6	0	47	604	4	0	655	0	1	544	3	2	548	1272
8:00 AM	0	1	0	12	0	13	0	2	1	0	0	3	0	13	179	3	0	195	0	0	100	3	0	103	314
8:15 AM	0	1	0	12	1	13	0	0	0	0	0	0	0	16	166	2	0	184	0	0	95	2	2	97	294
8:30 AM	0	0	0	9	1	9	0	0	0	0	0	0	0	13	122	0	0	135	0	0	110	4	0	114	258
8:45 AM	0	0	0	10	0	10	0	2	0	1	0	3	0	12	122	0	0	134	0	0	119	6	0	125	272
Hourly Total	0	2	0	43	2	45	0	4	1	1	0	6	0	54	589	5	0	648	0	0	424	15	2	439	1138
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	3	1	19	0	23	0	3	0	0	0	3	0	11	161	3	0	175	0	2	225	4	0	231	432
4:15 PM	0	4	1	17	2	22	0	2	1	1	0	4	0	10	149	0	0	159	0	0	199	4	2	203	388
4:30 PM	0	2	0	15	2	17	0	4	0	2	0	6	0	15	142	0	0	157	0	1	228	2	2	231	411
4:45 PM	0	2	1	12	0	15	0	2	1	1	0	4	0	7	161	0	0	168	0	0	230	4	0	234	421
Hourly Total	0	11	3	63	4	77	0	11	2	4	0	17	0	43	613	3	0	659	0	3	882	14	4	899	1652
5:00 PM	0	6	0	16	0	22	0	3	0	2	0	5	0	17	176	1	0	194	0	1	255	4	0	260	481
5:15 PM	0	3	0	11	0	14	0	4	1	1	0	6	0	11	198	2	0	211	0	2	232	3	0	237	468
5:30 PM	0	2	0	9	0	11	0	0	0	0	0	0	0	13	127	0	0	140	0	3	219	0	0	222	373
5:45 PM	0	1	0	12	0	13	0	1	1	0	0	2	0	12	125	1	0	138	0	0	176	2	0	178	331
Hourly Total	0	12	0	48	0	60	0	8	2	3	0	13	0	53	626	4	0	683	0	6	882	9	0	897	1653
Grand Total	0	28	3	214	7	245	0	28	5	9	0	42	0	197	2432	16	0	2645	0	10	2732	41	8	2783	5715
Approach %	0.0	11.4	1.2	87.3	-	-	0.0	66.7	11.9	21.4	-	-	0.0	7.4	91.9	0.6	-	-	0.0	0.4	98.2	1.5	-	-	-
Total %	0.0	0.5	0.1	3.7	-	4.3	0.0	0.5	0.1	0.2	-	0.7	0.0	3.4	42.6	0.3	-	46.3	0.0	0.2	47.8	0.7	-	48.7	-
Lights	0	28	3	210	-	241	0	26	5	9	-	40	0	193	2393	16	-	2602	0	10	2699	38	-	2747	5630
% Lights	-	100.0	100.0	98.1	-	98.4	-	92.9	100.0	100.0	-	95.2	-	98.0	98.4	100.0	-	98.4	-	100.0	98.8	92.7	-	98.7	98.5
Buses	0	0	0	3	-	3	0	1	0	0	-	1	0	2	17	0	-	19	0	0	17	1	-	18	41
% Buses	-	0.0	0.0	1.4	-	1.2	-	3.6	0.0	0.0	-	2.4	-	1.0	0.7	0.0	-	0.7	-	0.0	0.6	2.4	-	0.6	0.7
Single-Unit Trucks	0	0	0	1	-	1	0	1	0	0	-	1	0	0	16	0	-	16	0	0	14	2	-	16	34
% Single-Unit Trucks	-	0.0	0.0	0.5	-	0.4	-	3.6	0.0	0.0	-	2.4	-	0.0	0.7	0.0	-	0.6	-	0.0	0.5	4.9	-	0.6	0.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	6	0	-	8	0	0	2	0	-	2	10
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	1.0	0.2	0.0	-	0.3	-	0.0	0.1	0.0	-	0.1	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Count Name: Mill St with Commons Rd
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Commons Rd Eastbound						Access Dr Westbound						Mill St Northbound						Mill St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	2	0	22	0	24	0	2	0	0	0	2	0	8	145	1	0	154	0	0	169	1	0	170	350
7:45 AM	0	0	0	17	1	17	0	3	0	1	0	4	0	18	186	3	0	207	0	0	147	1	1	148	376
8:00 AM	0	1	0	12	0	13	0	2	1	0	0	3	0	13	179	3	0	195	0	0	100	3	0	103	314
8:15 AM	0	1	0	12	1	13	0	0	0	0	0	0	0	16	166	2	0	184	0	0	95	2	2	97	294
Total	0	4	0	63	2	67	0	7	1	1	0	9	0	55	676	9	0	740	0	0	511	7	3	518	1334
Approach %	0.0	6.0	0.0	94.0	-	-	0.0	77.8	11.1	11.1	-	-	0.0	7.4	91.4	1.2	-	-	0.0	0.0	98.6	1.4	-	-	-
Total %	0.0	0.3	0.0	4.7	-	5.0	0.0	0.5	0.1	0.1	-	0.7	0.0	4.1	50.7	0.7	-	55.5	0.0	0.0	38.3	0.5	-	38.8	-
PHF	0.000	0.500	0.000	0.716	-	0.698	0.000	0.583	0.250	0.250	-	0.563	0.000	0.764	0.909	0.750	-	0.894	0.000	0.000	0.756	0.583	-	0.762	0.887
Lights	0	4	0	61	-	65	0	5	1	1	-	7	0	52	667	9	-	728	0	0	500	6	-	506	1306
% Lights	-	100.0	-	96.8	-	97.0	-	71.4	100.0	100.0	-	77.8	-	94.5	98.7	100.0	-	98.4	-	-	97.8	85.7	-	97.7	97.9
Buses	0	0	0	1	-	1	0	1	0	0	-	1	0	2	4	0	-	6	0	0	7	0	-	7	15
% Buses	-	0.0	-	1.6	-	1.5	-	14.3	0.0	0.0	-	11.1	-	3.6	0.6	0.0	-	0.8	-	-	1.4	0.0	-	1.4	1.1
Single-Unit Trucks	0	0	0	1	-	1	0	1	0	0	-	1	0	0	5	0	-	5	0	0	4	1	-	5	12
% Single-Unit Trucks	-	0.0	-	1.6	-	1.5	-	14.3	0.0	0.0	-	11.1	-	0.0	0.7	0.0	-	0.7	-	-	0.8	14.3	-	1.0	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	1.8	0.0	0.0	-	0.1	-	-	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: Mill St with Commons Rd
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Commons Rd Eastbound						Access Dr Westbound						Mill St Northbound						Mill St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	2	0	15	2	17	0	4	0	2	0	6	0	15	142	0	0	157	0	1	228	2	2	231	411
4:45 PM	0	2	1	12	0	15	0	2	1	1	0	4	0	7	161	0	0	168	0	0	230	4	0	234	421
5:00 PM	0	6	0	16	0	22	0	3	0	2	0	5	0	17	176	1	0	194	0	1	255	4	0	260	481
5:15 PM	0	3	0	11	0	14	0	4	1	1	0	6	0	11	198	2	0	211	0	2	232	3	0	237	468
Total	0	13	1	54	2	68	0	13	2	6	0	21	0	50	677	3	0	730	0	4	945	13	2	962	1781
Approach %	0.0	19.1	1.5	79.4	-	-	0.0	61.9	9.5	28.6	-	-	0.0	6.8	92.7	0.4	-	-	0.0	0.4	98.2	1.4	-	-	-
Total %	0.0	0.7	0.1	3.0	-	3.8	0.0	0.7	0.1	0.3	-	1.2	0.0	2.8	38.0	0.2	-	41.0	0.0	0.2	53.1	0.7	-	54.0	-
PHF	0.000	0.542	0.250	0.844	-	0.773	0.000	0.813	0.500	0.750	-	0.875	0.000	0.735	0.855	0.375	-	0.865	0.000	0.500	0.926	0.813	-	0.925	0.926
Lights	0	13	1	54	-	68	0	13	2	6	-	21	0	50	669	3	-	722	0	4	942	12	-	958	1769
% Lights	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	98.8	100.0	-	98.9	-	100.0	99.7	92.3	-	99.6	99.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	2	0	-	2	3
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.1	0.0	-	0.1	-	0.0	0.2	0.0	-	0.2	0.2
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	6	0	-	6	0	0	1	1	-	2	8
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.9	0.0	-	0.8	-	0.0	0.1	7.7	-	0.2	0.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: Commons Rd with West St
Site Code:
Start Date: 01/09/2023

Turning Movement Data

Start Time	Commons Rd Eastbound						Commons Rd Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	13	7	0	0	20	0	0	4	1	0	5	0	0	0	0	0	0	0	2	1	0	0	3	28
7:15 AM	0	3	14	1	1	18	0	0	5	6	0	11	0	0	0	0	0	0	0	2	1	0	0	3	32
7:30 AM	0	8	13	0	0	21	0	0	7	4	0	11	0	0	0	0	0	0	0	2	0	1	1	3	35
7:45 AM	0	12	7	0	0	19	0	0	13	4	0	17	0	0	1	0	0	1	0	3	0	2	1	5	42
Hourly Total	0	36	41	1	1	78	0	0	29	15	0	44	0	0	1	0	0	1	0	9	2	3	2	14	137
8:00 AM	0	13	6	1	0	20	0	0	4	7	0	11	0	0	0	0	1	0	0	0	0	4	0	4	35
8:15 AM	0	9	5	0	0	14	0	0	2	14	0	16	0	0	0	0	2	0	0	4	0	2	0	6	36
8:30 AM	0	5	6	0	1	11	0	0	3	3	1	6	0	0	0	0	0	0	0	1	0	1	0	2	19
8:45 AM	0	4	5	0	1	9	0	0	1	3	0	4	0	0	0	0	0	0	0	2	0	2	0	4	17
Hourly Total	0	31	22	1	2	54	0	0	10	27	1	37	0	0	0	0	3	0	0	7	0	9	0	16	107
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	4	13	0	0	17	0	0	4	2	0	6	0	0	1	0	3	1	0	8	1	3	0	12	36
4:15 PM	0	5	10	0	0	15	0	0	14	6	0	20	0	0	1	0	0	1	0	2	1	4	0	7	43
4:30 PM	0	7	9	0	1	16	0	0	13	3	0	16	0	0	0	0	0	0	0	4	0	11	0	15	47
4:45 PM	0	4	13	1	1	18	0	1	11	1	0	13	0	0	0	1	1	1	0	3	1	8	0	12	44
Hourly Total	0	20	45	1	2	66	0	1	42	12	0	55	0	0	2	1	4	3	0	17	3	26	0	46	170
5:00 PM	0	4	4	0	0	8	0	0	12	3	0	15	0	0	1	0	0	1	0	8	0	8	0	16	40
5:15 PM	0	4	3	0	1	7	0	0	14	2	0	16	0	0	0	0	0	0	0	1	0	7	0	8	31
5:30 PM	0	4	4	0	0	8	0	0	9	0	0	9	0	0	0	0	0	0	0	2	0	6	0	8	25
5:45 PM	0	5	5	0	0	10	0	0	14	1	0	15	0	0	0	0	0	0	0	1	0	6	0	7	32
Hourly Total	0	17	16	0	1	33	0	0	49	6	0	55	0	0	1	0	0	1	0	12	0	27	0	39	128
Grand Total	0	104	124	3	6	231	0	1	130	60	1	191	0	0	4	1	7	5	0	45	5	65	2	115	542
Approach %	0.0	45.0	53.7	1.3	-	-	0.0	0.5	68.1	31.4	-	-	0.0	0.0	80.0	20.0	-	-	0.0	39.1	4.3	56.5	-	-	-
Total %	0.0	19.2	22.9	0.6	-	42.6	0.0	0.2	24.0	11.1	-	35.2	0.0	0.0	0.7	0.2	-	0.9	0.0	8.3	0.9	12.0	-	21.2	-
Lights	0	104	120	1	-	225	0	1	126	60	-	187	0	0	4	1	-	5	0	43	5	65	-	113	530
% Lights	-	100.0	96.8	33.3	-	97.4	-	100.0	96.9	100.0	-	97.9	-	-	100.0	100.0	-	100.0	-	95.6	100.0	100.0	-	98.3	97.8
Buses	0	0	2	0	-	2	0	0	2	0	-	2	0	0	0	0	-	0	0	2	0	0	-	2	6
% Buses	-	0.0	1.6	0.0	-	0.9	-	0.0	1.5	0.0	-	1.0	-	-	0.0	0.0	-	0.0	-	4.4	0.0	0.0	-	1.7	1.1
Single-Unit Trucks	0	0	1	2	-	3	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	5
% Single-Unit Trucks	-	0.0	0.8	66.7	-	1.3	-	0.0	1.5	0.0	-	1.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1

% Bicycles on Road	-	0.0	0.8	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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9575 W. Higgins Rd., Suite 400

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Count Name: Commons Rd with West St
Site Code:
Start Date: 01/09/2023

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Commons Rd Eastbound						Commons Rd Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	8	13	0	0	21	0	0	7	4	0	11	0	0	0	0	0	0	0	2	0	1	1	3	35
7:45 AM	0	12	7	0	0	19	0	0	13	4	0	17	0	0	1	0	0	1	0	3	0	2	1	5	42
8:00 AM	0	13	6	1	0	20	0	0	4	7	0	11	0	0	0	0	1	0	0	0	0	4	0	4	35
8:15 AM	0	9	5	0	0	14	0	0	2	14	0	16	0	0	0	0	2	0	0	4	0	2	0	6	36
Total	0	42	31	1	0	74	0	0	26	29	0	55	0	0	1	0	3	1	0	9	0	9	2	18	148
Approach %	0.0	56.8	41.9	1.4	-	-	0.0	0.0	47.3	52.7	-	-	0.0	0.0	100.0	0.0	-	-	0.0	50.0	0.0	50.0	-	-	-
Total %	0.0	28.4	20.9	0.7	-	50.0	0.0	0.0	17.6	19.6	-	37.2	0.0	0.0	0.7	0.0	-	0.7	0.0	6.1	0.0	6.1	-	12.2	-
PHF	0.000	0.808	0.596	0.250	-	0.881	0.000	0.000	0.500	0.518	-	0.809	0.000	0.000	0.250	0.000	-	0.250	0.000	0.563	0.000	0.563	-	0.750	0.881
Lights	0	42	30	0	-	72	0	0	24	29	-	53	0	0	1	0	-	1	0	9	0	9	-	18	144
% Lights	-	100.0	96.8	0.0	-	97.3	-	-	92.3	100.0	-	96.4	-	-	100.0	-	-	100.0	-	100.0	-	100.0	-	100.0	97.3
Buses	0	0	1	0	-	1	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	3
% Buses	-	0.0	3.2	0.0	-	1.4	-	-	7.7	0.0	-	3.6	-	-	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	2.0
Single-Unit Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.0	100.0	-	1.4	-	-	0.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Count Name: Commons Rd with West St
Site Code:
Start Date: 01/09/2023

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Commons Rd Eastbound						Commons Rd Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	7	9	0	1	16	0	0	13	3	0	16	0	0	0	0	0	0	0	4	0	11	0	15	47
4:45 PM	0	4	13	1	1	18	0	1	11	1	0	13	0	0	0	1	1	1	0	3	1	8	0	12	44
5:00 PM	0	4	4	0	0	8	0	0	12	3	0	15	0	0	1	0	0	1	0	8	0	8	0	16	40
5:15 PM	0	4	3	0	1	7	0	0	14	2	0	16	0	0	0	0	0	0	0	1	0	7	0	8	31
Total	0	19	29	1	3	49	0	1	50	9	0	60	0	0	1	1	1	2	0	16	1	34	0	51	162
Approach %	0.0	38.8	59.2	2.0	-	-	0.0	1.7	83.3	15.0	-	-	0.0	0.0	50.0	50.0	-	-	0.0	31.4	2.0	66.7	-	-	-
Total %	0.0	11.7	17.9	0.6	-	30.2	0.0	0.6	30.9	5.6	-	37.0	0.0	0.0	0.6	0.6	-	1.2	0.0	9.9	0.6	21.0	-	31.5	-
PHF	0.000	0.679	0.558	0.250	-	0.681	0.000	0.250	0.893	0.750	-	0.938	0.000	0.000	0.250	0.250	-	0.500	0.000	0.500	0.250	0.773	-	0.797	0.862
Lights	0	19	28	1	-	48	0	1	48	9	-	58	0	0	1	1	-	2	0	16	1	34	-	51	159
% Lights	-	100.0	96.6	100.0	-	98.0	-	100.0	96.0	100.0	-	96.7	-	-	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	98.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	2
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	4.0	0.0	-	3.3	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	1.2
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	3.4	0.0	-	2.0	-	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.6
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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Rosemont, Illinois, United States 60018
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Count Name: West St with Diehl St
Site Code:
Start Date: 12/08/2022

