RESOLUTION NO. 2022-53 (5/16/2022)

A RESOLUTION OF THE VILLAGE BOARD OF THE VILLAGE OF CALEDONIA APPROVING A TRAFFIC IMPACT ANALYSIS FOR THE RACINE COUNTY YOUTH DEVELOPMENT AND CARE CENTER PROPOSED ON PARCELS LOCATED DIRECTLY EAST OF 2525 3 MILE ROAD

WHEREAS, the Village Board approved Ordinance 2022-03 adopting an amendment to the Multi-Jurisdictional Comprehensive Plan for Racine County: 2035 for a Land Use Plan Amendment for the parcels from Commercial to Governmental & Institutional at their February 21, 2022 meeting.

WHEREAS, the Village Board approved Ordinance 2022-04 approving a request for Rezoning the parcels from M-3 Heavy Industrial District to P-1 Park Institutional District at their February 21, 2022 meeting.

WHEREAS, the Village Board approved Resolution 2022-11 approving a Payment in Lieu of Taxes Agreement between the Village of Caledonia and Racine County for the development of the parcels at their February 21, 2022 meeting.

WHEREAS, the Village Board approved Resolution 2022-12 approving a request for a Conditional Use Permit to allow the Operation of a Youth Development and Care Facility for the parcels subject to conditions at their February 21, 2022 meeting.

WHEREAS, a condition of approval of the Conditional Use Permit (Condition 4. A.) for the parcels is that a Traffic Impact Analysis shall be performed and submitted to the Village for review prior to the submission of applications to the Plan Commission for review of Site, Building, Landscape and similar plans.

WHEREAS, Racine County contracted with Traffic Analysis and Design, Inc. (TADI) to perform the Traffic Impact Analysis which was submitted to the Village of Caledonia on April 21, 2022.

WHEREAS, the Traffic Impact Analysis was reviewed by the Engineering Department and a memo dated May 3, 2022 (Exhibit A) was prepared for the Public Works Committee and Village Board recommending conditional approval of the Traffic Impact Analysis for the Racine County Youth Development and Care Center.

WHEREAS, the Public Works Committee moved to recommend approval of the Traffic Impact Analysis for the Racine County Youth Development and Care Center to the Village Board at their May 9, 2022 meeting.

NOW, THEREFORE, BE IT RESOLVED by the Village Board of the Village of Caledonia that the Traffic Impact Analysis for the Racine County Youth Development and Care Center is hereby approved subject to the condition in Exhibit A as recommended by the Public Works Committee and set forth within.

Adopted by the Village Board of the Village of Caledonia, Racine County, Wisconsin, this day of May 2022.

VILLAGE OF CALEDONIA

By:_

James R. Dobbs, Village President

Attest:

Joslyn M. Hoeffert, Village Clerk

MEMORANDUM

DATE:

May 3rd, 2022

TO:

Public Works Committee

Village Board

FROM:

Anthony A. Bunkelman
Public Services Director

Whong Bunkelman

RE:

Racine County Youth Development and Care Center - TIA

BACKGROUND INFORMATION

As part of the proposed Racine County Youth Development and Care Center on 3 Mile Road, the Village of Caledonia required a Traffic Impact Analysis (TIA) per Resolution 2011-06 and Village Ordinance for High/Moderate Impact Development as defined in Title 16.

Traffic Analysis and Design, Inc. (TADI) performed and submitted the TIA to Village Staff in April for approval. The study area included 3 Mile Road from STH 32/Douglas Ave. to the intersection at Wyoming Way. The TIA documents the peak hour traffic impacts expected at the aforementioned intersections along 3 Mile Road with the volume expected to be added by the proposed development. The TIA also analyzed and evaluated the sight distance for vehicles at the proposed access to the development due to the nature of the topography along 3 Mile Road.

With a range of 55-65 staff being employed over 3 different daily shifts, the study showed that all traffic movements operated at a Level of Service B or better during peak traffic hours with the proposed buildout. The TIA also recommended that no changes to the existing geometrics occur on 3 Mile Road. The proposed access is recommended to be located 75-145 feet east of the existing gravel driveway to meet the proper intersection and stopping sight distance requirements.

RECOMMENDATION

Move to approve the Traffic Impact Analysis performed by TADI for the Racine County Youth Development and Care Center on the condition that the final driveway location is surveyed, cross-checked, and verified for all applicable sight distance requirements by the developer.



TRAFFIC IMPACT ANALYSIS

DATE: April 13, 2022

TO: Julie Anderson

Racine County

FROM: Tammi Czewski, P.E., PTOE

Traffic Analysis & Design, Inc.

SUBJECT: Racine County Youth Development & Care Center Traffic Impact Analysis

Caledonia, WI

INTRODUCTION

A 70,000-square foot Racine County Youth Development and Care Center that can house up to 48 youths is being proposed on about 29 acres south of 3 Mile Road in Caledonia, Racine County, Wisconsin. A range of 55-65 staff will be employed over three different daily shifts.

The development site is located on the north side of the John H. Batten Airport property, and so a portion of the 29 acres on site are within the airport clear zone/no development area. Development is expected to begin in 2022 with completion in 2024. The location of the site with respect to the surrounding roadway system is shown on Exhibit 1. The conceptual site plan is shown on Exhibit 2.

This traffic impact analysis (TIA) technical memorandum was prepared to document the peak hour traffic impacts expected at adjacent intersections along 3 Mile Road with the existing traffic volumes and with additional traffic from the proposed development. The TIA also evaluates the sight distance for vehicles at the proposed site driveway to 3 Mile Road.

STUDY AREA

Study Intersections

The study area for this traffic study includes the following intersections:

- 3 Mile Road & Wyoming Way
- 3 Mile Road & Douglas Avenue (STH 32)
- 3 Mile Road & the proposed site driveway

The 3 Mile Road intersection with Douglas Avenue operates with traffic signal control and the 3 Mile Road intersection with Wyoming Way operates with stop sign control on Wyoming Way. A transportation detail illustrating existing intersection lane configurations, speed limits, and approximate intersection spacing is shown in Exhibit 3.

Study Area Roadways

Douglas Avenue (STH 32) is a north/south Principal Arterial with a four-lane undivided cross-section and a 35-mph speed limit. Douglas Avenue has sidewalks along both sides of the roadway, south of 3 Mile Road, but no sidewalks north of 3 Mile Road. The 2021 WisDOT annual average daily traffic (AADT) on Douglas Avenue was 14,200 vehicles per day (vpd) north of 3 Mile Road and 15,800 vpd south of 3 Mile Road.

3 Mile Road is an east/west Minor Arterial with a two-lane undivided rural cross-section, no sidewalks, and 35-mph speed limit. 3 Mile Road widens to a four-lane cross-section about 400 feet west of Douglas Avenue. The 2021 WisDOT AADT on 3 Mile Road was 5,600 vpd east of Wyoming Way.

Wyoming Way is a north/south local road with a two-lane undivided cross-section, no sidewalks, and 25-mph speed limit. Wyoming Way is part of the roadway network for the residential neighborhood on the south side of 3 Mile Road.

DATA COLLECTION/EXISTING TRAFFIC VOLUMES

TADI collected weekday turning movement traffic counts at the study intersections on March 31 and April 1, 2022. The traffic counts were collected from 6:00-9:00 a.m. and from 3:00-6:00 p.m. Based on the traffic count data, the peak traffic hours occur from 8:00-9:00 a.m. (AM peak hour) and from 4:00-5:00 p.m. (PM peak hour). The traffic volumes were compiled for these peak hours and are shown on Exhibit 4. All traffic count data collected for the study intersections and roadways are in Appendix A.

FUTURE TRAFFIC VOLUMES

The expected traffic volumes generated by the proposed youth development and care center were calculated based on trip rates or fitted curve equations published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition. The trip generation was based on the ITE land use #571 – Adult Detention Facility as it is the ITE land use that is most closely related to the use type (juvenile detention facility) of the proposed site. The trip generation for the site was based on number of employees as the size of this independent variable (65 total employees) was within the range of data for land use #571.

The trip generation table for the proposed youth development and care center is on Exhibit 5. As shown, the proposed development is expected to generate about 200 trips on a typical weekday, with 20 trips (10 in/10 out) during the weekday AM peak hour and 15 trips (5 in/10 out) during the weekday PM peak hour. The new site trips were distributed to the study intersections based on existing peak hour traffic patterns at the study intersections. The site trip distribution is listed below:

- 10% to/from the west on 3 Mile Road
- 20% to/from the east on 3 Mile Road
- 35% to/from the north on Douglas Avenue
- 35% to/from the south on Douglas Avenue

The new trips were assigned to the study intersections based on these trip distribution percentages. The site traffic assignment is shown on Exhibit 6. The on-site development new trips were added to the Existing traffic volumes to generate the Build traffic volumes, as shown on Exhibit 7.

PEAK HOUR TRAFFIC OPERATIONS & QUEUES

The study intersections were analyzed using the Synchro 11 traffic analysis model (outputs based on the Highway Capacity Manual, 6th Edition) and the peak hour turning movement volumes developed for each intersection. Intersection operation is defined by "level of service". Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purposes of this study, LOS D or better was used to define acceptable peak hour operating conditions. The descriptions of each LOS are in Table 1.

Table 1. LOS Descriptions - Unsignalized Intersections

LOS	Signalized Intersections Control Delay/Vehicle (sec/veh)	Unsignalized Intersections Avg. Control Delay (sec/veh)	Relative Delay
	≤10	≤10	
A	Free-flow traffic operations at avearge trunimpeded in ability to maneuver. Minim		
	> 10 - 20	> 10 - 15	71
В	Reasonably unimpeded traffic operations maneuverability slightly restricted. Low		Short Delays
	> 20 - 35	> 15 - 25	
С	Stable traffic operations. Lane changes b reduced to half of average free flow trav	ecoming more restricted. Travel speeds el speeds. Longer intersection delays.	
	> 35 - 55	> 25 - 35	
D	Small increases in traffic flow can cause attributable to increased traffic, reduced		Moderate
	> 55 - 80	> 35 - 50	Delays
Е	Significant delays. Travel speeds reduce travel speed.	d to one-third of average free flow	-
	> 80	> 50	Ţ
F	Extremely low speeds. Intersection congequeues at intersections.	estion. Long delays. Extensive traffic	Long Delays

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010

For both the Existing and Build traffic volume scenarios, the study intersections were modeled with the existing geometrics and traffic control, signal timings, peak hour factors, and heavy vehicle percentages. The proposed site driveway to 3 Mile Road was evaluated with no changes to 3 Mile Road and a single, shared left-turn/right-turn lane with stop sign control on the site driveway approach. The base saturation flow rates for the signalized intersection were calculated using WisDOT researched methodologies (saturation flow calculation worksheet is in Appendix A).

The capacity analysis tables showing the peak hour LOS, delays (in seconds per vehicle), and queues (in feet) are shown on Exhibit 8 for the Existing and Build traffic analysis. The Synchro

TADI

capacity analysis worksheets for the existing traffic volumes are in Appendix B. The Synchro capacity analysis worksheets for the build traffic volumes are in Appendix C.

As shown on Exhibit 8, all study intersections are expected to operate acceptably at LOS B or better for each turning movement during weekday AM and PM peak hours. Very little difference in peak hour delays and queues are expected with the buildout of the proposed development.

DRIVEWAY SIGHT DISTANCE EVALUATION

Based on the site plan, the primary entrance for the proposed youth development and care center is located at the existing property driveway, which is approximately 1,080 feet east of Wyoming Way. The driveway is at the top of a rise on 3 Mile Road. Therefore, a sight distance evaluation was completed for both passenger cars and single-unit trucks (delivery vehicles) to determine the adequacy of vehicle visibility at this location.

Driveways should be designed for intersection sight distance (ISD) and stopping sight distance (SSD) in accordance with the latest edition of the American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets. Based on AASHTO requirements for two-lane undivided roadways with no turn lanes and a 35-mph speed limit (40-mph design speed), the required SSD on 3 Mile Road for all vehicles is 305 feet. The ISD to the left of the site driveway (for right-turn movements) is 385 feet for passenger cars and 500 feet for single-unit trucks. The ISD to the right of the site driveway (for left-turn movements) is 445 feet for passenger cars and 560 feet for single-unit trucks. Worksheets and tables for ISD and SSD are in Appendix D.

The ISD and SSD for the site driveway were measured using elevation profiles and aerial view images from Google Earth. Per AASHTO, the evaluations used a passenger car eye height of 3.5 feet, a single-unit truck eye height of 7.6 feet, an ISD target of 3.5 feet, and an SSD target of two feet. The SSD evaluation was completed only for passenger cars as this is the controlling/worst-case condition for that analysis.

The ISD and SSD for the site driveway at the existing property driveway location is shown on Exhibit 9. The placement of the proposed site driveway at this location results in inadequate visibility for both design vehicles that are turning from the site driveway onto 3 Mile Road as well as for passenger cars that are approaching the site driveway from 3 Mile Road. Positioning the site driveway about 75-145 feet east of the existing location would improve visibility to acceptable levels for both design vehicles. The ISD and SSD evaluation for the proposed driveway location is shown on Exhibit 10.

RECOMMENDATIONS/CONCLUSIONS

Based on the traffic analysis, the study intersections are expected to operate acceptably with all traffic movemets at LOS B or better during the weekday AM and PM peak traffic hours with full buildout of the proposed Racine County Youth Development and Care Center on 3 Mile Road. A single shared left-turn/right-turn approach lane with stop sign control is recommended for the primary site driveway intersection with 3 Mile Road. No changes to the existing geometrics (no left or right-turn lanes) are recommended on 3 Mile Road.

With placement of the exiting lanes for the primary site driveway approximately 75-145 feet east of the existing gravel drive on the property, both intersection and stopping sight distance requirements are met for passenger cars and single-unit trucks. Note that the sight distance

TADI 4

measurements and photographs discussed in this report are based on the proposed placement of the site driveways and on-line aerial and street view photography. Surveyed profiles of 3 Mile Road may result in suitable driveway placement that varies from what was presented in this report and at other locations further east and west of the primary entrance shown on the development site plan. The party responsible for designing the intersection is responsible for cross-checking, verifying and designing for all applicable sight distances.

The recommendations for the study area are shown on Exhibit 11.

TADI 5

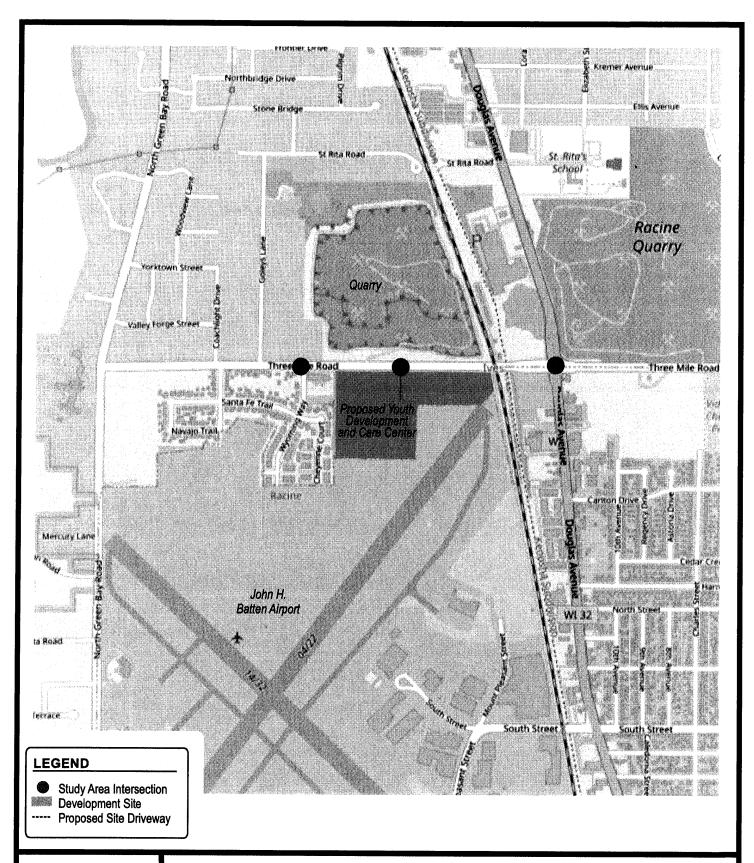






EXHIBIT 1
PROJECT LOCATION MAP

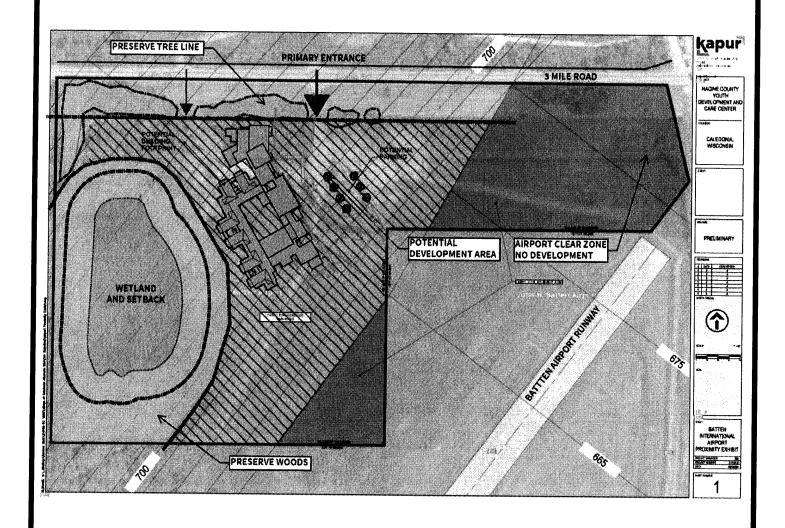
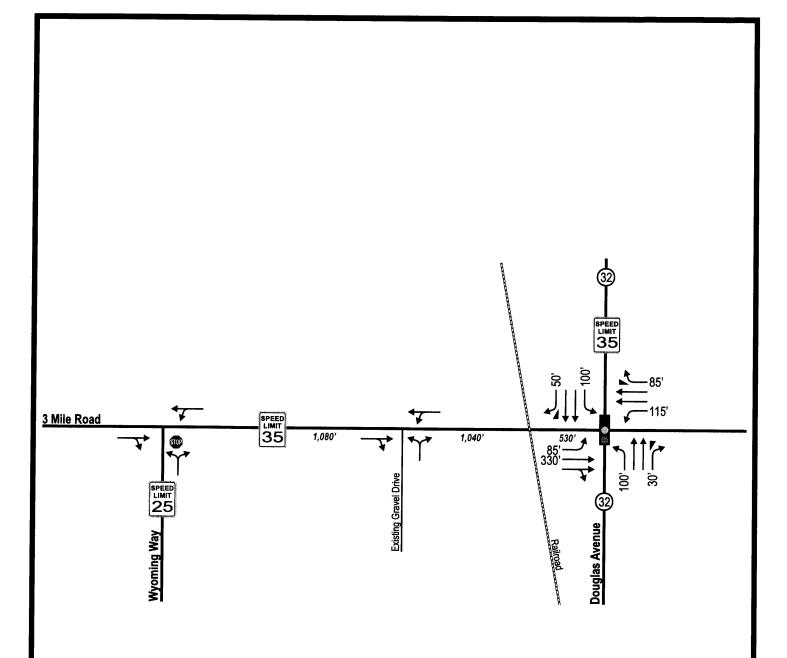