Turning Movement Data

Start Time	Diehl Rd Eastbound						Diehl Rd Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	3	104	1	0	108	0	1	104	0	0	105	0	15	0	6	0	21	0	0	0	0	0	0	234
7:15 AM	0	2	154	5	0	161	0	4	118	0	0	122	0	13	0	3	0	16	0	0	0	0	0	0	299
7:30 AM	0	4	176	6	0	186	0	8	146	0	0	154	0	12	0	6	0	18	0	0	0	0	0	0	358
7:45 AM	0	0	201	3	0	204	0	4	148	2	0	154	0	12	0	6	0	18	0	0	0	0	0	0	376
Hourly Total	0	9	635	15	0	659	0	17	516	2	0	535	0	52	0	21	0	73	0	0	0	0	0	0	1267
8:00 AM	1	4	174	6	0	185	0	6	161	2	0	169	0	9	0	3	0	12	0	0	0	1	0	1	367
8:15 AM	1	5	171	6	0	183	0	7	159	0	0	166	0	15	0	6	0	21	0	0	0	2	0	2	372
8:30 AM	0	2	157	7	0	166	0	10	132	2	0	144	0	10	0	5	0	15	0	0	0	1	0	1	326
8:45 AM	1	6	162	10	0	179	0	4	131	2	0	137	0	16	1	9	0	26	0	0	0	0	0	0	342
Hourly Total	3	17	664	29	0	713	0	27	583	6	0	616	0	50	1	23	0	74	0	0	0	4	0	4	1407
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	1	0	198	7	0	206	0	6	257	3	0	266	0	5	0	6	0	11	0	0	0	8	0	8	491
4:15 PM	0	2	181	12	0	195	0	8	193	1	0	202	0	15	0	1	0	16	0	0	0	1	0	1	414
4:30 PM	0	2	220	13	0	235	0	4	203	1	0	208	0	12	0	6	0	18	0	1	0	6	0	7	468
4:45 PM	0	0	223	11	0	234	0	4	193	4	0	201	0	7	0	5	0	12	0	0	0	6	0	6	453
Hourly Total	1	4	822	43	0	870	0	22	846	9	0	877	0	39	0	18	0	57	0	1	0	21	0	22	1826
5:00 PM	1	0	258	9	0	268	0	3	230	0	0	233	0	8	0	6	0	14	0	5	0	5	0	10	525
5:15 PM	0	1	214	9	0	224	0	6	181	1	0	188	0	11	0	5	0	16	0	0	0	4	0	4	432
5:30 PM	0	1	230	13	0	244	0	3	213	0	0	216	0	9	0	6	0	15	0	0	0	4	0	4	479
5:45 PM	0	1	160	8	0	169	0	2	169	3	0	174	0	7	0	4	0	11	0	0	0	1	0	1	355
Hourly Total	1	3	862	39	0	905	0	14	793	4	0	811	0	35	0	21	0	56	0	5	0	14	0	19	1791
Grand Total	5	33	2983	126	0	3147	0	80	2738	21	0	2839	0	176	1	83	0	260	0	6	0	39	0	45	6291
Approach %	0.2	1.0	94.8	4.0	-	-	0.0	2.8	96.4	0.7	-	-	0.0	67.7	0.4	31.9	-	-	0.0	13.3	0.0	86.7	-	-	-
Total %	0.1	0.5	47.4	2.0	-	50.0	0.0	1.3	43.5	0.3	-	45.1	0.0	2.8	0.0	1.3	-	4.1	0.0	0.1	0.0	0.6	-	0.7	-
Lights	5	31	2955	124	-	3115	0	76	2698	21	-	2795	0	173	1	81	-	255	0	6	0	38	-	44	6209
% Lights	100.0	93.9	99.1	98.4	-	99.0	-	95.0	98.5	100.0	-	98.5	-	98.3	100.0	97.6	-	98.1	-	100.0	-	97.4	-	97.8	98.7
Buses	0	0	16	1	-	17	0	4	18	0	-	22	0	1	0	2	-	3	0	0	0	0	-	0	42
% Buses	0.0	0.0	0.5	0.8	-	0.5	-	5.0	0.7	0.0	-	0.8	-	0.6	0.0	2.4	-	1.2	-	0.0	-	0.0	-	0.0	0.7
Single-Unit Trucks	0	2	10	0	-	12	0	0	16	0	-	16	0	1	0	0	-	1	0	0	0	1	-	1	30
% Single-Unit Trucks	0.0	6.1	0.3	0.0	-	0.4	-	0.0	0.6	0.0	-	0.6	-	0.6	0.0	0.0	-	0.4	-	0.0	-	2.6	-	2.2	0.5
Articulated Trucks	0	0	2	1	-	3	0	0	6	0	-	6	0	1	0	0	-	1	0	0	0	0	-	0	10
% Articulated Trucks	0.0	0.0	0.1	0.8	-	0.1	-	0.0	0.2	0.0	-	0.2	-	0.6	0.0	0.0	-	0.4	-	0.0	-	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0

% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: West St with Diehl St
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Diehl Rd Eastbound						Diehl Rd Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	4	176	6	0	186	0	8	146	0	0	154	0	12	0	6	0	18	0	0	0	0	0	0	358
7:45 AM	0	0	201	3	0	204	0	4	148	2	0	154	0	12	0	6	0	18	0	0	0	0	0	0	376
8:00 AM	1	4	174	6	0	185	0	6	161	2	0	169	0	9	0	3	0	12	0	0	0	1	0	1	367
8:15 AM	1	5	171	6	0	183	0	7	159	0	0	166	0	15	0	6	0	21	0	0	0	2	0	2	372
Total	2	13	722	21	0	758	0	25	614	4	0	643	0	48	0	21	0	69	0	0	0	3	0	3	1473
Approach %	0.3	1.7	95.3	2.8	-	-	0.0	3.9	95.5	0.6	-	-	0.0	69.6	0.0	30.4	-	-	0.0	0.0	0.0	100.0	-	-	-
Total %	0.1	0.9	49.0	1.4	-	51.5	0.0	1.7	41.7	0.3	-	43.7	0.0	3.3	0.0	1.4	-	4.7	0.0	0.0	0.0	0.2	-	0.2	-
PHF	0.500	0.650	0.898	0.875	-	0.929	0.000	0.781	0.953	0.500	-	0.951	0.000	0.800	0.000	0.875	-	0.821	0.000	0.000	0.000	0.375	-	0.375	0.979
Lights	2	12	716	21	-	751	0	24	600	4	-	628	0	47	0	21	-	68	0	0	0	3	-	3	1450
% Lights	100.0	92.3	99.2	100.0	-	99.1	-	96.0	97.7	100.0	-	97.7	-	97.9	-	100.0	-	98.6	-	-	-	100.0	-	100.0	98.4
Buses	0	0	4	0	-	4	0	1	8	0	-	9	0	0	0	0	-	0	0	0	0	0	-	0	13
% Buses	0.0	0.0	0.6	0.0	-	0.5	-	4.0	1.3	0.0	-	1.4	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	0.9
Single-Unit Trucks	0	1	2	0	-	3	0	0	6	0	-	6	0	0	0	0	-	0	0	0	0	0	-	0	9
% Single-Unit Trucks	0.0	7.7	0.3	0.0	-	0.4	-	0.0	1.0	0.0	-	0.9	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	0.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	2.1	-	0.0	-	1.4	-	-	-	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: West St with Diehl St
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Diehl Rd Eastbound						Diehl Rd Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	2	220	13	0	235	0	4	203	1	0	208	0	12	0	6	0	18	0	1	0	6	0	7	468
4:45 PM	0	0	223	11	0	234	0	4	193	4	0	201	0	7	0	5	0	12	0	0	0	6	0	6	453
5:00 PM	1	0	258	9	0	268	0	3	230	0	0	233	0	8	0	6	0	14	0	5	0	5	0	10	525
5:15 PM	0	1	214	9	0	224	0	6	181	1	0	188	0	11	0	5	0	16	0	0	0	4	0	4	432
Total	1	3	915	42	0	961	0	17	807	6	0	830	0	38	0	22	0	60	0	6	0	21	0	27	1878
Approach %	0.1	0.3	95.2	4.4	-	-	0.0	2.0	97.2	0.7	-	-	0.0	63.3	0.0	36.7	-	-	0.0	22.2	0.0	77.8	-	-	-
Total %	0.1	0.2	48.7	2.2	-	51.2	0.0	0.9	43.0	0.3	-	44.2	0.0	2.0	0.0	1.2	-	3.2	0.0	0.3	0.0	1.1	-	1.4	-
PHF	0.250	0.375	0.887	0.808	-	0.896	0.000	0.708	0.877	0.375	-	0.891	0.000	0.792	0.000	0.917	-	0.833	0.000	0.300	0.000	0.875	-	0.675	0.894
Lights	1	3	915	42	-	961	0	17	802	6	-	825	0	38	0	22	-	60	0	6	0	21	-	27	1873
% Lights	100.0	100.0	100.0	100.0	-	100.0	-	100.0	99.4	100.0	-	99.4	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	99.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	4
% Single-Unit Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.5	0.0	-	0.5	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Articulated Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.1	0.0	-	0.1	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Rosemont, Illinois, United States 60018
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Count Name: West St with Conestoga Rd/Habor Chase Access Dr TMC
Site Code:
Start Date: 07/12/2022

Turning Movement Data

Start Time	Conestoga Rd Eastbound						Harbor Chase access Dr Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	5	0	2	1	7	0	0	0	0	0	0	0	1	7	0	0	8	0	2	3	1	0	6	21
7:15 AM	0	14	0	0	0	14	0	0	0	0	0	0	0	0	16	0	1	16	0	0	3	1	0	4	34
7:30 AM	0	11	0	0	0	11	0	1	0	0	0	1	0	1	7	0	0	8	0	0	3	4	0	7	27
7:45 AM	0	15	0	0	1	15	0	0	0	1	2	1	0	0	16	0	1	16	0	0	4	1	2	5	37
Hourly Total	0	45	0	2	2	47	0	1	0	1	2	2	0	2	46	0	2	48	0	2	13	7	2	22	119
8:00 AM	0	10	0	1	0	11	0	0	0	0	1	0	0	2	18	0	0	20	0	0	2	4	0	6	37
8:15 AM	0	11	0	2	0	13	0	0	0	0	0	0	0	2	15	0	0	17	0	2	7	12	0	21	51
8:30 AM	0	7	0	2	0	9	0	0	0	0	0	0	0	2	24	0	0	26	0	0	4	4	0	8	43
8:45 AM	0	5	0	2	1	7	0	0	0	0	0	0	0	2	9	0	0	11	0	2	7	2	0	11	29
Hourly Total	0	33	0	7	1	40	0	0	0	0	1	0	0	8	66	0	0	74	0	4	20	22	0	46	160
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	5	0	1	2	6	0	0	0	1	0	1	0	0	7	0	0	7	0	0	6	6	0	12	26
4:15 PM	0	5	0	1	0	6	0	0	0	1	0	1	0	0	5	0	0	5	0	1	11	10	0	22	34
4:30 PM	0	7	1	4	0	12	0	0	0	1	0	1	0	0	7	0	0	7	0	0	15	3	0	18	38
4:45 PM	0	7	1	0	0	8	0	0	1	1	0	2	0	3	10	0	0	13	0	0	15	8	0	23	46
Hourly Total	0	24	2	6	2	32	0	0	1	4	0	5	0	3	29	0	0	32	0	1	47	27	0	75	144
5:00 PM	0	5	0	3	0	8	0	0	0	2	0	2	0	0	7	0	0	7	0	0	13	7	0	20	37
5:15 PM	0	5	0	1	0	6	0	1	0	1	0	2	0	0	1	0	0	1	0	1	13	6	0	20	29
5:30 PM	0	5	0	3	0	8	0	0	0	1	0	1	0	0	3	0	0	3	0	0	12	9	0	21	33
5:45 PM	0	4	0	0	0	4	0	0	0	0	0	0	0	1	4	0	0	5	0	0	11	13	0	24	33
Hourly Total	0	19	0	7	0	26	0	1	0	4	0	5	0	1	15	0	0	16	0	1	49	35	0	85	132
Grand Total	0	121	2	22	5	145	0	2	1	9	3	12	0	14	156	0	2	170	0	8	129	91	2	228	555
Approach %	0.0	83.4	1.4	15.2	-	-	0.0	16.7	8.3	75.0	-	-	0.0	8.2	91.8	0.0	-	-	0.0	3.5	56.6	39.9	-	-	-
Total %	0.0	21.8	0.4	4.0	-	26.1	0.0	0.4	0.2	1.6	-	2.2	0.0	2.5	28.1	0.0	-	30.6	0.0	1.4	23.2	16.4	-	41.1	-
Lights	0	120	1	18	-	139	0	1	1	7	-	9	0	9	156	0	-	165	0	6	125	91	-	222	535
% Lights	-	99.2	50.0	81.8	-	95.9	-	50.0	100.0	77.8	-	75.0	-	64.3	100.0	-	-	97.1	-	75.0	96.9	100.0	-	97.4	96.4
Buses	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	0.0	4.5	-	0.7	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Single-Unit Trucks	0	1	1	0	-	2	0	1	0	1	-	2	0	0	0	0	-	0	0	2	2	0	-	4	8
% Single-Unit Trucks	-	0.8	50.0	0.0	-	1.4	-	50.0	0.0	11.1	-	16.7	-	0.0	0.0	-	-	0.0	-	25.0	1.6	0.0	-	1.8	1.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	2	0	-	2	3
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	11.1	-	8.3	-	0.0	0.0	-	-	0.0	-	0.0	1.6	0.0	-	0.9	0.5
Bicycles on Road	0	0	0	3	-	3	0	0	0	0	-	0	0	5	0	0	-	5	0	0	0	0	-	0	8

% Bicycles on Road	-	0.0	0.0	13.6	-	2.1	-	0.0	0.0	0.0	-	0.0	-	35.7	0.0	-	-	2.9	-	0.0	0.0	0.0	-	0.0	1.4
Pedestrians	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Count Name: West St with Conestoga Rd/Habor Chase Access Dr TMC
Site Code:
Start Date: 07/12/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Conestoga Rd Eastbound						Harbor Chase access Dr Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	11	0	0	0	11	0	1	0	0	0	1	0	1	7	0	0	8	0	0	3	4	0	7	27
7:45 AM	0	15	0	0	1	15	0	0	0	1	2	1	0	0	16	0	1	16	0	0	4	1	2	5	37
8:00 AM	0	10	0	1	0	11	0	0	0	0	1	0	0	2	18	0	0	20	0	0	2	4	0	6	37
8:15 AM	0	11	0	2	0	13	0	0	0	0	0	0	0	2	15	0	0	17	0	2	7	12	0	21	51
Total	0	47	0	3	1	50	0	1	0	1	3	2	0	5	56	0	1	61	0	2	16	21	2	39	152
Approach %	0.0	94.0	0.0	6.0	-	-	0.0	50.0	0.0	50.0	-	-	0.0	8.2	91.8	0.0	-	-	0.0	5.1	41.0	53.8	-	-	-
Total %	0.0	30.9	0.0	2.0	-	32.9	0.0	0.7	0.0	0.7	-	1.3	0.0	3.3	36.8	0.0	-	40.1	0.0	1.3	10.5	13.8	-	25.7	-
PHF	0.000	0.783	0.000	0.375	-	0.833	0.000	0.250	0.000	0.250	-	0.500	0.000	0.625	0.778	0.000	-	0.763	0.000	0.250	0.571	0.438	-	0.464	0.745
Lights	0	47	0	2	-	49	0	0	0	0	-	0	0	3	56	0	-	59	0	1	15	21	-	37	145
% Lights	-	100.0	-	66.7	-	98.0	-	0.0	-	0.0	-	0.0	-	60.0	100.0	-	-	96.7	-	50.0	93.8	100.0	-	94.9	95.4
Buses	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	-	0.0	-	33.3	-	2.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.7
Single-Unit Trucks	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	1	1	0	-	2	3
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	100.0	-	0.0	-	50.0	-	0.0	0.0	-	-	0.0	-	50.0	6.3	0.0	-	5.1	2.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	100.0	-	50.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	2
% Bicycles on Road	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	40.0	0.0	-	-	3.3	-	0.0	0.0	0.0	-	0.0	1.3
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: West St with Conestoga Rd/Habor Chase Access Dr TMC
Site Code:
Start Date: 07/12/2022

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Conestoga Rd Eastbound						Harbor Chase access Dr Westbound						West St Northbound						West St Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	7	1	4	0	12	0	0	0	1	0	1	0	0	7	0	0	7	0	0	15	3	0	18	38
4:45 PM	0	7	1	0	0	8	0	0	1	1	0	2	0	3	10	0	0	13	0	0	15	8	0	23	46
5:00 PM	0	5	0	3	0	8	0	0	0	2	0	2	0	0	7	0	0	7	0	0	13	7	0	20	37
5:15 PM	0	5	0	1	0	6	0	1	0	1	0	2	0	0	1	0	0	1	0	1	13	6	0	20	29
Total	0	24	2	8	0	34	0	1	1	5	0	7	0	3	25	0	0	28	0	1	56	24	0	81	150
Approach %	0.0	70.6	5.9	23.5	-	-	0.0	14.3	14.3	71.4	-	-	0.0	10.7	89.3	0.0	-	-	0.0	1.2	69.1	29.6	-	-	-
Total %	0.0	16.0	1.3	5.3	-	22.7	0.0	0.7	0.7	3.3	-	4.7	0.0	2.0	16.7	0.0	-	18.7	0.0	0.7	37.3	16.0	-	54.0	-
PHF	0.000	0.857	0.500	0.500	-	0.708	0.000	0.250	0.250	0.625	-	0.875	0.000	0.250	0.625	0.000	-	0.538	0.000	0.250	0.933	0.750	-	0.880	0.815
Lights	0	24	1	6	-	31	0	1	1	5	-	7	0	3	25	0	-	28	0	1	55	24	-	80	146
% Lights	-	100.0	50.0	75.0	-	91.2	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	-	-	100.0	-	100.0	98.2	100.0	-	98.8	97.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	2
% Single-Unit Trucks	-	0.0	50.0	0.0	-	2.9	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	1.8	0.0	-	1.2	1.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	2	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	25.0	-	5.9	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	1.3
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: West St with 27545 Diehl Rd Access Dr
Site Code:
Start Date: 12/08/2022

Turning Movement Data

Start Time	Access Dr Eastbound			West St Northbound				West St Southbound					
	Left	Right	App. Total	U-Turn	Left	Thru	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	1	0	1	0	2	20	22	0	3	0	0	3	26
7:15 AM	0	0	0	0	5	15	20	0	5	3	0	8	28
7:30 AM	0	1	1	0	2	18	20	0	8	2	0	10	31
7:45 AM	0	0	0	0	5	18	23	0	6	1	0	7	30
Hourly Total	1	1	2	0	14	71	85	0	22	6	0	28	115
8:00 AM	0	0	0	0	3	12	15	0	4	2	0	6	21
8:15 AM	1	1	2	0	10	21	31	0	8	1	0	9	42
8:30 AM	1	4	5	0	5	13	18	0	6	6	0	12	35
8:45 AM	7	3	10	0	1	19	20	0	10	2	0	12	42
Hourly Total	9	8	17	0	19	65	84	0	28	11	0	39	140
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	4	12	16	0	0	7	7	0	13	0	0	13	36
4:15 PM	3	3	6	0	0	13	13	0	20	0	0	20	39
4:30 PM	4	2	6	0	1	14	15	0	14	0	0	14	35
4:45 PM	1	0	1	0	1	11	12	0	16	1	0	17	30
Hourly Total	12	17	29	0	2	45	47	0	63	1	0	64	140
5:00 PM	5	4	9	0	0	10	10	0	12	0	0	12	31
5:15 PM	2	4	6	0	0	12	12	0	15	0	0	15	33
5:30 PM	4	1	5	0	1	13	14	0	15	0	0	15	34
5:45 PM	0	0	0	0	1	10	11	0	10	0	0	10	21
Hourly Total	11	9	20	0	2	45	47	0	52	0	0	52	119
Grand Total	33	35	68	0	37	226	263	0	165	18	0	183	514
Approach %	48.5	51.5	-	0.0	14.1	85.9	-	0.0	90.2	9.8	-	-	-
Total %	6.4	6.8	13.2	0.0	7.2	44.0	51.2	0.0	32.1	3.5	-	35.6	-
Lights	30	34	64	0	37	223	260	0	162	18	-	180	504
% Lights	90.9	97.1	94.1	-	100.0	98.7	98.9	-	98.2	100.0	-	98.4	98.1
Buses	3	1	4	0	0	0	0	0	1	0	-	1	5
% Buses	9.1	2.9	5.9	-	0.0	0.0	0.0	-	0.6	0.0	-	0.5	1.0
Single-Unit Trucks	0	0	0	0	0	1	1	0	0	0	-	0	1
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	0.4	0.4	-	0.0	0.0	-	0.0	0.2
Articulated Trucks	0	0	0	0	0	2	2	0	0	0	-	0	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.9	0.8	-	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	0	0	0	0	2	0	-	2	2
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	-	1.2	0.0	-	1.1	0.4
Pedestrians	-	-	-	-	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: West St with 27545 Diehl Rd Access Dr
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Access Dr Eastbound			West St Northbound				West St Southbound					
	Left	Right	App. Total	U-Turn	Left	Thru	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	1	1	0	2	18	20	0	8	2	0	10	31
7:45 AM	0	0	0	0	5	18	23	0	6	1	0	7	30
8:00 AM	0	0	0	0	3	12	15	0	4	2	0	6	21
8:15 AM	1	1	2	0	10	21	31	0	8	1	0	9	42
Total	1	2	3	0	20	69	89	0	26	6	0	32	124
Approach %	33.3	66.7	-	0.0	22.5	77.5	-	0.0	81.3	18.8	-	-	-
Total %	0.8	1.6	2.4	0.0	16.1	55.6	71.8	0.0	21.0	4.8	-	25.8	-
PHF	0.250	0.500	0.375	0.000	0.500	0.821	0.718	0.000	0.813	0.750	-	0.800	0.738
Lights	1	2	3	0	20	67	87	0	23	6	-	29	119
% Lights	100.0	100.0	100.0	-	100.0	97.1	97.8	-	88.5	100.0	-	90.6	96.0
Buses	0	0	0	0	0	0	0	0	1	0	-	1	1
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	-	3.8	0.0	-	3.1	0.8
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	0	0	2	2	0	0	0	-	0	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	2.9	2.2	-	0.0	0.0	-	0.0	1.6
Bicycles on Road	0	0	0	0	0	0	0	0	2	0	-	2	2
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	-	7.7	0.0	-	6.3	1.6
Pedestrians	-	-	-	-	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: West St with 27545 Diehl Rd Access Dr
Site Code:
Start Date: 12/08/2022

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Access Dr Eastbound			West St Northbound				West St Southbound					
	Left	Right	App. Total	U-Turn	Left	Thru	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	4	2	6	0	1	14	15	0	14	0	0	14	35
4:45 PM	1	0	1	0	1	11	12	0	16	1	0	17	30
5:00 PM	5	4	9	0	0	10	10	0	12	0	0	12	31
5:15 PM	2	4	6	0	0	12	12	0	15	0	0	15	33
Total	12	10	22	0	2	47	49	0	57	1	0	58	129
Approach %	54.5	45.5	-	0.0	4.1	95.9	-	0.0	98.3	1.7	-	-	-
Total %	9.3	7.8	17.1	0.0	1.6	36.4	38.0	0.0	44.2	0.8	-	45.0	-
PHF	0.600	0.625	0.611	0.000	0.500	0.839	0.817	0.000	0.891	0.250	-	0.853	0.921
Lights	12	10	22	0	2	47	49	0	57	1	-	58	129
% Lights	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	0	0	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

Count Name: Mill St with Nike Sports Complex access Dr TMC
Site Code:
Start Date: 07/12/2022

Turning Movement Data

Start Time	Access Dr Westbound					Mill St Northbound					Mill St Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	0	0	0	0	117	0	0	117	0	0	63	0	63	180
7:15 AM	0	0	0	0	0	0	134	0	0	134	0	0	86	0	86	220
7:30 AM	0	0	1	0	1	0	168	0	0	168	0	0	115	0	115	284
7:45 AM	0	0	3	0	3	0	183	1	0	184	0	0	130	0	130	317
Hourly Total	0	0	4	0	4	0	602	1	0	603	0	0	394	0	394	1001
8:00 AM	0	0	0	0	0	0	136	0	0	136	0	0	129	0	129	265
8:15 AM	0	0	1	0	1	0	167	0	0	167	0	0	128	0	128	296
8:30 AM	0	0	1	0	1	0	146	2	0	148	0	0	132	0	132	281
8:45 AM	0	0	7	0	7	0	147	3	0	150	0	2	136	0	138	295
Hourly Total	0	0	9	0	9	0	596	5	0	601	0	2	525	0	527	1137
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	1	0	0	1	0	128	0	0	128	0	0	210	0	210	339
4:15 PM	0	0	0	0	0	0	137	0	0	137	0	0	188	0	188	325
4:30 PM	0	0	3	0	3	0	155	2	0	157	0	0	251	0	251	411
4:45 PM	0	0	0	0	0	0	144	0	0	144	0	0	241	0	241	385
Hourly Total	0	1	3	0	4	0	564	2	0	566	0	0	890	0	890	1460
5:00 PM	0	0	3	0	3	0	148	1	0	149	0	0	314	0	314	466
5:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	3	0	3	5
Grand Total	0	1	19	0	20	0	1912	9	0	1921	0	2	2126	0	2128	4069
Approach %	0.0	5.0	95.0	-	-	0.0	99.5	0.5	-	-	0.0	0.1	99.9	-	-	-
Total %	0.0	0.0	0.5	-	0.5	0.0	47.0	0.2	-	47.2	0.0	0.0	52.2	-	52.3	-
Lights	0	1	19	-	20	0	1889	7	-	1896	0	2	2096	-	2098	4014
% Lights	-	100.0	100.0	-	100.0	-	98.8	77.8	-	98.7	-	100.0	98.6	-	98.6	98.6
Buses	0	0	0	-	0	0	5	2	-	7	0	0	3	-	3	10
% Buses	-	0.0	0.0	-	0.0	-	0.3	22.2	-	0.4	-	0.0	0.1	-	0.1	0.2
Single-Unit Trucks	0	0	0	-	0	0	13	0	-	13	0	0	22	-	22	35
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.7	0.0	-	0.7	-	0.0	1.0	-	1.0	0.9
Articulated Trucks	0	0	0	-	0	0	5	0	-	5	0	0	5	-	5	10
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.3	0.0	-	0.3	-	0.0	0.2	-	0.2	0.2
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Mill St with Nike Sports Complex access Dr TMC
Site Code:
Start Date: 07/12/2022

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Access Dr Westbound					Mill St Northbound					Mill St Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:30 AM	0	0	1	0	1	0	168	0	0	168	0	0	115	0	115	284
7:45 AM	0	0	3	0	3	0	183	1	0	184	0	0	130	0	130	317
8:00 AM	0	0	0	0	0	0	136	0	0	136	0	0	129	0	129	265
8:15 AM	0	0	1	0	1	0	167	0	0	167	0	0	128	0	128	296
Total	0	0	5	0	5	0	654	1	0	655	0	0	502	0	502	1162
Approach %	0.0	0.0	100.0	-	-	0.0	99.8	0.2	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	0.4	-	0.4	0.0	56.3	0.1	-	56.4	0.0	0.0	43.2	-	43.2	-
PHF	0.000	0.000	0.417	-	0.417	0.000	0.893	0.250	-	0.890	0.000	0.000	0.965	-	0.965	0.916
Lights	0	0	5	-	5	0	640	1	-	641	0	0	486	-	486	1132
% Lights	-	-	100.0	-	100.0	-	97.9	100.0	-	97.9	-	-	96.8	-	96.8	97.4
Buses	0	0	0	-	0	0	3	0	-	3	0	0	0	-	0	3
% Buses	-	-	0.0	-	0.0	-	0.5	0.0	-	0.5	-	-	0.0	-	0.0	0.3
Single-Unit Trucks	0	0	0	-	0	0	8	0	-	8	0	0	12	-	12	20
% Single-Unit Trucks	-	-	0.0	-	0.0	-	1.2	0.0	-	1.2	-	-	2.4	-	2.4	1.7
Articulated Trucks	0	0	0	-	0	0	3	0	-	3	0	0	4	-	4	7
% Articulated Trucks	-	-	0.0	-	0.0	-	0.5	0.0	-	0.5	-	-	0.8	-	0.8	0.6
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 sainkeshavarzi@kloainc.com

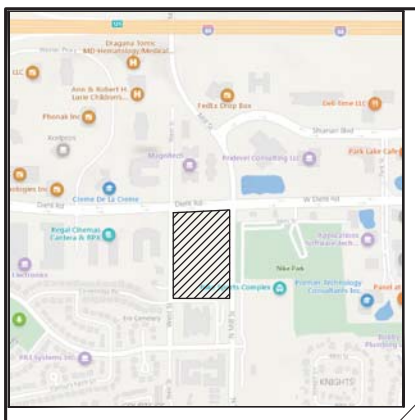
Count Name: Mill St with Nike Sports Complex access Dr TMC
Site Code:
Start Date: 07/12/2022

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Access Dr Westbound					Mill St Northbound					Mill St Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:30 PM	0	0	3	0	3	0	155	2	0	157	0	0	251	0	251	411
4:45 PM	0	0	0	0	0	0	144	0	0	144	0	0	241	0	241	385
5:00 PM	0	0	3	0	3	0	148	1	0	149	0	0	314	0	314	466
5:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	3	0	3	5
Total	0	0	6	0	6	0	449	3	0	452	0	0	809	0	809	1267
Approach %	0.0	0.0	100.0	-	-	0.0	99.3	0.7	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	0.5	-	0.5	0.0	35.4	0.2	-	35.7	0.0	0.0	63.9	-	63.9	-
PHF	0.000	0.000	0.500	-	0.500	0.000	0.724	0.375	-	0.720	0.000	0.000	0.644	-	0.644	0.680
Lights	0	0	6	-	6	0	447	3	-	450	0	0	808	-	808	1264
% Lights	-	-	100.0	-	100.0	-	99.6	100.0	-	99.6	-	-	99.9	-	99.9	99.8
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	2	0	-	2	0	0	1	-	1	3
% Single-Unit Trucks	-	-	0.0	-	0.0	-	0.4	0.0	-	0.4	-	-	0.1	-	0.1	0.2
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Site Plan