EXHIBIT 2
CONCEPTUAL SITE PLAN



LEGEND



Traffic Signal

Stop Sign

Lane Configuration

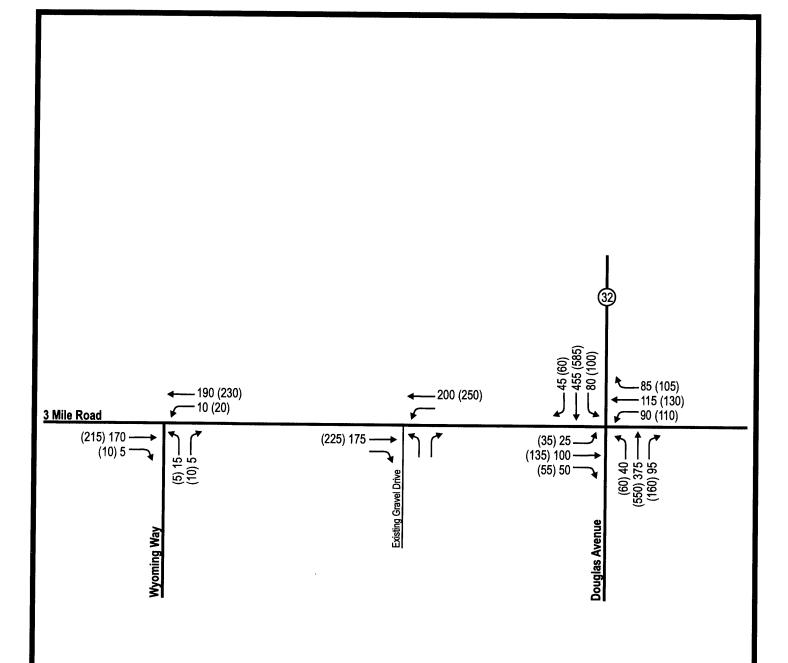
XX' Turn Bay Length (In Feet)

XX' Centerline Distance Between Intersections (in Feet)





EXHIBIT 3 EXISTING TRANSPORTATION SYSTEM



LEGEND

XX Weekday Morning Peak Hour Traffic (8:00-9:00 AM)

(XX) Weekday Evening Peak Hour Traffic (4:00-5:00 PM)

Fewer than 3 vehicles per hour





EXHIBIT 4 EXISTING TRAFFIC VOLUMES

Trip Generation Table ¹

Land Use	ITE Code	Proposed Size	Weekday Daily		AM Peal Out	Total	in	PM Peal Out	Total
Youth Development & Care Center ITE Adult Detention Facility	571	65 Employees	200 (3.04)	10 (59%)	10 (41%)	20 (0.34)	5 (18%)	10 (82%)	15 (0.25)
Total New Trips			200	10	10	20	5	10	15

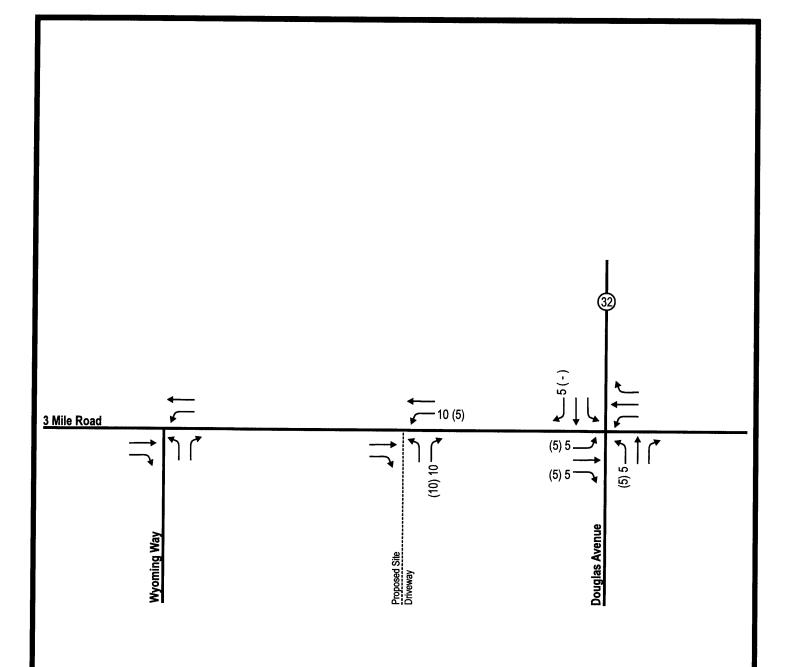
¹ ITE Trip Rates (X.XX) and/or Fitted Curve Equations (FCE) are from the ITE Trip Generation Manual, 10th Edition.

TRIP DISTRIBUTION (New Trips)

	100%	200	10	10	5	10	
S. on Douglas Avenue	35%	70	5	5	5	5	
N. on Douglas Avenue	35%	70	5	5	0	5	
E. on 3 Mile Road	20%	40	0	0	0	0	
W. on 3 Mile Road	10%	20	0	0	0	0	



EXHIBIT 5
ON-SITE DEVELOPMENT TRIP GENERATION TABLE



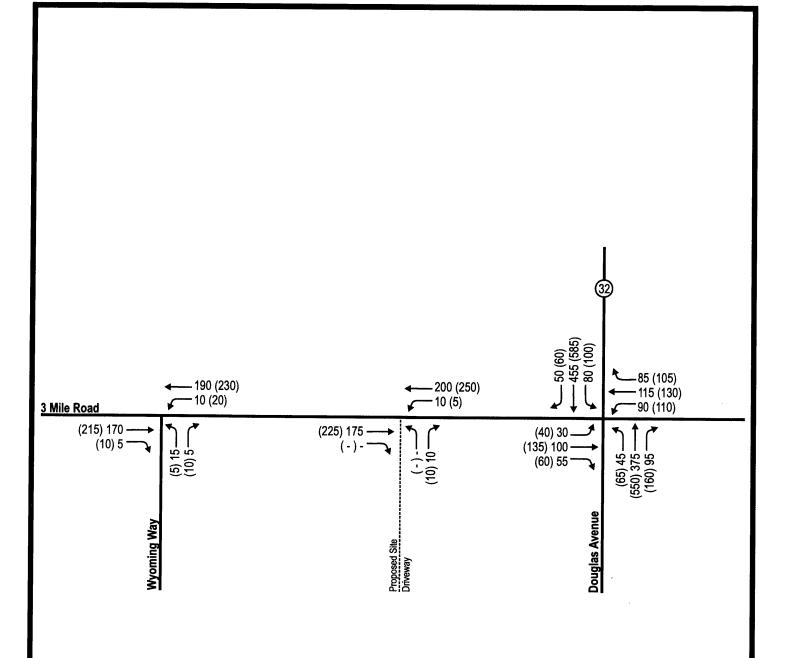
LEGEND

- XX Weekday Morning Peak Hour Traffic (8:00-9:00 AM)
- (XX) Weekday Evening Peak Hour Traffic (4:00-5:00 PM)
 - Fewer than 3 vehicles per hour





EXHIBIT 6
ON-SITE DEVELOPMENT NEW TRIPS



LEGEND

XX Weekday Morning Peak Hour Traffic (8:00-9:00 AM)

(XX) Weekday Evening Peak Hour Traffic (4:00-5:00 PM)

Fewer than 3 vehicles per hour





EXHIBIT 7
BUILD TRAFFIC VOLUMES

Existing Peak Hour Traffic Operations

Existing Geometrics & Traffic Control

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Intersection	Hour	Metric	1	+	7	I	-	t	-	T	F	ъ.	1	4	Delay
		Lanes->			1		1	-		1					
#100: 3 Mile Road & Wyoming		LOS	-		*		A	-		В			-		Α
Way	AM	Delay	-		*		7	-	† — —	10			-		0.7
Stop Sign Control (NB)		Queue	-		*		0'	-		5'			-		"
		LOS	-		*		A	-		В			-		А
	PM	Delay	-		*		7	-		10			_		0.6
		Queue	•		*)'	-		5'			-		"."
		Lanes->	1	2	>	1	2	1	1	2	1	1	2	1	
#200: 3 Mile Road & Douglas	1	LOS	В	В	В	В	В	В	В	В	В	Α	В	В	В
Avenue (STH 32)	AM	Delay	16	15	15	18	15	15	10	13	12	9	12	10	13.4
Traffic Signal Control		Queue	25'	45'	45'	65'	35'	40'	15'	85'	40'	25'	100'	20'	
		LOS	В	В	В	В	В	В	В	В	В	Α	В	В	В
	PM	Delay	16	16	16	19	15	15	10	14	12	9	13	11	14.2
		Queue	35'	60'	60'	90'	45'	55'	25'	135'	60'	35'	140'	30'	

Build Peak Hour Traffic Operations

Existing Geometrics & Traffic Control

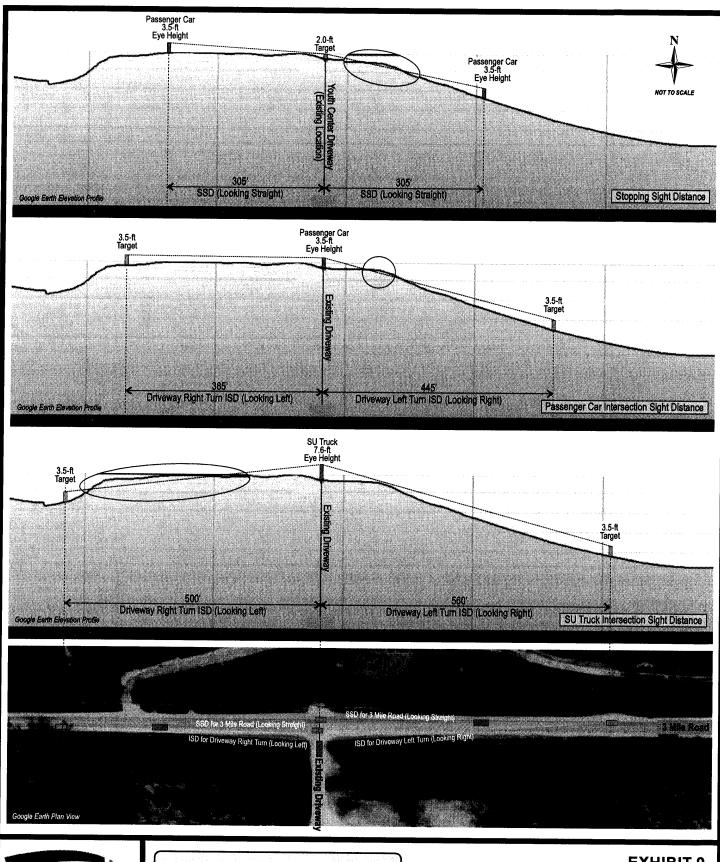
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*	AM	Delay	16	15	15	18	15	15	9	13	12	9	12	10	13.5
Traffic Signal Control		Queue	_25'	45'	45'	65'	35'	40'	20'	85'	40'	30'	105'	25'	
		LOS	В	В	В	В	В	В	В	В	В	Α	В	В	В
	PM	Delay	16	16	16	19	15	15	10	14	12	9	13	11	14.2
		Queue	40'	65'	65'	90'	45'	55'	25'	140'	60'	35'	145'	30'	
		Lanes->	•	•	1		1	-		1			•		
#200: 2 Mile Dood 9 Oite Delice		LOS	-		*		4			Α			-		A
#300: 3 Mile Road & Site Driveway	AM	Delay	-		t		7			9		-		0.5	
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⁽⁻⁾ indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.

Where zero is shown for the volume at a particular movement, a minimum value of 1 was used in the model.



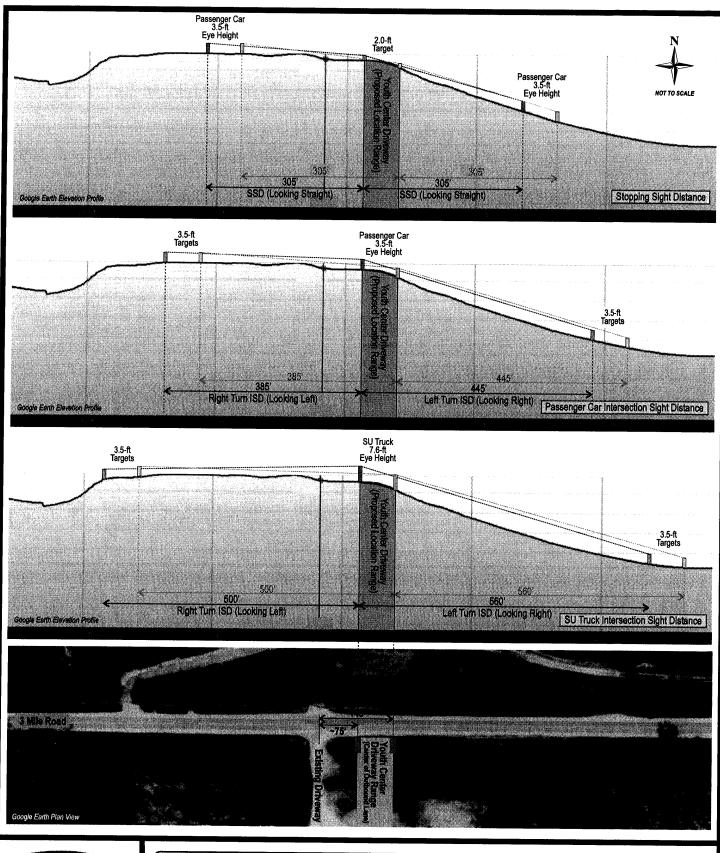
EXHIBIT 8 PEAK HOUR TRAFFIC OPERATIONS





Viewpoint (from Vehicle) Target (Oncoming or Downstream Vehicle) Line of Sight Blocked View

EXHIBIT 9
SIGHT DISTANCE EVALUATION
EXISTING SITE DRIVEWAY LOCATION





Viewpoint (from Vehicle) Target (Oncoming or Downstream Vehicle) Line of Sight Blocked View

SIGHT DISTANCE EVALUATION RECOMMENDED DRIVEWAY LOCATION

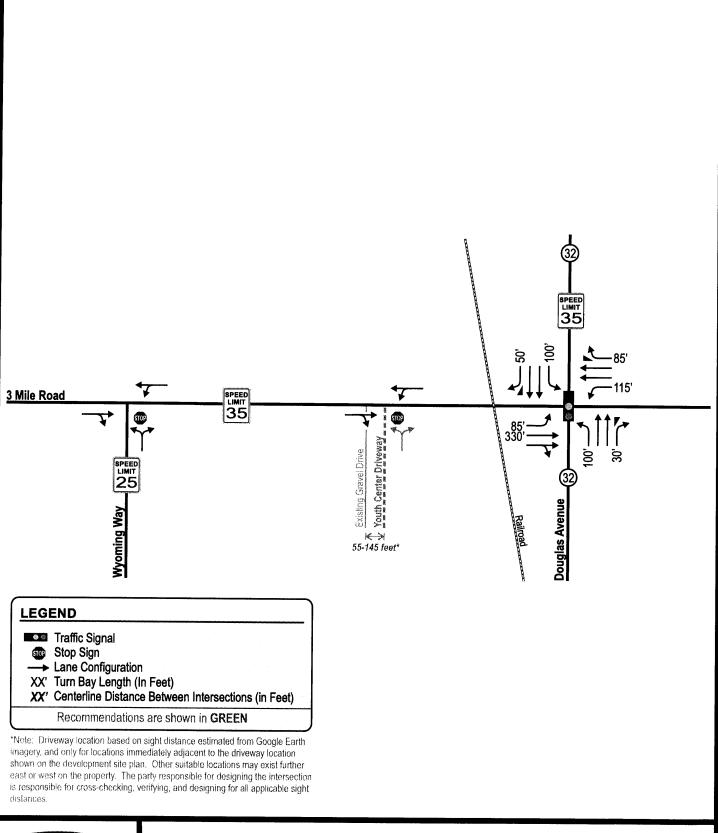






EXHIBIT 11 RECOMMENDATIONS

APPENDIX A

TRAFFIC COUNT DATA

Intersection Turning Movement Counts Saturation Flow Rate Calculation

Count Basics	Versio	n 2013.J4.1	Page 1 of 13
Start Date:	Thursday, March 31, 2022	Weekday	Schools in Session
Total Number of	of Hours Counted: 6	Non-Holiday	No Special Events