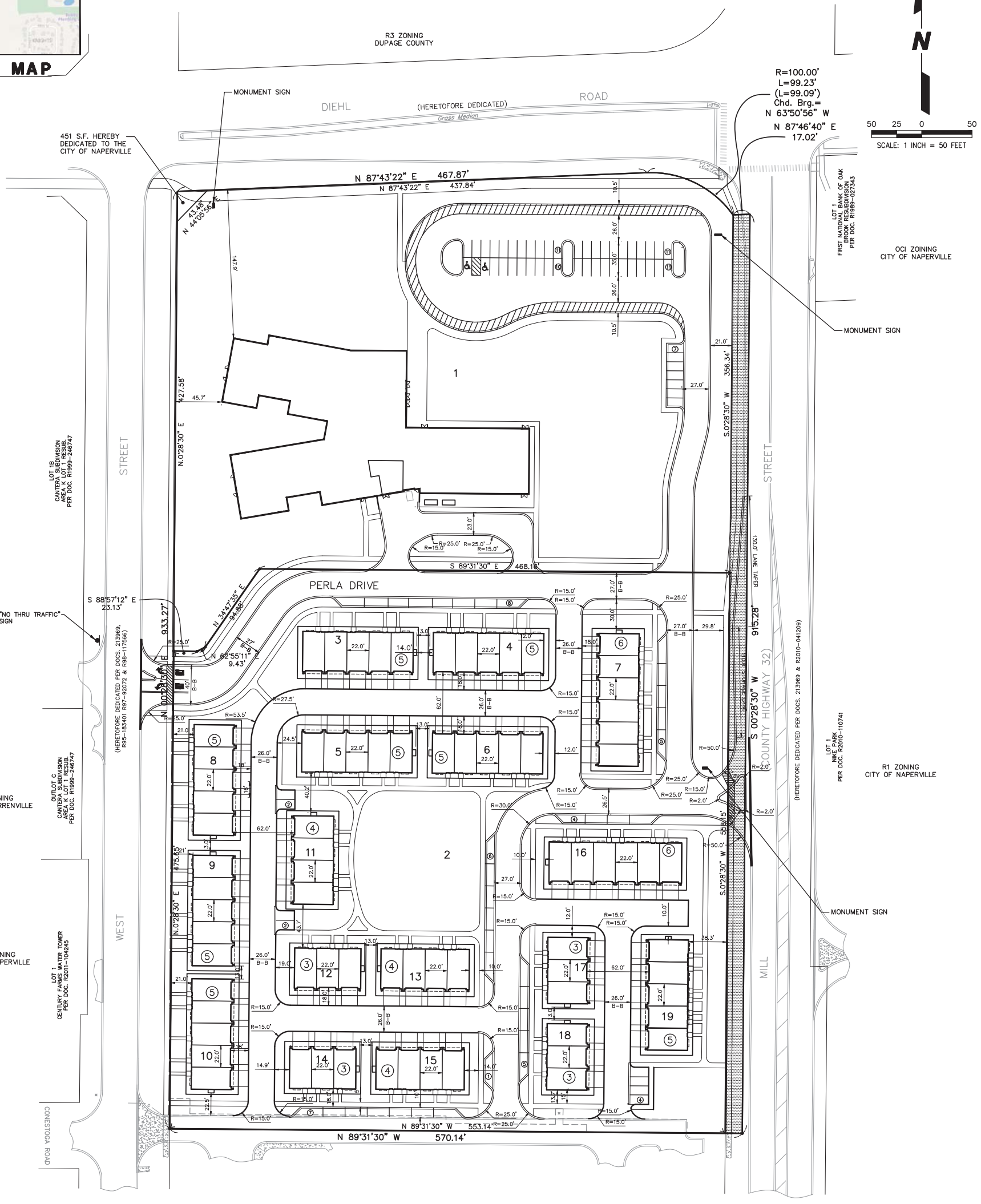
PRELIMINARY SITE PLAN
FOR
THE PROSPERITA & ORION STEM SCHOOL



LOCATION MAP

;OVERALL PARCEL DESCRIPTION

THAT PART OF THE SOUTH HALF OF SECTION 1 AND THE NORTH HALF OF SECTION 12, TOWNSHIP 38 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 1 IN THE FINAL PLAT OF SUBDIVISION FOR HARBORCHASE OF NAPERVILLE RECORDED AS DOCUMENT R2014-088045 SAID POINT ALSO BEING ON THE EAST LINE OF WEST STREET DEDICATED PER DOCUMENTS R95-183401, R97-92072 AND R98-117566; THENCE NORTH.0 DEGREES 28 MINUTES 30 SECONDS EAST 933.27 FEET ALONG SAID EAST LINE OF WEST STREET TO A POINT ON THE SOUTH LINE OF LAND CONVEYED TO THE COUNTY OF DUPAGE FOR DIEHL ROAD BY WARRANTY DEED RECORDED JULY 14, 1989 AS DOCUMENT R89-084247; THENCE NORTH 87 DEGREES 43 MINUTES 22 SECONDS EAST 467.87 FEET ALONG SAID SOUTH LINE TO A POINT OF CURVATURE; THENCE SOUTHEASTERLY 99.23 FEET ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 100.0 FEET AND A CHORD BEARING NORTH 63 DEGREES 50 MINUTES 56 SECONDS WEST; THENCE NORTH 87 DEGREES 46 MINUTES 40 SECONDS EAST 17.02 FEET TO A POINT ON THE WESTERLY LINE OF MILL STREET (COUNTY HIGHWAY 32) DEDICATED PER DOCUMENTS 213969 AND R2010-041209; THENCE SOUTH.0 DEGREES 28 MINUTES 30 SECONDS WEST 915.28 FEET ALONG SAID WESTERLY LINE TO THE NORTHEAST CORNER OF LOT 1 IN THE AFOREMENTIONED HARBORCHASE OF NAPERVILLE; THENCE NORTH 89 DEGREES 31 MINUTES 30 SECONDS WEST 570.14 ALONG THE NORTH LINE OF SAID LOT 1 TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS.



LOT 1
HARBORCHASE OF NAPERVILLE SUBDIVISION
PER DOC. R2014-088045

OCI ZONING
CITY OF NAPERVILLE

SITE DATA

A.	TOTAL AREA	12.35 AC.±
B.	SCHOOL SITE	5.01 AC.±
1.	PROPOSED ZONING	OCI
2.	BUILDING SQUARE FOOTAGE	44,000 S.F.
3.	PARKING STALLS PROVIDED	50
4.	F.A.R	0.201
C.	RESIDENTIAL AREA	7.20 AC.±
1.	PROPOSED ZONING	OCI/CONDITIONAL USE
2.	UNITS	76
3.	LOT AREA	313,632 S.F.
	REQUIRED (4,000 S.F. X 76)	304,000 S.F.
4.	SETBACKS	
	FRONT YARD SETBACK	20 FT.
	CORNER SIDE YARD	20 FT.
	INTERIOR SIDE YARD	10 FT.
6.	BUILDING SEPARATION	
	REAR TO REAR	62' (GARAGE DOOR TO GARAGE DOOR)
	SIDE TO SIDE	13'
	SIDE TO FRONT	40'
	SIDE TO REAR	50'
7.	PARKING REQUIRED	171
8.	PARKING PROVIDED	
	GARAGE	152
	DRIVEWAY	152
	SURFACE	44
	TOTAL	348
D.	MILL STREET R.OW. DEDICATION	0.36 AC.±
E.	WEST STREET R.O.W. DEDICATION	0.01 AC.±

PREPARED FOR:
VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803-5768

PREPARED BY:

CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
PH: 630.862.2100 FAX: 630.862.2199
E-Mail: info@cemcon.com Website: www.cemcon.com

DISC NO.: 904426 FILE NAME: PREOVER
DRAWN BY: PRP FLD. BK. / PG. NO.: -----
COMPLETION DATE: 09-21-22 JOB NO.: 904.426
XREF : TOPO PROJECT MANAGER : RWB
REV.: 09-27-22/KMS, 09-30-22/KMS, 12-13-22/KMS, 01-23-23/KMS, 02-14-23/KMS, 03-27-23/KMS, 04-12-23/KMS

PRELIMINARY SITE PLAN FOR THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.: 22-10000097

PLOT FILE CREATED: 4/13/2023 BY: KRISTIN STAEKREL DRAWING PATH: P:\904426\DWG\ENG\DRAWINGS\PRELIMINARY\PREOVER.DWG

ITE Trip Generation Summary Sheets

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.

- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.

- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

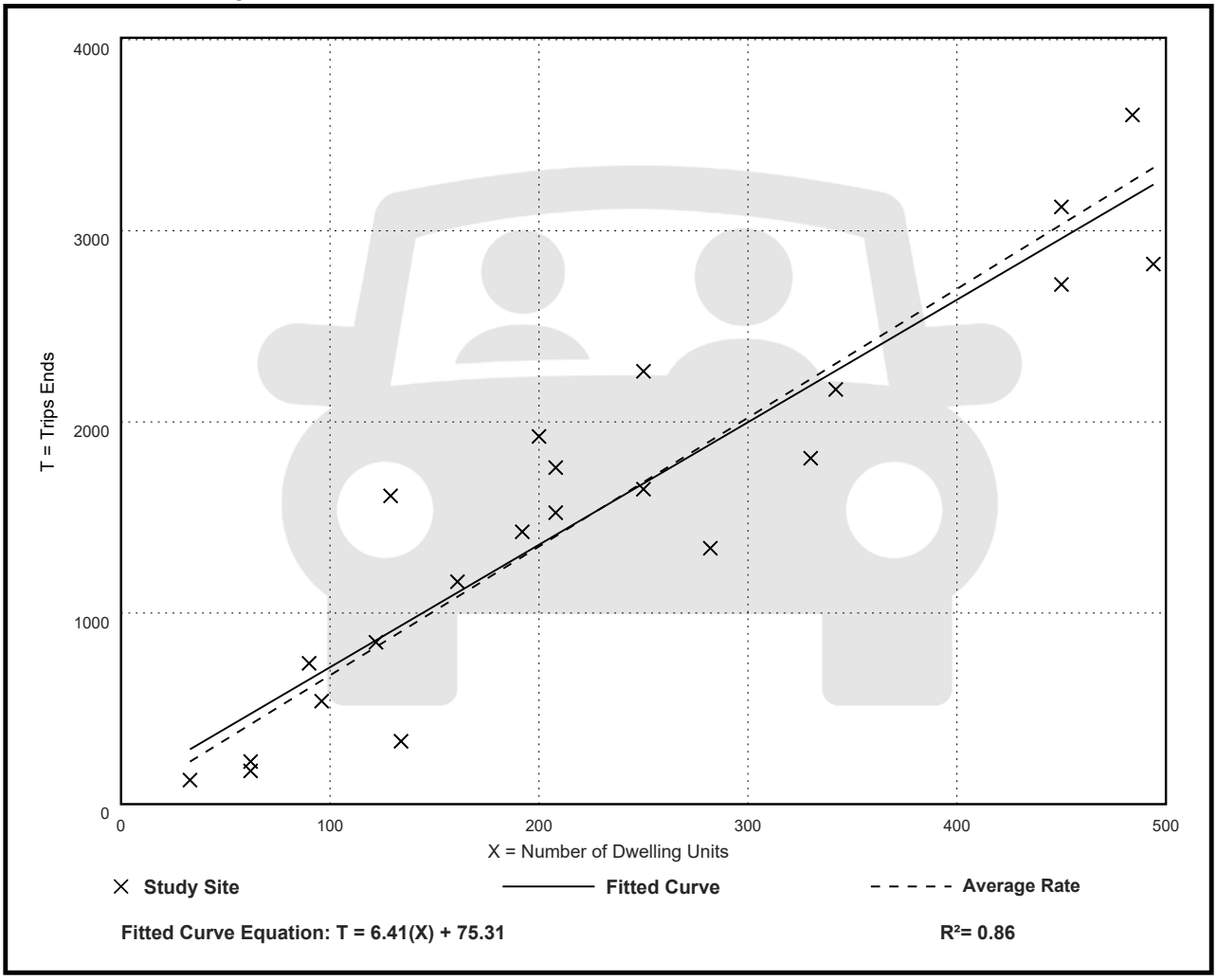
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Fitted Curve Equation: T = 6.41(X) + 75.31

R^2= 0.86

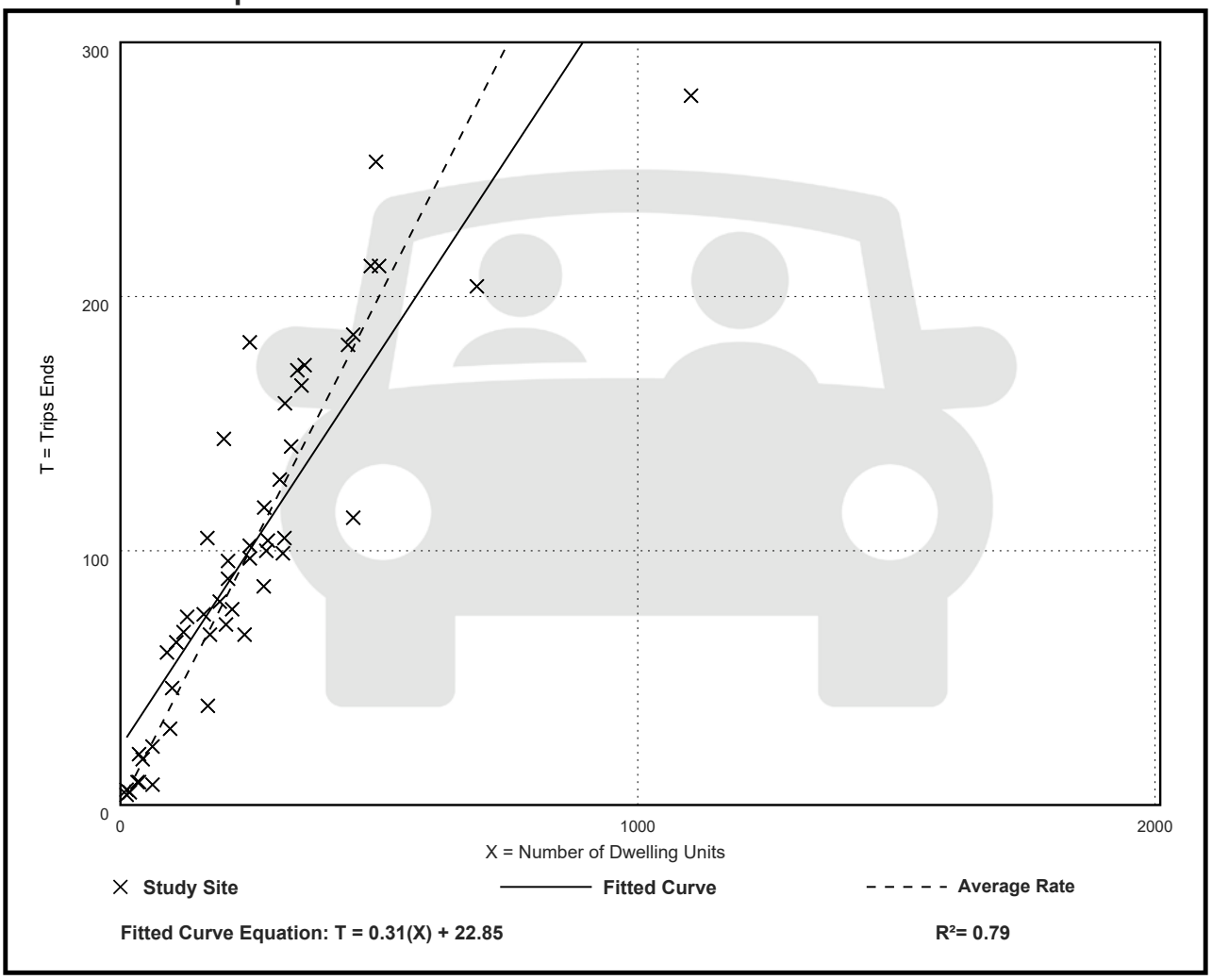
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



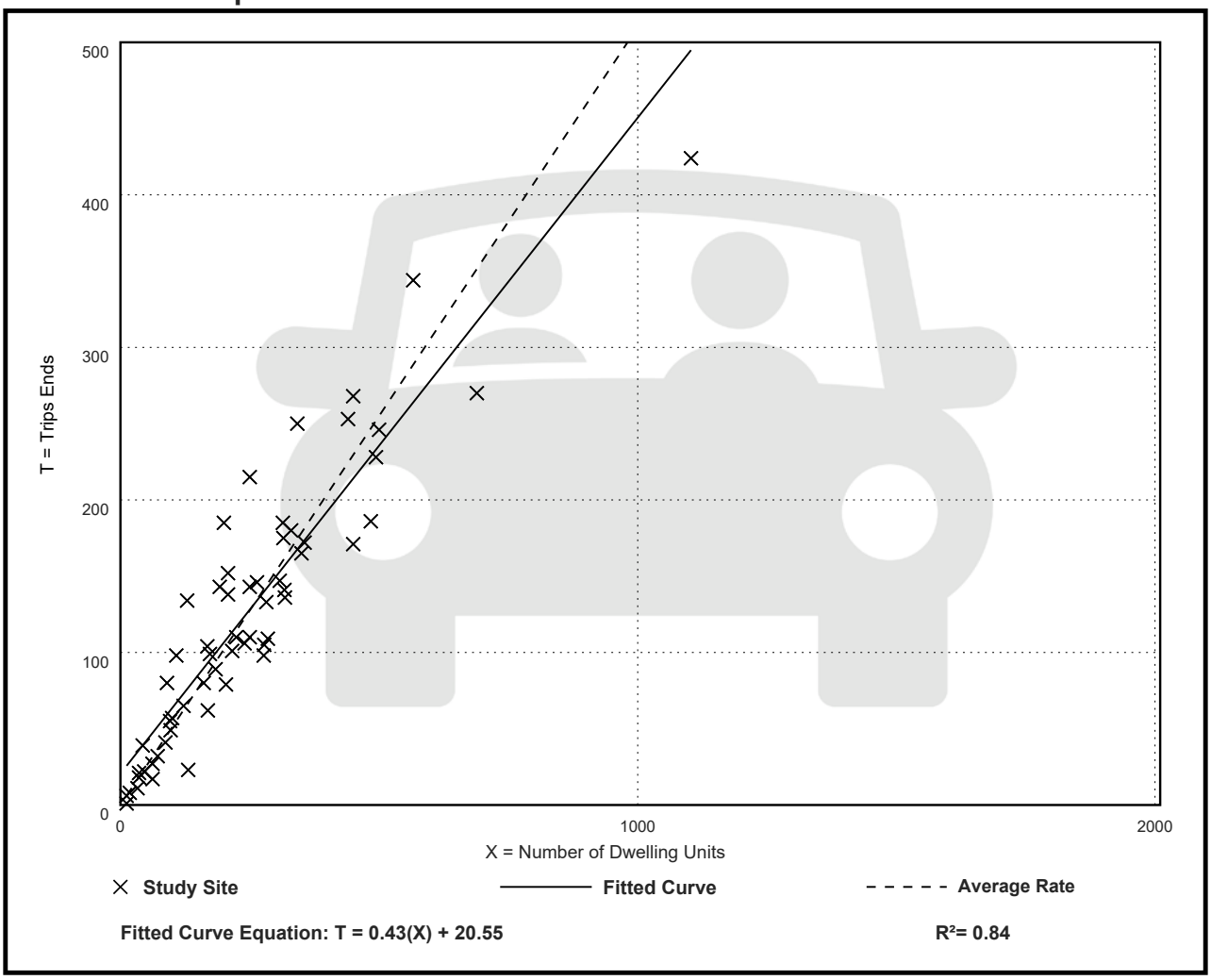
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



CMAP 2050 Projections Letter

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

August 12, 2022

Shahrzad Ainkeshavarzi
Consultant
Kenig, Lindgren, O'Hara, Aboona, Inc.
9575 West Higgins Road,
Suite 400
Rosemont, IL, 60018

Subject: ***Diehl Road @ North Mill Street***
IDOT

Dear Ms. Ainkeshavarzi:

In response to a request made on your behalf and dated August 12, 2022, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
N. Mill Street south of Diehl Road	10,500	14,500
N. Mill Street north of Diehl Road	5,650	8,800
Diehl Road west of N. Mill Street	8,100	12,000
Diehl Road east of N. Mill Street	6,550	9,600

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
2022_ForecastTraffic\Naperville\du-38-22\du-38-22.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

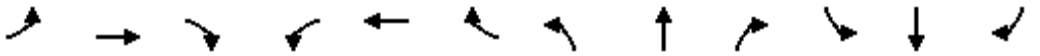
Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective, or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high, and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour

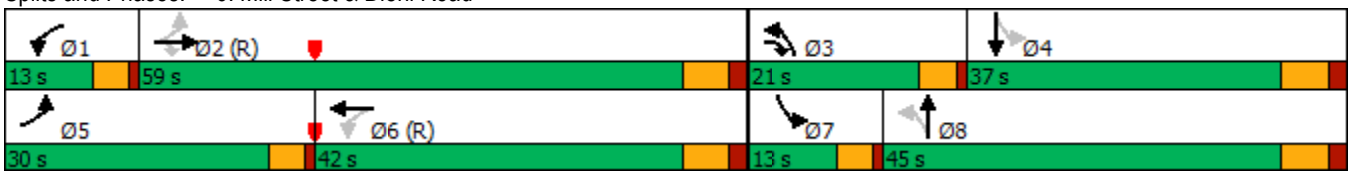


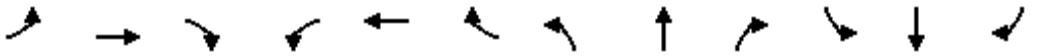
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	424	209	99	331	32	265	307	117	40	212	71
Future Volume (vph)	119	424	209	99	331	32	265	307	117	40	212	71
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	200		0	310		0	210		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	220			110			180			150		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.987			0.958			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3800	1599	1752	3499	0	1787	3424	0	1805	3339	0
Flt Permitted	0.408			0.427			0.478			0.484		
Satd. Flow (perm)	760	3800	1599	788	3499	0	899	3424	0	920	3339	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			230		8			44			33	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		646			348			833			345	
Travel Time (s)		11.0			5.9			14.2			5.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	0%	1%	3%	2%	0%	1%	1%	1%	0%	2%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	466	230	109	399	0	291	466	0	44	311	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	24.5	9.5	9.5	24.5		9.5	24.5		9.5	24.5	
Total Split (s)	30.0	59.0	21.0	13.0	42.0		21.0	45.0		13.0	37.0	
Total Split (%)	23.1%	45.4%	16.2%	10.0%	32.3%		16.2%	34.6%		10.0%	28.5%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5		4.5	6.5		4.5	6.5	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	Max		None	Max	
Act Effct Green (s)	54.9	41.9	65.8	49.1	38.9		64.4	52.6		49.7	40.5	
Actuated g/C Ratio	0.42	0.32	0.51	0.38	0.30		0.50	0.40		0.38	0.31	
v/c Ratio	0.32	0.38	0.25	0.30	0.38		0.52	0.33		0.11	0.29	
Control Delay	23.6	34.4	2.2	23.6	36.0		22.6	24.6		20.6	33.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.6	34.4	2.2	23.6	36.0		22.6	24.6		20.6	33.0	
LOS	C	C	A	C	D		C	C		C	C	
Approach Delay		23.8			33.4			23.8			31.4	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	67	161	0	55	137		143	128		19	93	
Queue Length 95th (ft)	98	191	34	83	175		236	197		45	149	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		566			268			753			265	
Turn Bay Length (ft)	190		190	200			310			210		
Base Capacity (vph)	529	1534	934	362	1051		571	1412		420	1062	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.25	0.30	0.25	0.30	0.38		0.51	0.33		0.10	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 84.5 (65%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Mill Street & Diehl Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	63	7	1	1	55	680	9	0	513	7
Future Volume (vph)	4	0	63	7	1	1	55	680	9	0	513	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	0		0	140		0	200		200	215		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			65			190			180		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.925				0.850		0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1805	1568	0	1399	1758	0	1719	3762	1615	1900	3526	0
Flt Permitted	0.757			0.711			0.413					
Satd. Flow (perm)	1438	1568	0	1047	1758	0	747	3762	1615	1900	3526	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		404			1				63		2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		648			166			330			674	
Travel Time (s)		14.7			3.8			5.6			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	3%	29%	0%	0%	5%	1%	0%	0%	2%	14%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	71	0	8	2	0	62	764	10	0	584	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0	15.0	3.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		9.5	24.0	24.0	9.5	24.0	
Total Split (s)	33.0	33.0		33.0	33.0		16.0	81.0	81.0	16.0	81.0	
Total Split (%)	25.4%	25.4%		25.4%	25.4%		12.3%	62.3%	62.3%	12.3%	62.3%	
Yellow Time (s)	4.5	4.5		4.5	4.5		3.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5	1.5	1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	8.9	8.9		8.9	8.9		113.4	113.1	113.1		104.4	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.87	0.87	0.87		0.80	
v/c Ratio	0.04	0.15		0.11	0.02		0.09	0.23	0.01		0.21	
Control Delay	56.8	0.6		59.7	47.5		1.8	2.1	0.0		4.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	56.8	0.6		59.7	47.5		1.8	2.1	0.0		4.2	
LOS	E	A		E	D		A	A	A		A	
Approach Delay		3.6			57.3			2.0			4.2	
Approach LOS		A			E			A			A	
Queue Length 50th (ft)	3	0		7	1		6	50	0		67	
Queue Length 95th (ft)	15	0		23	9		13	71	0		97	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		568			86			250			594	
Turn Bay Length (ft)				140			200		200			
Base Capacity (vph)	298	645		217	365		737	3273	1413		2831	
Starvation Cap Reductn	0	0		0	0		0	0	0		0	
Spillback Cap Reductn	0	0		0	0		0	0	0		0	
Storage Cap Reductn	0	0		0	0		0	0	0		0	
Reduced v/c Ratio	0.01	0.11		0.04	0.01		0.08	0.23	0.01		0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 21 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 3.3		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Commons Road & Mill Street

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	722	21	25	638	4	66	0	30	0	0	3
Future Vol, veh/h	15	722	21	25	638	4	66	0	30	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	110	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	7	1	0	4	2	0	2	0	0	0	0	0
Mvmt Flow	15	737	21	26	651	4	67	0	31	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	655	0	0	758	0	0	1156	1485	379	1104	1493	328
Stage 1	-	-	-	-	-	-	778	778	-	705	705	-
Stage 2	-	-	-	-	-	-	378	707	-	399	788	-
Critical Hdwy	4.24	-	-	4.18	-	-	7.54	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.27	-	-	2.24	-	-	3.52	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	*1233	-	-	836	-	-	*285	177	625	322	175	*847
Stage 1	-	-	-	-	-	-	*355	410	-	749	667	-
Stage 2	-	-	-	-	-	-	*794	665	-	604	405	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	*1233	-	-	836	-	-	*274	170	625	296	167	*847
Mov Cap-2 Maneuver	-	-	-	-	-	-	*274	170	-	296	167	-
Stage 1	-	-	-	-	-	-	*351	405	-	740	646	-
Stage 2	-	-	-	-	-	-	*767	644	-	567	400	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	18.9	9.3
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	274	625	* 1233	-	-	836	-	-	847
HCM Lane V/C Ratio	0.246	0.049	0.012	-	-	0.031	-	-	0.004
HCM Control Delay (s)	22.4	11.1	8	-	-	9.4	-	-	9.3
HCM Lane LOS	C	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.9	0.2	0	-	-	0.1	-	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	42	31	1	0	26	29	0	1	0	14	0	9
Future Vol, veh/h	42	31	1	0	26	29	0	1	0	14	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	3	100	0	8	0	0	0	0	0	0	0
Mvmt Flow	48	35	1	0	30	33	0	1	0	16	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	36	0	0	184	195	36	179	179	47
Stage 1	-	-	-	-	-	-	132	132	-	47	47	-
Stage 2	-	-	-	-	-	-	52	63	-	132	132	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1588	-	-	786	707	1042	792	721	1033
Stage 1	-	-	-	-	-	-	876	791	-	977	862	-
Stage 2	-	-	-	-	-	-	971	849	-	876	791	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1555	-	-	1588	-	-	759	685	1042	771	698	1033
Mov Cap-2 Maneuver	-	-	-	-	-	-	759	685	-	771	698	-
Stage 1	-	-	-	-	-	-	848	766	-	945	862	-
Stage 2	-	-	-	-	-	-	961	849	-	847	766	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.2	0	10.3	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	685	1555	-	-	1588	-	-	771	1033
HCM Lane V/C Ratio	0.002	0.031	-	-	-	-	-	0.021	0.01
HCM Control Delay (s)	10.3	7.4	0	-	0	-	-	9.8	8.5
HCM Lane LOS	B	A	A	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1	0

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	47	0	3	1	0	1	5	67	0	2	19	21
Future Vol, veh/h	47	0	3	1	0	1	5	67	0	2	19	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	25	100	0	100	0	0	0	50	5	0
Mvmt Flow	55	0	4	1	0	1	6	79	0	2	22	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	131	130	35	132	142	79	47	0	0	79	0	0
Stage 1	39	39	-	91	91	-	-	-	-	-	-	-
Stage 2	92	91	-	41	51	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.45	8.1	6.5	7.2	4.1	-	-	4.6	-	-
Critical Hdwy Stg 1	6.1	5.5	-	7.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	7.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.525	4.4	4	4.2	2.2	-	-	2.65	-	-
Pot Cap-1 Maneuver	846	764	976	658	753	766	1573	-	-	1264	-	-
Stage 1	981	866	-	722	823	-	-	-	-	-	-	-
Stage 2	920	823	-	774	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	841	759	976	653	748	766	1573	-	-	1264	-	-
Mov Cap-2 Maneuver	841	759	-	653	748	-	-	-	-	-	-	-
Stage 1	977	864	-	719	820	-	-	-	-	-	-	-
Stage 2	915	820	-	770	854	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	10.1	0.5	0.4
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1573	-	-	848	705	1264	-	-
HCM Lane V/C Ratio	0.004	-	-	0.069	0.003	0.002	-	-
HCM Control Delay (s)	7.3	0	-	9.6	10.1	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	684	1	0	520
Future Vol, veh/h	0	5	684	1	0	520
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	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	3
Mvmt Flow	0	5	743	1	0	565

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	372	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*823	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		1	-	-		-
Mov Cap-1 Maneuver	-	*823	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	823	-
HCM Lane V/C Ratio	-	-	0.007	-
HCM Control Delay (s)	-	-	9.4	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	2	20	95	40	6
Future Vol, veh/h	1	2	20	95	40	6
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	3	4	0
Mvmt Flow	1	3	27	128	54	8

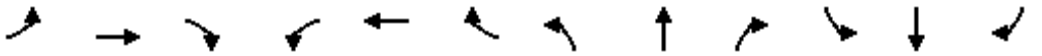
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	240	58	62	0	-	0
Stage 1	58	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	753	1014	1554	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	739	1014	1554	-	-	-
Mov Cap-2 Maneuver	739	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	854	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1554	-	902	-	-
HCM Lane V/C Ratio	0.017	-	0.004	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour

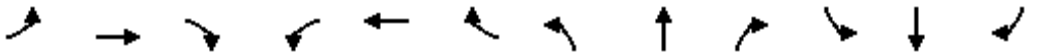


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	484	391	197	487	30	278	330	91	75	374	92
Future Volume (vph)	80	484	391	197	487	30	278	330	91	75	374	92
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	200		0	310		0	210		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	220			110			180			150		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.991			0.968			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3800	1615	1787	3544	0	1787	3467	0	1805	3467	0
Flt Permitted	0.416			0.357			0.173			0.483		
Satd. Flow (perm)	790	3800	1615	672	3544	0	325	3467	0	918	3467	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			286		5			24			18	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		646			348			833			345	
Travel Time (s)		11.0			5.9			14.2			5.9	
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
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	538	434	219	574	0	309	468	0	83	518	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	24.5	9.5	9.5	24.5		9.5	24.5		13.5	24.0	
Total Split (s)	13.5	45.0	27.0	40.5	72.0		27.0	51.0		13.5	37.5	
Total Split (%)	9.0%	30.0%	18.0%	27.0%	48.0%		18.0%	34.0%		9.0%	25.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5		4.5	6.5		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max		None	Min		None	Min	
Act Effct Green (s)	73.5	63.3	91.7	84.4	69.9		56.4	41.4		38.4	28.4	
Actuated g/C Ratio	0.49	0.42	0.61	0.56	0.47		0.38	0.28		0.26	0.19	
v/c Ratio	0.20	0.34	0.40	0.45	0.35		0.92	0.48		0.29	0.77	
Control Delay	17.7	31.2	6.4	20.1	26.8		69.0	42.7		33.5	63.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.7	31.2	6.4	20.1	26.8		69.0	42.7		33.5	63.9	
LOS	B	C	A	C	C		E	D		C	E	
Approach Delay		19.9			24.9			53.2			59.7	
Approach LOS		B			C			D			E	
Queue Length 50th (ft)	40	188	60	106	189		225	191		52	245	
Queue Length 95th (ft)	71	257	144	160	244		#362	242		89	307	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		566			268			753			265	
Turn Bay Length (ft)	190		190	200			310			210		
Base Capacity (vph)	452	1602	1103	646	1653		341	1045		291	742	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.20	0.34	0.39	0.34	0.35		0.91	0.45		0.29	0.70	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 112.5 (75%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 36.5		Intersection LOS: D	
Intersection Capacity Utilization 70.2%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Mill Street & Diehl Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1	54	13	2	6	50	677	3	4	945	13
Future Volume (vph)	13	1	54	13	2	6	50	677	3	4	945	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	0		0	140		0	200		200	215		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			65			190			180		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.853			0.887				0.850		0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1621	0	1805	1685	0	1805	3762	1615	1805	3599	0
Flt Permitted	0.752			0.719			0.255			0.375		
Satd. Flow (perm)	1429	1621	0	1366	1685	0	484	3762	1615	712	3599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		58			6				55		2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		648			166			330			674	
Travel Time (s)		14.7			3.8			5.6			11.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	59	0	14	8	0	54	728	3	4	1030	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0	15.0	3.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		9.5	24.0	24.0	9.5	24.0	
Total Split (s)	36.0	36.0		36.0	36.0		15.0	99.0	99.0	15.0	99.0	
Total Split (%)	24.0%	24.0%		24.0%	24.0%		10.0%	66.0%	66.0%	10.0%	66.0%	
Yellow Time (s)	4.5	4.5		4.5	4.5		3.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5	1.5	1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	9.4	9.4		9.4	9.4		132.2	130.6	130.6	128.8	124.0	
Actuated g/C Ratio	0.06	0.06		0.06	0.06		0.88	0.87	0.87	0.86	0.83	
v/c Ratio	0.16	0.38		0.16	0.07		0.11	0.22	0.00	0.01	0.35	
Control Delay	69.7	22.7		70.2	41.4		2.0	2.5	0.0	1.5	4.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	69.7	22.7		70.2	41.4		2.0	2.5	0.0	1.5	4.8	
LOS	E	C		E	D		A	A	A	A	A	
Approach Delay		31.7			59.7			2.5			4.8	
Approach LOS		C			E			A			A	
Queue Length 50th (ft)	13	1		13	2		5	49	0	1	134	
Queue Length 95th (ft)	38	48		38	20		12	113	0	m1	162	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		568			86			250			594	
Turn Bay Length (ft)				140			200		200	215		
Base Capacity (vph)	285	370		273	341		521	3275	1413	706	2976	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.16		0.05	0.02		0.10	0.22	0.00	0.01	0.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 19.5 (13%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Commons Road & Mill Street