Base Information, Observed (6) Hour and Estimated (24) Hour Volume Summaries

Intersection of: Wyoming Way and 3 Mile Road

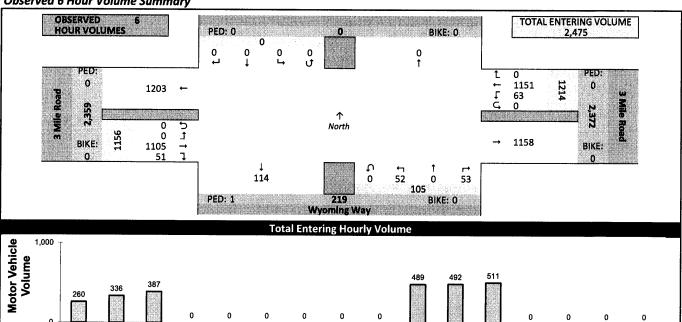
Site Information

Municipality	Village of Caledonia	
County	Racine WisDO	T Region SE
Traffic Control	Partial Stop Control	
Roadway Names	North Direction	in 🕂
North Leg		
East Leg	3 Mile Road	
South Leg	Wyoming Way	
West Leg	3 Mile Road	
Special Consider	itions	
Schools	In Session	
Holidays	None	
Special Events	None	
Special Pedestria	ns Observed	
	Pre-school children	None
	Elementry school age children	None
Visua	lly impaired (white cane/helper dog)	None
	iderly/disabled (except wheelchairs)	None
	Wheelchairs/electric scooters	None
Other (de	scribe) None	None

Count Information

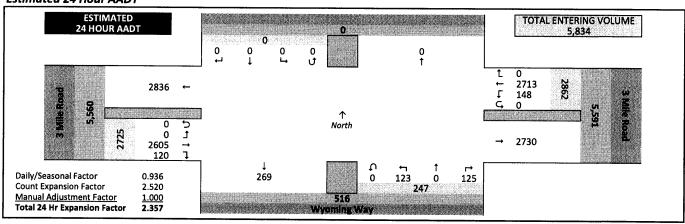
Count informa				
Hrs Counted: 6:00				
1st Day of Count	Thursd	ay, March 31, 20	22	Veather
AM Peak Peri	od Friday,	April 1, 2022	C	lear & Dry
Midday Peak Peri				lear & Dry
PM Peak Peri	od Thursd	ay, March 31, 20	22 C	lear & Dry
Calculated Peak Ho	ours			
AM 8:00	-9:00am	MD		PM 4:15-5:15pm
Peak Hours Selecte	d for Anal	ysis		
AM 8:00	-9:00am	MD		PM 4:00-5:00pm
Daily/Seasonal /	Adjustmen	t Group (2) Urba	an Arterials & Co	llectors
Count	Expansion	n Group (2) Urba	an Arterials & Co	llectors
Daily/Seasonal /	Adjustmen	t Factor 0.936	Count Expa	insion Factor 2.520
Company Nan	ne TADI, Ir	nc		Manual Adj. 1.000
Observers	AM Pea	k Period Jane Fai	t	
М	idday Pea	k Period None		
	PM Peal	k Period Jane Fai	t	
Comments 2019	DOT Seas	onal Factors		

Observed 6 Hour Volume Summary



6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM One-Hour Time Period Start Time (For example, 6am represents volume from 6am to 7am)

Estimated 24 Hour AADT



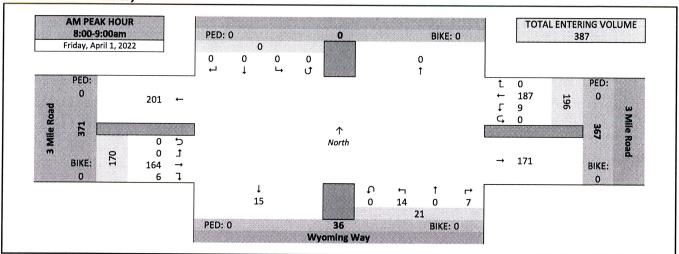
Peak Hour Volume Graphical Summary

Wyoming Way and 3 Mile Road

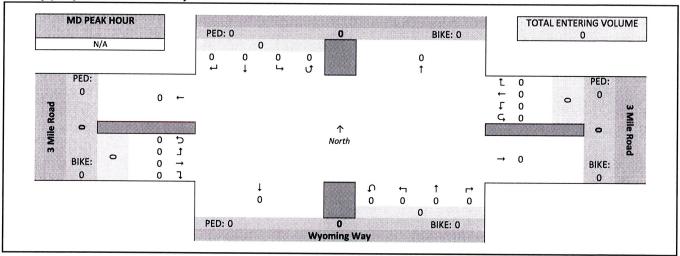
AM Peak Hour Summary



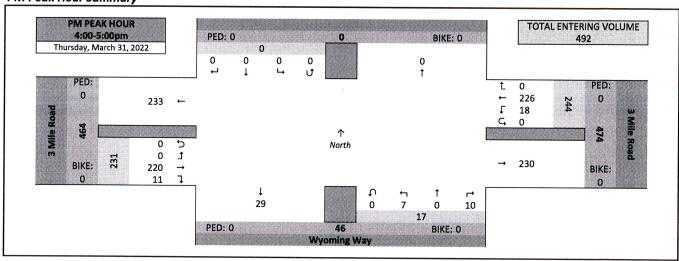




Midday (MD) Peak Hour Summary



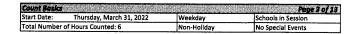
PM Peak Hour Summary



Peak Hour Volume Summary

Wyoming Way and 3 Mile Road

Peak Hour Volumes, Truck Percentages, and PHFs





riday, April 1, 2022	From North						Fr	← om Ea	st			Fre	↑ m So	uth			Fre	→ m W	est		
AM Peak Hour								Alle Ro				Wyc	ming	Wey			3 N	file Ro			
Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Total
8:00 AM	0	0	0	0	0	0	53	2	0	55	1	0	4	0	5	0	43	0	0	43	103
8:15 AM	0	0	0	0	0	0	36	2	0	38	2	0	2	0	4	2	36	0	0	38	
8:30 AM	0	0	0	0	0	0	48	2	0	50	2	0	4	0	6	4	43		-	47	103
8:45 AM	0	0	0		0	0	50	3	0	53		0	4	0	6		42		- 0	42	101
Peak Hour Volume	0	0	0	0	0	0		9	0	196		0	14	0			164	- 0		170	
Rounded Hourly Volume	0	. 0	0	0	0	0	185	10	0	******************		0	***************************************		*************	***************************************		0	0	*************	
% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	4.6	***************************************	0.0	7.1		4.8	0.0	4.3	0.0		***************************************	4.4
% Heavy 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			
% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	4.8		0.0	4.6		0.0	7.1	-			4.3	0.0			4.4
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.88		_	0.89	0.87	0.00	0.87	_	-	-	0.95	0.00	_		

N/A		From North					Fr	← om Ea	st			Fre	↑ om So	uth			Fre	→ m W	est		
MD Peak Hour							31	Aile Ro	ad			Wy	oming'	Way			3 f	Aile Ro	ad		1
Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
1 2:00 PM	(0	0	0	0	Ō	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2 12:30 PM		0	0	0	0	0	0	0	0	ō	0	0	0	0	ō	0	0	0	0		
12:45 PM		0	0	0	o	0	0	0	0	ō	0.	0	0	0			0	0	- 0		
Peak Hour Volume		0	0	0	0	O	O	0	0	0	0	0	ō	0		0	0	0	-	Ö	
Rounded Hourly Volum	ne (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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
% Heavy 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				-
% Trucks (Total)	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				
Peak Hour Factor (PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00		_		0.00	0.00		_		0.00	0.00			-	

Thursday, March 31, 2022	From North						From East					Fre	m Soi	uth			Fre	→ om W	est		
PM Peak Hour							31	dile Ro	ad			Wys	ming	Nay			31	Alle Ro	ad		
	Right	Thru	Left	U-Tn	Yeal	Rein	Thru	Left	U-Te	Total	Right	Thru	Left	Ustr	Total	Right	Thru	Left	U-Tri	Total	Totals
4:00 PM	0	0	0	0	0	0	57	1	0	58	2	0	4	0	6	2	55	0	0	57	121
4:15 PM	0	0	0	0	0	0	51	7	0	58	2	0	1	0	3	3	62	0	0	65	126
. ♀ 4:30 PM	0	0	0	0	0	0	59	4	0	63	4	0	1	0	5	2	47	0	0	49	117
4:45 PM	0	0	0	0	0	0	59	6	0	65	2	0	1	0	3	4	56	0	0	60	
Peak Hour Volume	0	0	0	0	0	0	226	18	0	244	10	0	7	0	17	11	220		0	231	492
Rounded Hourly Volume	0	0	0	0	0	0	225	20	0	245	10	0	5	0	15	10	220		0	230	VIII. 18 CO. A. C.
% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
% Heavy 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	0.0	0.0	0.0
% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0					1.2
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.64	0.00	0.94	0.62	0.00	0.44	0.00	0.71		0.89	0.00			

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists	C North Ap			Cı East Ap	rossing proach	1	Cr South App	rossing proach 4		Cı West Apı	rossing †		Tota Ped 8
V OO				3 1	Mile Road		Wyd	oming Way		31	Vile Road		Bike
15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0		0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	0	0	0	0	0			_	_				
12:15 PM	 0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	 	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1 0	0	0	0	0	0	0	0	0	0	0	0	0
Total	Ö	0	0	0	0	0		0	0	0	0	0	0
				v	J	Q	0	U	U	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	Ö	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0		0						0	0	U

15-Minute Motor Vehicle Data

Wyoming Way and 3 Mile Road

15-Minute Motor Vehicle Data

Count Basics Start Date: Thursday, March 31, 2022 Weekday Schools in Session Total Number of Hours Counted: 6 Non-Hollday No Special Events



5-Minute		ı	rom N	lorth		T	1	←	East				↑ From S	outh				→ From					Τ
me Period	—					1		Mile I			┿					_					4	l I., .	1
art Time	Right	Thru	Left	U-T	n Total	Right		Left	U-Tn	Total	Diek		Vyomir					3 Mile			15-Min	Hourly	
6:00 AM	0				0						Righ										Totals	Sum	PH
6:15 AM	1 0			0	8	0 0			`					_	0	4	0 1		0 0				50 0
6:30 AM	0		_	<u> </u>		0 0							-		0	3	1 2		0 0			28	
6:45 AM	0		_	ō -		o o					_				0	_	0 <u>2</u> 3 2		0 0			31	
7:00 AM	0		0	o l		o o		_					_		0	=	2 2		0 0			33	
7:15 AM	0		0	0	0	0 0				+				_	0	2			0 0			36	
7:30 AM	0		0 (0	0	0 0							-	_	ŏ 	_	3 2		0 0			37	
7.43 AIVI	0		0 ()	0	0 0	40	4	1 0		_					6			0 0			38	
8:00 AM	0)	0	0 0	53	7	. c	55		1					0 4		0 0			38	
8:15 AM	0		-		0	0 0	•		C	38		2	O	2	0	4			ol o	·	80		_
8:30 AM	0		2 (0	0 0			C			2	0	4	0	6			0 0				+-
9:00 AM	0		_		0	0 0		-				2	0 .	4	0	6 6	0 4	2	0 0				+
9:15 AM	0				0	0 0									0	0 () (0	0 0	0	0	<u> </u>	+
9:30 AM	0				0	<u> </u>			_		_				0	0 () (0	0 0	0	0		1
9:45 AM	0			_		0			_						0	0 (0 0	0	0		\perp
10:00 AM	0		_		_	0 0		_	_		_					0 (0 0		0		工
10:15 AM	0				0 1														0 0		0		1
10:30 AM	ő				ol d				_							_			0 0		0		4
10:45 AM	0				0 0								0 (0 0		0		4
11:00 AM	0				ol d										5				0 0		0	<u> </u>	
11:15 AM	0	(ol d								_						0 0	0	0		┵
11:30 AM	Ö				0 0					<u> </u>	_							_	0 0	0	0		╨
11:45 AM	0	C	0		0 (0									il d			_	0 0		0		╀
12:00 PM	0	C	0		0 (0	0	0		0	***************************************				3				0 0		0	-	-
12:15 PM 12:30 PM	0	C	C		0 (0		Ö			*********		5 (o c			0 0	- 0			4-
12:30 PM	0	C	0		0 (0	0	0	0	0) (************	o ő	0			+-
12:45 PM	0	C	C		0 (0	0	0	0	0						0 0				Ö	0	<u> </u>	+-
1:00 PM	0	0			0 (0	0	0	0	0	() (0 0) (0	e		o o	0	0		+
1:15 PM	0	0			0 0			0	0	0) (0 0						0	0	Ö	<u> </u>	+
1:30 PM	0	0			0 0			0	0	0) (0 0						o o	Ö	Ö		+-
1:45 PM	0	0	_	_	0 0			0	0	0) (00	0) (0	0	0		+
2:00 PM 2:15 PM	0	0						0	0) (0	C) (0	0	0		1
2:30 PM	0	0			0 0			0	0	0) () (0	C	(0	0	0		+
2:45 PM	0	0		-	0	0	0	0	0	0		_		C) (0	0		0	0	0		1
3:00 PM	0	0					0	0	0	0						0			0 0	0	0		T
3:15 PM	0	0					44	2	0	46	4								0	75	131	489	
3:30 PM	0	0				0	51	1	0	52	1		_	0					0	74	128	479	
3:45 PM	0	0				8	53 52	3	0	56	2			0		5				62	123	477	
4:00 PM	0	0) 0		57	1	0	53	2	_		<u> </u>		5				52	107	471	
4:15 PM	0	Ö) 6	0	51	7	0	58 58	2					- 3	55			57	121	497	
4:30 PM	Ö	0			*	0	59	4	0	36 63	4					3	62			65	126	515	_
4:45 PM	ō	0			•	Ö	59	6	Ö	53 53	2	4				- 3	•		•	49	117	500	
5:00 PM	0	0			•	0	52	4	0	56	<u>2</u>		******************************	0	-	<u>4</u> 2	56			60	128	508	
5:15 PM	0	0					43	0	<u></u>	43	1			0	-	2			-	82	144	511	1 0
5:30 PM	0	0	0	0			51	5	- 8	56	3			0		1		- 0		65	111		+
5:45 PM	0	0	0				62	6	0	68				0		2			-	65 61	125 131		₽
6:00 PM	0	0	0	С	0	0	0	0	0	0	0			0		0				0	131		+
6:15 PM	0	0	0	0	0	0	0	0	Ö	ő	0			0		0			+		- 0		+-
6:30 PM	0	0	0	C	0	0	0	0	0	0	0			_		0				ŏ		 	+-
6:45 PM	0	0	0	0		0	0	0	0	0	0										- 8		+
7:00 PM	0	0		0		0	0	0	0	0	0					0				0	- 6	<u> </u>	+
7:15 PM	0	. 0	0	0		0	0	0	0	0	0	0								ő	ő	—	+
7:30 PM 7:45 PM	0	0	0	0		0	0	0	0	0	0			0		0	0			ő			t^{-}
7:45 PM 8:00 PM	0	0	0	0		0	0	0	0	0	0					0	0			0	ō		T
8:00 PM 8:15 PM	0	0	0	0		0	0	0	0	0	0					0	0	0		0	ő		T
8:30 PM	0	0	0	0		. 0	0	0	0	0	0			0		0	Ö	0	0	0	0		\vdash
8:45 PM	0	0	0	0		0	0	0	0	0	0			0		0	0			0	0		1
9:00 PM	0	0	0	0		0	0	0	0	0	0			0	0	0	0	0	0	0	0		1
9:15 PM	0	0	0	0		0	- 0	0	0	0	0			0		0	0	0	0	0	0		
9:30 PM	0	0	0	0		0	0	- 9	0	0	0			0		0	0	0		0	0		-
9:45 PM	0	0	0	- 0		0	0	0	0	0	0			0		0	0	0		0	0		
is	0			0		0	0	0	0	0	0			0		0	0	. 0	0	0	0		
1.0	OI	ol	0	0	i ol	nΙ	1151	63	0	1214	53	0	52	0	105	51	1105	0	0	1156	2475		

Peak Hour All Vehicle Volume Summary

Hourly		Fr	om N	orth			F	← rom E	ast			Fi	nom Sc	uth			F	→ rom V	/est		Total
Time Period Start Time	Right	Thru	Left	U-Tn	Total	Right	3 Thru	Mile R	load U-Tn	Total	Right	W	yoming Left	, 	Tatal	Oi-ba		Mile F			Hourly
AM 8:00 AM	0				***************************************	0 0		***************************************	0-111	SAME AND ADDRESS OF THE PARTY O		***************************************		U-Tn 0	Total	Right	Thru	Left	U-Tn	Managaran	Volume
MD 12:00 PM	0	0	0	0							-		4						0		
PM 4:00 PM	0	0	a	0	C	0	225					d	1	a	17		220		0		



15-Minute Heavy Vehicle Data

Wyoming Way and 3 Mile Road

15-Minute Heavy Vehicle Data

Count Basics Start Date: Weekday Non-Holiday Thursday, March 31, 2022 Schools in Session Total Number of Hours Counted: 6



5-Min			Fı	om No	orth			CONTRACTOR OF THE PERSON	rom E	-			THE RESERVE	nom Sc	-			THE RESERVE OF THE PERSON	→ rom V			
me Pe		D: 1.							Mile F		_			yoming				3	Mile F	Road		15-Min
art Ti		Right	Thru	Left		Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
00000	00 AM 15 AM	0														(0	0	C	0	0	0
	O AM	0					0					0						5				7
	5 AM	0					0					0						0				2
	00 AM	0				0											-	0				0
	.5 AM	0				0						0						1				1
	O AM	0				0	0					0						1	0			3
	5 AM	0				0		0				0 1			_			0				0
200	O AM	0	0			0	0					0			0		. 0	0				2
8:1	5 AM	ō	0			0	0					Ö					0	<u>1</u>				4
8:3	0 AM	ō	ō			o o	ő	2				0						2	0	•		2
8:4	5 AM	O	Ō	O		0	Ö	5				0				C		<u>^</u>	0			4
9:0	0 AM	0	0		0	0	ő	0				ō	*****************			C		0		•		0
9:1	5 AM	0	0		0	0	0	0				0						0				0
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0000	5 AM	0	0	0	0	0	0	0				ō				0		0				0
	00 AM	0	0	0	0	0	0	0	-	THE REAL PROPERTY.		0	THE OWNER OF TAXABLE PARTY.	-	THE OWNER OF TAXABLE PARTY.	0		0		THE OWNER OF TAXABLE PARTY.		0
2002	15 AM	0	0	0	0	0	0	0				0				0	0	0				0
200	30 AM	0	0		0	0	0	0	0	0	0	0				0		0	0			0
200	45 AM	0	0	0	0	0	0	0				0	0	0	0	0		0	0			0
11:0	00 AM	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0			0
200	15 AM	0	0	0	0	0	0	0	0			0			0	0	0	0	0			0
11:3	30 AM	0	0	0	0	0	0	0				0			0	0	0	0	0			0
400	45 AM	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0
	00 PM	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0
200 \$00000000	15 PM	0	0	0	0	0	0	0	0	***************************************		0	0	0	0	0	0	0	0	0	0	0
12::	30 PM	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0
12:4	45 PM	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0
	0 PM 5 PM	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
	D PM 5 PM	0	0	0	0	0	0	0	0			0	0		0	0	0	0	0	0	0	0
000) PM	0	0	0	0	0	0	0	0		THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	0	0		0	0	0	0	0	0	0	0
***	5 PM	0	0	0	0	0	0	0	0			0	0		0	0	0	0	0			0
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500	5 PM	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0			0
	D PM	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0			0
3:15		0	0	0	0	0	0	1	0	0		0	0	0	0	0	0	2	0		2	3
3:30		0	0	0		0	0	4	0	0		0	0	0	0	0	0	1	0		1	5
3:45		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0
4:00		0	0	0	0	0	0	0 0	0	0	***************************************	0	0	0	0	0	0	0	0		0	0
4:15		0	0	- 8	0		0	1	0	0	0	0	0	0	0	0	0	0	0	0		0
4:30		0	0	0	0	0	0	1	0	0		0	0	0	0	0	0	0	0		0	1
4:45		0	a	0	0		0	4	- 6	0		0	0	0	0	0	0	0	0		0	1
	PM	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	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
00	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45		0	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 6:15	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30		0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45		0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
7:00		0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15		0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45		0	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0	0	0	0	0	0	0
8:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45		0	0	0	0	ō	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00		0	ō	0	0	ő	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30		0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45	PM	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	26	1	o	27	1	U	U	U	U		U	U	U	U	U

0 Peak Hour Heavy Vehicle Volume Summary

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		_	Ψ.					←					1					→			
Hourly		Fr	om N	orth	-		F	rom E	ast			Fr	om So	outh			F	rom V	Vest		Total
Time Period							3	Mile R	Road			Wy	oming	Way			3	Mile F	toad		Hourly
Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn		Volume
AM 8:00 AM	0	0	0	0	C	0	9	0	0	Ç	0	0	1	0	1	0	7	-	0	7	17
MD 12:00 PM	0	0	0	0	C	0	0	0	0	C	0	0		-	-	0	, 0	0			
PM 4:00 PM	0	0	0	0	(0	6	0		6	7	n	0	-	0	ō	0				

Count Basics	Vers	ion 2013.J4.1	Page 1 of 13
Start Date:	Thursday, March 31, 2022	Weekday	Schools in Session
Total Number of h	lours Counted: 6	Non-Holiday	No Special Events

Base Information, Observed (6) Hour and Estimated (24) Hour Volume Summaries

Intersection of: Douglas Avenue and 3 Mile Road

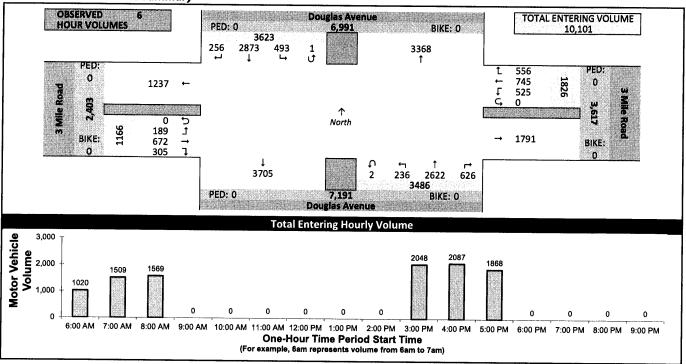
Site Information

Municipality	Village of Caledonia
County	Racine WisDOT Region SE
Traffic Control	Traffic Signal
Roadway Names	North Direction ↑
	Douglas Avenue
	3 Mile Road
South Leg	Douglas Avenue
West Leg	3 Míle Road
Special Considera	
Schools	In Session
Halidays	
Special Events	
Special Pedestria	ns Observed
	Pre-school children None
	Elementry school age children None
Visua	ily impaired (white cane/helper dog) None
I	iderly/disabled (except wheelchairs) None
	Wheelchairs/electric scooters None
Other (de:	scribe) None None

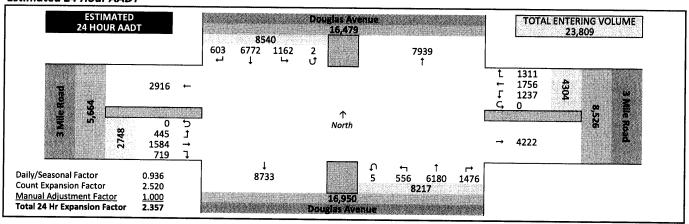
Count Information

Peak Hours Selected for Analysis AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion Factor Company Name TADI, Inc Manual	
AM Peak Period Friday, April 1, 2022 Clear & C PM Peak Period Thursday, March 31, 2022 Clear & C PM Peak Period Thursday, March 31, 2022 Clear & C Calculated Peak Hours AM 8:00-9:00am MD PM 3: Peak Hours Selected for Analysis AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion Factor Company Name TADI, Inc	rv
PM Peak Period Thursday, March 31, 2022 Clear & C Calculated Peak Hours AM 8:00-9:00am MD PM 3: Peak Hours Selected for Analysis AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion F2 Company Name TADI, Inc Manual	
Calculated Peak Hours AM 8:00-9:00am MD PM 3: Peak Hours Selected for Analysis AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor (0.936 Count Expansion Factor (0.936 Count E	ry
Peak Hours Selected for Analysis AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor (0.936 Count Expansion Factor (0.936 Manual Manual Manual Company Name TADI, Inc Manual	
Peak Hours Selected for Analysis AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion Factor Manual	
AM 8:00-9:00am MD PM 4: Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion Factor Company Name TADI, Inc Manual	45-4:45pm
Daily/Seasonal Adjustment Group (2) Urban Arterials & Collectors Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion Factor Company Name TADI, Inc	
Count Expansion Group (2) Urban Arterials & Collectors Daily/Seasonal Adjustment Factor 0.936 Count Expansion Fa Company Name TADI, Inc Manual	00-5:00pm
Daily/Seasonal Adjustment Factor 0.936 Count Expansion Fa Company Name TADI, Inc Manual	
Company Name TADI, Inc Manual	
Company Name TADI, Inc Manual	ctor 2.520
DI 4349 18 114 C1 11	Adj. 1.000
Observers AM Peak Period Amy Scheuerlein	
Midday Peak Period None	
PM Peak Period Amy Scheuerlein	
Comments 2019 DOT Seasonal Factors	

Observed 6 Hour Volume Summary



Estimated 24 Hour AADT



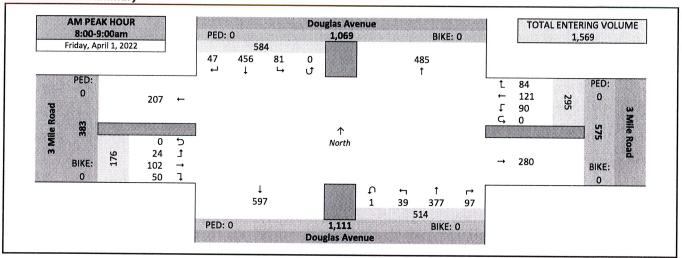
Peak Hour Volume Graphical Summary

Douglas Avenue and 3 Mile Road

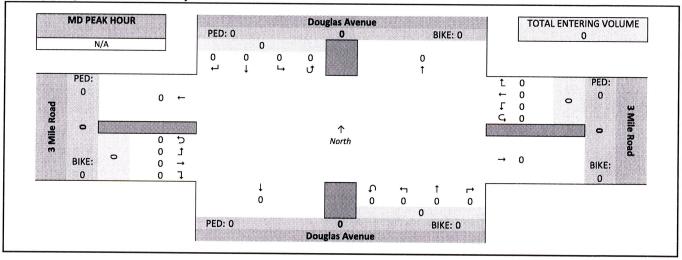
AM Peak Hour Summary



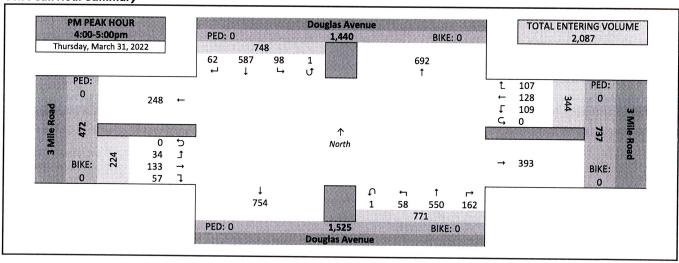




Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Peak Hour Volume Summary

Douglas Avenue and 3 Mile Road

Peak Hour Volumes, Truck Percentages, and PHFs

Count Basics Page 3 of 13 Start Date: Thursday, March 31, 2022 Weekday Schools in Session Total Number of Hours Counted: 6 Non-Holiday No Special Events



Friday, April 1, 2022		Fro	₩ m No	rth			Fr	← om Ea	ıst			Fro	↑ m So	uth			Fr	→ om W	est		
AM Peak Hour		Doug	glas Av	enue			1 E	/ile Ro	ad			Doug	glas Av	enue			3 (Viile Ro	ad		
Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
8:00 AM	25	124	20	0	169	22	28	23	0	73	23	73	6	0	102			6	0	43	387
8:15 AM	5	94	27	0	126	23	25	21	0	69	26	84	8	0	118	-			0	38	351
8:30 AM	8	117	15	0	140	23	32	24	0	79		107	15	0	146			- 6		49	414
8:45 AM	9	121	19	0	149		36	22		74		113			148		34	7	- 0	45	417
Peak Hour Volume	47	456	81	0	584		121	90	THE OWNER WHEN			377	-	_	514		THE RESERVE AND PERSONS NAMED IN	-	- 0	176	1569
Rounded Hourly Volume	45	455	80	0			120					375			510						1569
% Single Unit Trucks	2.1	4.6	11.1	0.0	5.3	8.3	7.4	16.7	0.0		***************************************	3.7	5.1	***********	4.1	6.0	•	***********			6.1
% Heavy Trucks	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0		0.3	0.0		0.2	0.0					0.1
% Trucks (Total)	2.1	4.8	11.1	0.0	5.5		7.4	16.7	0.0	10.5	5.2	4.0	5.1			6.0	7.8		-		6.2
Peak Hour Factor (PHF)	0.47	0.92	0.75	0.00	0.86		0.84	0.94	_	0.93		0.83	0.65		-	0.78	0.75	-			

N/A			Fro	₩ m No	rth			Fr	← om Ea	st			Fro	↑ m Soi	uth			Fre	→ om W	est		
	MD Peak Hour		Doug	las Av	enue			3 N	/ile Ro	ad			Doug	las Av	enue			3 1	Aile Ro	ad		
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
3	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0		0	0		0	0	0	0	(
Ķ	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	
60	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0			— ŏ	
ď	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0			- 0	
QV.	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0		0	0	0	0	Ŭ	0	0	0	- 0	
)) /	Rounded Hourly Volume	0	0	0	0	0	0	0					0	0	0	0		0	0	0	0	,
da	% Single Unit 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			
Aid	% Heavy 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			
¥	% Trucks (Total)	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	-		
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00		0.00										0.00	0.00			

Thursday, March 31, 2022		Fro	₩ m No	rth			Fr	← om Ea	st			Fro	↑ m Soi	<i>i</i> th			Fre	→ om We	est		
PM Peak Hour		Doug	las Av	enue			3 N	Aile Ro	ad			Doug	ias Av	enue				/ile Ro			
Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
4:00 PM	14	146	26	1	187	30	34	29	0	93	47	138	12	0	197	13	23	10	0	46	523
4:15 PM	18	137	29	0	184	24	31	31	0	86	38	128	17	0	183	20			0	68	521
5 4:30 PM	15	132	23	0	170	24	29	28	0	81	41	140	14	0	195	13	35	6	0	54	500
4:45 PM	15	172	20	0	207	29	34	21	0	84	36	144		1	196		36	9	0		543
Peak Hour Volume	62	587	98	1	748	107	128	109	0	344	-	550	_	1	771	57	133	34		_	2087
Rounded Hourly Volume	60	585	100	0	745	105	130	110	0	***************************************	160	550		_		***************************************		-	-	***************************************	
% Single Unit Trucks	3.2	2.6	1.0	0.0	2.4	0.0	6.2	0.9	0.0	2.6	1.2	2.4	***************************************	0.0	1.9	3.5	0.0	0.0		***************************************	2.1
% Heavy Trucks	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.0	0.0		0.3
% Trucks (Total)	3.2	3.1	1.0	0.0	2.8	0.0	6.2	0.9	0.0	2.6	1.2	2.9	0.0	0.0	2.3	3.5	0.0				2.4
Peak Hour Factor (PHF)	0.86	0.85	0.84	0.25	0.90	0.89	0.94	0.88	0.00	0.92		0.95	0.85	_	0.98		0.85	0.85			0.96

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists	Cı North Apı			Cı East Ap	rossing proach	1	Cı South Apı	rossing proach 🛶		Cr West App	oroach		Tota Ped 8
N 010	Doug	glas Avenue		31	Mile Road		Doug	glas Avenue		Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner,	Aile Road	****	Bike
15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
₹ 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
12.00 PM	T .												I
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	Ö	0	0	Ö	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	^					
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	n	0	0	0	0	0	0	0	0	0	0	0

15-Minute Motor Vehicle Data

Douglas Avenue and 3 Mile Road

15-Minute Motor Vehicle Data

Count Basics Page 5 of 13 Start Date: Thursday, March 31, 2022 Weekday Schools In Session Total Number of Hours Counted: 6 Non-Hollday No Special Events