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	925	42	17	834	6	40	0	24	6	0	21
Future Vol, veh/h	4	925	42	17	834	6	40	0	24	6	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	110	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	4	1039	47	19	937	7	45	0	27	7	0	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	944	0	0	1086	0	0	1578	2053	543	1507	2073	472
Stage 1	-	-	-	-	-	-	1071	1071	-	979	979	-
Stage 2	-	-	-	-	-	-	507	982	-	528	1094	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1099	-	-	650	-	-	*151	71	489	178	68	*756
Stage 1	-	-	-	-	-	-	*239	300	-	634	572	-
Stage 2	-	-	-	-	-	-	*713	570	-	507	292	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1099	-	-	650	-	-	*142	69	489	164	66	*756
Mov Cap-2 Maneuver	-	-	-	-	-	-	*142	69	-	164	66	-
Stage 1	-	-	-	-	-	-	*238	299	-	632	556	-
Stage 2	-	-	-	-	-	-	*671	554	-	477	291	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	30.9	14.3
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	142	489	1099	-	-	650	-	-	419
HCM Lane V/C Ratio	0.317	0.055	0.004	-	-	0.029	-	-	0.072
HCM Control Delay (s)	41.7	12.8	8.3	-	-	10.7	-	-	14.3
HCM Lane LOS	E	B	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	1.3	0.2	0	-	-	0.1	-	-	0.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	19	51	1	1	50	9	0	1	1	18	0	34
Future Vol, veh/h	19	51	1	1	50	9	0	1	1	18	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	22	59	1	1	58	10	0	1	1	21	0	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	68	0	0	60	0	0	189	174	60	170	169	63
Stage 1	-	-	-	-	-	-	104	104	-	65	65	-
Stage 2	-	-	-	-	-	-	85	70	-	105	104	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1554	-	-	1556	-	-	795	735	1011	819	740	1029
Stage 1	-	-	-	-	-	-	907	813	-	969	853	-
Stage 2	-	-	-	-	-	-	945	849	-	906	813	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1554	-	-	1556	-	-	755	724	1011	807	728	1029
Mov Cap-2 Maneuver	-	-	-	-	-	-	755	724	-	807	728	-
Stage 1	-	-	-	-	-	-	893	801	-	955	852	-
Stage 2	-	-	-	-	-	-	908	849	-	890	801	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.1	9.3	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	844	1554	-	-	1556	-	-	807	1029
HCM Lane V/C Ratio	0.003	0.014	-	-	0.001	-	-	0.026	0.038
HCM Control Delay (s)	9.3	7.3	0	-	7.3	0	-	9.6	8.6
HCM Lane LOS	A	A	A	-	A	A	-	A	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	2	8	1	1	5	3	25	1	1	43	24
Future Vol, veh/h	24	2	8	1	1	5	3	25	1	1	43	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	5	0
Mvmt Flow	30	3	10	1	1	6	4	31	1	1	54	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	114	111	69	118	126	32	84	0	0	32	0	0
Stage 1	71	71	-	40	40	-	-	-	-	-	-	-
Stage 2	43	40	-	78	86	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	868	783	1000	863	768	1048	1526	-	-	1593	-	-
Stage 1	944	840	-	980	866	-	-	-	-	-	-	-
Stage 2	976	866	-	936	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	859	780	1000	850	765	1048	1526	-	-	1593	-	-
Mov Cap-2 Maneuver	859	780	-	850	765	-	-	-	-	-	-	-
Stage 1	941	839	-	977	863	-	-	-	-	-	-	-
Stage 2	966	863	-	923	826	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	8.8	0.8	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1526	-	-	883	965	1593	-	-
HCM Lane V/C Ratio	0.002	-	-	0.048	0.009	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.3	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	693	3	0	962
Future Vol, veh/h	0	6	693	3	0	962
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	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	2	0	0	2
Mvmt Flow	0	9	1019	4	0	1415

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	512	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*818	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		1	-	-		-
Mov Cap-1 Maneuver	-	*818	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	818	-
HCM Lane V/C Ratio	-	-	0.011	-
HCM Control Delay (s)	-	-	9.4	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	10	2	52	58	1
Future Vol, veh/h	12	10	2	52	58	1
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	11	2	57	63	1

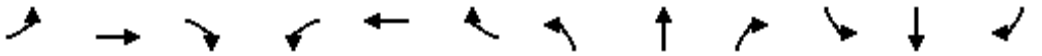
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	125	64	64	0	-	0
Stage 1	64	-	-	-	-	-
Stage 2	61	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	875	1006	1551	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	874	1006	1551	-	-	-
Mov Cap-2 Maneuver	874	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	967	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1551	-	929	-	-
HCM Lane V/C Ratio	0.001	-	0.026	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Capacity Analysis Summary Sheets

Year 2028 No-Build Weekday Morning Peak Hour

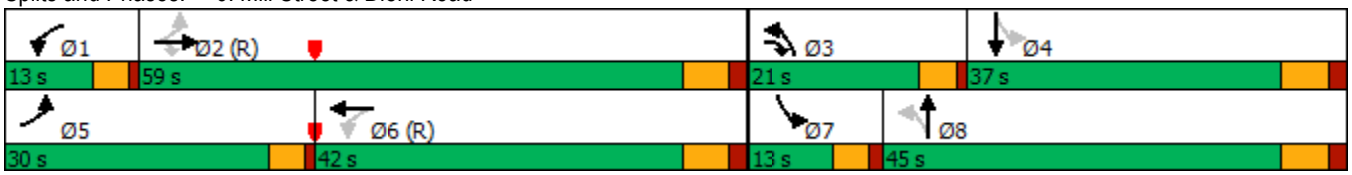


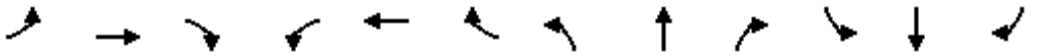
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	461	226	107	385	35	286	332	126	43	229	82
Future Volume (vph)	130	461	226	107	385	35	286	332	126	43	229	82
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	200		0	310		0	210		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	220			110			180			150		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.988			0.959			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3800	1599	1752	3502	0	1787	3428	0	1805	3332	0
Flt Permitted	0.369			0.405			0.441			0.467		
Satd. Flow (perm)	687	3800	1599	747	3502	0	830	3428	0	887	3332	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			248		7			43			36	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		646			348			833			345	
Travel Time (s)		11.0			5.9			14.2			5.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	0%	1%	3%	2%	0%	1%	1%	1%	0%	2%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	507	248	118	461	0	314	503	0	47	342	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	24.5	9.5	9.5	24.5		9.5	24.5		9.5	24.5	
Total Split (s)	30.0	59.0	21.0	13.0	42.0		21.0	45.0		13.0	37.0	
Total Split (%)	23.1%	45.4%	16.2%	10.0%	32.3%		16.2%	34.6%		10.0%	28.5%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0		1.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5		4.5	6.5		5.0	6.5	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	Max		None	Max	
Act Effct Green (s)	58.1	44.9	68.9	51.9	41.6		61.3	49.3		45.9	37.3	
Actuated g/C Ratio	0.45	0.35	0.53	0.40	0.32		0.47	0.38		0.35	0.29	
v/c Ratio	0.35	0.39	0.26	0.33	0.41		0.60	0.38		0.13	0.35	
Control Delay	22.3	32.5	2.1	22.2	34.8		26.9	27.2		22.9	35.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	22.3	32.5	2.1	22.2	34.8		26.9	27.2		22.9	35.5	
LOS	C	C	A	C	C		C	C		C	D	
Approach Delay		22.5			32.2			27.1			34.0	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	69	169	0	57	157		166	151		21	110	
Queue Length 95th (ft)	100	197	35	84	195		269	222		49	163	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		566			268			753			265	
Turn Bay Length (ft)	190		190	200			310			210		
Base Capacity (vph)	527	1534	971	365	1126		526	1327		376	981	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.27	0.33	0.26	0.32	0.41		0.60	0.38		0.13	0.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 84.5 (65%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 62.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: Mill Street & Diehl Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	73	8	1	1	92	734	10	0	554	8
Future Volume (vph)	4	0	73	8	1	1	92	734	10	0	554	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	0		0	140		0	200		200	215		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			65			190			180		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.925				0.850		0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1805	1568	0	1399	1758	0	1719	3762	1615	1900	3526	0
Flt Permitted	0.757			0.704			0.389					
Satd. Flow (perm)	1438	1568	0	1037	1758	0	704	3762	1615	1900	3526	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		378			1				63		2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		648			166			330			674	
Travel Time (s)		14.7			3.8			5.6			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	3%	29%	0%	0%	5%	1%	0%	0%	2%	14%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	82	0	9	2	0	103	825	11	0	631	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0	15.0	3.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		9.5	24.0	24.0	9.5	24.0	
Total Split (s)	33.0	33.0		33.0	33.0		16.0	81.0	81.0	16.0	81.0	
Total Split (%)	25.4%	25.4%		25.4%	25.4%		12.3%	62.3%	62.3%	12.3%	62.3%	
Yellow Time (s)	4.5	4.5		4.5	4.5		3.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5	1.5	1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	9.0	9.0		9.0	9.0		110.5	109.0	109.0		97.8	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.85	0.84	0.84		0.75	
v/c Ratio	0.04	0.18		0.13	0.02		0.16	0.26	0.01		0.24	
Control Delay	56.5	0.8		60.1	47.0		2.2	2.4	0.0		5.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	56.5	0.8		60.1	47.0		2.2	2.4	0.0		5.1	
LOS	E	A		E	D		A	A	A		A	
Approach Delay		3.4			57.7			2.4			5.1	
Approach LOS		A			E			A			A	
Queue Length 50th (ft)	3	0		7	1		10	56	0		80	
Queue Length 95th (ft)	15	0		25	9		20	80	0		95	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		568			86			250			594	
Turn Bay Length (ft)				140			200		200			
Base Capacity (vph)	298	625		215	365		688	3154	1364		2652	
Starvation Cap Reductn	0	0		0	0		0	0	0		0	
Spillback Cap Reductn	0	0		0	0		0	0	0		0	
Storage Cap Reductn	0	0		0	0		0	0	0		0	
Reduced v/c Ratio	0.01	0.13		0.04	0.01		0.15	0.26	0.01		0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 21 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 3.8		Intersection LOS: A	
Intersection Capacity Utilization 43.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Commons Road & Mill Street

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	780	33	60	689	4	72	0	36	0	0	3
Future Vol, veh/h	16	780	33	60	689	4	72	0	36	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	110	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	7	1	0	4	2	0	2	0	0	0	0	0
Mvmt Flow	16	796	34	61	703	4	73	0	37	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	0	830	0	0	1319	1674	415	1257	1689	354
Stage 1	-	-	-	-	-	-	845	845	-	827	827	-
Stage 2	-	-	-	-	-	-	474	829	-	430	862	-
Critical Hdwy	4.24	-	-	4.18	-	-	7.54	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.27	-	-	2.24	-	-	3.52	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	*1199	-	-	785	-	-	*217	132	592	252	129	*823
Stage 1	-	-	-	-	-	-	*324	382	-	658	601	-
Stage 2	-	-	-	-	-	-	*772	600	-	579	375	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	*1199	-	-	785	-	-	*201	120	592	220	117	*823
Mov Cap-2 Maneuver	-	-	-	-	-	-	*201	120	-	220	117	-
Stage 1	-	-	-	-	-	-	*320	377	-	649	554	-
Stage 2	-	-	-	-	-	-	*709	553	-	536	370	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.8	25.8	9.4
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	201	592	* 1199	-	-	785	-	-	823
HCM Lane V/C Ratio	0.366	0.062	0.014	-	-	0.078	-	-	0.004
HCM Control Delay (s)	32.9	11.5	8	-	-	10	-	-	9.4
HCM Lane LOS	D	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	1.6	0.2	0	-	-	0.3	-	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	45	33	1	0	28	64	0	1	0	20	0	10
Future Vol, veh/h	45	33	1	0	28	64	0	1	0	20	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	3	100	0	8	0	0	0	0	0	0	0
Mvmt Flow	51	38	1	0	32	73	0	1	0	23	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	39	0	0	215	246	39	210	210	69
Stage 1	-	-	-	-	-	-	141	141	-	69	69	-
Stage 2	-	-	-	-	-	-	74	105	-	141	141	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1500	-	-	1584	-	-	750	663	1038	756	694	1005
Stage 1	-	-	-	-	-	-	867	784	-	951	844	-
Stage 2	-	-	-	-	-	-	945	814	-	867	784	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1500	-	-	1584	-	-	722	640	1038	735	669	1005
Mov Cap-2 Maneuver	-	-	-	-	-	-	722	640	-	735	669	-
Stage 1	-	-	-	-	-	-	837	757	-	918	844	-
Stage 2	-	-	-	-	-	-	934	814	-	835	757	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.3	0	10.6	9.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	640	1500	-	-	1584	-	-	735	1005
HCM Lane V/C Ratio	0.002	0.034	-	-	-	-	-	0.031	0.011
HCM Control Delay (s)	10.6	7.5	0	-	0	-	-	10.1	8.6
HCM Lane LOS	B	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	51	0	3	1	0	1	5	105	0	2	26	23
Future Vol, veh/h	51	0	3	1	0	1	5	105	0	2	26	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	25	100	0	100	0	0	0	50	5	0
Mvmt Flow	60	0	4	1	0	1	6	124	0	2	31	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	186	185	45	187	198	124	58	0	0	124	0	0
Stage 1	49	49	-	136	136	-	-	-	-	-	-	-
Stage 2	137	136	-	51	62	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.45	8.1	6.5	7.2	4.1	-	-	4.6	-	-
Critical Hdwy Stg 1	6.1	5.5	-	7.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	7.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.525	4.4	4	4.2	2.2	-	-	2.65	-	-
Pot Cap-1 Maneuver	779	713	963	601	701	718	1559	-	-	1213	-	-
Stage 1	969	858	-	679	788	-	-	-	-	-	-	-
Stage 2	871	788	-	763	847	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	774	709	963	596	697	718	1559	-	-	1213	-	-
Mov Cap-2 Maneuver	774	709	-	596	697	-	-	-	-	-	-	-
Stage 1	965	856	-	676	785	-	-	-	-	-	-	-
Stage 2	866	785	-	759	845	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.6	0.3	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1559	-	-	783	651	1213	-	-
HCM Lane V/C Ratio	0.004	-	-	0.081	0.004	0.002	-	-
HCM Control Delay (s)	7.3	0	-	10	10.6	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	739	1	0	562
Future Vol, veh/h	0	5	739	1	0	562
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	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	3
Mvmt Flow	0	5	803	1	0	611

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	402	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*800	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		1	-	-		-
Mov Cap-1 Maneuver	-	*800	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	800	-
HCM Lane V/C Ratio	-	-	0.007	-
HCM Control Delay (s)	-	-	9.5	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	7	55	103	43	49
Future Vol, veh/h	6	7	55	103	43	49
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	3	4	0
Mvmt Flow	8	9	74	139	58	66