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	e Period			ıglas A				·	Mile R					ıglas A	venue			3	Mile R	oad		15-Min	Hourly	
star	t Time 6:00 AM		Thru		U-Tn	Total	Right	-	Left	U-Tn	Total	Right		Left		Total		Thru	Left	U-Tn	Total	Totals	Sum	PHF
	6:15 AM	6		17		42 74	12		5 11		37 54	7		5			-		0			164	1020	
	6:30 AM	4				93	24		23		88			2		77 103	6		3			226 304	1229	
	6:45 AM	9		13	0	129	19		20		71	4		4		100	9						1454	
200000	7:00 AM 7:15 AM	2	117	14		133	23			0	84	19		1			13	16	2	0	31	373	1509	
8	7:30 AM	3 10	100 114	17 10		120 134	39 24		20		86		114	8			6	16	7	0			1523	
Per	7:45 AM	9	115	21		145			28 22	0	94 75	12 17	102 91	5			11 11	20 21	6 16			384	1503 1533	
Peak	8:00 AM	25	124	20		169	22		23	0	73	23		6			15	22	6				1569	
	8:15 AM	5		27		126	23		21	0	69	26		8		118	14	19	5	Ö		351		+-
£	8:30 AM	8		15	0	140	23		24		79	24		15		146	16	27	6	0				T
	8:45 AM 9:00 AM	9 0		19	0	149	16		22		74	24		10		148		34	7			417		
	9:15 AM	0				0	0		0		0	0	0	0		0	0	0	0			0		
	9:30 AM	Ö				0	0		0		0	0		0		0	0	0	0			0		+-
2000000	9:45 AM	0	THE RESERVE OF THE PERSON NAMED IN	0	0	0	0		0		0	0		0		0	0	0	0			0		+-
	10:00 AM	0		0		0			0		0	0	0	0	0	0	0	0	0		THE RESERVE OF THE PARTY OF THE	0		_
	10:15 AM 10:30 AM	0	0	0		0					0	0		0		0	0	0	0		0	0		
8888888 3 L	10:45 AM	0	0	0		0	0		0		0	0	0	0		0	0	0	0	0	0	0		
	11:00 AM	0	0	0		0	0		0	0	0	0	0	0		0	0	0	0	0	0	0		
Period	11:15 AM	0	0	0		0	0		0	0	0	0	0	0		0	0	0	0	0	0	0		┼
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		+
2 768 L	11:45 AM	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0	0		\vdash
	12:00 PM 12:15 PM	0	0	0		0	0		0	0	0	0	0	0		O	0	0	0	0	0	0		
8	12:30 PM	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0	0		
(* 333 A	12:45 PM	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0	0		<u> </u>
~	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		-
00000	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	.0	0	0	0	0		╁─╴
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		\vdash
	1:45 PM 2:00 PM	0	0	0	0	0	0	_	0	0	0	0	0	0	-	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		
Ž	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		-
	3:00 PM	10	155	20	0	185	24	21	35	0	80	26	142	11	0	179	13	46	14	0	73	517	2048	0.9
2000	3:15 PM	14	149	26	0	189	24	31	19	0	74	34	116	14	0	164	21	45	16	0	82	509	2054	0.9
	3:30 PM 3:45 PM	11	142	21	0	174	22	27	27	0	76	36	114	16	0	166	11	36	4	0	51	467	2066	0.9
20000	1:00 PM	13 14	163 146	28	0 1	204	41	29	18	0	88	44	145	13	0	202	20	36	5	0	61	555	2099	0.9
	1:15 PM	18	137	26 29	- 0	187 184	30 24	34	29 31	0	93 86	47 38	138	12	o o	197	13	23	10	0	46	523	2087	0.9
×	1:30 PM	15	132	23	Ö	170	24	29	28	0	81	41	128 140	17 14	00	183 195	20 13	39 35	9	0	68 54	521 500	2043 1990	0.9
888 W	:45 PM	15	172	20	ō	207	29	34	21	Ö	84	36	144	15	1	196	11	36	9	0	56 56	543	1940	0.8
	:00 PM	10	119	28	0	157	19	35	26	0	80	28	120	14	0	162	20	44	16	o	80	479	1868	0.9
	5:15 PM 5:30 PM	10	124	25	0	159	26	29	21	0	76	33	122	6	0	161	15	46	11	0	72	468		
5	5:45 PM	19 13	138 126	33 24	0	190	18	25	13	0	56	33	99	11	0	143	17	36	8	0	61	450		
	:00 PM	0	0	0	0	163 0	13 0	39	16 0	0	68 0	45 0	118	16	0	179	15	37	9	0	61	471		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0	0	-	
0	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0		<u> </u>
	':00 PM ':15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8	:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:45 PM :00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
tals		256	2873	493	1	3623	U	U	U	U	U	U	0	0	0	0	0	0	O	0	0	0		

Peak Hour All Vehicle Volume Summary

	purly From North							+					1					→			
Hourly Time Period			glas Av			From East 3 Mile Road					From South Douglas Avenue					From West 3 Mile Road					Total
Start Time															Right Thru Left U-Tn Total				Hourly Volume		
AM 8:00 AM	47	456	81	0	584	84	121	90	0	295	97	377	39	1	514		102	24			
MD 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
PM 4:00 PM	62	587	98	1	748	107	128	109	0	344	162	550	58	1	771	57	133	34	0		

ı		ú				
ı	0	9	4			
ı						
-	200	2	×	×	*	

15-Minute Heavy Vehicle Data

Douglas Avenue and 3 Mile Road

15-Minute Heavy Vehicle Data

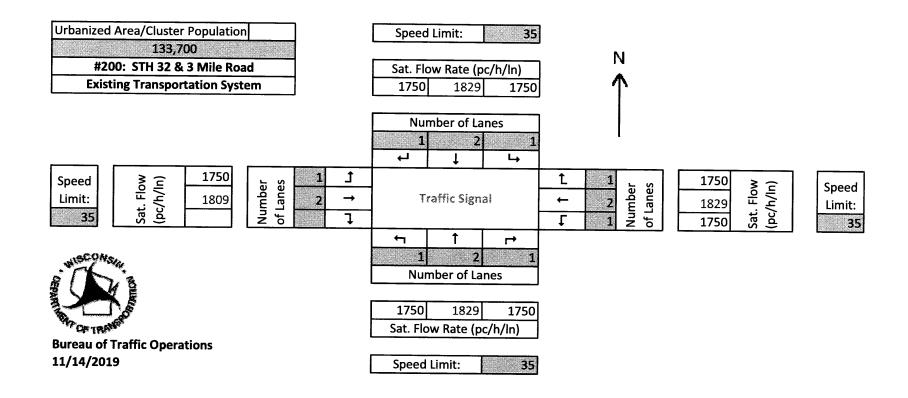
Start Date: Thursday, March 31, 2022 Total Number of Hours Counted: 6 Weekday Schools in Session No Special Events



	inute		NAME OF TAXABLE PARTY.	rom N	-			MANAGEMENT AND ADDRESS.	← rom l	-				↑ From S	outh			→ From West				
	Period	Di-k:			venue				Mile F						Avenue				Mile	Road		15-Min
_	Time 5:00 AM	Right	-	Left		-	Right	-	Left	-		THE OWNER OF TAXABLE PARTY.	-	THE R. P. LEWIS CO., LANSING	U-Tn	-	Right	Thru	Left	U-Tr	Total	Totals
0000	5:15 AM	0			_	0 2	2 0		_		0				0 0) 1			0 1	7
2000	:30 AM	0				0 9									0 0		3 4				3 (0	
6	:45 AM	0				0 13					0				0 0					_	0 1	17 20
	':00 AM	0	2	2 3		0 5	5 1				0	_			0 0							16
400	':15 AM	0				3 (3 4	1	. 3		0	8			1 0						0 1	
-	:30 AM	1) 4		0			0	2	0	4	0 0	4	1 0				0 0	
6	:45 AM :00 AM	1	4			0 7					0	_			0 0		. 2	1		0 () 3	
133 mm	:15 AM	1 0	1 4) 2) 8									0 0		3 C	·) 2	22
- T	:30 AM	0		•) 10		0	·						0 0		<u> </u>	·	•) 5	26
8	:45 AM	o			•			***************************************	3				••••		1 0 1 0		3		•	0 9		23
9	:00 AM	Ō	0								0 0		***		0 0						•••	27
	:15 AM	0	0	C						-		_			0 0							
	:30 AM	0	0				0	0	0	(0 0				-			
	:45 AM	0	0	-		The second name of	THE OWNER OF TAXABLE PARTY.	THE OWNER OF TAXABLE PARTY.	Name and Address of the Owner, where	THE OWNER OF THE OWNER, WHEN) () (0	0 (0 0		0			0 (
	0:00 AM 0:15 AM	0	0												0 0) (0	0
	0:30 AM	0	0									-			0) (
200	0:45 AM	0	0								0 (_	0 0							
1	1:00 AM	0	0												0 0		0		-			
333	1:15 AM	0	0	0											0	0	0					
	1:30 AM	0	0		0	0	0	0	0						0 0	0	Ö					
∞	1:45 AM	0	0					0	0) () (0 0	0	0	0					
	2:00 PM 2:15 PM	0	0	<u>-</u>				0	0					0 0		O	0	0	() (0	0
255 10000	2:30 PM	0	0					0	0					0 0		О	0	0	***************************************			
95 mas	2:45 PM	0	0			_		0	0							0		0				0
	00 PM	0	0					0	0							0	0					
1:	15 PM	0	0				0	0	0							0	0	0				0
	30 PM	0	0	0	0	0		0	0							0	0					0
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	00 PM	0	0	0				0	0			() (0 0	0	0	0	0	C	THE OWNER WHEN	THE OWNER OF THE OWNER,	0
	15 PM 30 PM	0	0					0	0							0	0	0	C	0	0	0
889	45 PM	0	0		0		0	0	0	0						0	0	0	C			0
333	00 PM	0	4	0	0		0 2	0	0	0						9	0	0	0			0
3:	15 PM	1	10	1	0		0	2	0	0						9 5	1	1	0			18
3:	30 PM	0	8	0	0		0	0	1			1				6	1	2				21 18
	45 PM	0	3	0	0	3	4	0	0	0		Ö				2	1	0	0			10
8 mm	00 PM	0	2	0	0		0	2	1	0	3	0				4	0	0	0			9
33 00000	15 PM	2	11	0	0	*************	0	0	0	O		*************	<u> </u>			6	1	0	0	0	1	20
	30 PM 45 PM	0	2	1	0		0	3	0	0						6	1	0	0			13
8 mm	00 PM	0	3	0	0 0		0	3 0	0	0		0				2	0	0	0			8
3	15 PM	0	0	0	0		0	0	0	0		0				2	0	0	0			6
	30 PM	0	1	0	0		0	0	0	0		0				2	0	0	0			2
	45 PM	0	1	0	0	1	0	0	1	0		0				4	0	1	0			7
-	00 PM	0	0	0	0	0	0	0	0	0	ō	0				0	0	0	0			0
	15 PM	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0			0
-	30 PM 45 PM	0	0	0	0	0	0	0	0	0		0				0	0	0	0		0	0
	00 PM	0	0	0	0 0	0	0	0	0	0						0	0	0	0			0
	15 PM	0	0	0	0		0	0	0	0		0				0	0	0	0			0
•	30 PM	0	0	0	0		0	0	0	0		0				0	0	0	0			0
	45 PM	0	0	0	0		0	0	0	0		0				0	0	0	0			0
	00 PM	0	0	0	0		0	0	0	0		0		_		0	0	0	0		0	0
	15 PM	0	0	0	0	0	0	0	0	0		0				0	0	0	0		0	0
	80 PM	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0		0	0
	15 PM 00 PM	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0		0	0
	L5 PM	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0
	BO PM	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
	5 PM	- 0	0	0	0	0	0	0	0	0	0 0	0				0	0	0	0	0	0	0
-	THE RESERVE OF THE PERSON NAMED IN					J	U	U	U	U	U	U	l o	ı Ul	0	0	0	0	0	0	0	0

96 **Peak Hour Heavy Vehicle Volume Summary**

Hourly	From North From East										Fr	↑ om So	uth			F	→ rom V	/est		Total	
Time Period Start Time	Right	Dou	glas Av Left	venue U-Tn	Total	Right	3 Thru	Mile R	oad U-Tn	Tatal	Dieka			venue				Mile R			Hourly
AM 8:00 AM	1	22				-	9				Right 5	Thru 15	Left	U-Tn 0	Total 22	Right	Thru		U-Tn		Volume
MD 12:00 PM	0	0	0								0	- 13		-			8		·	13 0	
PM 4:00 PM	2	18	1	0	21	0	8	1	0	9	2	16	0	0			0			2	50



APPENDIX B

SYNCHRO INTERSECTION CAPACITY ANALYSIS

Existing Traffic Volumes

	-	•	•	←	4	<i>></i>	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	}			सी	\ \		
Traffic Volume (vph)	170	5	10	190	15	5	
Future Volume (vph)	170	5	10	190	15	5	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0	***************************************	0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			100		100		
Link Speed (mph)	35			35	25		
Link Distance (ft)	389			1085	441		
Travel Time (s)	7.6			21.1	12.0		
Confl. Peds. (#/hr)				***************************************			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	4%	4%	5%	5%	5%	5%	
Bus Blockages (#/hr)	0	0	0	0	0	0	and the second considerate in
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		Tarak di Balanda da Karanda da Balanda da Ba
Shared Lane Traffic (%)							
Lane Group Flow (vph)	186	0	0	213	21	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	
Median Width(ft)	0	•		0	12	-	
Link Offset(ft)	0			0	0		
Crosswalk Width(ft)	16			16	16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Furning Speed (mph)		9	15		15	9	
Sign Control	Free			Free	Stop		
ntersection Summary							
A T OII							
Area Type: Otl	her						

Intersection											
Int Delay, s/veh	0.7										
Movement	EBT	EBR	WBL	WBT	NBL	NBR					
Lane Configurations	1→			4	¥γ						
Traffic Vol, veh/h	170	5	10		15	5					
Future Vol, veh/h	170	5	10	190	15	5					
Conflicting Peds, #/hr	0	0	0	0	0	0					
Sign Control	Free	Free	Free	Free	Stop	Stop					
RT Channelized	-	None		None		None					
Storage Length	-	-	-	-	0	-					1082944815
Veh in Median Storage,		•	•		0						
Grade, %	0	-	-	0	0	-				***************************************	200.00 200000
Peak Hour Factor	94	94	94	94	94	94					
Heavy Vehicles, %	4	4	5	5	. 5	5			***************************************		
Mvmt Flow	181	5	11	202	16	5					
	lajor1	ì	Aajor2		Vinor1						
Conflicting Flow All	0	0	186	0	408	184					
Stage 1			•		184						
Stage 2	-	-	-	-	224	-					r some ope
Critical Hdwy	•		4.15	•	6.45	6.25					
Critical Hdwy Stg 1	-	•	-	-	5.45	-					
Critical Hdwy Stg 2	•			•	5.45	•					
Follow-up Hdwy	-	-	2.245	-	3.545			000000000000000000000000000000000000000	***************************************		
Pot Cap-1 Maneuver	*		1371	•	594	851					
Stage 1 Stage 2	-	-	-	-	840	-					COMMUNICOR.
Platoon blocked, %	•	•	•	•	806	•					
Mov Cap-1 Maneuver	-	-	1371	-	589	851					Carren
Mov Cap-2 Maneuver	_		10/1	_	589	001					
Stage 1		w		*	840	-					
Stage 2	-	-	-	-	799	_					
Approach	EB		WB		NO.						
HCM Control Delay, s	0		0.4		NB						
HCM LOS	V		U.4		10.8						
TOW LOO					В						3880
Minor Lane/Major Mvmt	N	BLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)		638	•	•	1371	•					
HCM Lane V/C Ratio	(0.033	-	-	0.008	-					-wronautho
HCM Control Delay (s)		10.8		•	7.6	0					
HCM Lane LOS		В	-	-	A	Α					00.602.211
HCM 95th %tile Q(veh)		0.1	•	•	0	•					

	٠	-	*	•	+	4	4	†	<i>></i>	\	↓	4
Lane Group	EBL	EBT	EBR	WEL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	† }		J.	^	7	75	个 个	7	ሻ	个 个	7
Traffic Volume (vph)	25	100	50	90	115	85	40	375	95	80	455	45
Future Volume (vph)	25	100	50	90	115	85	40	375	95	80	455	45
Ideal Flow (vphpl)	1750	1809	1750	1750	1829	1750	1750	1829	1750	1750	1829	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85	***************************************	0	115		85	100		30	100		50
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100		_	100	En (at. Oronomous		100	2-40-0-00-00-00-00-00-00-00-00-00-00-00-0		100		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			35	NATIONAL CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CO		35	
Link Distance (ft)		350			644			491			584	
Travel Time (s)		6.8			12.5			9.6			11.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr) Peak Hour Factor	0.04	0.04	001	0.04	001	201						
Growth Factor	0.94 100%	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0,94	0.94	0.94	0.94
Heavy Vehicles (%)	7%	100% 7%	100% 7%	100%	100%	62%	100%	100%	62%	100%	100%	62%
Bus Blockages (#/hr)	0	170	176 0	11%	11%	11%	4%	4%	4%	6%	6%	6%
Parking (#/hr)	U	U	U	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			00/			00/	
Shared Lane Traffic (%)		U /0			U%			0%			0%	
Lane Group Flow (vph)	27	159	0	96	122	56	43	399	63	85	484	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No.	No	No	30 No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	MANAGE AND
Median Width(ft)	Lon	18	ragne	Loit	18	rigin	LOIL	24	Nigni	Leit	24	Right
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								,,,			10	
Headway Factor	1.11	1.07	1.11	1.11	1.05	1.11	1.11	1.05	1.11	1.11	1.05	1.11
Turning Speed (mph)	15		9	15		9	15		9	15	,,,,,	9
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2	-	1	6	
Permitted Phases	4			8		8	2		2	6		6
Detector Phase	4	4		8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0	15.0	6.0	20.0	20.0	6.0	20.0	20.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	10.0	26.0	26.0	10.0	26.0	26.0
Total Split (s)	46.0	46.0	***************************************	46.0	46.0	46.0	29.0	96.0	96.0	29.0	96.0	96.0
Total Split (%)		26.9%					17.0%	56.1%	56.1%	17.0%	56.1%	56.1%
Maximum Green (s)	40.0	40.0		40.0	40.0	40.0	25.0	90.0	90.0	25.0	90.0	90.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	6.4					_	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Gap (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