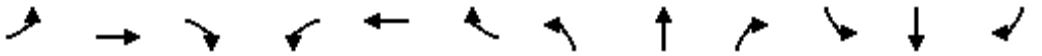
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	378	91	124	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	287	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	628	972	1475	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	594	972	1475	-	-	-
Mov Cap-2 Maneuver	594	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	766	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	2.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1475	-	751	-	-
HCM Lane V/C Ratio	0.05	-	0.023	-	-
HCM Control Delay (s)	7.6	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

Capacity Analysis Summary Sheets

Year 2028 No-Build Weekday Evening Peak Hour

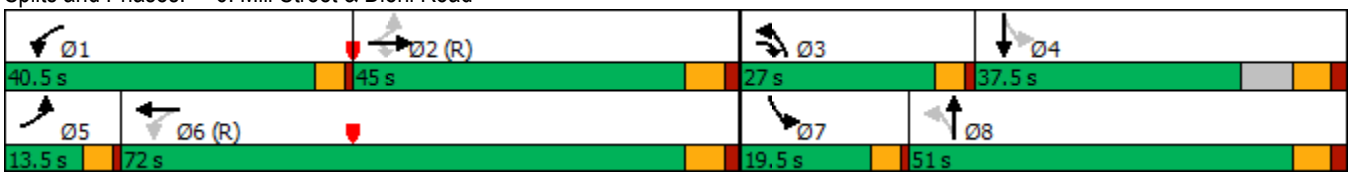


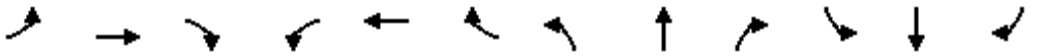
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	548	422	213	531	32	300	356	98	81	404	100
Future Volume (vph)	91	548	422	213	531	32	300	356	98	81	404	100
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	200		0	310		0	210		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	220			110			180			150		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.991			0.968			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3800	1615	1787	3544	0	1787	3460	0	1805	3467	0
Flt Permitted	0.382			0.309			0.169			0.454		
Satd. Flow (perm)	726	3800	1615	581	3544	0	318	3460	0	863	3467	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243		5			22			18	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		646			348			833			345	
Travel Time (s)		11.0			5.9			14.2			5.9	
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
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	1%	1%	1%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	609	469	237	626	0	333	505	0	90	560	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	24.5	9.5	9.5	24.5		9.5	24.5		19.5	24.5	
Total Split (s)	13.5	45.0	27.0	40.5	72.0		27.0	51.0		19.5	37.5	
Total Split (%)	8.7%	28.8%	17.3%	26.0%	46.2%		17.3%	32.7%		12.5%	24.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5		4.5	6.5		4.5	6.5	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max		None	Min		None	Min	
Act Effct Green (s)	74.2	63.3	92.3	86.2	70.9		60.7	43.8		44.1	31.7	
Actuated g/C Ratio	0.48	0.41	0.59	0.55	0.45		0.39	0.28		0.28	0.20	
v/c Ratio	0.25	0.40	0.44	0.53	0.39		0.99	0.51		0.29	0.78	
Control Delay	19.8	35.2	10.2	23.4	29.6		85.8	46.7		33.0	64.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.8	35.2	10.2	23.4	29.6		85.8	46.7		33.0	64.6	
LOS	B	D	B	C	C		F	D		C	E	
Approach Delay		24.0			27.9			62.3			60.2	
Approach LOS		C			C			E			E	
Queue Length 50th (ft)	48	230	114	122	220		258	218		59	278	
Queue Length 95th (ft)	85	321	233	189	287		#446	273		95	334	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		566			268			753			265	
Turn Bay Length (ft)	190		190	200			310			210		
Base Capacity (vph)	413	1541	1054	599	1612		335	1016		360	836	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.40	0.44	0.40	0.39		0.99	0.50		0.25	0.67	

Intersection Summary			
Area Type:	Other		
Cycle Length: 156			
Actuated Cycle Length: 156			
Offset: 112.5 (72%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 40.7		Intersection LOS: D	
Intersection Capacity Utilization 75.5%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Mill Street & Diehl Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1	88	14	2	6	60	731	3	4	1021	14
Future Volume (vph)	14	1	88	14	2	6	60	731	3	4	1021	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	0		0	140		0	200		200	215		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			65			190			180		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.852			0.887				0.850		0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1619	0	1805	1685	0	1805	3725	1615	1805	3529	0
Flt Permitted	0.752			0.560			0.229			0.354		
Satd. Flow (perm)	1429	1619	0	1064	1685	0	435	3725	1615	673	3529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		95			6				55		2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		648			166			330			674	
Travel Time (s)		14.7			3.8			5.6			11.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	96	0	15	8	0	65	786	3	4	1113	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0	15.0	3.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		9.5	24.0	24.0	9.5	24.0	
Total Split (s)	36.0	36.0		36.0	36.0		15.0	99.0	99.0	15.0	99.0	
Total Split (%)	24.0%	24.0%		24.0%	24.0%		10.0%	66.0%	66.0%	10.0%	66.0%	
Yellow Time (s)	4.5	4.5		4.5	4.5		3.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5	1.5	1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	9.8	9.8		9.8	9.8		129.1	126.2	126.2	125.4	119.5	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.86	0.84	0.84	0.84	0.80	
v/c Ratio	0.16	0.49		0.22	0.07		0.15	0.25	0.00	0.01	0.40	
Control Delay	69.0	21.0		72.9	40.7		2.4	3.0	0.0	1.8	5.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	69.0	21.0		72.9	40.7		2.4	3.0	0.0	1.8	5.4	
LOS	E	C		E	D		A	A	A	A	A	
Approach Delay		27.5			61.7			2.9			5.4	
Approach LOS		C			E			A			A	
Queue Length 50th (ft)	14	1		14	2		6	55	0	1	153	
Queue Length 95th (ft)	38	59		39	20		16	131	0	2	218	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		568			86			250			594	
Turn Bay Length (ft)				140			200		200	215		
Base Capacity (vph)	285	399		212	341		472	3133	1367	659	2811	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.24		0.07	0.02		0.14	0.25	0.00	0.01	0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 19.5 (13%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 6.2		Intersection LOS: A	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Commons Road & Mill Street

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	999	47	24	901	6	48	0	56	6	0	23
Future Vol, veh/h	4	999	47	24	901	6	48	0	56	6	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	110	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	4	1122	53	27	1012	7	54	0	63	7	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1019	0	0	1175	0	0	1717	2230	588	1639	2253	510
Stage 1	-	-	-	-	-	-	1157	1157	-	1070	1070	-
Stage 2	-	-	-	-	-	-	560	1073	-	569	1183	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	*1066	-	-	602	-	-	*124	52	457	151	49	*710
Stage 1	-	-	-	-	-	-	*212	273	-	636	565	-
Stage 2	-	-	-	-	-	-	*670	562	-	479	265	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	*1066	-	-	602	-	-	*115	49	457	126	46	*710
Mov Cap-2 Maneuver	-	-	-	-	-	-	*115	49	-	126	46	-
Stage 1	-	-	-	-	-	-	*211	272	-	634	539	-
Stage 2	-	-	-	-	-	-	*616	537	-	411	264	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	35.9	15.9
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	115	457	* 1066	-	-	602	-	-	362
HCM Lane V/C Ratio	0.469	0.138	0.004	-	-	0.045	-	-	0.09
HCM Control Delay (s)	61.3	14.1	8.4	-	-	11.3	-	-	15.9
HCM Lane LOS	F	B	A	-	-	B	-	-	C
HCM 95th %tile Q(veh)	2.1	0.5	0	-	-	0.1	-	-	0.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↕	
Traffic Vol, veh/h	21	55	1	1	54	16	0	1	1	49	0	37
Future Vol, veh/h	21	55	1	1	54	16	0	1	1	49	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	4	0	0	0	0	0	0	2
Mvmt Flow	24	64	1	1	63	19	0	1	1	57	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	65	0	0	209	197	65	189	188	73
Stage 1	-	-	-	-	-	-	113	113	-	75	75	-
Stage 2	-	-	-	-	-	-	96	84	-	114	113	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.318
Pot Cap-1 Maneuver	1536	-	-	1550	-	-	771	714	1005	795	723	1010
Stage 1	-	-	-	-	-	-	897	806	-	957	845	-
Stage 2	-	-	-	-	-	-	932	838	-	896	806	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1536	-	-	1550	-	-	729	702	1005	783	710	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	729	702	-	783	710	-
Stage 1	-	-	-	-	-	-	883	793	-	941	845	-
Stage 2	-	-	-	-	-	-	892	837	-	879	793	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.1	9.4	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	827	1536	-	-	1550	-	-	783	1010
HCM Lane V/C Ratio	0.003	0.016	-	-	0.001	-	-	0.073	0.043
HCM Control Delay (s)	9.4	7.4	0	-	7.3	0	-	10	8.7
HCM Lane LOS	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	2	9	1	1	5	3	33	1	1	76	26
Future Vol, veh/h	26	2	9	1	1	5	3	33	1	1	76	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	5	0
Mvmt Flow	33	3	11	1	1	6	4	41	1	1	95	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	167	164	112	171	180	42	128	0	0	42	0	0
Stage 1	114	114	-	50	50	-	-	-	-	-	-	-
Stage 2	53	50	-	121	130	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	802	732	947	797	717	1034	1470	-	-	1580	-	-
Stage 1	896	805	-	968	857	-	-	-	-	-	-	-
Stage 2	965	857	-	888	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	794	729	947	783	714	1034	1470	-	-	1580	-	-
Mov Cap-2 Maneuver	794	729	-	783	714	-	-	-	-	-	-	-
Stage 1	893	804	-	965	854	-	-	-	-	-	-	-
Stage 2	955	854	-	874	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	8.9	0.6	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1470	-	-	822	932	1580	-	-
HCM Lane V/C Ratio	0.003	-	-	0.056	0.009	0.001	-	-
HCM Control Delay (s)	7.5	0	-	9.6	8.9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	748	3	0	1039
Future Vol, veh/h	0	6	748	3	0	1039
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	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	0	9	1100	4	0	1528

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	552	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*777	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		1	-	-		-
Mov Cap-1 Maneuver	-	*777	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	777	-
HCM Lane V/C Ratio	-	-	0.011	-
HCM Control Delay (s)	-	-	9.7	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	48	41	8	56	63	9
Future Vol, veh/h	48	41	8	56	63	9
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	52	45	9	61	68	10

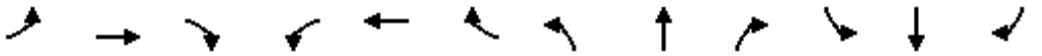
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	152	73	78	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	79	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	844	995	1533	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	949	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	839	995	1533	-	-	-
Mov Cap-2 Maneuver	839	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	949	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1533	-	904	-	-
HCM Lane V/C Ratio	0.006	-	0.107	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Capacity Analysis Summary Sheets

Year 2028 Total Projected Weekday Morning Peak Hour

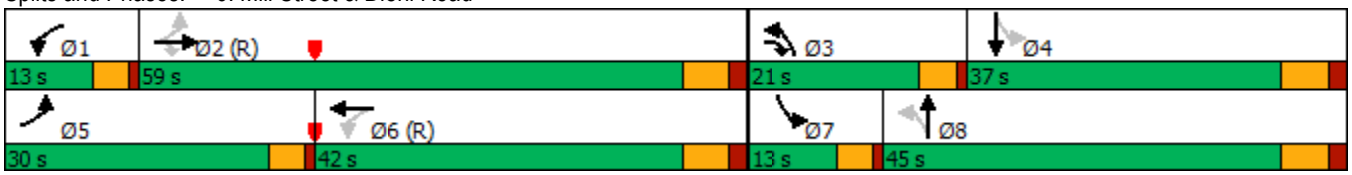


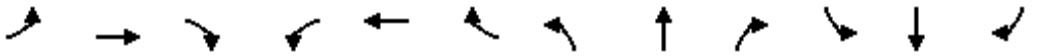
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	543	226	190	385	35	286	332	126	43	271	82
Future Volume (vph)	172	543	226	190	385	35	286	332	126	43	271	82
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	200		0	310		0	210		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	220			110			180			150		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.988			0.959			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3800	1599	1770	3502	0	1787	3428	0	1805	3354	0
Flt Permitted	0.350			0.354			0.401			0.467		
Satd. Flow (perm)	658	3800	1599	659	3502	0	754	3428	0	887	3354	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210		7			43			29	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		646			348			833			345	
Travel Time (s)		11.0			5.9			14.2			5.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	1%	0%	1%	2%	2%	0%	1%	1%	1%	0%	2%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	597	248	209	461	0	314	503	0	47	388	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	24.5	9.5	9.5	24.5		9.5	24.5		9.5	24.5	
Total Split (s)	30.0	59.0	21.0	13.0	42.0		21.0	45.0		13.0	37.0	
Total Split (%)	23.1%	45.4%	16.2%	10.0%	32.3%		16.2%	34.6%		10.0%	28.5%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5		4.5	6.5		4.5	6.5	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	None	None	C-Min		None	Max		None	Max	
Act Effct Green (s)	59.1	44.9	69.1	50.3	39.8		61.1	49.4		46.1	36.9	
Actuated g/C Ratio	0.45	0.35	0.53	0.39	0.31		0.47	0.38		0.35	0.28	
v/c Ratio	0.45	0.46	0.26	0.64	0.43		0.63	0.38		0.13	0.40	
Control Delay	23.9	33.7	3.4	33.1	36.5		28.2	27.2		22.7	37.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.9	33.7	3.4	33.1	36.5		28.2	27.2		22.7	37.6	
LOS	C	C	A	C	D		C	C		C	D	
Approach Delay		24.6			35.4			27.5			36.0	
Approach LOS		C			D			C			D	
Queue Length 50th (ft)	94	204	14	106	160		167	150		21	132	
Queue Length 95th (ft)	129	235	50	142	202		269	222		49	190	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		566			268			753			265	
Turn Bay Length (ft)	190		190	200			310			210		
Base Capacity (vph)	524	1534	955	327	1075		500	1329		383	973	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.39	0.26	0.64	0.43		0.63	0.38		0.12	0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 84.5 (65%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 29.6		Intersection LOS: C	
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Mill Street & Diehl Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	73	8	1	1	186	734	10	0	649	8
Future Volume (vph)	4	0	73	8	1	1	186	734	10	0	649	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	0		0	140		0	200		200	215		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			65			190			180		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.925				0.850		0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1805	1568	0	1399	1758	0	1752	3762	1615	1900	3527	0
Flt Permitted	0.757			0.704			0.343					
Satd. Flow (perm)	1438	1568	0	1037	1758	0	633	3762	1615	1900	3527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		317			1				63		2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		648			166			330			674	
Travel Time (s)		14.7			3.8			5.6			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	3%	29%	0%	0%	3%	1%	0%	0%	2%	14%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	82	0	9	2	0	209	825	11	0	738	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0	15.0	3.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		9.5	24.0	24.0	9.5	24.0	
Total Split (s)	34.0	34.0		34.0	34.0		15.0	81.0	81.0	15.0	81.0	
Total Split (%)	26.2%	26.2%		26.2%	26.2%		11.5%	62.3%	62.3%	11.5%	62.3%	
Yellow Time (s)	4.5	4.5		4.5	4.5		3.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5	1.5	1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	9.0	9.0		9.0	9.0		110.5	109.0	109.0		96.3	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.85	0.84	0.84		0.74	
v/c Ratio	0.04	0.20		0.13	0.02		0.34	0.26	0.01		0.28	
Control Delay	56.5	1.1		60.1	47.0		3.3	2.4	0.0		5.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	56.5	1.1		60.1	47.0		3.3	2.4	0.0		5.7	
LOS	E	A		E	D		A	A	A		A	
Approach Delay		3.7			57.7			2.6			5.7	
Approach LOS		A			E			A			A	
Queue Length 50th (ft)	3	0		7	1		21	56	0		97	
Queue Length 95th (ft)	15	0		25	9		38	80	0		134	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		568			86			250			594	
Turn Bay Length (ft)				140			200		200			
Base Capacity (vph)	309	586		223	379		628	3154	1364		2614	
Starvation Cap Reductn	0	0		0	0		0	0	0		0	
Spillback Cap Reductn	0	0		0	0		0	0	0		0	
Storage Cap Reductn	0	0		0	0		0	0	0		0	
Reduced v/c Ratio	0.01	0.14		0.04	0.01		0.33	0.26	0.01		0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 21 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 4.2		Intersection LOS: A	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Commons Road & Mill Street