	•	-	•	1	-	•	4	†	~	-	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)												******
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												H400000000
v/c Ratio	0.09	0.19		0.35	0.14	0.15	0.09	0.33	0.12	0.17	0.34	0.05
Control Delay	17.6	17.6		22.1	17.3	18.2	6.2	14.7	14.1	6.7	12.1	11.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.6	17.6		22.1	17.3	18.2	6.2	14.7	14.1	6.7	12.1	11.5
Queue Length 50th (ft)	7	22		27	16	15	6	51	14	12	43	4
Queue Length 95th (ft)	25	44		66	36	41	16	87	38	27	101	21
Internal Link Dist (ft)		270			564			411			504	
Turn Bay Length (ft)	85			115		85	100		30	100		50
Base Capacity (vph)	798	2208		742	2266	969	809	3341	1430	791	3278	1403
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	Ö
Storage Cap Reductn	0	0		0	0	0	0	Ō	0	0	0	0
Reduced v/c Ratio	0.03	0.07		0.13	0.05	0.06	0.05	0.12	0.04	0.11	0.15	0.02

Intersection Summary

Area Type: Other

Cycle Length: 171

Actuated Cycle Length: 55.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Description: Runs Free

Splits and Phases: 200: Douglas Avenue & 3 Mile Road



	۶	-	•	•	4	•	4	†	<i>></i>	/	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NET	NBR	SBL	SBT	SBR
Lane Configurations	آر	↑ }		ሻ	^	7	آر	^	7	75	ተተ	7
Traffic Volume (veh/h)	25	100	50	90	115	85	40	375	95	80	455	45
Future Volume (veh/h)	25	100	50	90	115	85	40	375	95	80	455	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00	mananasis anaka ayan	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	4054	No			No			No			No	
Adj Sat Flow, veh/h/ln	1654	1710	1654	1600	1672	1600	1695	1772	1695	1668	1743	1668
Adj Flow Rate, veh/h	27	106	53	96	122	56	43	399	63	85	484	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	7	7	11	11	11	4	4	4	6	6	6
Cap, veh/h	401	580	274	372	860	367	449	1216	519	498	1285	548
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.36	0.36	0.08	0.39	0.39
Sat Flow, veh/h	1123	2142	1011	1050	3177	1356	1615	3367	1437	1589	3312	1414
Grp Volume(v), veh/h	27	79	80	96	122	56	43	399	63	85	484	30
Grp Sat Flow(s),veh/h/in	1123	1625	1528	1050	1588	1356	1615	1683	1437	1589	1656	1414
Q Serve(g_s), s	1.0	2.1	2.2	4.3	1.6	1.7	0.9	4.8	1.6	1.8	5.8	0.7
Cycle Q Clear(g_c), s	2.6	2,1	2.2	6.5	1.6	1.7	0,9	4.8	1.6	1.8	5.8	0.7
Prop In Lane	1.00		0.66	1.00		1.00	1.00	***	1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	440	414	372	860	367	449	1216	519	498	1285	548
V/C Ratio(X)	0.07	0.18	0.19	0.26	0.14	0.15	0.10	0.33	0.12	0.17	0.38	0.05
Avail Cap(c_a), veh/h	909	1174	1104	846	2295	980	1093	5473	2336	1089	5385	2298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1.00
Uniform Delay (d), s/veh	16.3	15.5	15.5	18.0	15.3	15.4	10.0	12.8	11.8	9.4	12.1	10.6
Incr Delay (d2), s/veh	0.1	0.2	0.2	0.4	0.1	0.2	0.0	0.2	0.1	0.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%lle BackOfQ(50%),veh/in	0.2	0.7	0.7	1.0	0.5	0.5	0.3	1.6	0.5	0.5	1.8	0,2
Unsig. Movement Delay, s/vel						December 2010		***************************************				
LnGrp Delay(d),s/veh	16.4	15.7	15.8	18.4	15.4	15.5	10.0	13.0	12.0	9.4	12.4	10.7
LnGrp LOS	B	B	В	В	B	B	A	В	В	Α	B	B
Approach Vol, veh/h		186			274			505			599	
Approach Delay, s/veh	hannan an a	15.8	***************************************		16.5			12.6			√ 11.9	
Approach LOS		В			В			В			В	
Timer - Assigned Phs	1	2		4	5	6		8				
hs Duration (G+Y+Rc), s	8.4	26.0		21.0	6.9	27.5		21.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	90.0		40.0	25.0	90.0		40.0				
Max Q Clear Time (g_c+i1), s	3.8	6.8		4.6	2.9	7.8		8.5				
Green Ext Time (p_c), s	0.1	4.6		1.0	0.0	5.4		1.4				
				., -				1,77				
ntersection Summary												
HCM 6th Ctrl Delay			13,4									
HCM 6th LOS			В									

Lane Group Lane Configurations Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl) Lane Width (ft) Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)	*EBT 215 215 1900 12 0%	10 10 1900 12	20 20 1900 12	WBT 41 230 230 230 1900	** NBL ************************************	NBR 10	
Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl) Lane Width (ft) Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)	215 215 1900 12	10 1900 12	20 1900	230 230	5 5		
Future Volume (vph) Ideal Flow (vphpl) Lane Width (ft) Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)	215 215 1900 12	10 1900 12	20 1900	230 230	5 5		
Ideal Flow (vphpl) Lane Width (ft) Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)	1900 12	1900 12	1900	230	-		
Lane Width (ft) Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)	12	12		1900		10	
Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)			12		1900	1900	Control of the Contro
Storage Length (ft) Storage Lanes Taper Length (ft) Link Speed (mph)	0%	۸		12	12	12	
Storage Lanes Taper Length (ft) Link Speed (mph)		Λ		0%	0%		
Taper Length (ft) Link Speed (mph)		-	0		0	0	
Link Speed (mph)		0	0		1	0	
			100		100		
Link Distance (#1)	35			35	25		Talagraph (1970)
Link Distance (ft)	389			1085	441		
Travel Time (s)	7.6			21.1	12.0		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	1%	1%	3%	3%	1%	1%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)			200000000000000000000000000000000000000				
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)	Cookeasta on the control of the cont		***************************************				
Lane Group Flow (vph)	234	0	0	261	15	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	A STANDARD BOOK STANDARD BOOK STANDARD
Median Width(ft)	0	***	DI WAN	0	12		
Link Offset(ft)	0			0	0		
Crosswalk Width(ft)	16			16	16		
Two way Left Turn Lane						100	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	-	9	15	_	15	9	
Sign Control	Free			Free	Stop		
Intersection Summary							
							Annual Control of the
Control Type: Unsignalized	her						

Intersection									
Int Delay, s/veh	0.6								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	Ą.				147				
Traffic Vol, veh/h	215	10	20	230	5	10			
Future Vol, veh/h	215	10	20	230	5	10			
Conflicting Peds, #/hr Sign Control	0	0	_ 0	_ 0	0	0			
RT Channelized	Free -	Free None	Free	Free None	Stop	Stop			
Storage Length		-		INOHE	0	None			
Veh in Median Storage	,# 0	-	•	0	0				
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	96	96	96	96	96	96			
Heavy Vehicles, %	1	1	3	3	1	1		***************************************	 000000000000000000000000000000000000000
Mvmt Flow	224	10	21	240	5	10			
	Majort .		Aajor2		/inor1				
Conflicting Flow All Stage 1	0	0	234	0	511	229			
Stage 2	-	-	-	-	229 282	-			
Critical Hdwy	-	-	4.13	-	6.41	6.21			
Critical Hdwy Stg 1	-	-	-	-	5.41				
Critical Hdwy Stg 2			•		5.41	•			
Follow-up Hdwy	-		2.227		3.509				
Pot Cap-1 Maneuver		-	1328	•	524	813			
Stage 1 Stage 2	-	-	-	-	811	-			
Platoon blocked, %	-	-	•	-	768	•			
Mov Cap-1 Maneuver	-	-	1328	-	515	813			
Mov Cap-2 Maneuver	-	•	-	-	515	-			
Stage 1	•		•	•	811	*			
Stage 2	-	-	-	-	754	-			
100									
Approach	EB		WB		NB				
HCM Control Delay, s	0		0,6		10.4				
HCM LOS			200.200.000.000.000		В				
Minor Lane/Major Mvm	<u>N</u>	BLn1	EBT	EBR	WBL	WBT			
Capacity (veh/h)		682	•		1328				
HCM Lane V/C Ratio	(0.023	-		0.016	-			
HCM Control Delay (s)		10.4	•	•	7.8	0			
HCM D5th 9/tile O/yoh)		B	-	-	A	Α			
HCM 95th %tile Q(veh)		0.1	•	*	0	•			

	۶	→	*	1	4	4	4	†	~	\	↓	1
Lane Group	EBL	EBT	EBR	WBL	WET	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	75	† }		7	ተተ	7	ሻ	个 个	7	*	^ ^	7
Traffic Volume (vph)	35	135	55	110	130	105	60	550	160	100	585	60
Future Volume (vph)	35	135	55	110	130	105	60	550	160	100	585	60
Ideal Flow (vphpl)	1750	1809	1750	1750	1829	1750	1750	1829	1750	1750	1829	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85	*******************	0	115		85	100		30	100		50
Storage Lanes	1		0	1		- 1	1		1	1		1
Taper Length (ft)	100	19401114 120000 Augusta (Augusta (Augus	li della communication della communication della communication della communication della communication della co	100			100			100		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35	Switch Constitution of the		35	***		35			35	
Link Distance (ft)		350			644			491			584	
Travel Time (s)		6.8			12.5	0.00 American		9.6			11.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)									****************	**********		
Peak Hour Factor Growth Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
	100%	100%	100%	100%	100%	62%	100%	100%	62%	100%	100%	62%
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr) Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		00/			00/			00/				
Shared Lane Traffic (%)		0%			0%			0%			0%	
Lane Group Flow (vph)	36	198	0	445	405	20	20	570	400	404		
Enter Blocked Intersection	No.	No	No.	115	135	68 N-	63	573	103	104	609	39
Lane Alignment	Left	Left	Right	No Left	No	No	No	No	No	No	No	No
Median Width(ft)	Leit	18	Right	Leit	Left 18	Right	Left	Left	Right	Left	Left	Right
Link Offset(ft)		0			0			24			24	
Crosswalk Width(ft)		16			16			0 16			0 16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.11	1.07	1.11	1.11	1,05	1.11	1.11	1.05	1.11	1.11	1.05	
Turning Speed (mph)	15	1,01	9	15	1,00	9	1.11	1,00	9	1.11	1.00	1.11 9
Turn Type	Perm	NA	J	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		r onn	8	1 OIIII	5	2	COIII	риптрі 1	1NA 6	reiii)
Permitted Phases	4	,		8	Ü	8	2	2	2	6	U	6
Detector Phase	4	4		8	8	8	- 5	2	2	1	6	6
Switch Phase	•	,				Ü	U	2	2	ı	U	U
Minimum Initial (s)	15.0	15.0		15.0	15.0	15.0	6.0	20.0	20.0	6.0	20.0	20.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	10.0	26.0	26.0	10.0	26.0	26.0
Total Split (s)	46.0	46.0		46.0	46.0	46.0	29.0	96.0	96.0	29.0	96.0	96.0
Total Split (%)	26.9%	26.9%		26.9%	26.9%	26.9%	17.0%	56.1%	56.1%	17.0%	56.1%	56.1%
Maximum Green (s)	40.0	40.0		40.0	40.0	40.0	25.0	90.0	90.0	25.0	90.0	90.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Gap (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

	•	-	•	1	←	•	4	†	~	-	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)					***************************************							2000/00/2002/01
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												100000000000000000000000000000000000000
v/c Ratio	0.12	0.23		0.40	0.15	0.17	0.14	0.45	0.19	0.23	0.47	0.07
Control Delay	19.7	19.1		24.8	18.7	20.0	6.7	16.1	15.0	7.3	15.8	13.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.7	19.1		24.8	18.7	20.0	6.7	16.1	15.0	7.3	15.8	13.2
Queue Length 50th (ft)	9	28		33	18	18	9	80	24	15	84	9
Queue Length 95th (ft)	33	61		88	44	54	24	137	61	36	142	28
Internal Link Dist (ft)		270			564			411			504	
Turn Bay Length (ft)	85			115		85	100		30	100		50
Base Capacity (vph)	801	2261		739	2342	1002	798	3407	1458	791	3374	1444
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.09		0.16	0.06	0.07	0.08	0.17	0.07	0.13	0.18	0.03

Intersection Summary

Area Type: Other

Cycle Length: 171

Actuated Cycle Length: 58.6

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Description: Runs Free

Splits and Phases: 200: Douglas Avenue & 3 Mile Road

V _{Ø1}	↑ ø2	<u></u> → _□ 04
29 s	96 s (2.17)	46 's 100 100 100 100 100 100 100 100 100 10
↑ Ø5	₩ Ø6	◆ Ø8
29 s	96 s	45 s

	۶	→	•	•	+	•	4	†	<i>></i>	/	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NET	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ተኈ		ሻ	^ ^	7	J.	ተተ	7	ሻ	<u></u>	7
Traffic Volume (veh/h)	35	135	55	110	130	105	60	550	160	100	585	60
Future Volume (veh/h)	35	135	55	110	130	105	60	550	160	100	585	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.00	1.00	1.00
Work Zone On Approach Adj Sat Flow, veh/h/ln	1736	No	4700	4700	No	4700	4700	No	4700	4700	No	
Adj Flow Rate, veh/h	36	1795 141	1 736 57	1709 115	1786 135	1709 68	1 723 62	1800	1723	1709	1786	1709
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	573 0.96	103 0.96	104 0.96	609 0.96	39 0.96
Percent Heavy Veh, %	0.30	0.80	0.90	3	3	3	2	2	0.80	0.50	0.90	3
Cap, veh/h	407	646	250	368	912	389	419	1226	523	445	1283	548
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.36	0.36	0.09	0.38	0.38
Sat Flow, veh/h	1165	2402	930	1082	3394	1448	1641	3421	1460	1628	3394	1448
Grp Volume(v), veh/h	36	98	100	115	135	68	62	573	103	104	609	39
Grp Sat Flow(s),veh/h/ln	1165	1705	1627	1082	1697	1448	1641	1710	1460	1628	1697	1448
Q Serve(g_s), s	1.4	2.5	2.7	5.2	1.7	2.0	1.3	7.2	2.7	2.1	7.6	1.0
Cycle Q Clear(g_c), s	3.0	2.5	2.7	7.8	1.7	2.0	1.3	7.2	2.7	2.1	7.6	1.0
Prop In Lane	1.00		0.57	1.00		1.00	1.00	• • • •	1.00	1.00	•••	1.00
Lane Grp Cap(c), veh/h	407	458	437	368	912	389	419	1226	523	445	1283	548
V/C Ratio(X)	0.09	0.21	0.23	0.31	0.15	0.17	0.15	0.47	0.20	0.23	0.47	0.07
Avail Cap(c_a), veh/h	929	1222	1167	853	2433	1038	1045	5518	2355	1034	5474	2336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	15.8	15.9	18.9	15.5	15.7	10.0	13.8	12.4	9.7	13.2	11.1
Incr Delay (d2), s/veh	0.1	0.2	0.3	0.5	0.1	0.2	0.1	0.4	0.3	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/in	0.3	0.9	0.9	1.2	0.6	0.6	0.4	2.4	0.8	0.6	2.5	0.3
Unsig. Movement Delay, s/veh		40.4	40.0	40.4	4 = 0	^						
LnGrp Delay(d),s/veh	16.8	16.1	16.2	19.4	15.6	15.9	10.1	14.2	12.6	9.8	13.5	11.2
LnGrp LOS Approach Vol, veh/h	В	B 204	В	<u>B</u>	<u>B</u>	В	В	В	B	A	B	<u>B</u>
Approach Vol, venin		234 16.2			318			738			752	
Approach LOS		10.2 B			17.0			13.6			12.9	
• • •					8			В			В	
Timer - Assigned Phs	1	2		4	- 5	6		- 8				
Phs Duration (G+Y+Rc), s	8.8	26.0		21.0	7.7	27.1		21.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0		****		5/1000000000000000
Max Green Setting (Gmax), s	25.0	90.0		40.0	25.0	90.0		40.0				
Max Q Clear Time (g_c+l1), s	4.1	9.2		5.0	3.3	9.6		9.8	***************************************			
Green Ext Time (p_c), s	0.1	7.1		1.3	0.1	7.2		1.5				
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			В									

APPENDIX C

SYNCHRO INTERSECTION CAPACITY ANALYSIS

Build Traffic Volumes

	-	•	•	←	4	<i>></i>	
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	^}			4	\ \/		
Traffic Volume (vph)	170	5	10	190	15	5	
Future Volume (vph)	170	5	10	190	15	5	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			100		100		
Link Speed (mph)	35			35	25		
Link Distance (ft)	389			1085	441		
Travel Time (s)	7.6			21.1	12.0		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	4%	4%	5%	5%	5%	5%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%	100	
Shared Lane Traffic (%)	55.000 00 000 00 000 00 000 00 00 00 00 00						
Lane Group Flow (vph)	186	0	0	213	21	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	SERVICE PROPERTY OF A PROPERTY OF
Median Width(ft)	0		***************************************	0	12		
Link Offset(ft)	0			0	0		
Crosswalk Width(ft)	16		W	16	16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	_	9	15		15	9	
Sign Control	Free			Free	Stop		
Intersection Summary							
Area Type: O	ther						
Control Type: Unsignalized							Company of the compan

Intersection							
Int Delay, s/veh	0.7						
Movement 11 1	EBT	EBR	WBL	WBT		NBR	
Lane Configurations	4	-		ની	Ϋ́	_	
Traffic Vol, veh/h Future Vol, veh/h	1 70 170	5	10 10	190 190	15 15	5	
Conflicting Peds, #/hr	0	0	0	190	0	5 0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channellzed	-	None	•	None	•	None	
Storage Length	- 4	-	-	-	0	-	
Veh in Median Storage, Grade, %	, # 0		-	0	0	-	
Peak Hour Factor	94	94	94	94	94	94	
Heavy Vehicles, %	4	4	5	5	5	5	
Mvmt Flow	181	5	11	202	16	5	
Major/Minor N Conflicting Flow All	<u>fajor1</u>		Aajor2		linor1	404	
Stage 1	0	0	186	0	408 184	184 -	
Stage 2	-	-	_	-	224	-	
Critical Hdwy	-	•	4.15		6.45	6.25	
Critical Hdwy Stg 1	-	-	-	-	5.45	-	
Critical Hdwy Stg 2 Follow-up Hdwy	•	•	0.045		5.45	0.045	
Pot Cap-1 Maneuver	-	-	2.245 1 371	-	3.545 594	3.345 851	
Stage 1	-	-	-	-	840	-	
Stage 2	•		•	•	806	-	
Platoon blocked, %	-	-	4074	-			
Mov Cap-1 Maneuver Mov Cap-2 Maneuver			1371	_	589 589	851	
Stage 1			-	-	840	-	
Stage 2	-	-	-	-	799	-	
Approach	EB		WB		NB		THE RESIDENCE OF THE PROPERTY
HCM Control Delay, s	0		0.4		10.8		
HCM LOS					В		
Minor Lane/Major Mymt	4	IBLn1	EBT	EBR	***************************************	WBT	William Committee of the property of the professional and the committee of
Capacity (veh/h) HCM Lane V/C Ratio		638 0.033	-		1 371 0.008	•	
HCM Control Delay (s)		10.8	-	- (7.6	0	
HCM Lane LOS		В	-	-	Α	Ā	
HCM 95th %tile Q(veh)		0.1	•	•	0	•	
							The state of the s

	•	→	*	•	+-	4	4	†	<i>></i>	\	+	4
Lane Group	EBL	EBT	EBR	WBL	WET	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ŋ	↑ }		ሻ	十 个	7	ሻ	十 十	7	ሻ	^ ^	7
Traffic Volume (vph)	30	100	55	90	115	85	45	375	95	80	455	50
Future Volume (vph)	30	100	55	90	115	85	45	375	95	80	455	50
Ideal Flow (vphpl)	1750	1809	1750	1750	1829	1750	1750	1829	1750	1750	1829	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	. –
Storage Length (ft)	85		0	115		85	100		30	100		50
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100			100			100			100		***************************************
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		350			644			491			584	
Travel Time (s)		6.8			12.5			9.6			11.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	62%	100%	100%	62%
Heavy Vehicles (%)	7%	7%	7%	11%	11%	11%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0,0
Parking (#/hr)							-					J
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)											0,0	
Lane Group Flow (vph)	32	165	0	96	122	56	48	399	63	85	484	33
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18	Ü		18	J		24			24	
Link Offset(ft)	,	0			0			-0				
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								•			, -	
Headway Factor	1.11	1.07	1.11	1.11	1.05	1.11	1.11	1.05	1.11	1.11	1.05	1.11
Turning Speed (mph)	15		9	15		9	15		9	15	.,	9
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2	-	1	6	
Permitted Phases	4			8		8	2		2	6		6
Detector Phase	4	4		8	8	8	5	2	2	1	6	6
Switch Phase							-	-	_	•		· ·
Minimum Initial (s)	15.0	15.0		15.0	15.0	15.0	6.0	20.0	20.0	6.0	20.0	20.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	10.0	26.0	26.0	10.0	26.0	26.0
Total Split (s)	46.0	46.0		46.0	46.0	46.0	29.0	96.0	96.0	29.0	96.0	96.0
Total Split (%)	26.9%	26.9%		26.9%	26.9%	26.9%	17.0%	56.1%	56.1%	17.0%	56.1%	56.1%
Maximum Green (s)	40.0	40.0		40.0	40.0	40.0	25.0	90.0	90.0	25.0	90.0	90.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag		-			5,0	0,0			····			00000000000000000000000000000000000000
	3.0	3.0		3.0	3.0	3.0					AMERICAN AND AND AND AND AND AND AND AND AND A	
	200000000000000000000000000000000000000	*******				****	***********	200002200000000000000000000000000000000	*********	condition of the second	******	
Lead/Lag Lead-Lag Optimize? Vehicle Extension (s) Minimum Gap (s)	3.0 3.0	3.0 3.0		3.0 3.0	3.0 3.0	3.0 3.0	Lead Yes 2.0 3.0	Lag Yes 4.0 3.0	Lag Yes 4.0 3.0	Lead Yes 2.0 3.0	Yes 4.0 3.0	Lag Yes 4.0 3.0

	•	-	>	•	-	•	4	†	-	-	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)												00/2007/1545/2/25/2
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)											XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	800000 99900
v/c Ratio	0.11	0.20		0,35	0.14	0.15	0.10	0.33	0.12	0.17	0.37	0.06
Control Delay	17.8	17.6		22.1	17.3	18.2	6.3	14.7	14.1	6.7	13.7	12.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0
Total Delay	17.8	17.6		22.1	17.3	18.2	6.3	14.7	14.1	6.7	13.7	12.7
Queue Length 50th (ft)	8	23		27	16	15	7	51	14	12	64	7
Queue Length 95th (ft)	27	46		66	35	41	18	87	38	28	103	23
Internal Link Dist (ft)		270			564			411			504	
Turn Bay Length (ft)	85			115		85	100		30	100		50
Base Capacity (vph)	798	2197		738	2264	968	809	3341	1430	794	3278	1403
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.08		0.13	0.05	0.06	0.06	0.12	0.04	0.11	0.15	0.02

Intersection Summary

Area Type: Other

Cycle Length: 171
Actuated Cycle Length: 55.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Description: Runs Free

Splits and Phases: 200: Douglas Avenue & 3 Mile Road

Opino ana i naces.	oo. Douglas Averide & 5 Wille Noad	
▶ Ø1	★ Ø2	→ 04
29 s	96 s	46 s
↑ ø5	₩ Ø6	♦ Ø8
29 s	96 s	46 s

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	¥	† }		ħ	^	74	ኻ	ተ ተ	7	ሻ	ተተ	7
Traffic Volume (veh/h)	30	100	55	90	115	85	45	375	95	80	455	50
Future Volume (veh/h)	30	100	55	90	115	85	45	375	95	80	455	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	*************************	1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	ermonik (savasa) (savasa) viri		No			No			No	
Adj Sat Flow, veh/h/ln	1654	1710	1654	1600	1672	1600	1695	1772	1695	1668	1743	1668
Adj Flow Rate, veh/h	32	106	59	96	122	56	48	399	63	85	484	33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	7	7	11	11	11	4	4	4	6	6	6
Cap, veh/h	401	559	292	369	860	367	451	1216	519	498	1271	542
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.06	0.36	0.36	0.08	0.38	0.38
Sat Flow, veh/h	1123	2063	1078	1044	3177	1356	1615	3367	1437	1589	3312	1414
Grp Volume(v), veh/h	32	82	83	96	122	56	48	399	63	85	484	33
Grp Sat Flow(s), veh/h/ln	1123	1625	1516	1044	1588	1356	1615	1683	1437	1589	1656	1414
Q Serve(g_s), s	1.2	2.1	2.3	4.3	1.6	1.7	1.0	4.8	1.6	1.8	5.8	0.8
Cycle Q Clear(g_c), s	2.8	2.1	2.3	6.7	1.6	1.7	1.0	4.8	1.6	1.8	5.8	0.8
Prop In Lane	1.00		0.71	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	440	410	369	860	367	451	1216	519	498	1271	542
V/C Ratio(X)	0.08	0.19	0.20	0.26	0.14	0.15	0.11	0.33	0.12	0.17	0.38	0.06
Avail Cap(c_a), veh/h HCM Platoon Ratio	909	1174	1095	840	2295	980	1089	5473	2336	1089	5385	2298
Upstream Filter(I)	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	1.00 15.5	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incr Delay (d2), s/veh	0.1	0.2	15.6 0.2	18.1	15.3	15.4	9.9	12.8	11.8	9.4	12.3	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.2	0.4 0.0	0.1	0.2	0.0	0.2	0.1	0.1	0,3	0.1
%ile BackOfQ(50%),veh/in	0.0	0.0	0.0	1.0	0.0 0.5	0.0 0.5	0.0 0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh		U./	V./	1,0	0.5	U.Đ	U.3	1.6	0.5	0.5	1.9	0.2
LnGrp Delay(d),s/veh	16.5	15.7	15,8	18.5	15.4	15.5	9.9	13.0	12.0	9.4	400	40.0
LnGrp LOS	10.3 B	В	10.0 B	10.5 B	10. 4 B	10.0 B	9.9 A	13.U B	ız.u B		12.6	10.8
Approach Vol. veh/h		197	U	U	274		^_	510	<u>D</u>	A	B 602	<u>B</u>
Approach Delay, s/veh		15.9			16.5			12.6				
Approach LOS		В			10.5 B			12.0 B			12.0	
											В	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	26.0		21.0	7.1	27.2		21.0				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				**********************
Max Green Setting (Gmax), s	25.0	90.0		40.0	25.0	90.0		40.0				
Max Q Clear Time (g_c+l1), s	3.8	6.8		4.8	3.0	7.8		8.7				
Green Ext Time (p_c), s	0.1	4.6		1.1	0.0	5.5		1.4				
Intersection Summary HCM 6th Ctrl Delay			13.5									
HCM 6th LOS			В									

	-	•	1	4-	4	/		
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	f.			्र	¥			
Traffic Volume (vph)	175	1	10	200	1	10		
Future Volume (vph)	175	1	10	200	1	10		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)	0%			0%	0%	1 844		
Storage Length (ft)		0	0	7,3	0	0		
Storage Lanes		0	Ö		1	Ö		
Taper Length (ft)		_	100		100	•		
Link Speed (mph)	35			35	25			
Link Distance (ft)	1085			1335	456			
Travel Time (s)	21.1			26.0	12.4			
Confl. Peds. (#/hr)								X.2005
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	4%	4%	5%	5%	2%	2%		80000
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								*****
Mid-Block Traffic (%)	0%			0%	0%			
Shared Lane Traffic (%)								900000
Lane Group Flow (vph)	187	0	0	224	12	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	0			0	12	-		
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			00034000
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	 `	
Turning Speed (mph)		9	15		15	9		
Sign Control	Free			Free	Stop			avardisi
Intersection Summary								
	Other							
Control Type: Unsignalized	101							

						· · · · · · · · · · · · · · · · · · ·
Intersection						
Int Delay, s/veh	0.5					
-						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	^}			स	¥f	
Traffic Vol, veh/h	175	1	10	200	1	10
Future Vol, veh/h	175	1	10	200	1	10
Conflicting Peds, #/hr	0	0	0	200	0	0
			/// CO.			
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None	•	None	•	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	,# 0		-	0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	4	5	5	2	2
Mymt Flow		districtive consensus cons				
MALLIC LION	186	1	11	213	1	11
Major/Minor N	/ajor1	ı ı	dajor2		Vinor1	
						40-
Conflicting Flow All	0	0	187	0	422	187
Stage 1	•	-	-	•	187	-
Stage 2	-	-	-	-	235	-
Critical Hdwy		•	4.15	•	6.42	6.22
Critical Hdwy Stg 1	-	-	-		5.42	
Critical Hdwy Stg 2	_	_	-	-	5.42	-
	•	•	2245	•		
Follow-up Hdwy	-	-	2.245	-	3.518	
Pot Cap-1 Maneuver	•		1369		588	855
Stage 1	-	-	-	-	845	-
Stage 2			•		804	
Platoon blocked, %	-	_		-		
Mov Cap-1 Maneuver	-	_	1369	-	583	855
	-	**	1009	•		000
Mov Cap-2 Maneuver	-	-	-	-	583	-
Stage 1		-	•	•	845	
Stage 2	-	-	-	-	797	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		9.5	
HCM LOS					A	
					, ,	
Minor Lane/Major Mymt	N	BLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		820		-	1369	
			*			-
HCM Lane V/C Ratio	(0.014	-	-	0.008	-
HCM Control Delay (s)		9.5	-	•	7.7	0
HCM Lane LOS		Α	-	-	Α	Α
HCM 95th %tile Q(veh)		0	-		0	•
				esserved 8808080808		******************

	-	*	1	—	4	*
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	}			4	N/F	
Traffic Volume (vph)	215	10	20	230	5	10
Future Volume (vph)	215	10	20	230	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			100		100	
Link Speed (mph)	35			35	25	
Link Distance (ft)	389	000000000000000000000000000000000000000	*******************************	1085	441	
Travel Time (s)	7.6			21.1	12,0	
Confl. Peds. (#/hr)	83000000 000000000 c 7 00000 outou					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	3%	3%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	-50	W. C.				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)	2000000 Managaran arangan arangan arang					
Lane Group Flow (vph)	234	0	0	261	15	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16	000000000000000000000000000000000000000	***************************************	16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
	Other					
Control Type: Unsignalized						

Intersection								
Int Delay, s/veh	0.6				***************************************			
Movement Lane Configurations	<u>EBT</u>	EBR	WBL			NBR		
Traffic Vol, veh/h	î→ 215	10	20	र्स 230	** 5	10		
Future Vol, veh/h	215	10	20	230	5	10		86
Conflicting Peds, #/hr Sign Control	0 Free	0	0	0	0	0		
RT Channelized		Free None	Free	Free None	Stop	Stop None		
Storage Length	-	-	-	-	0	-		
Veh in Median Storage	0.2010.0000.0000.0000.0000.0000	•	•	0	0	•		
Grade, % Peak Hour Factor	0 96	96	96	0 96	0 96	- 96		
Heavy Vehicles, %	1	1	3	3	1	1		
Mvmt Flow	224	10	21	240	5	10		
* # _ :								
Major/Minor Conflicting Flow All	Vajor1 0	0	<u>//ajor2</u> 234	0	<u>Vinor1</u> 511	229		
Stage 1	•	•	£UT		229			
Stage 2	-	-	-	-	282	•		
Critical Hdwy Critical Hdwy Stg 1	-	-	4.13	-	6.41 5.41	6.21		
Critical Hdwy Stg 2	-	•	-	-	5.41	-		
Follow-up Hdwy	-	-	2.227	-	3.509			
Pot Cap-1 Maneuver Stage 1	•		1328	•	524 811	813		
Stage 2	-	-	-	-	768	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	-		1328	•	515	813		
Stage 1	-	-	-	-	515 811	-		
Stage 2	-	-	-	-	754	-		
Approach	EB		WB		NB			
HCM Control Delay, s HCM LOS	0		0.6		10.4			
HOW LOO					В			
Minor Lane/Major Mvm	i N	BLn1	EBT	EBR	WBL	WBT		
Capacity (veh/h)		682	-		1328	-		
HCM Lane V/C Ratio		0.023	-	-	0.016	-		
HCM Control Delay (s) HCM Lane LOS		10.4 B	-	-	7.8 A	0 A		
HCM 95th %tile Q(veh)		0.1	-	-	0	^		

	•	-	*	*	4 —	4	1	†	<i>></i>	-	 	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	75	^		ሻ	^	7	ሻ	^	7	ሻ	个 个	7
Traffic Volume (vph)	40	135	60	110	130	105	65	550	160	100	585	60
Future Volume (vph)	40	135	60	110	130	105	65	550	160	100	585	60
Ideal Flow (vphpl)	1750	1809	1750	1750	1829	1750	1750	1829	1750	1750	1829	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	115		85	100		30	100		50
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	100			100			100		***************************************	100	J-1000000000000000000000000000000000000	************
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		350			644			491			584	
Travel Time (s)	orange in initial and a viv	6.8			12.5			9.6			11.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)	K *** **** (*****************											
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0,96	0.96	0.96	0.96	0,96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	62%	100%	100%	62%
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	204	0	115	135	68	68	573	103	104	609	39
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			24			24	
Link Offset(ft)		.0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	4 4 4										04400000000000000000000000000000000000	XXXXXXXXXXXXX
Headway Factor	1.11	1.07	1,11	1.11	1.05	1.11	1.11	1.05	1.11	1.11	1.05	1.11
Turning Speed (mph)	15		9	15	*	_ 9	15		9	15		9
Turn Type Protected Phases	Perm	NA		Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Permitted Phases		4			8		5	2		1	6	_
Detector Phase	4	4		8	^	8	2	•	2	6		6
Switch Phase	4	4		8	8	8	5	2	2	1	6	6
Minimum Initial (s)	15.0	1E 0		45.0	45.0	45.0	0.0	00.0	00.0			
Minimum Split (s)		15.0 21.0		15.0	15.0	15.0	6.0	20.0	20.0	6.0	20.0	20.0
Total Split (s)	21.0 46.0	46.0		21.0	21.0	21.0	10.0	26.0	26.0	10.0	26.0	26.0
Total Split (%)		26.9%		46.0	46.0	46.0	29.0	96.0	96.0	29.0	96.0	96.0
Maximum Green (s)	40.0	40.0		26.9% 40.0	26.9%	26.9%	17.0%	56.1%	56.1%	17.0%	56.1%	56.1%
Yellow Time (s)	4.0	40.0		40.0	40.0	40.0	25.0	90.0	90.0	25.0	90.0	90.0
All-Red Time (s)	2.0	2.0		2.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0		0.0	2.0 0.0	2.0 0.0	1.0	2.0	2.0	1.0	2.0	2.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		0.0	0.0	0.0	0.0	0.0	0.0
Lead/Lag	0,0	0.0		U.U	۷.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead-Lag Optimize?							Lead	Lag	Lag	Lead	Lag	Lag
Vehicle Extension (s)	3.0	3.0		3.0	3.0	9.4	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Gap (s)	3.0 3.0	3.0		merrorrorrorrorrorrordenateaue	~	3.0	2.0	4.0	4.0	2.0	4.0	4.0
withintian Gap (s)	3.0	ა.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