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	780	76	60	689	4	118	0	160	0	0	3
Future Vol, veh/h	16	780	76	60	689	4	118	0	160	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	110	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	7	1	0	4	2	0	1	0	0	0	0	0
Mvmt Flow	16	796	78	61	703	4	120	0	163	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	0	874	0	0	1341	1696	437	1257	1733	354
Stage 1	-	-	-	-	-	-	867	867	-	827	827	-
Stage 2	-	-	-	-	-	-	474	829	-	430	906	-
Critical Hdwy	4.24	-	-	4.18	-	-	7.52	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.27	-	-	2.24	-	-	3.51	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	*1199	-	-	755	-	-	*208	127	573	252	119	*823
Stage 1	-	-	-	-	-	-	*316	373	-	658	601	-
Stage 2	-	-	-	-	-	-	*774	600	-	579	358	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	*1199	-	-	755	-	-	*192	115	573	167	108	*823
Mov Cap-2 Maneuver	-	-	-	-	-	-	*192	115	-	167	108	-
Stage 1	-	-	-	-	-	-	*312	368	-	649	552	-
Stage 2	-	-	-	-	-	-	*709	551	-	409	353	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.8	29.5	9.4
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	192	573	* 1199	-	-	755	-	-	823
HCM Lane V/C Ratio	0.627	0.285	0.014	-	-	0.081	-	-	0.004
HCM Control Delay (s)	50.9	13.8	8	-	-	10.2	-	-	9.4
HCM Lane LOS	F	B	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	3.6	1.2	0	-	-	0.3	-	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	59	33	1	0	28	158	0	1	0	20	0	25
Future Vol, veh/h	59	33	1	0	28	158	0	1	0	20	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	3	100	0	8	0	0	0	0	0	0	0
Mvmt Flow	67	38	1	0	32	180	0	1	0	23	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	212	0	0	39	0	0	309	385	39	295	295	122
Stage 1	-	-	-	-	-	-	173	173	-	122	122	-
Stage 2	-	-	-	-	-	-	136	212	-	173	173	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1371	-	-	1584	-	-	651	553	1038	665	622	939
Stage 1	-	-	-	-	-	-	834	760	-	891	801	-
Stage 2	-	-	-	-	-	-	875	732	-	834	760	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1371	-	-	1584	-	-	607	526	1038	638	591	939
Mov Cap-2 Maneuver	-	-	-	-	-	-	607	526	-	638	591	-
Stage 1	-	-	-	-	-	-	792	722	-	847	801	-
Stage 2	-	-	-	-	-	-	849	732	-	791	722	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.9	0	11.9	9.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	526	1371	-	-	1584	-	-	638	939
HCM Lane V/C Ratio	0.002	0.049	-	-	-	-	-	0.036	0.03
HCM Control Delay (s)	11.9	7.8	0	-	0	-	-	10.9	9
HCM Lane LOS	B	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	51	0	3	2	0	8	5	211	2	3	40	23
Future Vol, veh/h	51	0	3	2	0	8	5	211	2	3	40	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	25	50	0	13	0	0	0	33	4	0
Mvmt Flow	60	0	4	2	0	9	6	248	2	4	47	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	335	331	61	332	343	249	74	0	0	250	0	0
Stage 1	69	69	-	261	261	-	-	-	-	-	-	-
Stage 2	266	262	-	71	82	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.45	7.6	6.5	6.33	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.525	3.95	4	3.417	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	622	592	943	540	583	764	1538	-	-	1154	-	-
Stage 1	946	841	-	650	696	-	-	-	-	-	-	-
Stage 2	744	695	-	832	831	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	610	587	943	534	578	764	1538	-	-	1154	-	-
Mov Cap-2 Maneuver	610	587	-	534	578	-	-	-	-	-	-	-
Stage 1	941	838	-	647	693	-	-	-	-	-	-	-
Stage 2	731	692	-	826	828	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	10.2	0.2	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	622	703	1154	-	-
HCM Lane V/C Ratio	0.004	-	-	0.102	0.017	0.003	-	-
HCM Control Delay (s)	7.3	0	-	11.4	10.2	8.1	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	95	0	0	5	0	739	1	0	562	125
Future Vol, veh/h	0	0	95	0	0	5	0	739	1	0	562	125
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	-	-	0	-	-	-	-	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	3	0
Mvmt Flow	0	0	103	0	0	5	0	803	1	0	611	136

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	306	-	-	402	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.9	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.3	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*871	0	0	*800	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			1			1		-	-		-	-
Mov Cap-1 Maneuver	-	-	*871	-	-	*800	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.5	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	871	800	-	-
HCM Lane V/C Ratio	-	-	0.119	0.007	-	-
HCM Control Delay (s)	-	-	9.7	9.5	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↰		↱		↕			↕	
Traffic Vol, veh/h	6	0	7	14	0	163	55	110	106	42	44	49
Future Vol, veh/h	6	0	7	14	0	163	55	110	106	42	44	49
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	-	-	-	100	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	8	0	9	19	0	220	74	149	143	57	59	66

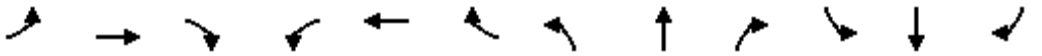
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	685	646	92	580	-	221	125	0	0	292	0	0
Stage 1	206	206	-	369	-	-	-	-	-	-	-	-
Stage 2	479	440	-	211	-	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	-	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	365	393	971	429	0	824	1474	-	-	1281	-	-
Stage 1	801	735	-	655	0	-	-	-	-	-	-	-
Stage 2	571	581	-	796	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	246	351	971	390	-	824	1474	-	-	1281	-	-
Mov Cap-2 Maneuver	246	351	-	390	-	-	-	-	-	-	-	-
Stage 1	752	700	-	615	-	-	-	-	-	-	-	-
Stage 2	393	546	-	750	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	11.3	1.5	2.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1474	-	-	411	390	824	1281	-	-
HCM Lane V/C Ratio	0.05	-	-	0.043	0.049	0.267	0.044	-	-
HCM Control Delay (s)	7.6	0	-	14.2	14.7	11	7.9	0	-
HCM Lane LOS	A	A	-	B	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.2	1.1	0.1	-	-

Capacity Analysis Summary Sheets

Year 2028 Total Projected Weekday Evening Peak Hour

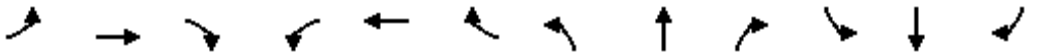


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	586	422	248	531	32	300	356	98	81	422	100
Future Volume (vph)	110	586	422	248	531	32	300	356	98	81	422	100
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	200		0	310		0	210		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	220			110			180			150		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.991			0.968			0.971	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3800	1615	1787	3544	0	1787	3467	0	1805	3471	0
Flt Permitted	0.398			0.276			0.145			0.466		
Satd. Flow (perm)	756	3800	1615	519	3544	0	273	3467	0	885	3471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210		5			24			17	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		646			348			833			345	
Travel Time (s)		11.0			5.9			14.2			5.9	
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
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	651	469	276	626	0	333	505	0	90	580	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	24.5	9.5	9.5	24.5		9.5	24.5		13.5	24.5	
Total Split (s)	13.5	45.0	27.0	40.5	72.0		27.0	51.0		13.5	37.5	
Total Split (%)	9.0%	30.0%	18.0%	27.0%	48.0%		18.0%	34.0%		9.0%	25.0%	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5		4.5	6.5		4.5	6.5	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max		None	Min		None	Min	
Act Effct Green (s)	68.3	57.6	86.6	82.5	67.3		58.5	43.4		40.1	29.5	
Actuated g/C Ratio	0.46	0.38	0.58	0.55	0.45		0.39	0.29		0.27	0.20	
v/c Ratio	0.30	0.45	0.46	0.63	0.39		1.00	0.50		0.31	0.83	
Control Delay	19.9	36.7	11.8	25.1	28.7		96.4	42.2		33.2	67.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.9	36.7	11.8	25.1	28.7		96.4	42.2		33.2	67.6	
LOS	B	D	B	C	C		F	D		C	E	
Approach Delay		25.7			27.6			63.8			63.0	
Approach LOS		C			C			E			E	
Queue Length 50th (ft)	57	251	136	143	216		281	185		55	278	
Queue Length 95th (ft)	93	337	253	204	268		#476	230		95	351	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		566			268			753			265	
Turn Bay Length (ft)	190		190	200			310			210		
Base Capacity (vph)	409	1459	1021	589	1593		333	1045		294	730	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.30	0.45	0.46	0.47	0.39		1.00	0.48		0.31	0.79	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 84.5 (56%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 41.7		Intersection LOS: D	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Mill Street & Diehl Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1	88	14	2	6	99	731	3	4	1065	14
Future Volume (vph)	14	1	88	14	2	6	99	731	3	4	1065	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	0		0	140		0	200		200	215		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			65			190			180		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.852			0.887				0.850		0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1619	0	1805	1685	0	1805	3762	1615	1805	3599	0
Flt Permitted	0.752			0.560			0.213			0.354		
Satd. Flow (perm)	1429	1619	0	1064	1685	0	405	3762	1615	673	3599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		95			6				55		2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		648			166			330			674	
Travel Time (s)		14.7			3.8			5.6			11.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	96	0	15	8	0	106	786	3	4	1160	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0	15.0	3.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		9.5	24.0	24.0	9.5	24.0	
Total Split (s)	36.0	36.0		36.0	36.0		15.0	99.0	99.0	15.0	99.0	
Total Split (%)	24.0%	24.0%		24.0%	24.0%		10.0%	66.0%	66.0%	10.0%	66.0%	
Yellow Time (s)	4.5	4.5		4.5	4.5		3.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5	1.5	1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.5	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	9.8	9.8		9.8	9.8		129.3	126.2	126.2	124.0	116.9	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.86	0.84	0.84	0.83	0.78	
v/c Ratio	0.16	0.49		0.22	0.07		0.26	0.25	0.00	0.01	0.41	
Control Delay	69.0	21.0		72.9	40.7		3.1	3.0	0.0	1.8	5.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	69.0	21.0		72.9	40.7		3.1	3.0	0.0	1.8	5.0	
LOS	E	C		E	D		A	A	A	A	A	
Approach Delay		27.5			61.7			3.0			5.0	
Approach LOS		C			E			A			A	
Queue Length 50th (ft)	14	1		14	2		11	54	0	0	106	
Queue Length 95th (ft)	38	59		39	20		23	130	0	m1	187	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		568			86			250			594	
Turn Bay Length (ft)				140			200		200	215		
Base Capacity (vph)	285	399		212	341		448	3164	1367	657	2805	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.24		0.07	0.02		0.24	0.25	0.00	0.01	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 19.5 (13%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 5.9		Intersection LOS: A	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Commons Road & Mill Street

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	999	71	24	901	6	70	0	113	6	0	23
Future Vol, veh/h	4	999	71	24	901	6	70	0	113	6	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	110	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	4	1122	80	27	1012	7	79	0	127	7	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1019	0	0	1202	0	0	1730	2243	601	1639	2280	510
Stage 1	-	-	-	-	-	-	1170	1170	-	1070	1070	-
Stage 2	-	-	-	-	-	-	560	1073	-	569	1210	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	*1074	-	-	588	-	-	*118	49	448	148	46	*715
Stage 1	-	-	-	-	-	-	*208	269	-	623	556	-
Stage 2	-	-	-	-	-	-	*675	554	-	479	258	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	*1074	-	-	588	-	-	*109	47	448	102	44	*715
Mov Cap-2 Maneuver	-	-	-	-	-	-	*109	47	-	102	44	-
Stage 1	-	-	-	-	-	-	*207	268	-	620	531	-
Stage 2	-	-	-	-	-	-	*620	529	-	342	257	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	46.9	17.6
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	109	448	* 1074	-	-	588	-	-	319
HCM Lane V/C Ratio	0.722	0.283	0.004	-	-	0.046	-	-	0.102
HCM Control Delay (s)	96.4	16.2	8.4	-	-	11.4	-	-	17.6
HCM Lane LOS	F	C	A	-	-	B	-	-	C
HCM 95th %tile Q(veh)	3.9	1.2	0	-	-	0.1	-	-	0.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	28	55	1	1	54	55	0	1	1	49	0	44
Future Vol, veh/h	28	55	1	1	54	55	0	1	1	49	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	33	64	1	1	63	64	0	1	1	57	0	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	127	0	0	65	0	0	254	260	65	229	228	95
Stage 1	-	-	-	-	-	-	131	131	-	97	97	-
Stage 2	-	-	-	-	-	-	123	129	-	132	131	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1477	-	-	1550	-	-	720	658	1005	748	686	987
Stage 1	-	-	-	-	-	-	877	792	-	931	827	-
Stage 2	-	-	-	-	-	-	902	801	-	876	792	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1477	-	-	1550	-	-	670	642	1005	732	669	987
Mov Cap-2 Maneuver	-	-	-	-	-	-	670	642	-	732	669	-
Stage 1	-	-	-	-	-	-	857	774	-	910	826	-
Stage 2	-	-	-	-	-	-	854	800	-	854	774	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	0.1	9.6	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	783	1477	-	-	1550	-	-	732	987
HCM Lane V/C Ratio	0.003	0.022	-	-	0.001	-	-	0.078	0.052
HCM Control Delay (s)	9.6	7.5	0	-	7.3	0	-	10.3	8.8
HCM Lane LOS	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.3	0.2

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	2	9	2	1	9	3	72	8	4	82	26
Future Vol, veh/h	26	2	9	2	1	9	3	72	8	4	82	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	4	0
Mvmt Flow	33	3	11	3	1	11	4	90	10	5	103	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	239	238	120	240	249	95	136	0	0	100	0	0
Stage 1	130	130	-	103	103	-	-	-	-	-	-	-
Stage 2	109	108	-	137	146	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	719	666	937	718	657	967	1461	-	-	1505	-	-
Stage 1	878	792	-	908	814	-	-	-	-	-	-	-
Stage 2	901	810	-	871	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	706	661	937	704	652	967	1461	-	-	1505	-	-
Mov Cap-2 Maneuver	706	661	-	704	652	-	-	-	-	-	-	-
Stage 1	875	789	-	905	812	-	-	-	-	-	-	-
Stage 2	886	808	-	854	777	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9.2	0.3	0.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1461	-	-	748	877	1505	-	-
HCM Lane V/C Ratio	0.003	-	-	0.062	0.017	0.003	-	-
HCM Control Delay (s)	7.5	0	-	10.1	9.2	7.4	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	44	0	0	6	0	748	3	0	1039	53
Future Vol, veh/h	0	0	44	0	0	6	0	748	3	0	1039	53
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	-	-	0	-	-	-	-	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	0	0	65	0	0	9	0	1100	4	0	1528	78

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	764	-	-	552	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.9	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.3	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*654	0	0	*777	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			1			1		-	-		-	-
Mov Cap-1 Maneuver	-	-	*654	-	-	*777	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	9.7	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	654	777	-	-
HCM Lane V/C Ratio	-	-	0.099	0.011	-	-
HCM Control Delay (s)	-	-	11.1	9.7	-	-
HCM Lane LOS	-	-	B	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↰		↱		↕			↕	
Traffic Vol, veh/h	48	0	41	6	0	75	8	60	39	21	66	9
Future Vol, veh/h	48	0	41	6	0	75	8	60	39	21	66	9
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	-	-	-	100	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	52	0	45	7	0	82	9	65	42	23	72	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	268	248	77	250	-	86	82	0	0	107	0	0
Stage 1	123	123	-	104	-	-	-	-	-	-	-	-
Stage 2	145	125	-	146	-	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	-	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	689	658	990	708	0	978	1528	-	-	1497	-	-
Stage 1	886	798	-	907	0	-	-	-	-	-	-	-
Stage 2	863	796	-	861	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	621	644	990	665	-	978	1528	-	-	1497	-	-
Mov Cap-2 Maneuver	621	644	-	665	-	-	-	-	-	-	-	-
Stage 1	881	785	-	902	-	-	-	-	-	-	-	-
Stage 2	786	791	-	809	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	9.1	0.6	1.6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1528	-	-	750	665	978	1497	-	-
HCM Lane V/C Ratio	0.006	-	-	0.129	0.01	0.083	0.015	-	-
HCM Control Delay (s)	7.4	0	-	10.5	10.5	9	7.4	0	-
HCM Lane LOS	A	A	-	B	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.3	0	-	-