	•	-	•	•	•	•	•	†	<i>></i>	\	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0,0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												2000
v/c Ratio	0.13	0.23		0.40	0.15	0.17	0.15	0.45	0.19	0.23	0.48	0.07
Control Delay	20.0	19.2	***************************************	24.9	18.8	20.1	6.8	16.1	15.0	7.3	16.0	13.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.0	19.2		24.9	18.8	20.1	6.8	16.1	15.0	7.3	16.0	13.3
Queue Length 50th (ft)	11	28		33	18	18	9	80	24	15	84	9
Queue Length 95th (ft)	38	63		88	44	54	26	138	62	36	143	28
Internal Link Dist (ft)		270			564			411			504	
Turn Bay Length (ft)	85			115		85	100		30	100		50
Base Capacity (vph)	800	2251		734	2339	1001	797	3407	1458	790	3374	1444
Starvation Cap Reductn	0	0	***************************************	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.09		0.16	0.06	0.07	0.09	0.17	0.07	0.13	0.18	0.03

Intersection Summary
Area Type: Other

Cycle Length: 171

Actuated Cycle Length: 58.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Description: Runs Free

Splits and Phases: 200: Douglas Avenue & 3 Mile Road

Ø1	™ Ø2	<u></u> → ₀₄
29 s	96 s	46 : 42 (1994) - 1994
↑ Ø5	▼ Ø6	◆ Ø8
29 s	96 s	46 s Afrika an Abrahaya an in

	۶	→	7	•	+	1	4	†	<i>></i>	/	 	√
Movement	EBL	EBT	EBR	WBL	WET	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ř	∱ }		ሻ	↑↑	7	ሻ	个个	7	ሻ	个个	7
Traffic Volume (veh/h)	40	135	60	110	130	105	65	550	160	100	585	60
Future Volume (veh/h)	40	135	60	110	130	105	65	550	160	100	585	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No		One Order and Address of the American	No	
Adj Sat Flow, veh/h/ln	1736	1795	1736	1709	1786	1709	1723	1800	1723	1709	1786	1709
Adj Flow Rate, veh/h	42	141	62	115	135	68	68	573	103	104	609	39
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	_ 1	3	3	_ 3	2	2	2	3	3	3
Cap, veh/h	407	629	264	366	912	389	422	1226	523	445	1271	542
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.36	0.36	0.09	0.37	0.37
Sat Flow, veh/h	1165	2340	983	1077	3394	1448	1641	3421	1460	1628	3394	1448
Grp Volume(v), veh/h	42	101	102	115	135	68	68	573	103	104	609	39
Grp Sat Flow(s), veh/h/ln	1165	1705	1618	1077	1697	1448	1641	1710	1460	1628	1697	1448
Q Serve(g_s), s	1.6	2.6	2.7	5.2	1.7	2.0	1.4	7.2	2.7	2.1	7.6	1.0
Cycle Q Clear(g_c), s	3.3	2.6	2.7	8.0	1.7	2.0	1.4	7.2	2.7	2.1	7.6	1,0
Prop In Lane	1.00		0.61	1.00		1.00	1.00		1.00	1.00	riemaile Ciri desar consuccessor	1.00
Lane Grp Cap(c), veh/h	407	458	435	366	912	389	422	1226	523	445	1271	542
V/C Ratio(X)	0.10	0.22	0.23	0.31	0.15	0.17	0.16	0.47	0.20	0.23	0.48	0.07
Avail Cap(c_a), veh/h	929	1222	1160	848	2433	1038	1042	5518	2355	1034	5474	2336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	15.9	15.9	19.0	15.5	15.7	10.0	13.8	12.4	9.7	13.3	11.2
Incr Delay (d2), s/veh	0.1	0.2	0.3	0.5	0.1	0.2	0.1	0.4	0.3	0.1	0,4	0,1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%lle BackOfQ(50%),veh/ln	0.4	0.9	0.9	1.2	0.6	0.6	0.4	2.4	8.0	0.6	2.5	0.3
Unsig. Movement Delay, s/vel		40.4	40.0	10 =								
LnGrp Delay(d),s/veh	16.9	16.1	16.2	19.5	15.6	15.9	10.0	14.2	12.6	9.8	13.7	11.3
LnGrp LOS	B	B	B	В	В	В	В	B	В	A	В	<u>B</u>
Approach Vol, veh/h		245			318			744			752	
Approach Delay, s/veh		16.3			17.1			13.6			13.0	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	26.0		21.0	7.9	26.9		21.0				
Change Period (Y+Rc), s	4.0	6.0	***************************************	6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	25.0	90.0		40.0	25.0	90.0		40.0				
Max Q Clear Time (g_c+I1), s	4.1	9.2	200220000000000000000000000000000000000	5.3	3.4	9.6	0.000.000.000.000.000.000.000	10.0				
Green Ext Time (p_c), s	0.1	7.1		1.3	0.1	7.2		1.5				
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			В									E-1000

	-	*	•	←	4	<i>></i>
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	Î>			4	¥.	
Traffic Volume (vph)	225	1	5	250	1	10
Future Volume (vph)	225	1	5	250	1	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	***************************************	0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)	***		100		100	
Link Speed (mph)	35			35	25	
Link Distance (ft)	1085	2.0000000000000000000000000000000000000		1335	456	
Travel Time (s)	21.1			26.0	12,4	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	3%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	235	0	0	265	11	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0	~~~		0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
	Other					
Control Type: Unsignalized	Other					
Control Type: Onsignalized						

		*:					 	 	 	
Intersection										
Int Delay, s/veh	0.3									
•									×	
Movement	EBT	EBR	WBL	WBT		NBR				
Lane Configurations	7			4	W				 	
Traffic Vol, veh/h	225	1	5	250	1	10				
Future Vol, veh/h	225	1	5	250	1	10				keesen 8000
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop					
RT Channelized				None						
Storage Length	-	-	-	-	0	-				
Veh in Median Storage,	# 0		•	0	0					
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	96	96	96	96	96	96				
Heavy Vehicles, %	1	1	3	3	2	2				
Mymt Flow	234	1	5	260	1	10				
months ive		ı	U	ZUU	1	10				

	lajor1		Aajor2	1	dinort.					
Conflicting Flow All	0	0	235	0	505	235	 	 		
Stage 1	-	-	-	-	235					
Stage 2	-	-	-	-	270	-				
Critical Hdwy		•	4.13	•	6.42	6.22				
Critical Hdwy Stg 1	-	-	-	-	5.42	-				
Critical Hdwy Stg 2			•		5.42					
Follow-up Hdwy	-	-	2.227	_		3.318				
Pot Cap-1 Maneuver			1326		527	804				
Stage 1	_	-	-	-	804	-				
Stage 2		_	_		775	_				
Platoon blocked, %	_	_	7	-	110	-				
Mov Cap-1 Maneuver		_	1326	•	525	804				
Mov Cap-1 Maneuver	•	-	1320	•	525	004				
Stage 1	-	-	-	-		-				
	•	•	•	*	804	•				
Stage 2	-	-	-	-	772	-				
Approach	EB		WB		NB					
HCM Control Delay, s	0		0.2		9.8					
HCM LOS			•		A					
					, ,					
	,									
Minor Lane/Major Mvmt	N	BLn1	EBT		WBL	WBT				
Capacity (veh/h)		767	-		1326	•				
HCM Lane V/C Ratio	(0.015	-	-	0.004	-	 	 	 	
HCM Control Delay (s)		9.8		•	7.7	0				
HCM Lane LOS	000000000000000000000000000000000000000	Α	-	-	Α	Α	 	 		
HCM 95th %tile Q(veh)		0	•	•	0	•				

APPENDIX D

INTERSECTION AND STOPPING SIGHT DISTANCE TABLES/WORKSHEETS

3 Mile Road & Site Driveway

ISD CALCULATIONS (TWSC)

Performed by: TADI - TSC Date: 4/7/2022
Intersection: 3 Mile Road & Youth Center Driveway
Community: Caledonia, Racine County, Wi

Mainline Name: 3 Mile Road

Sidestreet Name: Youth Center Driveway

Left-In Allowed? Left-Out Allowed? Right-In Allowed? Right-Out Allowed? Through-Out Allowed?	Yes Yes Yes	P-vehicle Design Length: 19.0 feet (P = 19.0. Overwrite if other design veh) SU-vehicle Design Length: 39.5 feet (SU-40 = 39.5. Overwrite if other design veh) WB-vehicle Design Length: 73.5 feet (WB-67 = 73.5. Overwrite if other design veh)
Design Speed from Left:		mph P SU WB
Design Speed from Right:		mph Design Vehicles: x X (place an "X")
Median Width:		feet
Minor Street Approach Grade:	0.0%	If a minor street vehicle approaches the major street at greater than 3%, enter grade.
Number of Near Side Right & Bike:		equivalent 12-ft lanes. Include tapers, auxiliary lanes, parking lanes, and bicycle accommodations.
Number of Near Side Thru:		equivalent 12-ft lanes.
Number of Far Side Thru:	1.00	equivalent 12-ft lanes.
Number of Far Side Right & Bike:	0.00	equivalent 12-ft lanes. Include tapers, auxiliary lanes, parking lanes, and bicycle accommodations.
AASHTO or WisDOT:	AASHTO	, , , , , , , , , , , , , , , , , , ,

ISD CASE B1: Left Turn from Minor Street or Median (driver looking right)

	AASHTO MINIMUM ISD			W(500)	WOLAD FERRY R MINIMUM SEC			
	P	SU	776		5.0	VVIA		
Base Time Gap, sec:	7.50	9.50	11.50	17,00	12 on	13.06		
Additional Time Gap 1, sec:	0.00	0.00	0.00	0.00	0.50	5.07.		
Additional Time Gap 2, sec:	0.00	0.00	ti do	COD	0.00	Đ Ju		
Total Time Gap, sec:	7.50	9.50	11.50	16.00	92.00	13 100		
Case B1 ISD, feet:	440.0	557.3	074,7	586.7	754.0	76,1.2		
Rounded Case B1 ISD, feet:	445	560	875	Ran	7435	76e		

ISD CASE B2: Right Turn from Minor Street (driver looking left)

	AASHTO MINIMUM ISD		PASDOT OFFER PRIMORES			
	Р	SU	WHE	F2	9.U	WB
Base Time Gap, sec:	6.50	8.50	10.50	8 00	10 Ju	12.00
Additional Time Gap 1, sec:	0.00	0.00	0.00	C 00	0,75	5.40
Additional Time Gap 2, sec:	0.00	0.00	0.00	0.00	0.50	0.00
Total Time Gap, sec:	6.50	8.50	10.50	3 6u	10.00	12.00
Case B2 ISD, feet:	381.3	498.7	616.0	469.1	586.7	7G4.u
Rounded Case B2 ISD, feet:	385	500	#0.59m	amit	50.00	77.1944

ISD CASE B3a: Crossing from Minor Street Traffic from Left (driver looking left)

	AASHTO MINIMUM ISD			VASDOT GEPER MAMMUUTSO			
	P	SU	WB	<u></u>	50	1676	
Base Time Gap, sec:	6.50	8.50	16.50	7.00	15,00	19.00	
Additional Time Gap 1, sec:	0.00	0.00		0.00	U-00	0.00	
Additional Time Gap 2, sec:	0.00	0.00	0.00	0.00		9.00	
Total Time Gap, sec:	6.50	8.50		7.40	355,00	L3 (ii)	
Case B3a ISD, feet:	381.3	498.7	ú (ú.u	410.7	586.7	762.7	
Rounded Case B3a ISD, feet:	385	500	924	415	598	785	

ISD CASE B3b: Crossing from Minor Street or Median (driver looking right)

	AASHTO MINIMUM ISD			SAÑOOT PPPER MINIMERESE			
	Р	SU	V/15	[·*	100		
Base Time Gap, sec:	6.50	8.50	fd 50	7.00	10.00	13.66	
Additional Time Gap 1, sec:	-6.50	-8.50	-15.50	-7.00	-10.50	-13.00	
Additional Time Gap 2, sec:	0.00	0.00	0.00	0.50	0.30	0.00	
Total Time Gap, sec:	0.00	0.00	Ð.Pt;	6.00	9.46	0.05	
Case B3b ISD, feet:	0.0	0.0	6.5	5.6	2.0	6.8	
Rounded Case B3b ISD, feet:	0	0	0	n	9	0	

ISD CASE F: Left from Major to Minor (driver looking to left of access towards oncoming traffic)

	AASI	TO MINIMUI	M ISD	WISDOT UPPER MARKETONIS			
	Р	SU	\$***E*	1 4			
Base Time Gap, sec:	5.50	6.50	7.50	81 (01)	8 W.	8. (0.0	
Additional Time Gap 1, sec:	0.00	0.00	0.60	0.00	6.86	5 66	
Additional Time Gap 2, sec:	N/A	N/A	NA	NA	243.55%		
Total Time Gap, sec:	5.50	6.50	2,60	8 00	8.30	5 00	
Case F ISD, feet:	322.7	381.3	83000	44549)	494.3	469.5	
Rounded Case F ISD, feet:	325	385	JJ 5	476	a. H	d 7.0	

ISD CONTROLLING DISTANCES:

AASHTO	MINIMUM ISD	

MAGNAT	APPER	6/04/6/16/6	Dad John

	P	SU	141		7.4	1918
To Left of Access:	385'	500'	620'	470	590"	7551
To Right of Access:	445'	560'	675	590	705	7651
Left-Turn from Mainline:	325'	385'	445	4770	470	470

North

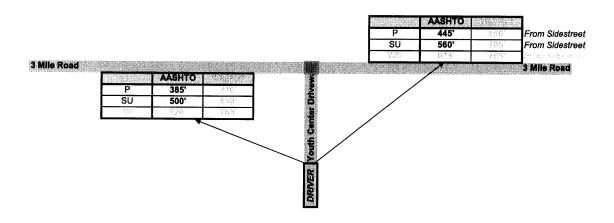
ISD CALCULATIONS (TWSC)

Performed by: TADI - TSC Date: Intersection: 3 Mile Road & Youth Center Driveway Date: 4/7/2022 Community: Caledonia, Racine County, WI

Eye Height (start of Arrows): 3.5-ft for P, 7.6-ft for SU & WB Object Height (head of Arrows): 3.5-ft

Eye Location: 14.5-ft from edge of traveled way

Special Instructions



3 Mile Road				DRIVER 2 Mile Pond
		AASHTO	- 4	3 Mile Road
	Р	325'	470'	2
	SU	385'	470"	<u>a</u>
	WIE	445'	470,	
				¥

SSD CALCULATIONS

	EB	WB	NB	SB	
Design Speed:			1,547	usa Tali	
Deceleration (ft/s ²):		11.2	11.9	11.2	De
Estimated Grade (%):		3.00%	0,0%	62 BF2	Po
Brake Reaction Time (s):		PV 3.5 7 .50	× 5	2.5	De
Brake Reaction (ft):		0.0		0.0	
Braking Distance (ft):		0.79	1933	0.0	
Calculated SSD (ft):		166	5,00	6.0	
Rounded SSD (ft):			i i	n n]

Default rate is 11.2 ft/s² per AASHTO GDHS Positive is uphill, negative is downhill Default rate is 2.5s per AASHTO GDHS

Eye Height (upstream of object to be seen): 3.5-ft Object Height (downstream of motorist): 2.0-ft

Special Instructions

Sight Distance Values⁵

		SIGHT DISTANCE - FEET							
			D	ECISION SIG					
DESIGN	STOPPING		AVOID	ANCE MANE	EUVER 2		PASSING		
MPH	SPEED SIGHT MPH DISTANCE 1	A	В	С	D	E	SIGHT DISTANCE ^{1, 3, 4}		
25	155						900		
30	200	220	490	450	535	620	1090		
35	250	275	590	525	625	720	1280		
40	305	330	690	600	715	825	1470		
45	360	395	800	675	800	930	1625		
50	425	465	910	750	890	1030	1835		
55	495	535	1030	865	980	1135	1985		
60	570	610	1150	990	1125	1280	2135		
65	645	695	1275	1050	1220	1365	2285		
70	730	780	1410	1105	1275	1445	2480		

Notes

1 From Chapter 3, GDHS 2001 and GDHS 2004 (values are identical in both editions).

2 Avoidance maneuver A: Stop on rural road - t = 3.0 s

Avoidance maneuver B: Stop on urban road - t = 9.1s

Avoidance maneuver C: Speed/path/direction change on rural road - t varies between 10.2 and 11.2 s

Avoidance maneuver D: Speed/path/direction change on suburban road - t varies between 12.1 and 12.9 s

Avoidance maneuver E: Speed/path/direction change on urban road - t varies between 14.0 and 14.5 s

- 3 See Chapter 3 of the Wisconsin Traffic Engineering, Operations and Safety Manual (TEOpS) for No passing zone standards.
- 4 See Attachment 5.8 for vertical curve design for Passing Sight Distance.
- 5 See Attachment 5.2 for Sight Distance Categories and Application